




TEST REPORT

For WiFi-2.4GHz Band

Report No. : **CHTEW23110071** Report Verification: 


Project No...... : **SHT2306080101EW**

FCC ID..... : **2A8OE-F8926-GW-02**

Applicant's name..... : **Xiamen Four-Faith Communication Technology Co., Ltd.**

Address..... : 11th Floor,A-06 Area,No.370,Chengyi Street,Jimei,Xiamen,Fujian,China.

Product Name : **LoRaWAN Gateway**

Trade Mark : 

Model No. : F8926-GW-02

Listed Model(s) : -

Standard : **FCC CFR Title 47 Part 15 Subpart C § 15.247**

Date of receipt of test sample..... : Aug. 07, 2023

Date of testing..... : Aug. 14, 2023- Nov. 24, 2023

Date of issue..... : Nov. 27, 2023

Result..... : **PASS**

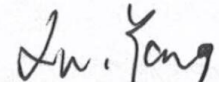
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Approved by
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Testing Laboratory Name : **Shenzhen Huatongwei International Inspection Co., Ltd.**

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The test report merely correspond to the test sample.

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1. TEST STANDARDS AND REPORT VERSION

1.1. Test Standards

The tests were performed according to following standards:

- [FCC CFR Title 47 Part 15 Subpart C § 15.247](#): Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz
- [ANSI C63.10:2020](#): American National Standard for Testing Unlicensed Wireless Devices
- [KDB 558074 D01 15.247 Meas Guidance v05r02](#): Guidance for Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid System Devices Operating under Section 15.247 of The FCC Rules

1.2. Report version

Revision No.	Date of issue	Description
N/A	2023-11-27	Original

2. TEST DESCRIPTION

Report clause	Test Items	Standard Requirement	Result	Test Engineer
5.1	Antenna Requirement	15.203/15.247(c)	PASS	Caspar Chen
5.2	AC Conducted Emission	15.207	PASS	Caspar Chen
5.3	Peak Output Power	15.247(b)(3)	PASS	Caspar Chen
5.4	Power Spectral Density	15.247(e)	PASS	Caspar Chen
5.5	6dB Bandwidth	15.247(a)(2)	PASS	Caspar Chen
5.6	99% Occupied Bandwidth	-	PASS ^{*1}	Caspar Chen
5.7	Duty cycle	-	PASS ^{*1}	Caspar Chen
5.8	Conducted Band Edge and Spurious Emission	15.247(d)/15.205	PASS	Caspar Chen
5.9	Radiated Band Edge Emission	15.205/15.209	PASS	Yifan Wang
5.10	Radiated Spurious Emission	15.247(d)/15.205/15.209	PASS	Yifan Wang

Note:


- The measurement uncertainty is not included in the test result.
- *1: No requirement on standard, only report these test data.

3. SUMMARY

3.1. Client Information

Applicant:	Xiamen Four-Faith Communication Technology Co., Ltd.
Address:	11th Floor,A-06 Area,No.370,Chengyi Street,Jimei,Xiamen,Fujian,China.
Manufacturer:	Xiamen Four-Faith Communication Technology Co., Ltd.
Address:	11th Floor,A-06 Area,No.370,Chengyi Street,Jimei,Xiamen,Fujian,China.

3.2. Product Description

Main unit information:	
Product Name:	LoRaWAN Gateway
Trade Mark:	
Model No.:	F8926-GW-02
Listed Model(s):	-
Power supply:	DC 12V from Adapter
Hardware version:	V 1.0.0.2
Software version:	F8926GW-V2-IOTGW-32M-STD-VPN-20230313.flash
Accessory unit information:	
Adapter information:	MODEL: KL-AD3060VA INPUT: 100-240V~50/60Hz 0.7A OUTPUT: DC 12V, 1.5A

3.3. Radio Specification Description

Support type:	<input checked="" type="checkbox"/> 802.11b	<input checked="" type="checkbox"/> 802.11g	<input checked="" type="checkbox"/> 802.11n
Support bandwidth:	<input checked="" type="checkbox"/> 20MHz	<input checked="" type="checkbox"/> 40MHz	
Modulation:	802.11b: DBPSK, DQPSK, BPSK, QPSK	802.11g/n: BPSK, QPSK, 16QAM, 64QAM	
Operation frequency:	802.11b/g/n(HT20): 2412MHz~2462MHz	802.11n(HT40) 2422MHz~2452MHz	
Channel number:	802.11b/g/n(HT20): 11	802.11n(HT40) 7	
Channel separation:	5MHz		
Antenna technology:	<input checked="" type="checkbox"/> SISO	<input type="checkbox"/> MIMO	
Antenna type:	Stick Antenna		
Antenna gain:	2.9dBi		

3.4. Testing Laboratory Information

Laboratory Name	Shenzhen Huatongwei International Inspection Co., Ltd.	
Laboratory Location	1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China	
Contact information:	Phone: 86-755-26715499 E-mail: cs@szhtw.com.cn http://www.szhtw.com.cn	
Qualifications	Type	Accreditation Number
	FCC	762235

4. TEST CONFIGURATION

4.1. Test frequency list

According to section 15.31(m), regards to the operating frequency range over 10 MHz, must select three channels which were tested. The Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, please see the below blue front.

802.11b/g/n(HT20)		802.11n(HT40)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	03	2422
02	2417	04	2427
· : · : · :	· : · : · :	· : · : · :	· : · : · :
06	2437	06	2437
· : · : · :	· : · : · :	· : · : · :	· : · : · :
10	2457	08	2447
11	2462	09	2452

4.2. Test mode

For RF test items
The engineering test program was provided and enabled to make EUT continuous transmit.
For AC power line conducted emissions:
The EUT was set to connect with the WLAN AP under large package sizes transmission.
For Radiated spurious emissions
The engineering test program was provided and enabled to make EUT continuous transmit. The EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data Recorded in the report.

Preliminary tests were performed in different data rates, final test modes are considering the modulation and worse data rates as below table.

Modulation	Data rate
802.11b	1Mbps
802.11g	6Mbps
802.11n(HT20)	MCS0
802.11n(HT40)	MCS0

4.3. Test sample information

Test item	HTW sample no.
RF Conducted test items	Please refer to the description in the appendix report
RF Radiated test items	YPHT23060801007
EMI test items	YPHT23060801008

Note:

RF Conducted test items: Peak Output Power, Power Spectral Density, 6dB Bandwidth, 99% Occupied Bandwidth, Duty cycle, Conducted Band Edge and Spurious Emission

RF Radiated test items: Radiated Band Edge Emission, Radiated Spurious Emission

EMI test items: AC Conducted Emission

4.4. Support unit used in test configuration and system

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The following peripheral devices and interface cables were connected during the measurement:

Whether support unit is used?			
✓ No			
Item	Equipment	Trade Name	Model No.
1			
2			

4.5. Testing environmental condition

Type	Requirement	Actual
Temperature:	15~35°C	25°C
Relative Humidity:	25~75%	50%
Air Pressure:	860~1060mbar	1000mbar

4.6. Statement of the measurement uncertainty

No.	Test Items	Measurement Uncertainty
1	AC Conducted Emission	3.21dB
2	Peak Output Power	1.07
3	Power Spectral Density	1.07
4	6dB Bandwidth	0.002%
5	99% Occupied Bandwidth	0.002%
6	Duty cycle	-
7	Conducted Band Edge and Spurious Emission	1.68dB
8	Radiated Band Edge Emission	4.54dB for 30MHz-1GHz 5.10dB for above 1GHz
9	Radiated Spurious Emission	4.54dB for 30MHz-1GHz 5.10dB for above 1GHz

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=1.96$.

4.7. Equipment Used during the Test

● RF Conducted test item							
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Signal and spectrum Analyzer	R&S	HTWE0242	FSV40	100048	2023/08/22	2024/08/21
●	Signal & Spectrum Analyzer	R&S	HTWE0262	FSW26	103440	2023/08/22	2024/08/21
●	Vector signal generator	R&S	HTWE0244	SMBV100A	260790	2023/05/23	2024/05/22
●	Test software	Tonscend	N/A	JS1120	N/A	N/A	N/A

● Conducted Emission							
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	EMI Test Receiver	R&S	HTWE0111	ESCI	101247	2023/8/22	2024/8/21
●	Artificial Mains	SCHWARZBECK	HTWE0113	NNLK 8121	573	2023/8/18	2024/8/17
●	Protection Network	SCHWARZBECK	HTWE0567	VTSD9561FN	00899	2023/8/18	2024/8/17
●	ISN	FCC	HTWE0148	FCC-TLISN-T2-02	20371	2023/8/18	2024/8/17
●	ISN	FCC	HTWE0150	FCC-TLISN-T8-02	20375	2023/8/18	2024/8/17
●	Test Software	R&S	N/A	EMC32	N/A	N/A	N/A

● Radiated Emission – 9kHz~30MHz							
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Semi-Anechoic Chamber	Albatross projects	HTWE0127	SAC-3m-02	C11121	2023/4/6	2026/4/5
●	EMI Test Receiver	R&S	HTWE0099	ESCI 7	100900	2023/8/22	2024/8/21
●	Loop Antenna	R&S	HTWE0170	HFH2-Z2	100020	2021/4/6	2024/4/5
●	Test Software	R&S	N/A	EMC32	N/A	N/A	N/A

● Radiated Emission - 30MHz~1GHz							
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Semi-Anechoic Chamber	Albatross projects	HTWE0127	SAC-3m-02	C11121	2023/4/6	2026/4/5
●	EMI Test Receiver	R&S	HTWE0099	ESCI 7	100900	2023/8/22	2024/8/21
●	Ultra-Broadband Antenna	SCHWARZBECK	HTWE0119	VULB9163	546	2023/2/22	2026/2/21
●	Pre-Amplifier	SCHWARZBECK	HTWE0295	BBV 9742	/	2023/5/25	2024/5/24
●	Test Software	R&S	N/A	EMC32	N/A	N/A	N/A

● Radiated emission-Above 1GHz							
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Semi-Anechoic Chamber	Albatross projects	HTWE0122	SAC-3m-01	C11121	2023/4/17	2026/4/16
●	Spectrum Analyzer	R&S	HTWE0098	FSP40	100597	2023/8/22	2024/8/21
●	Horn Antenna	SCHWARZBECK	HTWE0126	BBHA 9120D	1011	2023/2/14	2026/2/13
●	Horn Antenna	SCHWARZBECK	HTWE0103	BBHA9170	BBHA9170472	2023/2/20	2026/2/19
●	Broadband Pre-amplifier	SCHWARZBECK	HTWE0201	BBV 9718	9718-248	2023/5/25	2024/5/24
●	Test Software	R&S	N/A	EMC32	N/A	N/A	N/A

5. TEST CONDITIONS AND RESULTS

5.1. Antenna Requirement

REQUIREMENT

FCC CFR Title 47 Part 15 Subpart C Section 15.203:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, 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.

TEST RESULT

Passed Not Applicable

The antenna type is a Stick Antenna, please refer to the below antenna photo.



5.2. AC Conducted Emission

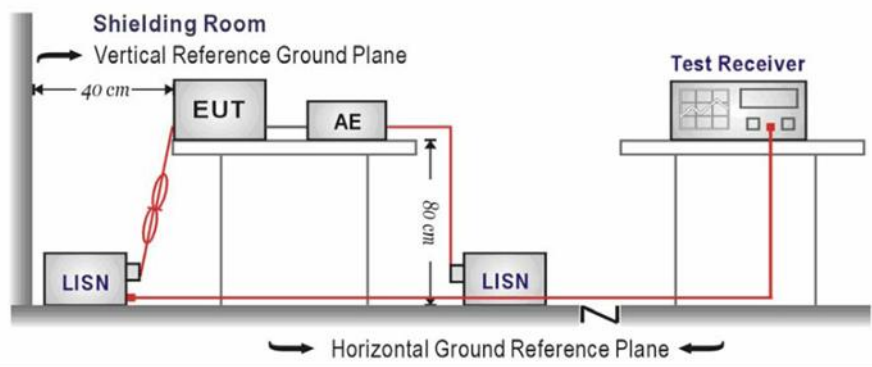
LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.207

Frequency range (MHz)	Limit (dBuV)	
	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.

TEST CONFIGURATION



TEST PROCEDURE

1. The EUT was setup according to ANSI C63.10 requirements.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
3. The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment.
4. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
6. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
8. During the above scans, the emissions were maximized by cable manipulation.

TEST MODE

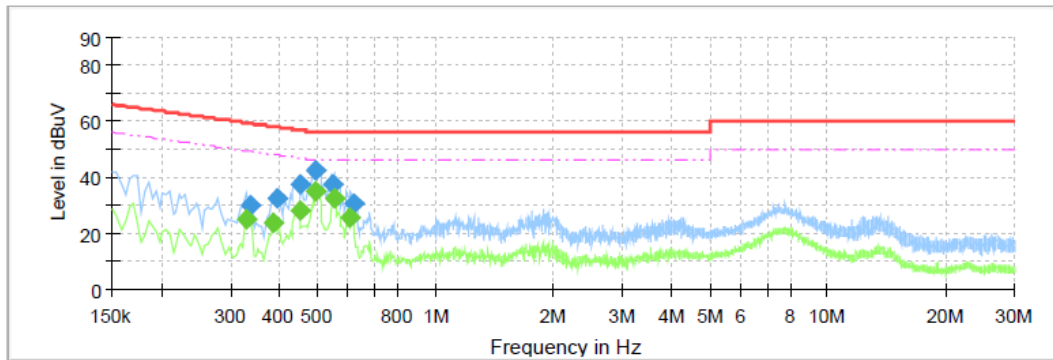
Refer to the clause 4.2

TEST RESULT

Passed Not Applicable

Test Line:

L

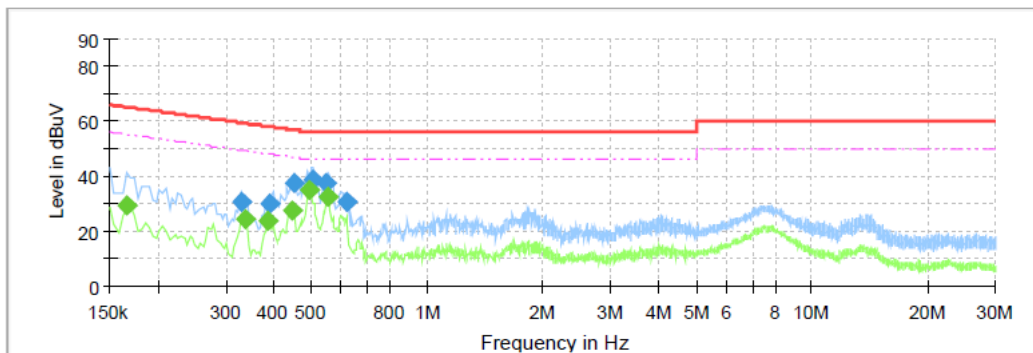


Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.3315	---	25.22	49.41	24.20	L1	10.0
0.3355	30.11	---	59.31	29.20	L1	10.0
0.3875	---	23.82	48.12	24.29	L1	10.0
0.3955	32.79	---	57.95	25.15	L1	10.0
0.4515	---	28.05	46.85	18.80	L1	10.0
0.4515	37.42	---	56.85	19.43	L1	10.0
0.4955	42.47	---	56.08	13.61	L1	10.0
0.4955	---	34.72	46.08	11.36	L1	10.0
0.5475	37.55	---	56.00	18.45	L1	10.0
0.5515	---	32.48	46.00	13.52	L1	10.0
0.6075	---	25.59	46.00	20.41	L1	10.0
0.6165	30.47	---	56.00	25.53	L1	10.0

Test Line:

N



Final Result

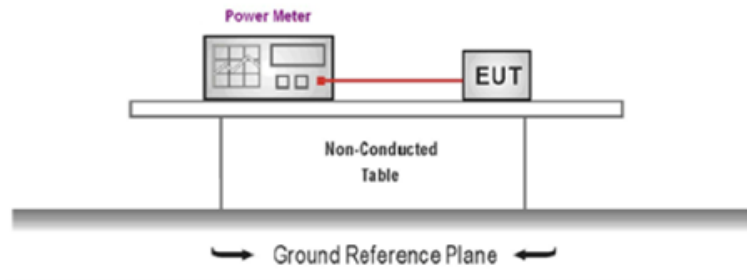
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.1660	---	29.19	55.16	25.96	N	10.0
0.3315	30.70	---	59.41	28.71	N	10.0
0.3355	---	24.32	49.31	24.99	N	10.0
0.3875	---	23.68	48.12	24.44	N	10.0
0.3915	30.23	---	58.03	27.80	N	10.0
0.4475	---	27.61	46.92	19.31	N	10.0
0.4515	37.40	---	56.85	19.45	N	10.0
0.4955	---	34.81	46.08	11.27	N	10.0
0.5075	38.84	---	56.00	17.16	N	10.0
0.5475	37.37	---	56.00	18.63	N	10.0
0.5515	---	32.79	46.00	13.21	N	10.0
0.6195	30.67	---	56.00	25.33	N	10.0

5.3. Peak Output Power

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (b)(3): 30dBm

TEST CONFIGURATION



TEST PROCEDURE

1. The EUT was tested according to ANSI C63.10 and KDB 558074 D01 requirements.
2. The maximum peak conducted output power may be measured using a broadband peak RF power meter.
3. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.
4. Record the measurement data.

TEST MODE

Refer to the clause 4.2

TEST RESULT

Passed Not Applicable

TEST DATA

Refer to the appendix report

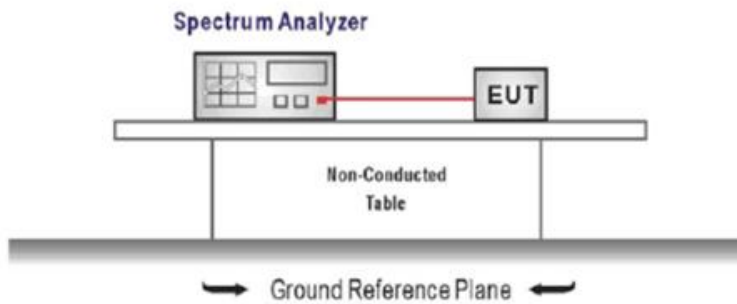
5.4. Power Spectral Density

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (e):

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission.

TEST CONFIGURATION



TEST PROCEDURE

1. Connect the antenna port(s) to the spectrum analyzer input,
2. Configure the spectrum analyzer as shown below:
Center frequency=DTS channel center frequency
Span =1.5 times the DTS bandwidth
RBW = 3 kHz ≤ RBW ≤ 100 kHz, VBW ≥ 3 × RBW
Sweep time = auto couple
Detector = peak
Trace mode = max hold
3. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter wave form on the spectrum analyzer.
4. Use the peak marker function to determine the maximum amplitude level within the RBW.
5. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST MODE

Refer to the clause 4.2

TEST RESULT

Passed Not Applicable

TEST DATA

Refer to the appendix report

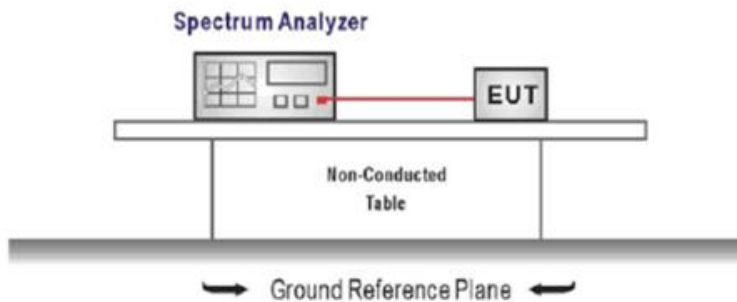
5.5. 6dB bandwidth

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (a)(2):

For digital modulation systems, the minimum 6 dB bandwidth shall be at least 500 kHz.

TEST CONFIGURATION



TEST PROCEDURE

1. Connect the antenna port(s) to the spectrum analyzer input.
2. Configure the spectrum analyzer as shown below (enter all losses between the transmitter output and the spectrum analyzer).
Center Frequency =DTS channel center frequency
Span=2 x DTS bandwidth
RBW = 100 kHz, VBW \geq 3 x RBW
Sweep time= auto couple
Detector = Peak
Trace mode = max hold
3. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter waveform on the spectrum analyzer.
4. 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, and record the pertinent measurements.

TEST MODE

Refer to the clause 4.2

TEST RESULT

Passed Not Applicable

TEST DATA

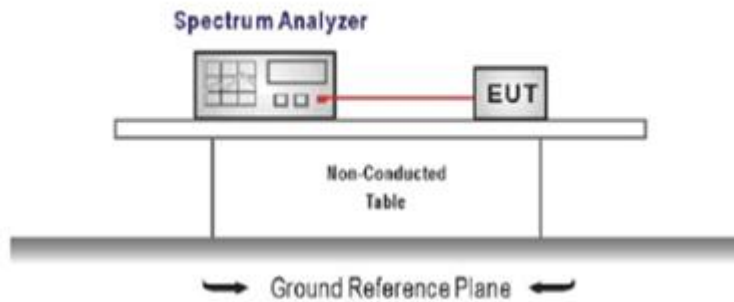
Refer to the appendix report

5.6. 99% Occupied Bandwidth

LIMIT

N/A

TEST CONFIGURATION



TEST PROCEDURE

1. Connect the antenna port(s) to the spectrum analyzer input.
2. Configure the spectrum analyzer as shown below (enter all losses between the transmitter output and the spectrum analyzer).
Center Frequency = channel center frequency
Span $\geq 1.5 \times$ OBW
RBW = 1%~5%OBW
VBW $\geq 3 \times$ RBW
Sweep time = auto couple
Detector = Peak
Trace mode = max hold
3. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter waveform on the spectrum analyzer.

TEST MODE

Refer to the clause 4.2

TEST RESULT

Passed Not Applicable

TEST DATA

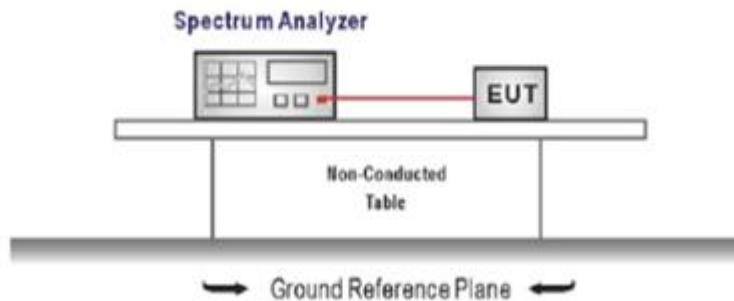
Refer to the appendix report

5.7. Duty Cycle

LIMIT

N/A

TEST CONFIGURATION



TEST PROCEDURE

1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously
3. Use the following spectrum analyzer settings:
Span=zero span, Frequency=centered channel, RBW= 1 MHz, VBW \geq RBW
Sweep=as necessary to capture the entire dwell time,
Detector function = peak, Trigger mode
4. Measure and record the duty cycle data

TEST MODE

Refer to the clause 4.2

TEST DATA

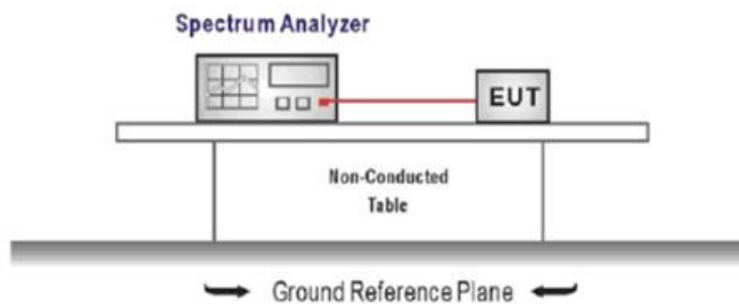
Refer to the appendix report

5.8. Conducted Band edge and Spurious Emission

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.

TEST CONFIGURATION



TEST PROCEDURE

1. Connect the antenna port(s) to the spectrum analyzer input.
2. Establish a reference level by using the following procedure
Center frequency=DTS channel center frequency
The span = 1.5 times the DTS bandwidth.
RBW = 100 kHz, VBW $\geq 3 \times$ RBW
Detector = peak, Sweep time = auto couple, Trace mode = max hold
Allow trace to fully stabilize
Use the peak marker function to determine the maximum PSD level

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

3. Emission level measurement
Set the center frequency and span to encompass frequency range to be measured
RBW = 100 kHz, VBW $\geq 3 \times$ RBW
Detector = peak, Sweep time = auto couple, Trace mode = max hold
Allow trace to fully stabilize
Use the peak marker function to determine the maximum amplitude level.
4. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter waveform on the spectrum analyzer.
5. Ensure that the amplitude of all unwanted emission outside of the authorized frequency band (excluding restricted frequency bands) are attenuated by at least the minimum requirements specified (at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz). Report the three highest emission relative to the limit.

TEST MODE

Refer to the clause 4.2

TEST RESULT

Passed **Not Applicable**

TEST DATA

Refer to the appendix report

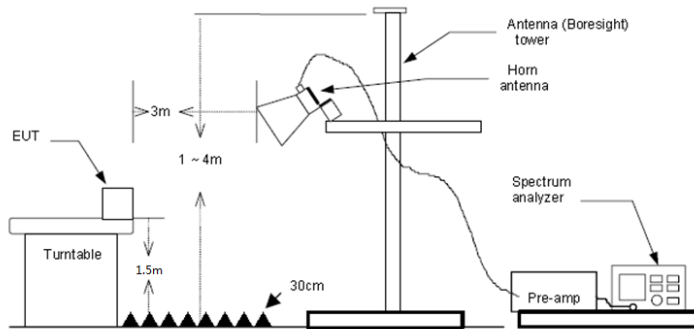
5.9. Radiated Band edge Emission

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d):

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, Radiated Emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the Radiated Emissions limits specified in §15.209(a) (see §15.205(c)).

TEST CONFIGURATION



TEST PROCEDURE

1. The EUT was setup and tested according to ANSI C63.10 .
2. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10 on radiated measurement.
5. Use the following spectrum analyzer settings:
 - a) Span shall wide enough to fully capture the emission being measured
 - b) Set RBW=100kHz for <1GHz, VBW=3*RBW, Sweep time=auto, Detector=peak, Trace=max hold
 - c) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement

For average measurement:

 - VBW=10Hz, When duty cycle is no less than 98 percent
 - VBW \geq 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation, so refer to this clause 5.7 duty cycle.

TEST MODE

Refer to the clause 4.2

TEST RESULT

Passed Not Applicable

Note:

- 1) Level= Reading + Factor; Factor =Antenna Factor+ Cable Loss- Preamp Factor
- 2) Over Limit = Level– Limit
- 3) Average measurement was not performed if peak level is lower than average limit(54 dBuV/m).

Type	802.11b		Test channel	CH01	Polarity			Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2310.00	40.50	27.86	4.01	37.55	20.00	54.82	74.00	-19.18	Peak
2	2390.01	41.33	27.54	4.31	37.55	20.00	55.63	74.00	-18.37	Peak
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2310.00	32.39	27.86	4.01	37.55	20.00	46.71	54.00	-7.29	Average
2	2390.01	33.20	27.54	4.31	37.55	20.00	47.50	54.00	-6.50	Average
Type	802.11b		Test channel	CH01	Polarity			Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2310.00	41.61	27.86	4.01	37.55	20.00	55.93	74.00	-18.07	Peak
2	2390.01	41.37	27.54	4.31	37.55	20.00	55.67	74.00	-18.33	Peak
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2310.00	32.34	27.86	4.01	37.55	20.00	46.66	54.00	-7.34	Average
2	2390.01	32.27	27.54	4.31	37.55	20.00	46.57	54.00	-7.43	Average

Type	802.11b		Test channel	CH11	Polarity			Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2483.49	39.74	27.33	4.18	37.64	20.00	53.61	74.00	-20.39	Peak
2	2500.00	38.91	27.30	4.19	37.67	20.00	52.73	74.00	-21.27	Peak
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2483.49	32.82	27.33	4.18	37.64	20.00	46.69	54.00	-7.31	Average
2	2500.00	32.82	27.30	4.19	37.67	20.00	46.64	54.00	-7.36	Average
Type	802.11b		Test channel	CH11	Polarity			Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2483.49	38.20	27.33	4.18	37.64	20.00	52.07	74.00	-21.93	Peak
2	2500.00	37.89	27.30	4.19	37.67	20.00	51.71	74.00	-22.29	Peak
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Aux dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2483.49	32.03	27.33	4.18	37.64	20.00	45.90	54.00	-8.10	Average
2	2500.00	32.25	27.30	4.19	37.67	20.00	46.07	54.00	-7.93	Average

Type	802.11g		Test channel		CH01		Polarity		Horizontal	
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
1	2310.00	41.50	27.86	4.01	37.55	20.00	55.82	74.00	-18.18	Peak
2	2390.01	41.20	27.54	4.31	37.55	20.00	55.50	74.00	-18.50	Peak
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
1	2310.00	29.41	27.86	4.01	37.55	20.00	43.73	54.00	-10.27	Average
2	2390.01	30.77	27.54	4.31	37.55	20.00	45.07	54.00	-8.93	Average

Type	802.11g		Test channel		CH01		Polarity		Vertical	
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
1	2310.00	40.88	27.86	4.01	37.55	20.00	55.20	74.00	-18.80	Peak
2	2390.01	41.68	27.54	4.31	37.55	20.00	55.98	74.00	-18.02	Peak
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
1	2310.00	29.27	27.86	4.01	37.55	20.00	43.59	54.00	-10.41	Average
2	2390.01	29.51	27.54	4.31	37.55	20.00	43.81	54.00	-10.19	Average

Type	802.11g		Test channel		CH11		Polarity		Horizontal	
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
1	2483.49	40.54	27.33	4.18	37.64	20.00	54.41	74.00	-19.59	Peak
2	2500.00	39.70	27.30	4.19	37.67	20.00	53.52	74.00	-20.48	Peak
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
1	2483.49	30.64	27.33	4.18	37.64	20.00	44.51	54.00	-9.49	Average
2	2500.00	30.03	27.30	4.19	37.67	20.00	43.85	54.00	-10.15	Average

Type	802.11g		Test channel		CH11		Polarity		Vertical	
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
1	2483.49	39.87	27.33	4.18	37.64	20.00	53.74	74.00	-20.26	Peak
2	2500.00	41.56	27.30	4.19	37.67	20.00	55.38	74.00	-18.62	Peak
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
1	2483.49	29.21	27.33	4.18	37.64	20.00	43.08	54.00	-10.92	Average
2	2500.00	29.19	27.30	4.19	37.67	20.00	43.01	54.00	-10.99	Average

Type	802.11n(HT20)		Test channel	CH01	Polarity		Horizontal			
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
1	2310.00	40.85	27.86	4.01	37.55	20.00	55.17	74.00	-18.83	Peak
2	2390.01	41.49	27.54	4.31	37.55	20.00	55.79	74.00	-18.21	Peak
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
1	2310.00	29.29	27.86	4.01	37.55	20.00	43.61	54.00	-10.39	Average
2	2390.01	31.04	27.54	4.31	37.55	20.00	45.34	54.00	-8.66	Average
Type	802.11n(HT20)		Test channel	CH01	Polarity		Vertical			
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
1	2310.00	40.89	27.86	4.01	37.55	20.00	55.21	74.00	-18.79	Peak
2	2390.01	41.26	27.54	4.31	37.55	20.00	55.56	74.00	-18.44	Peak
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
1	2310.00	29.39	27.86	4.01	37.55	20.00	43.71	54.00	-10.29	Average
2	2390.01	29.23	27.54	4.31	37.55	20.00	43.53	54.00	-10.47	Average

Type	802.11n(HT20)		Test channel	CH11	Polarity		Horizontal			
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
1	2483.49	41.98	27.33	4.18	37.64	20.00	55.85	74.00	-18.15	Peak
2	2500.00	40.66	27.30	4.19	37.67	20.00	54.48	74.00	-19.52	Peak
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
1	2483.49	30.66	27.33	4.18	37.64	20.00	44.53	54.00	-9.47	Average
2	2500.00	29.91	27.30	4.19	37.67	20.00	43.73	54.00	-10.27	Average
Type	802.11n(HT20)		Test channel	CH11	Polarity		Vertical			
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
1	2483.49	40.30	27.33	4.18	37.64	20.00	54.17	74.00	-19.83	Peak
2	2500.00	41.08	27.30	4.19	37.67	20.00	54.90	74.00	-19.10	Peak
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit	
1	2483.49	29.43	27.33	4.18	37.64	20.00	43.30	54.00	-10.70	Average
2	2500.00	29.34	27.30	4.19	37.67	20.00	43.16	54.00	-10.84	Average

Type		802.11n(HT40)		Test channel		CH03		Polarity		Horizontal	
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark	
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit		
1	2310.00	41.08	27.86	4.01	37.55	20.00	55.40	74.00	-18.60	Peak	
2	2389.99	44.72	27.54	4.31	37.55	20.00	59.02	74.00	-14.98	Peak	
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark	
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit		
1	2310.00	29.77	27.86	4.01	37.55	20.00	44.09	54.00	-9.91	Average	
2	2389.99	32.41	27.54	4.31	37.55	20.00	46.71	54.00	-7.29	Average	
Type		802.11n(HT40)		Test channel		CH03		Polarity		Vertical	
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark	
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit		
1	2310.00	41.60	27.86	4.01	37.55	20.00	55.92	74.00	-18.08	Peak	
2	2389.99	40.82	27.54	4.31	37.55	20.00	55.12	74.00	-18.88	Peak	
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark	
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit		
1	2310.00	29.84	27.86	4.01	37.55	20.00	44.16	54.00	-9.84	Average	
2	2389.99	30.10	27.54	4.31	37.55	20.00	44.40	54.00	-9.60	Average	

Type		802.11n(HT40)		Test channel		CH09		Polarity		Horizontal	
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark	
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit		
1	2483.50	40.83	27.33	4.18	37.64	20.00	54.70	74.00	-19.30	Peak	
2	2500.00	40.87	27.30	4.19	37.67	20.00	54.69	74.00	-19.31	Peak	
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark	
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit		
1	2483.50	31.53	27.33	4.18	37.64	20.00	45.40	54.00	-8.60	Average	
2	2500.00	30.35	27.30	4.19	37.67	20.00	44.17	54.00	-9.83	Average	
Type		802.11n(HT40)		Test channel		CH09		Polarity		Vertical	
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark	
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit		
1	2483.50	40.72	27.33	4.18	37.64	20.00	54.59	74.00	-19.41	Peak	
2	2500.00	40.55	27.30	4.19	37.67	20.00	54.37	74.00	-19.63	Peak	
Mark	Frequency	Reading	Antenna	Cable	Preamp	Aux	Level	Limit	Over	Remark	
	MHz	dBuV/m	dB	dB	dB	dB	dBuV/m	dBuV/m	limit		
1	2483.50	30.43	27.33	4.18	37.64	20.00	44.30	54.00	-9.70	Average	
2	2500.00	29.87	27.30	4.19	37.67	20.00	43.69	54.00	-10.31	Average	

5.10. Radiated Spurious Emission

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.209

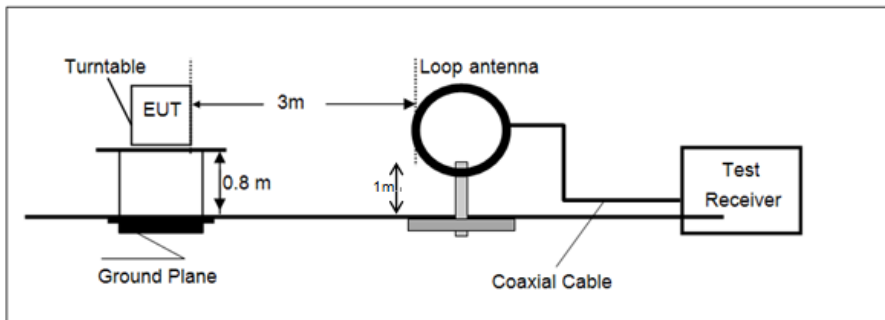
Frequency	Limit (dBuV/m)	Value
0.009 MHz ~0.49 MHz	2400/F(kHz) @300m	Quasi-peak
0.49 MHz ~ 1.705 MHz	24000/F(kHz) @30m	Quasi-peak
1.705 MHz ~30 MHz	30 @30m	Quasi-peak

Note: Limit dBuV/m @3m = Limit dBuV/m @300m + 40*log(300/3)= Limit dBuV/m @300m +80,
 Limit dBuV/m @3m = Limit dBuV/m @30m +40*log(30/3)= Limit dBuV/m @30m + 40.

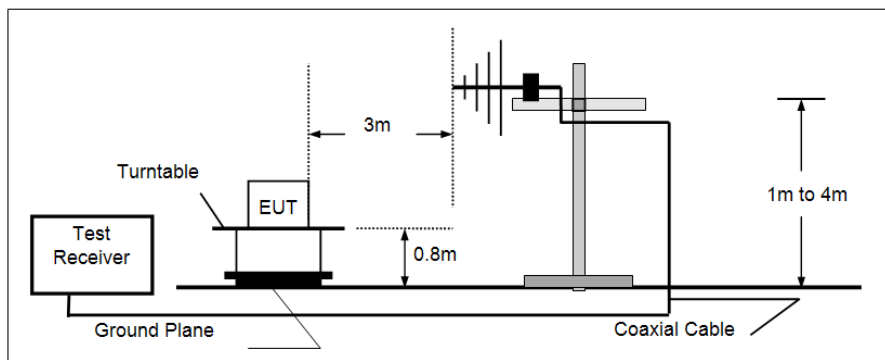
Frequency	Limit (dBuV/m @3m)	Value
30MHz~88MHz	40.00	Quasi-peak
88MHz~216MHz	43.50	Quasi-peak
216MHz~960MHz	46.00	Quasi-peak
960MHz~1GHz	54.00	Quasi-peak
Above 1GHz	54.00	Average
	74.00	Peak

TEST CONFIGURATION

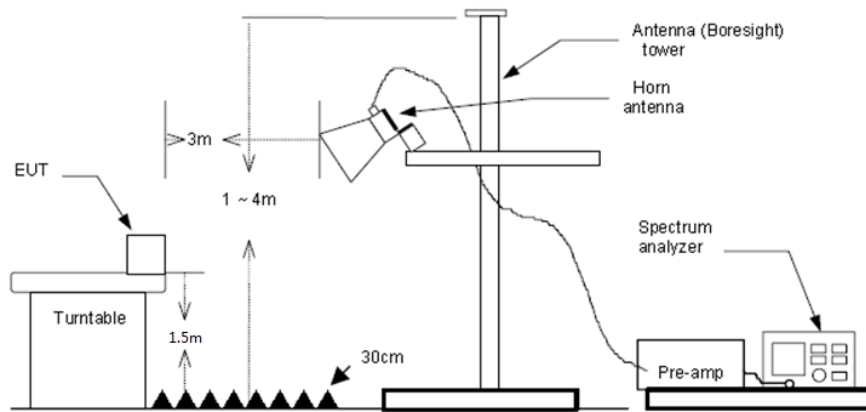
- 9 kHz ~ 30 MHz



- 30 MHz ~ 1 GHz



- Above 1 GHz



TEST PROCEDURE

1. The EUT was setup and tested according to ANSI C63.10 .
2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
4. For each suspected emission, 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 to comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. Use the following spectrum analyzer settings
 - a) Span shall wide enough to fully capture the emission being measured;
 - b) Below 1 GHz:
 - RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;
 - 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.
 - c) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement
 - For average measurement:
 - VBW=10Hz, When duty cycle is no less than 98 percent
 - $VBW \geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation, so refer to this clause 5.7 duty cycle.

TEST MODE

Refer to the clause 4.2

TEST RESULT

Passed **Not Applicable**

Note:

- 1) Level= Reading + Factor/Transd; Factor/Transd =Antenna Factor+ Cable Loss- Preamp Factor
- 2) Over Limit = Level– Limit
- 3) Average measurement was not performed if peak level is lower than average limit(54 dBuV/m) for above 1GHz.

For 9 kHz ~ 30 MHz

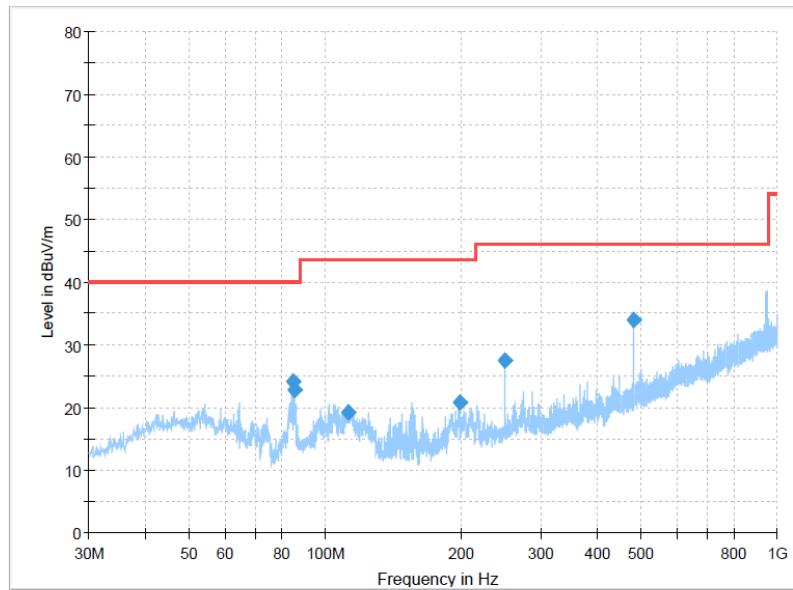
The EUT was pre-scanned this frequency band, found the radiated level 20dB lower than the limit, so don't show data on this report.

For 30 MHz ~ 1000 MHz

Have pre-scan all test channel, found CH06 of 802.11B which it was worst case, so only show the worst case's data on this report.

Polarization:

Horizontal

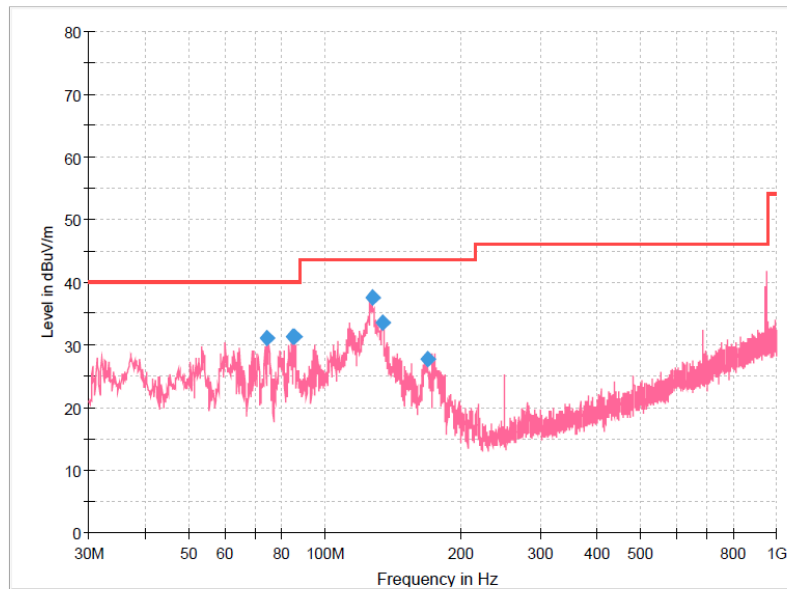


Final Result

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
84.8050	24.10	40.00	15.90	300.0	H	169.0	-14.6
85.4113	22.87	40.00	17.13	300.0	H	74.0	-14.4
112.5713	19.13	43.50	24.37	300.0	H	181.0	-11.6
198.5375	20.70	43.50	22.80	100.0	H	135.0	-10.4
249.9475	27.54	46.00	18.46	100.0	H	248.0	-8.9
479.9588	34.01	46.00	11.99	100.0	H	335.0	-2.8

Polarization:

Vertical



Final Result

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
74.4988	30.97	40.00	9.03	100.0	V	11.0	-14.9
84.6838	31.26	40.00	8.74	100.0	V	130.0	-14.6
85.4113	31.28	40.00	8.72	100.0	V	257.0	-14.4
127.3638	37.59	43.50	5.91	100.0	V	35.0	-13.7
134.2750	33.60	43.50	9.90	100.0	V	138.0	-14.2
168.8313	27.80	43.50	15.70	100.0	V	0.0	-13.4

For 1 GHz ~ 25 GHz

Type	802.11b	Test channel	CH01	Polarity	Horizontal				
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2995.54	54.52	28.50	4.75	37.38	50.39	74.00	-23.61	Peak
2	4983.99	43.08	31.34	6.08	35.81	44.69	74.00	-29.31	Peak
3	7820.82	40.83	36.28	7.83	33.79	51.15	74.00	-22.85	Peak
4	9809.40	34.17	39.32	9.50	33.53	49.46	74.00	-24.54	Peak
Type	802.11b	Test channel	CH01	Polarity	Vertical				
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2987.92	52.39	28.50	4.77	37.40	48.26	74.00	-25.74	Peak
2	4821.76	47.35	31.26	6.00	35.86	48.75	74.00	-25.25	Peak
3	4983.99	48.94	31.34	6.08	35.81	50.55	74.00	-23.45	Peak
4	9784.47	34.20	39.30	9.48	33.44	49.54	74.00	-24.46	Peak
Type	802.11b	Test channel	CH06	Polarity	Horizontal				
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2987.92	46.98	28.50	4.77	37.40	42.85	74.00	-31.15	Peak
2	4858.72	46.91	31.20	6.33	36.07	48.37	74.00	-25.63	Peak
3	6833.77	39.87	34.34	7.27	34.22	47.26	74.00	-26.74	Peak
4	9784.47	35.49	39.30	9.48	33.44	50.83	74.00	-23.17	Peak
Type	802.11b	Test channel	CH06	Polarity	Vertical				
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2995.54	52.65	28.50	4.75	37.38	48.52	74.00	-25.48	Peak
2	3983.75	46.60	29.77	5.60	36.91	45.06	74.00	-28.94	Peak
3	4858.72	42.34	31.20	6.33	36.07	43.80	74.00	-30.20	Peak
4	4996.69	47.67	31.39	6.09	35.75	49.40	74.00	-24.60	Peak
Type	802.11b	Test channel	CH11	Polarity	Horizontal				
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2995.54	53.78	28.50	4.75	37.38	49.65	74.00	-24.35	Peak
2	6851.19	39.98	34.40	7.29	34.05	47.62	74.00	-26.38	Peak
3	7820.82	40.22	36.28	7.83	33.79	50.54	74.00	-23.46	Peak
4	9562.85	36.89	38.95	9.34	34.60	50.58	74.00	-23.42	Peak
Type	802.11b	Test channel	CH11	Polarity	Vertical				
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	3003.17	52.37	28.51	4.72	37.37	48.23	74.00	-25.77	Peak
2	3993.90	47.28	29.79	5.62	36.97	45.72	74.00	-28.28	Peak
3	4267.18	48.76	30.07	5.77	36.54	48.06	74.00	-25.94	Peak
4	4996.69	48.93	31.39	6.09	35.75	50.66	74.00	-23.34	Peak

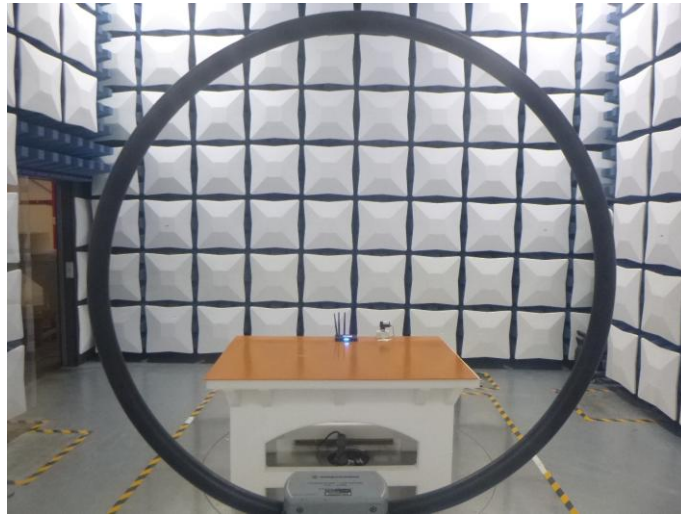
Type	802.11g		Test channel	CH01			Polarity	Horizontal	
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2987.92	47.63	28.50	4.77	37.40	43.50	74.00	-30.50	Peak
2	4821.76	44.38	31.26	6.00	35.86	45.78	74.00	-28.22	Peak
3	6974.36	39.77	35.00	7.34	34.15	47.96	74.00	-26.04	Peak
4	9759.59	34.45	39.30	9.46	33.66	49.55	74.00	-24.45	Peak
Type	802.11g		Test channel	CH01			Polarity	Vertical	
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2995.54	54.63	28.50	4.75	37.38	50.50	74.00	-23.50	Peak
2	4267.18	49.44	30.07	5.77	36.54	48.74	74.00	-25.26	Peak
3	4821.76	49.90	31.26	6.00	35.86	51.30	74.00	-22.70	Peak
4	7245.81	41.70	36.00	7.61	34.39	50.92	74.00	-23.08	Peak
Type	802.11g		Test channel	CH06			Polarity	Horizontal	
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2987.92	47.96	28.50	4.77	37.40	43.83	74.00	-30.17	Peak
2	4871.10	47.96	31.20	6.30	36.04	49.42	74.00	-24.58	Peak
3	6956.63	39.18	34.93	7.35	34.16	47.30	74.00	-26.70	Peak
4	9809.40	33.73	39.32	9.50	33.53	49.02	74.00	-24.98	Peak
Type	802.11g		Test channel	CH06			Polarity	Vertical	
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2987.92	53.55	28.50	4.77	37.40	49.42	74.00	-24.58	Peak
2	4871.10	49.58	31.20	6.30	36.04	51.04	74.00	-22.96	Peak
3	6974.36	41.44	35.00	7.34	34.15	49.63	74.00	-24.37	Peak
4	7301.36	40.99	36.10	7.76	34.26	50.59	74.00	-23.41	Peak
Type	802.11g		Test channel	CH11			Polarity	Horizontal	
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2995.54	46.34	28.50	4.75	37.38	42.21	74.00	-31.79	Peak
2	3993.90	45.52	29.79	5.62	36.97	43.96	74.00	-30.04	Peak
3	4933.50	49.09	31.20	6.05	35.79	50.55	74.00	-23.45	Peak
4	9809.40	34.17	39.32	9.50	33.53	49.46	74.00	-24.54	Peak
Type	802.11g		Test channel	CH11			Polarity	Vertical	
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2995.54	53.55	28.50	4.75	37.38	49.42	74.00	-24.58	Peak
2	4996.69	46.78	31.39	6.09	35.75	48.51	74.00	-25.49	Peak
3	6974.36	42.58	35.00	7.34	34.15	50.77	74.00	-23.23	Peak
4	9784.47	34.53	39.30	9.48	33.44	49.87	74.00	-24.13	Peak

Type	802.11n(HT20)		Test channel	CH01			Polarity	Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark	
1	2995.54	49.79	28.50	4.75	37.38	45.66	74.00	-28.34	Peak	
2	4821.76	48.19	31.26	6.00	35.86	49.59	74.00	-24.41	Peak	
3	6992.14	39.17	35.07	7.34	34.22	47.36	74.00	-26.64	Peak	
4	10860.83	34.87	40.42	9.93	35.94	49.28	74.00	-24.72	Peak	
Type	802.11n(HT20)		Test channel	CH01			Polarity	Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark	
1	2987.92	53.35	28.50	4.77	37.40	49.22	74.00	-24.78	Peak	
2	4821.76	48.81	31.26	6.00	35.86	50.21	74.00	-23.79	Peak	
3	6992.14	41.82	35.07	7.34	34.22	50.01	74.00	-23.99	Peak	
4	9859.47	35.66	39.38	9.50	34.73	49.81	74.00	-24.19	Peak	
Type	802.11n(HT20)		Test channel	CH06			Polarity	Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark	
1	2987.92	49.11	28.50	4.77	37.40	44.98	74.00	-29.02	Peak	
2	4883.52	47.21	31.20	6.21	35.97	48.65	74.00	-25.35	Peak	
3	7009.96	39.70	35.14	7.35	34.24	47.95	74.00	-26.05	Peak	
4	9784.47	33.77	39.30	9.48	33.44	49.11	74.00	-24.89	Peak	
Type	802.11n(HT20)		Test channel	CH06			Polarity	Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark	
1	2987.92	53.71	28.50	4.77	37.40	49.58	74.00	-24.42	Peak	
2	3993.90	48.27	29.79	5.62	36.97	46.71	74.00	-27.29	Peak	
3	4883.52	49.47	31.20	6.21	35.97	50.91	74.00	-23.09	Peak	
4	6974.36	42.57	35.00	7.34	34.15	50.76	74.00	-23.24	Peak	
Type	802.11n(HT20)		Test channel	CH11			Polarity	Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark	
1	2987.92	47.71	28.50	4.77	37.40	43.58	74.00	-30.42	Peak	
2	4996.69	40.47	31.39	6.09	35.75	42.20	74.00	-31.80	Peak	
3	6992.14	39.11	35.07	7.34	34.22	47.30	74.00	-26.70	Peak	
4	9228.06	36.00	38.97	9.28	34.15	50.10	74.00	-23.90	Peak	
Type	802.11n(HT20)		Test channel	CH11			Polarity	Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark	
1	2987.92	53.57	28.50	4.77	37.40	49.44	74.00	-24.56	Peak	
2	3993.90	49.86	29.79	5.62	36.97	48.30	74.00	-25.70	Peak	
3	4920.96	48.92	31.20	6.06	35.82	50.36	74.00	-23.64	Peak	
4	6974.36	42.17	35.00	7.34	34.15	50.36	74.00	-23.64	Peak	

Type	802.11n(HT40)		Test channel	CH03	Polarity		Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2987.92	45.34	28.50	4.77	37.40	41.21	74.00	-32.79	Peak
2	4846.37	44.62	31.21	6.21	35.99	46.05	74.00	-27.95	Peak
3	7264.28	38.29	36.03	7.66	34.35	47.63	74.00	-26.37	Peak
4	9759.59	34.69	39.30	9.46	33.66	49.79	74.00	-24.21	Peak
Type	802.11n(HT40)		Test channel	CH03	Polarity		Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2995.54	50.55	28.50	4.75	37.38	46.42	74.00	-27.58	Peak
2	4846.37	49.01	31.21	6.21	35.99	50.44	74.00	-23.56	Peak
3	6992.14	42.00	35.07	7.34	34.22	50.19	74.00	-23.81	Peak
4	9784.47	34.31	39.30	9.48	33.44	49.65	74.00	-24.35	Peak
Type	802.11n(HT40)		Test channel	CH06	Polarity		Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2987.92	47.77	28.50	4.77	37.40	43.64	74.00	-30.36	Peak
2	4871.10	45.77	31.20	6.30	36.04	47.23	74.00	-26.77	Peak
3	6868.65	38.82	34.44	7.34	34.20	46.40	74.00	-27.60	Peak
4	10295.50	35.03	39.59	9.65	36.11	48.16	74.00	-25.84	Peak
Type	802.11n(HT40)		Test channel	CH06	Polarity		Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2995.54	50.05	28.50	4.75	37.38	45.92	74.00	-28.08	Peak
2	4871.10	47.47	31.20	6.30	36.04	48.93	74.00	-25.07	Peak
3	6992.14	41.83	35.07	7.34	34.22	50.02	74.00	-23.98	Peak
4	9834.41	35.17	39.37	9.50	34.13	49.91	74.00	-24.09	Peak
Type	802.11n(HT40)		Test channel	CH09	Polarity		Horizontal		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	2987.92	51.00	28.50	4.77	37.40	46.87	74.00	-27.13	Peak
2	4933.50	46.09	31.20	6.05	35.79	47.55	74.00	-26.45	Peak
3	6851.19	40.14	34.40	7.29	34.05	47.78	74.00	-26.22	Peak
4	9784.47	34.26	39.30	9.48	33.44	49.60	74.00	-24.40	Peak
Type	802.11n(HT40)		Test channel	CH09	Polarity		Vertical		
Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	3993.90	47.11	29.79	5.62	36.97	45.55	74.00	-28.45	Peak
2	4245.51	46.08	29.99	5.78	36.62	45.23	74.00	-28.77	Peak
3	4920.96	46.93	31.20	6.06	35.82	48.37	74.00	-25.63	Peak
4	9809.40	34.65	39.32	9.50	33.53	49.94	74.00	-24.06	Peak

6. TEST SETUP PHOTOS

Radiated Emission





AC Conducted Emission



7. EXTERNAL AND INTERNAL PHOTOS

Refer to the test report No.: CHTEW23110070

8. APPENDIX REPORT

APPENDIX REPORT

Project No.	SHT2306080101EW	Radio Specification	WIFI 2.4G
Test sample No.	YPHT23060801006	Model No.	F8926-GW-02
Start test date	2023-09-08	Finish date	2023-11-23
Temperature	24.6°C	Humidity	48%
Test Engineer	<i>Casper Chen</i>	Auditor	<i>Xiaodong Zhu</i>

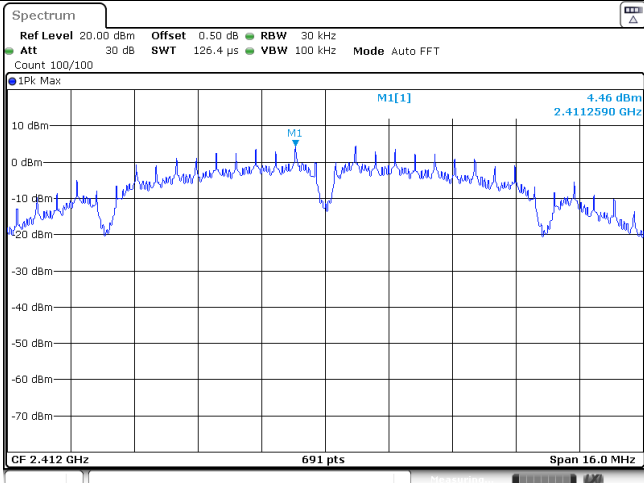
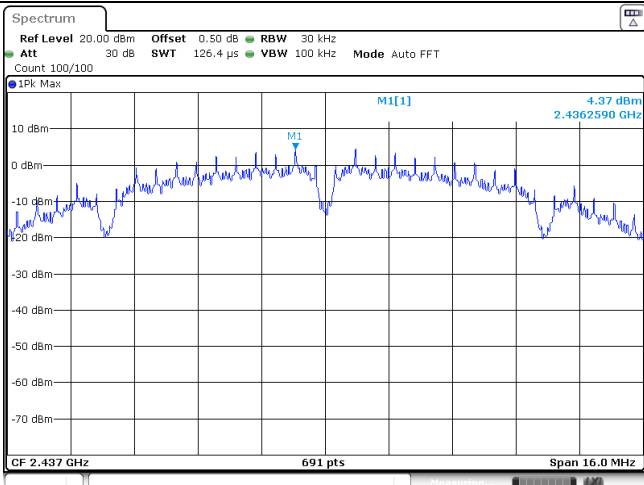
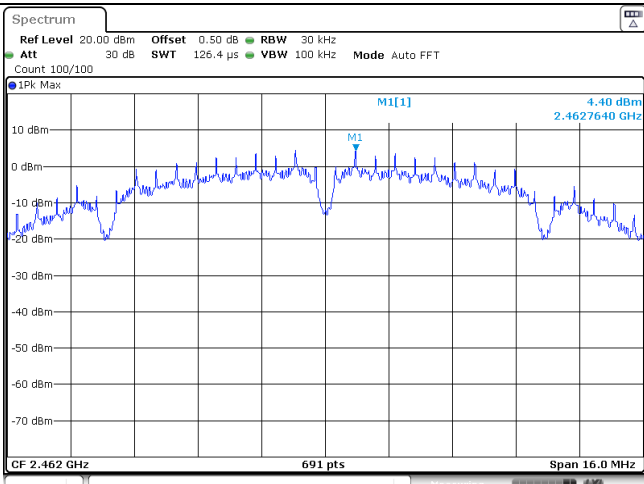
Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty Cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

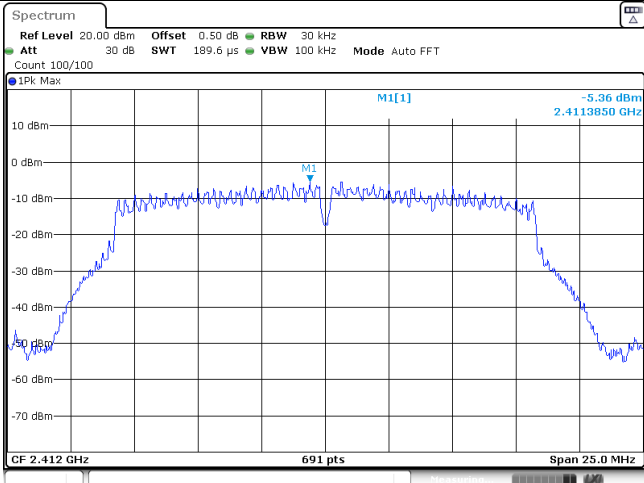
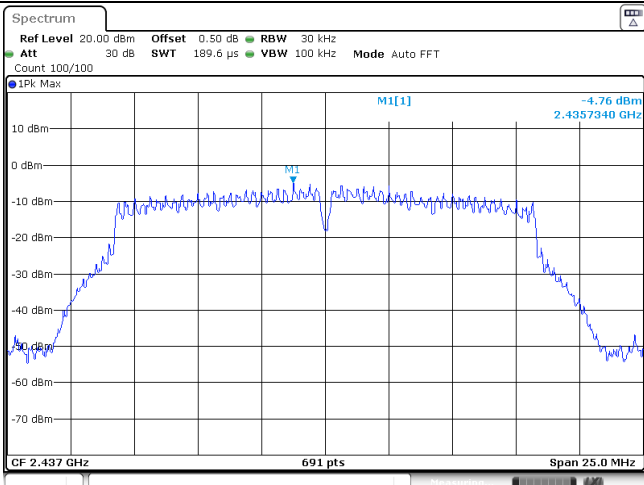
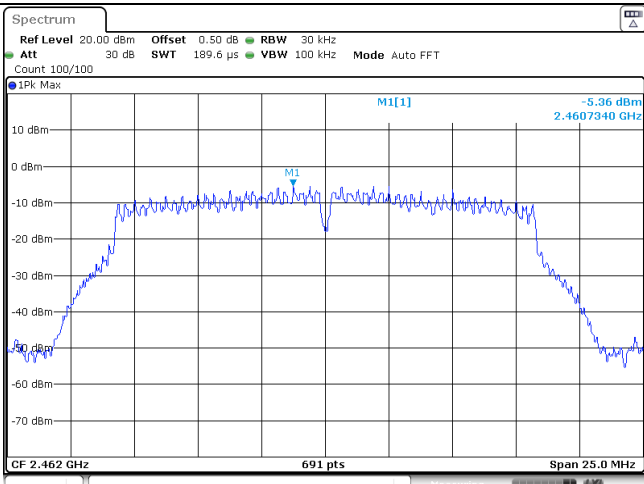
Appendix A: Conducted Peak Output Power

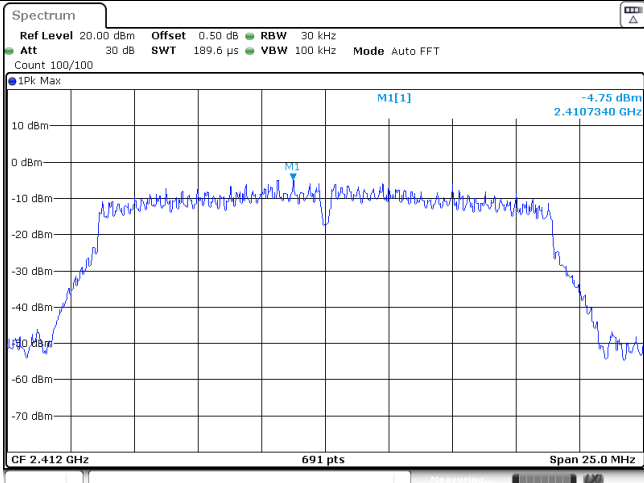
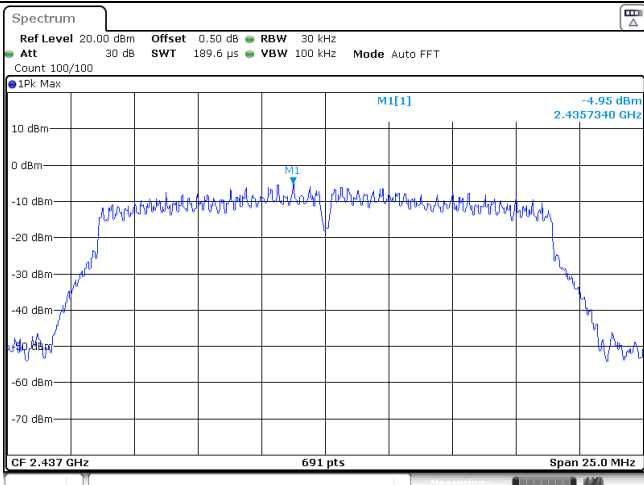
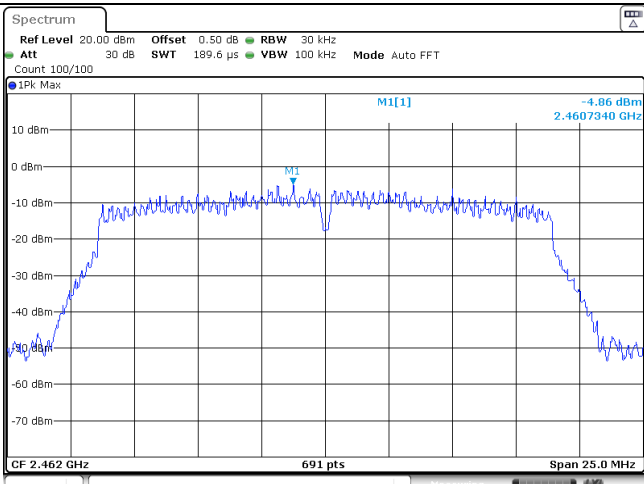
Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
802.11b	01	18.27	16.29	≤ 30.00	Pass
	06	18.12	16.08		
	11	18.22	16.09		
802.11g	01	18.24	16.09	≤ 30.00	Pass
	06	18.32	15.48		
	11	18.25	16.32		
802.11n (HT20)	01	18.05	16.11	≤ 30.00	Pass
	06	18.10	15.54		
	11	18.08	16.13		
802.11n(HT40)	03	18.38	15.62	≤ 30.00	Pass
	06	18.24	16.03		
	09	18.17	16.20		

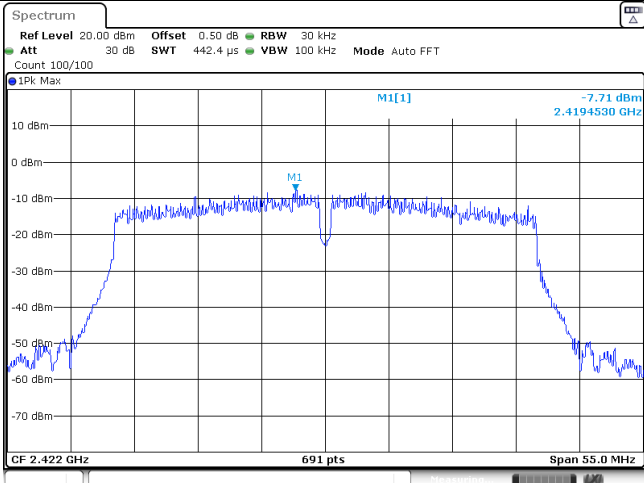
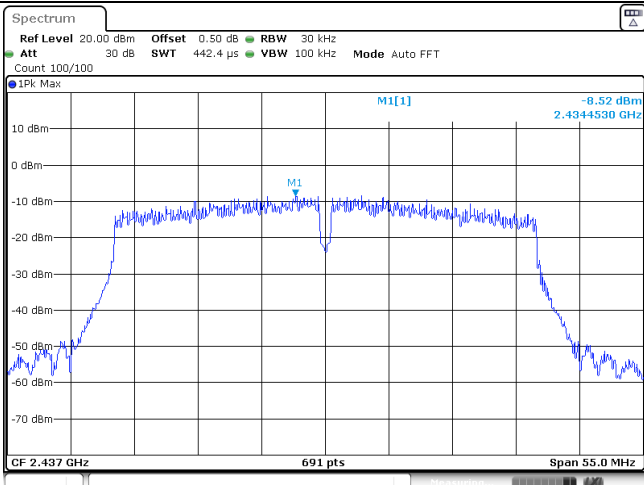
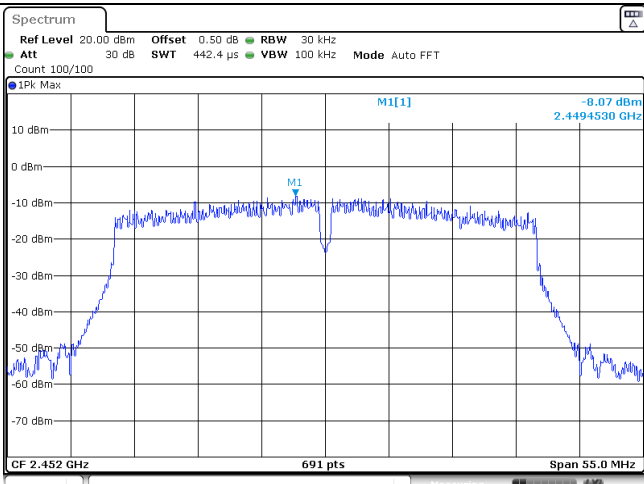
Appendix B: Power Spectral Density

Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	4.46	≤8.00	Pass
	06	4.37		
	11	4.40		
802.11g	01	-5.36	≤8.00	Pass
	06	-4.76		
	11	-5.36		
802.11n(HT20)	01	-4.75	≤8.00	Pass
	06	-4.95		
	11	-4.82		
802.11n(HT40)	03	-7.71	≤8.00	Pass
	06	-8.52		
	09	-8.07		

Type:		802.11 b
CH01	 <p>Spectrum</p> <p>Ref Level 20.00 dBm Offset 0.50 dB RBW 30 kHz Att 30 dB SWT 126.4 μs VBW 100 kHz Mode Auto FFT Count 100/100</p> <p>IPK Max</p> <p>4.46 dBm 2.4112590 GHz</p> <p>CF 2.412 GHz 691 pts Span 16.0 MHz</p> <p>Date: 21 SEP 2023 09:44:42</p>	
CH06	 <p>Spectrum</p> <p>Ref Level 20.00 dBm Offset 0.50 dB RBW 30 kHz Att 30 dB SWT 126.4 μs VBW 100 kHz Mode Auto FFT Count 100/100</p> <p>IPK Max</p> <p>4.97 dBm 2.4362590 GHz</p> <p>CF 2.437 GHz 691 pts Span 16.0 MHz</p> <p>Date: 21 SEP 2023 09:46:26</p>	
CH11	 <p>Spectrum</p> <p>Ref Level 20.00 dBm Offset 0.50 dB RBW 30 kHz Att 30 dB SWT 126.4 μs VBW 100 kHz Mode Auto FFT Count 100/100</p> <p>IPK Max</p> <p>4.40 dBm 2.4627640 GHz</p> <p>CF 2.462 GHz 691 pts Span 16.0 MHz</p> <p>Date: 21 SEP 2023 09:47:40</p>	

Type:		802.11 g
CH01		
CH06		
CH11		

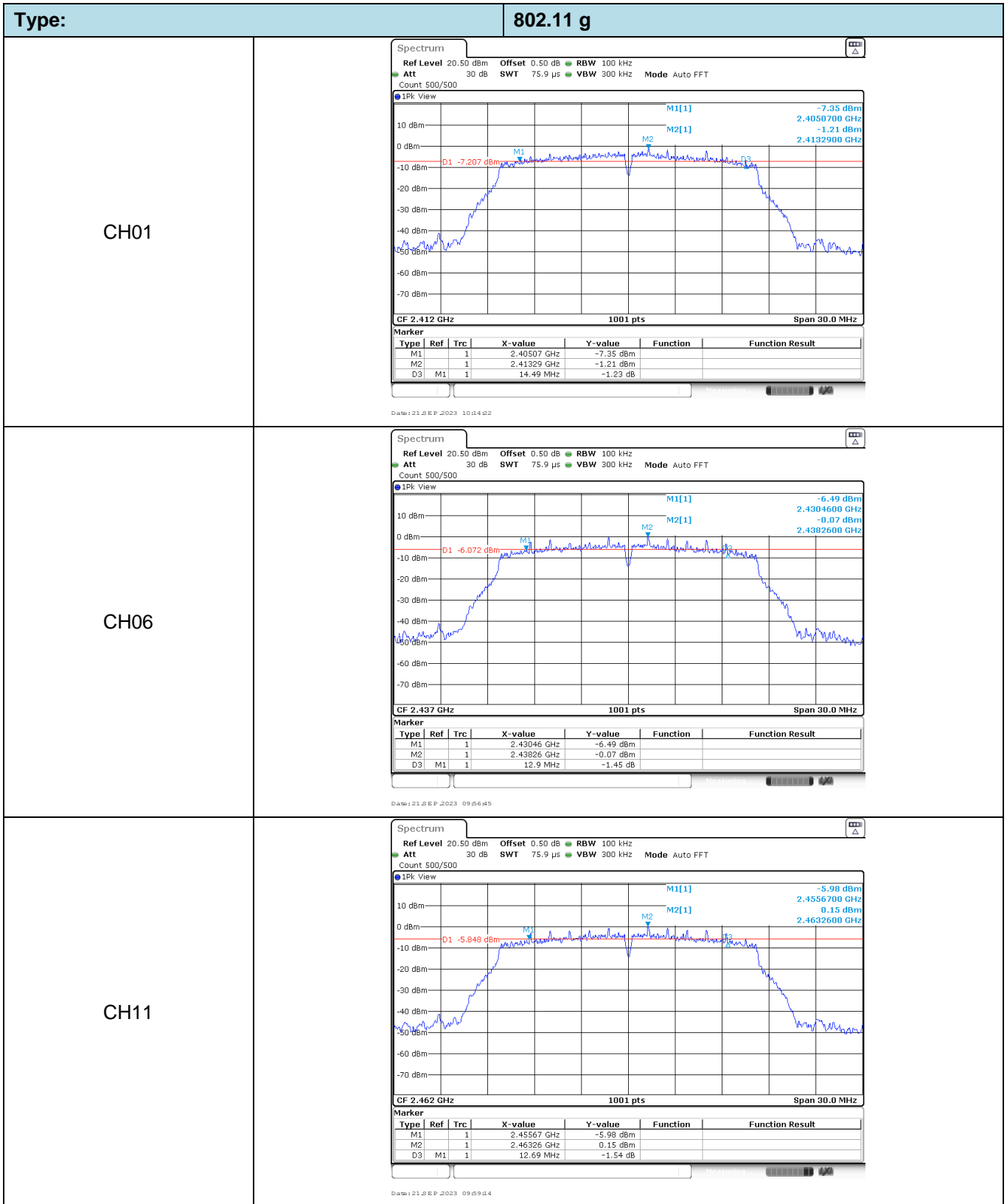
Type:		802.11n(HT20)
CH01		
CH06		
CH11		

Type:		802.11n(HT40)
CH03	 <p>Spectrum</p> <p>Ref Level 20.00 dBm Offset 0.50 dB RBW 30 kHz Att 30 dB SWT 442.4 μs VBW 100 kHz Mode Auto FFT Count 100/100</p> <p>IPK Max</p> <p>M1[1] -7.71 dBm 2.4194530 GHz</p> <p>CF 2.422 GHz 691 pts Span 55.0 MHz</p> <p>Date: 21 SEP 2023 10:08:25</p>	
CH06	 <p>Spectrum</p> <p>Ref Level 20.00 dBm Offset 0.50 dB RBW 30 kHz Att 30 dB SWT 442.4 μs VBW 100 kHz Mode Auto FFT Count 100/100</p> <p>IPK Max</p> <p>M1[1] -8.52 dBm 2.4344530 GHz</p> <p>CF 2.437 GHz 691 pts Span 55.0 MHz</p> <p>Date: 21 SEP 2023 10:10:02</p>	
CH09	 <p>Spectrum</p> <p>Ref Level 20.00 dBm Offset 0.50 dB RBW 30 kHz Att 30 dB SWT 442.4 μs VBW 100 kHz Mode Auto FFT Count 100/100</p> <p>IPK Max</p> <p>M1[1] -8.07 dBm 2.4494530 GHz</p> <p>CF 2.452 GHz 691 pts Span 55.0 MHz</p> <p>Date: 21 SEP 2023 10:11:18</p>	

Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	01	9.63	≥0.5	Pass
	06	9.63		
	11	10.08		
802.11g	01	14.49	≥0.5	Pass
	06	12.90		
	11	12.69		
802.11n(HT20)	01	13.86	≥0.5	Pass
	06	12.03		
	11	12.69		
802.11n(HT40)	03	35.22	≥0.5	Pass
	06	35.22		
	09	35.16		

Type:	802.11 b																												
CH01	<p>Spectrum Ref Level 20.50 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT Count 500/500</p> <p>IPK View</p> <p>10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm</p> <p>CF 2.412 GHz 1001 pts Span 30.0 MHz</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.40696 GHz</td> <td>-1.23 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.41251 GHz</td> <td>5.28 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>9.63 MHz</td> <td>-0.64 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21 SEP 2023 09:44:23</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.40696 GHz	-1.23 dBm			M2		1	2.41251 GHz	5.28 dBm			D3	M1	1	9.63 MHz	-0.64 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.40696 GHz	-1.23 dBm																									
M2		1	2.41251 GHz	5.28 dBm																									
D3	M1	1	9.63 MHz	-0.64 dB																									
CH06	<p>Spectrum Ref Level 20.50 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT Count 500/500</p> <p>IPK View</p> <p>10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm</p> <p>CF 2.437 GHz 1001 pts Span 30.0 MHz</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.43196 GHz</td> <td>-1.31 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.43649 GHz</td> <td>5.16 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>9.63 MHz</td> <td>0.22 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21 SEP 2023 09:46:08</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.43196 GHz	-1.31 dBm			M2		1	2.43649 GHz	5.16 dBm			D3	M1	1	9.63 MHz	0.22 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.43196 GHz	-1.31 dBm																									
M2		1	2.43649 GHz	5.16 dBm																									
D3	M1	1	9.63 MHz	0.22 dB																									
CH11	<p>Spectrum Ref Level 20.50 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT Count 500/500</p> <p>IPK View</p> <p>10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm</p> <p>CF 2.462 GHz 1001 pts Span 30.0 MHz</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.45696 GHz</td> <td>-1.36 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.46149 GHz</td> <td>5.22 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>10.08 MHz</td> <td>0.27 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21 SEP 2023 09:47:22</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.45696 GHz	-1.36 dBm			M2		1	2.46149 GHz	5.22 dBm			D3	M1	1	10.08 MHz	0.27 dB		
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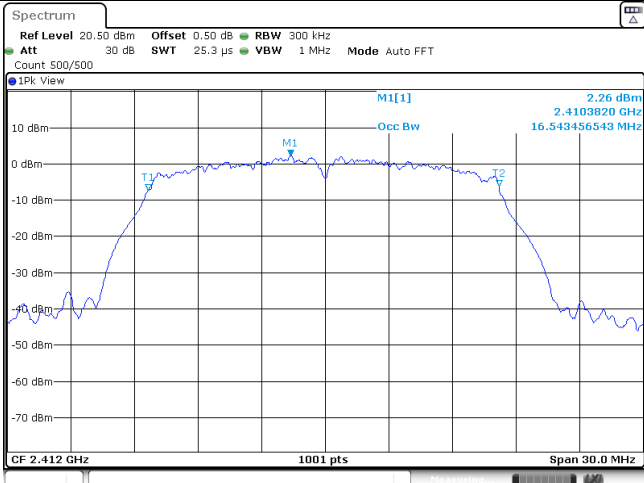
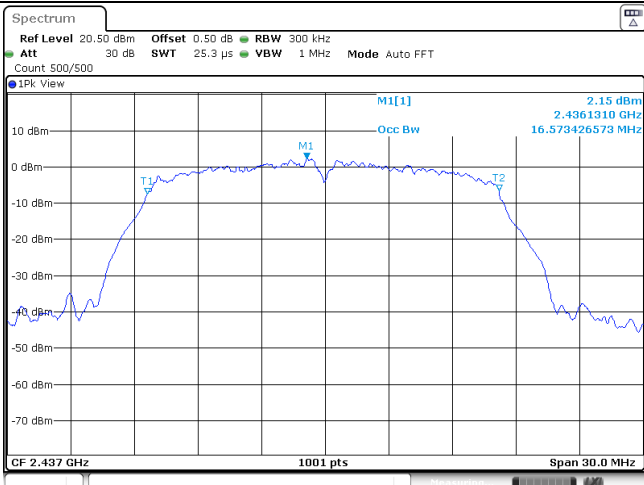
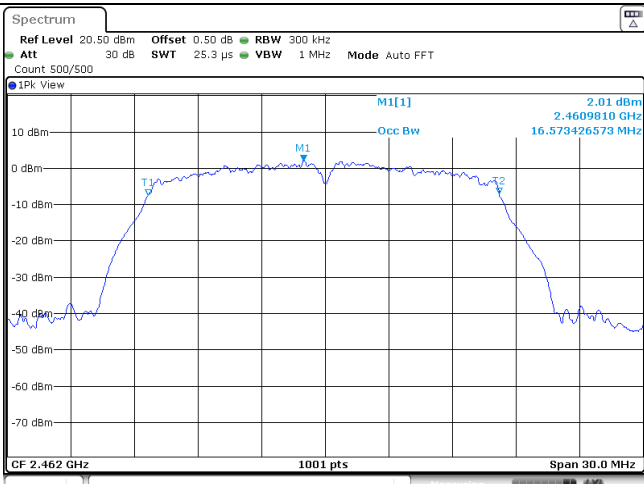
Type:	802.11n(HT20)																												
CH01	<p>Spectrum Ref Level 20.50 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT Count 500/500</p> <p>IPK View</p> <p>CF 2.412 GHz 1001 pts Span 30.0 MHz</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.4045 GHz</td> <td>-6.25 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.41074 GHz</td> <td>-0.17 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>13.86 MHz</td> <td>-1.10 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21 SEP 2023 10:03:01</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.4045 GHz	-6.25 dBm			M2		1	2.41074 GHz	-0.17 dBm			D3	M1	1	13.86 MHz	-1.10 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.4045 GHz	-6.25 dBm																									
M2		1	2.41074 GHz	-0.17 dBm																									
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CH06	<p>Spectrum Ref Level 20.50 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT Count 500/500</p> <p>IPK View</p> <p>CF 2.437 GHz 1001 pts Span 30.0 MHz</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.43064 GHz</td> <td>-8.17 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.43574 GHz</td> <td>-0.10 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>12.03 MHz</td> <td>1.27 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21 SEP 2023 10:04:54</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.43064 GHz	-8.17 dBm			M2		1	2.43574 GHz	-0.10 dBm			D3	M1	1	12.03 MHz	1.27 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.43064 GHz	-8.17 dBm																									
M2		1	2.43574 GHz	-0.10 dBm																									
D3	M1	1	12.03 MHz	1.27 dB																									
CH11	<p>Spectrum Ref Level 20.50 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT Count 500/500</p> <p>IPK View</p> <p>CF 2.462 GHz 1001 pts Span 30.0 MHz</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.45567 GHz</td> <td>-6.21 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.46326 GHz</td> <td>-0.05 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>12.69 MHz</td> <td>-1.56 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21 SEP 2023 10:06:10</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.45567 GHz	-6.21 dBm			M2		1	2.46326 GHz	-0.05 dBm			D3	M1	1	12.69 MHz	-1.56 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																							
M1		1	2.45567 GHz	-6.21 dBm																									
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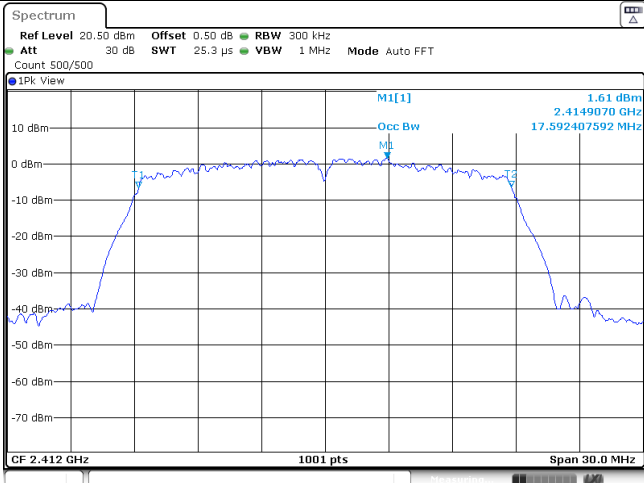
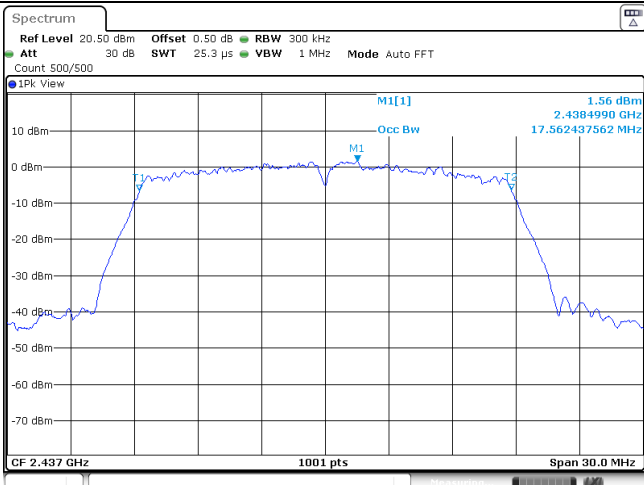
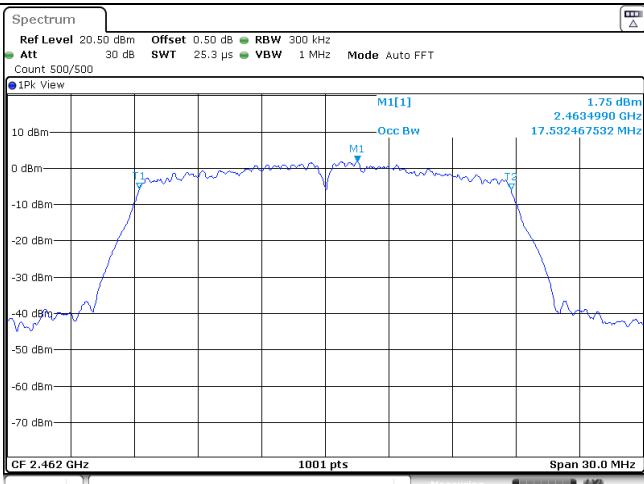
Type:		802.11n(HT40)																												
CH03	<p>Spectrum Ref Level 20.50 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 132.7 μs VBW 300 kHz Mode Auto FFT Count 500/500</p> <p>IPK View</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.40436 GHz</td> <td>-12.13 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.41948 GHz</td> <td>-3.09 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>35.22 MHz</td> <td>2.66 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>CF 2.422 GHz 1001 pts Span 60.0 MHz</p> <p>Date: 21.SEP.2023 10:07:52</p>		Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.40436 GHz	-12.13 dBm			M2		1	2.41948 GHz	-3.09 dBm			D3	M1	1	35.22 MHz	2.66 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																								
M1		1	2.40436 GHz	-12.13 dBm																										
M2		1	2.41948 GHz	-3.09 dBm																										
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CH06	<p>Spectrum Ref Level 20.50 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 132.7 μs VBW 300 kHz Mode Auto FFT Count 500/500</p> <p>IPK View</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.41942 GHz</td> <td>-9.46 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.43448 GHz</td> <td>-2.69 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>35.22 MHz</td> <td>-3.31 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>CF 2.437 GHz 1001 pts Span 60.0 MHz</p> <p>Date: 21.SEP.2023 10:09:44</p>		Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.41942 GHz	-9.46 dBm			M2		1	2.43448 GHz	-2.69 dBm			D3	M1	1	35.22 MHz	-3.31 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																								
M1		1	2.41942 GHz	-9.46 dBm																										
M2		1	2.43448 GHz	-2.69 dBm																										
D3	M1	1	35.22 MHz	-3.31 dB																										
CH09	<p>Spectrum Ref Level 20.50 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 132.7 μs VBW 300 kHz Mode Auto FFT Count 500/500</p> <p>IPK View</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td></td> <td>1</td> <td>2.43442 GHz</td> <td>-8.75 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td></td> <td>1</td> <td>2.44948 GHz</td> <td>-2.58 dBm</td> <td></td> <td></td> </tr> <tr> <td>D3</td> <td>M1</td> <td>1</td> <td>35.16 MHz</td> <td>0.05 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>CF 2.452 GHz 1001 pts Span 60.0 MHz</p> <p>Date: 21.SEP.2023 10:10:59</p>		Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1		1	2.43442 GHz	-8.75 dBm			M2		1	2.44948 GHz	-2.58 dBm			D3	M1	1	35.16 MHz	0.05 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																								
M1		1	2.43442 GHz	-8.75 dBm																										
M2		1	2.44948 GHz	-2.58 dBm																										
D3	M1	1	35.16 MHz	0.05 dB																										

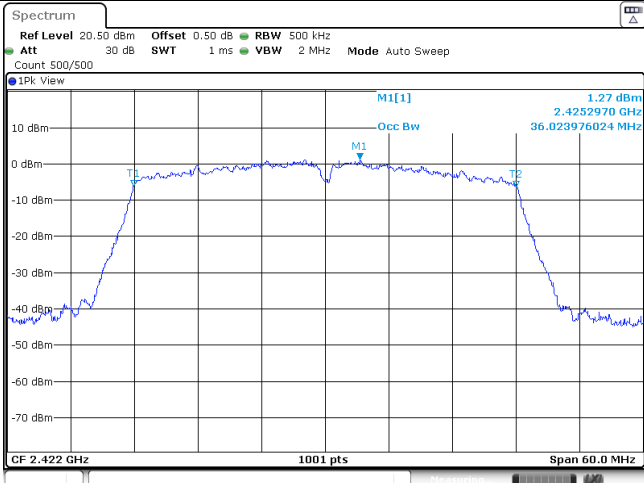
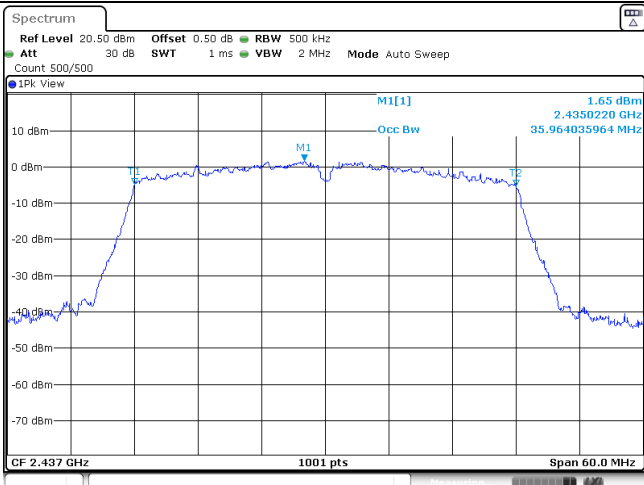
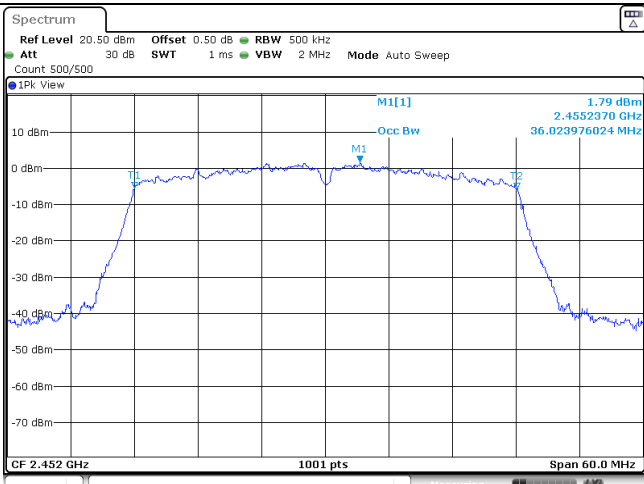
Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Bandwidth (MHz)	Limit (kHz)	Result
802.11b	01	14.21	-	Pass
	06	14.21		
	11	14.18		
802.11g	01	16.54	-	Pass
	06	16.57		
	11	16.57		
802.11n(HT20)	01	17.59	-	Pass
	06	17.56		
	11	17.53		
802.11n(HT40)	03	36.02	-	Pass
	06	35.96		
	09	36.02		

Type:		802.11 b
CH01	<p>Spectrum Ref Level 20.50 dBm Offset 0.50 dB RBW 300 kHz Att 30 dB SWT 25.3 μs VBW 1 MHz Mode Auto FFT Count 500/500 IPK View M1[1] 6.76 dBm 2.4125090 GHz 14.205794206 MHz Occ Bw T1 T2 CF 2.412 GHz 1001 pts Span 30.0 MHz Date: 21 SEP 2023 09:44:31</p>	
CH06	<p>Spectrum Ref Level 20.50 dBm Offset 0.50 dB RBW 300 kHz Att 30 dB SWT 25.3 μs VBW 1 MHz Mode Auto FFT Count 500/500 IPK View M1[1] 7.62 dBm 2.4375090 GHz 14.205794206 MHz Occ Bw T1 T2 CF 2.437 GHz 1001 pts Span 30.0 MHz Date: 21 SEP 2023 09:46:15</p>	
CH11	<p>Spectrum Ref Level 20.50 dBm Offset 0.50 dB RBW 300 kHz Att 30 dB SWT 25.3 μs VBW 1 MHz Mode Auto FFT Count 500/500 IPK View M1[1] 6.90 dBm 2.4625090 GHz 14.175824176 MHz Occ Bw T1 T2 CF 2.462 GHz 1001 pts Span 30.0 MHz Date: 21 SEP 2023 09:47:30</p>	

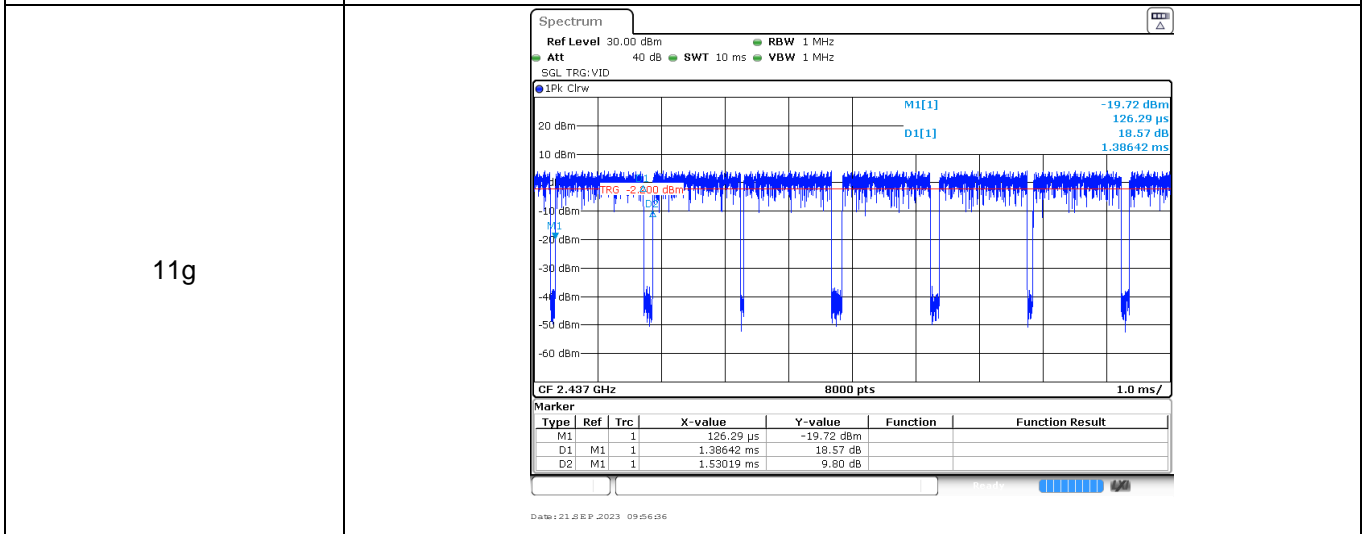
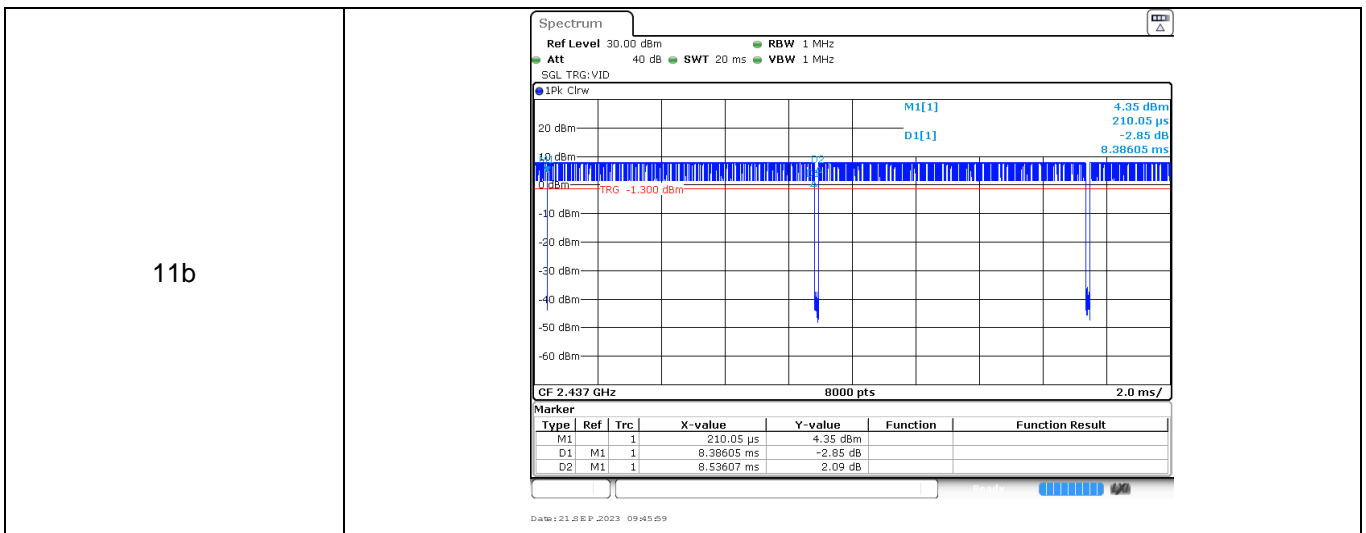
Type:		802.11 g
CH01	 <p>Spectrum</p> <p>Ref Level 20.50 dBm Offset 0.50 dB RBW 300 kHz Att 30 dB SWT 25.3 μs VBW 1 MHz Mode Auto FFT Count 500/500</p> <p>IPK View</p> <p>M1[1] 2.26 dBm 2.4103820 GHz Occ Bw 16.543456543 MHz</p> <p>CF 2.412 GHz 1001 pts Span 30.0 MHz</p> <p>Date: 21 SEP 2023 10:14:30</p>	
CH06	 <p>Spectrum</p> <p>Ref Level 20.50 dBm Offset 0.50 dB RBW 300 kHz Att 30 dB SWT 25.3 μs VBW 1 MHz Mode Auto FFT Count 500/500</p> <p>IPK View</p> <p>M1[1] 2.15 dBm 2.4361310 GHz Occ Bw 16.573426573 MHz</p> <p>CF 2.437 GHz 1001 pts Span 30.0 MHz</p> <p>Date: 21 SEP 2023 09:56:02</p>	
CH11	 <p>Spectrum</p> <p>Ref Level 20.50 dBm Offset 0.50 dB RBW 300 kHz Att 30 dB SWT 25.3 μs VBW 1 MHz Mode Auto FFT Count 500/500</p> <p>IPK View</p> <p>M1[1] 2.01 dBm 2.4609810 GHz Occ Bw 16.573426573 MHz</p> <p>CF 2.462 GHz 1001 pts Span 30.0 MHz</p> <p>Date: 21 SEP 2023 09:59:22</p>	

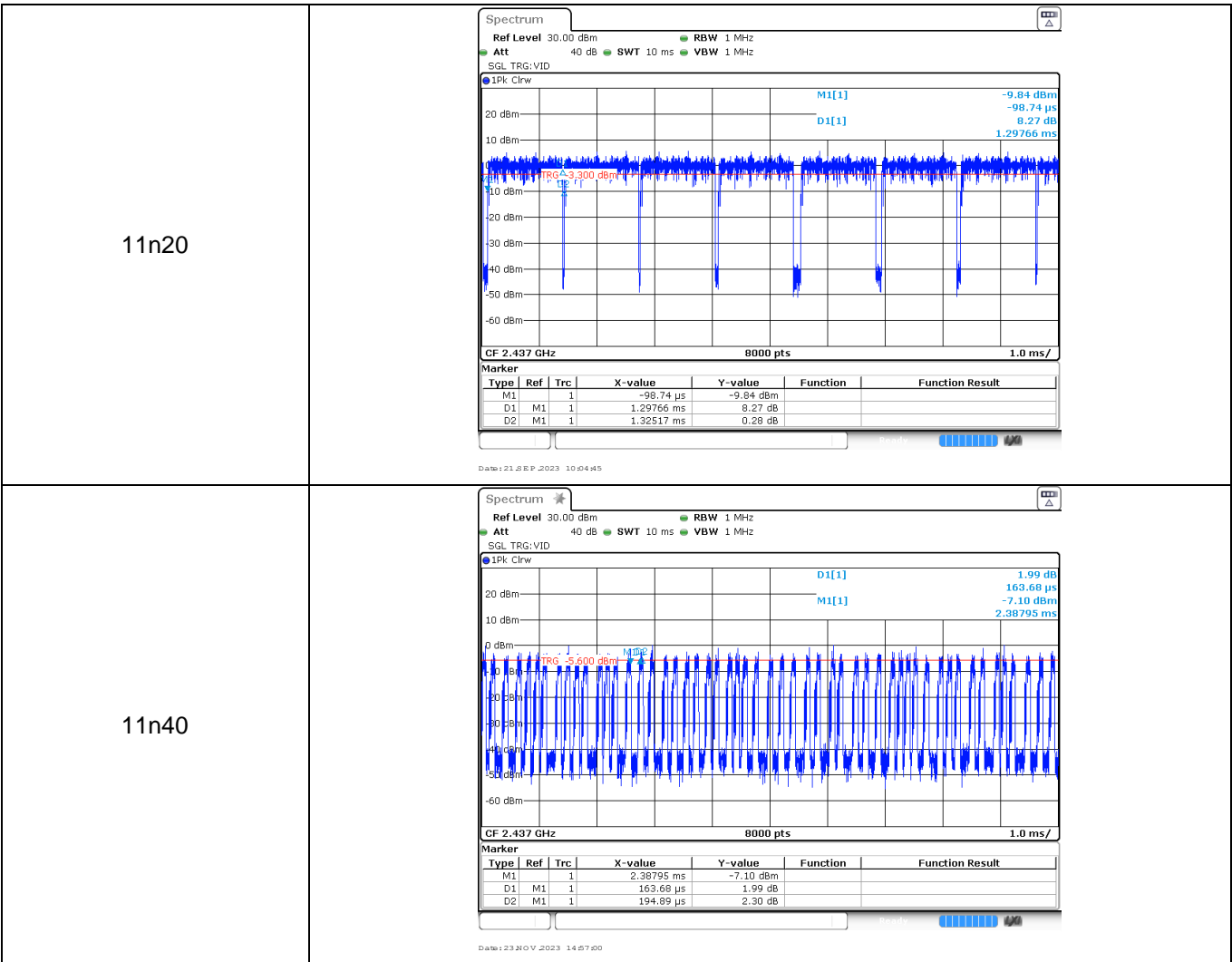
Type:		802.11n(HT20)
CH01	 <p>Spectrum</p> <p>Ref Level 20.50 dBm Offset 0.50 dB RBW 300 kHz Att 30 dB SWT 25.3 μs VBW 1 MHz Mode Auto FFT Count 500/500</p> <p>IPK View</p> <p>M1[1] 1.61 dBm Occ Bw 2.4149070 GHz M1 17.592407592 MHz</p> <p>CF 2.412 GHz 1001 pts Span 30.0 MHz</p> <p>Date: 21 SEP 2023 10:03:09</p>	
CH06	 <p>Spectrum</p> <p>Ref Level 20.50 dBm Offset 0.50 dB RBW 300 kHz Att 30 dB SWT 25.3 μs VBW 1 MHz Mode Auto FFT Count 500/500</p> <p>IPK View</p> <p>M1[1] 1.56 dBm Occ Bw 2.4384990 GHz M1 17.562437562 MHz</p> <p>CF 2.437 GHz 1001 pts Span 30.0 MHz</p> <p>Date: 21 SEP 2023 10:05:01</p>	
CH11	 <p>Spectrum</p> <p>Ref Level 20.50 dBm Offset 0.50 dB RBW 300 kHz Att 30 dB SWT 25.3 μs VBW 1 MHz Mode Auto FFT Count 500/500</p> <p>IPK View</p> <p>M1[1] 1.75 dBm Occ Bw 2.4634990 GHz M1 17.532467532 MHz</p> <p>CF 2.462 GHz 1001 pts Span 30.0 MHz</p> <p>Date: 21 SEP 2023 10:06:18</p>	

Type:		802.11n(HT40)
CH03	 <p>Spectrum plot for CH03. The plot shows a signal with a peak at 1.27 dBm. The frequency is 2.4252970 GHz. The span is 60.0 MHz. The plot includes parameters: Ref Level 20.50 dBm, Att 30 dB, Offset 0.50 dB, RBW 500 kHz, Mode Auto Sweep, Count 500/500, SWT 1 ms, VBW 2 MHz. The plot also shows a peak at 36.023976024 MHz. The plot is titled 'Spectrum' and 'IPK View'.</p>	
CH06	 <p>Spectrum plot for CH06. The plot shows a signal with a peak at 1.65 dBm. The frequency is 2.4350220 GHz. The span is 60.0 MHz. The plot includes parameters: Ref Level 20.50 dBm, Att 30 dB, Offset 0.50 dB, RBW 500 kHz, Mode Auto Sweep, Count 500/500, SWT 1 ms, VBW 2 MHz. The plot also shows a peak at 35.964035964 MHz. The plot is titled 'Spectrum' and 'IPK View'.</p>	
CH09	 <p>Spectrum plot for CH09. The plot shows a signal with a peak at 1.79 dBm. The frequency is 2.4552370 GHz. The span is 60.0 MHz. The plot includes parameters: Ref Level 20.50 dBm, Att 30 dB, Offset 0.50 dB, RBW 500 kHz, Mode Auto Sweep, Count 500/500, SWT 1 ms, VBW 2 MHz. The plot also shows a peak at 36.023976024 MHz. The plot is titled 'Spectrum' and 'IPK View'.</p>	


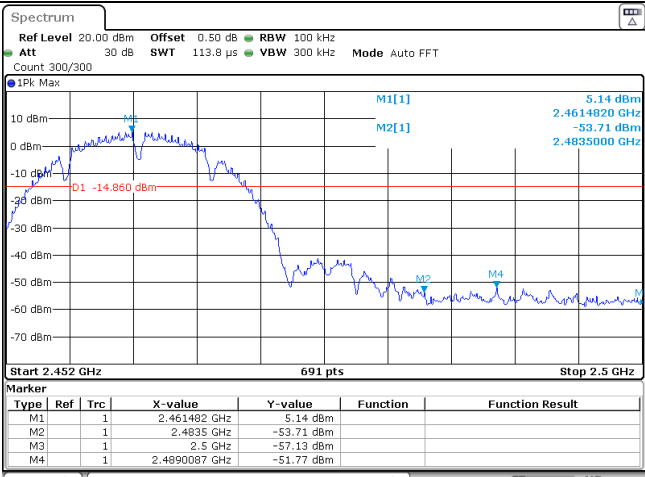
Appendix E: Duty Cycle

Modulation Type	Test Frequency (MHz)	T _{on time} for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on time} (kHz)
11b	2437	8.39	8.54	0.98	0.12
11g	2437	1.39	1.53	0.91	0.72
11n20	2437	1.30	1.33	0.98	0.77
11n40	2437	0.16	0.19	0.84	6.25

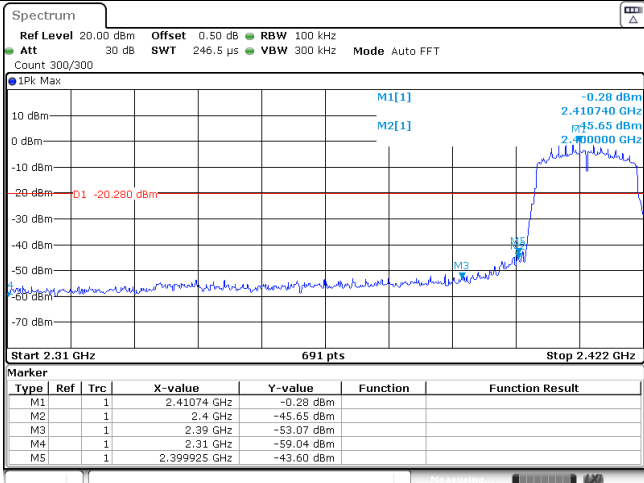
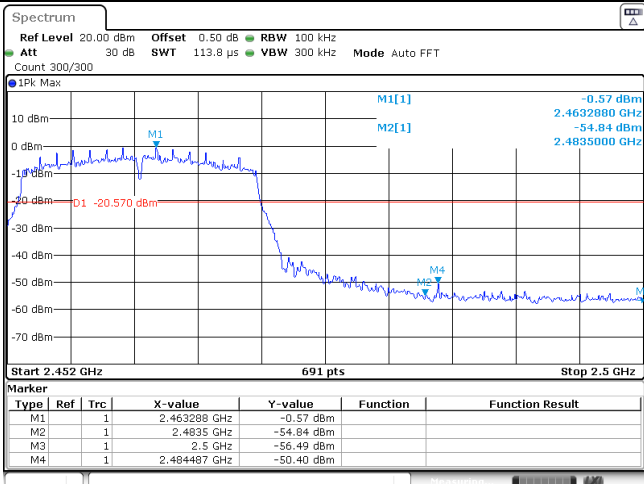




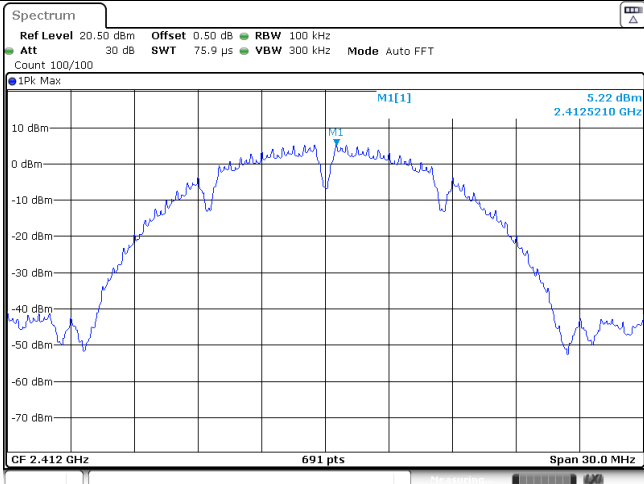
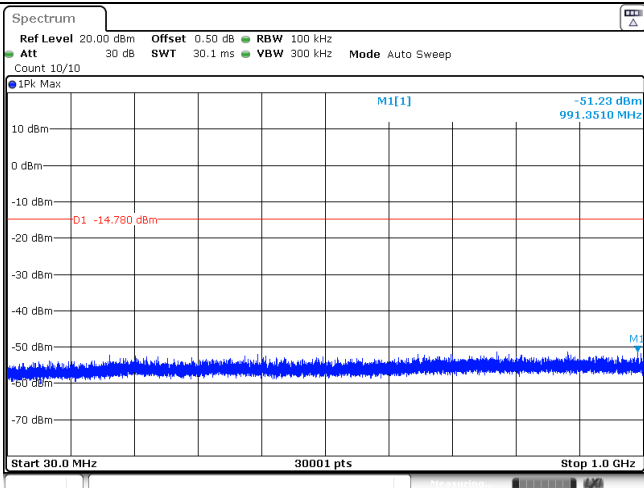
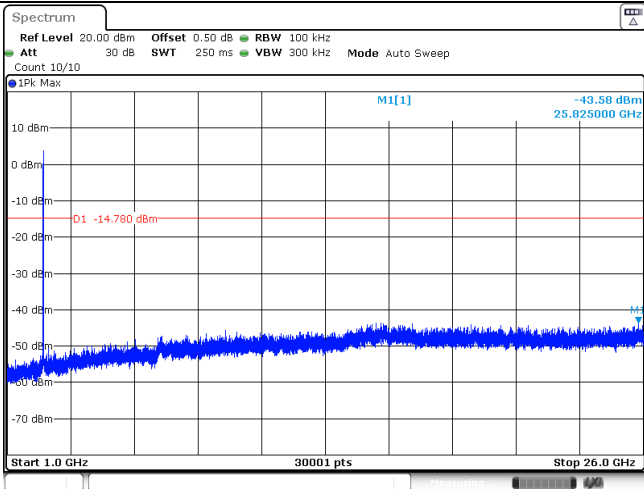
Appendix F: Band edge and Spurious Emissions (conducted)

Test Item:	Bandedge	Type:	802.11 b																																										
CH01	 <p>Marker Data for CH01:</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.41155 GHz</td> <td>5.49 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-42.16 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-52.93 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-58.40 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.397003 GHz</td> <td>-40.19 dBm</td> <td></td> <td></td> </tr> </tbody> </table>			Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.41155 GHz	5.49 dBm			M2	1		2.4 GHz	-42.16 dBm			M3	1		2.39 GHz	-52.93 dBm			M4	1		2.31 GHz	-58.40 dBm			M5	1		2.397003 GHz	-40.19 dBm		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																							
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CH11	 <p>Marker Data for CH11:</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.461482 GHz</td> <td>5.14 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4835 GHz</td> <td>-53.71 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.5 GHz</td> <td>-57.13 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.4890087 GHz</td> <td>-51.77 dBm</td> <td></td> <td></td> </tr> </tbody> </table>			Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.461482 GHz	5.14 dBm			M2	1		2.4835 GHz	-53.71 dBm			M3	1		2.5 GHz	-57.13 dBm			M4	1		2.4890087 GHz	-51.77 dBm									
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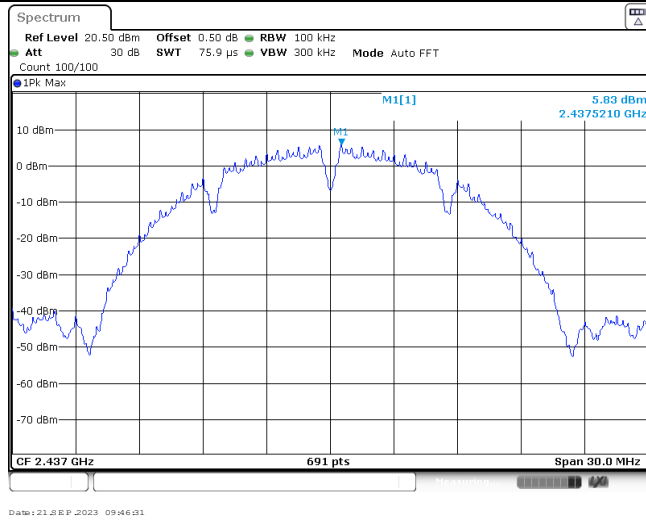
Test Item:	Bandedge	Type:	802.11 g																																										
CH01	<p>Spectrum Ref Level 20.00 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 246.5 μs VBW 300 kHz Mode Auto FFT Count 300/300</p> <p>1PK Max</p> <p>10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm</p> <p>M1[1] -0.93 dBm 2.414460 GHz M2[1] -45.69 dBm 2.400000 GHz</p> <p>D1 -20.930 dBm</p> <p>Start 2.31 GHz 691 pts Stop 2.422 GHz</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td>1</td> <td>2.41446 GHz</td> <td>-0.93 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td>1</td> <td>2.4 GHz</td> <td>-45.69 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td>1</td> <td>2.39 GHz</td> <td>-54.91 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td>1</td> <td>2.31 GHz</td> <td>-56.95 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td>1</td> <td>2.399925 GHz</td> <td>-43.85 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21 SEP 2023 10:14:50</p>			Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1	1	2.41446 GHz	-0.93 dBm			M2	1	1	2.4 GHz	-45.69 dBm			M3	1	1	2.39 GHz	-54.91 dBm			M4	1	1	2.31 GHz	-56.95 dBm			M5	1	1	2.399925 GHz	-43.85 dBm		
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M5	1	1	2.399925 GHz	-43.85 dBm																																									
CH11	<p>Spectrum Ref Level 20.00 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 113.8 μs VBW 300 kHz Mode Auto FFT Count 300/300</p> <p>1PK Max</p> <p>10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm</p> <p>M1[1] -1.63 dBm 2.4569670 GHz M2[1] -53.49 dBm 2.4835000 GHz</p> <p>D1 -21.630 dBm</p> <p>Start 2.452 GHz 691 pts Stop 2.5 GHz</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td>1</td> <td>2.456967 GHz</td> <td>-1.63 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td>1</td> <td>2.4835 GHz</td> <td>-53.49 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td>1</td> <td>2.5 GHz</td> <td>-56.75 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td>1</td> <td>2.484487 GHz</td> <td>-51.00 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21 SEP 2023 09:59:42</p>			Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1	1	2.456967 GHz	-1.63 dBm			M2	1	1	2.4835 GHz	-53.49 dBm			M3	1	1	2.5 GHz	-56.75 dBm			M4	1	1	2.484487 GHz	-51.00 dBm									
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Test Item:	Bandedge	Type:	802.11 n(HT20)																																										
CH01	 <p>Spectrum Ref Level 20.00 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 246.5 μs VBW 300 kHz Mode Auto FFT Count 300/300</p> <p>Start 2.31 GHz 691 pts Stop 2.422 GHz</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.41074 GHz</td> <td>-0.28 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-45.65 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-53.07 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-59.04 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.399925 GHz</td> <td>-43.60 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21 SEP 2023 10:03:29</p>			Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.41074 GHz	-0.28 dBm			M2	1		2.4 GHz	-45.65 dBm			M3	1		2.39 GHz	-53.07 dBm			M4	1		2.31 GHz	-59.04 dBm			M5	1		2.399925 GHz	-43.60 dBm		
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CH11	 <p>Spectrum Ref Level 20.00 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 113.8 μs VBW 300 kHz Mode Auto FFT Count 300/300</p> <p>Start 2.452 GHz 691 pts Stop 2.5 GHz</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.463288 GHz</td> <td>-0.57 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4835 GHz</td> <td>-54.84 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.5 GHz</td> <td>-56.49 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.484487 GHz</td> <td>-50.40 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21 SEP 2023 10:06:37</p>			Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.463288 GHz	-0.57 dBm			M2	1		2.4835 GHz	-54.84 dBm			M3	1		2.5 GHz	-56.49 dBm			M4	1		2.484487 GHz	-50.40 dBm									
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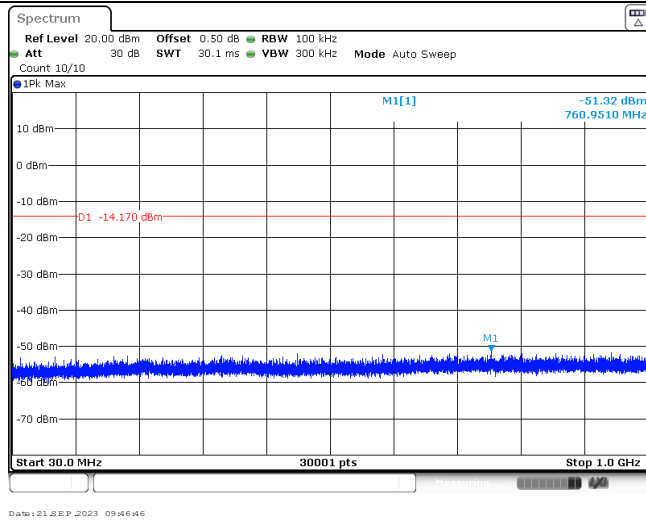
Test Item:	Bandedge	Type:	802.11 n(HT40)																																										
CH03	<p>Spectrum Ref Level 20.00 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 303.4 μs VBW 300 kHz Mode Auto FFT Count 265/300</p> <p>1PK Max</p> <p>10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm</p> <p>M1[1] -2.57 dBm 2.419550 GHz M2[1] -44.34 dBm 2.400000 GHz M1 2.400000 GHz</p> <p>D1 -22.570 dBm</p> <p>Start 2.31 GHz 691 pts Stop 2.442 GHz</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.41955 GHz</td> <td>-2.57 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-44.34 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-50.58 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-58.32 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.39953 GHz</td> <td>-44.36 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21 SEP 2023 10:08:34</p>			Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.41955 GHz	-2.57 dBm			M2	1		2.4 GHz	-44.34 dBm			M3	1		2.39 GHz	-50.58 dBm			M4	1		2.31 GHz	-58.32 dBm			M5	1		2.39953 GHz	-44.36 dBm		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																							
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M5	1		2.39953 GHz	-44.36 dBm																																									
CH09	<p>Spectrum Ref Level 20.00 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 1.1 ms VBW 300 kHz Mode Auto Sweep Count 300/300</p> <p>1PK Max</p> <p>10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm</p> <p>M1[1] -2.74 dBm 2.4494670 GHz M2[1] -50.54 dBm 2.4835000 GHz M1 2.4835000 GHz</p> <p>D1 -22.740 dBm</p> <p>Start 2.432 GHz 691 pts Stop 2.5 GHz</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.449467 GHz</td> <td>-2.74 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4835 GHz</td> <td>-50.54 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.5 GHz</td> <td>-52.12 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.4869913 GHz</td> <td>-49.22 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21 SEP 2023 10:11:27</p>			Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.449467 GHz	-2.74 dBm			M2	1		2.4835 GHz	-50.54 dBm			M3	1		2.5 GHz	-52.12 dBm			M4	1		2.4869913 GHz	-49.22 dBm									
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M4	1		2.4869913 GHz	-49.22 dBm																																									

Test Item:	SE	Type:	802.11b
<p>CH01 Reference level</p>			
<p>CH01 30MHz~1000MHz</p>			
<p>CH01 1GHz~26GHz</p>			

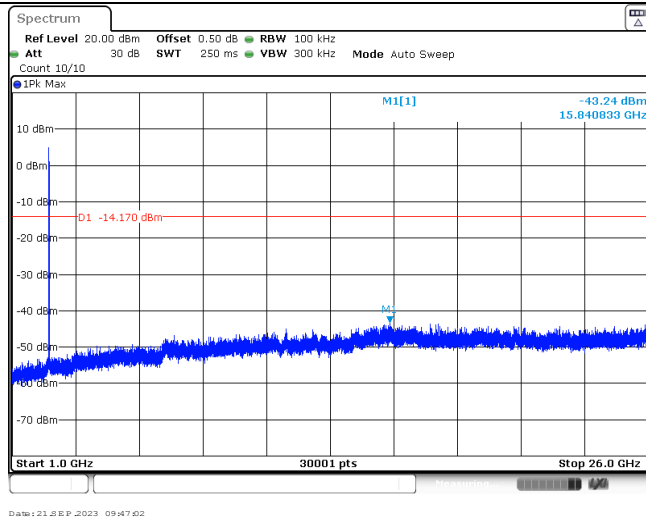
CH06
Reference level



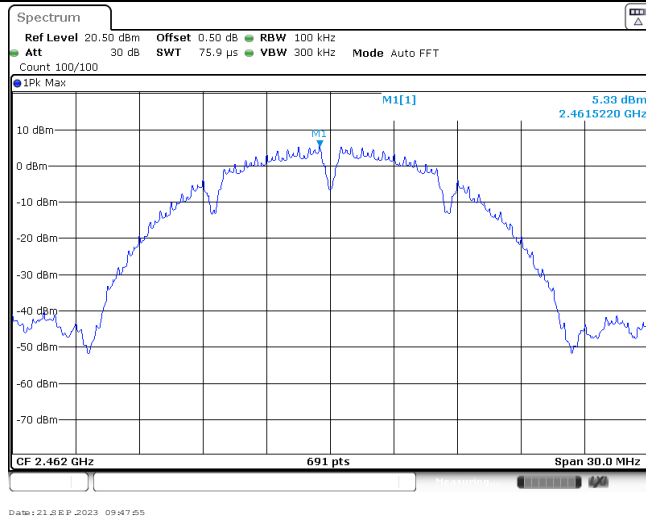
CH06
30MHz~1000MHz



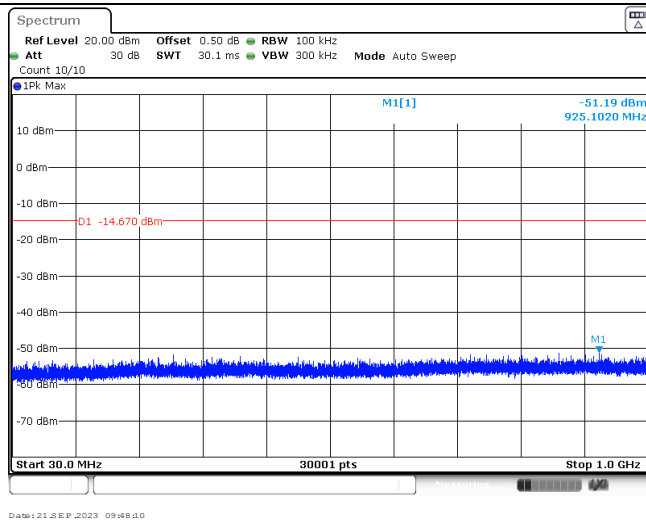
CH06
1GHz~26GHz



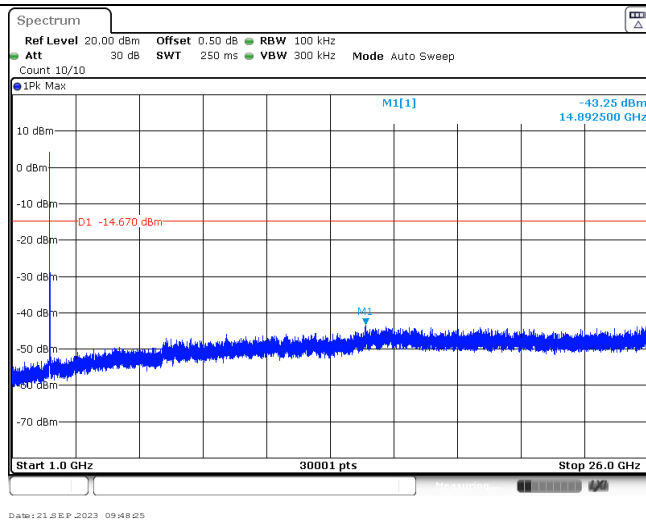
CH11
Reference level

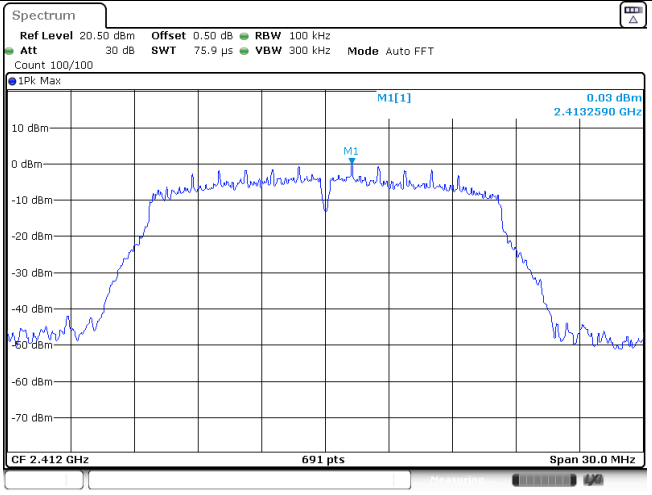
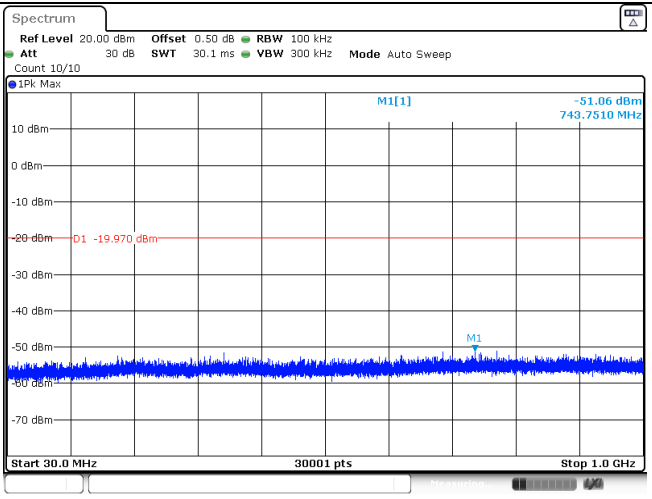
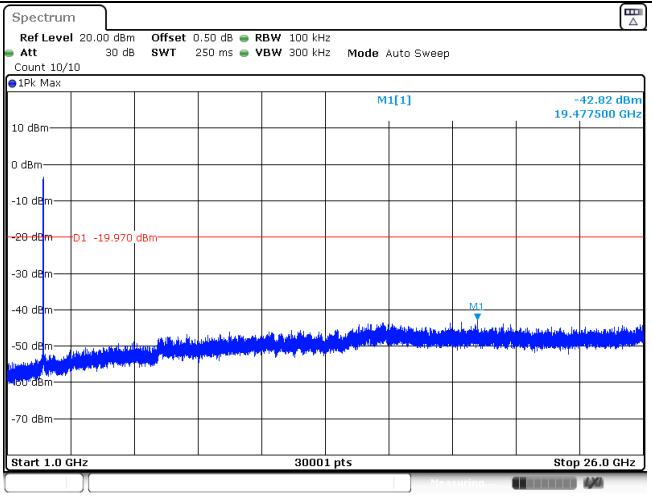


CH11
30MHz~1000MHz

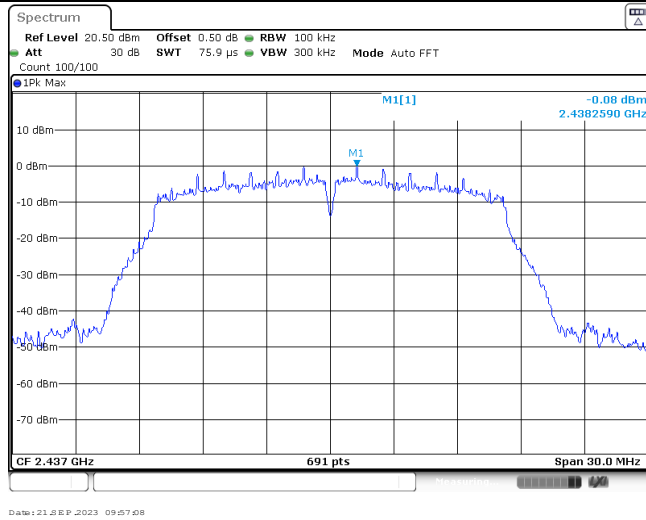


CH11
1GHz~26GHz

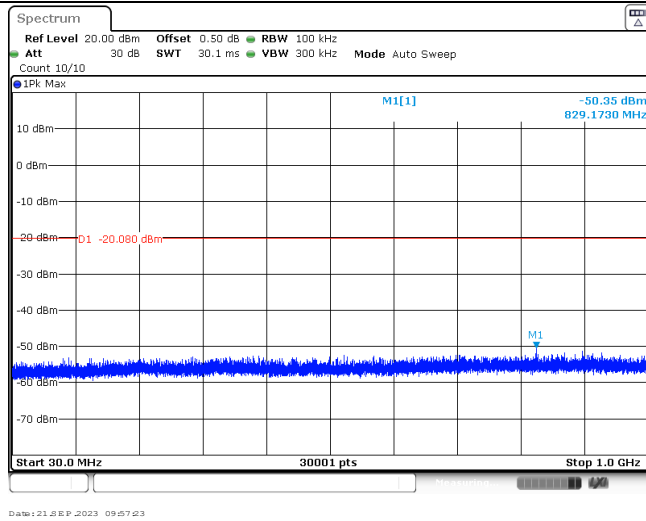


Test Item:	SE	Type:	802.11g
<p>CH01 Reference level</p>		 <p>Spectrum</p> <p>Ref Level 20.50 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT Count 100/100</p> <p>1Pk Max</p> <p>M1[1] 0.03 dBm 2.4132590 GHz</p> <p>M1</p> <p>CF 2.412 GHz 691 pts Span 30.0 MHz</p> <p>Date: 21 SEP 2023 10:14:55</p>	
<p>CH01 30MHz~1000MHz</p>		 <p>Spectrum</p> <p>Ref Level 20.00 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10</p> <p>1Pk Max</p> <p>M1[1] -51.06 dBm 743.7510 MHz</p> <p>M1</p> <p>D1 -19.970 dBm</p> <p>Start 30.0 MHz 30001 pts Stop 1.0 GHz</p> <p>Date: 21 SEP 2023 10:15:10</p>	
<p>CH01 1GHz~26GHz</p>		 <p>Spectrum</p> <p>Ref Level 20.00 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10</p> <p>1Pk Max</p> <p>M1[1] -42.82 dBm 19.477500 GHz</p> <p>M1</p> <p>D1 -19.970 dBm</p> <p>Start 1.0 GHz 30001 pts Stop 26.0 GHz</p> <p>Date: 21 SEP 2023 10:15:26</p>	

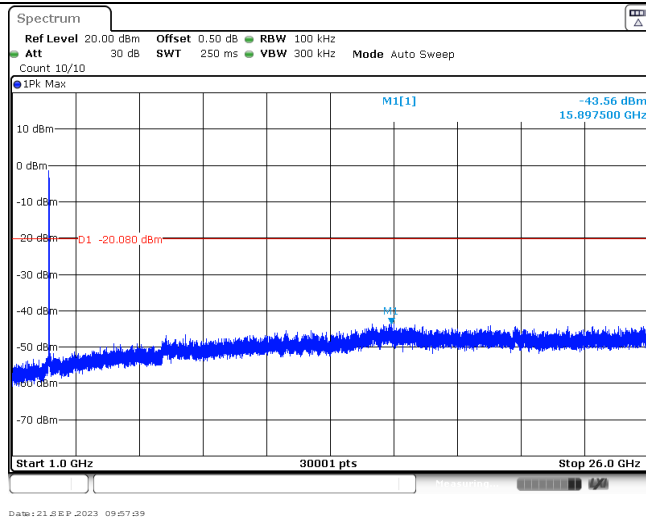
CH06
Reference level



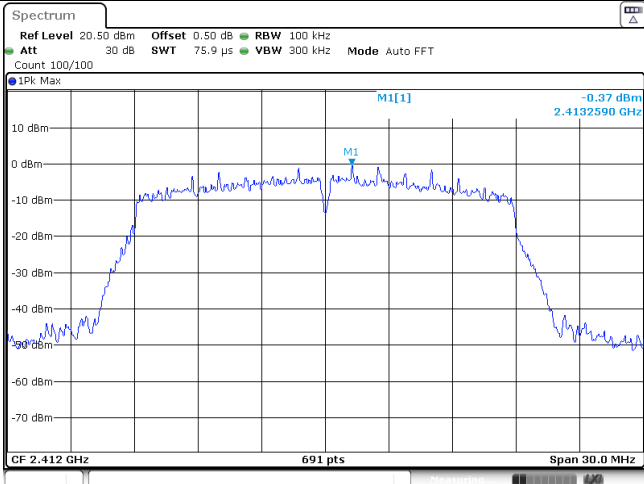
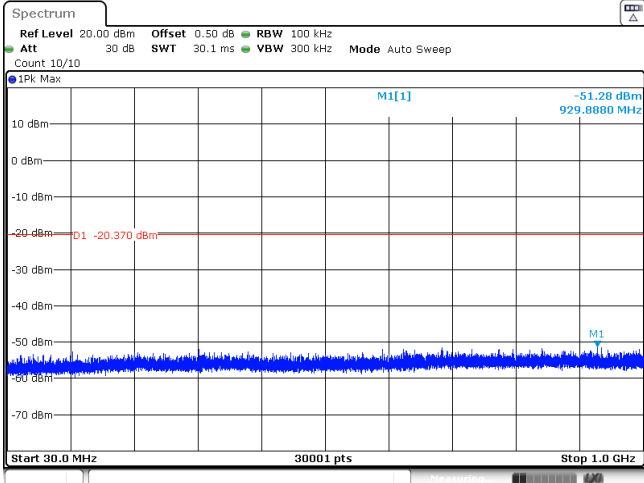
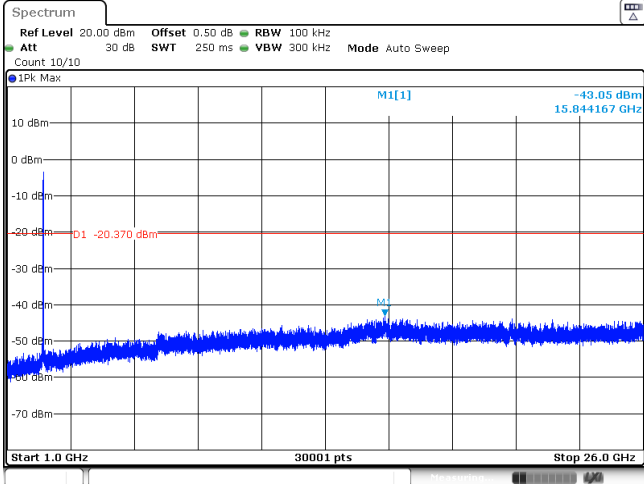
CH06
30MHz~1000MHz



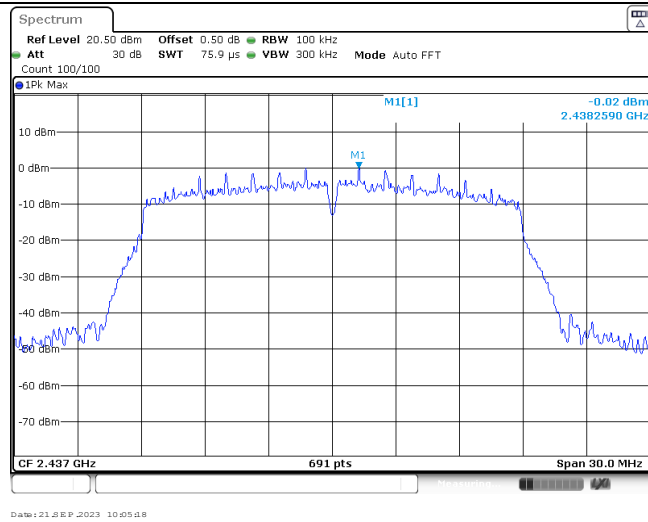
CH06
1GHz~26GHz



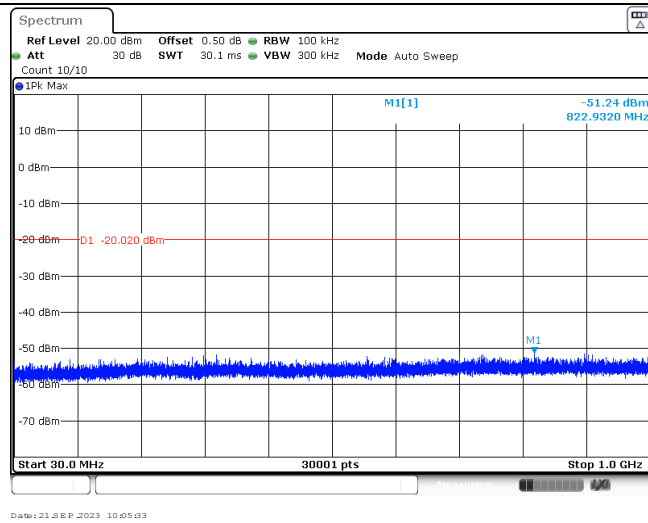
<p>CH11 Reference level</p>	
<p>CH11 30MHz~1000MHz</p>	
<p>CH11 1GHz~26GHz</p>	

Test Item:	SE	Type:	802.11n(HT20)
<p>CH01 Reference level</p>			
<p>CH01 30MHz~1000MHz</p>			
<p>CH01 1GHz~26GHz</p>			

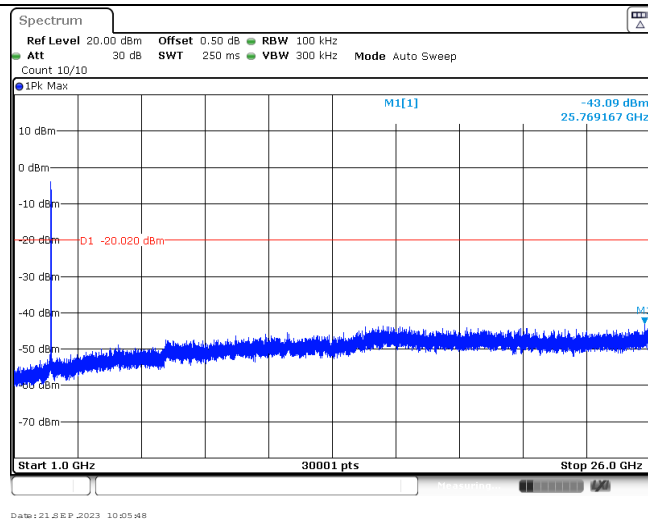
CH06
Reference level



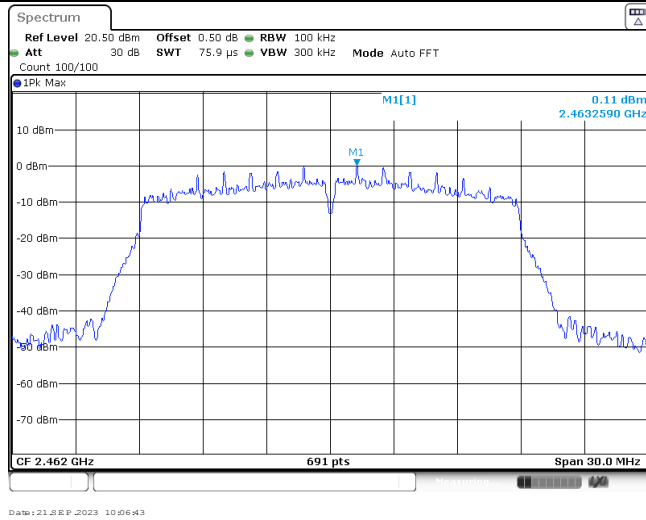
CH06
30MHz~1000MHz



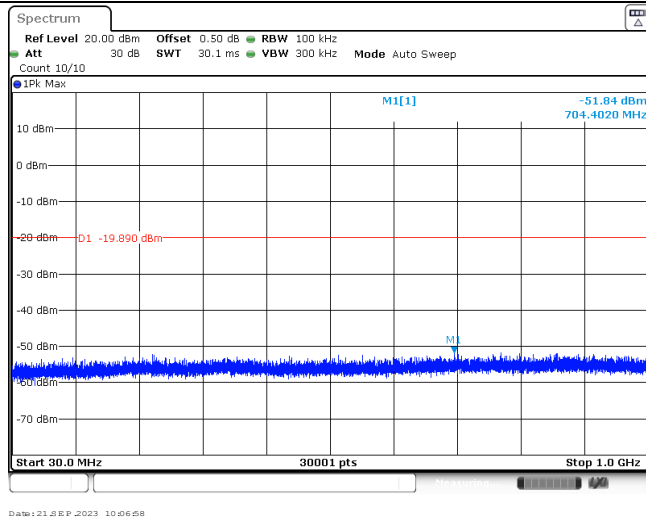
CH06
1GHz~26GHz



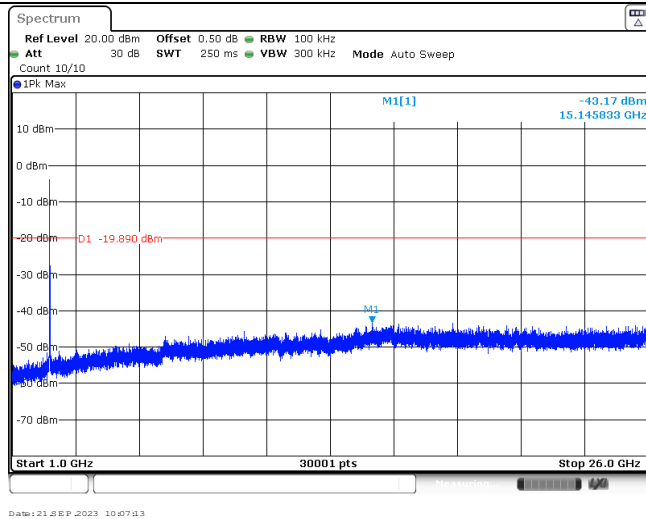
CH11
Reference level

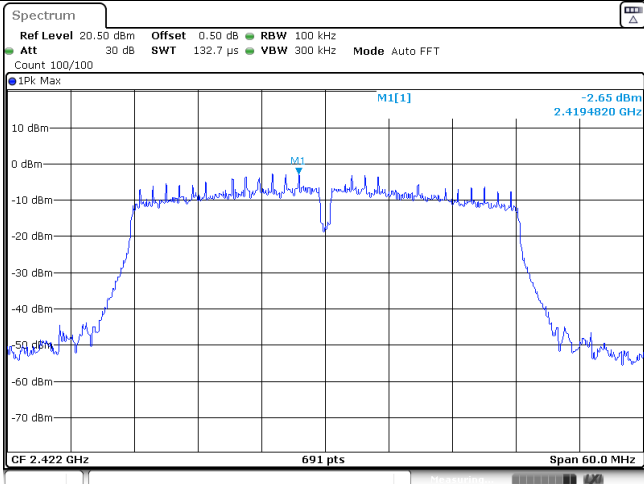
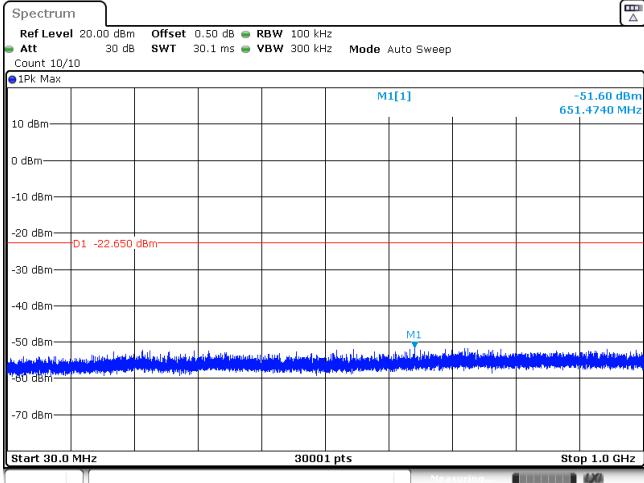
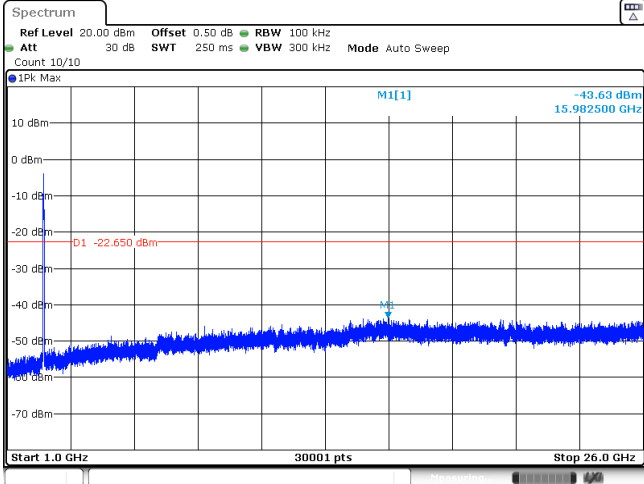


CH11
30MHz~1000MHz



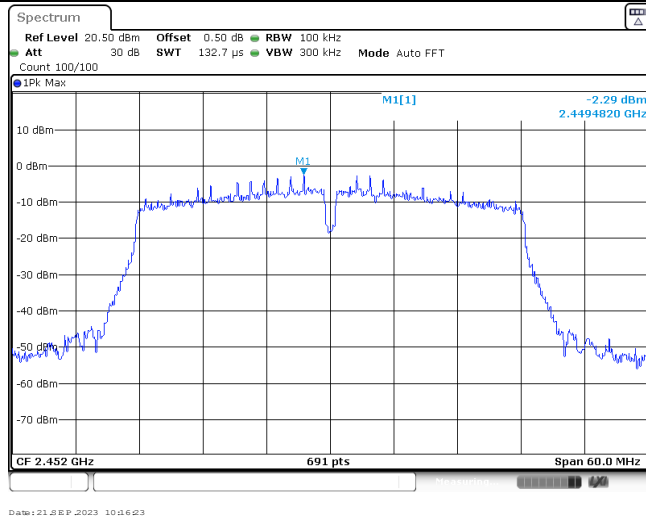
CH11
1GHz~26GHz



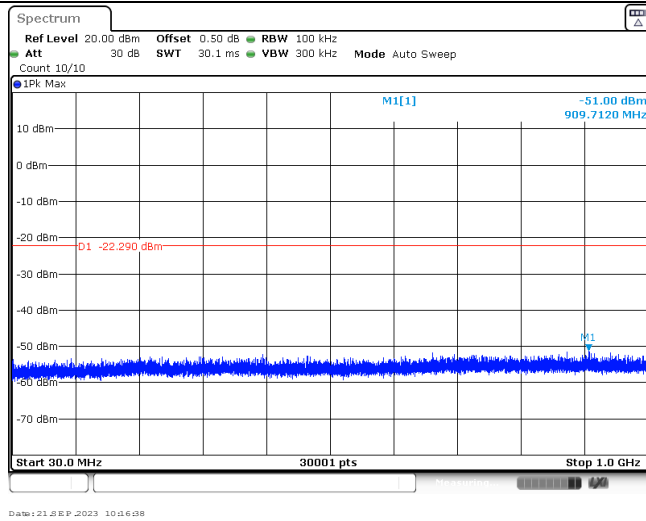
Test Item:	SE	Type:	802.11n(HT40)
<p>CH03 Reference level</p>			
<p>CH03 30MHz~1000MHz</p>			
<p>CH03 1GHz~26GHz</p>			

<p>CH06 Reference level</p>	<p>Spectrum Ref Level 20.50 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 132.7 μs VBW 300 kHz Mode Auto FFT Count 100/100 1Pk Max M1[1] -2.43 dBm 2.4344820 GHz CF 2.437 GHz 691 pts Span 60.0 MHz Date: 21 SEP 2023 10:10:07</p>
<p>CH06 30MHz~1000MHz</p>	<p>Spectrum Ref Level 20.00 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1Pk Max M1[1] -50.85 dBm 672.6840 MHz D1 -22.430 dBm Start 30.0 MHz 30001 pts Stop 1.0 GHz Date: 21 SEP 2023 10:10:02</p>
<p>CH06 1GHz~26GHz</p>	<p>Spectrum Ref Level 20.00 dBm Offset 0.50 dB RBW 100 kHz Att 30 dB SWT 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1Pk Max M1[1] -43.59 dBm 15.550833 GHz D1 -22.430 dBm Start 1.0 GHz 30001 pts Stop 26.0 GHz Date: 21 SEP 2023 10:10:08</p>

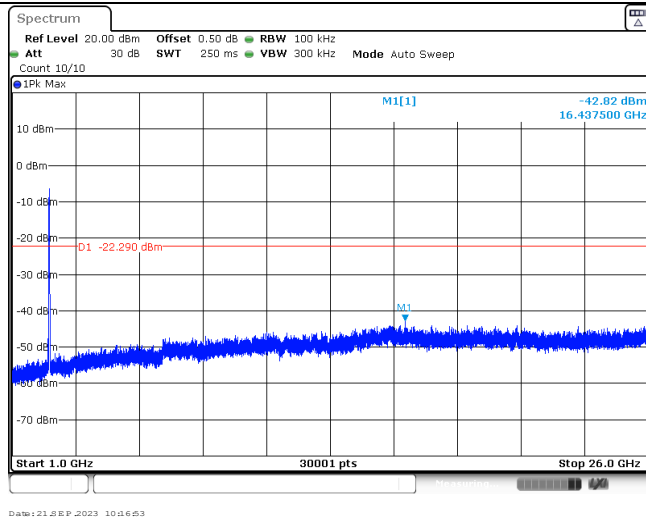
CH09
Reference level



CH09
30MHz~1000MHz



CH09
1GHz~26GHz



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