JAPAN SPECIFIED RADIO TEST REPORT
for
Jinan USR IOT Technology Limited

Serial to WIFI Module
Model No.: USR-WIFI232-2, USR-WIFI232-602, USR-WIFI232-604, USR-WIFI232-610, USR-WIFI232-630, USR-WIFI232-A, USR-WIFI232-B, USR-WIFI232-Ca, USR-WIFI232-Cb, USR-WIFI232-D2

Prepared for	:	Jinan USR IOT Technology Limited
Address	:	#1-724~729, Huizhan Guoji Cheng, Gaoxin District, Jinan City, Shandong Province, 250101, China

Prepared By	:	Shenzhen Anbotek Compliance Laboratory Limited
Address	:	1/F., Building 1, SEC Industrial Park, No.0409 Qianhai Road,Nanshan District, Shenzhen, 518054, China Tel: (86) 755-26066544 Fax: (86) 755-26014772

Report Number	:	R011412620I
Date of Test	:	Dec. 20, 2014~ Jan. 20, 2015
Date of Report	:	Jan. 21, 2015

TABLE OF CONTENTS

Description

Page

Test Report

TEST REPORT

Applicant	:	Jinan USR IOT Technology Limited
Manufacturer	:	INSPUR SOFTWARE GROUP LTD.
EUT	:	Serial to WIFI Module
Model No.	:	USR-WIFI232-2, USR-WIFI232-602, USR-WIFI232-604, USR-WIFI232-610, USR-WIFI232-630, USR-WIFI232-A, USR-WIFI232-B, USR-WIFI232-Ca, USR-WIFI232-Cb, USR-WIFI232-D2
Serial No.	:	N.A.
Trade Mark	:	USR IOT
Rating	:	DC 5-9V, 1000mA

Measurement Procedure Used:
MIC Notice No.88 Annex43
Certificate regulation article 2, paragraph 1, item 19

The device described above is tested by Shenzhen Anbotek 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 Anbotek 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 and Certificate regulation article 2, paragraph 1, item 19 requirements.
This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Test : Dec. 20, 2014~ Jan. 20, 2015

Prepared by : (Tested Engineer / Kebo Zhang)

Reviewer : (Project Manager / Amy Ding)

Approved & Authorized Signer : (Manager / Tom Chen)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT	:	Serial to WIFI Module
Model Number	:	USR-WIFI232-2, USR-WIFI232-602, USR-WIFI232-604, USR-WIFI232-610, USR-WIFI232-630, USR-WIFI232-A, USR-WIFI232-B, USR-WIFI232-Ca, USR-WIFI232-Cb, USR-WIFI232-D2 (Note: All samples are the same except the model number, so we prepare "USR-WIFI232-2" for test only.)
Test Power Supply	:	AC 100V/50Hz (For Adapter)
Frequency	:	2412-2472MHz(802.11b/802.11g/802.11n(HT20)) 2422-2462MHz (802.11n(HT40))
Channels	:	802.11b, 802.11g, 802.11n,(HT20) 13 Channels 802.11n(HT40) 9 Channels
Antenna Specification	:	SMD Antenna 0.8dBi
Rated output Power	:	8.2 mW/MHz for 802.11b/g/n (HT20) 4.4 mW/MHz for 802.11n (HT40)
Applicant	:	Jinan USR IOT Technology Limited
Address	:	#1-724~729, Huizhan Guoji Cheng, Gaoxin District, Jinan City, Shandong Province, 250101, China
Manufacturer	:	INSPUR SOFTWARE GROUP LTD.
Address	:	No.2877, Kehang Road of High-tech Industrial Development Zone,Jinan, Shandong, China, 250104
Factory	:	INSPUR SOFTWARE GROUP LTD.
Address	:	No.2877, Kehang Road of High-tech Industrial Development Zone,Jinan, Shandong, China, 250104
Date of receipt	:	Dec. 20, 2014
Date of Test	:	Dec. 20, 2014~ Jan. 20, 2015

1.2. Auxiliary Equipment Used during Test

Adapter : Model: FLDS1003-0501000C
Input: AC 100-240V, 50/60Hz, 0.15A Max
Output: DC 5V, 1.0A

1.3. Description of Test Facility

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

CNAS - LAB Code: L3503
Shenzhen Anbotek Compliance Laboratory Limited., Laboratory has been assessed and in compliance with CNAS/CL01: 2006 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of Testing Laboratories.

FCC-Registration No.: 752021
Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registed 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 752021, July 10, 2013.

IC-Registration No.: 8058A-1
Shenzhen Anbotek Compliance Laboratory Limited., EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada. The acceptance letter from the IC is maintained in our files. Registration 8058A-1, February 22, 2013.

Test Location
All Emissions tests were performed at
Shenzhen Anbotek Compliance Laboratory Limited. at 1/F., Building 1, SEC Industrial Park, No.0409 Qianhai Road,Nanshan District, Shenzhen, 518054, China

1.4. Measurement Uncertainty

Radiation Uncertainty	:	Ur = 4.3dB
Conduction Uncertainty	:	Uc = 3.4dB

1.5. 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 isprogrammed.

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: When the external power supply of adapter is changed within the rated voltage ±10%, its output always keeps within a variation of 1%, so the normal rated voltage AC 100V is chosen for the final testing.

2. Summary of Test

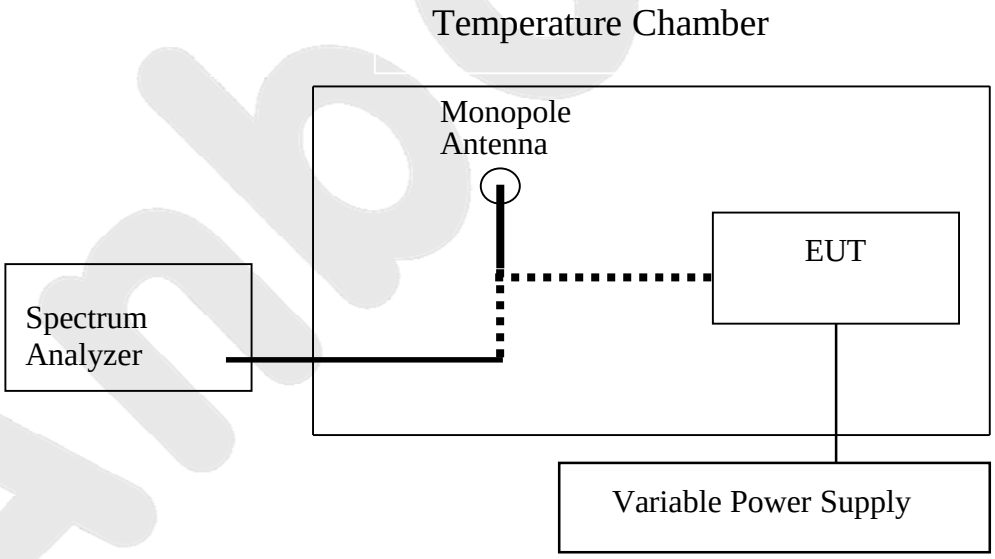
Test Items	Subclause	Required	Results
General Provisions			
Frequency Tolerance	5	Yes	Complies
Occupied Bandwidth	6	Yes	Complies
Spurious Emissions	7	Yes	Complies
Transmitting equipment			
Antenna power	14	Yes	Complies
SAR	14.2	N/A	N/A
Frequency stabilization	15	Yes	Complies
Transmitter antenna			
Type, 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)	Yes	Complies
Angular width of principal radiation (AWPR)	49.20(1); f(2)	Yes	Complies
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
Carrier sensing function	--	N/A	N/A

3. FREQUENCY TOLERANCE TEST

3.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analysis	Agilent	E4407B	US39390582	Aug. 08, 2014	1 Year
2.	Preamplifier	Instruments corporation	EMC011830	980100	Aug. 08, 2014	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESPI	101604	Apr. 22, 2014	1 Year
4.	Double Ridged Horn Antenna	Instruments corporation	GTH-0118	351600	Apr. 04, 2014	1 Year
5.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	Apr. 24, 2014	1 Year
6.	Pre-amplifier	SONOMA	310N	186860	Aug. 08, 2014	1 Year
7.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A

3.2. Test Configuration



3.3. Test Results

Normal Voltage: AC 100V

802.11b

Frequency(MHz)	Reading(MHz)	Tolerance(ppm)	Limit(ppm)
2412.0000	2411.9720	-11.61	50
2442.0000	2441.9724	-11.30	50
2472.0000	2471.9716	-11.49	50

Normal Voltage: AC 100V

802.11g

Frequency(MHz)	Reading(MHz)	Tolerance(ppm)	Limit(ppm)
2412.0000	2411.9712	-11.94	50
2442.0000	2441.9710	-11.88	50
2472.0000	2471.9706	-11.89	50

Normal Voltage: AC 100V

802.11n (HT20)

Frequency(MHz)	Reading(MHz)	Tolerance(ppm)	Limit(ppm)
2412.0000	2411.9700	-12.44	50
2442.0000	2441.9700	-12.29	50
2472.0000	2471.9700	-12.14	50

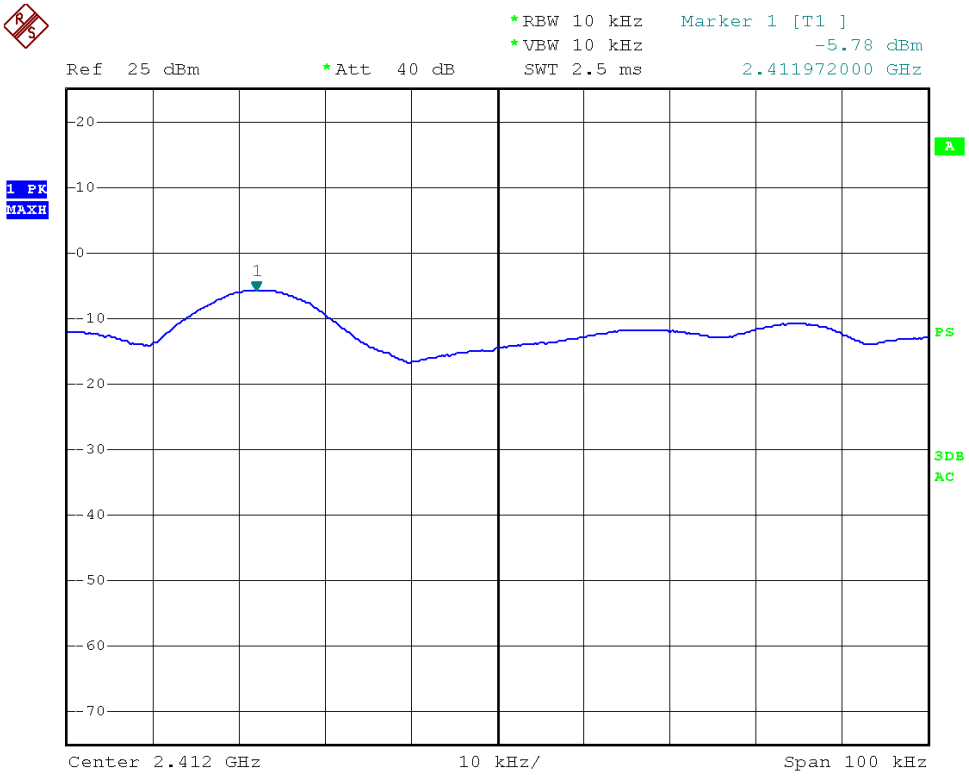
Normal Voltage: AC 100V

802.11n (HT40)

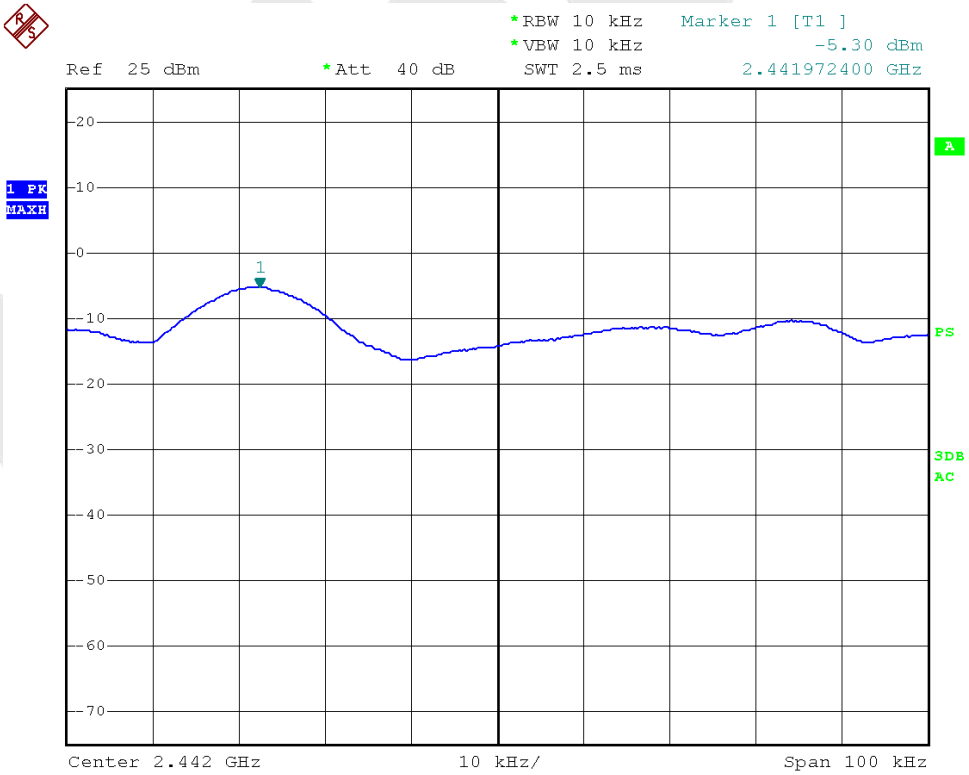
Frequency(MHz)	Reading(MHz)	Tolerance(ppm)	Limit(ppm)
2422.0000	2421.9706	-12.14	50
2442.0000	2441.9710	-11.88	50
2462.0000	2461.9716	-11.54	50

802.11b

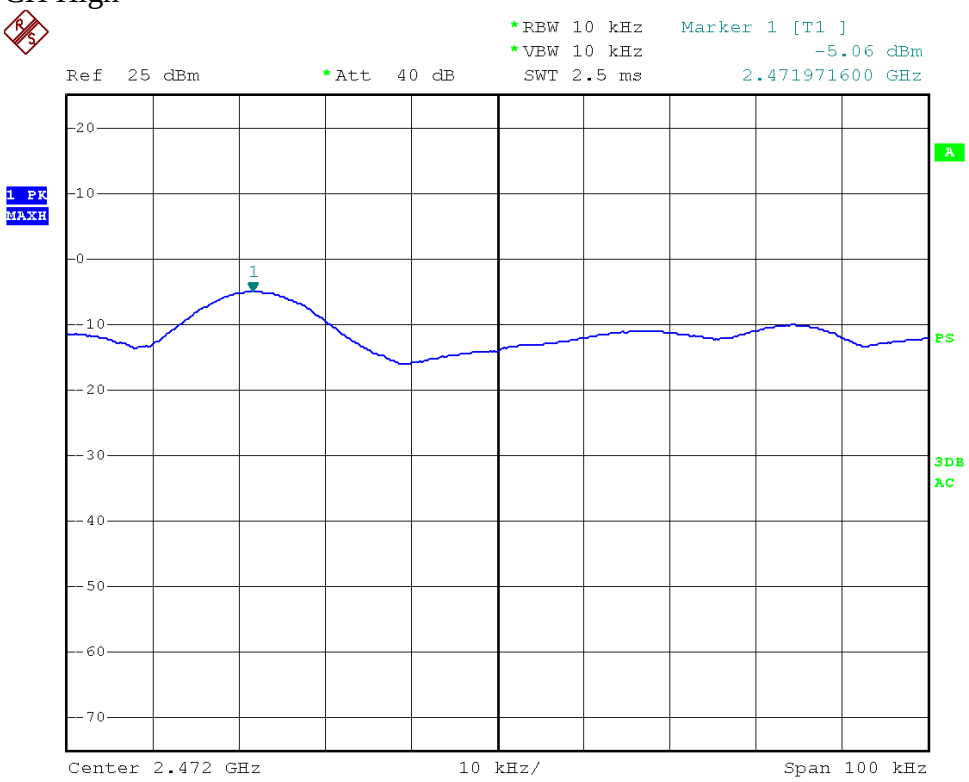
CH Low



CH Mid

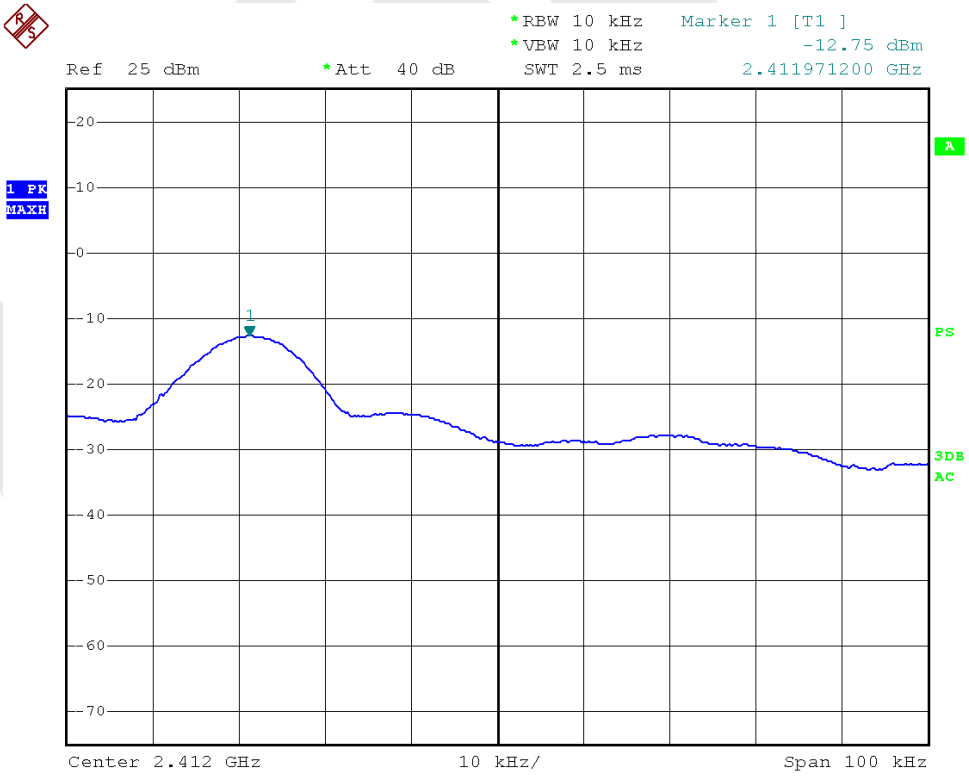


CH High

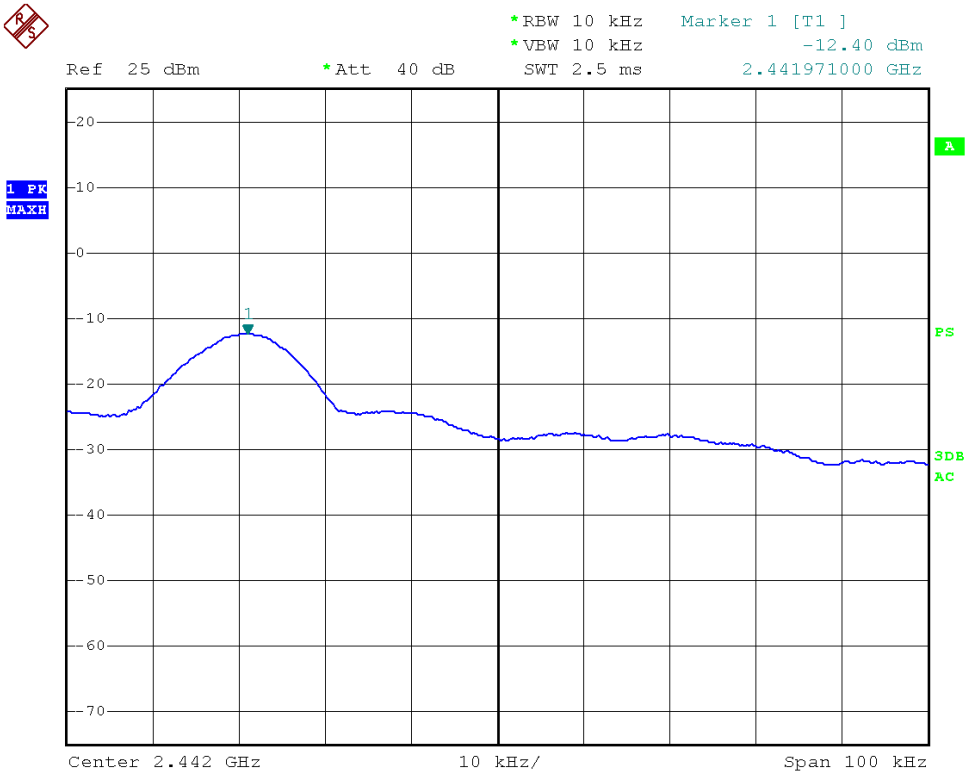


802.11g

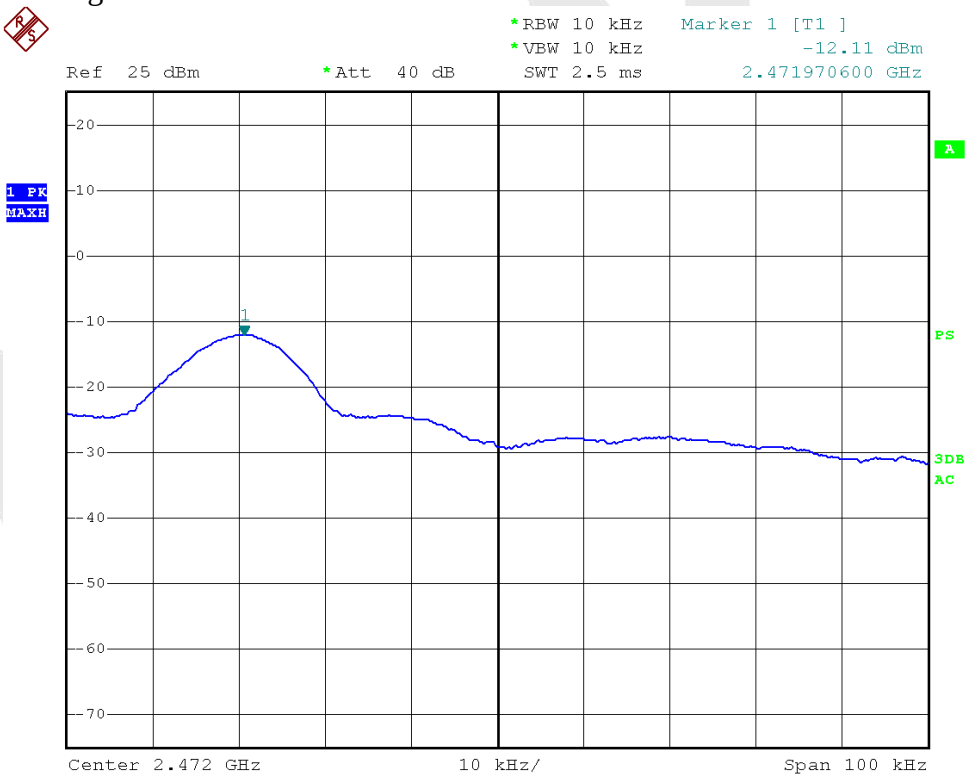
CH Low



CH Mid

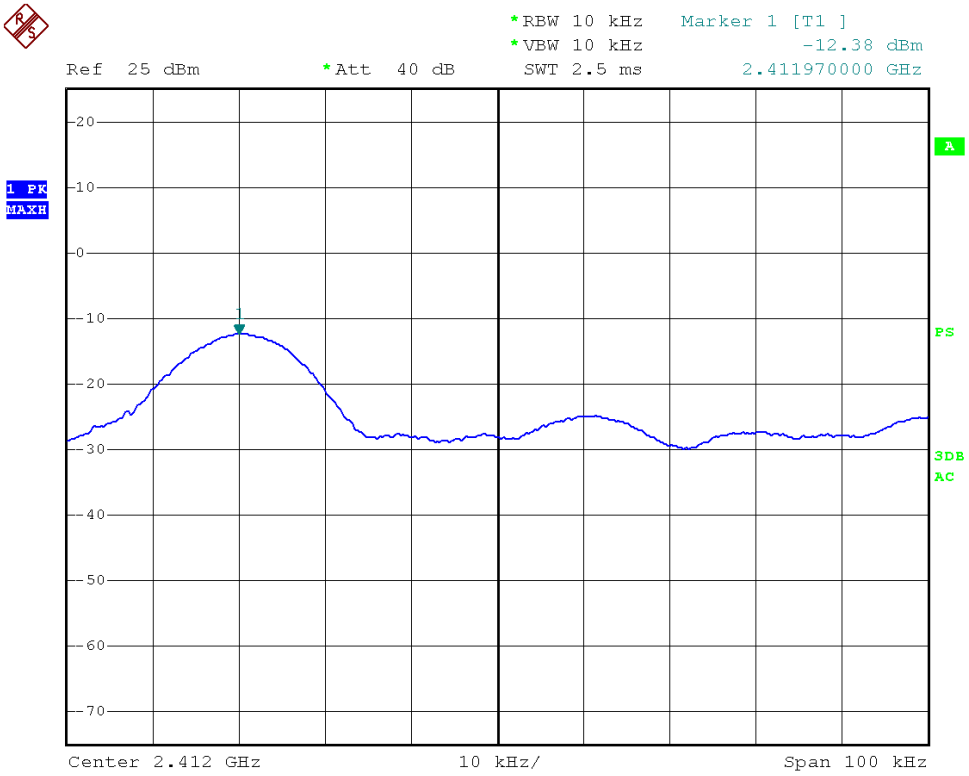


CH High

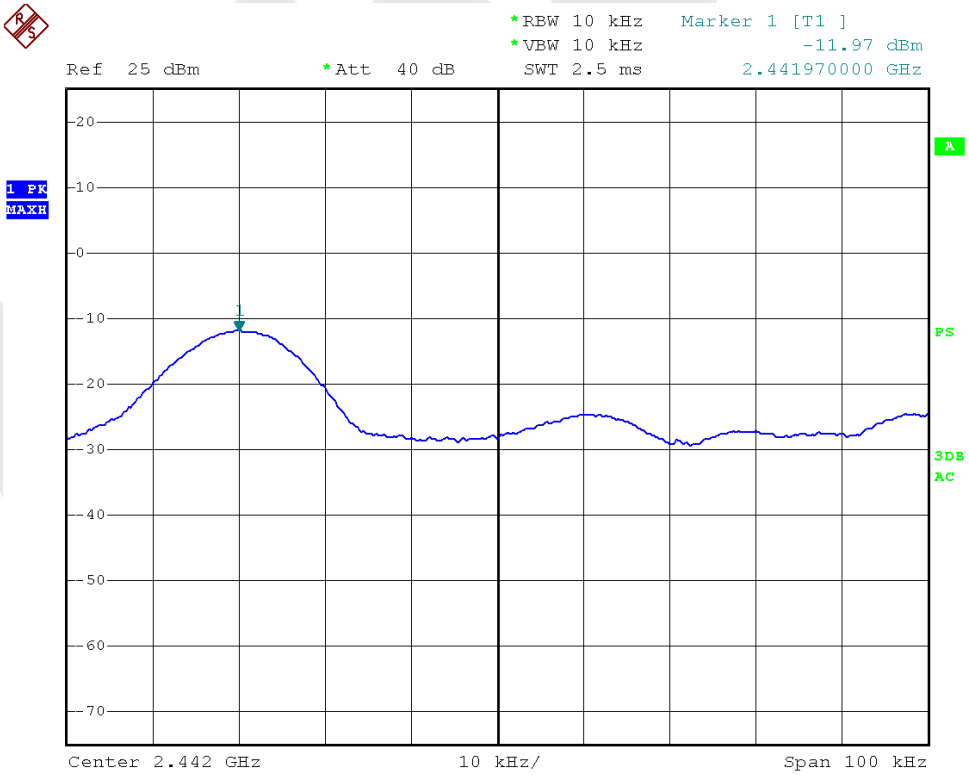


802.11n (HT20)

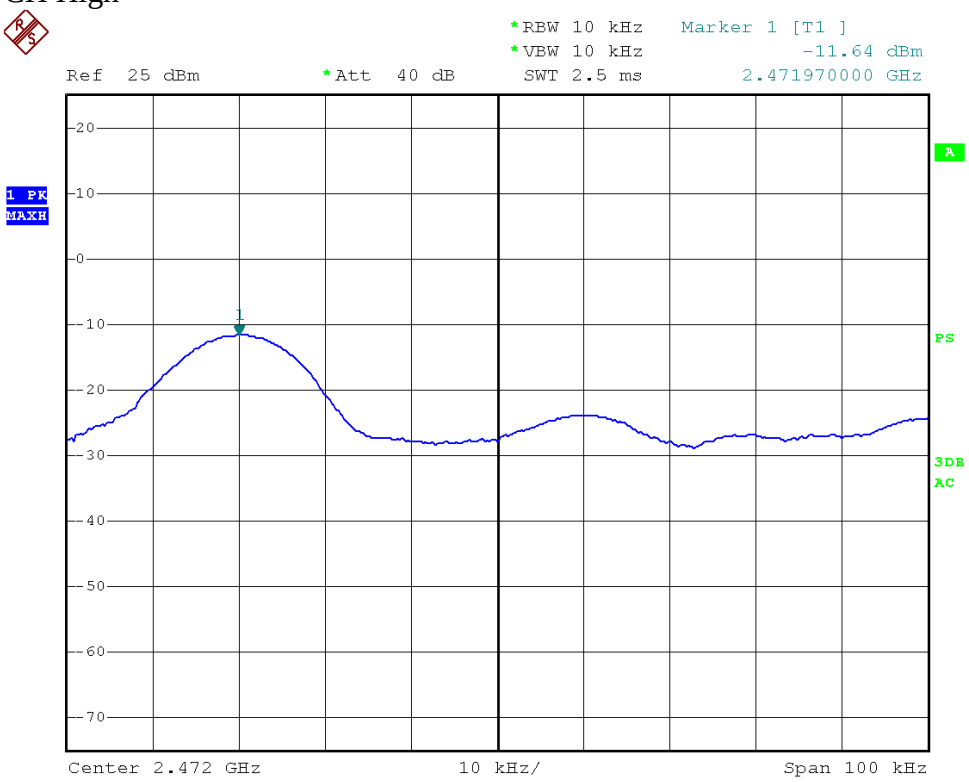
CH Low



CH Mid

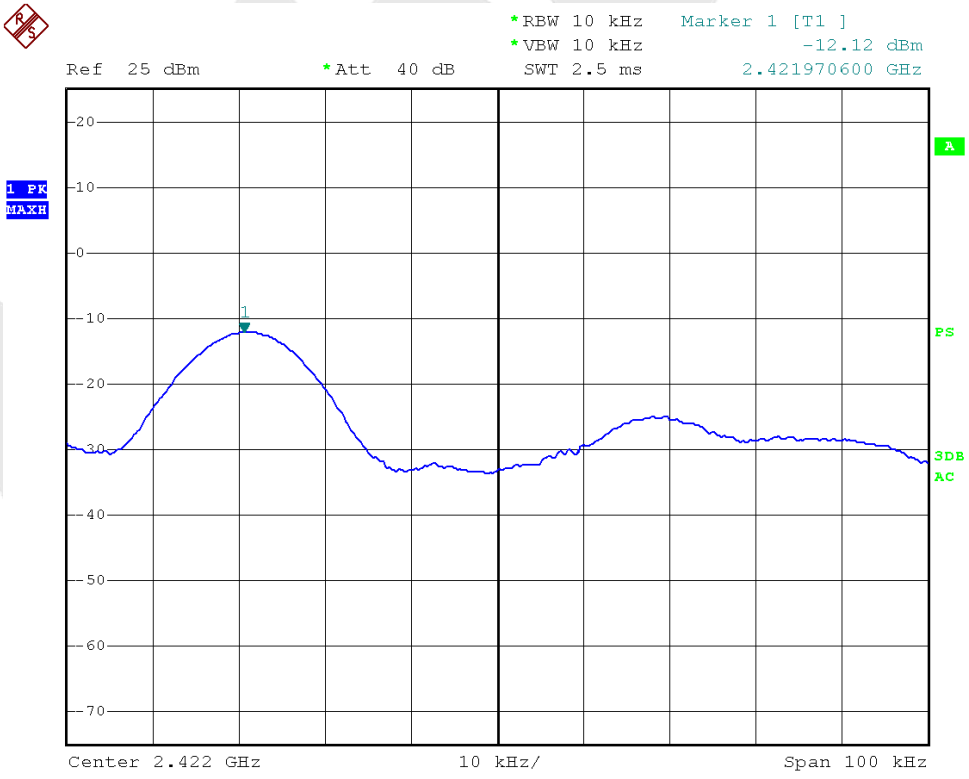


CH High

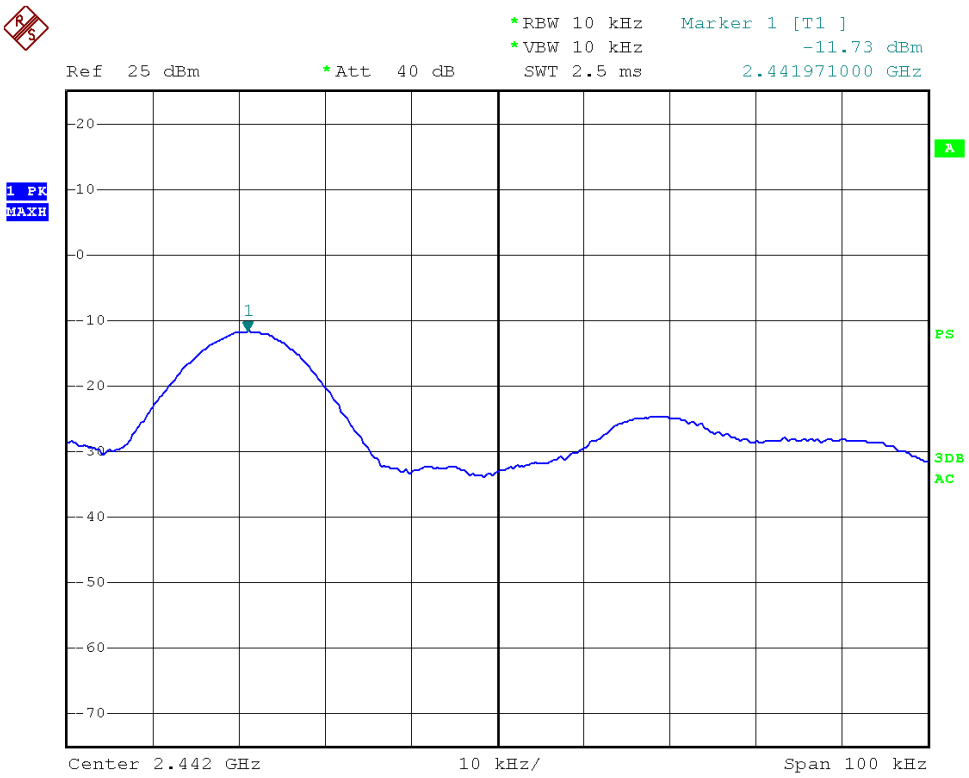


802.11n (HT40)

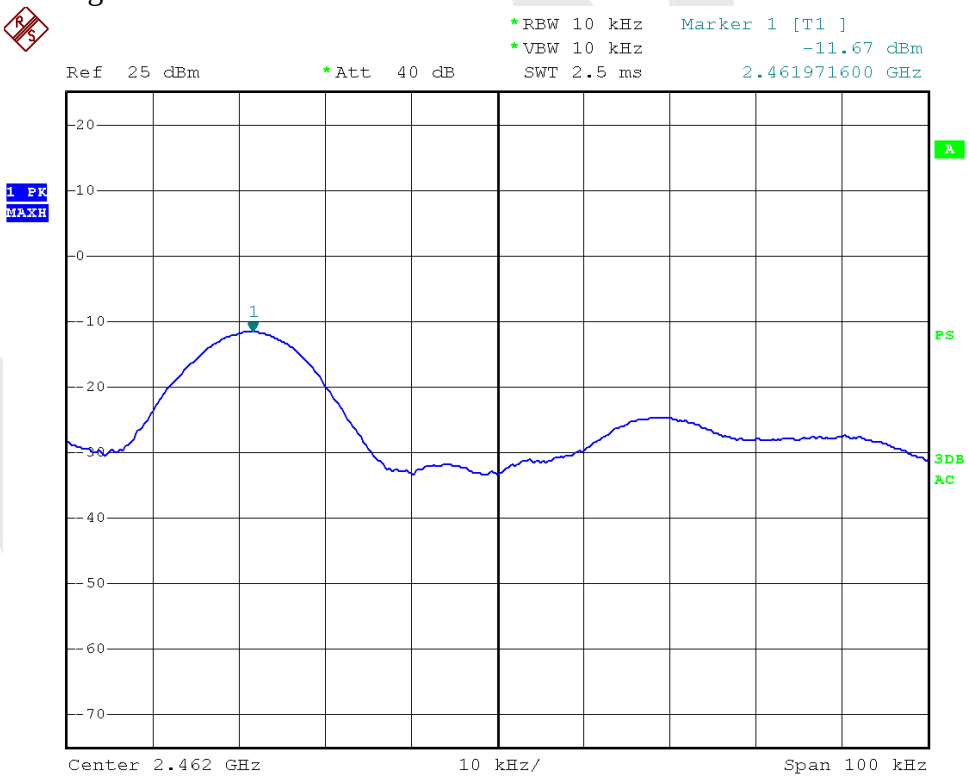
CH Low



CH Mid



CH High



4. OCCUPIED BANDWIDTH (99%) TEST

4.1. Test Equipment

Same as 3.1 Frequency tolerance measurement.

4.2. Test Configuration

Same as 3.2 Frequency tolerance measurement.

4.3. Test Results

802.11b

Frequency(MHz)	99% Bandwidth(MHz)	Remark
2412.000	12.30	Normal Voltage: AC 100V
2442.000	12.30	Normal Voltage: AC 100V
2472.000	12.30	Normal Voltage: AC 100V

802.11g

Frequency(MHz)	99% Bandwidth(MHz)	Remark
2412.000	16.80	Normal Voltage: AC 100V
2442.000	16.80	Normal Voltage: AC 100V
2472.000	16.70	Normal Voltage: AC 100V

802.11n (HT20)

Frequency(MHz)	99% Bandwidth(MHz)	Remark
2412.000	17.60	Normal Voltage: AC 100V
2442.000	17.60	Normal Voltage: AC 100V
2472.000	17.60	Normal Voltage: AC 100V

802.11n (HT40)

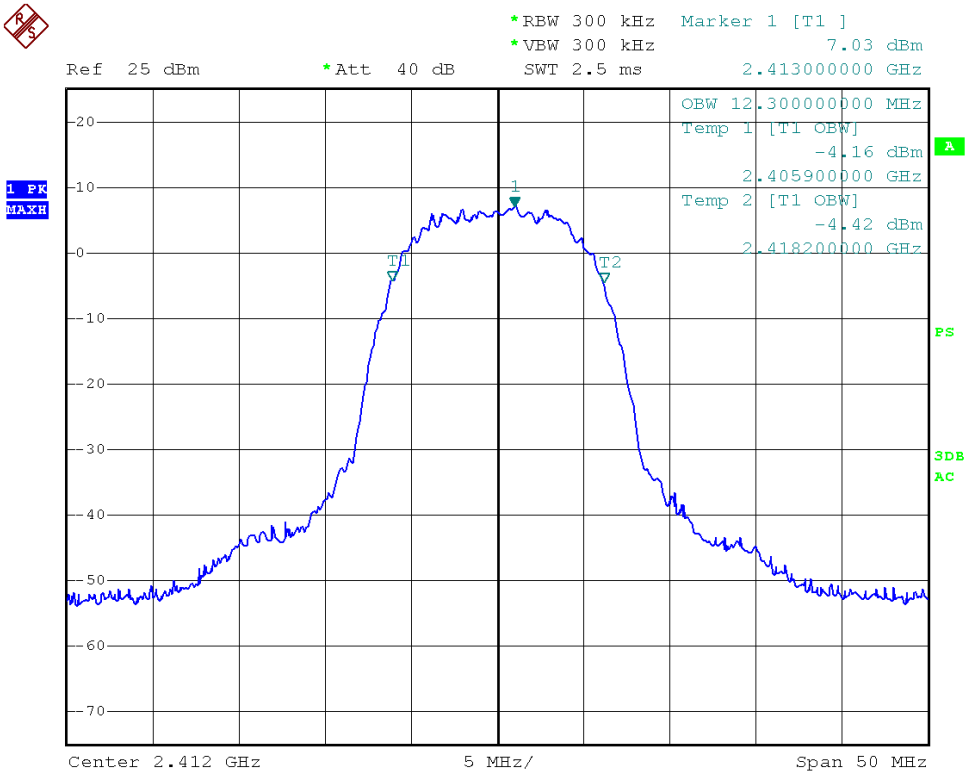
Frequency(MHz)	99% Bandwidth(MHz)	Remark
2422.000	36.00	Normal Voltage: AC 100V
2442.000	36.00	Normal Voltage: AC 100V
2462.000	36.00	Normal Voltage: AC 100V

Remark:
The limits of standard are as follows:

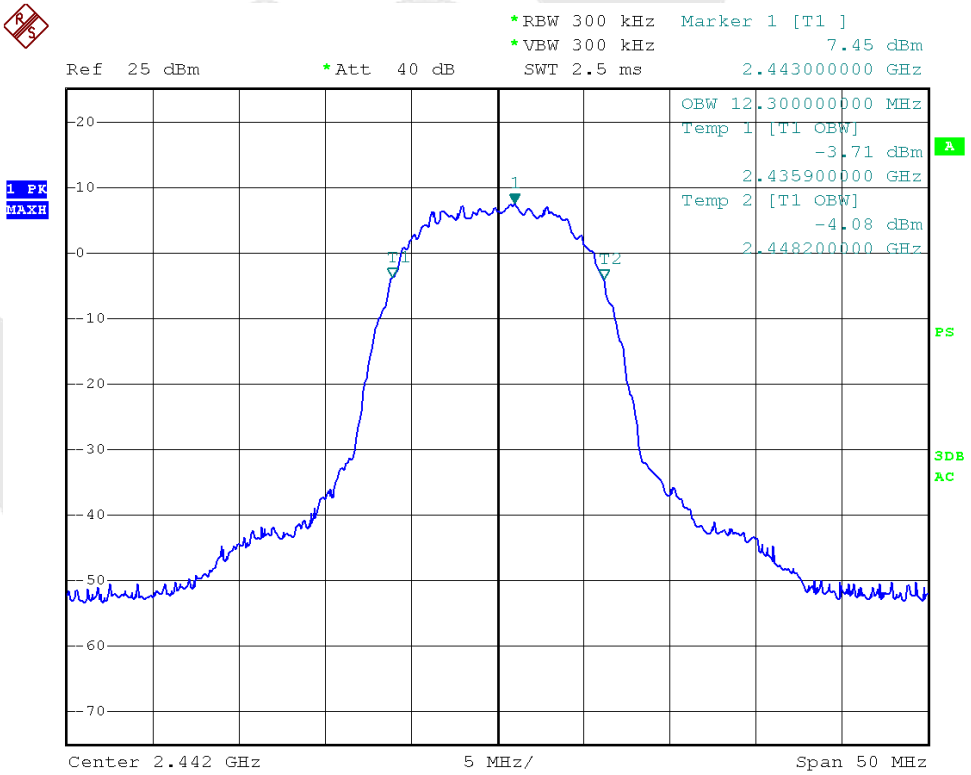
Under all test conditions	FH: 83.5 MHz
	FH + DS: 83.5 MHz
	FH + OFDM: 83.5MHz
	OFDM, DS: 26MHz
	Others: 26MHz
	OFDM equipment with 40MHz channel separation: 38MHz

802.11b

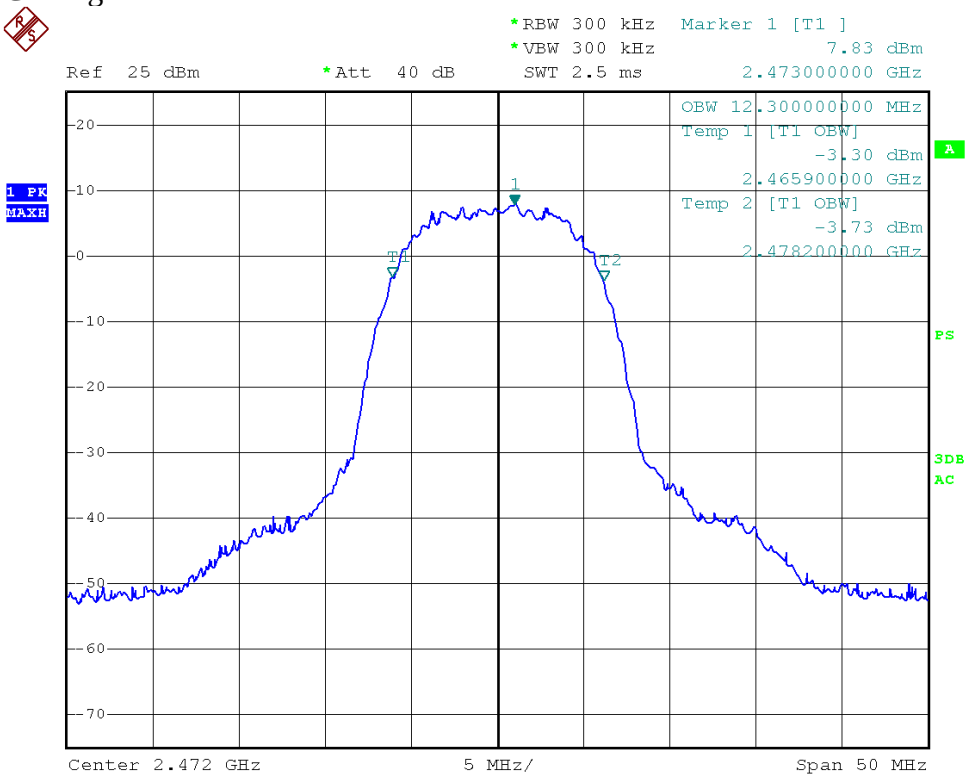
CH Low



CH Mid

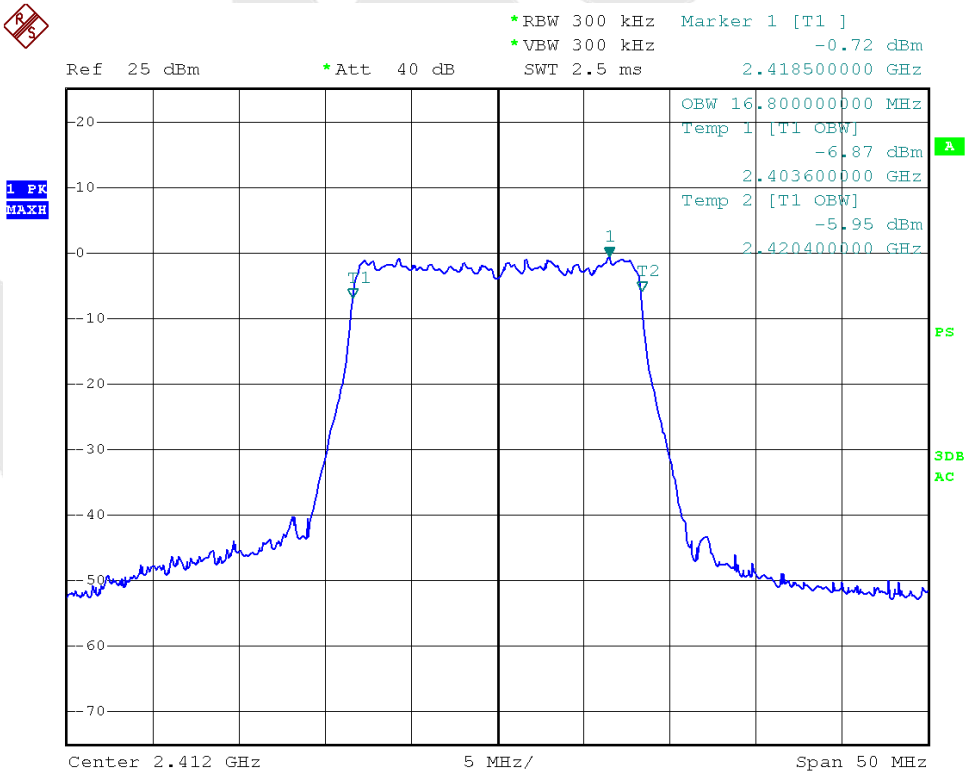


CH High

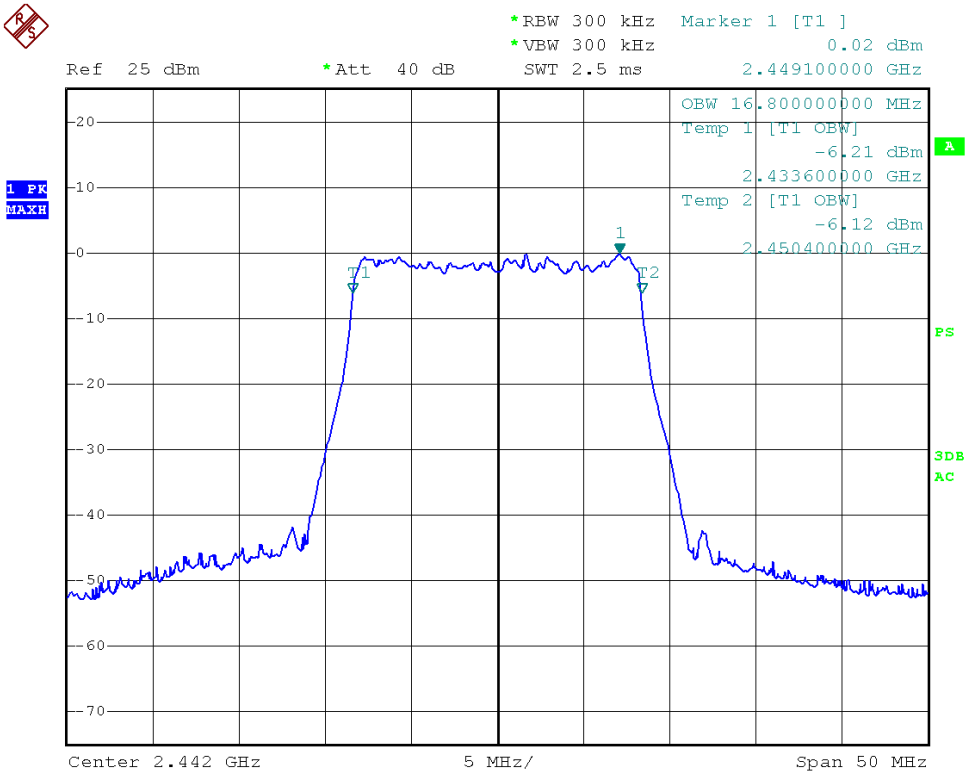


802.11g

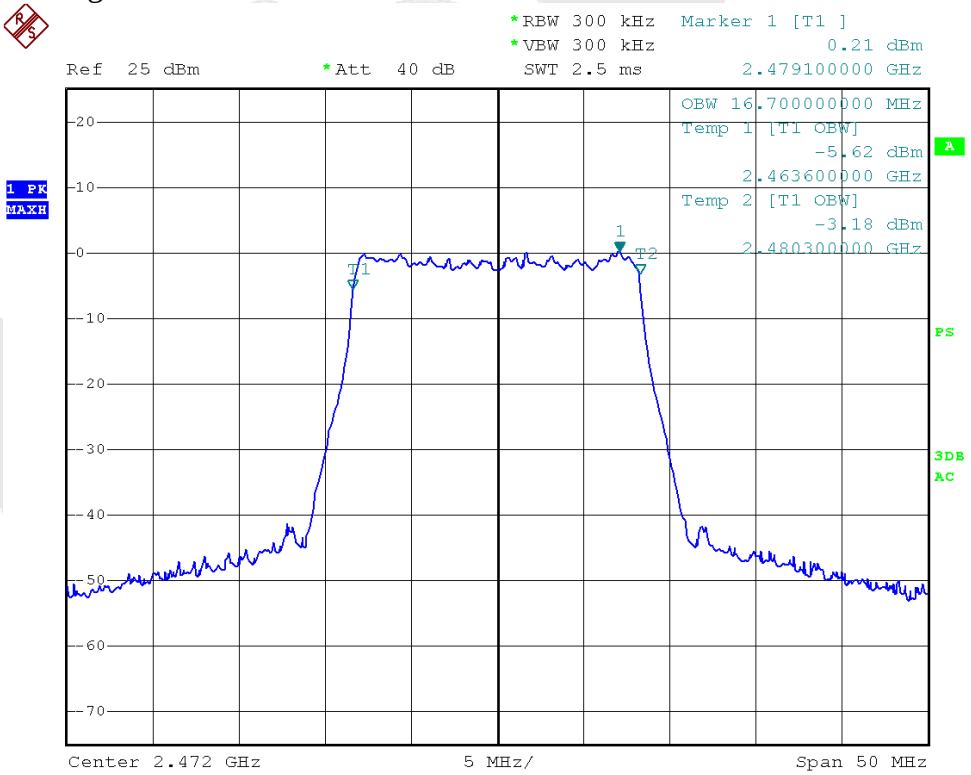
CH Low



CH Mid

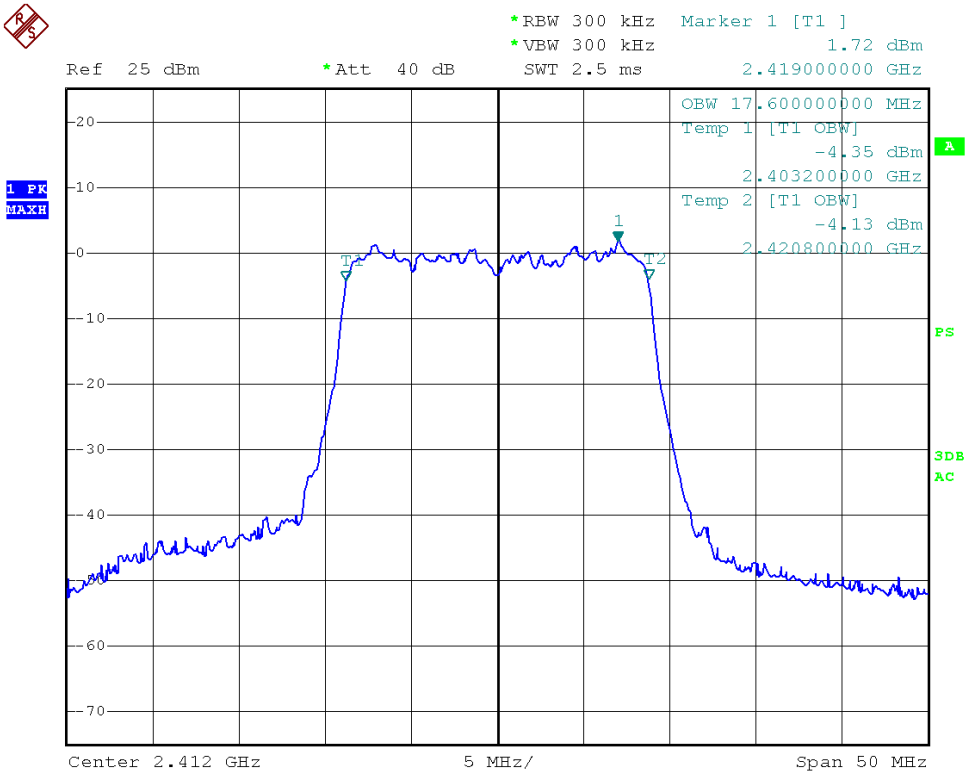


CH High

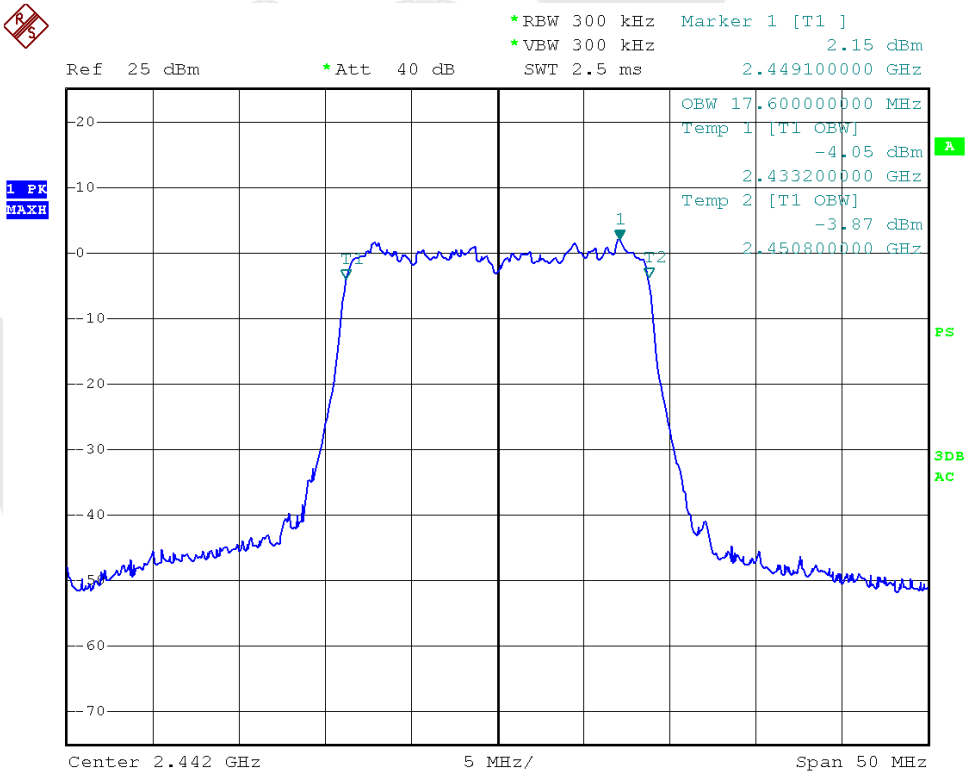


802.11n (HT20)

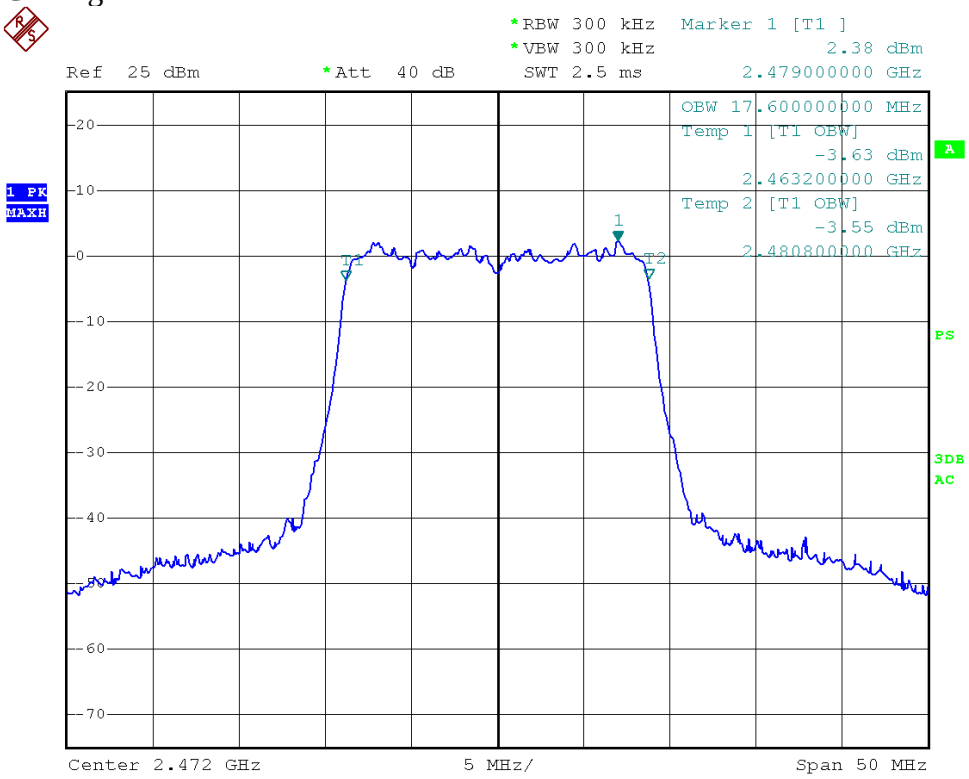
CH Low



CH Mid

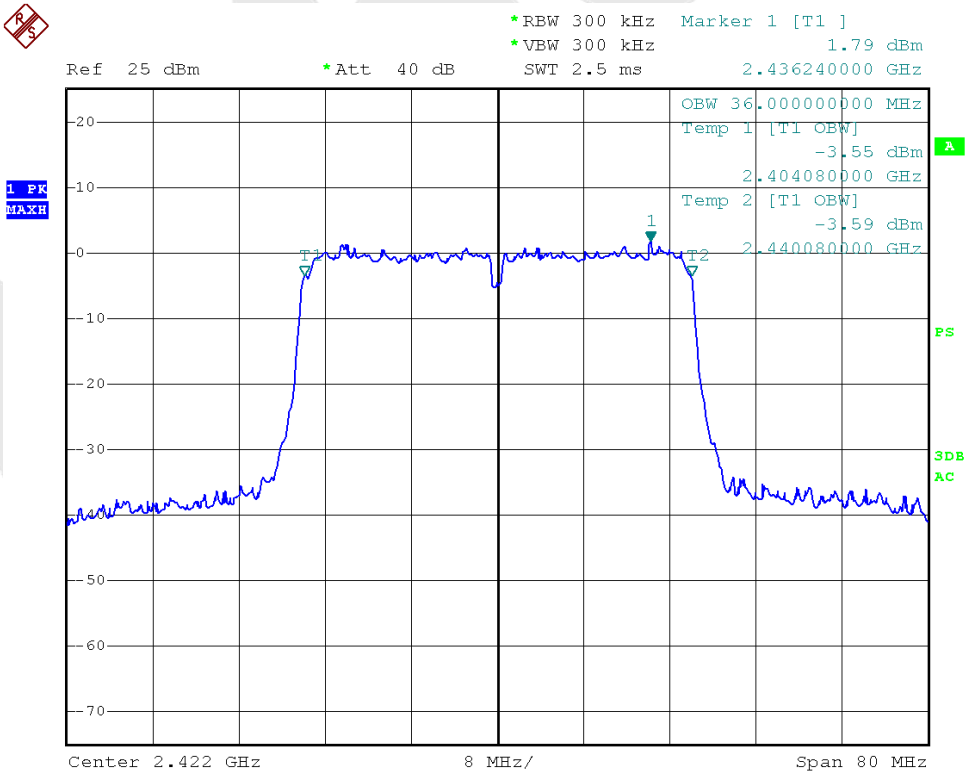


CH High

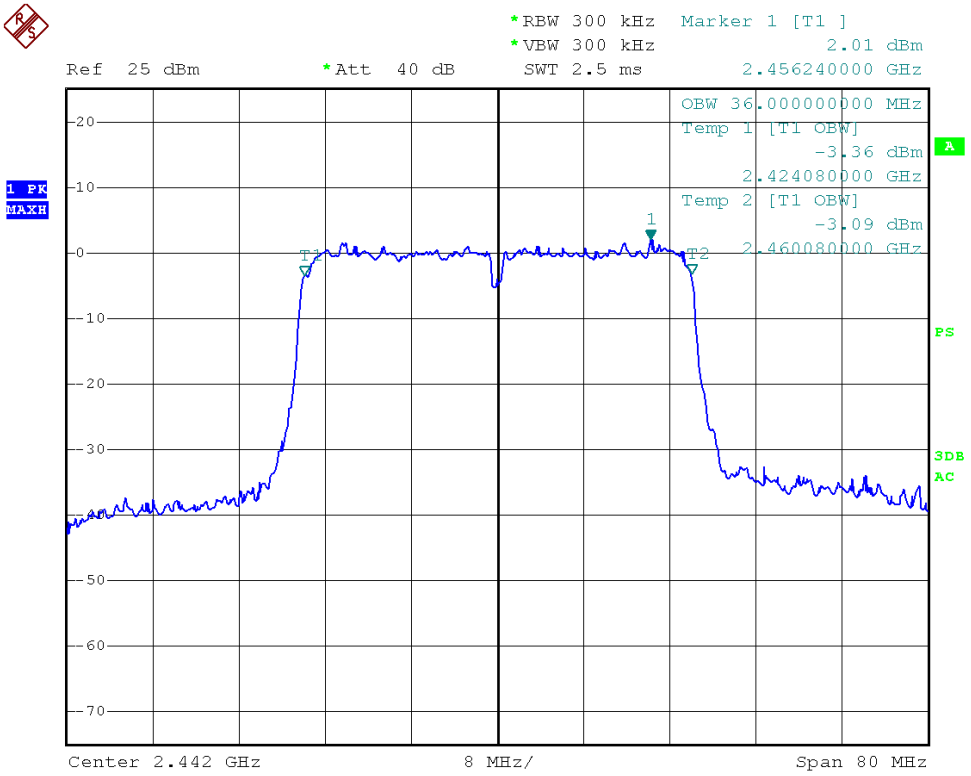


802.11n (HT40)

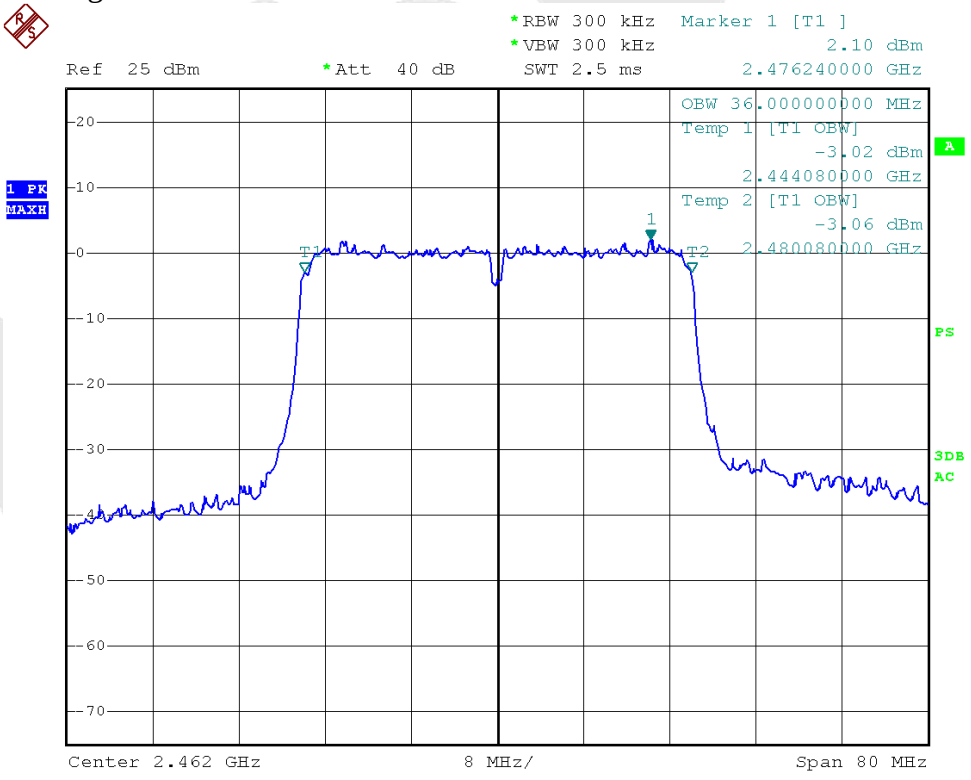
CH Low



CH Mid



CH High



5. SPREAD-SPECTRUM BANDWIDTH (90%) TEST

5.1. Test Equipment

Same as 3.1 Frequency tolerance measurement.

5.2. Test Configuration

Same as 3.2 Frequency tolerance measurement.

5.3. Test Results

802.11b

Frequency(MHz)	90% Bandwidth(MHz)	Limit (MHz)	Remark
2412.000	9.20	≥ 0.5	Normal Voltage: AC 100V
2442.000	9.20	≥ 0.5	Normal Voltage: AC 100V
2472.000	9.20	≥ 0.5	Normal Voltage: AC 100V

802.11g

Frequency(MHz)	90% Bandwidth(MHz)	Limit (MHz)	Remark
2412.000	15.20	≥ 0.5	Normal Voltage: AC 100V
2442.000	15.20	≥ 0.5	Normal Voltage: AC 100V
2472.000	15.20	≥ 0.5	Normal Voltage: AC 100V

802.11n (HT20)

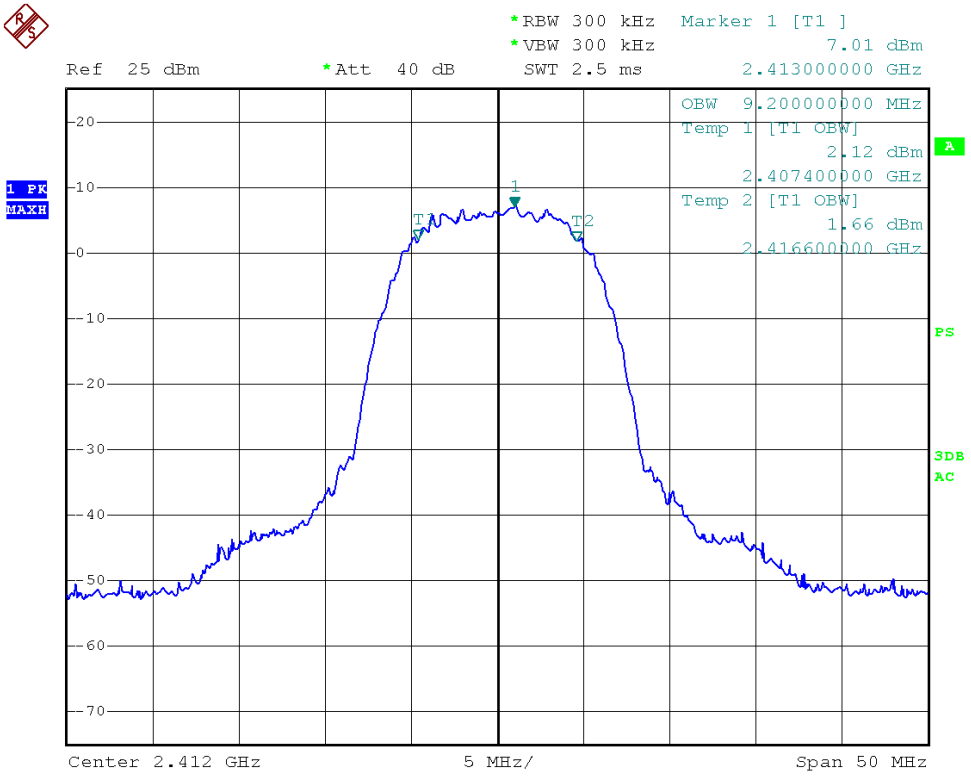
Frequency(MHz)	90% Bandwidth(MHz)	Limit (MHz)	Remark
2412.000	15.70	≥ 0.5	Normal Voltage: AC 100V
2442.000	15.70	≥ 0.5	Normal Voltage: AC 100V
2472.000	15.60	≥ 0.5	Normal Voltage: AC 100V

802.11n (HT40)

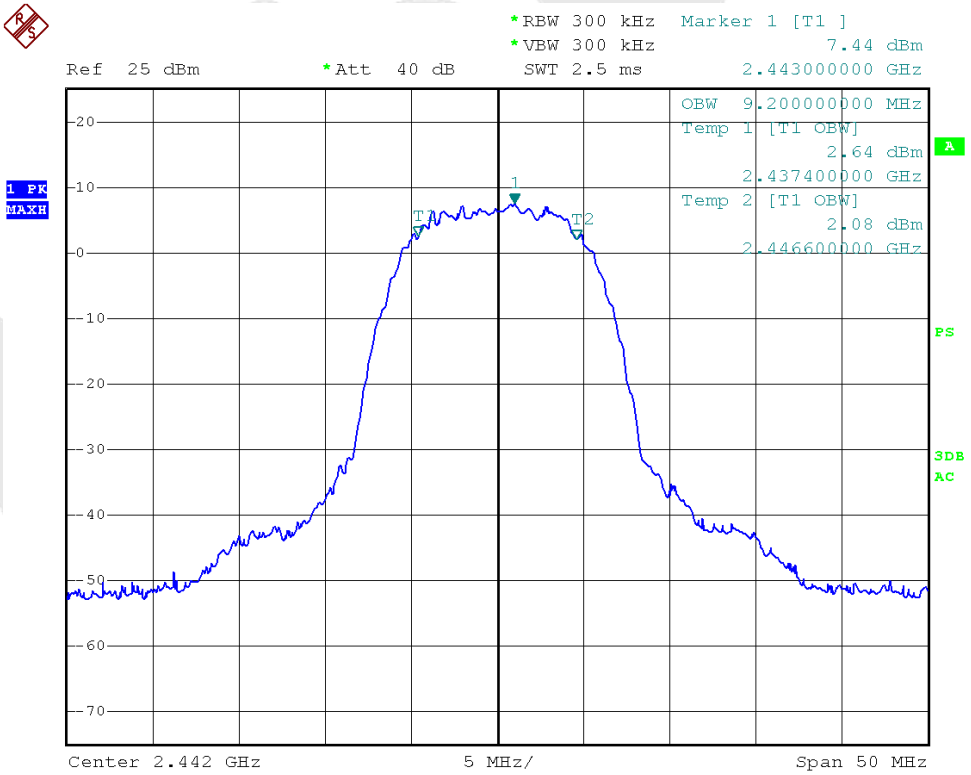
Frequency(MHz)	90% Bandwidth(MHz)	Limit (MHz)	Remark
2422.000	32.00	≥ 0.5	Normal Voltage: AC 100V
2442.000	32.00	≥ 0.5	Normal Voltage: AC 100V
2462.000	32.16	≥ 0.5	Normal Voltage: AC 100V

802.11b

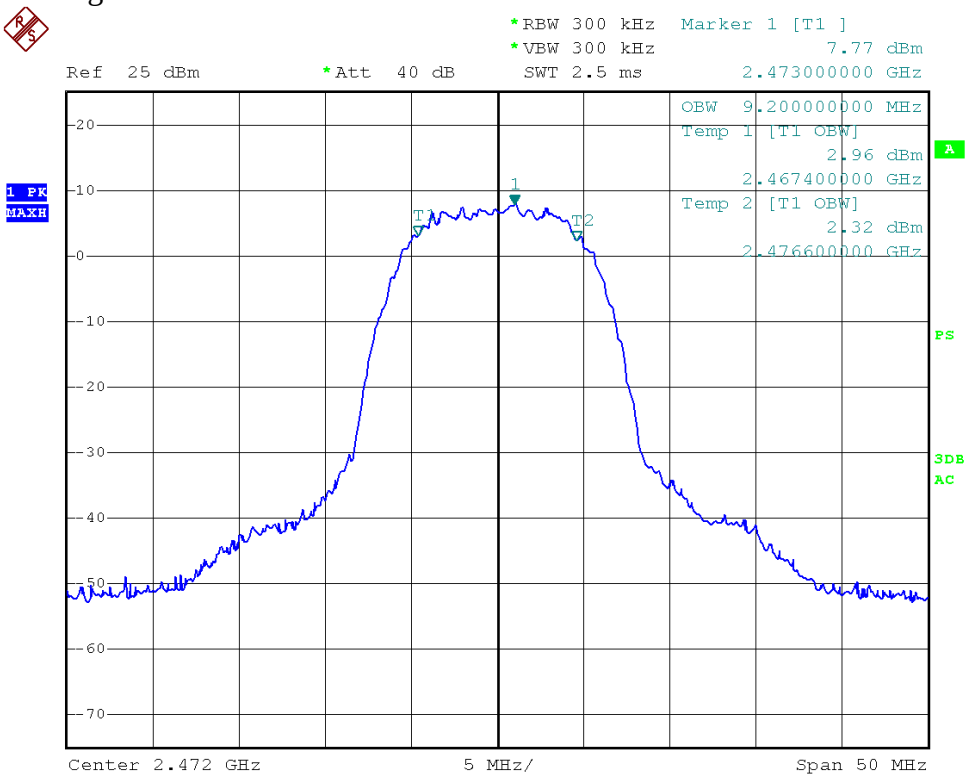
CH Low



CH Mid

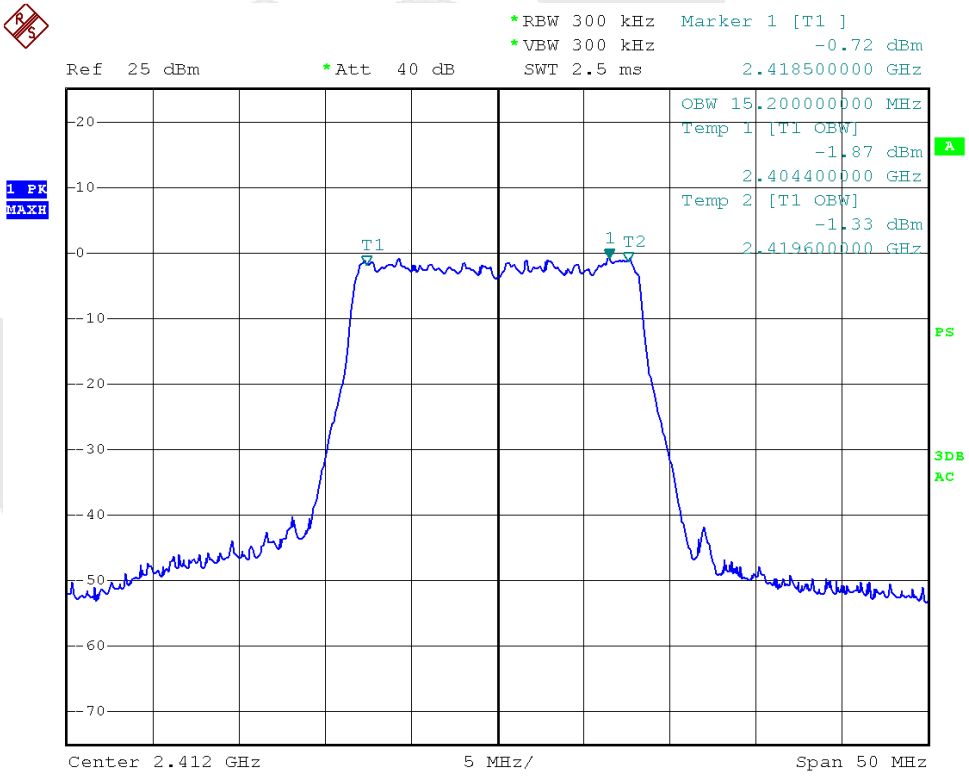


CH High

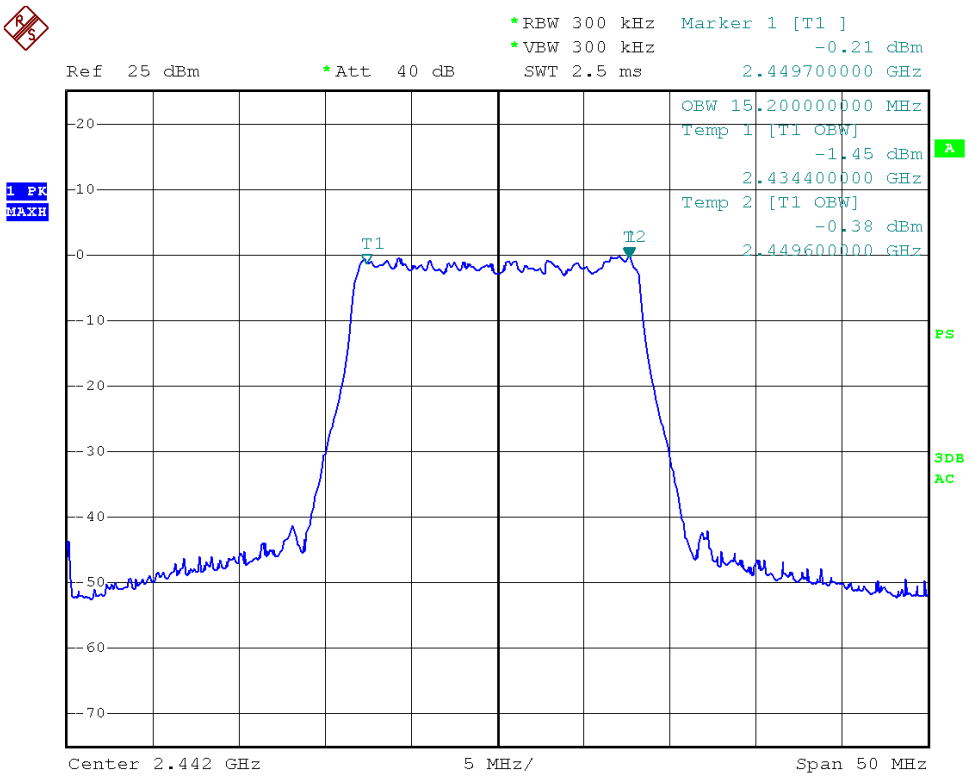


802.11g

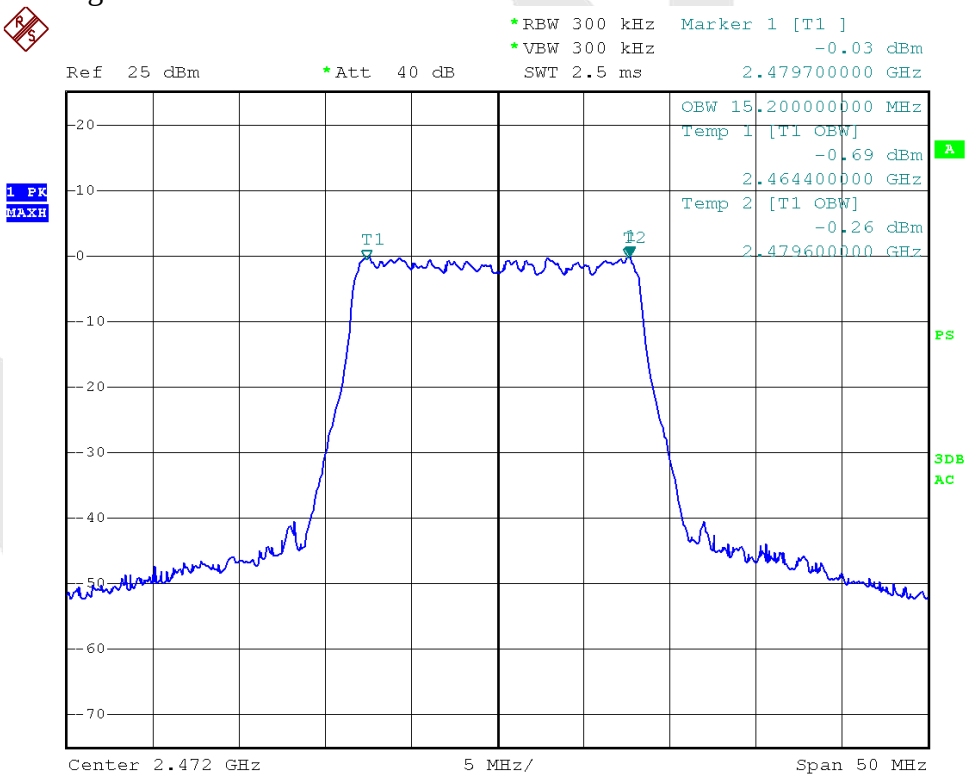
CH Low



CH Mid

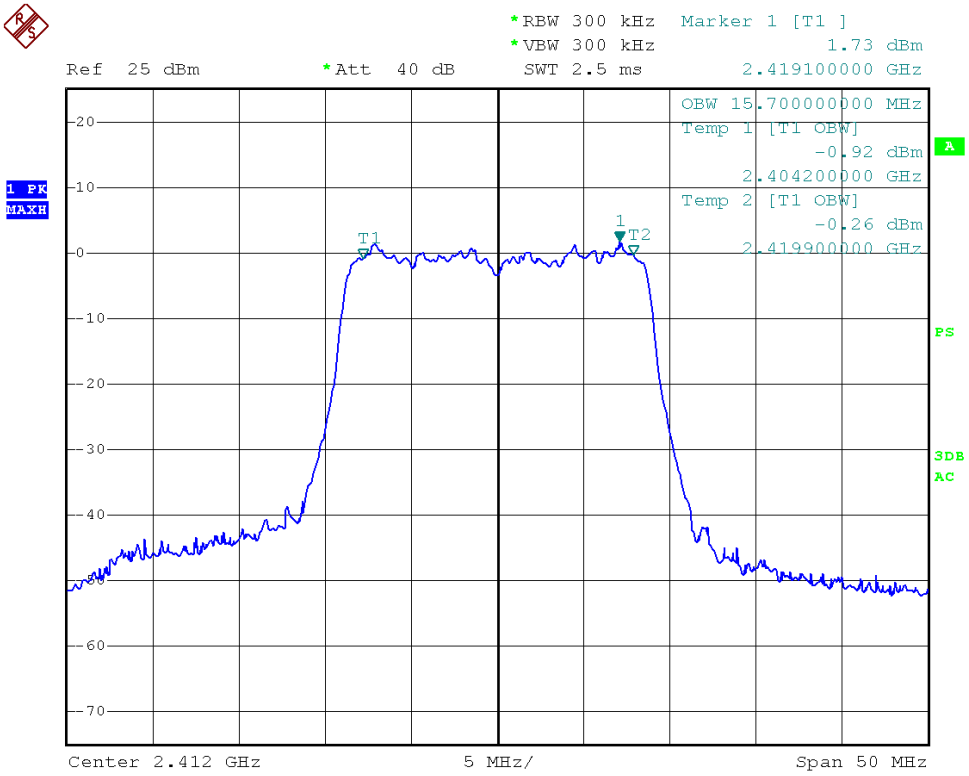


CH High

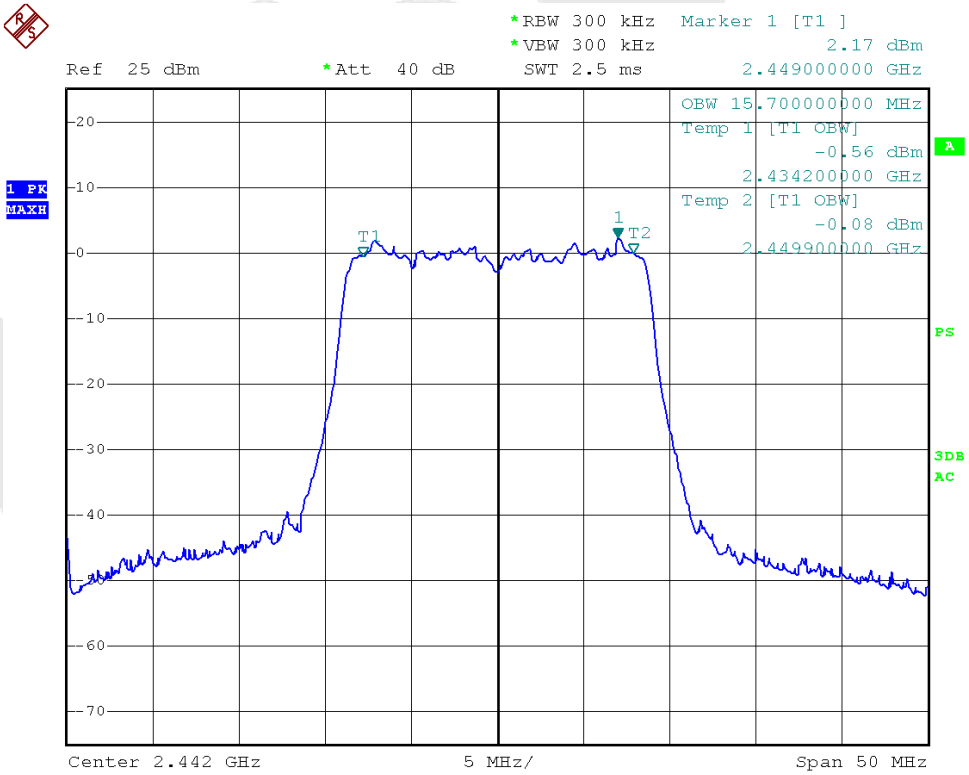


802.11n (HT20)

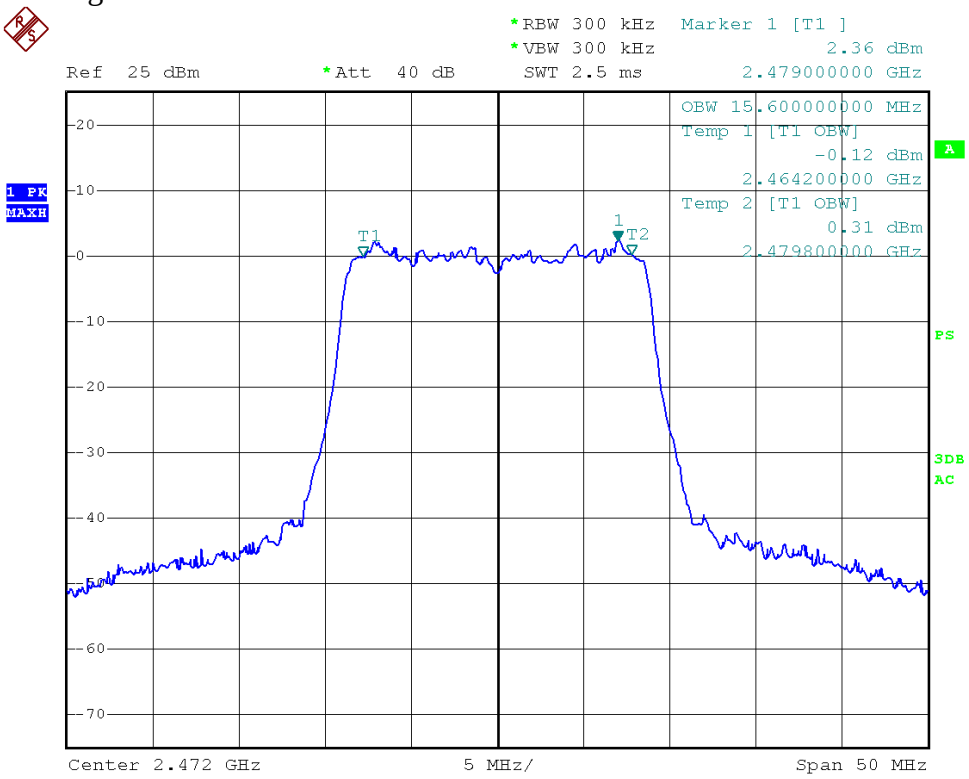
CH Low



CH Mid

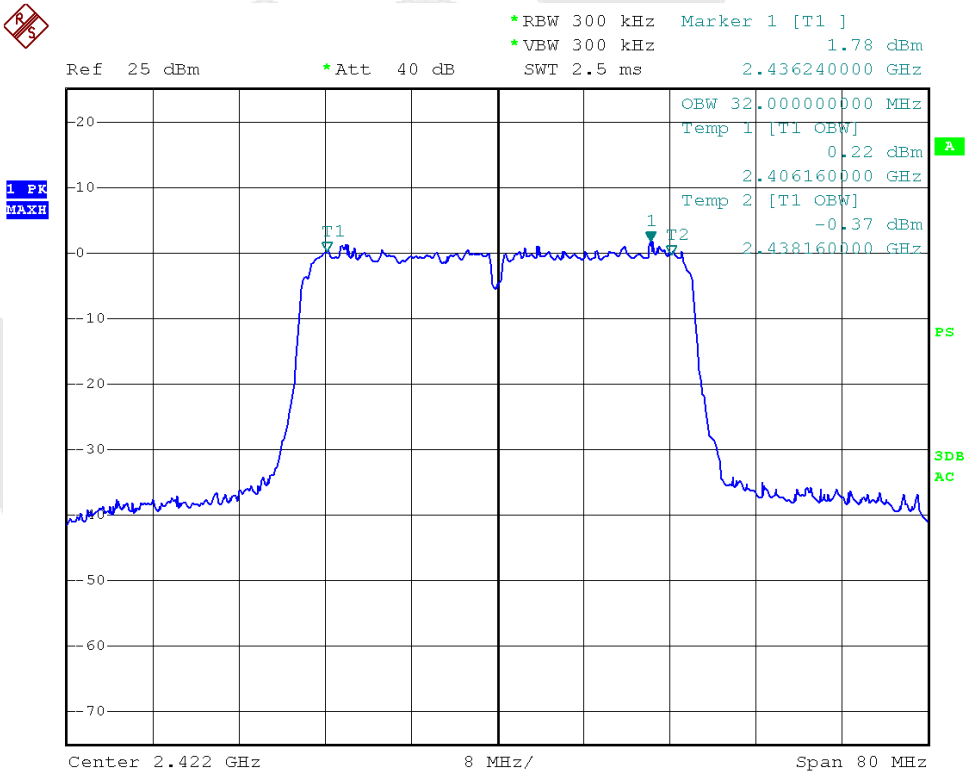


CH High

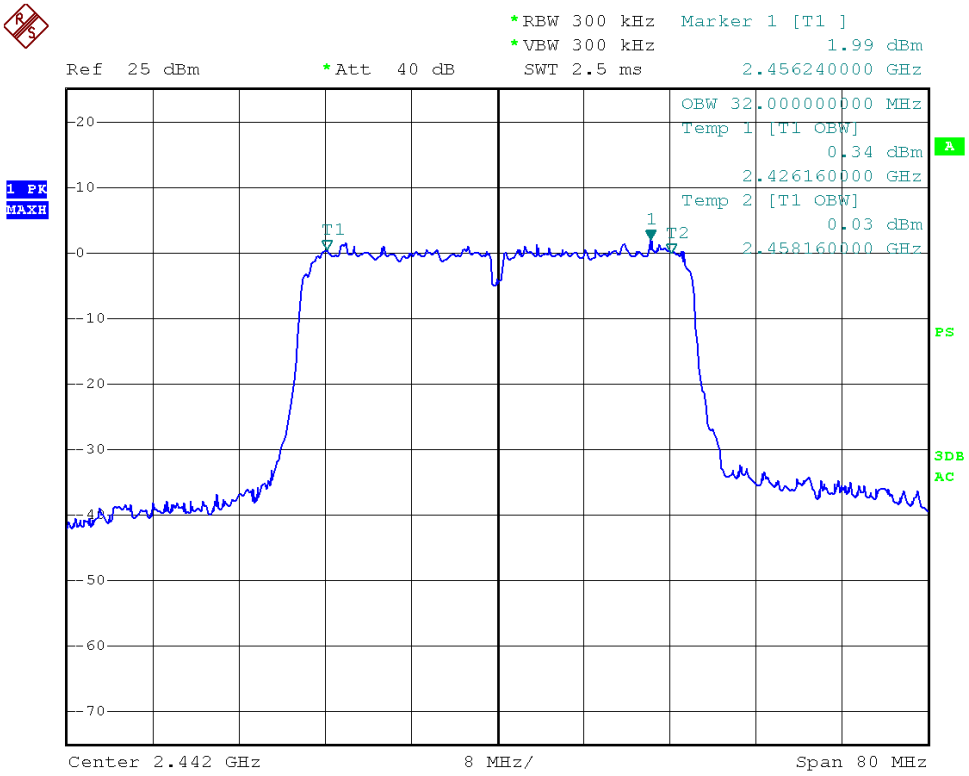


802.11n (HT40)

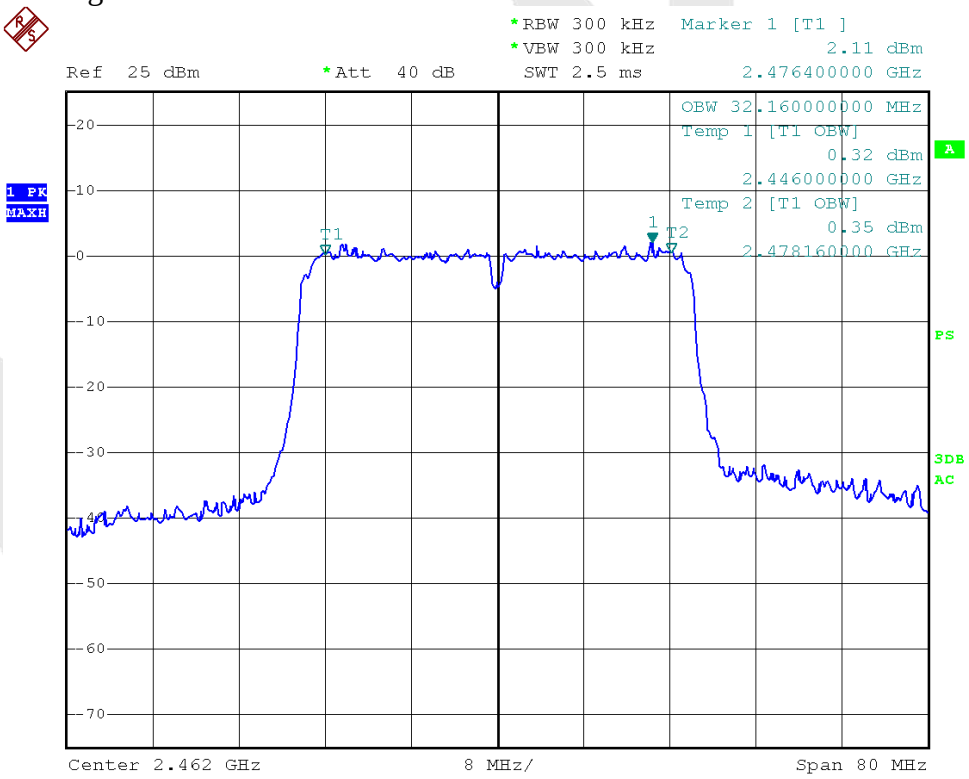
CH Low



CH Mid



CH High



5.4. Spreading Factor

Spreading Factor	
802.11b	6.6909
802.11g	11.0545
802.11n (HT20)	11.4182
802.11n (HT40)	23.3891

Spreading Factor = Spreading Bandwidth/ throughput (1.375Msps)

The limit of standard is as follows:

Under all test conditions	Operating Frequency 2400-2483MHz: ≥ 5 Operating Frequency 2471-2497MHz: ≥ 10

6. SPURIOUS EMISSIONS INTENSITY TEST

6.1. Test Equipment

Same as 3.1 Frequency tolerance measurement.

6.2. Test Configuration

Same as 3.2 Frequency tolerance measurement.

6.3. Test Results

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

802.11b

Frequency(MHz)	Reading(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	2257.3650	-49.80	30~ 2387MHz	≤ -26dBm
	2399.7075	-38.40	2387~ 2400MHz	≤ -16dBm
	2487.4325	-51.17	2483.5~ 2496.5MHz	≤ -16dBm
	2572.0000	-52.98	2496.5~ 12500MHz	≤ -26dBm
2442.000	2328.0000	-50.13	30~ 2387MHz	≤ -26dBm
	2394.6050	-51.15	2387~ 2400MHz	≤ -16dBm
	2487.3025	-49.82	2483.5~ 2496.5MHz	≤ -16dBm
	3172.0000	-52.62	2496.5~ 12500MHz	≤ -26dBm
2472.000	2375.0000	-48.46	30~ 2387MHz	≤ -26dBm
	2387.3900	-50.82	2387~ 2400MHz	≤ -16dBm
	2483.5000	-33.50	2483.5~ 2496.5MHz	≤ -16dBm
	2497.0000	-37.22	2496.5~ 12500MHz	≤ -26dBm

802.11g

Frequency(MHz)	Reading(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	2251.0000	-49.50	30~ 2387MHz	≤ -26dBm
	2399.9350	-34.40	2387~ 2400MHz	≤ -16dBm
	2491.0725	-49.45	2483.5~ 2496.5MHz	≤ -16dBm
	2497.0000	-50.73	2496.5~ 12500MHz	≤ -26dBm
2442.000	2310.0000	-49.31	30~ 2387MHz	≤ -26dBm
	2398.0825	-50.68	2387~ 2400MHz	≤ -16dBm
	2495.0050	-50.10	2483.5~ 2496.5MHz	≤ -16dBm
	2547.0000	-51.31	2496.5~ 12500MHz	≤ -26dBm
2472.000	2352.0000	-49.28	30~ 2387MHz	≤ -26dBm
	2396.3600	-51.04	2387~ 2400MHz	≤ -16dBm
	2483.5000	-31.96	2483.5~ 2496.5MHz	≤ -16dBm
	2497.0000	-40.29	2496.5~ 12500MHz	≤ -26dBm

802.11n (HT20)

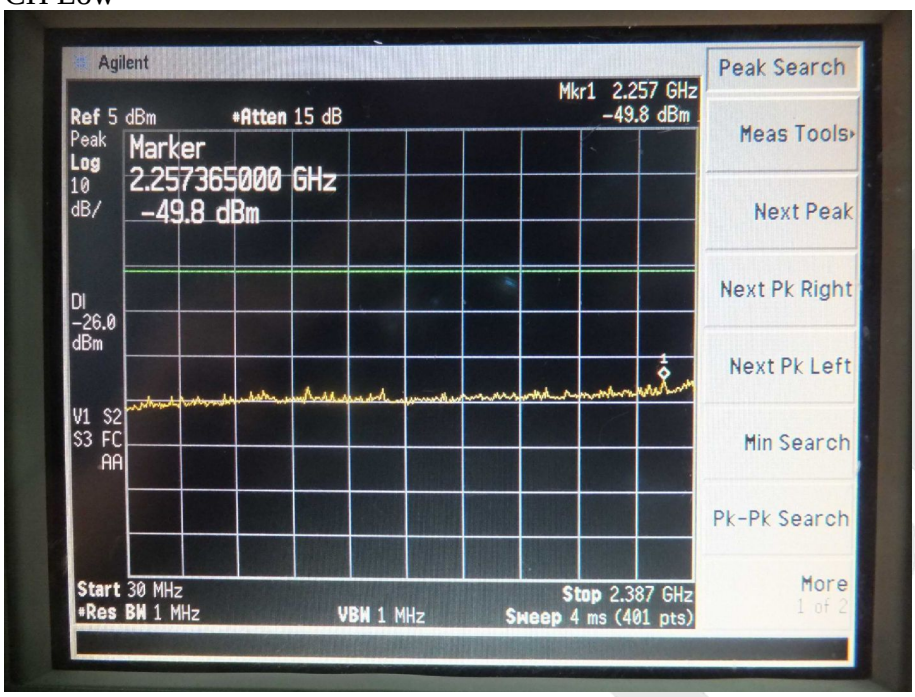
Frequency(MHz)	Reading(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	2387.0000	-47.28	30~ 2387MHz	≤ -26dBm
	2398.4400	-33.96	2387~ 2400MHz	≤ -16dBm
	2496.5000	-48.96	2483.5~ 2496.5MHz	≤ -16dBm
	2547.0000	-50.65	2496.5~ 12500MHz	≤ -26dBm
2442.000	2198.0000	-48.42	30~ 2387MHz	≤ -26dBm
	2398.4075	-49.52	2387~ 2400MHz	≤ -16dBm
	2486.3600	-49.34	2483.5~ 2496.5MHz	≤ -16dBm
	2547.0000	-51.78	2496.5~ 12500MHz	≤ -26dBm
2472.000	2316.0000	-49.73	30~ 2387MHz	≤ -26dBm
	2394.1825	-50.22	2387~ 2400MHz	≤ -16dBm
	2483.5325	-27.91	2483.5~ 2496.5MHz	≤ -16dBm
	2497.0000	-38.51	2496.5~ 12500MHz	≤ -26dBm

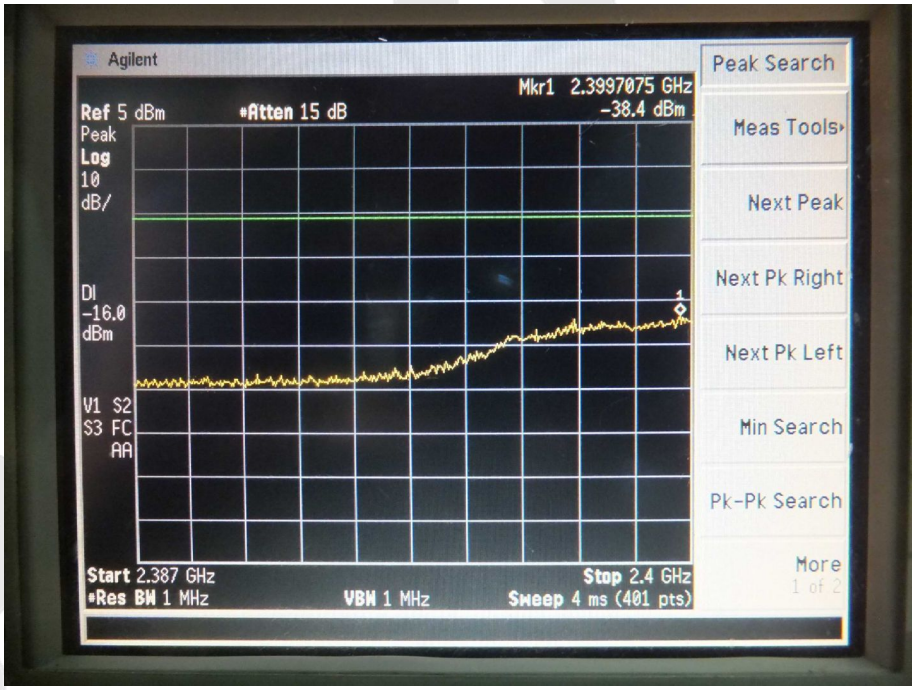
802.11n (HT40)

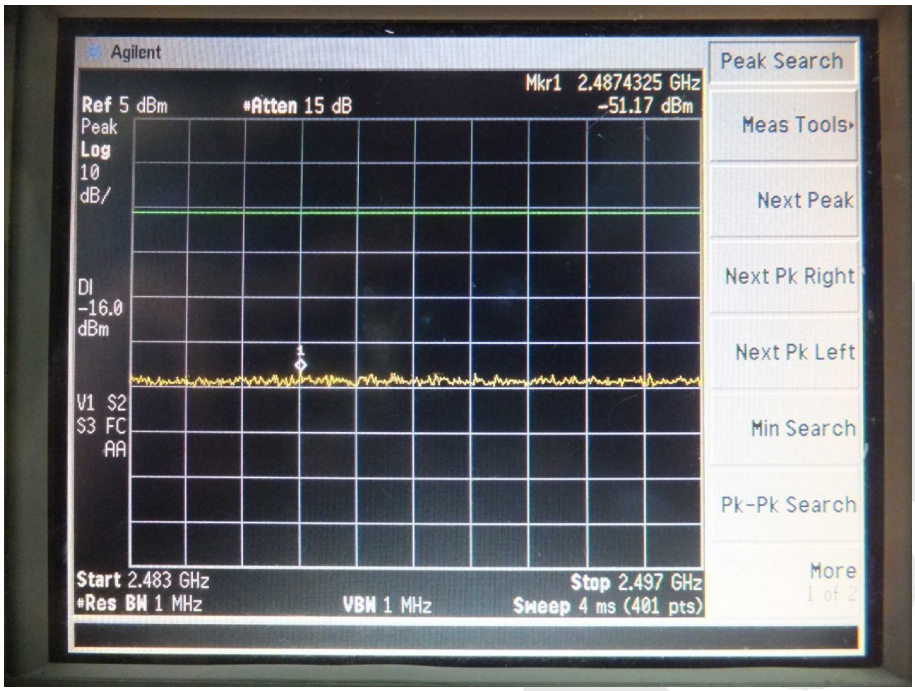
Frequency(MHz)	Reading(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2422.000	2387.0000	-34.68	30~ 2387MHz	≤ -26dBm
	2399.4800	-37.77	2387~ 2400MHz	≤ -16dBm
	2485.5800	-42.53	2483.5~ 2496.5MHz	≤ -16dBm
	2497.0000	-47.58	2496.5~ 12500MHz	≤ -26dBm
2442.000	2387.0000	-45.20	30~ 2387MHz	≤ -26dBm
	2399.9350	-35.88	2387~ 2400MHz	≤ -16dBm
	2496.4350	-40.92	2483.5~ 2496.5MHz	≤ -16dBm
	2497.0000	-36.11	2496.5~ 12500MHz	≤ -26dBm
2462.000	2340.0000	-48.59	30~ 2387MHz	≤ -26dBm
	2400.0000	-43.97	2387~ 2400MHz	≤ -16dBm
	2484.9950	-24.58	2483.5~ 2496.5MHz	≤ -16dBm
	2497.0000	-30.03	2496.5~ 12500MHz	≤ -26dBm

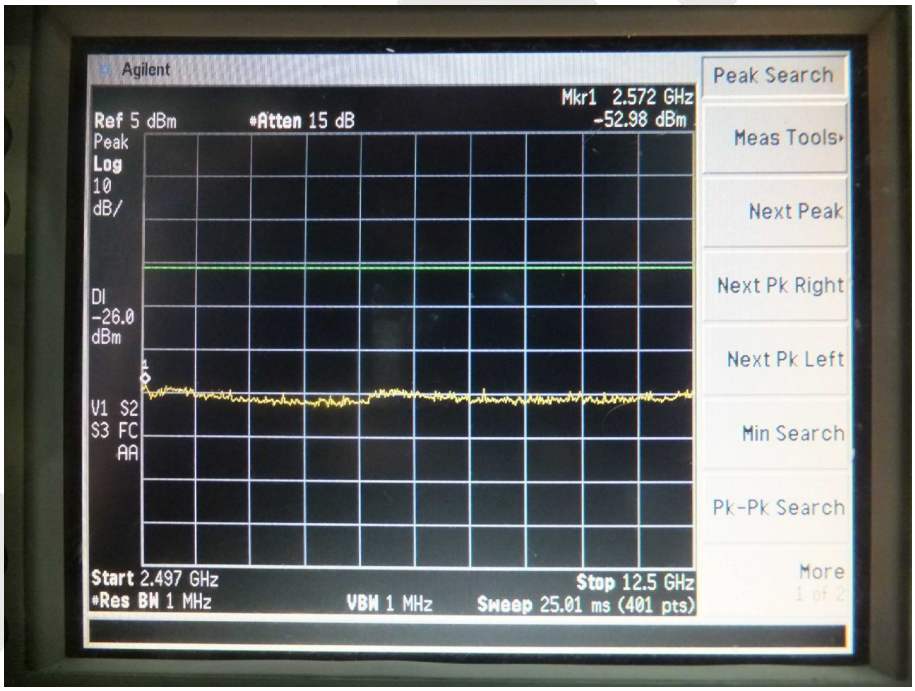
802.11b

CH Low

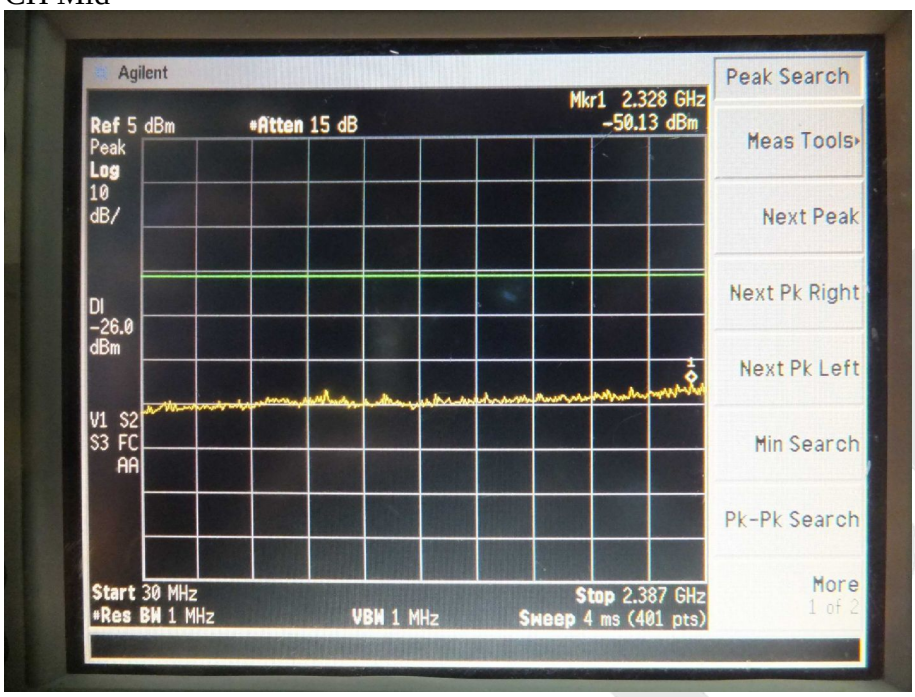


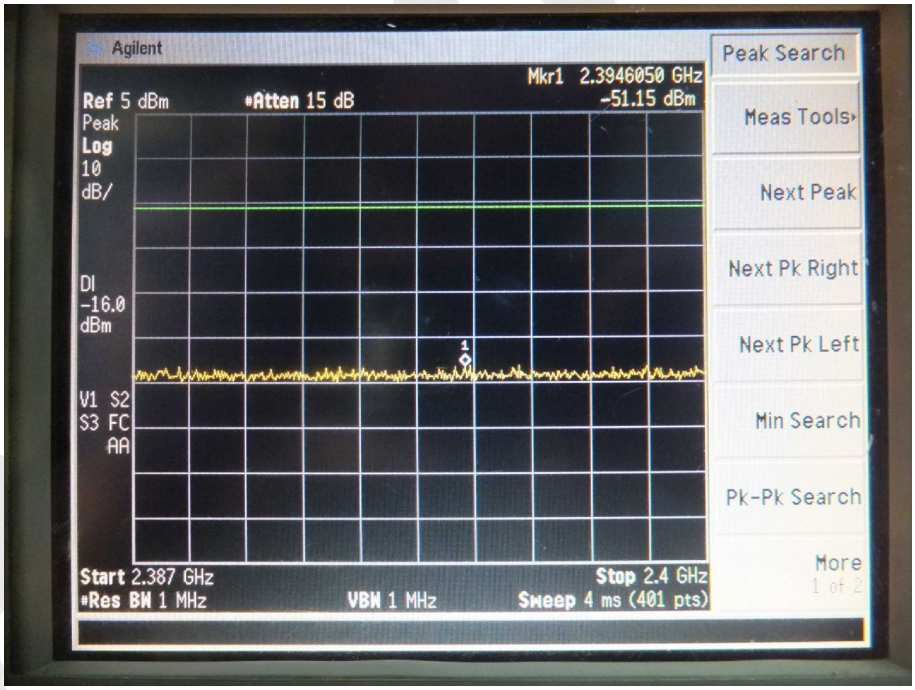


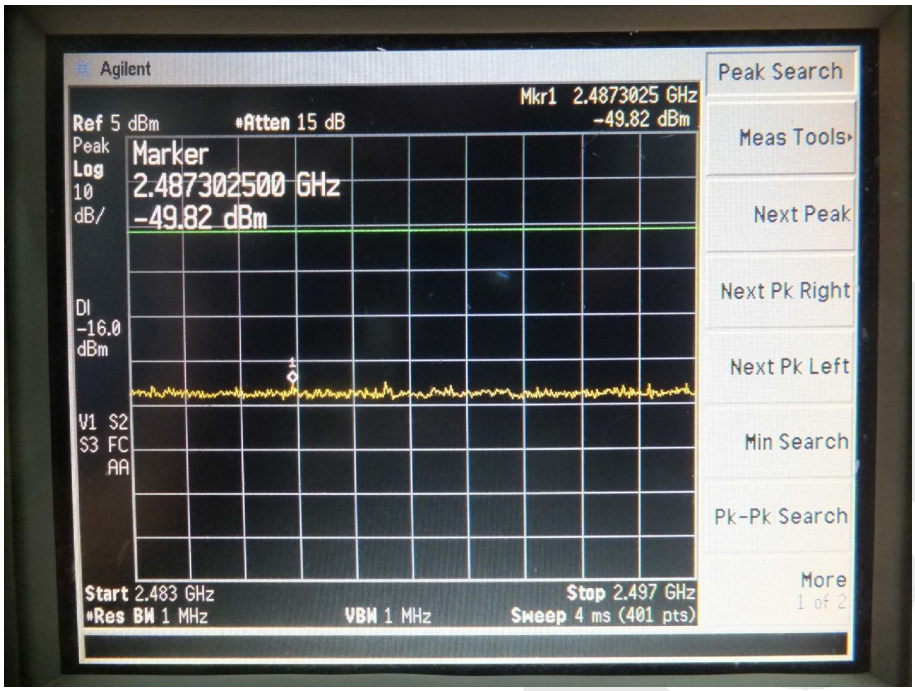

Agilent
Mkr1 2.4874325 GHz
-51.17 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.483 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.497 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

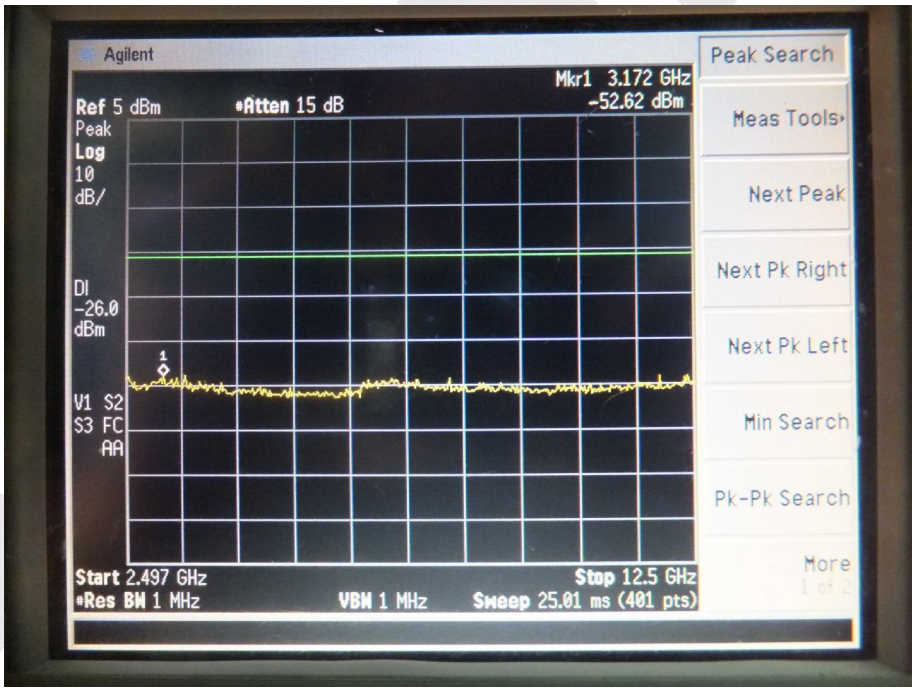

Agilent
Mkr1 2.572 GHz
-52.98 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-26.0
dBm
V1 S2
S3 FC
AA
Start 2.497 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 25.01 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

CH Mid

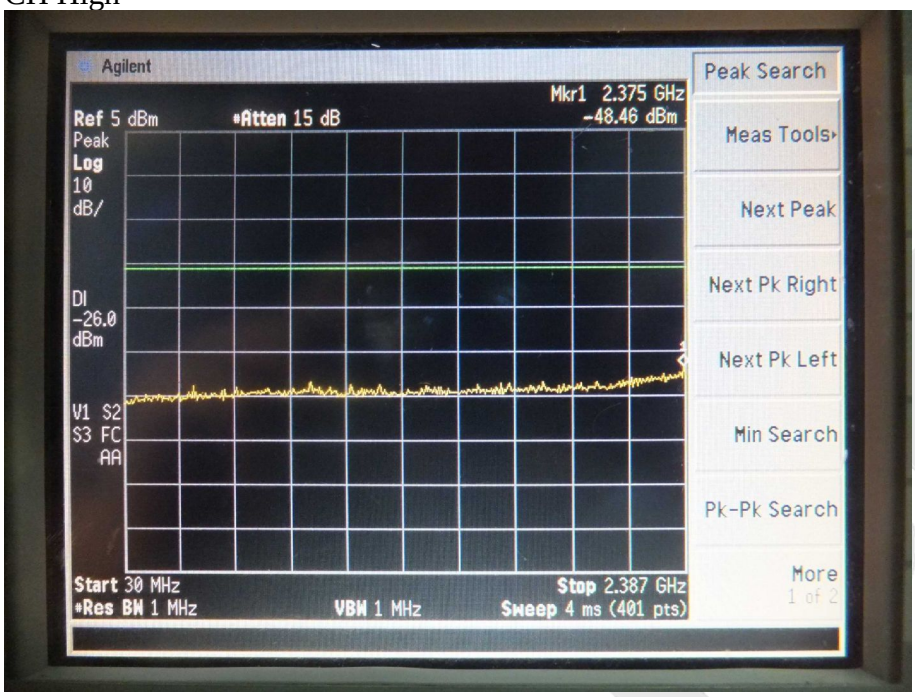

Agilent
Mkr1 2.328 GHz
-50.13 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
Dl
-26.0
dBm
V1 S2
S3 FC
AA
Start 30 MHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.387 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

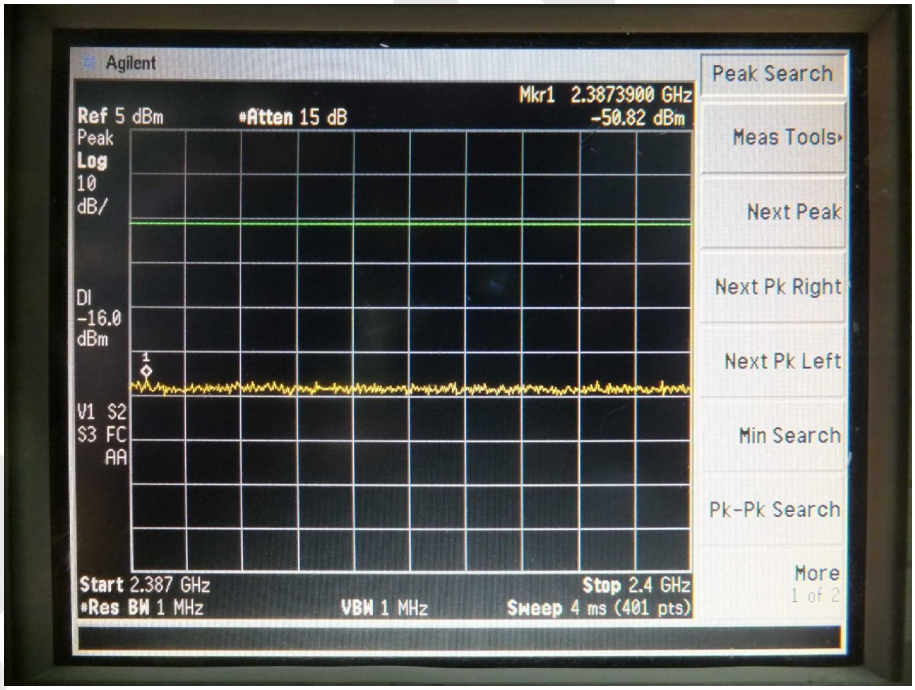

Agilent
Mkr1 2.3946050 GHz
-51.15 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
Dl
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.387 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.4 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

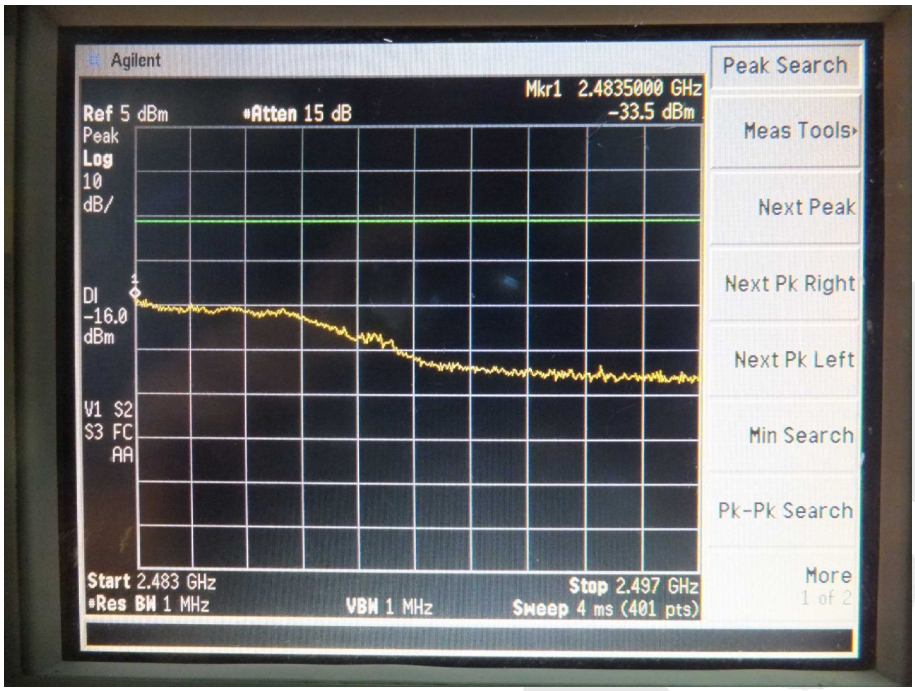

Agilent
Mkr1 2.4873025 GHz
-49.82 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
Marker
2.487302500 GHz
-49.82 dBm
DI
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.483 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.497 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

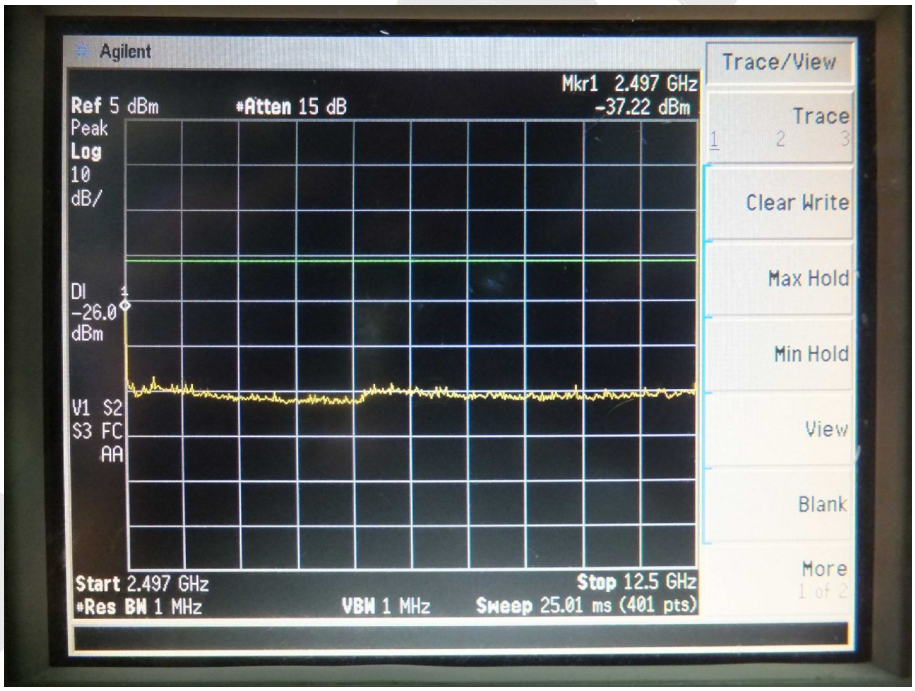

Agilent
Mkr1 3.172 GHz
-52.62 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-26.0
dBm
V1 S2
S3 FC
AA
Start 2.497 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 25.01 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More

CH High


Agilent
Mkr1 2.375 GHz
-48.46 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-26.0
dBm
V1 S2
S3 FC
AA
Start 30 MHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.387 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

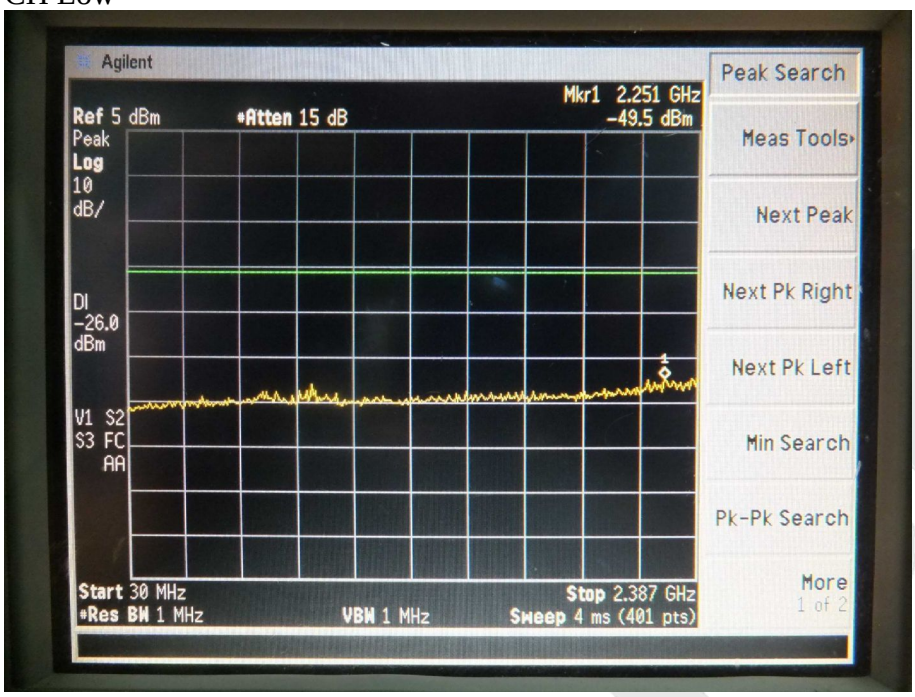

Agilent
Mkr1 2.3873900 GHz
-50.82 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.387 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.4 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

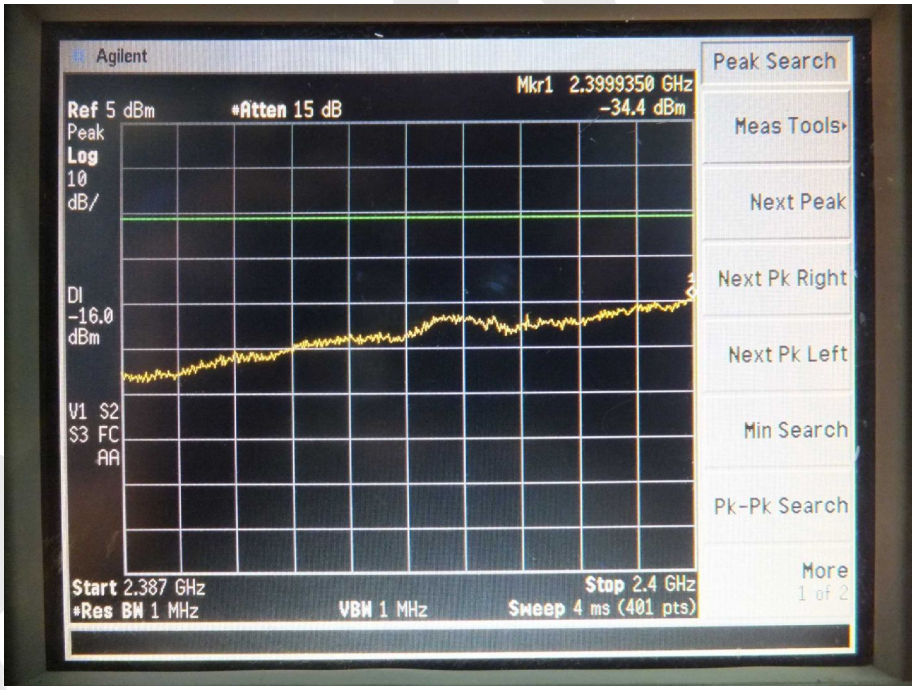

Agilent
Mkr1 2.4835000 GHz
Ref 5 dBm
#Atten 15 dB
-33.5 dBm
Peak
Log
10
dB/
D1
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.483 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.497 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

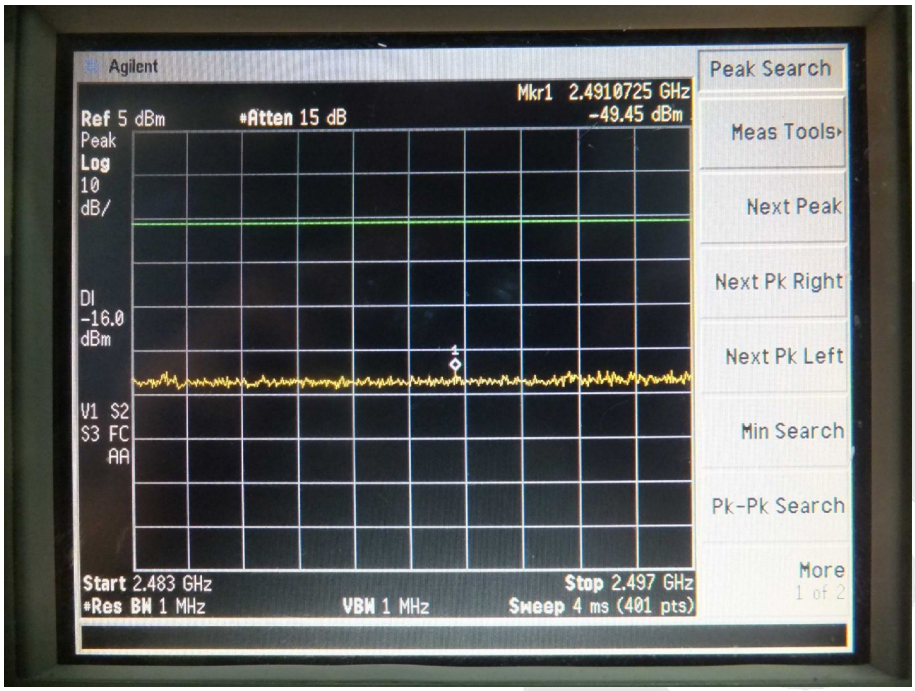

Agilent
Mkr1 2.497 GHz
Ref 5 dBm
#Atten 15 dB
-37.22 dBm
Peak
Log
10
dB/
D1
-26.0
dBm
V1 S2
S3 FC
AA
Start 2.497 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 25.01 ms (401 pts)
Trace/View
Trace
1 2 3
Clear Write
Max Hold
Min Hold
View
Blank
More
1 of 2

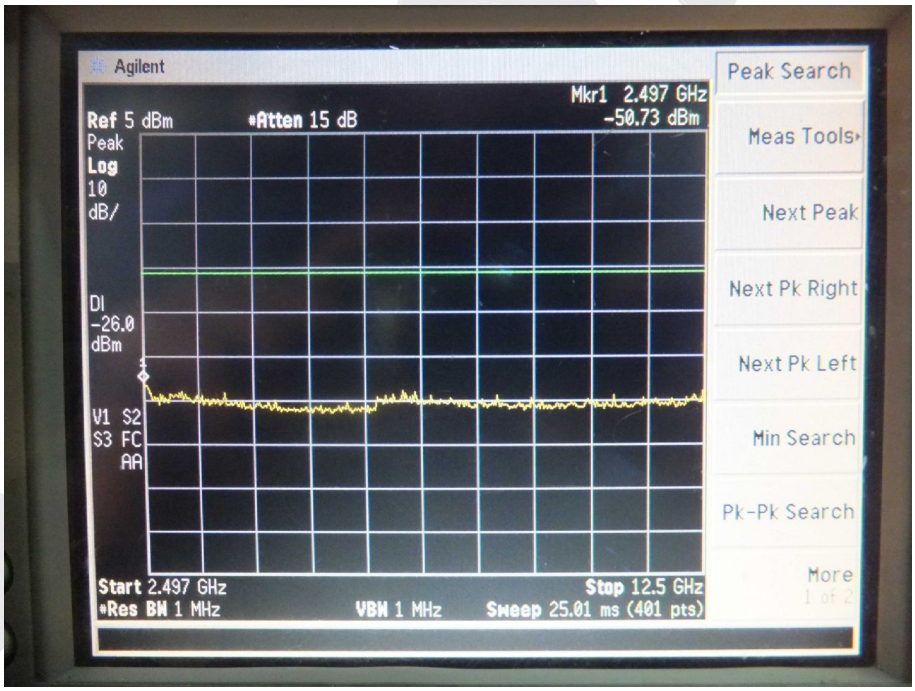
802.11g

CH Low

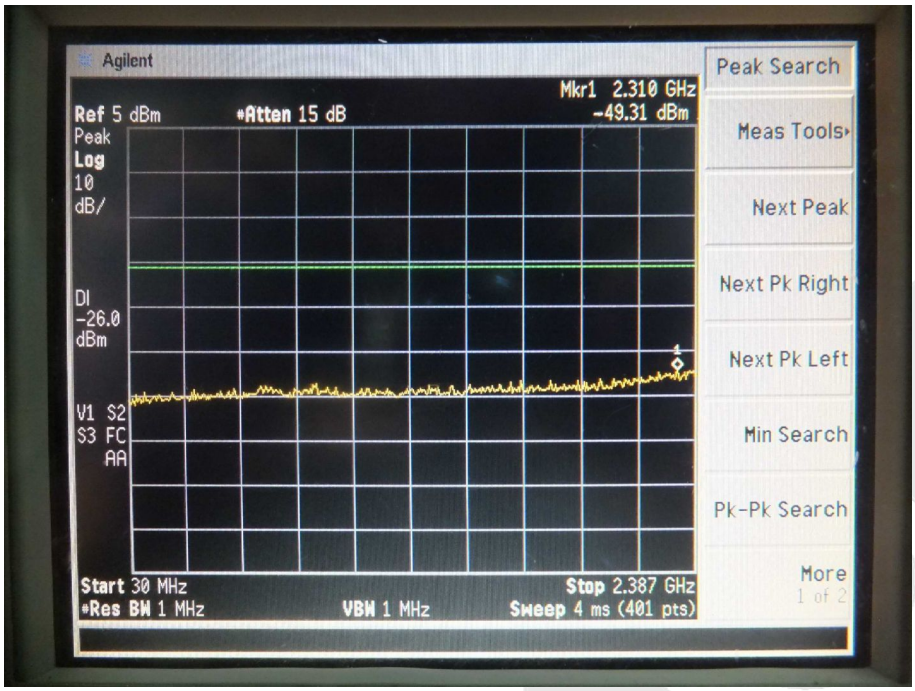


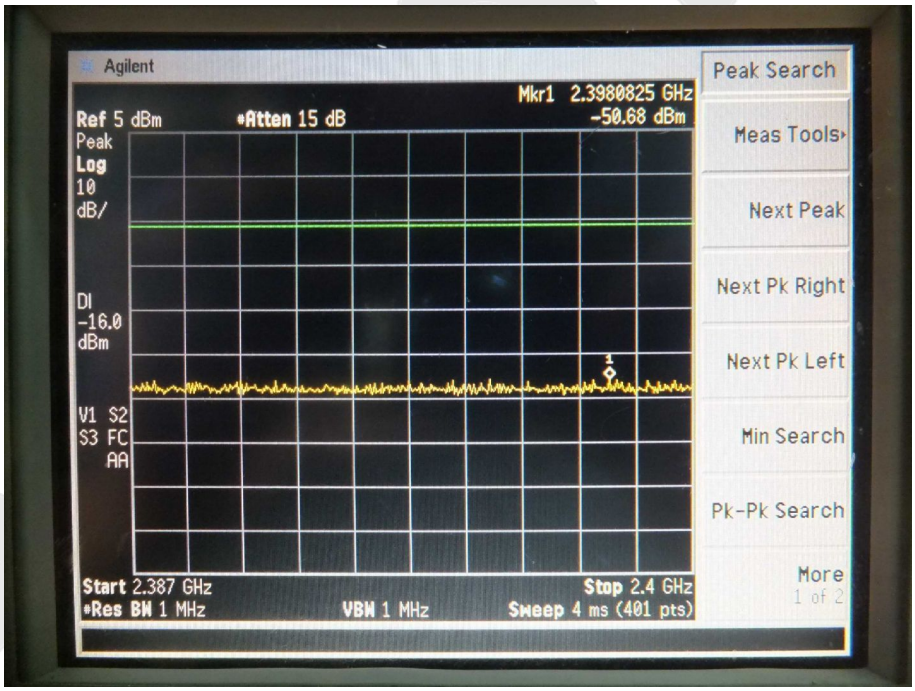


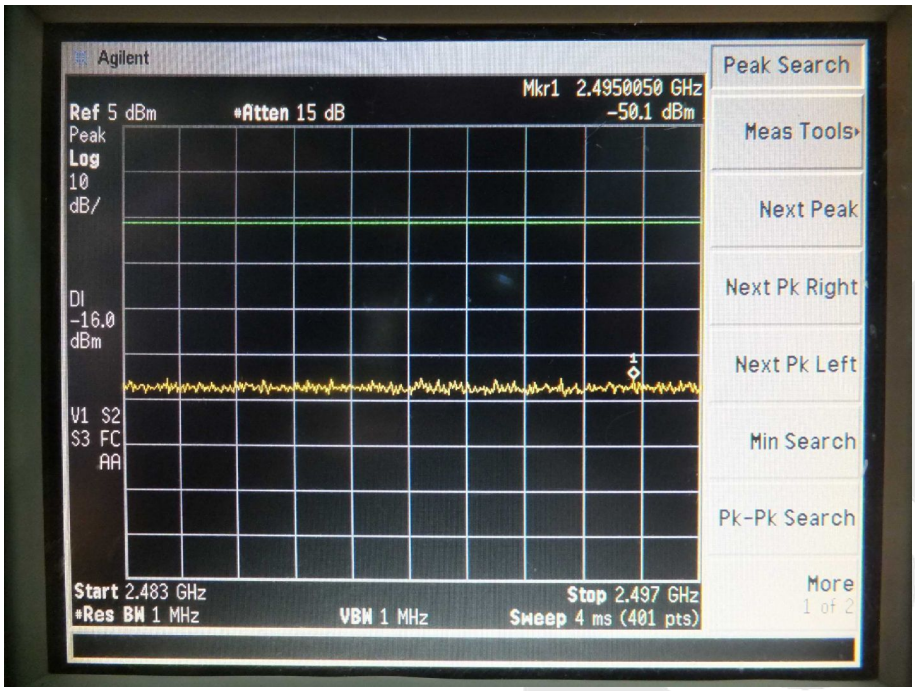

Agilent
Mkr1 2.4910725 GHz
-49.45 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.483 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.497 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

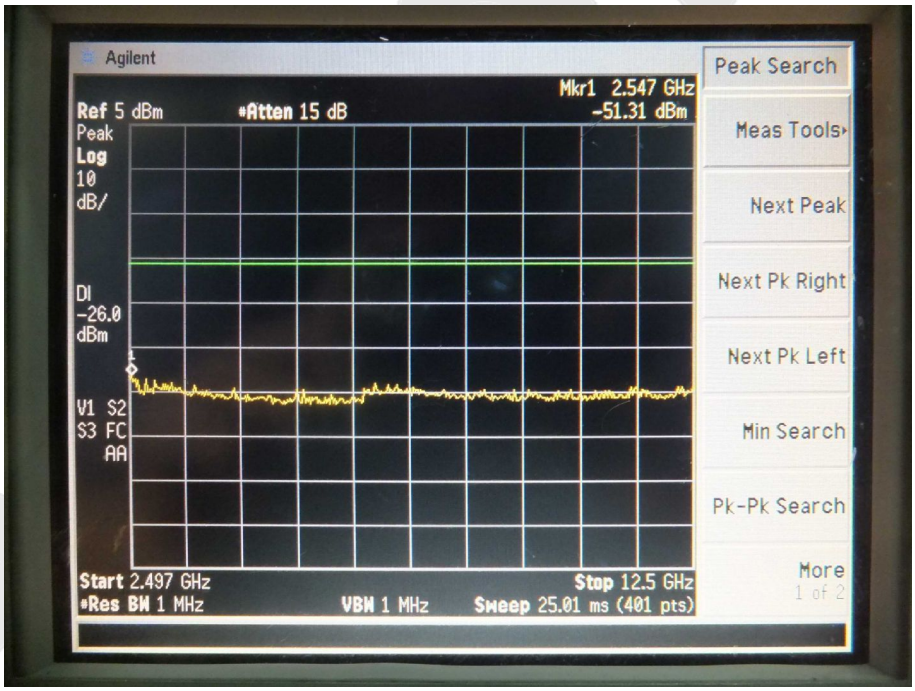

Agilent
Mkr1 2.497 GHz
-50.73 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-26.0
dBm
V1 S2
S3 FC
AA
Start 2.497 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 25.01 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

CH Mid

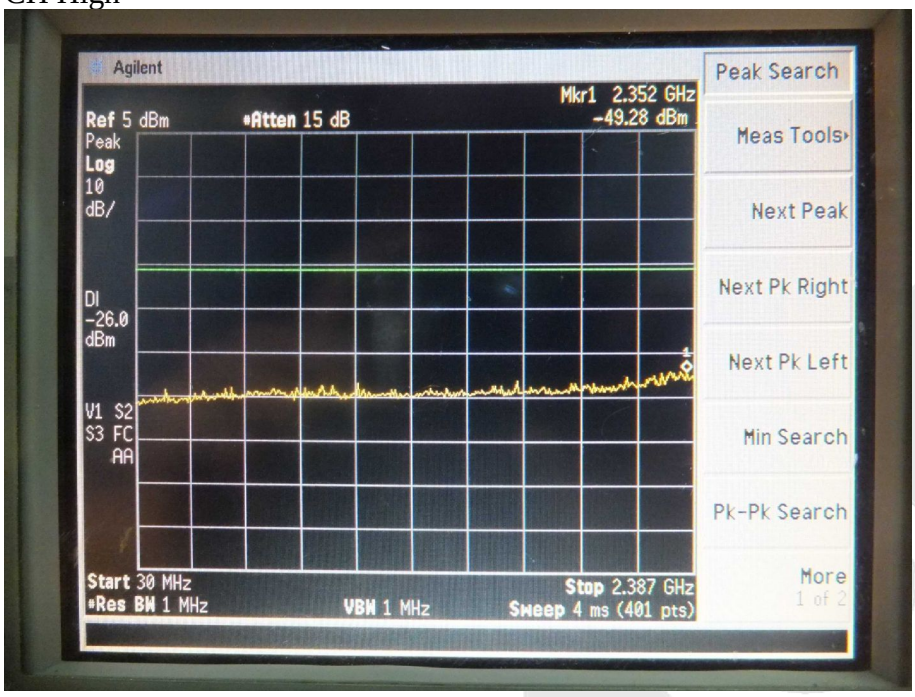

Agilent
Mkr1 2.310 GHz
-49.31 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
Dl
-26.0
dBm
V1 S2
S3 FC
AA
Start 30 MHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.387 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

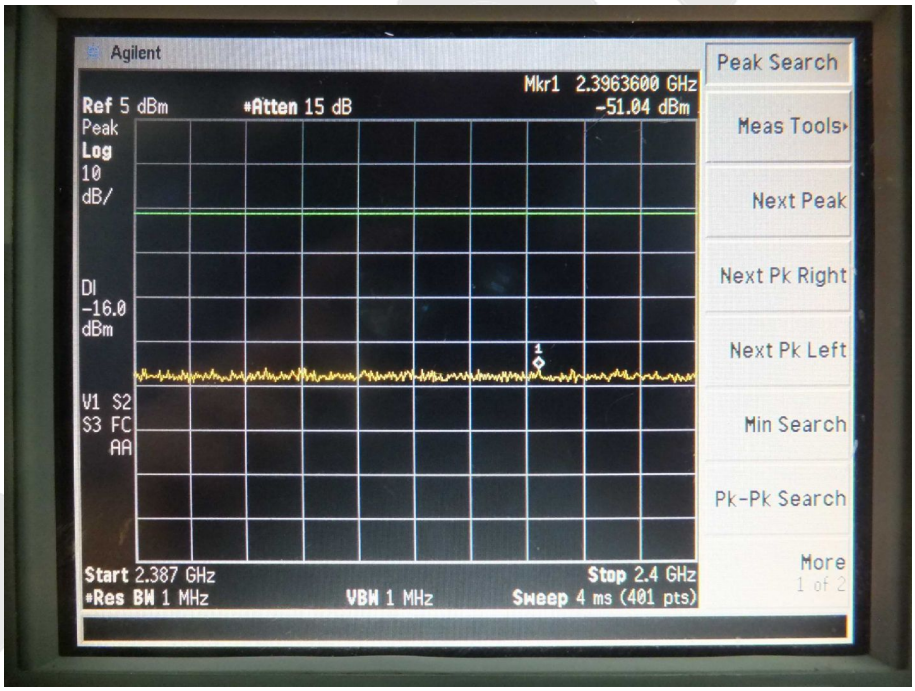

Agilent
Mkr1 2.3980825 GHz
-50.68 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
Dl
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.387 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.4 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

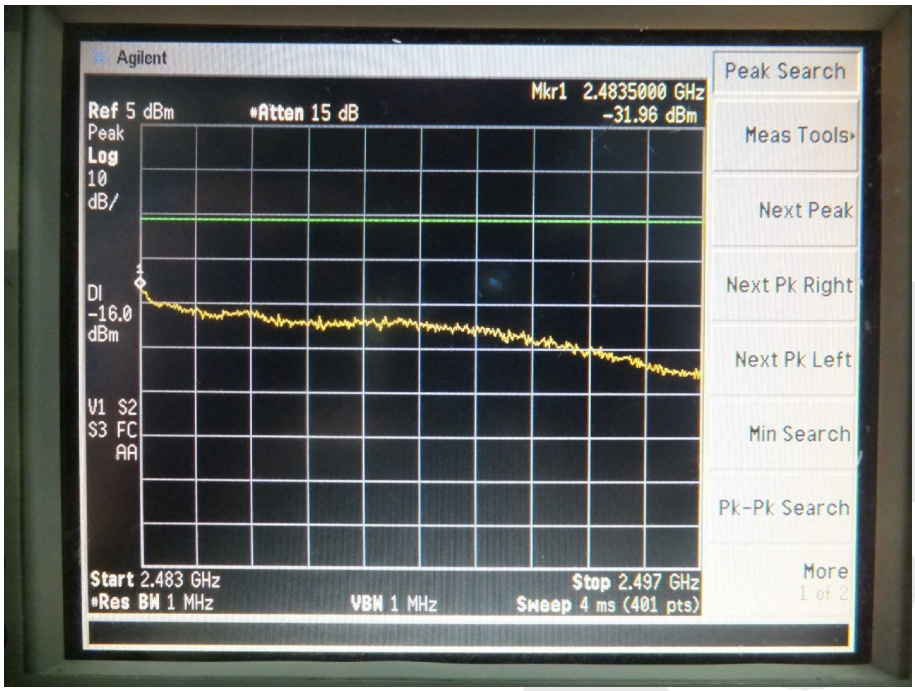

Agilent
Mkr1 2.4950050 GHz
Ref 5 dBm
#Atten 15 dB
-50.1 dBm
Peak
Log
10
dB/
DI
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.483 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.497 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

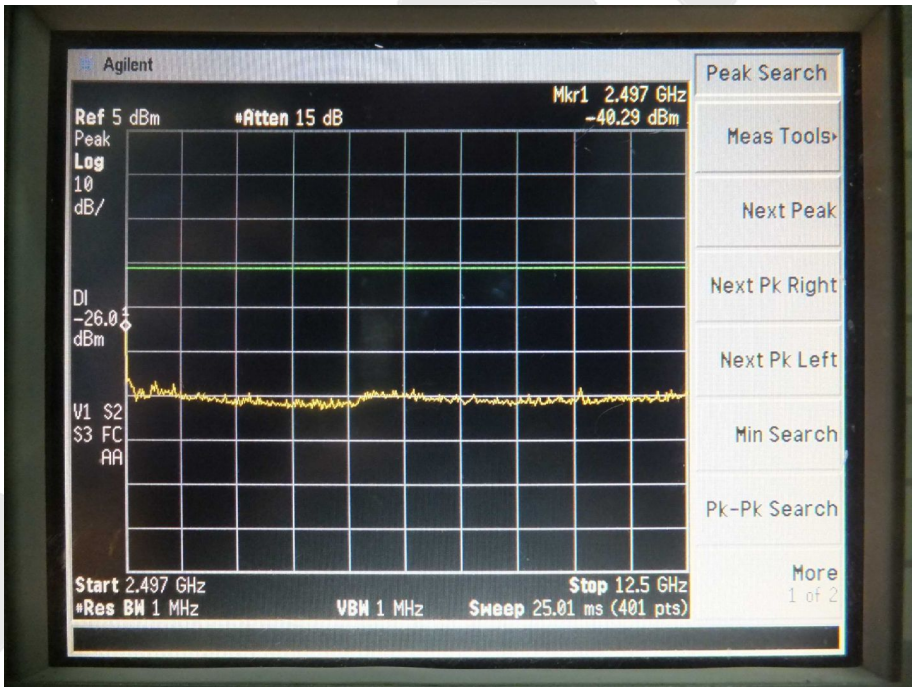

Agilent
Mkr1 2.547 GHz
Ref 5 dBm
#Atten 15 dB
-51.31 dBm
Peak
Log
10
dB/
DI
-26.0
dBm
V1 S2
S3 FC
AA
Start 2.497 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 25.01 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

CH High


Agilent
Mkr1 2.352 GHz
-49.28 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
Dl
-26.0
dBm
V1 S2
S3 FC
AA
Start 30 MHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.387 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

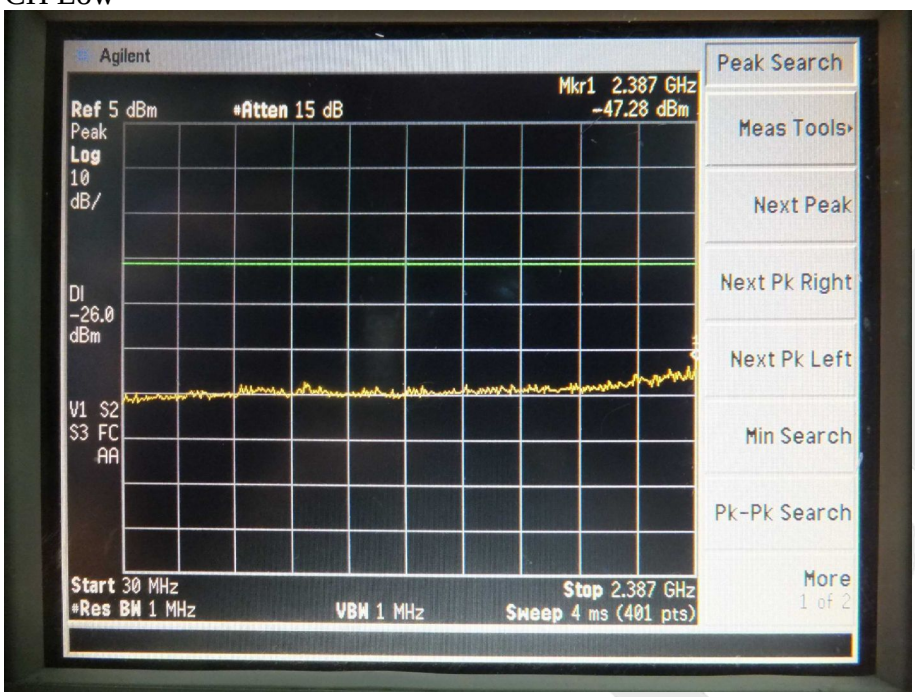

Agilent
Mkr1 2.3963600 GHz
-51.04 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
Dl
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.387 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.4 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

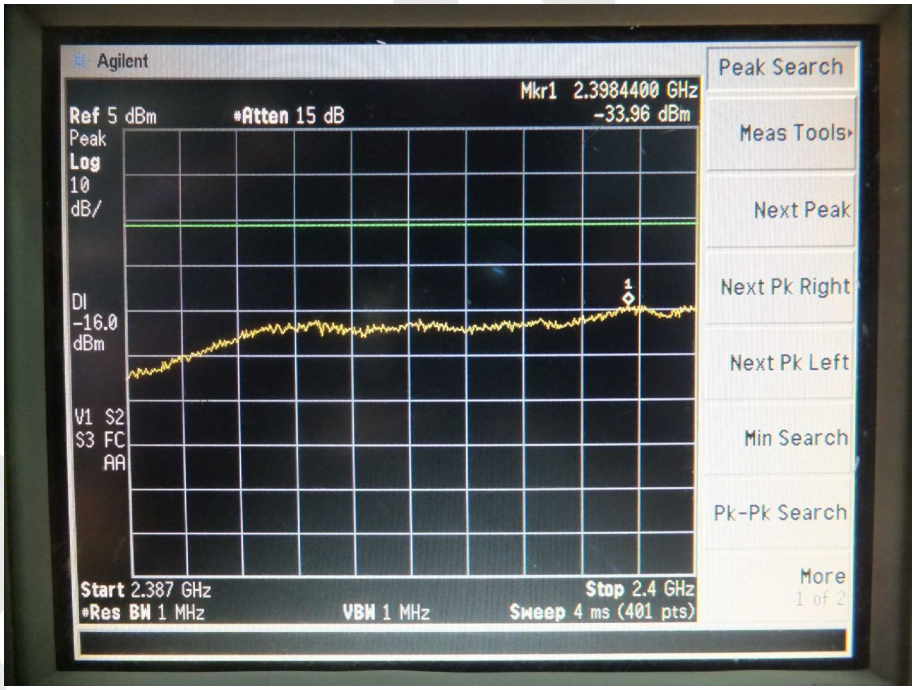

Agilent
Mkr1 2.4835000 GHz
-31.96 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
D1
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.483 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.497 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

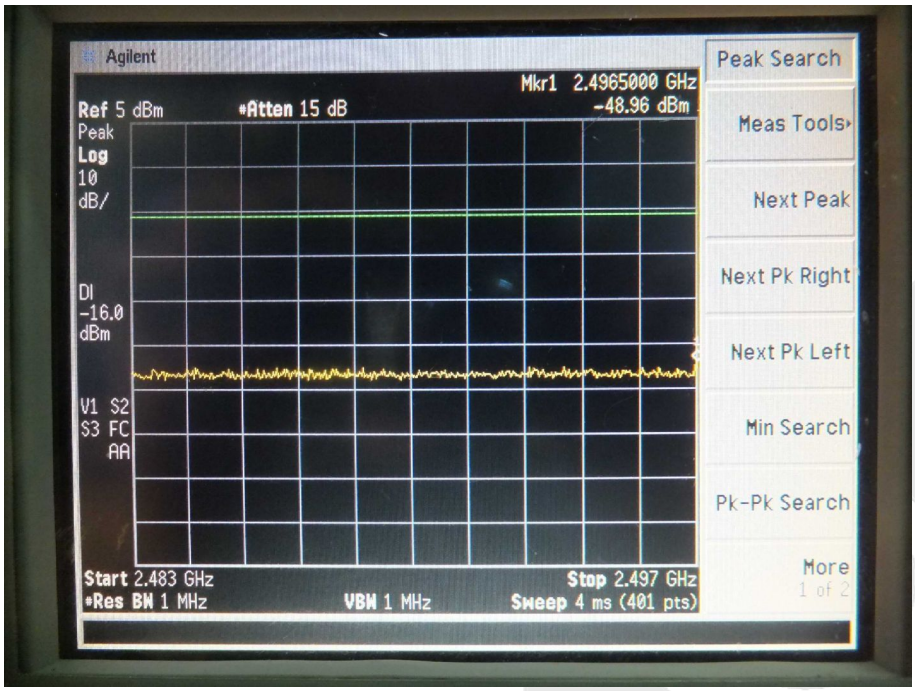

Agilent
Mkr1 2.497 GHz
-40.29 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
D1
-26.0
dBm
V1 S2
S3 FC
AA
Start 2.497 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 25.01 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

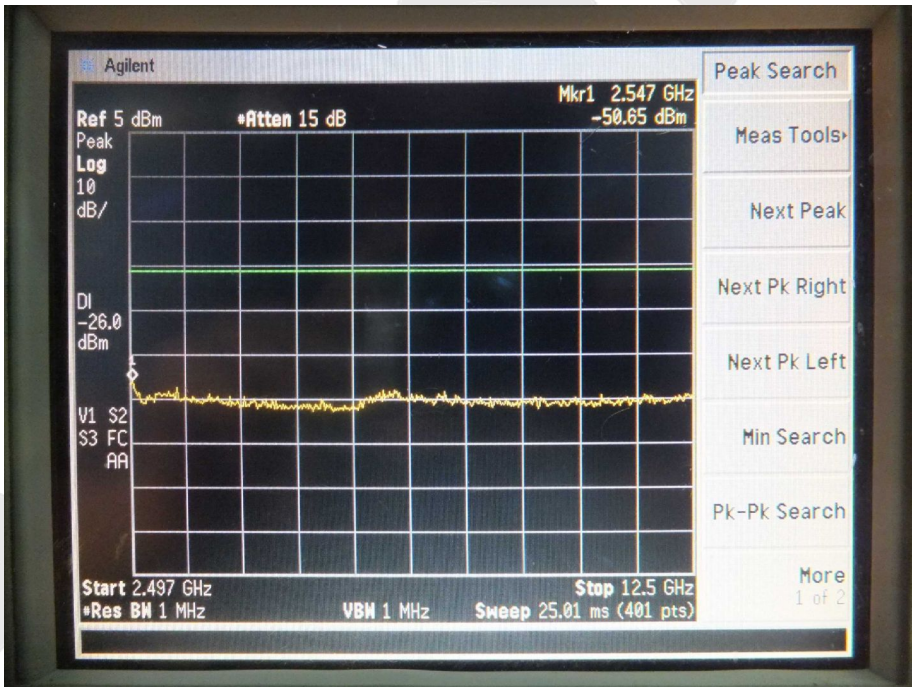
802.11n (HT20)

CH Low

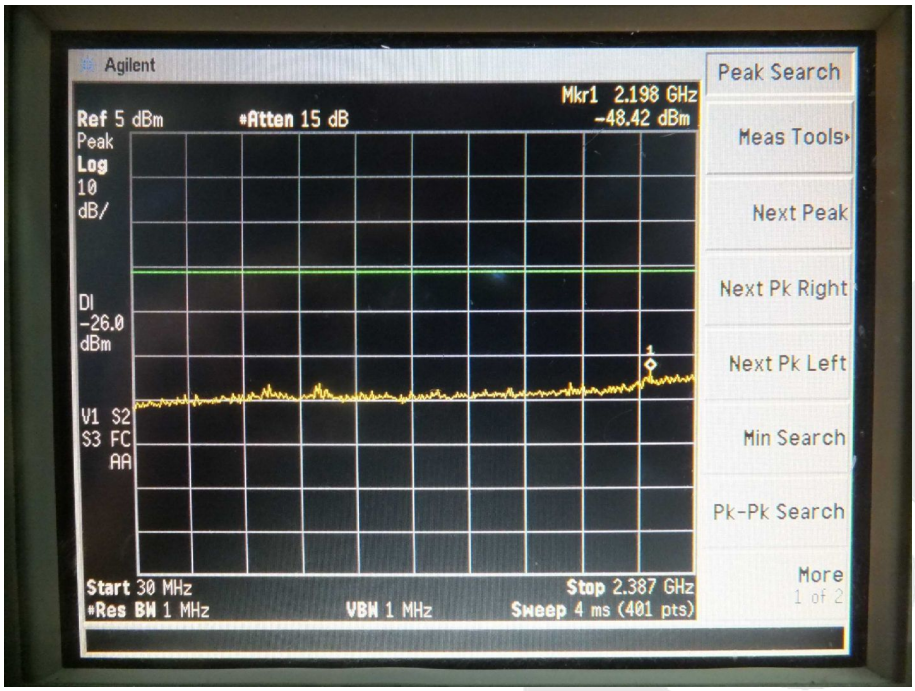


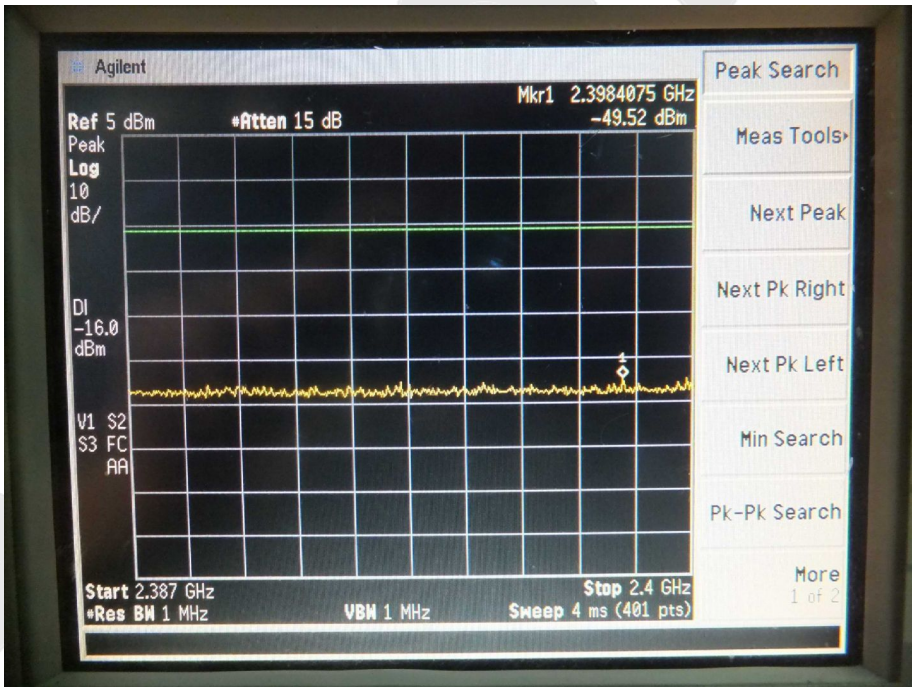


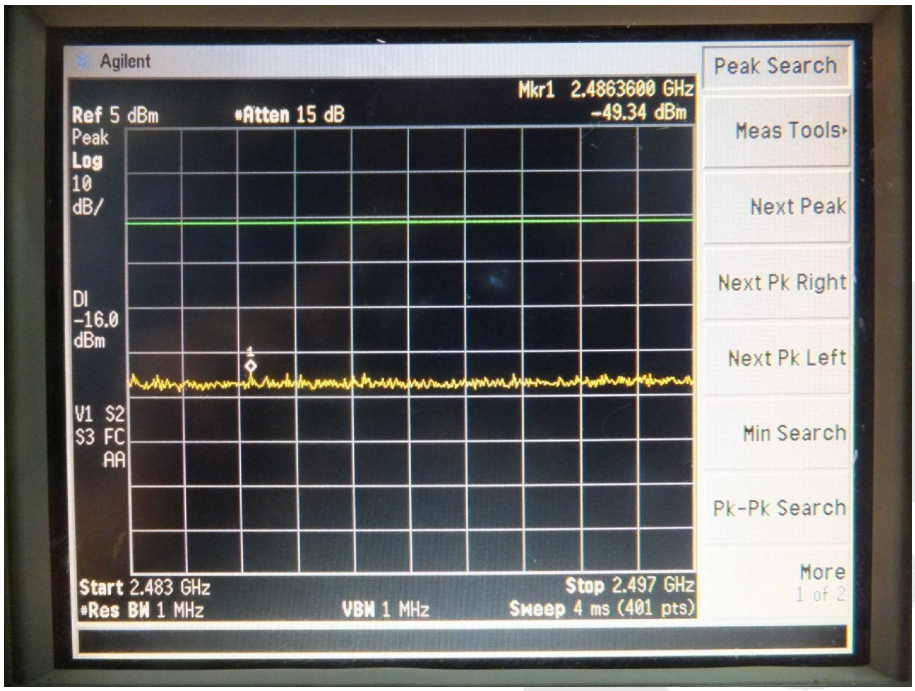

Agilent
Mkr1 2.4965000 GHz
-48.96 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.483 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.497 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

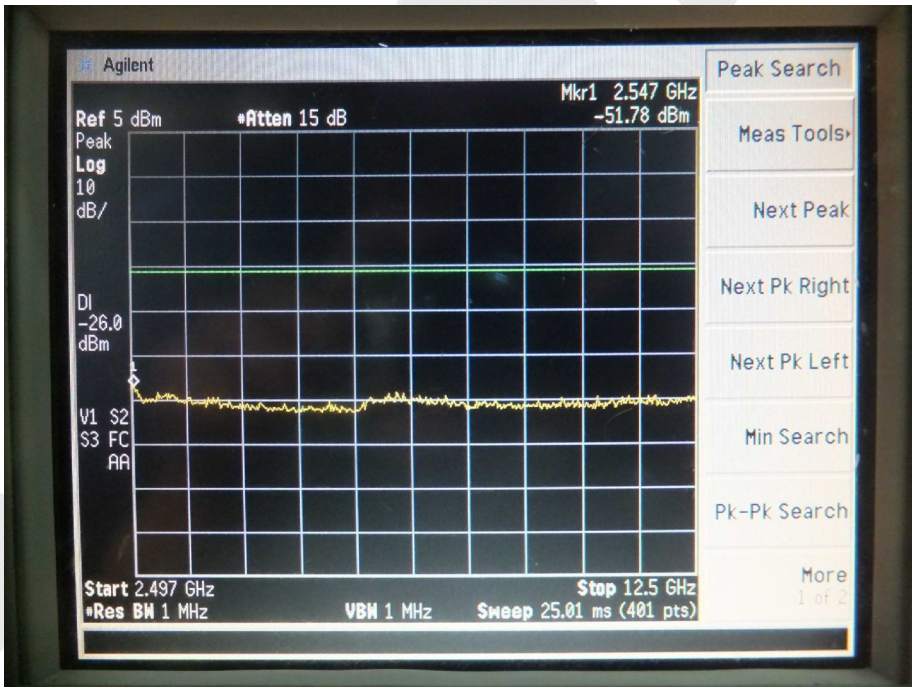

Agilent
Mkr1 2.547 GHz
-50.65 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-26.0
dBm
V1 S2
S3 FC
AA
Start 2.497 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 25.01 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

CH Mid

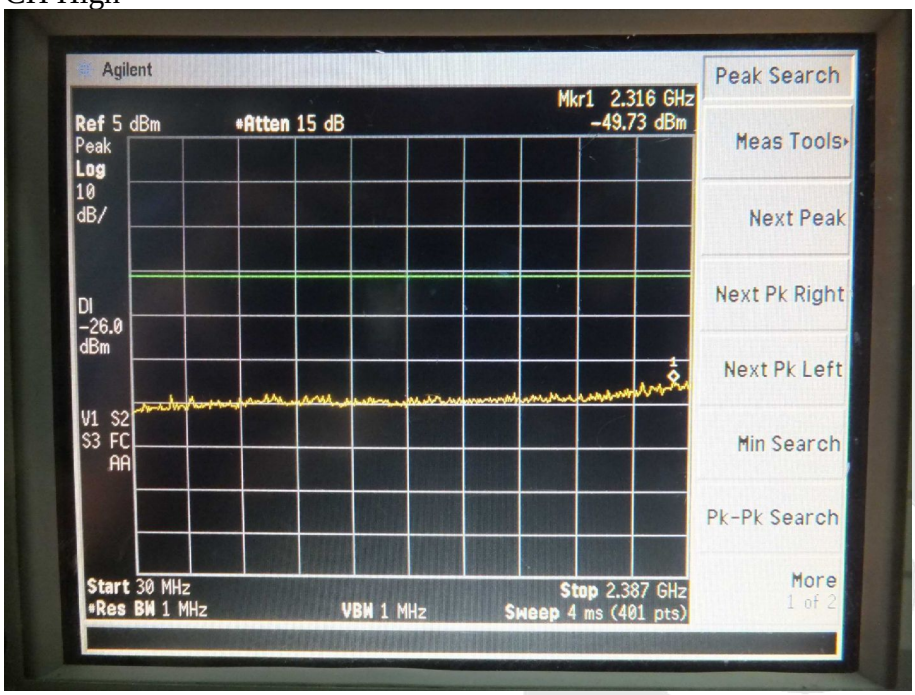

Agilent
Mkr1 2.198 GHz
-48.42 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-26.0
dBm
V1 S2
S3 FC
AA
Start 30 MHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.387 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

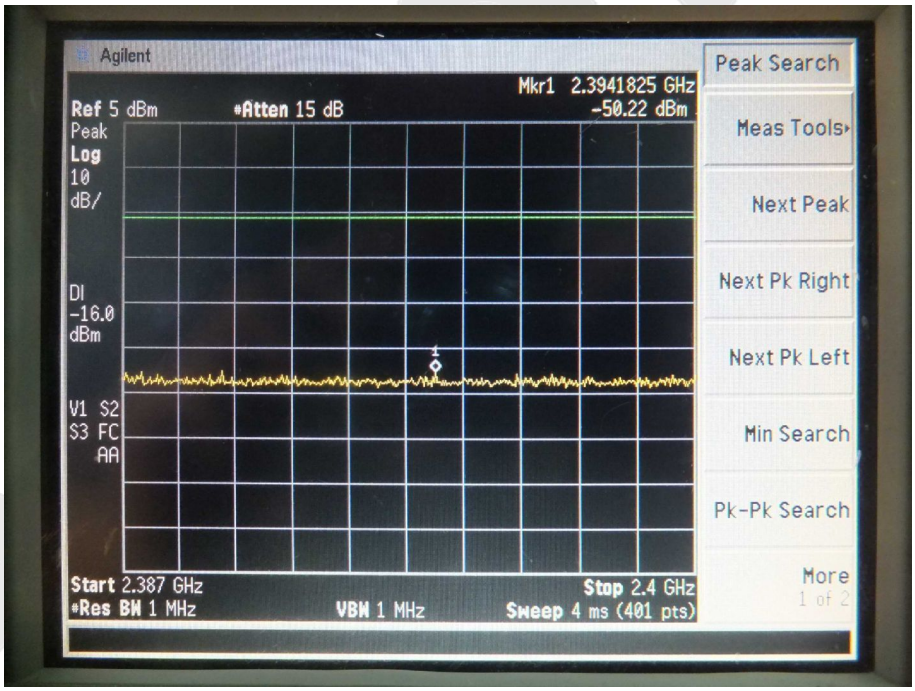

Agilent
Mkr1 2.3984075 GHz
-49.52 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.387 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.4 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

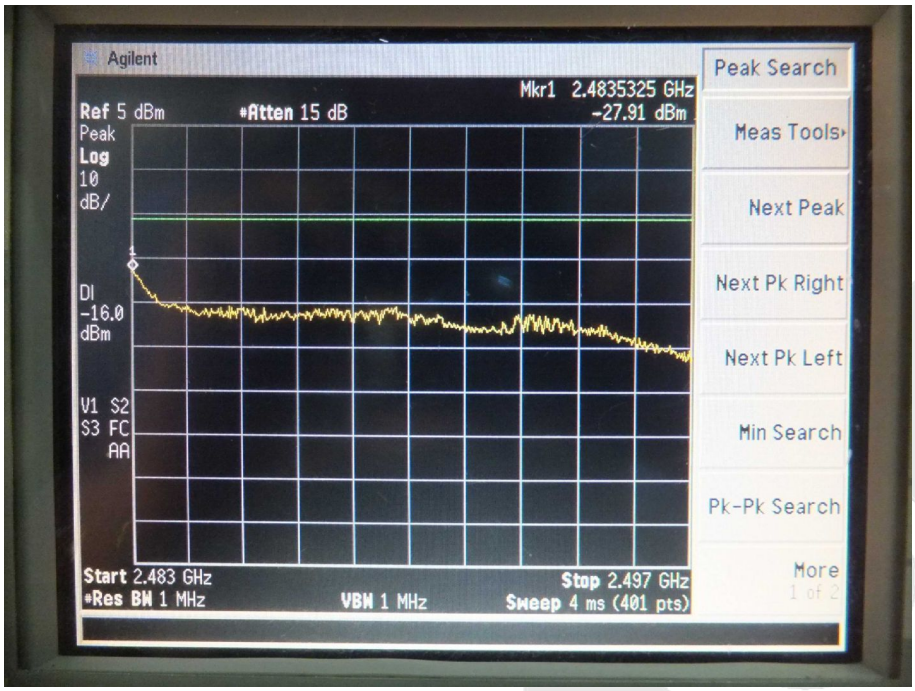

Agilent
Mkr1 2.4863600 GHz
-49.34 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.483 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.497 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

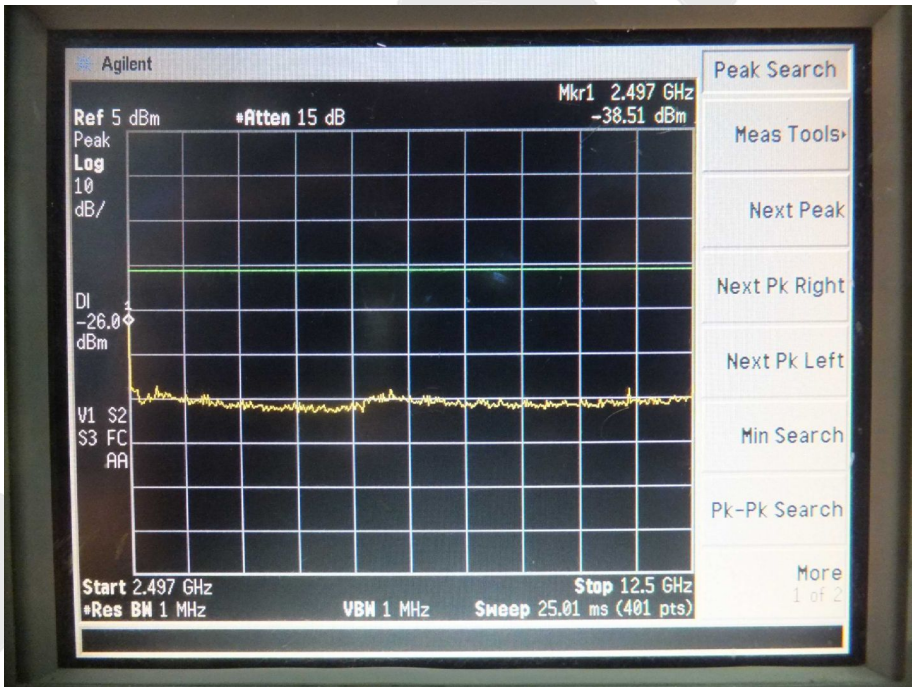

Agilent
Mkr1 2.547 GHz
-51.78 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-26.0
dBm
V1 S2
S3 FC
AA
Start 2.497 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 25.01 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

CH High


Agilent
Mkr1 2.316 GHz
-49.73 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-26.0
dBm
V1 S2
S3 FC
AA
Start 30 MHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.387 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

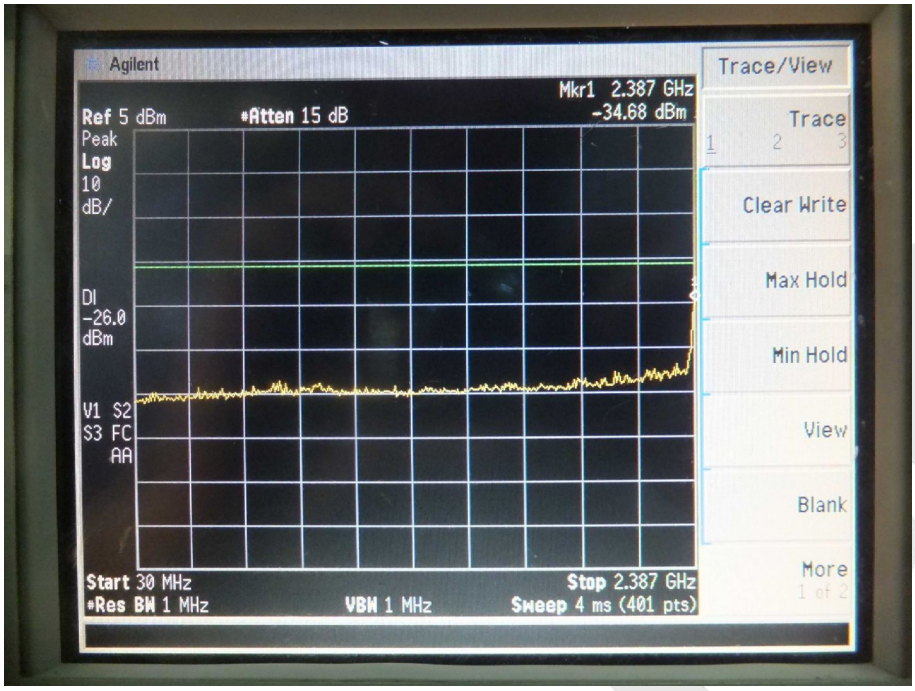

Agilent
Mkr1 2.3941825 GHz
-50.22 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.387 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.4 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

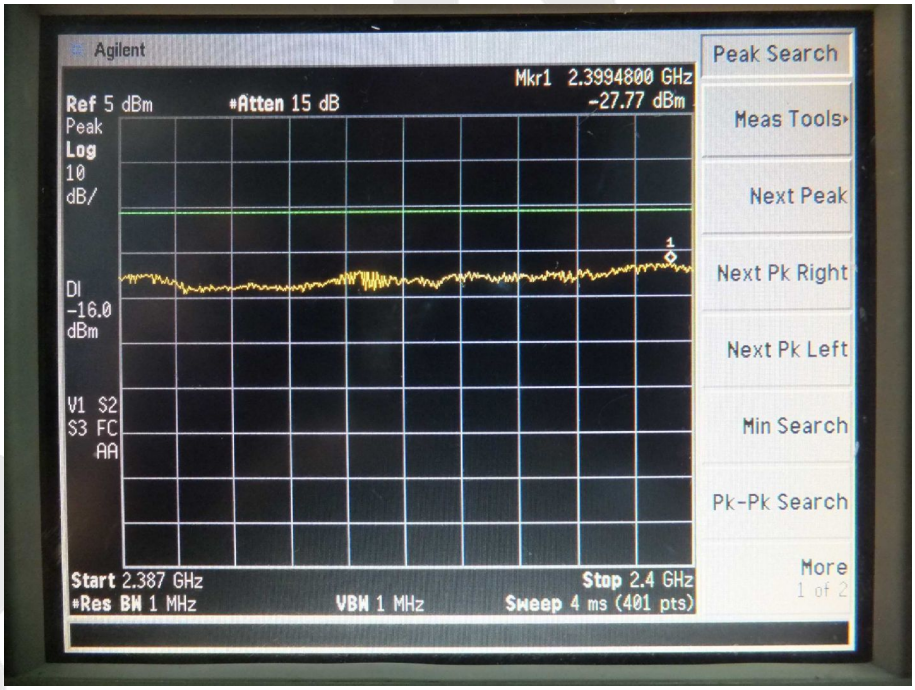

Agilent
Mkr1 2.4835325 GHz
-27.91 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
Dl
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.483 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.497 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

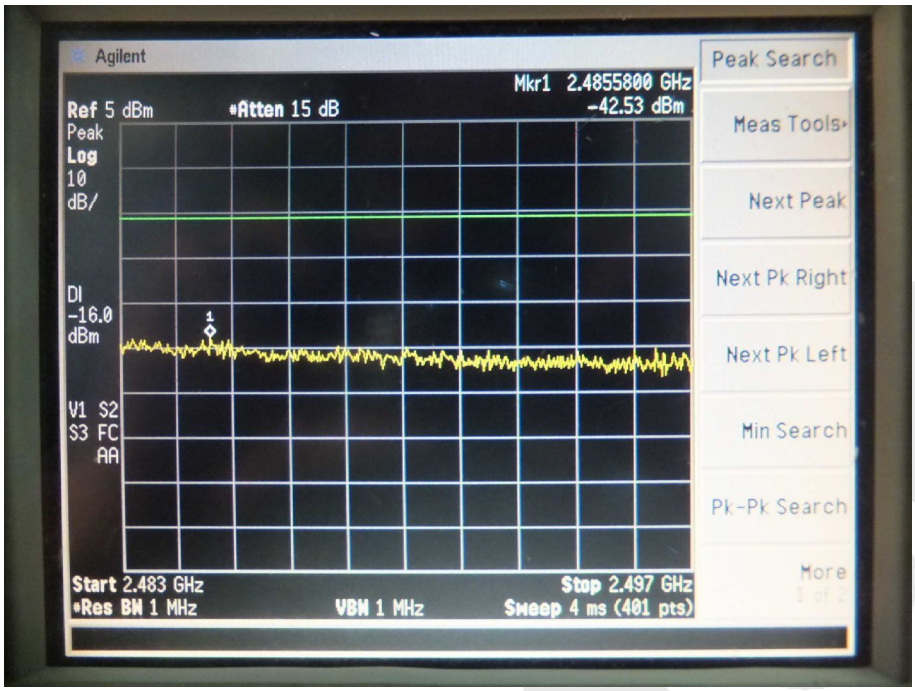

Agilent
Mkr1 2.497 GHz
-38.51 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
Dl
-26.0
dBm
V1 S2
S3 FC
AA
Start 2.497 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 25.01 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

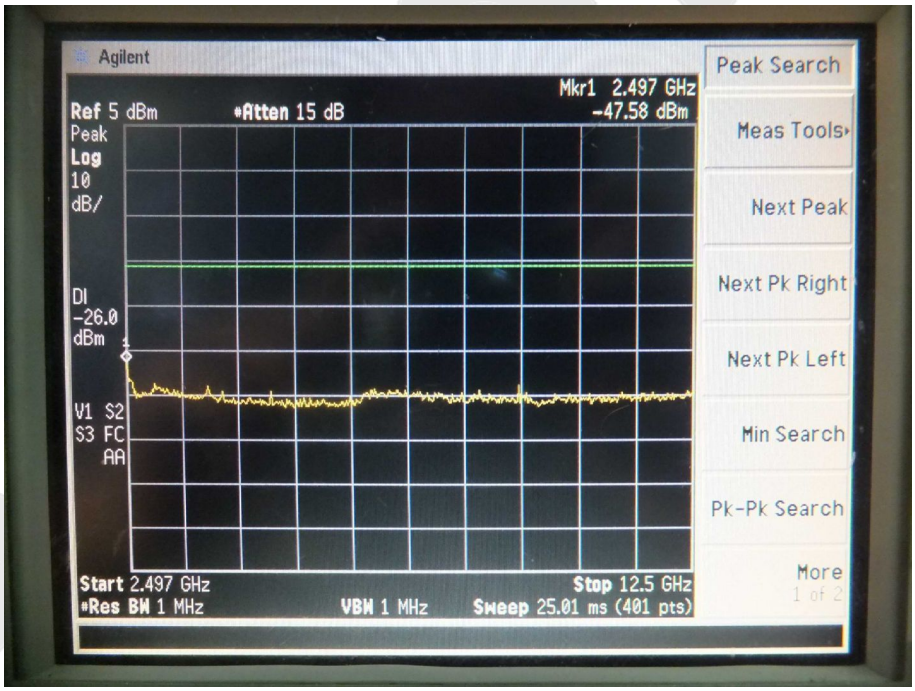
802.11n (HT40)

CH Low

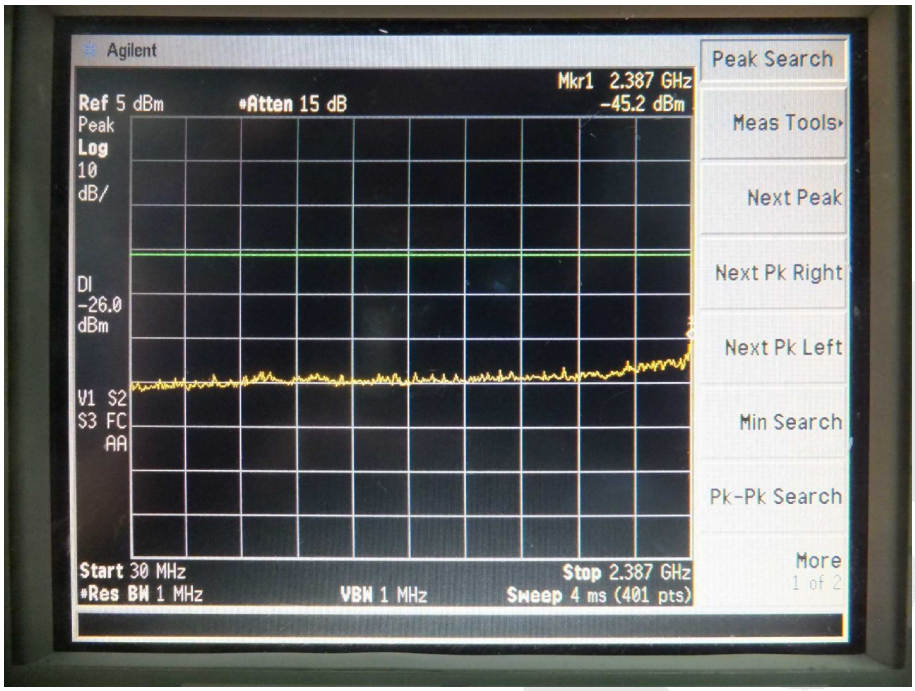


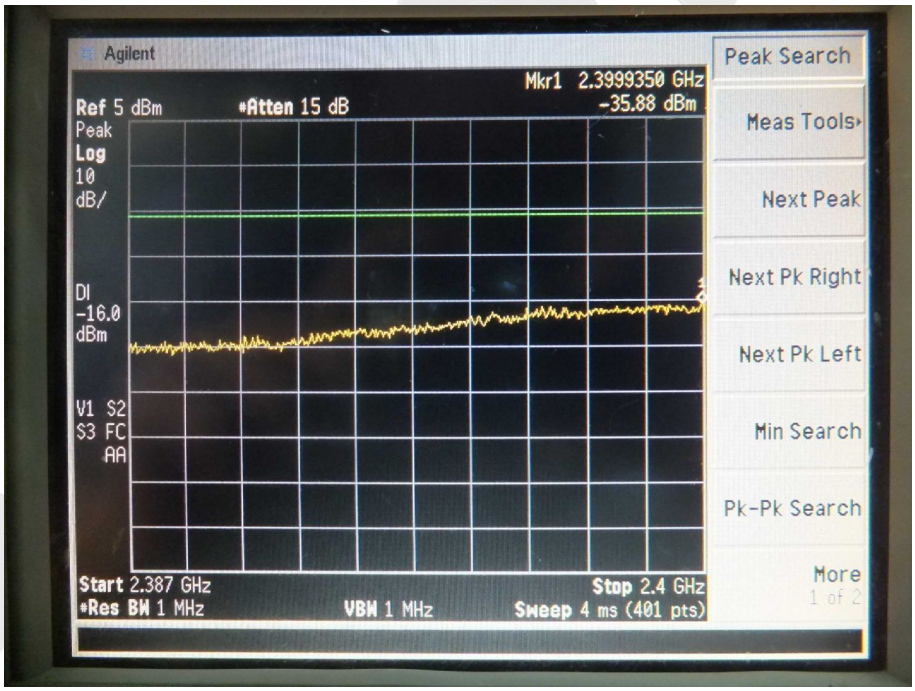


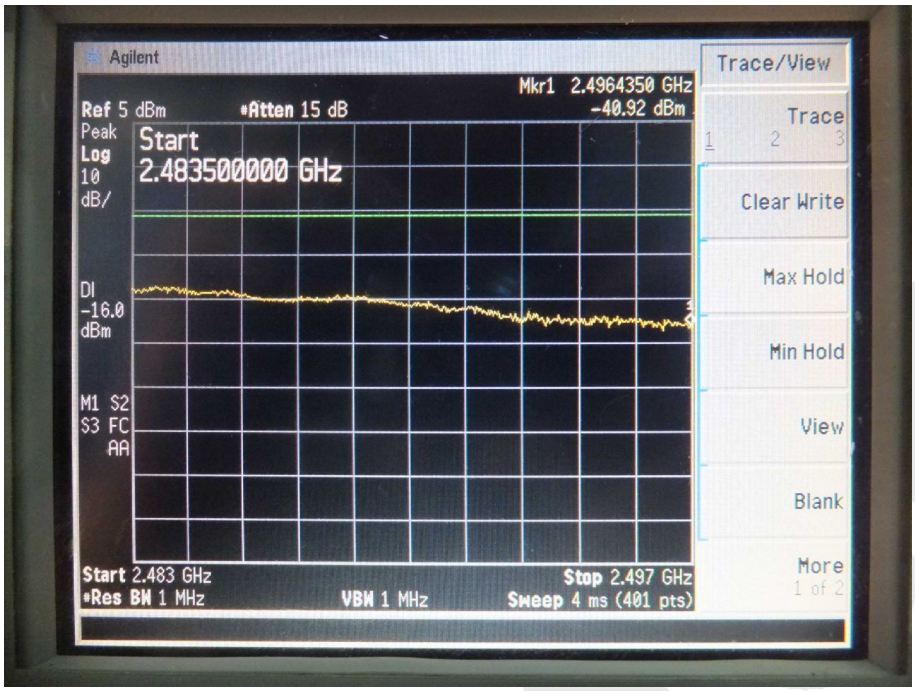

Agilent
Mkr1 2.4855800 GHz
-42.53 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.483 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.497 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

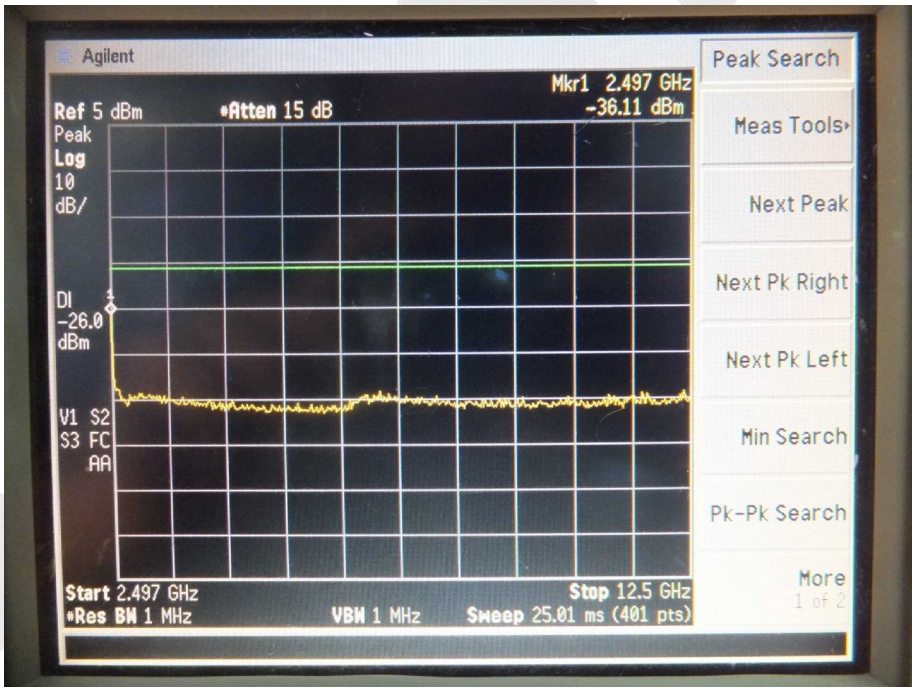

Agilent
Mkr1 2.497 GHz
-47.58 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
DI
-26.0
dBm
V1 S2
S3 FC
AA
Start 2.497 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 25.01 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

CH Mid

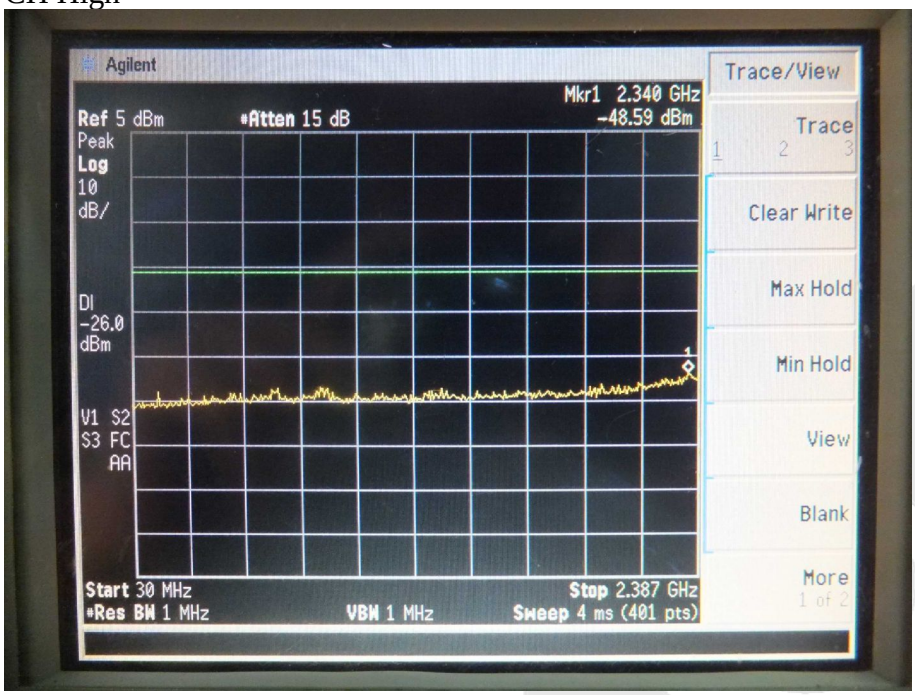

Agilent
Mkr1 2.387 GHz
-45.2 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
Dl
-26.0
dBm
V1 S2
S3 FC
AA
Start 30 MHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.387 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

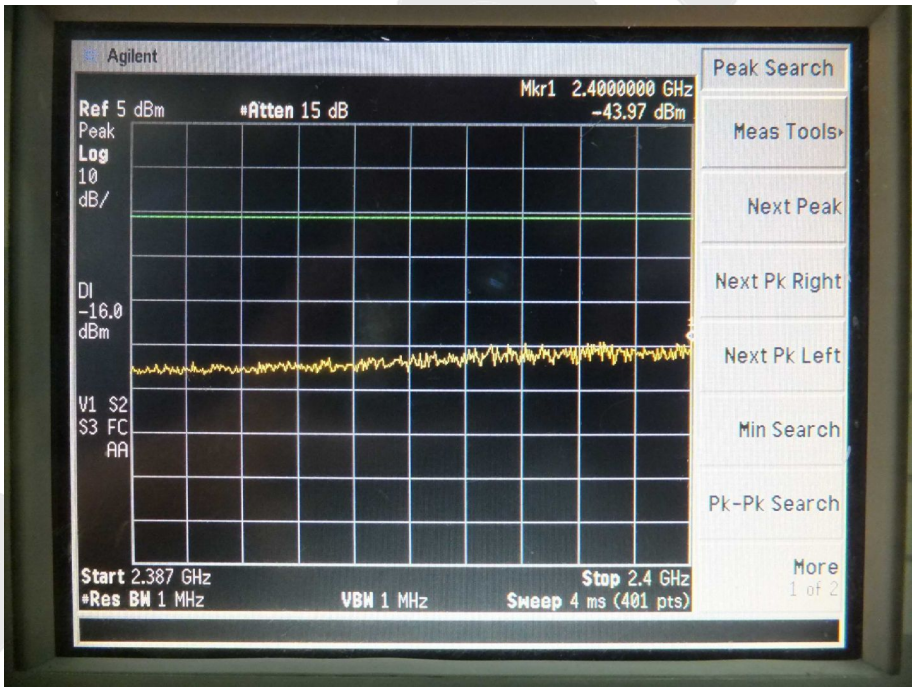

Agilent
Mkr1 2.3999350 GHz
-35.88 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
Dl
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.387 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.4 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

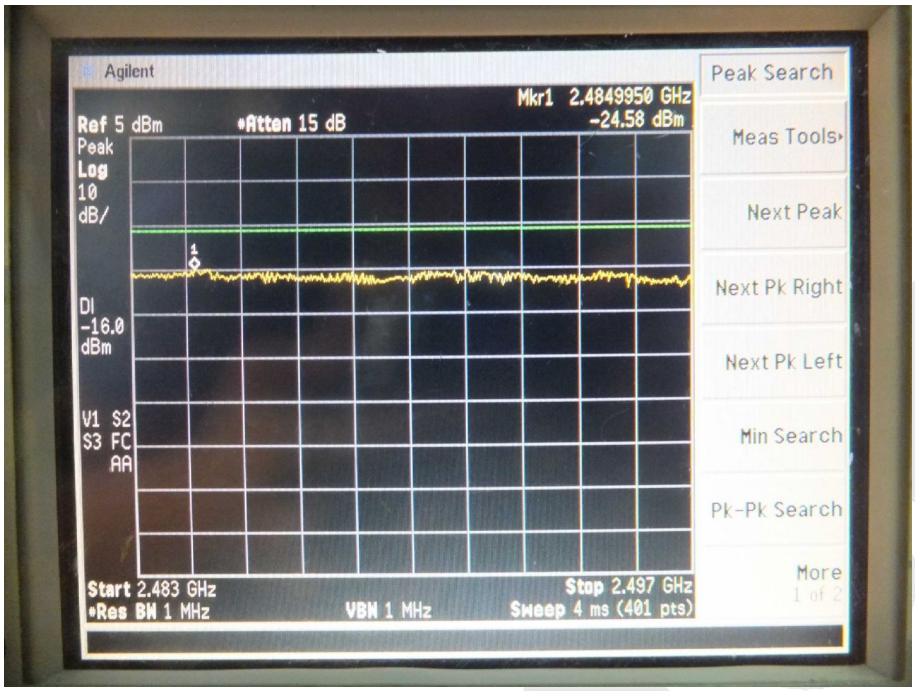

Agilent
Trace/View
Mkr1 2.4964350 GHz
-40.92 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
Start
2.483500000 GHz
Trace
1 2 3
Clear Write
Max Hold
Min Hold
View
Blank
More
1 of 2
D1
-16.0
dBm
M1 S2
S3 FC
AA
Start 2.483 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.497 GHz
Sweep 4 ms (401 pts)

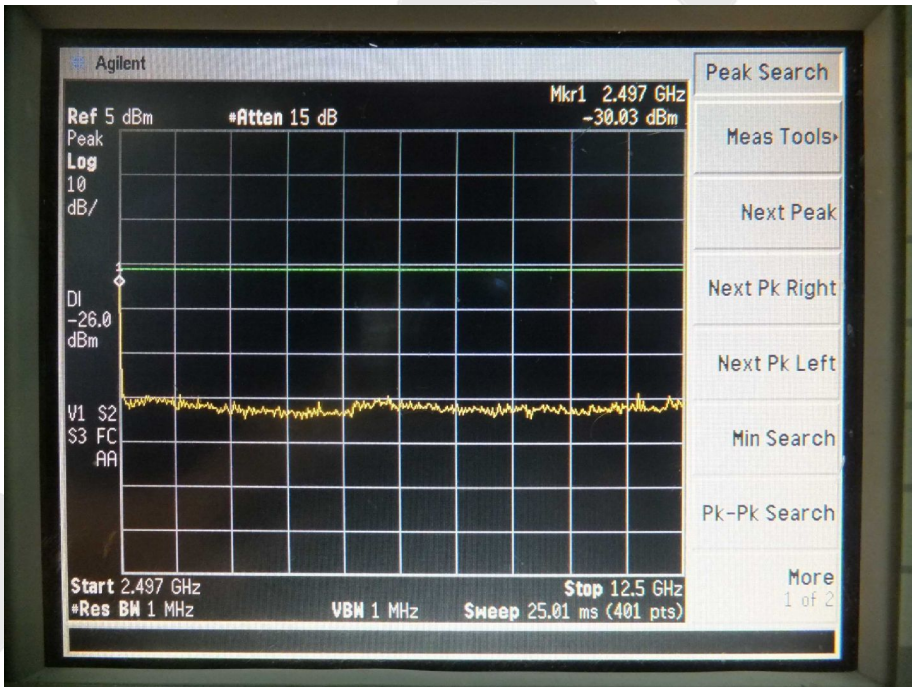

Agilent
Peak Search
Mkr1 2.497 GHz
-36.11 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2
D1
-26.0
dBm
V1 S2
S3 FC
AA
Start 2.497 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 25.01 ms (401 pts)

CH High


Agilent
Trace/View
Mkr1 2.340 GHz
Ref 5 dBm
#Atten 15 dB
-48.59 dBm
Peak
Log
10
dB/
Trace
1 2 3
Clear Write
Max Hold
Min Hold
View
Blank
More
1 of 2
Dl
-26.0
dBm
V1 S2
S3 FC
AA
Start 30 MHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.387 GHz
Sweep 4 ms (401 pts)


Agilent
Peak Search
Mkr1 2.4000000 GHz
Ref 5 dBm
#Atten 15 dB
-43.97 dBm
Peak
Log
10
dB/
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2
Dl
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.387 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.4 GHz
Sweep 4 ms (401 pts)


Agilent
Mkr1 2.4849950 GHz
-24.58 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
Dl
-16.0
dBm
V1 S2
S3 FC
AA
Start 2.483 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.497 GHz
Sweep 4 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr1 2.497 GHz
-30.03 dBm
Ref 5 dBm
#Atten 15 dB
Peak
Log
10
dB/
Dl
-26.0
dBm
V1 S2
S3 FC
AA
Start 2.497 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 25.01 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

7. ANTENNA POWER TEST

7.1. Test Equipment

Same as 3.1 Frequency tolerance measurement.

7.2. Test Configuration

Same as 3.2 Frequency tolerance measurement.

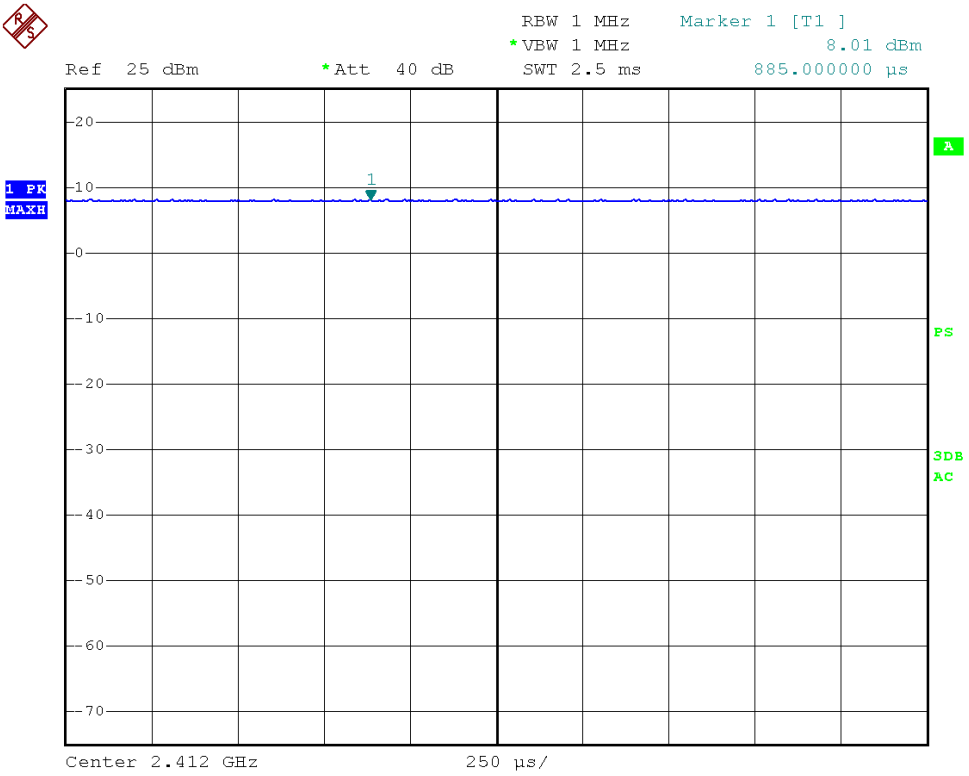
7.3. Test Results

Normal Voltage: AC 100V

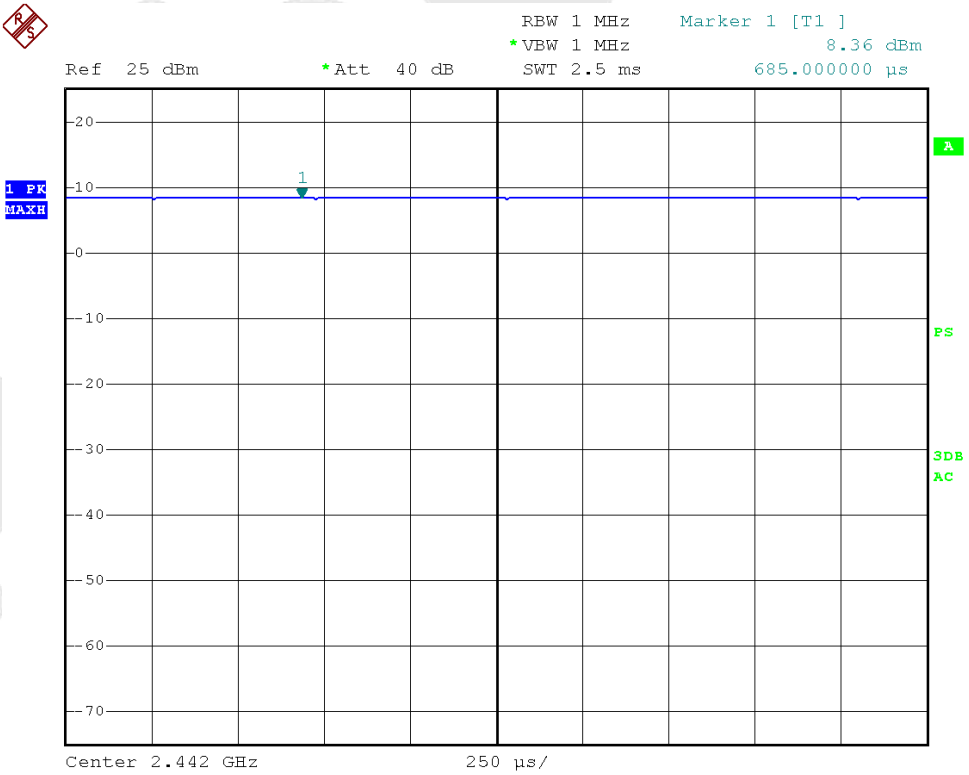
Mode	Channel Frequency (MHz)	conducted antenna power density (mW/MHz)	Rated Conducted power density (mW/MHz)	Antenna Power Error (mW/MHz) (-80%, +20%)
802.11b	2412	6.32	8.20	-22.93%
	2442	6.85	8.20	-16.46%
	2472	7.28	8.20	-11.22%
802.11g	2412	2.23	8.20	-72.80%
	2442	2.51	8.20	-69.39%
	2472	2.61	8.20	-68.17%
802.11n(HT20)	2412	2.87	8.20	-65.00%
	2442	3.10	8.20	-62.20%
	2472	3.26	8.20	-60.24%
802.11n (HT40)	2422	1.51	4.40	-65.68%
	2442	1.53	4.40	-65.23%
	2462	1.59	4.40	-63.86%

802.11b

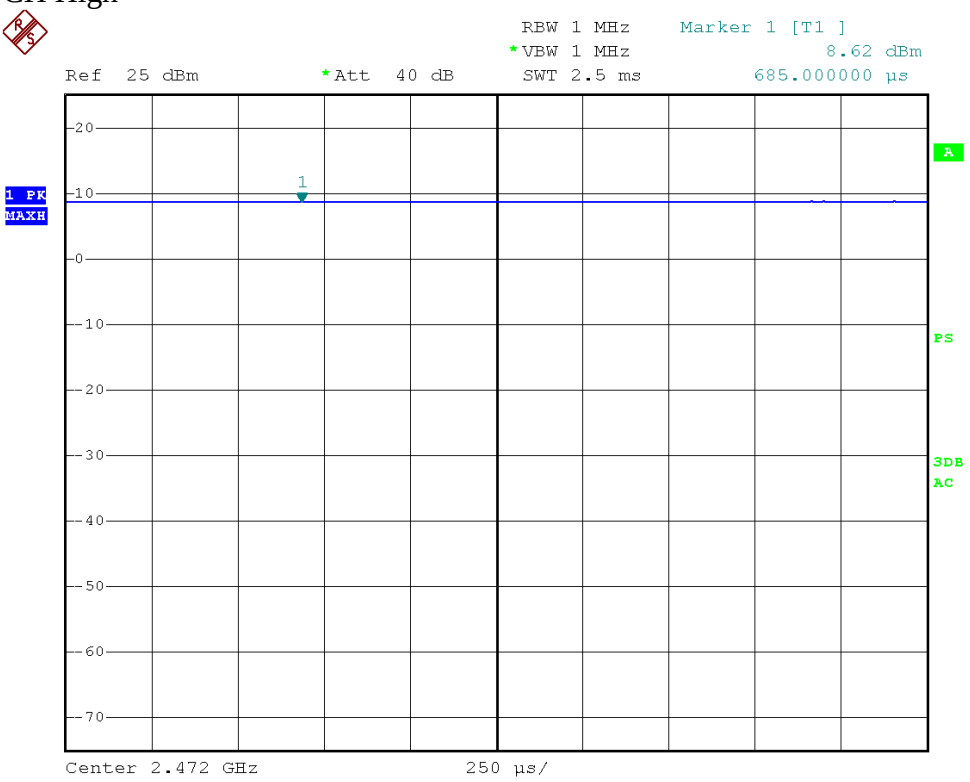
CH Low



CH Mid

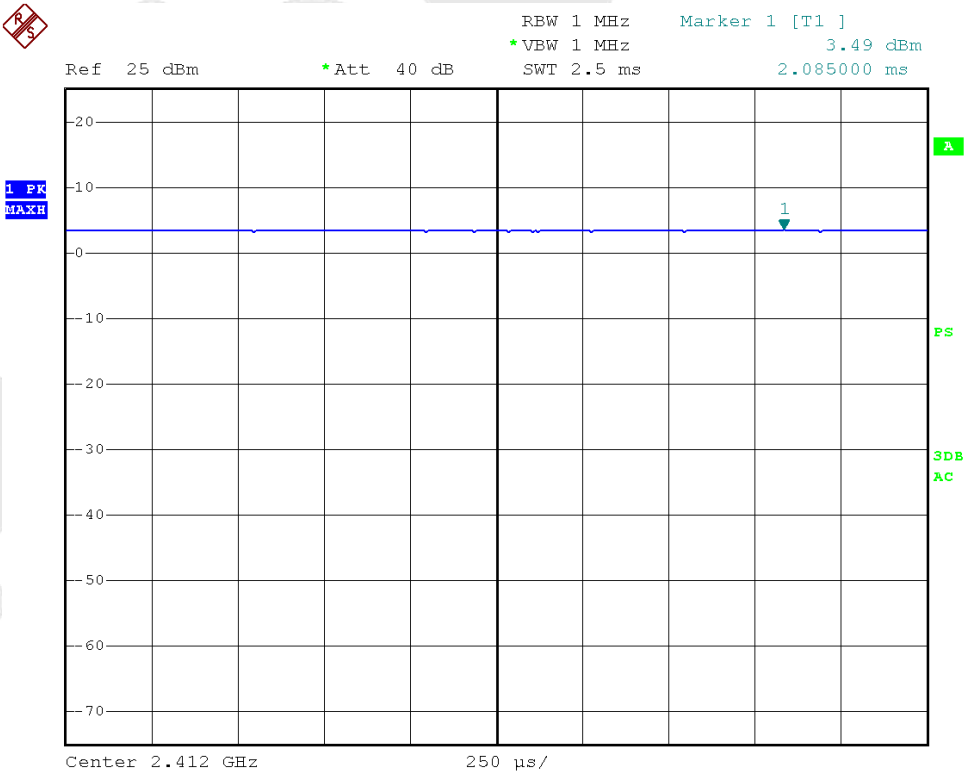


CH High

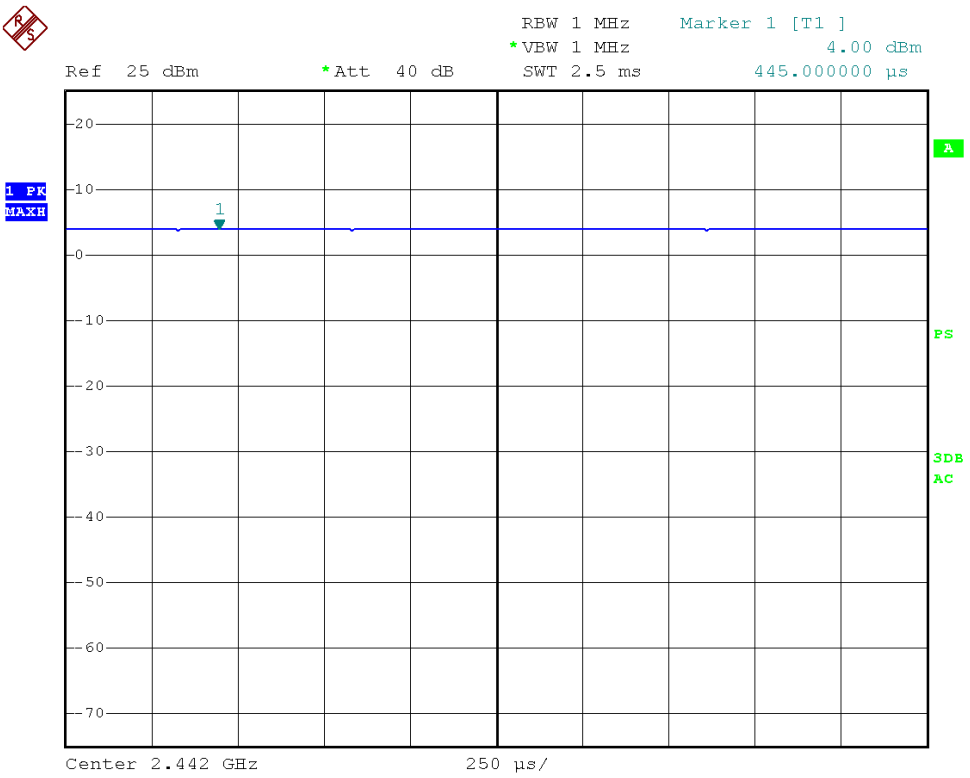


802.11g

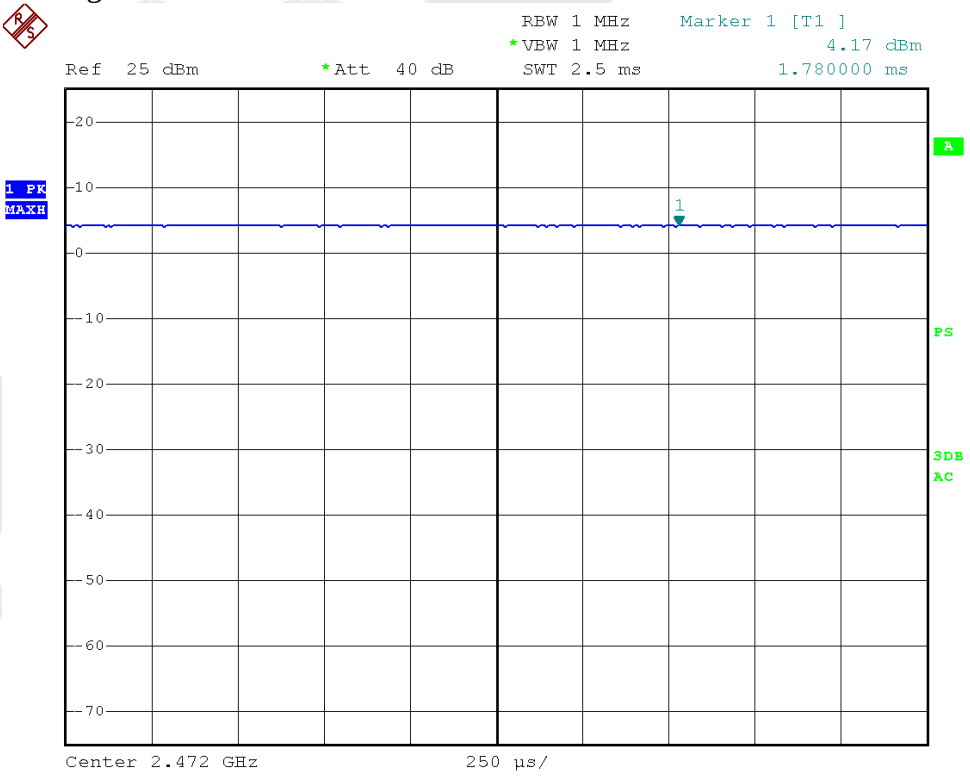
CH Low



CH Mid

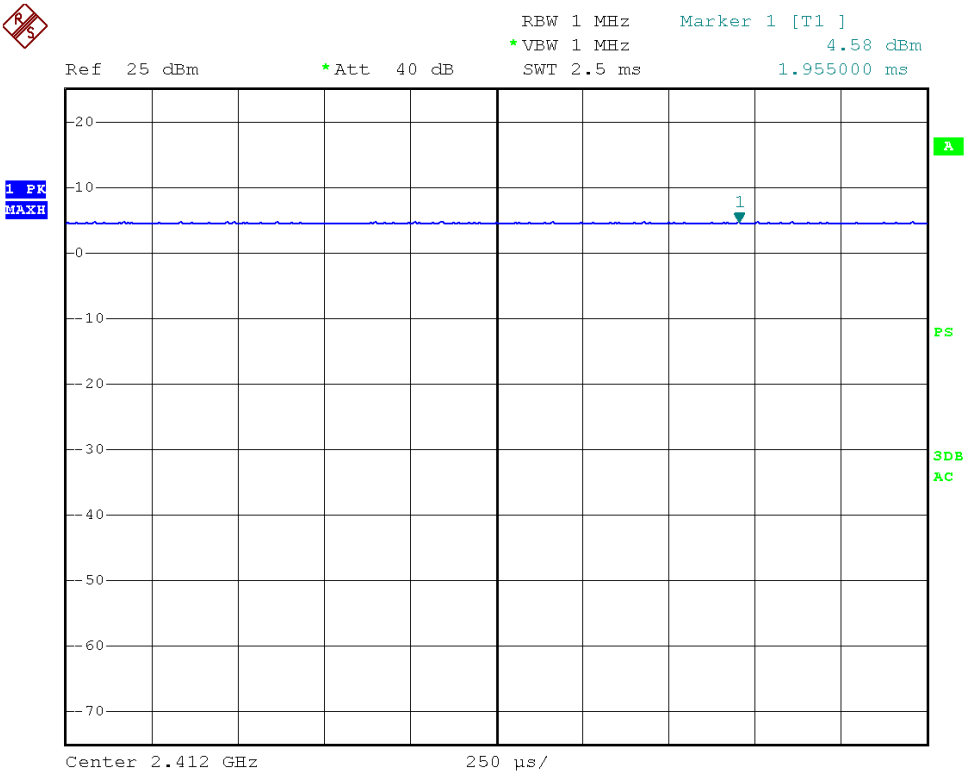


CH High

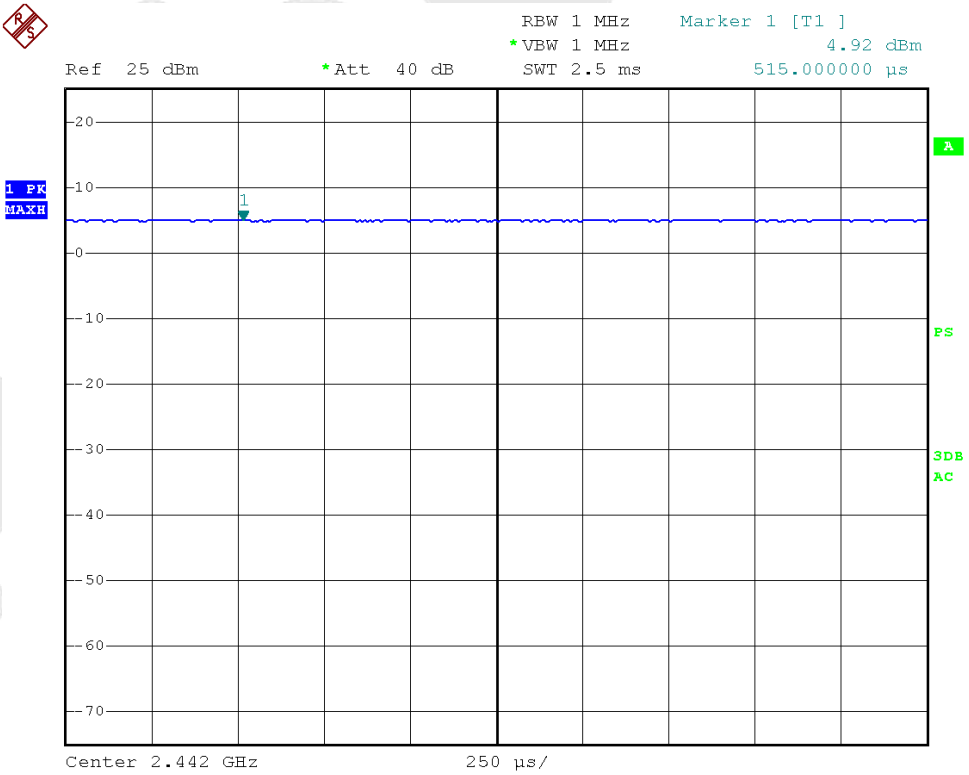


802.11n (HT20)

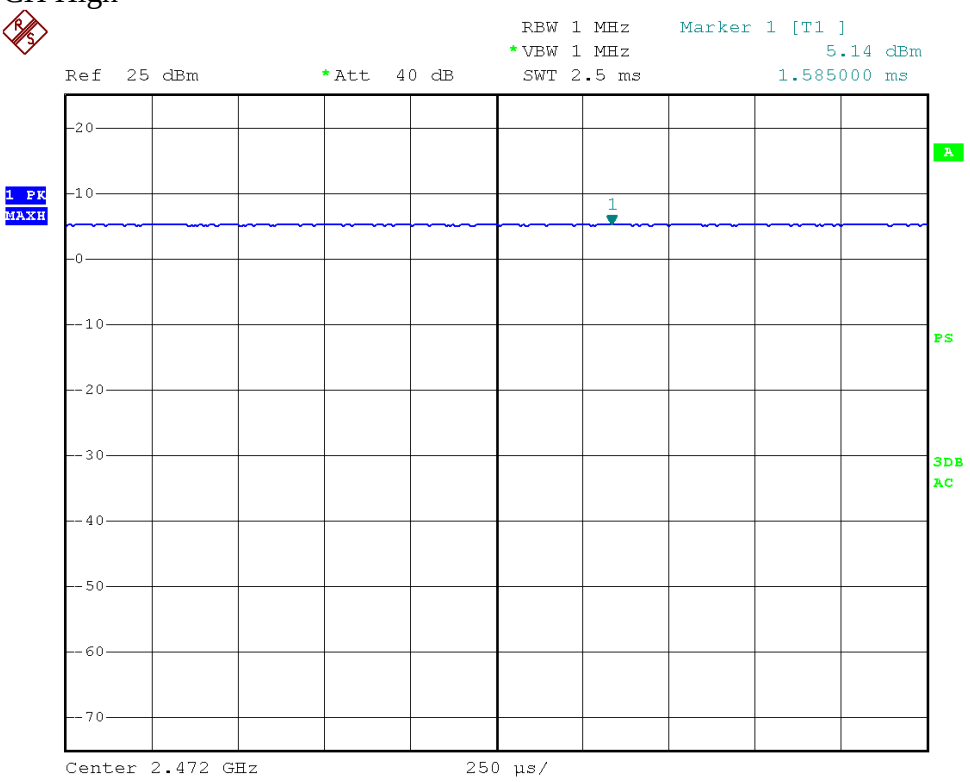
CH Low



CH Mid

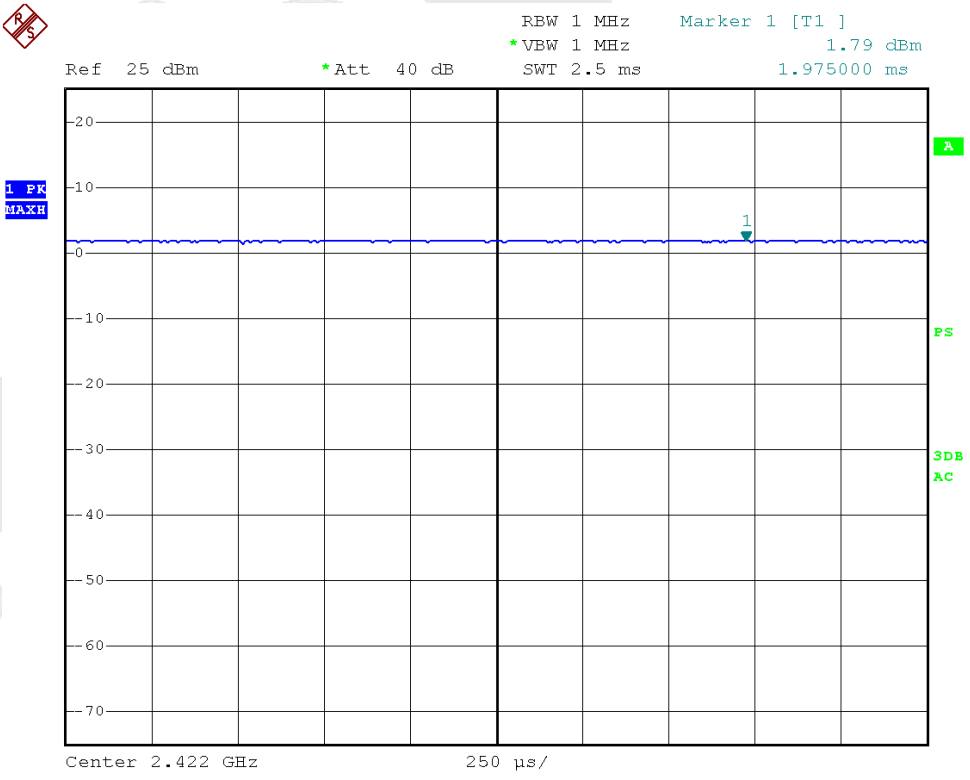


CH High

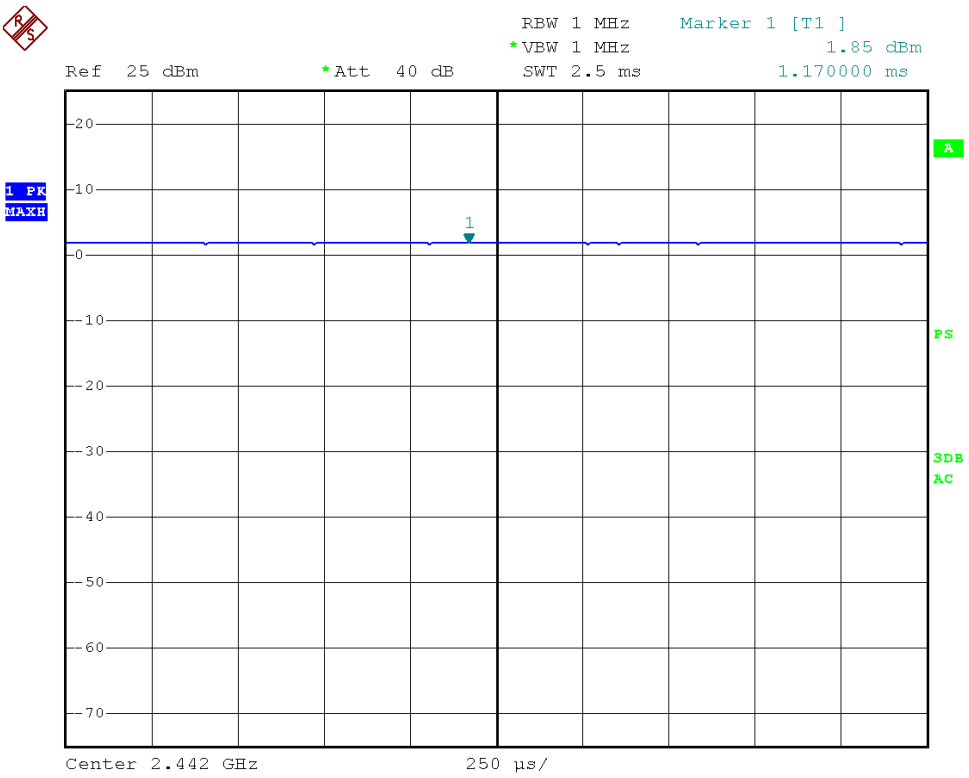


802.11n (HT40)

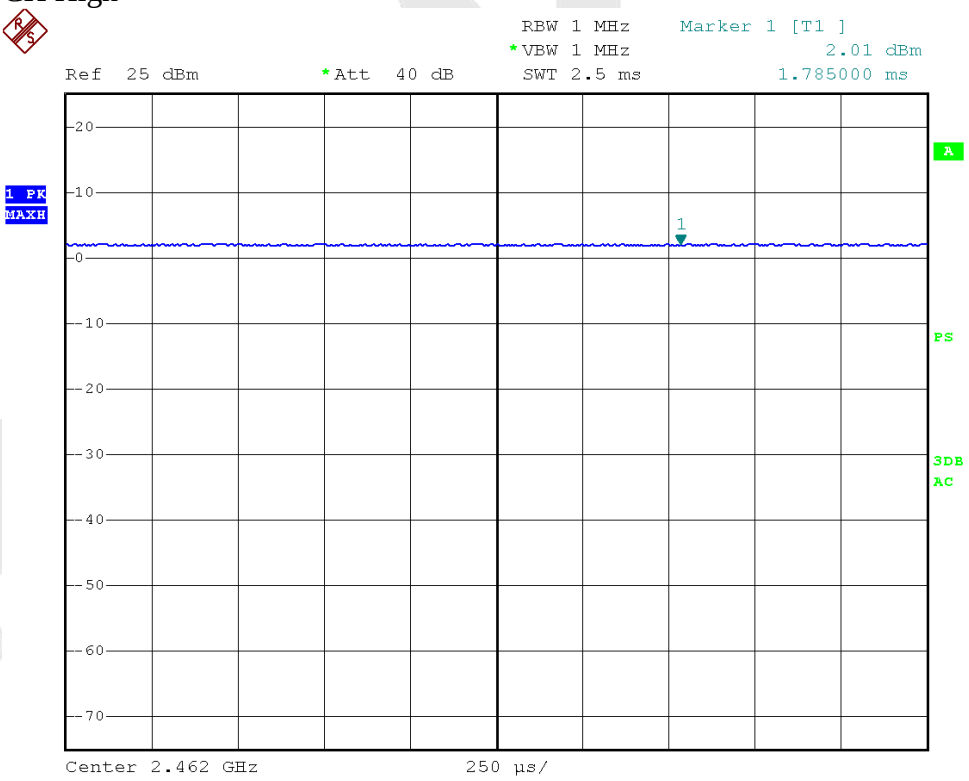
CH Low



CH Mid



CH High



8. LIMITATION OF COLLATERAL EMISSIONS OF RECEIVER TEST

8.1. Test Equipment

Same as 3.1 Frequency tolerance measurement.

8.2. Test Configuration

Same as 3.2 Frequency tolerance measurement.

8.3. Test Results

Scanning Bandwidth: 30~ 1000MHz, 1000~ 12500MHz.

802.11b

Frequency(MHz)	Reading(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	401.0000	-64.04	30~ 1000MHz	≤ -54dBm
	7239.0000	-52.51	1000~ 12500MHz	≤ -47dBm
2442.000	401.0000	-64.07	30~ 1000MHz	≤ -54dBm
	7325.0000	-57.72	1000~ 12500MHz	≤ -47dBm
2472.000	401.0000	-64.04	30~ 1000MHz	≤ -54dBm
	7411.0000	-63.34	1000~ 12500MHz	≤ -47dBm

802.11g

Frequency(MHz)	Reading(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	401.0000	-64.47	30~ 1000MHz	≤ -54dBm
	7239.0000	-60.79	1000~ 12500MHz	≤ -47dBm
2442.000	401.0000	-63.53	30~ 1000MHz	≤ -54dBm
	7325.0000	-65.68	1000~ 12500MHz	≤ -47dBm
2472.000	401.0000	-63.81	30~ 1000MHz	≤ -54dBm
	7325.0000	-69.17	1000~ 12500MHz	≤ -47dBm

802.11n (HT20)

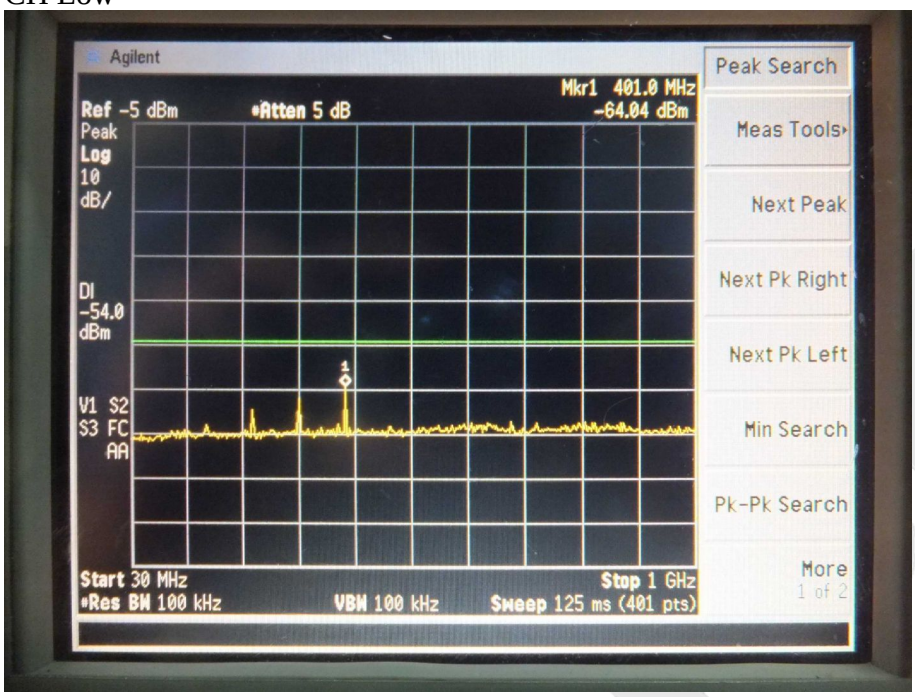
Frequency(MHz)	Reading(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2412.000	401.0000	-63.09	30~ 1000MHz	≤ -54dBm
	7210.0000	-50.53	1000~ 12500MHz	≤ -47dBm
2442.000	401.0000	-63.93	30~ 1000MHz	≤ -54dBm
	7325.0000	-51.63	1000~ 12500MHz	≤ -47dBm
2472.000	401.0000	-64.12	30~ 1000MHz	≤ -54dBm
	9884.0000	-55.26	1000~ 12500MHz	≤ -47dBm

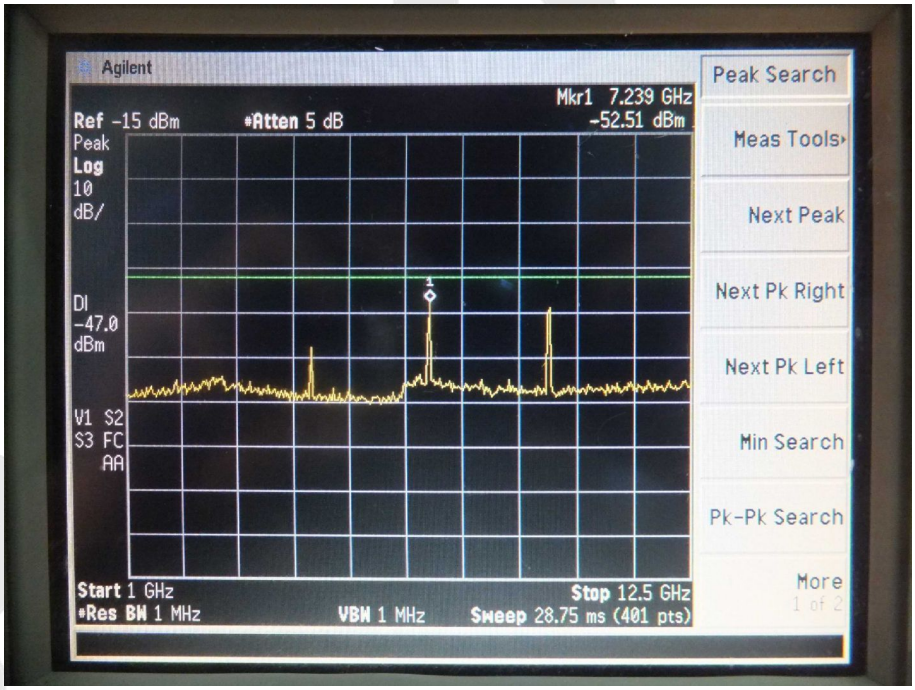
802.11n (HT40)

Frequency(MHz)	Reading(MHz)	Reading(dBm)	Scanning Bandwidth	Limit
2422.000	401.0000	-63.51	30~ 1000MHz	≤ -54dBm
	7268.0000	-57.54	1000~ 12500MHz	≤ -47dBm
2442.000	401.0000	-63.51	30~ 1000MHz	≤ -54dBm
	7325.0000	-59.69	1000~ 12500MHz	≤ -47dBm
2462.000	401.0000	-63.64	30~ 1000MHz	≤ -54dBm
	7354.0000	-64.64	1000~ 12500MHz	≤ -47dBm

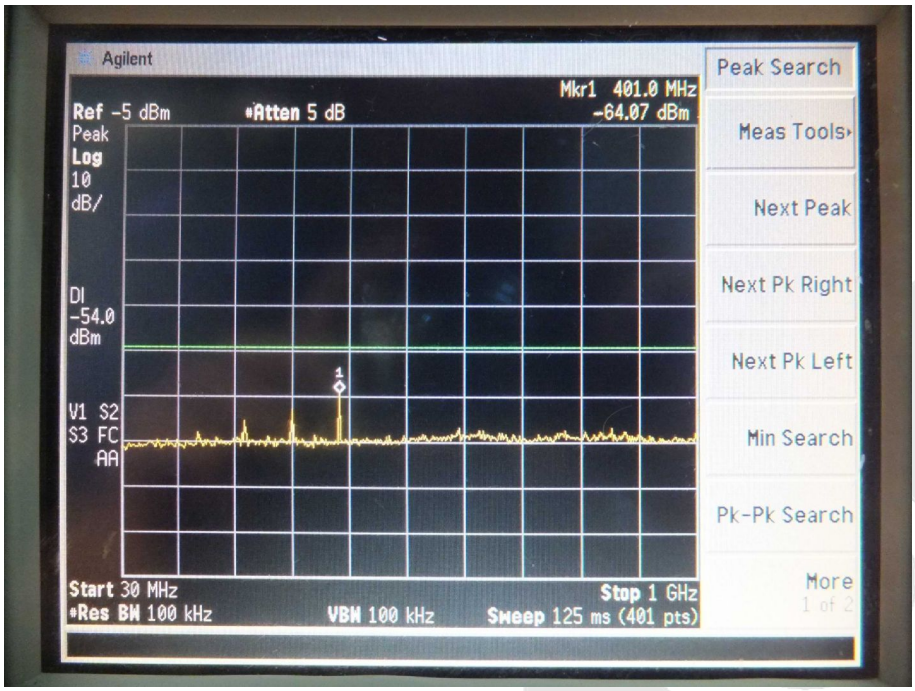
802.11b

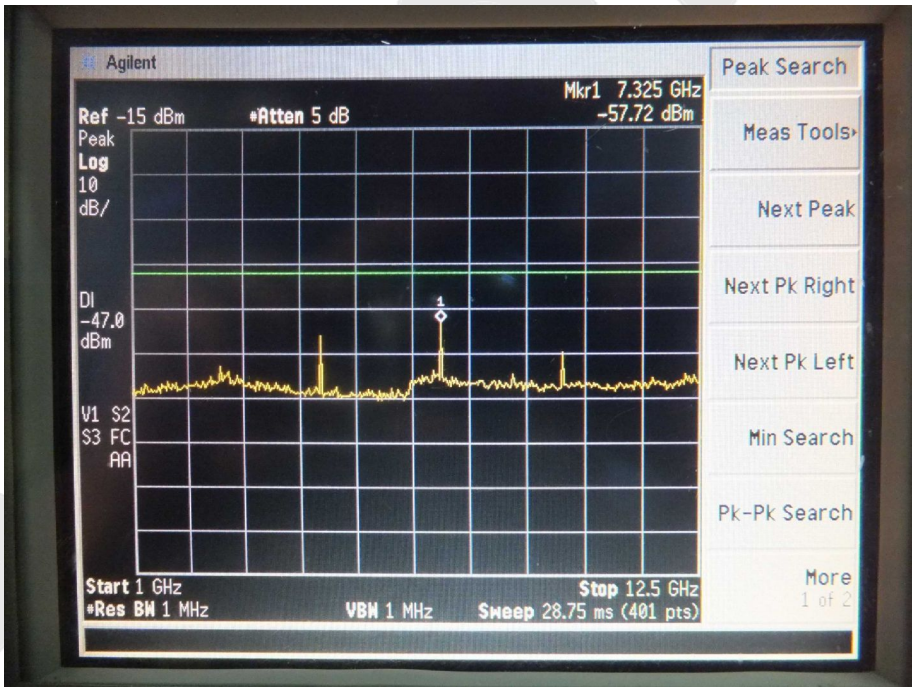
CH Low



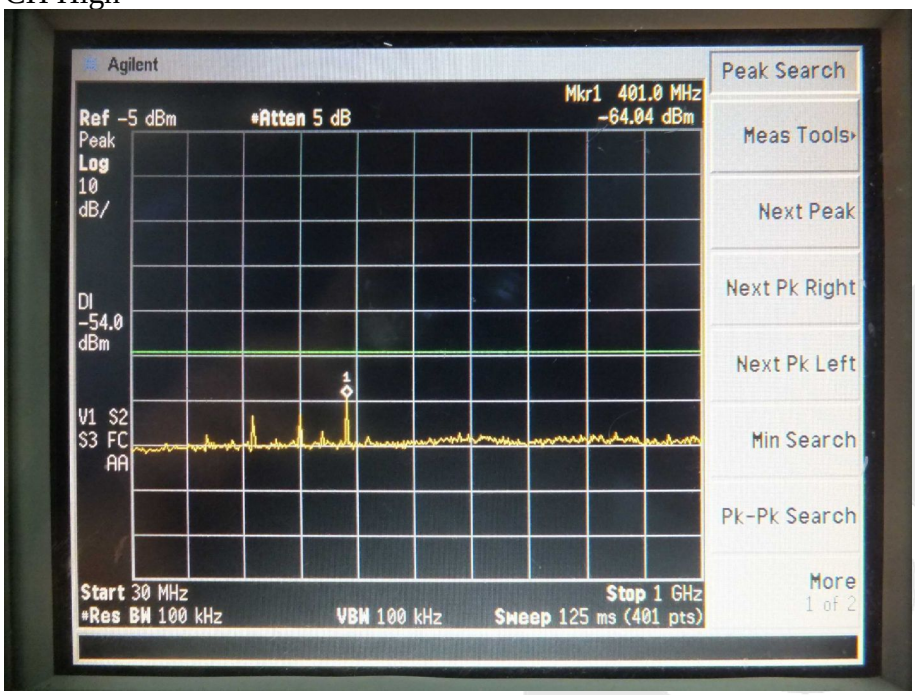


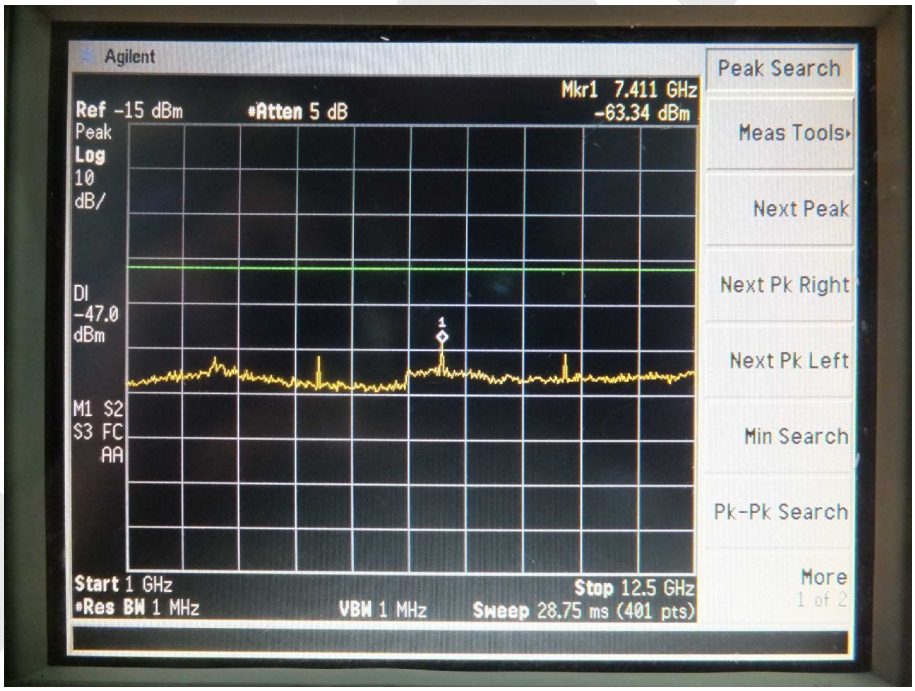
CH Mid


Agilent
Mkr1 401.0 MHz
Ref -5 dBm
#Atten 5 dB
-64.07 dBm
Peak
Log
10
dB/
DI
-54.0
dBm
V1 S2
S3 FC
AA
Start 30 MHz
#Res BW 100 kHz
VBW 100 kHz
Stop 1 GHz
Sweep 125 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr1 7.325 GHz
Ref -15 dBm
#Atten 5 dB
-57.72 dBm
Peak
Log
10
dB/
DI
-47.0
dBm
V1 S2
S3 FC
AA
Start 1 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 28.75 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

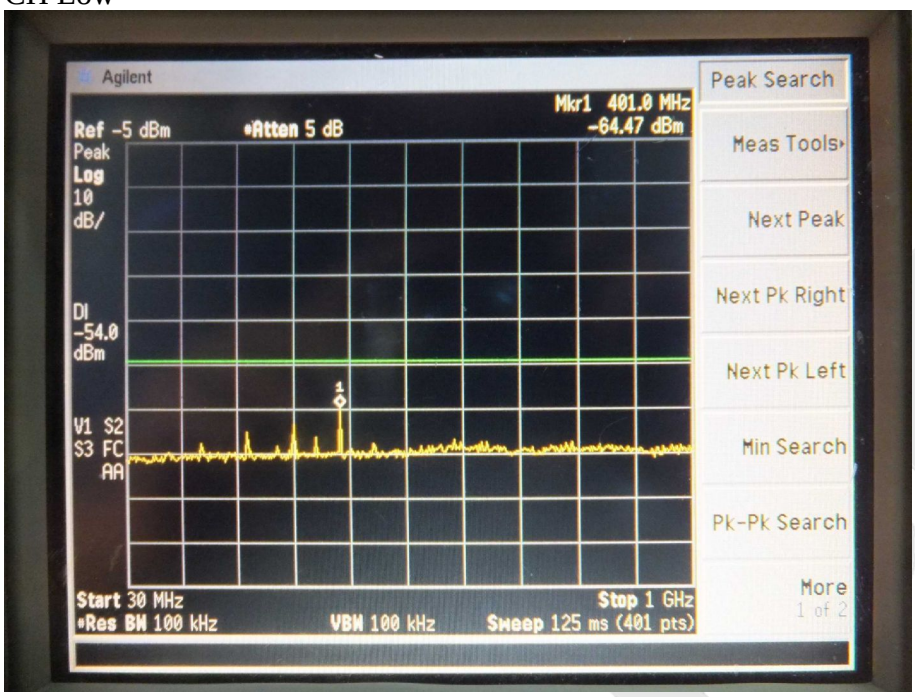
CH High

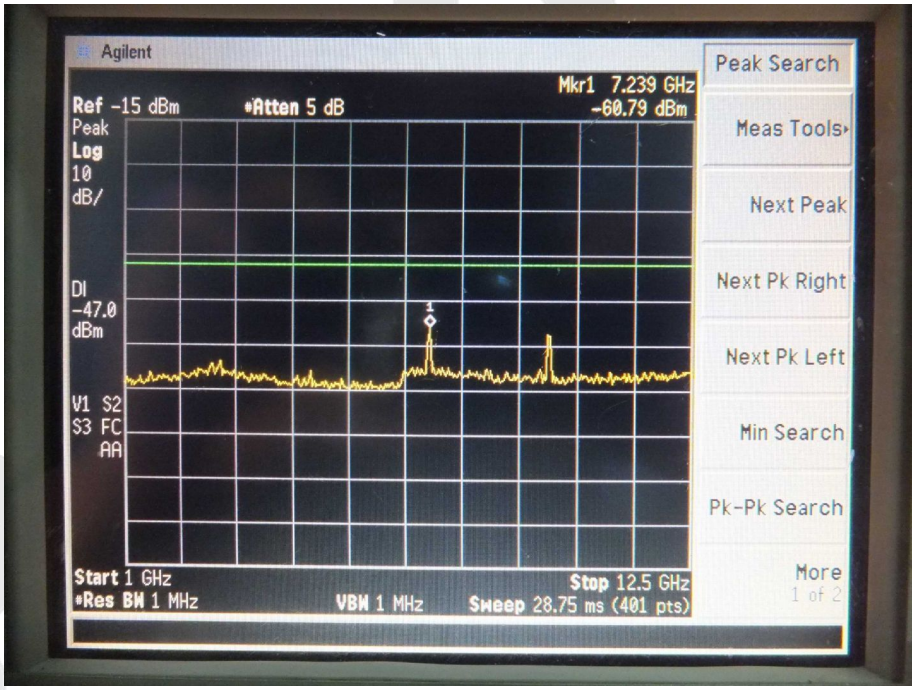

Agilent
Mkr1 401.0 MHz
-64.04 dBm
Ref -5 dBm
#Atten 5 dB
Peak
Log
10
dB/
DI
-54.0
dBm
V1 S2
S3 FC
AA
Start 30 MHz
#Res BW 100 kHz
VBW 100 kHz
Stop 1 GHz
Sweep 125 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr1 7.411 GHz
-63.34 dBm
Ref -15 dBm
#Atten 5 dB
Peak
Log
10
dB/
DI
-47.0
dBm
M1 S2
S3 FC
AA
Start 1 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 28.75 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

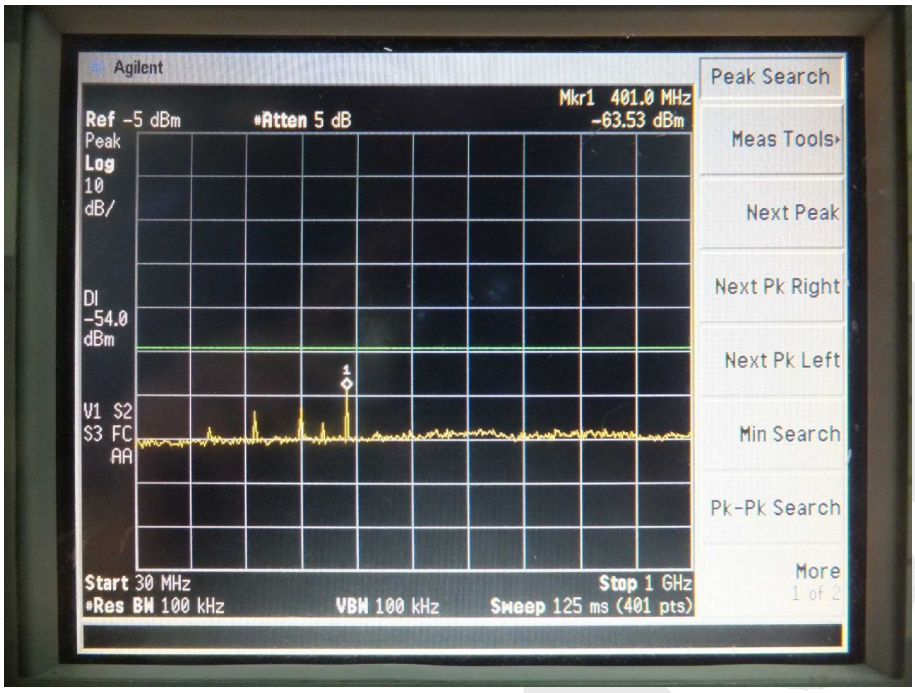
802.11g

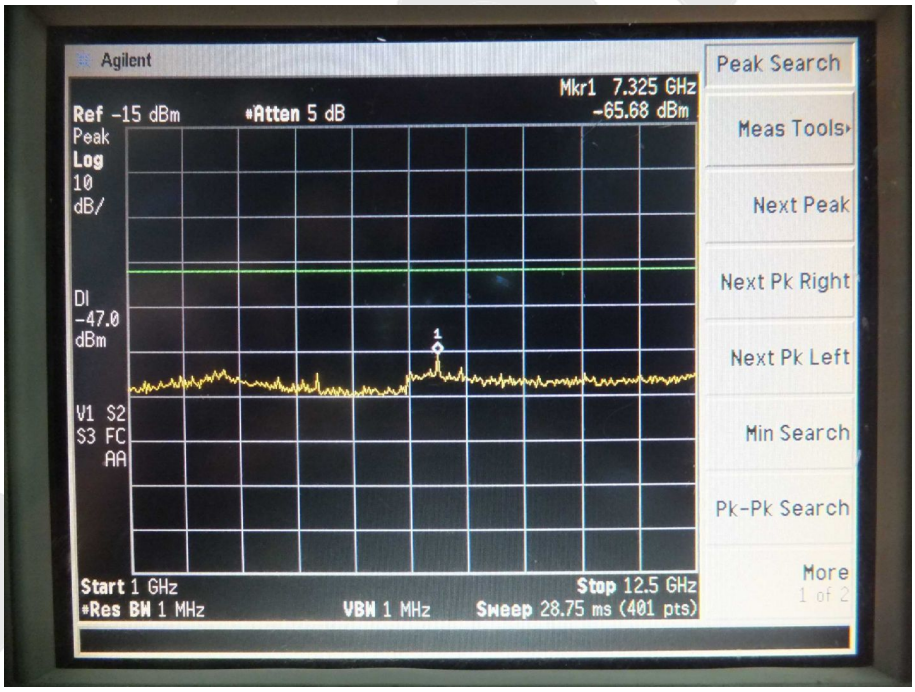
CH Low



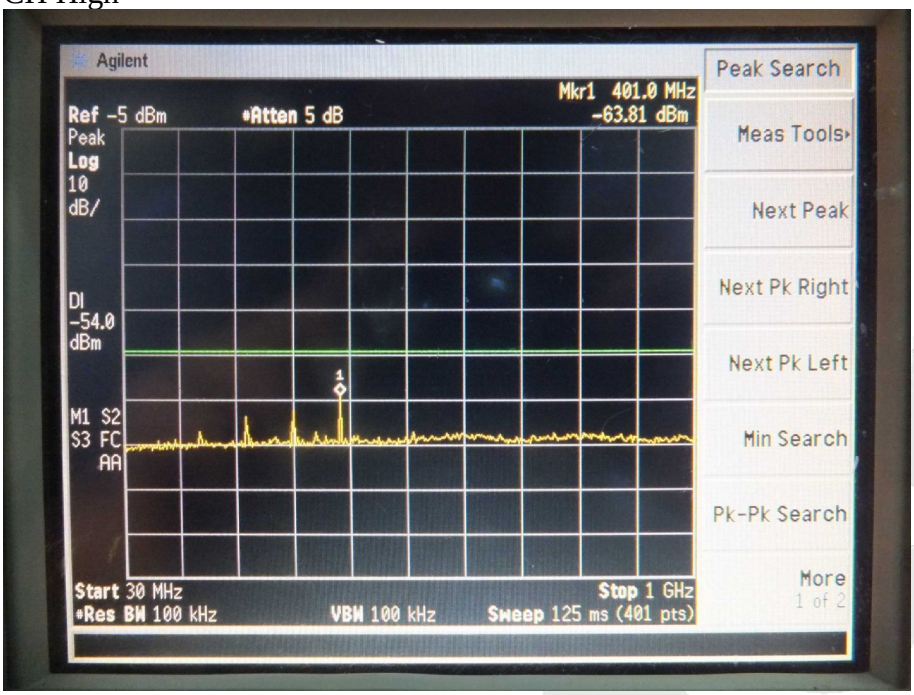


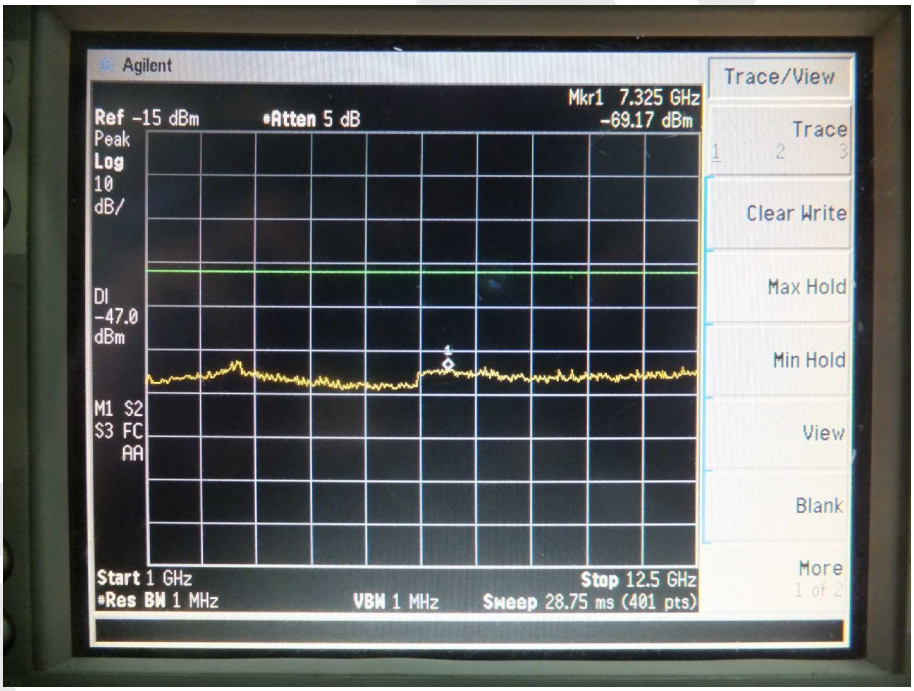
CH Mid


Agilent
Mkr1 401.0 MHz
-63.53 dBm
Ref -5 dBm
#Atten 5 dB
Peak
Log
10
dB/
Dl
-54.0
dBm
V1 S2
S3 FC
AA
Start 30 MHz
#Res BW 100 kHz
VBW 100 kHz
Stop 1 GHz
Sweep 125 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr1 7.325 GHz
-65.68 dBm
Ref -15 dBm
#Atten 5 dB
Peak
Log
10
dB/
Dl
-47.0
dBm
V1 S2
S3 FC
AA
Start 1 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 28.75 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

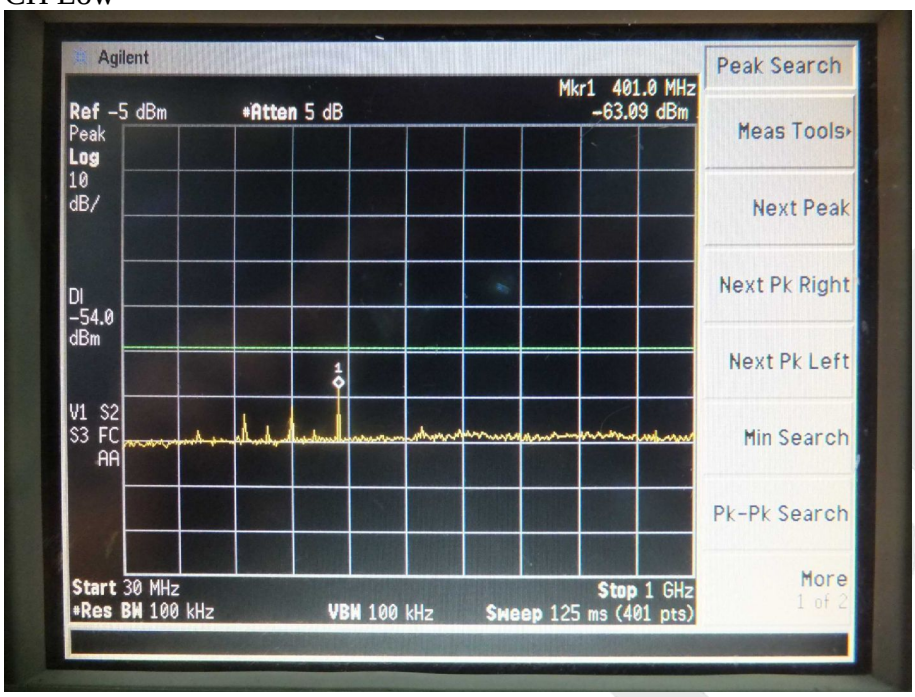
CH High

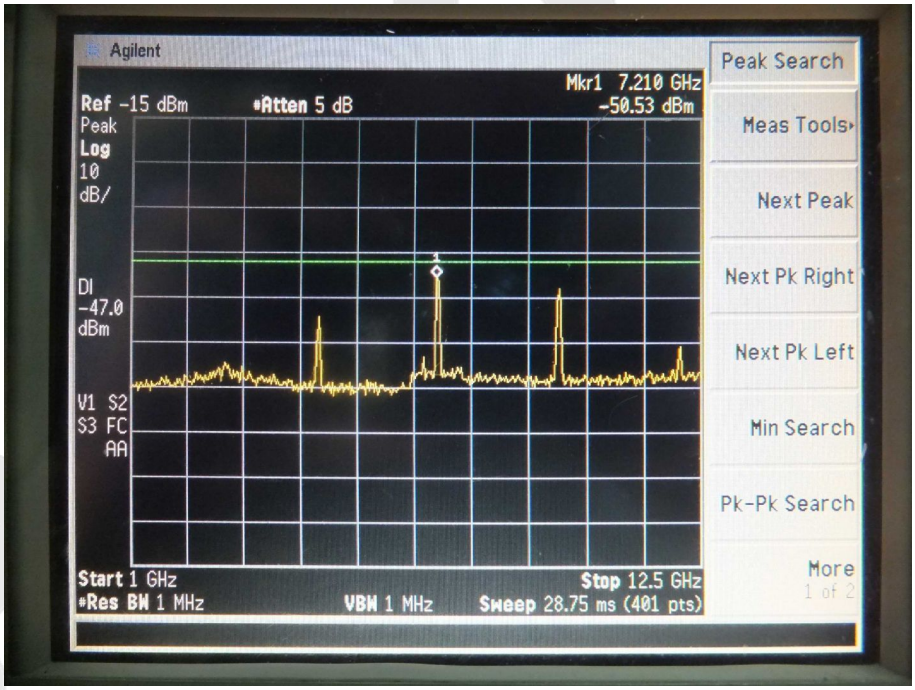

Agilent
Mkr1 401.0 MHz
-63.81 dBm
Ref -5 dBm
#Atten 5 dB
Peak
Log
10
dB/
Dl
-54.0
dBm
M1 S2
S3 FC
AA
Start 30 MHz
#Res BW 100 kHz
VBW 100 kHz
Stop 1 GHz
Sweep 125 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr1 7.325 GHz
-69.17 dBm
Ref -15 dBm
#Atten 5 dB
Peak
Log
10
dB/
Dl
-47.0
dBm
M1 S2
S3 FC
AA
Start 1 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 28.75 ms (401 pts)
Trace/View
Trace
1 2 3
Clear Write
Max Hold
Min Hold
View
Blank
More
1 of 2

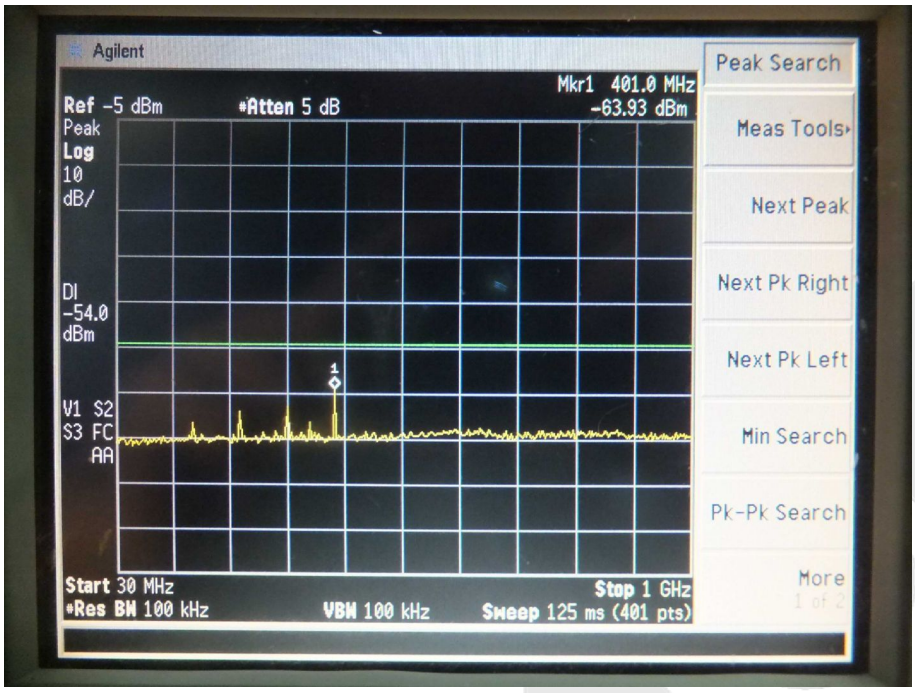
802.11n (HT20)

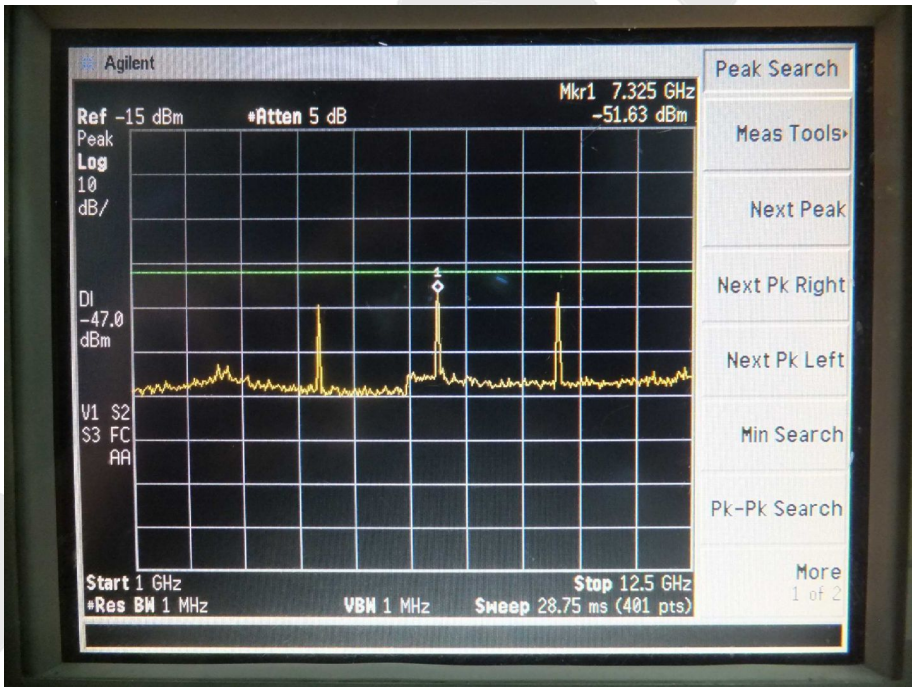
CH Low



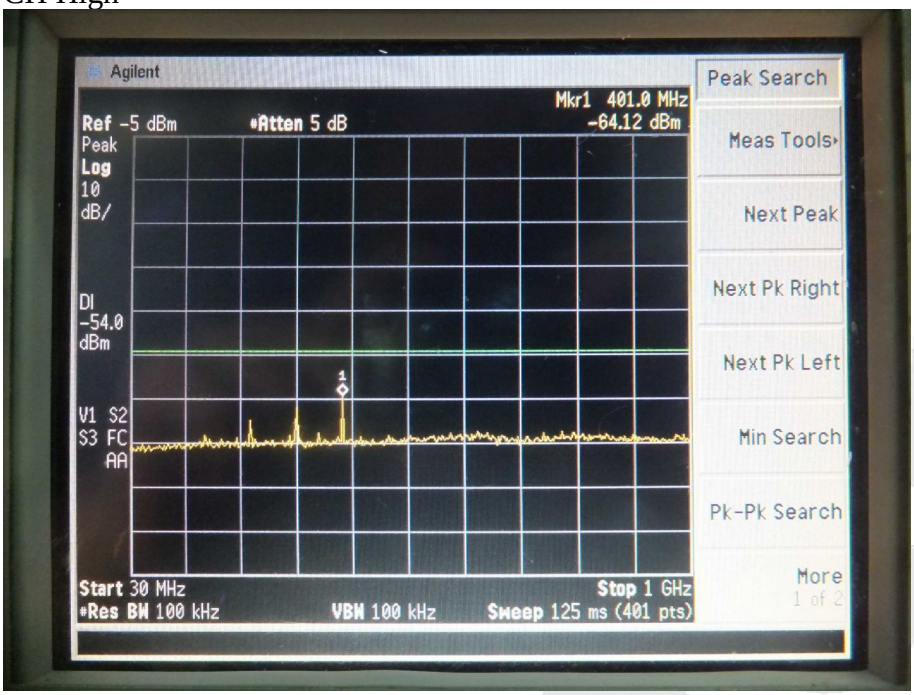


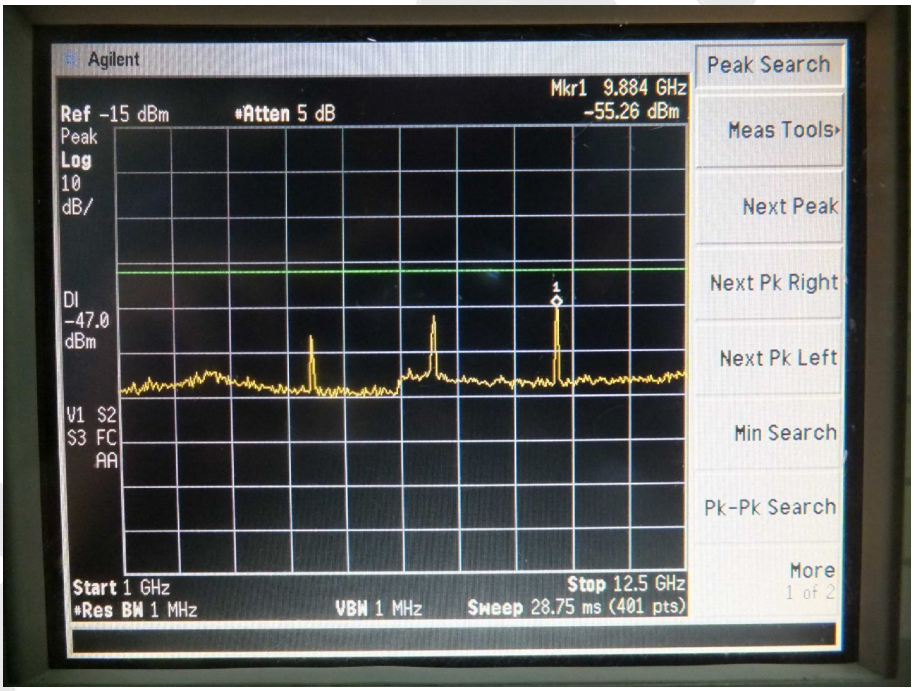
CH Mid


Agilent
Mkr1 401.0 MHz
Ref -5 dBm
#Atten 5 dB
-63.93 dBm
Peak
Log
10
dB/
Dl
-54.0
dBm
V1 S2
S3 FC
AA
Start 30 MHz
#Res BW 100 kHz
VBW 100 kHz
Stop 1 GHz
Sweep 125 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr1 7.325 GHz
Ref -15 dBm
#Atten 5 dB
-51.63 dBm
Peak
Log
10
dB/
Dl
-47.0
dBm
V1 S2
S3 FC
AA
Start 1 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 28.75 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

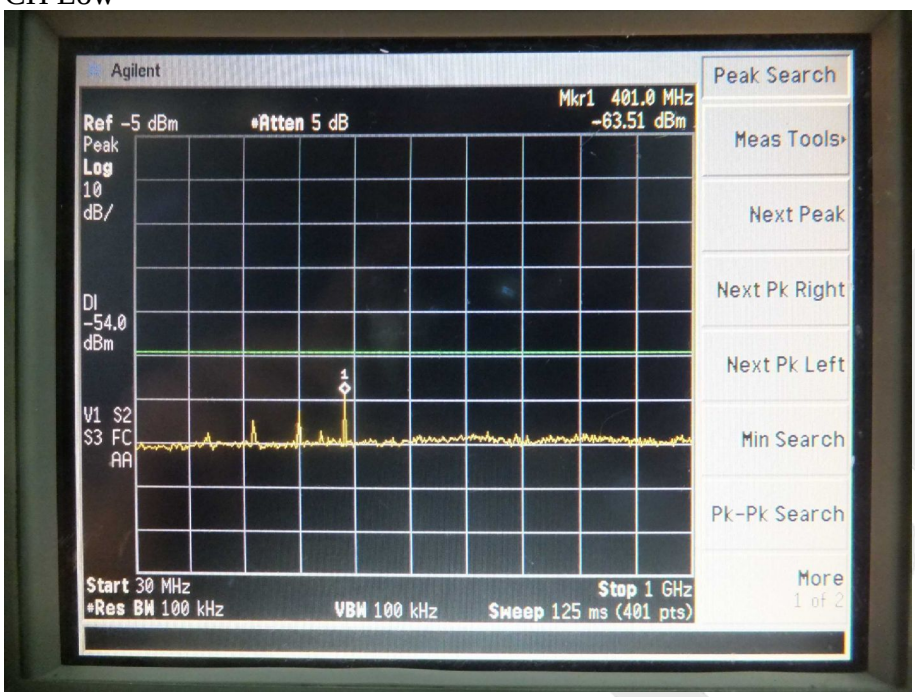
CH High

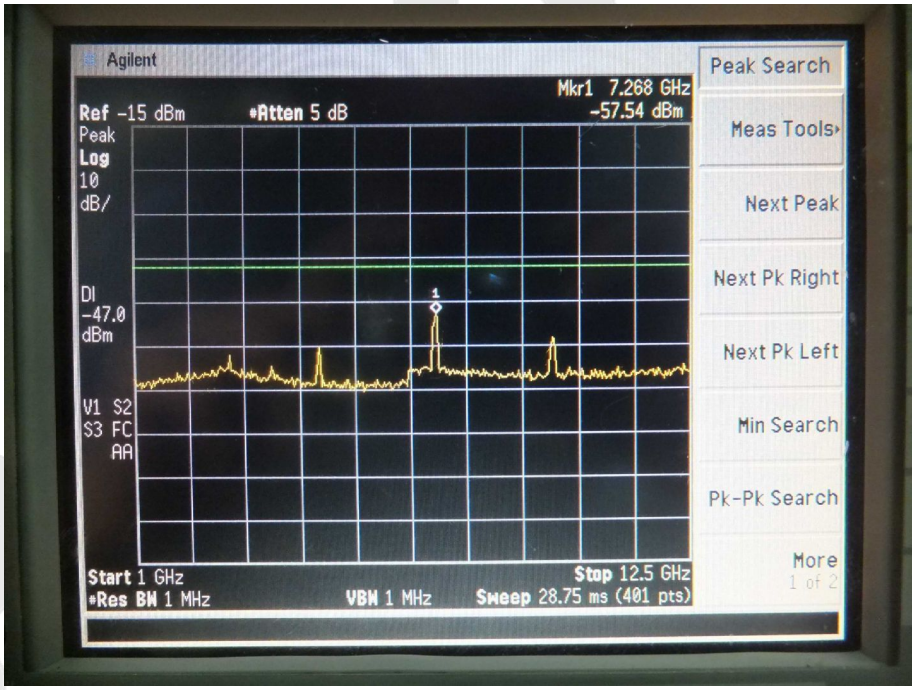

Agilent
Mkr1 401.0 MHz
-64.12 dBm
Ref -5 dBm
#Atten 5 dB
Peak
Log
10
dB/
Dl
-54.0
dBm
V1 S2
S3 FC
AA
Start 30 MHz
#Res BW 100 kHz
VBW 100 kHz
Stop 1 GHz
Sweep 125 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr1 9.884 GHz
-55.26 dBm
Ref -15 dBm
#Atten 5 dB
Peak
Log
10
dB/
Dl
-47.0
dBm
V1 S2
S3 FC
AA
Start 1 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 28.75 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

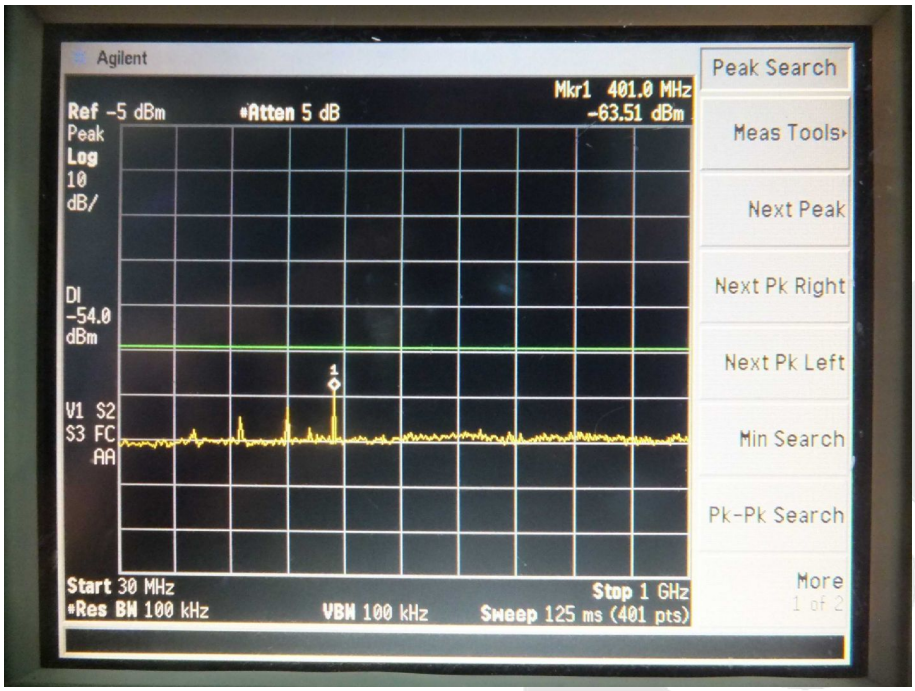
802.11n (HT40)

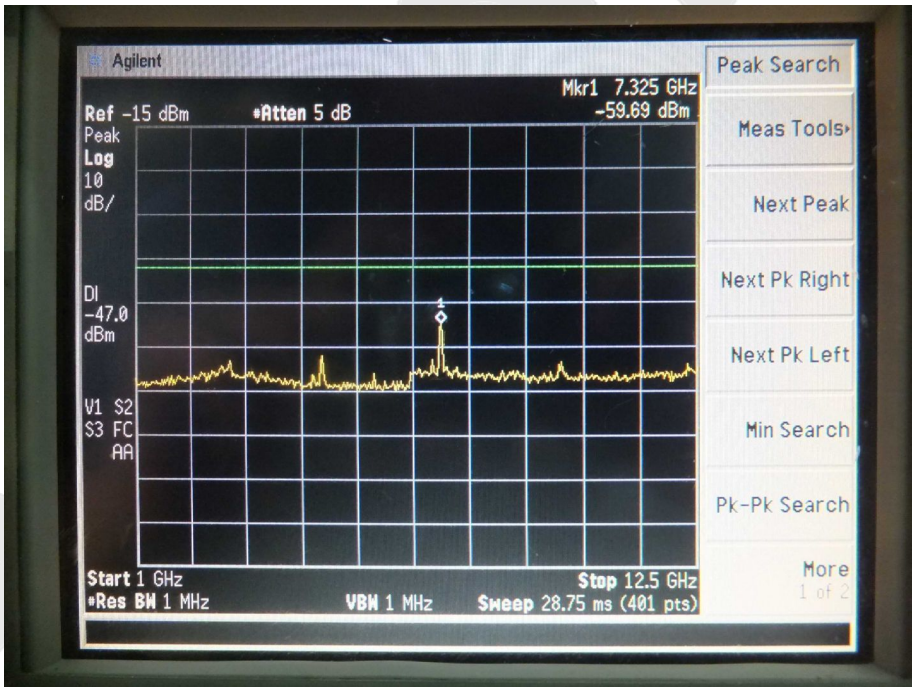
CH Low



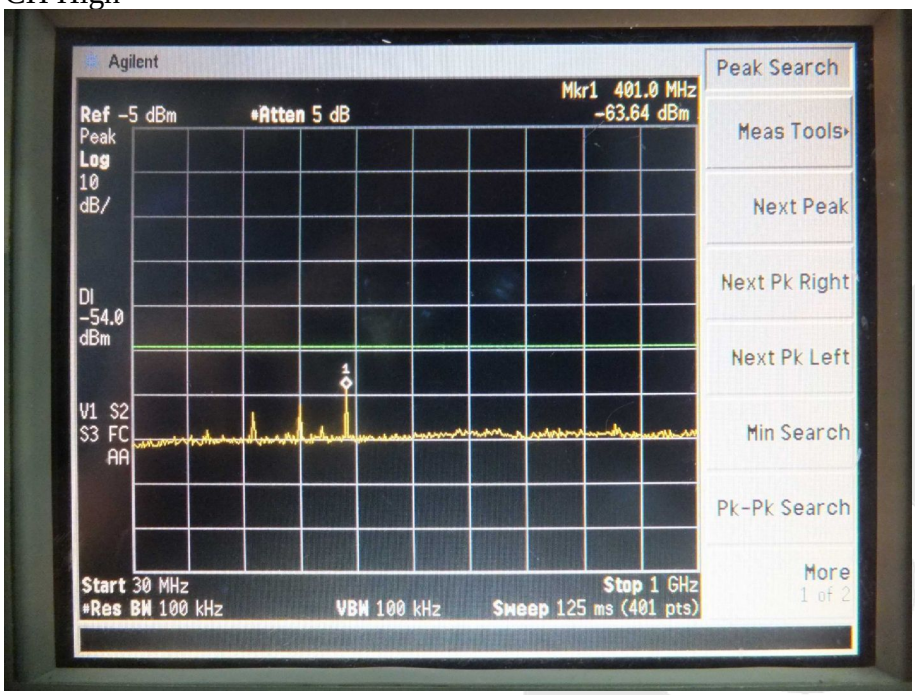


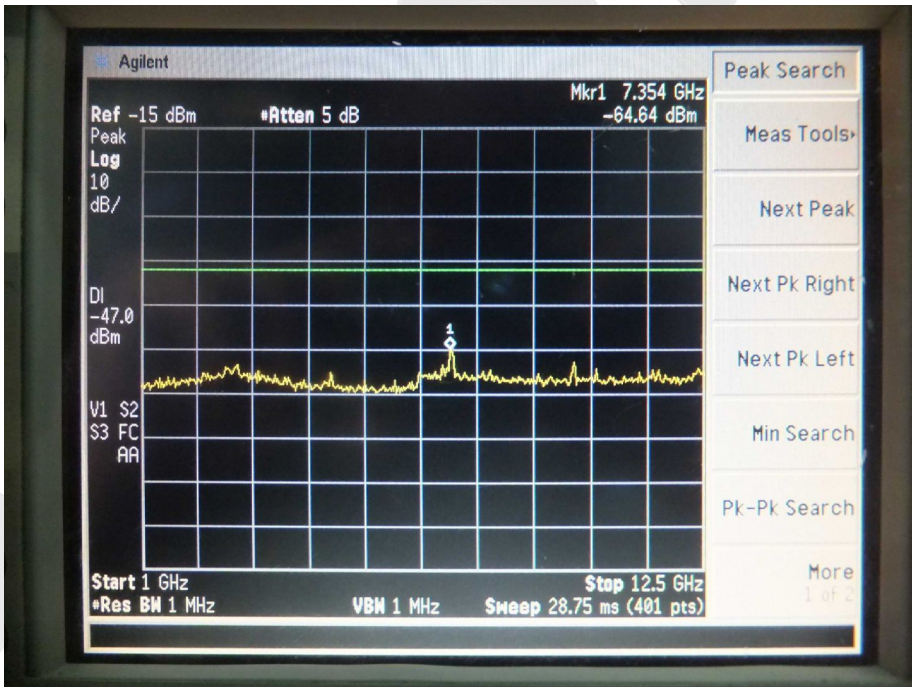
CH Mid


Agilent
Peak Search
Mkr1 401.0 MHz
Ref -5 dBm
#Atten 5 dB
-63.51 dBm
Peak
Log
10
dB/
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2
Dl
-54.0
dBm
V1 S2
S3 FC
AA
Start 30 MHz
#Res BW 100 kHz
VBW 100 kHz
Stop 1 GHz
Sweep 125 ms (401 pts)

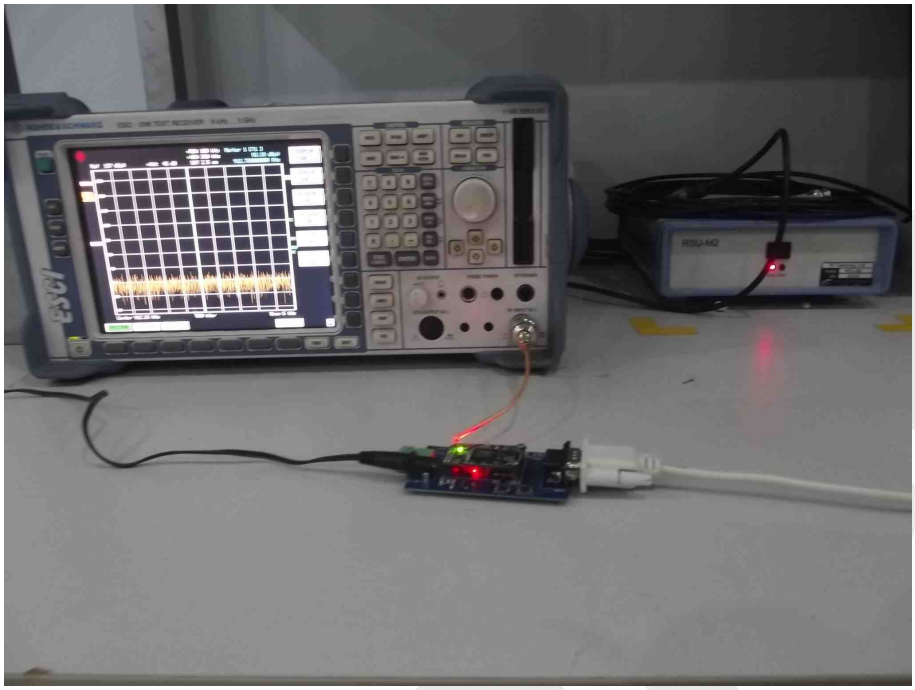

Agilent
Peak Search
Mkr1 7.325 GHz
Ref -15 dBm
#Atten 5 dB
-59.69 dBm
Peak
Log
10
dB/
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2
Dl
-47.0
dBm
V1 S2
S3 FC
AA
Start 1 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 28.75 ms (401 pts)

CH High


Agilent
Mkr1 401.0 MHz
-63.64 dBm
Ref -5 dBm
#Atten 5 dB
Peak
Log
10
dB/
Dl
-54.0
dBm
V1 S2
S3 FC
AA
Start 30 MHz
#Res BW 100 kHz
VBW 100 kHz
Stop 1 GHz
Sweep 125 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr1 7.354 GHz
-64.64 dBm
Ref -15 dBm
#Atten 5 dB
Peak
Log
10
dB/
Dl
-47.0
dBm
V1 S2
S3 FC
AA
Start 1 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 12.5 GHz
Sweep 28.75 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

9. PHOTOS OF TEST SETUP



APPENDIX I (External Photos)

Figure 1
The EUT-Front View

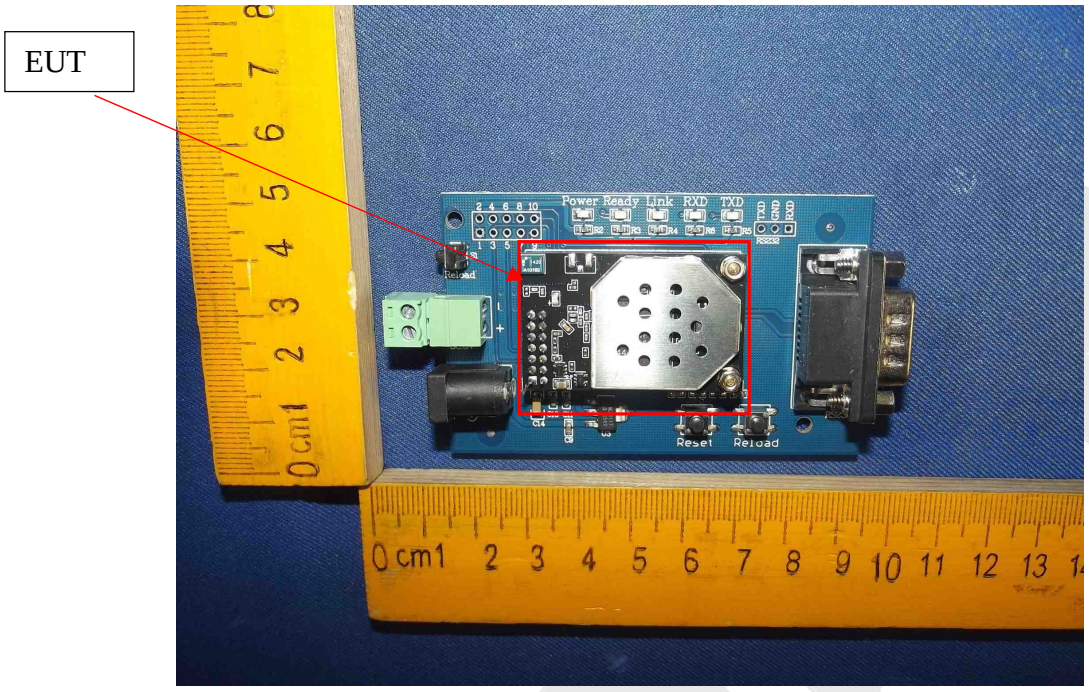


Figure 2
The EUT-Back View

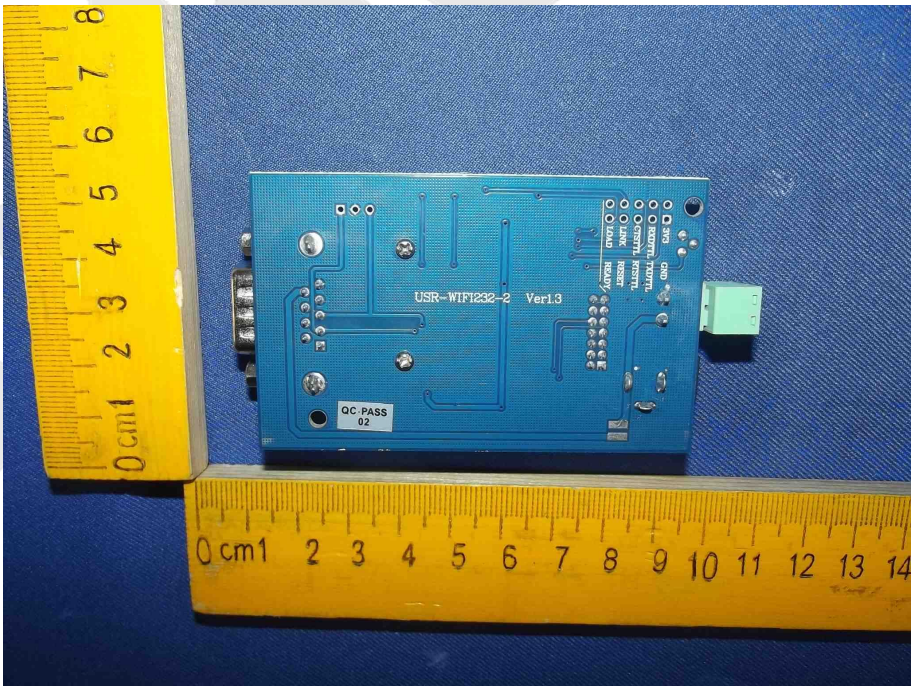
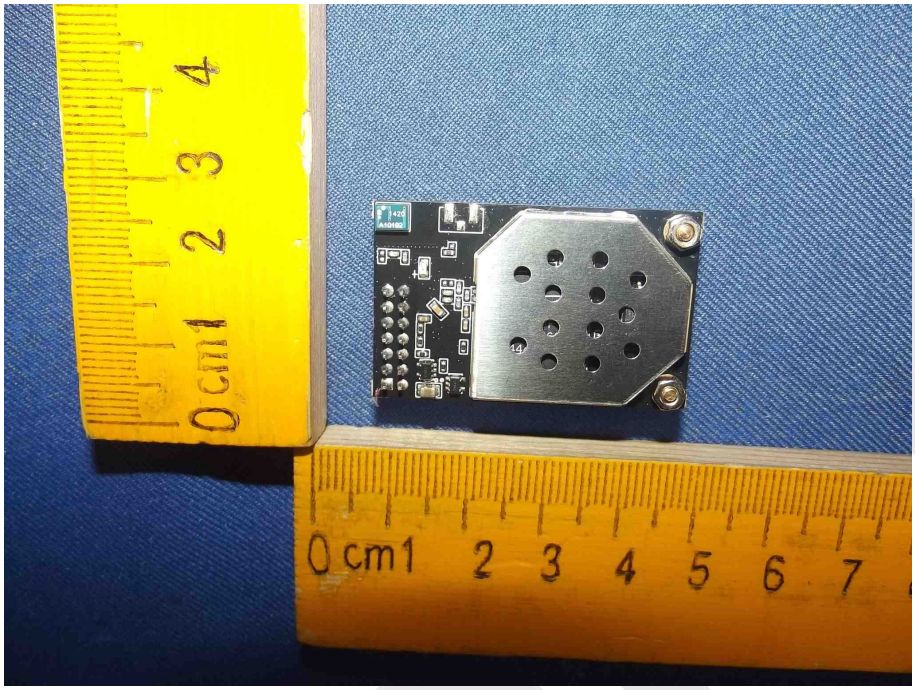


Figure 3
The EUT-Front View



APPENDIX Ⅱ(Internal Photos)

Figure 4
The EUT-Inside View

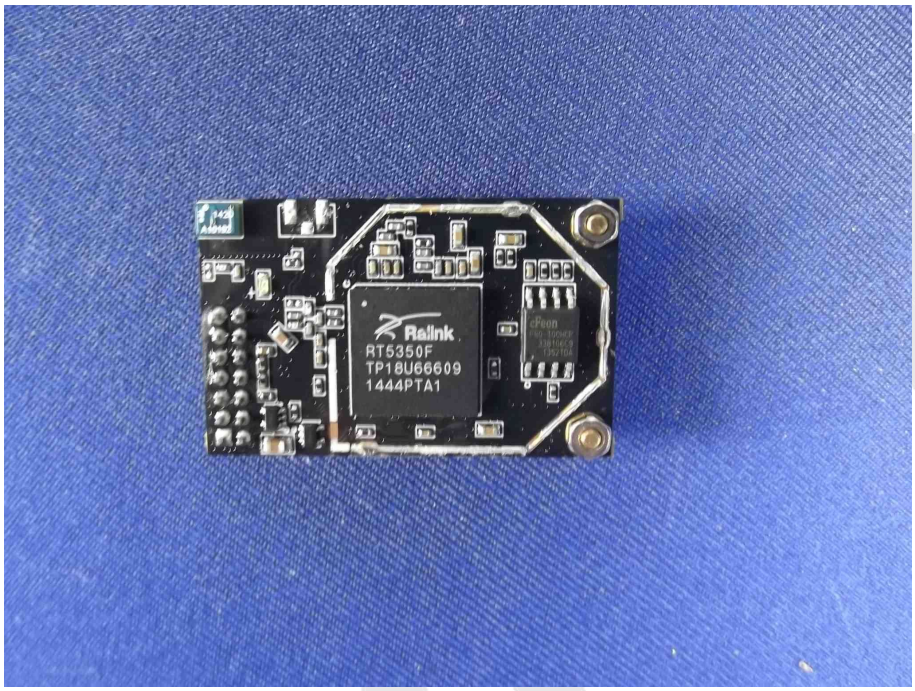


Figure 5
The EUT-Inside View