FCC 47 CFR PART 15 SUBPART C
ISED RSS-247 Issue 4

TEST REPORT

For

WIFI+BT Module

MODEL NUMBER: WKCT1KR2501

REPORT NUMBER: 4792162064-RF-3

ISSUE DATE: April 9, 2026

FCC ID: 2AC23-WKCT1K
IC: 12290A-WKCT1K

Prepared for

Hui Zhou Gaoshengda Technology Co.,LTD
No.6,Qiaoguang Road,Chenjiang Street,Zhongkai High-tech Zone,Huizhou,Guangdong,China

Prepared by

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Room 101, Building 2, No.4, Information Road, Songshan Lake, Dongguan, Guangdong, China

Tel: +86 769 22038881
Fax: +86 769 33244054
Website: www.ul.com

The results reported herein have been performed in accordance with the laboratory's terms of accreditation. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report apply to the test sample(s) mentioned above at the time of the testing period only and are not to be used to indicate applicability to other similar products.

Revision History

Rev.	Issue Date	Revisions	Revised By
V0	April 9, 2026	Initial Issue	

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Summary of Test Results

Test Item	Clause	Limit/Requirement	Result
Antenna Requirement	N/A	FCC Part 15.203/15.247 (c) RSS-GEN Clause 6.8	Pass
AC Power Line Conducted Emission	ANSI C63.10-2020, Clause 6.2	FCC Part 15.207 RSS-GEN Clause 8.8	Pass
Conducted Output Power	ANSI C63.10-2020, Clause 11.9.2.3.1	FCC Part 15.247 (b)(3) RSS-247 Clause 6.3.2	Pass
6dB Bandwidth and 99% Occupied Bandwidth	ANSI C63.10-2020, Clause 11.8.1	FCC Part 15.247 (a)(2) RSS-247 Clause 6.3.1 (a) RSS-Gen Clause 6.7	Pass
Power Spectral Density	ANSI C63.10-2020, Clause 11.10.5	FCC Part 15.247 (e) RSS-247 Clause 6.3.1 (b)	Pass
Conducted Band edge and spurious emission	ANSI C63.10-2020, Clause 11.11	FCC Part 15.247(d) RSS-247 Clause 6.6	Pass
Radiated Band edge and Spurious Emission	ANSI C63.10-2020, Clause 11.12	FCC Part 15.247 (d) FCC Part 15.205/15.209 RSS-247 Clause 6.6 RSS-GEN Clause 8.9	Pass
Duty Cycle	ANSI C63.10-2020, Clause 11.6	None; for reporting purposes only.	Pass

Note:
1. For ISED, this report is also performed according to ANSI C63.10-2020 + Cor.1-2023 + C63.10a-2024 + Errata to C63.10a-2024 standards.
2. For FCC, this report is also performed according to ANSI C63.10-2020 + Cor.1-2023 standards.

*This test report is only published to and used by the applicant, and it is not for evidence purpose in China.
*The measurement result for the sample received is <Pass> according to <FCC 47 CFR PART 15 SUBPART C, ISED RSS-247 Issue 4> when <Simple Acceptance> decision rule is applied. Decision rule for statement of conformity: The measurement uncertainty is not taken into account for statement of conformity.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

CONTENTS

1. ATTESTATION OF TEST RESULTS 6

2. TEST METHODOLOGY 7

3. FACILITIES AND ACCREDITATION 7

4. CALIBRATION AND UNCERTAINTY 8

4.1. MEASURING INSTRUMENT CALIBRATION 8

4.2. MEASUREMENT UNCERTAINTY 8

5. EQUIPMENT UNDER TEST 9

5.1. DESCRIPTION OF EUT 9

5.2. CHANNEL LIST 9

5.3. MAXIMUM POWER 9

5.4. TEST CHANNEL CONFIGURATION 10

5.5. THE WORSE CASE POWER SETTING PARAMETER 10

5.6. WORST-CASE CONFIGURATIONS 11

5.7. DESCRIPTION OF AVAILABLE ANTENNAS 12

5.8. SUPPORT UNITS FOR SYSTEM TEST 13

6. MEASURING EQUIPMENT AND SOFTWARE USED 14

7. ANTENNA PORT TEST RESULTS 17

7.1. CONDUCTED OUTPUT POWER 17

7.2. 6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH 18

7.3. POWER SPECTRAL DENSITY 20

7.4. CONDUCTED BAND EDGE AND SPURIOUS EMISSION 22

7.5. DUTY CYCLE 24

8. RADIATED TEST RESULTS 25

8.1. RESTRICTED BANDEDGE 33

8.2. SPURIOUS EMISSIONS(1 GHZ~3 GHZ) 42

8.3. SPURIOUS EMISSIONS(3 GHZ~18 GHZ) 48

8.4. SPURIOUS EMISSIONS(9 KHZ~30 MHZ) 58

8.5. SPURIOUS EMISSIONS(18 GHZ~26 GHZ) 61

8.6. SPURIOUS EMISSIONS(30 MHZ~1 GHZ) 63

9. ANTENNA REQUIREMENT 65

10. AC POWER LINE CONDUCTED EMISSION 66

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11. TEST DATA 70

11.1. APPENDIX A: DTS BANDWIDTH 70
11.1.1. Test Result 70
11.1.2. Test Graphs 71

11.2. APPENDIX B: OCCUPIED CHANNEL BANDWIDTH 72
11.2.1. Test Result 72
11.2.2. Test Graphs 73

11.3. APPENDIX C: MAXIMUM CONDUCTED OUTPUT POWER 74
11.3.1. Test Result 74

11.4. APPENDIX D: MAXIMUM POWER SPECTRAL DENSITY 75
11.4.1. Test Result 75
11.4.2. Test Graphs 76

11.5. APPENDIX E: BAND EDGE MEASUREMENTS 78
11.5.1. Test Result 78
11.5.2. Test Graphs 79

11.6. APPENDIX F: CONDUCTED SPURIOUS EMISSION 85
11.6.1. Test Result 85
11.6.2. Test Graphs 87

11.7. APPENDIX G: DUTY CYCLE 89
11.7.1. Test Result 89
11.7.2. Test Graphs 90

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name:	Hui Zhou Gaoshengda Technology Co.,LTD
Address:	No.6,Qiaoguang Road,Chenjiang Street,Zhongkai High-tech Zone,Huizhou,Guangdong,China

Manufacturer Information

Company Name:	Hui Zhou Gaoshengda Technology Co.,LTD
Address:	No.6,Qiaoguang Road,Chenjiang Street,Zhongkai High-tech Zone,Huizhou,Guangdong,China

EUT Information

EUT Name:	WIFI+BT Module
Model:	WKCT1KR2501
Brand:	GSD
Sample Received Date:	March 5, 2026
Sample Status:	Normal
Sample ID:	9498185
Date of Tested:	March 5, 2026 to April 9, 2026

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC 47 CFR PART 15 SUBPART C **ISED RSS-247 Issue 4**	**Pass**

Prepared By:

Fanny Huang

Project Engineer

Checked By:

Kebo Zhang

Operations Leader

Approved By:

Stephen Guo

Operations Manager

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

2. TEST METHODOLOGY

All tests were performed in accordance with the standard FCC 47 CFR PART 15 SUBPART C ISED RSS-247 Issue 4, KDB 558074 D01 15.247 Meas Guidance v05r02, KDB 414788 D01 Radiated Test Site v01r01, KDB 662911 D01 Multiple Transmitter Output v02r01, FCC 47 CFR Part 2, ANSI C63.10-2020 + Cor.1-2023, ANSI C63.10-2020 + Cor.1-2023 + C63.10a-2024 + Errata to C63.10a-2024 and ISED RSS-GEN Issue 5

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	**A2LA (Certificate No.: 4102.01)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA. **FCC (FCC Designation No.: CN1187)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules. **ISED (Company No.: 21320)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046. **VCCI (Registration No.: C-20202, G-20240, R-20248 and T-20202)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber E, the VCCI registration No. is G-20240 and R-20248 Shielding Room F, the VCCI registration No. is C-20202 and T-20202

Note 1:
All tests measurement facilities use to collect the measurement data are located at Room 101, Building 2, No.4, Information Road, Songshan Lake, Dongguan, Guangdong, China.

Note 2:
The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd.
Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3:
For below 30 MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30 MHz had been correlated to measurements performed on an OFS.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Conduction emission	3.62 dB
Radiated Emission (Included Fundamental Emission) (9 kHz ~ 30 MHz)	4.36 dB
Radiated Emission (Included Fundamental Emission) (30 MHz ~ 1 GHz)	4.47 dB
Radiated Emission (Included Fundamental Emission) (1 GHz to 26 GHz)	5.65 dB (1 GHz ~ 18 GHz)
	4.73 dB (18 GHz ~ 26 GHz)
Duty Cycle	±0.028%
DTS and 99% Occupied Bandwidth	±0.0196%
Maximum Conducted Output Power	±0.686 dB
Maximum Power Spectral Density Level	±0.743 dB
Conducted Band-edge Compliance	±1.328 dB
Conducted Unwanted Emissions In Non-restricted Frequency Bands	±0.746 dB (9 kHz ~ 1 GHz)
	±1.328dB (1 GHz ~ 26 GHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

Remark: For Radiated Emission measurements (200 MHz - 18 GHz), the EUT support table is made of Expanded Polystyrene (EPS). This material is characterized by a low dielectric constant, as recognized in CISPR 16-1-4, to minimize its influence on field strength measurements. This influence has been considered in the uncertainty budget.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name	WIFI+BT Module
Model	WKCT1KR2501

Frequency Range:	2412 MHz to 2462 MHz
Type of Modulation:	IEEE 802.11b: DSSS(CCK, DQPSK, DBPSK) IEEE 802.11g/n: OFDM(64-QAM, 16-QAM, QPSK, BPSK)
Radio Technology:	IEEE 802.11b/g/n HT20/n HT40
Normal Test Voltage:	DC 3.3 V

5.2. CHANNEL LIST

Channel List For Bandwidth=20 MHz							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	4	2427	7	2442	10	2457
2	2417	5	2432	8	2447	11	2462
3	2422	6	2437	9	2452	/	/

Channel List For Bandwidth=40 MHz							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	2422	5	2432	7	2442	9	2452
4	2427	6	2437	8	2447	/	/

5.3. MAXIMUM POWER

IEEE Std. 802.11	Frequency (MHz)	Channel Number	Maximum Conducted AVG Output Power (dBm)	Maximum AVG EIRP (dBm)
b	2412 ~ 2462	1-11[11]	14.43	16.47
g	2412 ~ 2462	1-11[11]	14.31	16.35
n HT20	2412 ~ 2462	1-11[11]	17.55	19.59
n HT40	2422 ~ 2452	3-9[7]	17.51	19.55

Note:
1. Maximum conducted output power = measured value + cable loss (provided by UL) + cable loss (provided by UL or client)
2. Maximum EIRP = maximum conducted output power + antenna gain

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

5.4. TEST CHANNEL CONFIGURATION

IEEE Std. 802.11	Test Channel Number	Frequency
b	CH 1(Low Channel), CH 6(MID Channel), CH 11(High Channel)	2412 MHz, 2437 MHz, 2462 MHz
g	CH 1(Low Channel), CH 6(MID Channel), CH 11(High Channel)	2412 MHz, 2437 MHz, 2462 MHz
n HT20	CH 1(Low Channel), CH 6(MID Channel), CH 11(High Channel)	2412 MHz, 2437 MHz, 2462 MHz
n HT40	CH 3(Low Channel), CH 6(MID Channel), CH 9(High Channel)	2422 MHz, 2437 MHz, 2452 MHz

5.5. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band							
Test Software		MP Tool					
Modulation Mode	Transmit Antenna Number	Test Channel					
		NCB: 20MHz			NCB: 40MHz		
		CH 1	CH 6	CH 11	CH 3	CH 6	CH 9
802.11b	1	65	68	70	/		
	2	73	75	77			
802.11g	1	55	58	60			
	2	60	63	63			
802.11n HT20	1	58	60	60			
	2	62	64	64			
802.11n HT40	1	/			58	60	60
	2	/			62	64	64

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

5.6. WORST-CASE CONFIGURATIONS

The EUT was tested in the following configuration(s):

Controlled in test mode using a software application on the EUT supplied by customer. The application was used to enable a continuous transmission and to select the mode, test channels, bandwidth, data rates as required.

Test channels referring to section 5.4.

Maximum power setting referring to section 5.5.

Worst-case data rates as provided by the client were:

802.11b mode: 1 Mbps
802.11g mode: 6 Mbps
802.11n HT20 mode: MCS0
802.11n HT40 mode: MCS0

802.11b/g only support SISO mode.
802.11n HT20/HT40 support SISO and MIMO mode.

802.11b/g SISO mode, Antenna 1 and Antenna 2 has the same power setting, so only Antenna 1 worst case test data were recorded in the report.

802.11n SISO mode and MIMO mode have the same power setting, so only the worst case power mode(MIMO) will be record in the report.

The measured additional path loss was included in any path loss calculations for all RF cable used during tested.

Conducted output power, power spectral density tests separately on each port with all supported SISO & MIMO port combinations.

Conducted bandedge and spurious emissions tests were performed with SISO mode, as this port was found to have the worst case in terms of power settings amongst all supported possible SISO & MIMO port combinations.

Radiated emissions tests were performed with the MIMO modes. These were found to be the worst modulation scheme with regards to emissions after preliminary investigations and, as this mode emits the highest conducted output power level, it was deemed to be the worst case.

The EUT support Cyclic Shift Diversity(CDD), Space Time Coding(STBC), Spartial Division Multiplexing(SDM) modes. They use the same conducted power per chain in any given mode, so we only chose the worst case mode CDD for final testing.

Based on ANSI C63.10-2020 section 5.6.2.2(b), for Harmonics and Spurious Emissions, all modes have been tested, only the worst-case power and PSD of 802.11n HT20 mode and 802.11b mode were recorded in the report.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

5.7. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna	Frequency (MHz)	Antenna Type	MAX Antenna Gain (dBi)
1	2412-2462	PIFA Antenna	2.04
2	2412-2462	PIFA antenna	-0.26

Note: The antenna gain is provided by client / obtained through lab tests.

The EUT support Cyclic Shift Diversity(CDD) mode.

MIMO output power port and MIMO PSD port summing were performed in accordance with KDB 662911 D01. For the CDD results the Directional Gain was calculated in accordance with the following mothed.

For output power measurements:
Directional gain= G_{ANT} + Array Gain = 2.04 dBi
G_{ANT} : equal to the gain of the antenna having the highest gain
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$

For power spectral density (PSD) measurements:
Directional gain= G_{ANT} + Array Gain = 5.05 dBi
Array Gain = 10 log(N_{ANT}/N_{SS}) dB.
N_{ANT} : number of transmit antennas
N_{SS} : number of spatial streams, The worst case directional gain will occur when N_{SS} = 1

Test Mode	Transmit and Receive Mode	Description
IEEE 802.11b	☒1TX, 2RX	ANT 1 or ANT 2 can be used as transmitting/receiving antenna.
IEEE 802.11g	☒1TX, 2RX	ANT 1 or ANT 2 can be used as transmitting/receiving antenna.
IEEE 802.11n HT20	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
IEEE 802.11n HT40	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
Note: 1.BT&WLAN 2.4G, BT & WLAN 5G, WLAN 2.4G & WLAN 5G can't transmit simultaneously. (declared by client)		

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

5.8. SUPPORT UNITS FOR SYSTEM TEST

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	Remark
1	PC	Lenovo	E42-80	/
2	AC Adaptor	Lenovo	ADLX65YCC3D	Input: AC 100-240V, 1.8A, 50-60Hz Output: DC 20V, 3.25A,65.0W Max

I/O CABLES

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	USB	/	/	1.0	/

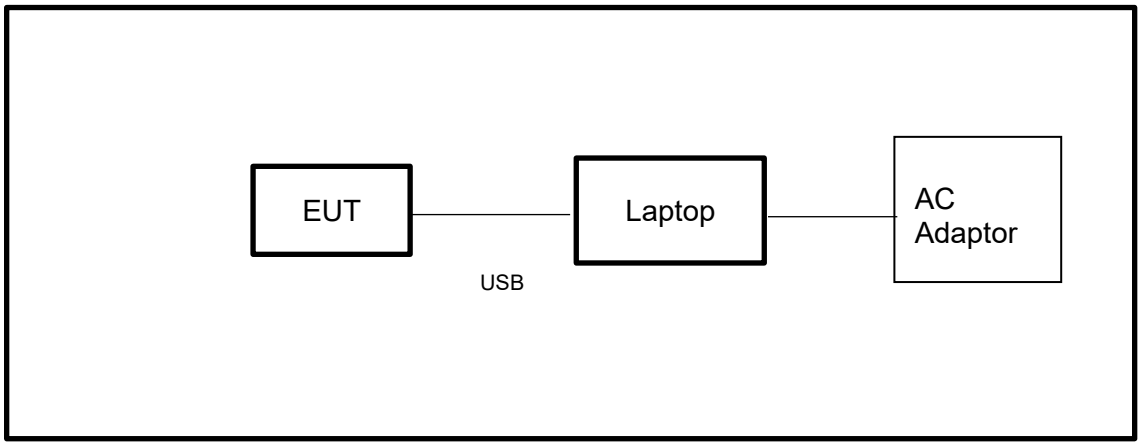
ACCESSORIES

Item	Accessory	Brand Name	Model Name	Description
/	/	/	/	/

TEST SETUP

The EUT can work in engineering mode with a software through a Laptop.

SETUP DIAGRAM FOR TESTS



Note: AC Adaptor only use for AC POWER LINE CONDUCTED EMISSION test.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

6. MEASURING EQUIPMENT AND SOFTWARE USED

R&S TS 8997 Test System					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
Power sensor, Power Meter	R&S	OSP120	100921	Dec.26,2025	Dec.25,2026
Vector Signal Generator	R&S	SMBV100A	261637	Sep.12, 2025	Sep.11, 2026
Signal Generator	R&S	SMB100A	178553	Sep.12, 2025	Sep.11, 2026
Signal Analyzer	R&S	FSV40	101118	Sep.12, 2025	Sep.11, 2026

Software			
Description	Manufacturer	Name	Version
For R&S TS 8997 Test System	Rohde & Schwarz	EMC 32	10.60.10

Tonsend RF Test System					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
Wireless Connectivity Tester	R&S	CMW270	1201.0002N75-102	Sep.12, 2025	Sep.11, 2026
PXA Signal Analyzer	Keysight	N9030A	MY55410512	Sep.12, 2025	Sep.11, 2026
MXG Vector Signal Generator	Keysight	N5182B	MY56200284	Sep.12, 2025	Sep.11, 2026
MXG Vector Signal Generator	Keysight	N5172B	MY56200301	Sep.12, 2025	Sep.11, 2026
DC power supply	TSSTAKASAGO	ZX-400L	409150160137	Sep.12, 2025	Sep.11, 2026
Temperature & Humidity Chamber	SANMOOD	SG-80-CC-2	2088	Sep.12, 2025	Sep.11, 2026
Attenuator	Aglient	8495B	2814a12853	Sep.12, 2025	Sep.11, 2026
RF Control Unit	Tonscend	JS0806-2	23B80620666	Dec.26,2025	Dec.25,2026

Software			
Description	Manufacturer	Name	Version
Tonsend SRD Test System	Tonsend	JS1120-3 RF Test System	V3.2.22

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Conducted Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
EMI Test Receiver	R&S	ESR3	101961	Sep.12, 2025	Sep.11, 2026
Two-Line V-Network	R&S	ENV216	101983	Sep.12, 2025	Sep.11, 2026
Artificial Mains Networks	Schwarzbeck	NSLK 8126	8126465	Sep.12, 2025	Sep.11, 2026
Software					
Description			Manufacturer	Name	Version
Test Software for Conducted Emissions			Farad	EZ-EMC	Ver. UL-3A1

Radiated Emissions(Below 1G)					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Sep.12, 2025	Sep.11, 2026
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	June 28, 2024	June.27 2027
Preamplifier	HP	8447D	2944A09099	Sep.12, 2025	Sep.11, 2026
Loop antenna	Schwarzbeck	1519B	00008	Dec.09, 2024	Dec.08, 2027
Software					
Description			Manufacturer	Name	Version
Test Software for Radiated Emissions			Farad	EZ-EMC	Ver. UL-3A1

Radiated Emissions(Above 1G)					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
Signal Analyzer	R&S	FSV40	101117	Sep.12, 2025	Sep.11, 2026
Preamplifier	TDK	PA-02-001-3000	TRS-302-00051	Sep.12, 2025	Sep.11, 2026
Horn Antenna	ETS-Lindgren	3117	00213191	Jan.29,2026	Jan.28,2029
Preamplifier	TDK	PA-02-0118	TRS-305-00067	Sep.12, 2025	Sep.11, 2026
High Gain Horn Antenna	Schwarzbeck	BBHA-9170	697	Jun. 30, 2024	Jun. 29, 2027
Preamplifier	TDK	PA-02-2	TRS-307-00002	Sep.12, 2025	Sep.11, 2026
Preamplifier	TDK	PA-02-3	TRS-308-00002	Sep.12, 2025	Sep.11, 2026
Highpass Filter	Wainwright	WHKX10-2700-3000-1800-40SS	24	Sep.12, 2025	Sep.11, 2026

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Band Reject Filter	Wainwright	WRCJV8-2350-2400-2483.5-2533.5-40SS	4	Sep.12, 2025	Sep.11, 2026

Software			
Description	Manufacturer	Name	Version
Test Software for Radiated Emission	Tonscend	JS32-RE	5.0.0
Test Software for Radiated Emissions	Farad	EZ-EMC	Ver. UL-3A1

Other Instrument					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Temperature humidity probe	OMEGA	ITHX-SD-5	18470007	Sep.16, 2025	Sep.15, 2026
Barometer	Yiyi	Baro	N/A	Sep.19, 2025	Sep.18, 2026
Attenuator	Agilent	8495B	2814a12853	Sep.12, 2025	Sep.11, 2026

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

7. ANTENNA PORT TEST RESULTS

7.1. CONDUCTED OUTPUT POWER

LIMITS

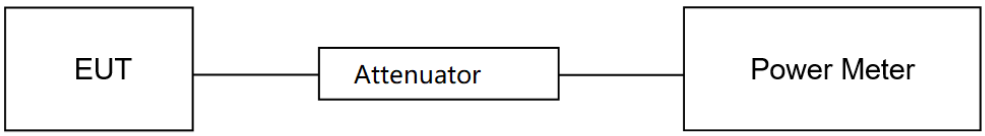
FCC 47 CFR Part15 (15.247) Subpart C ISED RSS-247 ISSUE 4			
Section	Test Item	Limit	Frequency Range (MHz)
FCC 47 CFR 15.247(b)(3) ISED RSS-247 6.3.2	AVG Output Power	1 watt or 30 dBm	2400-2483.5

TEST PROCEDURE

Refer to ANSI C63.10-2020 clause 11.9.2.3.1.

Connect the EUT to a low loss RF cable from the antenna port to the power sensor (video bandwidth is greater than the occupied bandwidth).
Measure peak emission level, the indicated level is the average output power, after any corrections for external attenuators and cables.
The test result in dBm by adding [10 log (1 / D)], where D is the duty cycle.

TEST SETUP



TEST ENVIRONMENT

Temperature	25.5℃	Relative Humidity	52.8%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.3V

TEST DATE / ENGINEER

Test Date	March 16, 2026	Test By	Bairong Liu

TEST RESULTS

Please refer to section "Test Data" - Appendix C

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

7.2. 6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH

LIMITS

FCC 47 CFR Part15 (15.247) Subpart C ISED RSS-247 ISSUE 4			
Section	Test Item	Limit	Frequency Range (MHz)
FCC 47 CFR 15.247(a)(2) ISED RSS-247 6.3.1(a)	6 dB Bandwidth	≥ 500 kHz	2400-2483.5
ISED RSS-Gen Clause 6.7	99 % Occupied Bandwidth	For reporting purposes only.	2400-2483.5

TEST PROCEDURE

Refer to ANSI C63.10-2020 clause 11.8 for DTS bandwidth and clause 6.9 for Occupied Bandwidth.

Connect the EUT to the spectrum analyzer and use the following settings:

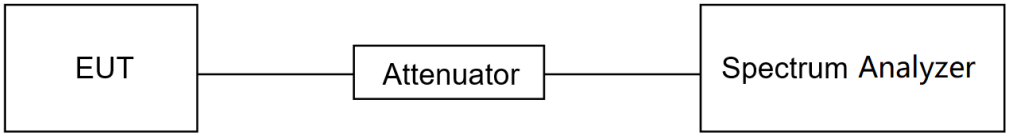
Center Frequency	The center frequency of the channel under test
Frequency Span	For 6 dB Bandwidth: Enough to capture all products of the modulation carrier emission For 99 % Occupied Bandwidth: Between 1.5 times and 5.0 times the OBW
Detector	Peak
RBW	For 6 dB Bandwidth: 1 % to 5 % of the OBW but not less than 100 kHz For 99 % Occupied Bandwidth: 1 % to 5 % of the occupied bandwidth
VBW	For 6 dB Bandwidth: ≥3 × RBW For 99 % Occupied Bandwidth: ≥3 × RBW
Trace	Max hold
Sweep	Auto couple

a) Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.

b) Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TEST SETUP



TEST ENVIRONMENT

Temperature	25.5℃	Relative Humidity	52.8%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.3V

TEST DATE / ENGINEER

Test Date	March 16, 2026	Test By	Bairong Liu

TEST RESULTS

Please refer to section "Test Data" - Appendix A&B

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

7.3. POWER SPECTRAL DENSITY

LIMITS

FCC 47 CFR Part15 (15.247) Subpart C ISED RSS-247 ISSUE 4			
Section	Test Item	Limit	Frequency Range (MHz)
FCC 47 CFR §15.247 (e) ISED RSS-247 6.3.1 (b)	Power Spectral Density	8 dBm in any 3 kHz band	2400-2483.5

TEST PROCEDURE

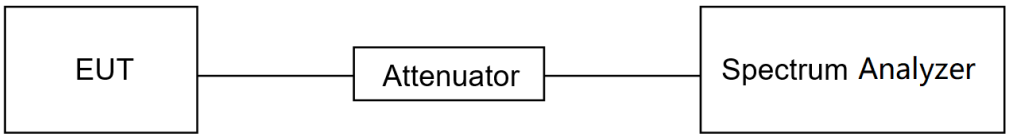
Refer to ANSI C63.10-2020 clause 11.10.5.

Connect the EUT to the spectrum analyzer and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	power averaging (rms)
RBW	3 kHz ≤ RBW ≤ 100 kHz
VBW	≥3 × RBW
Span	>1.5 x OBW bandwidth
Trace	Employ trace averaging(rms)mode over a minimum of 100 traces
Sweep time	Auto couple

Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.
If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST SETUP



This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TEST ENVIRONMENT

Temperature	25.5℃	Relative Humidity	52.8%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.3V

TEST DATE / ENGINEER

Test Date	March 16, 2026	Test By	Bairong Liu

TEST RESULTS

Please refer to section "Test Data" - Appendix D

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

7.4. CONDUCTED BAND EDGE AND SPURIOUS EMISSION

LIMITS

FCC 47 CFR Part15 (15.247) Subpart C ISED RSS-247 ISSUE 4		
Section	Test Item	Limit
FCC 47 CFR §15.247 (d) ISED RSS-247 6.6	Conducted Bandedge and Spurious Emissions	at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

TEST PROCEDURE

Refer to ANSI C63.10-2020 clause 11.11.

Connect the EUT to the spectrum analyzer and use the following settings for reference level measurement:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	100 kHz
VBW	≥3 × RBW
Span	≥1.5 x DTS bandwidth
Trace	Max hold
Sweep time	No faster than coupled (auto) time

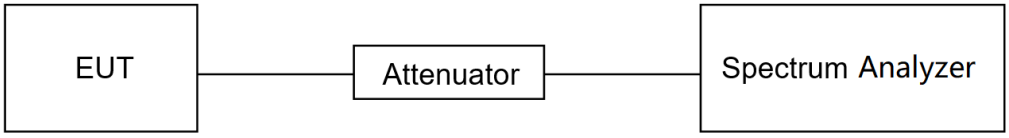
Allow trace to fully stabilize and use the peak marker function to determine the maximum PSD level.
Change the settings for emission level measurement:

Span	Set the center frequency and span to encompass frequency range to be measured
Detector	Peak
RBW	100 kHz
VBW	≥3 × RBW
measurement points	≥span/RBW
Trace	Max hold
Sweep time	No faster than coupled (auto) time

Allow trace to fully stabilize and use the peak marker function to determine the maximum PSD level. Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TEST SETUP



TEST ENVIRONMENT

Temperature	25.5℃	Relative Humidity	52.8%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.3V

TEST DATE / ENGINEER

Test Date	March 16, 2026	Test By	Bairong Liu

TEST RESULTS

Please refer to section "Test Data" - Appendix E&F

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

7.5. DUTY CYCLE

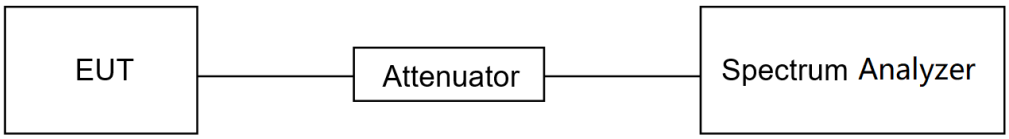
LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Refer to ANSI C63.10-2020 clause 11.6 Zero – Span Spectrum Analyzer method.

TEST SETUP



TEST ENVIRONMENT

Temperature	25.5℃	Relative Humidity	52.8%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.3V

TEST DATE / ENGINEER

Test Date	March 16, 2026	Test By	Bairong Liu

TEST RESULTS

Please refer to section "Test Data" - Appendix G

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8. RADIATED TEST RESULTS

LIMITS

Please refer to FCC 47 CFR §15.205 and §15.209.

Please refer to ISED RSS-GEN Clause 8.9 and Clause 8.10.

Radiation Disturbance Test Limit for FCC (Class B) (9 kHz ~ 1 GHz)

Emissions radiated outside of the specified frequency bands above 30 MHz			
Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m	
		Quasi-Peak	
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	
Above 1000	500	Peak	Average
		74	54

FCC Emissions radiated outside of the specified frequency bands below 30 MHz		
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

ISED General field strength limits at frequencies below 30 MHz

Table 6 – General field strength limits at frequencies below 30 MHz		
Frequency	**Magnetic field strength (H-Field) (µA/m)**	**Measurement distance (m)**
9 - 490 kHz[Note 1]	6.37/F (F in kHz)	300
490 - 1705 kHz	63.7/F (F in kHz)	30
1.705 - 30 MHz	0.08	30

Note 1: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

ISED Restricted bands please refer to ISED RSS-GEN Clause 8.10

Table 7 – Restricted frequency bands[Note 1]		
MHz	MHz	GHz
0.090 - 0.110	149.9 - 150.05	9.0 - 9.2
0.495 - 0.505	156.52475 - 156.52525	9.3 - 9.5
2.1735 - 2.1905	156.7 - 156.9	10.6 - 12.7
3.020 - 3.026	162.0125 - 167.17	13.25 - 13.4
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5
4.17725 - 4.17775	240 – 285	15.35 - 16.2
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4
5.677 - 5.683	399.9 - 410	22.01 - 23.12
6.215 - 6.218	608 - 614	23.6 - 24.0
6.26775 - 6.26825	960 - 1427	31.2 - 31.8
6.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5
8.291 - 8.294	1645.5 - 1646.5	Above 38.6
8.362 - 8.366	1660 - 1710	
8.37625 - 8.38675	1718.8 - 1722.2	
8.41425 - 8.41475	2200 - 2300	
12.29 - 12.293	2310 - 2390	
12.51975 - 12.52025	2483.5 - 2500	
12.57675 - 12.57725	2655 - 2900	
13.36 - 13.41	3260 – 3267	
16.42 - 16.423	3332 - 3339	
16.69475 - 16.69525	3345.8 - 3358	
16.80425 - 16.80475	3500 - 4400	
25.5 - 25.67	4500 - 5150	
37.5 - 38.25	5350 - 5460	
73 - 74.6	7250 - 7750	
74.8 - 75.2	8025 – 8500	
108 – 138		

Note 1: Certain frequency bands listed in table 7 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

FCC Restricted bands of operation refer to FCC 47 CFR §15.205 (a):

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	([2])
13.36-13.41			

Note: [1]Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.
[2]Above 38.6c

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TEST PROCEDURE

Below 30 MHz

The setting of the spectrum analyzer

RBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
VBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
Sweep	Auto

1. The testing follows the guidelines in ANSI C63.10-2020 clause 6.4.

2. The EUT was arranged to its worst case and then 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. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80 cm above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1 m height antenna tower.

5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz Radiated emission limits in these three bands are based on measurements employing an average detector.

6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode re-measured. 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 and average detector and reported.

7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.

8. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377Ω. For example, the measurement frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to Y-51.5 = Z dBuA/m, which has the same margin, W dB, to the corresponding RSS-GEN Table 6 limit as it has to be 15.209(a) limit.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Below 1 GHz and above 30 MHz

The setting of the spectrum analyzer

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2020 clause 6.5.

2. 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. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80 cm above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. 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.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Above 1 GHz

The setting of the spectrum analyzer

RBW	1 MHz
VBW	PEAK: 3 MHz AVG: see note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2020 clause 6.6.

2. 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. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

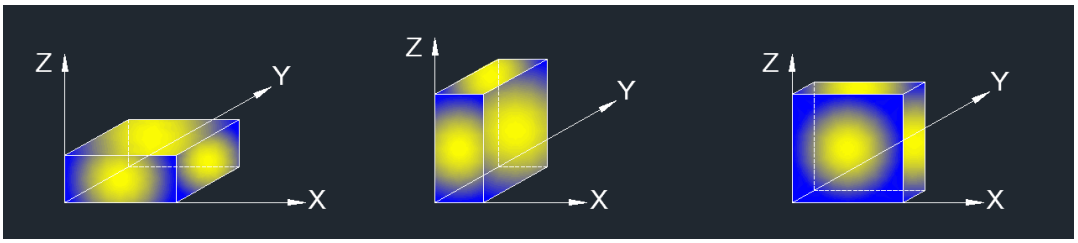
3. The EUT was placed on a turntable with 1.5 m above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement above 1 GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.

6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 7.5. ON TIME AND DUTY CYCLE.

X axis, Y axis, Z axis positions:



Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

For Restricted Bandedge:
Note:
1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. PK=Peak: Peak detector.
4. AV=Average: VBW=1/Ton, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.5.
6. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
7. Both horizontal and vertical have been tested, only the worst data was recorded in the report.
8. All modes have been tested, but only the worst data was recorded in the report.

For Radiate Spurious emission (9 kHz ~ 30 MHz):
Note:
1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the QP limit, the QP result is deemed to comply with QP limit.
3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.
4. All modes have been tested, but only the worst data was recorded in the report.
5. dBuA/m= dBuV/m- 20Log10[120π] = dBuV/m- 51.5

For Radiate Spurious Emission (30 MHz ~ 1 GHz):
Note:
1. Result Level = Read Level + Correct Factor.
2. If the peak values are less than the QP limit, the QP result is deemed to comply with QP limit.
3. All modes have been tested, but only the worst data was recorded in the report.

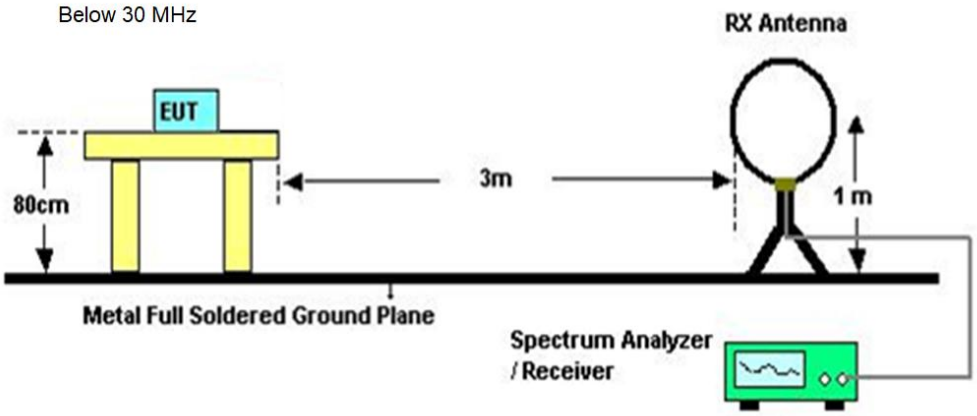
For Radiate Spurious Emission (1 GHz ~ 3 GHz):
Note:
1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.5.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. All modes have been tested, but only the worst data was recorded in the report.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

For Radiate Spurious Emission (3 GHz ~ 18 GHz):
Note:
1. Peak Result = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.5.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. All modes have been tested, but only the worst data was recorded in the report.

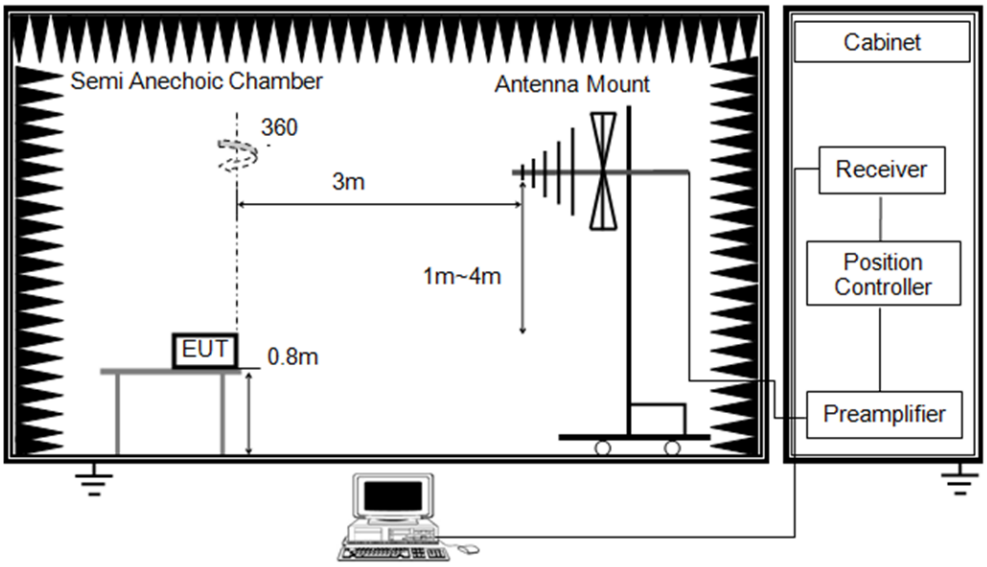
For Radiate Spurious emission (18 GHz ~ 26 GHz):
Note:
1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. All modes have been tested, but only the worst data was recorded in the report.

TEST SETUP

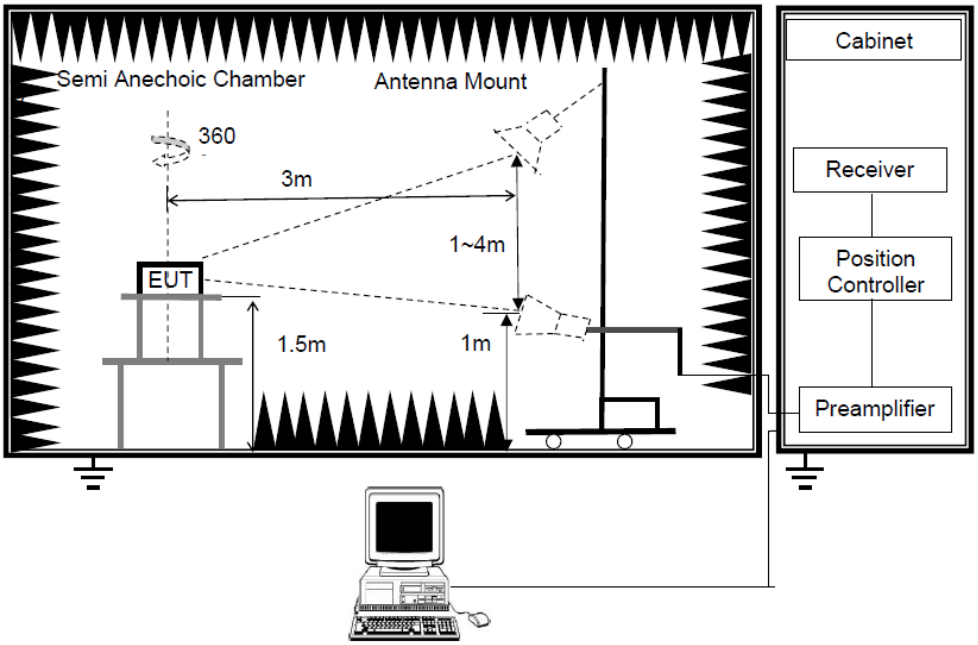


This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Below 1 GHz and above 30 MHz



Above 1GHz



TEST ENVIRONMENT

Temperature	22.9℃	Relative Humidity	58%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.3V

TEST DATE / ENGINEER

Test Date	March 20, 2026	Test By	Leslie Xie

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

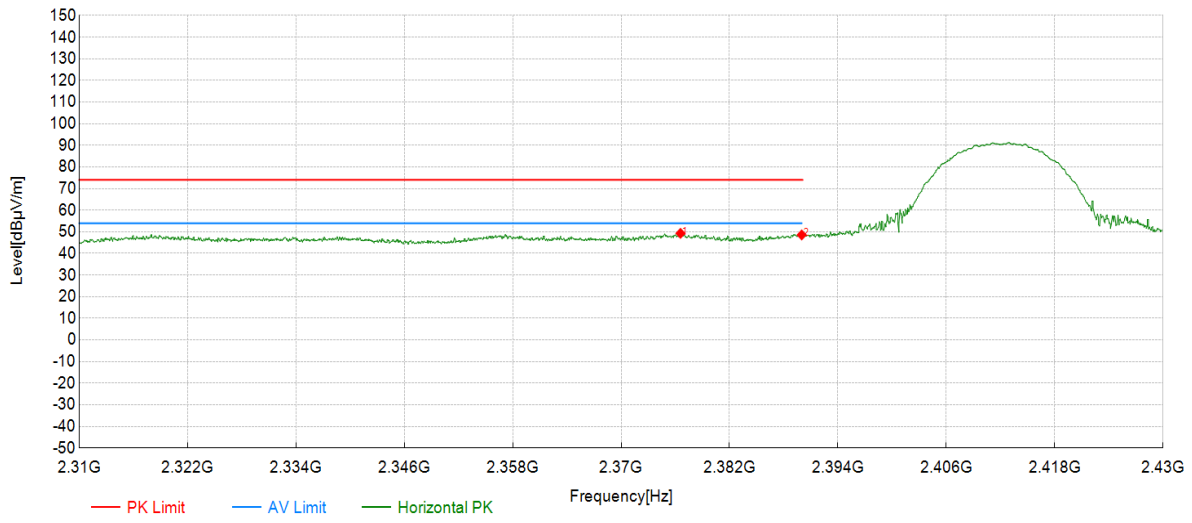
TEST RESULTS

8.1. RESTRICTED BANDEDGE

TX Radiated Test Result

Project Information			
Test Mode	802.11b	Frequency	2412
Bandwidth	20M	Polarity	H
Environment	Temp: 22.9℃; Humi:58%	Test Date	2026-03-20
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	2376.57	40.77	49.29	8.52	74.00	-24.71	PK	Horizontal	PASS
2	2390.00	39.86	48.56	8.70	74.00	-25.44	PK	Horizontal	PASS

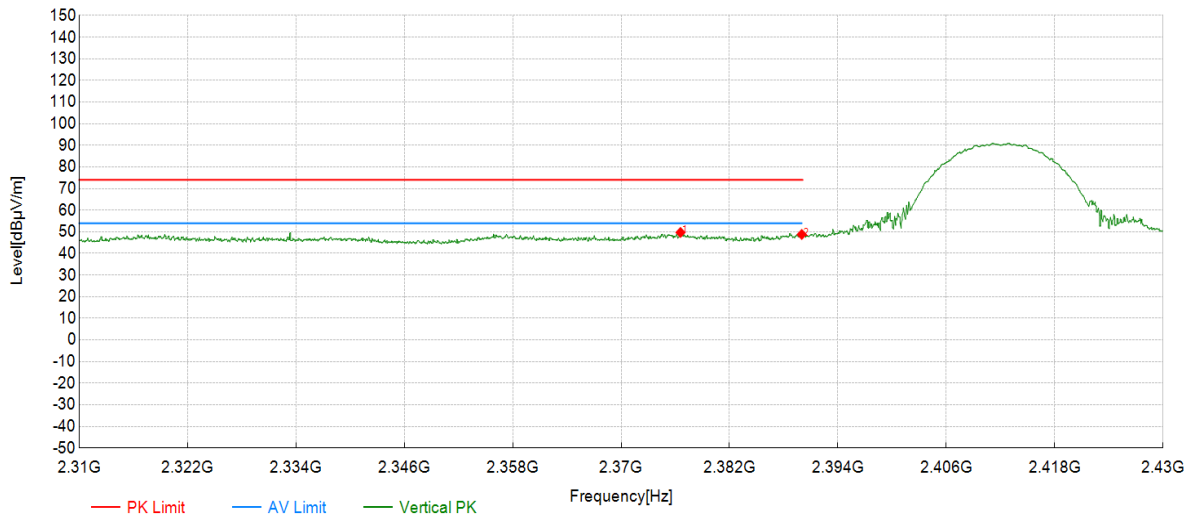
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11b	Frequency	2412
Bandwidth	20M	Polarity	V
Environment	Temp: 22.9℃; Humi:58%	Test Date	2026-03-20
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	2376.57	40.75	49.27	8.52	74.00	-24.73	PK	Vertical	PASS
2	2390.00	40.09	48.79	8.70	74.00	-25.21	PK	Vertical	PASS

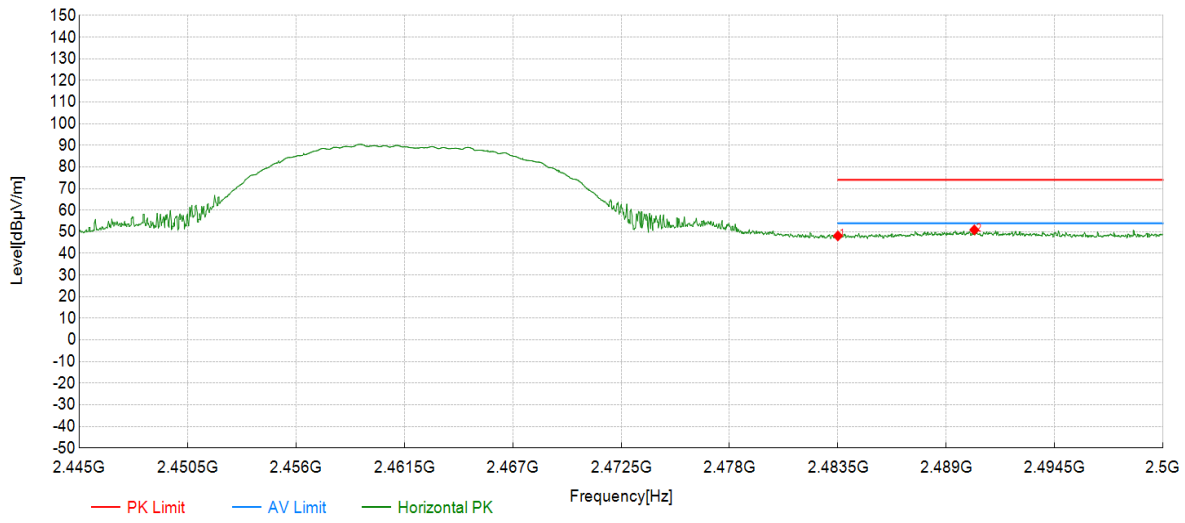
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11b	Frequency	2462
Bandwidth	20M	Polarity	H
Environment	Temp: 22.9℃; Humi:58%	Test Date	2026-03-20
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	2483.50	38.13	48.12	9.99	74.00	-25.88	PK	Horizontal	PASS
2	2490.43	40.80	50.88	10.08	74.00	-23.12	PK	Horizontal	PASS

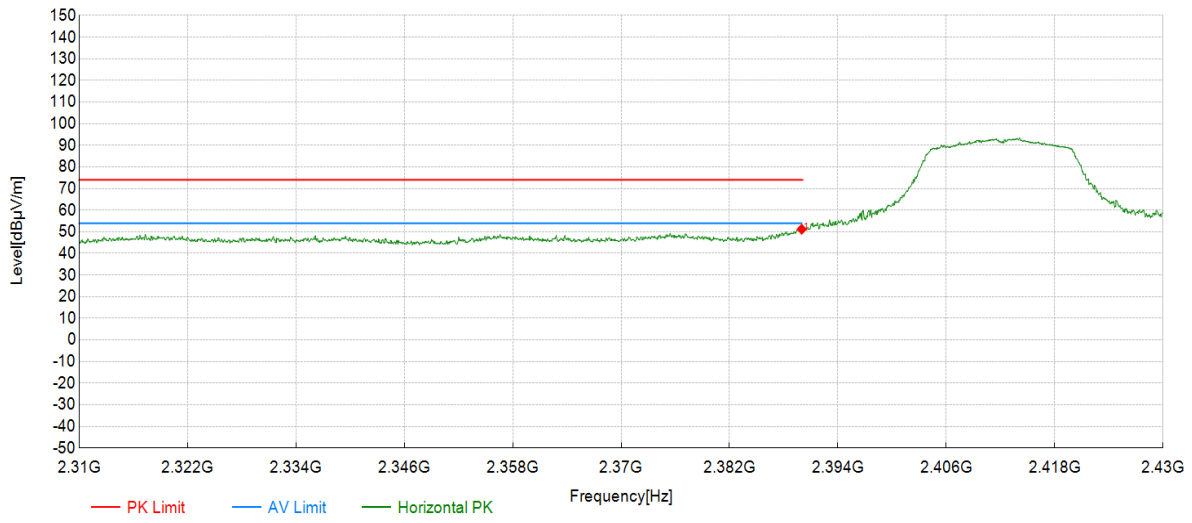
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11g	Frequency	2412
Bandwidth	20M	Polarity	H
Environment	Temp: 22.9℃; Humi:58%	Test Date	2026-03-20
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	2390.00	42.50	51.20	8.70	74.00	-22.80	PK	Horizontal	PASS

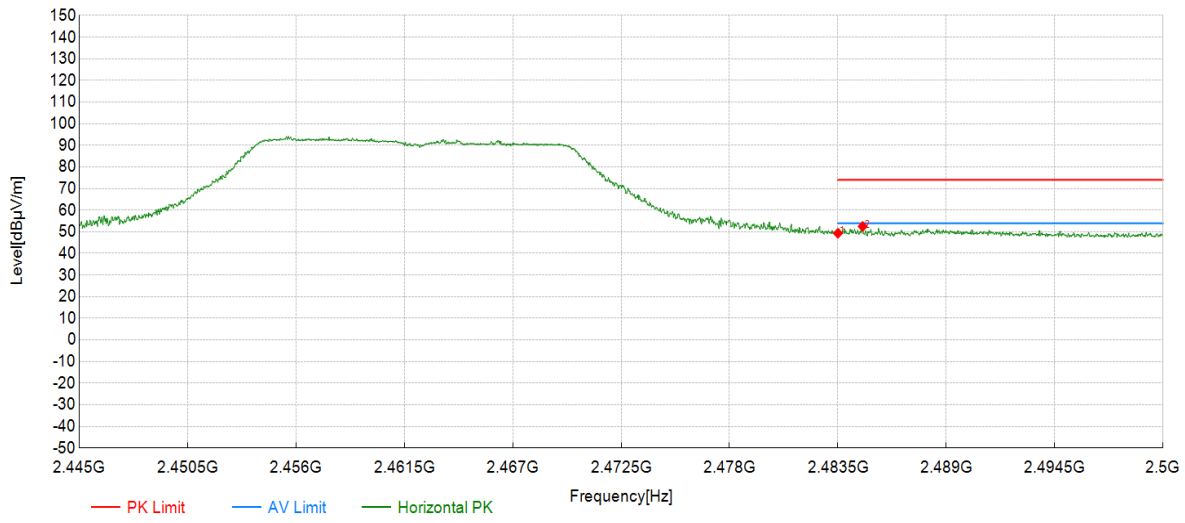
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11g	Frequency	2462
Bandwidth	20M	Polarity	H
Environment	Temp: 22.9℃; Humi:58%	Test Date	2026-03-20
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	2483.50	39.32	49.31	9.99	74.00	-24.69	PK	Horizontal	PASS
2	2484.76	42.48	52.49	10.01	74.00	-21.51	PK	Horizontal	PASS

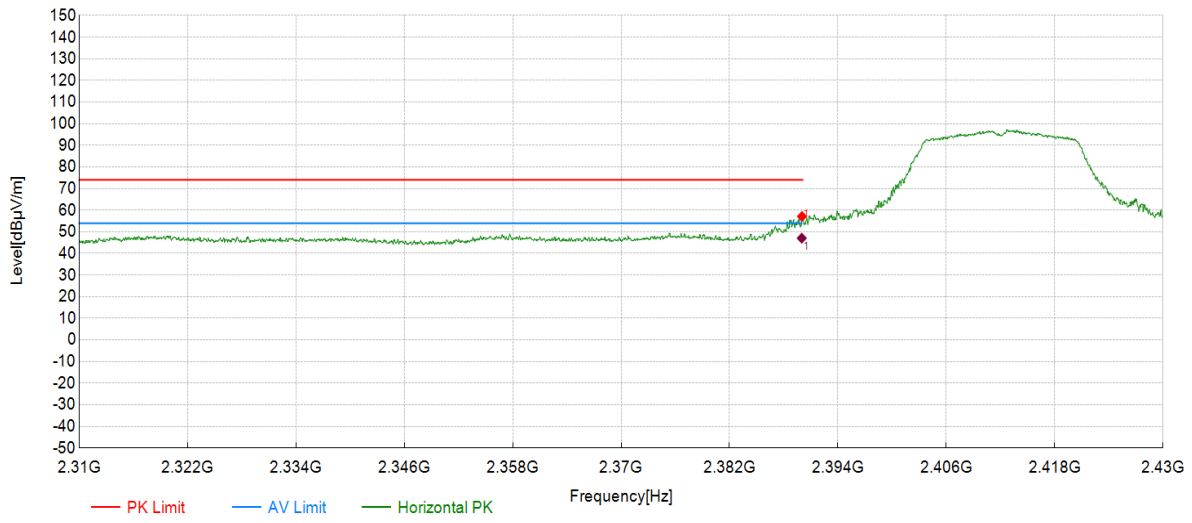
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11n HT	Frequency	2412
Bandwidth	20M	Polarity	H
Environment	Temp: 22.9℃; Humi:58%	Test Date	2026-03-20
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	2390.02	48.43	57.13	8.70	74.00	-16.87	PK	Horizontal	PASS

AVG Data List								
NO.	Frequency [MHz]	Factor [dB/m]	AV Reading [dBµV/m]	AV Value [dBµV/m]	AV Limit [dBµV/m]	AV Margin [dB]	Polarity	Verdict
1	2390.00	8.70	38.36	47.06	54.00	-6.94	Horizontal	PASS

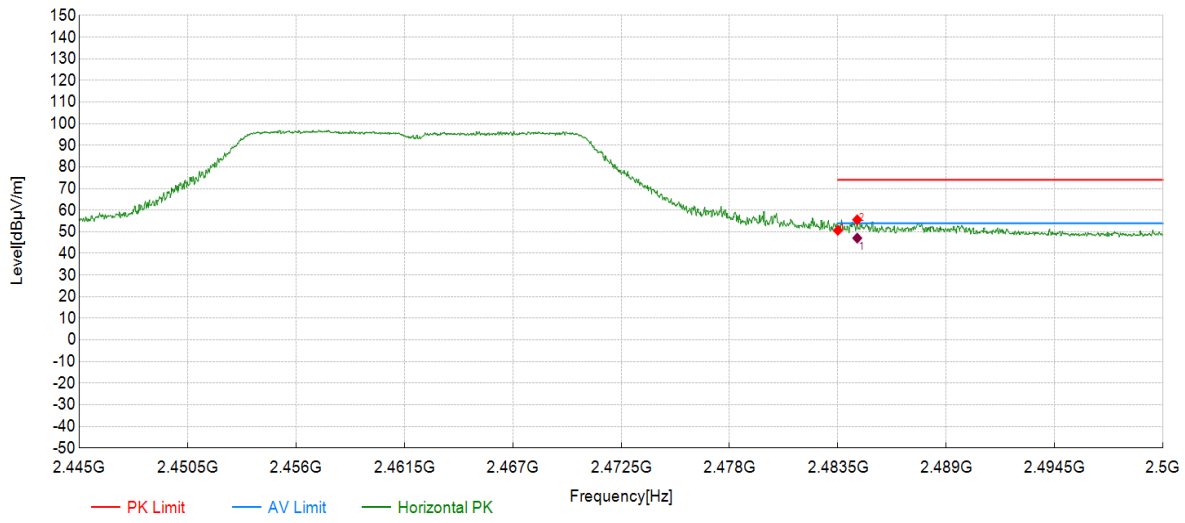
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11n HT	Frequency	2462
Bandwidth	20M	Polarity	H
Environment	Temp: 22.9℃; Humi:58%	Test Date	2026-03-20
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	2483.50	40.67	50.66	9.99	74.00	-23.34	PK	Horizontal	PASS
2	2484.48	45.58	55.59	10.01	74.00	-18.41	PK	Horizontal	PASS

AVG Data List								
NO.	Frequency [MHz]	Factor [dB/m]	AV Reading [dBµV/m]	AV Value [dBµV/m]	AV Limit [dBµV/m]	AV Margin [dB]	Polarity	Verdict
1	2484.48	10.01	37.07	47.08	54.00	-6.92	Horizontal	PASS

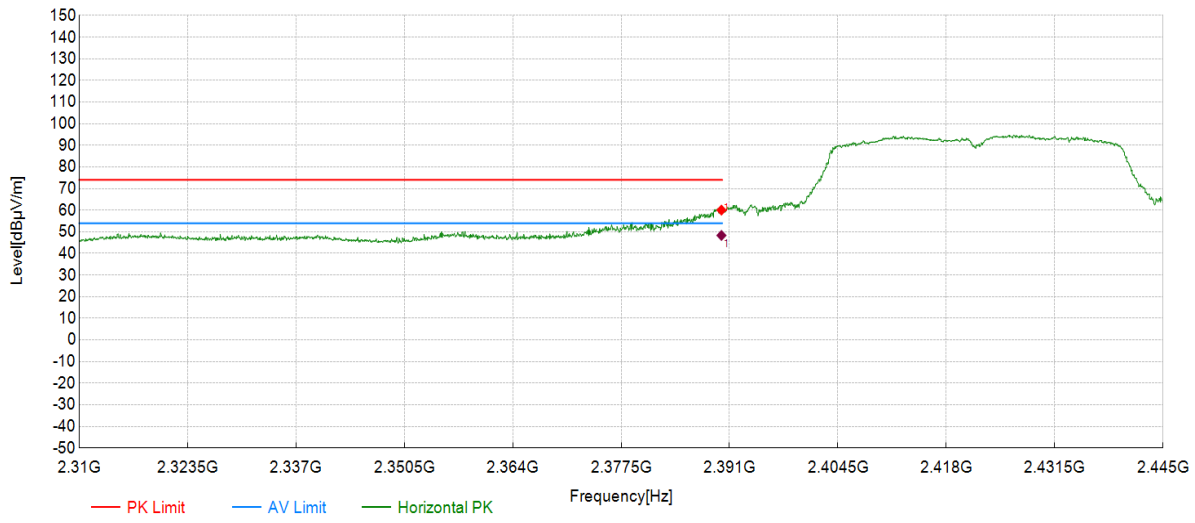
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11n HT	Frequency	2422
Bandwidth	40M	Polarity	H
Environment	Temp: 22.9℃; Humi:58%	Test Date	2026-03-20
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	2390.00	51.34	60.04	8.70	74.00	-13.96	PK	Horizontal	PASS

AVG Data List								
NO.	Frequency [MHz]	Factor [dB/m]	AV Reading [dBµV/m]	AV Value [dBµV/m]	AV Limit [dBµV/m]	AV Margin [dB]	Polarity	Verdict
1	2390.00	8.69	39.65	48.34	54.00	-5.66	Horizontal	PASS

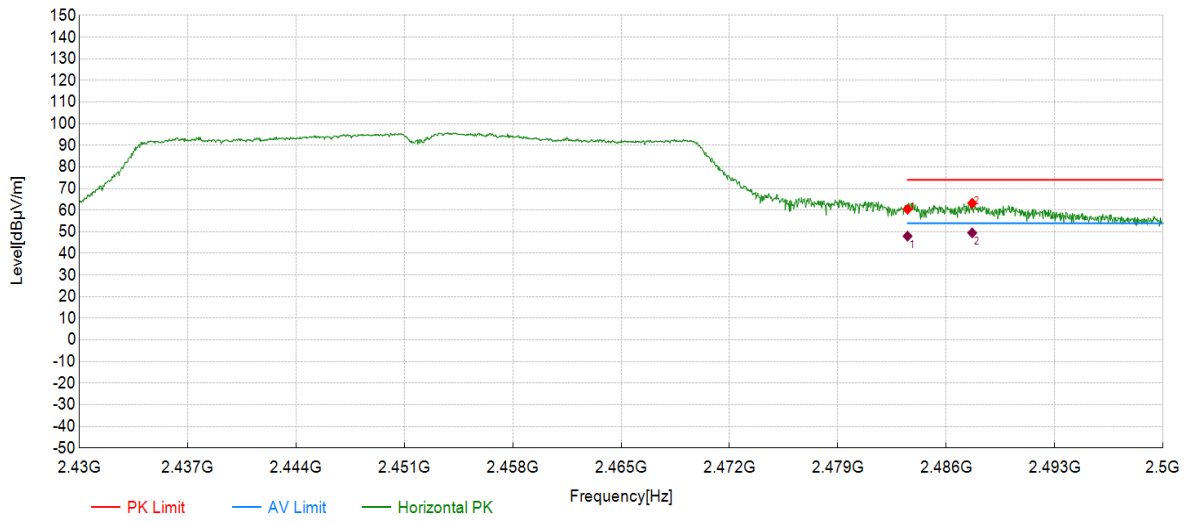
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11n HT	Frequency	2452
Bandwidth	40M	Polarity	H
Environment	Temp: 22.9℃; Humi:58%	Test Date	2026-03-20
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	2483.50	50.43	60.42	9.99	74.00	-13.58	PK	Horizontal	PASS
2	2487.67	53.17	63.22	10.05	74.00	-10.78	PK	Horizontal	PASS

AVG Data List								
NO.	Frequency [MHz]	Factor [dB/m]	AV Reading [dBµV/m]	AV Value [dBµV/m]	AV Limit [dBµV/m]	AV Margin [dB]	Polarity	Verdict
1	2483.50	9.99	38.00	47.99	54.00	-6.01	Horizontal	PASS
2	2487.67	10.05	39.46	49.51	54.00	-4.49	Horizontal	PASS

Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

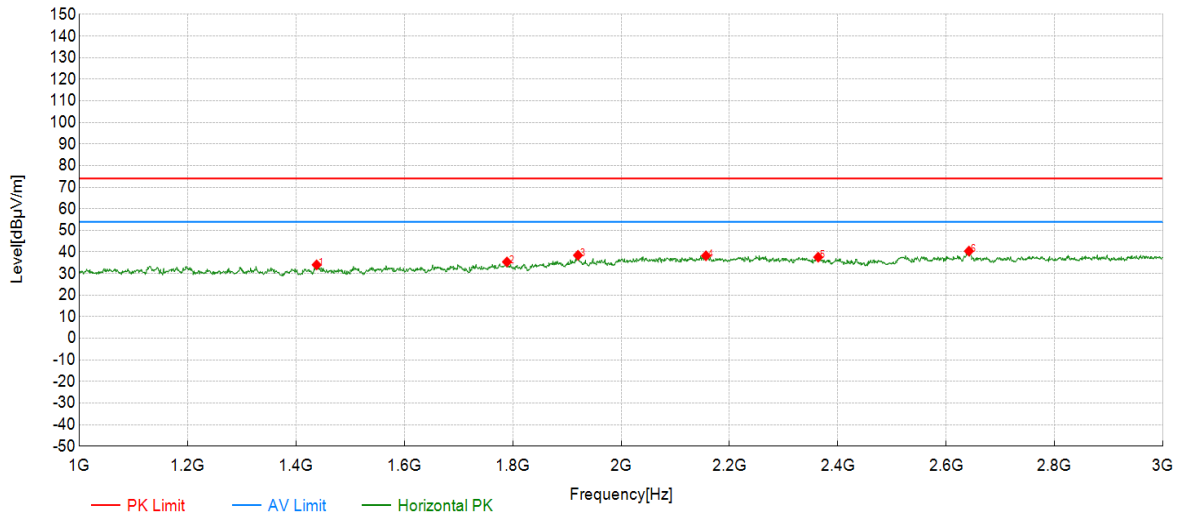
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8.2. SPURIOUS EMISSIONS(1 GHZ~3 GHZ)

TX Radiated Test Result

Project Information			
Test Mode	802.11b	Frequency	2412
Bandwidth	20M	Polarity	H
Environment	Temp: 22.1℃; Humi:58%	Test Date	2026-04-03
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	1438.22	58.66	34.04	-24.62	74.00	-39.96	PK	Horizontal	PASS
2	1789.39	57.76	35.40	-22.36	74.00	-38.60	PK	Horizontal	PASS
3	1920.46	59.43	38.46	-20.97	74.00	-35.54	PK	Horizontal	PASS
4	2156.58	58.03	38.23	-19.80	74.00	-35.77	PK	Horizontal	PASS
5	2363.68	57.22	37.58	-19.64	74.00	-36.42	PK	Horizontal	PASS
6	2641.82	59.80	40.40	-19.40	74.00	-33.60	PK	Horizontal	PASS

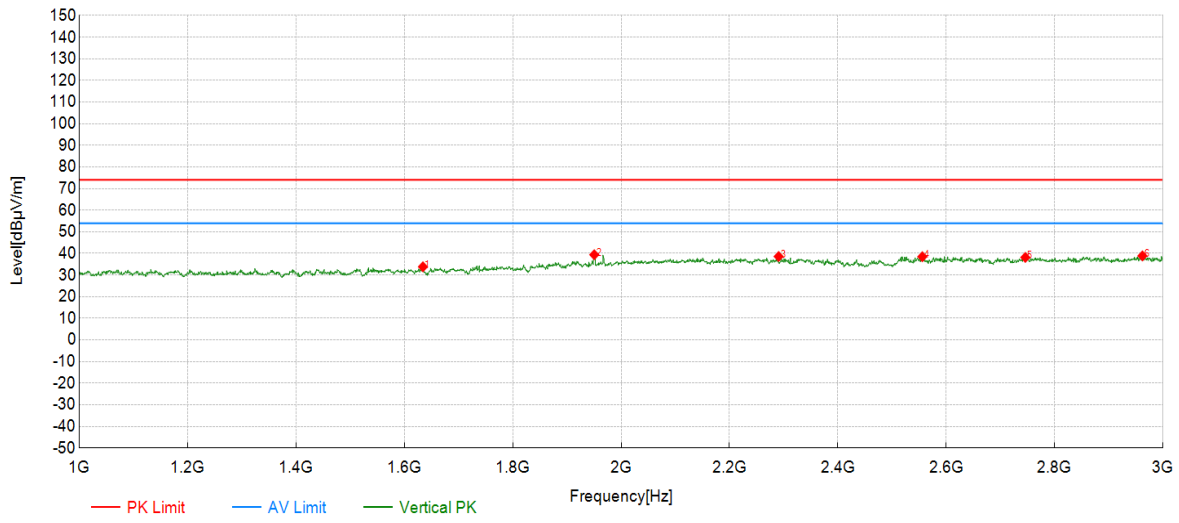
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11b	Frequency	2412
Bandwidth	20M	Polarity	V
Environment	Temp: 22.1℃; Humi:58%	Test Date	2026-04-03
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	1634.32	57.37	33.83	-23.54	74.00	-40.17	PK	Vertical	PASS
2	1950.48	60.04	39.39	-20.65	74.00	-34.61	PK	Vertical	PASS
3	2290.65	58.26	38.58	-19.68	74.00	-35.42	PK	Vertical	PASS
4	2555.78	58.03	38.49	-19.54	74.00	-35.51	PK	Vertical	PASS
5	2745.87	57.38	38.15	-19.23	74.00	-35.85	PK	Vertical	PASS
6	2961.98	57.89	38.87	-19.02	74.00	-35.13	PK	Vertical	PASS

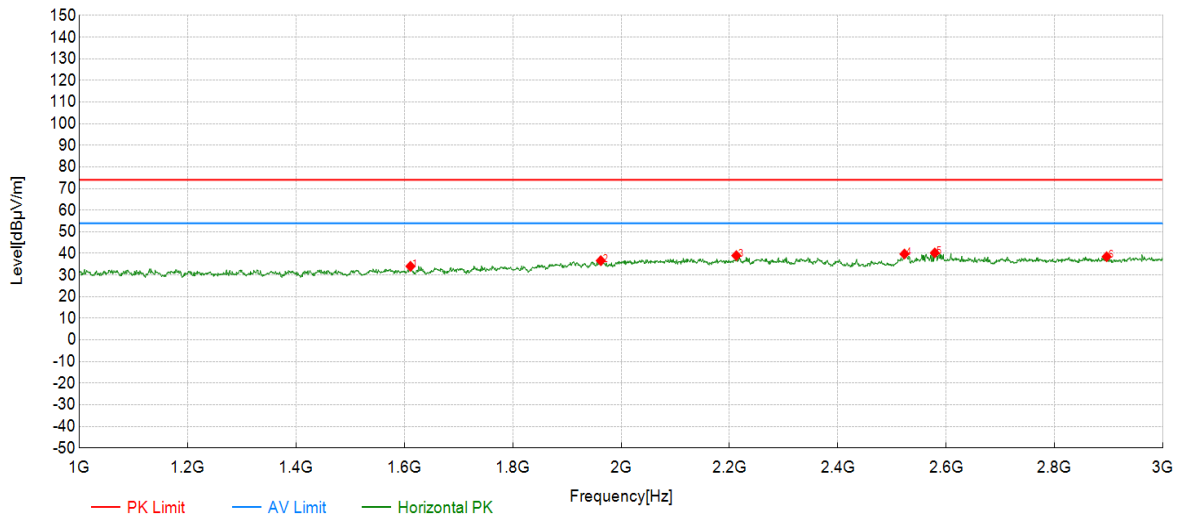
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11b	Frequency	2437
Bandwidth	\	Polarity	H
Environment	Temp: 22.1℃; Humi:58%	Test Date	2026-04-03
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	1611.31	57.76	34.04	-23.72	74.00	-39.96	PK	Horizontal	PASS
2	1962.48	57.17	36.65	-20.52	74.00	-37.35	PK	Horizontal	PASS
3	2212.61	58.72	39.01	-19.71	74.00	-34.99	PK	Horizontal	PASS
4	2522.76	59.32	39.74	-19.58	74.00	-34.26	PK	Horizontal	PASS
5	2578.79	59.75	40.24	-19.51	74.00	-33.76	PK	Horizontal	PASS
6	2895.95	57.57	38.50	-19.07	74.00	-35.50	PK	Horizontal	PASS

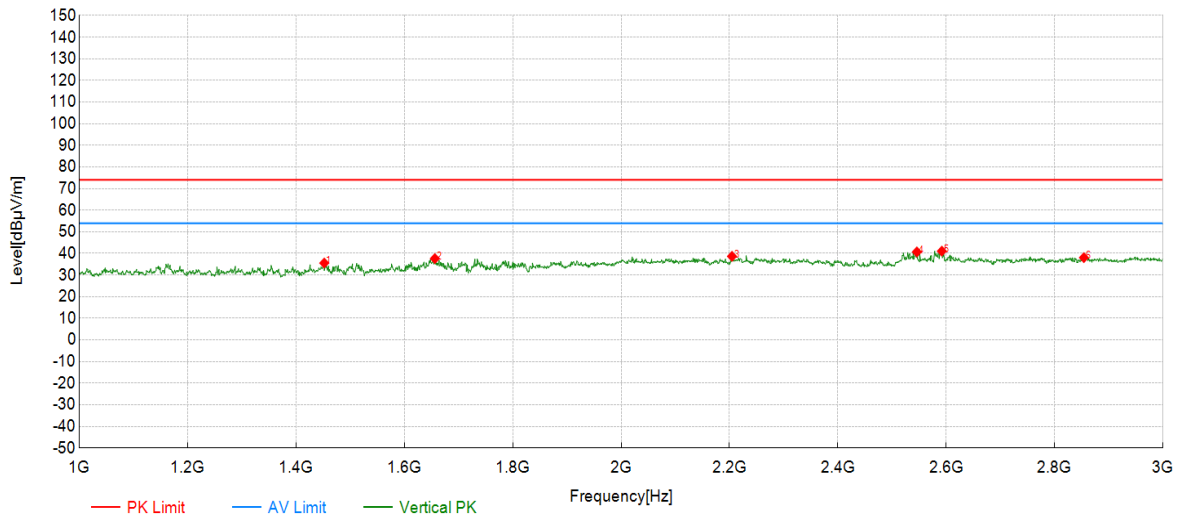
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11b	Frequency	2437
Bandwidth	\	Polarity	V
Environment	Temp: 22.1℃; Humi:58%	Test Date	2026-04-03
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	1452.23	60.16	35.55	-24.61	74.00	-38.45	PK	Vertical	PASS
2	1656.33	61.00	37.62	-23.38	74.00	-36.38	PK	Vertical	PASS
3	2204.60	58.39	38.67	-19.72	74.00	-35.33	PK	Vertical	PASS
4	2545.77	60.25	40.69	-19.56	74.00	-33.31	PK	Vertical	PASS
5	2591.80	60.55	41.07	-19.48	74.00	-32.93	PK	Vertical	PASS
6	2853.93	57.14	38.05	-19.09	74.00	-35.95	PK	Vertical	PASS

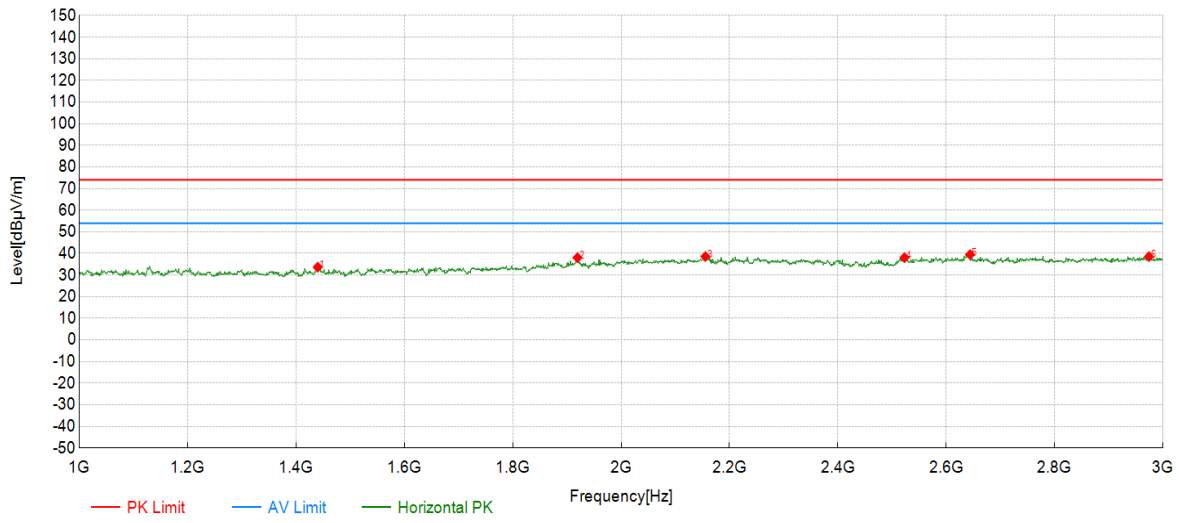
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11b	Frequency	2462
Bandwidth	\	Polarity	H
Environment	Temp: 22.1℃; Humi:58%	Test Date	2026-04-03
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	1440.22	58.29	33.67	-24.62	74.00	-40.33	PK	Horizontal	PASS
2	1919.46	59.02	38.04	-20.98	74.00	-35.96	PK	Horizontal	PASS
3	2155.58	58.43	38.61	-19.82	74.00	-35.39	PK	Horizontal	PASS
4	2522.76	57.63	38.05	-19.58	74.00	-35.95	PK	Horizontal	PASS
5	2643.82	58.84	39.45	-19.39	74.00	-34.55	PK	Horizontal	PASS
6	2973.99	57.57	38.55	-19.02	74.00	-35.45	PK	Horizontal	PASS

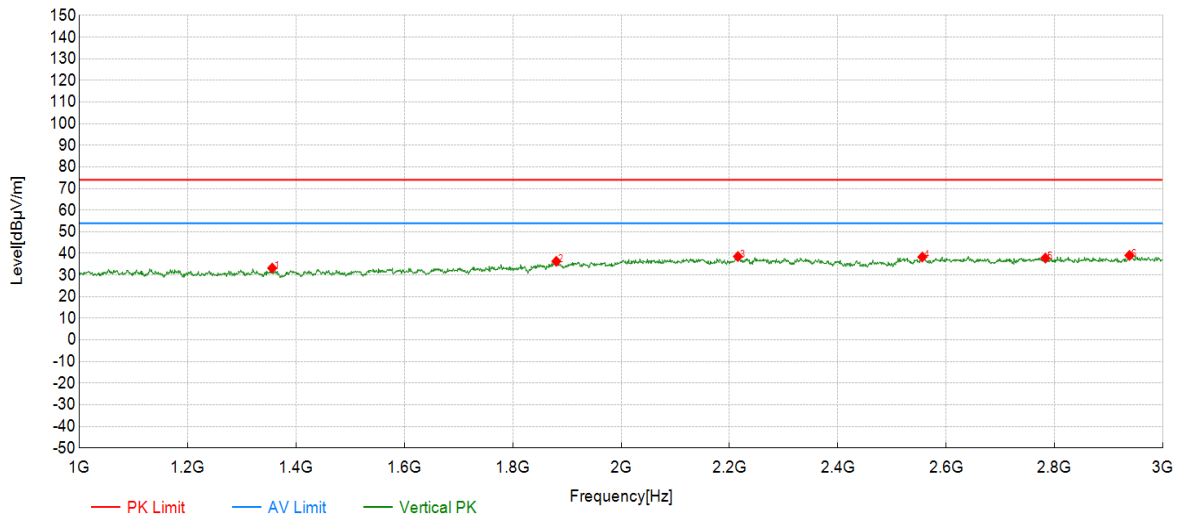
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11b	Frequency	2462
Bandwidth	\	Polarity	V
Environment	Temp: 22.1℃; Humi:58%	Test Date	2026-04-03
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	1356.18	57.85	33.22	-24.63	74.00	-40.78	PK	Vertical	PASS
2	1880.44	57.74	36.34	-21.40	74.00	-37.66	PK	Vertical	PASS
3	2215.61	58.31	38.59	-19.72	74.00	-35.41	PK	Vertical	PASS
4	2555.78	57.89	38.35	-19.54	74.00	-35.65	PK	Vertical	PASS
5	2782.89	57.00	37.84	-19.16	74.00	-36.16	PK	Vertical	PASS
6	2937.97	58.15	39.10	-19.05	74.00	-34.90	PK	Vertical	PASS

Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

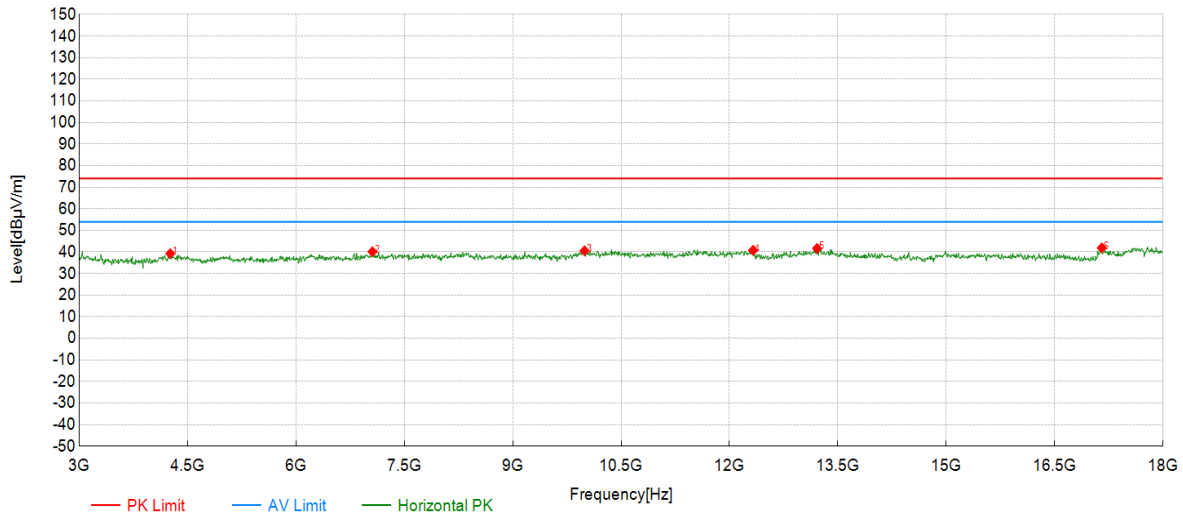
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8.3. SPURIOUS EMISSIONS(3 GHZ~18 GHZ)

TX Radiated Test Result

Project Information			
Test Mode	802.11b	Frequency	2412
Bandwidth	20M	Polarity	H
Environment	Temp: 22.3℃; Humi:56%	Test Date	2026-04-07
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	4260.63	56.91	39.26	-17.65	74.00	-34.74	PK	Horizontal	PASS
2	7059.53	55.09	40.14	-14.95	74.00	-33.86	PK	Horizontal	PASS
3	9993.50	51.25	40.56	-10.69	74.00	-33.44	PK	Horizontal	PASS
4	12327.16	51.35	40.77	-10.58	74.00	-33.23	PK	Horizontal	PASS
5	13212.61	52.50	41.65	-10.85	74.00	-32.35	PK	Horizontal	PASS
6	17152.08	48.90	41.91	-6.99	74.00	-32.09	PK	Horizontal	PASS

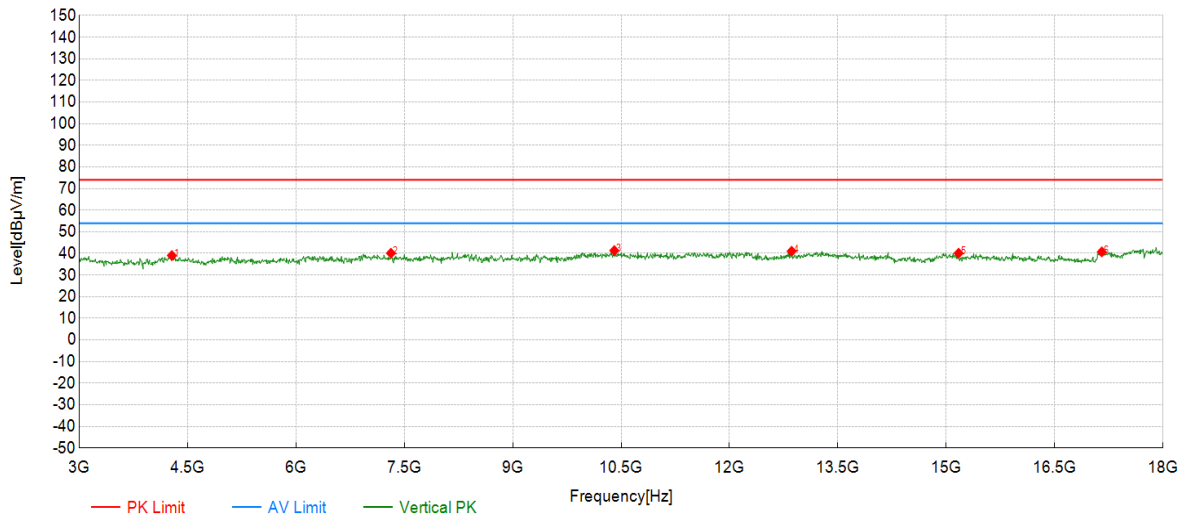
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11b	Frequency	2412
Bandwidth	20M	Polarity	V
Environment	Temp: 22.3℃; Humi:56%	Test Date	2026-04-07
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	4283.14	56.72	39.03	-17.69	74.00	-34.97	PK	Vertical	PASS
2	7314.66	55.30	40.12	-15.18	74.00	-33.88	PK	Vertical	PASS
3	10406.20	50.95	41.33	-9.62	74.00	-32.67	PK	Vertical	PASS
4	12859.93	52.38	40.99	-11.39	74.00	-33.01	PK	Vertical	PASS
5	15171.09	50.32	40.13	-10.19	74.00	-33.87	PK	Vertical	PASS
6	17152.08	47.71	40.72	-6.99	74.00	-33.28	PK	Vertical	PASS

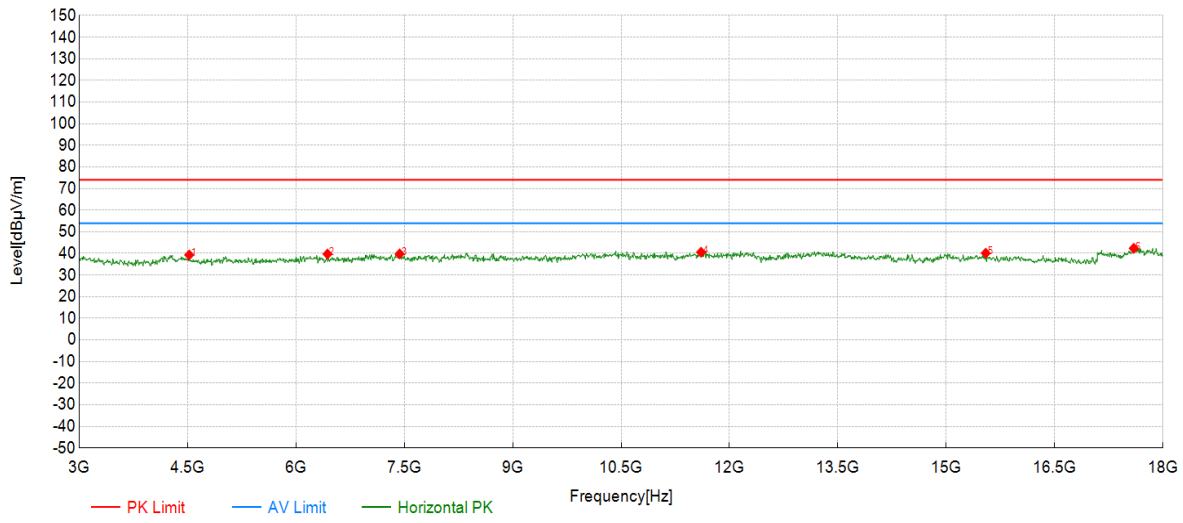
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11b	Frequency	2437
Bandwidth	20M	Polarity	H
Environment	Temp: 22.3℃; Humi:56%	Test Date	2026-04-07
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	4523.26	57.44	39.29	-18.15	74.00	-34.71	PK	Horizontal	PASS
2	6436.72	56.02	39.74	-16.28	74.00	-34.26	PK	Horizontal	PASS
3	7434.72	55.00	39.79	-15.21	74.00	-34.21	PK	Horizontal	PASS
4	11606.80	49.22	40.57	-8.65	74.00	-33.43	PK	Horizontal	PASS
5	15546.27	49.60	40.12	-9.48	74.00	-33.88	PK	Horizontal	PASS
6	17594.80	47.45	42.38	-5.07	74.00	-31.62	PK	Horizontal	PASS

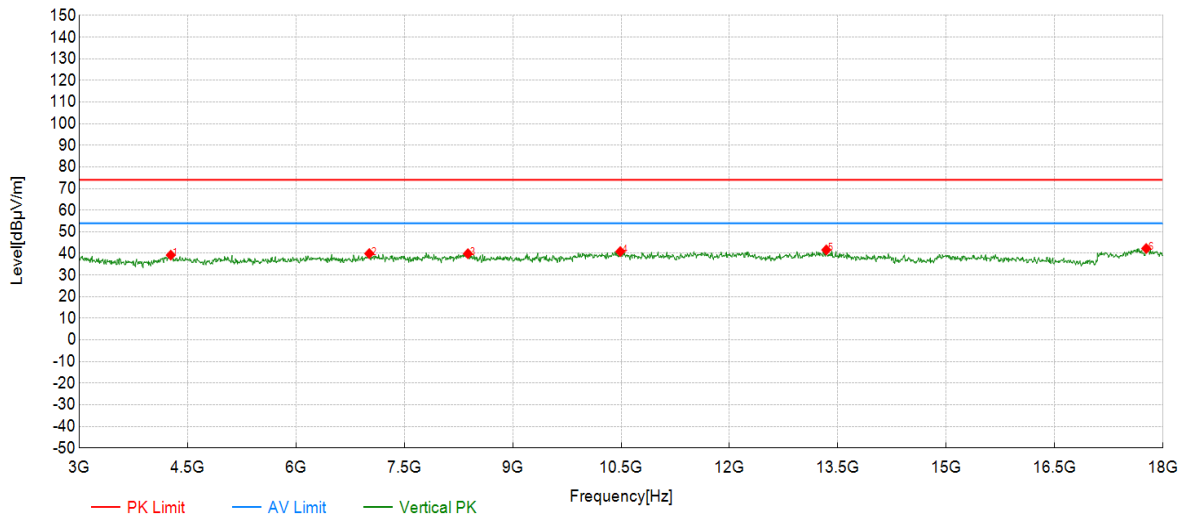
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11b	Frequency	2437
Bandwidth	20M	Polarity	V
Environment	Temp: 22.3℃; Humi:56%	Test Date	2026-04-07
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	4268.13	56.89	39.23	-17.66	74.00	-34.77	PK	Vertical	PASS
2	7014.51	54.80	39.95	-14.85	74.00	-34.05	PK	Vertical	PASS
3	8380.19	52.53	39.88	-12.65	74.00	-34.12	PK	Vertical	PASS
4	10488.74	50.44	40.87	-9.57	74.00	-33.13	PK	Vertical	PASS
5	13340.17	52.79	41.63	-11.16	74.00	-32.37	PK	Vertical	PASS
6	17767.38	47.38	42.28	-5.10	74.00	-31.72	PK	Vertical	PASS

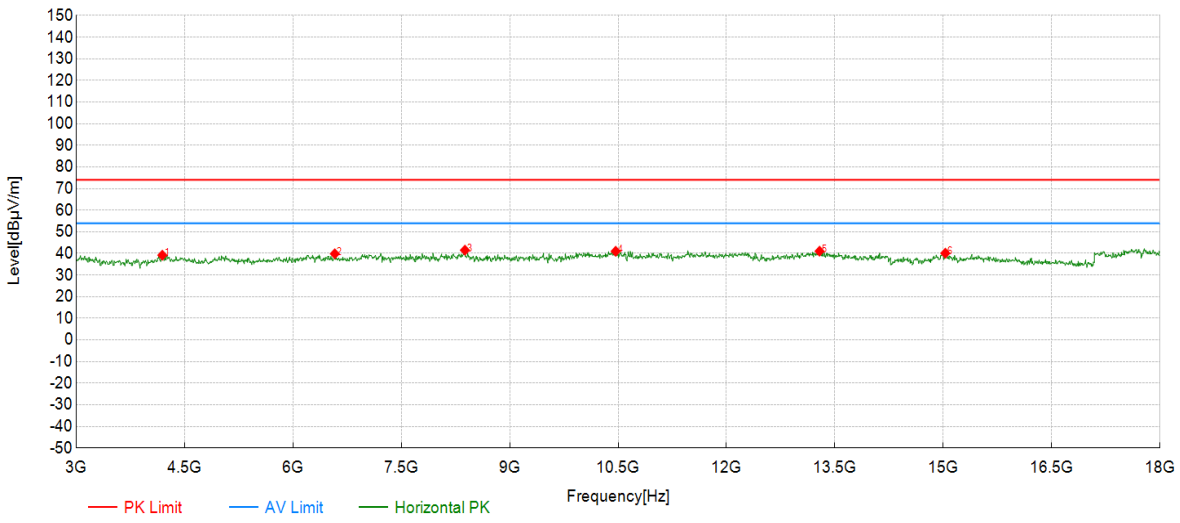
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11b	Frequency	2462
Bandwidth	20M	Polarity	H
Environment	Temp: 22.3℃; Humi:56%	Test Date	2026-04-07
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	4193.10	56.76	39.18	-17.58	74.00	-34.82	PK	Horizontal	PASS
2	6579.29	55.98	39.84	-16.14	74.00	-34.16	PK	Horizontal	PASS
3	8380.19	54.16	41.51	-12.65	74.00	-32.49	PK	Horizontal	PASS
4	10466.23	50.58	41.00	-9.58	74.00	-33.00	PK	Horizontal	PASS
5	13287.64	52.07	41.04	-11.03	74.00	-32.96	PK	Horizontal	PASS
6	15028.51	49.50	40.11	-9.39	74.00	-33.89	PK	Horizontal	PASS

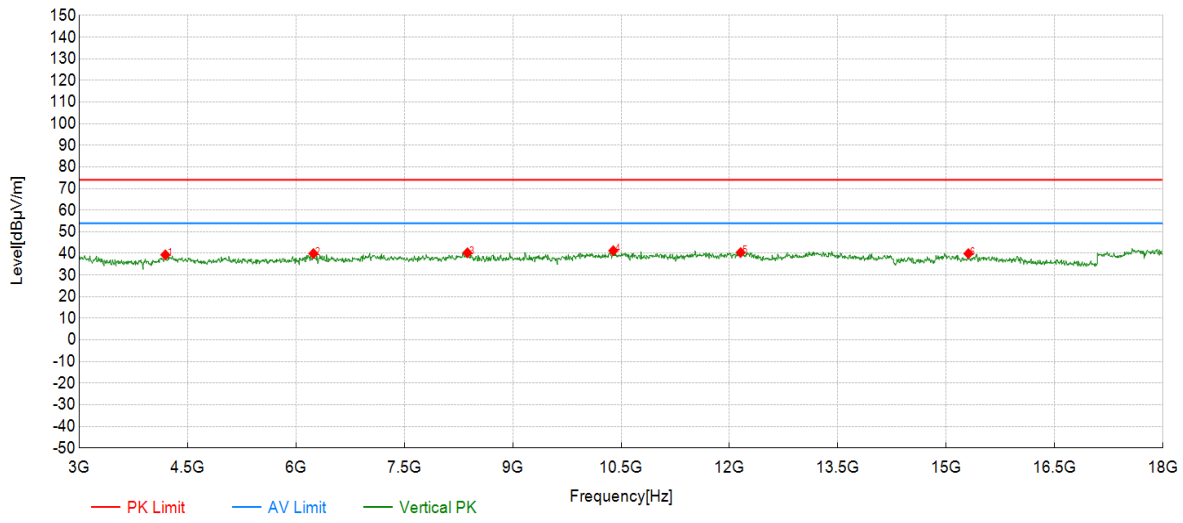
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11b	Frequency	2462
Bandwidth	20M	Polarity	V
Environment	Temp: 22.3℃; Humi:56%	Test Date	2026-04-07
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	4193.10	56.92	39.34	-17.58	74.00	-34.66	PK	Vertical	PASS
2	6241.62	56.20	39.94	-16.26	74.00	-34.06	PK	Vertical	PASS
3	8372.69	53.02	40.31	-12.71	74.00	-33.69	PK	Vertical	PASS
4	10391.20	50.98	41.27	-9.71	74.00	-32.73	PK	Vertical	PASS
5	12154.58	50.14	40.41	-9.73	74.00	-33.59	PK	Vertical	PASS
6	15306.15	49.66	39.92	-9.74	74.00	-34.08	PK	Vertical	PASS

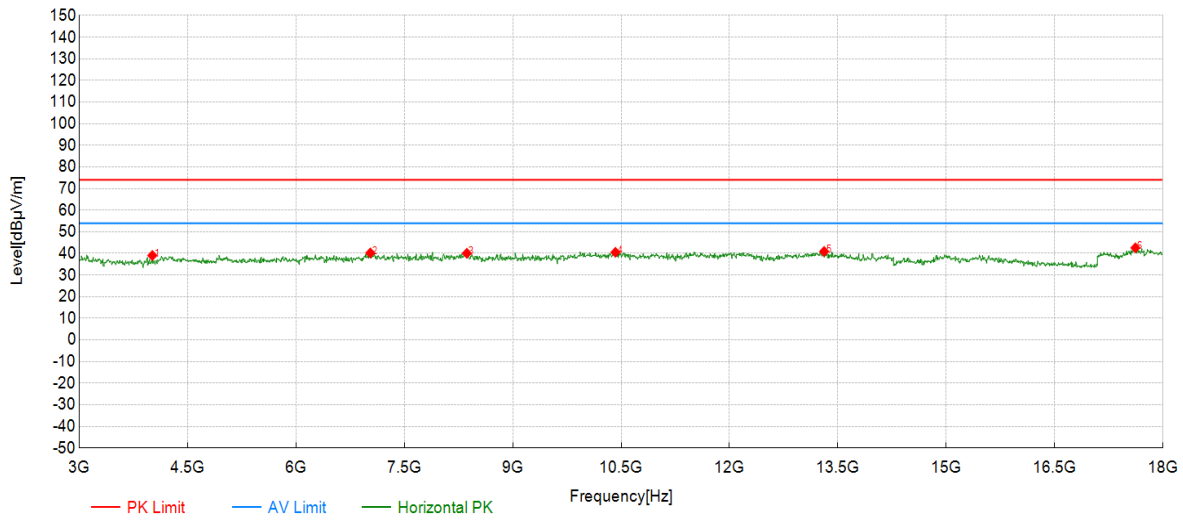
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11n HT	Frequency	2437
Bandwidth	20M	Polarity	H
Environment	Temp: 22.3℃; Humi:56%	Test Date	2026-04-07
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	4013.01	58.53	39.05	-19.48	74.00	-34.95	PK	Horizontal	PASS
2	7029.51	55.08	40.21	-14.87	74.00	-33.79	PK	Horizontal	PASS
3	8365.18	52.85	40.07	-12.78	74.00	-33.93	PK	Horizontal	PASS
4	10421.21	50.15	40.53	-9.62	74.00	-33.47	PK	Horizontal	PASS
5	13310.16	51.99	40.90	-11.09	74.00	-33.10	PK	Horizontal	PASS
6	17617.31	47.63	42.61	-5.02	74.00	-31.39	PK	Horizontal	PASS

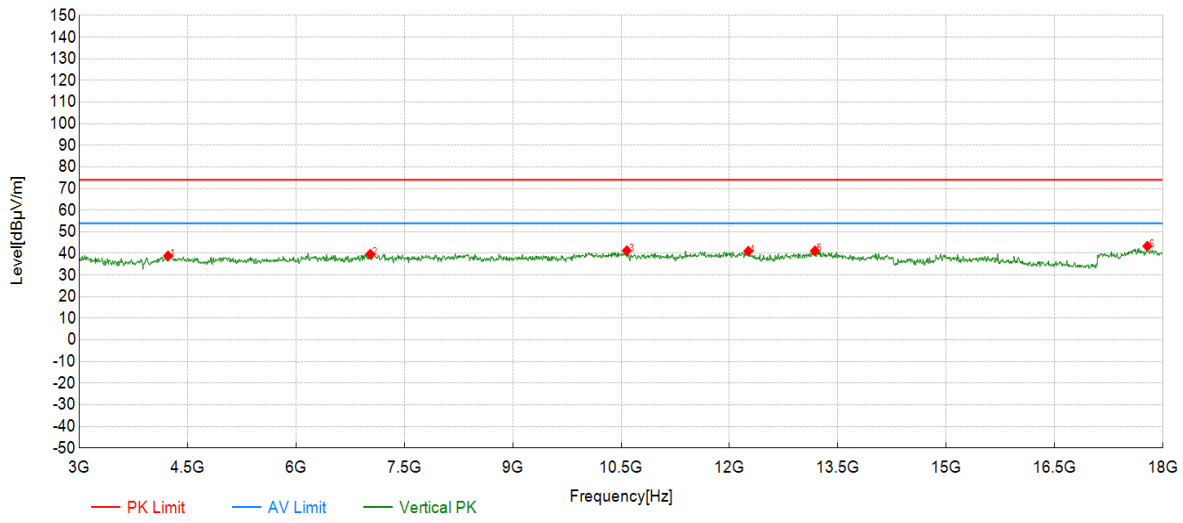
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11n HT	Frequency	2437
Bandwidth	20M	Polarity	V
Environment	Temp: 22.3℃; Humi:56%	Test Date	2026-04-07
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	4230.62	56.43	38.87	-17.56	74.00	-35.13	PK	Vertical	PASS
2	7029.51	54.55	39.68	-14.87	74.00	-34.32	PK	Vertical	PASS
3	10578.79	50.84	41.32	-9.52	74.00	-32.68	PK	Vertical	PASS
4	12259.63	51.19	41.04	-10.15	74.00	-32.96	PK	Vertical	PASS
5	13182.59	52.11	41.22	-10.89	74.00	-32.78	PK	Vertical	PASS
6	17782.39	48.45	43.35	-5.10	74.00	-30.65	PK	Vertical	PASS

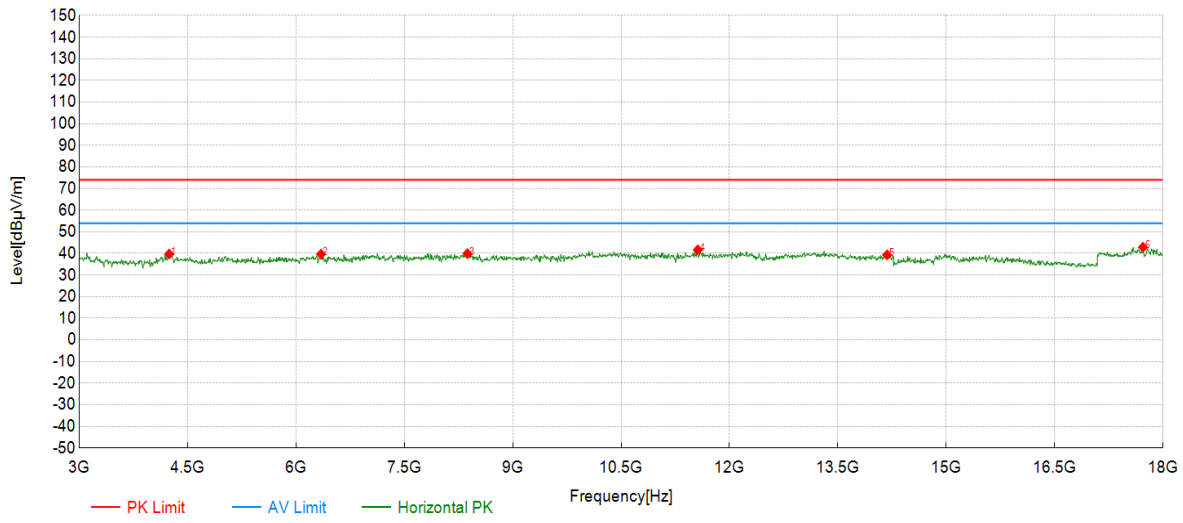
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11n HT	Frequency	2462
Bandwidth	20M	Polarity	H
Environment	Temp: 22.3℃; Humi:56%	Test Date	2026-04-07
Note	\	Engineer	Leslie Xie

Test Graph



PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	4245.62	57.35	39.74	-17.61	74.00	-34.26	PK	Horizontal	PASS
2	6346.67	55.95	39.66	-16.29	74.00	-34.34	PK	Horizontal	PASS
3	8372.69	52.64	39.93	-12.71	74.00	-34.07	PK	Horizontal	PASS
4	11561.78	50.33	41.67	-8.66	74.00	-32.33	PK	Horizontal	PASS
5	14180.59	49.99	39.32	-10.67	74.00	-34.68	PK	Horizontal	PASS
6	17722.36	47.95	42.88	-5.07	74.00	-31.12	PK	Horizontal	PASS

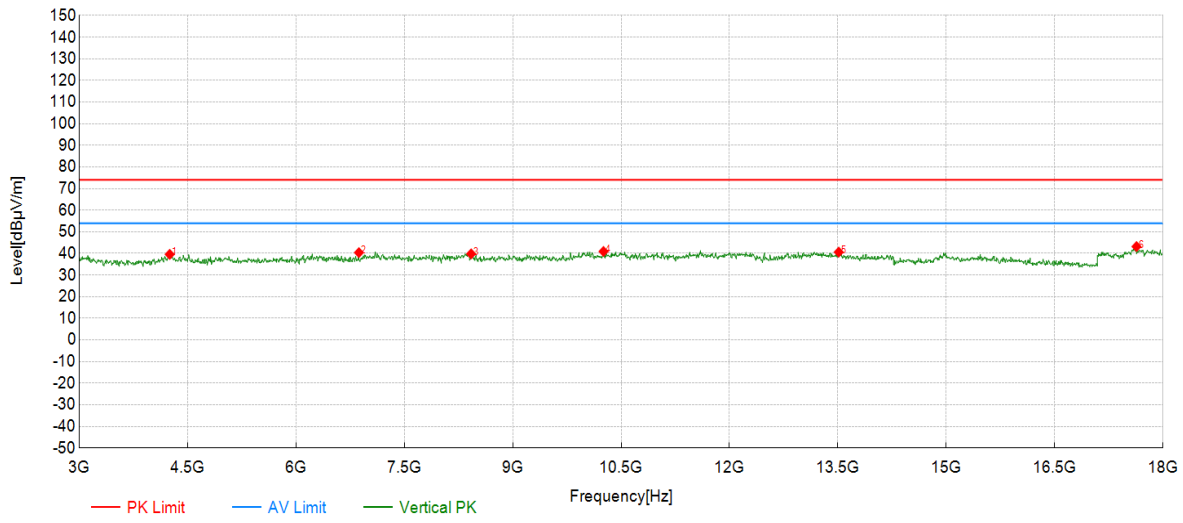
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TX Radiated Test Result

Project Information			
Test Mode	802.11n HT	Frequency	2462
Bandwidth	20M	Polarity	V
Environment	Temp: 22.3℃; Humi:56%	Test Date	2026-04-07
Note	\	Engineer	Leslie Xie

Test Graph



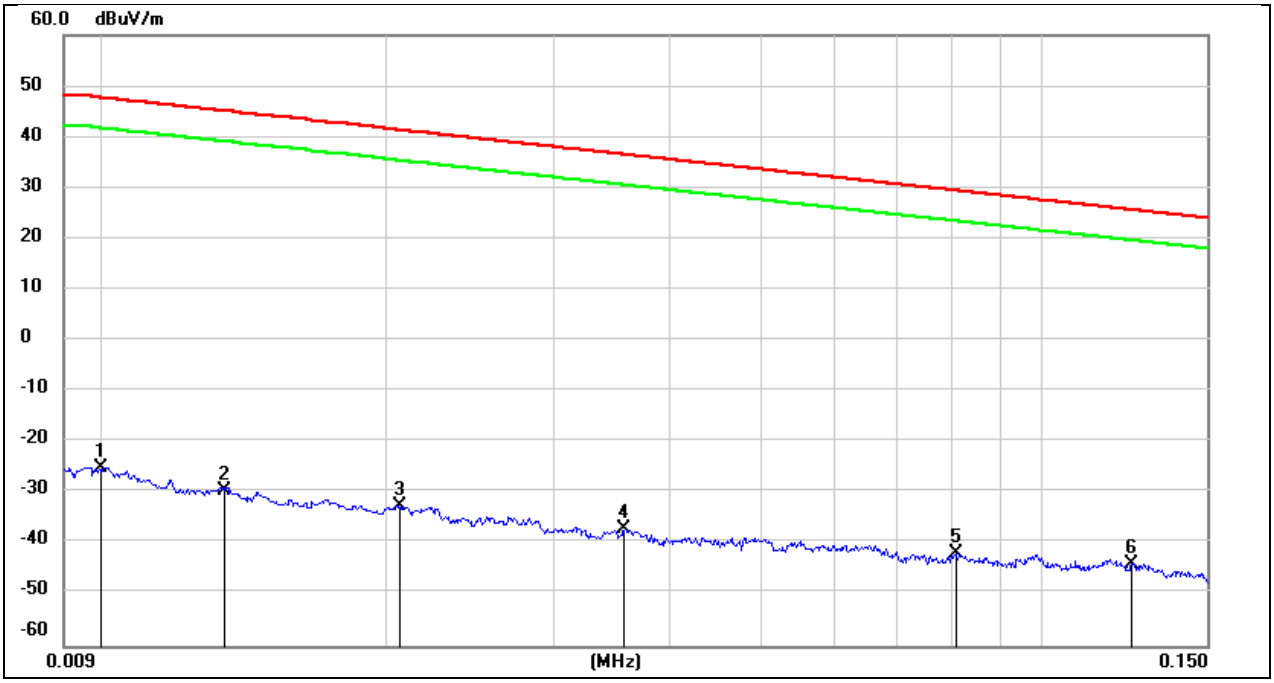
PEAK Data List									
NO.	Frequency [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Detector	Polarity	Verdict
1	4253.13	57.21	39.58	-17.63	74.00	-34.42	PK	Vertical	PASS
2	6871.94	55.77	40.39	-15.38	74.00	-33.61	PK	Vertical	PASS
3	8425.21	52.41	39.81	-12.60	74.00	-34.19	PK	Vertical	PASS
4	10256.13	51.78	40.93	-10.85	74.00	-33.07	PK	Vertical	PASS
5	13512.76	52.59	40.62	-11.97	74.00	-33.38	PK	Vertical	PASS
6	17632.32	48.20	43.18	-5.02	74.00	-30.82	PK	Vertical	PASS

Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8.4. SPURIOUS EMISSIONS(9 KHZ~30 MHZ)

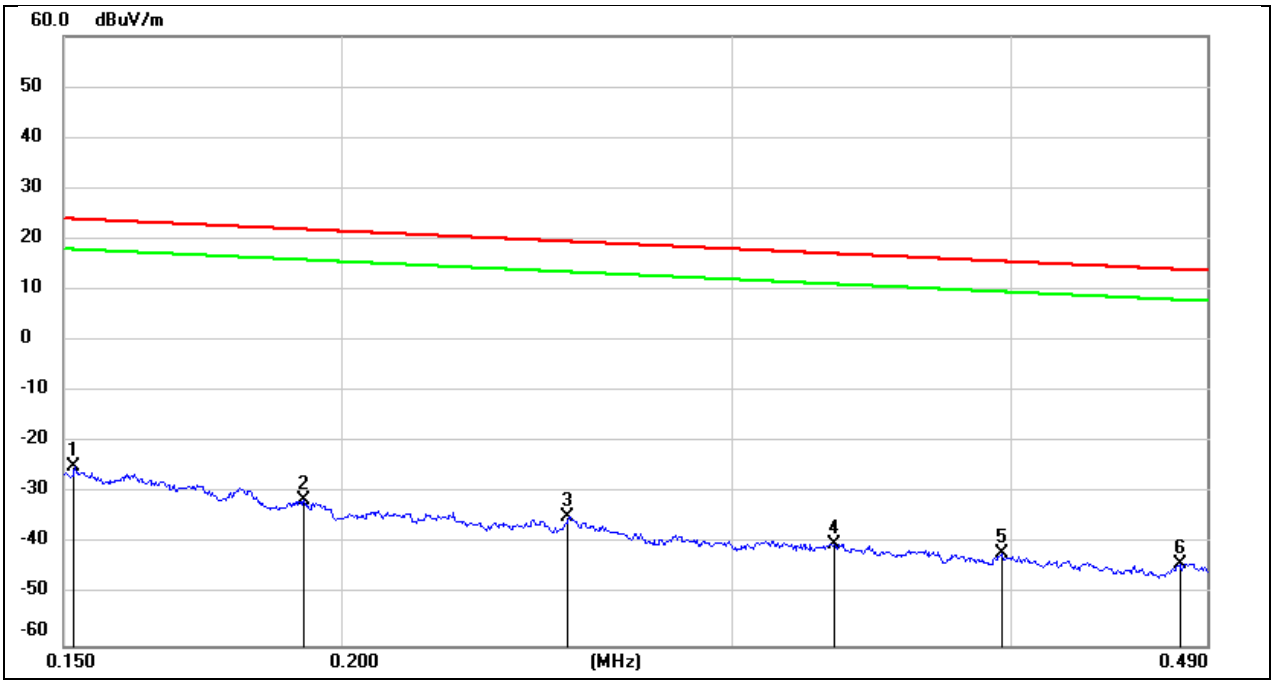
Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.3V



No.	Frequency	Reading	Correct	FCC Result	FCC Limit	ISED Result	ISED Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.0100	76.22	-101.40	-25.18	47.60	-76.68	-3.90	-72.78	peak
2	0.0134	71.73	-101.39	-29.66	45.06	-81.16	-6.44	-74.72	peak
3	0.0206	68.71	-101.35	-32.64	41.32	-84.14	-10.18	-73.96	peak
4	0.0357	64.32	-101.41	-37.09	36.55	-88.59	-14.95	-73.64	peak
5	0.0806	59.68	-101.63	-41.95	29.47	-93.45	-22.03	-71.42	peak
6	0.1246	57.89	-101.72	-43.83	25.70	-95.33	-25.80	-69.53	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

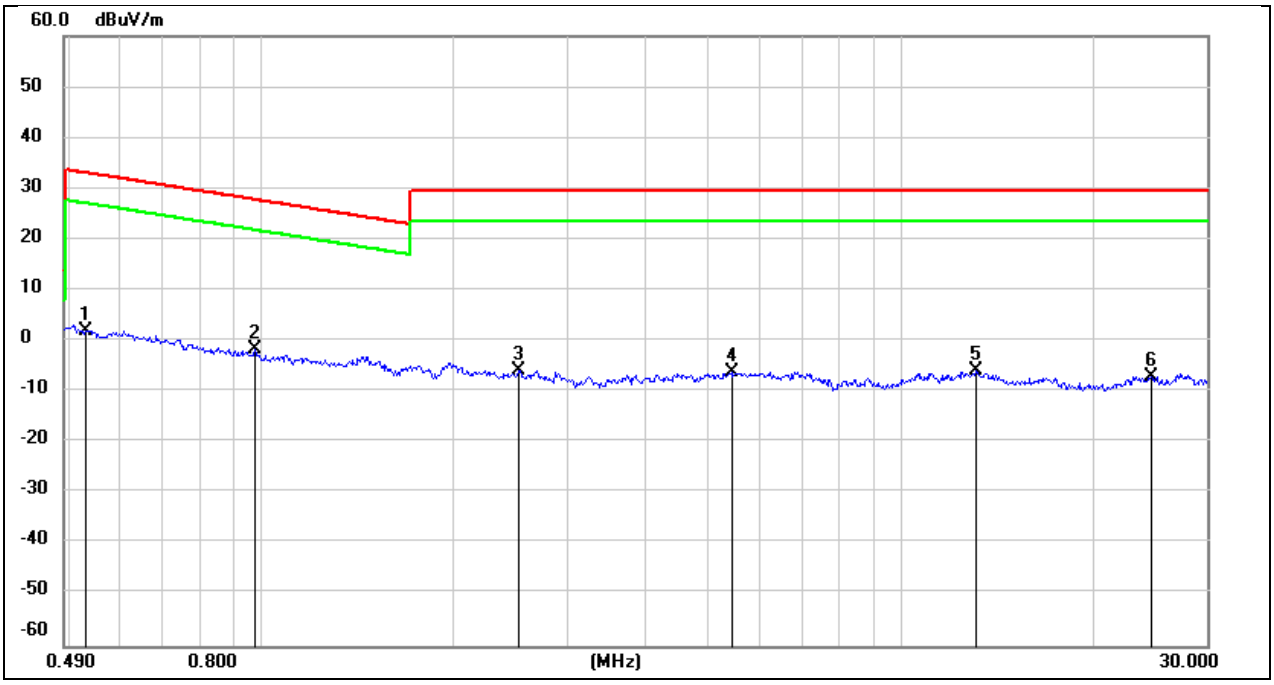
Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.3V



No.	Frequency	Reading	Correct	FCC Result	FCC Limit	ISED Result	ISED Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.1517	76.75	-101.63	-24.88	23.98	-76.38	-27.52	-48.86	peak
2	0.1925	70.46	-101.70	-31.24	21.92	-82.74	-29.58	-53.16	peak
3	0.2530	67.14	-101.80	-34.66	19.54	-86.16	-31.96	-54.20	peak
4	0.3331	61.96	-101.89	-39.93	17.15	-91.43	-34.35	-57.08	peak
5	0.3966	60.18	-101.96	-41.78	15.63	-93.28	-35.87	-57.41	peak
6	0.4767	57.98	-102.04	-44.06	14.04	-95.56	-37.46	-58.10	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.3V

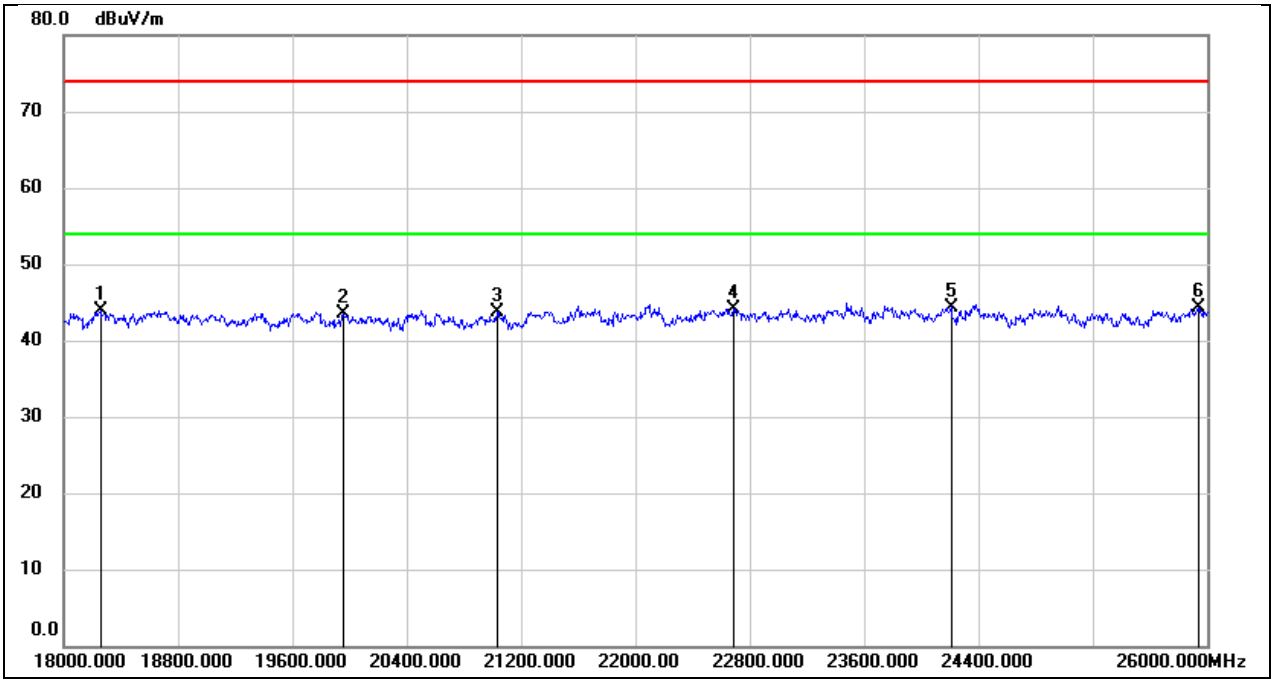


No.	Frequency	Reading	Correct	FCC Result	FCC Limit	ISED Result	ISED Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.5298	64.03	-62.08	1.95	33.12	-49.55	-18.38	-31.17	peak
2	0.9737	60.71	-62.25	-1.54	27.83	-53.04	-23.67	-29.37	peak
3	2.5261	55.91	-61.69	-5.78	29.54	-57.28	-21.96	-35.32	peak
4	5.4180	55.16	-61.43	-6.27	29.54	-57.77	-21.96	-35.81	peak
5	13.0907	55.13	-60.93	-5.80	29.54	-57.30	-21.96	-35.34	peak
6	24.5701	53.44	-60.48	-7.04	29.54	-58.54	-21.96	-36.58	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8.5. SPURIOUS EMISSIONS(18 GHZ~26 GHZ)

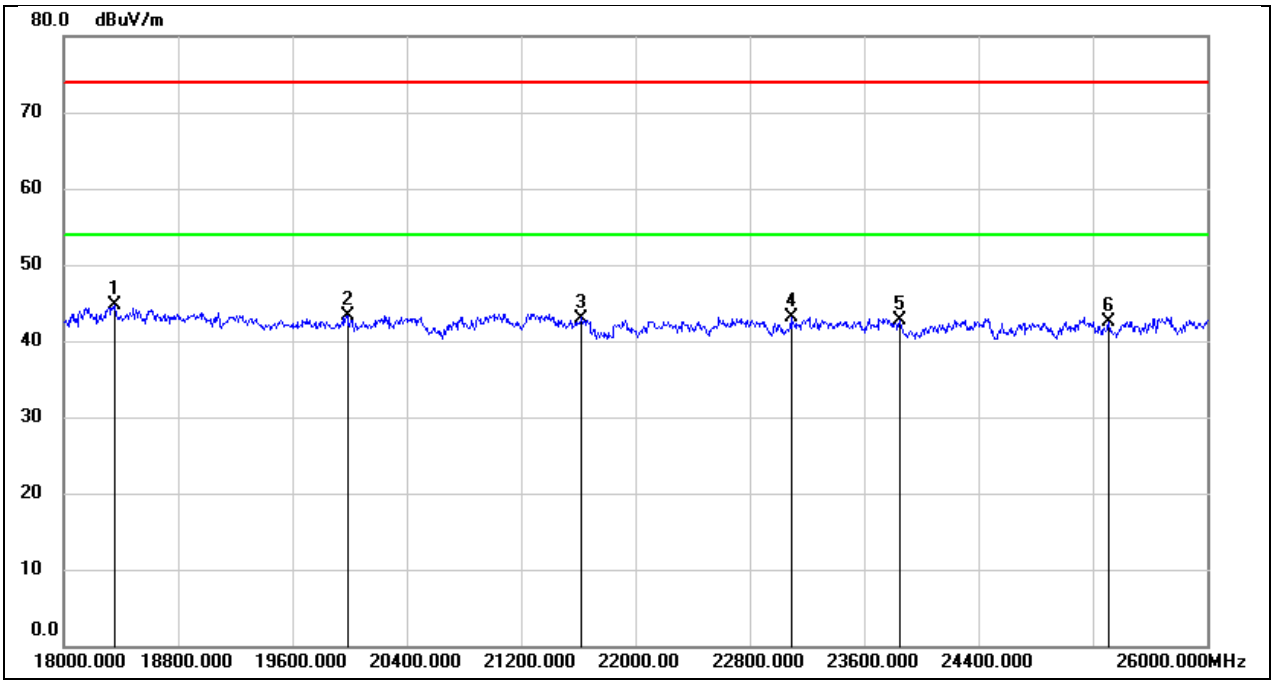
Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.3V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18256.000	49.40	-5.55	43.85	74.00	-30.15	peak
2	19952.000	48.96	-5.41	43.55	74.00	-30.45	peak
3	21032.000	48.65	-4.87	43.78	74.00	-30.22	peak
4	22688.000	47.91	-3.74	44.17	74.00	-29.83	peak
5	24208.000	47.21	-2.81	44.40	74.00	-29.60	peak
6	25936.000	45.28	-0.95	44.33	74.00	-29.67	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.3V

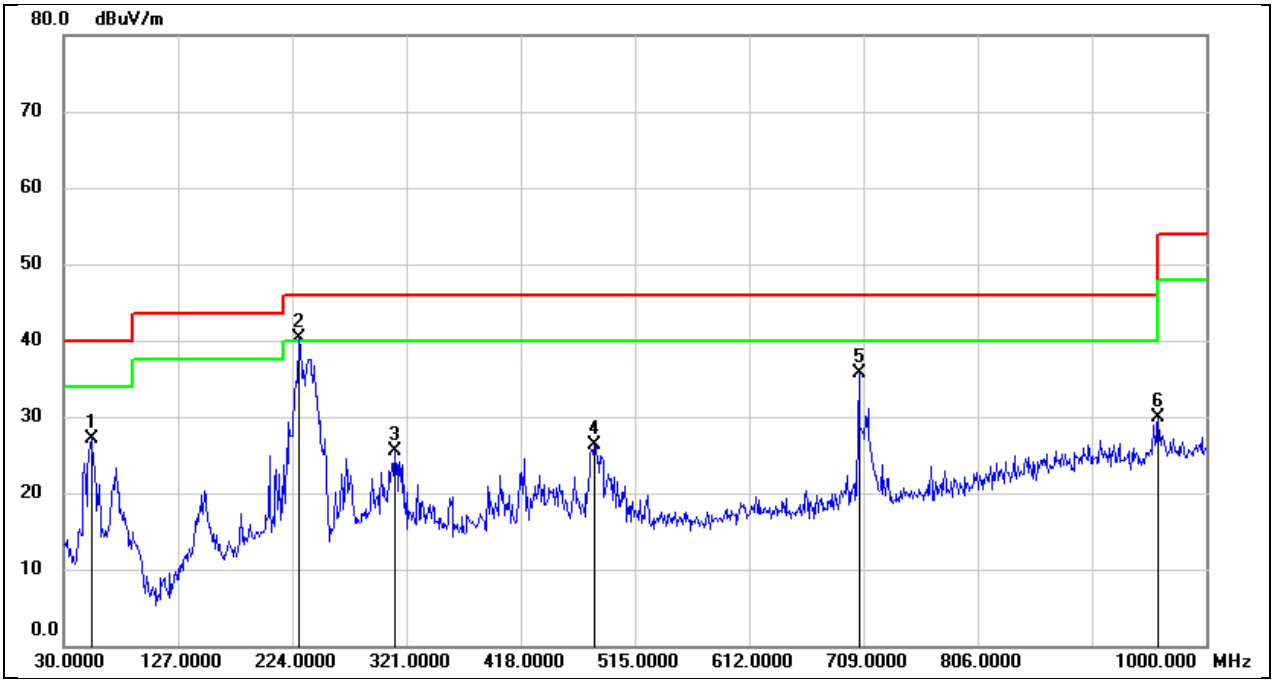


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18352.000	50.15	-5.43	44.72	74.00	-29.28	peak
2	19984.000	48.71	-5.44	43.27	74.00	-30.73	peak
3	21624.000	47.51	-4.51	43.00	74.00	-31.00	peak
4	23088.000	46.52	-3.41	43.11	74.00	-30.89	peak
5	23848.000	45.68	-3.03	42.65	74.00	-31.35	peak
6	25312.000	44.20	-1.70	42.50	74.00	-31.50	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8.6. SPURIOUS EMISSIONS(30 MHZ~1 GHZ)

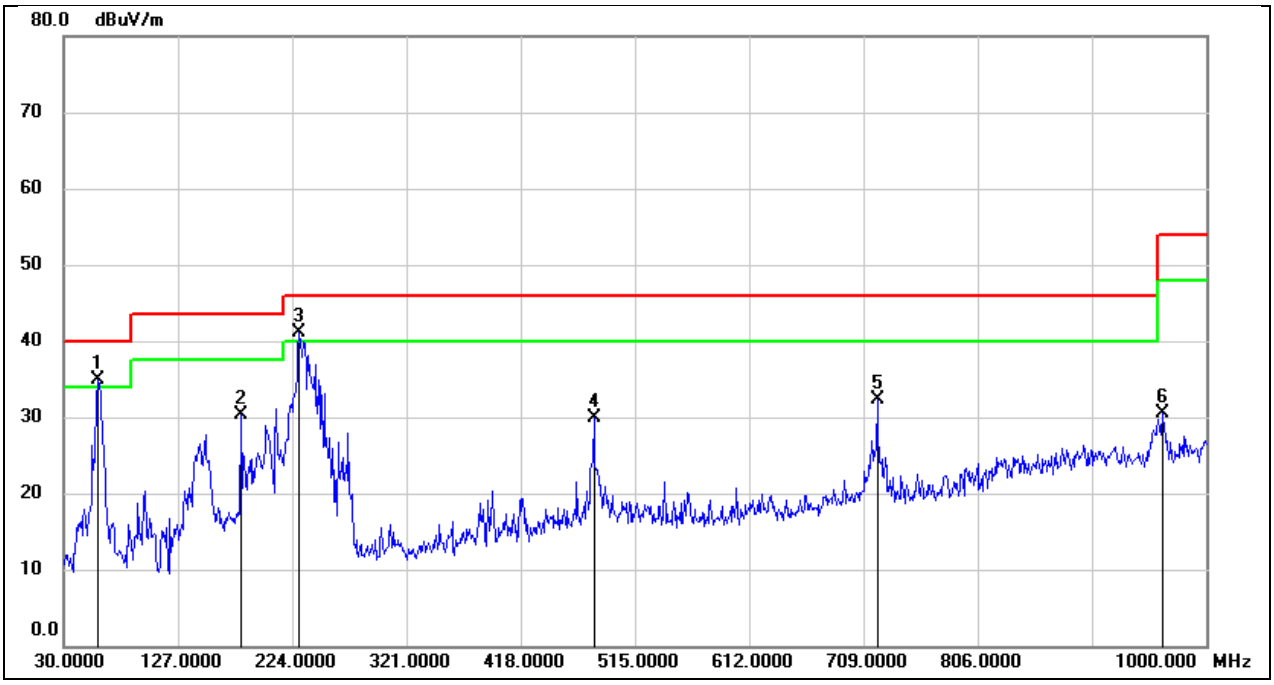
Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Horizontal	Test Voltage:	DC 3.3V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	53.2800	42.23	-15.22	27.01	40.00	-12.99	peak
2	229.8200	53.85	-13.60	40.25	46.00	-5.75	peak
3	311.3000	36.42	-10.86	25.56	46.00	-20.44	peak
4	480.0800	33.84	-7.51	26.33	46.00	-19.67	peak
5	705.1200	39.65	-4.01	35.64	46.00	-10.36	peak
6	959.2600	30.29	-0.46	29.83	46.00	-16.17	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11b	Frequency(MHz):	2412
Polarity:	Vertical	Test Voltage:	DC 3.3V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	59.1000	50.03	-15.17	34.86	40.00	-5.14	peak
2	180.3500	42.22	-11.92	30.30	43.50	-13.20	peak
3	229.8200	54.66	-13.60	41.06	46.00	-4.94	peak
4	480.0800	37.34	-7.51	29.83	46.00	-16.17	peak
5	720.6400	36.25	-3.85	32.40	46.00	-13.60	peak
6	963.1400	30.81	-0.39	30.42	54.00	-23.58	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

9. ANTENNA REQUIREMENT

REQUIREMENT

Please refer to FCC part 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 shall be considered sufficient to comply with the provisions of this section. 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.

Please refer to FCC part 15.247(b)(4)
The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DESCRIPTION

Pass

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

10. AC POWER LINE CONDUCTED EMISSION

LIMITS

Please refer to FCC 47 CFR §15.207 (a) and ISED RSS-Gen Clause 8.8

FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

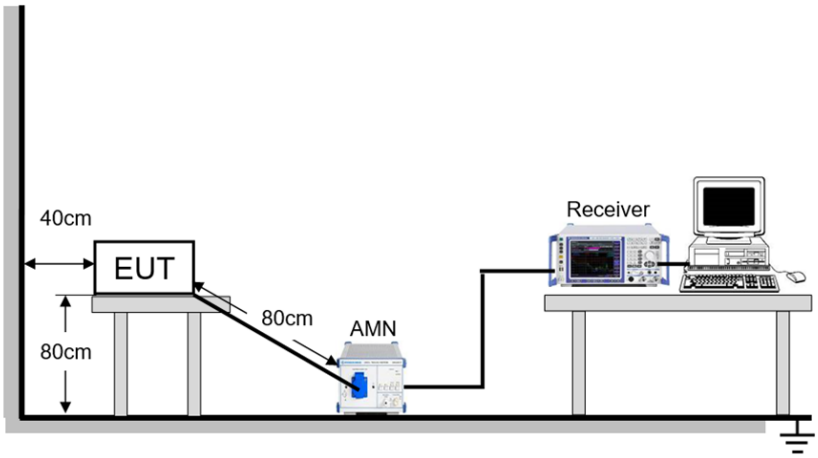
*Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2020. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

TEST SETUP



This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TEST ENVIRONMENT

Temperature	24.2℃	Relative Humidity	62%
Atmosphere Pressure	101kPa	Test Voltage	AC 120 V,60 Hz

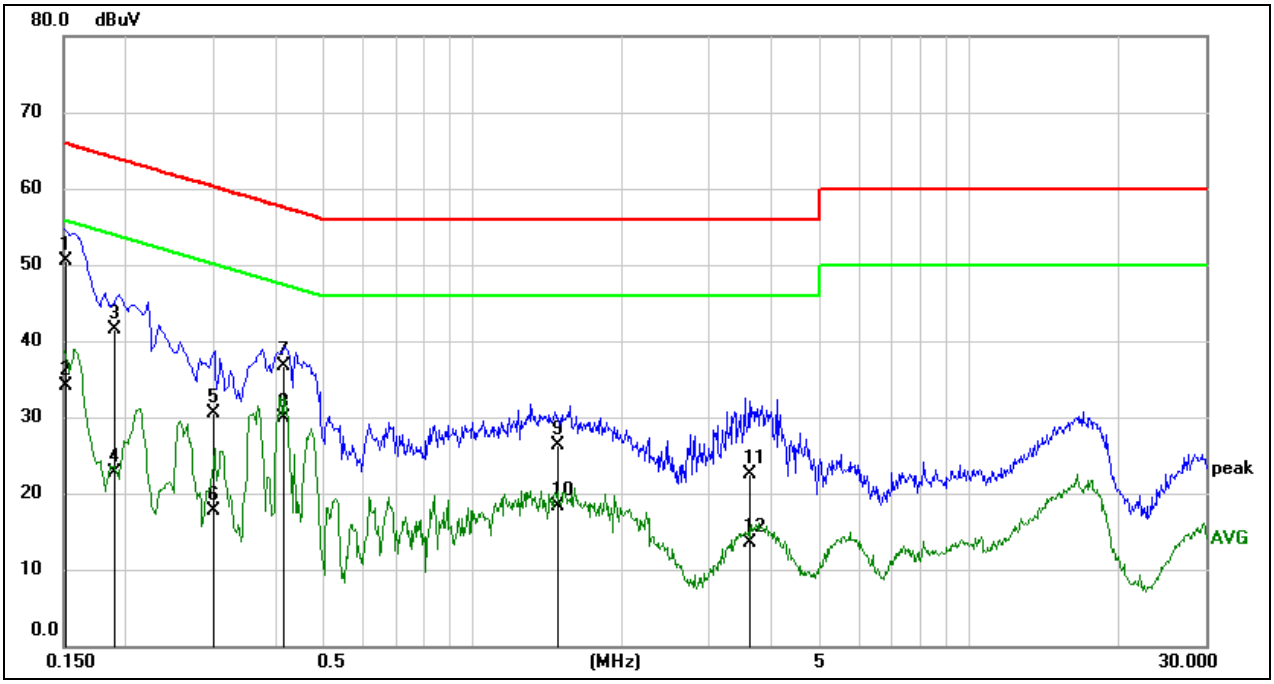
TEST DATE / ENGINEER

Test Date	April 7, 2026	Test By	Fanny Huang

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TEST RESULTS

Test Mode:	802.11b	Frequency(MHz):	2412
Line:	Line		



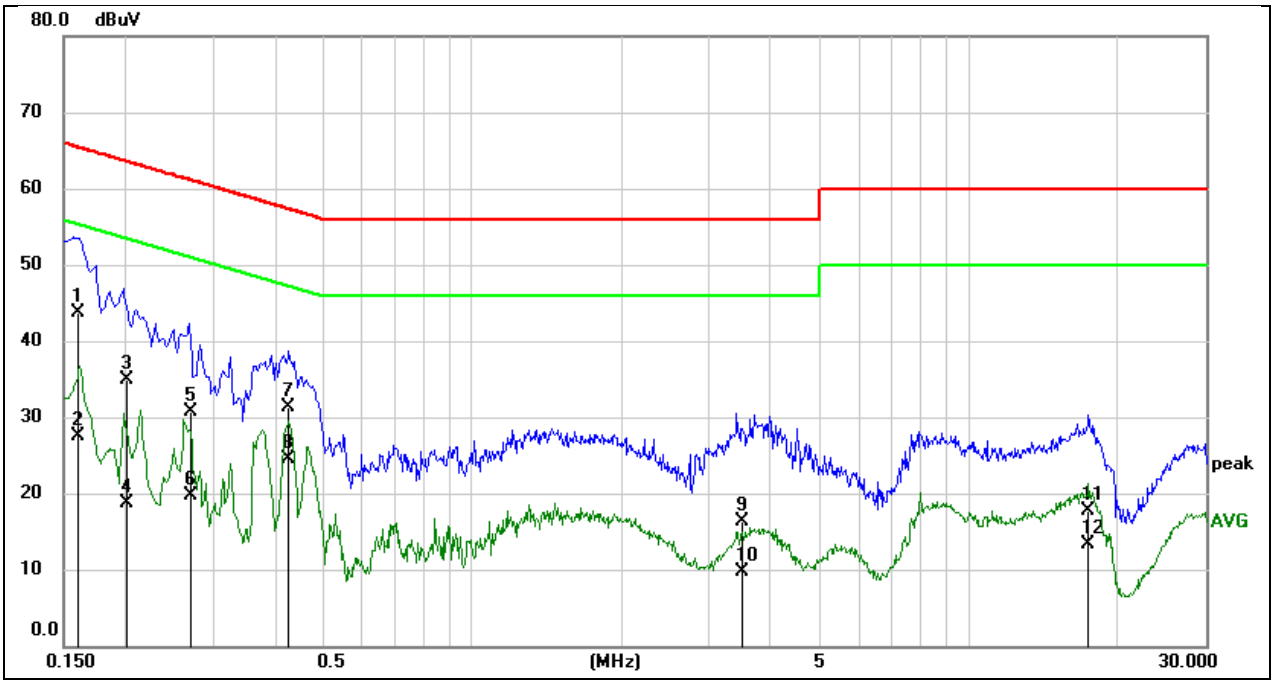
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1521	40.16	10.44	50.60	65.88	-15.28	QP
2	0.1521	23.62	10.44	34.06	55.88	-21.82	AVG
3	0.1893	31.16	10.44	41.60	64.07	-22.47	QP
4	0.1893	12.22	10.44	22.66	54.07	-31.41	AVG
5	0.2991	20.04	10.41	30.45	60.27	-29.82	QP
6	0.2991	7.30	10.41	17.71	50.27	-32.56	AVG
7	0.4186	26.24	10.37	36.61	57.48	-20.87	QP
8	0.4186	19.48	10.37	29.85	47.48	-17.63	AVG
9	1.4955	15.85	10.44	26.29	56.00	-29.71	QP
10	1.4955	7.87	10.44	18.31	46.00	-27.69	AVG
11	3.6018	12.18	10.41	22.59	56.00	-33.41	QP
12	3.6018	3.04	10.41	13.45	46.00	-32.55	AVG

Note:
1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes have been tested, only the worst data was recorded in the report.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11b	Frequency(MHz):	2412
Line:	Neutral		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1612	33.27	10.45	43.72	65.40	-21.68	QP
2	0.1612	17.08	10.45	27.53	55.40	-27.87	AVG
3	0.2014	24.77	10.14	34.91	63.55	-28.64	QP
4	0.2014	8.64	10.14	18.78	53.55	-34.77	AVG
5	0.2701	20.55	10.19	30.74	61.11	-30.37	QP
6	0.2701	9.49	10.19	19.68	51.11	-31.43	AVG
7	0.4242	21.03	10.29	31.32	57.37	-26.05	QP
8	0.4242	14.12	10.29	24.41	47.37	-22.96	AVG
9	3.4863	5.86	10.40	16.26	56.00	-39.74	QP
10	3.4863	-0.78	10.40	9.62	46.00	-36.38	AVG
11	17.3001	6.83	10.78	17.61	60.00	-42.39	QP
12	17.3001	2.54	10.78	13.32	50.00	-36.68	AVG

Note:
1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes have been tested, only the worst data was recorded in the report.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11. TEST DATA

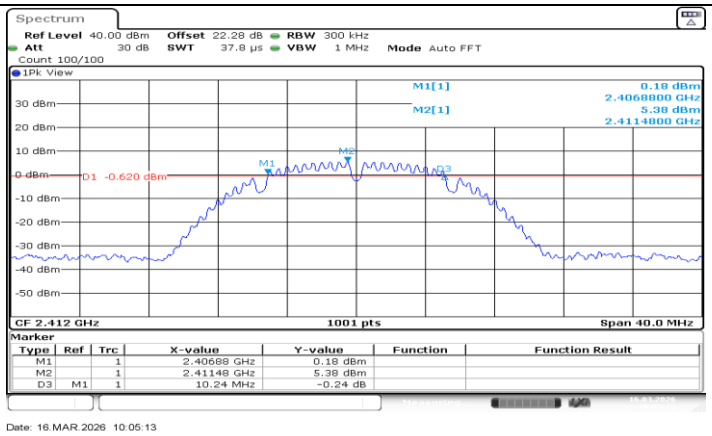
11.1. APPENDIX A: DTS BANDWIDTH

11.1.1. Test Result

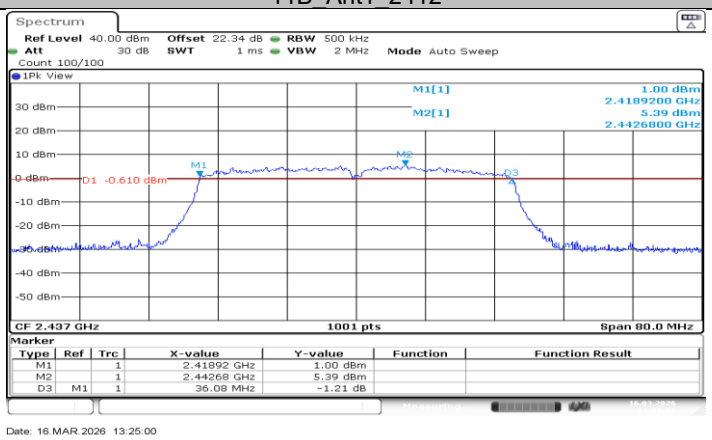
Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.24	2406.88	2417.12	≥0.5	PASS
	Ant2	2412	10.24	2406.88	2417.12	≥0.5	PASS
	Ant1	2437	10.24	2431.88	2442.12	≥0.5	PASS
	Ant2	2437	10.24	2431.88	2442.12	≥0.5	PASS
	Ant1	2462	10.24	2456.88	2467.12	≥0.5	PASS
	Ant2	2462	10.24	2456.88	2467.12	≥0.5	PASS
11G	Ant1	2412	16.36	2403.84	2420.20	≥0.5	PASS
	Ant2	2412	16.36	2403.84	2420.20	≥0.5	PASS
	Ant1	2437	16.36	2428.84	2445.20	≥0.5	PASS
	Ant2	2437	16.36	2428.84	2445.20	≥0.5	PASS
	Ant1	2462	16.36	2453.84	2470.20	≥0.5	PASS
	Ant2	2462	16.36	2453.84	2470.20	≥0.5	PASS
11N20MIMO	Ant1	2412	17.56	2403.24	2420.80	≥0.5	PASS
	Ant2	2412	17.56	2403.24	2420.80	≥0.5	PASS
	Ant1	2437	17.64	2428.20	2445.84	≥0.5	PASS
	Ant2	2437	17.60	2428.20	2445.80	≥0.5	PASS
	Ant1	2462	17.64	2453.20	2470.84	≥0.5	PASS
	Ant2	2462	17.56	2453.24	2470.80	≥0.5	PASS
11N40MIMO	Ant1	2422	36.32	2403.76	2440.08	≥0.5	PASS
	Ant2	2422	36.16	2403.84	2440.00	≥0.5	PASS
	Ant1	2437	36.24	2418.76	2455.00	≥0.5	PASS
	Ant2	2437	36.08	2418.92	2455.00	≥0.5	PASS
	Ant1	2452	36.32	2433.76	2470.08	≥0.5	PASS
	Ant2	2452	36.24	2433.76	2470.00	≥0.5	PASS

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11.1.2. Test Graphs



11B_Ant1_2412



11N40MIMO_Ant2_2437

Note:
1. Only the worst data plots were reported to show setting parameter compliance with testing method/procedure.
2. RBW setting to 300kHz is used in 802.11b/g/n HT20 modes.
3. RBW setting to 500kHz is used in 802.11n HT4 mode.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

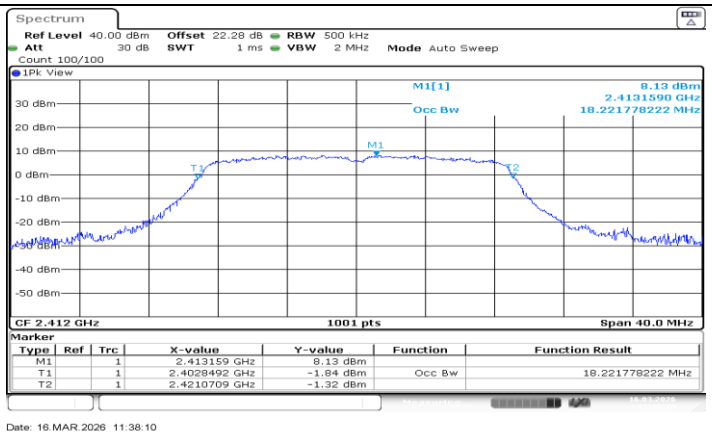
11.2. APPENDIX B: OCCUPIED CHANNEL BANDWIDTH

11.2.1. Test Result

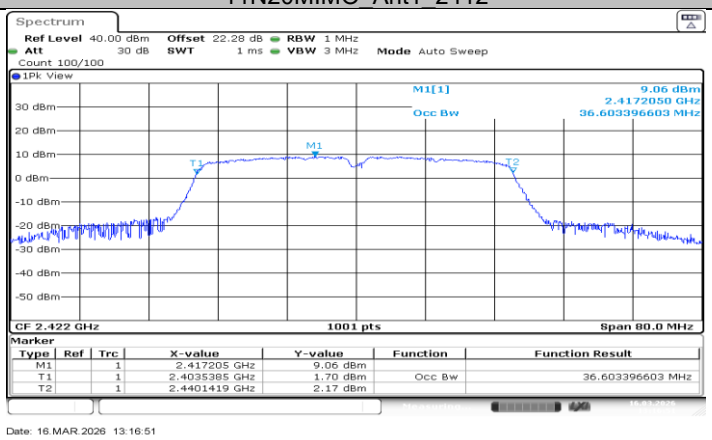
Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
11B	Ant1	2412	14.865	2404.5674	2419.4326	PASS
	Ant2	2412	14.825	2404.6074	2419.4326	PASS
	Ant1	2437	14.945	2429.5275	2444.4725	PASS
	Ant2	2437	14.825	2429.6074	2444.4326	PASS
	Ant1	2462	14.945	2454.5275	2469.4725	PASS
	Ant2	2462	14.825	2454.6074	2469.4326	PASS
11G	Ant1	2412	17.103	2403.4885	2420.5914	PASS
	Ant2	2412	17.103	2403.4885	2420.5914	PASS
	Ant1	2437	17.063	2428.5285	2445.5914	PASS
	Ant2	2437	17.063	2428.4885	2445.5514	PASS
	Ant1	2462	17.023	2453.5285	2470.5514	PASS
	Ant2	2462	17.063	2453.4885	2470.5514	PASS
11N20MIMO	Ant1	2412	18.222	2402.8492	2421.0709	PASS
	Ant2	2412	18.142	2402.8891	2421.0310	PASS
	Ant1	2437	18.222	2427.8492	2446.0709	PASS
	Ant2	2437	18.102	2427.9291	2446.0310	PASS
	Ant1	2462	18.182	2452.8891	2471.0709	PASS
	Ant2	2462	18.182	2452.8891	2471.0709	PASS
11N40MIMO	Ant1	2422	36.603	2403.5385	2440.1419	PASS
	Ant2	2422	36.444	2403.6983	2440.1419	PASS
	Ant1	2437	36.603	2418.5385	2455.1419	PASS
	Ant2	2437	36.523	2418.6184	2455.1419	PASS
	Ant1	2452	36.523	2433.6184	2470.1419	PASS
	Ant2	2452	36.523	2433.6184	2470.1419	PASS

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11.2.2. Test Graphs



11N20MIMO_Ant1_2412



11N40MIMO_Ant1_2422

Note:
1. Only the worst data plots were reported to show setting parameter compliance with testing method/procedure.
2. RBW setting to 500kHz is used in 802.11b/g/n HT20 modes.
3. RBW setting to 1MHz is used in 802.11n HT40 mode.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11.3. APPENDIX C: MAXIMUM CONDUCTED OUTPUT POWER

11.3.1. Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	14.10	≤30.00	PASS
	Ant2	2412	14.15	≤30.00	PASS
	Ant1	2437	14.12	≤30.00	PASS
	Ant2	2437	14.41	≤30.00	PASS
	Ant1	2462	14.20	≤30.00	PASS
	Ant2	2462	14.43	≤30.00	PASS
11G	Ant1	2412	14.01	≤30.00	PASS
	Ant2	2412	14.27	≤30.00	PASS
	Ant1	2437	14.12	≤30.00	PASS
	Ant2	2437	14.10	≤30.00	PASS
	Ant1	2462	14.31	≤30.00	PASS
	Ant2	2462	14.19	≤30.00	PASS
11N20MIMO	Ant1	2412	14.59	≤30.00	PASS
	Ant2	2412	14.48	≤30.00	PASS
	total	2412	17.55	≤30.00	PASS
	Ant1	2437	14.29	≤30.00	PASS
	Ant2	2437	14.37	≤30.00	PASS
	total	2437	17.34	≤30.00	PASS
	Ant1	2462	13.96	≤30.00	PASS
	Ant2	2462	14.01	≤30.00	PASS
	total	2462	17.00	≤30.00	PASS
11N40MIMO	Ant1	2422	14.54	≤30.00	PASS
	Ant2	2422	14.45	≤30.00	PASS
	total	2422	17.51	≤30.00	PASS
	Ant1	2437	14.50	≤30.00	PASS
	Ant2	2437	14.18	≤30.00	PASS
	total	2437	17.35	≤30.00	PASS
	Ant1	2452	14.31	≤30.00	PASS
	Ant2	2452	14.44	≤30.00	PASS
	total	2452	17.39	≤30.00	PASS

Note: 1. Conducted Power=Meas. Level+ Correction Factor
2. The Duty Cycle Factor (refer to section 7.5) had already compensated to the test data.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11.4. APPENDIX D: MAXIMUM POWER SPECTRAL DENSITY

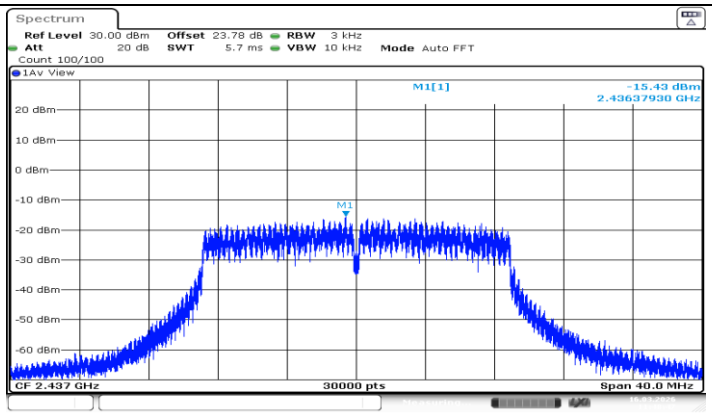
11.4.1. Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-17.36	≤8.00	PASS
	Ant2	2412	-17.03	≤8.00	PASS
	Ant1	2437	-17.14	≤8.00	PASS
	Ant2	2437	-16.54	≤8.00	PASS
	Ant1	2462	-16.61	≤8.00	PASS
	Ant2	2462	-16.60	≤8.00	PASS
11G	Ant1	2412	-16.46	≤8.00	PASS
	Ant2	2412	-16.04	≤8.00	PASS
	Ant1	2437	-15.99	≤8.00	PASS
	Ant2	2437	-16.24	≤8.00	PASS
	Ant1	2462	-15.56	≤8.00	PASS
	Ant2	2462	-16.03	≤8.00	PASS
11N20MIMO	Ant1	2412	-15.62	≤8.00	PASS
	Ant2	2412	-16.03	≤8.00	PASS
	total	2412	-12.81	≤8.00	PASS
	Ant1	2437	-15.43	≤8.00	PASS
	Ant2	2437	-15.35	≤8.00	PASS
	total	2437	-12.38	≤8.00	PASS
	Ant1	2462	-16.45	≤8.00	PASS
	Ant2	2462	-16.34	≤8.00	PASS
	total	2462	-13.38	≤8.00	PASS
11N40MIMO	Ant1	2422	-16.62	≤8.00	PASS
	Ant2	2422	-17.18	≤8.00	PASS
	total	2422	-13.88	≤8.00	PASS
	Ant1	2437	-16.05	≤8.00	PASS
	Ant2	2437	-17.83	≤8.00	PASS
	total	2437	-13.84	≤8.00	PASS
	Ant1	2452	-17.28	≤8.00	PASS
	Ant2	2452	-17.60	≤8.00	PASS
	total	2452	-14.43	≤8.00	PASS

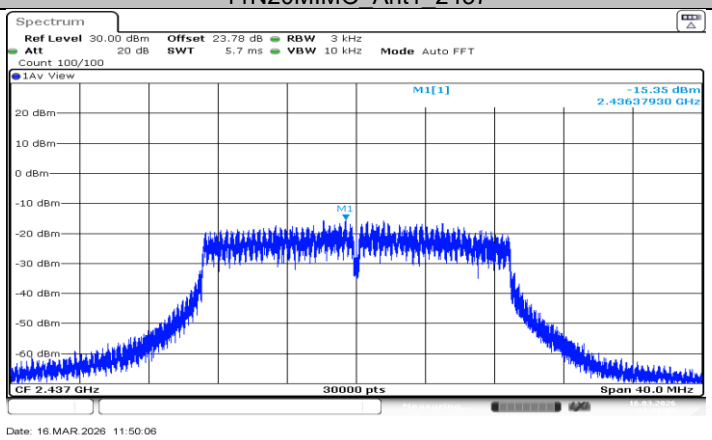
Note: 1. The Duty Cycle Factor (refer to section 7.5) had already compensated to the test data.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

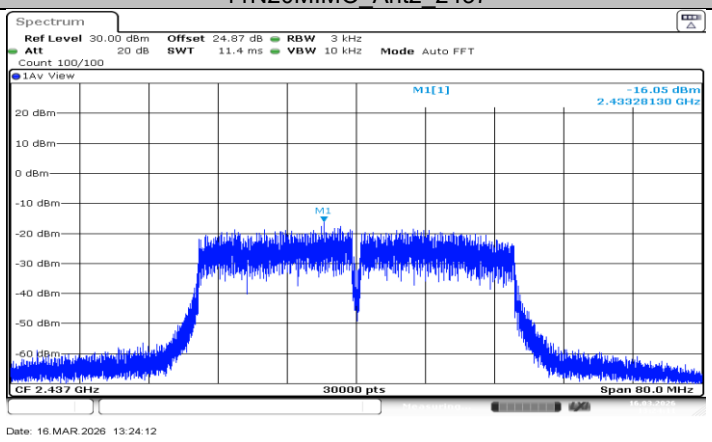
11.4.2. Test Graphs



11N20MIMO_Ant1_2437

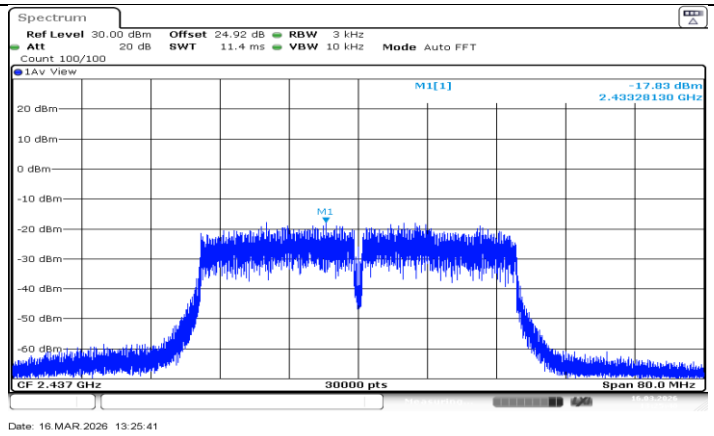


11N20MIMO_Ant2_2437



11N40MIMO_Ant1_2437

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N40MIMO_Ant2_2437

Note:
1. Only the worst data plots were reported to show setting parameter compliance with testing method/procedure.
2. For all modes, RBW setting to 3kHz is used on PSD measurement.
3. Span is set to 40MHz for 802.11b/g/n HT20 modes.
4. Span is set to 80MHz for 802.11n HT40 modes.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

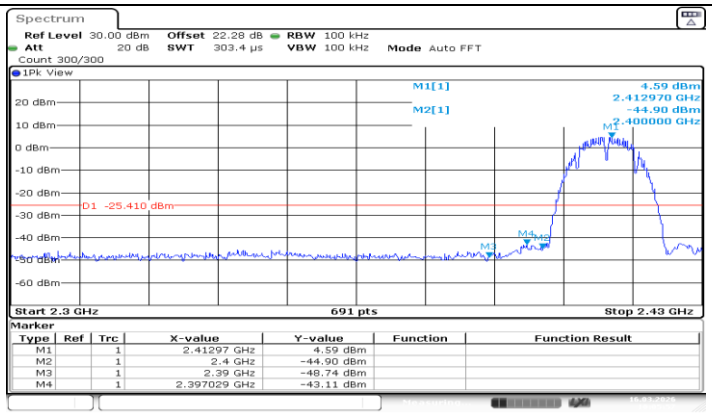
11.5. APPENDIX E: BAND EDGE MEASUREMENTS

11.5.1. Test Result

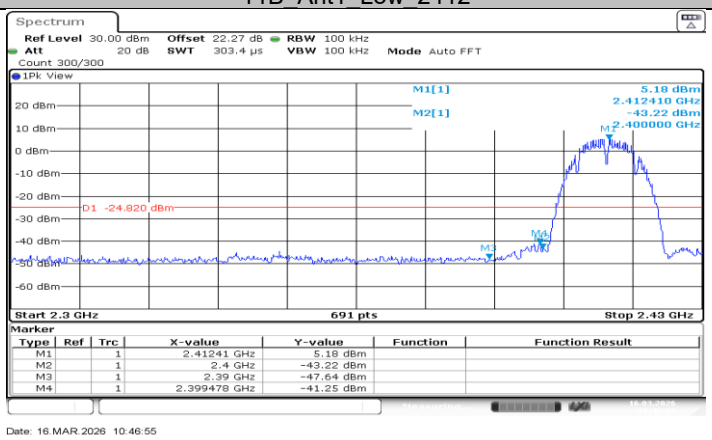
Test Mode	Antenna	ChName	Frequency [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.59	-43.11	≤-25.41	PASS
	Ant2	Low	2412	5.18	-41.25	≤-24.82	PASS
	Ant1	High	2462	5.29	-46.05	≤-24.71	PASS
	Ant2	High	2462	5.31	-45.71	≤-24.69	PASS
11G	Ant1	Low	2412	3.51	-33.59	≤-26.49	PASS
	Ant2	Low	2412	3.63	-34.33	≤-26.37	PASS
	Ant1	High	2462	3.00	-44.01	≤-27	PASS
	Ant2	High	2462	2.25	-42.88	≤-27.75	PASS
11N20MIMO	Ant1	Low	2412	3.73	-32.5	≤-26.27	PASS
	Ant2	Low	2412	3.58	-33.52	≤-26.42	PASS
	Ant1	High	2462	3.51	-45.73	≤-26.49	PASS
	Ant2	High	2462	2.01	-44.8	≤-27.99	PASS
11N40MIMO	Ant1	Low	2422	1.43	-33.53	≤-28.57	PASS
	Ant2	Low	2422	1.52	-36.12	≤-28.48	PASS
	Ant1	High	2452	1.23	-38.99	≤-28.77	PASS
	Ant2	High	2452	1.08	-40.53	≤-28.92	PASS

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

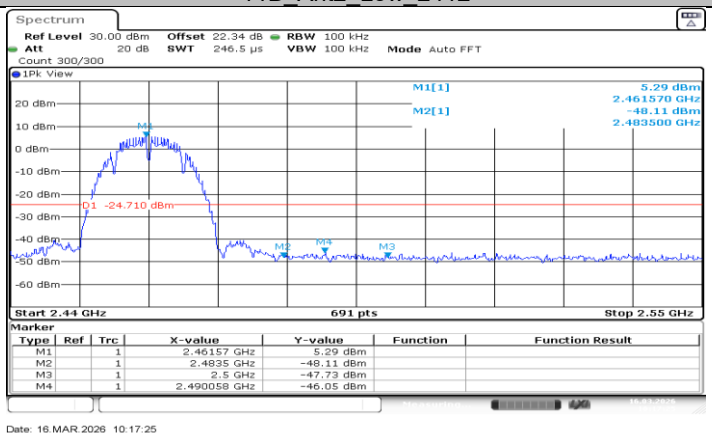
11.5.2. Test Graphs



11B_Ant1_Low_2412

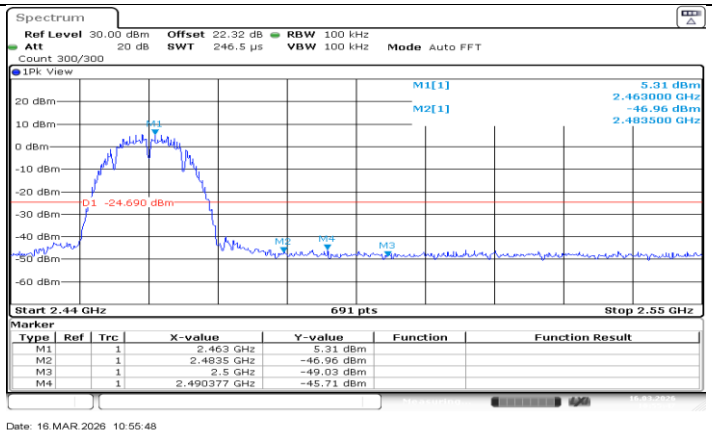


11B_Ant2_Low_2412

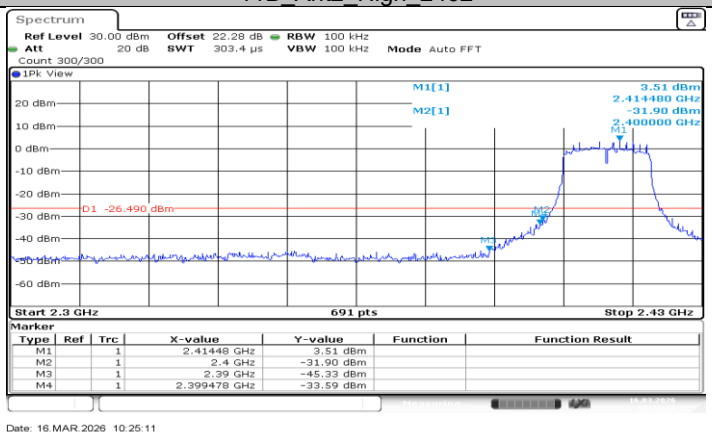


11B_Ant1_High_2462

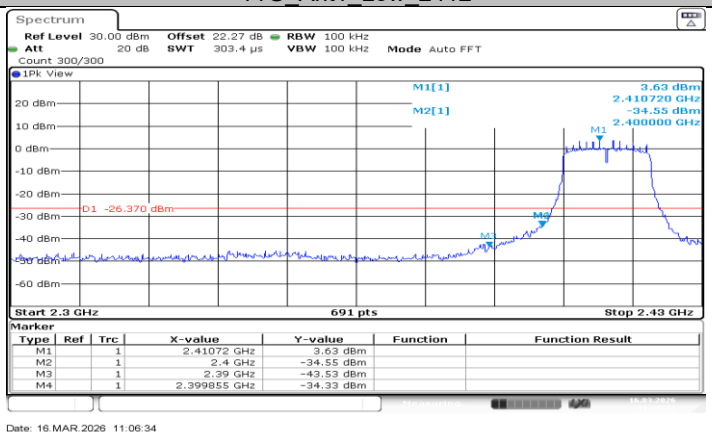
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11B_Ant2_High_2462

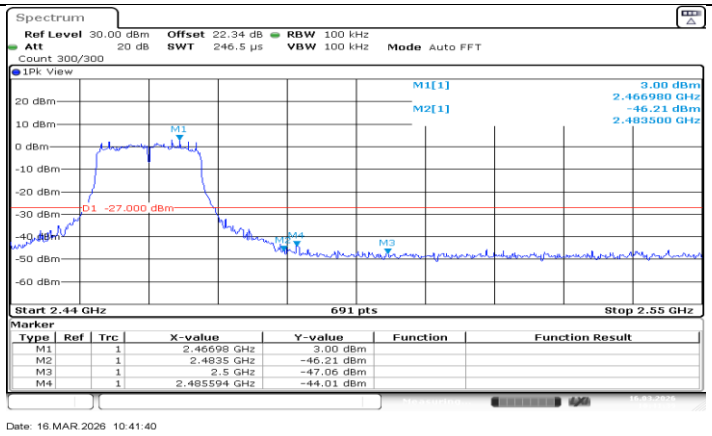


11G_Ant1_Low_2412

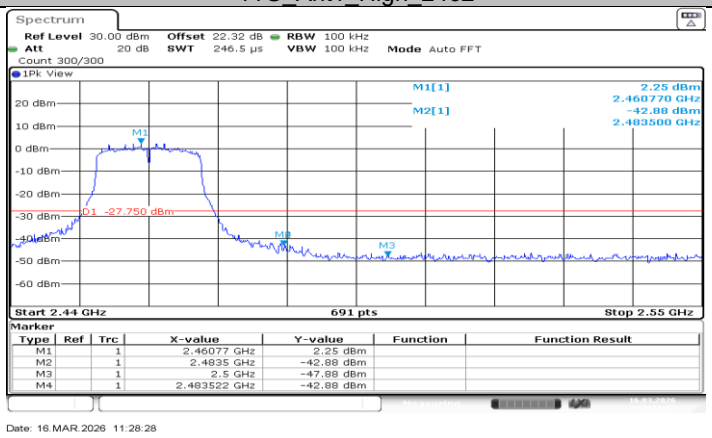


11G_Ant2_Low_2412

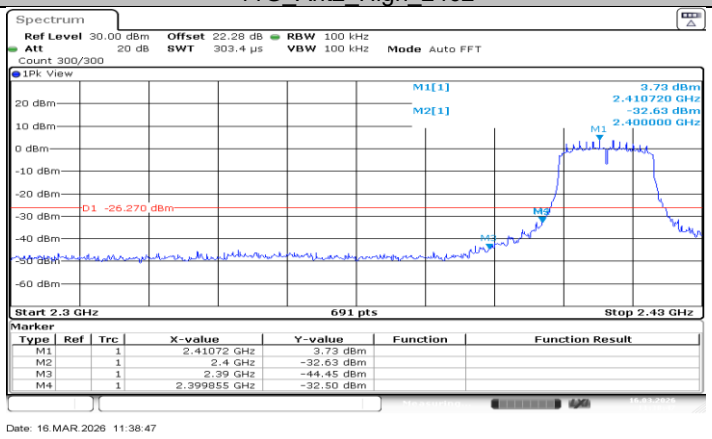
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11G_Ant1_High_2462

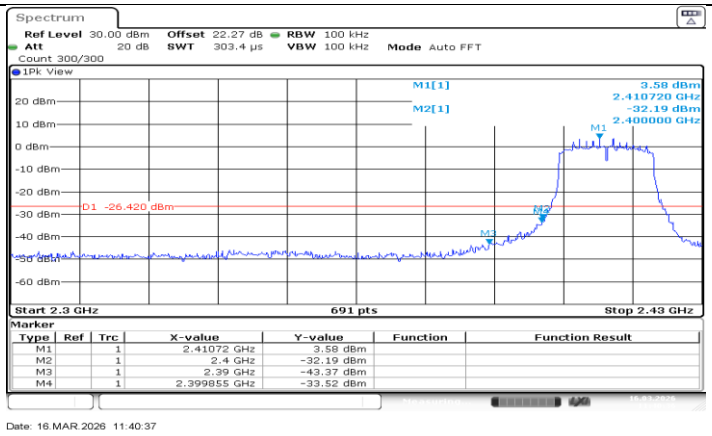


11G_Ant2_High_2462

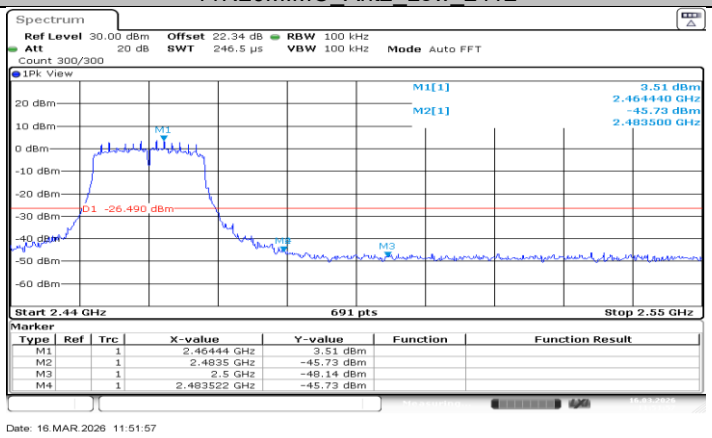


11N20MIMO_Ant1_Low_2412

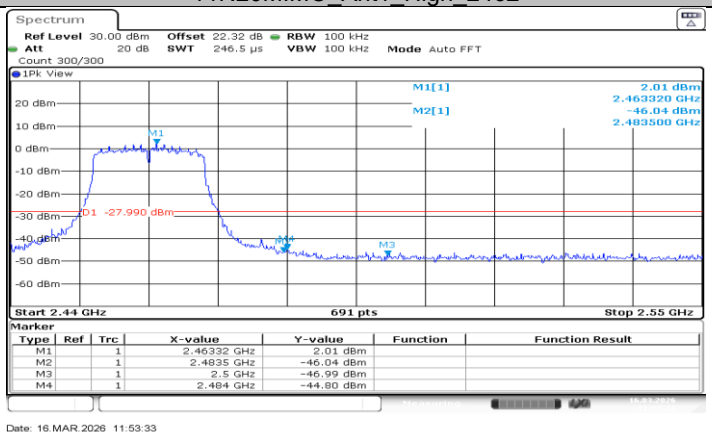
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N20MIMO_Ant2_Low_2412

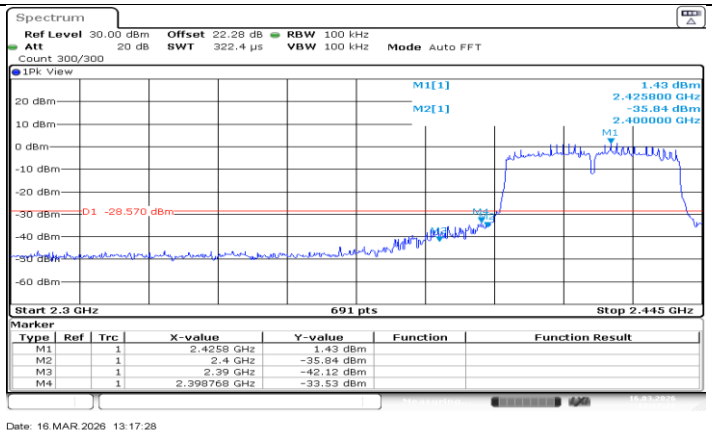


11N20MIMO_Ant1_High_2462

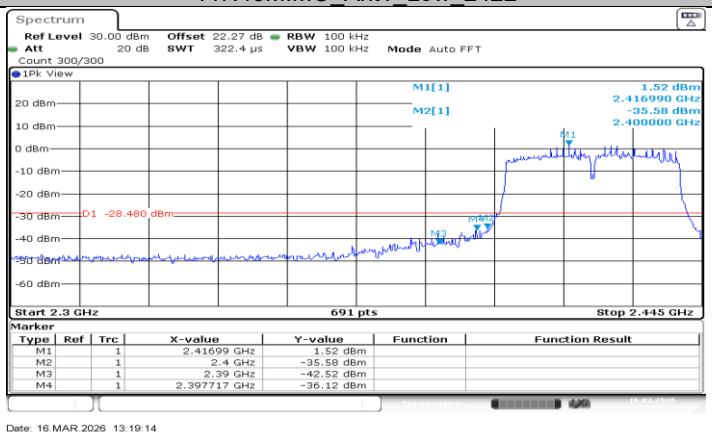


11N20MIMO_Ant2_High_2462

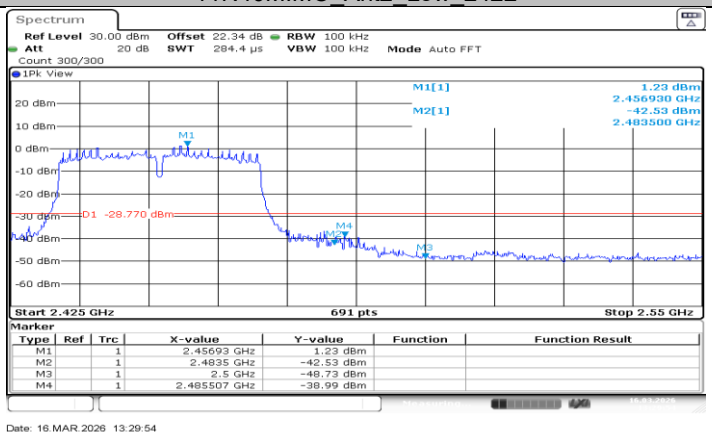
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N40MIMO_Ant1_Low_2422

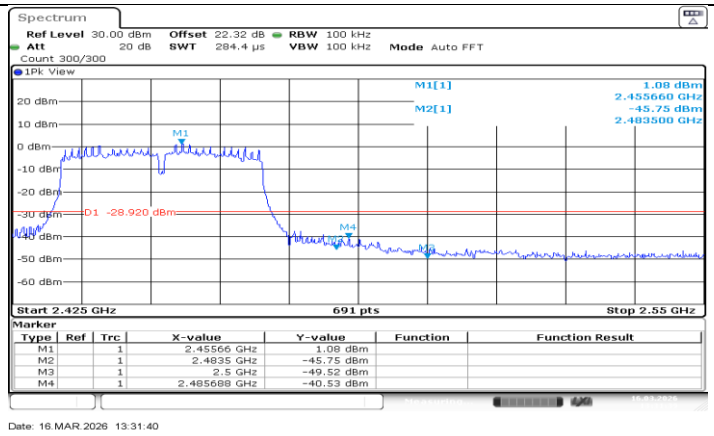


11N40MIMO_Ant2_Low_2422



11N40MIMO_Ant1_High_2452

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N40MIMO_Ant2_High_2452

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11.6. APPENDIX F: CONDUCTED SPURIOUS EMISSION

11.6.1. Test Result

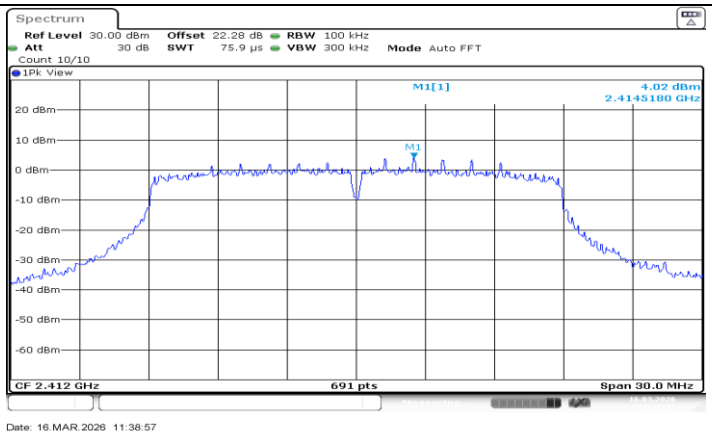
Test Mode	Antenna	Frequency[MHz]	FreqRange [Mhz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	5.24	---	PASS
			30~1000	-44.84	≤-24.76	PASS
			1000~26500	-39.3	≤-24.76	PASS
	Ant2	2412	Reference	5.21	---	PASS
			30~1000	-43.91	≤-24.79	PASS
			1000~26500	-39.65	≤-24.79	PASS
	Ant1	2437	Reference	5.39	---	PASS
			30~1000	-44.76	≤-24.61	PASS
			1000~26500	-39.85	≤-24.61	PASS
	Ant2	2437	Reference	5.35	---	PASS
			30~1000	-44.47	≤-24.65	PASS
			1000~26500	-39.9	≤-24.65	PASS
	Ant1	2462	Reference	5.36	---	PASS
			30~1000	-45.12	≤-24.64	PASS
			1000~26500	-39.99	≤-24.64	PASS
	Ant2	2462	Reference	5.55	---	PASS
			30~1000	-43.92	≤-24.45	PASS
			1000~26500	-39.87	≤-24.45	PASS
11G	Ant1	2412	Reference	3.72	---	PASS
			30~1000	-44.49	≤-26.28	PASS
			1000~26500	-39.42	≤-26.28	PASS
	Ant2	2412	Reference	3.49	---	PASS
			30~1000	-45.18	≤-26.51	PASS
			1000~26500	-40.26	≤-26.51	PASS
	Ant1	2437	Reference	3.65	---	PASS
			30~1000	-45.4	≤-26.35	PASS
			1000~26500	-40.04	≤-26.35	PASS
	Ant2	2437	Reference	3.67	---	PASS
			30~1000	-44.87	≤-26.33	PASS
			1000~26500	-39.39	≤-26.33	PASS
	Ant1	2462	Reference	3.93	---	PASS
			30~1000	-45.26	≤-26.07	PASS
			1000~26500	-40.25	≤-26.07	PASS
	Ant2	2462	Reference	3.84	---	PASS
			30~1000	-45.11	≤-26.16	PASS
			1000~26500	-40.04	≤-26.16	PASS
11N20MIMO	Ant1	2412	Reference	4.02	---	PASS
			30~1000	-44.91	≤-25.98	PASS
			1000~26500	-39.95	≤-25.98	PASS
	Ant2	2412	Reference	3.76	---	PASS
			30~1000	-45.24	≤-26.24	PASS
			1000~26500	-39.69	≤-26.24	PASS
	Ant1	2437	Reference	3.91	---	PASS
			30~1000	-45.13	≤-26.09	PASS
			1000~26500	-40.53	≤-26.09	PASS
	Ant2	2437	Reference	3.69	---	PASS
			30~1000	-45.66	≤-26.31	PASS
			1000~26500	-39.28	≤-26.31	PASS
	Ant1	2462	Reference	3.62	---	PASS
			30~1000	-44.57	≤-26.38	PASS
			1000~26500	-40.06	≤-26.38	PASS
	Ant2	2462	Reference	3.18	---	PASS
			30~1000	-43.98	≤-26.82	PASS
			1000~26500	-39.94	≤-26.82	PASS
11N40MIMO	Ant1	2422	Reference	1.01	---	PASS

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

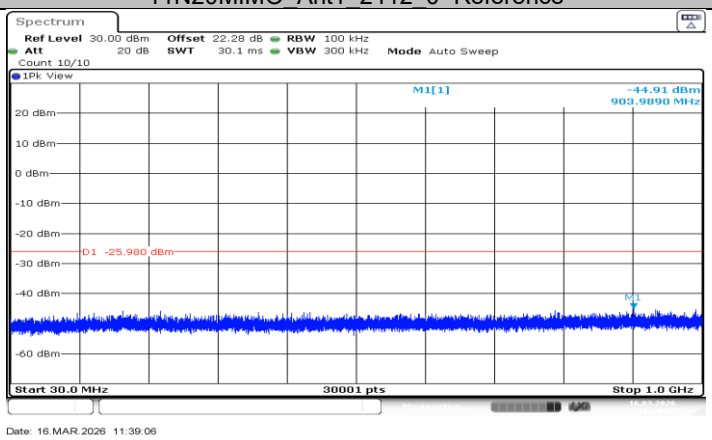
			30~1000	-44.68	≤-28.99	PASS
			1000~26500	-40	≤-28.99	PASS
	Ant2	2422	Reference	1.58	---	PASS
			30~1000	-45.32	≤-28.42	PASS
			1000~26500	-40.04	≤-28.42	PASS
	Ant1	2437	Reference	1.33	---	PASS
			30~1000	-44.46	≤-28.67	PASS
			1000~26500	-40.26	≤-28.67	PASS
	Ant2	2437	Reference	1.10	---	PASS
			30~1000	-45.05	≤-28.9	PASS
			1000~26500	-40.44	≤-28.9	PASS
	Ant1	2452	Reference	0.86	---	PASS
			30~1000	-45.45	≤-29.14	PASS
			1000~26500	-39.58	≤-29.14	PASS
	Ant2	2452	Reference	1.21	---	PASS
			30~1000	-44.81	≤-28.79	PASS
			1000~26500	-39.89	≤-28.79	PASS

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

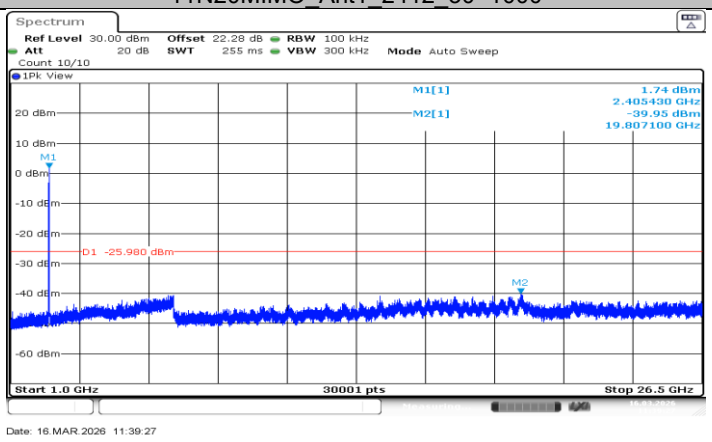
11.6.2. Test Graphs



11N20MIMO_Ant1_2412_0~Reference

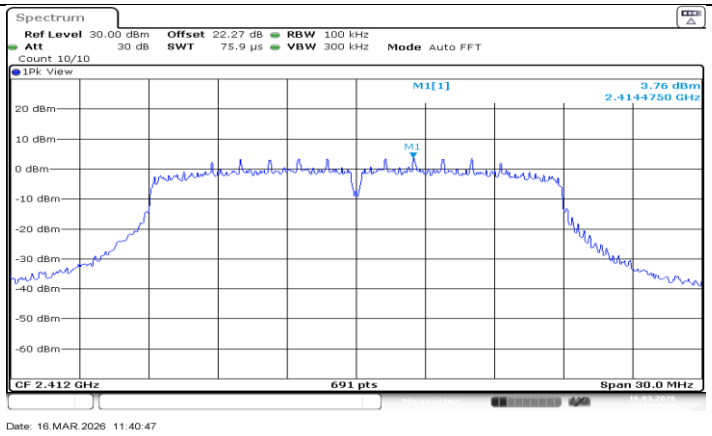


11N20MIMO_Ant1_2412_30~1000

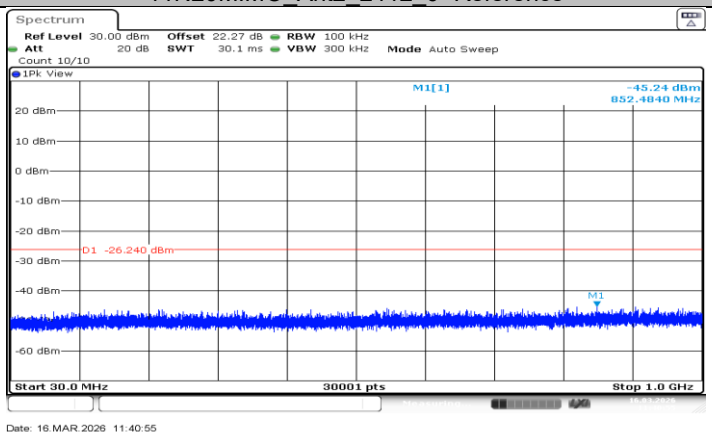


11N20MIMO_Ant1_2412_1000~26500

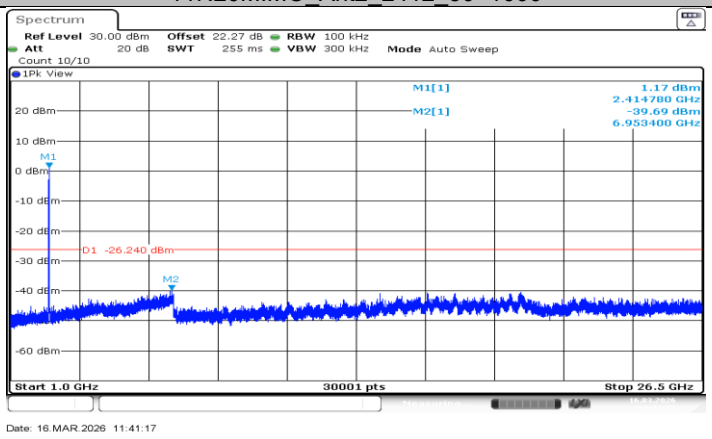
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N20MIMO_Ant2_2412_0~Reference



11N20MIMO_Ant2_2412_30~1000



11N20MIMO_Ant2_2412_1000~26500

Note:
1. Only the worst data plots were reported to show setting parameter compliance with testing method/procedure.
2. RBW setting to 100kHz is used in all modes on Conducted Spurious Emission test.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11.7. APPENDIX G: DUTY CYCLE

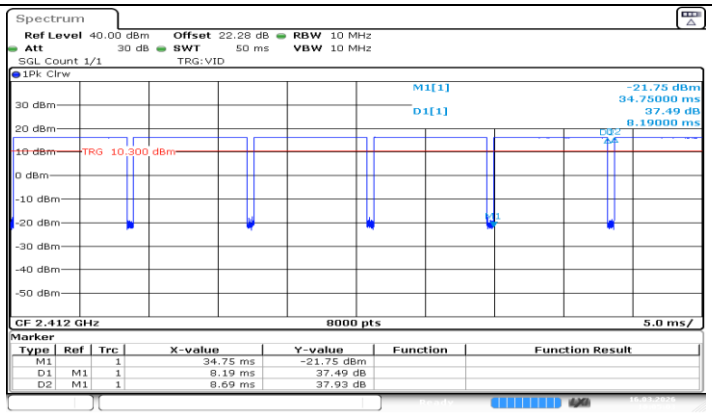
11.7.1. Test Result

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11B	8.19	8.69	0.9425	94.25	0.26	0.12	1
11G	1.35	1.85	0.7297	72.97	1.37	0.74	1
11N20MIMO	1.26	1.76	0.7159	71.59	1.45	0.79	1
11N40MIMO	0.63	1.13	0.5575	55.75	2.54	1.59	2

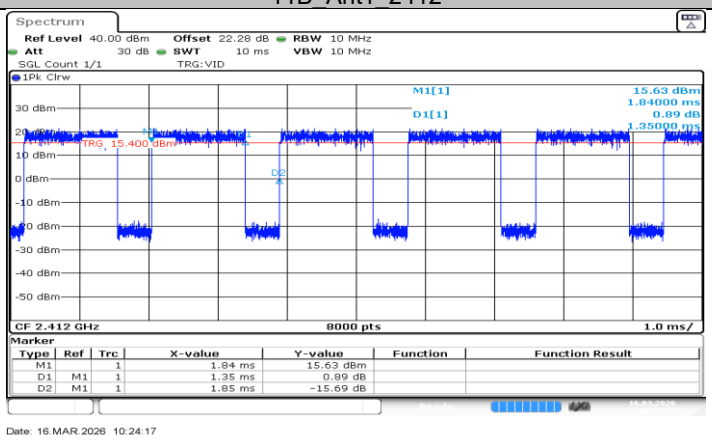
Note:
Duty Cycle Correction Factor=10log (1/x).
Where: x is Duty Cycle (Linear)
Where: T is On Time
If that calculated VBW is not available on the analyzer then the next higher value should be used.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

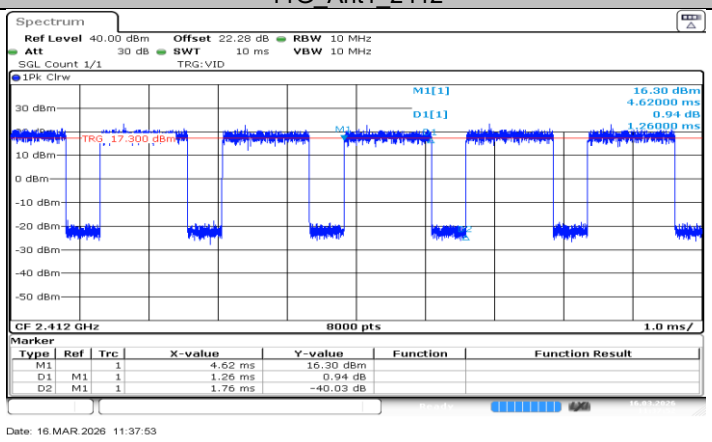
11.7.2. Test Graphs



11B_Ant1_2412

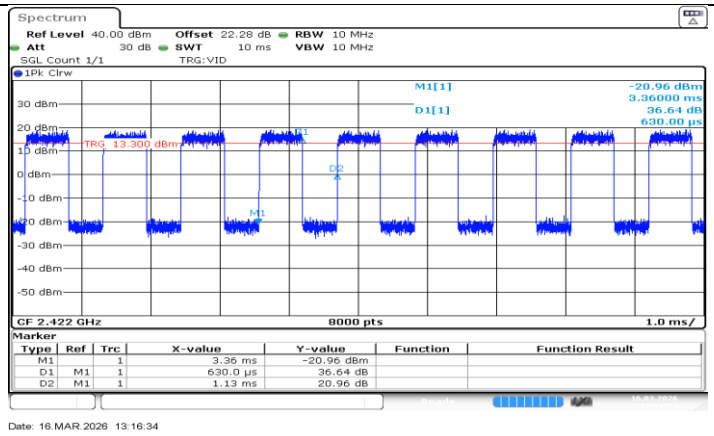


11G_Ant1_2412



11N20MIMO_Ant1_2412

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N40MIMO_Ant1_2422

END OF REPORT

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.