

TEST REPORT

Report No.: 8233EU012101W1

Applicant: SHENZHEN ELECTRON TECHNOLOGY CO.,LTD.

Address: Bld.2,Yingfeng Industrial Zone,Tantou Community,
Songgang Street, Baoan, Shenzhen, China

Product Name: Wi-Fi/Bluetooth Module

Model No.: AP6611S

Trademark: N/A

FCC ID: 2ABC5-AP6611S

Test Standard(s): 47 CFR Part 15 Subpart C

Date of Receipt: Sep. 22, 2024

Test Date: Sep. 22, 2024 – Oct. 30, 2024

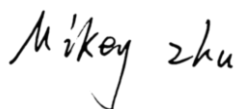
Date of Issue: Oct. 30, 2024

ISSUED BY:

SHENZHEN EU TESTING LABORATORY LIMITED



Prepared by:



Mikey Zhu/ Engineer

Reviewed and Approved by:



Sally Zhang/ Manager

Revision Record

Report Version	Issued Date	Description	Status
V0	Oct. 30, 2024	Original	Valid



Table of Contents

1	COVER PAGE.....	1
2	GENERAL INFORMATION	4
2.1	APPLICANT INFORMATION.....	4
2.2	MANUFACTURER INFORMATION.....	4
2.3	FACTORY INFORMATION.....	4
2.4	GENERAL DESCRIPTION OF E.U.T.....	4
2.5	TECHNICAL INFORMATION OF E.U.T.....	5
3	TEST SUMMARY	7
3.1	TEST STANDARD	7
3.2	TEST VERDICT.....	7
3.3	TEST LABORATORY	7
4	TEST CONFIGURATION	8
4.1	TEST ENVIRONMENT	8
4.2	TEST EQUIPMENT	8
4.3	DESCRIPTION OF SUPPORT UNIT	9
4.4	TEST MODE.....	9
4.5	DESCRIPTION OF CALCULATION	9
4.6	MEASUREMENT UNCERTAINTY	10
4.7	DEVIATION FROM STANDARDS	10
4.8	ABNORMALITIES FROM STANDARD CONDITION	10
5	TEST ITEMS	11
5.1	MAXIMUM CONDUCTED OUTPUT POWER	11
5.1.1	Test Requirement.....	11
5.1.2	Test Setup Diagram	11
5.1.3	Test Procedure.....	11
5.1.4	Test Data.....	12
5.2	RADIATED SPURIOUS EMISSION	13
5.2.1	Test Requirement.....	13
5.2.2	Test Setup Diagram	14
5.2.3	Test Procedure.....	15
5.2.4	Test Data.....	15
ANNEX A	TEST SETUP PHOTOS	27
ANNEX B	EXTERNAL PHOTOS.....	27
ANNEX C	INTERNAL PHOTOS	27

2 General Information

2.1 Applicant Information

Applicant	SHENZHEN ELECTRON TECHNOLOGY CO.,LTD.
Address	Bld.2,Yingfeng Industrial Zone,Tantou Community, Songgang Street, Baoan, Shenzhen, China

2.2 Manufacturer Information

Manufacturer	SHENZHEN ELECTRON TECHNOLOGY CO.,LTD.
Address	Bld.2,Yingfeng Industrial Zone,Tantou Community, Songgang Street, Baoan, Shenzhen, China

2.3 Factory Information

Factory	SHENZHEN ELECTRON TECHNOLOGY CO., LTD.
Address	Bld.2,Yingfeng Industrial Zone,Tantou Community, Songgang Street, Baoan, Shenzhen, China

2.4 General Description of E.U.T.

Product Name	Wi-Fi/Bluetooth Module
Model No. Under Test	AP6611S
List Model No.	N/A
Description of Model differentiation	N/A
Rating(s)	From host system
Product Type	☒ Mobile ☐ Portable ☐ Fix Location
Test Sample No.	-1/2(Normal Sample), -2/2(Engineering Sample)
Hardware Version	N/A
Software Version	N/A
Remark	1) The above information is declared by the applicant, EU-LAB is not responsible for the information accuracy provided by the applicant. 2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.5 Technical Information of E.U.T.

Network and Wireless Connectivity	Bluetooth (BDR+EDR+BLE) WiFi 2.4G: 802.11b, 802.11g, 802.11n(HT20), 802.11ax (HEW20) WiFi 5G: 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80), and 802.11ax(HEW20/40/80) WiFi 6E: 802.11ax(HEW20/40/80) U-NII-1~3, U-NII-5~8
-----------------------------------	---

The requirement for the following technical information of the EUT was tested in this report:

Equipment Class	DSS_Part 15 Spread Spectrum Transmitter
-----------------	---

Technology	Bluetooth
Operation Mode	☒ BDR ☒ EDR
Modulation Type	GFSK, $\pi/4$ -DQPSK, 8DPSK
Operating Frequency	2402-2480MHz
Transfer Rate	DH5: 1 Mbps 2DH5: 2 Mbps 3DH5: 3 Mbps
Number of Channel	79
Antenna Type	PIFA Antenna
Antenna Gain(Peak)	2.73dBi (Refer to the detailed antenna information)
Remark	The above information is declared by the applicant, EU-LAB is not responsible for the information accuracy provided by the applicant.

Antenna Information:

Ant.	Brand	Antenna Model No.	Antenna Gain (dBi)			
			Bluetooth	WiFi 2.4G	WiFi 5G	WiFi 6E
1	Shenzhen Yishengbang Technology Co., Ltd	SLK-YLD-3028A1-L-220I-B	2.47	2.47	2.87	2.52
2		SLK-YLD-3028A-L-320I-B	2.57	2.57	2.83	2.71
3		SLK-YLD-3028A-L-400I-B	1.92	1.92	2.85	2.94
4		SLK-YLD-3028B-R-350I-B	2.73	2.73	2.59	1.87

Note: The lab use Ant. 4 (Model No. SLK-YLD-3028B-R-350I-B) to conduct all tests focus on bluetooth function.

All channels were listed on the following table:

Channel Number	Freq. (MHz)	Channel Number	Freq. (MHz)	Channel Number	Freq. (MHz)	Channel Number	Freq. (MHz)
0	2402	21	2423	42	2444	63	2465
1	2403	22	2424	43	2445	64	2466
2	2404	23	2425	44	2446	65	2467
3	2405	24	2426	45	2447	66	2468
4	2406	25	2427	46	2448	67	2469
5	2407	26	2428	47	2449	68	2470
6	2408	27	2429	48	2450	69	2471
7	2409	28	2430	49	2451	70	2472
8	2410	29	2431	50	2452	71	2473
9	2411	30	2432	51	2453	72	2474
10	2412	31	2433	52	2454	73	2475
11	2413	32	2434	53	2455	74	2476
12	2414	33	2435	54	2456	75	2477
13	2415	34	2436	55	2457	76	2478
14	2416	35	2437	56	2458	77	2479
15	2417	36	2438	57	2459	78	2480
16	2418	37	2439	58	2460	/	/
17	2419	38	2440	59	2461	/	/
18	2420	39	2441	60	2462	/	/
19	2421	40	2442	61	2463	/	/
20	2422	41	2443	62	2464	/	/

3 Test Summary

3.1 Test Standard

The tests were performed according to following standards:

No.	Identity	Document Title
1	47 CFR Part 15, Subpart C	Intentional radiators of radio frequency equipment
2	ANSI C63.10-2020	American National Standard for Testing Unlicensed Wireless Devices
3	KDB 558074 D01 15.247 Meas Guidance v05r02	Guidance for compliance measurements on digital transmission system, frequency hopping spread spectrum system, and hybrid system devices operating under section 15.247 of the FCC rules

Remark:

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product maybe which result in lowering the emission/immunity should be checked to ensure compliance has been maintained.

3.2 Test Verdict

No.	Description	FCC Part No.	Channel	Verdict	Remark
1	Maximum Conducted Output Power	15.247(b)(1)	Low/Middle/High	Pass	--
2	Radiated Spurious Emission	15.209 15.247(d)	Low/Middle/High	Pass	--

Note ¹: This report is request a Class II Permissive Change (C2PC).

Note ²: Compared with the original test report of EUT: FR412210AD which was issued by Sporton International Inc. Hsinchu Laboratory dated on May 02, 2024, the changes of EUT are as below:

1. Changed the antenna type from “Dipole” to “PIFA”, and the antenna gain value “2.73dBi” is lower than the original one “3.68dBi”.

All others are the same in electrical parameters and internal circuit structure. Therefore, pre-tested the conducted output power, the results are lower than or equal to the original value, so the test data were refer to the original report.

Besides re-tested radiated spurious emissions and attached them in this report.

3.3 Test Laboratory

Test Laboratory	Shenzhen EU Testing Laboratory Limited
Address	101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Designation Number	CN1368
Test Firm Registration Number	952583

4 Test Configuration

4.1 Test Environment

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

Relative Humidity	30% to 60%	
Atmospheric Pressure	86 kPa to 106 kPa	
Temperature	NT (Normal Temperature)	+15°C to +35°C
Working Voltage of the EUT	NV (Normal Voltage)	From host system

4.2 Test Equipment

Conducted Emission at AC power line					
Equipment	Manufacturer	Model No	Serial No	Cal Date	Cal Due Date
L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	EE-004	2024/01/09	2025/01/08
EMI Test Receiver	Rohde & Schwarz	ESCI	EE-005	2024/01/09	2025/01/08
Test Software	Farad	EZ-EMC	EE-014	N.C.R	N.C.R

Radiated Emission and RF Test					
Equipment	Manufacturer	Model No	Serial No	Cal. Date	Cal. Due Date
EMI Test Receiver	ROHDE & SCHWARZ	ESPI	EE-006	2024/01/09	2025/01/08
Bilog Broadband Antenna	SCHWARZBECK	VULB 9163	EE-007	2023/01/14	2026/01/09
Double Ridged Horn Antenna	A-INFOMW	LB-10180-NF	EE-008	2023/01/12	2026/01/09
Pre-amplifier	Agilent	8447D	EE-009	2024/01/09	2025/01/08
Pre-amplifier	Agilent	8449B	EE-010	2024/01/09	2025/01/08
MXA Signal Analyzer	Agilent	N9020A	EE-011	2024/01/09	2025/01/08
MXG RF Vector Signal Generator	Agilent	N5182A	EE-012	2024/01/09	2025/01/08
Test Software	Farad	EZ-EMC	EE-015	N.C.R	N.C.R
MIMO Power Measurement Module	TSTPASS	TSPS 2023R	EE-016	2024/01/09	2025/01/08
RF Test Software	TSTPASS	TS32893 V2.0	EE-017	N.C.R	N.C.R
Antenna Mast	TOP Precision	TPBAM-4	EE-306	N.C.R	N.C.R
Wideband Radio Communication Tester	ROHDE & SCHWARZ	CMW500	EE-402	2024/02/15	2025/02/14
Loop Antenna	TESEQ	HLA6121	EE-403	2024/02/15	2025/02/14
MXG RF Analog Signal Generator	Agilent	N5181A	EE-406	2024/02/15	2025/02/14
DRG Horn Antenna	SCHWARZBECK	BBHA 9170	EE-410	2024/02/15	2025/02/14
Pre-amplifier	SKET	LNPA-1840-50	EE-411	2024/02/15	2025/02/14
Power Meter	Anritsu	ML2495A	EE-416	2024/02/15	2025/02/14
Constant Temperature Humidity Chamber	Guangxin	GXP-401	ES-002	2024/07/30	2025/07/29

4.3 Description of Support Unit

No.	Title	Manufacturer	Model No.	Serial No.
1	---			

4.4 Test Mode

No.	Test Modes	Description
TM1	BT-BR (1Mbps)	Keep the EUT in continuously transmitting mode with 1Mbps rate.
TM2	BT-EDR (2Mbps)	Keep the EUT in continuously transmitting mode with 2Mbps rate.
TM3	BT-EDR (3Mbps)	Keep the EUT in continuously transmitting mode with 3Mbps rate.

4.5 Description of Calculation

4.5.1. 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:

$$FS \text{ (dBuV/m)} = RA \text{ (dBuV)} + AF \text{ (dB/m)} + CL \text{ (dB)} - AG \text{ (dB)}$$

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

4.5.2. 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:

$$CD \text{ (dBuV)} = RA \text{ (dBuV)} + PL \text{ (dB)} + CL \text{ (dB)}$$

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

4.6 Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Test Item	Measurement Uncertainty
Conducted Emission	2.64 dB
Occupied Channel Bandwidth	2.8 %
RF output power, conducted	0.68 dB
Power Spectral Density, conducted	1.37 dB
Unwanted Emissions, conducted	1.84 dB
Radiated Emission (30MHz- 1GHz)	Ur = 2.70 dB (Horizontal)
	Ur = 2.70 dB (Vertical)
Radiated Emission (1GHz- 18GHz)	Ur = 3.50 dB (Horizontal)
	Ur = 3.50 dB (Vertical)
Radiated Emission (18GHz- 40GHz)	Ur = 5.15 dB (Horizontal)
	Ur = 5.24 dB (Vertical)
Temperature	0.8°C
Humidity	4%

4.7 Deviation from Standards

None.

4.8 Abnormalities from Standard Condition

None.

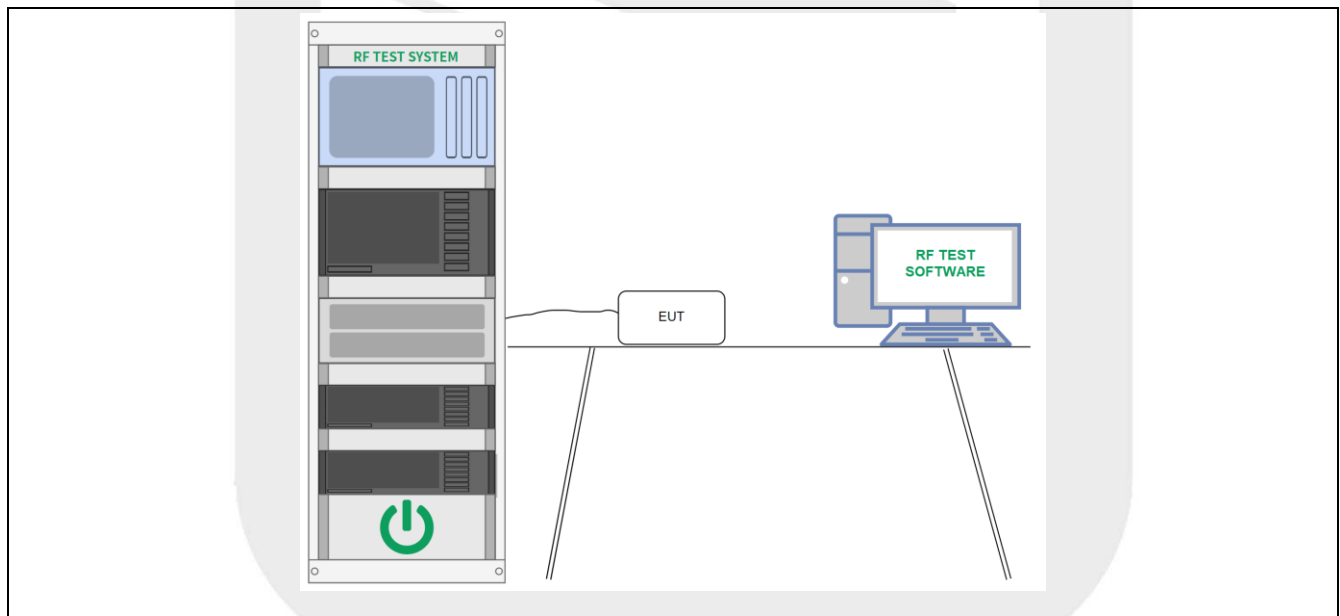
5 Test Items

5.1 Maximum Conducted Output Power

5.1.1 Test Requirement

Test Requirement	For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.
Test Limit:	For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.
Test Method	ANSI C63.10-2020, section 7.8.5 Output power test procedure for frequency-hopping spread-spectrum (FHSS) devices

5.1.2 Test Setup Diagram



5.1.3 Test Procedure

This is an RF-conducted test to evaluate maximum peak output power. Use a direct connection between the antenna port of the unlicensed wireless device and the spectrum analyzer, through suitable attenuation.

The hopping shall be disabled for this test:

a) Use the following spectrum analyzer settings:

- 1) Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel.
- 2) RBW > 20 dB bandwidth of the emission being measured.
- 3) VBW >= RBW.
- 4) Sweep: Auto.
- 5) Detector function: Peak.
- 6) Trace: Max hold.

b) Allow trace to stabilize.

c) Use the marker-to-peak function to set the marker to the peak of the emission.

d) The indicated level is the peak output power, after any corrections for external attenuators and cables.

A plot of the test results and setup description shall be included in the test report. NOTE—A peak responding power meter may be used, where the power meter and sensor system video bandwidth is greater than the occupied bandwidth of the unlicensed wireless device, rather than a spectrum analyzer.

5.1.4 Test Data

PASS.

The EUT is part of the C2PC program, pre-tested the conducted output power, the results are lower than or equal to the original value, so the test data were refer to the original report.

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	7.93	0.00621
BT-EDR(2Mbps)	9.25	0.00841
BT-EDR(3Mbps)	9.70	0.00933

Results

Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
BT-BR (1Mbps)	SISO	2402	DH5	7.93	<=20.97	Pass
		2441	DH5	7.67	<=20.97	Pass
		2480	DH5	7.34	<=20.97	Pass
BT-EDR (2Mbps)	SISO	2402	2DH5	8.99	<=20.97	Pass
		2441	2DH5	9.25	<=20.97	Pass
		2480	2DH5	8.94	<=20.97	Pass
BT-EDR (3Mbps)	SISO	2402	3DH5	9.47	<=20.97	Pass
		2441	3DH5	9.70	<=20.97	Pass
		2480	3DH5	9.36	<=20.97	Pass

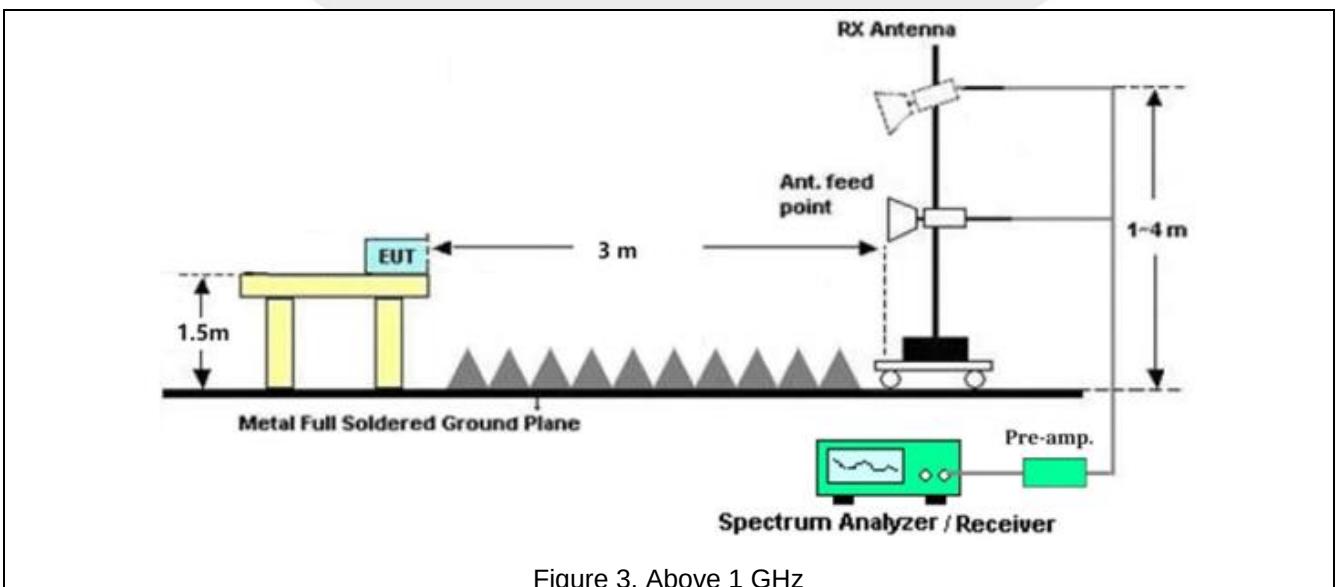
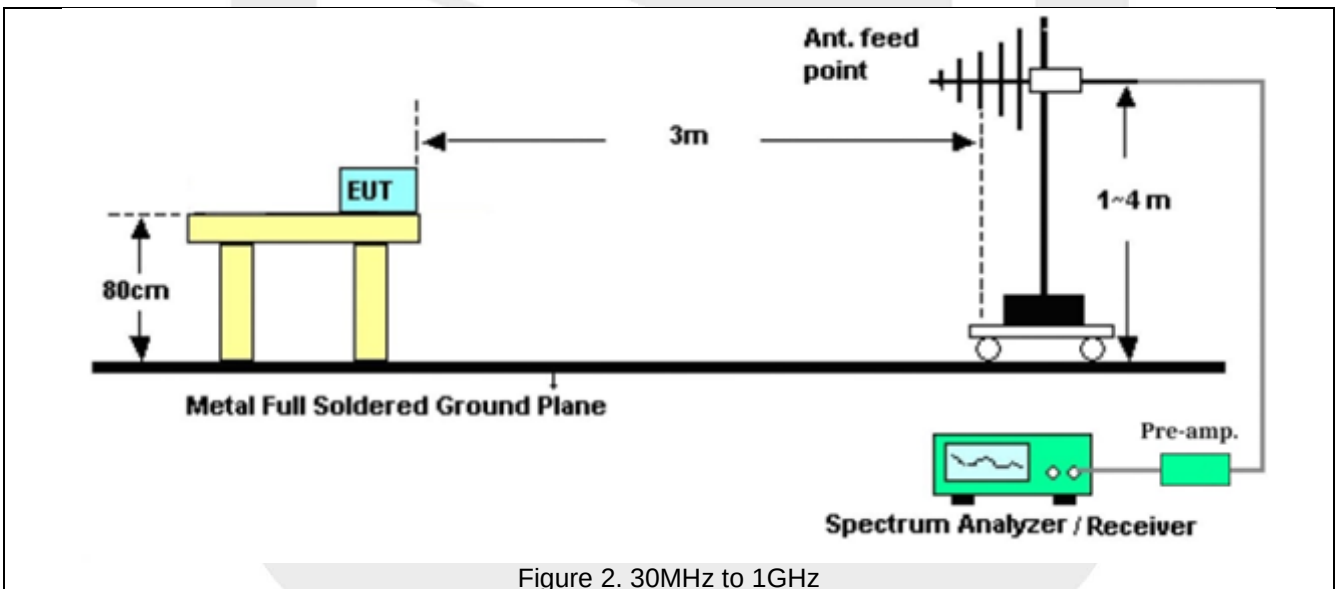
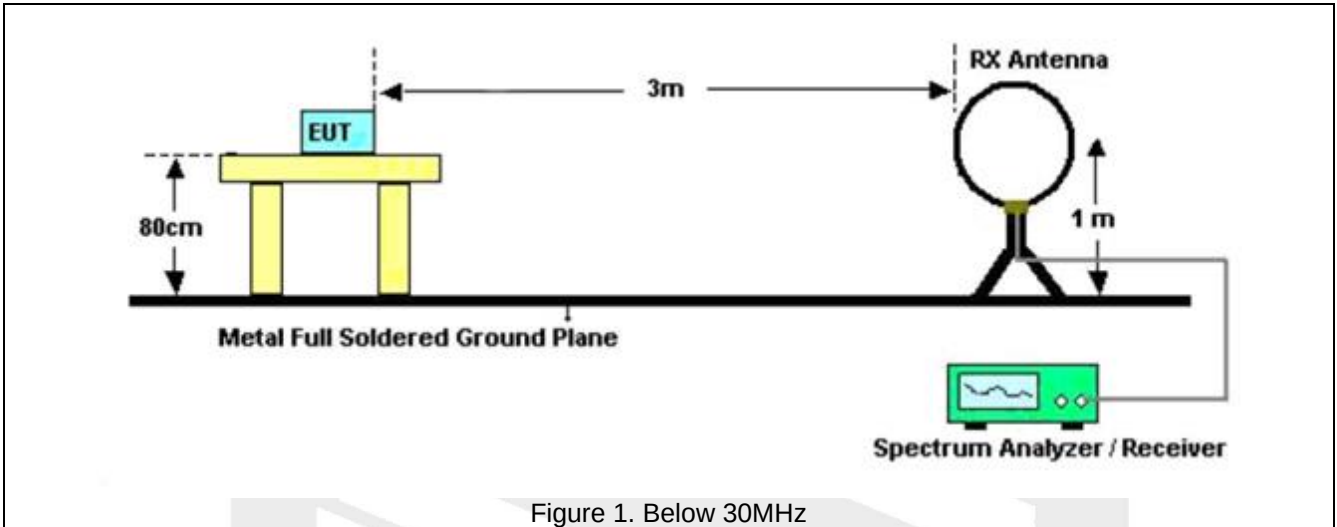
Note1: The antenna gain is 2.73dBi.

5.2 Radiated Spurious Emission

5.2.1 Test Requirement

Test Requirement	In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).		
Test Limit	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241. Note: 1) Field Strength (dBµV/m) = 20*log[Field Strength (µV/m)]. 2) In the emission tables above, the tighter limit applies at the band edges. 3) For Above 1000 MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit. 4) For above 1000 MHz, limit field strength of harmonics: 54dBuV/m@3m (AV) and 74dBuV/m@3m (PK).			
Test Method	ANSI C63.10-2020 section 6.6.4 Radiated emissions tests		

5.2.2 Test Setup Diagram



5.2.3 Test Procedure

The measurement frequency range is from 9 kHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power.

Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

For 9kHz to 150kHz, Set the spectrum analyzer as:

RBW = 200Hz, VBW = 1kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For 150kHz to 30MHz, Set the spectrum analyzer as:

RBW = 9kHz, VBW = 30kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For 30MHz to 1000MHz, Set the spectrum analyzer as:

RBW = 100kHz, VBW = 300kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For above 1GHz, Set the spectrum analyzer as:

RBW = 1MHz, VBW = 1MHz, Detector= Peak, Trace mode= Max hold, Sweep- auto couple.

RBW = 1MHz, VBW = 10Hz, Detector= Average, Trace mode= Max hold, Sweep- auto couple.

For measurement below 1GHz, 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.

5.2.4 Test Data

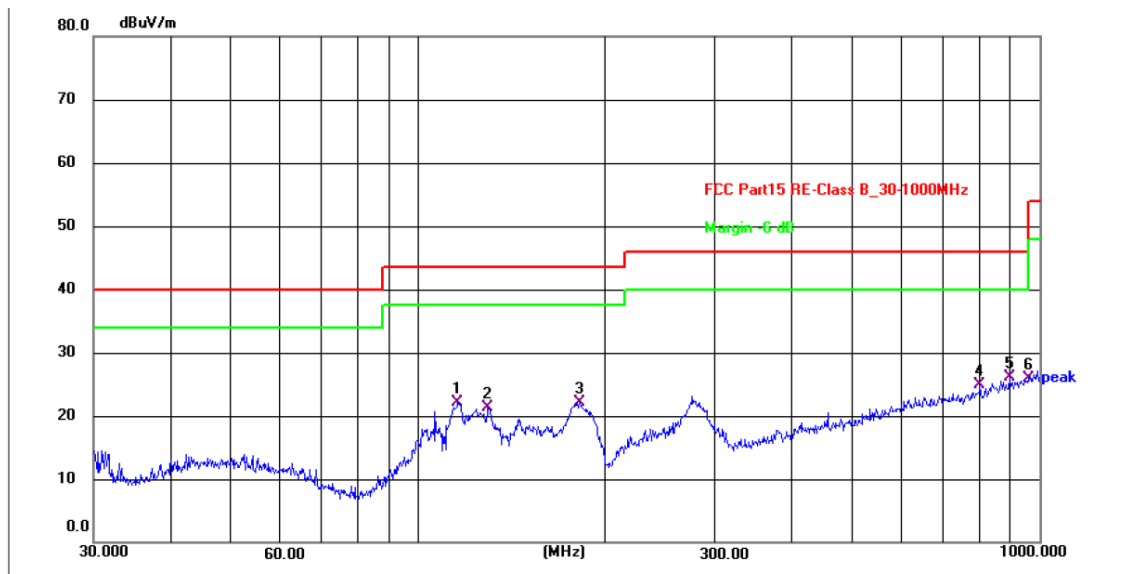
PASS.

The test results of 9kHz-30MHz was attenuated more than 20dB below the permissible limits, so the results don't record in the report.

During the test, for 30MHz to 1000MHz, pre-scan all modulations, and found the BT-BR (1Mbps) with middle channel which is the worst case, only the worst case is recorded in the report.

Radiated Emission Test Data (30-1000MHz)

Test Site:	966 Chamber #1	Polarization:	Horizontal
Distance:	3m	Test Mode:	TM1/ CH Middle



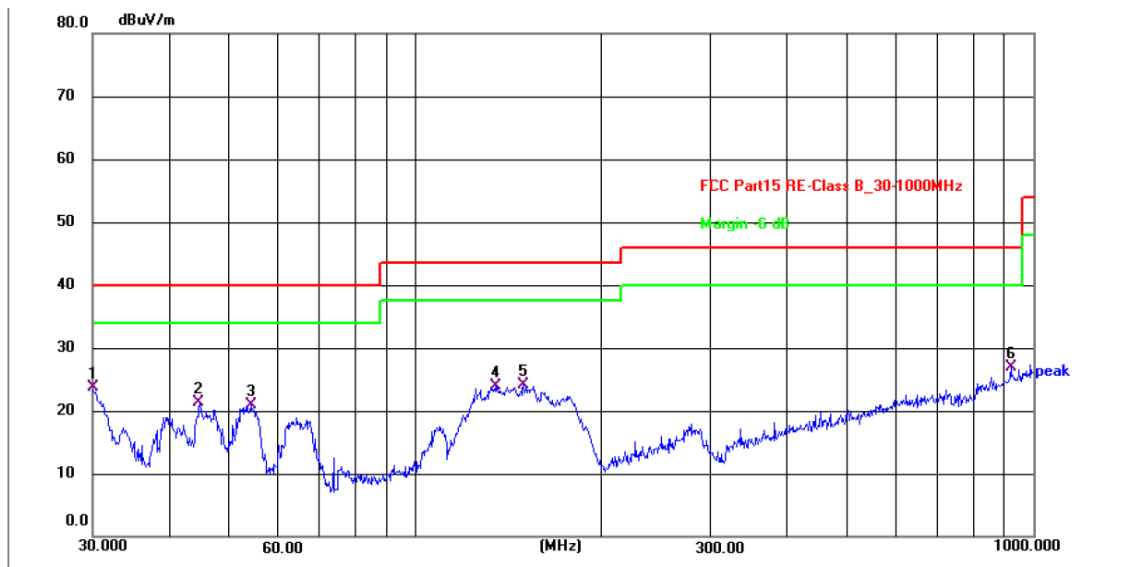
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	115.7256	38.80	-16.67	22.13	43.50	-21.37	QP	P	
2	129.4677	38.74	-17.47	21.27	43.50	-22.23	QP	P	
3	181.9200	38.52	-16.38	22.14	43.50	-21.36	QP	P	
4	801.7862	28.77	-3.94	24.83	46.00	-21.17	QP	P	
5 *	893.8564	28.26	-2.22	26.04	46.00	-19.96	QP	P	
6	958.7943	27.03	-1.16	25.87	46.00	-20.13	QP	P	

Note: Level = Reading + Factor

Margin = Level - Limit

Radiated Emission Test Data (30-1000MHz)

Test Site:	966 Chamber #1	Polarization:	Vertical
Distance:	3m	Test Mode:	TM1/ CH Middle



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	30.0000	40.60	-16.94	23.66	40.00	-16.34	QP	P	
2	44.7433	35.55	-14.29	21.26	40.00	-18.74	QP	P	
3	54.0710	35.29	-14.45	20.84	40.00	-19.16	QP	P	
4	135.0318	41.64	-17.81	23.83	43.50	-19.67	QP	P	
5	149.4857	42.86	-18.67	24.19	43.50	-19.31	QP	P	
6	919.2865	28.84	-2.03	26.81	46.00	-19.19	QP	P	

Note: Level = Reading + Factor

Margin = Level - Limit

Radiated Spurious Emission (1GHz-25GHz)

Test Mode: BT-BR (1Mbps)					CH Low: 2402 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	4804.00	41.14	4.68	45.82	74.00	-28.19	PK	PASS
V	7206.78	33.90	9.84	43.74	74.00	-30.27	PK	PASS
V	9608.62	29.35	13.17	42.52	74.00	-31.49	PK	PASS
V	12010.74	*	*	*	74.00	*	PK	PASS
V	14412.55	*	*	*	74.00	*	PK	PASS
V	16814.35	*	*	*	74.00	*	PK	PASS
H	4804.53	40.96	4.68	45.64	74.00	-28.36	PK	PASS
H	7206.05	35.92	9.84	45.76	74.00	-28.24	PK	PASS
H	9608.26	28.47	13.17	41.64	74.00	-32.37	PK	PASS
H	12010.21	*	*	*	74.00	*	PK	PASS
H	14412.25	*	*	*	74.00	*	PK	PASS
H	16814.15	*	*	*	74.00	*	PK	PASS
V	4804.96	30.59	4.68	35.27	54.00	-18.73	AV	PASS
V	7206.74	24.85	9.84	34.69	54.00	-19.31	AV	PASS
V	9608.34	17.04	13.17	30.21	54.00	-23.80	AV	PASS
V	12010.64	*	*	*	54.00	*	AV	PASS
V	14412.09	*	*	*	54.00	*	AV	PASS
V	16814.20	*	*	*	54.00	*	AV	PASS
H	4804.20	32.73	4.68	37.41	54.00	-16.59	AV	PASS
H	7206.05	24.30	9.84	34.14	54.00	-19.86	AV	PASS
H	9608.26	17.69	13.17	30.86	54.00	-23.15	AV	PASS
H	12010.21	*	*	*	54.00	*	AV	PASS
H	14412.25	*	*	*	54.00	*	AV	PASS
H	16814.15	*	*	*	54.00	*	AV	PASS

Remark:

1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.
2. “*” means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.

Radiated Spurious Emission (1GHz-25GHz)

Test Mode: BT-BR (1Mbps)					CH Middle: 2441 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	4882.71	42.11	4.92	47.03	74.00	-26.98	PK	PASS
V	7323.71	34.32	9.83	44.15	74.00	-29.85	PK	PASS
V	9764.01	28.19	13.22	41.41	74.00	-32.60	PK	PASS
V	12205.49	*	*	*	74.00	*	PK	PASS
V	14646.04	*	*	*	74.00	*	PK	PASS
V	17087.66	*	*	*	74.00	*	PK	PASS
H	4882.42	42.48	4.92	47.40	74.00	-26.61	PK	PASS
H	7323.08	35.19	9.83	45.02	74.00	-28.98	PK	PASS
H	9764.02	28.36	13.22	41.58	74.00	-32.43	PK	PASS
H	12205.61	*	*	*	74.00	*	PK	PASS
H	14646.98	*	*	*	74.00	*	PK	PASS
H	17087.52	*	*	*	74.00	*	PK	PASS
V	4882.84	30.28	4.92	35.20	54.00	-18.80	AV	PASS
V	7323.32	24.89	9.83	34.72	54.00	-19.28	AV	PASS
V	9764.14	19.59	13.22	32.81	54.00	-21.19	AV	PASS
V	12205.16	*	*	*	54.00	*	AV	PASS
V	14646.22	*	*	*	54.00	*	AV	PASS
V	17087.94	*	*	*	54.00	*	AV	PASS
H	4882.42	32.09	4.92	37.01	54.00	-17.00	AV	PASS
H	7323.08	22.88	9.83	32.71	54.00	-21.29	AV	PASS
H	9764.02	18.54	13.22	31.76	54.00	-22.24	AV	PASS
H	12205.61	*	*	*	54.00	*	AV	PASS
H	14646.98	*	*	*	54.00	*	AV	PASS
H	17087.52	*	*	*	54.00	*	AV	PASS

Remark:

1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.
2. “*” means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.

Radiated Spurious Emission (1GHz-25GHz)

Test Mode: BT-BR (1Mbps)					CH High: 2480 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	4960.59	41.15	5.17	46.32	74.00	-27.68	PK	PASS
V	7440.65	34.92	9.83	44.75	74.00	-29.26	PK	PASS
V	9920.95	29.06	13.27	42.33	74.00	-31.67	PK	PASS
V	12400.68	*	*	*	74.00	*	PK	PASS
V	14880.22	*	*	*	74.00	*	PK	PASS
V	17360.01	*	*	*	74.00	*	PK	PASS
H	4960.16	40.67	5.17	45.84	74.00	-28.16	PK	PASS
H	7440.78	34.92	9.83	44.75	74.00	-29.26	PK	PASS
H	9920.32	29.02	13.27	42.29	74.00	-31.71	PK	PASS
H	12400.78	*	*	*	74.00	*	PK	PASS
H	14880.06	*	*	*	74.00	*	PK	PASS
H	17360.86	*	*	*	74.00	*	PK	PASS
V	4960.96	32.07	5.17	37.24	54.00	-16.76	AV	PASS
V	7440.14	24.67	9.83	34.50	54.00	-19.50	AV	PASS
V	9920.84	17.60	13.27	30.87	54.00	-23.13	AV	PASS
V	12400.41	*	*	*	54.00	*	AV	PASS
V	14880.37	*	*	*	54.00	*	AV	PASS
V	17360.44	*	*	*	54.00	*	AV	PASS
H	4960.16	30.94	5.17	36.11	54.00	-17.90	AV	PASS
H	7440.78	23.11	9.83	32.94	54.00	-21.07	AV	PASS
H	9920.32	18.55	13.27	31.82	54.00	-22.18	AV	PASS
H	12400.78	*	*	*	54.00	*	AV	PASS
H	14880.06	*	*	*	54.00	*	AV	PASS
H	17360.86	*	*	*	54.00	*	AV	PASS

Remark:

1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.
2. “*” means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.

Radiated Spurious Emission (1GHz-25GHz)

Test Mode: BT-EDR (2Mbps)					CH Low: 2402 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	4804.35	40.67	4.68	45.35	74.00	-28.66	PK	PASS
V	7206.17	33.42	9.84	43.26	74.00	-30.74	PK	PASS
V	9608.49	29.85	13.17	43.02	74.00	-30.98	PK	PASS
V	12010.27	*	*	*	74.00	*	PK	PASS
V	14412.98	*	*	*	74.00	*	PK	PASS
V	16814.67	*	*	*	74.00	*	PK	PASS
H	4804.84	41.33	4.68	46.01	74.00	-28.00	PK	PASS
H	7206.13	34.49	9.84	44.33	74.00	-29.67	PK	PASS
H	9608.40	28.34	13.17	41.51	74.00	-32.49	PK	PASS
H	12010.08	*	*	*	74.00	*	PK	PASS
H	14412.38	*	*	*	74.00	*	PK	PASS
H	16814.47	*	*	*	74.00	*	PK	PASS
V	4804.21	32.47	4.68	37.15	54.00	-16.86	AV	PASS
V	7206.25	22.92	9.84	32.76	54.00	-21.25	AV	PASS
V	9608.18	18.74	13.17	31.91	54.00	-22.10	AV	PASS
V	12010.44	*	*	*	54.00	*	AV	PASS
V	14412.04	*	*	*	54.00	*	AV	PASS
V	16814.79	*	*	*	54.00	*	AV	PASS
H	4804.12	30.03	4.68	34.71	54.00	-19.30	AV	PASS
H	7206.13	24.23	9.84	34.07	54.00	-19.94	AV	PASS
H	9608.40	18.01	13.17	31.18	54.00	-22.82	AV	PASS
H	12010.08	*	*	*	54.00	*	AV	PASS
H	14412.38	*	*	*	54.00	*	AV	PASS
H	16814.47	*	*	*	54.00	*	AV	PASS

Remark:

1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.
2. “*” means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.

Radiated Spurious Emission (1GHz-25GHz)

Test Mode: BT-EDR (2Mbps)					CH Middle: 2441 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	4882.52	41.88	4.92	46.80	74.00	-27.20	PK	PASS
V	7323.07	33.99	9.83	43.82	74.00	-30.18	PK	PASS
V	9764.05	30.32	13.22	43.54	74.00	-30.47	PK	PASS
V	12205.57	*	*	*	74.00	*	PK	PASS
V	14646.69	*	*	*	74.00	*	PK	PASS
V	17087.89	*	*	*	74.00	*	PK	PASS
H	4882.22	41.87	4.92	46.79	74.00	-27.22	PK	PASS
H	7323.16	35.27	9.83	45.10	74.00	-28.90	PK	PASS
H	9764.99	30.09	13.22	43.31	74.00	-30.69	PK	PASS
H	12205.49	*	*	*	74.00	*	PK	PASS
H	14646.47	*	*	*	74.00	*	PK	PASS
H	17087.53	*	*	*	74.00	*	PK	PASS
V	4882.29	30.81	4.92	35.73	54.00	-18.28	AV	PASS
V	7323.12	24.81	9.83	34.64	54.00	-19.36	AV	PASS
V	9764.80	19.77	13.22	32.99	54.00	-21.01	AV	PASS
V	12205.57	*	*	*	54.00	*	AV	PASS
V	14646.99	*	*	*	54.00	*	AV	PASS
V	17087.08	*	*	*	54.00	*	AV	PASS
H	4882.22	31.75	4.92	36.67	54.00	-17.34	AV	PASS
H	7323.16	24.06	9.83	33.89	54.00	-20.12	AV	PASS
H	9764.99	19.60	13.22	32.82	54.00	-21.18	AV	PASS
H	12205.49	*	*	*	54.00	*	AV	PASS
H	14646.47	*	*	*	54.00	*	AV	PASS
H	17087.53	*	*	*	54.00	*	AV	PASS

Remark:

1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.
2. “*” means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.

Radiated Spurious Emission (1GHz-25GHz)

Test Mode: BT-EDR (2Mbps)					CH High: 2480 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	4960.27	40.57	5.17	45.74	74.00	-28.26	PK	PASS
V	7440.29	35.73	9.83	45.56	74.00	-28.45	PK	PASS
V	9920.38	30.59	13.27	43.86	74.00	-30.14	PK	PASS
V	12400.58	*	*	*	74.00	*	PK	PASS
V	14880.49	*	*	*	74.00	*	PK	PASS
V	17360.02	*	*	*	74.00	*	PK	PASS
H	4960.06	41.34	5.17	46.51	74.00	-27.50	PK	PASS
H	7440.96	35.21	9.83	45.04	74.00	-28.96	PK	PASS
H	9920.40	29.04	13.27	42.31	74.00	-31.69	PK	PASS
H	12400.69	*	*	*	74.00	*	PK	PASS
H	14880.87	*	*	*	74.00	*	PK	PASS
H	17360.14	*	*	*	74.00	*	PK	PASS
V	4960.21	30.27	5.17	35.44	54.00	-18.57	AV	PASS
V	7440.49	22.48	9.83	32.31	54.00	-21.70	AV	PASS
V	9920.39	17.90	13.27	31.17	54.00	-22.83	AV	PASS
V	12400.57	*	*	*	54.00	*	AV	PASS
V	14880.31	*	*	*	54.00	*	AV	PASS
V	17360.38	*	*	*	54.00	*	AV	PASS
H	4960.06	31.98	5.17	37.15	54.00	-16.86	AV	PASS
H	7440.96	22.16	9.83	31.99	54.00	-22.02	AV	PASS
H	9920.40	20.00	13.27	33.27	54.00	-20.73	AV	PASS
H	12400.69	*	*	*	54.00	*	AV	PASS
H	14880.87	*	*	*	54.00	*	AV	PASS
H	17360.14	*	*	*	54.00	*	AV	PASS

Remark:

1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.
2. “*” means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.

Radiated Spurious Emission (1GHz-25GHz)

Test Mode: BT-EDR (3Mbps)					CH Low: 2402 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	4804.19	41.50	4.68	46.18	74.00	-27.83	PK	PASS
V	7206.61	33.71	9.84	43.55	74.00	-30.46	PK	PASS
V	9608.88	30.56	13.17	43.73	74.00	-30.27	PK	PASS
V	12010.89	*	*	*	74.00	*	PK	PASS
V	14412.49	*	*	*	74.00	*	PK	PASS
V	16814.01	*	*	*	74.00	*	PK	PASS
H	4804.74	41.87	4.68	46.55	74.00	-27.46	PK	PASS
H	7206.20	33.34	9.84	43.18	74.00	-30.82	PK	PASS
H	9608.02	30.87	13.17	44.04	74.00	-29.97	PK	PASS
H	12011.00	*	*	*	74.00	*	PK	PASS
H	14412.63	*	*	*	74.00	*	PK	PASS
H	16814.78	*	*	*	74.00	*	PK	PASS
V	4804.32	31.95	4.68	36.63	54.00	-17.37	AV	PASS
V	7206.73	23.31	9.84	33.15	54.00	-20.86	AV	PASS
V	9608.38	19.32	13.17	32.49	54.00	-21.51	AV	PASS
V	12010.10	*	*	*	54.00	*	AV	PASS
V	14412.85	*	*	*	54.00	*	AV	PASS
V	16814.64	*	*	*	54.00	*	AV	PASS
H	4804.32	31.08	4.68	35.76	54.00	-18.24	AV	PASS
H	7206.20	22.68	9.84	32.52	54.00	-21.48	AV	PASS
H	9608.02	19.31	13.17	32.48	54.00	-21.52	AV	PASS
H	12011.00	*	*	*	54.00	*	AV	PASS
H	14412.63	*	*	*	54.00	*	AV	PASS
H	16814.78	*	*	*	54.00	*	AV	PASS

Remark:

1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.
2. “*” means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.

Radiated Spurious Emission (1GHz-25GHz)

Test Mode: BT-EDR (3Mbps)					CH Middle: 2441 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	4882.31	42.11	4.92	47.03	74.00	-26.97	PK	PASS
V	7323.72	35.15	9.83	44.98	74.00	-29.03	PK	PASS
V	9764.54	28.06	13.22	41.28	74.00	-32.73	PK	PASS
V	12205.27	*	*	*	74.00	*	PK	PASS
V	14646.07	*	*	*	74.00	*	PK	PASS
V	17087.85	*	*	*	74.00	*	PK	PASS
H	4882.19	42.85	4.92	47.77	74.00	-26.23	PK	PASS
H	7323.75	34.48	9.83	44.31	74.00	-29.69	PK	PASS
H	9764.09	30.44	13.22	43.66	74.00	-30.34	PK	PASS
H	12205.14	*	*	*	74.00	*	PK	PASS
H	14646.87	*	*	*	74.00	*	PK	PASS
H	17087.98	*	*	*	74.00	*	PK	PASS
V	4882.84	30.65	4.92	35.57	54.00	-18.44	AV	PASS
V	7323.56	23.28	9.83	33.11	54.00	-20.89	AV	PASS
V	9764.45	18.46	13.22	31.68	54.00	-22.32	AV	PASS
V	12205.41	*	*	*	54.00	*	AV	PASS
V	14646.30	*	*	*	54.00	*	AV	PASS
V	17087.69	*	*	*	54.00	*	AV	PASS
H	4882.19	31.00	4.92	35.92	54.00	-18.08	AV	PASS
H	7323.75	23.50	9.83	33.33	54.00	-20.68	AV	PASS
H	9764.09	17.03	13.22	30.25	54.00	-23.76	AV	PASS
H	12205.14	*	*	*	54.00	*	AV	PASS
H	14646.87	*	*	*	54.00	*	AV	PASS
H	17087.98	*	*	*	54.00	*	AV	PASS

Remark:

1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.
2. “*” means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.

Radiated Spurious Emission (1GHz-25GHz)

Test Mode: BT-EDR (3Mbps)					CH High: 2480 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	4960.01	41.41	5.17	46.58	74.00	-27.43	PK	PASS
V	7440.14	33.37	9.83	43.20	74.00	-30.80	PK	PASS
V	9920.18	30.10	13.27	43.37	74.00	-30.63	PK	PASS
V	12400.26	*	*	*	74.00	*	PK	PASS
V	14880.42	*	*	*	74.00	*	PK	PASS
V	17360.65	*	*	*	74.00	*	PK	PASS
H	4960.93	42.31	5.17	47.48	74.00	-26.52	PK	PASS
H	7440.66	35.26	9.83	45.09	74.00	-28.91	PK	PASS
H	9920.62	28.92	13.27	42.19	74.00	-31.82	PK	PASS
H	12400.11	*	*	*	74.00	*	PK	PASS
H	14880.72	*	*	*	74.00	*	PK	PASS
H	17360.87	*	*	*	74.00	*	PK	PASS
V	4960.59	30.10	5.17	35.27	54.00	-18.74	AV	PASS
V	7440.52	24.26	9.83	34.09	54.00	-19.92	AV	PASS
V	9920.09	18.13	13.27	31.40	54.00	-22.61	AV	PASS
V	12400.49	*	*	*	54.00	*	AV	PASS
V	14880.03	*	*	*	54.00	*	AV	PASS
V	17360.91	*	*	*	54.00	*	AV	PASS
H	4960.93	32.15	5.17	37.32	54.00	-16.68	AV	PASS
H	7440.66	22.82	9.83	32.65	54.00	-21.35	AV	PASS
H	9920.62	17.60	13.27	30.87	54.00	-23.13	AV	PASS
H	12400.11	*	*	*	54.00	*	AV	PASS
H	14880.72	*	*	*	54.00	*	AV	PASS
H	17360.87	*	*	*	54.00	*	AV	PASS

Remark:

1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.
2. “*” means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.

ANNEX A TEST SETUP PHOTOS

Please refer to the document "8233EU012101W-AA.PDF"

ANNEX B EXTERNAL PHOTOS

Please refer to the document "8233EU012101W-AB.PDF"

ANNEX C INTERNAL PHOTOS

Please refer to the document "8233EU012101W-AC.PDF"



STATEMENT

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. The report without China inspection body and laboratory Mandatory Approval (CMA) mark has no effect of proving to the society.
3. For the report with CNAS mark or A2LA mark, the items marked with "☆" are not within the accredited scope.
4. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the "inspection and testing dedicated stamp" or test report stamp.
5. The test data and results are only valid for the tested samples provided by the customer.
6. This report shall not be partially reproduced without the written permission of the laboratory.
7. Any objection shall be raised to the laboratory within 30 days after receiving the report.

--- End of Report ---