

## TEST REPORT

**Application No.:** HKEM2008000841AT  
**Applicant:** BINATONE ELECTRONIC INTERNATIONAL LIMITED  
**Address of Applicant:** Floor 23A, 9 Des Voeux Road West Sheung Wan, Hong Kong  
**Equipment Under Test (EUT):**  
**EUT Name:** 5" Wi-Fi® Video Baby Monitor  
**Model No.:** CONNECT40BU, COMFORT85BU, CN75BU  
**Additional model:** Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.  
**FCC ID:** VLJ-CF85BU  
**IC:** 4522A-CF85BU  
**Standard(s) :** 47 CFR Part 15, Subpart C 15.247  
RSS-247 Issue 2: May 2017  
RSS-Gen: Issue 5 Amdt 2019  
**Date of Receipt:** 2020-08-14  
**Date of Test:** 2020-08-26 to 2020-09-21  
**Date of Issue:** 2020-09-23

<b>Test Result:</b>	<b>Pass*</b>
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\* In the configuration tested, the EUT complied with the standards specified above.



**Law Man Kit**  
EMC Manager

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

<b>Revision Record</b>				
<b>Version</b>	<b>Chapter</b>	<b>Date</b>	<b>Modifier</b>	<b>Remark</b>
01		2020-09-24		Original

<b>Authorized for issue by:</b>			
			
		<hr/> Leo Xu /Project Engineer	Date: 2020-09-22
		<hr/> Law Man Kit	
<hr/> /Reviewer			Date: 2020-09-22

## 2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Antenna Requirement	47 CFR Part 15, Subpart C 15.247	N/A	47 CFR Part 15, Subpart C 15.203 & 15.247(b)(4)	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207	Pass
Minimum 6dB Bandwidth	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.8.1	47 CFR Part 15, Subpart C 15.247a(2)	Pass
Conducted Peak Output Power	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.9.1	47 CFR Part 15, Subpart C 15.247(b)(3)	Pass
Power Spectrum Density	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.10.2	47 CFR Part 15, Subpart C 15.247(e)	Pass
Conducted Band Edges Measurement	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.13.3.2	47 CFR Part 15, Subpart C 15.247(d)	Pass
Conducted Spurious Emissions	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.11	47 CFR Part 15, Subpart C 15.247(d)	Pass
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.10.5	47 CFR Part 15, Subpart C 15.209 & 15.247(d)	Pass
Radiated Spurious Emissions	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.4,6.5,6.6	47 CFR Part 15, Subpart C 15.209 & 15.247(d)	Pass

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Antenna Requirement	RSS-Gen Issue 5, Amdt 2019	N/A	RSS-Gen Section 6.8	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at AC Power Line (150kHz-30MHz)	RSS-Gen Issue 5: Amdt 2019	ANSI C63.10 (2013) Section 6.2	RSS-Gen Section 8.8	Pass
99% Bandwidth	RSS-Gen Issue 5: Amdt 2019	ANSI C63.10 Section 6.9.3	RSS-Gen Section 6.7	Pass
Minimum 6dB Bandwidth	RSS-247 Issue 2, February 2017	ANSI C63.10 (2013) Section 11.8.1	RSS-247 Section 5.2(a)	Pass
Conducted Peak Output Power	RSS-247 Issue 2, February 2017	ANSI C63.10 (2013) Section 11.9.1	RSS-247 Section 5.4(d)	Pass
Power Spectrum Density	RSS-247 Issue 2, February 2017	ANSI C63.10 (2013) Section 11.10.2	RSS-247 Clause 5.2(b)	Pass
Conducted Band Edges Measurement	RSS-247 Issue 2, February 2017	ANSI C63.10 (2013) Section 11.12	RSS-247 Section 5.5	Pass

<b>Radio Spectrum Matter Part</b>				
<b>Item</b>	<b>Standard</b>	<b>Method</b>	<b>Requirement</b>	<b>Result</b>
Spurious Emissions	RSS-247 Issue 2, February 2017	ANSI C63.10 (2013) Section 11.11	RSS-247 Section 5.5	Pass
Radiated Emissions which fall in the restricted bands	RSS-Gen Issue 5: Amdt 2019	ANSI C63.10 (2013) Section 6.4&6.5&6.6	RSS-247 Section Section 3.3 & RSS-Gen Section 8.10	Pass
Frequency stability	RSS-247 Issue 2, February 2017	RSS-Gen Section 6.11	RSS-Gen Section 8.11	Pass

Note: Frequency stability requested in RSS GEN Section 8.1.1 has been complied since the result of band edge can demonstrate.

**Declaration of EUT Family Grouping:**

Item no.:

CONNECT40BU, COMFORT85BU, CN75BU

According to the confirmation from the applicant, the above models are identical in all electrical aspects in relating to the circuit design, PCB layout, electrical components used, internal wiring and functions. The difference is only on Color Finishing.

Therefore only the model CONNECT40BU was tested in this report.

Abbreviation:

Tx: In this whole report Tx (or tx) means Transmitter.  
Rx: In this whole report Rx (or rx) means Receiver.  
RF: In this whole report RF means Radiated Frequency.  
CH: In this whole report CH means channel.  
Volt: In this whole report Volt means Voltage.  
Temp: In this whole report Temp means Temperature.  
Humid: In this whole report Humid means humidity.  
Press: In this whole report Press means Pressure.  
N/A: In this whole report not application.

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## 4 General Information

### 4.1 Details of E.U.T.

Power supply:	Adaptor model: BQ06A-0501000-U Input: AC 100-240V, 50/60Hz, 300mA Output: DC 5V, 1000mA
Test voltage:	AC 120V
Cable:	Power Cable: 180cm unshielded 2-wires DC cable
Antenna Gain:	0 dBi
Antenna Type:	Integrated Antenna
Channel Spacing:	5MHz
Modulation Type:	802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Number of Channels:	802.11b/g/n(HT20):11 802.11n(HT40):7
Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2462MHz 802.11n(HT40): 2422MHz to 2452MHz
Description of Function:	Baby monitor
Series Number:	A1
Hard Version:	V1.0
Software Version:	03.40.06
	Remark: Power level setting was not adjustable and fixed default through SW Version.

#### Frequency List

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

## 4.2 Description of Support Units

The EUT has been tested with corresponding accessories as below:

Supplied by client

Description	Manufacturer	Model No.	SN/Certificate NO
UART Test board	N/A	N/A	N/A
Test Software	T. Teranishi	Version 4.105	N/A

Supplied by SGS:

Description	Manufacturer	Model No.	SN/Certificate NO
NoteBook (EMC4)	Dell	P75F	N/A

## 4.3 Measurement Uncertainty

RF

No.	Item	Measurement Uncertainty
1	Radio Frequency	$\pm 7.25 \times 10^{-8}$
2	Duty cycle	$\pm 0.37\%$
3	Occupied Bandwidth	$\pm 3\%$
4	RF conducted power (30MHz-40GHz)	1.5dB
5	RF power density	1.5dB
6	Conducted Spurious emissions	1.5dB
7	RF Radiated power	5.1dB (below 1GHz) 5.3dB (above 1GHz)
8	Radiated Spurious emission test	5.1dB (below 1GHz) 5.3dB (above 1GHz)
9	Temperature test	$\pm 1^\circ\text{C}$
10	Humidity test	$\pm 3\%$
11	Supply voltages	$\pm 1.5\%$
12	Time	$\pm 3\%$

Remark:

The  $U_{\text{lab}}$  (lab Uncertainty) is less than  $U_{\text{cisp}}$  (CISPR Uncertainty), so the test results

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

According to decision rule based on Clause 4.2 of CISPR 16-4-2, the EUT complied with the standards specified above.

#### 4.4 Test Location

All tests were performed at:

SGS Hong Kong Limited  
Unit 2 and 3, G/F, Block A, Po Lung Centre,  
11 Wang Chiu Road, Kowloon Bay, Kowloon, Hong Kong  
Tel: +852 2305 2570 Fax: +852 2756 4480

No tests were sub-contracted.

#### 4.5 Test Facility

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

- **HOKLAS (Lab Code: 009)**

SGS Hong Kong Limited has been accepted by HKAS Executive, on the recommendation of the Accreditation Advisory Board, as a HOKLAS Accredited Laboratory, this laboratory meets the requirements of ISO/IEC 17025:2017 and it has been accredited for performing specific test as listed in the scope of accreditation within the test category of Electrical and Electronic Products.

- **IAS Accreditation (Lab Code: TL-187)**

SGS Hong Kong Limited has met the requirements of AC89, IAS Accreditation Criteria for Testing Laboratories, and has demonstrated compliance with ISO/IEC Standard 17025:2017, General requirements for the competence of testing and calibration laboratories. This organization is accredited to provide the services specified in the scope of accreditation maintained on the IAS website ([www.iasonline.org](http://www.iasonline.org)).

The report must not be used by the client to claim product certification, approval, or endorsement by IAS, NIST, or any agency of the Federal Government.

- **FCC Recognized Accredited Test Firm(CAB Registration No.: 514599)**

SGS Hong Kong Limited has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: HK0015, Test Firm Registration Number: 514599.

- **Industry Canada (Site Registration No.: 26103; CAB Identifier No.: HK0015)**

SGS Hong Kong Limited has been recognized by Department of Innovation, Science and Economic Development (ISED) Canada as a wireless testing laboratory. The acceptance letter from the ISED is maintained in our files. CAB Identifier No: HK0015, Site Registration Number: 26103.

#### 4.6 Deviation from Standards

None

#### 4.7 Abnormalities from Standard Conditions

None

## 5 Equipment List

Minimum 6dB Bandwidth, Conducted Peak Output Power, Power Spectrum Density, Conducted Band Edges Measurement, Conducted Spurious Emissions					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
SMBV100A VECTOR SIGNAL GENERATOR	Rohde & Schwarz	SMBV100A	E234	2020/08/31	2021/08/30
FSV40 SIGNAL ANALYZER 40GHz	Rohde & Schwarz	FSV40	E235	2020/08/31	2021/08/30
Wireless Conn. Tester (CMW)	Rohde & Schwarz	CMW270	E240	CAL IN USE	CAL IN USE
OSP	Rohde & Schwarz	OSP-B157W8	E242	2020/08/31	2021/08/30
Cable	Rohde & Schwarz	J12J103539-00-2	E239	2020/07/20	2021/07/19
WMS32 Test Software	R&S	Version 10	N/A	--	--

Conducted Emissions at Mains Terminals (150kHz-30MHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EMI Test Receiver 9kHz to 3.6GHz	Rohde & Schwarz	ESR3 / 102326	E231	2020/08/31	2021/08/30
Signal Generator	Rohde & Schwarz	SMT03	E177	2020/03/12	2021/03/11
Artificial Mains Network (LISN)	Schwarzbeck	NSLK 8127 / 8127312	E005	2020/05/12	2021/05/11
Impulse Limiter	Rohde & Schwarz	ESH-3-Z2 / 357881052	E028	2019/10/23	2020/10/22
EMC32 Test software	Rohde & Schwarz	Version 10	N/A	N/A	N/A

Radiated Spurious Emissions (30MHz-1GHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
3m Semi-Anechoic Chamber	ChamPro	N/A	E229	2020/08/09	2021/08/08
Coaxial Cable	SGS	N/A	E167	2020/07/20	2021/07/19
EMI Test Receiver 9kHz to 7GHz	Rohde & Schwarz	ESR7 / 102298	E314	2020/05/18	2021/05/18
EMI Test Receiver 9kHz to 3.6GHz	Rohde & Schwarz	ESR3 / 102326	E231	2020/08/31	2021/08/30
TRILOG Super Broadb. Test Antenna, (25) 30-1000	Schwarzbeck	VULB 9168	E264	2018/10/20	2020/10/19
EMC32 Test software	Rohde & Schwarz	Version 10	N/A	N/A	N/A
Boresight Mast Controller	ChamPro	AM-BS-4500-E	E237	--	--

Radiated Spurious Emissions (above 1GHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
3m Semi-Anechoic Chamber	ChamPro	N/A	E229	2020/08/09	2021/08/08
Coaxial Cable	SGS	N/A	E167	2020/07/20	2021/07/19
EMI Test Receiver 9kHz to 3.6GHz	Rohde & Schwarz	ESR3 / 102326	E231	2020/08/31	2021/08/30
Signal and Spectrum Analyzer 2Hz - 26.5GHz	Rohde & Schwarz	FSW26	E296	2020/08/31	2021/08/30
Spectrum Analyzer 9kHz - 30GHz	Rohde & Schwarz	FSP30	E204	2020/05/11	2021/05/10
Horn Antenna 1 - 18GHz	Schwarzbeck	BBHA9120D	E211	2020/01/30	2022/01/29
Horn Antenna 15 - 40GHz	Schwarzbeck	BBHA9170	E212	2020/01/30	2022/01/29
Preamplifier 33dB, 1 - 18GHz	Schwarzbeck	BBV9718	E214	2020/04/14	2021/04/12
Preamplifier 33dB, 18 - 26.5GHz	Schwarzbeck	BBV9719	E215	2019/04/24	2021/04/23
Broadband Coaxial Preamplifier typ. 30 dB, 18-40GHz	Schwarzbeck	BBV 9721	E266	2020/09/21	2021/09/20
Highpass Filter 3.5-26.5GHz	Wainwright	WHNX3.5/26.5 G-6SS	E205	2019/04/24	2021/04/23
Band Reject Filter 2.4-2.5GHz	Wainwright	WRCJV 2400/2500-2100	E206	2019/04/24	2021/04/23
RF cable SMA to SMA 10000mm	HUBER+SUHNER	SF104-26.5/2*11SMA 45	E207	2020/09/21	2021/09/20
Boresight Mast Controller	ChamPro	AM-BS-4500-E	E237	--	--
Turntable with Controller	ChamPro	EM1000	E238	--	--
EMC32 Test Software	R&S	Version 10	N/A	--	--

General used equipment					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Digital temperature & humidity data logger	SATO	SK-L200TH II	E232	2019/10/28	2020/10/27
Electronic Digital Thermometer with Hygrometer	nil	2074/2075	E159	2019/10/28	2020/10/27
Barometer with digital thermometer	SATO	7612-00	E218	2020/04/23	2021/04/22
Conditional Chamber	Zhong Zhi Testing Instruments	CZ-E-608D	E216	2020/08/31	2021/08/30

## 6 Radio Spectrum Technical Requirement

### 6.1 Antenna Requirement

#### 6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203 & 15.247(b)(4)

#### 6.1.2 Conclusion

Standard Requirement:

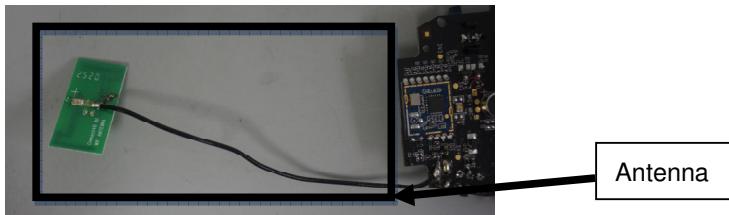
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

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

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 0dBi.



Antenna location: Refer to internal photo.

## 7 Radio Spectrum Matter Test Results

### 7.1 Conducted Emissions at AC Power Line (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207

Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

Frequency of emission(MHz)	Conducted limit(dB $\mu$ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

\*Decreases with the logarithm of the frequency.

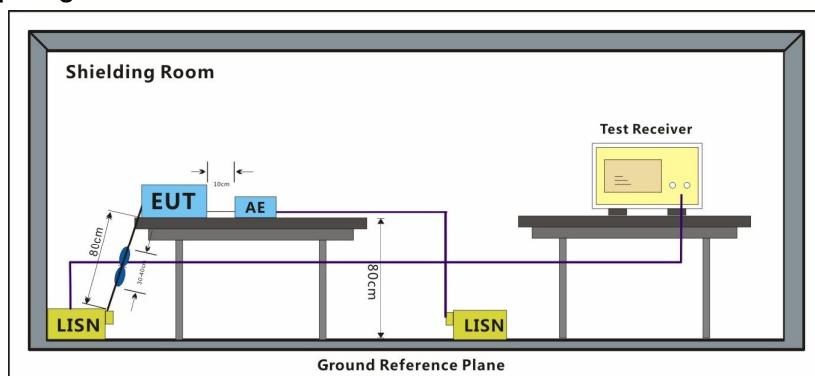
### 7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22.5 °C      Humidity: 49.1 % RH      :

Test mode      a:Charge + TX mode\_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.

### 7.1.2 Test Setup Diagram

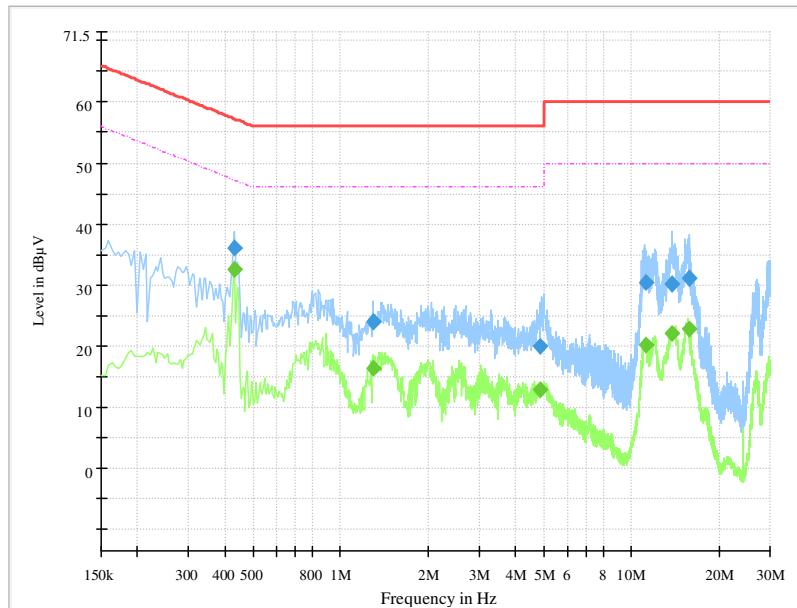


### 7.1.3 Measurement Procedure and Data

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50µH + 50hm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane.
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

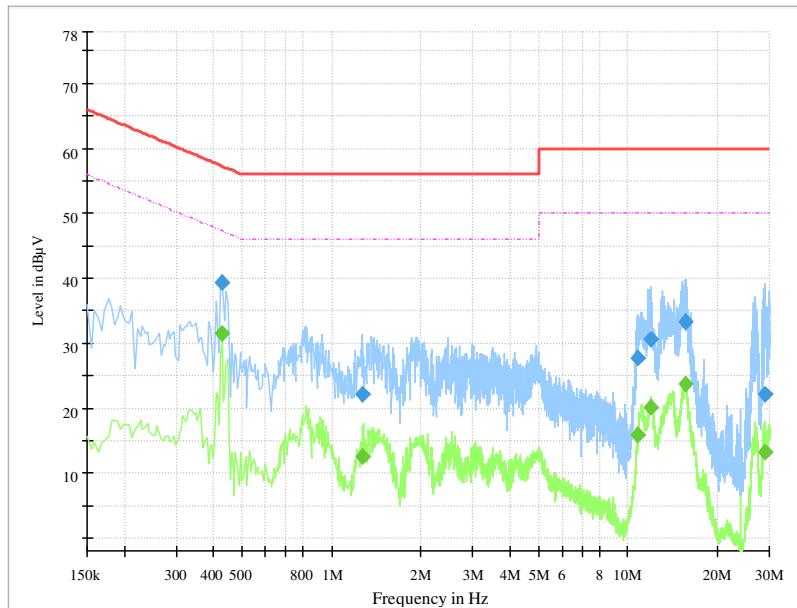
Remark: LISN=Read Level+ Cable Loss+ LISN Factor

Mode:a; Line:Live Line



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Corr. (dB)	Result
0.429000	---	32.5	47.3	14.8	10.2	Pass
0.429000	36.1	---	57.3	21.2	10.2	Pass
1.293000	---	16.4	46.0	29.6	10.2	Pass
1.293000	23.9	---	56.0	32.1	10.2	Pass
4.834500	---	12.9	46.0	33.1	10.3	Pass
4.834500	20.0	---	56.0	36.0	10.3	Pass
11.238000	---	20.2	50.0	29.8	10.5	Pass
11.238000	30.3	---	60.0	29.7	10.5	Pass
13.825500	---	22.1	50.0	27.9	10.5	Pass
13.825500	30.2	---	60.0	29.8	10.5	Pass
15.747000	---	22.9	50.0	27.1	10.6	Pass
15.747000	31.0	---	60.0	29.0	10.6	Pass

Line: Neutral Line



Frequency (MHz)	QuasiPeak (dB $\mu$ V)	Average (dB $\mu$ V)	Limit (dB $\mu$ V)	Margin (dB)	Corr. (dB)	Result
0.429000	---	31.5	47.3	15.8	10.2	Pass
0.429000	39.3	---	57.3	18.0	10.2	Pass
1.266000	---	12.5	46.0	33.5	10.2	Pass
1.266000	22.1	---	56.0	33.9	10.2	Pass
10.806000	---	16.0	50.0	34.0	10.5	Pass
10.806000	27.6	---	60.0	32.4	10.5	Pass
11.868000	---	20.2	50.0	29.8	10.5	Pass
11.868000	30.6	---	60.0	29.4	10.5	Pass
15.594000	---	23.6	50.0	26.4	10.6	Pass
15.594000	33.4	---	60.0	26.6	10.6	Pass
28.972500	---	13.2	50.0	36.8	10.6	Pass
28.972500	22.2	---	60.0	37.8	10.6	Pass

## 7.2 99% Bandwidth

Test Requirement RSS-Gen Section 6.6  
Test Method: ANSI C63.10 Section 6.9.3

### 7.2.1 E.U.T. Operation

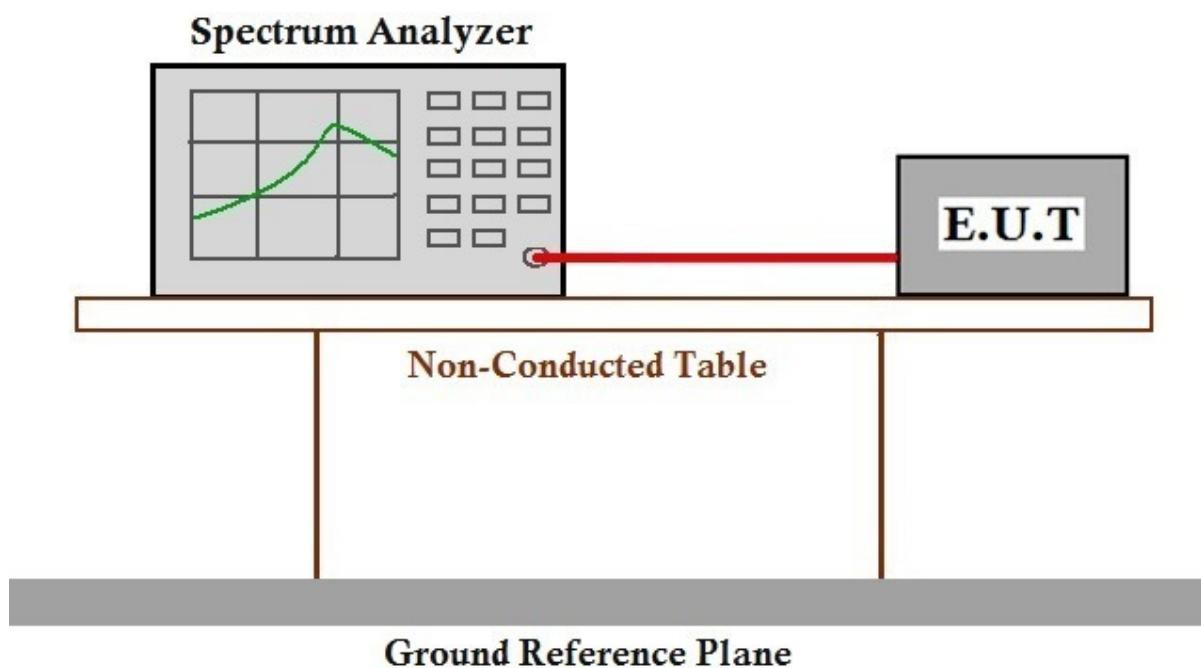
Operating Environment:

Temperature: 22.5 °C Humidity: 51.2 % RH :

Test mode a:TX mode\_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20).

Only the data of worst case is recorded in the report.

### 7.2.2 Test Setup Diagram



### 7.2.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.247

### 7.3 Minimum 6dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.247a(2)

Test Method: ANSI C63.10 (2013) Section 11.8.1

Limit:  $\geq 500$  kHz

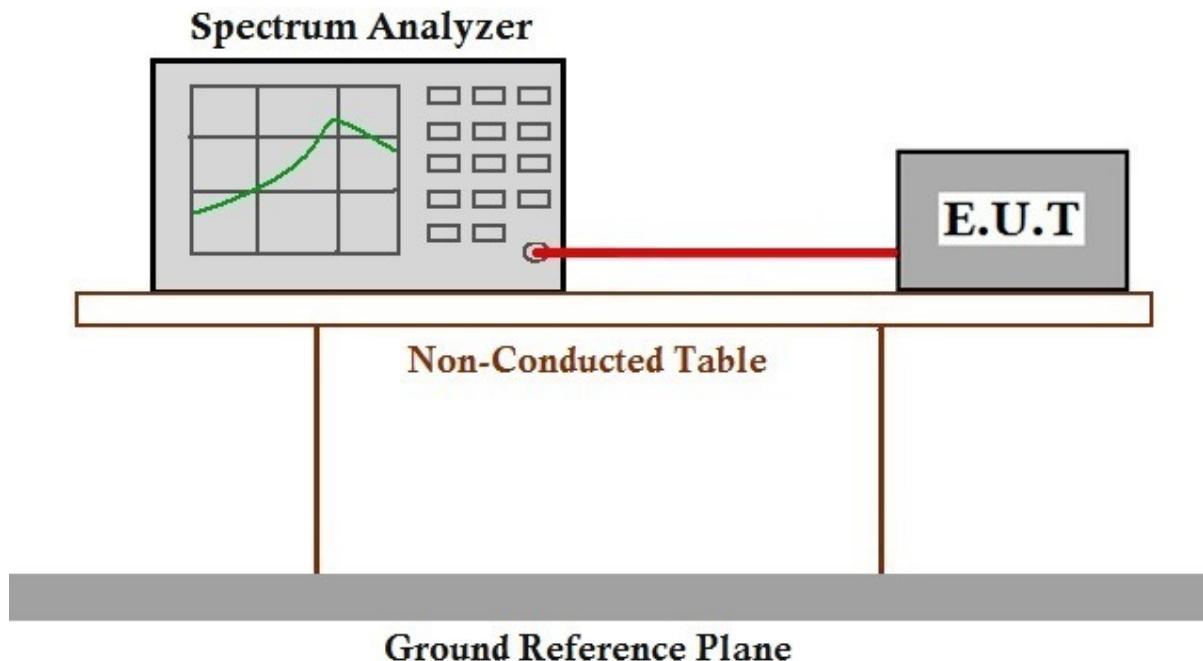
#### 7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 22.8 °C Humidity: 49.8 % RH :

Test mode a:Charge + TX mode\_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.

#### 7.3.2 Test Setup Diagram



#### 7.3.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.247

## 7.4 Conducted Peak Output Power

Test Requirement 47 CFR Part 15, Subpart C 15.247(b)(3) , RSS-247 Section 5.4(b)

Test Method: ANSI C63.10 (2013) Section 11.9.1

Limit:

Frequency range(MHz)	Output power of the intentional radiator(watt)
902-928	1 for $\geq 50$ hopping channels
	0.25 for $25 \leq$ hopping channels $< 50$
	1 for digital modulation
2400-2483.5	1 for $\geq 75$ non-overlapping hopping channels
	0.125 for all other frequency hopping systems
	1 for digital modulation
5725-5850	1 for frequency hopping systems and digital modulation

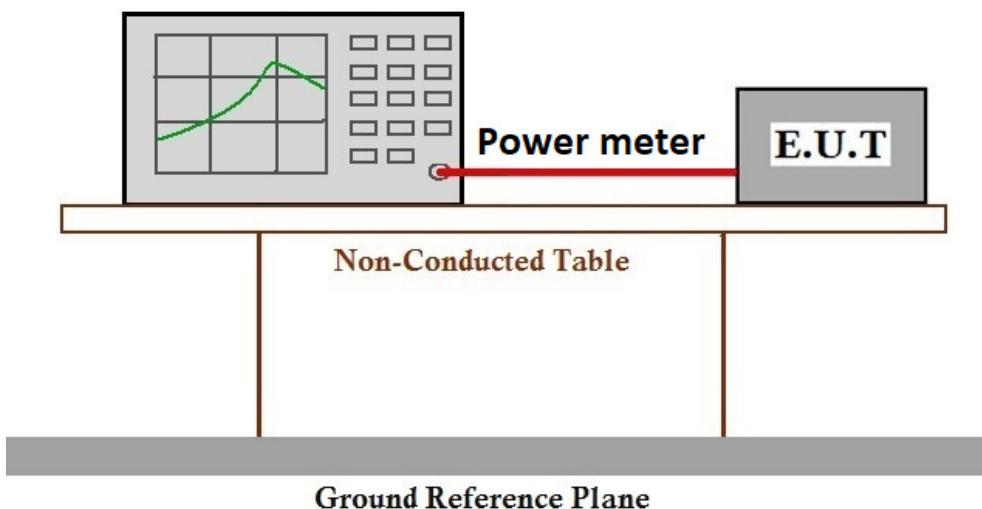
### 7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 22.8 °C Humidity: 49.8 % RH :

Test mode a:Charge + TX mode \_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.

### 7.4.2 Test Setup Diagram



### 7.4.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.247

## 7.5 Power Spectrum Density

Test Requirement 47 CFR Part 15, Subpart C 15.247(e), RSS-247 Clause 5.2(b)

Test Method: ANSI C63.10 (2013) Section 11.10.2

Limit:  $\leq 8\text{dBm}$  in any 3 kHz band during any time interval of continuous transmission

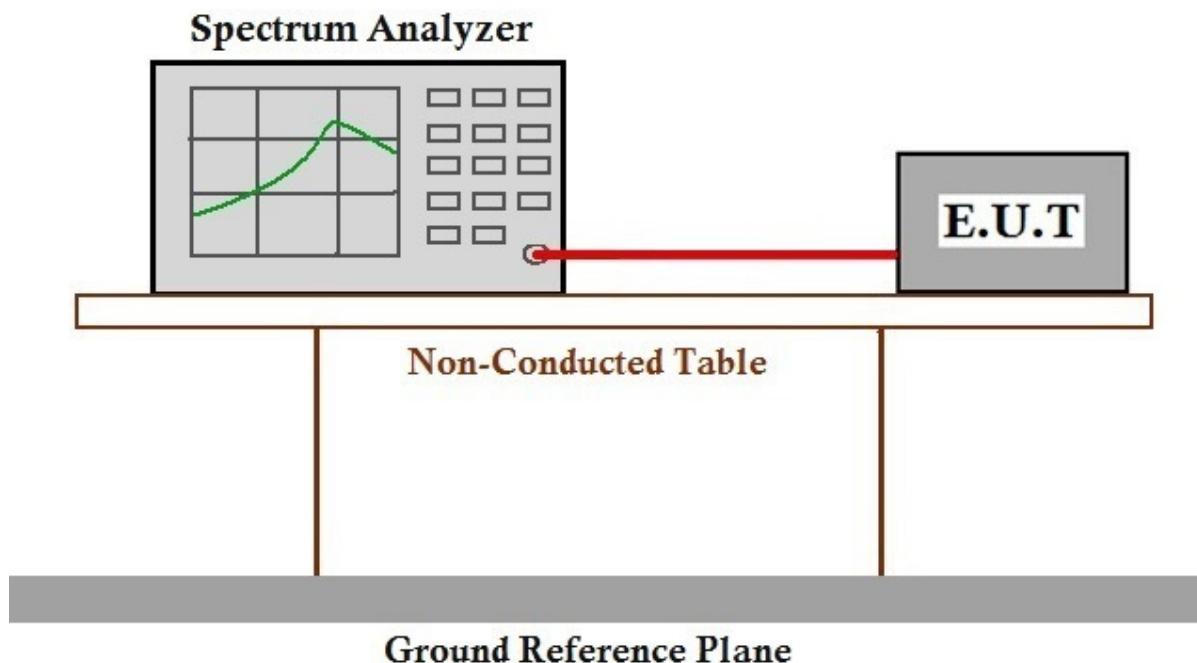
### 7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 22.8 °C Humidity: 49.8 % RH :

Test mode a:Charge + TX mode\_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.

### 7.5.2 Test Setup Diagram



### 7.5.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.247

## 7.6 Conducted Band Edges Measurement

Test Requirement 47 CFR Part 15, Subpart C 15.247(d), RSS-247 Section 5.5

Test Method: ANSI C63.10 (2013) Section 11.13.3.2

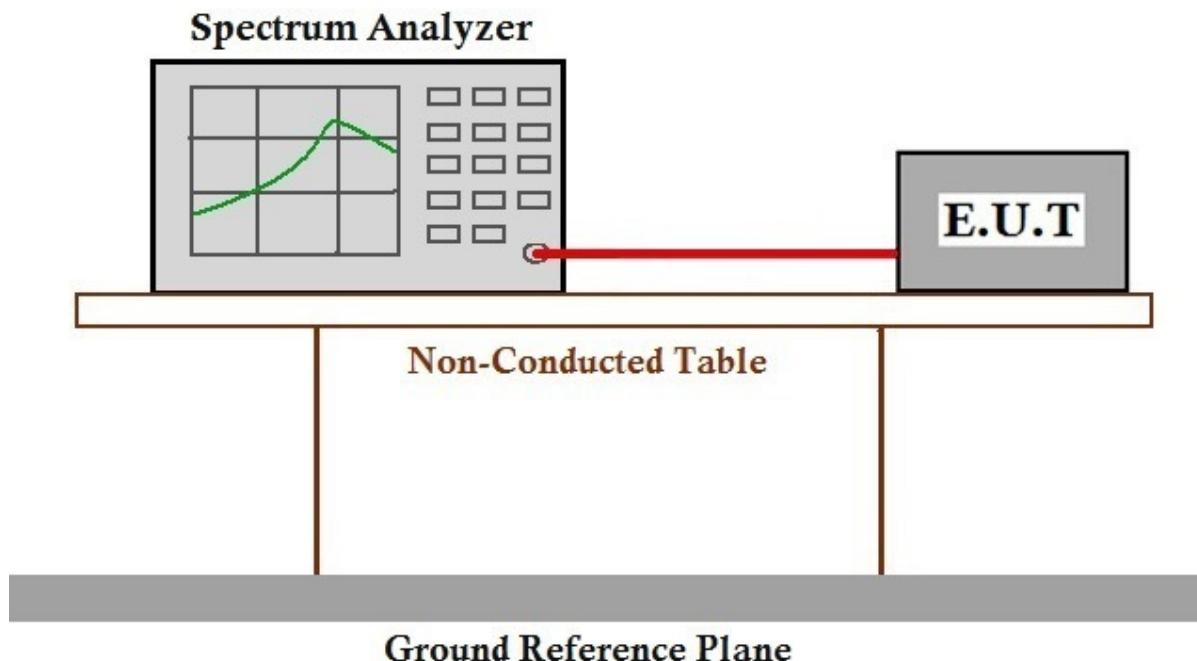
Limit: In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c))

### 7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 22.7 °C      Humidity: 49.3 % RH      :

### 7.6.2 Test Setup Diagram



### 7.6.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.247

## 7.7 Conducted Spurious Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.247(d), RSS-247 Section 5.5

Test Method: ANSI C63.10 (2013) Section 11.11

Limit: In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c))

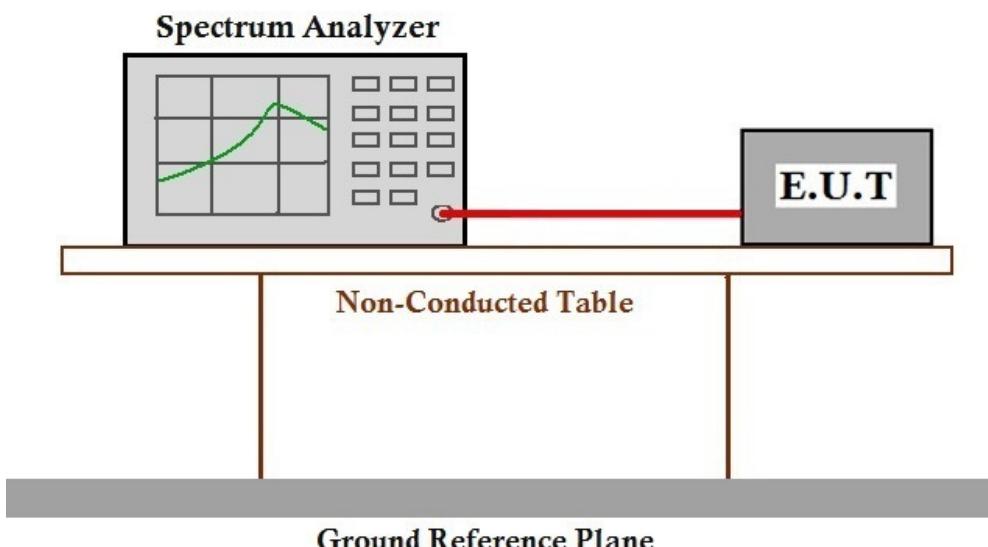
### 7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 22.9 °C Humidity: 49.2 % RH

Test mode a: Charge + TX mode\_ Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.

### 7.7.2 Test Setup Diagram



### 7.7.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.247

## 7.8 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.247(d), Section 3.3 & RSS-Gen Section 8.9

Test Method: ANSI C63.10 (2013) Section 6.10.5

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

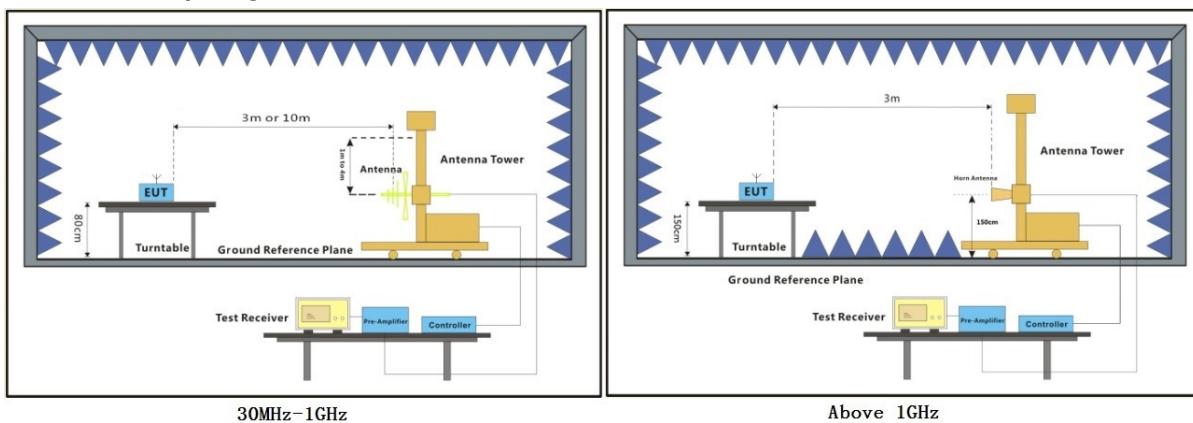
### 7.8.1 E.U.T. Operation

Operating Environment:

Temperature: 22.9 °C      Humidity: 49.2 % RH      :

Test mode      a:Charge + TX mode\_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.

### 7.8.2 Test Setup Diagram



### 7.8.3 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Remark 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

Mode: 802.11b

Frequency (MHz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Remark
		Peak	Average	Peak	Average	
2389.750	V	53.7	/	74.0	54.0	Pass
2483.500	V	54.1	47.6	74.0	54.0	Pass

Mode: 802.11g

Frequency (MHz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Remark
		Peak	Average	Peak	Average	
2389.750	V	53.8	/	74.0	54.0	Pass
2483.500	V	53.9	/	74.0	54.0	Pass

Mode: 802.11n20

Frequency (MHz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Remark
		Peak	Average	Peak	Average	
2389.750	V	53.2	/	74.0	54.0	Pass
2484.250	V	53.8	/	74.0	54.0	Pass

Mode: 802.11n40

Frequency (MHz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Remark
		Peak	Average	Peak	Average	
2389.750	V	53.4	/	74.0	54.0	Pass
2484.250	V	53.5	/	74.0	54.0	Pass

## 7.9 Radiated Spurious Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.247(d)

Test Method: ANSI C63.10 (2013) Section 6.4,6.5,6.6

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

### 7.9.1 E.U.T. Operation

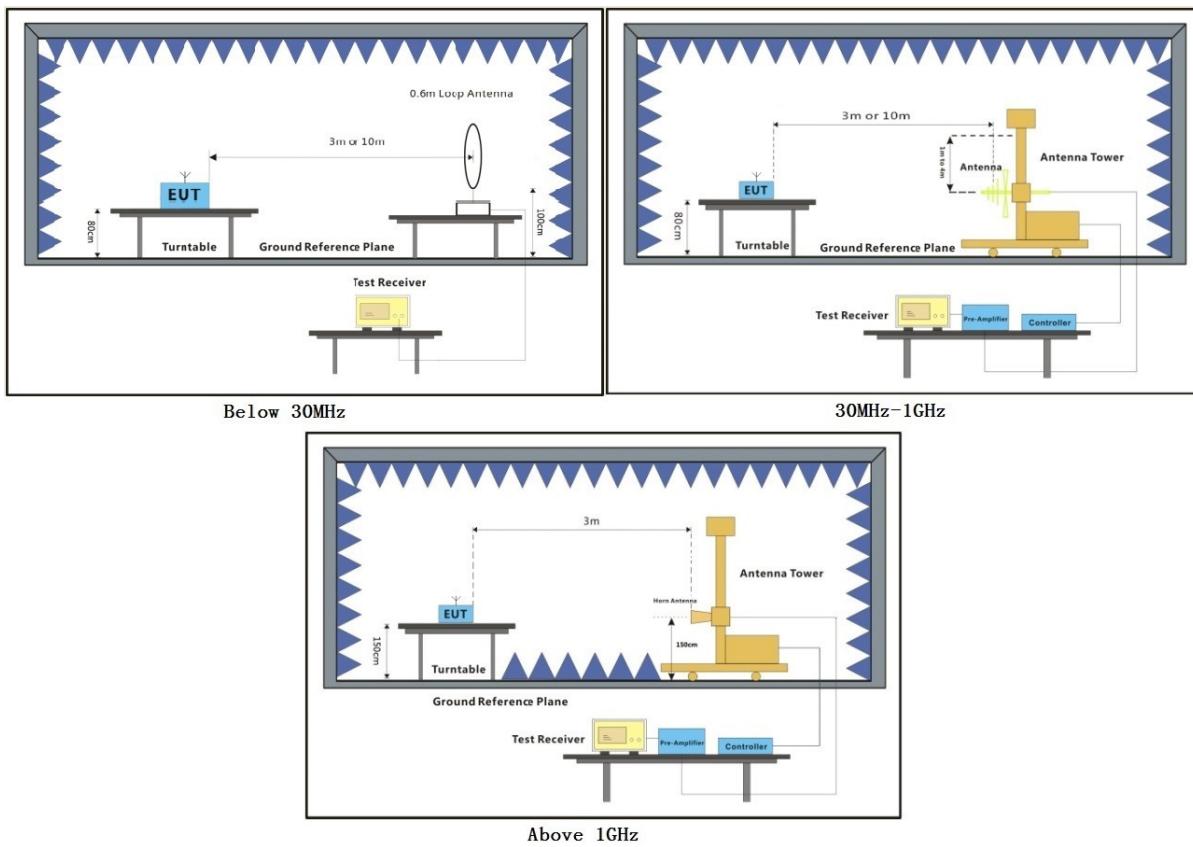
Operating Environment:

Temperature: 22.9 °C      Humidity: 49.2 % RH      :

Test mode

a:Charge + TX mode\_Keep the EUT in charging and continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 1Mbps is the worst case of IEEE 802.11b; data rate @ 6Mbps is the worst case of IEEE 802.11g; data rate @ 6.5Mbps is the worst case of IEEE 802.11n(HT20); data rate @ 13.5Mbps is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.

### 7.9.2 Test Setup Diagram



### 7.9.3 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

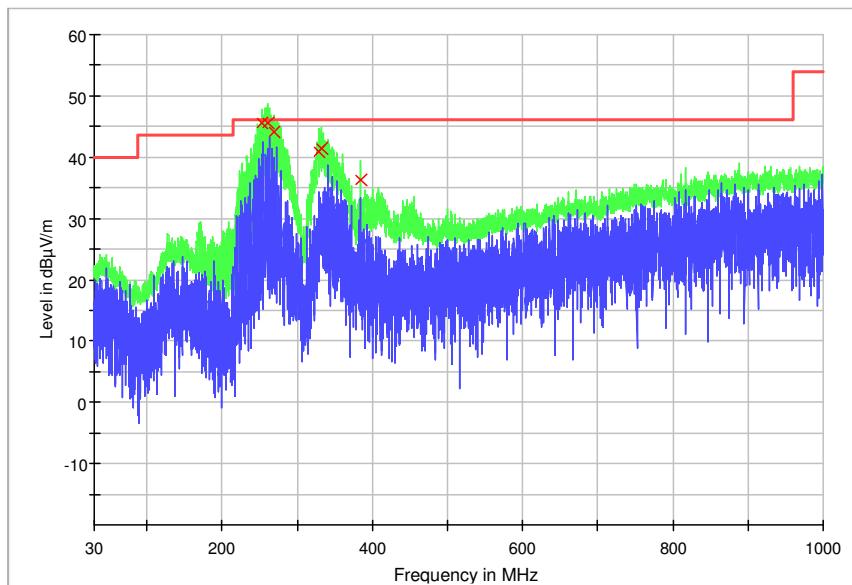
Remark:

- 1) For emission below 1GHz, through pre-scan found the worst case is the lowest channel. Only the worst case is recorded in the report.
- 2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:  
Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
- 3) Scan from 9kHz to 25GHz, the disturbance above 18GHz and below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 4) For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

802.11b

**Radiated emission below 1GHz**

Horizontal (worse plots was shown as below)

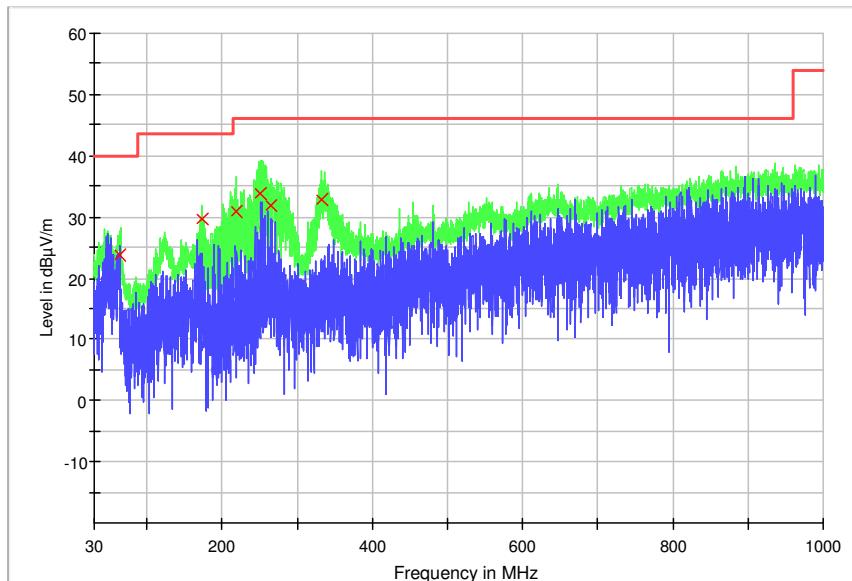


Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Pol.	Corr. (dB/m)	Margin (dB)	Limit (dB $\mu$ V/m)	Result
253.832500	45.6	H	12.6	0.4	46.0	Pass
260.365000	45.6	H	12.4	0.4	46.0	Pass
269.627500	44.0	H	13.0	2.0	46.0	Pass
328.615000	40.8	H	15.3	5.2	46.0	Pass
333.100000	41.5	H	15.5	4.5	46.0	Pass
383.995000	36.3	H	16.3	9.8	46.0	Pass

## Remark:

1. All readings are Quasi-Peak values.
2. Correction Factor = Antenna Factor + Cable Loss.
3. Pol. = antenna polarization

Vertical (worse plots was shown as below)



Frequency (MHz)	QuasiPeak (dBμV/m)	Pol.	Corr. (dB/m)	Margin (dB)	Limit (dBμV/m)	Result
64.292500	23.7	V	12.4	16.3	40.0	Pass
173.395000	29.7	V	13.6	13.8	43.5	Pass
219.415000	30.9	V	10.4	15.1	46.0	Pass
250.907500	33.8	V	12.8	12.2	46.0	Pass
264.460000	31.9	V	12.7	14.1	46.0	Pass
332.320000	32.9	V	15.5	13.1	46.0	Pass

## Remark:

1. All readings are Quasi-Peak values.
2. Correction Factor = Antenna Factor + Cable Loss.
3. Pol. = antenna polarization

**Above 1GHz**

Channel:Low

Frequency (MHz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Remark
		Peak	Average	Peak	Average	
1077.444	H	33.4	/	74.0	54.0	Pass
1278.139	H	34.8	/	74.0	54.0	Pass
2563.055	V	44.4	/	74.0	54.0	Pass
3150.027	H	37.1	/	74.0	54.0	Pass
4823.583	H	50.3	/	74.0	54.0	Pass
7234.750	H	50.3	/	74.0	54.0	Pass

Channel:Middle

Frequency (MHz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Remark
		Peak	Average	Peak	Average	
1425.472	H	34.0	/	74.0	54.0	Pass
1805.611	V	34.0	/	74.0	54.0	Pass
3992.875	V	45.1	/	74.0	54.0	Pass
5032.000	V	48.0	/	74.0	54.0	Pass
6530.500	V	50.7	/	74.0	54.0	Pass
7324.000	V	51.2	/	74.0	54.0	Pass

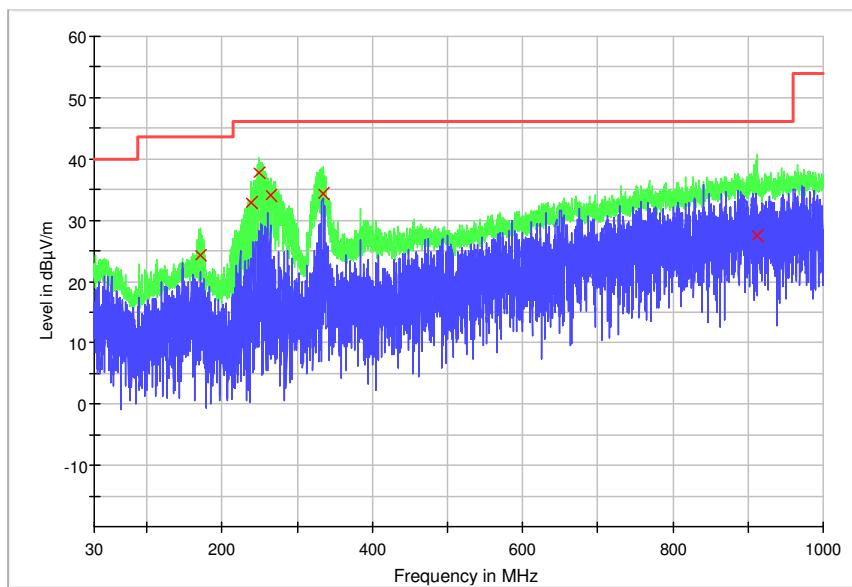
Channel: High

Frequency (MHz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Remark
		Peak	Average	Peak	Average	
1087.361	H	33.1	/	74.0	54.0	Pass
1545.889	H	34.3	/	74.0	54.0	Pass
2593.750	V	43.3	/	74.0	54.0	Pass
2600.833	H	42.0	/	74.0	54.0	Pass
5139.500	H	48.8	/	74.0	54.0	Pass
8087.500	H	58.8	/	74.0	54.0	Pass

802.11g

**Radiated emission below 1GHz**

Horizontal (worse plots was shown as below)

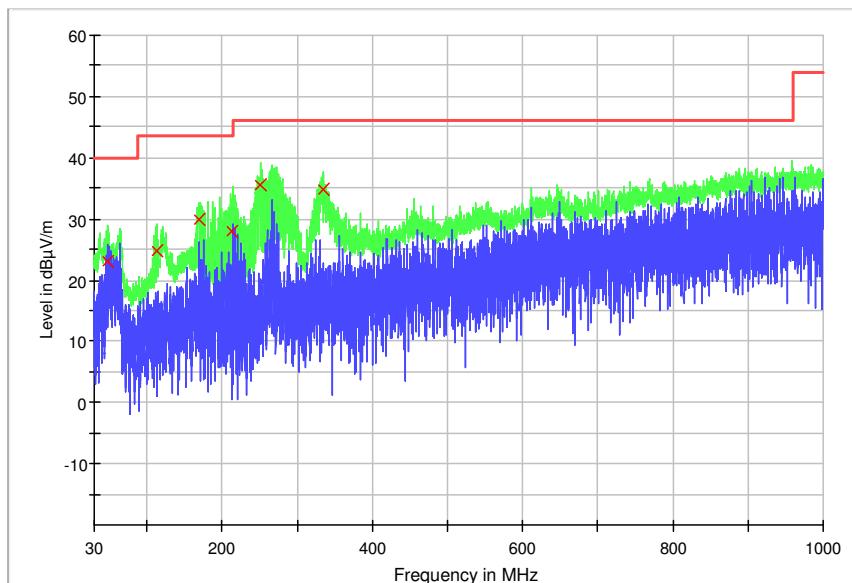


Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Pol.	Corr. (dB/m)	Margin (dB)	Limit (dB $\mu$ V/m)	Result
171.152500	24.3	H	13.9	19.2	43.5	Pass
238.720000	32.8	H	12.5	13.2	46.0	Pass
249.737500	37.7	H	12.9	8.3	46.0	Pass
264.850000	34.1	H	12.7	11.9	46.0	Pass
334.660000	34.4	H	15.6	11.6	46.0	Pass
911.860000	27.4	H	26.6	18.6	46.0	Pass

Remark:

1. All readings are Quasi-Peak values.
2. Correction Factor = Antenna Factor + Cable Loss.
3. Pol. = antenna polarization

Vertical (worse plots was shown as below)



Frequency (MHz)	QuasiPeak (dBμV/m)	Pol.	Corr. (dB/m)	Margin (dB)	Limit (dBμV/m)	Result
48.800000	23.1	V	14.0	16.9	40.0	Pass
113.120000	24.9	V	11.3	18.6	43.5	Pass
168.920000	29.9	V	14.1	13.6	43.5	Pass
214.240000	28.0	V	10.5	15.6	43.5	Pass
251.800000	35.5	V	12.8	10.5	46.0	Pass
334.640000	34.8	V	15.6	11.2	46.0	Pass

Remark:

1. All readings are Quasi-Peak values.
2. Correction Factor = Antenna Factor + Cable Loss.
3. Pol. = antenna polarization

**Above 1GHz**

Channel:Low

Frequency (MHz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Remark
		Peak	Average	Peak	Average	
1455.694	H	34.6	/	74.0	54.0	Pass
1847.639	H	33.8	/	74.0	54.0	Pass
2607.917	V	42.5	/	74.0	54.0	Pass
4820.278	H	49.5	/	74.0	54.0	Pass
6296.444	H	44.6	/	74.0	54.0	Pass
7238.056	H	49.0	/	74.0	54.0	Pass

Channel:Middle

Frequency (MHz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Remark
		Peak	Average	Peak	Average	
1071.306	H	33.3	/	74.0	54.0	Pass
2581.944	V	43.3	/	74.0	54.0	Pass
2605.083	H	41.8	/	74.0	54.0	Pass
3553.306	V	37.1	/	74.0	54.0	Pass
4889.222	H	44.9	/	74.0	54.0	Pass
7315.972	V	48.6	/	74.0	54.0	Pass

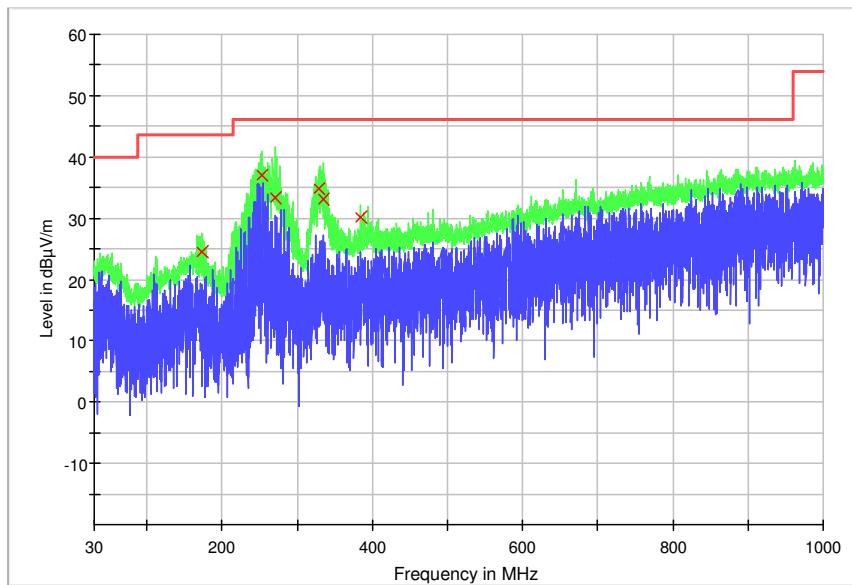
Channel: High

Frequency (MHz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Remark
		Peak	Average	Peak	Average	
1270.111	H	34.1	/	74.0	54.0	Pass
1642.222	H	34.1	/	74.0	54.0	Pass
2587.611	V	43.7	/	74.0	54.0	Pass
3679.389	H	37.9	/	74.0	54.0	Pass
4944.472	H	47.3	/	74.0	54.0	Pass
7412.306	H	48.4	/	74.0	54.0	Pass

802.11n20

**Radiated emission below 1GHz**

Horizontal (worse plots was shown as below)

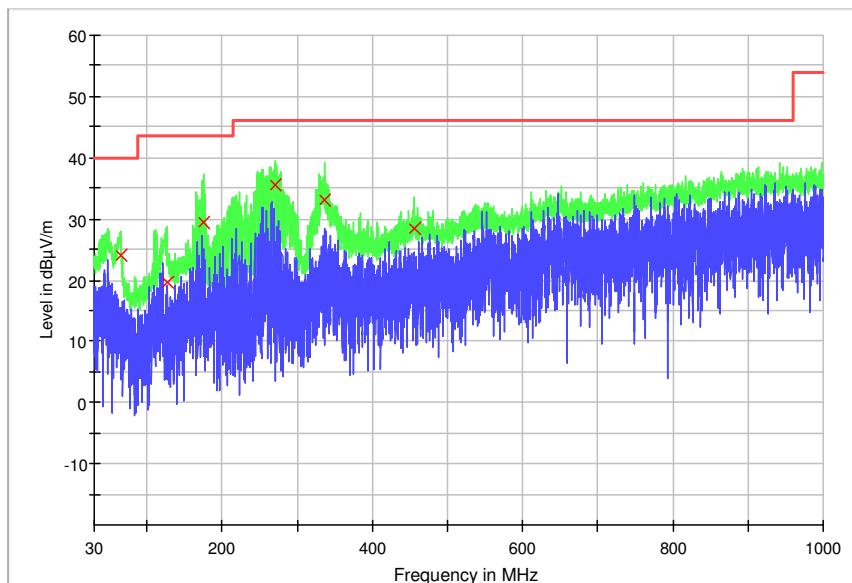


Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Pol.	Corr. (dB/m)	Margin (dB)	Limit (dB $\mu$ V/m)	Result
173.297500	24.4	H	13.6	19.1	43.5	Pass
253.930000	37.0	H	12.6	9.0	46.0	Pass
270.212500	33.3	H	13.0	12.7	46.0	Pass
328.322500	34.8	H	15.3	11.2	46.0	Pass
334.952500	33.0	H	15.6	13.0	46.0	Pass
383.995000	30.1	H	16.3	15.9	46.0	Pass

Remark:

1. All readings are Quasi-Peak values.
2. Correction Factor = Antenna Factor + Cable Loss.
3. Pol. = antenna polarization

Vertical (worse plots was shown as below)



Frequency (MHz)	QuasiPeak (dBμV/m)	Pol.	Corr. (dB/m)	Margin (dB)	Limit (dBμV/m)	Result
64.877500	24.0	V	12.3	16.1	40.0	Pass
128.350000	19.6	V	12.5	23.9	43.5	Pass
174.662500	29.5	V	13.4	14.0	43.5	Pass
271.382500	35.4	V	13.1	10.6	46.0	Pass
336.025000	33.1	V	15.6	13.0	46.0	Pass
456.047500	28.5	V	18.4	17.5	46.0	Pass

Remark:

1. All readings are Quasi-Peak values.
2. Correction Factor = Antenna Factor + Cable Loss.
3. Pol. = antenna polarization

**Above 1GHz**

Channel:Low

Frequency (MHz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Remark
		Peak	Average	Peak	Average	
1356.528	V	33.9	/	74.0	54.0	Pass
2586.194	H	43.6	/	74.0	54.0	Pass
2614.056	V	42.2	/	74.0	54.0	Pass
3934.861	V	38.6	/	74.0	54.0	Pass
4821.694	H	49.2	/	74.0	54.0	Pass
7241.361	V	49.5	/	74.0	54.0	Pass

Channel:Middle

Frequency (MHz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Remark
		Peak	Average	Peak	Average	
1378.722	H	33.2	/	74.0	54.0	Pass
1760.278	V	34.2	/	74.0	54.0	Pass
2579.583	H	42.9	/	74.0	54.0	Pass
4879.306	V	43.1	/	74.0	54.0	Pass
4881.667	H	45.1	/	74.0	54.0	Pass
7319.278	V	51.2	/	74.0	54.0	Pass

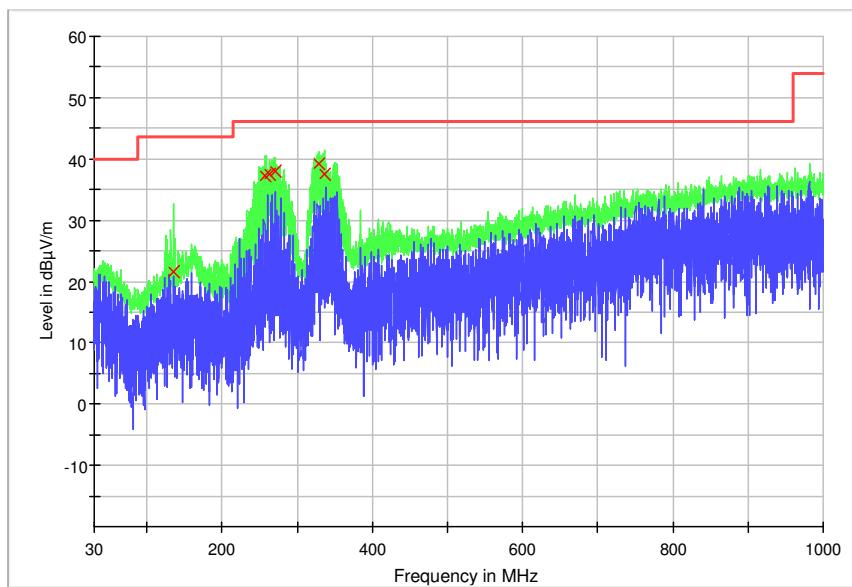
Channel: High

Frequency (MHz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Remark
		Peak	Average	Peak	Average	
1354.639	H	34.1	/	74.0	54.0	Pass
2592.806	V	42.9	/	74.0	54.0	Pass
3632.167	H	36.9	/	74.0	54.0	Pass
4945.417	H	45.3	/	74.0	54.0	Pass
6297.861	H	44.8	/	74.0	54.0	Pass
7413.722	V	48.0	/	74.0	54.0	Pass

802.11n40

**Radiated emission below 1GHz**

Horizontal (worse plots was shown as below)

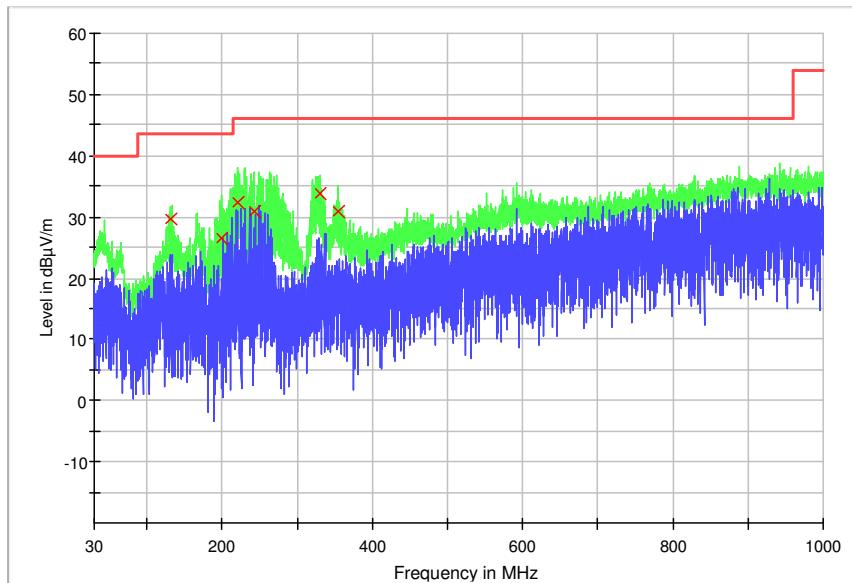


Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Pol.	Corr. (dB/m)	Margin (dB)	Limit (dB $\mu$ V/m)	Result
134.687500	21.7	H	13.1	21.9	43.5	Pass
256.172500	37.2	H	12.5	8.8	46.0	Pass
262.997500	37.5	H	12.6	8.5	46.0	Pass
270.700000	37.9	H	13.1	8.1	46.0	Pass
327.835000	39.1	H	15.3	6.9	46.0	Pass
335.927500	37.6	H	15.6	8.4	46.0	Pass

Remark:

1. All readings are Quasi-Peak values.
2. Correction Factor = Antenna Factor + Cable Loss.
3. Pol. = antenna polarization

Vertical (worse plots was shown as below)



Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Pol.	Corr. (dB/m)	Margin (dB)	Limit (dB $\mu$ V/m)	Result
131.275000	29.6	V	12.7	14.0	43.5	Pass
199.232500	26.6	V	10.6	16.9	43.5	Pass
221.365000	32.3	V	10.5	13.7	46.0	Pass
243.205000	30.8	V	12.7	15.2	46.0	Pass
330.077500	33.8	V	15.4	12.2	46.0	Pass
354.550000	30.9	V	16.0	15.1	46.0	Pass

Remark:

1. All readings are Quasi-Peak values.
2. Correction Factor = Antenna Factor + Cable Loss.
3. Pol. = antenna polarization

**Above 1GHz**

Channel:Low

Frequency (MHz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Remark
		Peak	Average	Peak	Average	
1588.543	V	36.5	/	74.0	54.0	Pass
3707.610	H	44.2	/	74.0	54.0	Pass
5135.589	V	49.0	/	74.0	54.0	Pass
3963.870	V	39.0	/	74.0	54.0	Pass
6241.833	H	50.7	/	74.0	54.0	Pass
7502.098	H	58.0	43.4	74.0	54.0	Pass

Channel:Middle

Frequency (MHz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Remark
		Peak	Average	Peak	Average	
1388.923	H	34.3	/	74.0	54.0	Pass
2625.979	V	43.2	/	74.0	54.0	Pass
3666.401	H	37.6	/	74.0	54.0	Pass
4972.884	V	45.7	/	74.0	54.0	Pass
6326.864	H	45.2	/	74.0	54.0	Pass
7441.879	V	48.7	/	74.0	54.0	Pass

Channel: High

Frequency (MHz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)		Limit (dB $\mu$ V/m)		Remark
		Peak	Average	Peak	Average	
1386.877	H	34.1	/	74.0	54.0	Pass
2616.195	V	43.9	/	74.0	54.0	Pass
2647.226	H	42.9	/	74.0	54.0	Pass
3965.078	H	39.0	/	74.0	54.0	Pass
4851.797	H	49.6	/	74.0	54.0	Pass
7269.421	V	50.2	/	74.0	54.0	Pass

## 8 Photographs

Remark: Photos refer to Appendix: External Photo, Internal Phot, Setup Photo

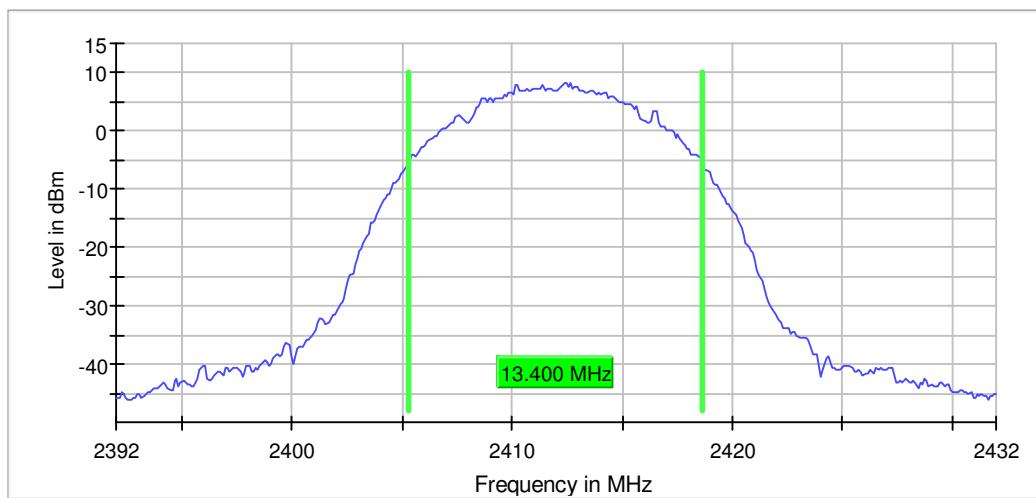
## 9 Appendix 15.247

### 9.1 99% Bandwidth

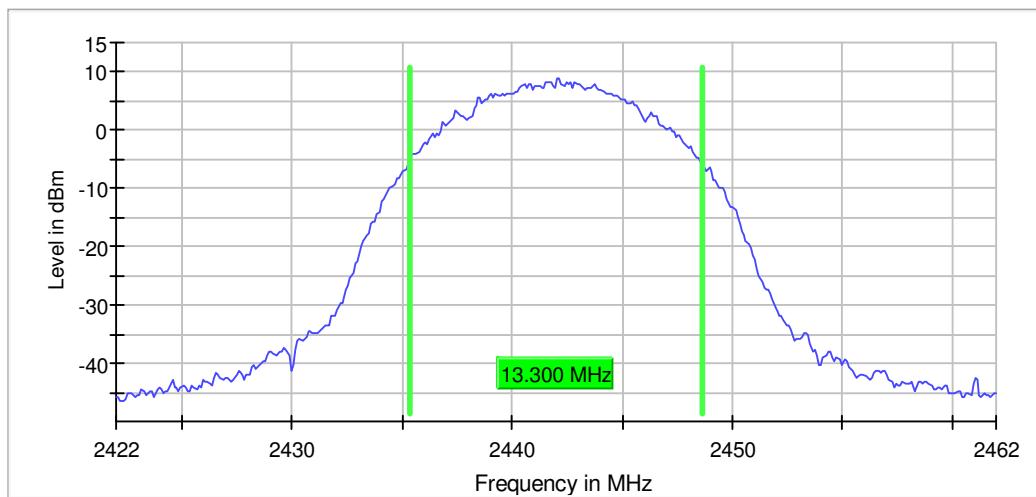
802.11b:

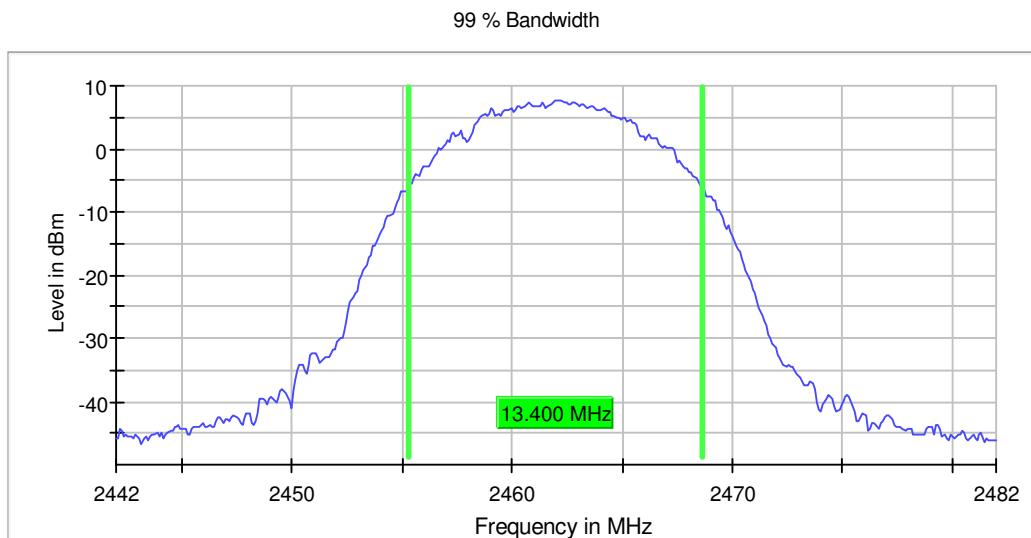
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	13.400000	---	---	2405.250000	2418.650000
2442.000000	13.300000	---	---	2435.350000	2448.650000
2462.000000	13.400000	---	---	2455.250000	2468.650000

99 % Bandwidth



99 % Bandwidth



**Measurement setting:**

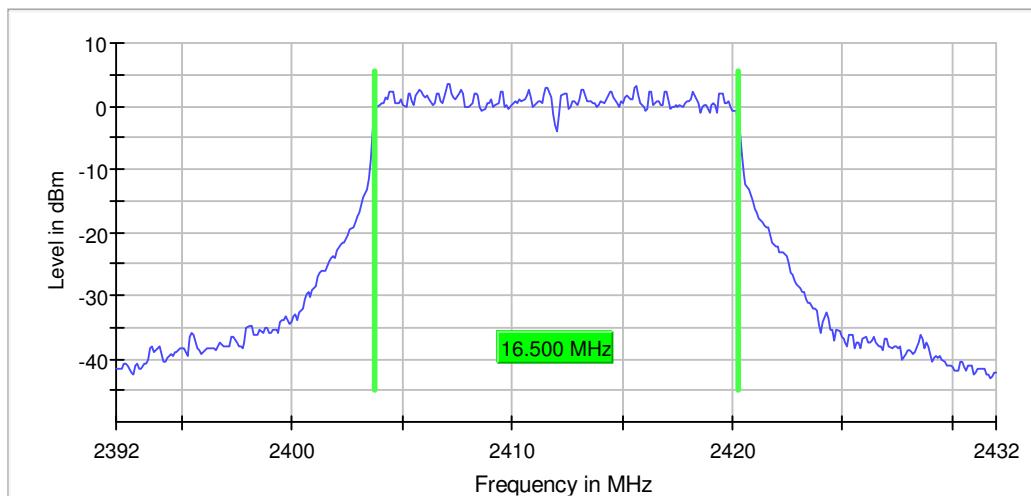
Setting	Instrument Value	Target Value
Span	40.000 MHz	40.000 MHz
RBW	300.000 kHz	~ 300.000 kHz
VBW	1.000 MHz	~ 1.000 MHz
SweepPoints	800	~ 800
Sweeptime	94.922 $\mu$ s	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	18 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.38 dB	0.50 dB

Remark: Cable loss 0.8dB was considered and set in system configuration.

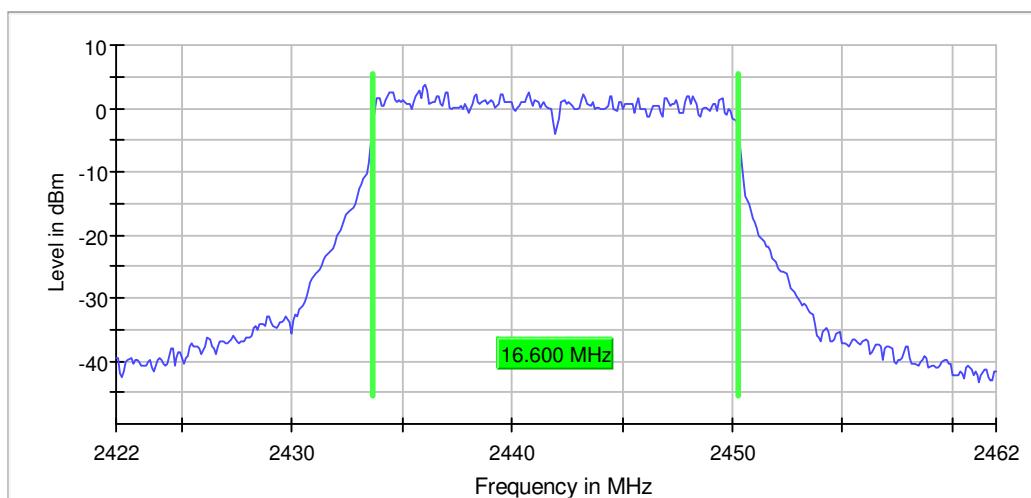
802.11g:

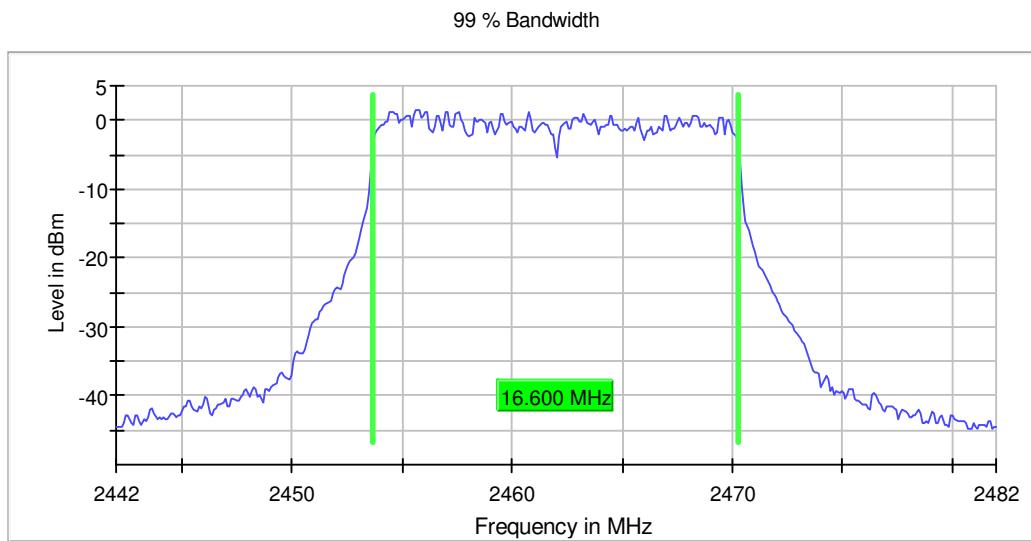
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	16.500000	---	---	2403.750000	2420.250000
2442.000000	16.450000	---	---	2433.650000	2450.250000
2462.000000	16.600000	---	---	2453.650000	2470.250000

99 % Bandwidth



99 % Bandwidth



**Measurement setting:**

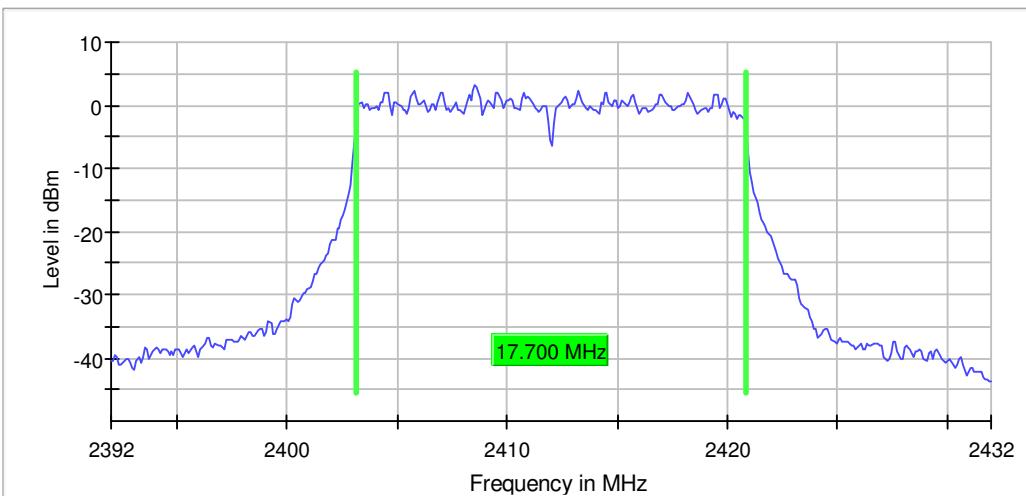
Setting	Instrument Value	Target Value
Span	40.000 MHz	40.000 MHz
RBW	300.000 kHz	~ 300.000 kHz
VBW	1.000 MHz	~ 1.000 MHz
SweepPoints	800	~ 800
Sweptime	94.922 us	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	37 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.25 dB	0.50 dB

Remark: Cable loss 0.8dB was considered and set in system configuration.

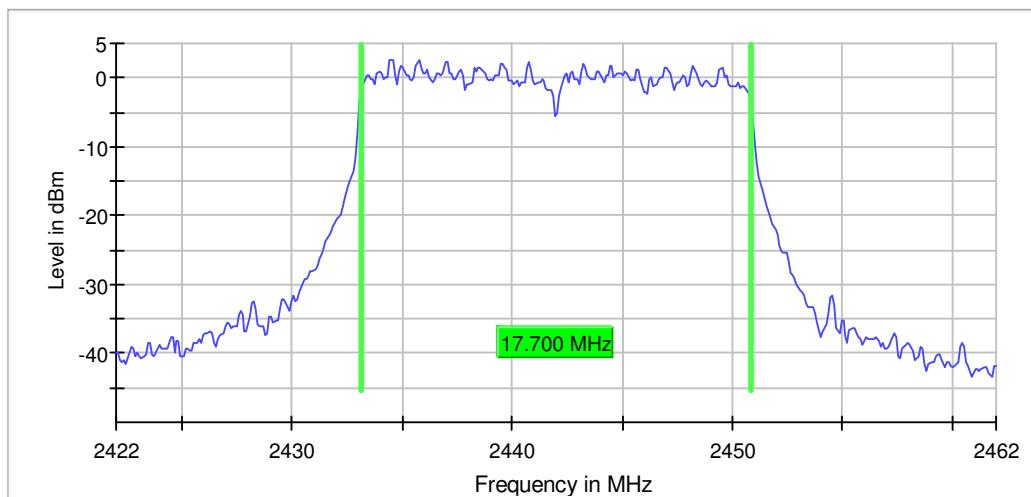
802.11n20:

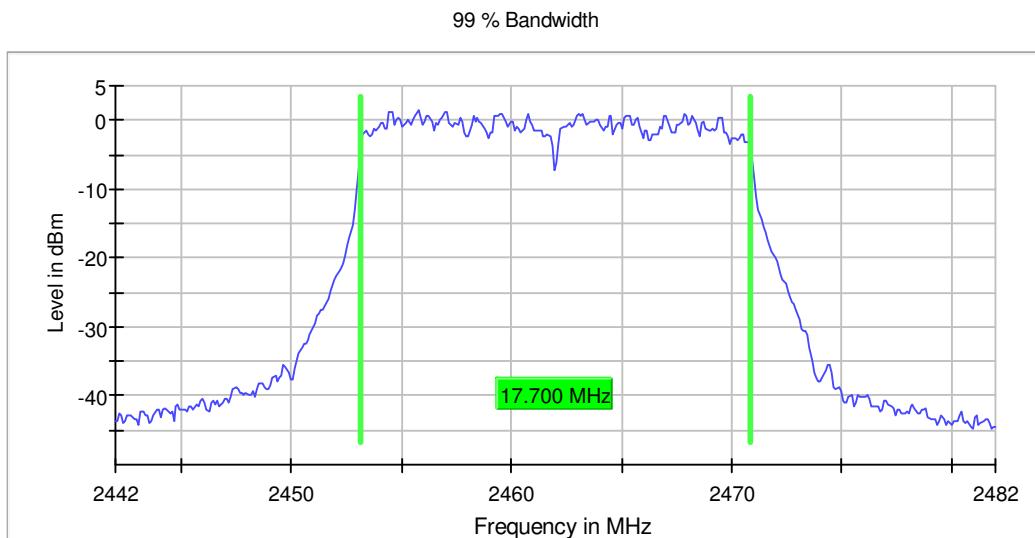
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	17.700000	---	---	2403.150000	2420.850000
2442.000000	17.700000	---	---	2433.150000	2450.850000
2462.000000	17.700000	---	---	2453.150000	2470.850000

99 % Bandwidth



99 % Bandwidth



**Measurement Setting:**

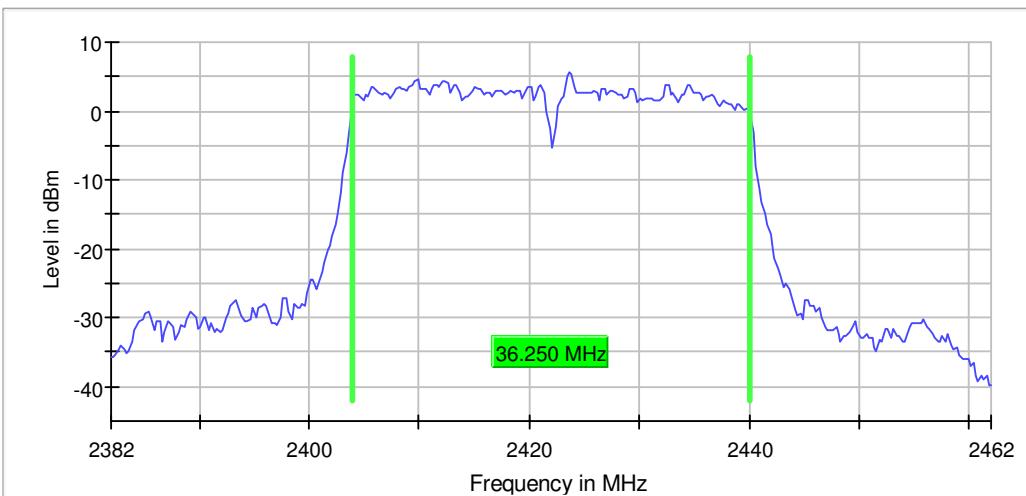
Setting	Instrument Value	Target Value
Span	40.000 MHz	40.000 MHz
RBW	300.000 kHz	~ 300.000 kHz
VBW	1.000 MHz	~ 1.000 MHz
SweepPoints	800	~ 800
Sweptime	94.922 us	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	92 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.00 dB	0.50 dB

Remark: Cable loss 0.8dB was considered and set in system configuration.

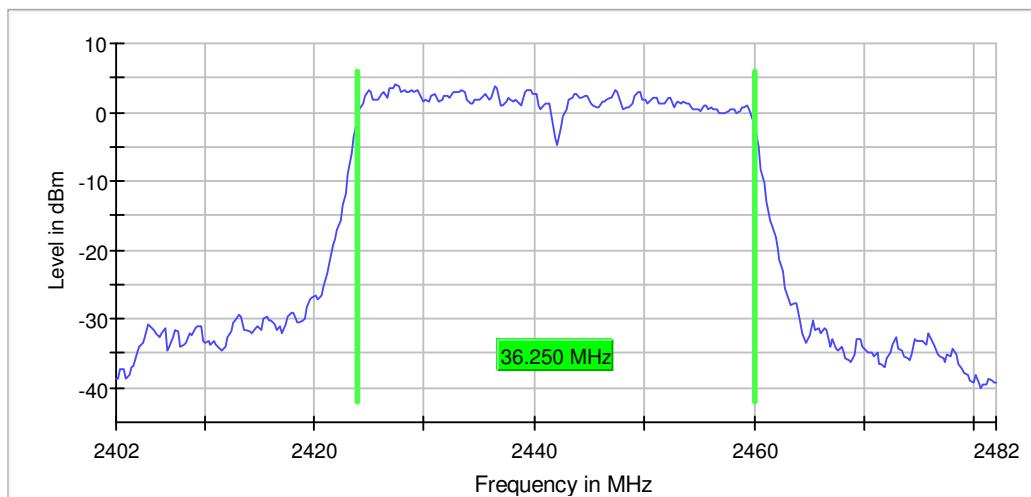
802.11n40:

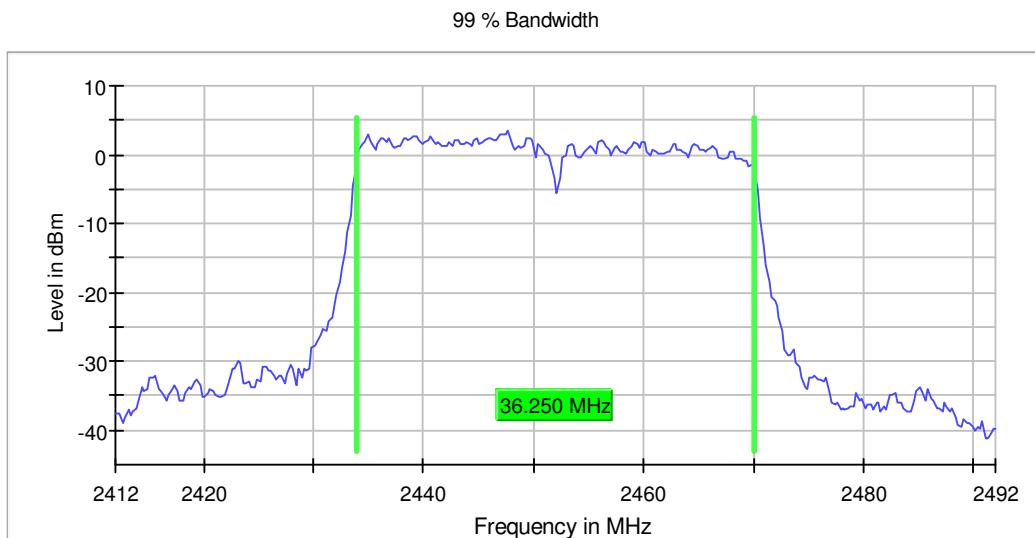
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	36.250000	---	---	2403.875000	2440.125000
2442.000000	36.250000	---	---	2423.875000	2460.125000
2452.000000	36.250000	---	---	2433.875000	2470.125000

99 % Bandwidth



99 % Bandwidth



**Measurement Setting:**

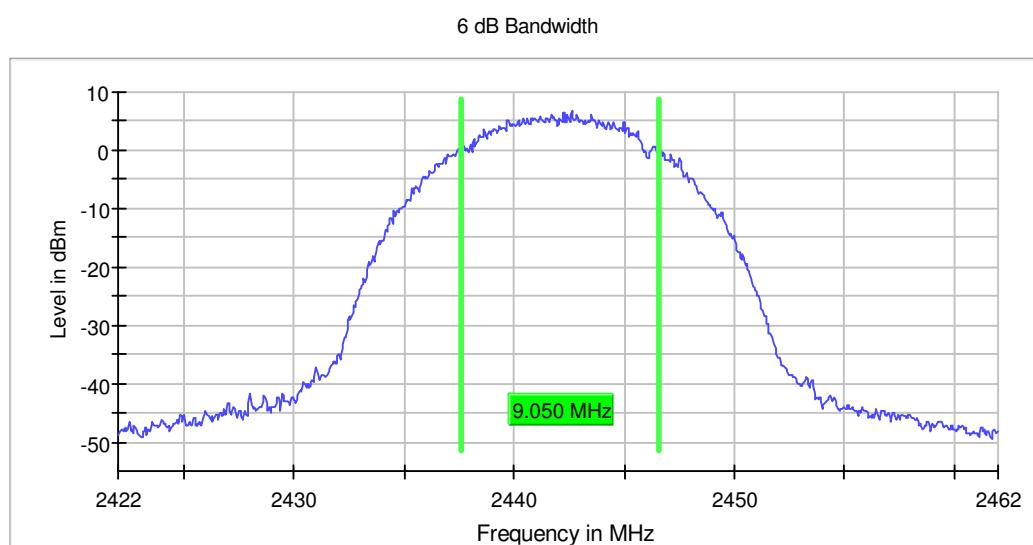
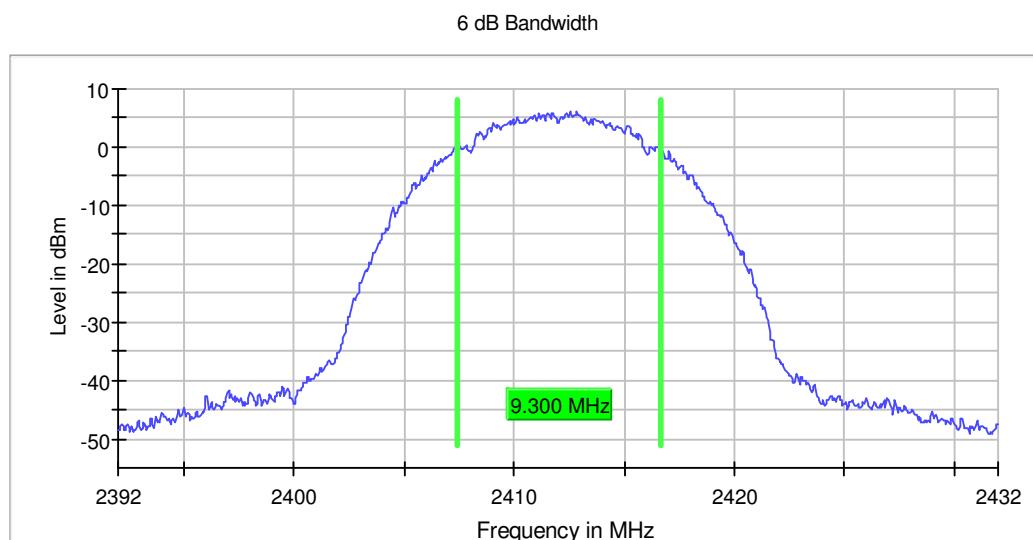
Setting	Instrument Value	Target Value
Span	80.000 MHz	80.000 MHz
RBW	500.000 kHz	>= 400.000 kHz
VBW	2.000 MHz	>= 1.500 MHz
SweepPoints	320	~ 320
Sweptime	1.000 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	19 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.05 dB	0.30 dB

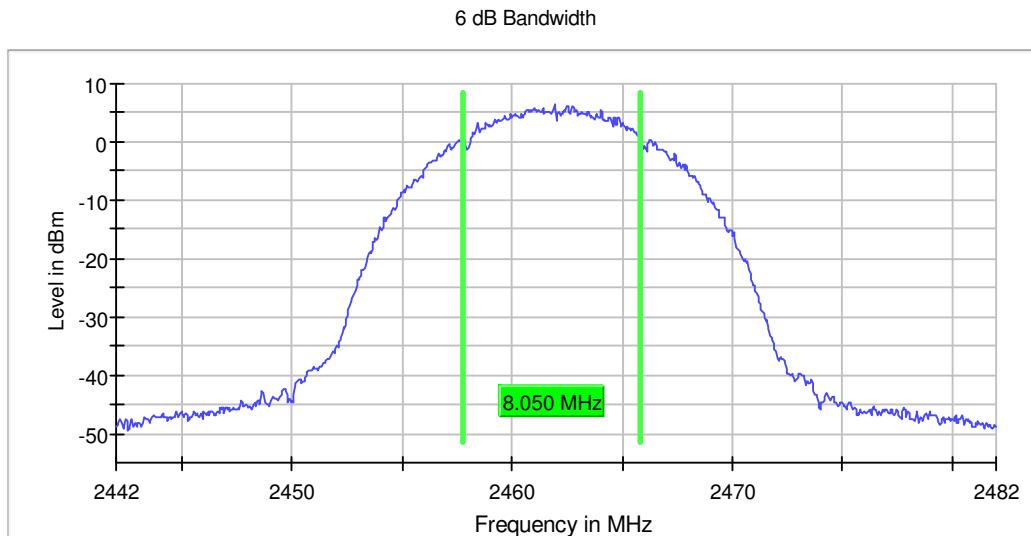
Remark: Cable loss 0.8dB was considered and set in system configuration.

## 9.2 Minimum Emission Bandwidth 6 dB

802.11b:

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	9.300000	0.500000	---	2407.375000	2416.675000
2442.000000	9.050000	0.500000	---	2437.575000	2446.625000
2462.000000	8.050000	0.500000	---	2457.775000	2465.825000



**Measurement setting:**

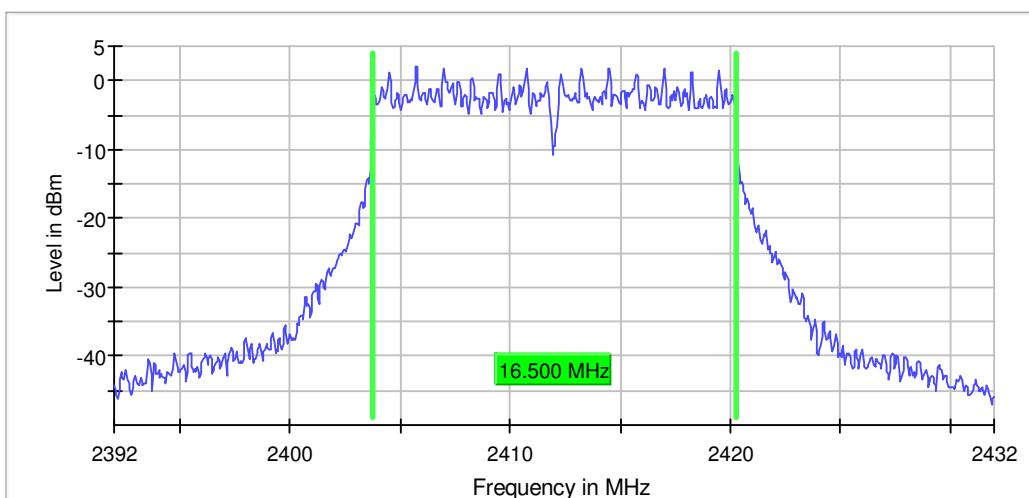
Setting	Instrument Value	Target Value
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweeptime	94.922 us	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptime	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	18 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.38 dB	0.50 dB

Remark: Cable loss 0.8dB was considered and set in system configuration.

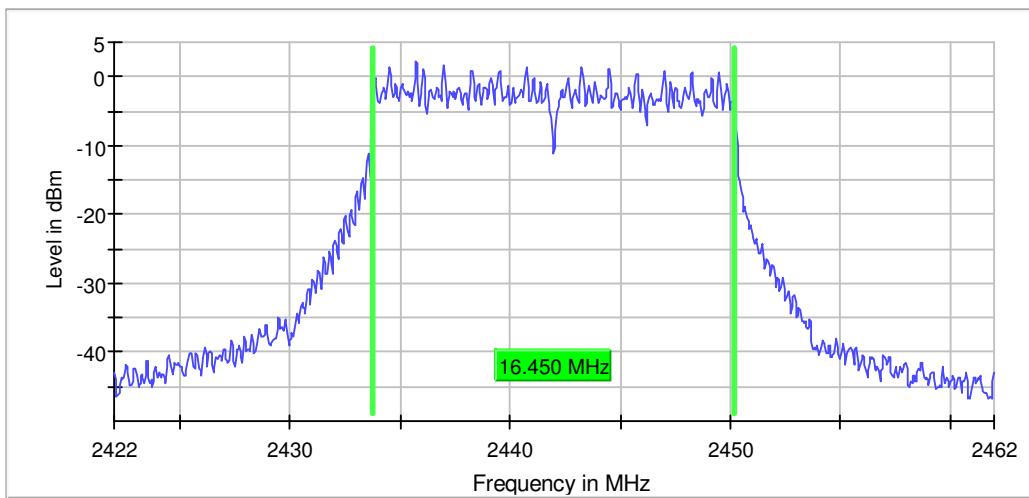
802.11g:

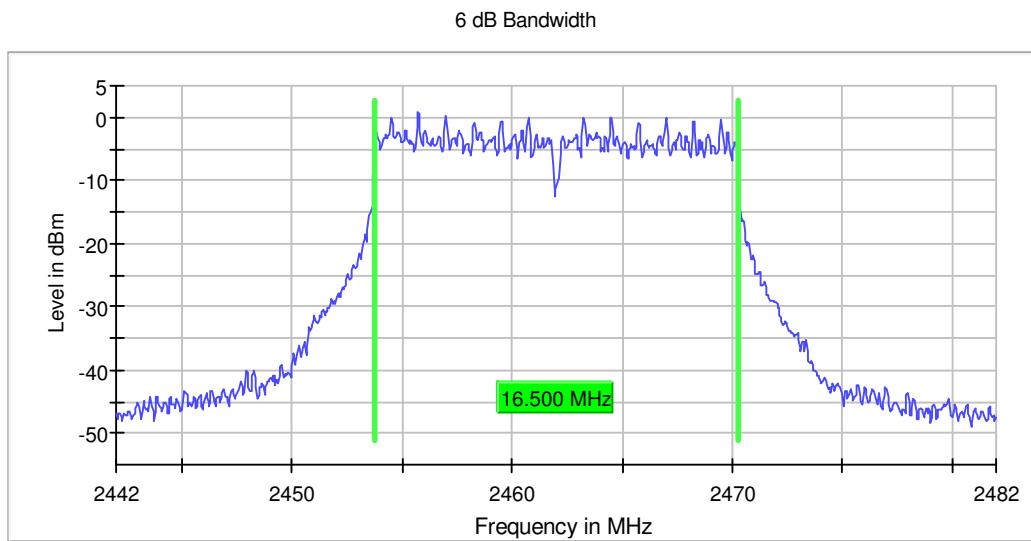
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	16.500000	0.500000	---	2403.725000	2420.225000
2442.000000	16.450000	0.500000	---	2433.725000	2450.175000
2462.000000	16.500000	0.500000	---	2453.725000	2470.225000

6 dB Bandwidth



6 dB Bandwidth



**Measurement setting:**

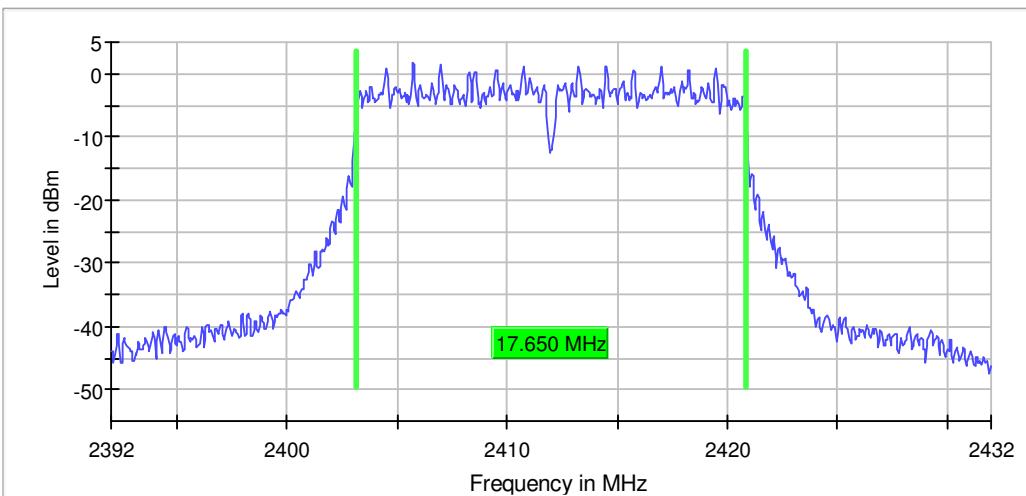
Setting	Instrument Value	Target Value
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweptime	94.922 us	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	37 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.25 dB	0.50 dB

Remark: Cable loss 0.8dB was considered and set in system configuration.

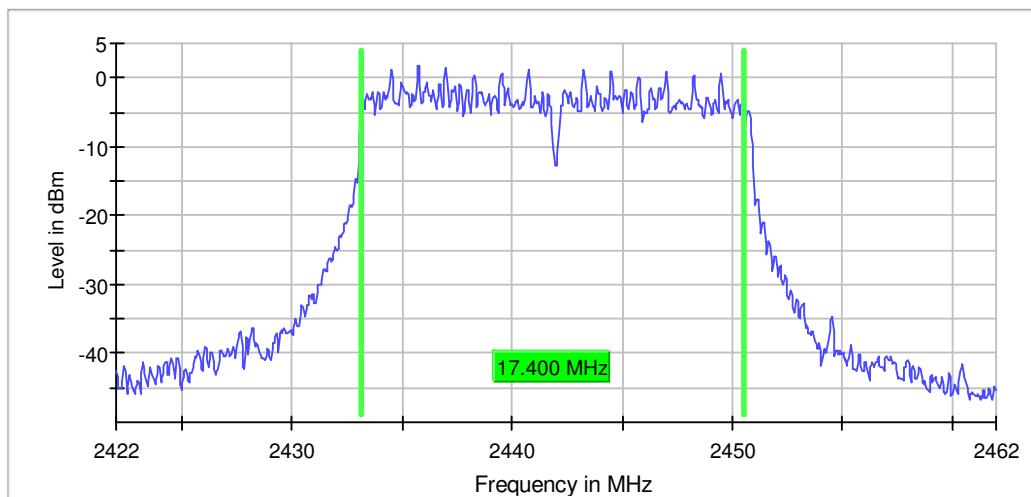
802.11n20:

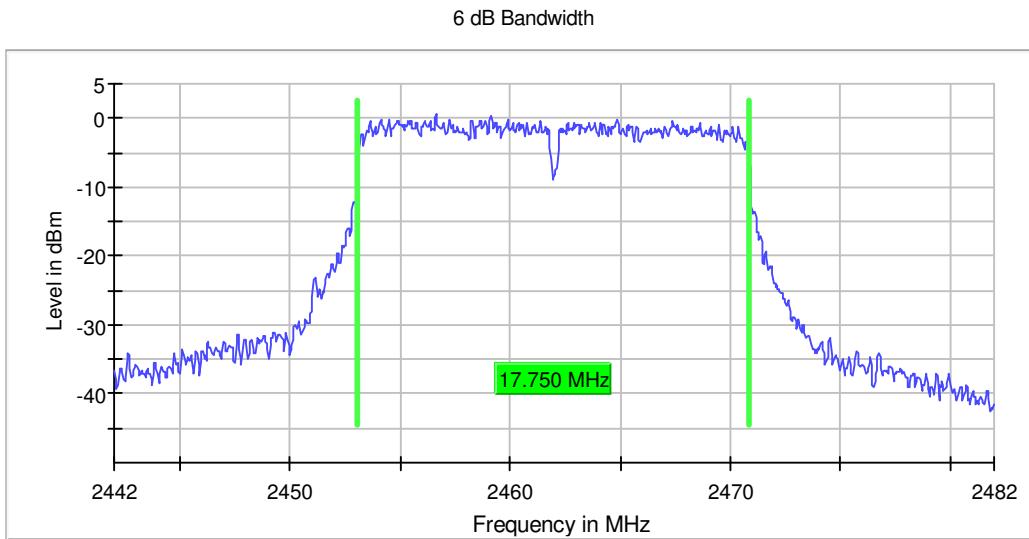
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	17.650000	0.500000	---	2403.175000	2420.825000
2442.000000	17.400000	0.500000	---	2433.125000	2450.525000
2462.000000	17.300000	0.500000	---	2453.225000	2470.525000

6 dB Bandwidth



6 dB Bandwidth



**Measurement Setting:**

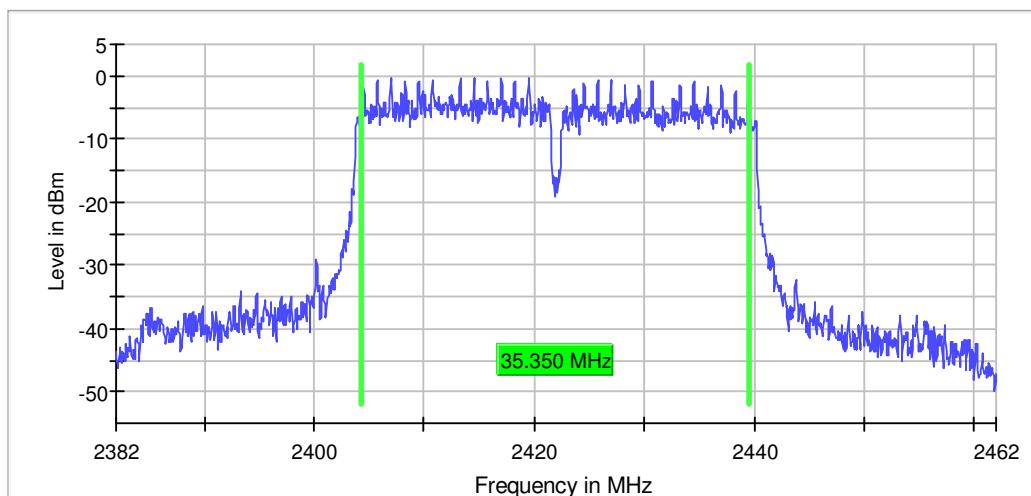
Setting	Instrument Value	Target Value
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweptime	94.922 us	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	92 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.00 dB	0.50 dB

Remark: Cable loss 0.8dB was considered and set in system configuration.

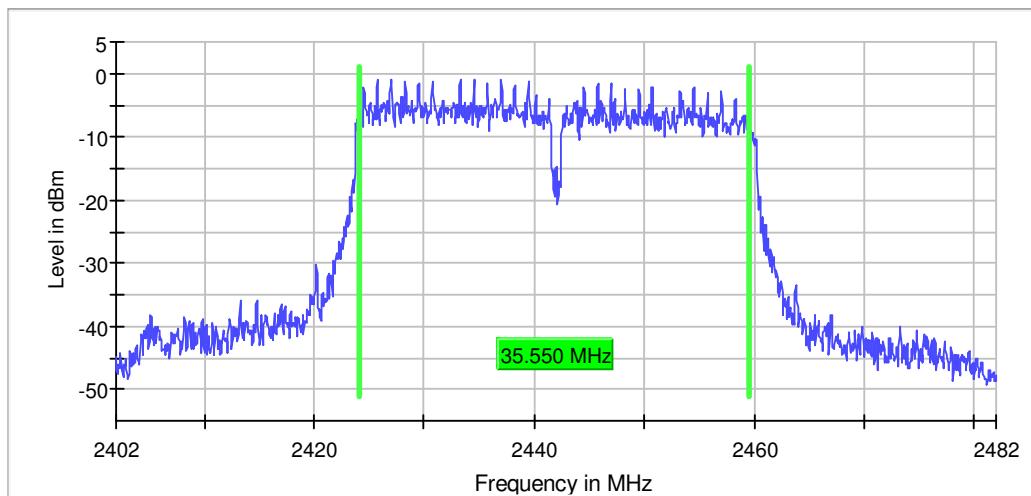
802.11n40:

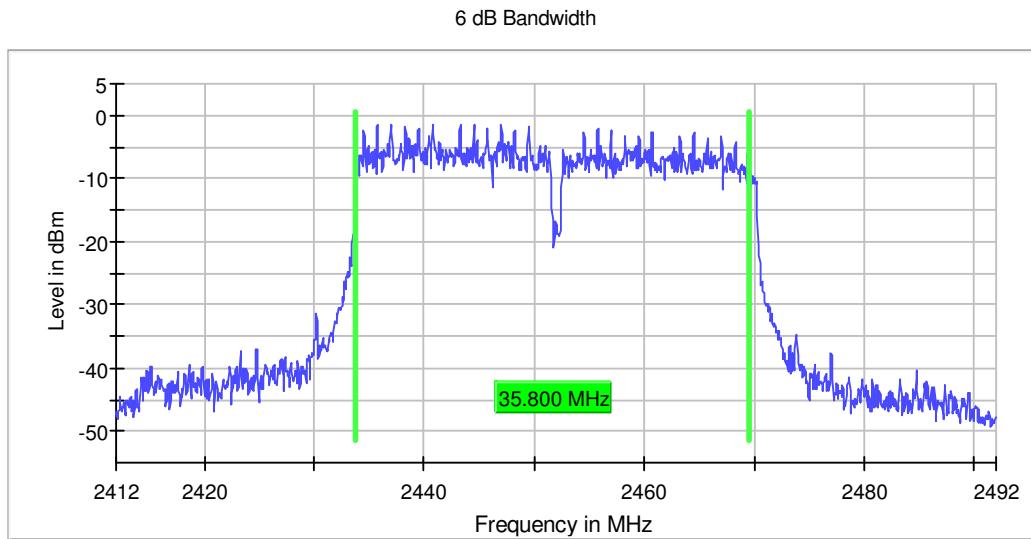
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	35.350000	0.500000	---	2404.275000	2439.625000
2442.000000	35.550000	0.500000	---	2424.075000	2459.625000
2452.000000	35.800000	0.500000	---	2433.825000	2469.625000

6 dB Bandwidth



6 dB Bandwidth



**Measurement Setting:**

Setting	Instrument Value	Target Value
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	1600	~ 1600
Sweeptime	1.600 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	32 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.19 dB	0.50 dB

Remark: Cable loss 0.8dB was considered and set in system configuration.

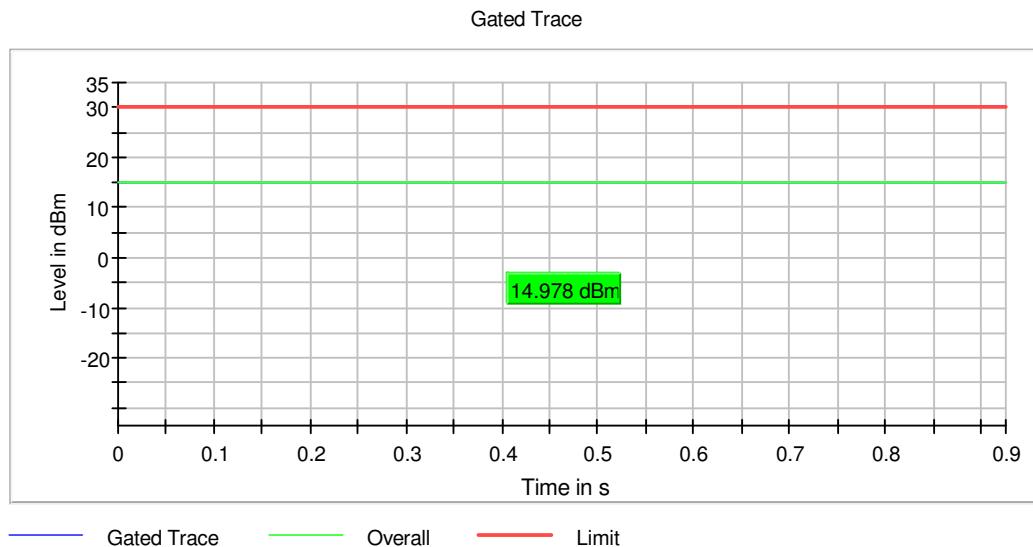
### 9.3 RF output power

Operation Mode	DUT Frequency (MHz)	Limit Max (dBm)	Gated Level (dBm)	Result
802.11b	2412.000000	30.0	14.8	PASS
802.11b	2442.000000	30.0	14.7	PASS
802.11b	2462.000000	30.0	15.0	PASS
802.11g	2412.000000	30.0	13.7	PASS
802.11g	2442.000000	30.0	13.7	PASS
802.11g	2462.000000	30.0	12.3	PASS
802.11n20	2412.000000	30.0	13.3	PASS
802.11n20	2442.000000	30.0	13.3	PASS
802.11n20	2462.000000	30.0	12.3	PASS
802.11n40	2422.000000	30.0	14.3	PASS
802.11n40	2442.000000	30.0	13.5	PASS
802.11n40	2452.000000	30.0	13.0	PASS

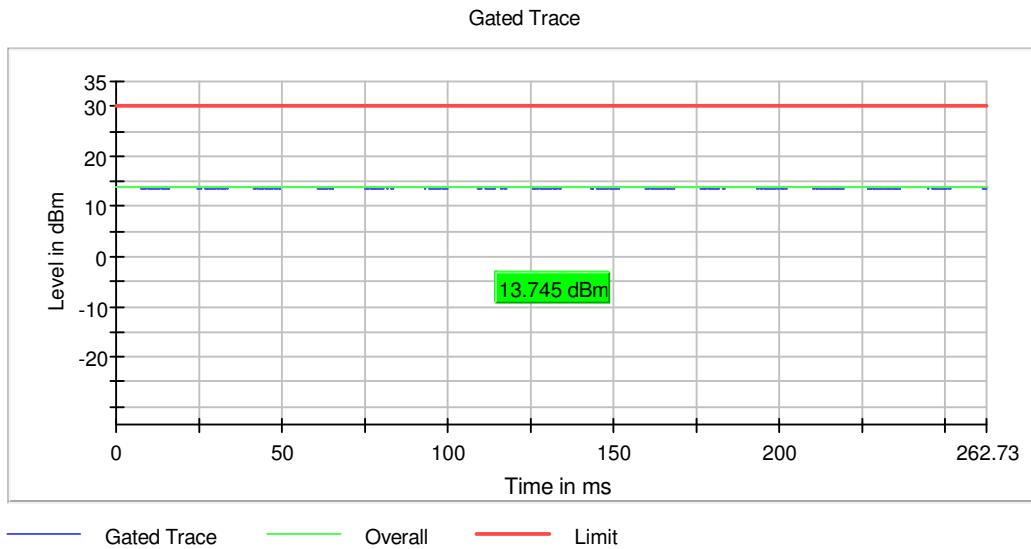
Remark: Antenna gain: 0dBi

Remark: Cable loss 0.8dB was considered and set in system configuration.  
(only worst case shown)

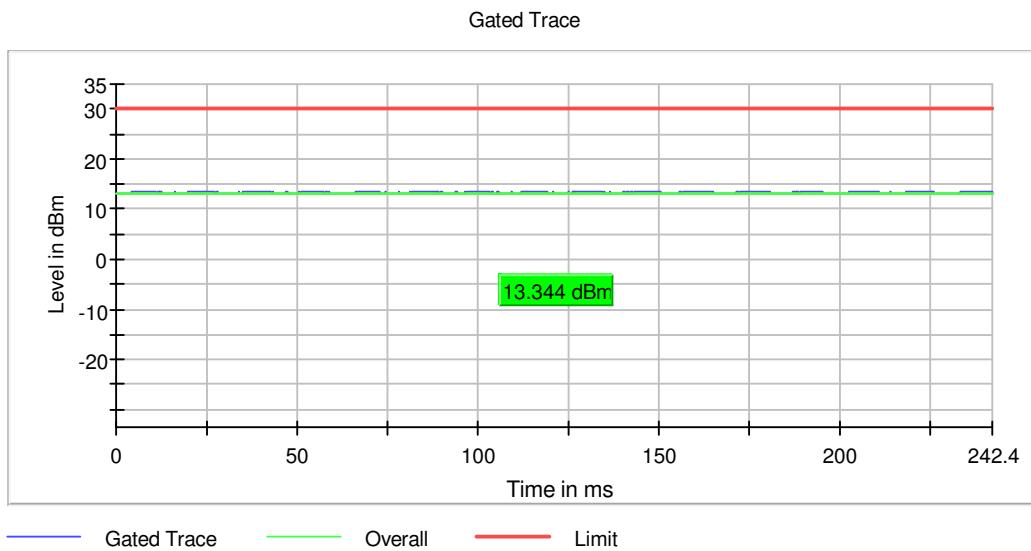
802.11b:



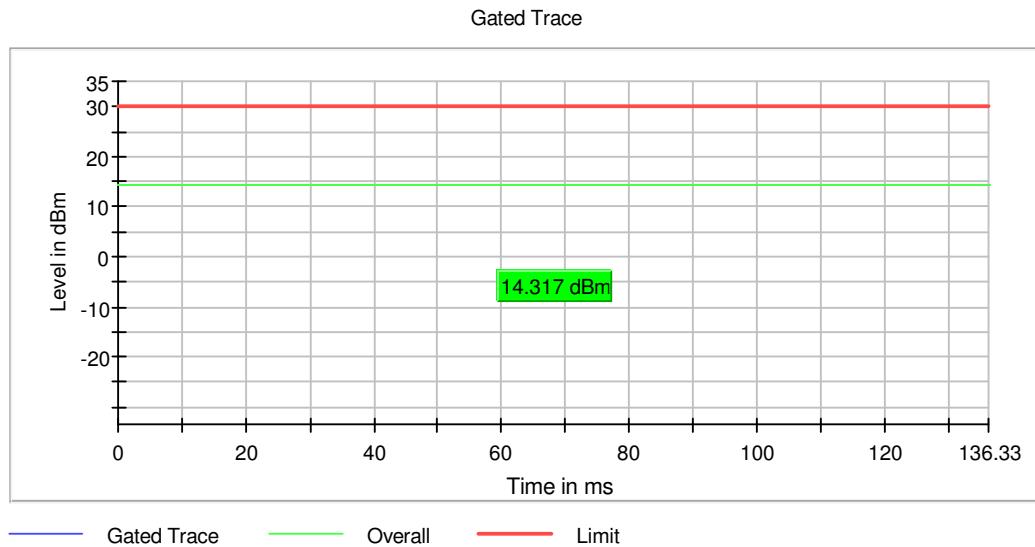
802.11g:



802.11n20:



802.11n40:

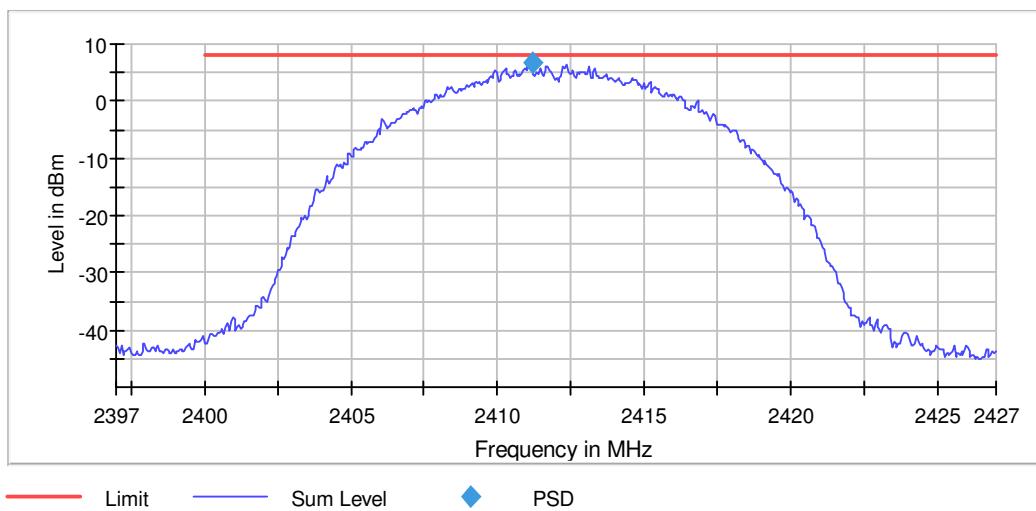


## Power Spectral Density

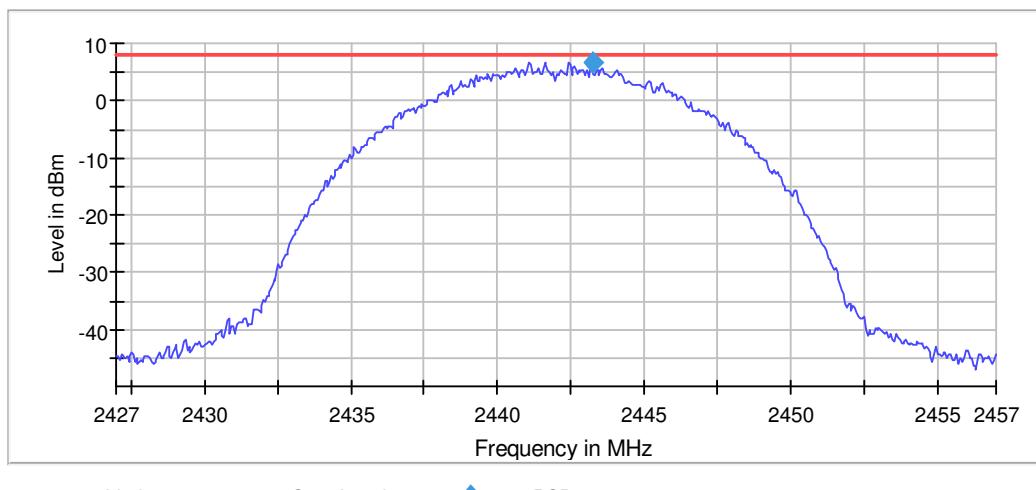
802.11b:

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2411.175000	6.674	8.0	PASS
2442.000000	2443.225000	6.791	8.0	PASS
2462.000000	2462.525000	5.846	8.0	PASS

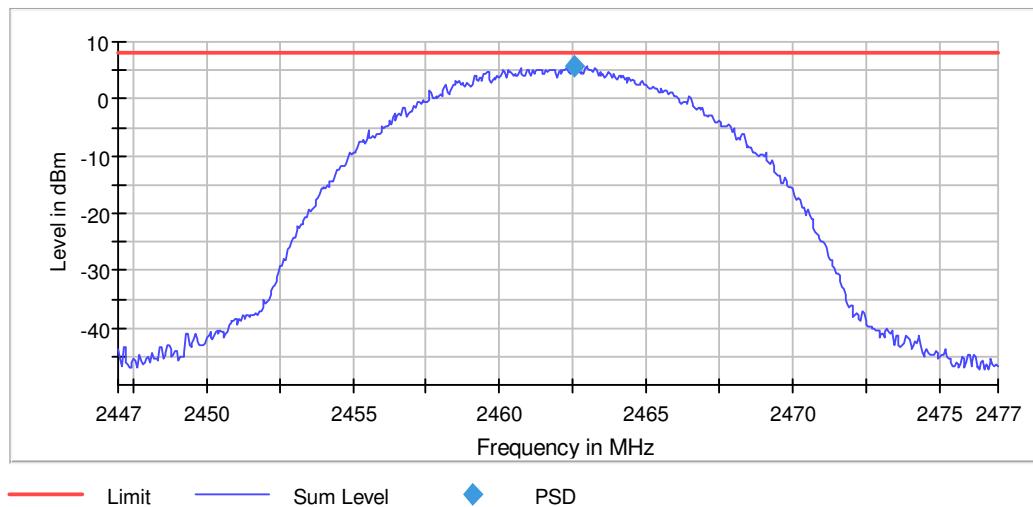
Peak Power Spectral Density



Peak Power Spectral Density



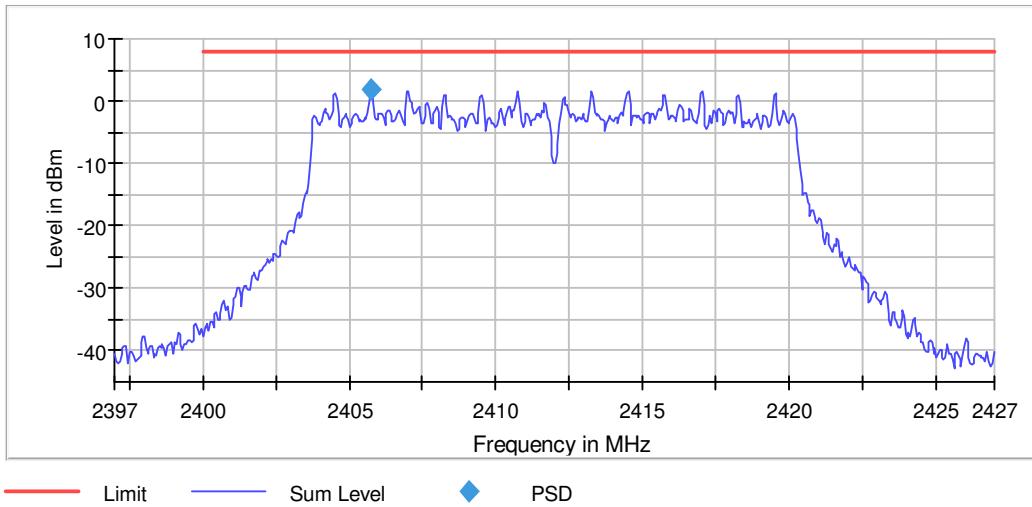
Peak Power Spectral Density

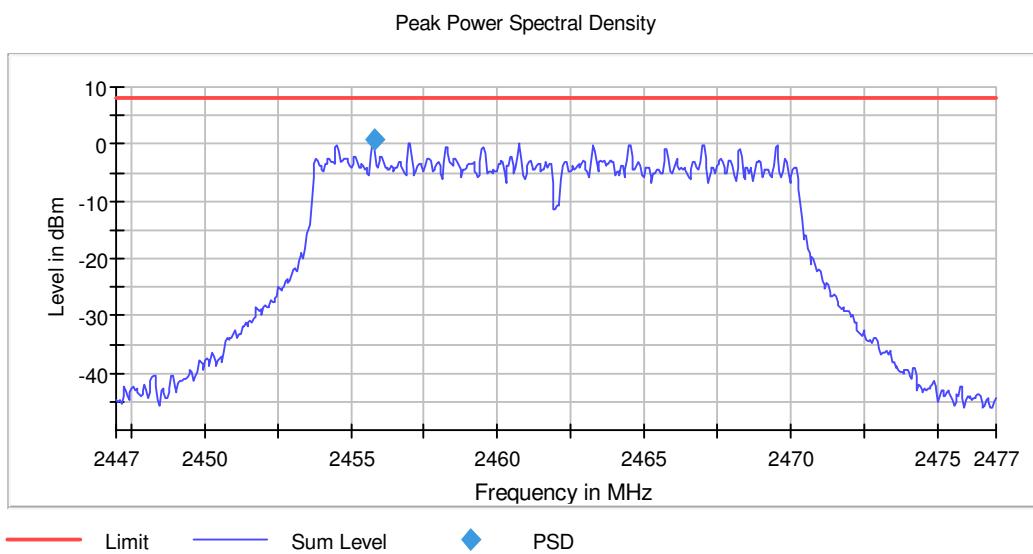
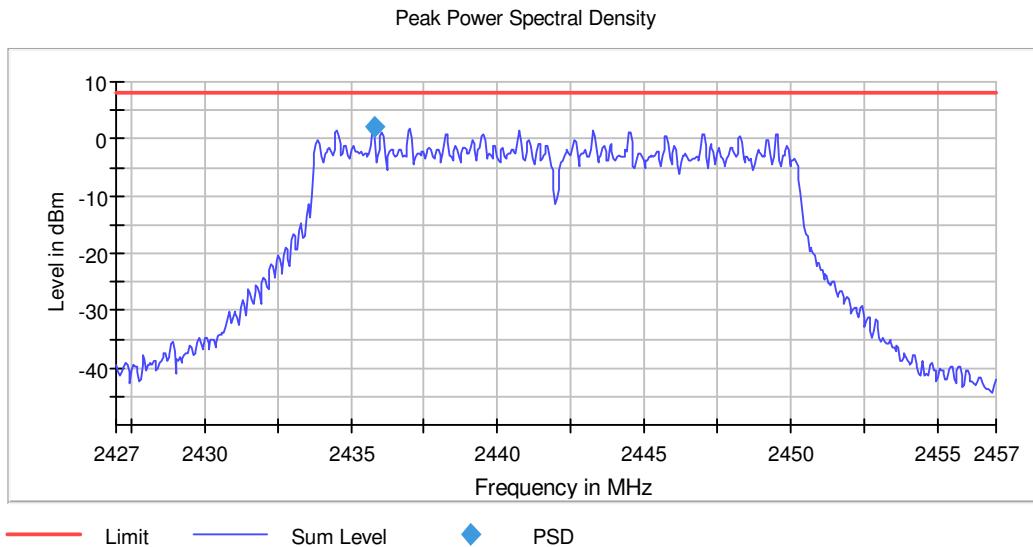


802.11g:

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2405.725000	1.749	8.0	PASS
2442.000000	2435.775000	2.010	8.0	PASS
2462.000000	2455.775000	0.676	8.0	PASS

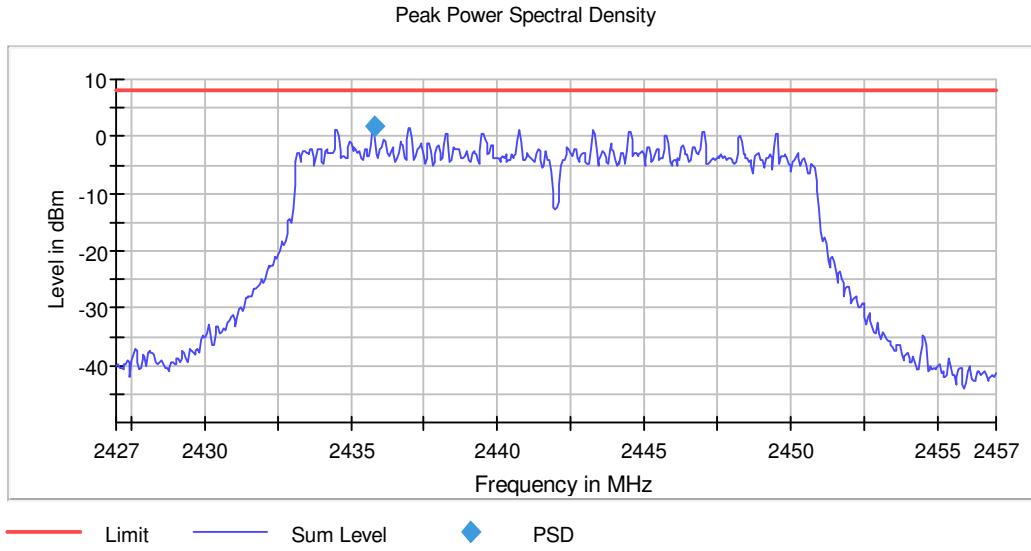
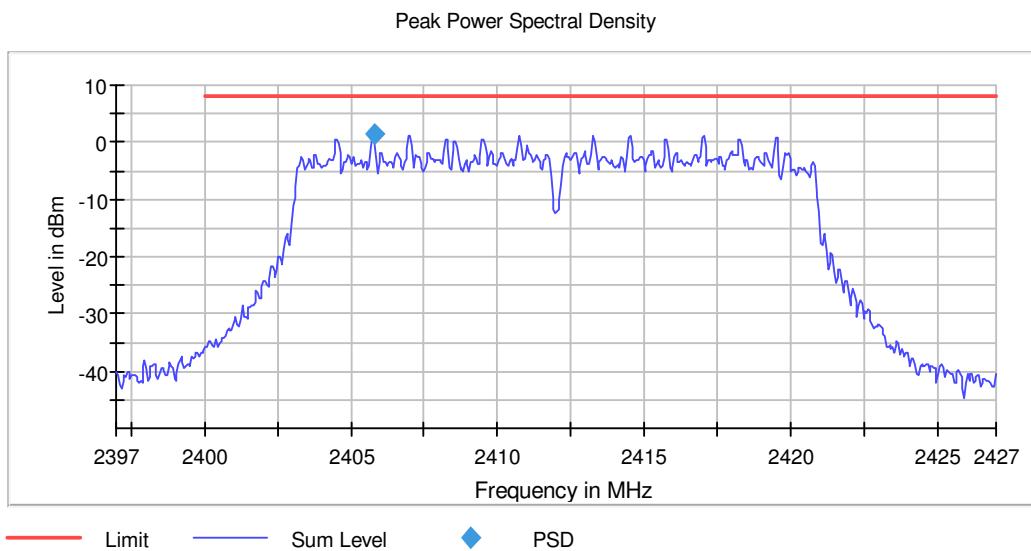
Peak Power Spectral Density

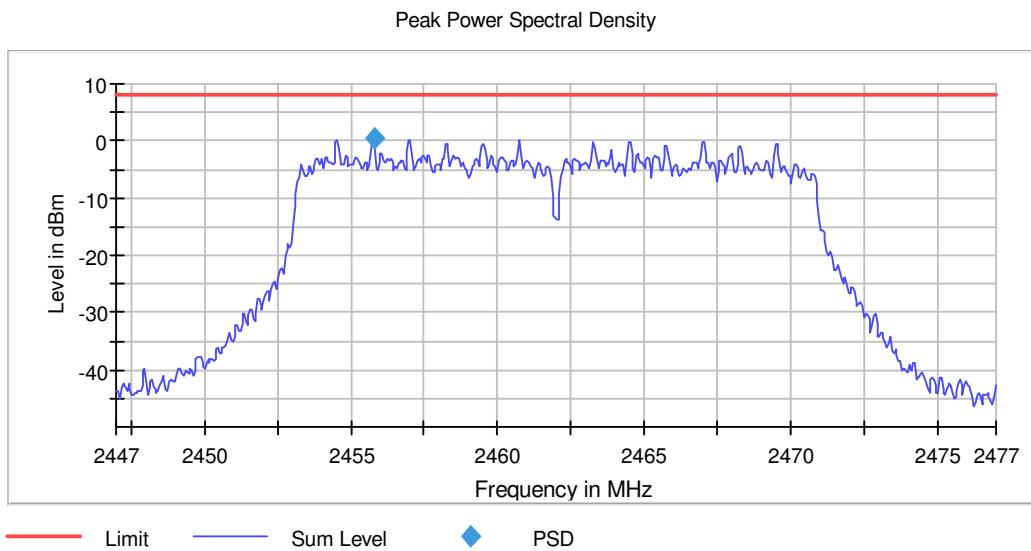




802.11n20:

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2405.775000	1.482	8.0	PASS
2442.000000	2435.775000	1.740	8.0	PASS
2462.000000	2455.775000	0.552	8.0	PASS



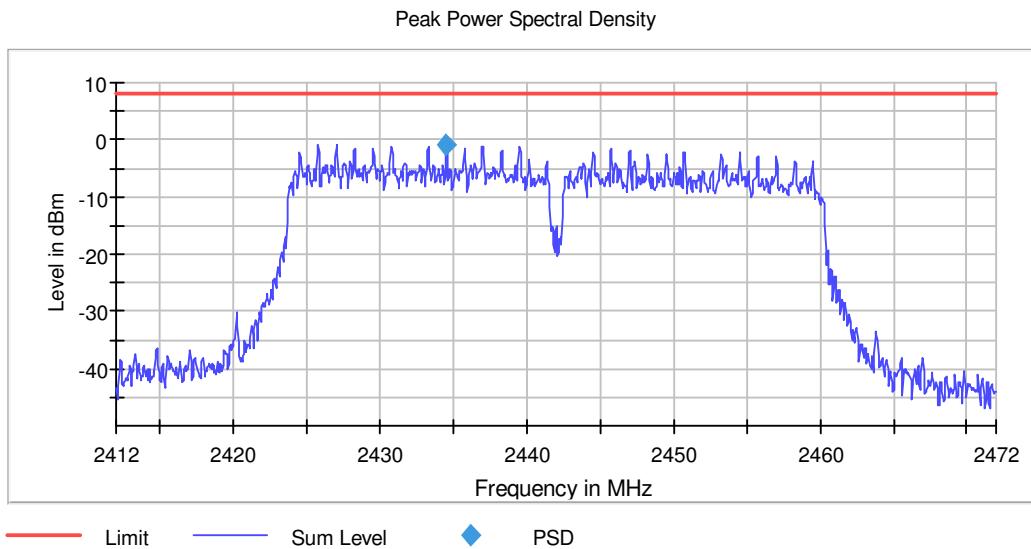
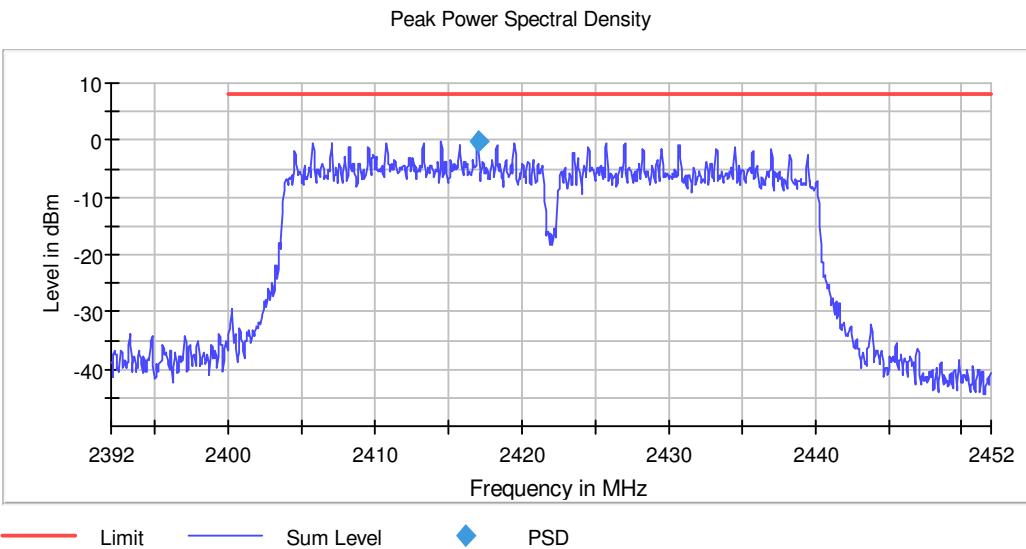
**Measurement Setting:**

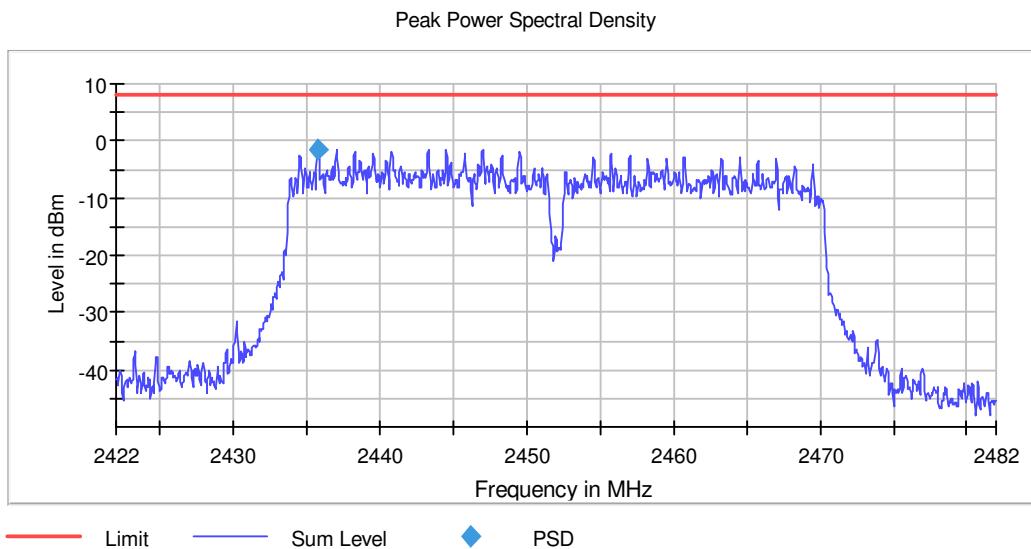
Setting	Instrument Value	Target Value
Span	30.000 MHz	30.000 MHz
RBW	3.000 kHz-100.000 kHz	3.000 kHz-100.000 kHz
VBW	10.000 kHz-300.000 kHz	10.000 kHz-300.000 kHz
SweepPoints	600	~ 600
Sweeptime	12.000 ms	12.000 ms
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	RMS	RMS
SweepCount	1	1
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	33 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.36 dB	0.50 dB

Remark: Cable loss 0.8dB was considered and set in system configuration.

802.11n40:

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2422.000000	2417.025000	-0.179	8.0	PASS
2442.000000	2434.525000	-0.880	8.0	PASS
2452.000000	2435.775000	-1.439	8.0	PASS



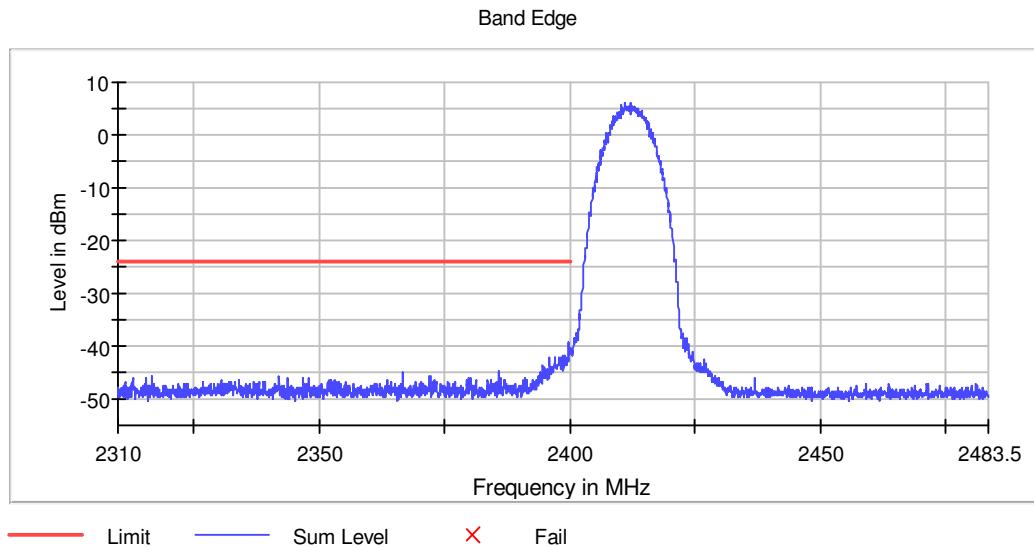
**Measurement Setting:**

Setting	Instrument Value	Target Value
Span	60.000 MHz	60.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1200	~ 1200
Sweeptime	1.200 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	18 / max. 150	max. 150
Stable	2 / 2	2
Max Stable Difference	0.32 dB	0.50 dB

Remark: Cable loss 0.8dB was considered and set in system configuration.

## 9.4 Band Edge

802.11b Band Edge Low



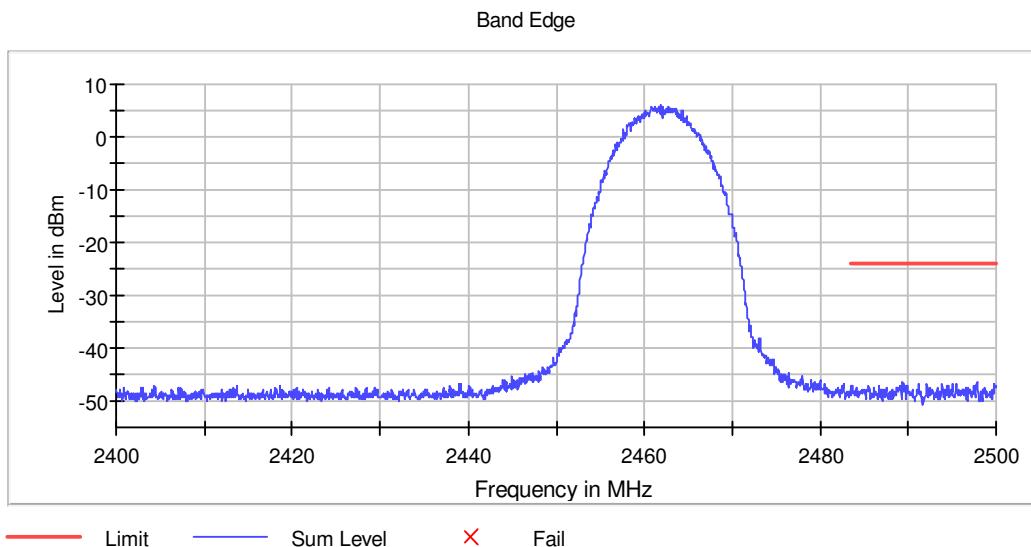
### Inband Peak

Frequency (MHz)	Level (dBm)
2410.925000	6.2

### Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.825000	-39.3	15.5	-23.8	PASS
2399.775000	-39.5	15.8	-23.8	PASS
2399.875000	-39.8	16.0	-23.8	PASS
2399.725000	-41.2	17.5	-23.8	PASS
2399.975000	-41.3	17.6	-23.8	PASS
2399.925000	-41.6	17.9	-23.8	PASS

## 802.11b Band Edge High

**Inband Peak**

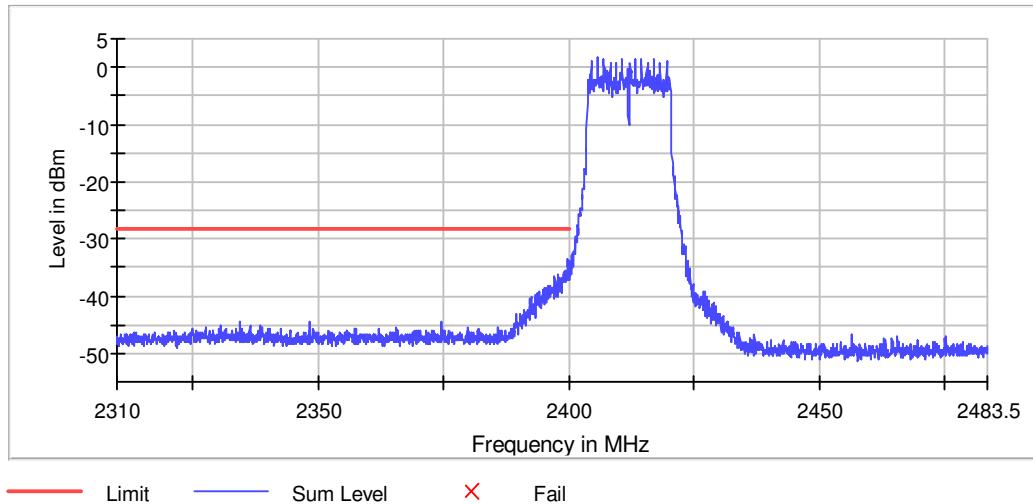
Frequency (MHz)	Level (dBm)
2461.925000	6.0

**Measurements**

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2489.375000	-46.4	22.4	-24.0	PASS
2497.775000	-46.5	22.5	-24.0	PASS
2489.425000	-46.6	22.6	-24.0	PASS
2492.175000	-46.7	22.6	-24.0	PASS
2493.875000	-46.7	22.7	-24.0	PASS
2495.475000	-46.7	22.7	-24.0	PASS

## 802.11g Band Edge Low

Band Edge



## Inband Peak

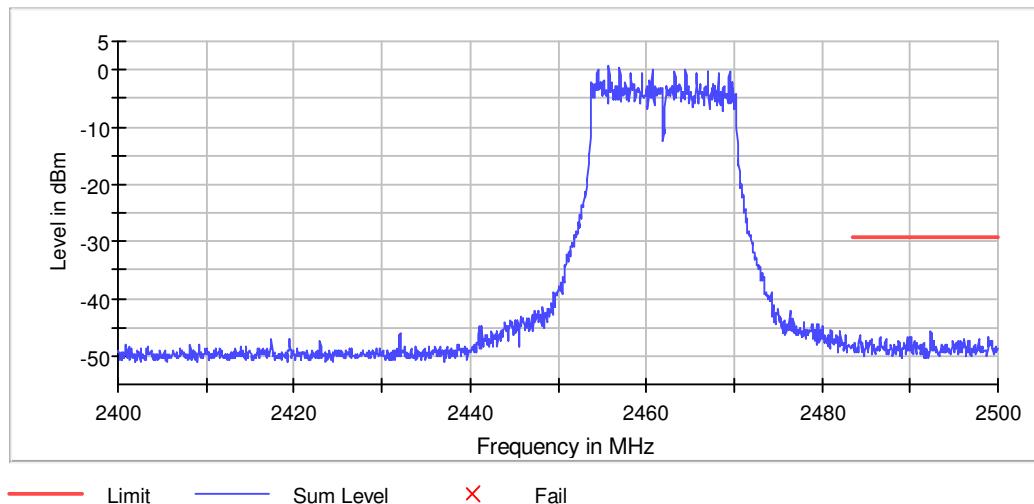
Frequency (MHz)	Level (dBm)
2405.775000	1.8

## Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.825000	-33.7	5.4	-28.2	PASS
2399.975000	-33.8	5.5	-28.2	PASS
2399.775000	-34.1	5.8	-28.2	PASS
2399.875000	-34.9	6.7	-28.2	PASS
2399.725000	-35.0	6.8	-28.2	PASS
2399.925000	-35.0	6.8	-28.2	PASS

## 802.11g Band Edge High

Band Edge

**Inband Peak**

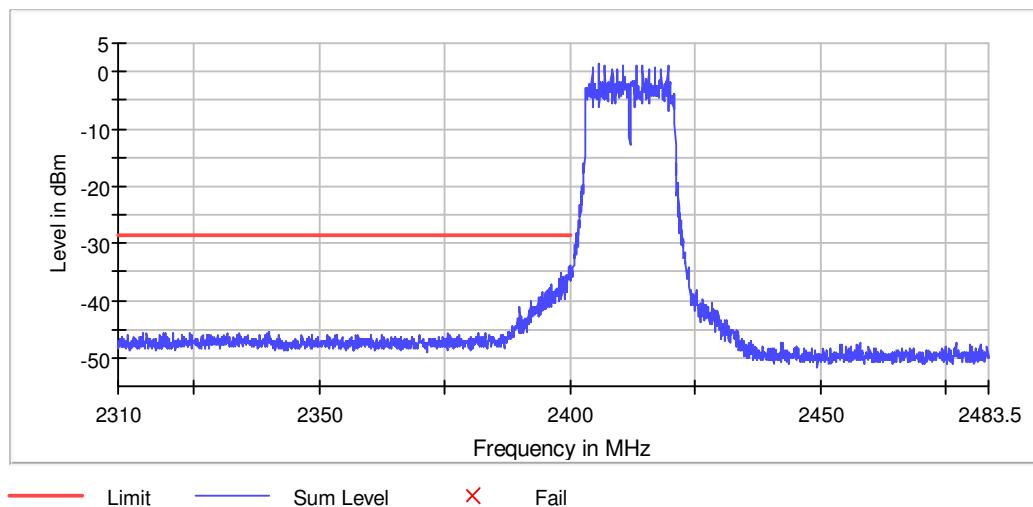
Frequency (MHz)	Level (dBm)
2455.775000	0.7

**Measurements**

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2492.375000	-45.8	16.5	-29.3	PASS
2492.425000	-46.0	16.7	-29.3	PASS
2484.325000	-46.4	17.1	-29.3	PASS
2484.275000	-46.5	17.1	-29.3	PASS
2492.325000	-46.6	17.3	-29.3	PASS
2490.025000	-46.7	17.4	-29.3	PASS

## 802.11n20 Band Edge Low

Band Edge



## Inband Peak

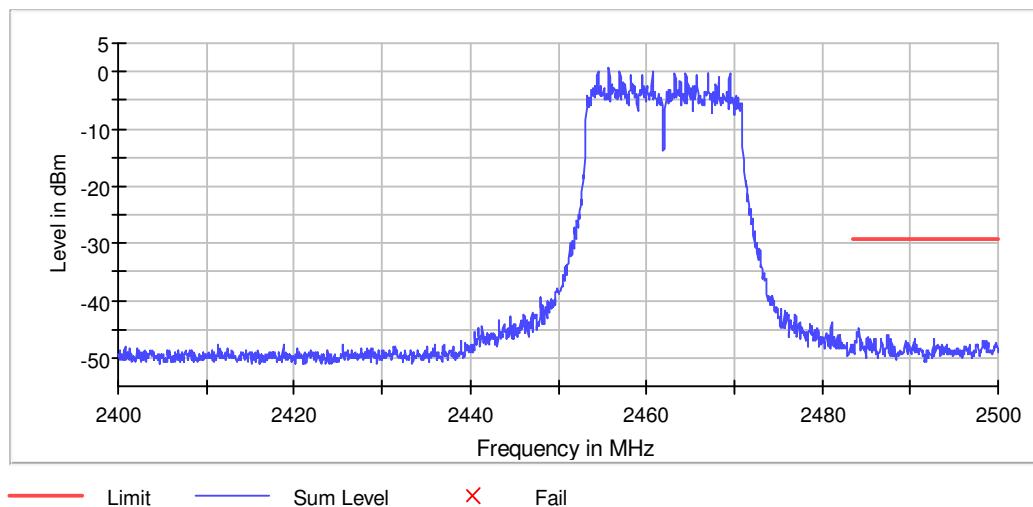
Frequency (MHz)	Level (dBm)
2405.775000	1.4

## Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.975000	-33.7	5.1	-28.6	PASS
2399.925000	-34.1	5.5	-28.6	PASS
2399.875000	-34.2	5.6	-28.6	PASS
2399.775000	-34.6	6.0	-28.6	PASS
2399.825000	-34.7	6.1	-28.6	PASS
2399.725000	-34.7	6.1	-28.6	PASS

## 802.11n20 Band Edge High

## Band Edge



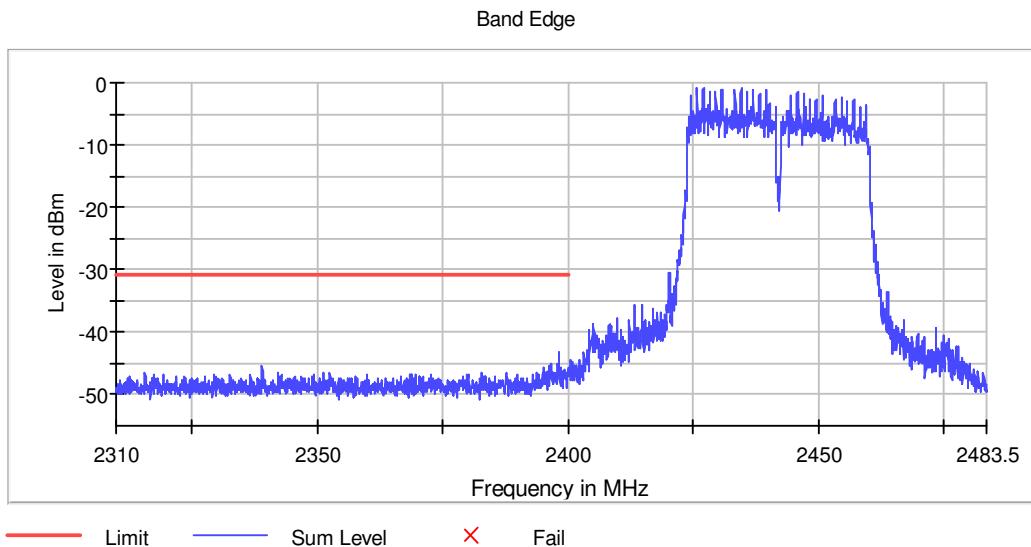
## Inband Peak

Frequency (MHz)	Level (dBm)
2455.775000	0.7

## Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2484.175000	-44.7	15.4	-29.3	PASS
2484.225000	-44.8	15.4	-29.3	PASS
2484.025000	-45.3	15.9	-29.3	PASS
2483.975000	-45.7	16.3	-29.3	PASS
2487.425000	-46.1	16.8	-29.3	PASS
2487.475000	-46.2	16.9	-29.3	PASS

## 802.11n40 Band Edge Low

**Inband Peak**

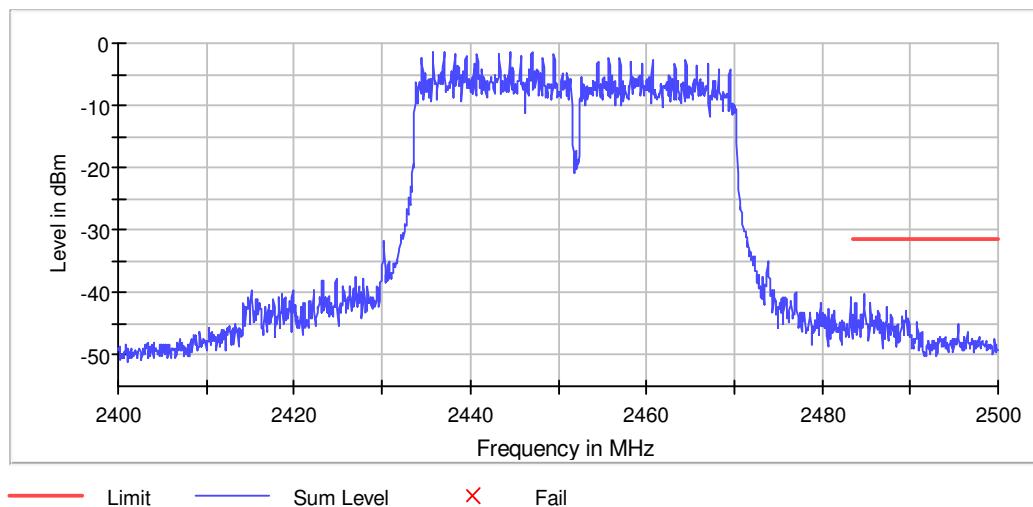
Frequency (MHz)	Level (dBm)
2427.025000	-0.9

**Measurements**

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2398.275000	-43.3	12.4	-30.9	PASS
2398.325000	-43.4	12.5	-30.9	PASS
2398.225000	-44.2	13.3	-30.9	PASS
2398.025000	-45.0	14.1	-30.9	PASS
2396.725000	-45.2	14.2	-30.9	PASS
2398.125000	-45.2	14.2	-30.9	PASS

## 802.11n40 Band Edge High

## Band Edge



## Inband Peak

Frequency (MHz)	Level (dBm)
2435.775000	-1.4

## Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2484.775000	-40.3	8.8	-31.4	PASS
2484.825000	-40.4	8.9	-31.4	PASS
2483.875000	-41.6	10.2	-31.4	PASS
2483.825000	-41.6	10.2	-31.4	PASS
2485.475000	-41.7	10.3	-31.4	PASS
2484.725000	-41.9	10.5	-31.4	PASS

**Measurement Setting:**

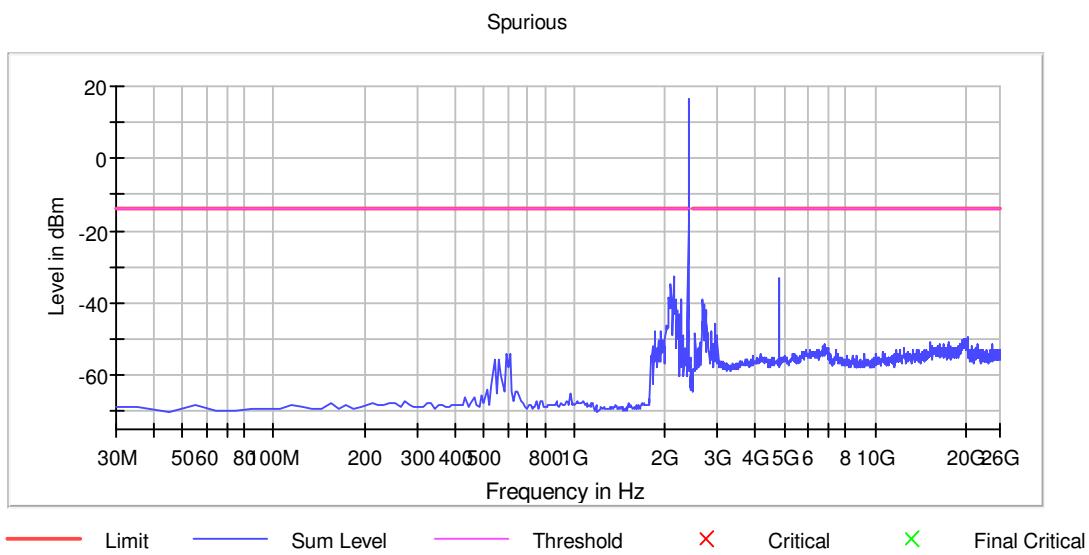
Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
Sweeptime	1.670 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	95 / max. 150	max. 150
Stable	3 / 3	3
<b>Max Stable Difference</b>	<b>0.33 dB</b>	<b>0.50 dB</b>

Remark: Cable loss 0.8dB was considered and set in system configuration.

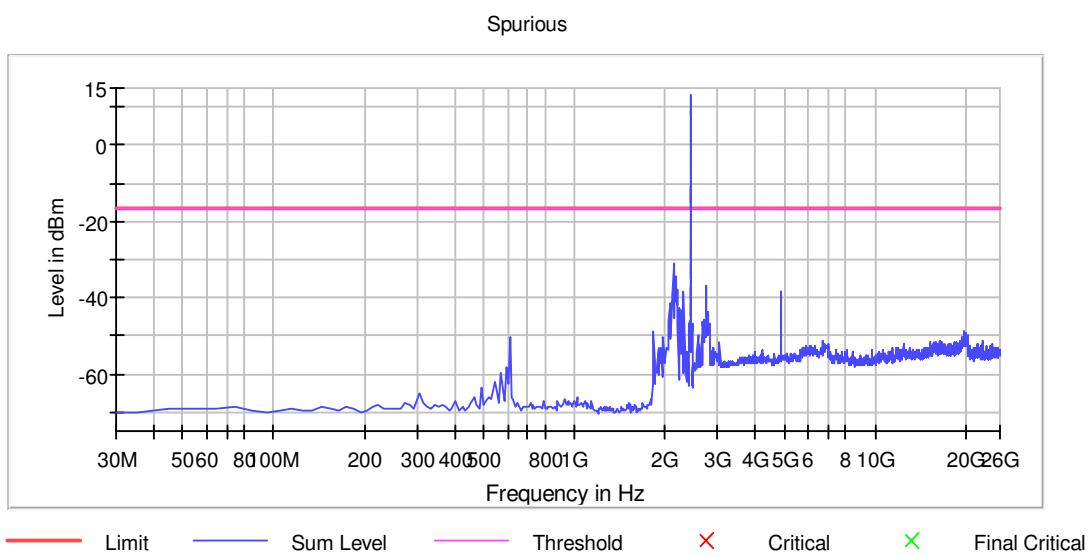
## 9.5 Conducted spurious emission

Remark: only worst case shown

802.11b

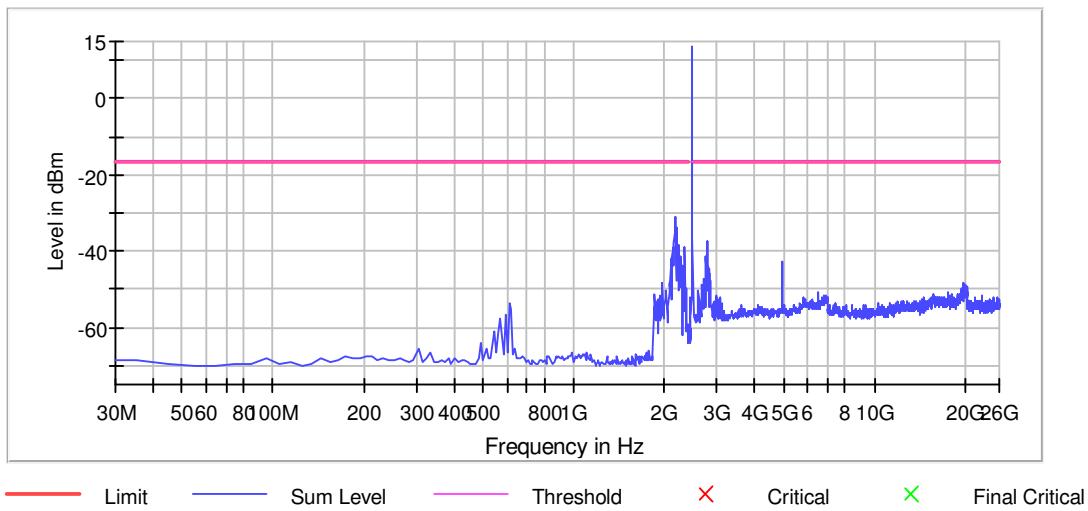


802.11g



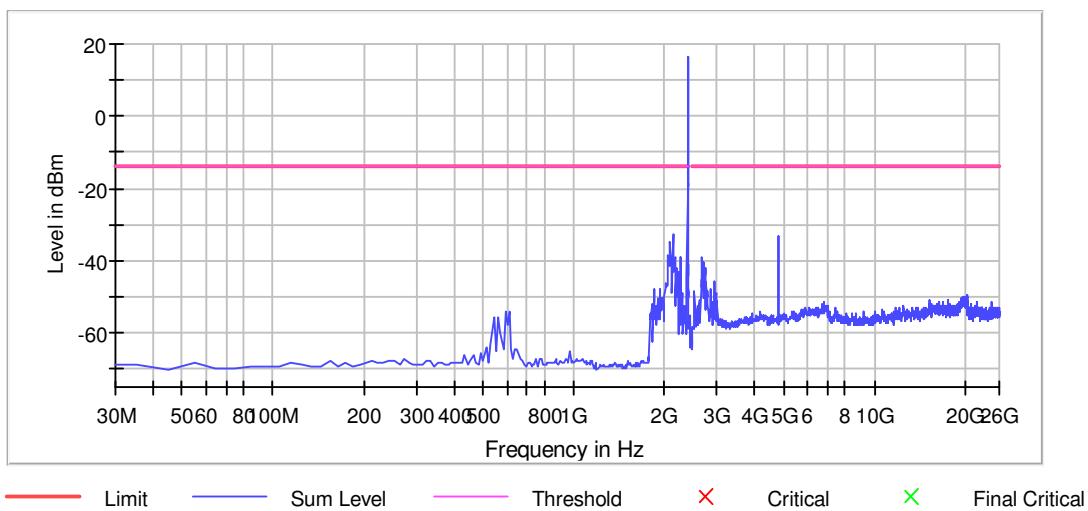
802.11n20

Spurious



802.11n40

Spurious



## Measurement Setting

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000
VBW	300.000 kHz	>= 300.000
SweepPoints	238	~ 238
Sweeptime	23.700 ms	AUTO
Reference Level	-10.000 dBm	-30.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	3	3
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	14 / max. 40	max. 40
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Remark: Cable loss 0.8dB was considered and set in system configuration.

- End of the Report -