

FCC TEST REPORT

For

Wearable Data Terminal

Model Number: U2

FCC ID: SWSU2

Report Number : WT178005937

Test Laboratory : Shenzhen Academy of Metrology and Quality
Inspection
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TEST REPORT DECLARATION

Applicant : Shenzhen Urovo Technology Co., Ltd
Address : A7, Zondy Cyber Building, Nanshan, Shenzhen, China
Manufacturer : Shenzhen Urovo Technology Co., Ltd
Address : A7, Zondy Cyber Building, Nanshan, Shenzhen, China
EUT Description : Wearable Data Terminal
Model No : U2
Trade mark : UROVO
Serial Number : /
FCC ID : SWSU2

Test Standards:

FCC Part 15 15.207, 15.209, 15.247(2016)

The EUT described above is tested by Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory to determine the maximum emissions from the EUT. Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory is assumed full responsibility for the accuracy of the test results. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with FCC Rules Part 15.207, 15.209, 15.247 .

The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.

Project Engineer:	 _____ (Chen Silin 陈司林)	Date:	<u>Oct.27, 2017</u>
Checked by:	 _____ (Lin Yixiang 林奕翔)	Date:	<u>Oct.27, 2017</u>
Approved by:	 _____ (Lin Bin 林斌)	Date:	<u>Oct.27, 2017</u>

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1. TEST RESULTS SUMMARY

Table 1 Test Results Summary

Test Items	FCC Rules	Test Results
6dB DTS bandwidth measurement	15.247 (a) (2)	Pass
Maximum Peak Conducted Power	15.247 (b) (3)	Pass
Maximum Power Spectral Density Level	15.247 (3)	Pass
Conducted Bandedge and Spurious	15.247 (d)	Pass
Radiated Bandedge and Spurious	15.247 (d) 15.209 15.205	Pass
Conducted emission test for AC power port	15.207	Pass
Antenna Requirement	15.203	Pass

Remark: "N/A" means "Not applicable."

2. GENERAL INFORMATION

2.1. Report information

This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that SMQ approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that SMQ in any way guarantees the later performance of the product/equipment.

The sample/s mentioned in this report is/are supplied by Applicant, SMQ therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.

Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through SMQ, unless the applicant has authorized SMQ in writing to do so.

2.2. Laboratory Accreditation and Relationship to Customer

The testing report were performed by the Shenzhen Academy of Metrology and The testing report were performed by the Shenzhen Academy of Metrology and quality Inspection EMC Laboratory (Guangdong EMC compliance testing center), in their facilities located at NETC Building, No.4 Tongfa Rd., Xili, Nanshan, Shenzhen, China. At the time of testing, Laboratory is accredited by the following organizations:

China National Accreditation Service for Conformity Assessment (CNAS) accredits the Laboratory for conformance to FCC standards, EMC international standards and EN standards. The Registration Number is CNAS L0579.

The Laboratory is listed in the United States of American Federal Communications Commission (FCC), and the registration number is 582918.

The Laboratory is registered to perform emission tests with Industry Canada (IC), and the registration number is 11177A-1 11177A-2.

TUV Rhineland accredits the Laboratory for conformance to IEC and EN standards, the registration number is E2024086Z02.

2.3.Measurement Uncertainty

Conducted Emission

9kHz~30MHz 3.5dB

Radiated Emission

30MHz~1000MHz 4.5dB

1GHz~26.5GHz 4.6dB

3. PRODUCT DESCRIPTION

3.1.EUT Description

Description : Wearable Data Terminal
Manufacturer : Shenzhen Urovo Technology Co., Ltd
Model Number : U2
Operate Frequency : 2.412GHz~2.462GHz
Antenna Designation : PIFA Antenna -1.0dBi,
Remark: /

WLAN :

Table 2 Working Frequency List(802.11b, 802.11g,802.11n HT20)

Channel	Frequency	Channel	Frequency
1	2412MHz	8	2447MHz
2	2417MHz	9	2452MHz
3	2422MHz	10	2457MHz
4	2427MHz	11	2462MHz
5	2432MHz	---	---
6	2437MHz	---	---
7	2442MHz	---	---

Table 3 Working Frequency List(802.11n HT40)

Channel	Frequency	Channel	Frequency
3	2422MHz	8	2447MHz
4	2427MHz	9	2452MHz
5	2432MHz	---	---
6	2437MHz	---	---
7	2442MHz	---	---

3.2.Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **SWSU2** filing to comply with Section 15.207, 15.209, 15.247 of the FCC Part 15, Subpart C Rules.

3.3. Block Diagram of EUT Configuration



Figure 1 EUT setup

3.4. Operating Condition of EUT

The Radiated spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission (X plane).

Worst-case mode and channel used for 30-1000 MHz radiated and power line conducted emissions was the mode and channel with the highest output power.

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

802.11b mode: 1 Mbps

802.11g mode: 6 Mbps

802.11n HT20 mode: MCS0

802.11n HT40 mode: MCS0

802.11b and 802.11g operates in SISO mode. For SISO conducted measurements, the modes tested in this report will be considered as a worst case mode.

802.11n operate in SISO mode. For SISO conducted measurements, the modes tested in this report will be considered as a worst case mode.

3.5. Directional Antenna Gain

The EUT does NOT support a WIFI MIMO function.
Directional gain need NOT to be considered.

3.6.Support Equipment List

Table 4 Support Equipment List

Name	Model No	S/N	Manufacturer
Adaptor for EUT	ZAC-A050150A-02	--	SHEN ZHEN ZHONG LIN TECHNOLOGY CO.,LTD
Battery for EUT	HBLU2	--	ICON ENERGY SYSTEM(SHEN ZHEN) CO.,LTD
Notebook	T400	---	Lenovo

3.7.Test Conditions

Date of test : Sep.21, 2017 – Oct.20, 2017

Date of EUT Receive : Sep.21, 2017

Temperature: 19 ~ 25 °C

Relative Humidity: 38-59 %

3.8.Special Accessories

Not available for this EUT intended for grant.

3.9.Equipment Modifications

Not available for this EUT intended for grant.

4. TEST EQUIPMENT USED

Table 5 Test Equipment

No.	Equipment	Manufacturer	Model No.	Last Cal.	Cal. Interval
SB3319	EMI Test Receiver	Rohde & Schwarz	ESCS30	Nov.29, 2016	1 Year
SB4357	AMN	Rohde & Schwarz	ESH2-Z5	Sep.29, 2016	1 Year
SB3436	EMI Test Receiver	Rohde & Schwarz	ESI26	Nov.29, 2016	1 Year
SB8501/09	EMI Test Receiver	Rohde & Schwarz	ESU40	Mar.21, 2017	1 Year
SB8501/04	Bilog Antenna	Schwarzbeck	VULB9163	Mar.21, 2017	1 Year
SB3955	Bilog Antenna	Schwarzbeck	VULB9163	Mar.22, 2017	1 Year
SB3435	Horn Antenna	Rohde & Schwarz	HF906	Jan.03, 2017	1 Year
SB8501/01	Horn Antenna	Rohde & Schwarz	HF907	Mar.22, 2017	1 Year
SB8501/11	Horn Antenna	ETS-Lindgren	3160-09	Mar.1, 2017	1 Year
SB3345	Loop Antenna	Schwarzbeck	FMZB1516	Mar.22, 2017	2 Years
SB8501/14	Preamplifier	Rohde & Schwarz	SCU-03	Mar.19, 2017	1 Year
SB8501/16	Preamplifier	Rohde & Schwarz	SCU-26	Mar.06, 2017	1 Year
SB8501/17	Preamplifier	Rohde & Schwarz	SCU-18	Mar.06, 2017	1 Year
SB12827/01	Power Sensor	Rohde & Schwarz	NRP-Z22	Jun.19, 2017	1 Year
SB11873/01	Power Sensor	Rohde & Schwarz	OSP120+OSP-B 157	Mar.13, 2017	1 Year
--	Test Software	Rohde & Schwarz	Power Viewer Plus	--	--
SB9060	Signal Analyzer	Rohde & Schwarz	F5Q40	Mar.31, 2017	1 Year

5. DUTY CYCLE

5.1.LIMITS OF DUTY CYCLE

None; for reporting purposes only

5.2.TEST PROCEDURE

1. Set span = Zero
2. RBW = 10MHz
3. VBW = 10MHz,
4. Detector = RMS

5.3.TEST SETUP

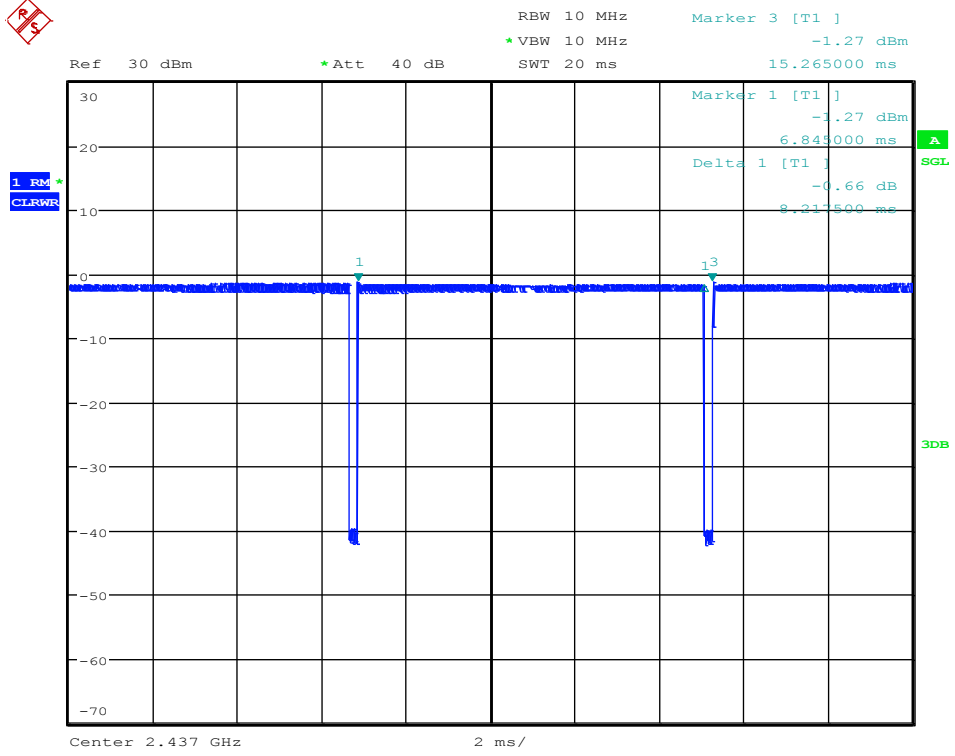


5.4.TEST DATA

Table 6 Duty Cycle Test Data

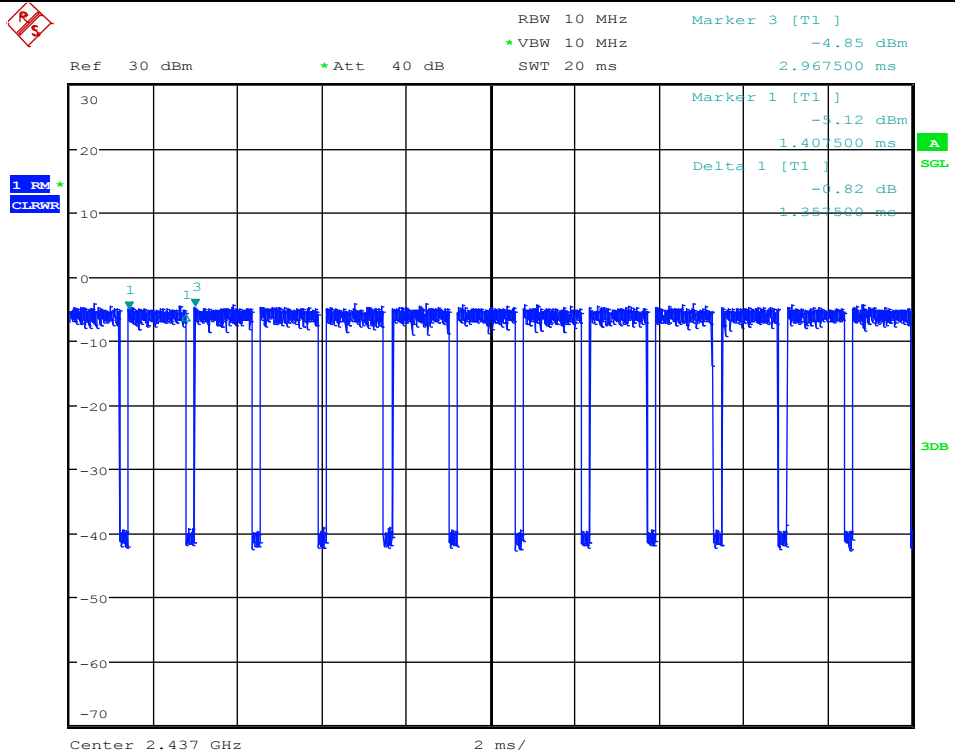
Test Mode	On Time (ms)	Duty Cycle(%)	Duty Factor	1/T Minimum VBW (kHz)
802.11b	8.22	97.6%	0.11	0.01
802.11g	1.358	87.02%	0.60	1
802.11n HT20	1.27	86.1%	0.65	1
802.11n HT40	0.62	75.45%	1.22	1

Duty Cycle_11b_2437



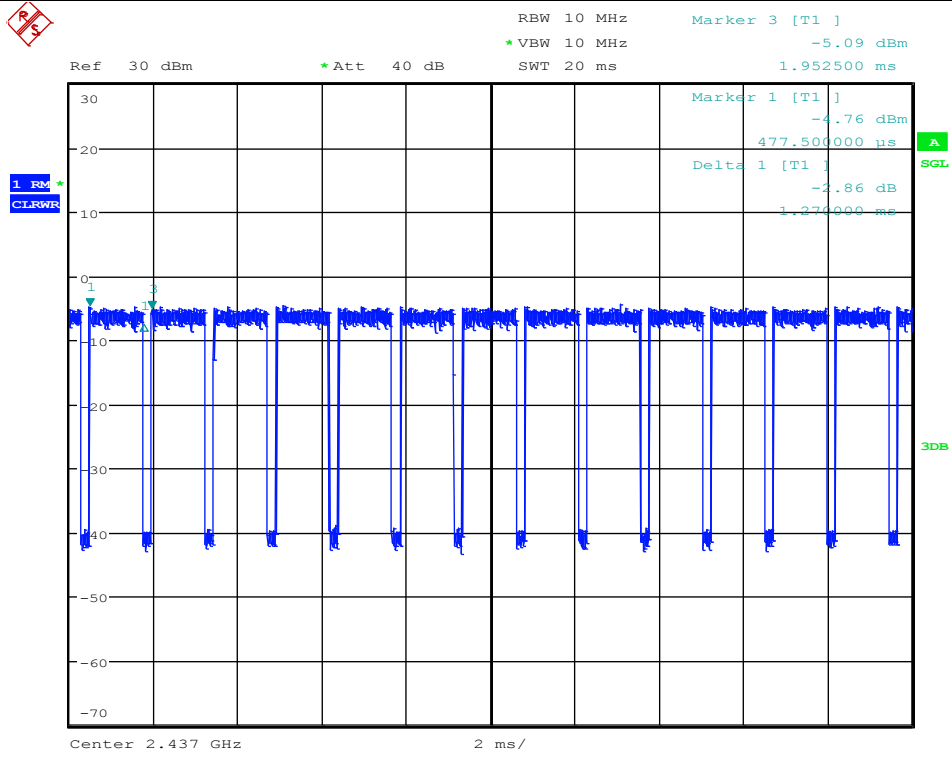
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Duty Cycle_11g_2437



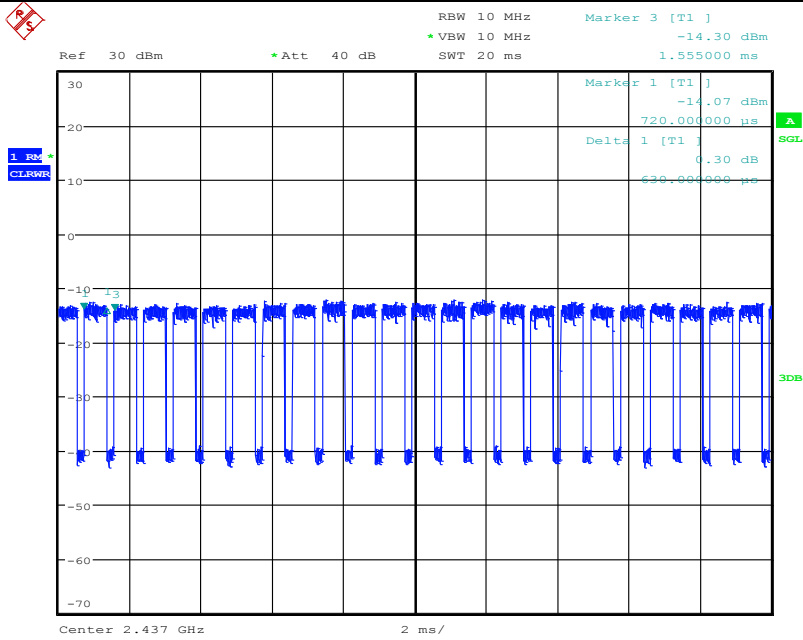
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Duty Cycle_11n HT20_2437



Date: 17.OCT.2017 19:05:21

Duty Cycle_11n HT40_2437



Date: 17.OCT.2017 19:54:37

6. 6DB BANDWIDTH MEASUREMENT

6.1.LIMITS OF 6dB BANDWIDTH MEASUREMENT

CFR 47 (FCC) part 15.247 (a) (2) , 558074 D01 DTS Meas Guidance v03r05

6.2.TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer.

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- c)Detector = Peak.
- d)Trace mode = max hold.
- e)Sweep = auto couple.
- f)Allow the trace to stabilize.
- g)Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.3.TEST SETUP



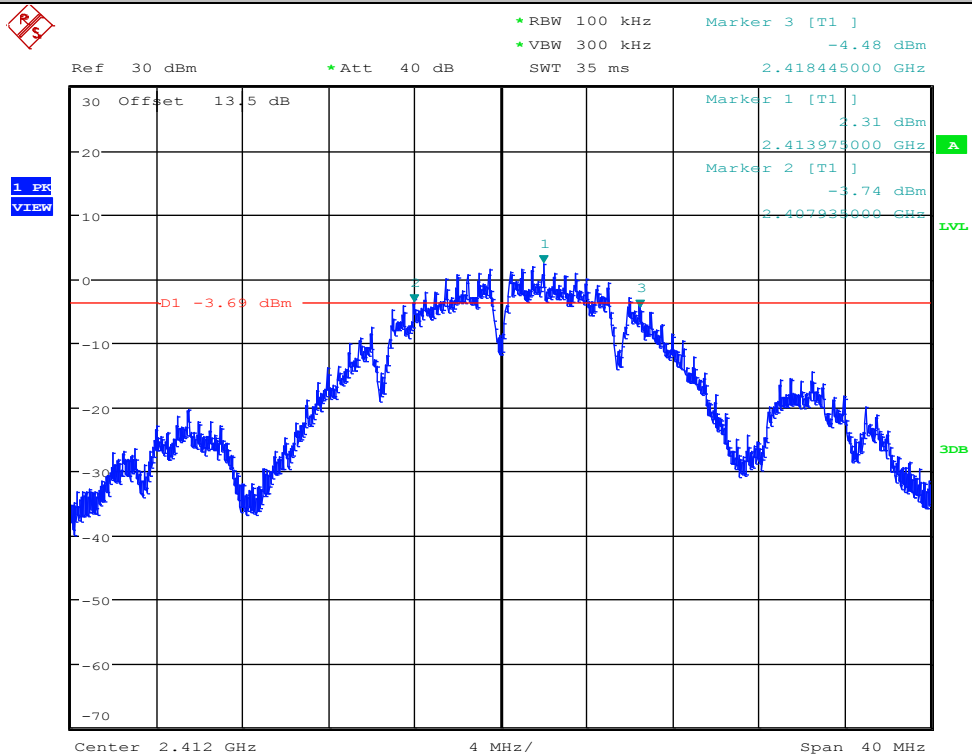
Test Data

Table 7 6dB Bandwidth Test Data

Mode	Channel	6dB Bandwidth [MHz]	Verdict
8.02.11b	LCH	10.510	PASS
8.02.11b	MCH	9.085	PASS
8.02.11b	HCH	9.015	PASS
8.02.11g	LCH	15.755	PASS
8.02.11g	MCH	15.665	PASS
8.02.11g	HCH	15.660	PASS
8.02.11n HT20	LCH	16.440	PASS
8.02.11n HT20	MCH	16.340	PASS
8.02.11n HT20	HCH	15.870	PASS
8.02.11n HT40	LCH	18.810	PASS
8.02.11n HT40	MCH	13.770	PASS
8.02.11n HT40	HCH	33.830	PASS

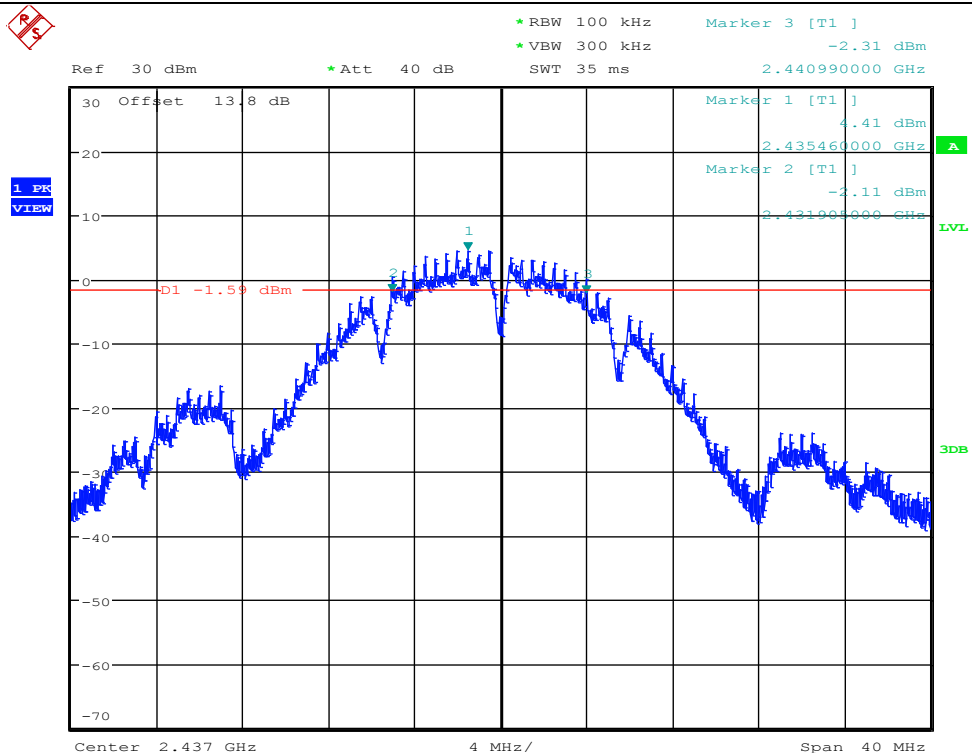
Graphs

11b/LCH



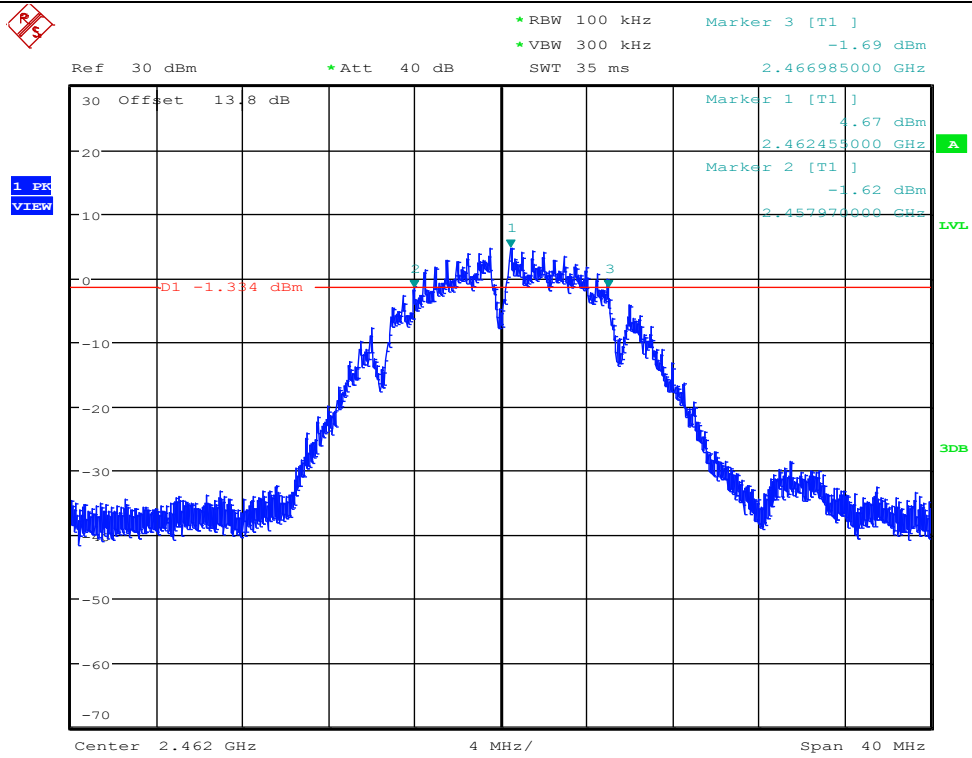
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11b/MCH



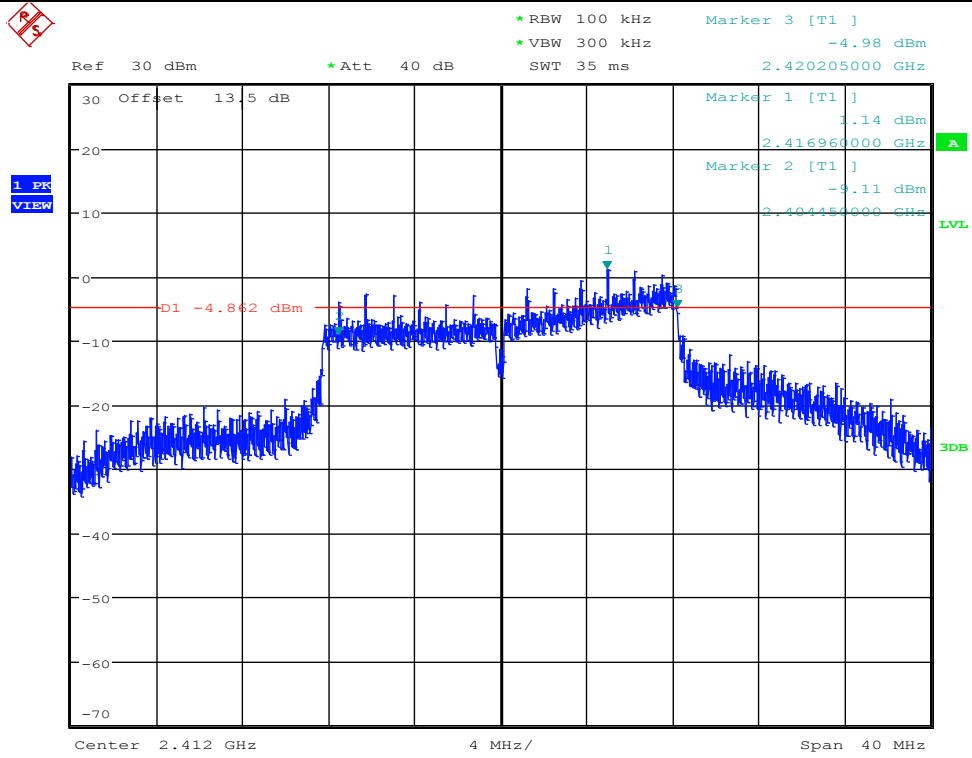
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11B/HCH



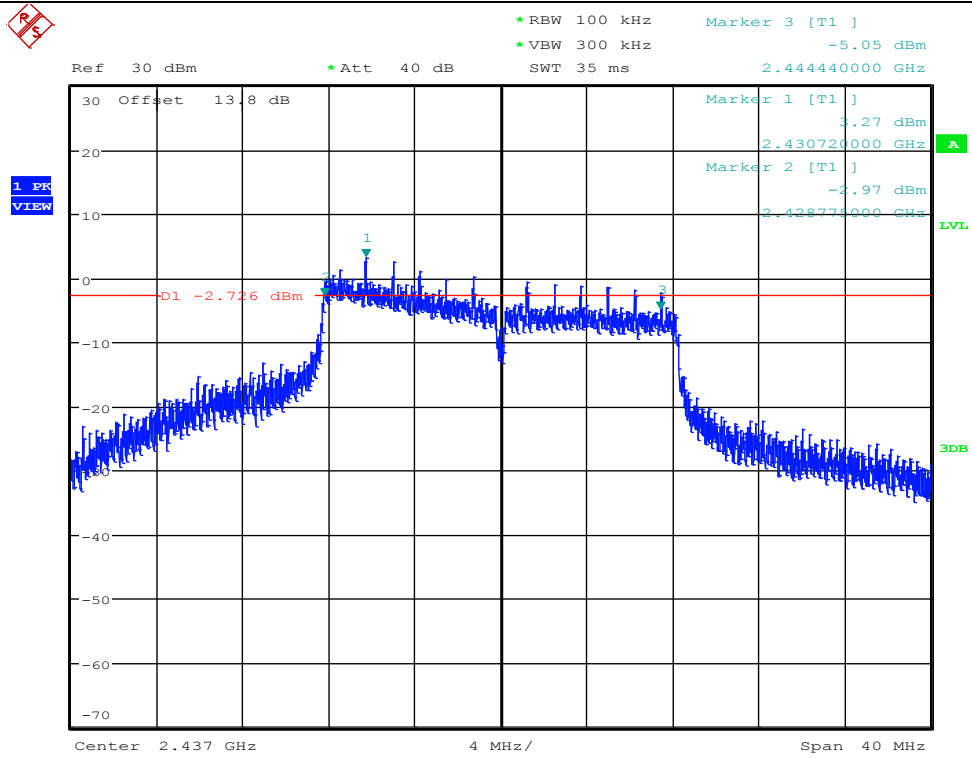
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11G/LCH



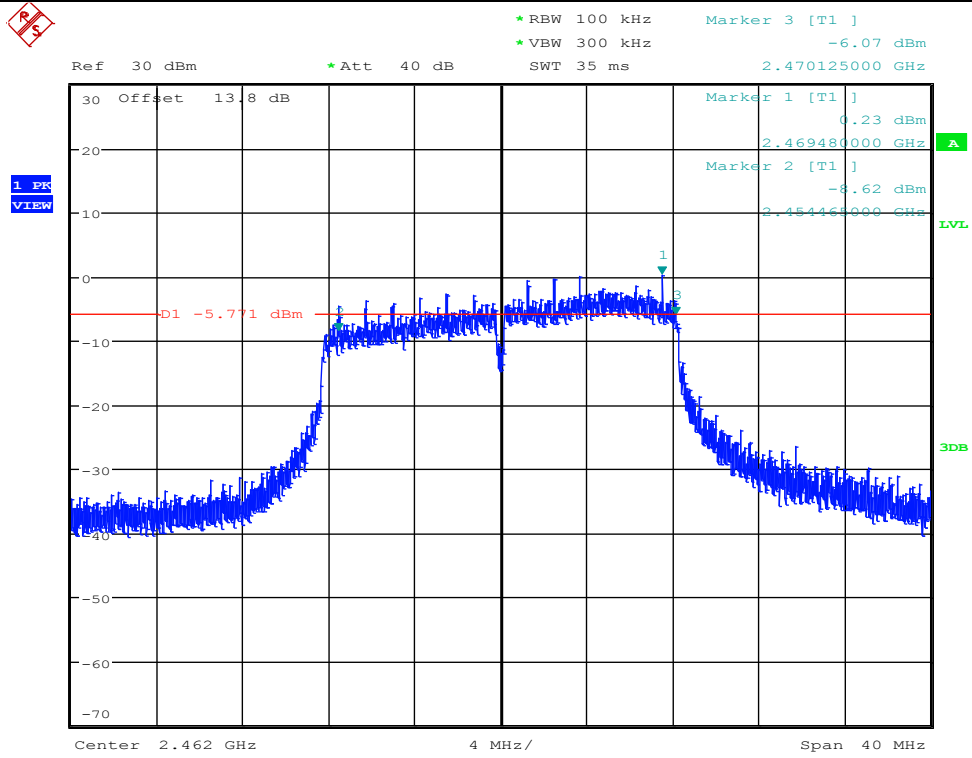
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11G/MCH



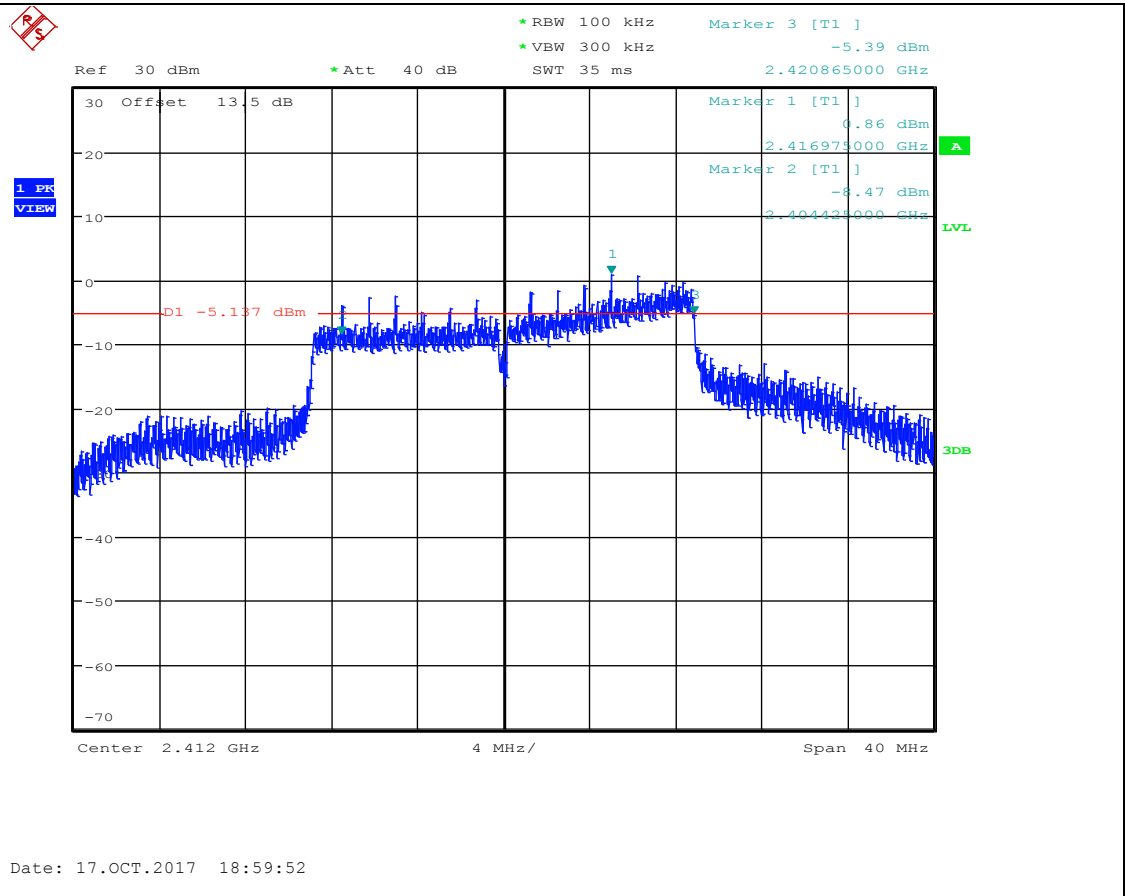
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11G/HCH

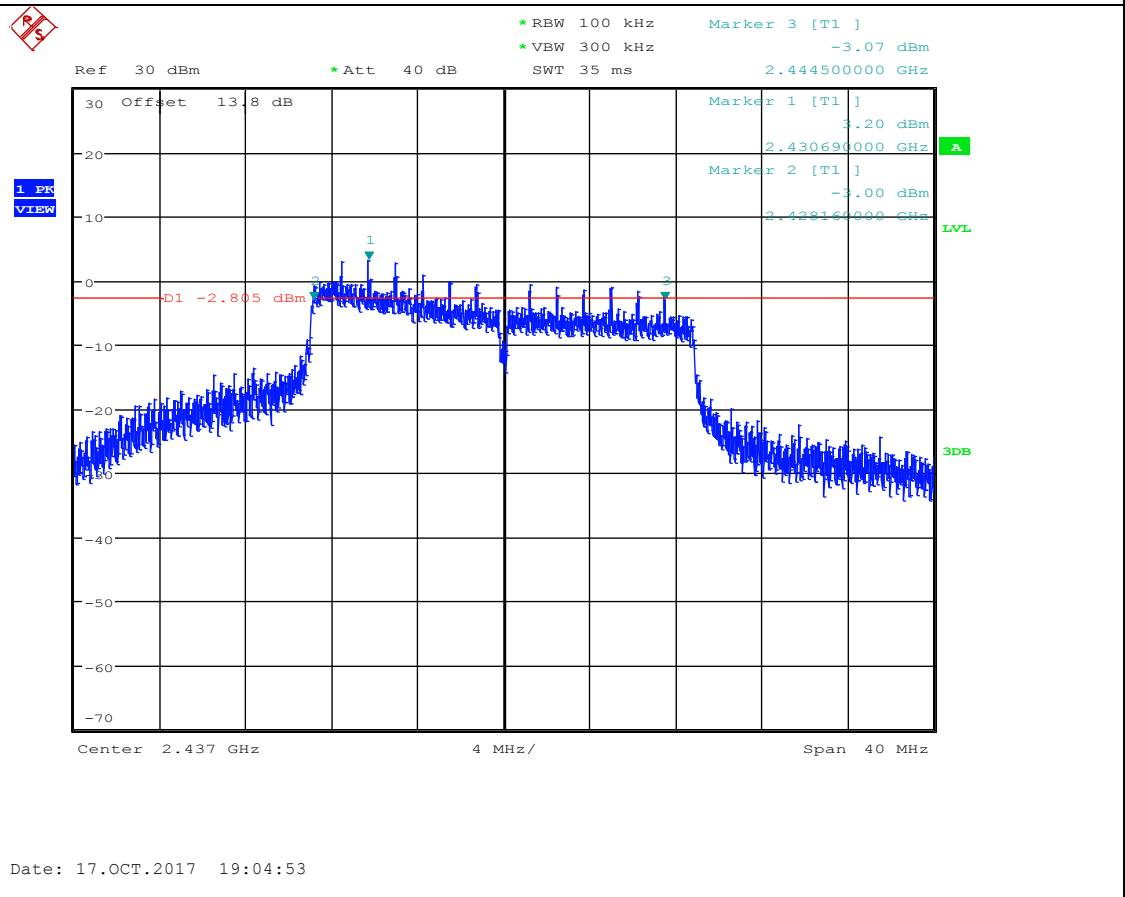


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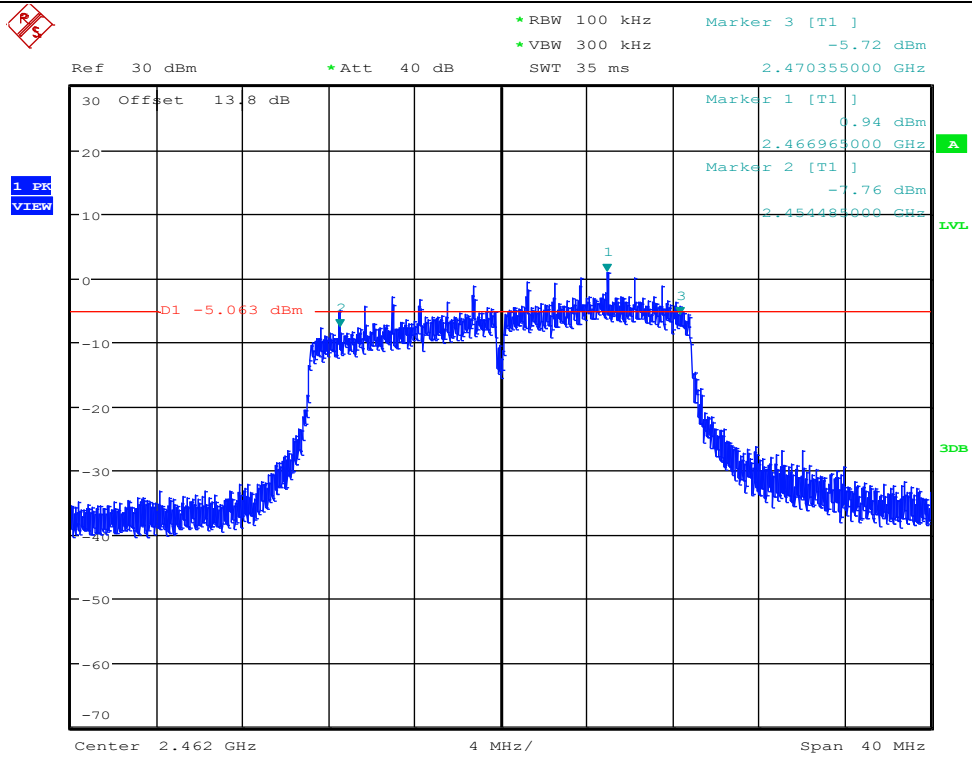
11N20SISO/LCH



11N20SISO/MCH

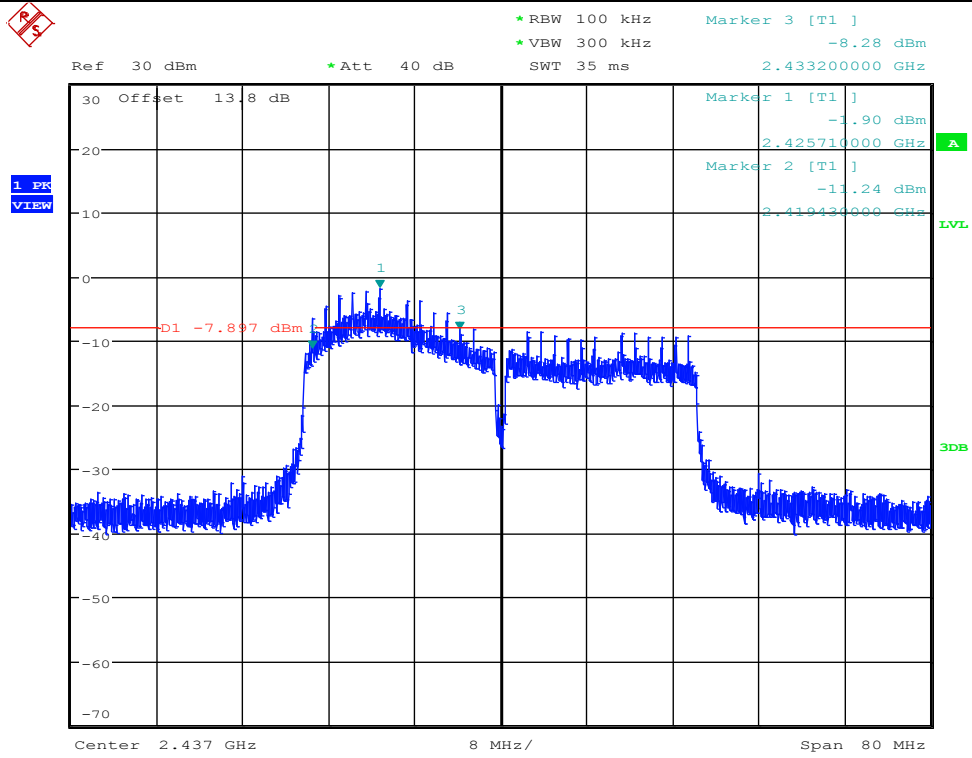


11N20SISO/HCH



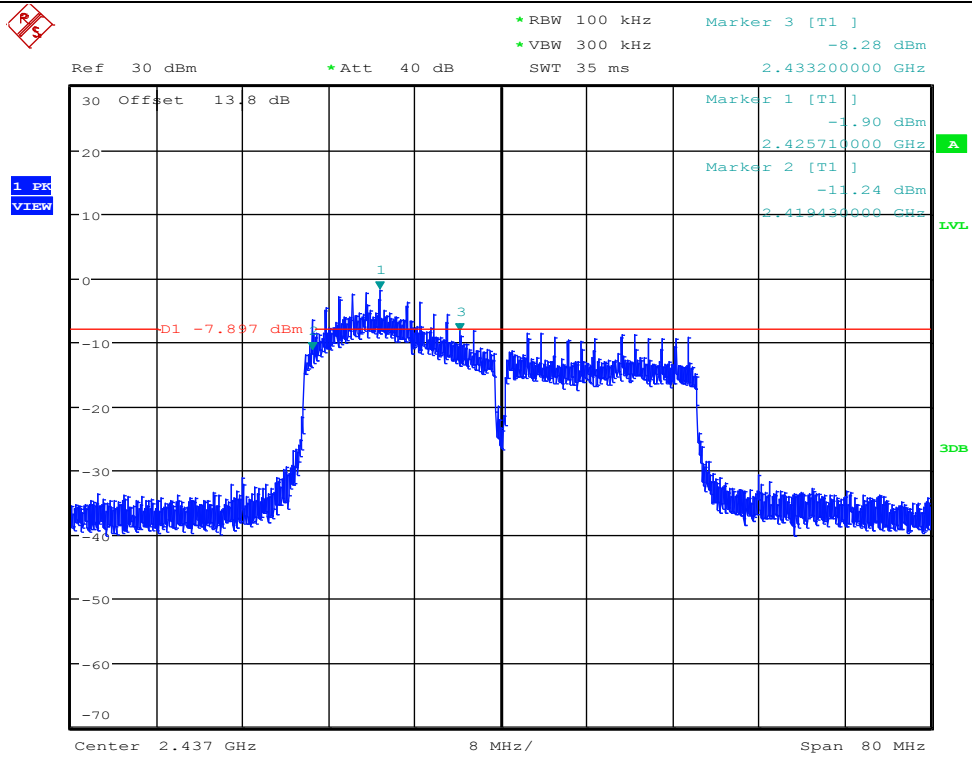
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11N40SISO/LCH



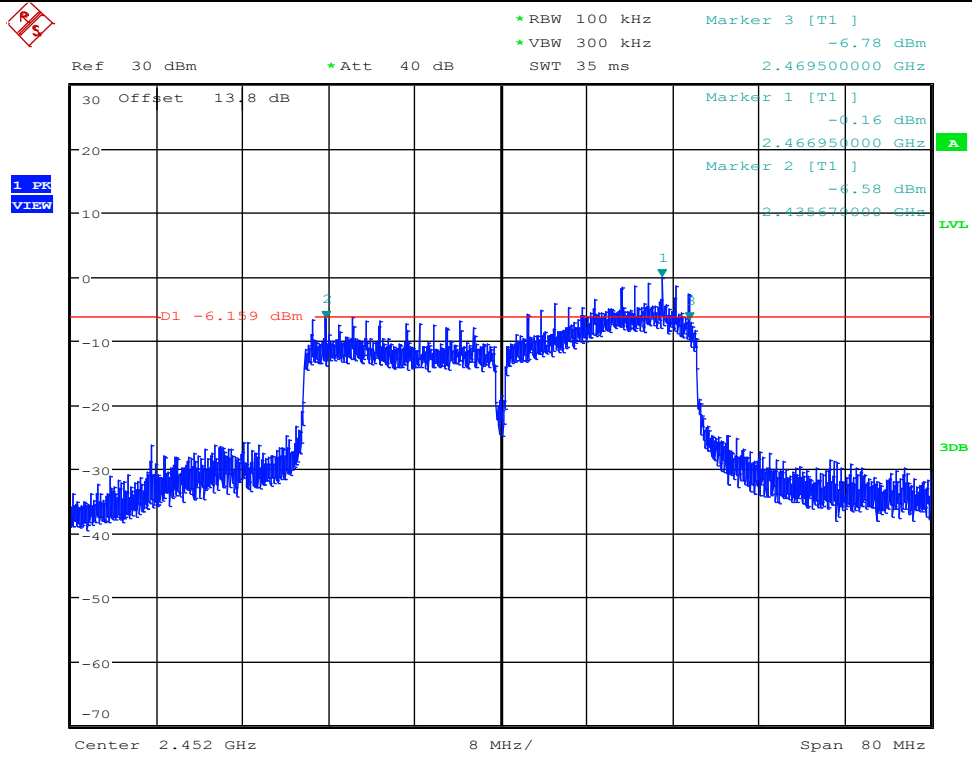
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11N40SISO/MCH



Date: 17.OCT.2017 19:54:09

11N40SISO/HCH



Date: 17.OCT.2017 19:57:22

7. MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

7.1.LIMITS OF Maximum Conducted Output Power Measurement

CFR 47 (FCC) part 15.247 (b) (3), 558074 D01 DTS Meas Guidance v03r05

7.2.TEST PROCEDURE

The transmitter output was connected to the RF power meter.

a) Using a wideband RF power meter with a thermocouple detector or equivalent if all of the conditions listed below are satisfied.

1) The EUT is configured to transmit continuously, or to transmit with a constant duty factor.

2) At all times when the EUT is transmitting, it shall be transmitting at its maximum power control level.

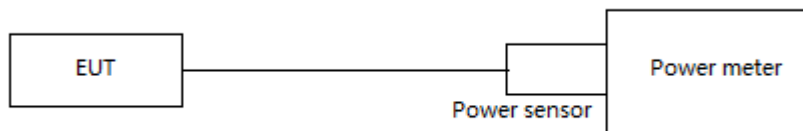
3) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.

b) If the transmitter does not transmit continuously, measure the duty cycle (x) of the transmitter output signal as described in Section 6.0.

c) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.

d) Adjust the measurement in dBm by adding $10\log(1/x)$, where x is the duty cycle to the measurement result.

7.3.TEST SETUP



7.4.TEST DATA

Table 8 Maximum Conducted Output Power

Mode	Channel	Meas.Level [dBm]	Av.Power [dBm]	Verdict
8.02.11b	LCH	11.61	11.72	PASS
8.02.11b	MCH	13.69	13.8	PASS
8.02.11b	HCH	13.92	14.03	PASS
8.02.11g	LCH	10.29	10.89	PASS
8.02.11g	MCH	12.06	12.66	PASS
8.02.11g	HCH	10.8	11.4	PASS
8.02.11n HT20	LCH	10.47	11.12	PASS
8.02.11n HT20	MCH	12.19	12.84	PASS
8.02.11n HT20	HCH	10.58	11.23	PASS
8.02.11n HT40	LCH	10.6	11.82	PASS
8.02.11n HT40	MCH	9.15	10.37	PASS
8.02.11n HT40	HCH	10.77	11.99	PASS

8. MAXIMUM POWER SPECTRAL DENSITY LEVEL MEASUREMENT

8.1.LIMITS OF Maximum Power Spectral Density Level Measurement

CFR 47 (FCC) part 15.247 (e) , 558074 D01 DTS Meas Guidance v03r05

8.2.TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer.

- a)Set analyzer center frequency to DTS channel center frequency.
- b) Set the span to 1.5 times the DTS bandwidth.
- c) Set RBW to: $3\text{kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- d) Set VBW $\geq 3 \times \text{RBW}$.
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h)Allow trace to fully stabilize.
- i)Use the peak marker function to determine the maximum amplitude level within the RBW.
- j)If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

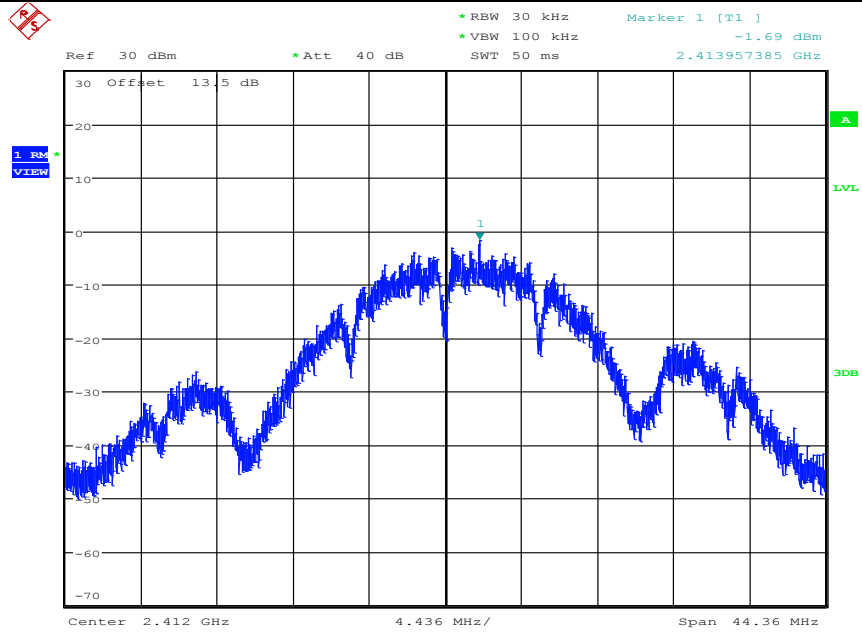
8.3.TEST DATA

Table 9 Maximum Power Spectral Density Level

Mode	Channel	Meas.Level [dBm]	Av.PSD [dBm]	Verdict
8.02.11b	LCH	-1.690	-1.58	PASS
8.02.11b	MCH	-1.210	-1.1	PASS
8.02.11b	HCH	0.520	0.63	PASS
8.02.11g	LCH	-3.930	-3.33	PASS
8.02.11g	MCH	-3.730	-3.13	PASS
8.02.11g	HCH	-4.520	-3.92	PASS
8.02.11n HT20	LCH	-3.260	-2.61	PASS
8.02.11n HT20	MCH	-2.590	-1.94	PASS
8.02.11n HT20	HCH	-5.400	-4.75	PASS
8.02.11n HT40	LCH	-7.840	-6.62	PASS
8.02.11n HT40	MCH	-8.490	-7.27	PASS
8.02.11n HT40	HCH	-6.480	-5.26	PASS

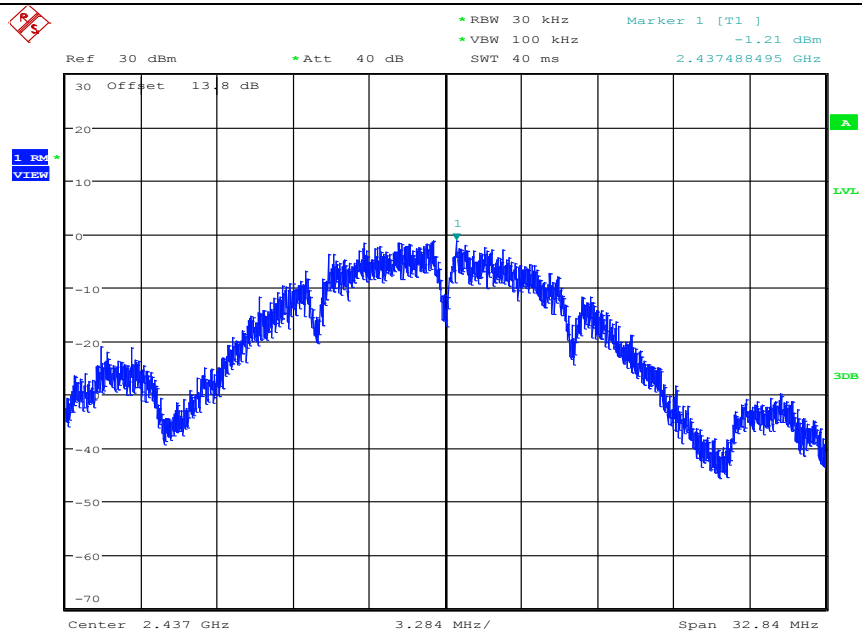
Graphs

11B/LCH



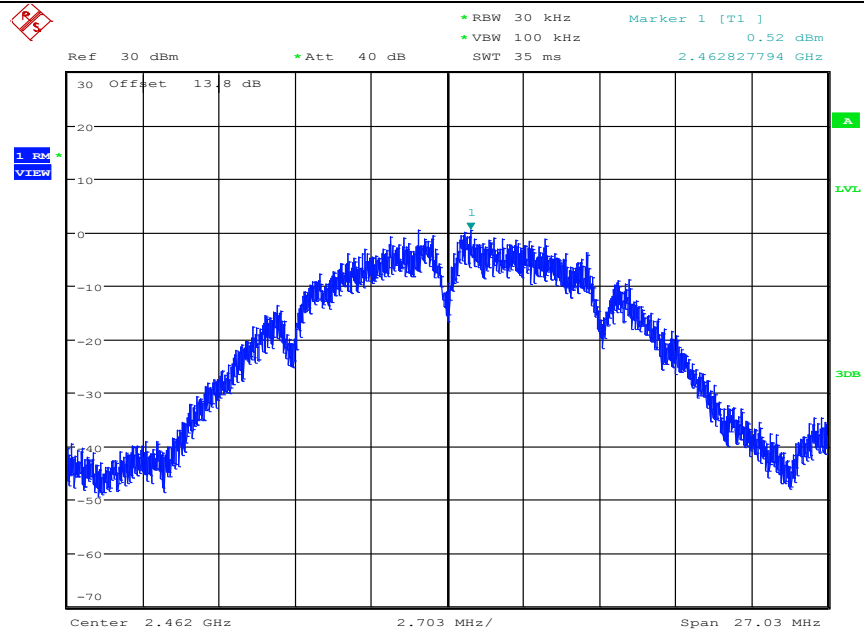
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11B/MCH



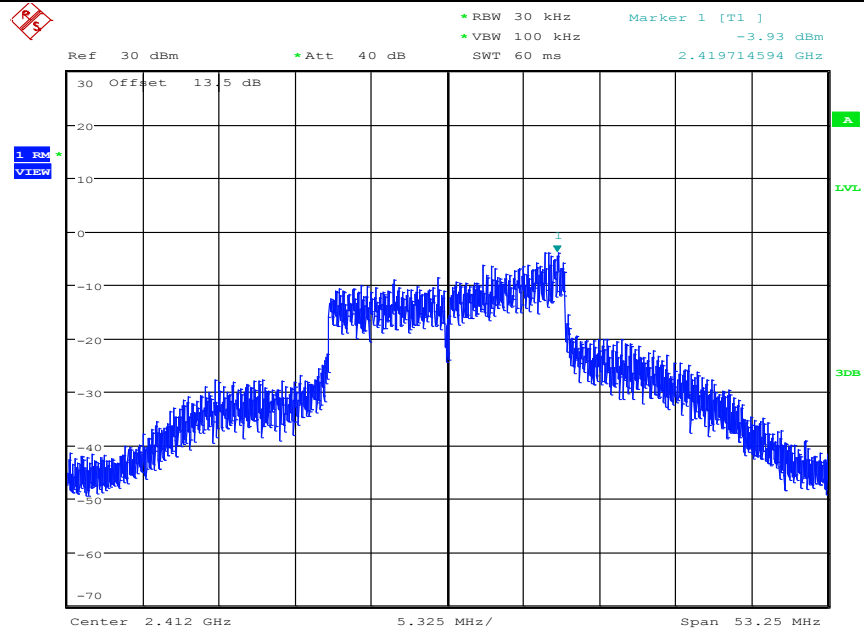
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11B/HCH



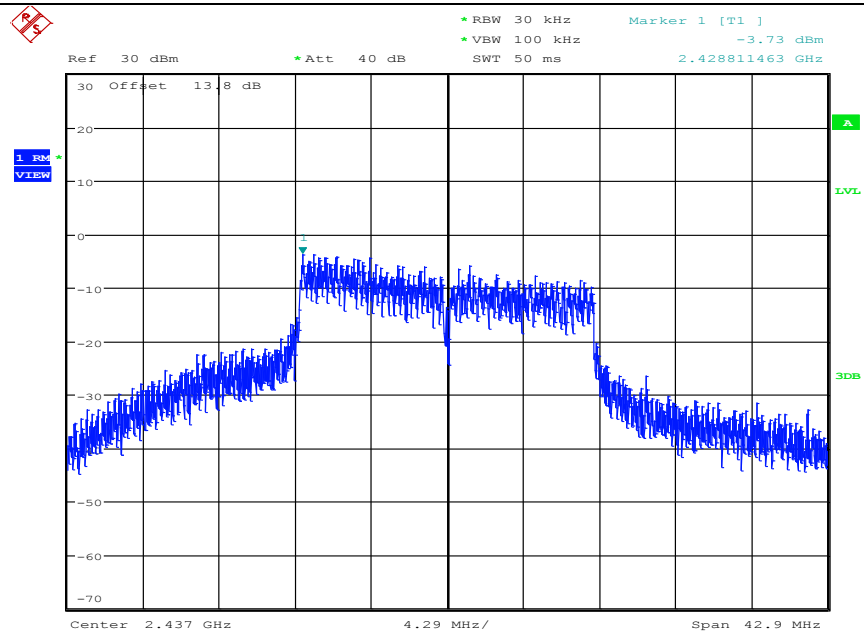
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11G/LCH



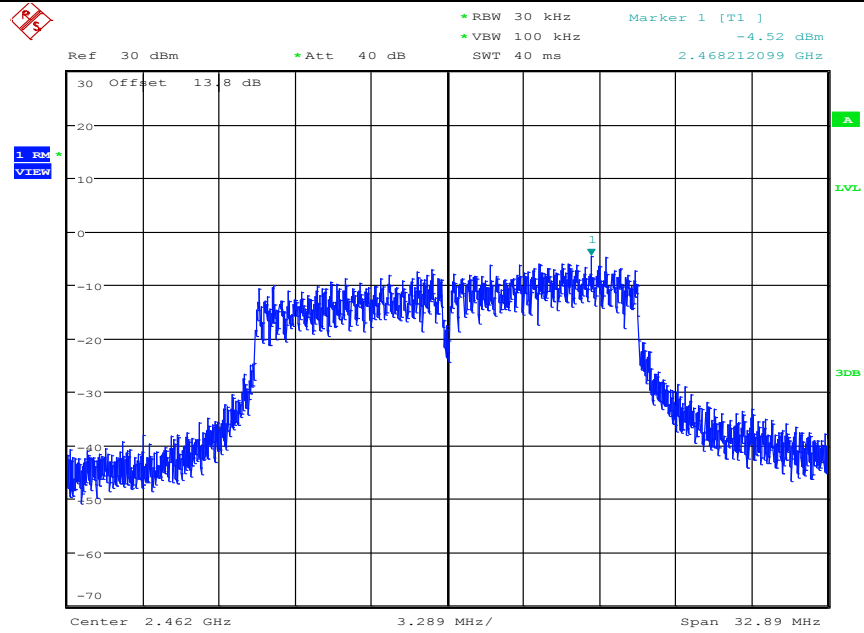
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11G/MCH



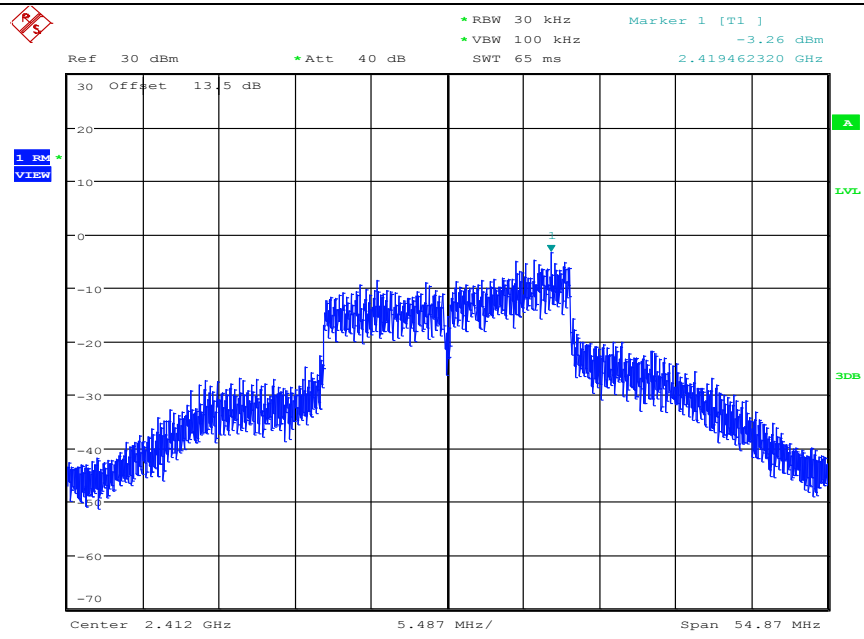
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11G/HCH



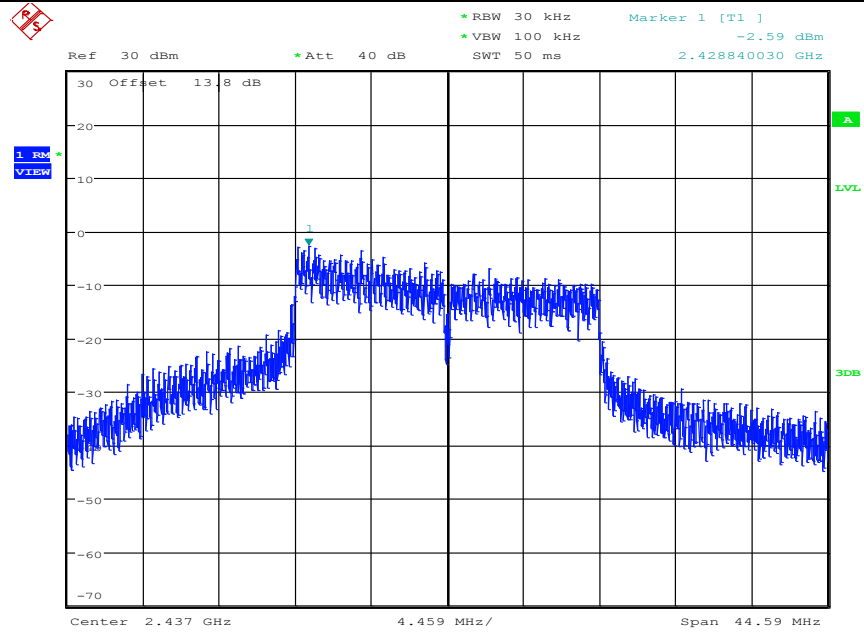
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11N20SISO/LCH



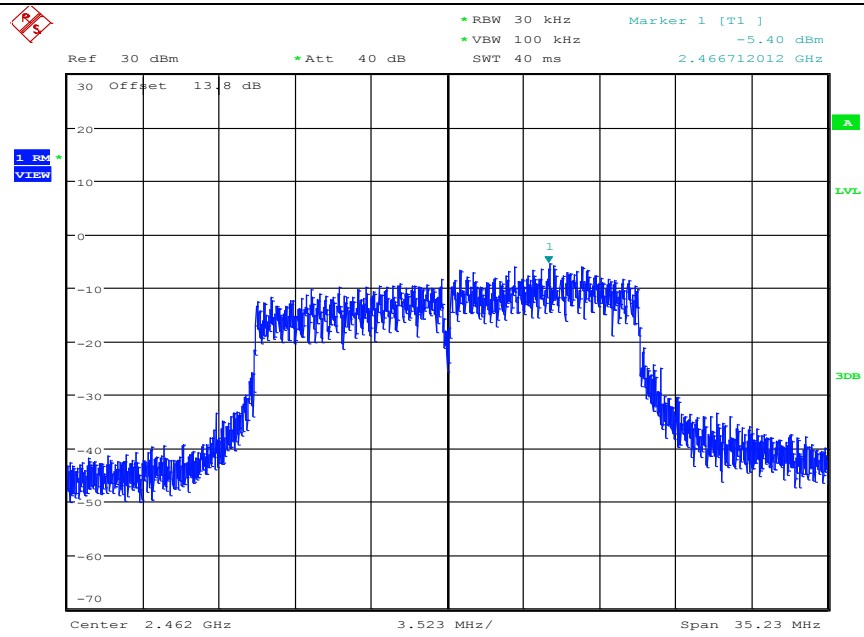
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11N20SISO/MCH



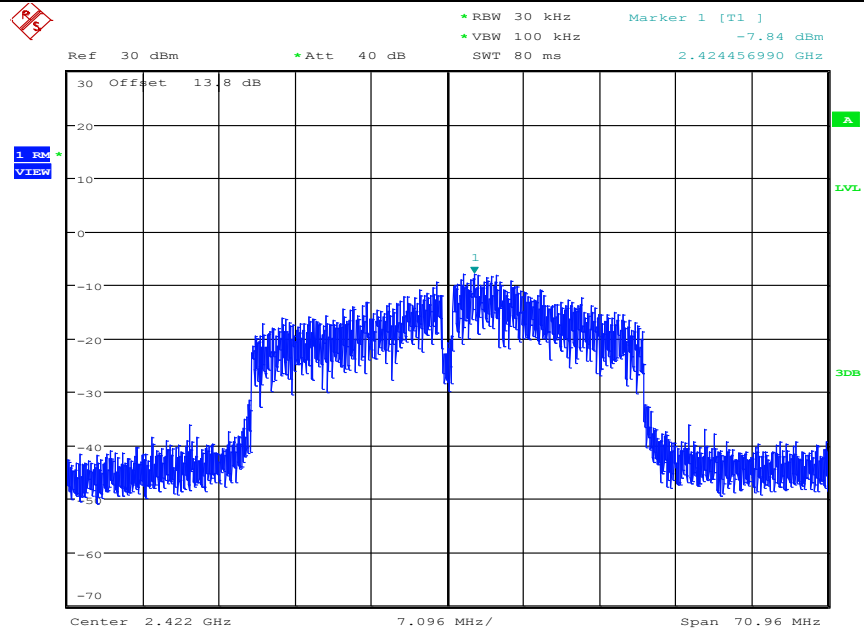
Date: 17.OCT.2017 19:06:08

11N20SISO/HCH



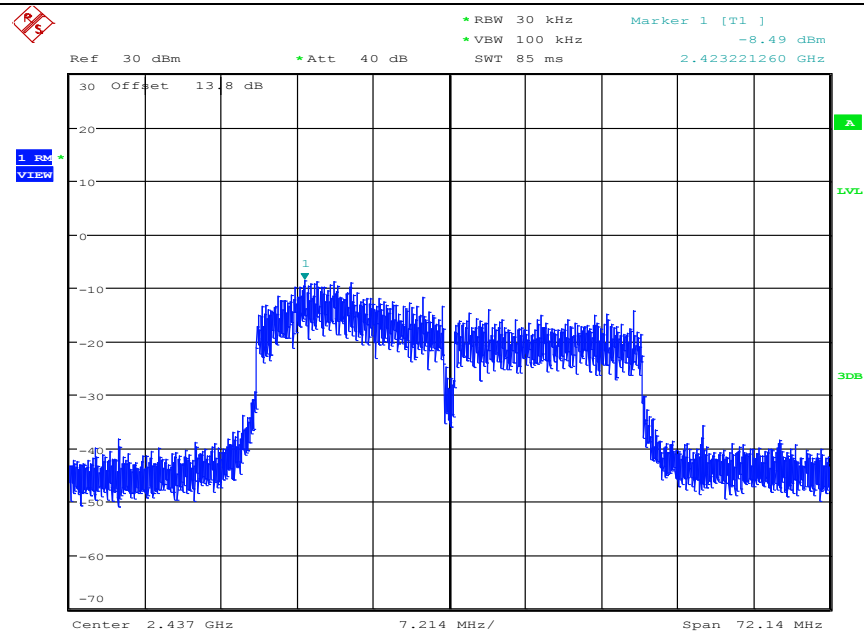
Date: 17.OCT.2017 19:09:18

11N40SISO/LCH



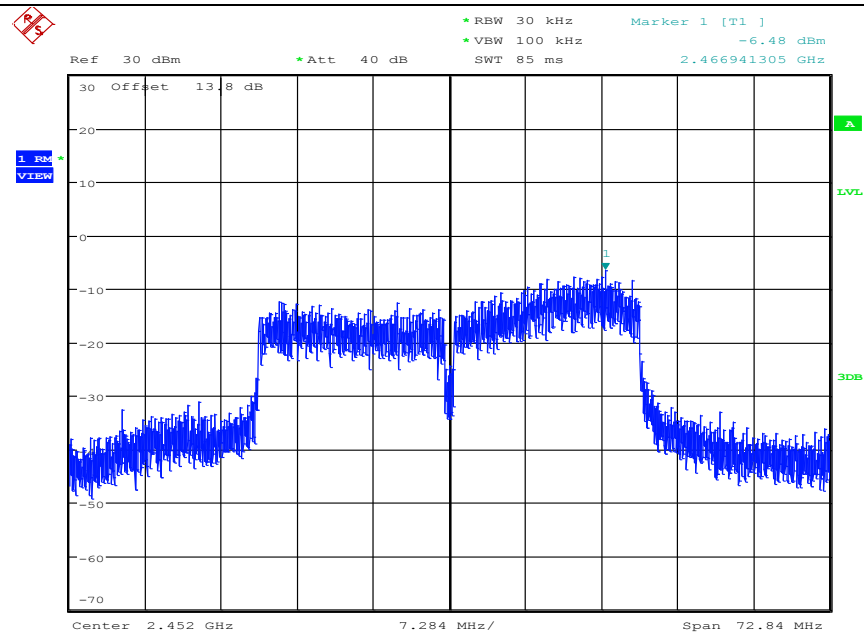
Date: 17.OCT.2017 19:40:55

11N40SISO/MCH



Date: 17.OCT.2017 19:55:24

11N40SISO/HCH



Date: 17.OCT.2017 19:58:38

9. CONDUCTED BANDEGE AND SPURIOUS MEASUREMENT

9.1.LIMITS OF Conducted Bandedge and Spurious Measurement

CFR 47 (FCC) part 15.247 (d) and 558074 D01 DTS Meas Guidance v03r05

9.2.TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer.

Establish a reference level by using the following procedure:

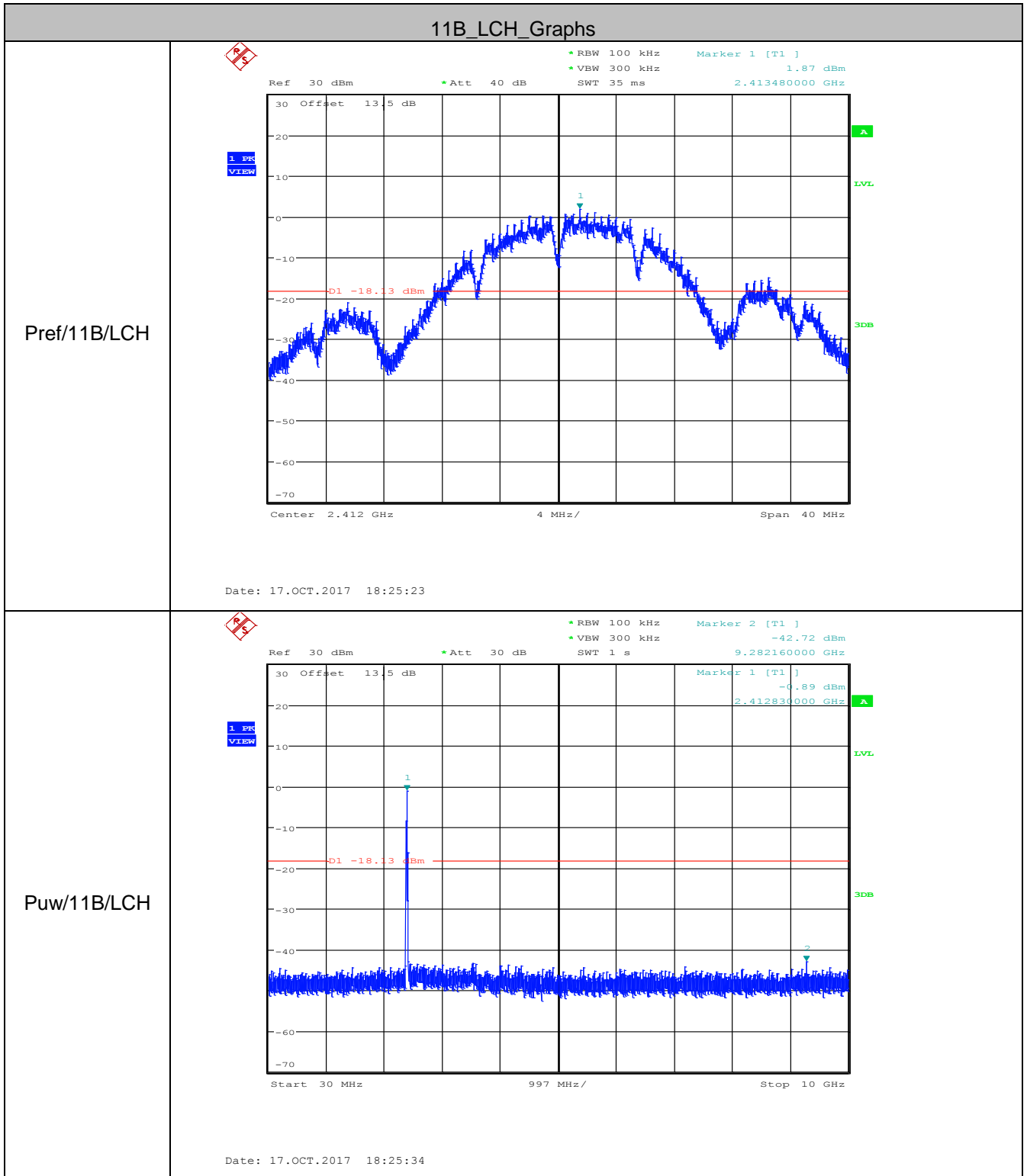
- a)Set instrument center frequency to DTS channel center frequency.
- b)Set the span to ≥ 1.5 times the DTS bandwidth.
- c)Set the RBW = 100 kHz.
- d)Set the VBW $\geq 3 \times$ RBW.
- e)Detector = peak.
- f)Sweep time = auto couple.
- g)Trace mode = max hold.
- h)Allow trace to fully stabilize.
- i)Use the peak marker function to determine the maximum PSD level.

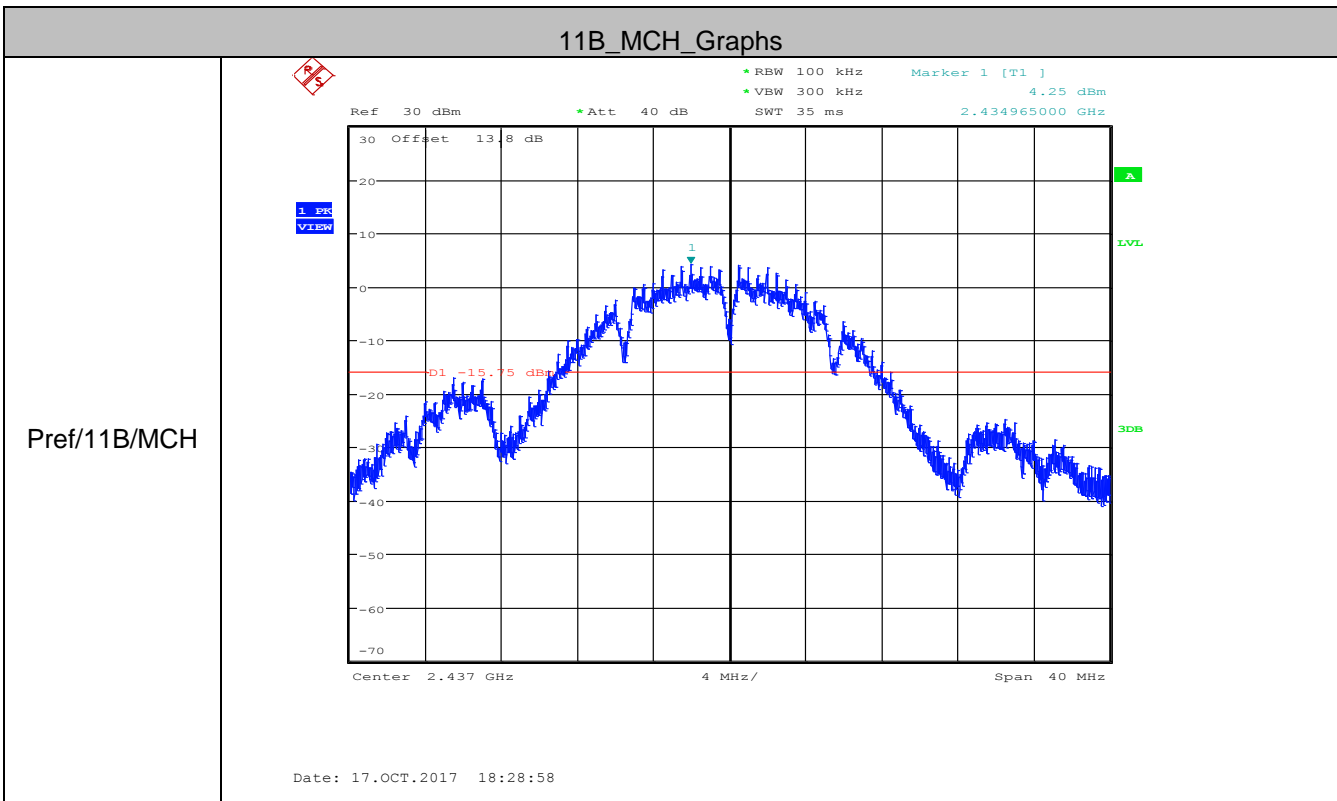
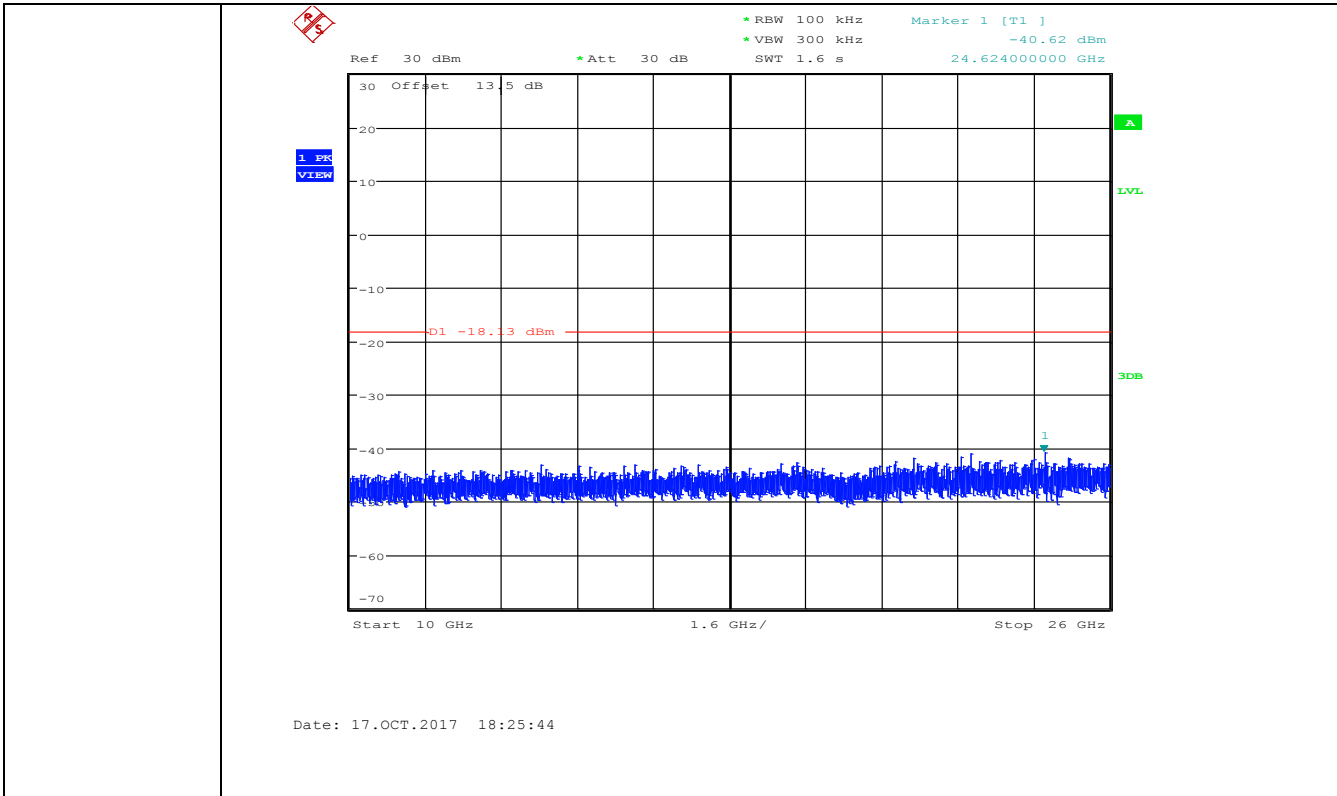
Emission level measurement

- a)Set the center frequency and span to encompass frequency range to be measured.
- b)Set the RBW = 100 kHz.
- c)Set the VBW $\geq 3 \times$ RBW.
- d)Detector = peak.
- e)Ensure that the number of measurement points \geq span/RBW
- f)Sweep time = auto couple.
- g)Trace mode = max hold.
- h)Allow trace to fully stabilize.
- i)Use the peak marker function to determine the maximum amplitude level.

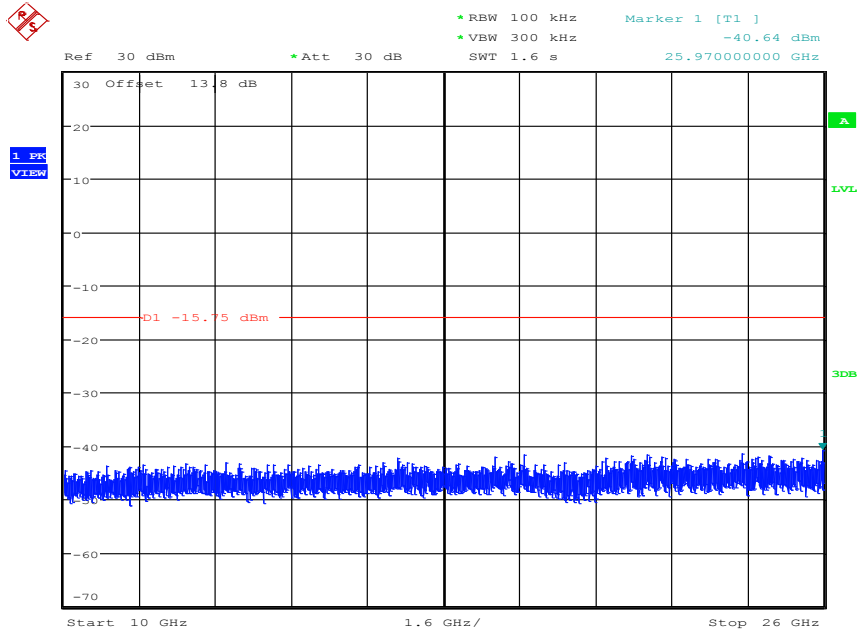
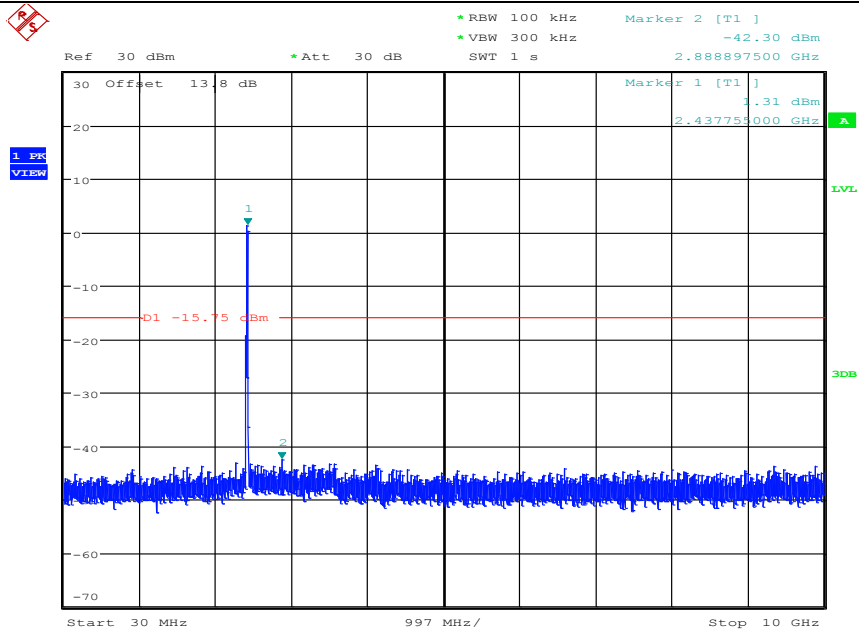
Test Result : ALL emission outside of 2400-2483.5 are lower at least 20dB than fundamental frequency.

9.3.TEST DATA



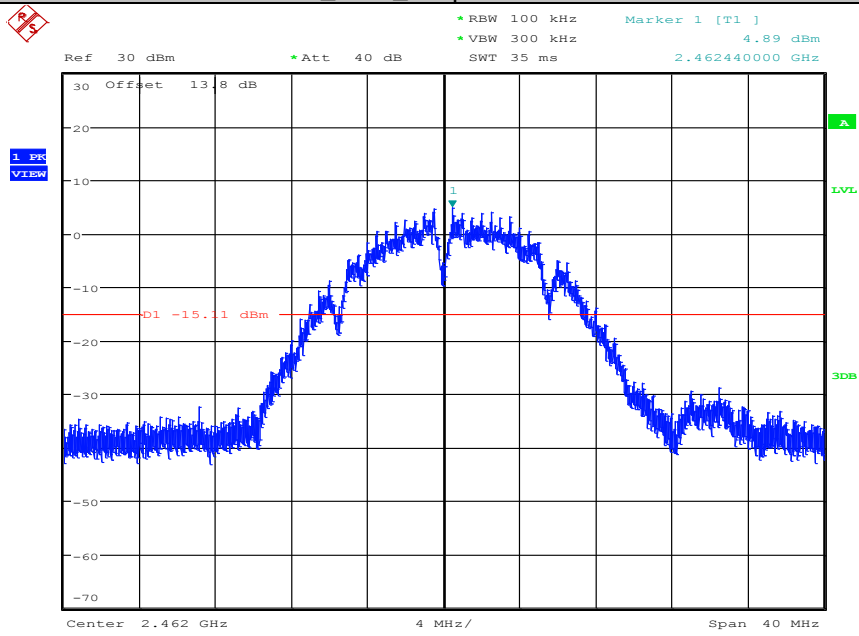


Puw/11B/MCH



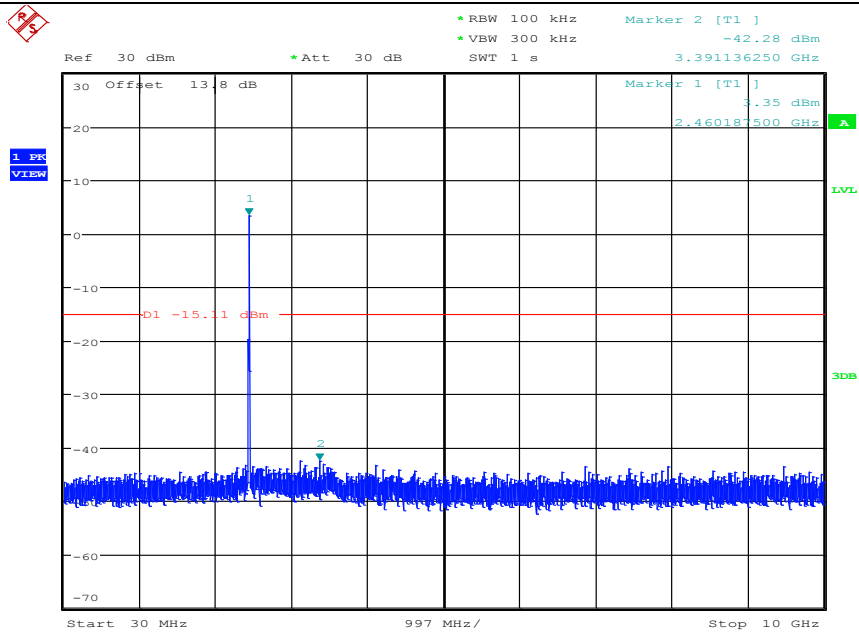
11B_HCH_Graphs

Pref/11B/HCH

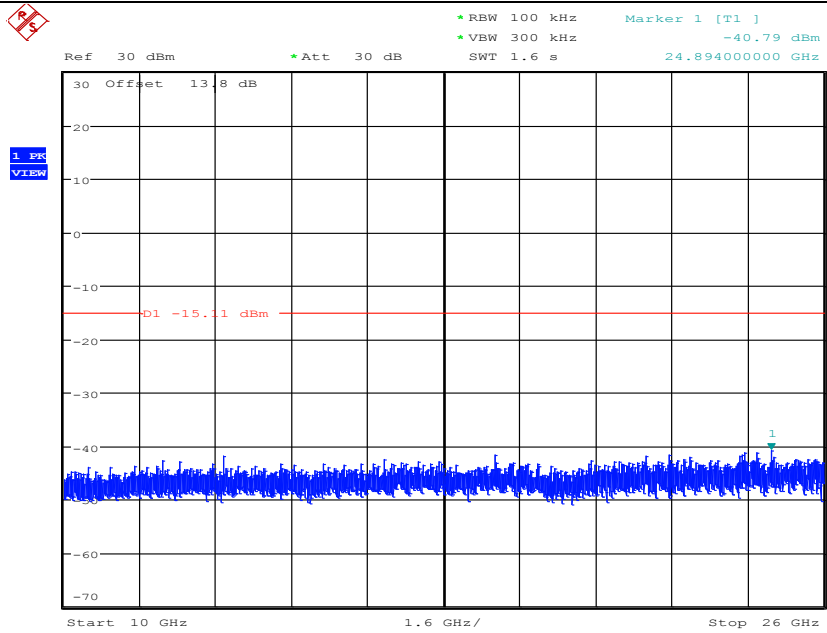


Date: 17.OCT.2017 18:32:08

Puw/11B/HCH

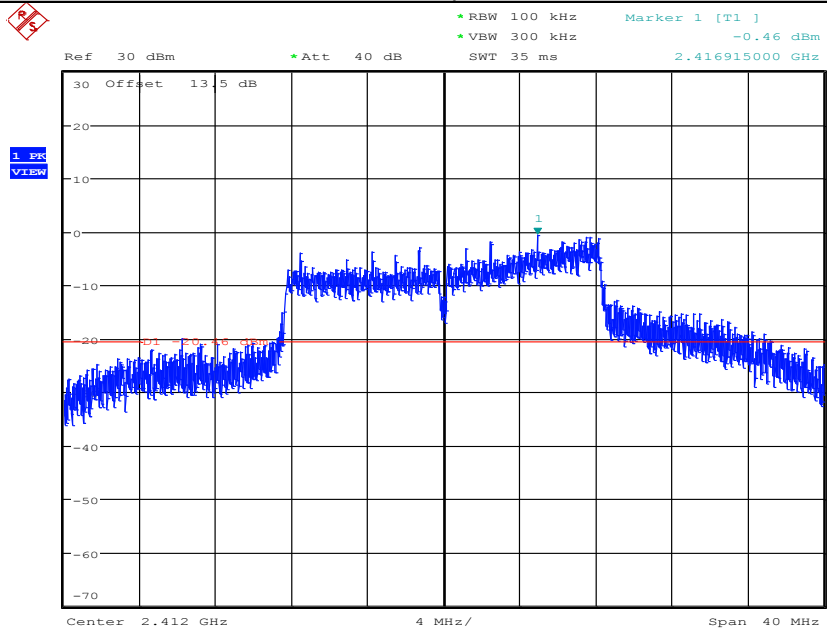


Date: 17.OCT.2017 18:32:20



Date: 17.OCT.2017 18:32:30

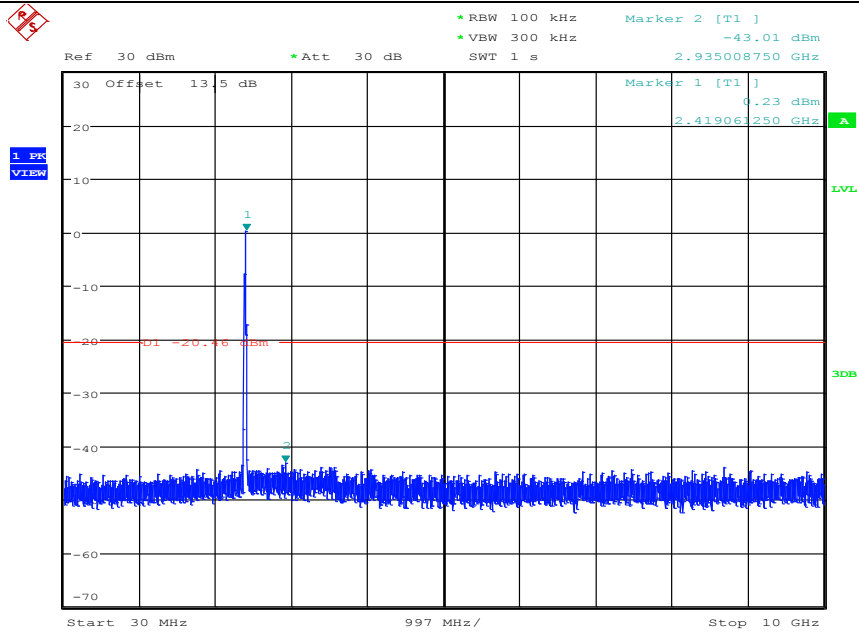
11G_LCH_Graphs



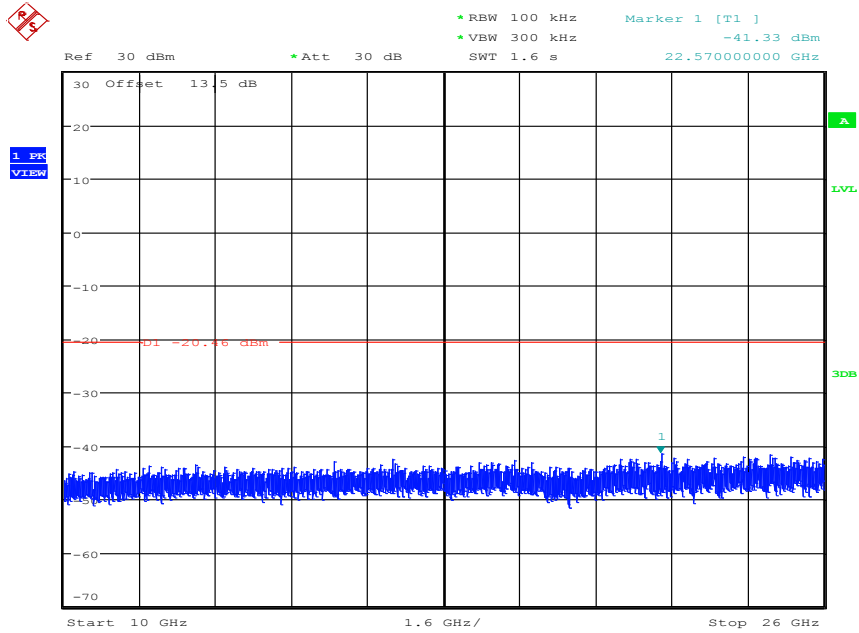
Date: 17.OCT.2017 18:54:24

Pref/11G/LCH

Puw/11G/LCH



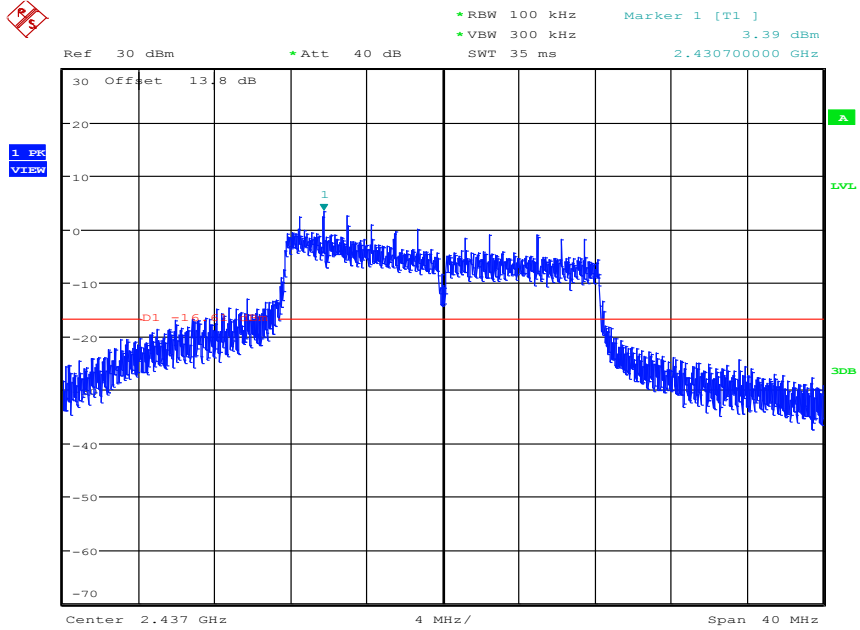
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Date: 17.OCT.2017 18:54:46

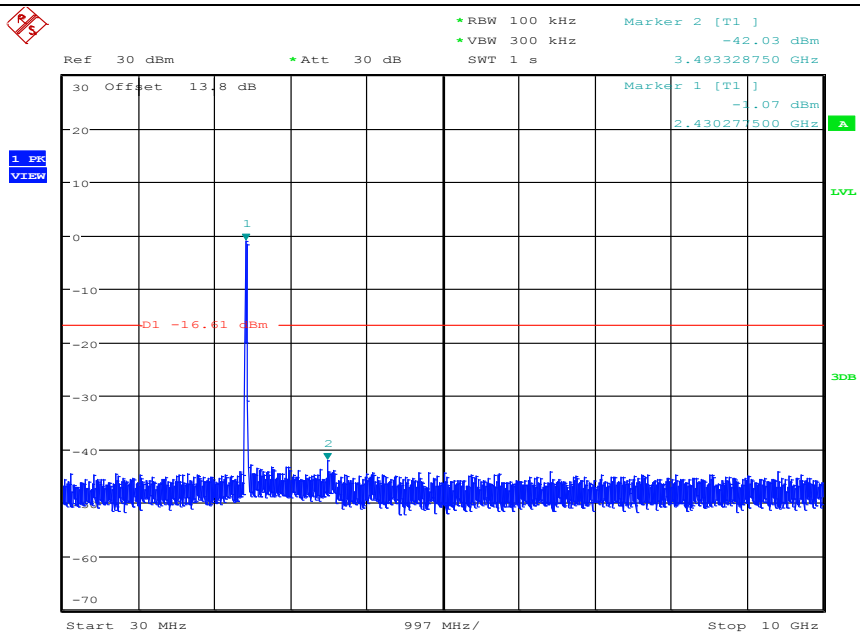
11G_MCH_Graphs

Pref/11G/MCH

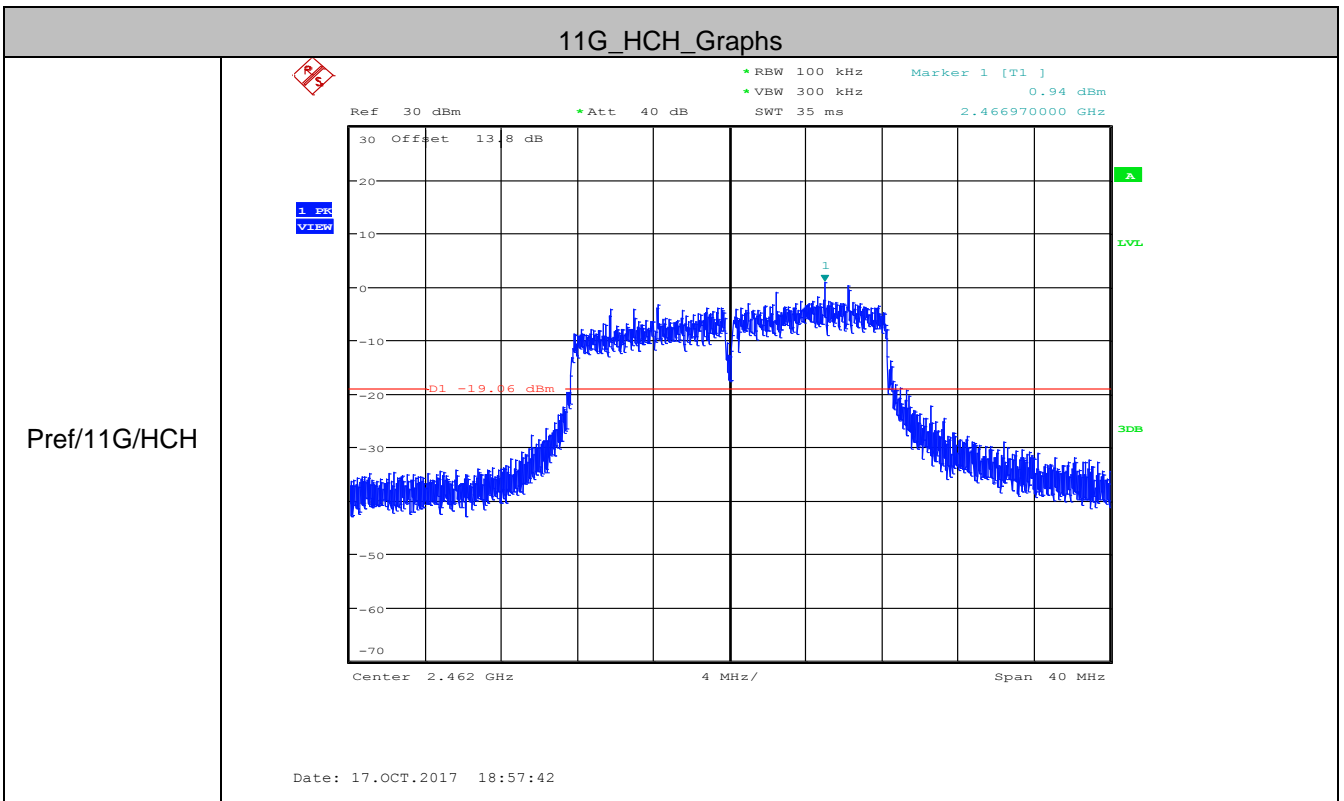
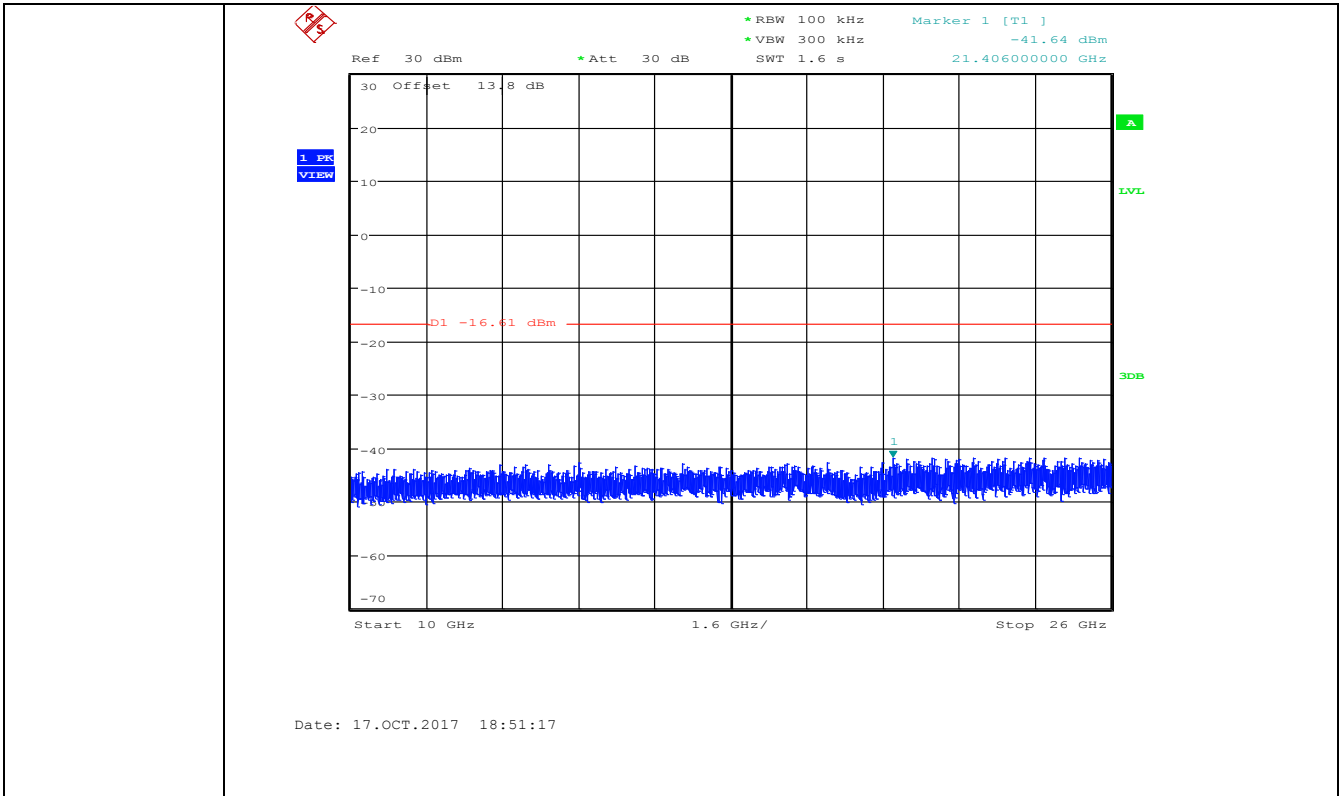


Date: 17.OCT.2017 18:50:56

Puw/11G/MCH

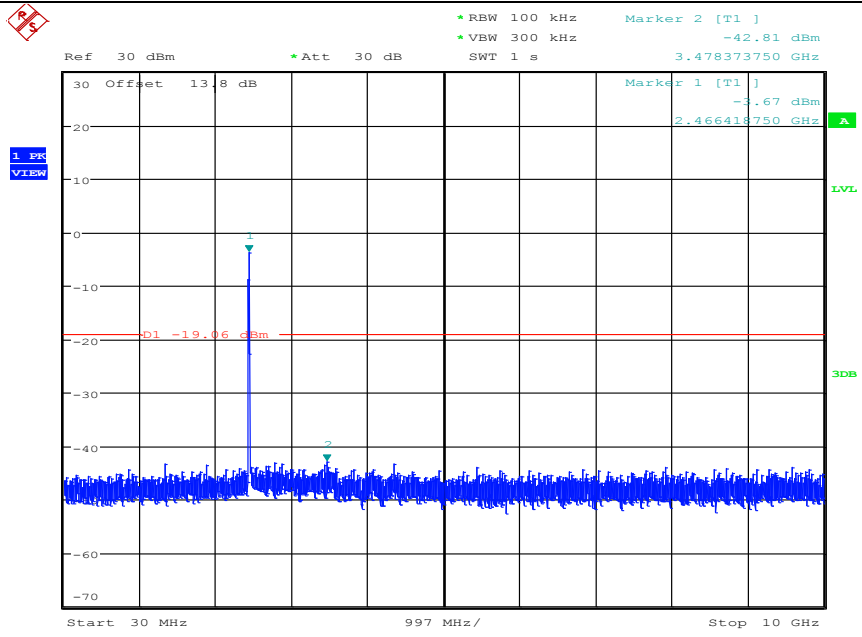


Date: 17.OCT.2017 18:51:07

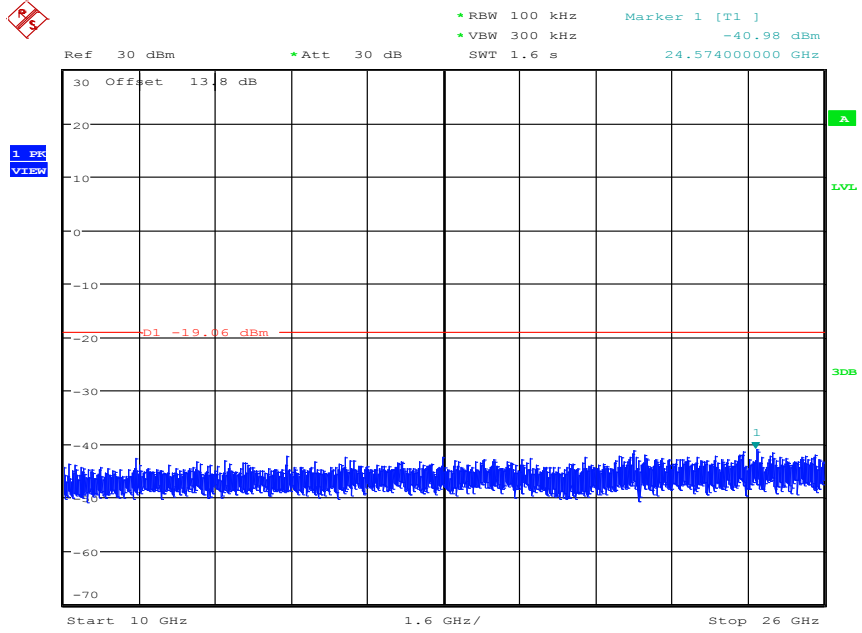


Pref/11G/HCH

Puw/11G/HCH



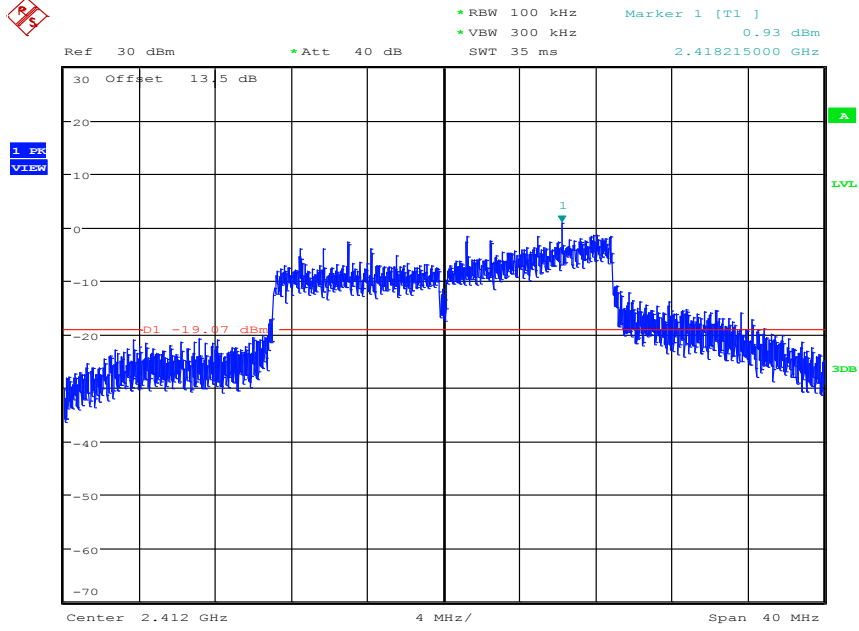
Date: 17.OCT.2017 18:57:53



Date: 17.OCT.2017 18:58:03

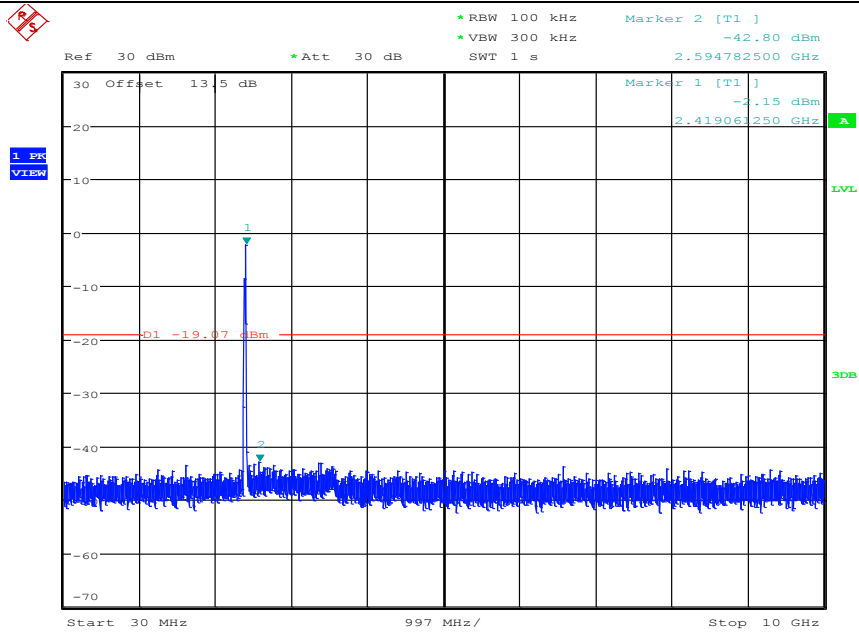
11N20SISO_LCH_Graphs

Pref/
11N20SISO/
LCH

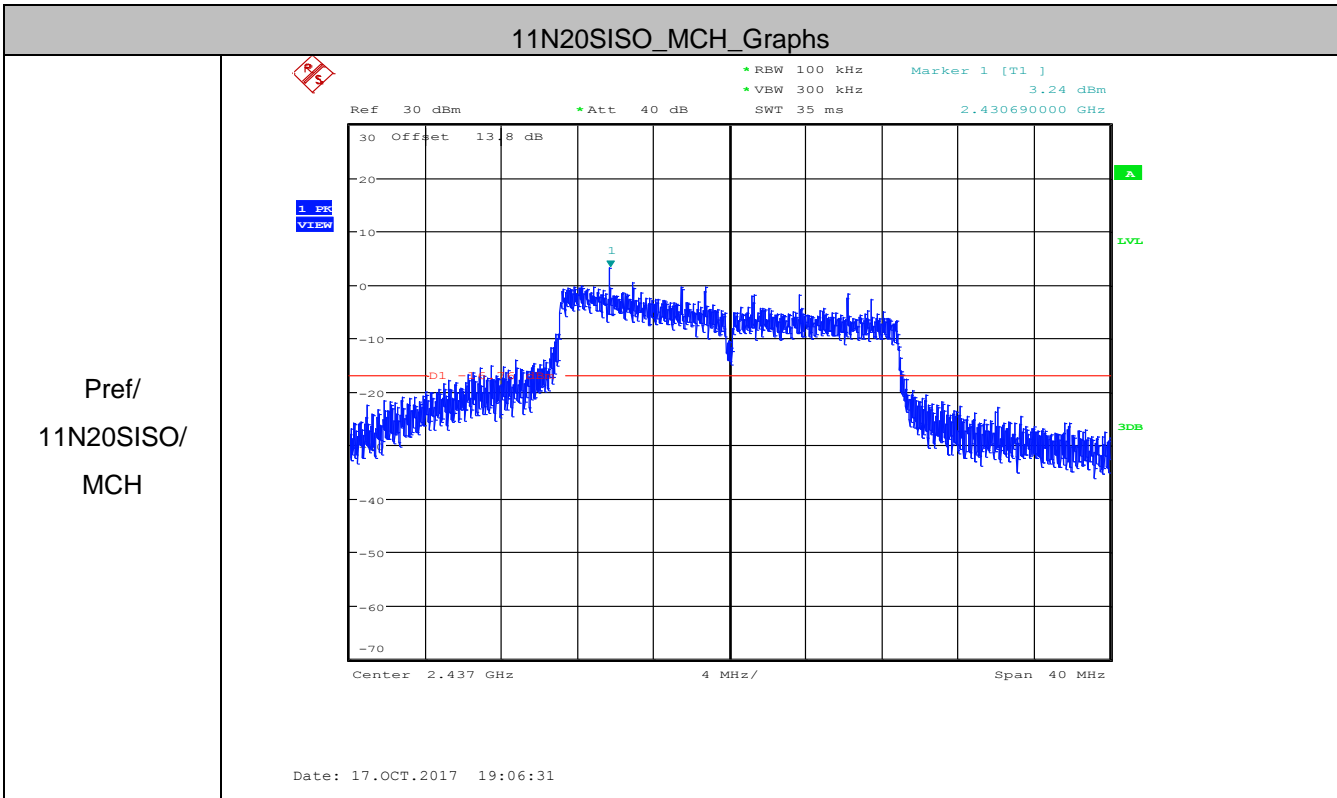
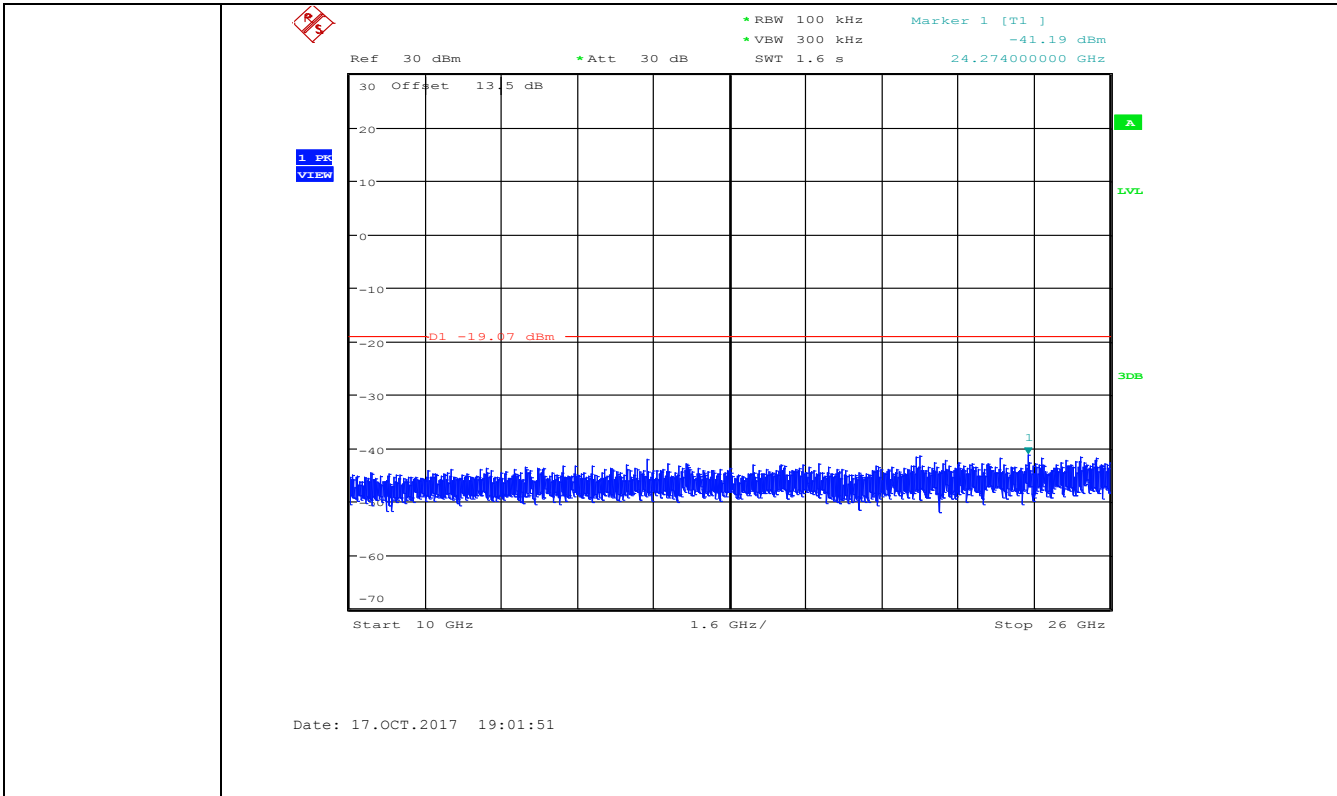


Date: 17.OCT.2017 19:01:30

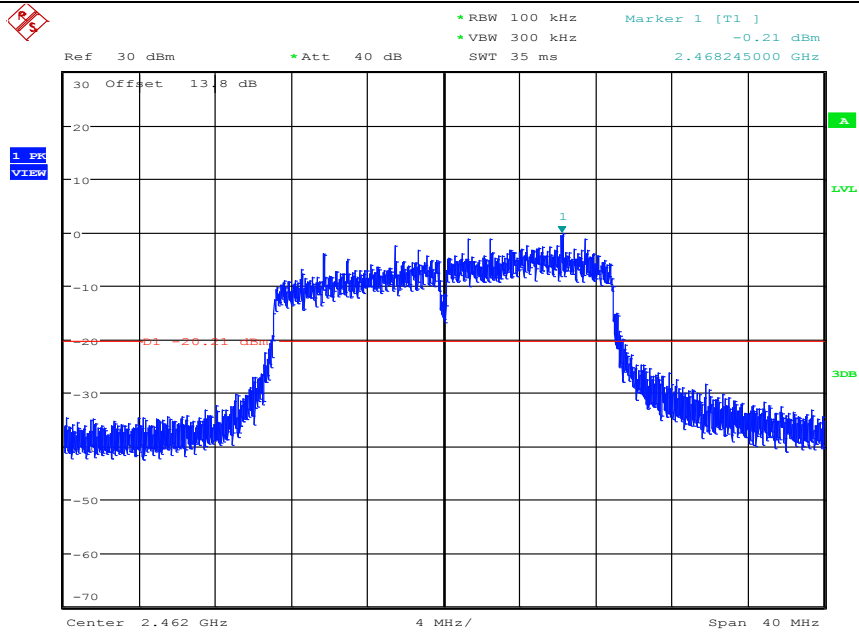
11N20SISO/
LCH



Date: 17.OCT.2017 19:01:41

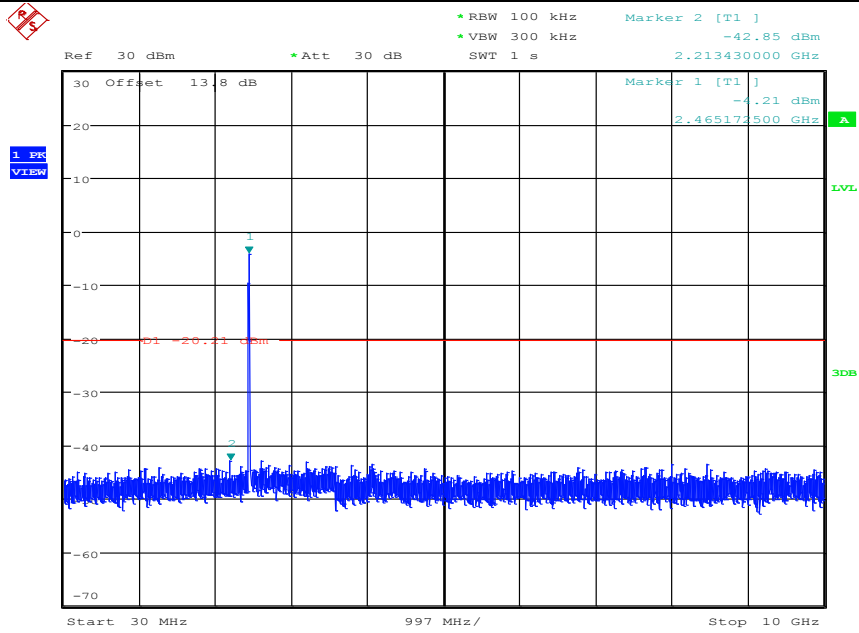


Pref/
11N20SISO/
HCH

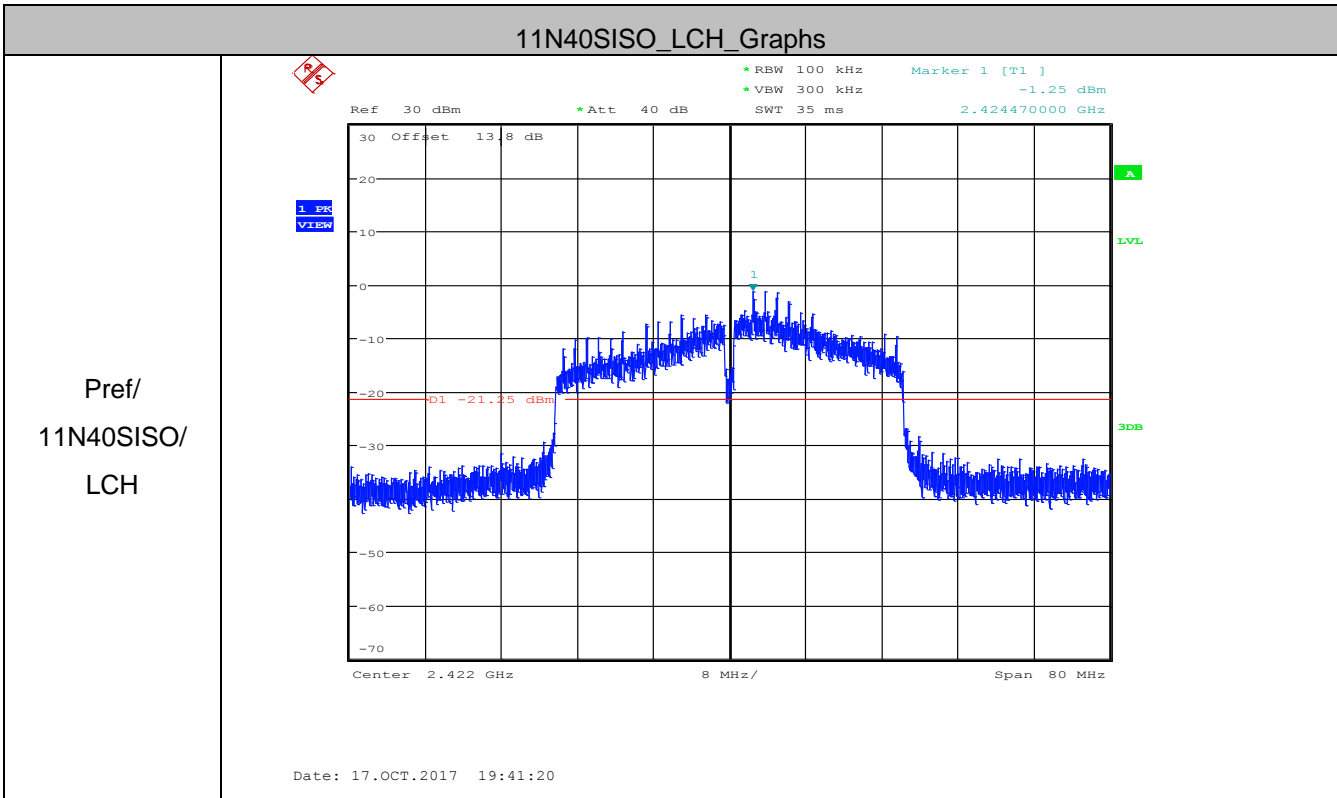
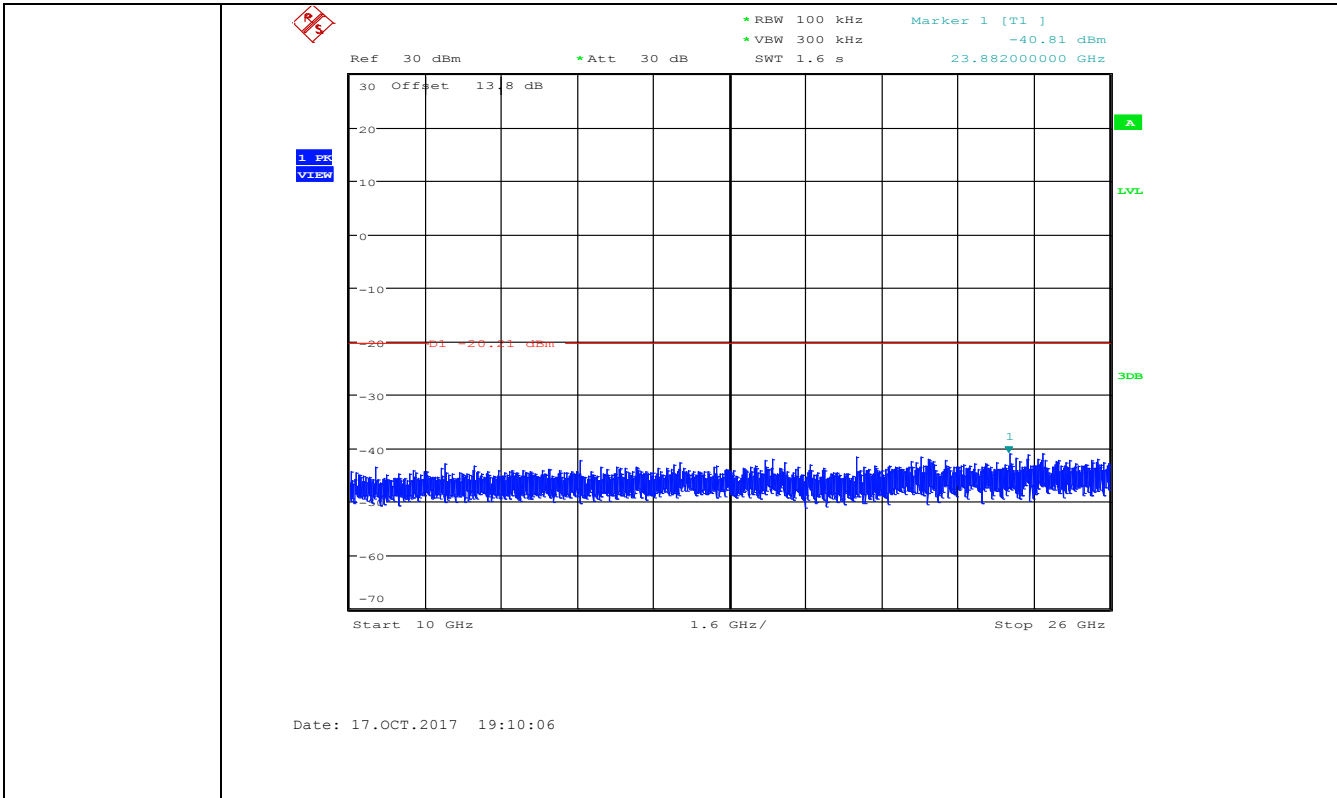


Date: 17.OCT.2017 19:09:44

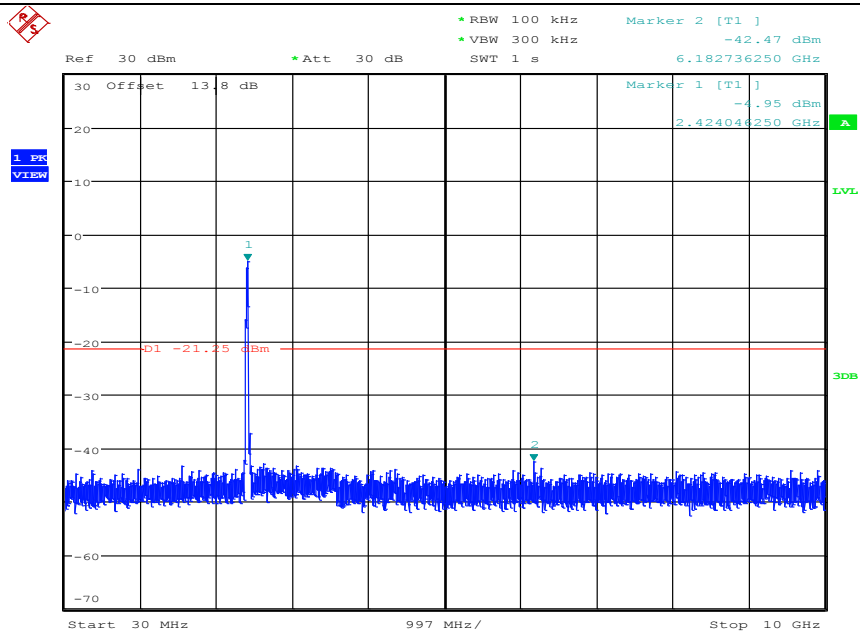
Puw/
11N20SISO/
HCH



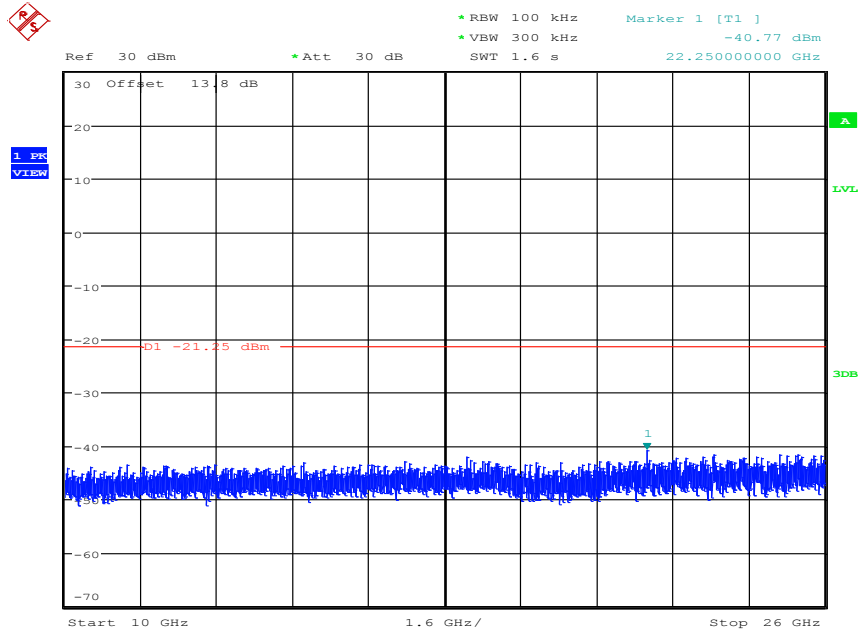
Date: 17.OCT.2017 19:09:56



Puw/
11N40SISO/
LCH



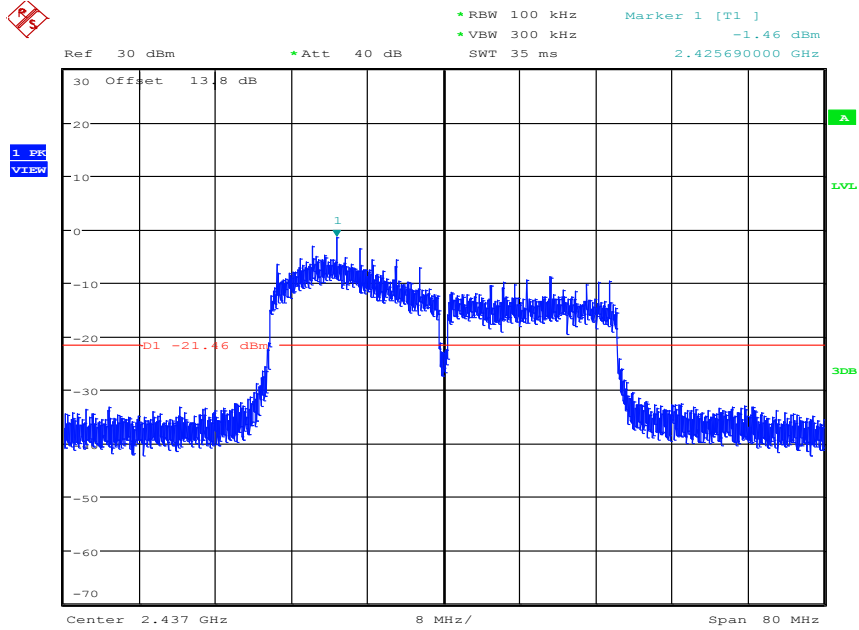
Date: 17.OCT.2017 19:41:32



Date: 17.OCT.2017 19:41:42

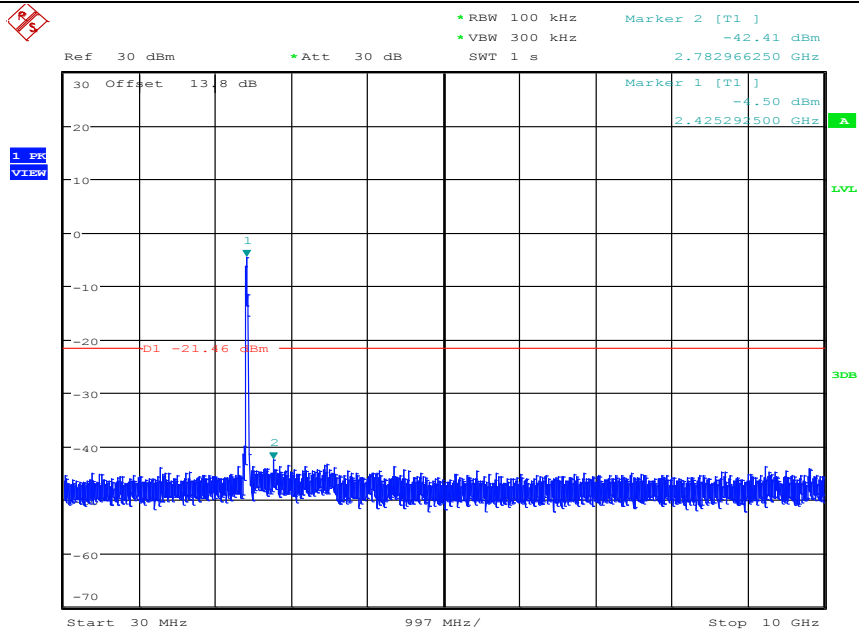
11N40SISO_MCH_Graphs

Pref/
11N40SISO/
MCH

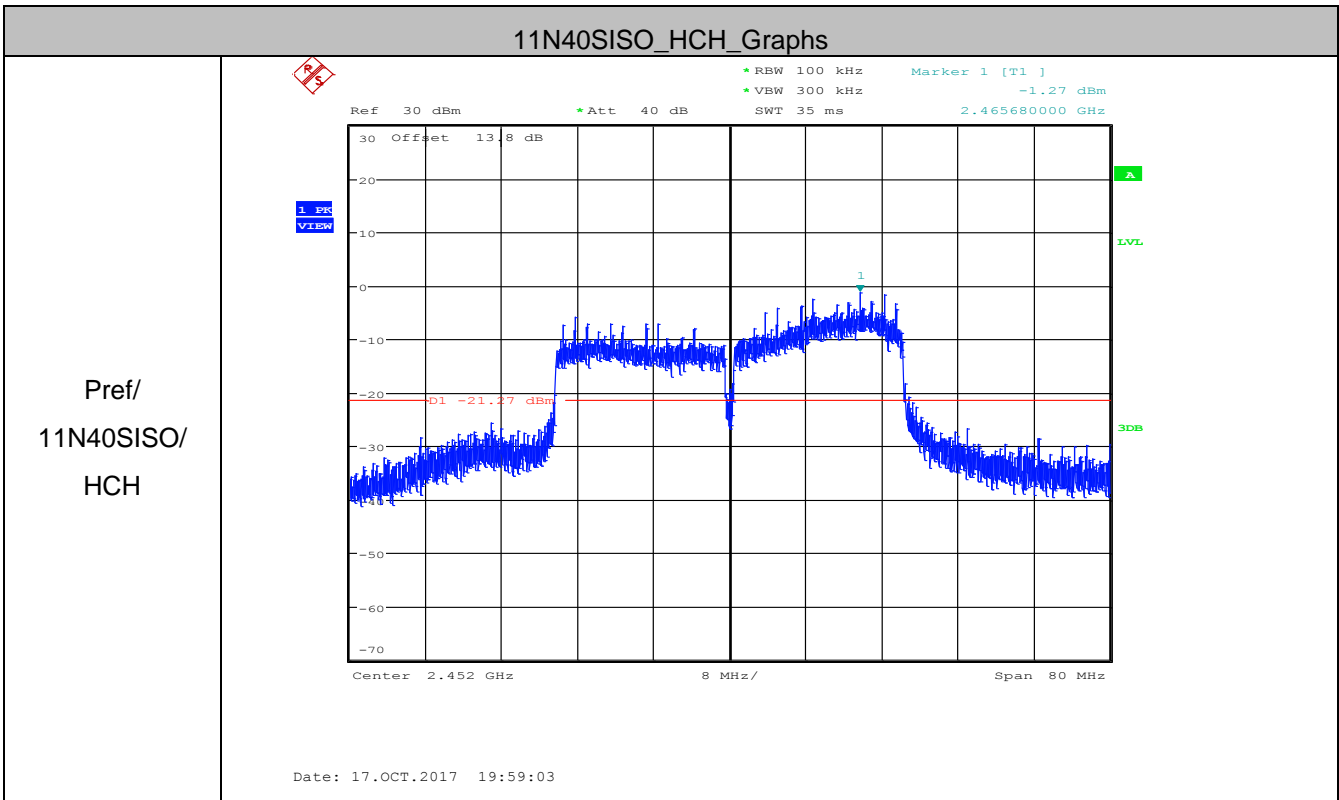
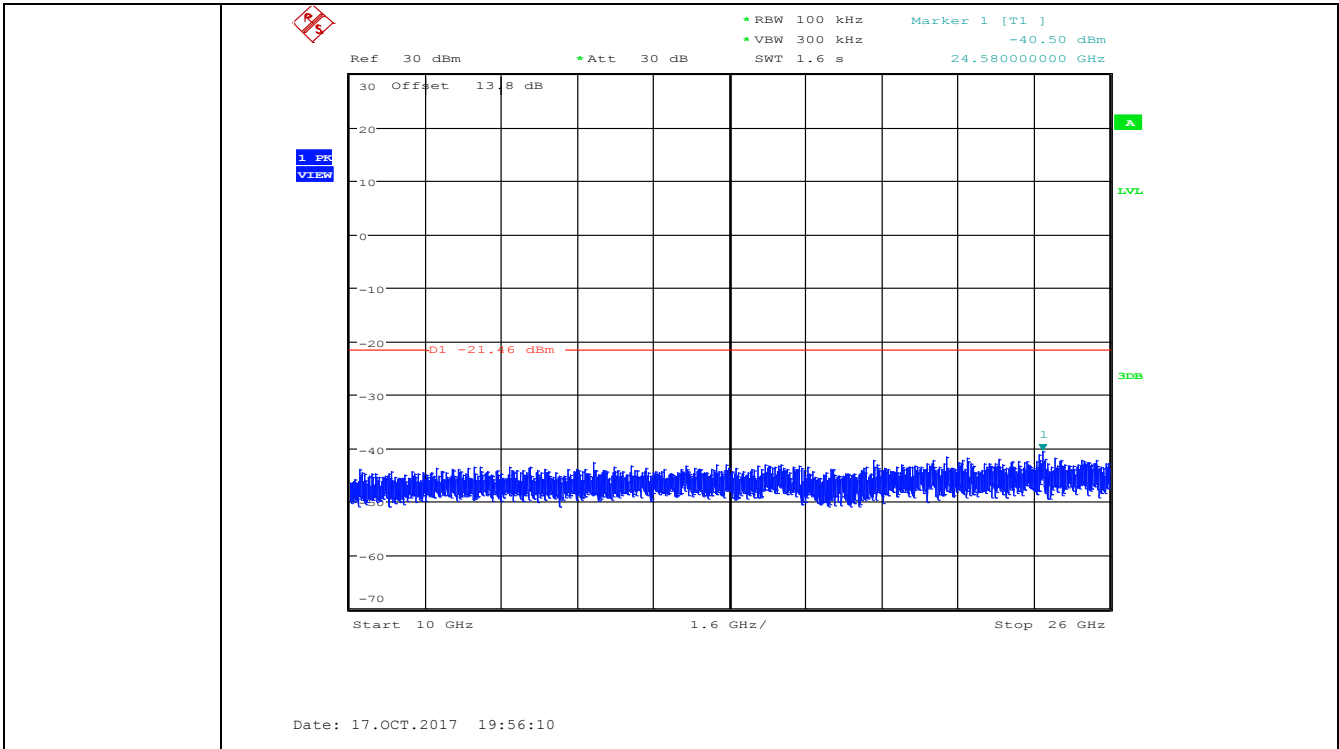


Date: 17.OCT.2017 19:55:47

Puw/
11N40SISO/
MCH

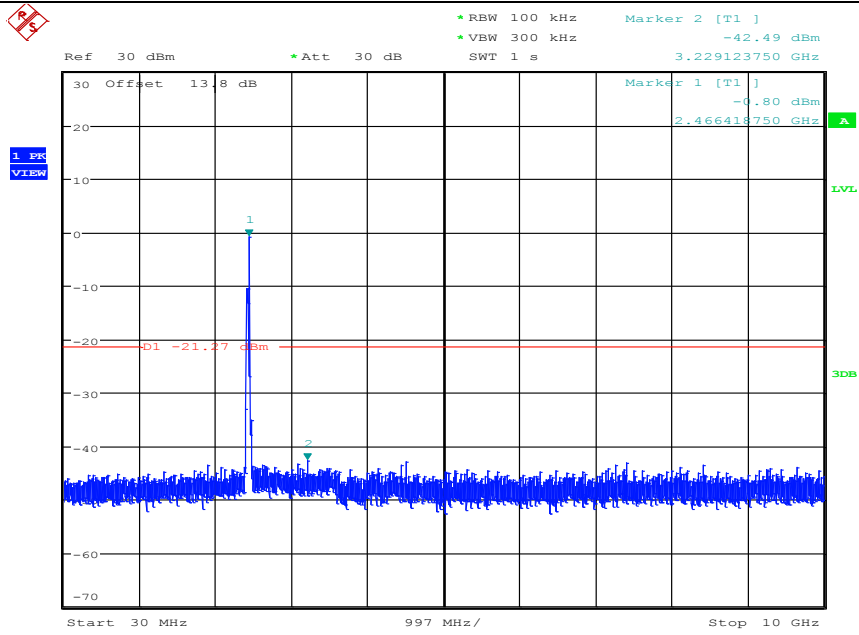


Date: 17.OCT.2017 19:56:00

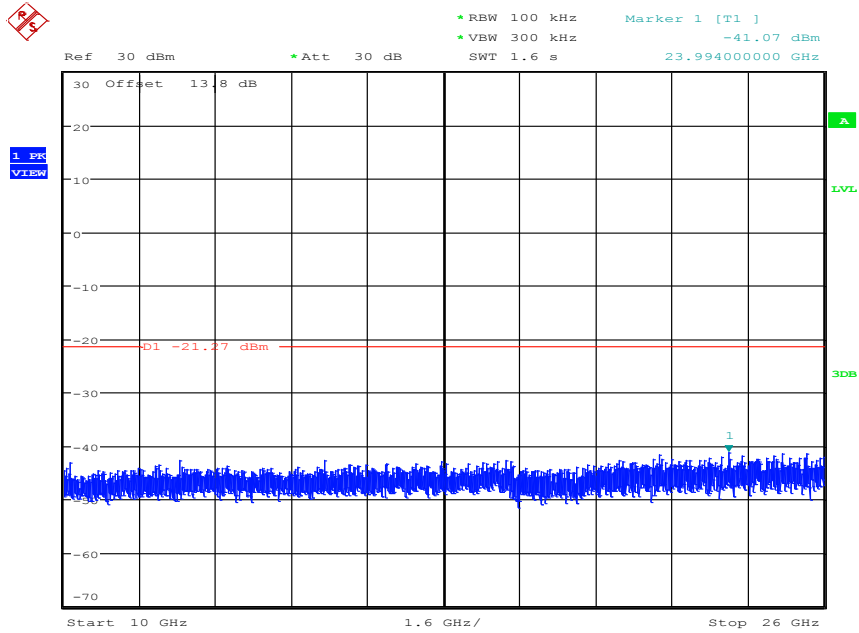


Pref/
11N40SISO/
HCH

Puw/
11N40SISO/
HCH



Date: 17.OCT.2017 19:59:15

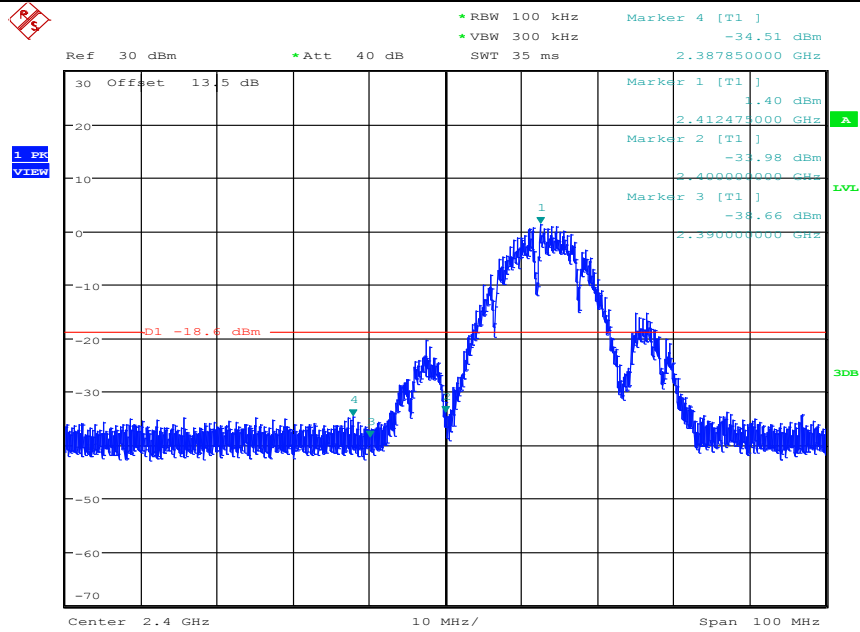


Date: 17.OCT.2017 19:59:25

Band-edge for RF Conducted Emissions

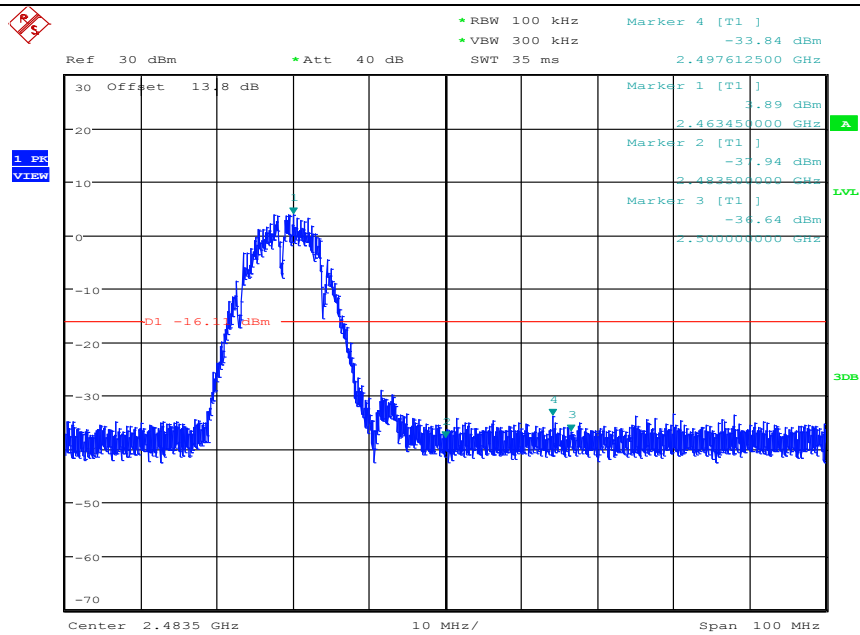
Graphs

11B/LCH



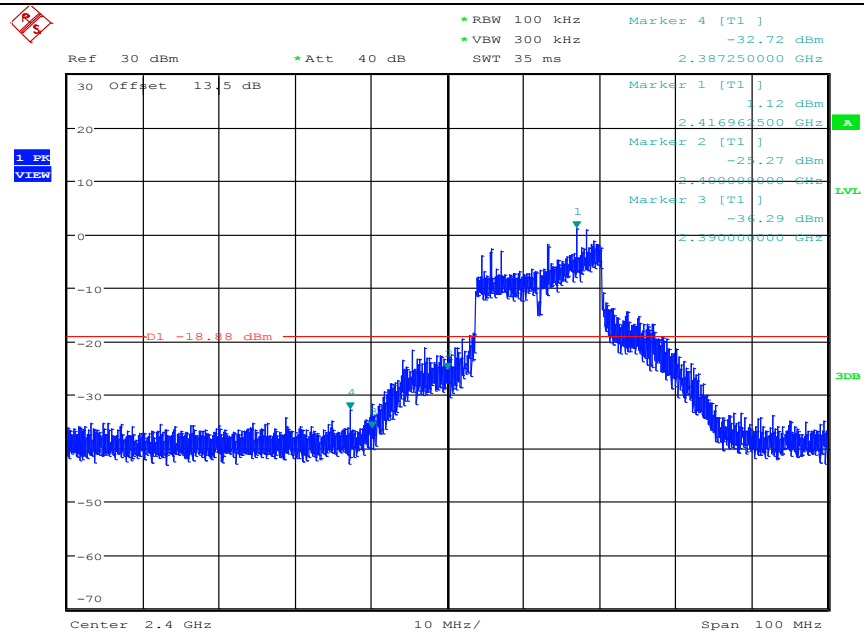
Date: 17.OCT.2017 18:25:11

11B/HCH



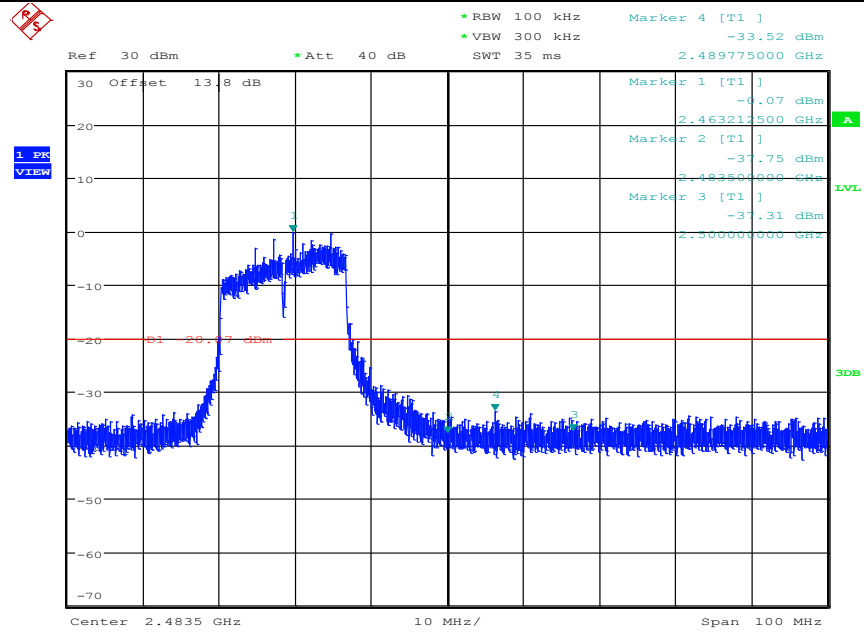
Date: 17.OCT.2017 18:31:57

11G/LCH



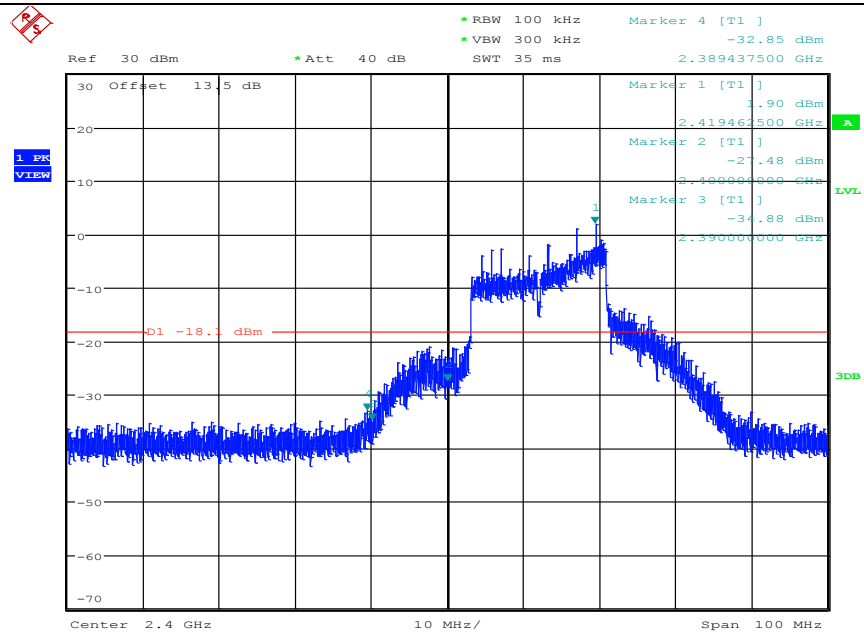
Date: 17.OCT.2017 18:54:12

11G/HCH



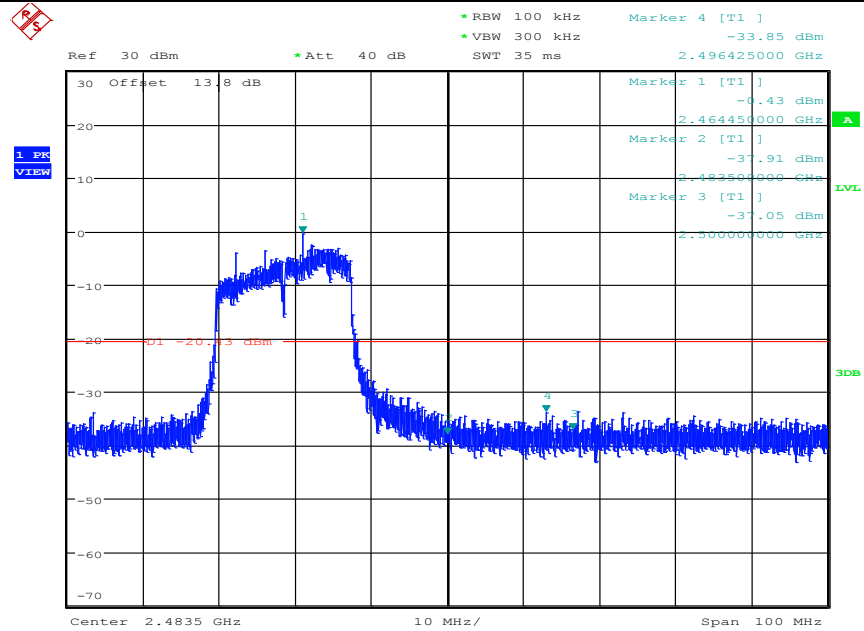
Date: 17.OCT.2017 18:57:30

11N20SISO/LCH



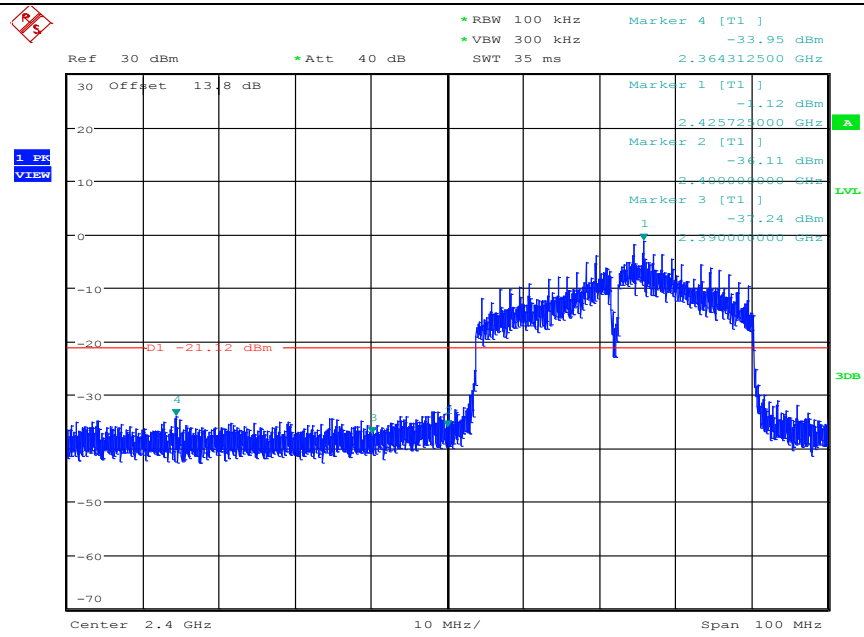
Date: 17.OCT.2017 19:01:18

11N20SISO/HCH

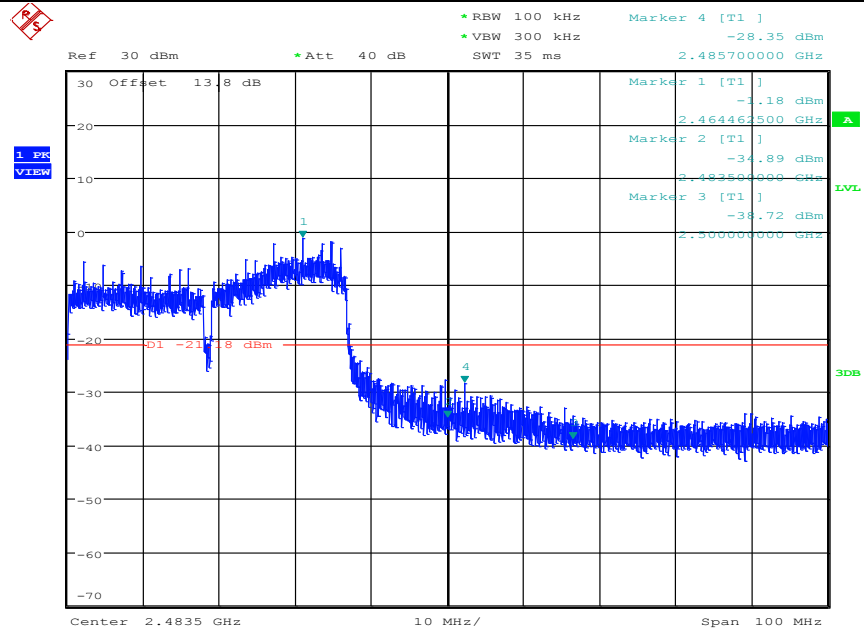


Date: 17.OCT.2017 19:09:31

11N40SISO/LCH



11N40SISO/HCH



10. RADIATED BANDEDGE AND SPURIOUS MEASUREMENT

10.1. LIMITS OF Radiated Bandedge and Spurious Measurement

CFR 47 (FCC) part 15.247 (d) and 558074 D01 DTS Meas Guidance v03r05

10.2. TEST PROCEDURE

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. For measurement below 1GHz, the EUT was placed on a turntable with 0.8 meter, above ground. For measurement above 1 GHz, test at FAR, the EUT is placed on a non-conductive table, which is 1.5 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: $\text{Antenna Factor} + \text{Cable Loss} + \text{Read Level} - \text{Preamp Factor} = \text{Level}$
6. For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
7. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW=100 kHz for $f < 1$ GHz; VBW \geq RBW; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3MHz for $f > 1$ GHz for peak measurement. Set RBW = 1 MHz, and 1/T (on time) for average measurement.

10.3.TEST DATA

9KHz-30MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

Table 10 Radiated Emission Test Data 9k Hz-30MHz

Frequency MHz	Cable Loss(dB)	Antenna Factor(dB)	Readings(dBμV/m)	Level(dBμV/m)	Polarity(H/V)	Turntable Angle(deg)	Antenna Height(m)	Limits(dBμV/m)	Margin(dB)
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--

30MHz-1GHz

Worst case is shown below for 30MHz-1GHz only.

The emissions don't show in following result tables are more than 20dB below the limits.

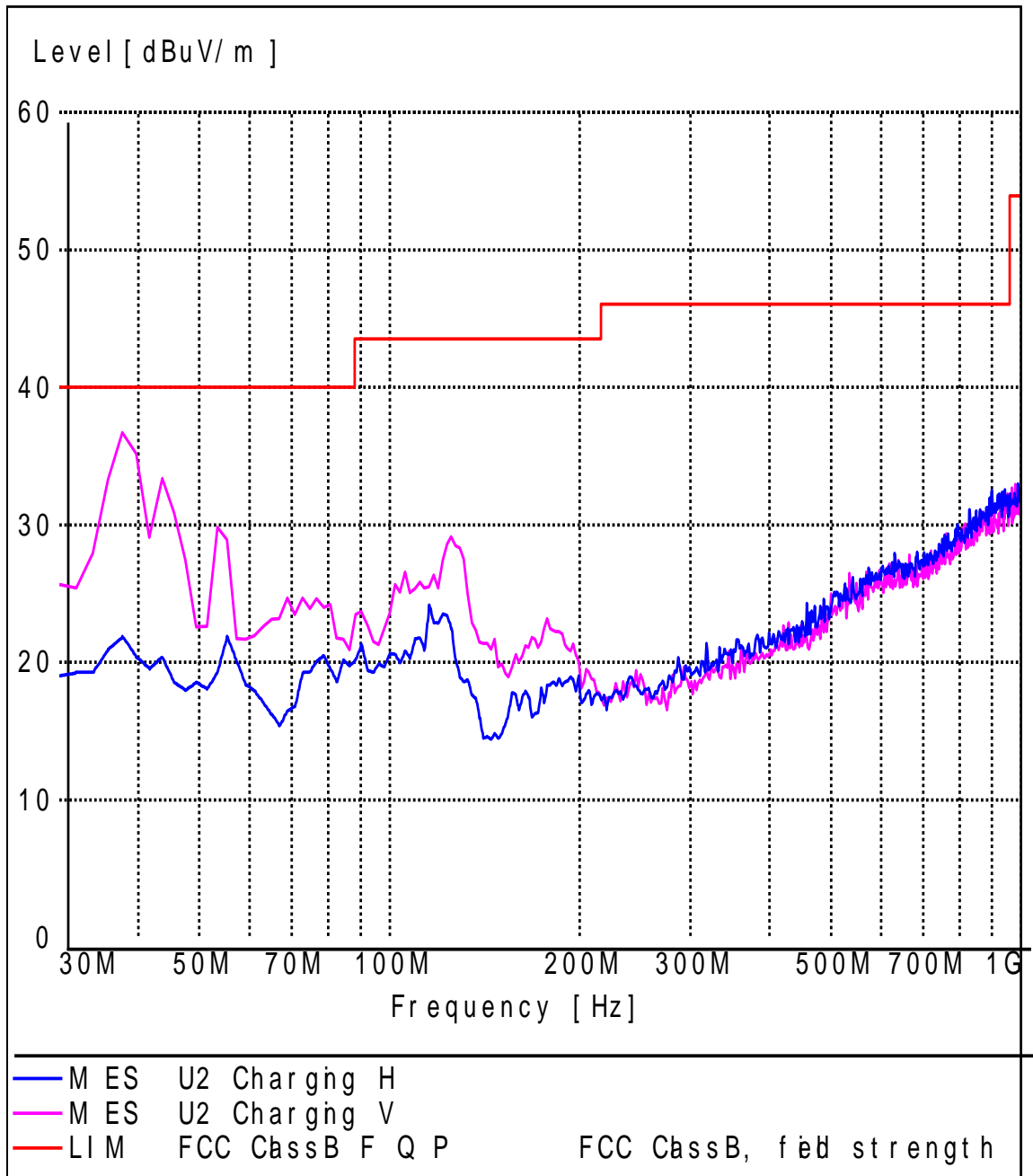
Table 11 Radiated Emission Test Data 30MHz-1GHz

Frequency MHz	Cable Loss(dB)	Antenna Factor(dB)	Readings(dBμV/m)	Level(dBμV/m)	Polarity(H/V)	Turntable Angle(deg)	Antenna Height(m)	Limits(dBμV/m)	Margin(dB)
30.026	0.6	12.3	9.8	22.7	V	30	100	40	17.3
37.966	0.7	12.3	20.9	33.9	V	20	100	40	6.1
43.686	0.7	13.6	16.1	30.4	V	50	100	40	9.6
53.326	0.7	13.3	12.7	26.7	V	30	100	40	13.3
105.811	1.2	13.2	9.2	23.6	V	50	100	43.5	19.9
125.251	1.2	10.5	15.3	27.0	V	60	100	43.5	16.5
37.563	0.6	12.3	5.2	18.1	H	50	100	40	21.9
55.331	0.8	13.0	4.7	18.5	H	30	100	40	21.5
78.597	1.0	7.8	8.8	17.6	H	30	100	40	22.4
109.699	1.2	13.2	3.6	18.0	H	50	100	43.5	25.5
115.661	1.2	12.3	8.0	21.5	H	50	100	43.5	22.0
121.362	1.3	10.5	8.5	20.3	H	60	100	43.5	23.2

REMARK: Emission level(dBuV)=Read Value(dBuV/m) + Antenna Factor(dB)+ Cable Loss +preamp(dB)

Radiated Emission

EUT Name: U2
Operating Condition: Charging and Transmitting
Test site: SMQ NETC EMC Lab.
Antenna Position: Vertical & Horizontal
Comment: 120V/60Hz



1-18G

11b

Ch1

Radiated Emission

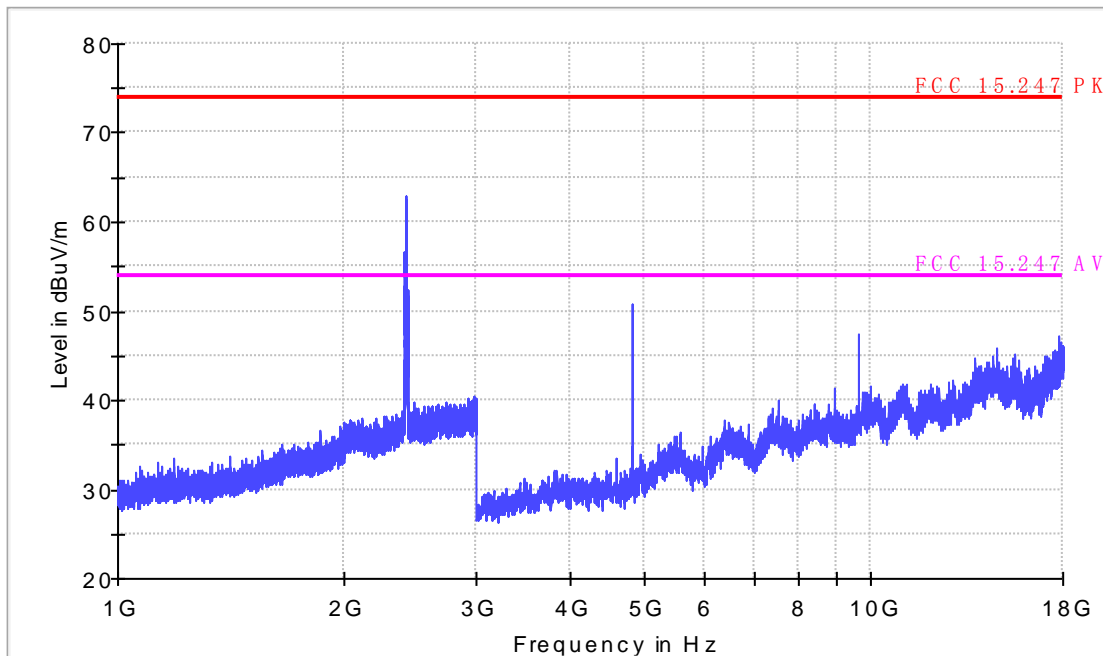
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11b CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



Radiated Emission

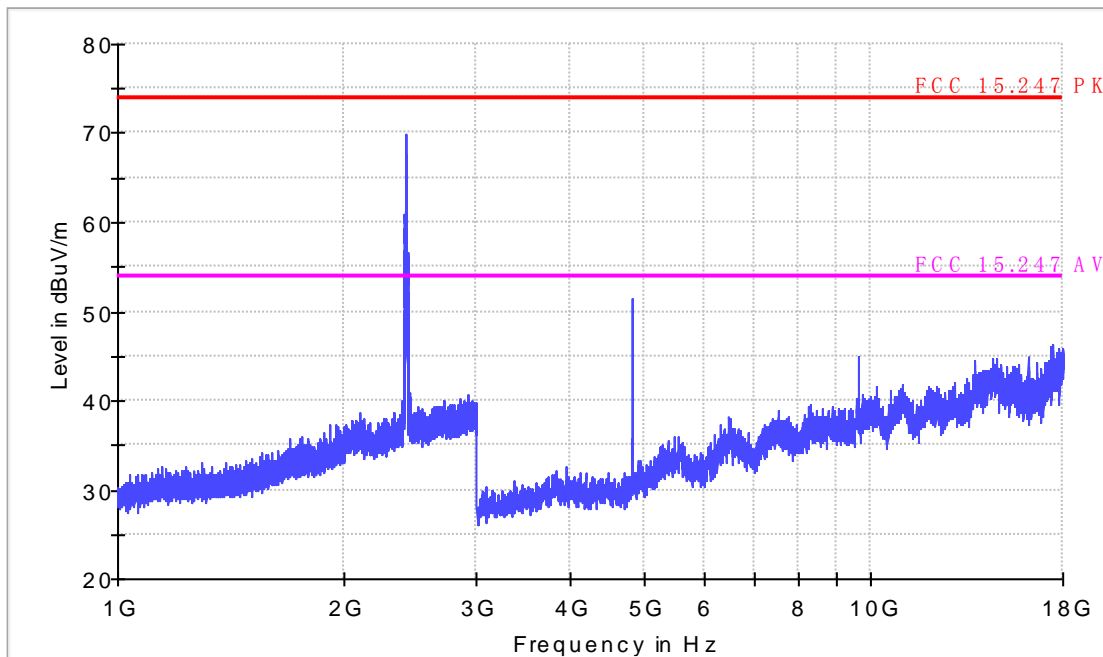
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11b CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



1-18G

11b

CH6

Radiated Emission

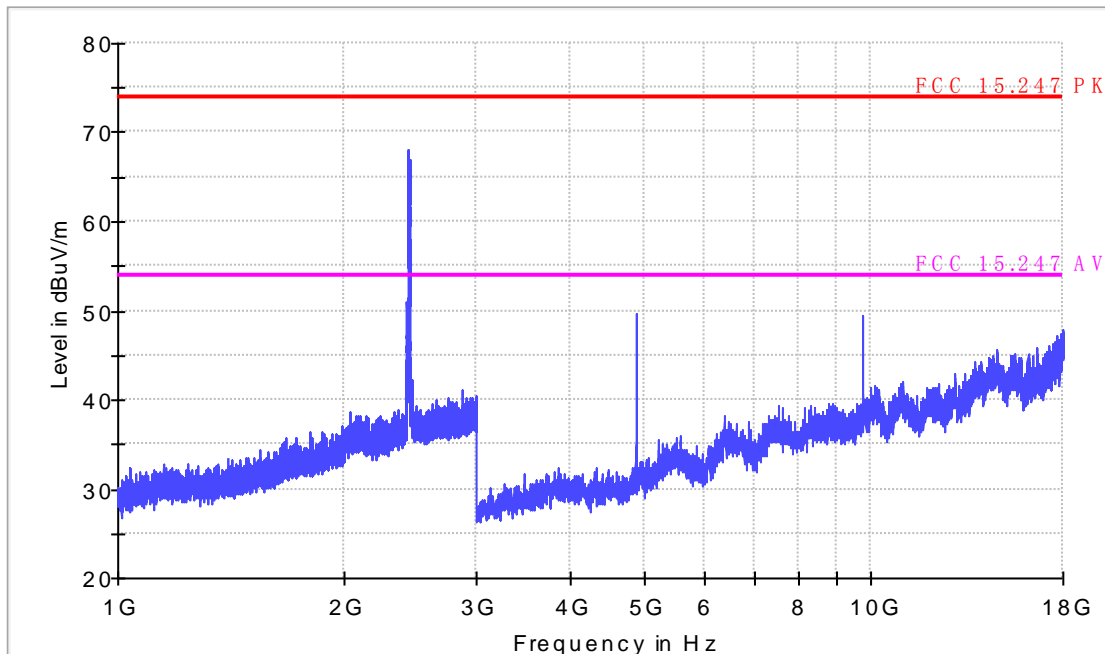
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11b CH6
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



Radiated Emission

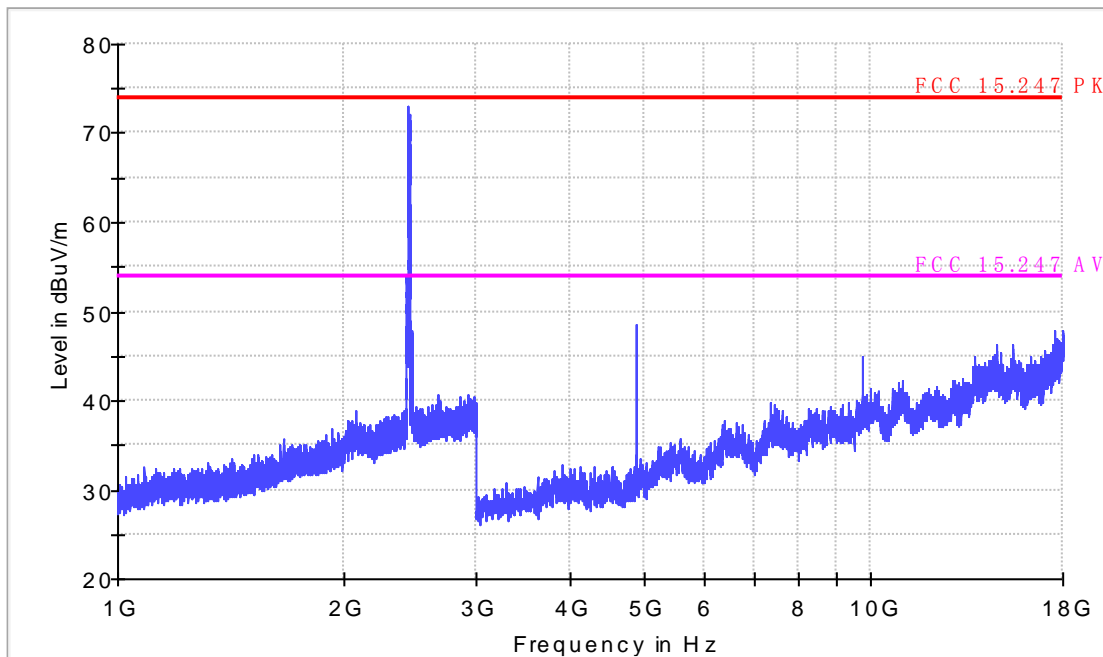
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11b CH6
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



1-18G

11b

CH11

Radiated Emission

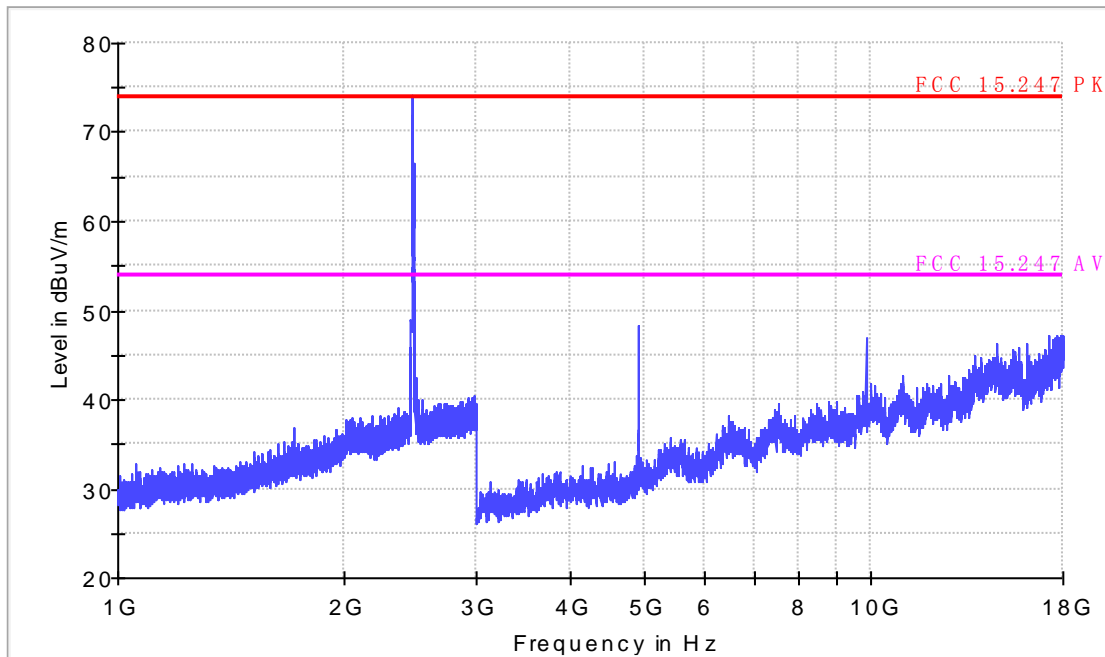
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11b CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



Radiated Emission

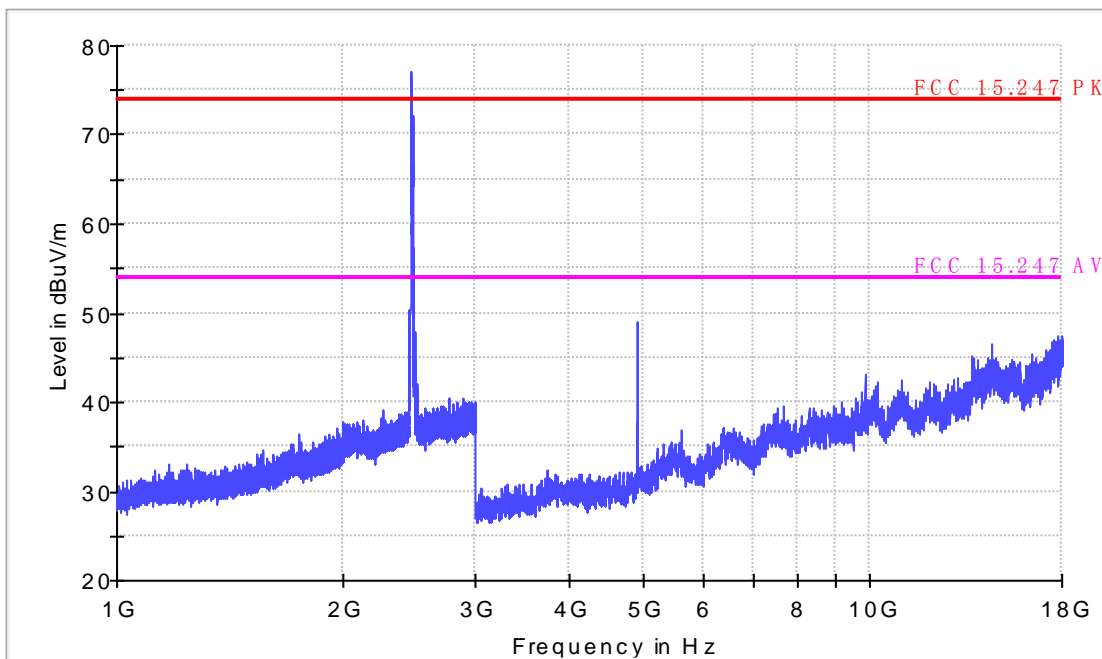
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11b CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



1-18G

11g

CH1

Radiated Emission

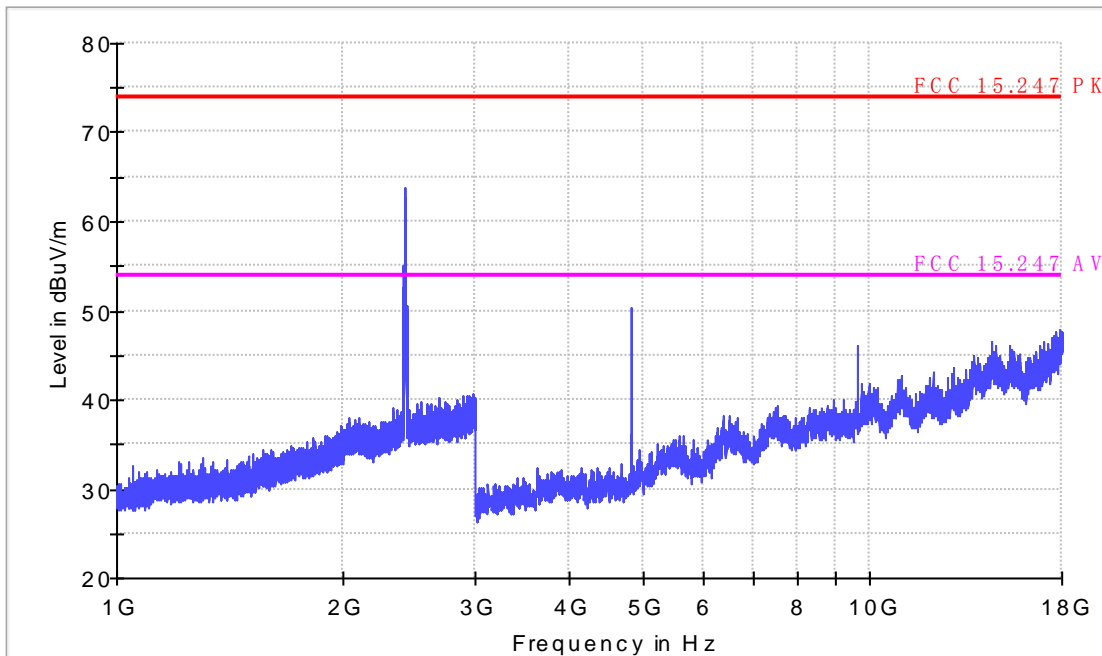
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11g CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



Radiated Emission

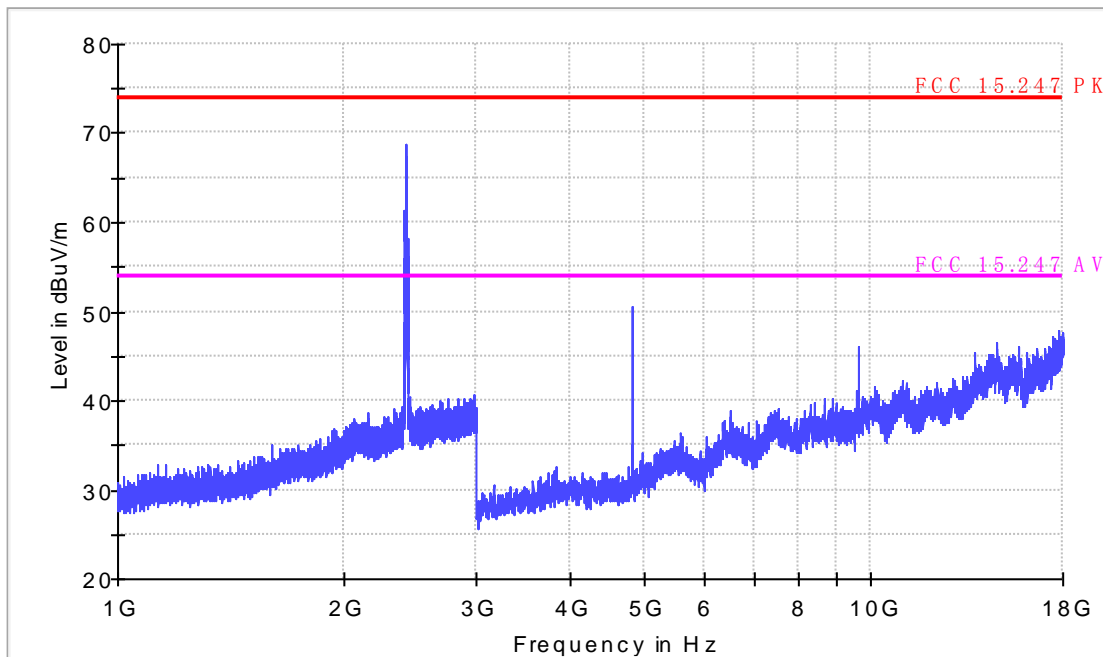
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11a CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



1-18G

11g

CH6

Radiated Emission

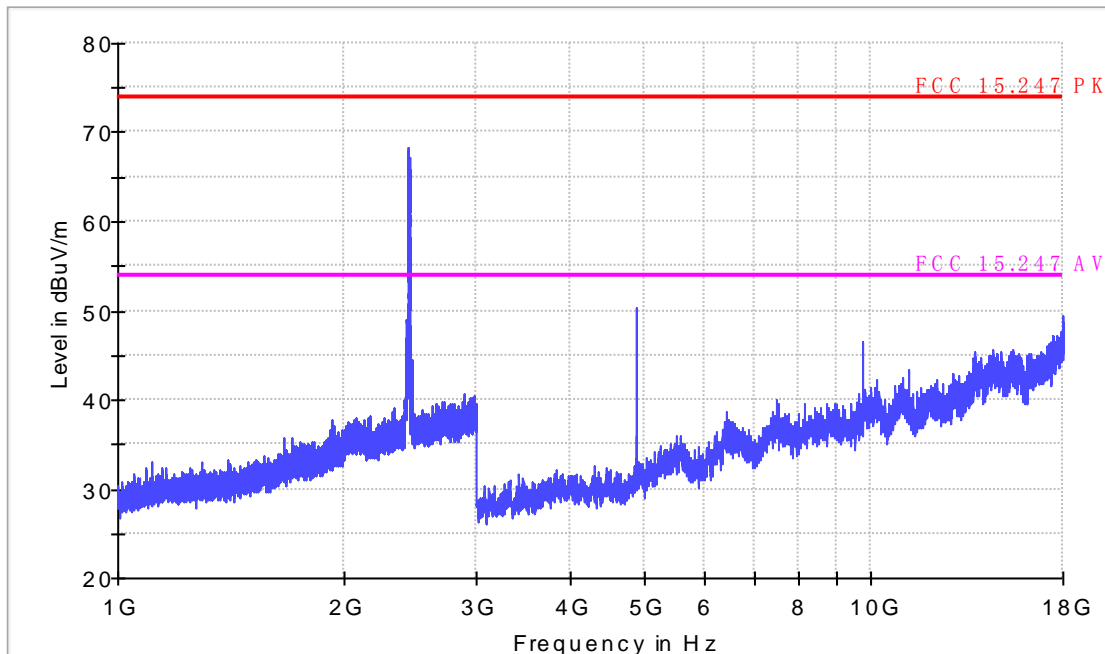
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11g CH6
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



Radiated Emission

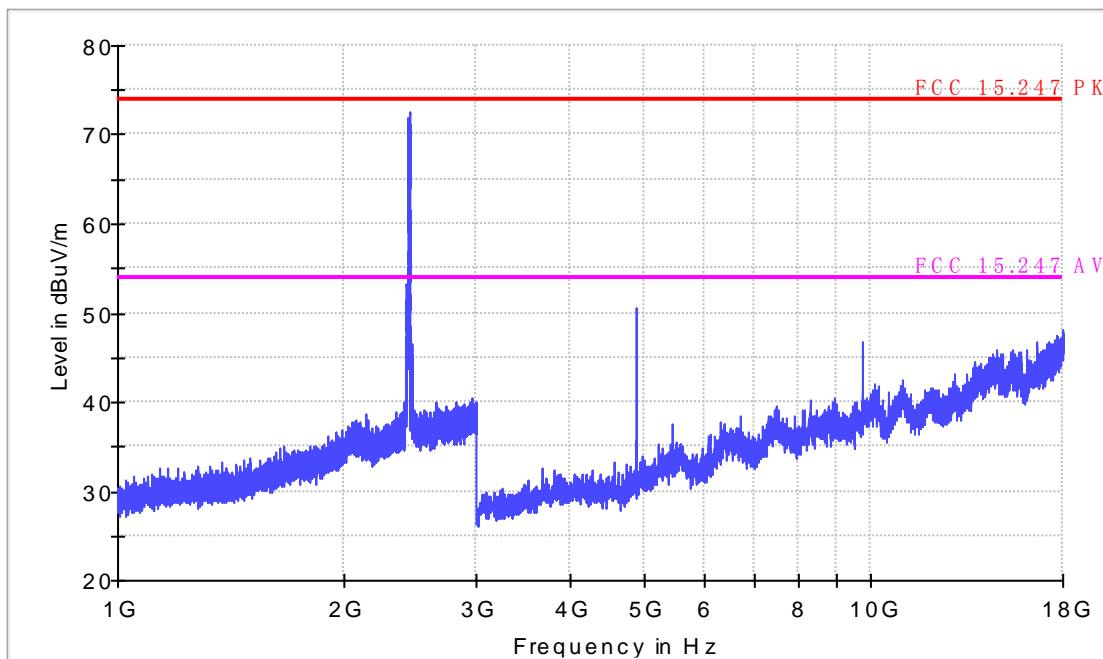
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11g CH6
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



1-18G

11g

CH11

Radiated Emission

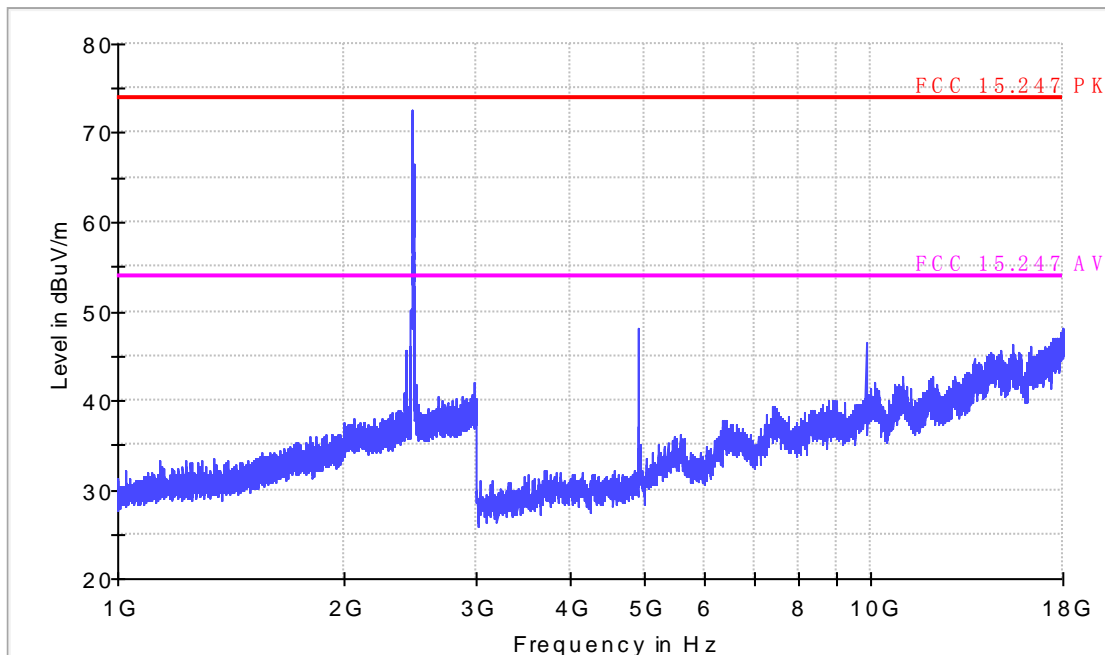
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11a CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



Radiated Emission

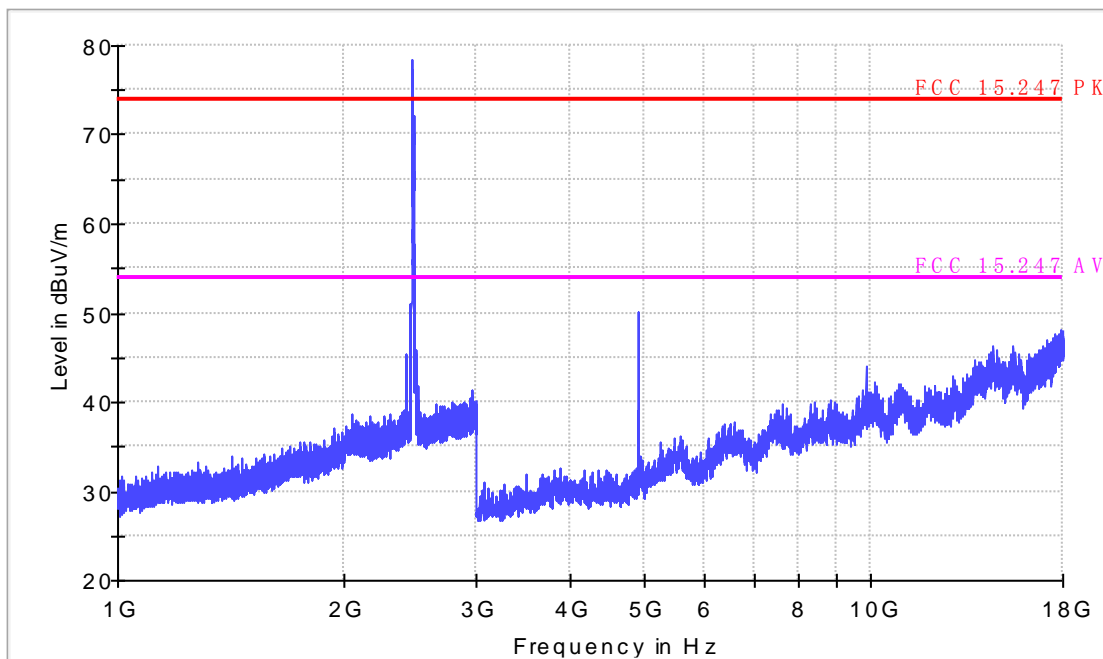
EUT Information

EUT Model Name: M U2
Operation mode: Wifi 11g CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



1-18G
11n-HT20
CH1

Radiated Emission

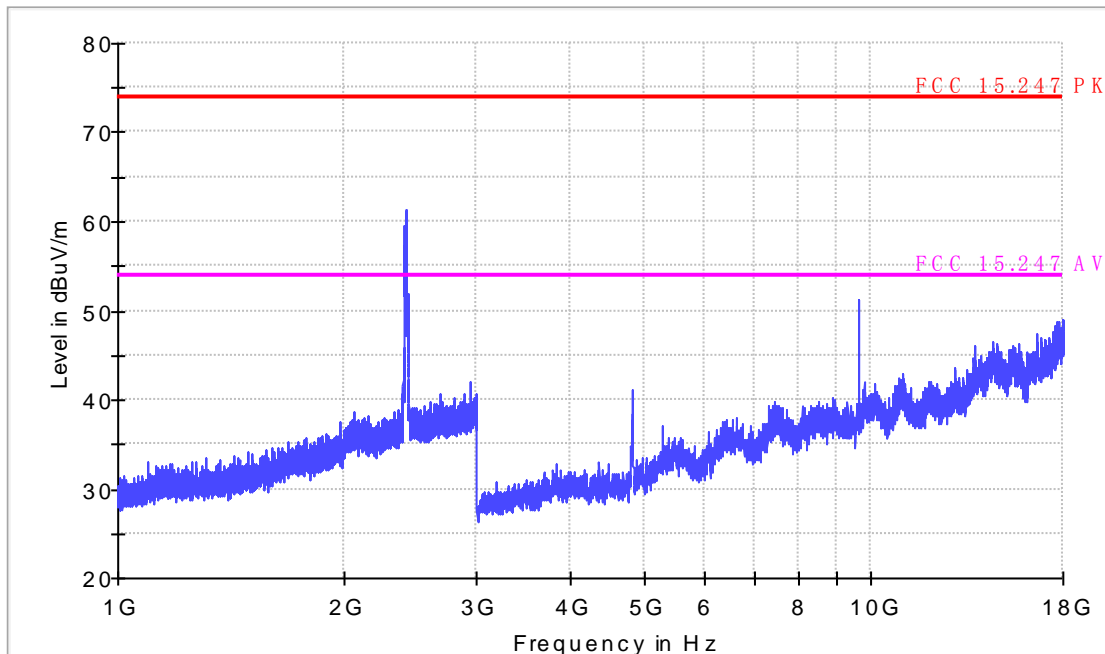
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n HT20 CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



Radiated Emission

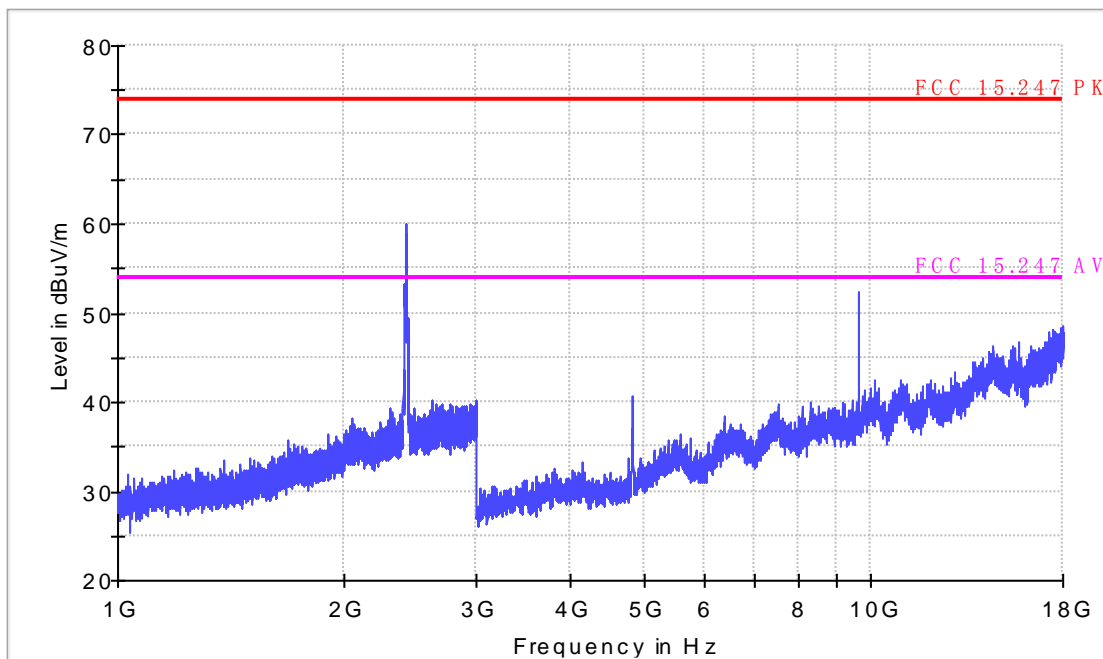
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n HT20 CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



1-18G
11n-HT20
CH6

Radiated Emission

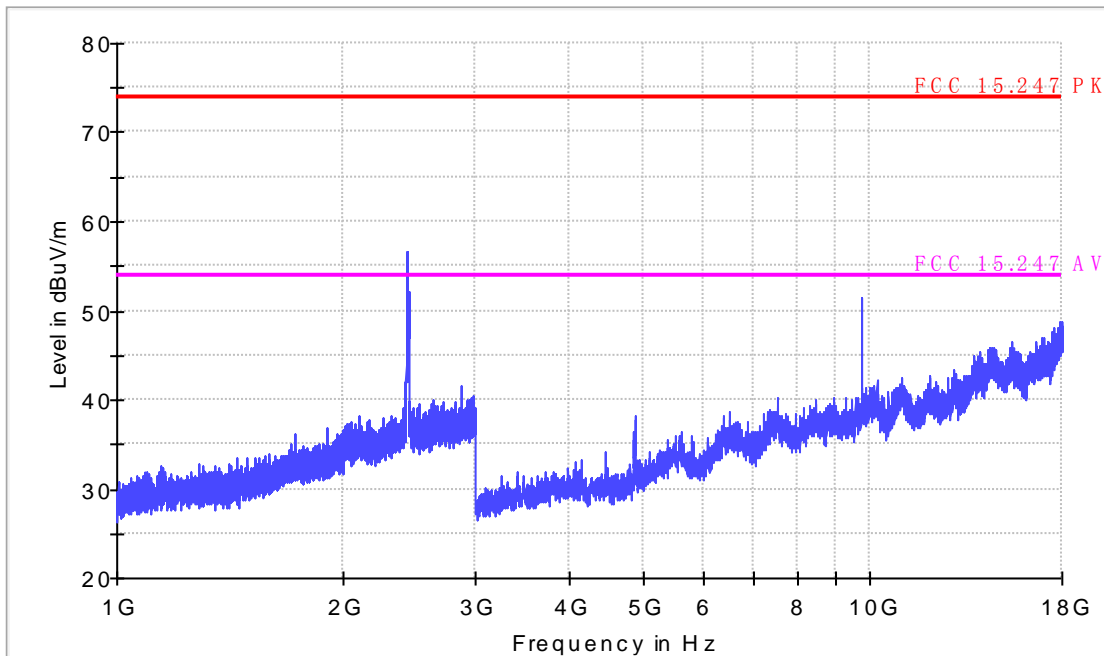
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n HT20 CH6
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



Radiated Emission

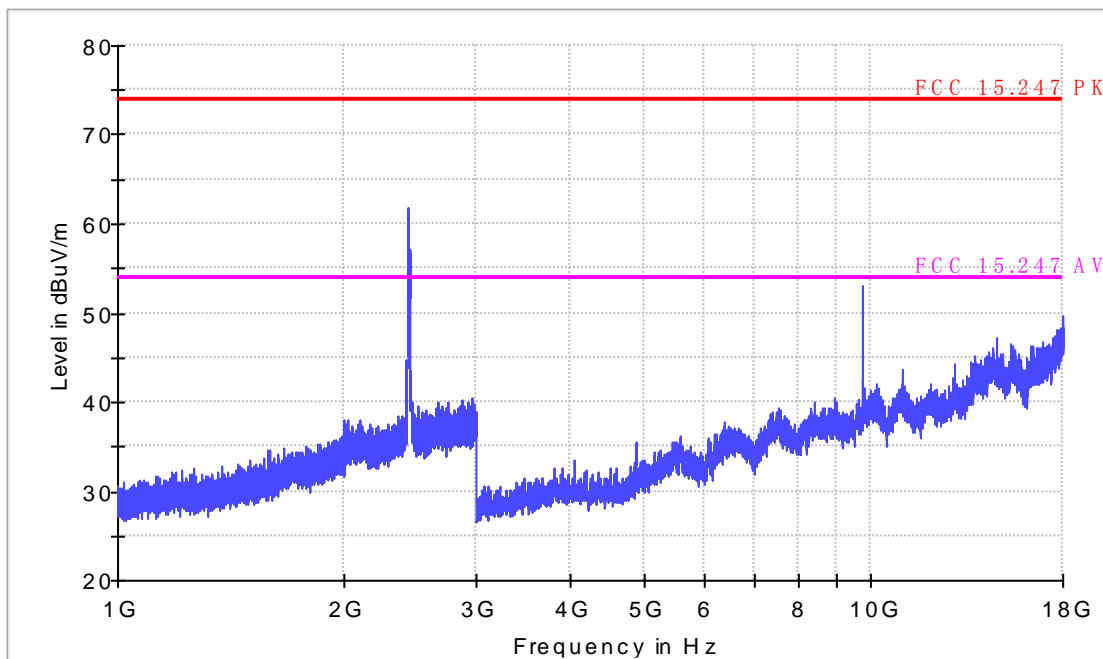
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n HT20 CH6
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



1-18G
11n-HT20
CH11

Radiated Emission

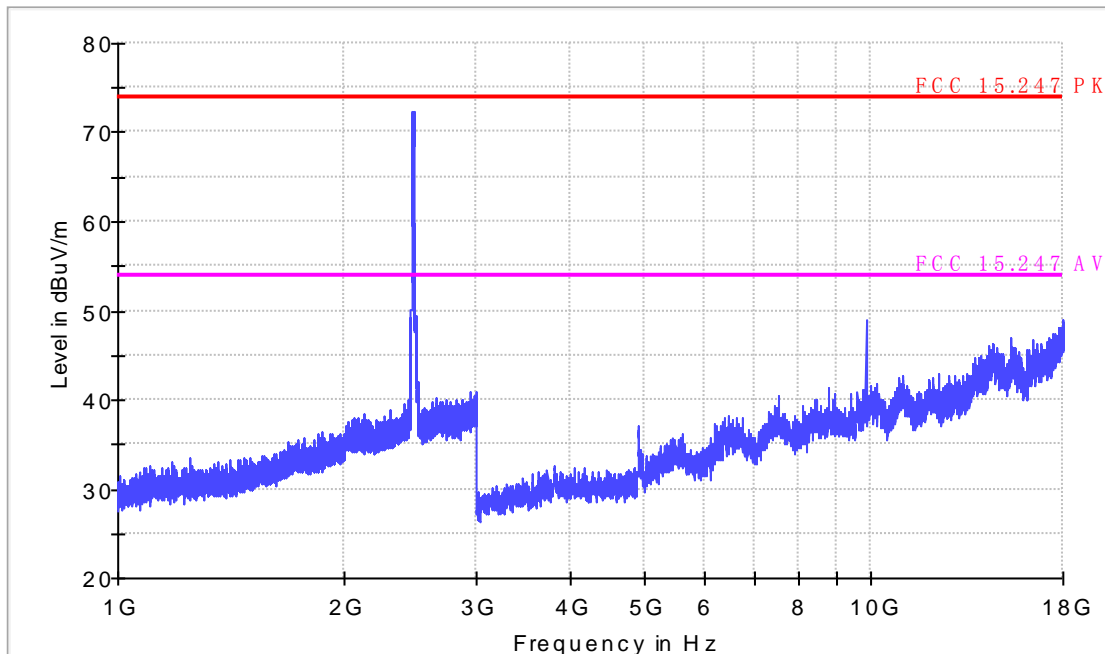
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n HT20 CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



Radiated Emission

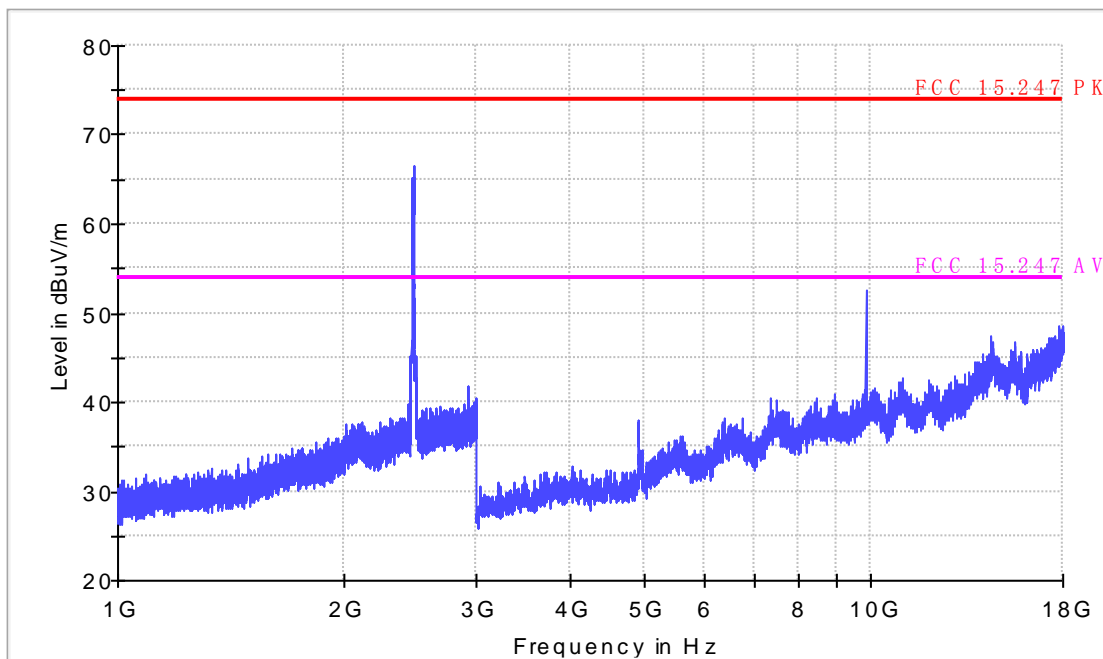
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n HT20 CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



1-18G
11n-HT40
CH3

Radiated Emission

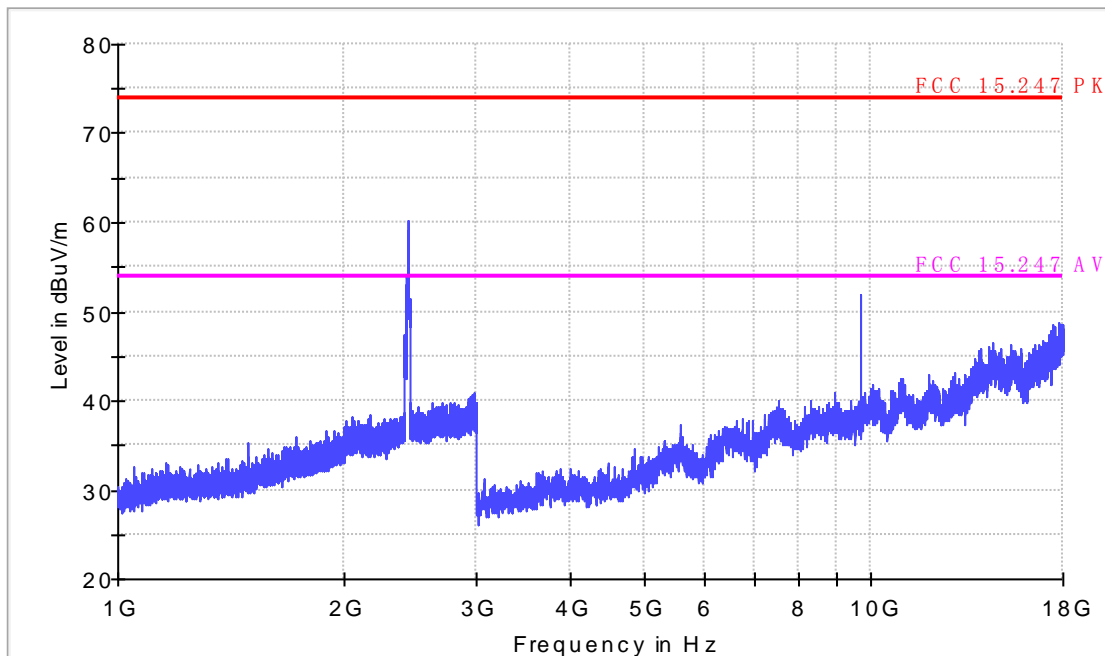
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n HT40 CH3
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



Radiated Emission

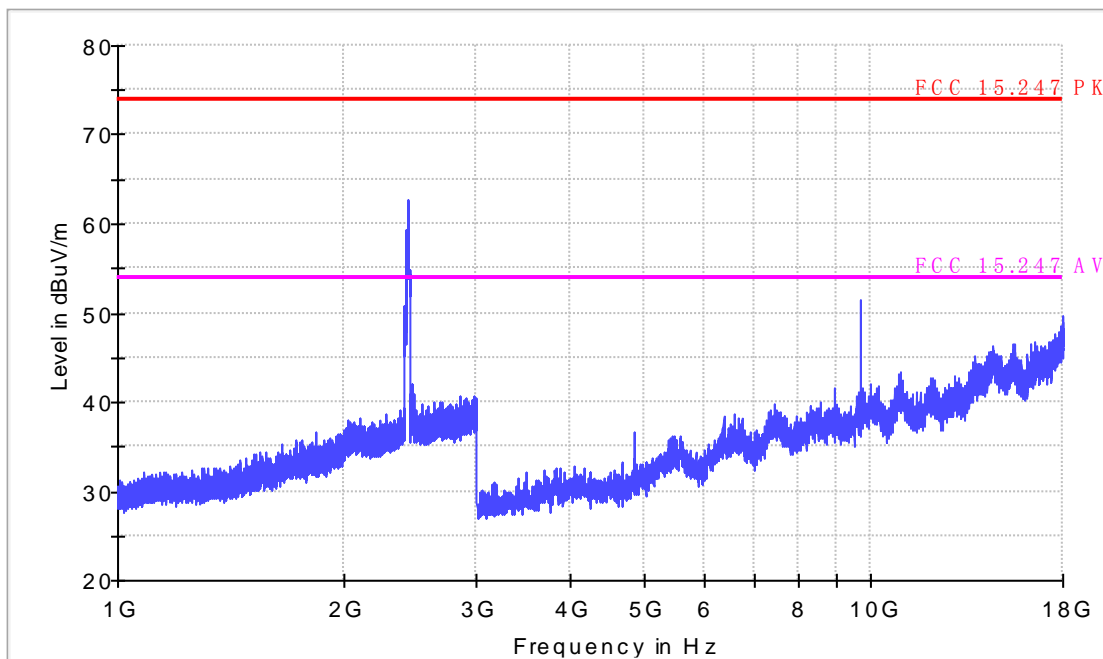
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n HT40 CH3
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



1-18G
11n-HT40
CH6

Radiated Emission

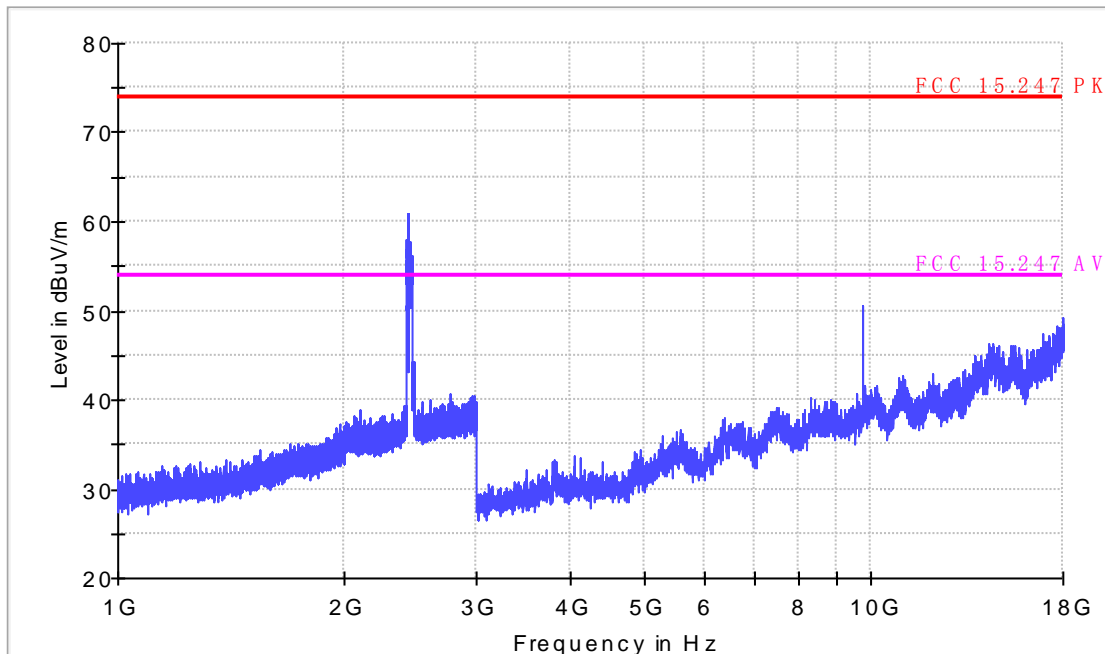
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n HT40 CH6
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



Radiated Emission

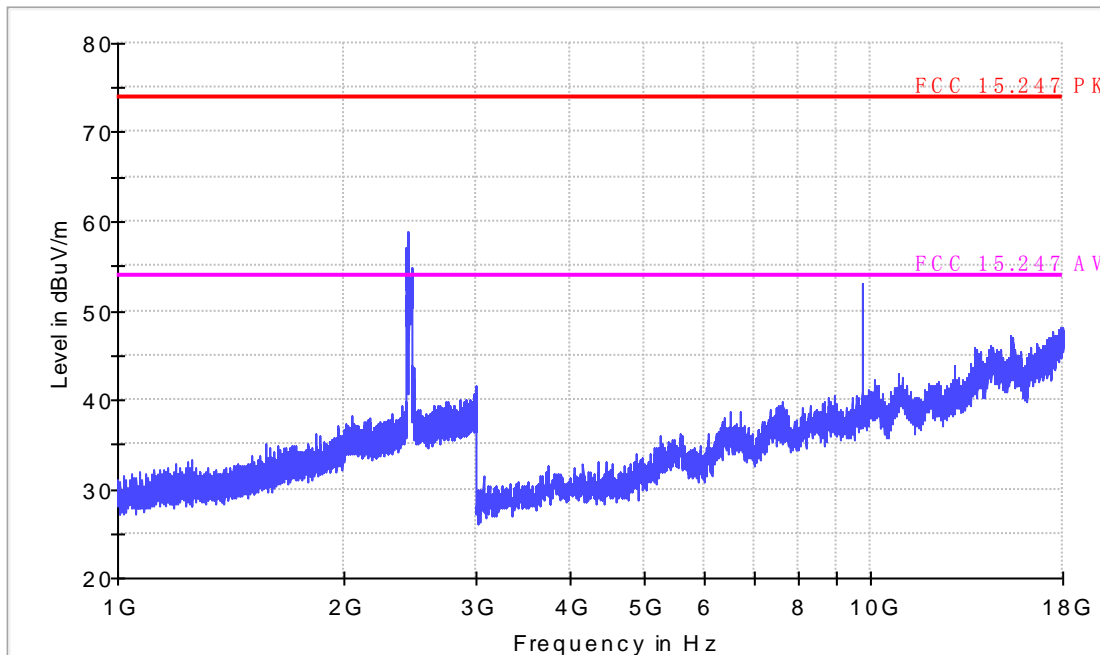
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n HT40 CH6
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



1-18G
11n-HT40
CH9

Radiated Emission

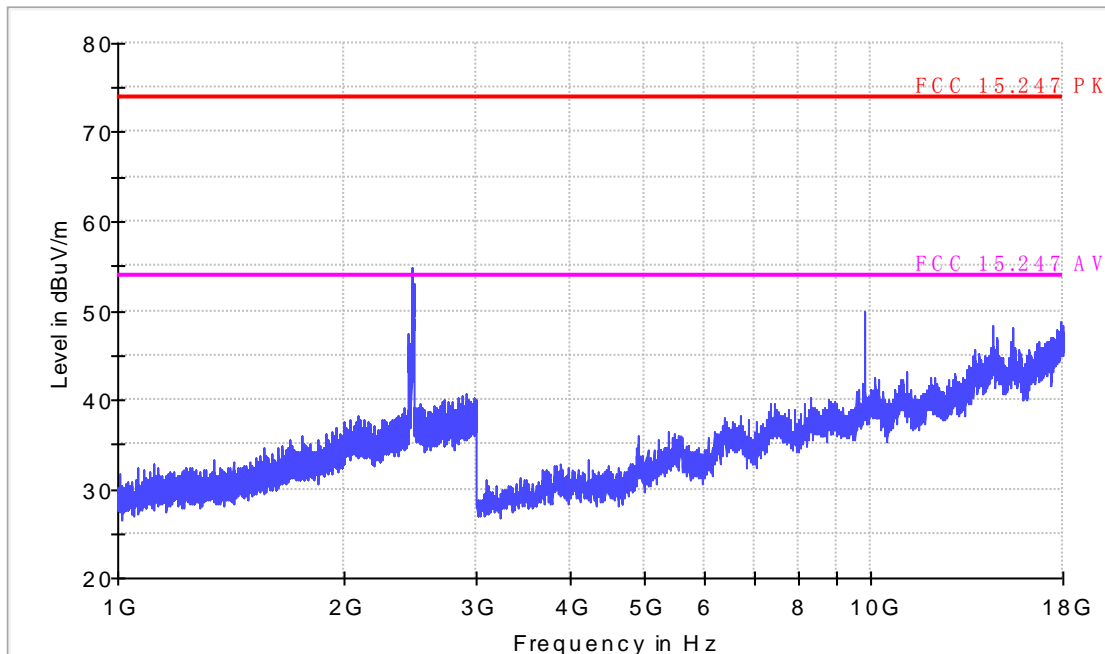
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n HT40 CH9
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



Radiated Emission

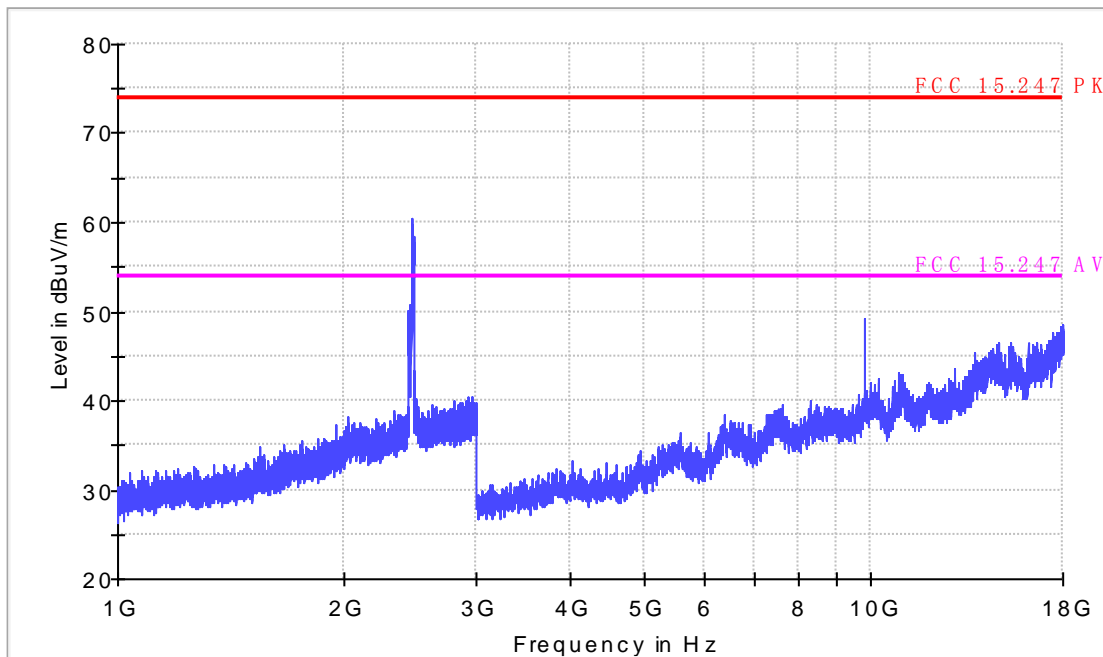
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n HT40 CH9
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



18-25G

(Worst Case at 802.11b CH6)

Radiated Emission

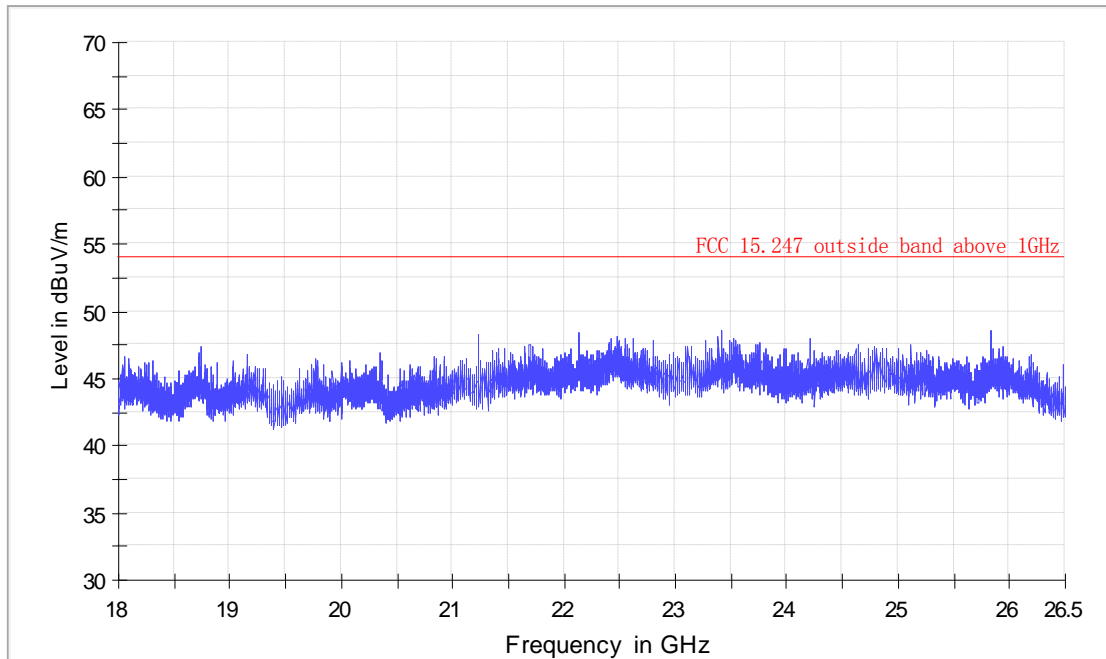
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11b CH6
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 18-26.5GHz



Radiated Emission

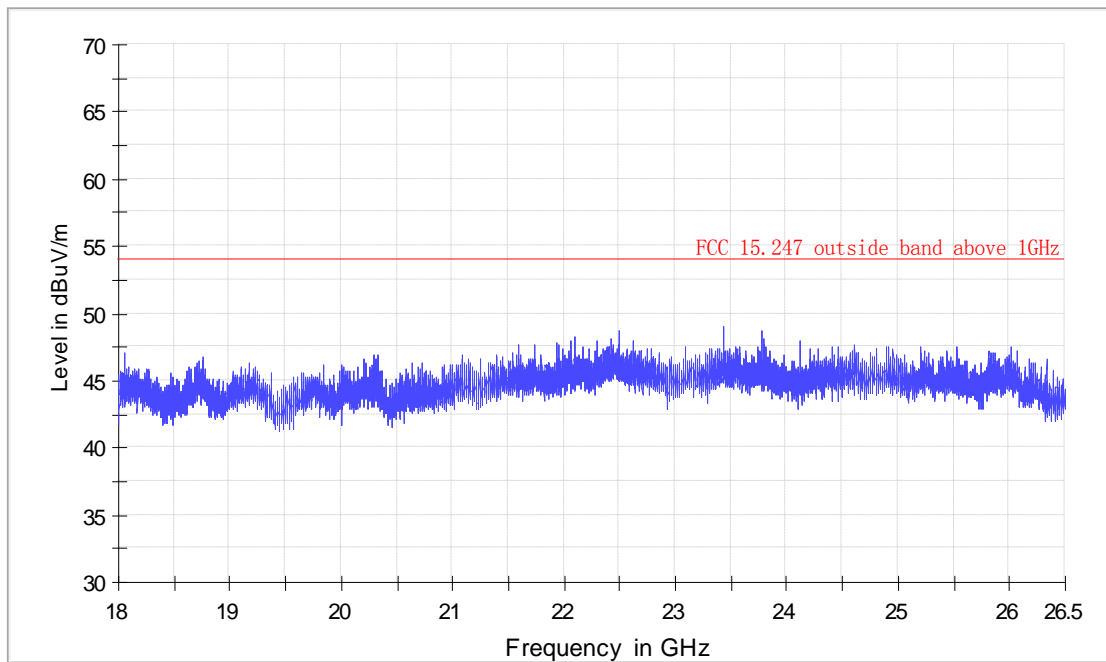
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11b CH6
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 18-26.5GHz



Band edge

11b

CH1

Radiated Emission

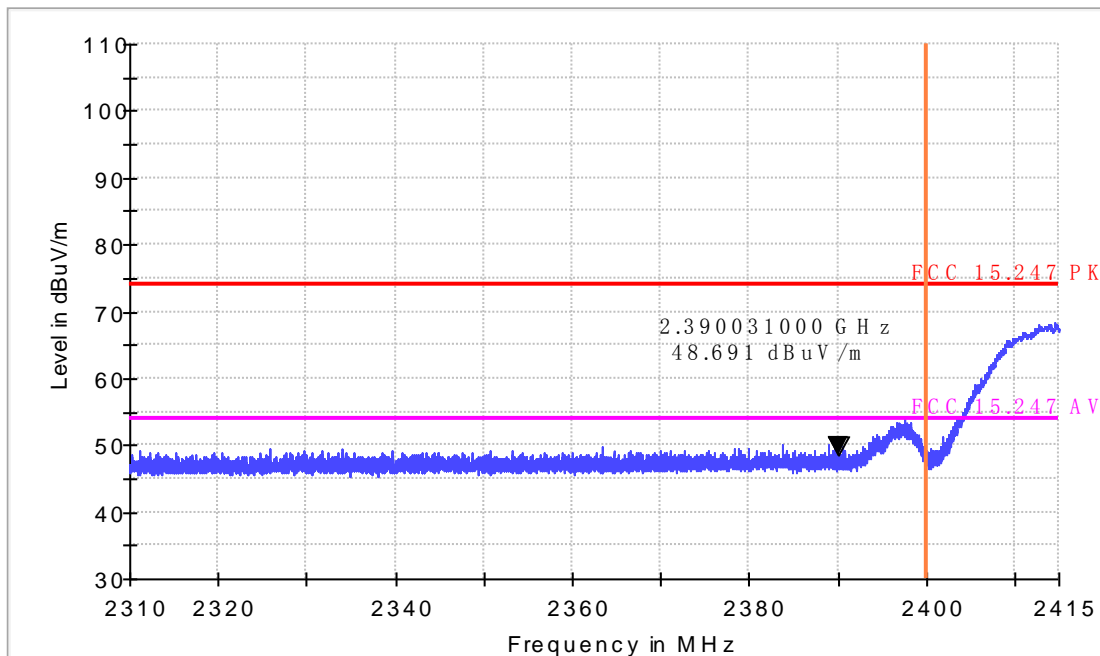
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11b CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Radiated Emission

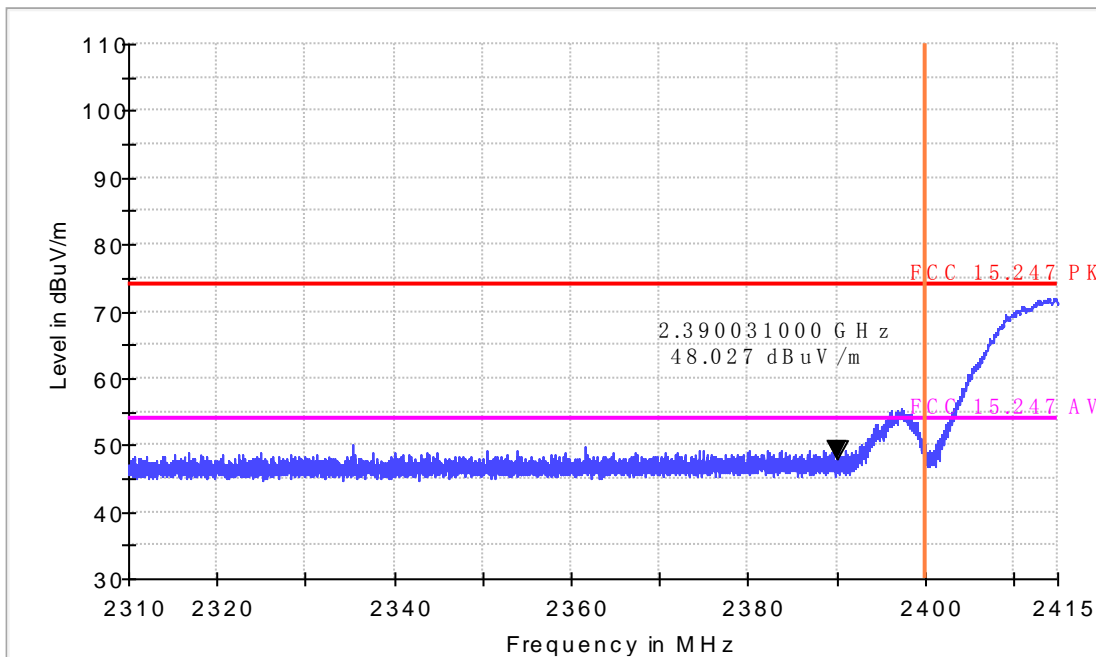
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11b CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Radiated Emission

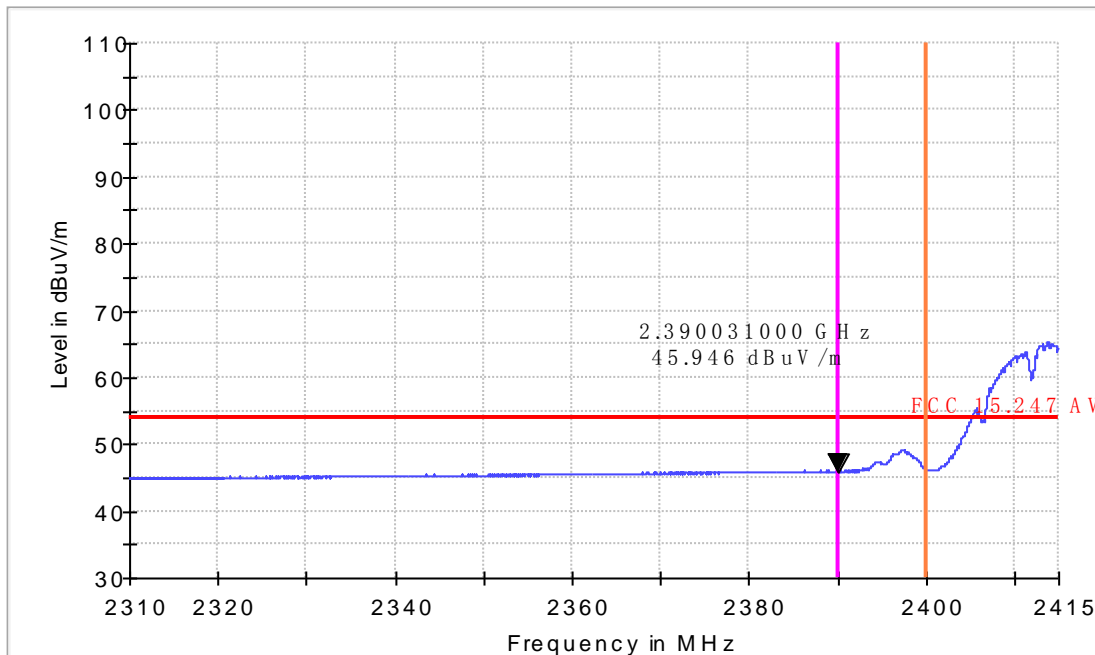
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11b CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Radiated Emission

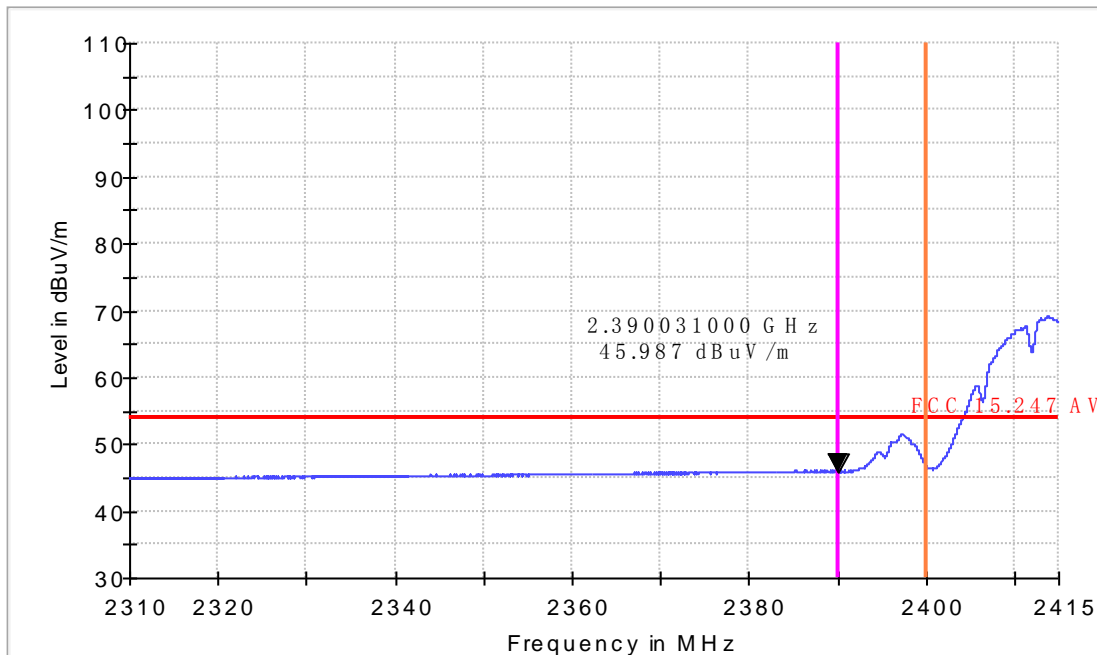
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11b CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Band edge

11g

CH1

Radiated Emission

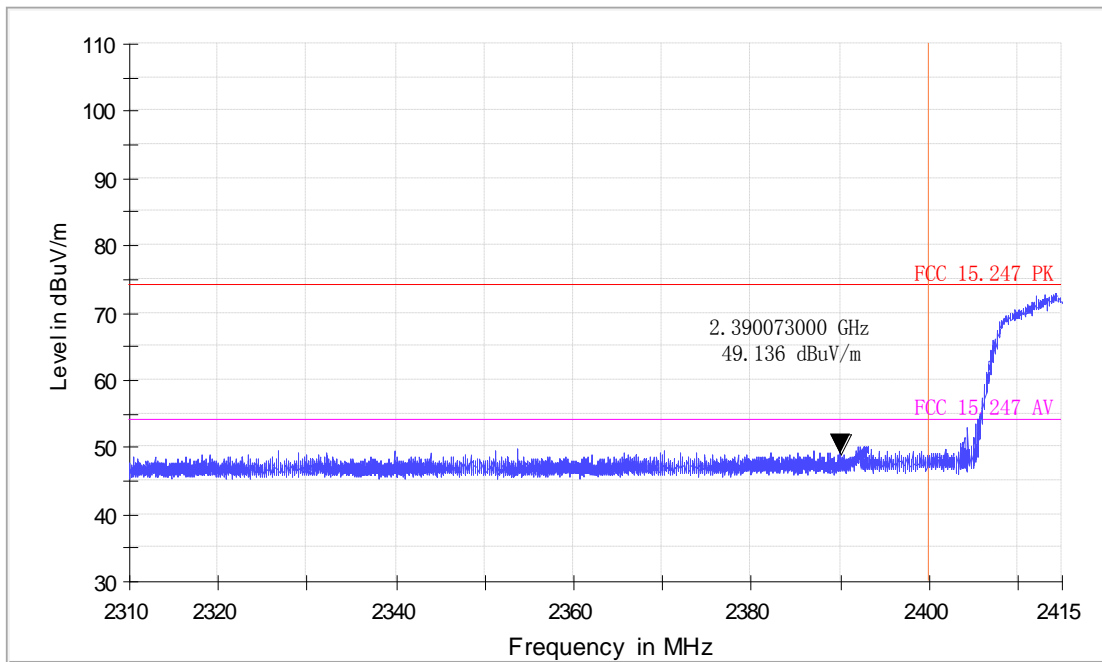
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11g CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Radiated Emission

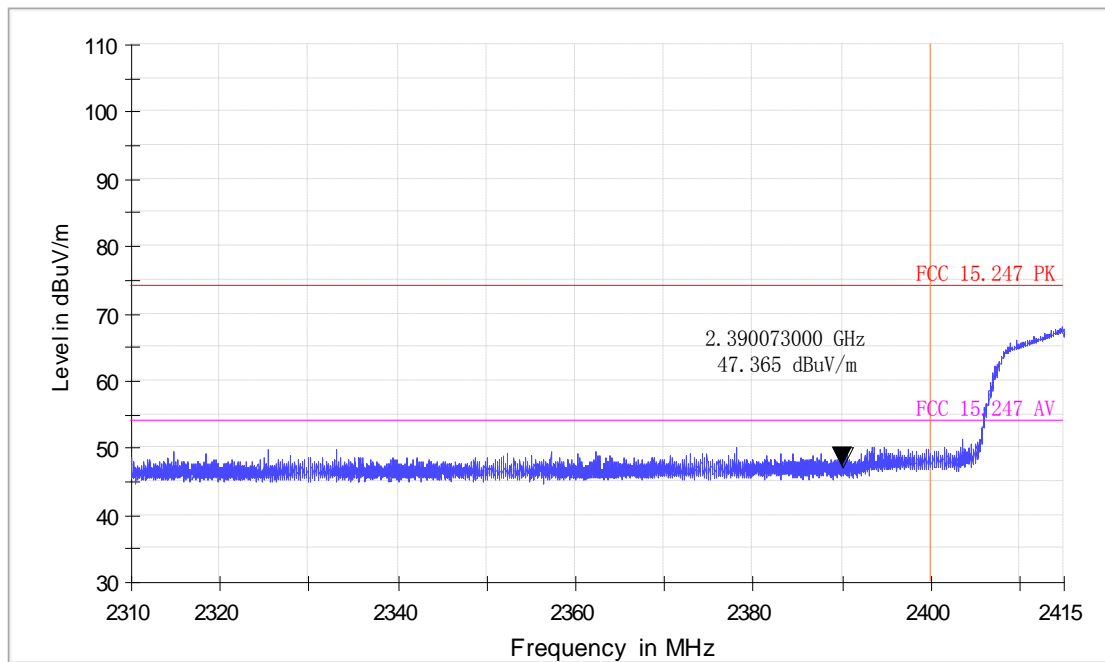
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11a CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Radiated Emission

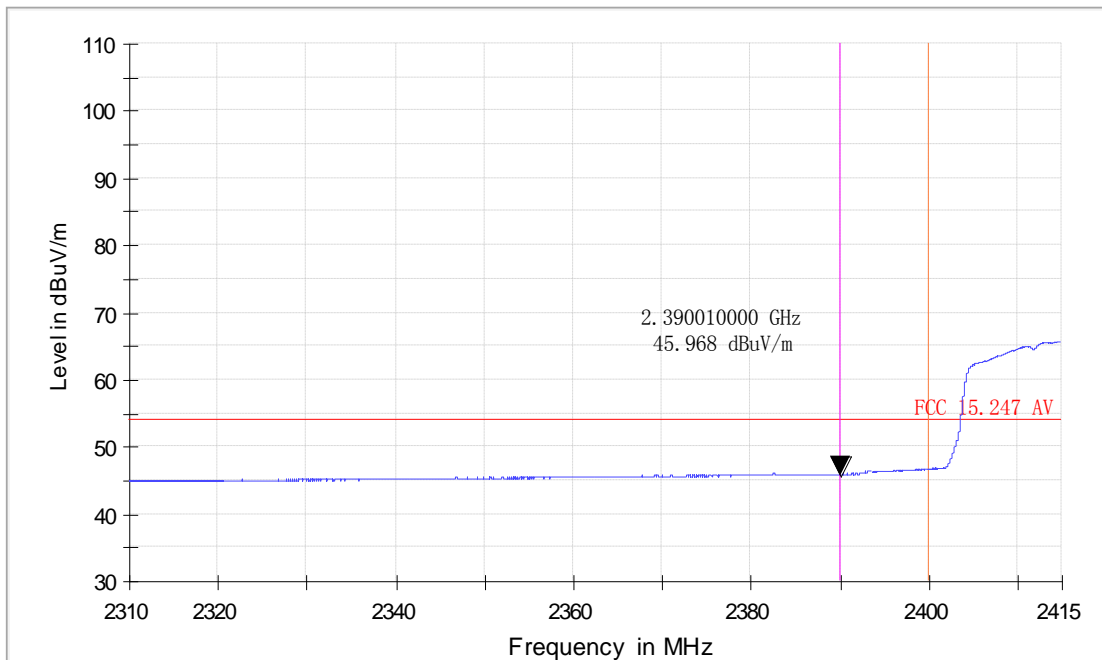
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11a CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Radiated Emission

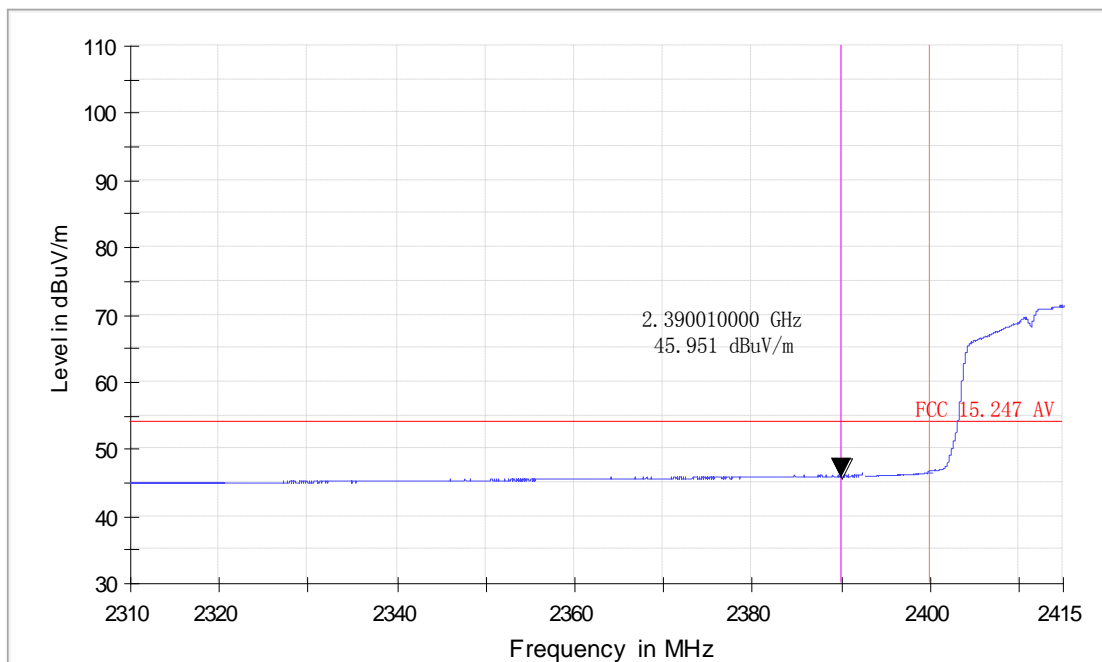
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11a CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Band edge

11n-HT20

CH1

Radiated Emission

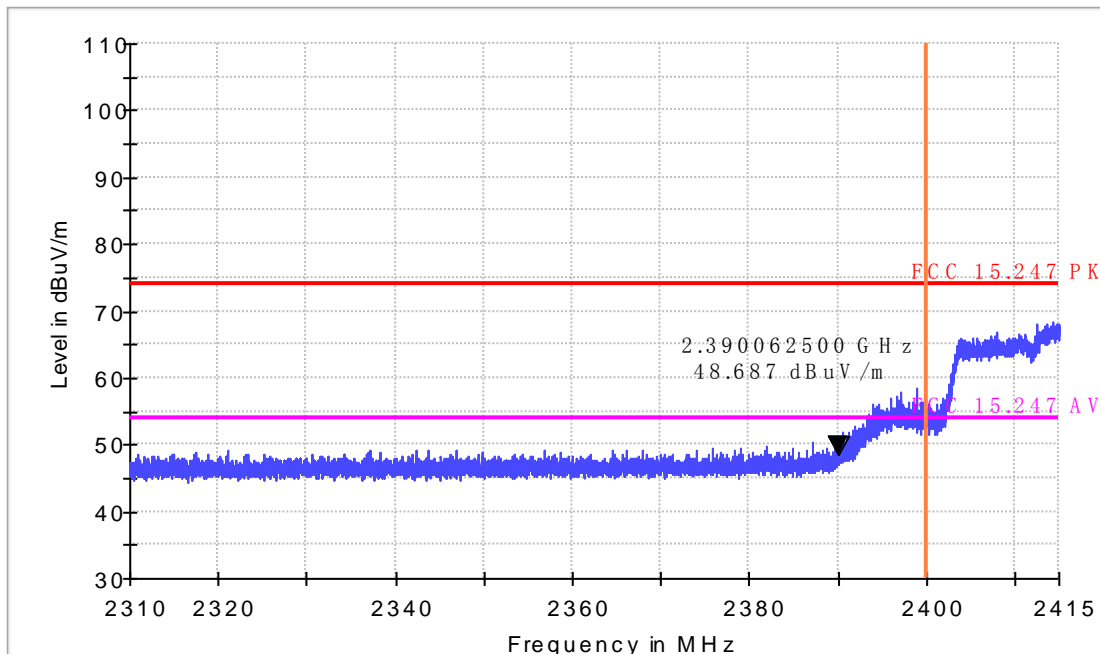
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n20 CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Radiated Emission

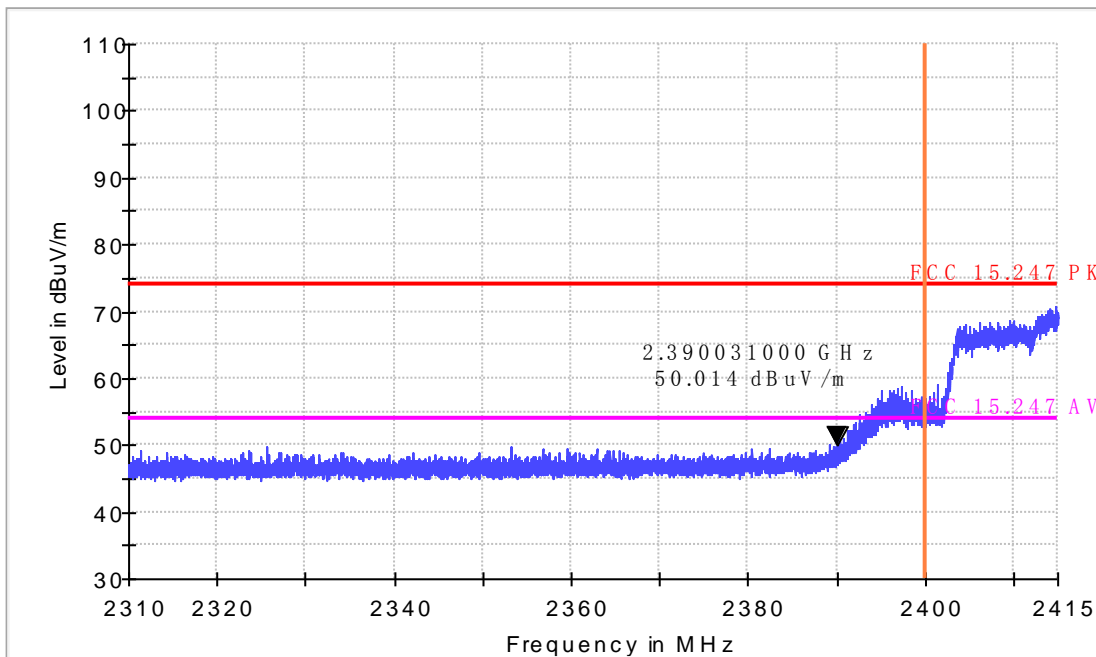
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n20 CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Radiated Emission

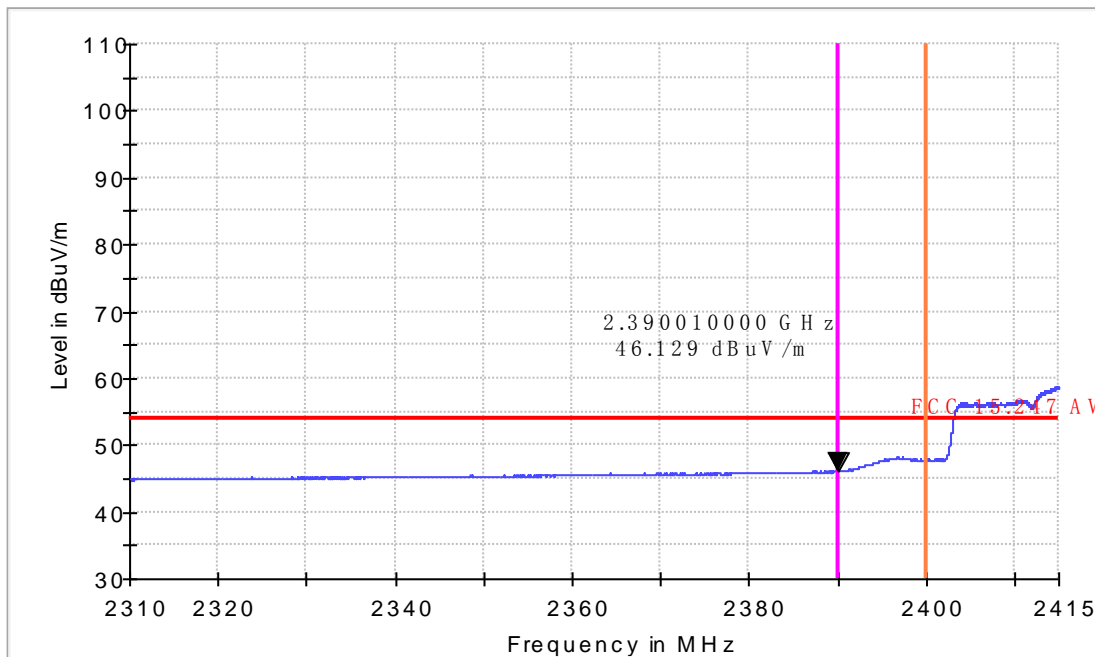
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n20 CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Radiated Emission

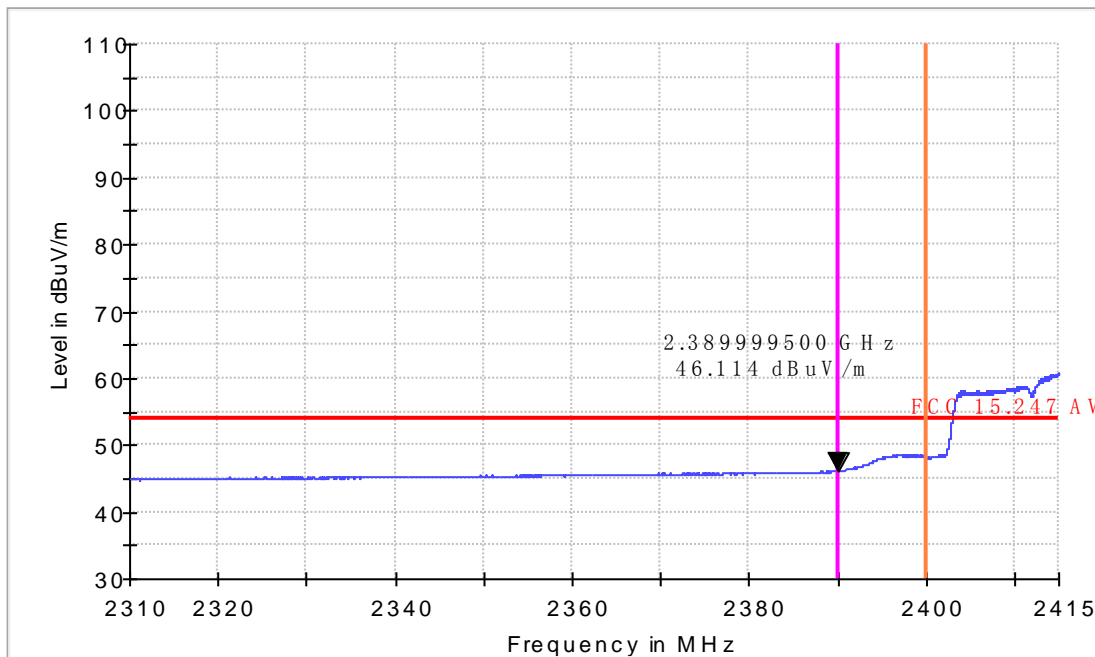
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n20 CH1
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Band edge

11n-HT40

CH3

Radiated Emission

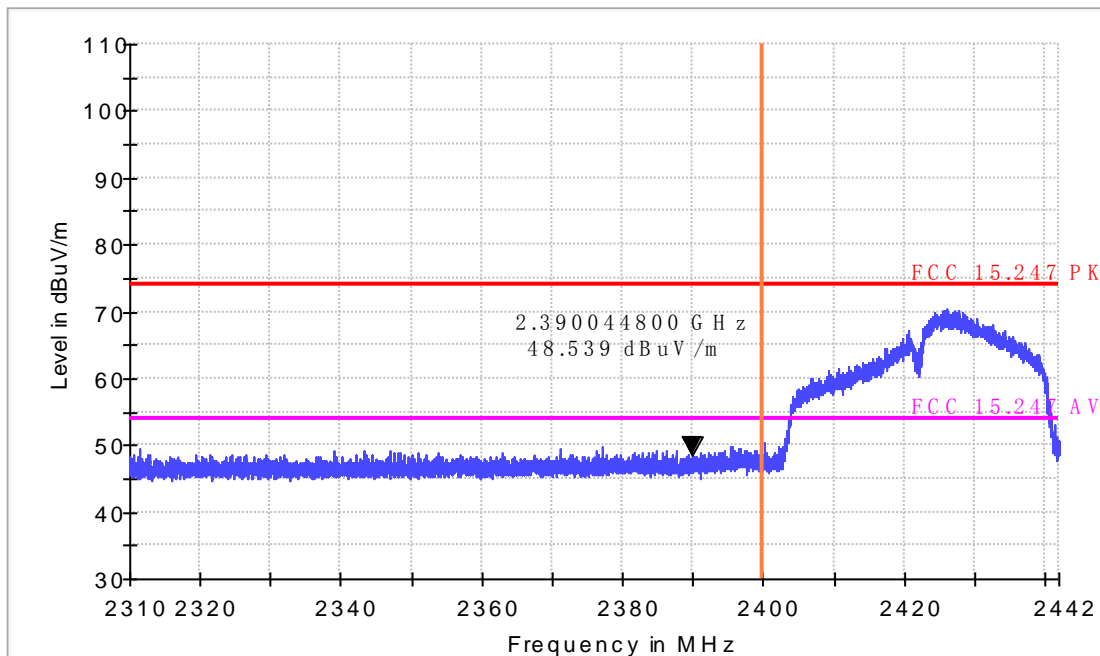
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n40 CH3
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Radiated Emission

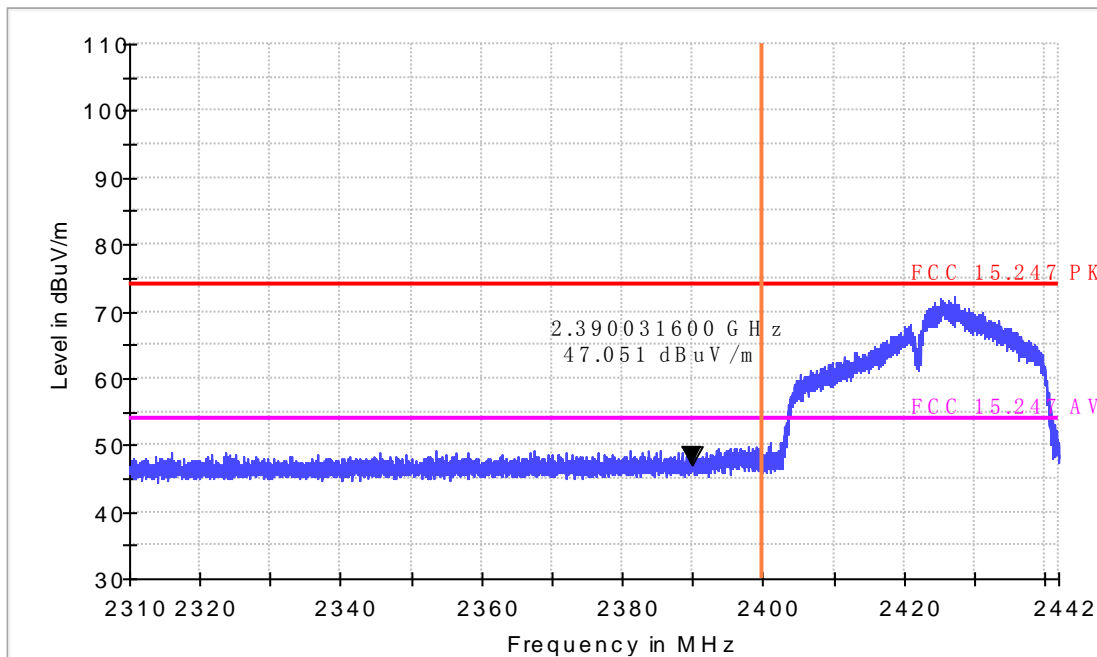
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n40 CH3
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Radiated Emission

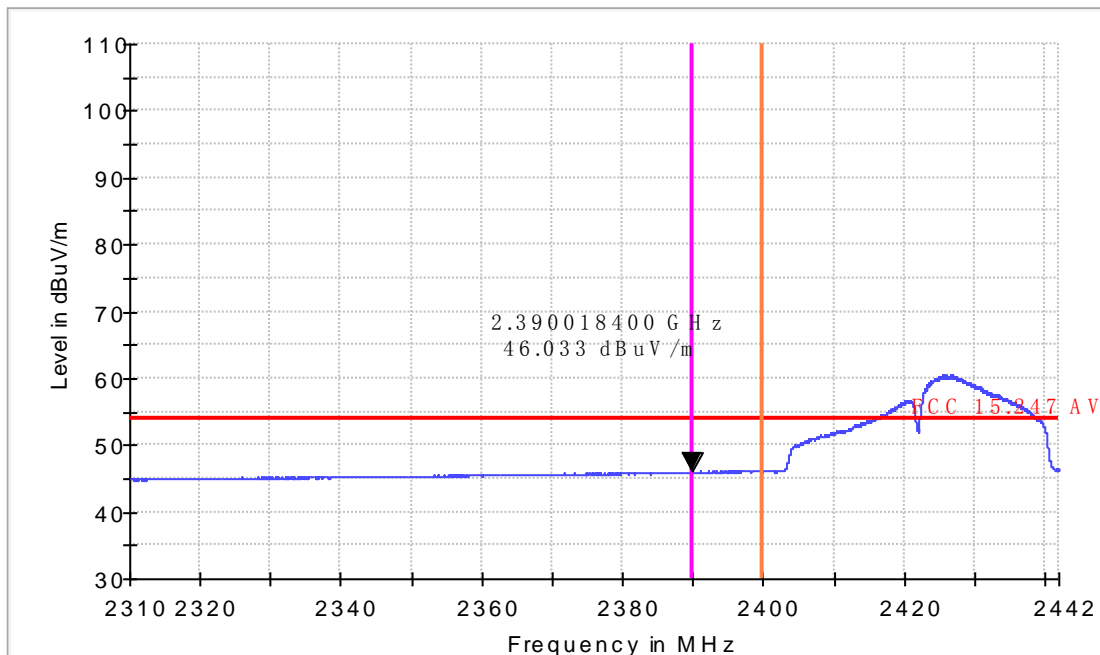
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n40 CH3
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Radiated Emission

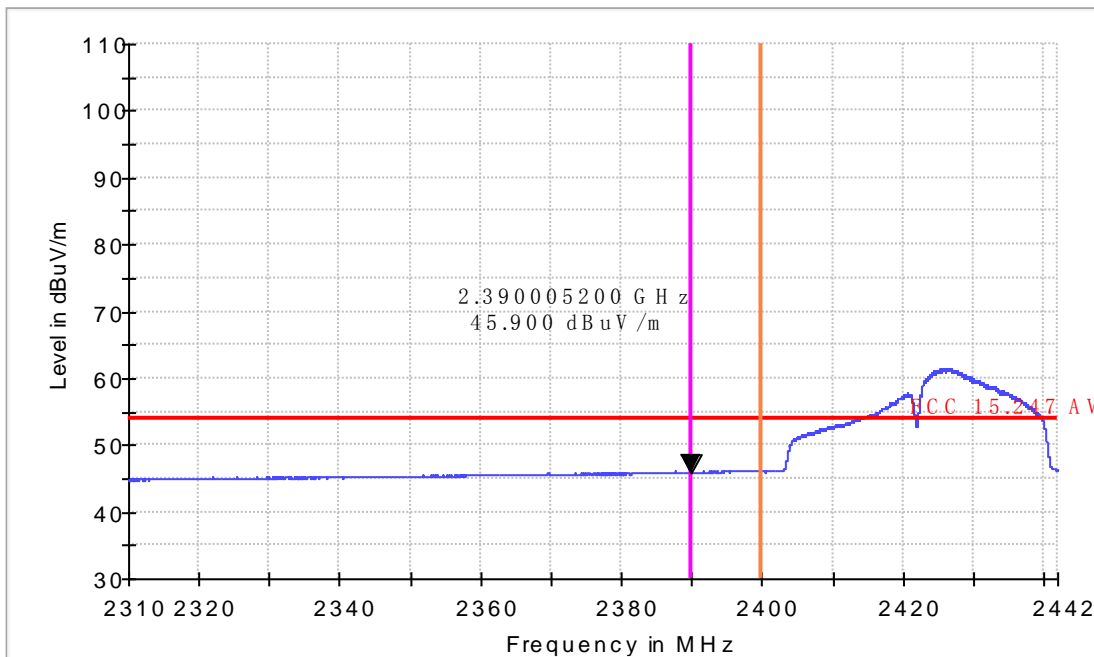
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n40 CH3
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Band edge

11b

CH11

Radiated Emission

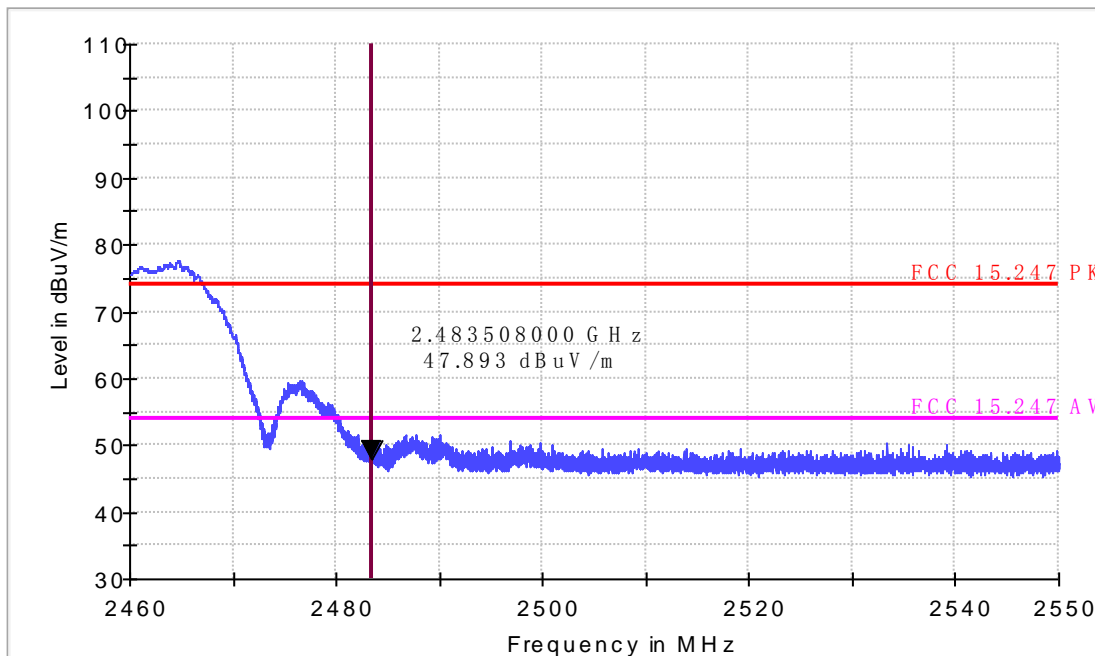
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11b CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Radiated Emission

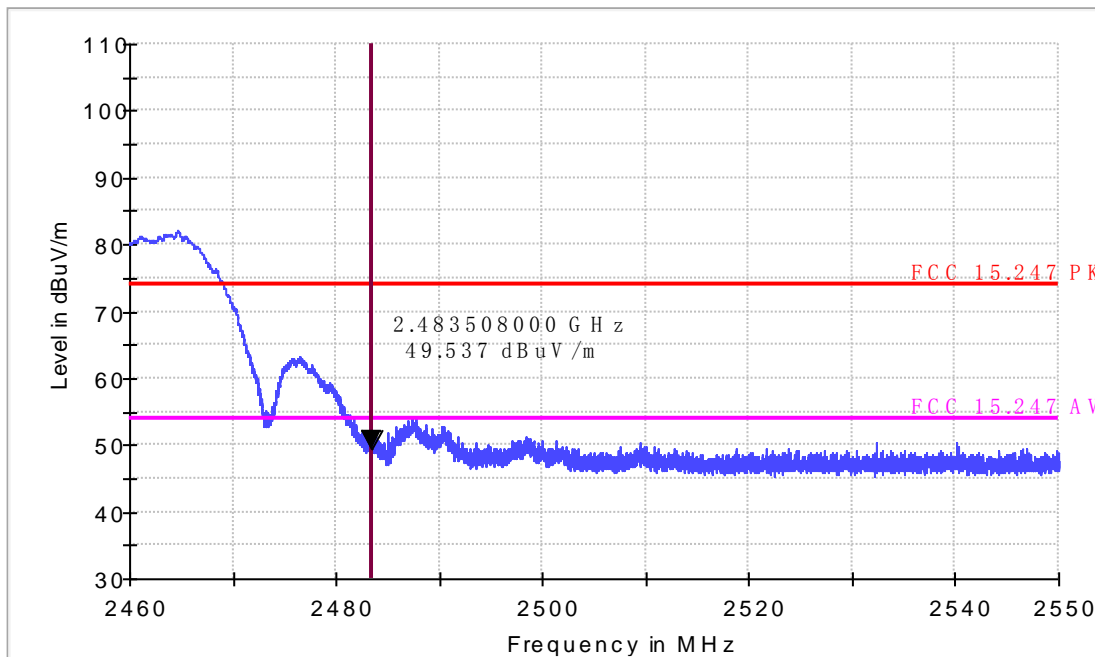
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11b CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Radiated Emission

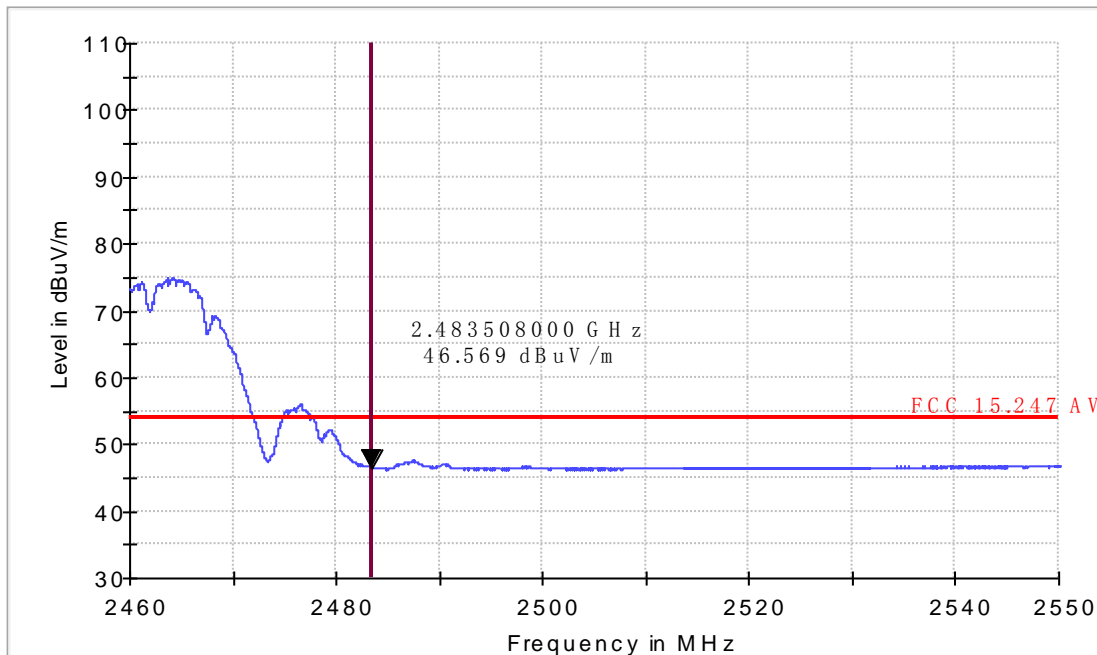
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11b CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Radiated Emission

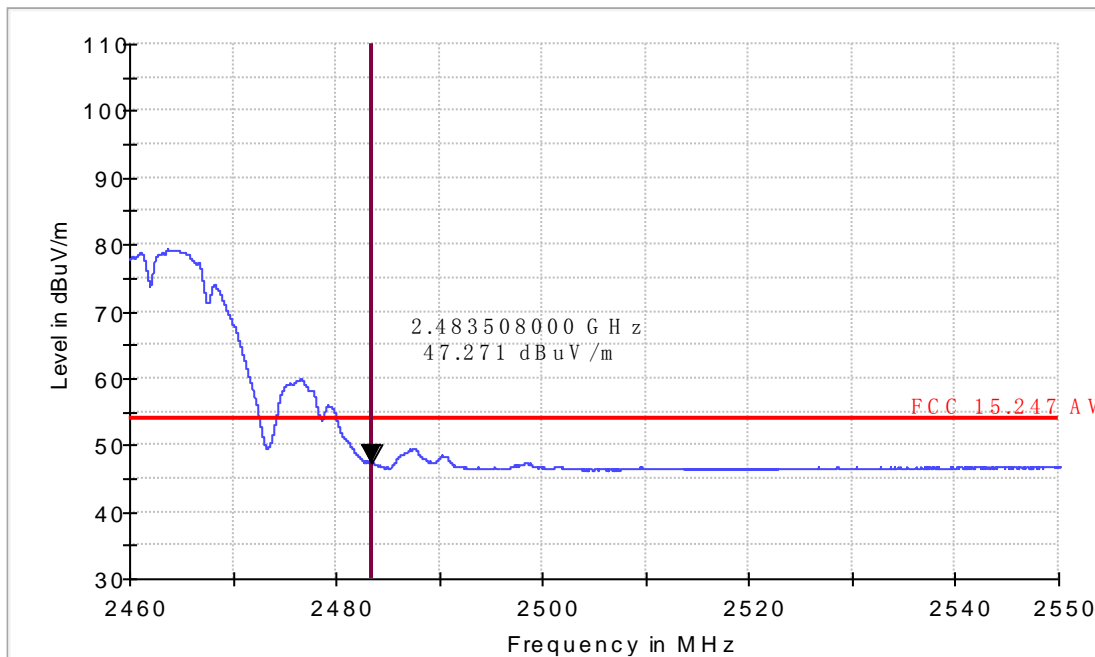
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11b CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Band edge

11g

CH11

Radiated Emission

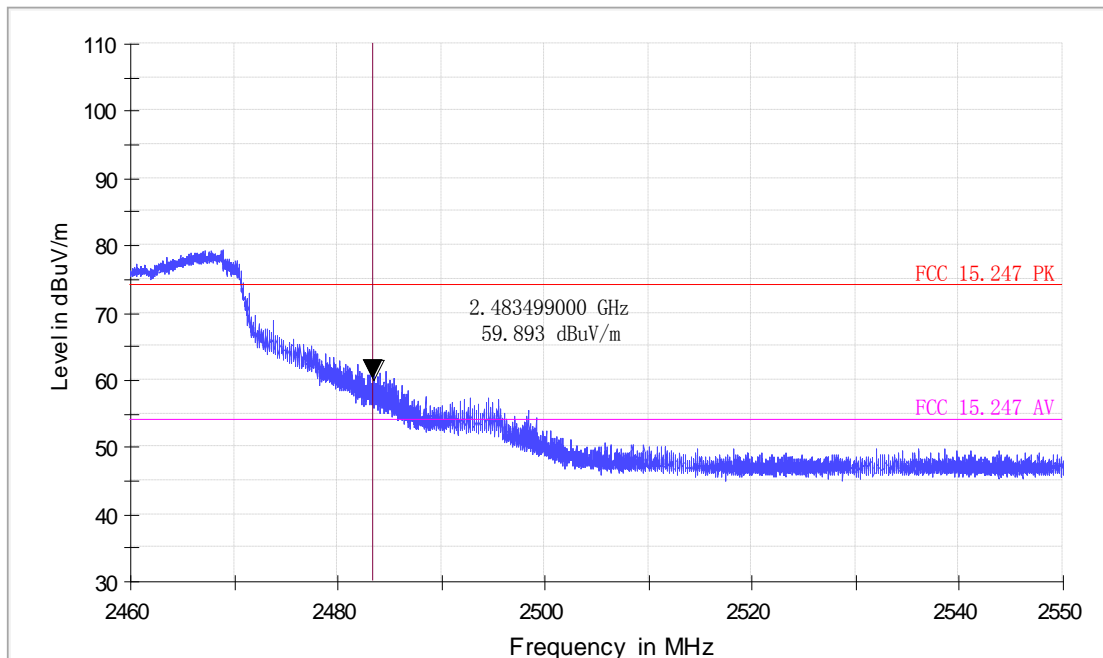
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11g CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Radiated Emission

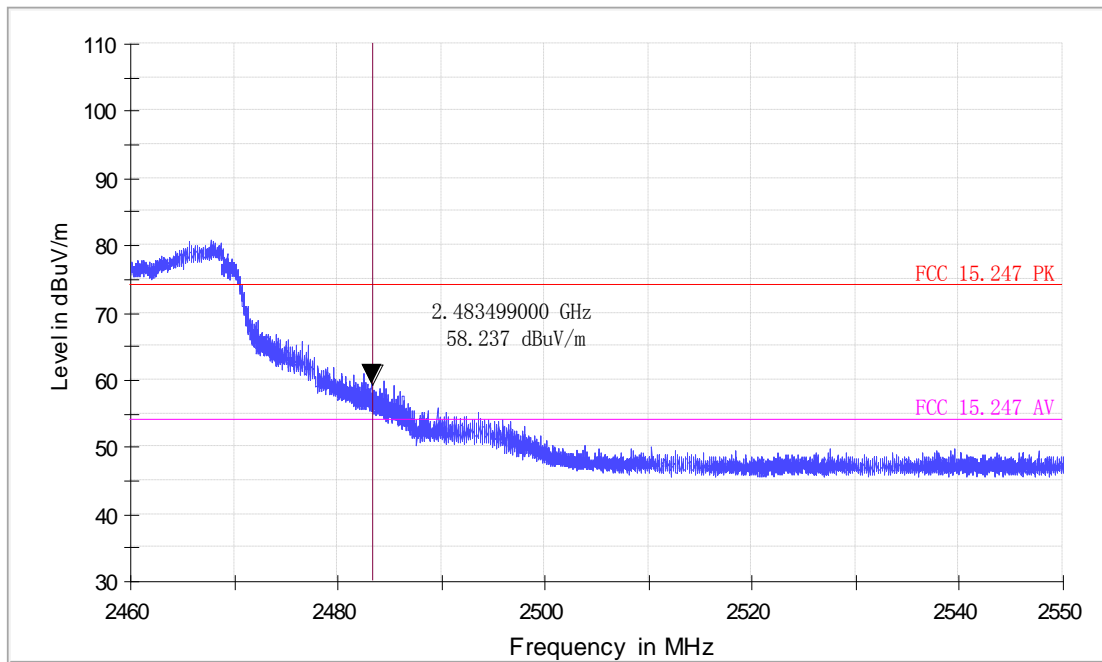
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11g CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Radiated Emission

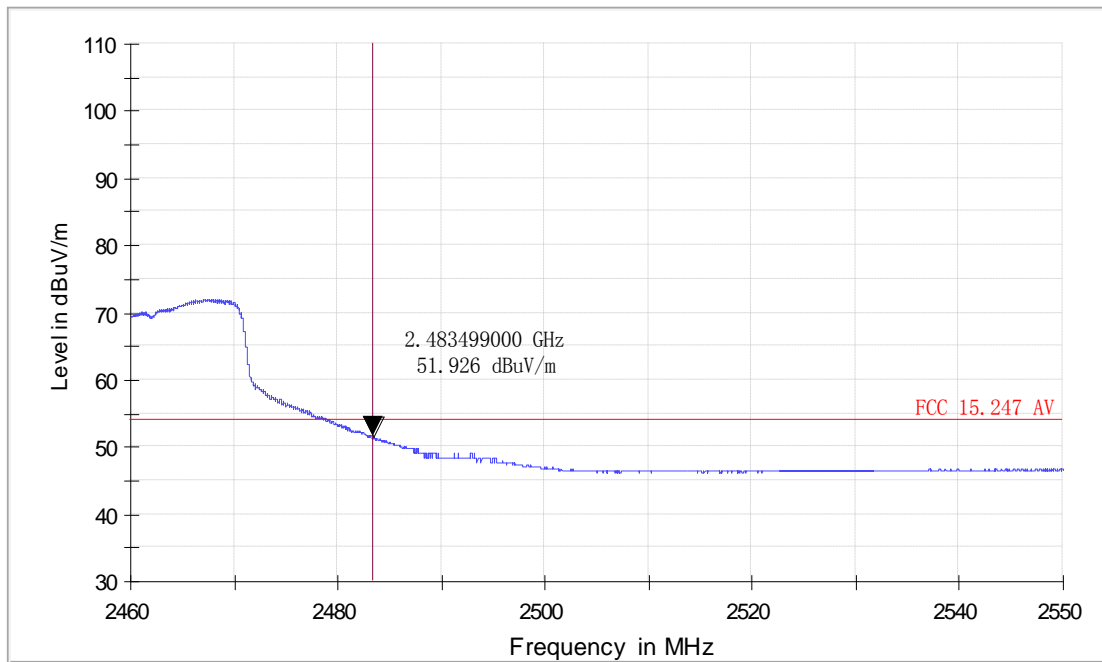
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11a CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Radiated Emission

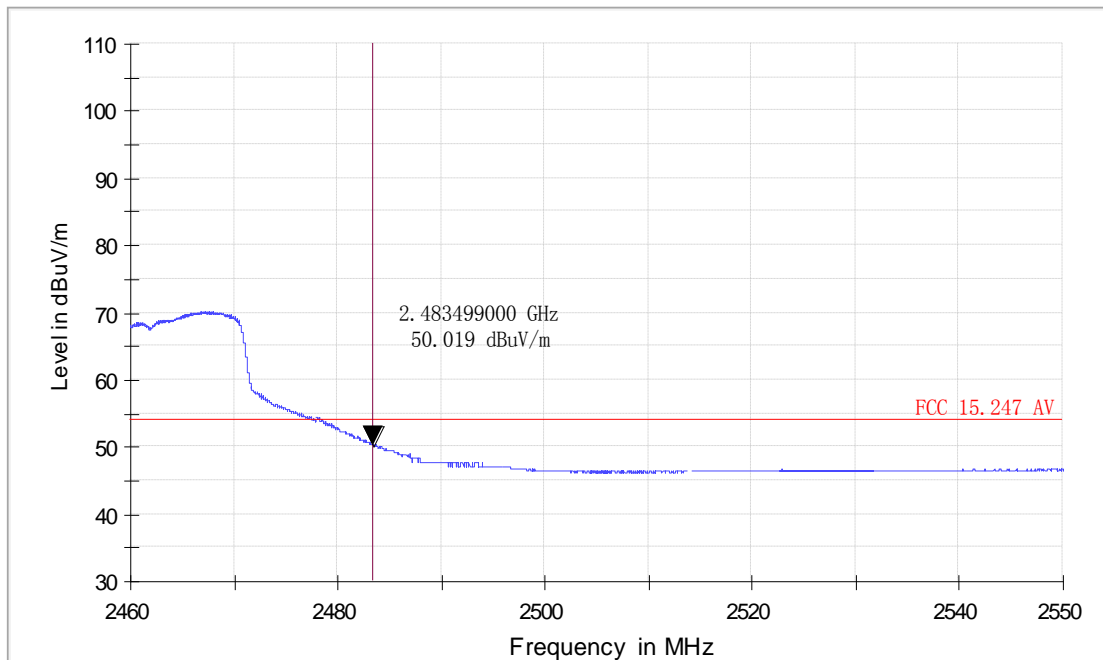
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11a CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Band edge

11n-HT20

CH11

Radiated Emission

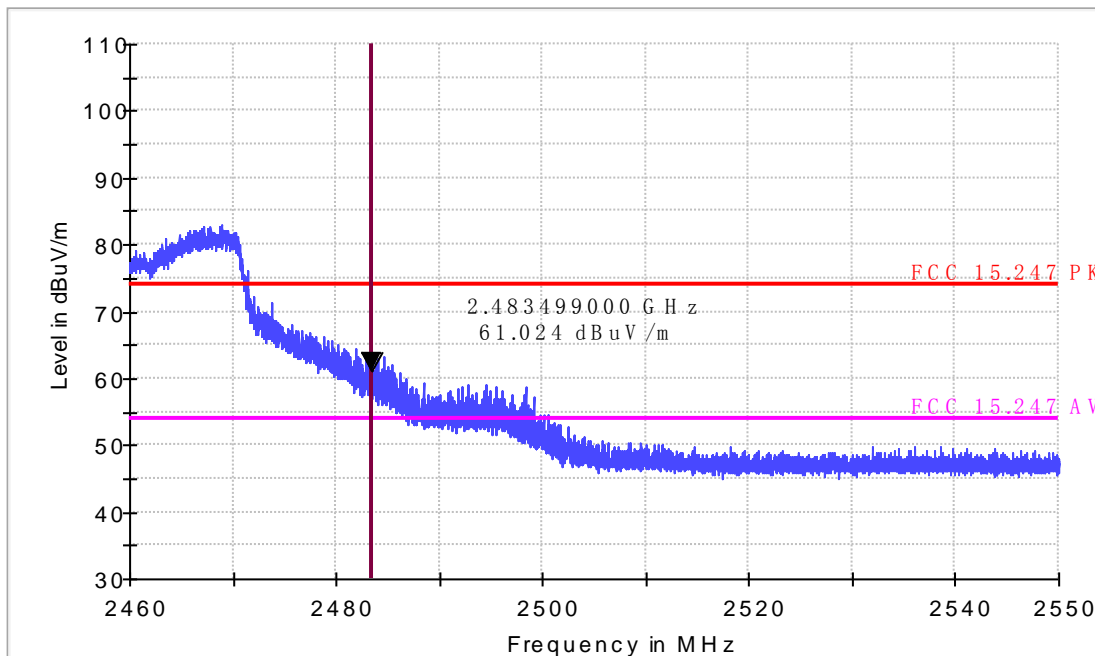
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n20 CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Radiated Emission

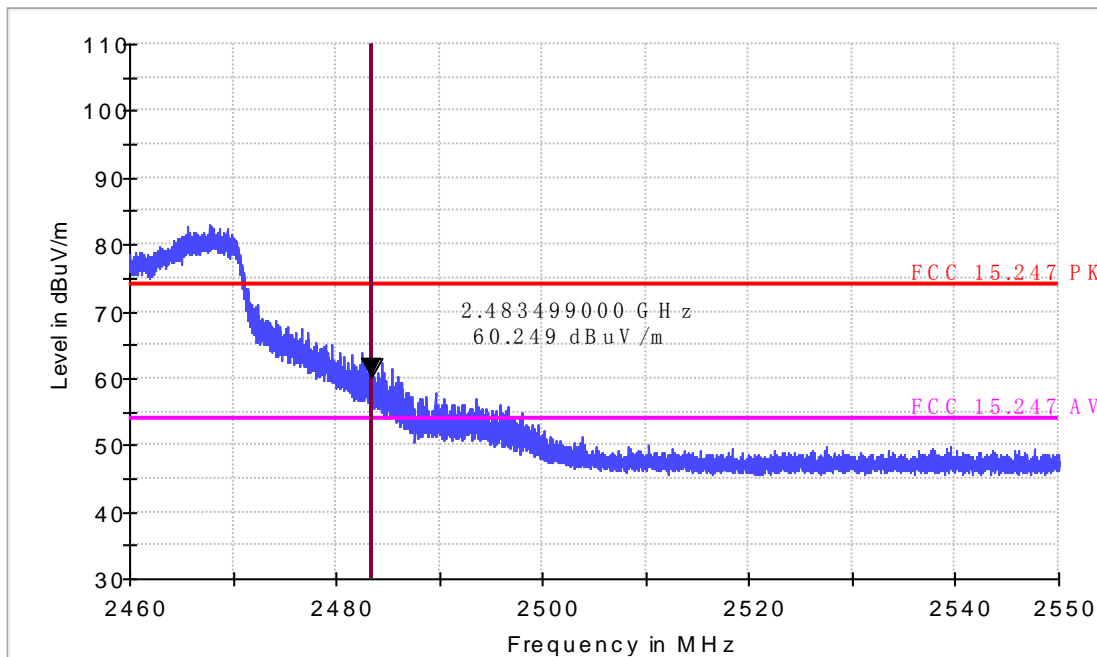
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n20 CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Radiated Emission

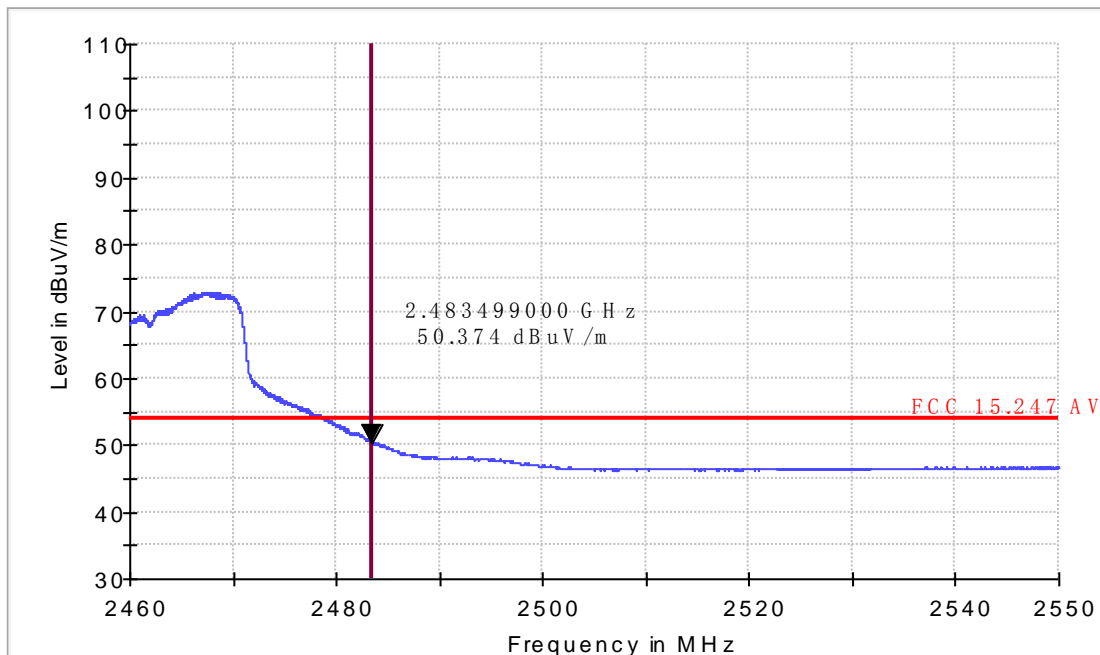
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n20 CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Radiated Emission

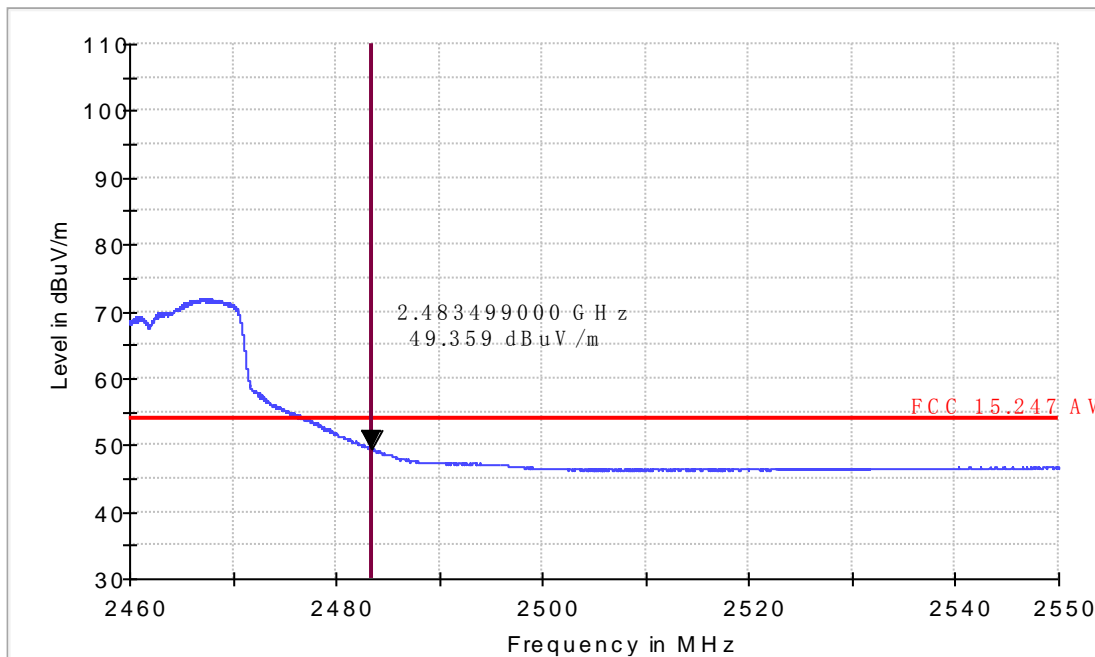
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n20 CH11
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Band edge

11n-HT40

CH9

Radiated Emission

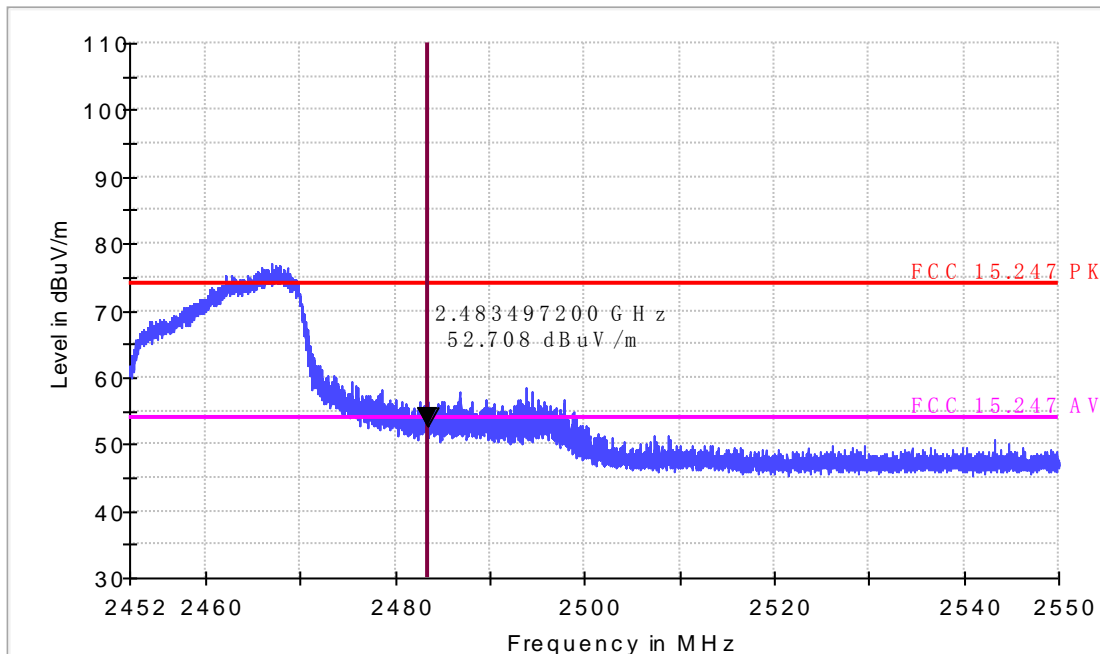
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n40 CH9
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Radiated Emission

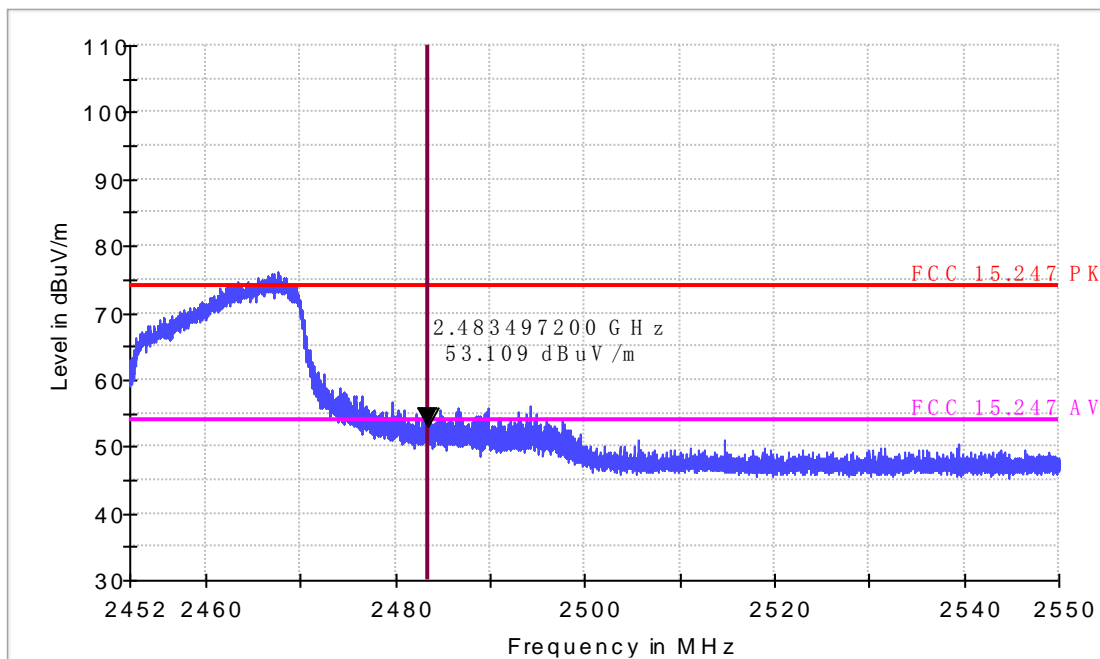
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n40 CH9
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Radiated Emission

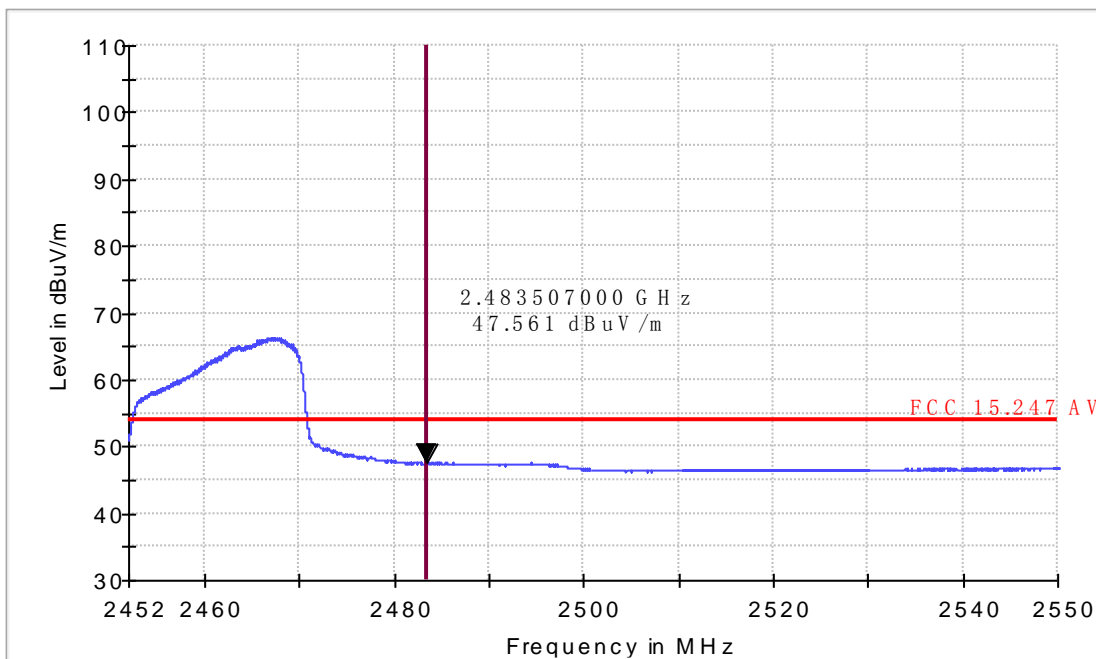
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n40 CH9
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Horizontal
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Radiated Emission

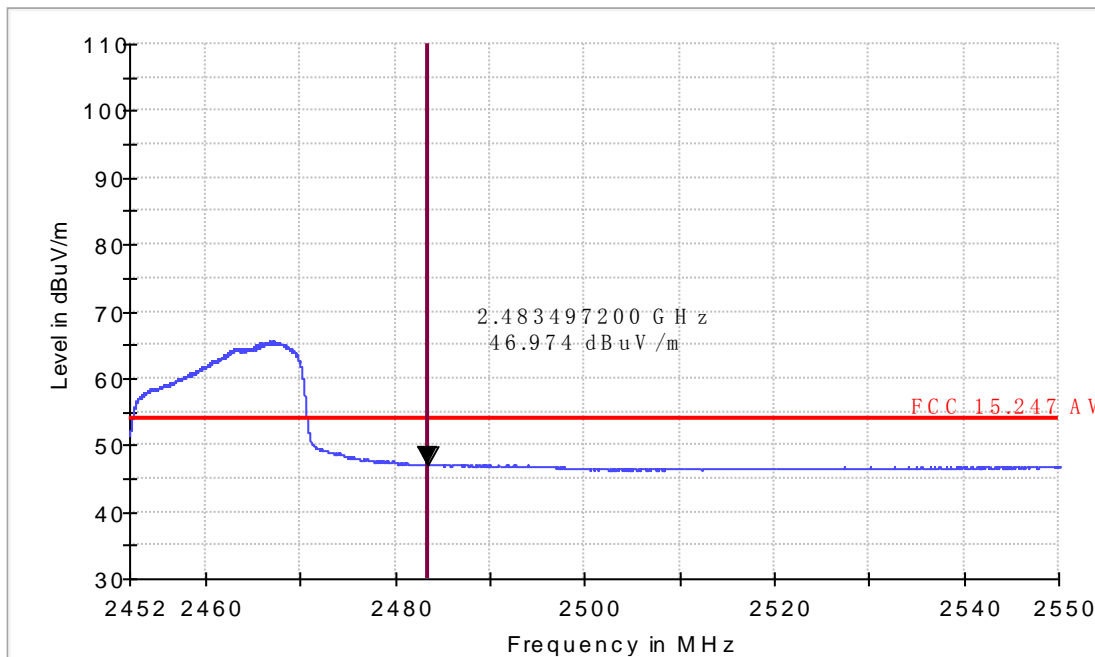
EUT Information

EUT Model Name: U2
Operation mode: Wifi 11n40 CH9
Test Voltage:
Comment:

Common Information

Test Site: SMQ EMC Lab.
Environment
Antenna Polarization: Vertical
Operator Name:
Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



11.CONDUCTED EMISSION TEST FOR AC POWER PORT MEASUREMENT

11.1.Test Standard and Limit

11.1.1.Test Standard

FCC Part 15.207

11.1.2.Test Limit

Table 12 Conducted Disturbance Test Limit

Frequency	Maximum RF Line Voltage (dB μ V)	
	Quasi-peak Level	Average Level
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
500kHz~5MHz	56	46
5MHz~30MHz	60	50

* Decreasing linearly with logarithm of the frequency

* The lower limit shall apply at the transition frequency.

11.2.Test Procedure

The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI test receiver (R&S Test Receiver ESCS30) is used to test the emissions form both sides of AC line. According to the requirements of ANSI C63.10-2013.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode.

The bandwidth of EMI test receiver is set at 9kHz.

11.3.Test Arrangement

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

11.4.Test Data

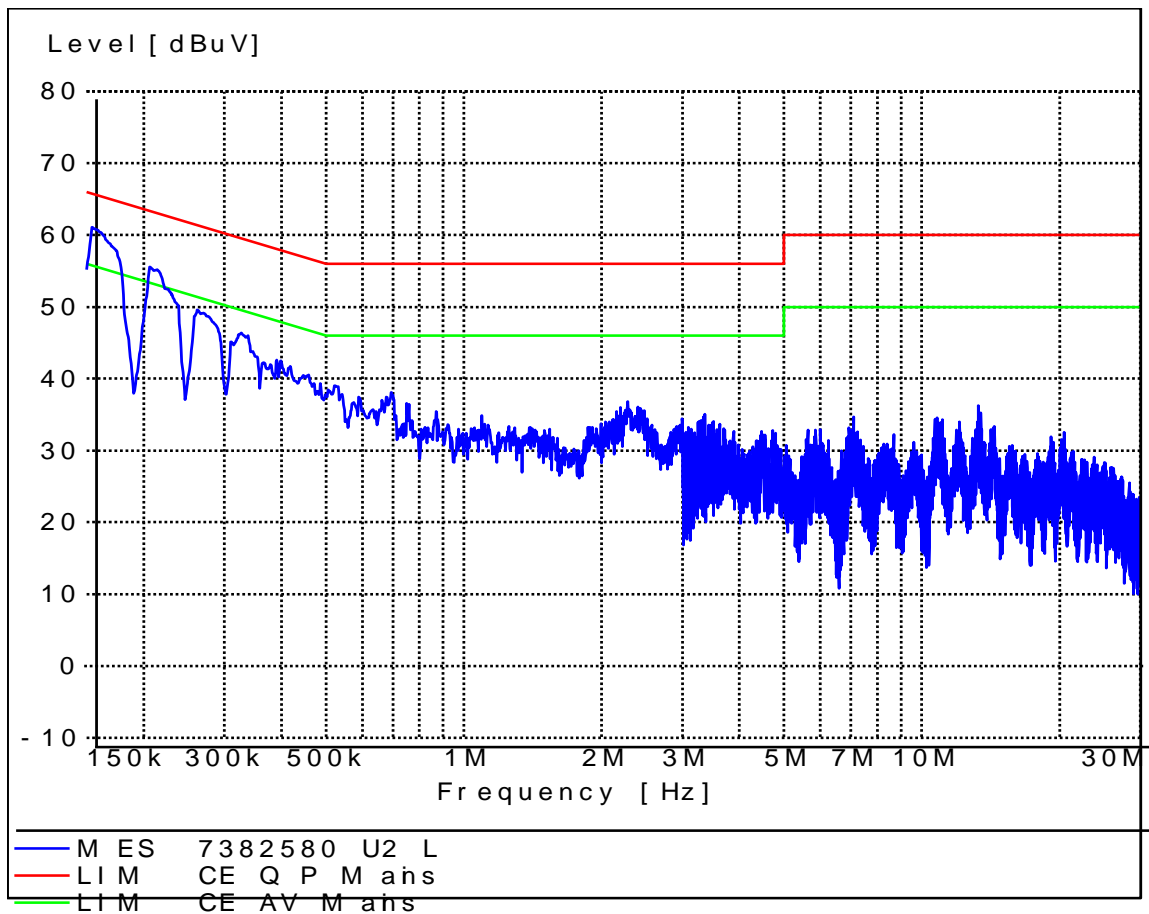
The emissions don't show in below are too low against the limits. Refer to the test curves.

Table 13 Conducted Disturbance Test Data

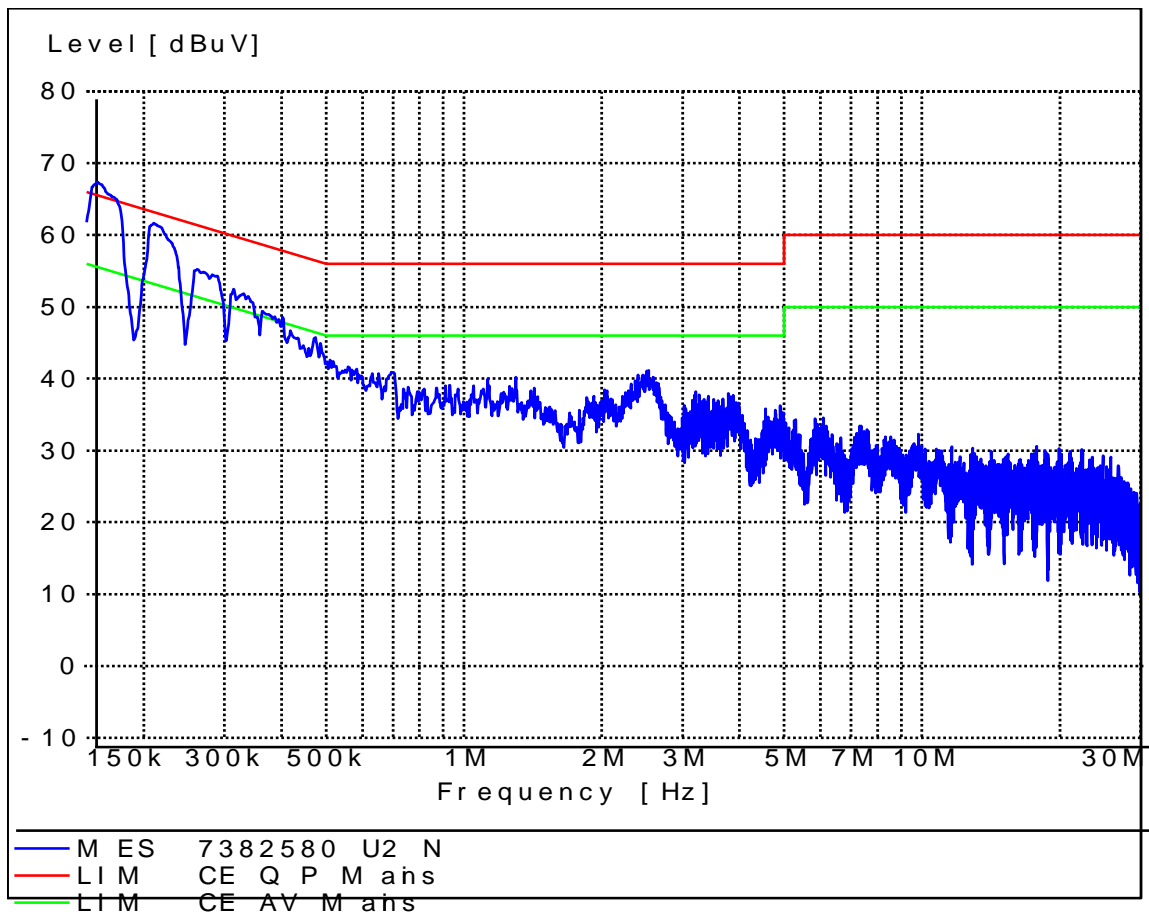
Model No.: U2								
Test mode: Charging and Transmitting								
	Frequency (MHz)	Correction Factor (dB)	Quasi-Peak			Average		
			Reading (dB μ V)	Emission Level (dB μ V)	Limits (dB μ V)	Reading (dB μ V)	Emission Level (dB μ V)	Limits (dB μ V)
Line	0.158	9.7	48.9	58.6	65.6	33.8	43.5	55.6
	0.206	9.7	38.5	48.2	63.4	21.3	31.0	53.4
	0.266	9.7	35.1	44.8	61.2	21.4	31.1	51.2
	0.326	9.7	30.6	40.3	59.6	19.8	29.5	49.6
	0.694	9.8	22.1	31.9	56	13.5	23.3	46
	2.278	9.9	20.6	30.5	56	11.6	21.5	46
Neutral	0.158	9.7	52.2	61.9	65.6	37.6	47.3	55.6
	0.210	9.7	44.7	54.4	63.2	30.1	39.8	53.2
	0.262	9.7	37.9	47.6	61.4	22.8	32.5	51.4
	0.314	9.7	32.8	42.5	59.9	20.7	30.4	49.9
	0.694	9.8	26.3	36.1	56	17.1	26.9	46
	2.506	9.9	23.8	33.7	56	16.5	26.4	46

- REMARKS: 1. Emission level(dBuV)=Read Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB) =LISN Factor (dB) + Cable Factor (dB)+Limiter Factor(dB)
 3. The other emission levels were very low against the limit.

EUT: U2
 Manufacturer:
 Operating Condition: Charging and Transmitting
 Test Site:
 Operator:
 Test Specification: L
 Comment: AC 120V/60Hz



EUT: U2
Manufacturer:
Operating Condition: Charging and Transmitting
Test Site:
Operator:
Test Specification: N
Comment: AC 120V/60Hz



12. ANTENNA REQUIREMENTS

12.1. Applicable requirements

If directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

12.2. Antenna Connector

Antenna Connector is on the PCB within enclosure and not accessible to user.

12.3. Antenna Gain

The antenna gain of EUT is less than 6 dBi.