

JAPAN SPECIFIED RADIO TEST REPORT

Client Name : Jinan USR IOT Technology Limited

Address : Room 201,301 of East Building, No.889 Chonghua Road, Jinan Free Trade Area, Shandong, 250101, China

Product Name : Serial to WIFI Module

Date : Mar. 06, 2020



Shenzhen Anbotech Compliance Laboratory Limited

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TEST REPORT

Applicant : Jinan USR IOT Technology Limited
Manufacturer : Jinan USR IOT Technology Limited
Product Name : Serial to WIFI Module
Model No. : USR-WIFI232-A2, USR-WIFI232-B2, USR-W610

Trade Mark :



Rating(s) : Input: DC 3.2-3.6V

MIC Notice No.88 Annex43

**Test Standard(s) : Certificate regulation article 2, paragraph 1, item 19
ARIB STD-T66 V3.7**

The device described above is tested by Shenzhen Anbotech Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotech Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the MIC Notice No.88 Annex43, Certificate regulation article 2, paragraph 1, item 19 and ARIB STD-T66 V3.7 requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotech Compliance Laboratory Limited.

Date of Receipt

Dec. 25, 2019

Date of Test

Dec. 25, 2019~Feb. 24, 2020

Prepared By

(Engineer / Dolly Mo)

Reviewer

(Supervisor / Bibo Zhang)

Approved & Authorized Signer

(Manager / Tom Chen)

Shenzhen Anbotech Compliance Laboratory Limited**Code:AB-RF-07-a**

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400-003-0500
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1. General Information

1.1. Client Information

Applicant	:	Jinan USR IOT Technology Limited
Address	:	Room 201,301 of East Building,No.889 Chonghua Road,Jinan Free Trade Area,Shandong,250101,China
Manufacturer	:	Jinan USR IOT Technology Limited
Address	:	Room 201,301 of East Building,No.889 Chonghua Road,Jinan Free Trade Area,Shandong,250101,China
Factory	:	Jinan USR IOT Technology Limited
Address	:	Room 201,301 of East Building,No.889 Chonghua Road,Jinan Free Trade Area,Shandong,250101,China

1.2. Description of Device (EUT)

Product Name	:	Serial to WIFI Module
Model No.	:	USR-WIFI232-A2, USR-WIFI232-B2, USR-W610 (Note: All samples are the same except the model number, so we prepare "USR-WIFI232-A2" for test only.)
Trade Mark	:	
Test Power Supply	:	DC 3.3V
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Product Description	Operation Frequency:	2412MHz~2472MHz / 2422~2462MHz
	Modulation Type:	CCK/DSSS/OFDM with BPSK / QPSK / 16QAM / 64QAM for 802.11b/g/n
	Antenna Type:	PCB Antenna
	Antenna Gain(Peak):	1.84 dBi
	Rated output Power	4.2 mW/MHz
	Hardware version	V1.2
	Software version	V1.2
Remark: 1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.		

1.3. Auxiliary Equipment Used During Test

N/A	
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1.4. Description of Test Modes

The EUT has been tested under operating condition.

Software used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

IEEE802.11b: Channel 1(2412MHz), Channel 7(2442MHz) and Channel 13(2472MHz) with 11Mbps Worst data rate (worst case) are chosen for the final testing.

IEEE802.11g: Channel 1(2412MHz), Channel 7(2442MHz) and Channel 13(2472MHz) with 54Mbps data rate (the worst case) are chosen for the final testing.

IEEE802.11n(HT20): Channel 1(2412MHz), Channel7(2442MHz) and Channel 13(2472MHz) with 65Mbps Worst data rate (worst case) are chosen for the final testing.

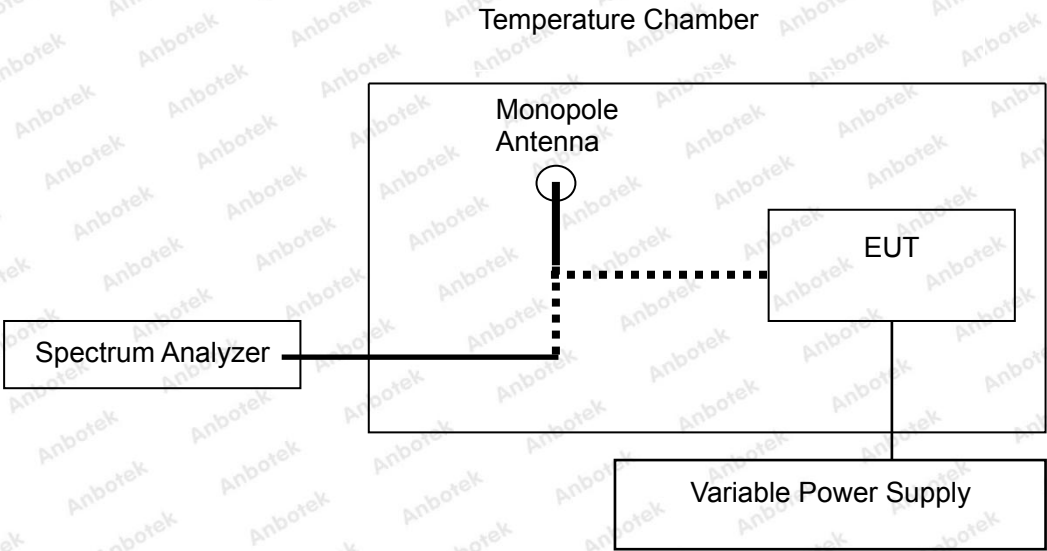
IEEE802.11n(HT40): Channel 3(2422MHz), Channel 7(2442MHz) and Channel 11 (2462MHz) with 135Mbps data rate (the worst case) are chosen for the final testing.

Remark: This device have more than 1 subcarrier in 1MHz, compliance with the requirement.

1.5. Test Conditions

	Normal Test Conditions	Extreme Test Conditions
Temperature	15°C - 35°C	-10°C ~ 45°C
Relative Humidity	20% - 75%	N/A
Supply Voltage	DC 3.3V	DC 2.97V ~DC 3.63V

1.6. Test Configuration



1.7. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	Nov. 04, 2019	1 Year
2.	EMI Test Receiver	Rohde & Schwarz	ESPI3	101604	Nov. 04, 2019	1 Year
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Nov. 04, 2019	1 Year
4.	MAX Spectrum Analysis	Agilent	N9020A	MY51170037	Nov. 04, 2019	1 Year
5.	Preamplifier	SKET Electronic	BK1G18G30 D	KD17503	Nov. 04, 2019	1 Year
6.	Double Ridged Horn Antenna	Instruments corporation	GTH-0118	351600	Nov. 01, 2019	1 Year
7.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	Nov. 01, 2019	1 Year
8.	Loop Antenna	Schwarzbeck	FMZB1519B	00053	Nov. 01, 2019	1 Year
9.	Horn Antenna	A-INFO	LB-180400-K F	J211060628	Nov. 01, 2019	1 Year
10.	Pre-amplifier	SONOMA	310N	186860	Nov. 04, 2019	1 Year
11.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A
12.	RF Test Control System	YIHENG	YH3000	2017430	Nov. 04, 2019	1 Year
13.	Power Sensor	DAER	RPR3006W	15I00041SN045	Nov. 04, 2019	1 Year
14.	Power Sensor	DAER	RPR3006W	15I00041SN046	Nov. 04, 2019	1 Year
15.	MXA Spectrum Analysis	Agilent	N9020A	MY51170037	Nov. 04, 2019	1 Year
16.	MXG RF Vector Signal Generator	Agilent	N5182A	MY48180656	Nov. 04, 2019	1 Year
17.	Signal Generator	Agilent	E4421B	MY41000743	Nov. 04, 2019	1 Year
18.	DC Power Supply	LW	TPR-6420D	374470	Nov. 04, 2019	1 Year
19.	Constant Temperature Humidity Chamber	ZHONGJIAN	ZJ-KHWS80 B	N/A	Nov. 04, 2019	1 Year

1.8. Description of Test Facility

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

FCC-Registration No.: 184111

Shenzhen Anbotech Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 184111, September 27, 2019.

ISED-Registration No.: 8058A

Shenzhen Anbotech Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A, March 07, 2019.

Test Location

Shenzhen Anbotech Compliance Laboratory Limited.

1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.518102



2. Summary of Test Results

Test Items	Subclause	Required	Results
General Provisions			
Frequency Tolerance	5	Yes	Complies
Occupied Bandwidth	6	Yes	Complies
Spurious Emissions	7	Yes	Complies
Transmitting equipment			
Antenna power	14	Yes	Complies
Frequency stabilization	15	Yes	Complies
Transmitter antenna			
Type, configuration, etc. of transmitting antenna	20	Yes	Complies
Directional pattern of transmitting antenna	22	Yes	Complies
Receiving equipment			
Spurious emission of receiver	24	Yes	Complies
Refer to all articles for transmitter antenna	26	Yes	Complies
Operating frequency 2400-2483.5MHz			
High Frequency/modulation section cannot be opened easily	49.20(1); a	Yes	Complies
Communication method	49.20(1); b	Yes	Complies
Modulation method	49.20(1); c	Yes	Complies
Spread spectrum method	49.20(1); d	Yes	Complies
Antenna power	49.20(1); e	Yes	Complies
Absolute gain of transmitting antenna	49.20(1); f(1)	N/A	N/A
Angular width of principal radiation (AWPR)	49.20(1); f(2)	N/A	N/A
Number of carriers within 1 MHz bandwidth in OFDM	49.20(1); g	Yes	Complies
Diffusion bandwidth	49.20(1); h	Yes	Complies
Spreading factor	49.20(1); i	Yes	Complies
Frequency retention time (FH employed)	49.20(1); j	N/A	N/A
EIRP	49.20(1);	N/A	N/A
Carrier sensing function	--	Yes	Complies
Interference prevention function	--	Yes	Complies
Note: "N/A" denotes test is not applicable in this Test Report.			

3. FREQUENCY TOLERANCE TEST

3.1. Test Limit

Test Limit	±50 ppm
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3.2. Test Equipment

Same as 1.7.

3.3. Test Configuration

Same as 1.6.

3.4. Test Data

PASS

Please refer to the following data.

Low Voltage: DC 2.97V

Frequency(MHz)	Reading(MHz)	Tolerance(ppm)	Limit(ppm)
2412.0000	2411.9868	-5.473	±50
2442.0000	2441.9877	-5.037	±50
2472.0000	2471.9894	-4.288	±50

Frequency(MHz)	Reading(MHz)	Tolerance(ppm)	Limit(ppm)
2422.0000	2421.9899	-4.170	±50
2442.0000	2441.9884	-4.750	±50
2462.0000	2461.9902	-3.981	±50

High Voltage: DC 3.63V

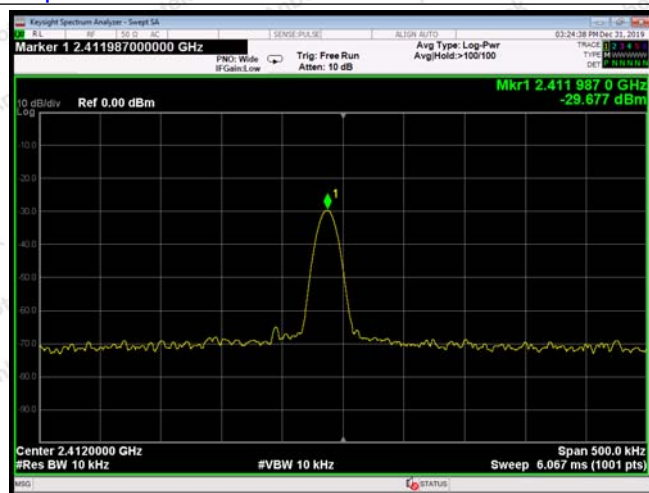
Frequency(MHz)	Reading(MHz)	Tolerance(ppm)	Limit(ppm)
2412.0000	2411.9892	-4.478	±50
2442.0000	2441.9856	-5.897	±50
2472.0000	2471.9929	-2.872	±50

Frequency(MHz)	Reading(MHz)	Tolerance(ppm)	Limit(ppm)
2422.0000	2421.9900	-4.129	±50
2442.0000	2441.9927	-2.989	±50
2462.0000	2461.9884	-4.712	±50

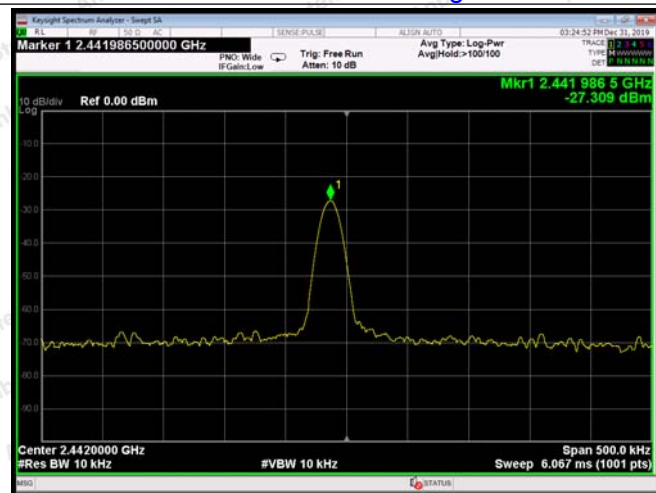
Normal Voltage: DC 3.3V

Frequency(MHz)	Reading(MHz)	Tolerance(ppm)	Limit(ppm)
2412.0000	2411.9870	-5.390	±50
2442.0000	2441.9865	-5.528	±50
2472.0000	2471.9865	-5.461	±50

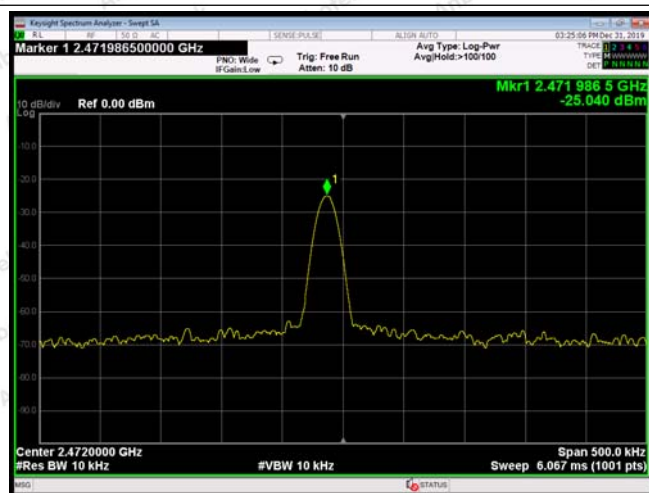
Frequency(MHz)	Reading(MHz)	Tolerance(ppm)	Limit(ppm)
2422.0000	2421.9870	-5.367	±50
2442.0000	2441.9870	-5.324	±50
2462.0000	2461.9865	-5.483	±50



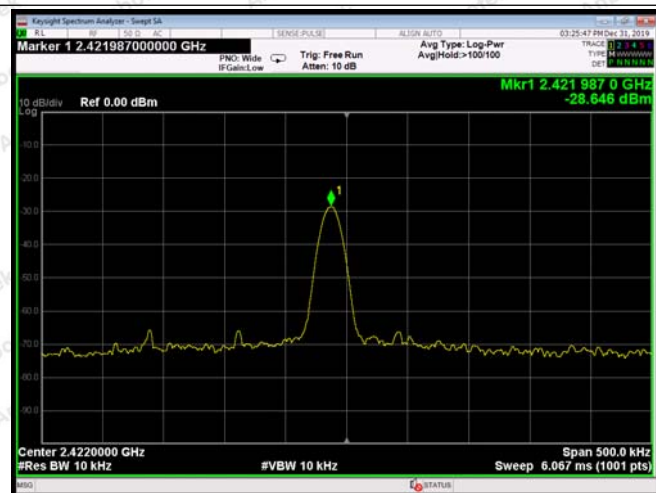
Frequency Error- 2412MHz



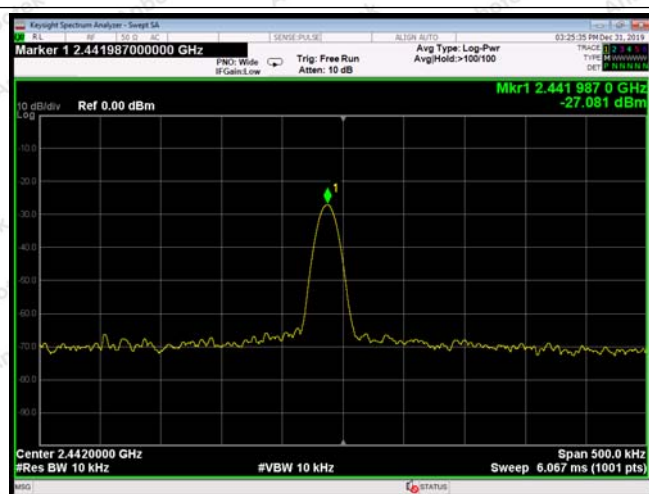
Frequency Error- 2442MHz



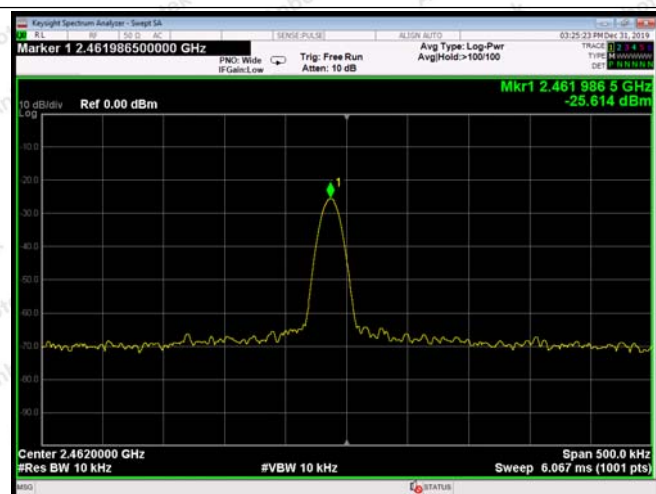
Frequency Error- 2472MHz



Frequency Error- 2422MHz



Frequency Error- 2442MHz



Frequency Error- 2462MHz

Remark: That worst case normal voltage's plot is reported in the report.

4. OCCUPIED BANDWIDTH (99%) TEST

4.1. Test Limit

Under all test conditions	FH: 83.5 MHz
	FH + DS: 83.5 MHz
	FH + OFDM: 83.5MHz
	OFDM, DS: 26MHz
	Others: 26MHz
	OFDM equipment with 40MHz channel separation: 38MHz

4.2. Test Equipment

Same as 1.7 Frequency tolerance measurement.

4.3. Test Configuration

Same as 1.6 Frequency tolerance measurement.

4.4. Test Data

PASS

Please refer to the following data.

Low Voltage: DC 2.97V**802.11b**

Frequency(MHz)	99% Bandwidth(MHz)	Remark
2412.000	14.337	Low Voltage: DC 2.97V
2442.000	14.440	Low Voltage: DC 2.97V
2472.000	14.695	Low Voltage: DC 2.97V

802.11g

Frequency(MHz)	99% Bandwidth(MHz)	Remark
2412.000	16.658	Low Voltage: DC 2.97V
2442.000	16.640	Low Voltage: DC 2.97V
2472.000	16.736	Low Voltage: DC 2.97V

802.11n (HT20)

Frequency(MHz)	99% Bandwidth(MHz)	Remark
2412.000	17.595	Low Voltage: DC 2.97V
2442.000	17.619	Low Voltage: DC 2.97V
2472.000	17.676	Low Voltage: DC 2.97V

802.11n (HT40)

Frequency(MHz)	99% Bandwidth(MHz)	Remark
2422.000	36.115	Low Voltage: DC 2.97V
2442.000	36.158	Low Voltage: DC 2.97V
2462.000	36.197	Low Voltage: DC 2.97V

High Voltage: DC 3.63V**802.11b**

Frequency(MHz)	99% Bandwidth(MHz)	Remark
2412.000	14.330	High Voltage: DC 3.63V
2442.000	14.444	High Voltage: DC 3.63V
2472.000	14.700	High Voltage: DC 3.63V

802.11g

Frequency(MHz)	99% Bandwidth(MHz)	Remark
2412.000	16.660	High Voltage: DC 3.63V
2442.000	16.637	High Voltage: DC 3.63V
2472.000	16.737	High Voltage: DC 3.63V

802.11n (HT20)

Frequency(MHz)	99% Bandwidth(MHz)	Remark
2412.000	17.593	High Voltage: DC 3.63V
2442.000	17.616	High Voltage: DC 3.63V
2472.000	17.668	High Voltage: DC 3.63V

802.11n (HT40)

Frequency(MHz)	99% Bandwidth(MHz)	Remark
2422.000	36.120	High Voltage: DC 3.63V
2442.000	36.163	High Voltage: DC 3.63V
2462.000	36.201	High Voltage: DC 3.63V

Normal Voltage: DC 3.3V**802.11b**

Frequency(MHz)	99% Bandwidth(MHz)	Remark
2412.000	14.333	Normal Voltage: DC 3.3V
2442.000	14.438	Normal Voltage: DC 3.3V
2472.000	14.696	Normal Voltage: DC 3.3V

802.11g

Frequency(MHz)	99% Bandwidth(MHz)	Remark
2412.000	16.659	Normal Voltage: DC 3.3V
2442.000	16.640	Normal Voltage: DC 3.3V
2472.000	16.732	Normal Voltage: DC 3.3V

802.11n (HT20)

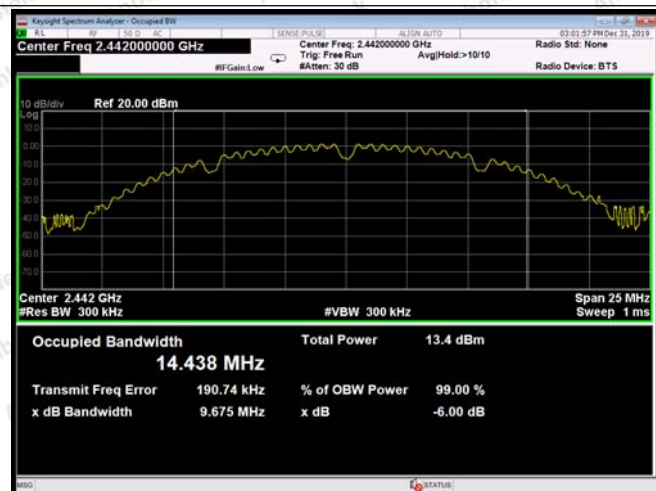
Frequency(MHz)	99% Bandwidth(MHz)	Remark
2412.000	17.592	Normal Voltage: DC 3.3V
2442.000	17.613	Normal Voltage: DC 3.3V
2472.000	17.670	Normal Voltage: DC 3.3V

802.11n (HT40)

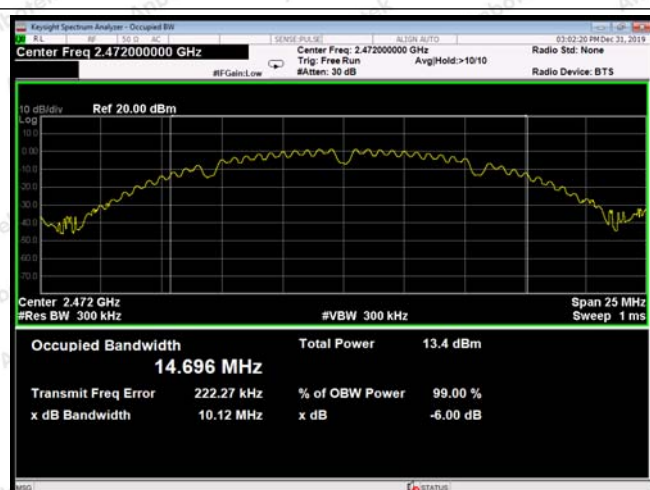
Frequency(MHz)	99% Bandwidth(MHz)	Remark
2422.000	36.114	Normal Voltage: DC 3.3V
2442.000	36.162	Normal Voltage: DC 3.3V
2462.000	36.195	Normal Voltage: DC 3.3V



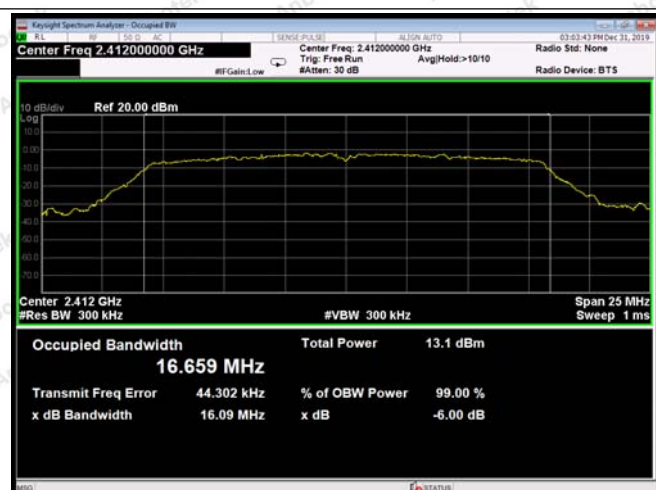
Test Mode: 802.11b---Low



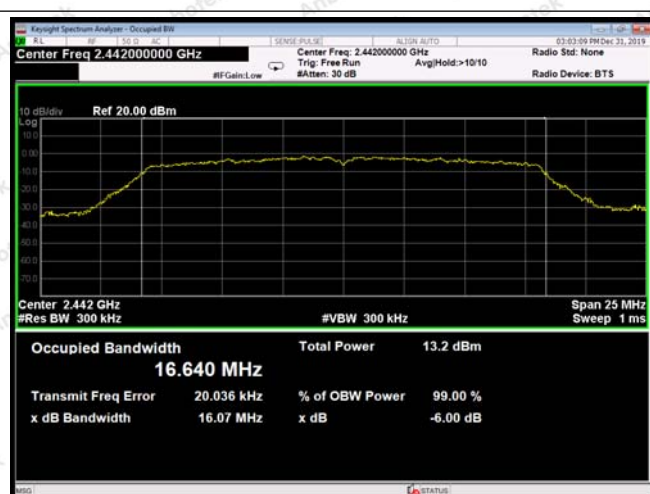
Test Mode: 802.11b---Mid



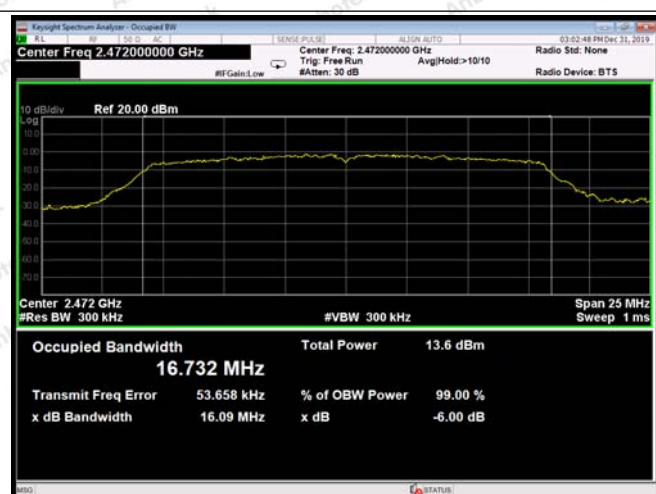
Test Mode: 802.11b---High



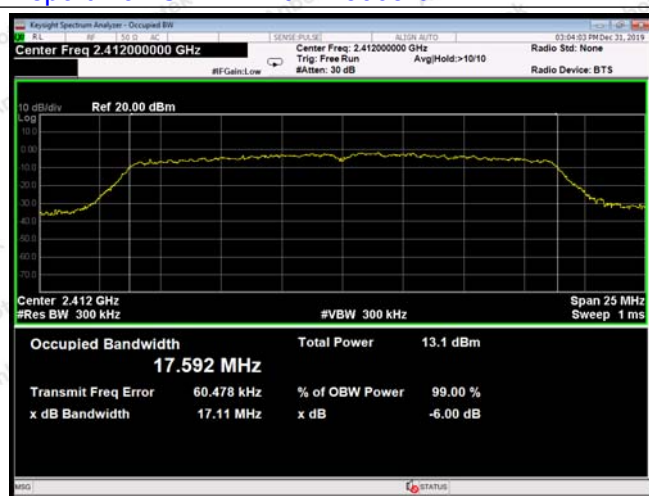
Test Mode: 802.11g---Low



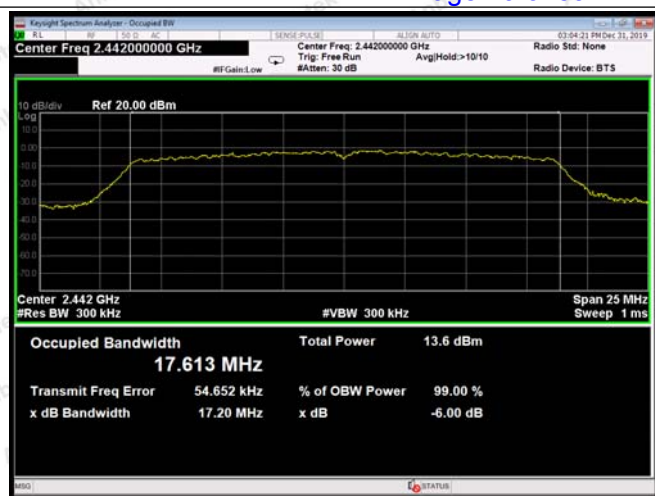
Test Mode: 802.11g---Mid



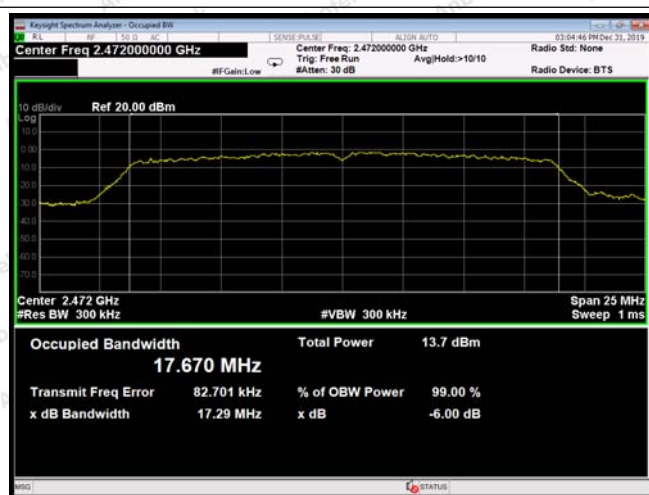
Test Mode: 802.11g---High



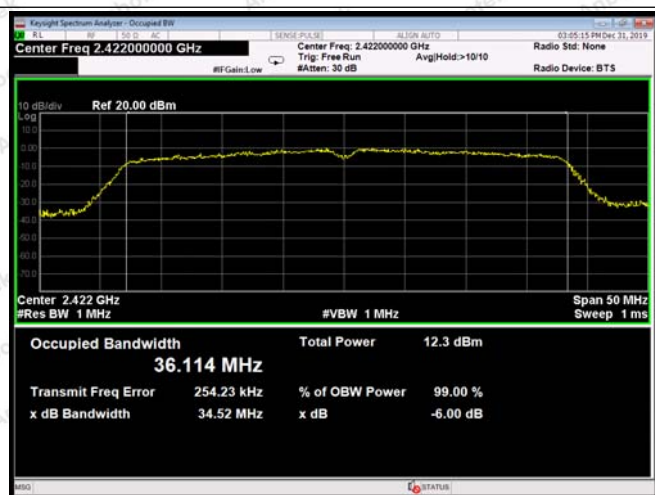
Test Mode: 802.11n20---Low



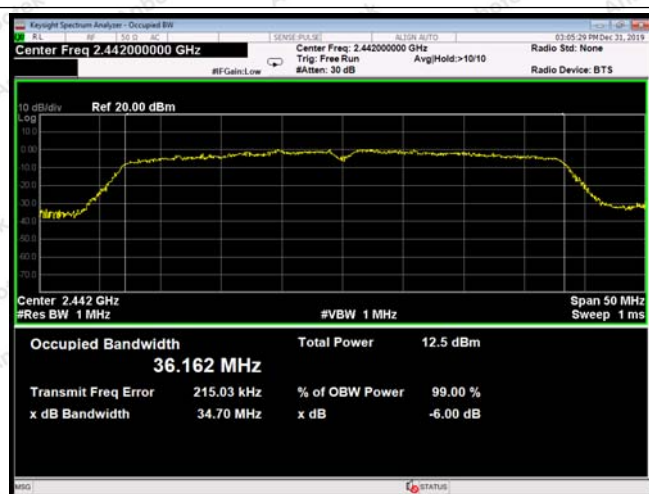
Test Mode: 802.11n20---Mid



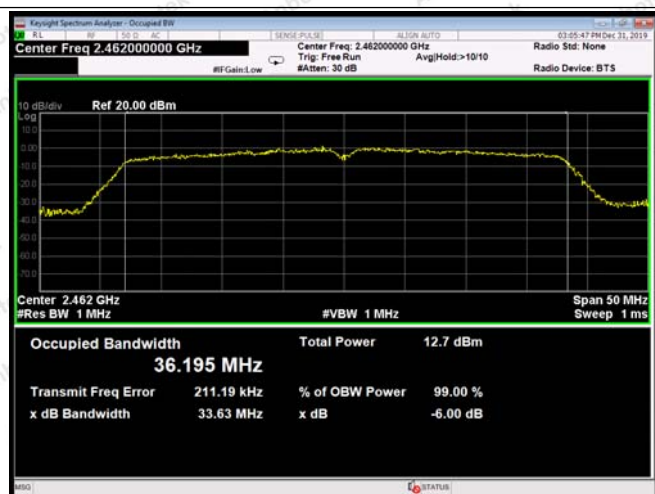
Test Mode: 802.11n20---High



Test Mode: 802.11n40---Low



Test Mode: 802.11n40---Mid



Test Mode: 802.11n40---High

Remark: That worst case normal voltage's plot is reported in the report.

5. SPREAD-SPECTRUM BANDWIDTH (90%) TEST

5.1. Test Limit

Test Limit	Spreading factor: > 5
	Spread bandwidth: $\geq 500\text{KHz}$

5.2. Test Equipment

Same as 1.7 Frequency tolerance measurement.

5.3. Test Configuration

Same as 1.6 Frequency tolerance measurement.

5.4. Test Data

Pass

Please refer to the following data.

Low Voltage: DC 2.97V**802.11b**

Frequency(MHz)	90% Bandwidth(MHz)	Limit (MHz)	Remark
2412.000	9.2548	≥ 0.5	Low Voltage: DC 2.97V
2442.000	9.3114	≥ 0.5	Low Voltage: DC 2.97V
2472.000	9.4920	≥ 0.5	Low Voltage: DC 2.97V

90% bandwidth / rate = 9.2548 / 1.375 = 6.7308 > 5 (Low)

90% bandwidth / rate = 9.3114 / 1.375 = 6.7719 > 5 (Middle)

90% bandwidth / rate = 9.4920 / 1.375 = 6.9033 > 5 (High)

802.11g

Frequency(MHz)	90% Bandwidth(MHz)	Limit (MHz)	Remark
2412.000	13.767	≥ 0.5	Low Voltage: DC 2.97V
2442.000	13.773	≥ 0.5	Low Voltage: DC 2.97V
2472.000	13.822	≥ 0.5	Low Voltage: DC 2.97V

802.11n (HT20)

Frequency(MHz)	90% Bandwidth(MHz)	Limit (MHz)	Remark
2412.000	14.642	≥ 0.5	Low Voltage: DC 2.97V
2442.000	14.683	≥ 0.5	Low Voltage: DC 2.97V
2472.000	14.665	≥ 0.5	Low Voltage: DC 2.97V

802.11n (HT40)

Frequency(MHz)	90% Bandwidth(MHz)	Limit (MHz)	Remark
2422.000	29.998	≥ 0.5	Low Voltage: DC 2.97V
2442.000	30.035	≥ 0.5	Low Voltage: DC 2.97V
2462.000	30.095	≥ 0.5	Low Voltage: DC 2.97V

High Voltage: DC 3.63V**802.11b**

Frequency(MHz)	90% Bandwidth(MHz)	Limit (MHz)	Remark
2412.000	9.2551	≥ 0.5	High Voltage: DC 3.63V
2442.000	9.3032	≥ 0.5	High Voltage: DC 3.63V
2472.000	9.4910	≥ 0.5	High Voltage: DC 3.63V

90% bandwidth / rate = 9.2551 / 1.375 = 6.7310 > 5 (Low)

90% bandwidth / rate = 9.3032 / 1.375 = 6.7660 > 5 (Middle)

90% bandwidth / rate = 9.4910 / 1.375 = 6.9025 > 5 (High)

802.11g

Frequency(MHz)	90% Bandwidth(MHz)	Limit (MHz)	Remark
2412.000	13.763	≥ 0.5	High Voltage: DC 3.63V
2442.000	13.783	≥ 0.5	High Voltage: DC 3.63V
2472.000	13.825	≥ 0.5	High Voltage: DC 3.63V

802.11n (HT20)

Frequency(MHz)	90% Bandwidth(MHz)	Limit (MHz)	Remark
2412.000	14.637	≥ 0.5	High Voltage: DC 3.63V
2442.000	14.683	≥ 0.5	High Voltage: DC 3.63V
2472.000	14.664	≥ 0.5	High Voltage: DC 3.63V

802.11n (HT40)

Frequency(MHz)	90% Bandwidth(MHz)	Limit (MHz)	Remark
2422.000	30.001	≥ 0.5	High Voltage: DC 3.63V
2442.000	30.036	≥ 0.5	High Voltage: DC 3.63V
2462.000	30.095	≥ 0.5	High Voltage: DC 3.63V

Normal Voltage: DC 3.3V**802.11b**

Frequency(MHz)	90% Bandwidth(MHz)	Limit (MHz)	Remark
2412.000	9.2586	≥ 0.5	Normal Voltage: DC 3.3V
2442.000	9.3064	≥ 0.5	Normal Voltage: DC 3.3V
2472.000	9.4910	≥ 0.5	Normal Voltage: DC 3.3V

90% bandwidth / rate = 9.2586 / 1.375 = 6.7335 > 5 (Low)

90% bandwidth / rate = 9.3064 / 1.375 = 6.7683 > 5 (Middle)

90% bandwidth / rate = 9.4910 / 1.375 = 6.9025 > 5 (High)

802.11g

Frequency(MHz)	90% Bandwidth(MHz)	Limit (MHz)	Remark
2412.000	13.766	≥ 0.5	Normal Voltage: DC 3.3V
2442.000	13.777	≥ 0.5	Normal Voltage: DC 3.3V
2472.000	13.819	≥ 0.5	Normal Voltage: DC 3.3V

802.11n (HT20)

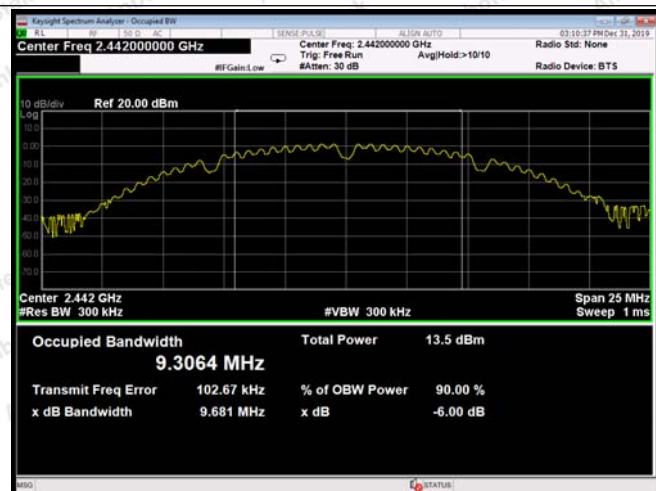
Frequency(MHz)	90% Bandwidth(MHz)	Limit (MHz)	Remark
2412.000	14.636	≥ 0.5	Normal Voltage: DC 3.3V
2442.000	14.681	≥ 0.5	Normal Voltage: DC 3.3V
2472.000	14.667	≥ 0.5	Normal Voltage: DC 3.3V

802.11n (HT40)

Frequency(MHz)	90% Bandwidth(MHz)	Limit (MHz)	Remark
2422.000	29.995	≥ 0.5	Normal Voltage: DC 3.3V
2442.000	30.030	≥ 0.5	Normal Voltage: DC 3.3V
2462.000	30.097	≥ 0.5	Normal Voltage: DC 3.3V



Test Mode: 802.11b---Low



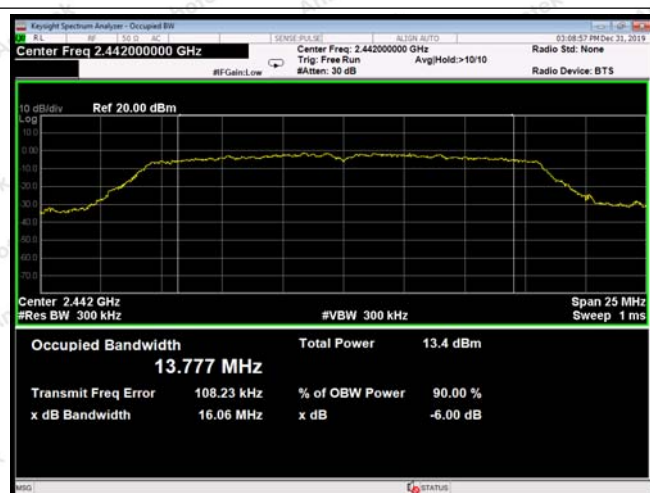
Test Mode: 802.11b---Mid



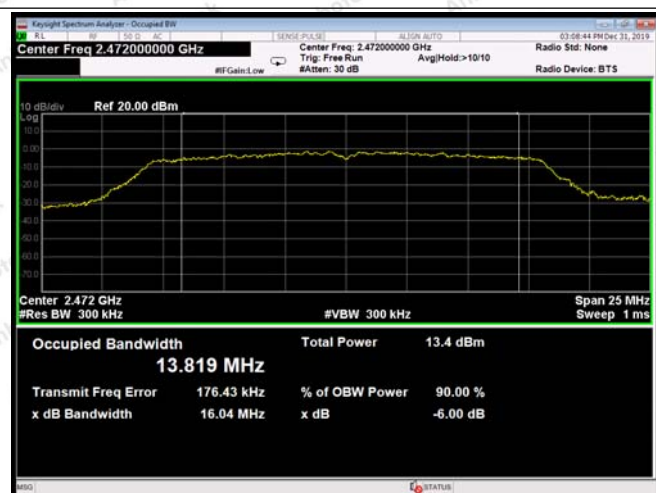
Test Mode: 802.11b---High



Test Mode: 802.11g---Low



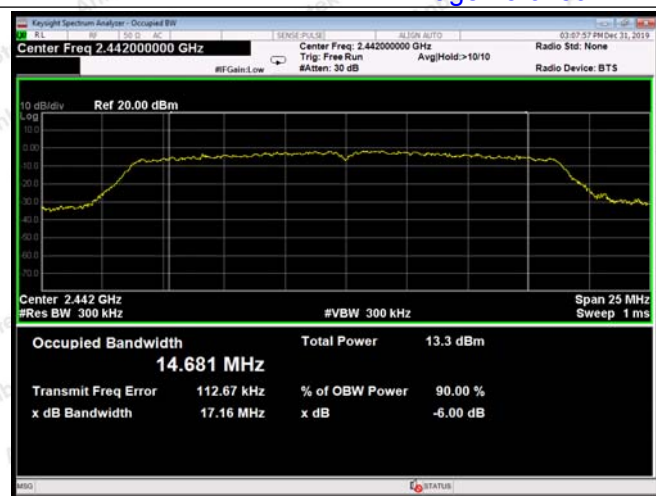
Test Mode: 802.11g---Mid



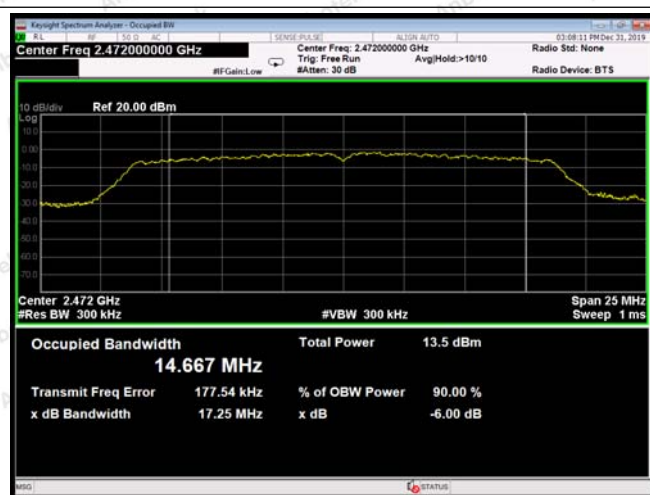
Test Mode: 802.11g---High



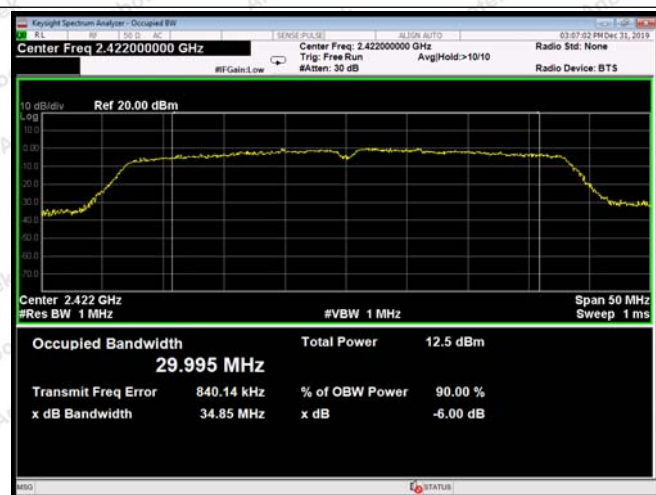
Test Mode: 802.11n20---Low



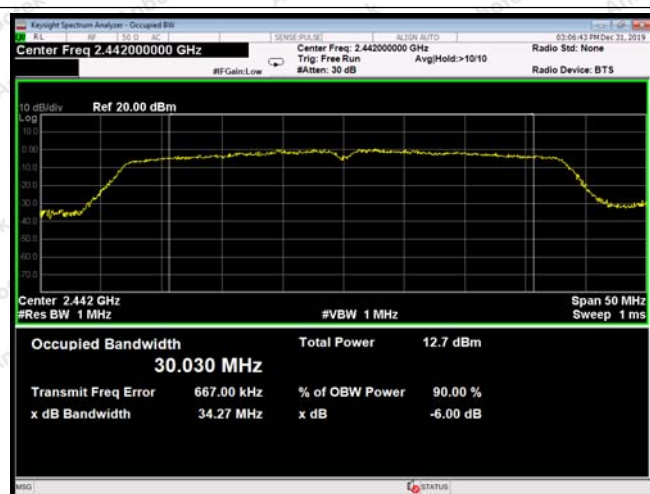
Test Mode: 802.11n20---Mid



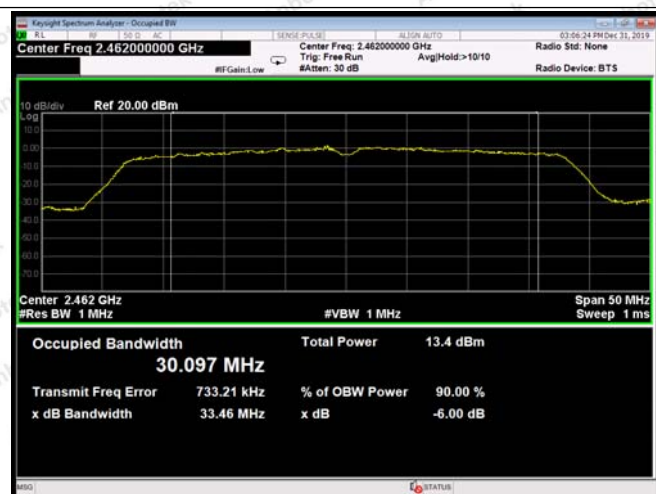
Test Mode: 802.11n20---High



Test Mode: 802.11n40---Low



Test Mode: 802.11n40---Mid



Test Mode: 802.11n40---High

Remark: That only normal voltage's plot is reported in the report.

6. SPURIOUS EMISSIONS INTENSITY TEST

6.1. Test Equipment

Same as 1.7 Frequency tolerance measurement.

6.2. Test Configuration

Same as 1.6 Frequency tolerance measurement.

6.3. Test Data

Scanning Bandwidth	:	30~ 2387MHz
		2387~ 2400MHz
		2483.5~ 2496.5MHz
		2496.5~ 12500MHz.

Pass

Please refer to the following data.

Low Voltage: DC 2.97V**802.11b**

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-69.401	30~ 2387MHz	≤ -26dBm
	-68.550	2387~ 2400MHz	≤ -16dBm
	-69.021	2483.5~ 2496.5MHz	≤ -16dBm
	-67.269	2496.5~ 12500MHz	≤ -26dBm
2442.000	-69.134	30~ 2387MHz	≤ -26dBm
	-67.423	2387~ 2400MHz	≤ -16dBm
	-68.890	2483.5~ 2496.5MHz	≤ -16dBm
	-68.161	2496.5~ 12500MHz	≤ -26dBm
2472.000	-70.015	30~ 2387MHz	≤ -26dBm
	-68.371	2387~ 2400MHz	≤ -16dBm
	-68.161	2483.5~ 2496.5MHz	≤ -16dBm
	-67.702	2496.5~ 12500MHz	≤ -26dBm

802.11g

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-68.884	30~ 2387MHz	≤ -26dBm
	-69.069	2387~ 2400MHz	≤ -16dBm
	-68.801	2483.5~ 2496.5MHz	≤ -16dBm
	-66.757	2496.5~ 12500MHz	≤ -26dBm
2442.000	-68.565	30~ 2387MHz	≤ -26dBm
	-68.533	2387~ 2400MHz	≤ -16dBm
	-67.983	2483.5~ 2496.5MHz	≤ -16dBm
	-67.995	2496.5~ 12500MHz	≤ -26dBm
2472.000	-69.069	30~ 2387MHz	≤ -26dBm
	-68.204	2387~ 2400MHz	≤ -16dBm
	-68.037	2483.5~ 2496.5MHz	≤ -16dBm
	-67.837	2496.5~ 12500MHz	≤ -26dBm

802.11n (HT20)

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-69.059	30~ 2387MHz	≤ -26dBm
	-68.939	2387~ 2400MHz	≤ -16dBm
	-68.004	2483.5~ 2496.5MHz	≤ -16dBm
	-66.982	2496.5~ 12500MHz	≤ -26dBm
2442.000	-69.822	30~ 2387MHz	≤ -26dBm
	-67.664	2387~ 2400MHz	≤ -16dBm
	-68.476	2483.5~ 2496.5MHz	≤ -16dBm
	-67.531	2496.5~ 12500MHz	≤ -26dBm
2472.000	-69.780	30~ 2387MHz	≤ -26dBm
	-67.407	2387~ 2400MHz	≤ -16dBm
	-69.099	2483.5~ 2496.5MHz	≤ -16dBm
	-67.944	2496.5~ 12500MHz	≤ -26dBm

802.11n (HT40)

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2422.000	-67.980	30~ 2387MHz	≤ -26dBm
	-68.472	2387~ 2400MHz	≤ -16dBm
	-68.262	2483.5~ 2496.5MHz	≤ -16dBm
	-68.163	2496.5~ 12500MHz	≤ -26dBm
2442.000	-67.914	30~ 2387MHz	≤ -26dBm
	-68.114	2387~ 2400MHz	≤ -16dBm
	-68.637	2483.5~ 2496.5MHz	≤ -16dBm
	-68.910	2496.5~ 12500MHz	≤ -26dBm
2462.000	-69.534	30~ 2387MHz	≤ -26dBm
	-68.645	2387~ 2400MHz	≤ -16dBm
	-67.961	2483.5~ 2496.5MHz	≤ -16dBm
	-67.454	2496.5~ 12500MHz	≤ -26dBm

High Voltage: DC 3.63V**802.11b**

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-68.628	30~ 2387MHz	≤ -26dBm
	-67.926	2387~ 2400MHz	≤ -16dBm
	-68.075	2483.5~ 2496.5MHz	≤ -16dBm
	-66.457	2496.5~ 12500MHz	≤ -26dBm
2442.000	-68.761	30~ 2387MHz	≤ -26dBm
	-67.123	2387~ 2400MHz	≤ -16dBm
	-68.864	2483.5~ 2496.5MHz	≤ -16dBm
	-67.288	2496.5~ 12500MHz	≤ -26dBm
2472.000	-69.918	30~ 2387MHz	≤ -26dBm
	-69.120	2387~ 2400MHz	≤ -16dBm
	-68.303	2483.5~ 2496.5MHz	≤ -16dBm
	-68.406	2496.5~ 12500MHz	≤ -26dBm

802.11g

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-68.936	30~ 2387MHz	≤ -26dBm
	-68.369	2387~ 2400MHz	≤ -16dBm
	-69.108	2483.5~ 2496.5MHz	≤ -16dBm
	-67.237	2496.5~ 12500MHz	≤ -26dBm
2442.000	-68.763	30~ 2387MHz	≤ -26dBm
	-68.933	2387~ 2400MHz	≤ -16dBm
	-68.042	2483.5~ 2496.5MHz	≤ -16dBm
	-68.369	2496.5~ 12500MHz	≤ -26dBm
2472.000	-68.483	30~ 2387MHz	≤ -26dBm
	-68.557	2387~ 2400MHz	≤ -16dBm
	-68.750	2483.5~ 2496.5MHz	≤ -16dBm
	-67.490	2496.5~ 12500MHz	≤ -26dBm

802.11n (HT20)

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-68.347	30~ 2387MHz	≤ -26dBm
	-68.713	2387~ 2400MHz	≤ -16dBm
	-68.572	2483.5~ 2496.5MHz	≤ -16dBm
	-67.240	2496.5~ 12500MHz	≤ -26dBm
2442.000	-69.513	30~ 2387MHz	≤ -26dBm
	-68.182	2387~ 2400MHz	≤ -16dBm
	-68.651	2483.5~ 2496.5MHz	≤ -16dBm
	-67.415	2496.5~ 12500MHz	≤ -26dBm
2472.000	-69.047	30~ 2387MHz	≤ -26dBm
	-67.396	2387~ 2400MHz	≤ -16dBm
	-69.192	2483.5~ 2496.5MHz	≤ -16dBm
	-68.617	2496.5~ 12500MHz	≤ -26dBm

802.11n (HT40)

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2422.000	-68.116	30~ 2387MHz	≤ -26dBm
	-69.403	2387~ 2400MHz	≤ -16dBm
	-68.767	2483.5~ 2496.5MHz	≤ -16dBm
	-68.320	2496.5~ 12500MHz	≤ -26dBm
2442.000	-67.659	30~ 2387MHz	≤ -26dBm
	-68.549	2387~ 2400MHz	≤ -16dBm
	-69.079	2483.5~ 2496.5MHz	≤ -16dBm
	-68.905	2496.5~ 12500MHz	≤ -26dBm
2462.000	-69.412	30~ 2387MHz	≤ -26dBm
	-68.442	2387~ 2400MHz	≤ -16dBm
	-68.636	2483.5~ 2496.5MHz	≤ -16dBm
	-67.227	2496.5~ 12500MHz	≤ -26dBm

Normal Voltage: DC 3.3V**802.11b**

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-69.257	30~ 2387MHz	≤ -26dBm
	-68.382	2387~ 2400MHz	≤ -16dBm
	-68.693	2483.5~ 2496.5MHz	≤ -16dBm
	-67.057	2496.5~ 12500MHz	≤ -26dBm
2442.000	-69.289	30~ 2387MHz	≤ -26dBm
	-67.661	2387~ 2400MHz	≤ -16dBm
	-68.559	2483.5~ 2496.5MHz	≤ -16dBm
	-67.819	2496.5~ 12500MHz	≤ -26dBm
2472.000	-69.616	30~ 2387MHz	≤ -26dBm
	-68.993	2387~ 2400MHz	≤ -16dBm
	-68.567	2483.5~ 2496.5MHz	≤ -16dBm
	-68.225	2496.5~ 12500MHz	≤ -26dBm

802.11g

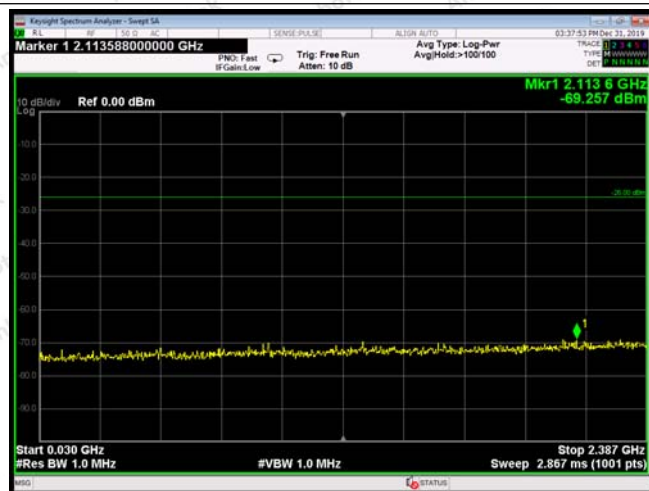
Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-69.288	30~ 2387MHz	≤ -26dBm
	-68.959	2387~ 2400MHz	≤ -16dBm
	-68.797	2483.5~ 2496.5MHz	≤ -16dBm
	-67.237	2496.5~ 12500MHz	≤ -26dBm
2442.000	-68.706	30~ 2387MHz	≤ -26dBm
	-68.907	2387~ 2400MHz	≤ -16dBm
	-68.417	2483.5~ 2496.5MHz	≤ -16dBm
	-68.281	2496.5~ 12500MHz	≤ -26dBm
2472.000	-68.877	30~ 2387MHz	≤ -26dBm
	-68.832	2387~ 2400MHz	≤ -16dBm
	-68.592	2483.5~ 2496.5MHz	≤ -16dBm
	-67.696	2496.5~ 12500MHz	≤ -26dBm

802.11n (HT20)

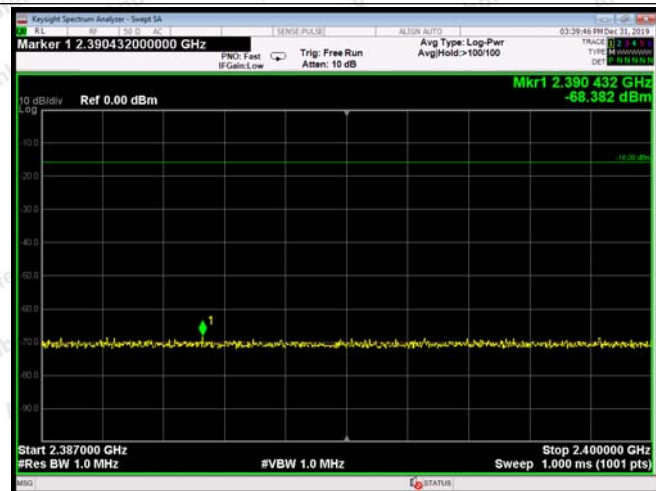
Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-68.855	30~ 2387MHz	≤ -26dBm
	-68.990	2387~ 2400MHz	≤ -16dBm
	-68.512	2483.5~ 2496.5MHz	≤ -16dBm
	-67.073	2496.5~ 12500MHz	≤ -26dBm
2442.000	-69.618	30~ 2387MHz	≤ -26dBm
	-67.912	2387~ 2400MHz	≤ -16dBm
	-68.599	2483.5~ 2496.5MHz	≤ -16dBm
	-67.478	2496.5~ 12500MHz	≤ -26dBm
2472.000	-69.398	30~ 2387MHz	≤ -26dBm
	-67.889	2387~ 2400MHz	≤ -16dBm
	-68.901	2483.5~ 2496.5MHz	≤ -16dBm
	-68.325	2496.5~ 12500MHz	≤ -26dBm

802.11n (HT40)

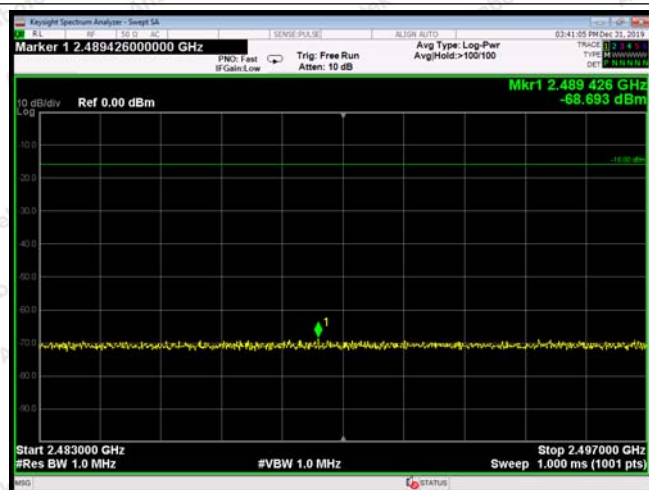
Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2422.000	-68.232	30~ 2387MHz	≤ -26dBm
	-69.096	2387~ 2400MHz	≤ -16dBm
	-68.405	2483.5~ 2496.5MHz	≤ -16dBm
	-68.470	2496.5~ 12500MHz	≤ -26dBm
2442.000	-67.983	30~ 2387MHz	≤ -26dBm
	-68.627	2387~ 2400MHz	≤ -16dBm
	-68.872	2483.5~ 2496.5MHz	≤ -16dBm
	-68.662	2496.5~ 12500MHz	≤ -26dBm
2462.000	-69.544	30~ 2387MHz	≤ -26dBm
	-68.438	2387~ 2400MHz	≤ -16dBm
	-68.453	2483.5~ 2496.5MHz	≤ -16dBm
	-67.378	2496.5~ 12500MHz	≤ -26dBm



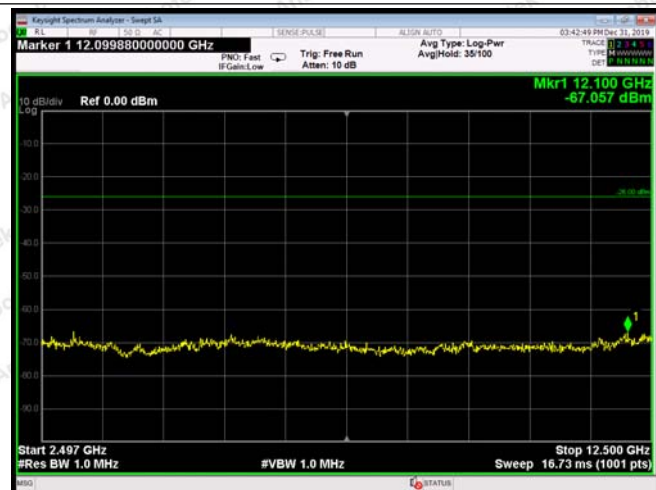
802.11b---Low (30~ 2387MHz)



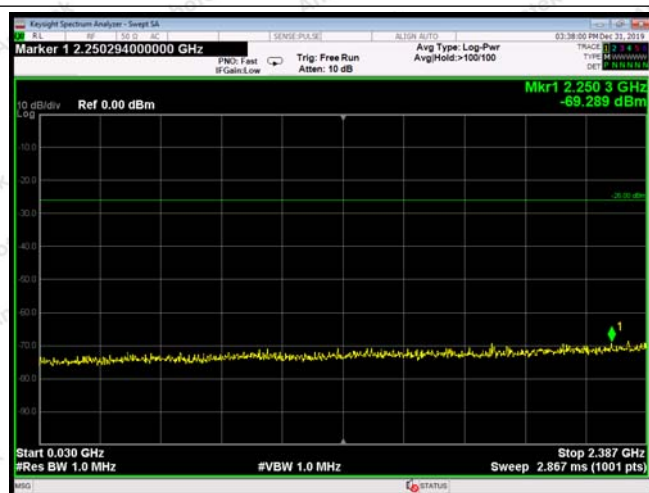
802.11b---Low (2387~ 2400MHz)



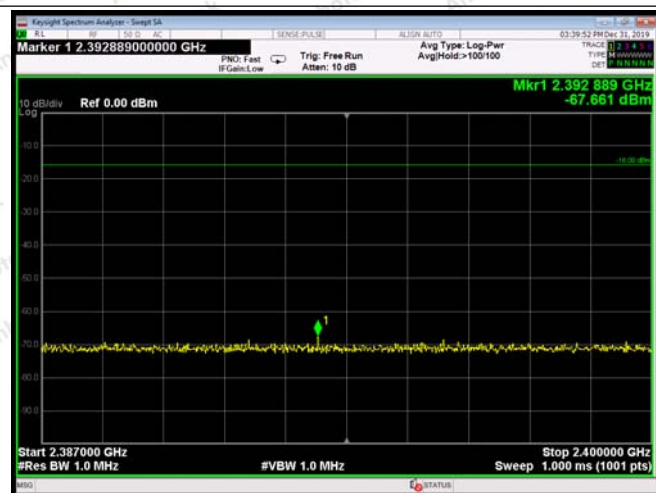
802.11b---Low (2483.5~ 2496.5MHz)



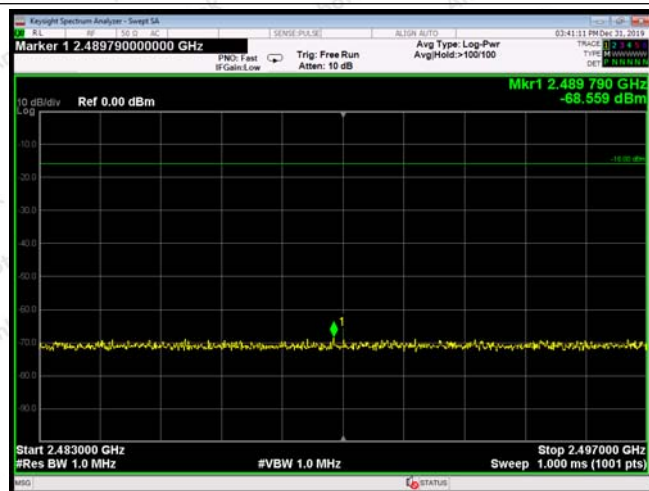
802.11b---Low (2496.5~ 12500MHz)



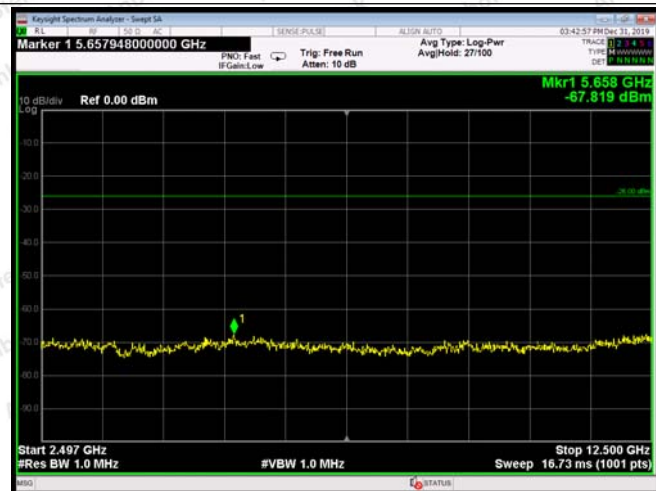
802.11b---Mid (30~ 2387MHz)



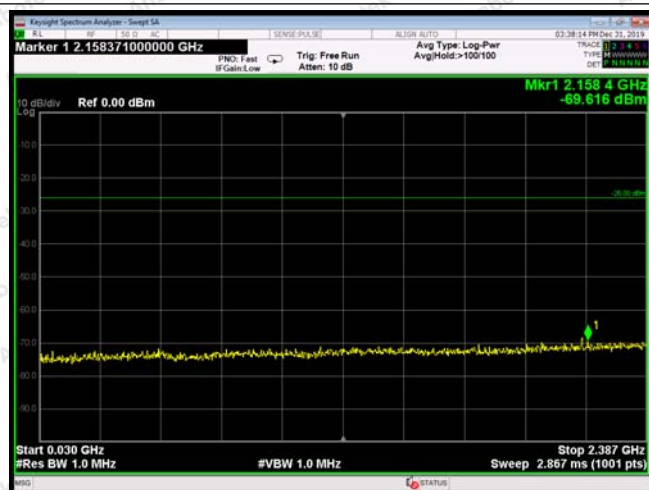
802.11b---Mid (2387~ 2400MHz)



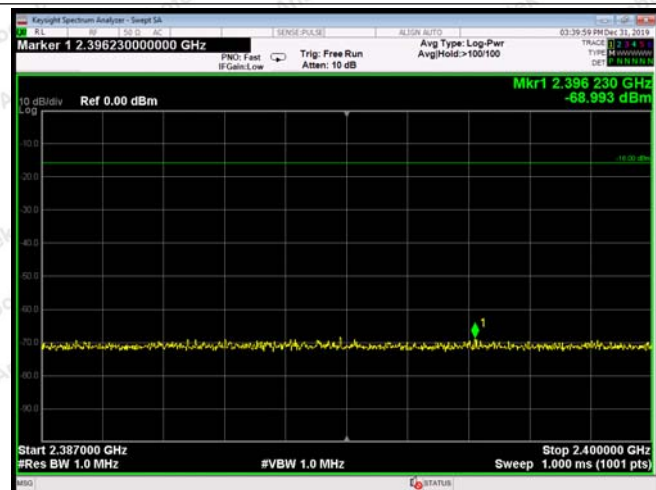
802.11b---Mid (2483.5~ 2496.5MHz)



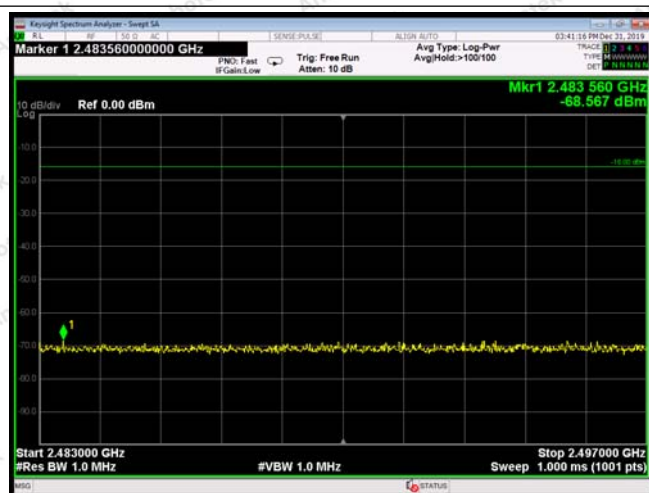
802.11b---Mid (2496.5~ 12500MHz)



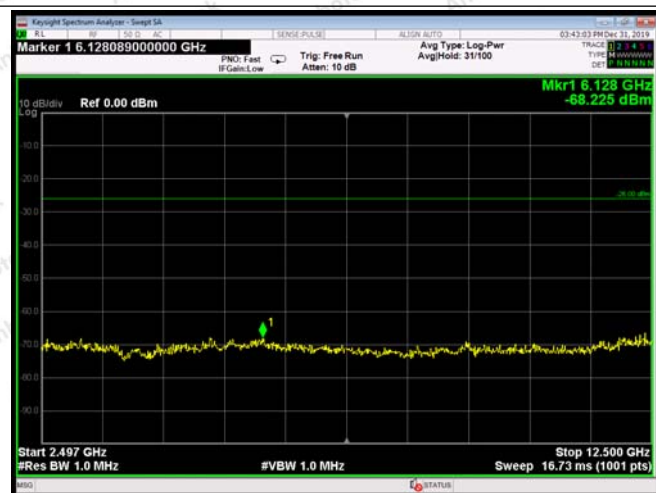
802.11b---High (30~ 2387MHz)



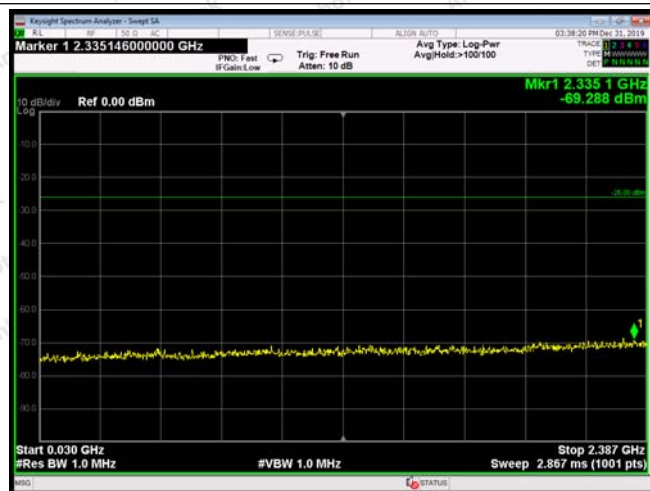
802.11b---High (2387~ 2400MHz)



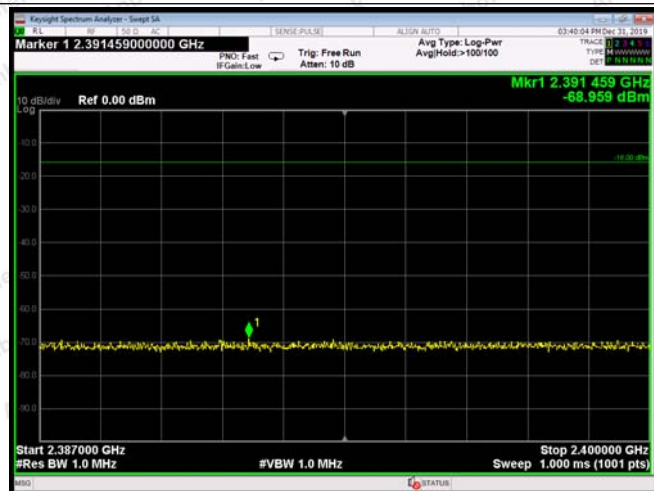
802.11b---High (2483.5~ 2496.5MHz)



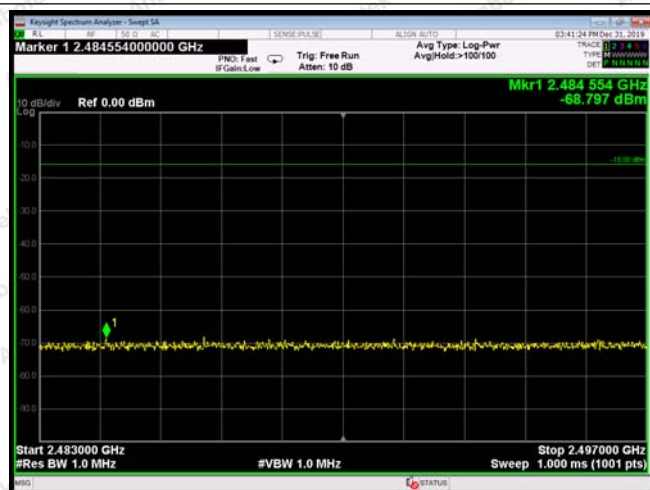
802.11b---High (2496.5~ 12500MHz)



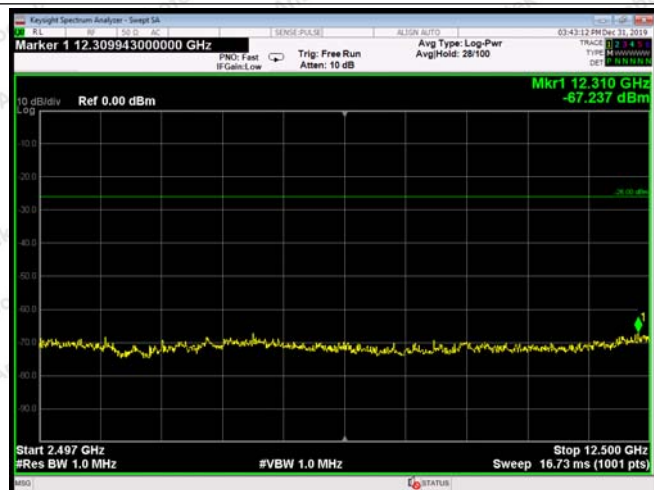
802.11g---Low (30~ 2387MHz)



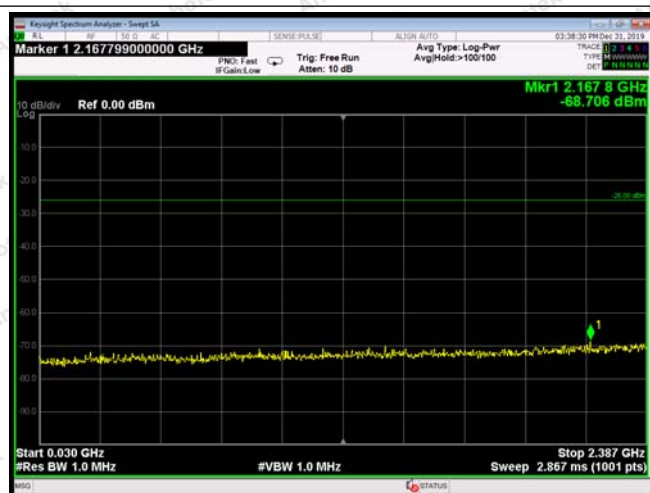
802.11g---Low (2387~ 2400MHz)



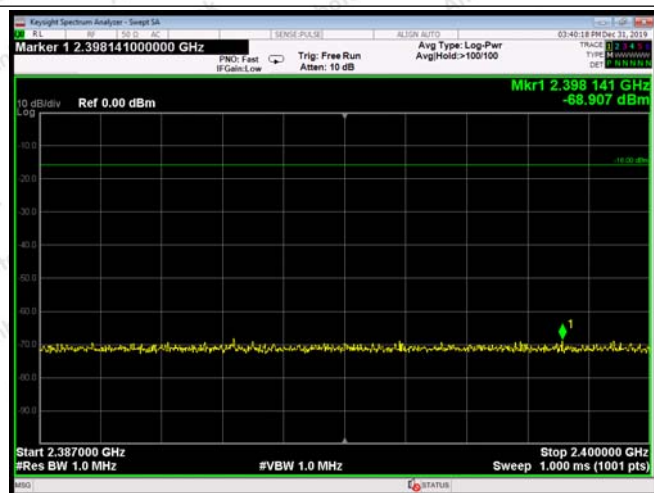
802.11g---Low (2483.5~ 2496.5MHz)



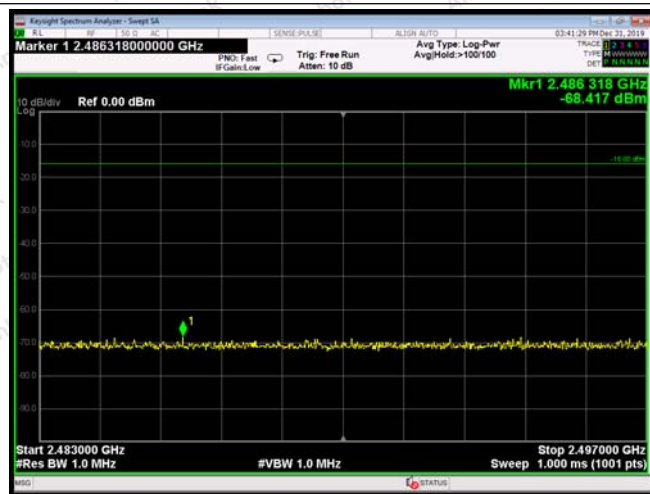
802.11g---Low (2496.5~ 12500MHz)



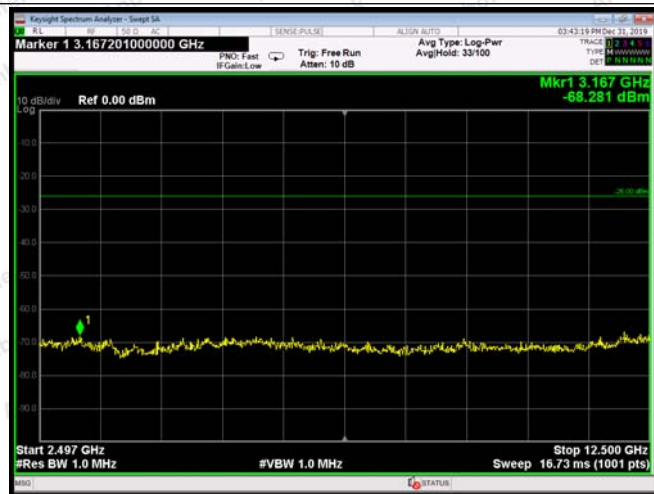
802.11g---Mid (30~ 2387MHz)



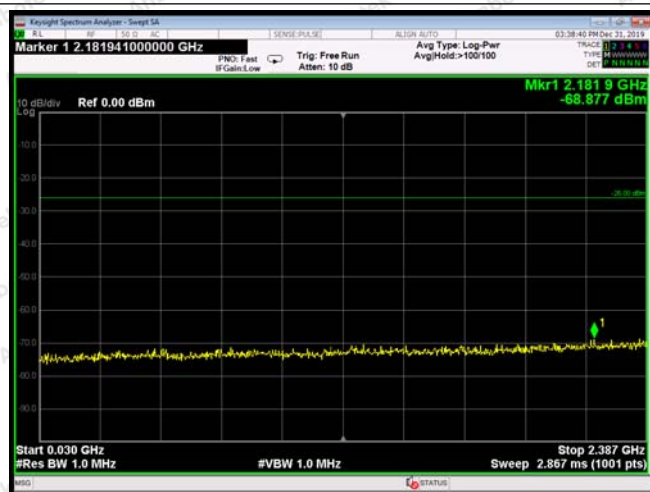
802.11g---Mid (2387~ 2400MHz)



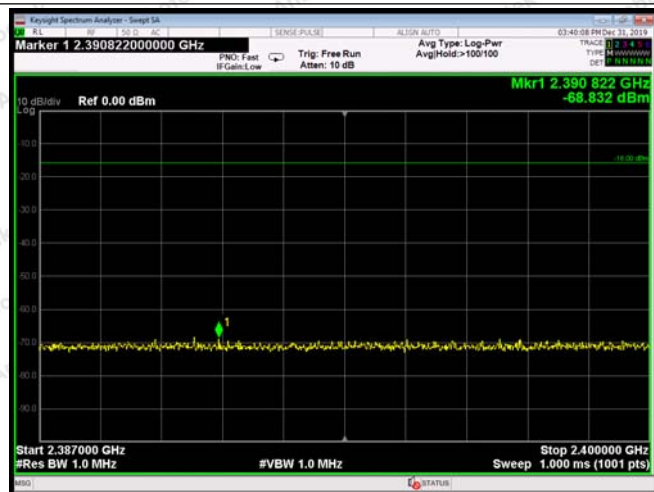
802.11g---Mid (2483.5~ 2496.5MHz)



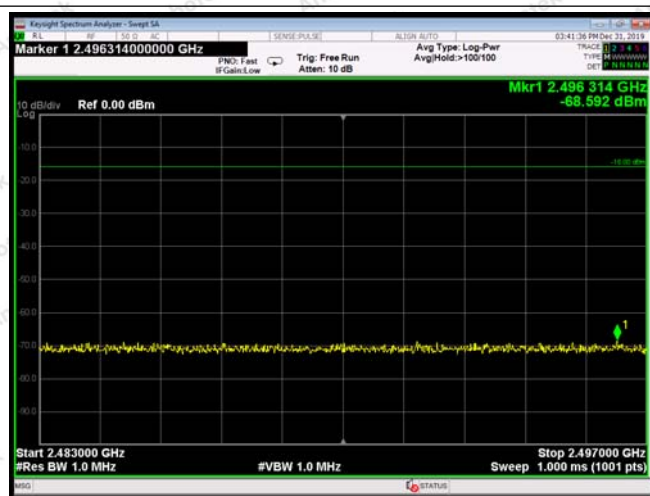
802.11g---Mid (2496.5~ 12500MHz)



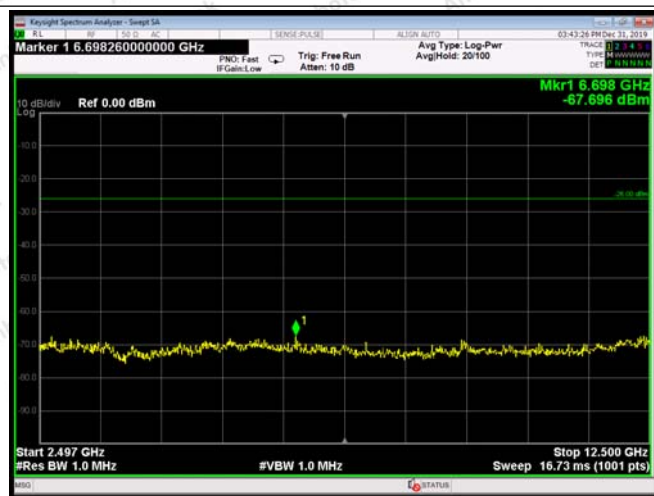
802.11g---High (30~ 2387MHz)



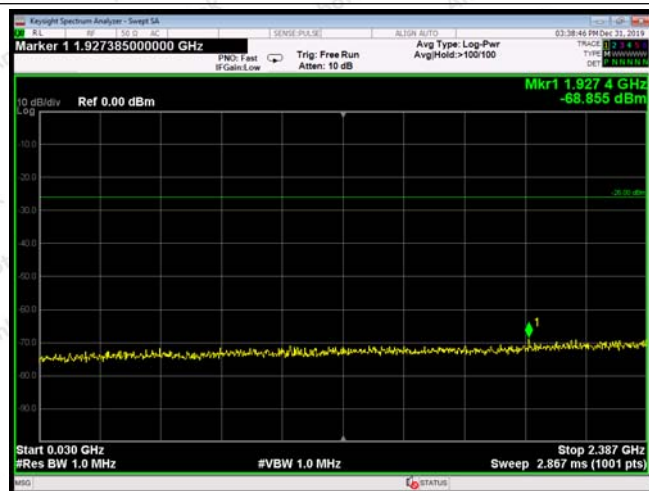
802.11g---High (2387~ 2400MHz)



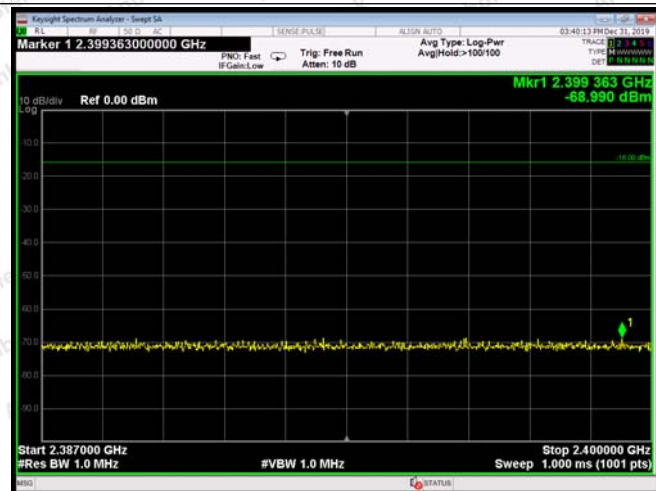
802.11g---High (2483.5~ 2496.5MHz)



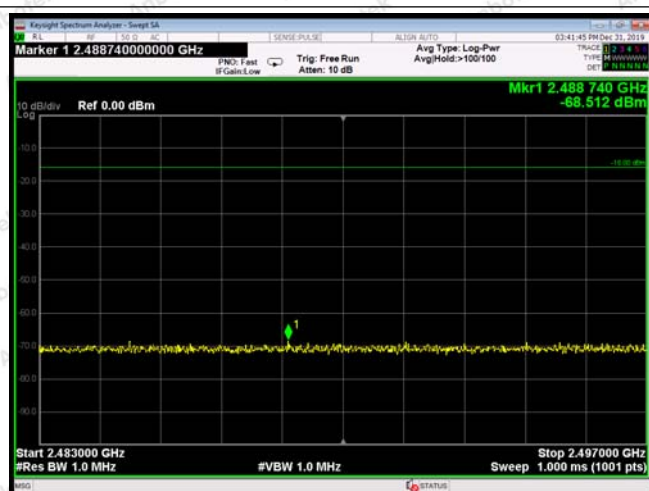
802.11g---High (2496.5~ 12500MHz)



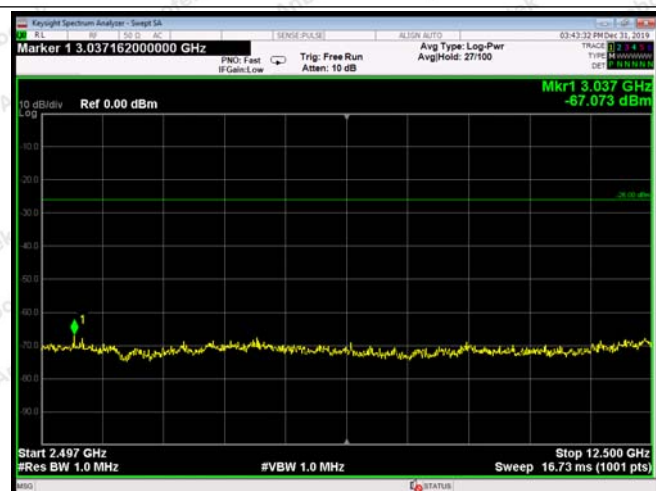
802.11n20---Low (30~ 2387MHz)



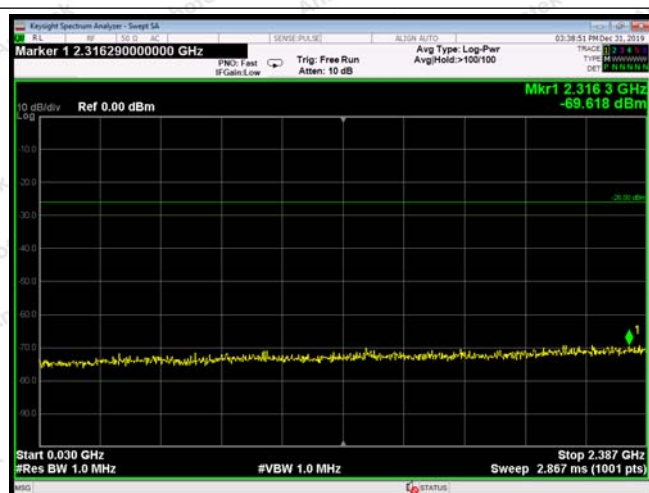
802.11n20---Low (2387~ 2400MHz)



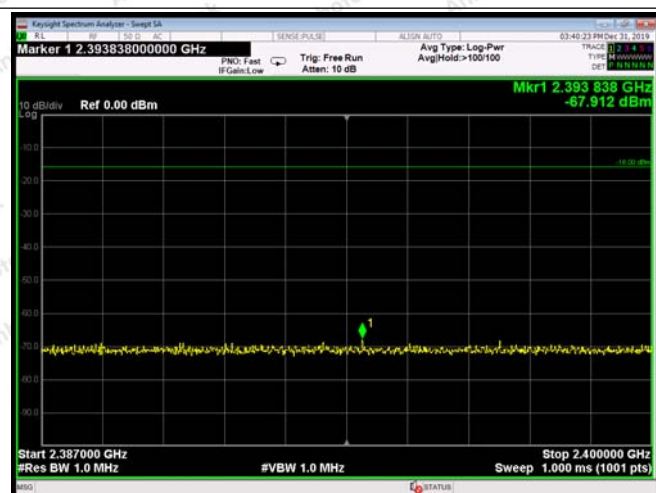
802.11n20---Low (2483.5~ 2496.5MHz)



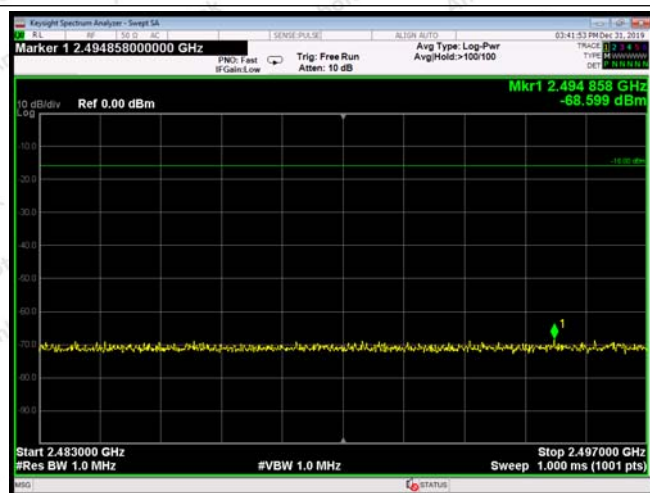
802.11n20---Low (2496.5~ 12500MHz)



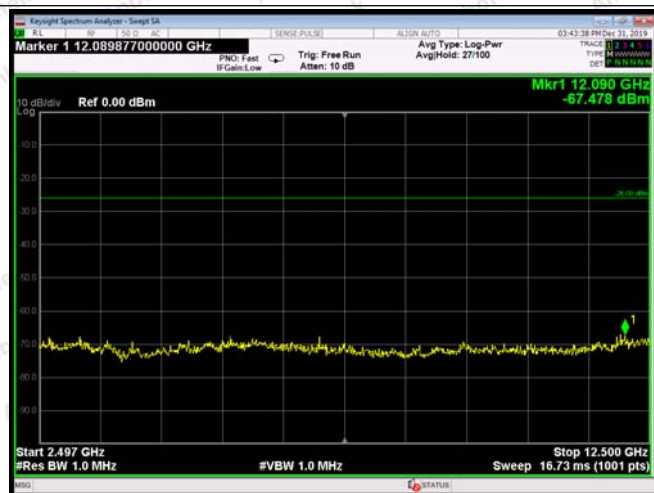
802.11n20---Mid (30~ 2387MHz)



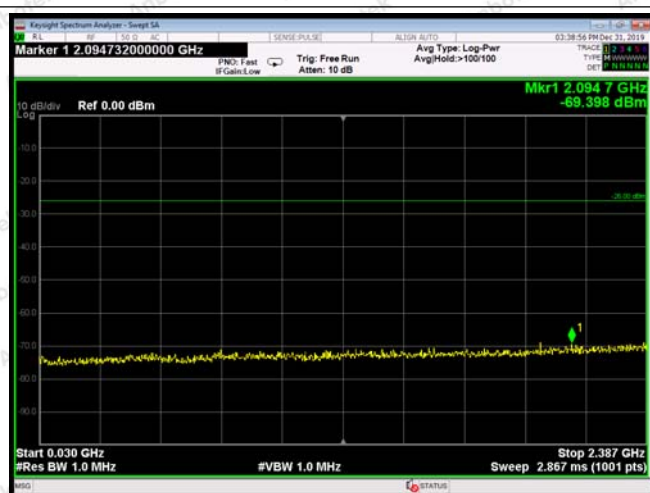
802.11n20---Mid (2387~ 2400MHz)



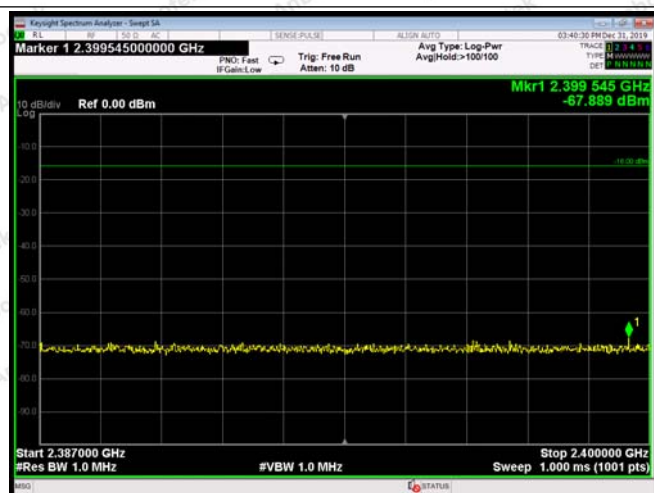
802.11n20---Mid (2483.5~ 2496.5MHz)



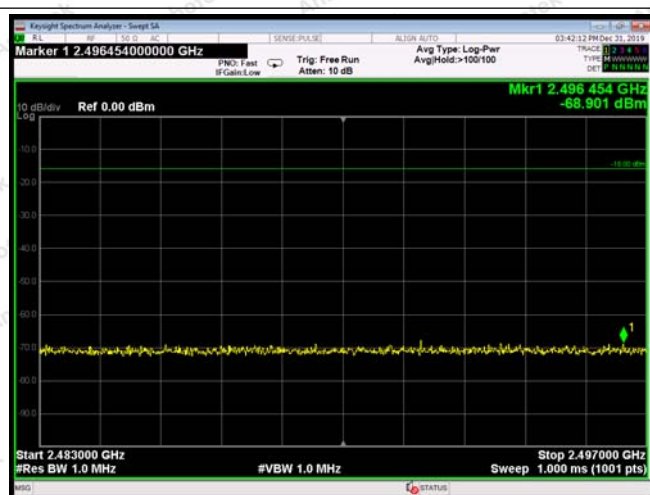
802.11n20---Mid (2496.5~ 12500MHz)



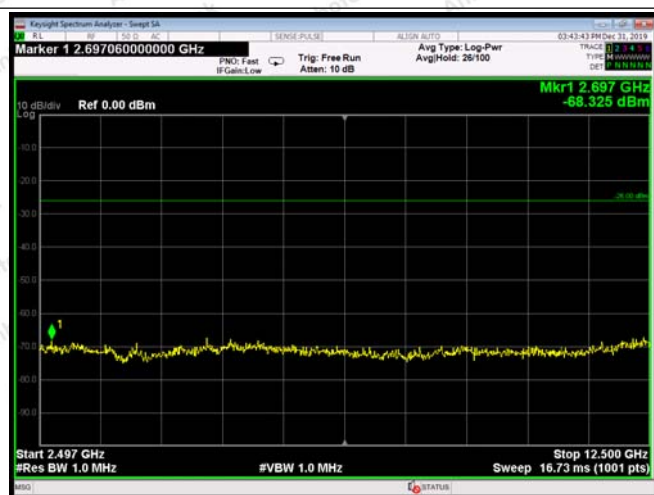
802.11n20---High (30~ 2387MHz)



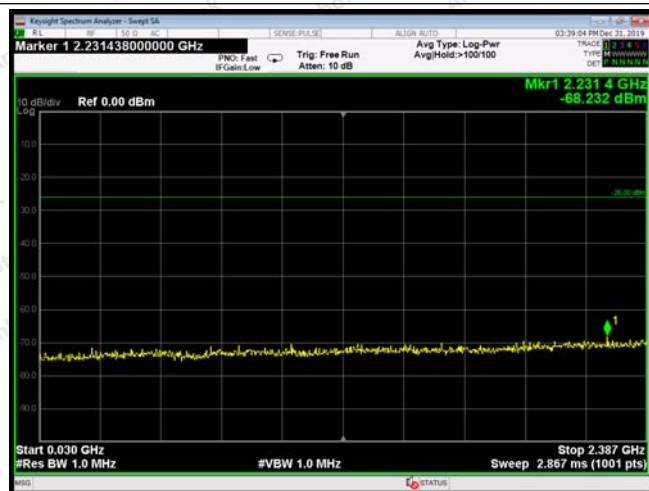
802.11n20---High (2387~ 2400MHz)



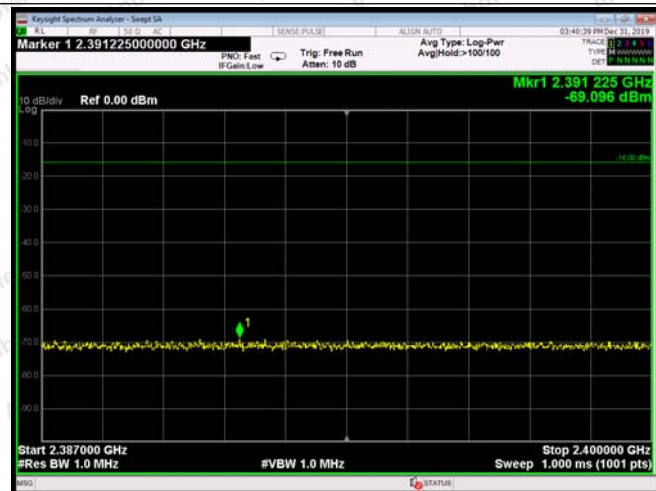
802.11n20---High (2483.5~ 2496.5MHz)



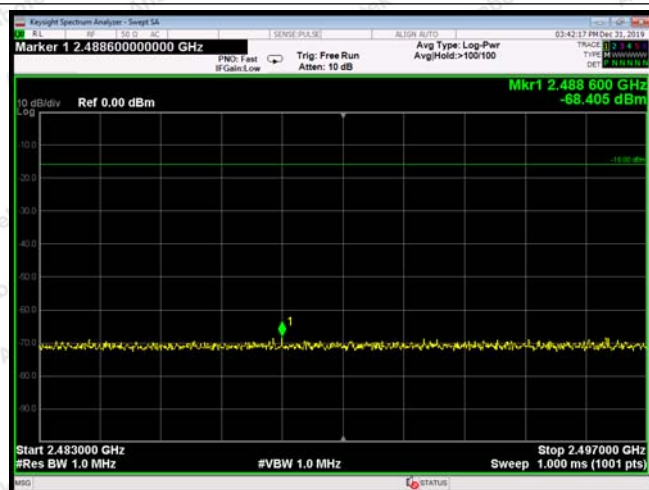
802.11n20---High (2496.5~ 12500MHz)



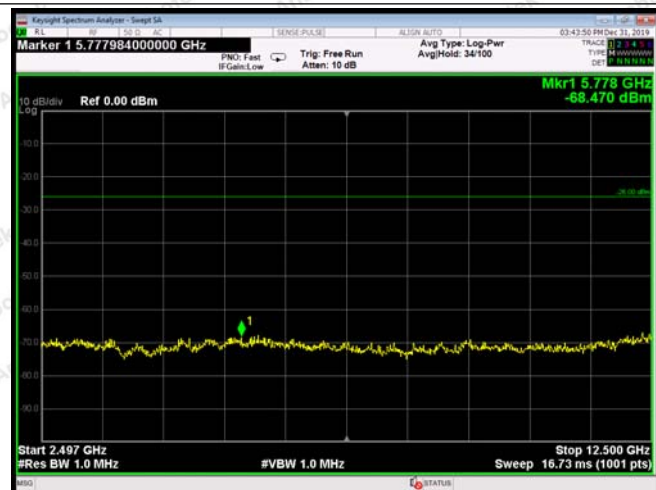
802.11n40---Low (30~ 2387MHz)



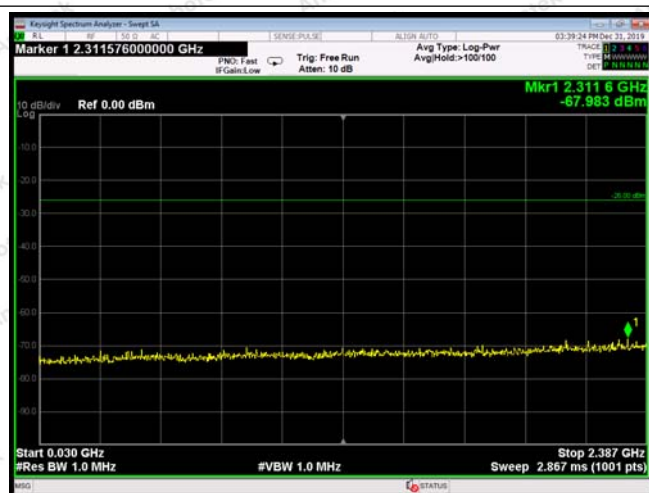
802.11n40---Low (2387~ 2400MHz)



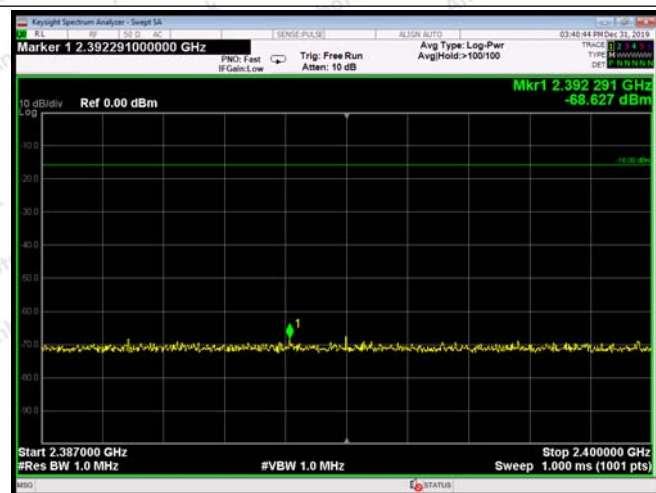
802.11n40---Low (2483.5~ 2496.5MHz)



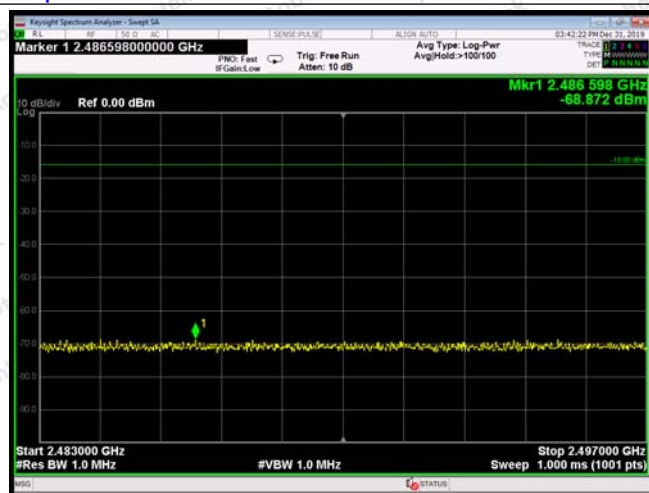
802.11n40---Low (2496.5~ 12500MHz)



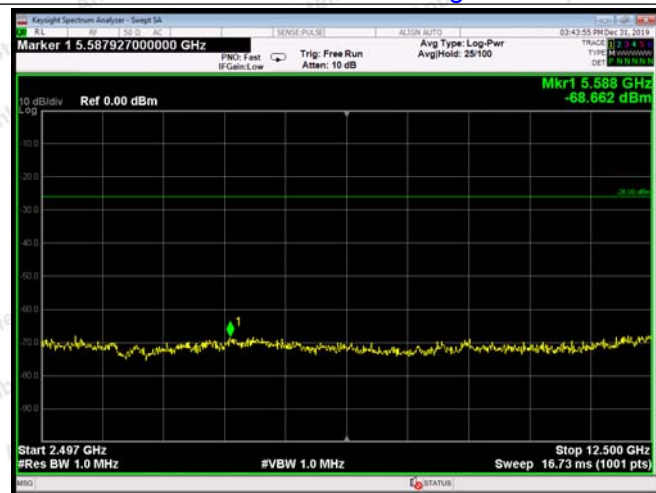
802.11n40---Mid (30~ 2387MHz)



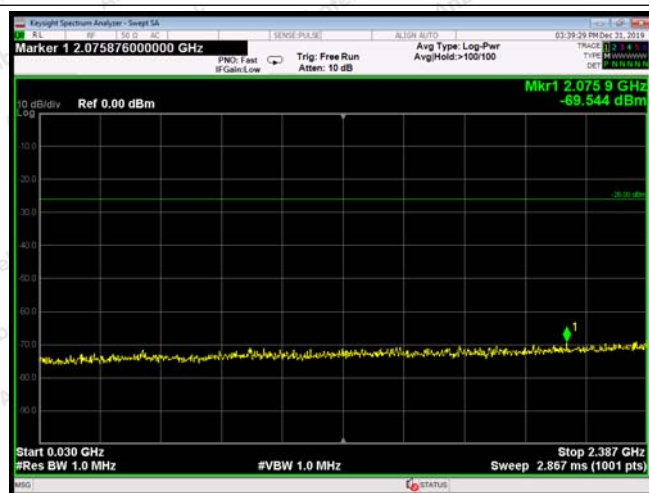
802.11n40---Mid (2387~ 2400MHz)



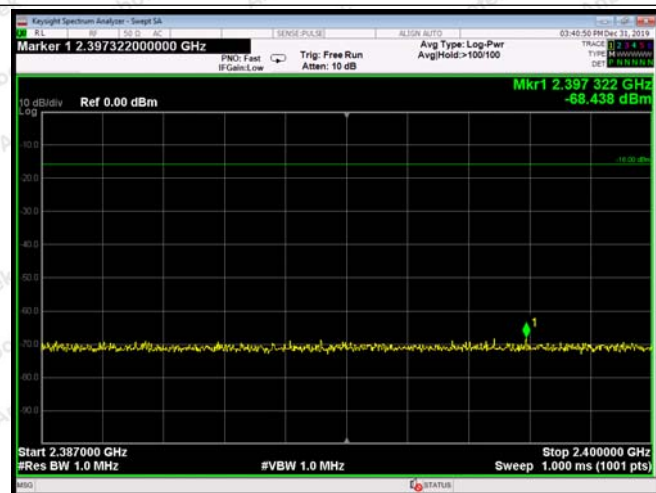
802.11n40---Mid (2483.5~ 2496.5MHz)



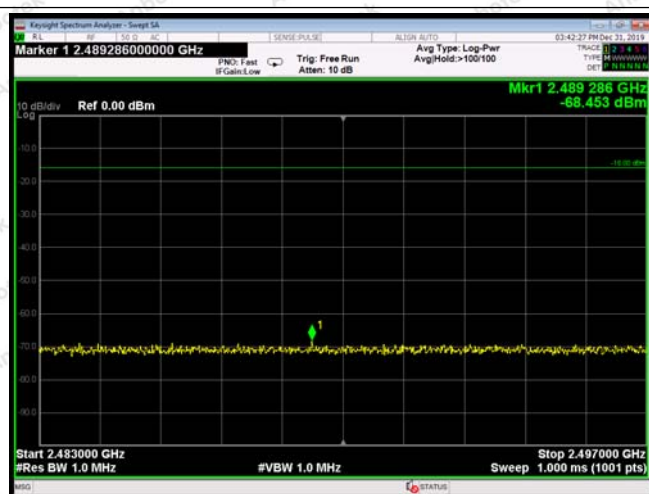
802.11n40---Mid (2496.5~ 12500MHz)



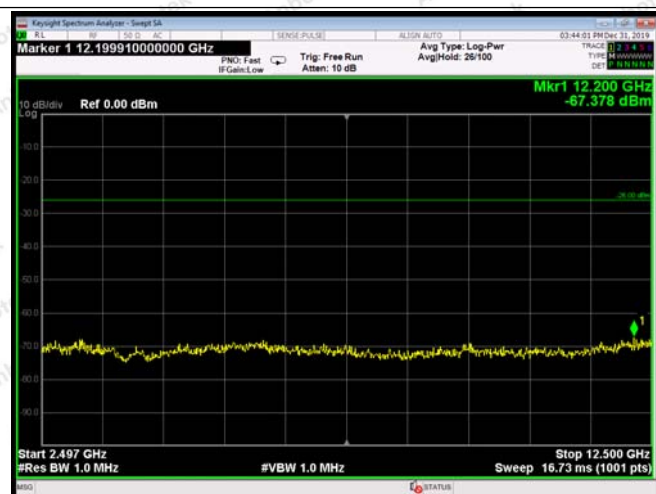
802.11n40---High (30~ 2387MHz)



802.11n40---High (2387~ 2400MHz)



802.11n40---High (2483.5~ 2496.5MHz)



802.11n40---High (2496.5~ 12500MHz)

Remark: That only normal voltage's plot is reported in the report.

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Tel: (86) 755-26066440 Fax: (86) 755-26014772 Email: service@anbotech.com

Code: AB-RF-07-a

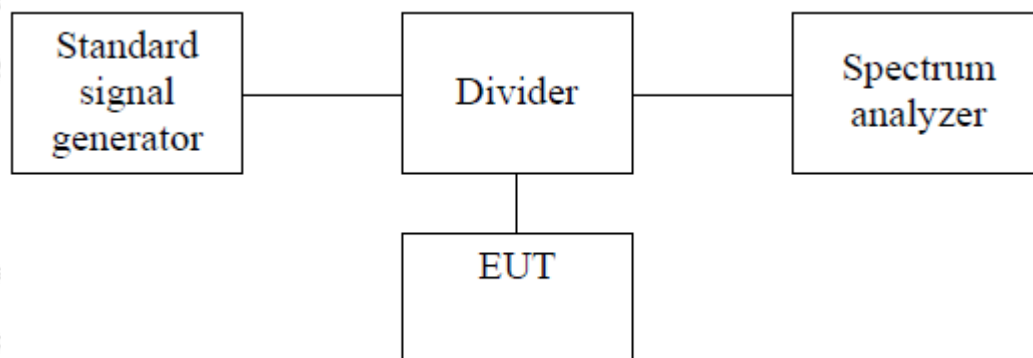
Hotline
400-003-0500
www.anbotech.com

7. Carrier sense

7.1. Test Equipment

Same as 1.7 Frequency tolerance measurement.

7.2. Test Setup



7.3. Test Configuration

1. Set the standard signal generator as follows.

Carrier frequency	Center frequency of received frequency band
Modulation	Non-modulation
Output level	declared level of applicant at the antenna input part of the EUT.

2. Set the spectrum analyzer as follows.

Frequency:	Center frequency of received frequency band
Span	50MHz
RBW	1MHz
VBW	1MHz
Triggered	Free run
Detector mode	Positive peak

7.4. Test Measurement procedure

1. Confirm that EUT can transmit.
2. Set EUT into Rx Mode.
3. Signal Generator ON
4. Confirm that EUT don't transmit.

7.5. Test Data

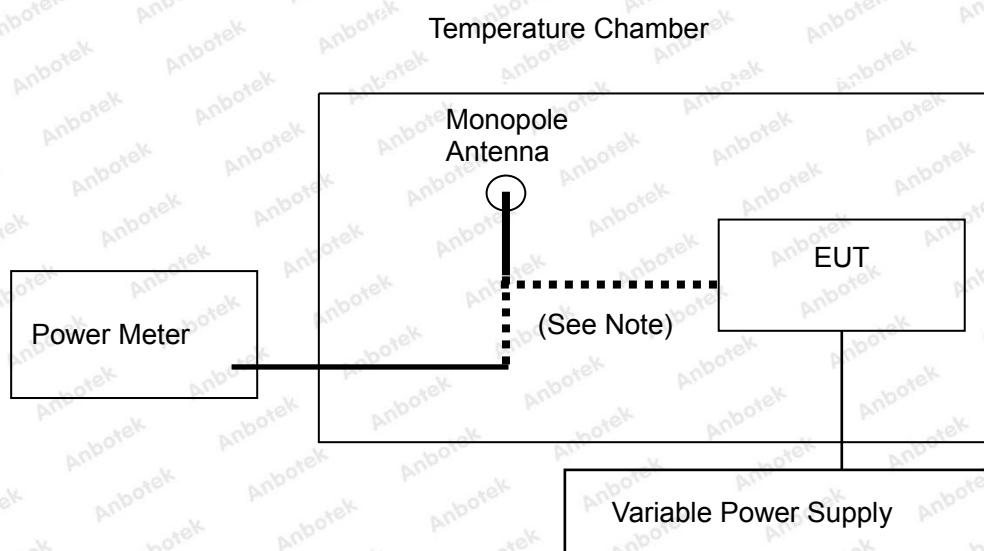
Describe as acceptance
(Test pass)

8. ANTENNA POWER TEST

8.1. Test Equipment

Same as 1.7 Frequency tolerance measurement.

8.2. Test Setup



8.3. Test Data

Test Mode	ID Code	Test Results
WiFi 2.4G	9CA525220678	Pass

Low Voltage: DC 2.97V

Frequency (MHz)	conducted antenna power density (mW/MHz)		Rated Conducted power density (mW/MHz)	Antenna Power Error (mW/MHz) (-80%, +20%)
802.11b				
	dBm	mw		
2412	3.274	2.125	4.2	-49.40%
2442	3.563	2.271	4.2	-45.93%
2472	3.476	2.226	4.2	-47.00%
802.11g				
2412	3.706	2.347	4.2	-44.12%
2442	3.750	2.371	4.2	-43.55%
2472	4.233	2.650	4.2	-36.90%
802.11n(HT20)				
2412	2.606	1.822	4.2	-56.62%
2442	3.072	2.029	4.2	-51.69%
2472	3.326	2.151	4.2	-48.79%
802.11n(HT40)				
2422	0.459	1.111	4.2	-73.55%
2442	0.692	1.173	4.2	-72.07%
2462	0.935	1.240	4.2	-70.48%

High Voltage: DC 3.63V

Frequency (MHz)	conducted antenna power density (mW/MHz)		Rated Conducted power density (mW/MHz)	Antenna Power Error (mW/MHz) (-80%, +20%)
802.11b				
	dBm	mw		
2412	3.273	2.125	4.2	-49.40%
2442	3.557	2.268	4.2	-46.00%
2472	3.475	2.226	4.2	-47.00%
802.11g				
2412	3.711	2.350	4.2	-44.05%
2442	3.743	2.368	4.2	-43.62%
2472	4.238	2.653	4.2	-36.83%
802.11n(HT20)				
2412	2.602	1.821	4.2	-56.64%
2442	3.072	2.029	4.2	-51.69%
2472	3.327	2.151	4.2	-48.79%
802.11n(HT40)				
2422	0.453	1.110	4.2	-73.57%
2442	0.697	1.174	4.2	-72.05%
2462	0.932	1.239	4.2	-70.50%

Normal Voltage: DC 3.3V

Frequency (MHz)	conducted antenna power density (mW/MHz)		Rated Conducted power density (mW/MHz)	Antenna Power Error (mW/MHz) (-80%, +20%)
802.11b				
	dBm	mw		
2412	3.276	2.126	4.2	-49.38%
2442	3.559	2.269	4.2	-45.98%
2472	3.472	2.224	4.2	-47.05%
802.11g				
2412	3.707	2.348	4.2	-44.10%
2442	3.746	2.369	4.2	-43.60%
2472	4.233	2.650	4.2	-36.90%
802.11n(HT20)				
2412	2.605	1.822	4.2	-56.62%
2442	3.074	2.030	4.2	-51.67%
2472	3.325	2.150	4.2	-48.81%
802.11n(HT40)				
2422	0.457	1.111	4.2	-73.55%
2442	0.694	1.173	4.2	-72.07%
2462	0.934	1.240	4.2	-70.48%

9. LIMITATION OF COLLATERAL EMISSIONS OF RECEIVER TEST

9.1. Test Equipment

Same as 1.7 Frequency tolerance measurement.

9.2. Test Configuration

Same as 1.6 Frequency tolerance measurement.

9.3. Test Data

Scanning Bandwidth	:	30~ 1000MHz
		1000~ 12500MHz

Pass

Please refer to the following data.

Low Voltage: DC 2.97V**802.11b**

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-80.804	30~ 1000MHz	≤ -54dBm
	-68.042	1000~ 12750MHz	≤ -47dBm
2442.000	-82.094	30~ 1000MHz	≤ -54dBm
	-68.100	1000~ 12750MHz	≤ -47dBm
2472.000	-80.624	30~ 1000MHz	≤ -54dBm
	-67.634	1000~ 12750MHz	≤ -47dBm

802.11g

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-80.663	30~ 1000MHz	≤ -54dBm
	-66.602	1000~ 12750MHz	≤ -47dBm
2442.000	-80.644	30~ 1000MHz	≤ -54dBm
	-68.612	1000~ 12750MHz	≤ -47dBm
2472.000	-81.885	30~ 1000MHz	≤ -54dBm
	-66.729	1000~ 12750MHz	≤ -47dBm

802.11n (HT20)

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-81.721	30~ 1000MHz	≤ -54dBm
	-68.405	1000~ 12750MHz	≤ -47dBm
2442.000	-80.771	30~ 1000MHz	≤ -54dBm
	-67.823	1000~ 12750MHz	≤ -47dBm
2472.000	-81.556	30~ 1000MHz	≤ -54dBm
	-67.450	1000~ 12750MHz	≤ -47dBm

802.11n (HT40)

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2422.000	-82.077	30~ 1000MHz	≤ -54dBm
	-68.120	1000~ 12750MHz	≤ -47dBm
2442.000	-81.765	30~ 1000MHz	≤ -54dBm
	-68.640	1000~ 12750MHz	≤ -47dBm
2462.000	-81.930	30~ 1000MHz	≤ -54dBm
	-68.832	1000~ 12750MHz	≤ -47dBm

High Voltage: DC 3.63V**802.11b**

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-80.700	30~ 1000MHz	≤ -54dBm
	-68.408	1000~ 12750MHz	≤ -47dBm
2442.000	-81.697	30~ 1000MHz	≤ -54dBm
	-67.654	1000~ 12750MHz	≤ -47dBm
2472.000	-81.164	30~ 1000MHz	≤ -54dBm
	-67.704	1000~ 12750MHz	≤ -47dBm

802.11g

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-80.384	30~ 1000MHz	≤ -54dBm
	-67.073	1000~ 12750MHz	≤ -47dBm
2442.000	-80.606	30~ 1000MHz	≤ -54dBm
	-68.632	1000~ 12750MHz	≤ -47dBm
2472.000	-81.768	30~ 1000MHz	≤ -54dBm
	-66.401	1000~ 12750MHz	≤ -47dBm

802.11n (HT20)

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-81.869	30~ 1000MHz	≤ -54dBm
	-68.871	1000~ 12750MHz	≤ -47dBm
2442.000	-80.930	30~ 1000MHz	≤ -54dBm
	-67.810	1000~ 12750MHz	≤ -47dBm
2472.000	-81.459	30~ 1000MHz	≤ -54dBm
	-68.069	1000~ 12750MHz	≤ -47dBm

802.11n (HT40)

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2422.000	-82.177	30~ 1000MHz	≤ -54dBm
	-67.972	1000~ 12750MHz	≤ -47dBm
2442.000	-82.062	30~ 1000MHz	≤ -54dBm
	-68.259	1000~ 12750MHz	≤ -47dBm
2462.000	-81.222	30~ 1000MHz	≤ -54dBm
	-69.068	1000~ 12750MHz	≤ -47dBm

Normal Voltage: DC 3.3V**802.11b**

Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-81.202	30~ 1000MHz	≤ -54dBm
	-68.028	1000~ 12750MHz	≤ -47dBm
2442.000	-81.862	30~ 1000MHz	≤ -54dBm
	-68.273	1000~ 12750MHz	≤ -47dBm
2472.000	-80.918	30~ 1000MHz	≤ -54dBm
	-67.846	1000~ 12750MHz	≤ -47dBm

802.11g

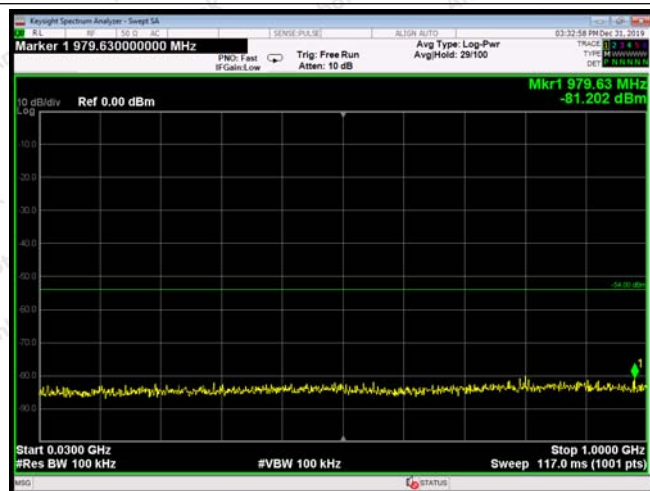
Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-80.960	30~ 1000MHz	≤ -54dBm
	-67.229	1000~ 12750MHz	≤ -47dBm
2442.000	-80.947	30~ 1000MHz	≤ -54dBm
	-68.699	1000~ 12750MHz	≤ -47dBm
2472.000	-81.858	30~ 1000MHz	≤ -54dBm
	-66.686	1000~ 12750MHz	≤ -47dBm

802.11n (HT20)

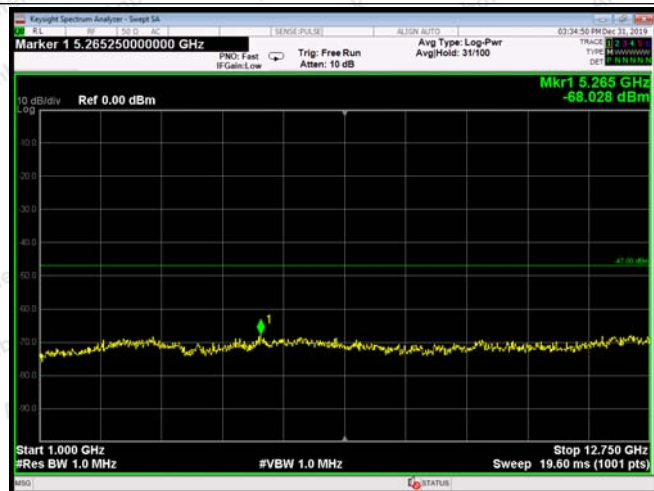
Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	-81.541	30~ 1000MHz	≤ -54dBm
	-68.741	1000~ 12750MHz	≤ -47dBm
2442.000	-81.362	30~ 1000MHz	≤ -54dBm
	-68.308	1000~ 12750MHz	≤ -47dBm
2472.000	-81.415	30~ 1000MHz	≤ -54dBm
	-67.967	1000~ 12750MHz	≤ -47dBm

802.11n (HT40)

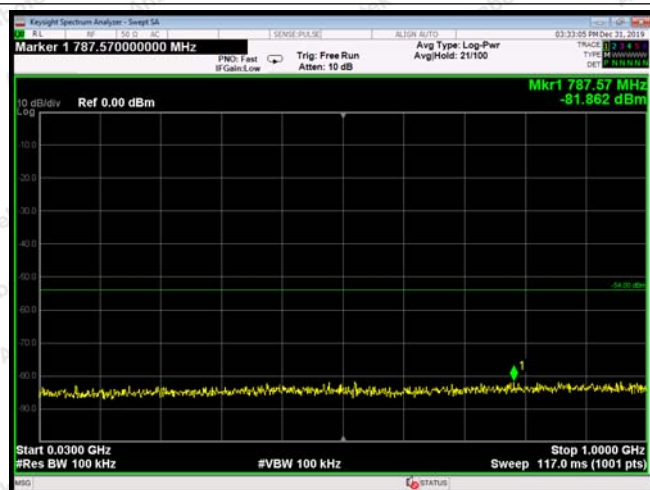
Frequency(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2422.000	-81.819	30~ 1000MHz	≤ -54dBm
	-67.782	1000~ 12750MHz	≤ -47dBm
2442.000	-81.950	30~ 1000MHz	≤ -54dBm
	-68.363	1000~ 12750MHz	≤ -47dBm
2462.000	-81.772	30~ 1000MHz	≤ -54dBm
	-68.691	1000~ 12750MHz	≤ -47dBm



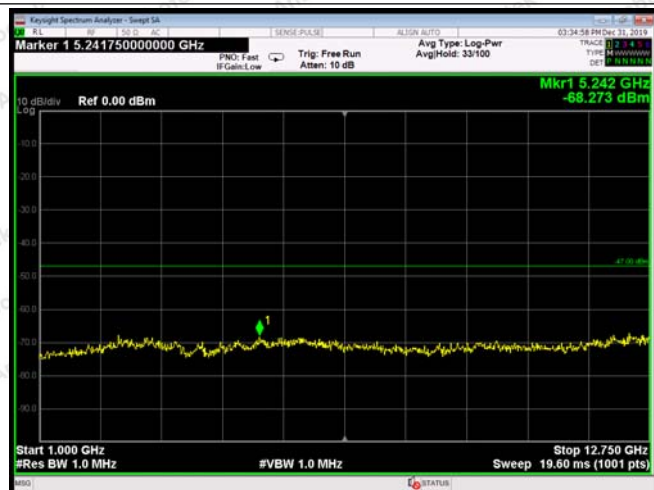
802.11b---Low (30~ 1000MHz)



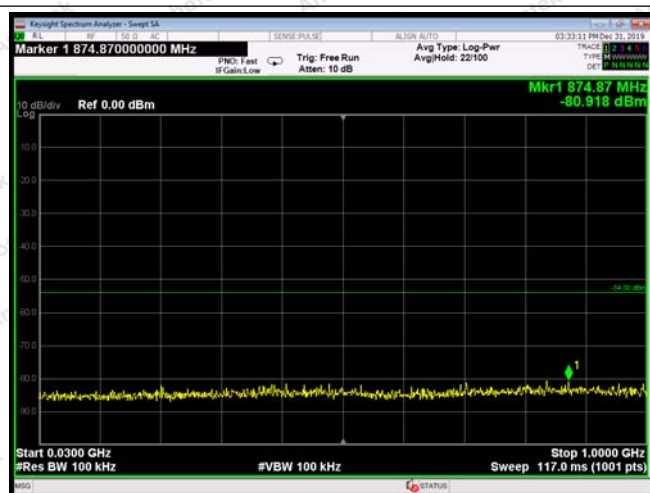
802.11b---Low (1000~ 12750MHz)



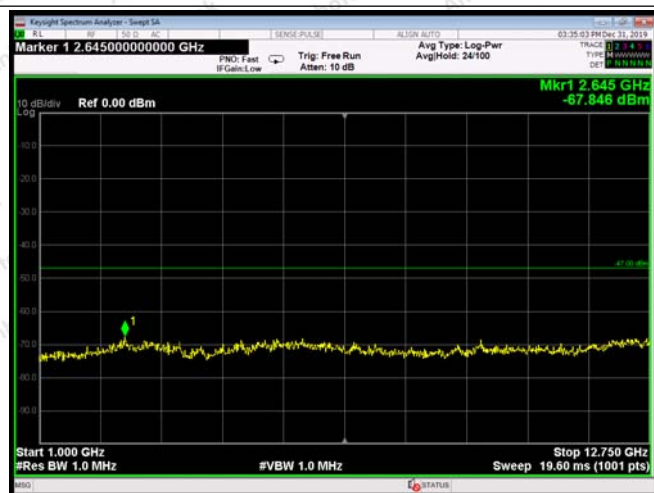
802.11b---Mid (30~ 1000MHz)



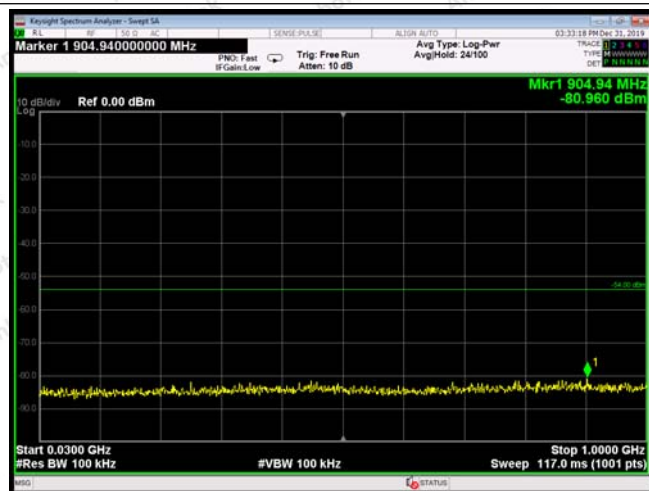
802.11b---Mid (1000~ 12750MHz)



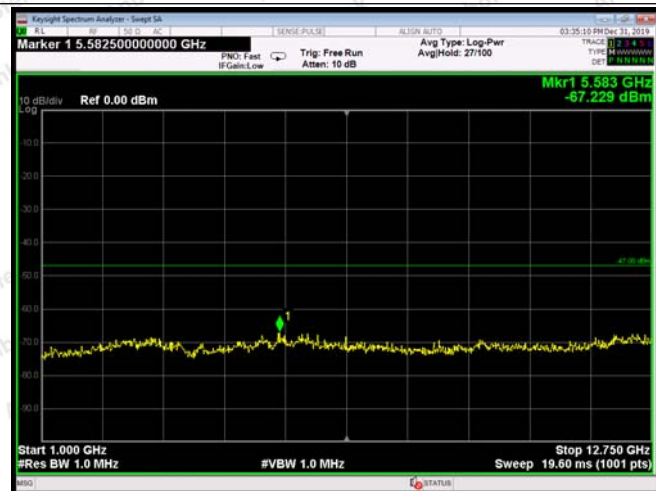
802.11b---High (30~ 1000MHz)



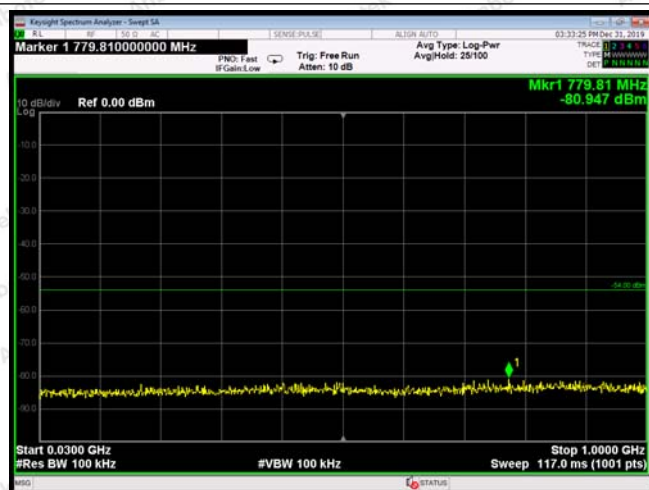
802.11b---High (1000~ 12750MHz)



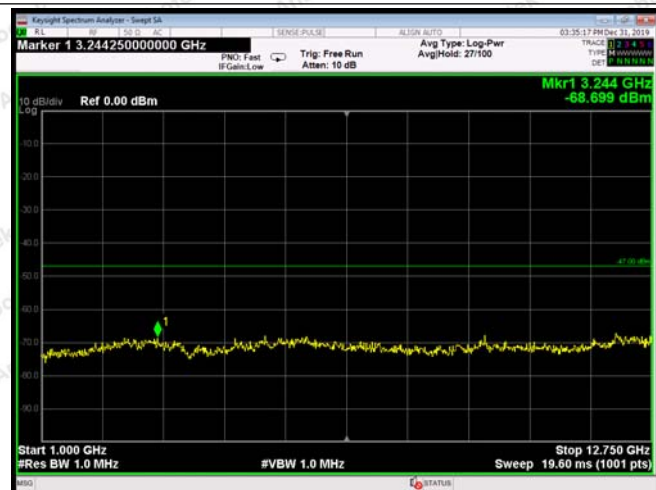
802.11g---Low (30~ 1000MHz)



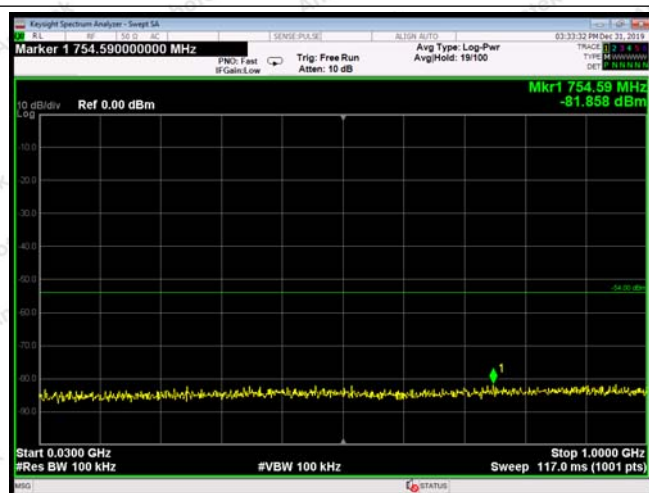
802.11g---Low (1000~ 12750MHz)



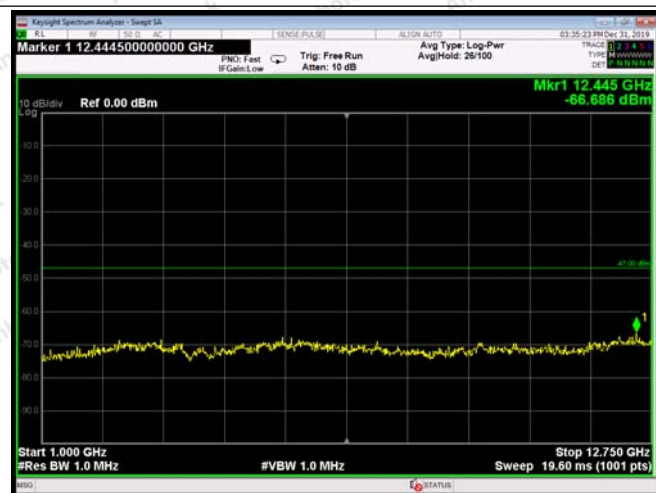
802.11g---Mid (30~ 1000MHz)



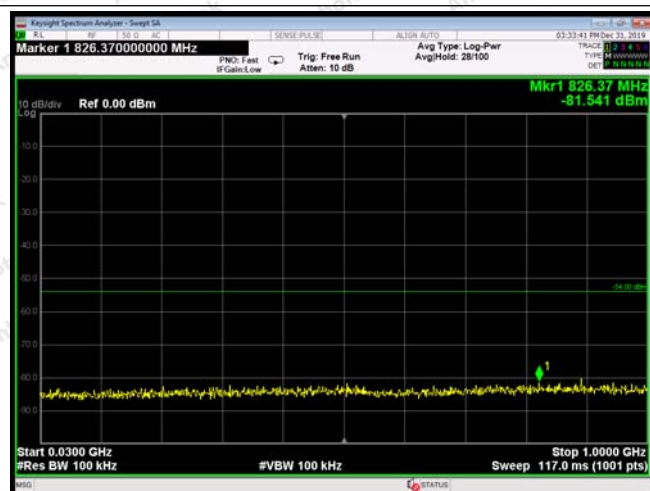
802.11g---Mid (1000~ 12750MHz)



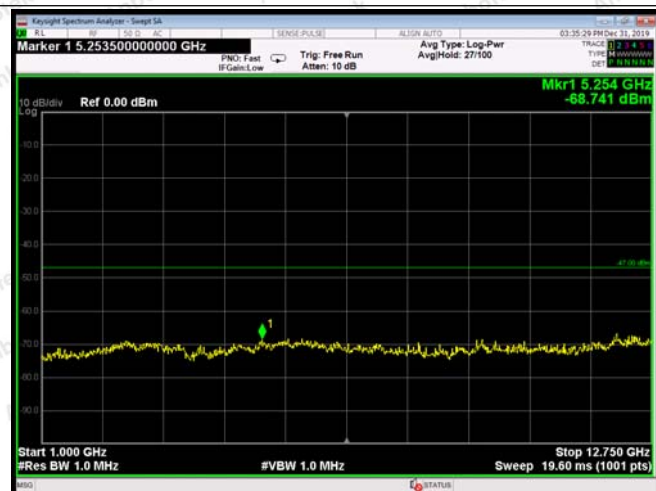
802.11g---High (30~ 1000MHz)



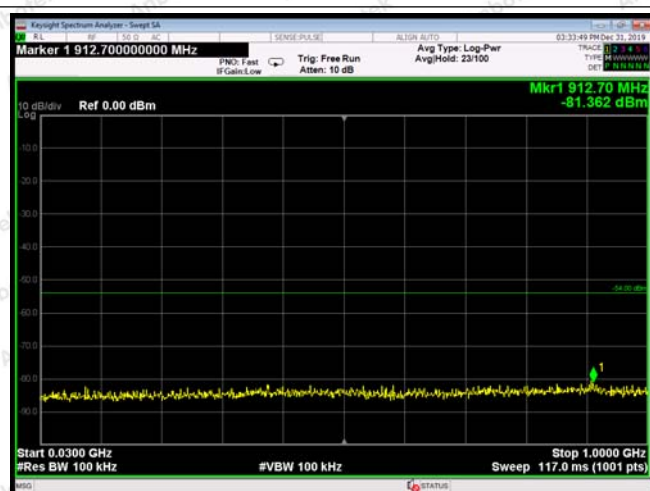
802.11g---High (1000~ 12750MHz)



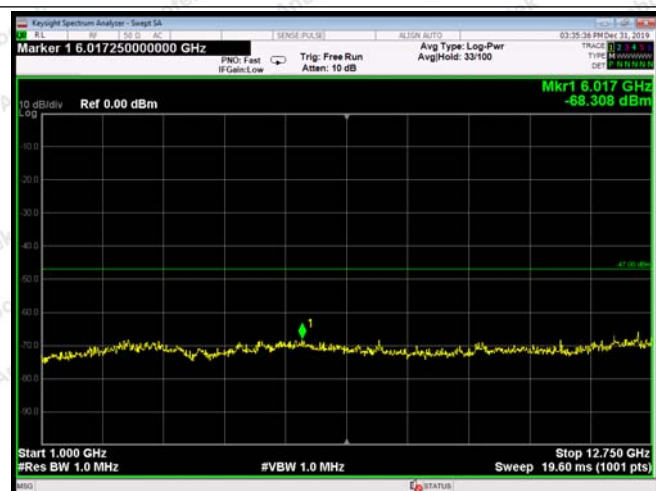
802.11n20---Low (30~ 1000MHz)



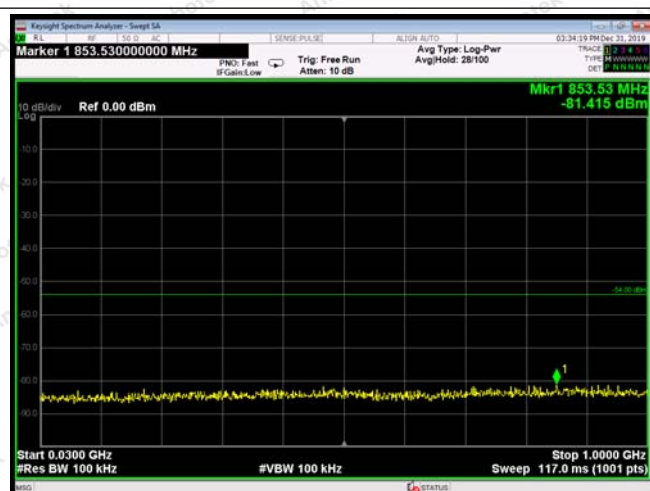
802.11n20---Low (1000~ 12750MHz)



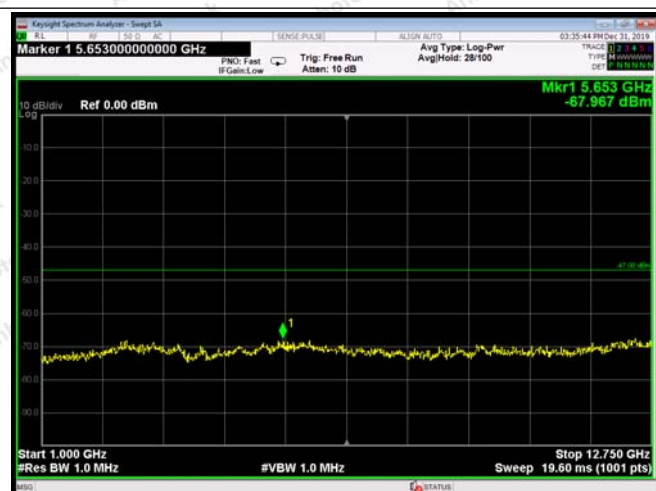
802.11n20---Mid (30~ 1000MHz)



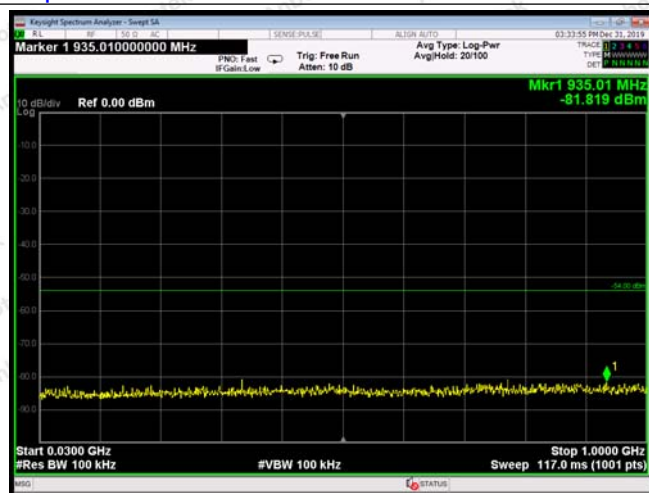
802.11n20---Mid (1000~ 12750MHz)



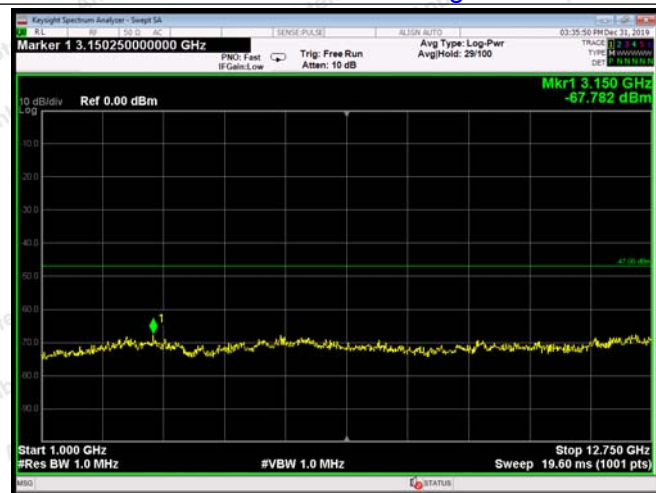
802.11n20---High (30~ 1000MHz)



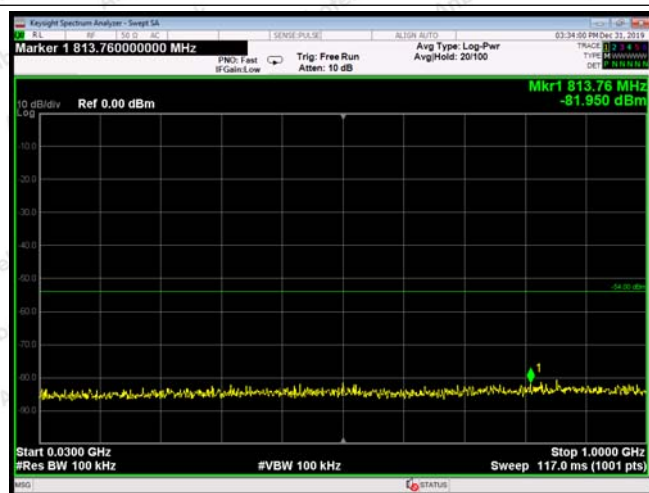
802.11n20---High (1000~ 12750MHz)



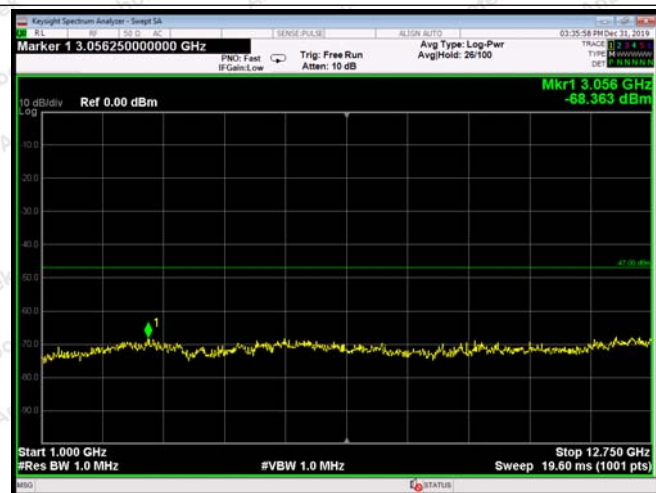
802.11n40---Low (30~ 1000MHz)



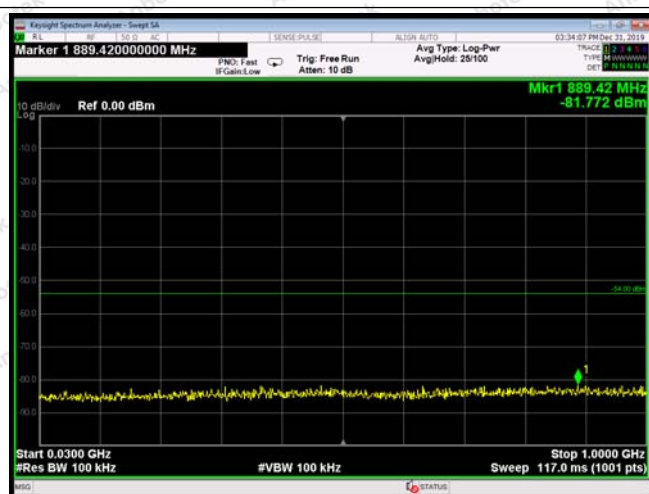
802.11n40---Low (1000~ 12750MHz)



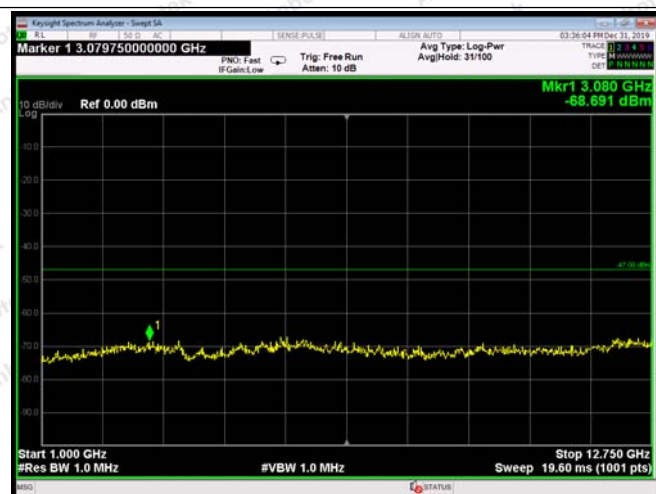
802.11n40---Mid (30~ 1000MHz)



802.11n40---Mid (1000~ 12750MHz)



802.11n40---High (30~ 1000MHz)



802.11n40---High (1000~ 12750MHz)

Remark: That only normal voltage's plot is reported in the report.

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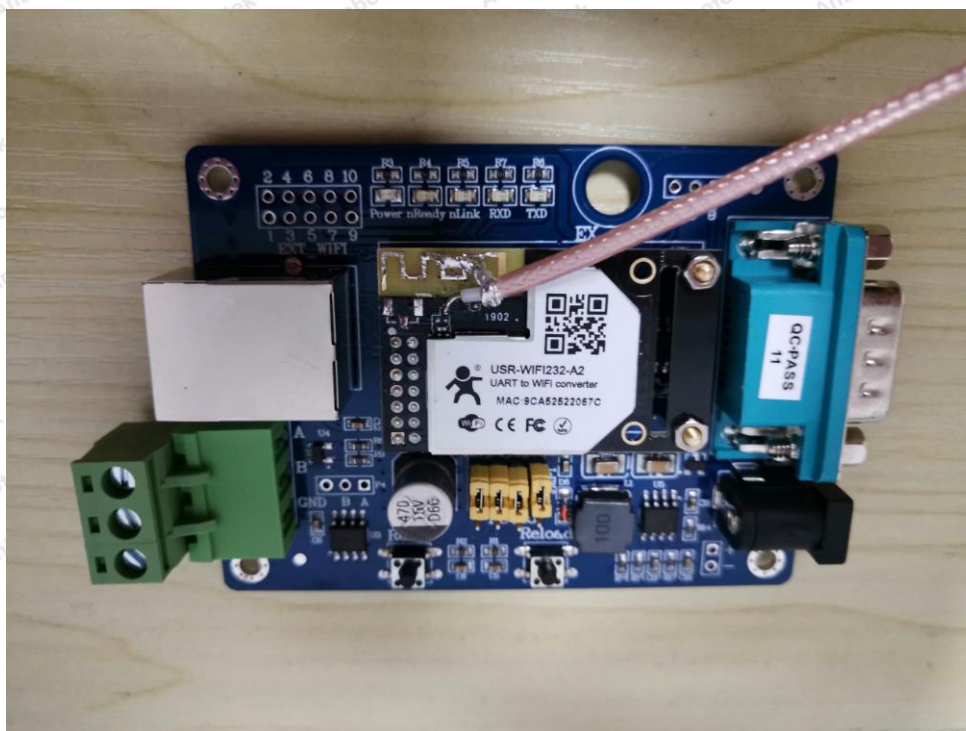
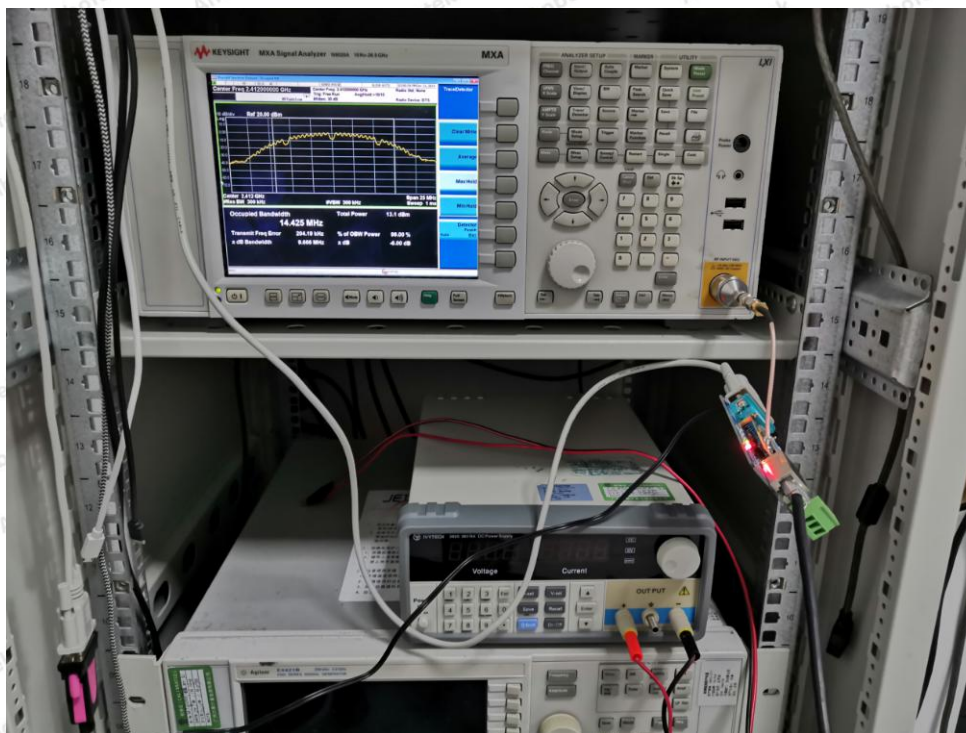
Address: 1/F., Building D, Sogood Science and Technology Park, Sanwei Community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.

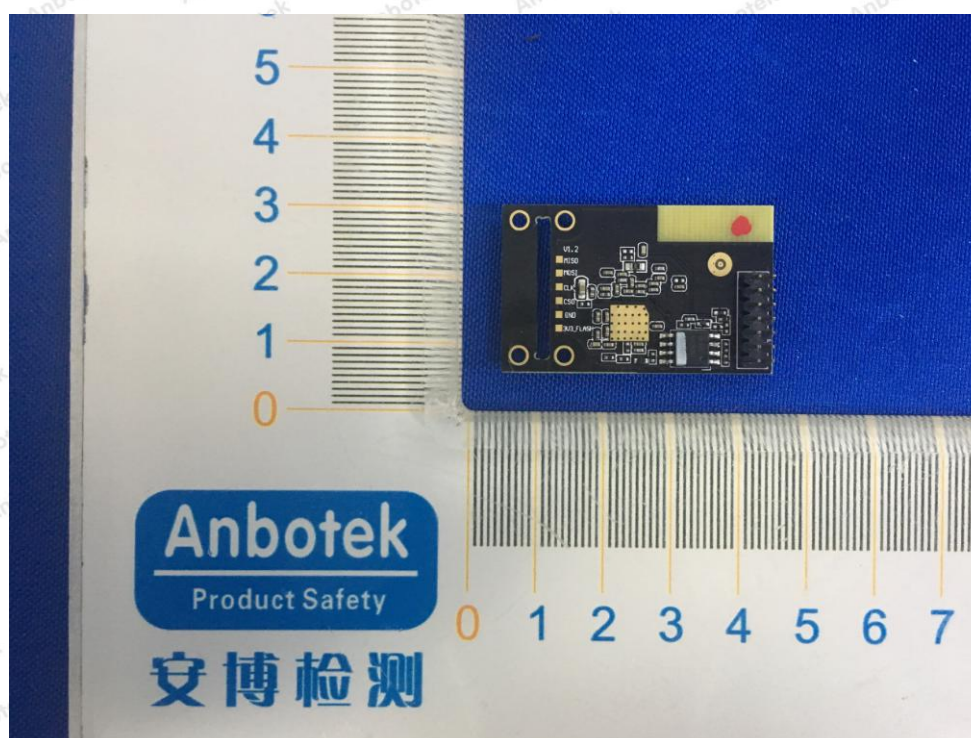
Tel: (86) 755-26066440 Fax: (86) 755-26014772 Email: service@anbotech.com

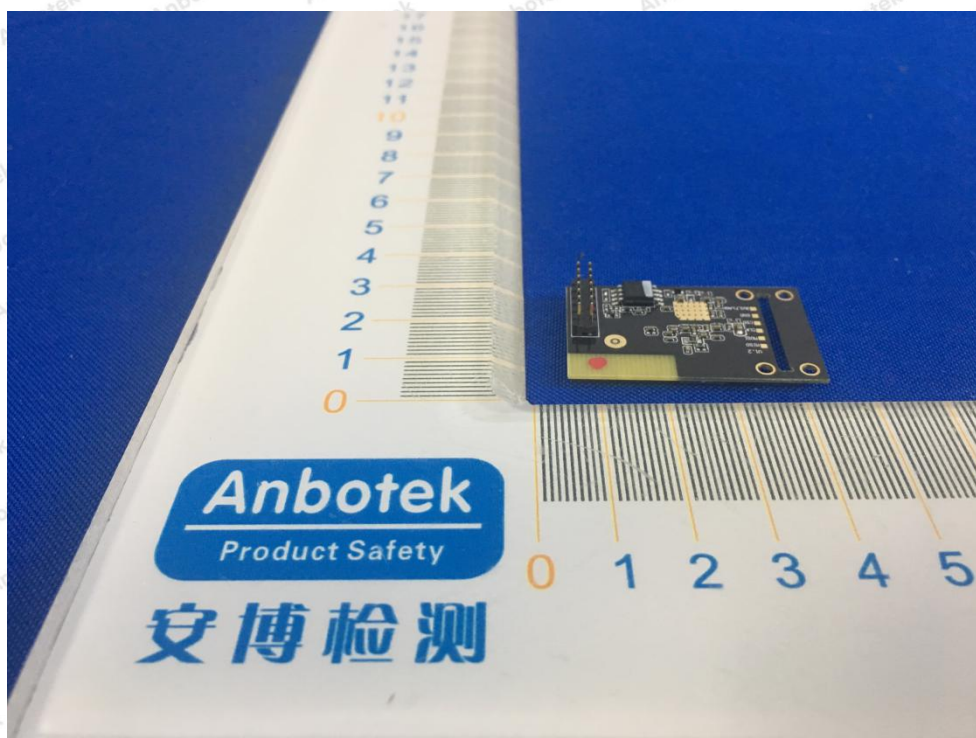
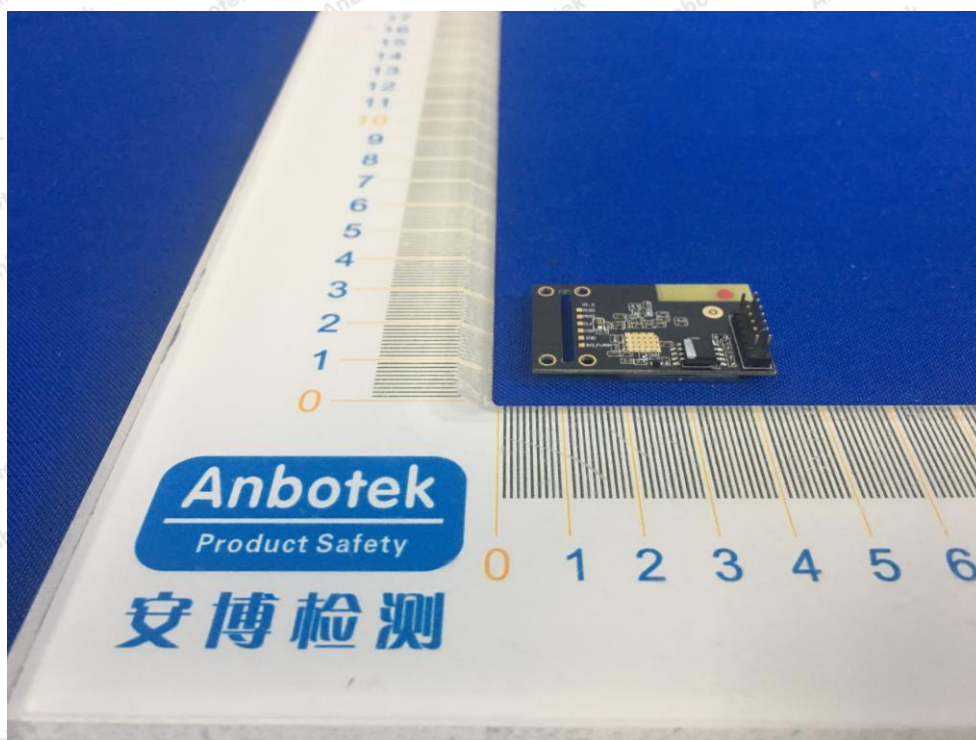
Code: AB-RF-07-a

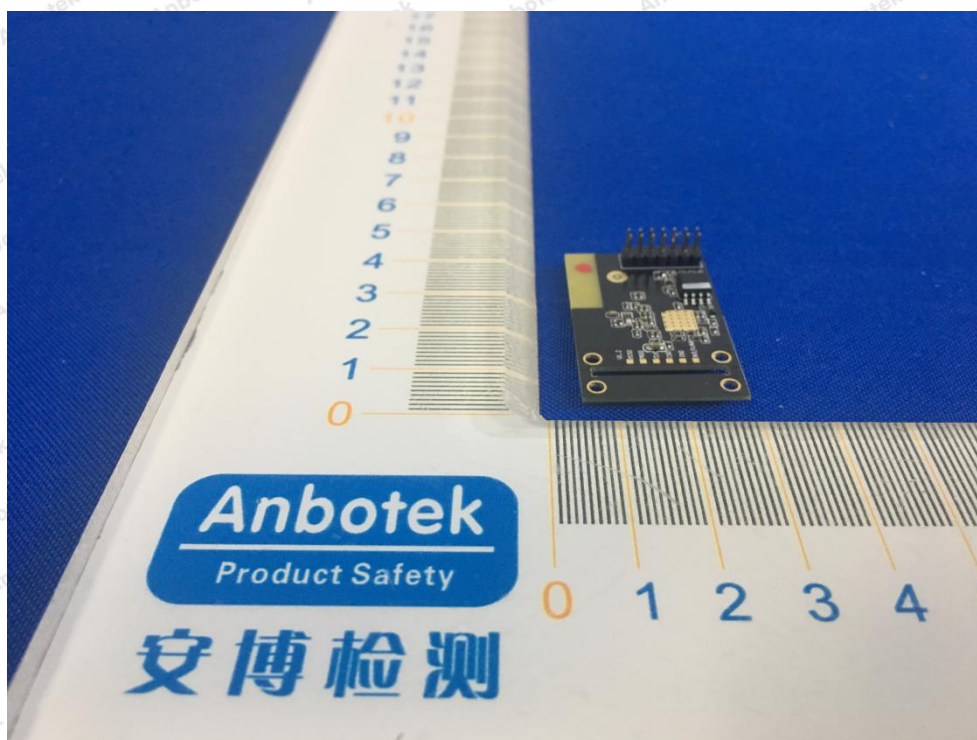
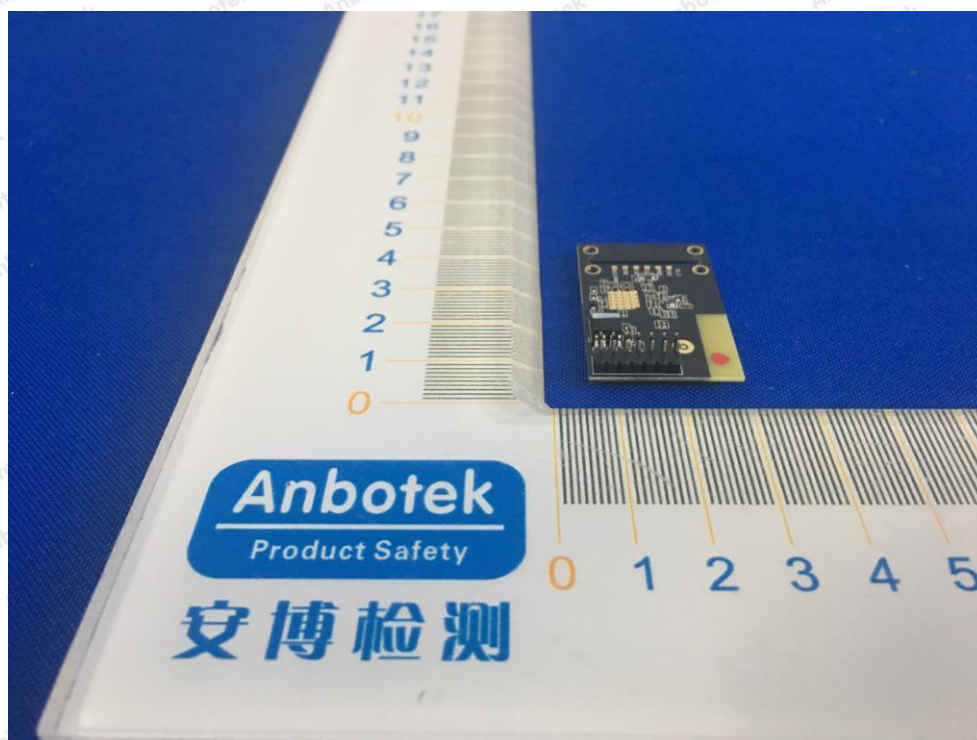
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400-003-0500
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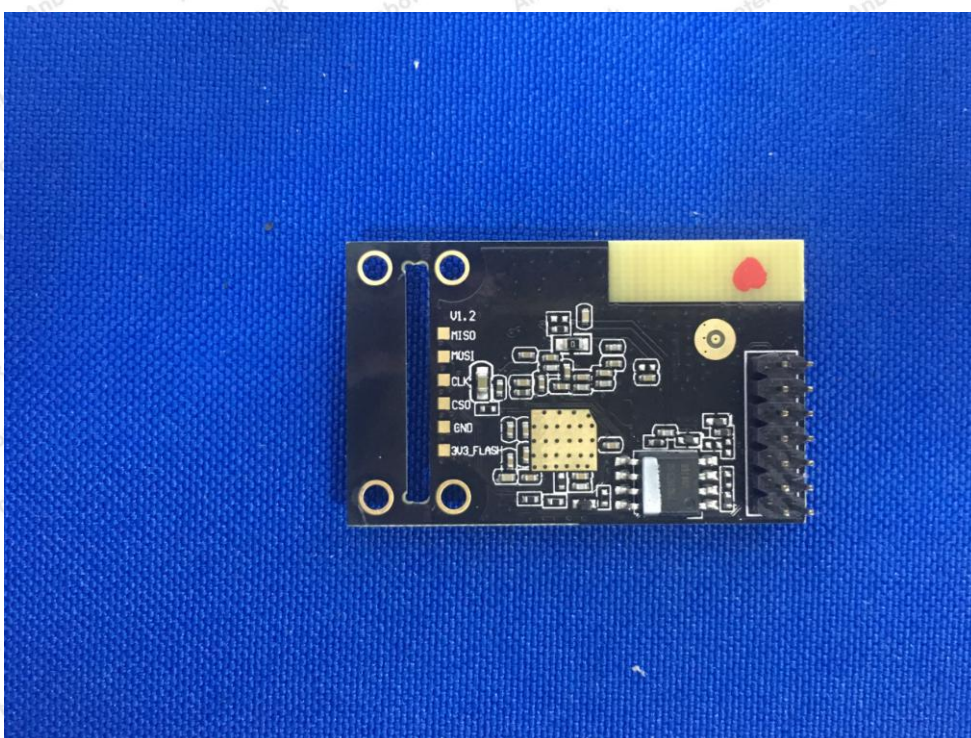
APPENDIX I -- TEST SETUP PHOTOGRAPH



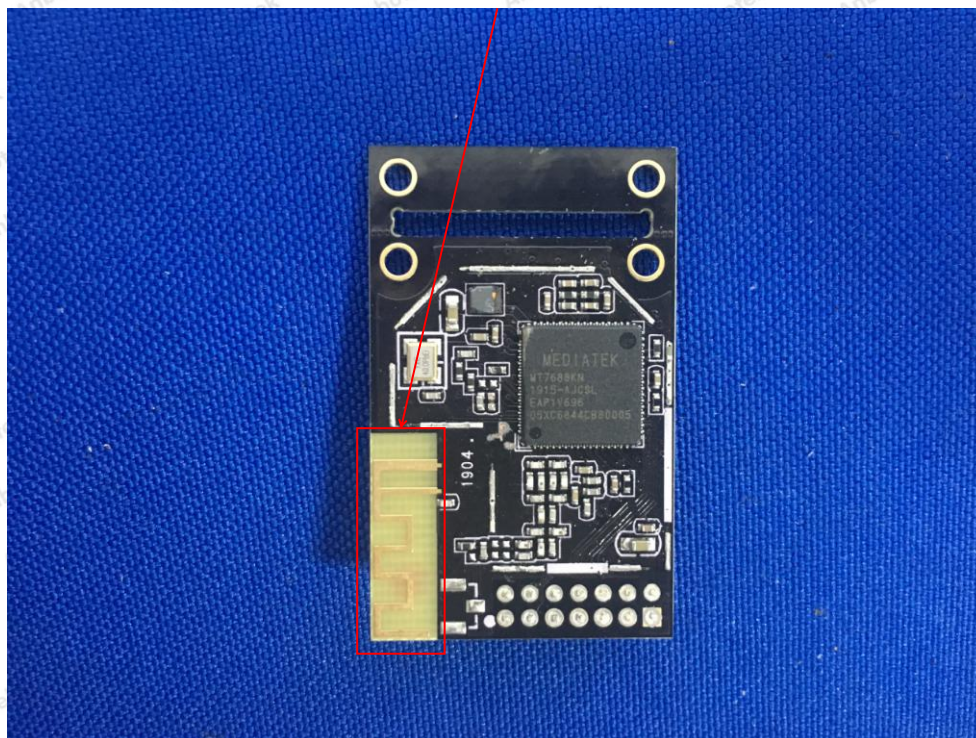
APPENDIX II -- EXTERNAL PHOTOGRAPH





APPENDIX III -- INTERNAL PHOTOGRAPH

ANT



----- End of Report -----

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