

Scan QR code
verification of authenticity

FCC PART 15 SUBPART C FCC PART 15.247 TEST REPORT

FCC ID:2BS3LBIT144**Report No:** CTSL2531120001ER**Product Name:** Bitcoin Miner**Main Test Model:** BIT144**Series Models:****Applicant:** DONGGUAN FLY FAR INDUSTRIAL INVESTMENT CO

A sample of this product was tested and found to be in compliance with
FCC PART 15C, FCC PART 15 SUBPART C (15.247).

Any reproduction of this document must be done in full. No single part of this document may
be reproduced without permission from CTSL. All Test Data Presented in this report is only
applicable to presented Test sample.

CTSL Testing (Dongguan) Co., Ltd.

Main company address: Hexing Building, Houjie Avenue, Houjie Road Houjie Town,
Guangdong Province Dongguan City, People's Republic of China

Test Report

FCC ID:2BS3LBIT144

Applicant Name	DONGGUAN FLY FAR INDUSTRIAL INVESTMENT CO				
Applicant Address	Room1507, Building6, Dongcheng Wanda Plaza, No.208 Dongcheng Section, Dongzong Rd, Dongcheng Street, DongGuan, Guang Dong, China 523000				
Manufacturer Name	DONGGUAN FLY FAR INDUSTRIAL INVESTMENT CO				
Manufacturer Address	Room1507, Building6, Dongcheng Wanda Plaza, No.208 Dongcheng Section, Dongzong Rd, Dongcheng Street, DongGuan, Guang Dong, China 523000				
Trade Mark	Olele				
Product name	Bitcoin Miner				
Main Test Model	BIT144				
Series Models					
Standard	FCC Part 15 Subpart C (15.247) ANSI C63.10:2020 FCC KDB 558074 D01 15.247 Meas Guidance v05r02				
Test Location	ISO/IEC 17025 by ILAC-MRA is A2LA 7556.01 CTSL Testing (Dongguan) Co., Ltd. Room 112, Building 1, No. 15, Jiaoyuansongshan Hetian Village, Houjie Town Dongguan City, Guangdong, People's Republic of China				
Receipt Date	2025.12.01	Test period	2025.12.01-2025.12.05	Issue Date	2025.12.06
Conclusion	The equipment under test was found to be compliance with the requirements of the standards applied.				
Performs Testing:	Ethan Zhao				
Test Report Reviewer:	Steve Qin				
Test Report Authorizer:	Alan Li				

TABLE OF CONTENTS

Description	Page
TEST REPORT VERIFICATION.....	3
1. GENERAL INFORMATION	5
1.1. General Description of EUT (Equipment Under Test).....	5
1.2. Antenna Information	6
1.3. Information of RF Cable	6
2. SUMMARY OF TEST	7
2.1. Test Standards	7
2.2. Summary of test result	7
2.3. Test Facilities	8
2.4. Measurement uncertainty	9
2.5. Block Diagram	10
2.6. Assistant equipment used for test	10
2.7. Test mode	11
2.8. Channel List	12
2.9. Power Setting of Test Software	12
2.10. Test Equipment	13
3. DUTY CYCLE	15
3.1. Limit	15
3.2. Test Setup	15
3.3. Spectrum Analyzer Setting	15
3.4. Test Procedure	15
3.5. Test Result	16
3.6. Original Test record	17
4. 6DB BANDWIDTH	18
4.1. Limit	18
4.2. Test Setup	18
4.3. Spectrum Analyzer Setting	18
4.4. Test Procedure	18
4.5. Test Result	19
4.6. Original Test record	20
5. 99% BANDWIDTH	22
5.1. Limit	22
5.2. Test Setup	22
5.3. Spectrum Analyzer Setting	22
5.4. Test Procedure	22
5.5. Test Data	23
5.6. Original Test record	24
6. MAXIMUM CONDUCTED OUTPUT POWER	26
6.1. Limit	26
6.2. Test Setup	26
6.3. Spectrum Analyzer Setting	26
6.4. Test Procedure	26

6.5. Test Result	27
6.6. Original Test record	28
7. POWER SPECTRAL DENSITY	30
7.1. Limit	30
7.2. Test Setup	30
7.3. Spectrum Analyzer Setting	30
7.4. Test Procedure	30
7.5. Test Result	31
7.6. Original Test record	32
8. CONDUCTED BAND EDGE	34
8.1. Limit	34
8.2. Test Setup	34
8.3. Spectrum Analyzer Setting	34
8.4. Test Procedure	34
8.5. Test Result	35
9. CONDUCTED SPURIOUS EMISSIONS	39
9.1. Limit	39
9.2. Test Setup	39
9.3. Spectrum Analyzer Setting	39
9.4. Test Procedure	39
9.5. Test Result	40
10. RADIATED SPURIOUS EMISSIONS AND BAND EDGE	46
10.1. Limit	46
10.2. Test Setup	47
10.3. Spectrum Analyzer Setting	48
10.4. Test Procedure	50
10.5. Test Result	51
11. AC POWER LINE CONDUCTED EMISSIONS	65
11.1. Limit	65
11.2. Test Setup	65
11.3. Spectrum Analyzer Setting	65
11.4. Test Procedure	66
11.5. Test Result	67
12. ANTENNA REQUIREMENTS	71
12.1. Limit	71
12.2. Test Result	71
13. APPENDIX	72

1. GENERAL INFORMATION

1.1. General Description of EUT (Equipment Under Test)

Product Information	
Product Name	: Bitcoin Miner
Main Test Model	: BIT144
Series Models	: --
Power supply	: DC 12V by Switching Power Supply Switching Power Supply Input: 100-240V~ 50/60Hz 2.5A Max Input: DC 12V, 10.0A 120W
Battery	: --
Software Version	: v1.0.33
Hardware Version	: re5.1
Equipment Under Test	
Testing sample ID	: CTSL2531120001-S1 (Engineer sample) CTSL2531120001-S2 (Normal sample)
Test supplied	: ☒ supplied by the manufacturer ☐ supplied by the lab (Auxiliary test supplied by test Lab)
Switching Power Supply information	: Switching Power Supply Input: 100-240V~ 50/60Hz 2.5A Max Input: DC 12V, 10.0A 120W
Wireless Specification	
Supported Type	: 2.4G WLAN: 802.11b/802.11g/802.11n(HT20)/802.11n(HT40)
Modulation Type	: IEEE 802.11b mode: DSSS(CCK/QPSK/BPSK) IEEE 802.11g mode: OFDM (BPSK/QPSK/16QAM/64QAM) IEEE 802.11n HT20& IEEE 802.11n HT40 mode: OFDM (BPSK/QPSK/16QAM/64QAM)
Transmit data rate (WLAN)	: IEEE 802.11b: 1/2/5.5/11Mbps IEEE 802.11g: 6/9/12/18/24/36/48/54Mbps IEEE 802.11n HT20: up to 72.2Mbps
Operation frequency	: IEEE 802.11b/g/n HT20: 2412MHz-2462MHz IEEE 802.11n HT40: 2422MHz~2452MHz
Number of channels	: IEEE 802.11b/g/n HT20: 11 Channels IEEE 802.11n HT40: 7 Channels
Channel separation	: 5MHz
Max Output Power (PEAK)	: 21.0(±1.0) dBm
Antenna Gain& type	: Refer to Section 1.2 of the report.
Sample Type	: Prototype production
Type of Device	: ☐ Portable Device; ☒ Mobile Device; ☐ Modular Device

Note: For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

1.2. Antenna Information

Ant No.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	2400-2483.5MHz	XSM-12010000 W14	PCB Antenna	N/A	1.6
Note: 1. The antenna gain is declared by the customer and the laboratory is not responsible for the accuracy of the antenna gain. 2.The test results of this report only apply to the sample as received.					

1.3. Information of RF Cable

Cable Loss(dB)	Provided by
1.0	DONGGUAN FLY FAR INDUSTRIAL INVESTMENT CO
Note: 1. The customer declared the loss value of the RF Cable. and the test results of this report only apply to the sample as received. 2.The laboratory is not responsible for the accuracy of the cable loss.	

2. SUMMARY OF TEST

2.1. Test Standards

FCC Rules Part 15.247: Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz.

ANSI C63.10:2020: American National Standard for Testing Unlicensed Wireless Devices
FCC KDB 558074 D01 15.247 Meas Guidance v05r02

2.2. Summary of test result

No.	Description of Test Item	FCC Standard Section	Results
1	6dB Bandwidth & 99% Bandwidth	§15.247(a)(2)	PASS
2	Maximum Conducted Output Power	15.247(b)(3)	PASS
3	Power Spectral Density	15.247(e)	PASS
4	Conducted Band Edge	15.247(d)	PASS
5	Conducted Spurious Emissions	15.247(d)	PASS
6	Radiated Spurious Emissions and Band Edge	15.109/ 15.205/ 15.209/ 15.247(d)	PASS
7	AC Power Line Conducted Emissions	15.207(a)	PASS
8	Antenna Requirement	15.203	PASS

Note: "N/A" denotes test is not applicable in this test report.

2.3. Test Facilities

EMC Lab :

A2LA Certificate Number: 7556.01;
CTSL Testing (Dongguan) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.10 and CISPR 16-1-4:2010.

FCC-Registration No.: 0037614732;
Test Firm Registration Number:750639;
CTSL Testing (Dongguan) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

Industry Canada Registration Number. Is: 34801;
CAB identifier: CN0192;
CTSL Testing (Dongguan) Co., Ltd. The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

Name of Firm : CTSL Testing (Dongguan) Co.,Ltd.

EMC test location/satellite location:

Room 112, Building 1, No. 15, Jiaoyuansongshan Hetian Village, Houjie Town Dongguan City, Guangdong, People's Republic of China City, Guangdong, China

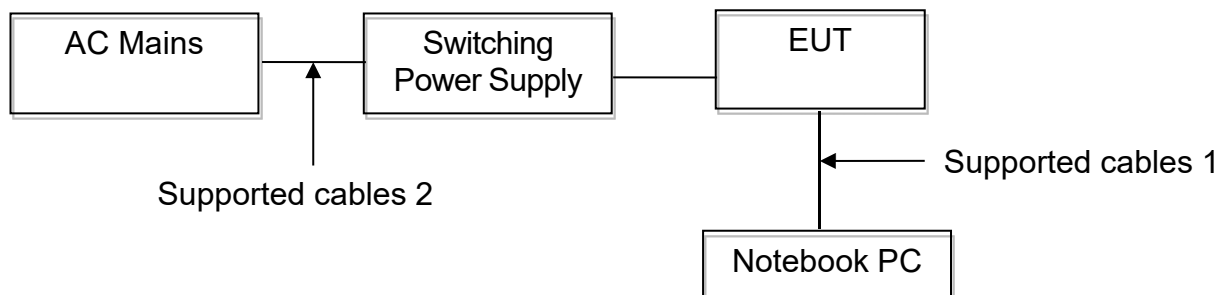
2.4. Measurement uncertainty

Test Item	Uncertainty
Uncertainty for Conduction emission test	$\pm 3.48\text{dB}$
Uncertainty for spurious emissions test (Below 30MHz)	$\pm 1.62\text{ dB}$
Uncertainty for spurious emissions test (30MHz-1GHz)	$\pm 4.60\text{ dB(Polarize: H)}$
	$\pm 4.68\text{ dB(Polarize: V)}$
Uncertainty for spurious emissions test (1GHz to 25GHz)	$\pm 4.96\text{dB}$
Uncertainty for radio frequency	7×10^{-8}
Uncertainty for conducted RF Power	1.08dB
Uncertainty for Power density test	0.26dB

Note: This uncertainty represents an expanded uncertainty expressed at approximately The 95% confidence level using a coverage factor of k=2.

2.5. Block Diagram

For radiated emissions test: EUT was placed on a turn table, which is 0.8 (or 1.5) meter high above ground. EUT was beset into Bluetooth test mode by software before test.



(EUT: Bitcoin Miner)

2.6. Assistant equipment used for test

Item	Equipment	Brand	Model Name/Type No.	FCC ID	Series No.
1	Notebook PC	-	Inspiron 14R-5421 (Manufacturer: Dell)	-	25TZHW1
2	Switching Power Supply	-	BIT144	-	-

Supported cables				
Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	0.5m	USB Extension Cable, supplied by the Lab.
2	NO	NO	1.2m	AC Line (3Pin) supplied by the manufacturer

2.7. Test mode

Combining all the rates, modulations, and packet types, the Pre-scans had been carried out. The worst-case test mode was selected for the final test as listed below.

Test Item	Mode	Data Rate	Test Channel
6dB Bandwidth	IEEE 802.11b	1Mbps	Low / Middle / High
	IEEE 802.11g	6Mbps	Low / Middle / High
	IEEE 802.11n HT20	MCS0	Low / Middle / High
	IEEE 802.11n HT40	MCS0	Low / Middle / High
Maximum Peak Output Power	IEEE 802.11b	1Mbps	Low / Middle / High
	IEEE 802.11g	6Mbps	Low / Middle / High
	IEEE 802.11n HT20	MCS0	Low / Middle / High
	IEEE 802.11n HT40	MCS0	Low / Middle / High
Power Spectral Density	IEEE 802.11b	1Mbps	Low / Middle / High
	IEEE 802.11g	6Mbps	Low / Middle / High
	IEEE 802.11n HT20	MCS0	Low / Middle / High
	IEEE 802.11n HT40	MCS0	Low / Middle / High
Conducted Band Edge	IEEE 802.11b	1Mbps	Low / High
	IEEE 802.11g	6Mbps	Low / High
	IEEE 802.11n HT20	MCS0	Low / High
	IEEE 802.11n HT40	MCS0	Low / High
Conducted Spurious Emissions	IEEE 802.11b	1Mbps	Low / Middle / High
	IEEE 802.11g	6Mbps	Low / Middle / High
	IEEE 802.11n HT20	MCS0	Low / Middle / High
	IEEE 802.11n HT40	MCS0	Low / Middle / High
Radiated Spurious Emissions (Below 1GHz)	IEEE 802.11b	1Mbps	Low / Middle / High
	IEEE 802.11g	6Mbps	Low / Middle / High
	IEEE 802.11n HT20	MCS0	Low / Middle / High
	IEEE 802.11n HT40	MCS0	Low / Middle / High
Radiated Spurious Emissions (Above 1GHz)	IEEE 802.11b	1Mbps	Low / Middle / High
	IEEE 802.11g	6Mbps	Low / Middle / High
	IEEE 802.11n HT20	MCS0	Low / Middle / High
	IEEE 802.11n HT40	MCS0	Low / Middle / High
Radiated Band Edge	IEEE 802.11b	1Mbps	Low / High
	IEEE 802.11g	6Mbps	Low / High
	IEEE 802.11n HT20	MCS0	Low / High
	IEEE 802.11n HT40	MCS0	Low / High
AC Power Line Conducted Emissions	IEEE 802.11b	1Mbps	Low / Middle / High
	IEEE 802.11g	6Mbps	Low / Middle / High
	IEEE 802.11n HT20	MCS0	Low / Middle / High
	IEEE 802.11n HT40	MCS0	Low / Middle / High

Note: In radiated measurement, the EUT had been pre-scan on the positioned of each 3 axis (X, Y, Z), the worst case was found when positioned on **X-plane**.

2.8. Channel List

IEEE 802.11b/802.11g/802.11n HT20							
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
01	2412	02	2417	03	2422	04	2427
05	2432	06	2437	07	2442	08	2447
09	2452	10	2457	11	2462		

IEEE 802.11n HT40							
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
03	2422	40	2427	05	2432	06	2437
07	2442	08	2457	09	2452		

2.9. Power Setting of Test Software

Software Name	Pandora_R22.24.1701		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b Setting	5	5	5
IEEE 802.11g Setting	5	5	5
IEEE 802.11n HT20 Setting	5	5	5
Frequency (MHz)	2422	2437	2452
IEEE 802.11n HT40 Setting	5	5	5

Note: This information is provided by the applicant.

2.10. Test Equipment

For Conducted Emission Test						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESCI 3	AT005	GUANGZHOU NEM	May 16,25	May 15,26
LISN	Rohde & Schwarz	ENV216	AT006	LISAI	July 31,25	July 30,26
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	AT007	CCIC (Shenzhen)	July 10,25	July 09,26
CE Cable	Times Microwave	LMR195UF-N MNM-1.50M	AT041	GUANGZHOU NEM	May 16,25	May 15,26
Test Software	FARAD	EZ-EMC Ver.3A1.1+	N/A	N/A	N/A	N/A

For Radiated Emission Test (9kHz-30MHz)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
EMI TestReceiver	Rohde& Schwarz	ESCI 7	AT001	Ti Group	July 31,24	July 30,26
Active Loop Antenna	ZHINAN	ZN30900C	AT063	LISAI	Aug 03,24	Aug 02,26
Test Software	FARAD	EZ-EMC Ver.3A1.1+	N/A	N/A	N/A	N/A
9kHz-30MHz Cable	Times Microwave	LMR195UF-N MNM-9M	AT045	GUANGZHOU NEM	May 16,25	May 15,26

For Radiated Emissions Test (30MHz-1000MHz)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
EMI Test Receiver	Rohde& Schwarz	ESCI 7	AT001	Ti Group	Jun 12,25	Jun 11,26
Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	AT002	LISAI	Aug 03,24	Aug 02,26
Test Software	FARAD	EZ-EMC Ver.3A1.1+	N/A	N/A	May 16,25	May 15,26
30-1000MHz Cable	Times Microwave Systems	LMR195UF-N MRNMR-3.00M+ LMR400UF-N MNM-3.00M+ LMR400UF-N MNM-3.00M	AT042+AT043+AT044	GUANGZHOU NEM	May 16,25	May 15,26

For Radiated Emission test (Above 1000MHz)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
Horn Antenna 1-18G	SCHWARZBECK	BBHA 9120 D	AT003	Shenzhen Academy of Metrology & Quality Inspection	Sep 23,24	Sep 22,26
Horn Antenna 18-40GHz	XIBAO	XB-WDB18-40K	AT064	LISAI	Feb 25,25	Feb 24,26
Broadband Preamplifier	SCHWARZBECK	BBV 9718 D	AT004	CCIC (Shenzhen)	July 10,25	July 9,26
Low Noise Amplifier	MWRFTest	DLA8-18-40G-2078	AT065	GUANGZHOU NEM	July 10,25	July 9,26
Spectrum Analyzer 40G	Keysight	N9020B	AT066	GUANGZHOU NEM	May 13,25	May 12,26
Spectrum Analyzer 26.5G	Keysight	N9020A	AT050	GUANGZHOU NEM	Jun 12,25	Jun 11,26
Radio switching unit	TiGroup	SU319	AT055	N/A	N/A	N/A
Filtering unit	TiGroup	SU319F	AT056	N/A	N/A	N/A
Test Software	BL	BL410-E V25.5 en	N/A	N/A	N/A	N/A
Above 1GHz Cable	Times Microwave Systems	SFT205-NMN M-7.0M+ SFT205-NMN M-2.0M	AT057+ AT058	N/A	N/A	N/A

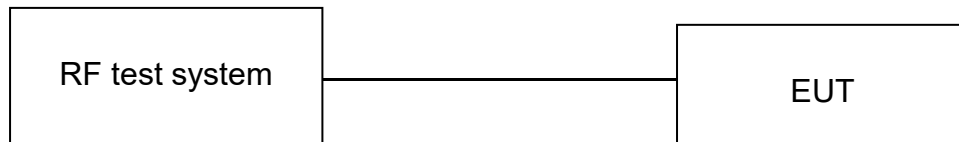
For Connect EUT Antenna Terminal Test (RF Test system)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
Spectrum analyzer	Keysight	N9020A	AT050	GUANGZHOU NEM	Jun 12,25	Jun 11,26
Analog signal source	Keysight	N5173B	AT051	GUANGZHOU NEM	Jun 12,25	Jun 11,26
WIDEBAND RADIO COMMUNICATION TESTER	Rohde&Schwarz	CMW500	AT052	GUANGZHOU NEM	Jun 12,25	Jun 11,26
Power probe unit	Ti Group	SU319P	AT053	GUANGZHOU NEM	Jun 12,25	Jun 11,26
Switch unit	Ti Group	SU319S	AT054	N/A	N/A	N/A
Test Software	BL	BL410R 3.5.2.621	N/A	N/A	N/A	N/A

3. DUTY CYCLE

3.1. Limit

None; for reporting purpose only.

3.2. Test Setup



3.3. Spectrum Analyzer Setting

Spectrum Parameters	Setting
Centre frequency	2437MHz
RBW	8
VBW	8
Span	0
Sweep Time	Auto
Detector	Peak
Trace Mode	Single hold

3.4. Test Procedure

- Connect EUT antenna terminal to the spectrum analyzer with RF cable.
- Spectrum analyzer setting parameters in accordance with section 3.3.
- When the trace is complete, measure the sending time of 1 burst and the duty cycle of 1 burst cycle.
- Duty Cycle= Transmission Duration (Tx On (s))/ Transmission Period(s)
- Repeat above procedures until all channels and test modes were measured.
- Record the results in the test report.

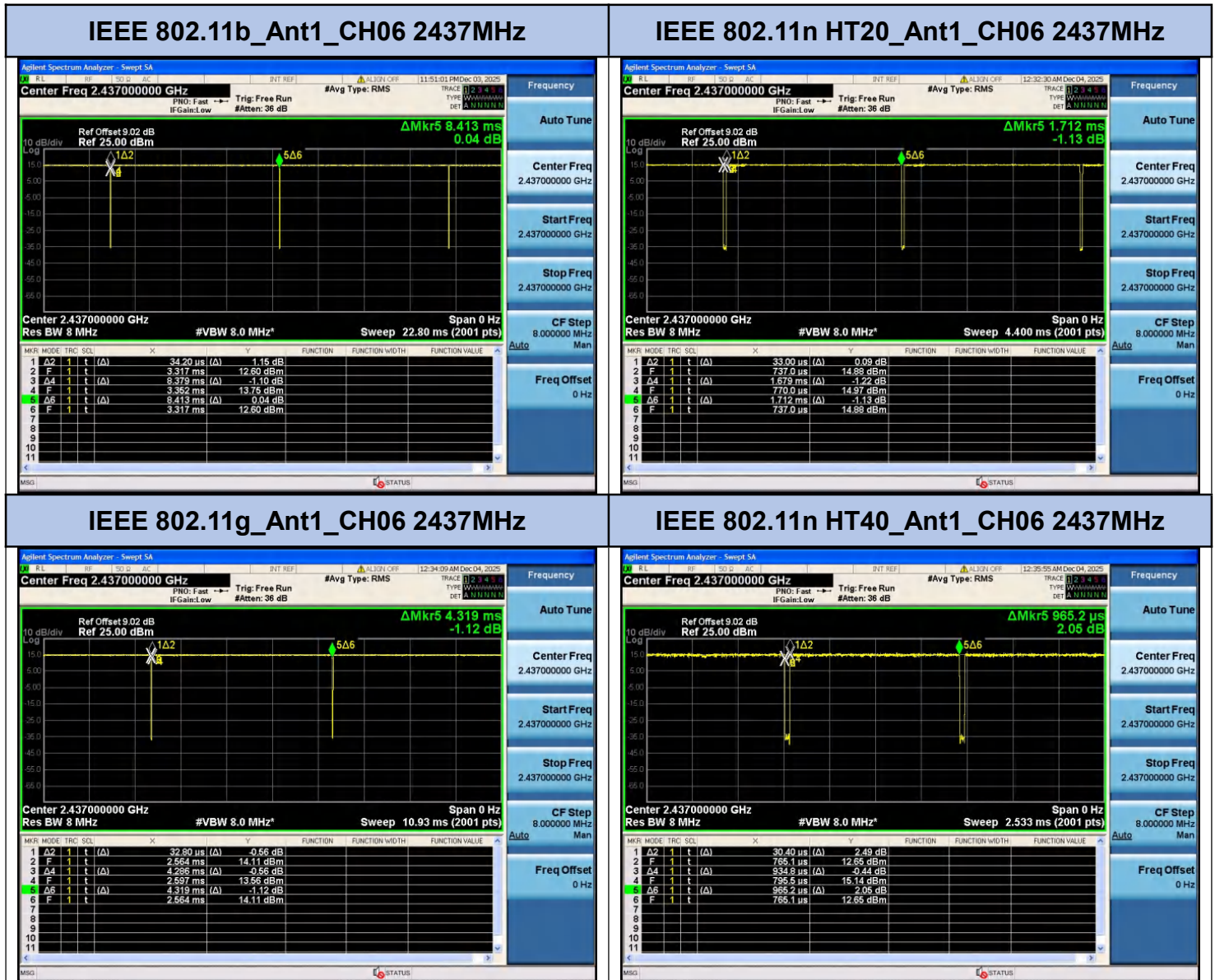
3.5. Test Result

Mode	Channel	Center Frequency (MHz)	RBW (MHz)	Detector	Tx On (s)	Tx Off (s)	Period (s)	Duty Cycle
IEEE 802.11b	CH06	2437	8	RMS	0.004286	0.000033	0.004319	0.9924
IEEE 802.11g	CH06	2437	8	RMS	0.004286	0.000033	0.004319	0.9924
IEEE 802.11n HT20	CH06	2437	8	RMS	0.001679	0.000033	0.001712	0.9807
IEEE 802.11n HT40	CH06	2437	8	RMS	0.000935	0.00003	0.000965	0.9685

Note:

1. If duty cycle <98 %, the conducted average output power and average power spectral density should be add duty factor.
2. If duty cycle ≥98 %, the EUT is consider to be transmitting continuously, the conducted average output power and average power spectral density no need to add duty factor (consider to be zero).
3. The conducted peak output power and peak power spectral density no need to consider duty factor.
4. Tx On time is transmission duration(s).

3.6. Original Test record

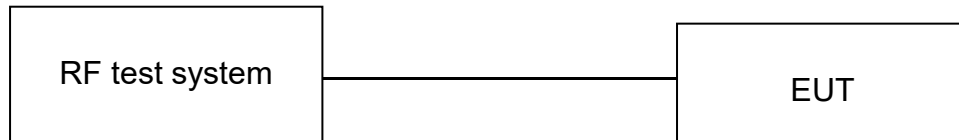


4. 6dB BANDWIDTH

4.1. Limit

Systems using digital modulation techniques operate in the 2400-2483.5 MHz, the minimum 6 dB bandwidth shall be at least 500 kHz.

4.2. Test Setup



4.3. Spectrum Analyzer Setting

6dB Bandwidth	
Spectrum Parameters	Setting
RBW	200KHz (20MHz Bandwidth mode) 430KHz (40MHz Bandwidth mode) (Set RBW=shall be in the range of 1% to 5% of the OBW but not less than 100 kHz.)
VBW	$\geq 3 \times \text{RBW}$ 620KHz (20MHz Bandwidth mode) 1.3MHz (40MHz Bandwidth mode)
Span	40MHz(20MHz Bandwidth mode) 80MHz(40MHz Bandwidth mode)
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

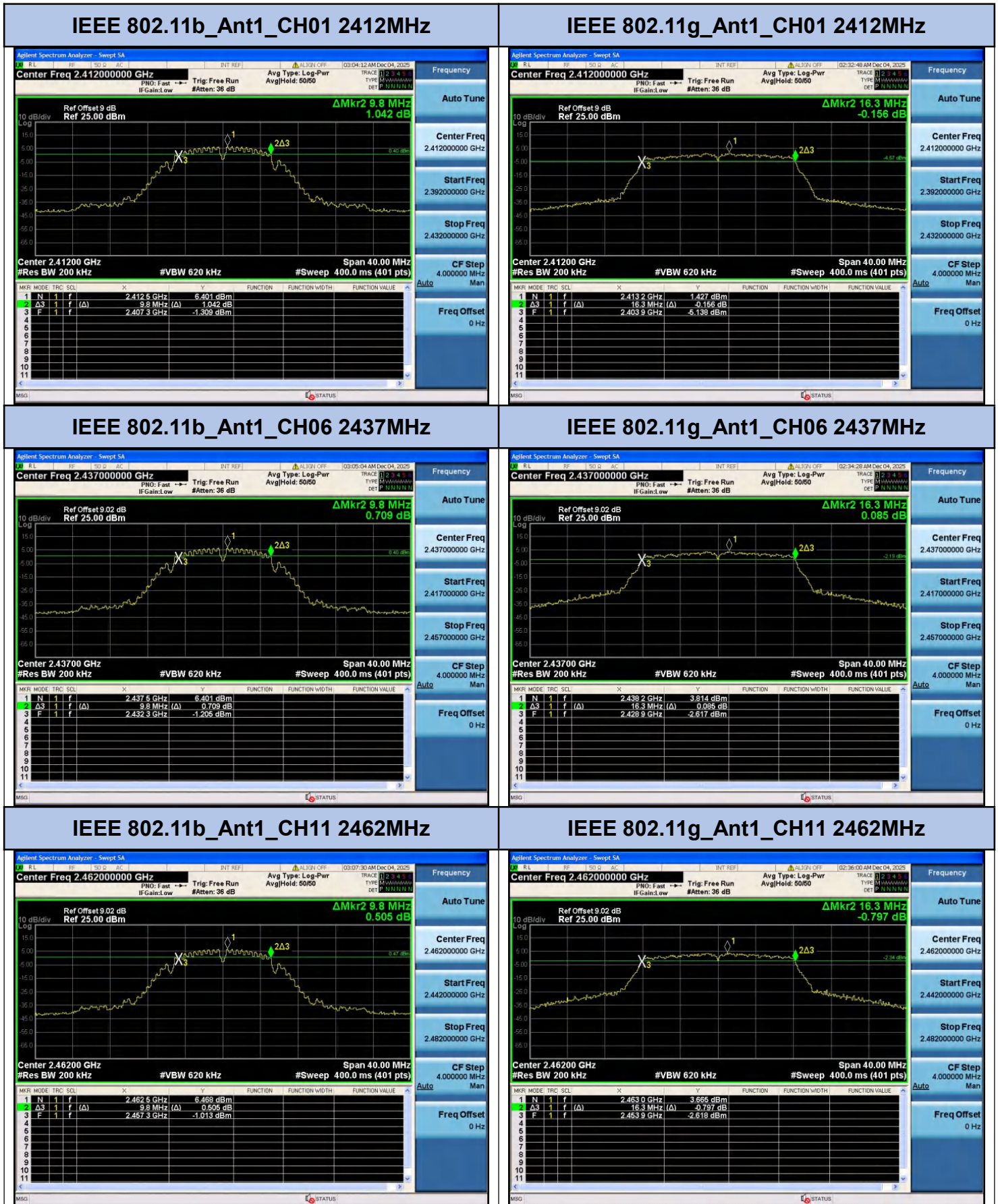
4.4. Test Procedure

- The test according to ANSI C63.10 clause 11.8.
- Connect EUT antenna terminal to the spectrum analyzer with RF cable.
- Spectrum analyzer setting parameters in accordance with section 4.3.
- Set the EUT transmit continuously with maximum output power.
- Allow trace to stabilize, 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.
- Repeat above procedures until all channels and test modes were measured.
- Record the results in the test report.

4.5. Test Result

Test Mode	Antenna	Channel& Frequency	6dB Bandwidth	6dB Bandwidth Conducted Limit	Result
		MHz	MHz	KHz	
IEEE 802.11b	Ant1	CH01 2412	9.8	≥500	PASS
		CH06 2437	9.8		
		CH11 2462	9.8		
IEEE 802.11g	Ant1	CH01 2412	16.3	≥500	PASS
		CH06 2437	16.3		
		CH11 2462	16.3		
IEEE 802.11n HT20	Ant1	CH01 2412	17.5	≥500	PASS
		CH06 2437	17.5		
		CH11 2462	17.4		
IEEE 802.11n HT40	Ant1	CH03 2422	36.2	≥500	PASS
		CH06 2437	36.4		
		CH09 2452	36.2		

4.6. Original Test record



IEEE 802.11n HT20_Ant1_CH01 2412MHz



IEEE 802.11n HT40_Ant1_CH03 2422MHz



IEEE 802.11n HT20_Ant1_CH06 2437MHz



IEEE 802.11n HT40_Ant1_CH06 2437MHz



IEEE 802.11n HT20_Ant1_CH11 2462MHz



IEEE 802.11n HT40_Ant1_CH9 2452MHz

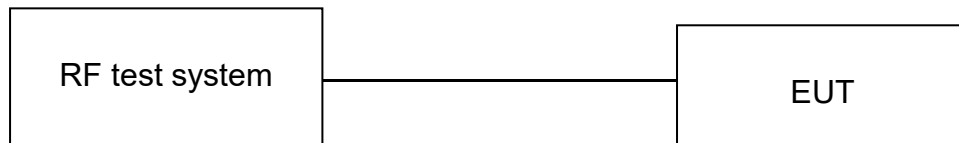


5. 99% BANDWIDTH

5.1. Limit

None; for reporting purpose only.

5.2. Test Setup



5.3. Spectrum Analyzer Setting

99% Occupied Bandwidth	
Spectrum Parameters	Setting
RBW	510KHz
VBW	2MHz
Span	30MHz(20MHz Bandwidth mode)/ 60MHz(40MHz Bandwidth mode)
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

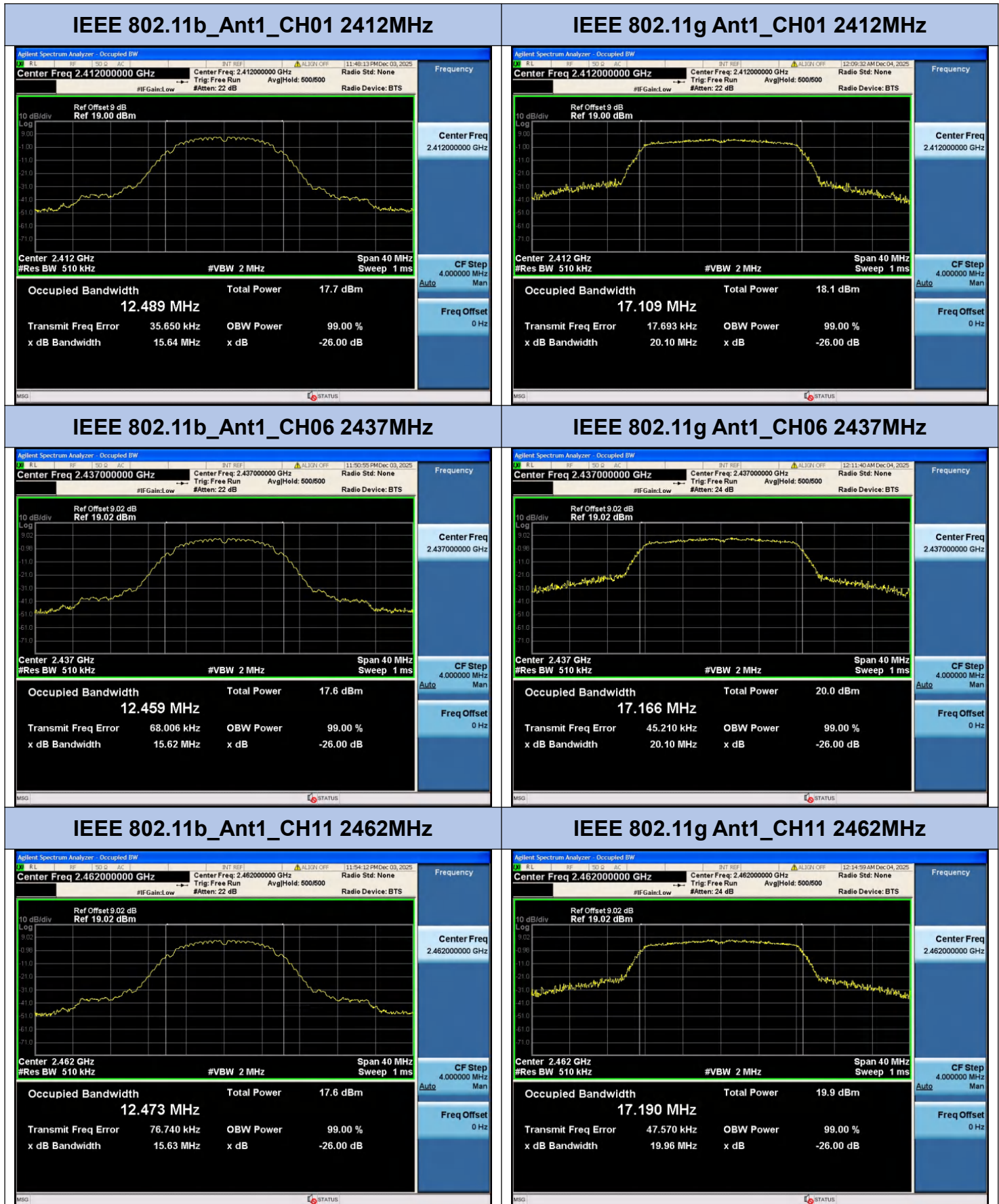
5.4. Test Procedure

- The test according to ANSI C63.10 clause 6.9.3.
- Connect EUT antenna terminal to the spectrum analyzer with RF cable.
- Spectrum analyzer setting parameters in accordance with section 5.3.
- Set the EUT transmit continuously with maximum output power.
- Repeat above procedures until all channels and test modes were measured.
- Record the results in the test report.

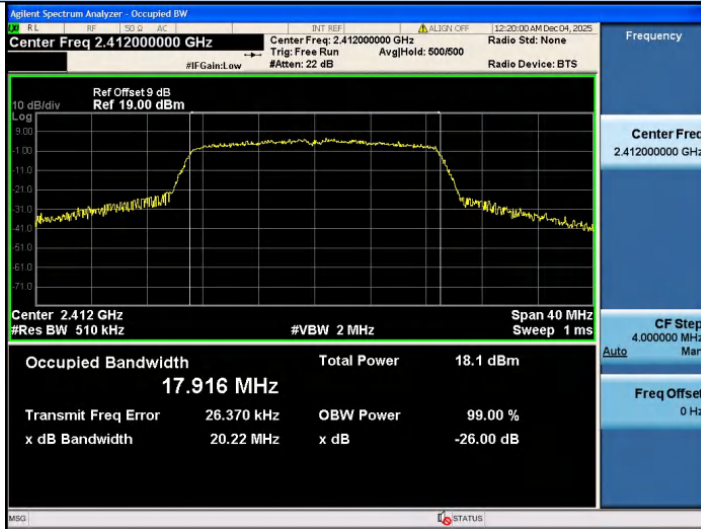
5.5. Test Data

Test Mode	Antenna	Channel& Frequency	Occupied Channel Bandwidth
		MHz	MHz
IEEE 802.11b	Ant1	CH01 2412	12.489
		CH06 2437	12.459
		CH11 2462	12.473
IEEE 802.11g	Ant1	CH01 2412	17.109
		CH06 2437	17.166
		CH11 2462	17.190
IEEE 802.11n HT20	Ant1	CH01 2412	17.916
		CH06 2437	17.931
		CH11 2462	17.960
IEEE 802.11n HT40	Ant1	CH03 2422	36.140
		CH06 2437	36.089
		CH09 2452	36.088

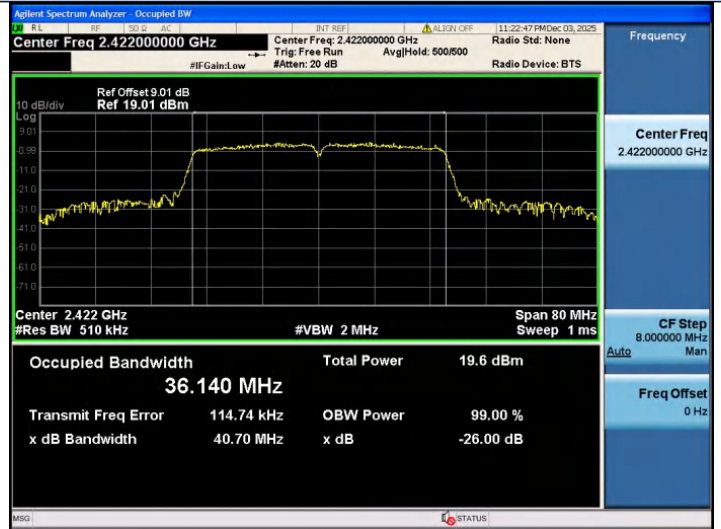
5.6. Original Test record



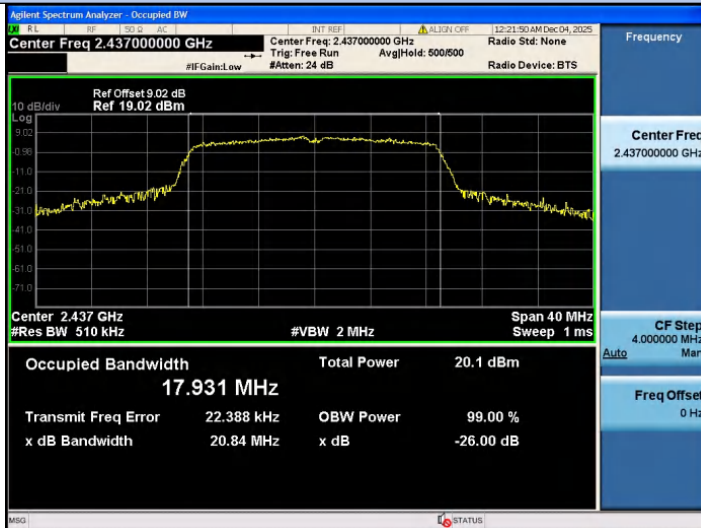
IEEE 802.11n HT20 Ant1_CH01 2412MHz



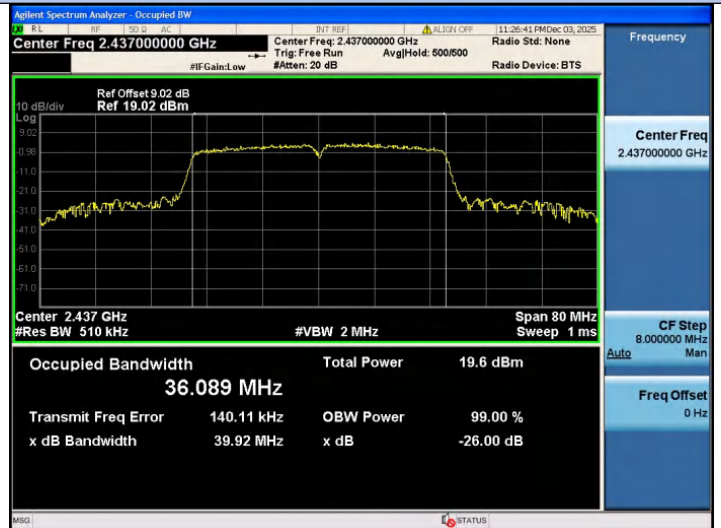
IEEE 802.11n HT40 Ant1_CH03 2422MHz



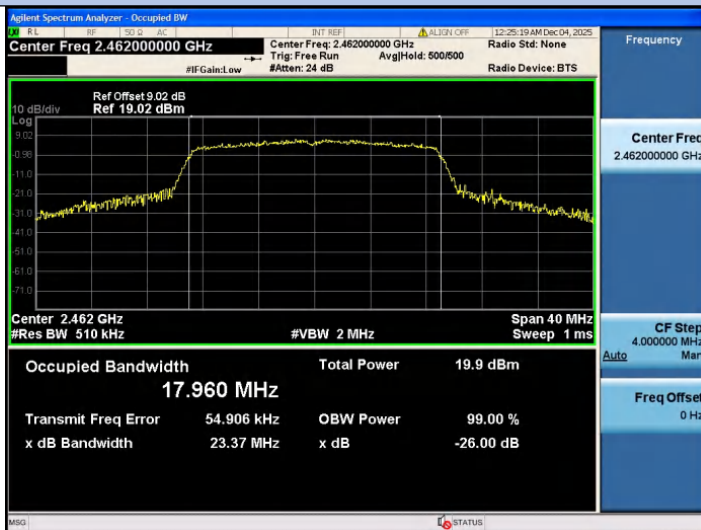
IEEE 802.11n HT20 Ant1_CH06 2437MHz



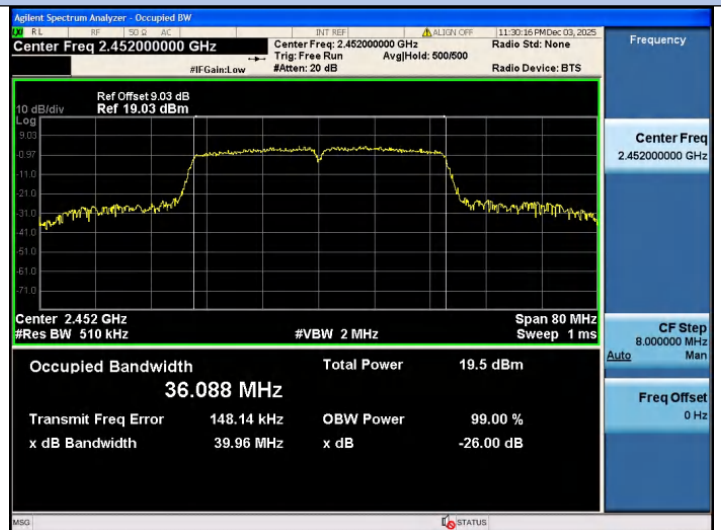
IEEE 802.11n HT40 Ant1_CH06 2437MHz



IEEE 802.11n HT20 Ant1_CH11 2462MHz



IEEE 802.11n HT40 Ant1_CH09 2452MHz



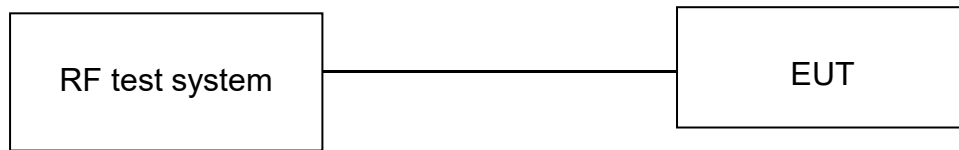
6. MAXIMUM CONDUCTED OUTPUT POWER

6.1. Limit

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt.

If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

6.2. Test Setup



6.3. Spectrum Analyzer Setting

Spectrum Parameters	Setting
RBW	1MHz
VBW	3MHz
Span	40MHz(20MHz Bandwidth mode) 80MHz(40MHz Bandwidth mode)
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

6.4. Test Procedure

- The test according to ANSI C63.10 clause 11.9.2.3.
- Connect EUT antenna terminal to the spectrum analyzer with RF cable.
- Spectrum analyzer setting parameters in accordance with section 6.3.
- Set the EUT transmit continuously with maximum output power.
- Use the channel power function to measure maximum peak output power, allow trace to stabilize, save test pictures.
- Repeat above procedures until all modes and channels were measured.
- Record the results in the test report.

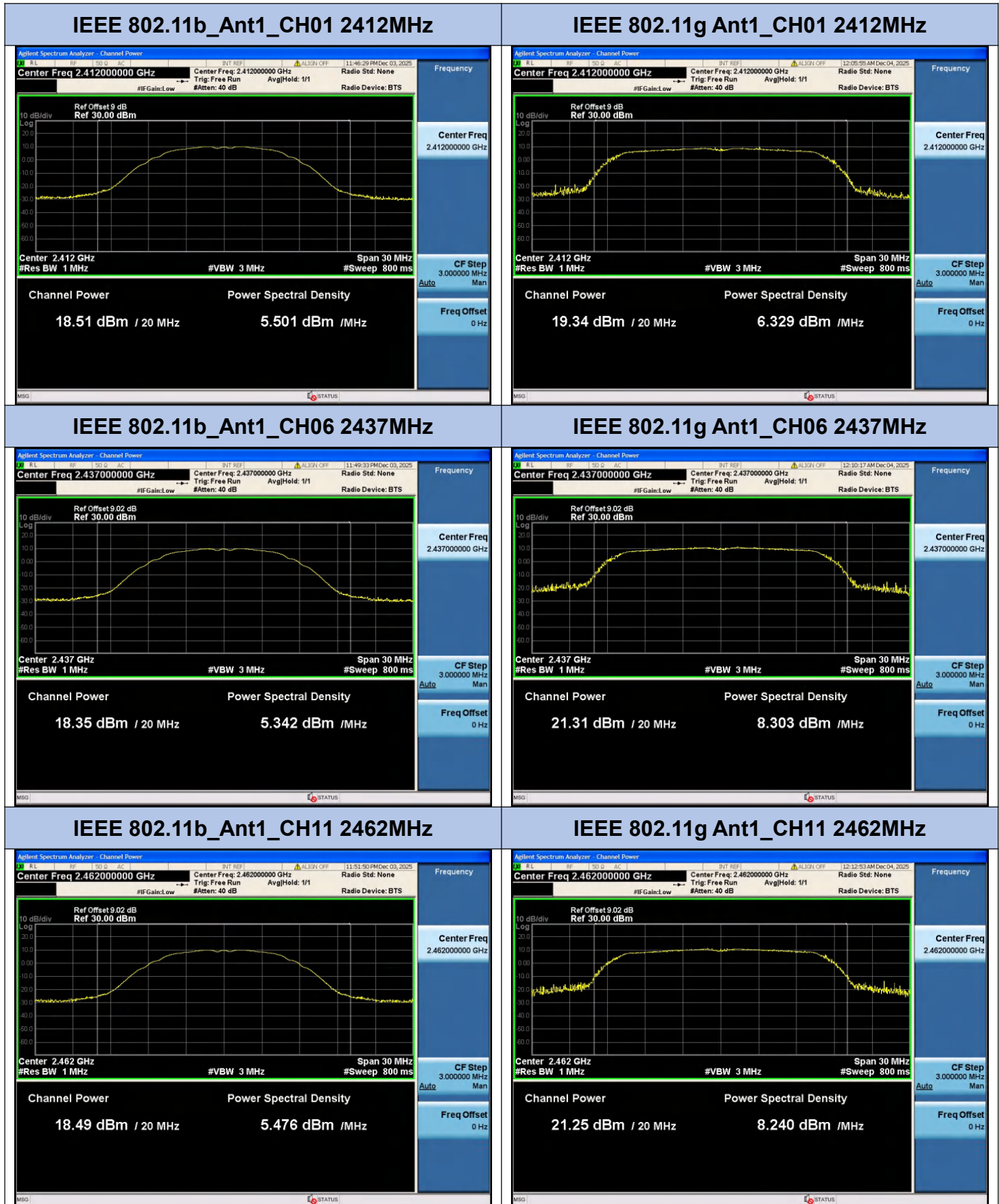
6.5. Test Result

Test Mode	Antenna	Channel& Frequency	Peak Output Power	Limit	Result
		MHz	dBm	dBm	
IEEE 802.11b	Ant1	CH01 2412	18.51	30	PASS
		CH06 2437	18.35		
		CH11 2462	18.49		
IEEE 802.11g	Ant1	CH01 2412	19.34	30	PASS
		CH06 2437	21.31		
		CH11 2462	21.25		
IEEE 802.11n HT20	Ant1	CH01 2412	19.38	30	PASS
		CH06 2437	21.31		
		CH11 2462	21.24		
IEEE 802.11n HT40	Ant1	CH03 2422	20.85	30	PASS
		CH06 2437	20.97		
		CH09 2452	20.87		

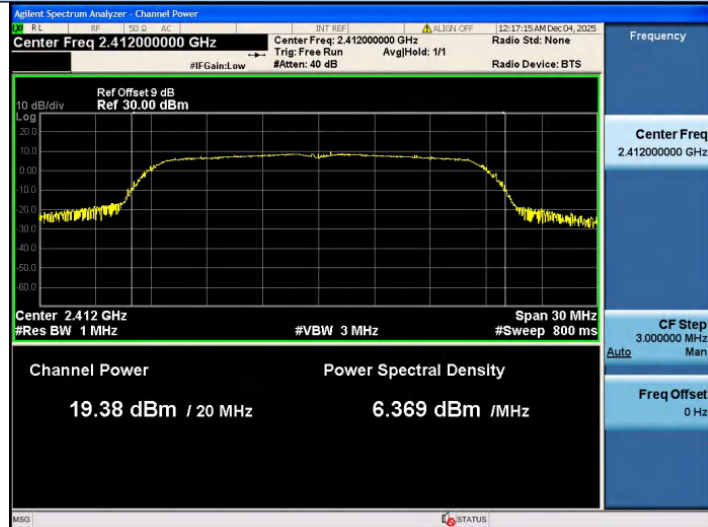
Note:

- 1) If the test results under the Peak detector meet the limit requirements, then there is no need to consider the coefficient obtained by multiplying by the Duty cycle.

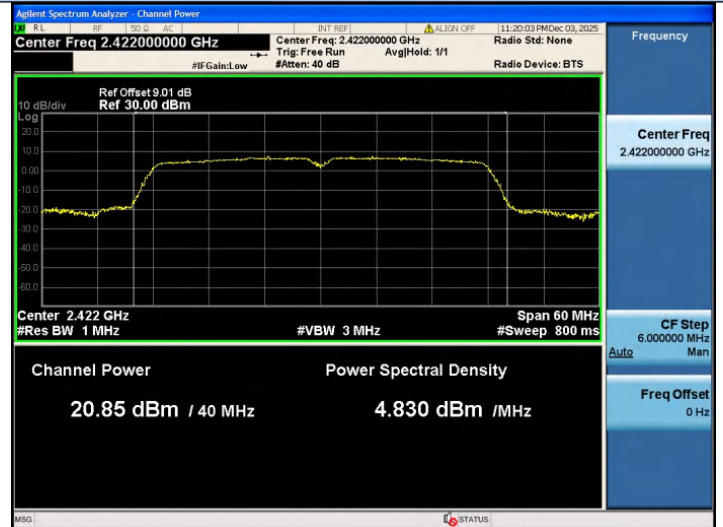
6.6. Original Test record



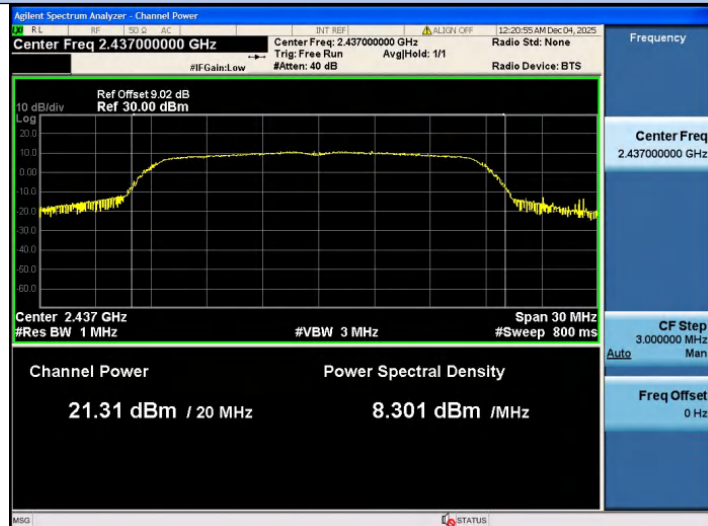
IEEE 802.11n HT20 Ant1_CH01 2412MHz



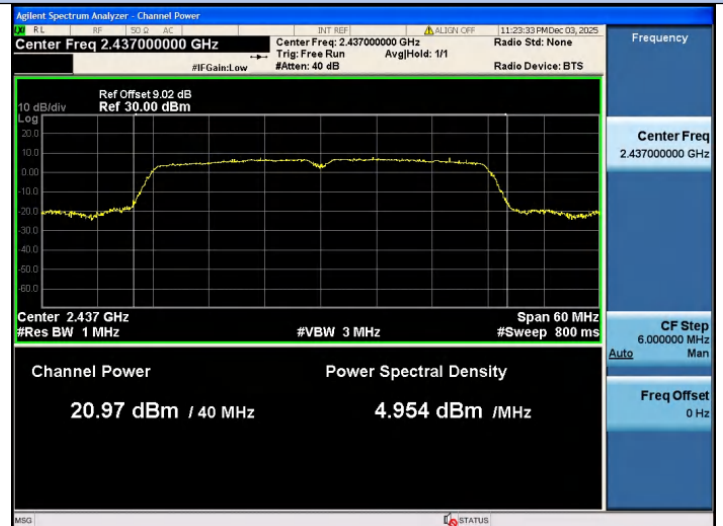
IEEE 802.11n HT40 Ant1_CH03 2422MHz



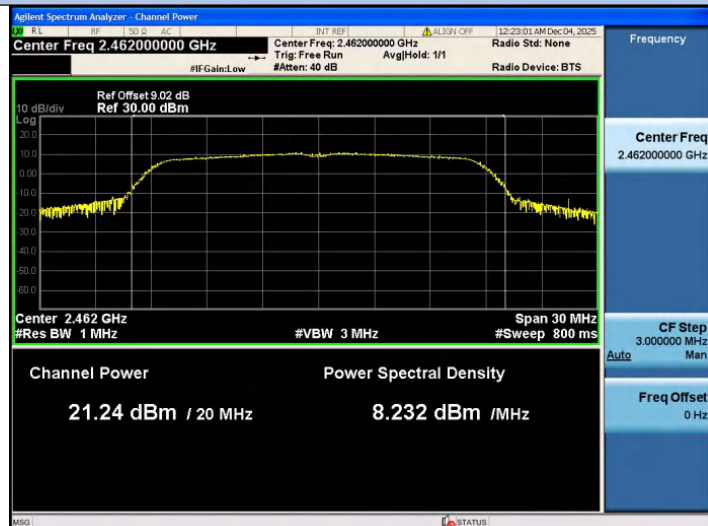
IEEE 802.11n HT20 Ant1_CH06 2437MHz



IEEE 802.11n HT40 Ant1_CH06 2437MHz



IEEE 802.11n HT20 Ant1_CH11 2462MHz



IEEE 802.11n HT40 Ant1_CH09 2452MHz

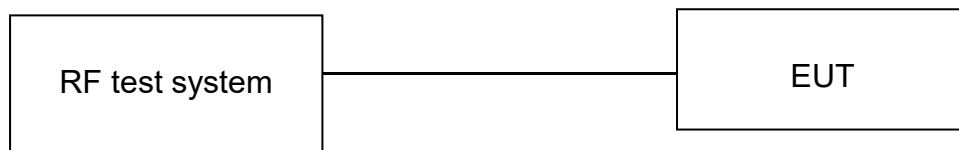


7. POWER SPECTRAL DENSITY

7.1. Limit

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

7.2. Test Setup



7.3. Spectrum Analyzer Setting

Spectrum Parameters	Setting
RBW	3KHz
VBW	10KHz
Span	30MHz(20MHz Bandwidth mode) 60MHz(40MHz Bandwidth mode)
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

7.4. Test Procedure

- Connect EUT antenna terminal to the spectrum analyzer with RF cable.
- Spectrum analyzer setting parameters in accordance with section 7.3.
- Set the EUT transmit continuously with maximum output power.
- Allow trace to stabilize, use the marker-to-peak function to set the marker to the peak of the emission.
- Repeat above procedures until all modes and channels were measured.
- Record the results in the test report.

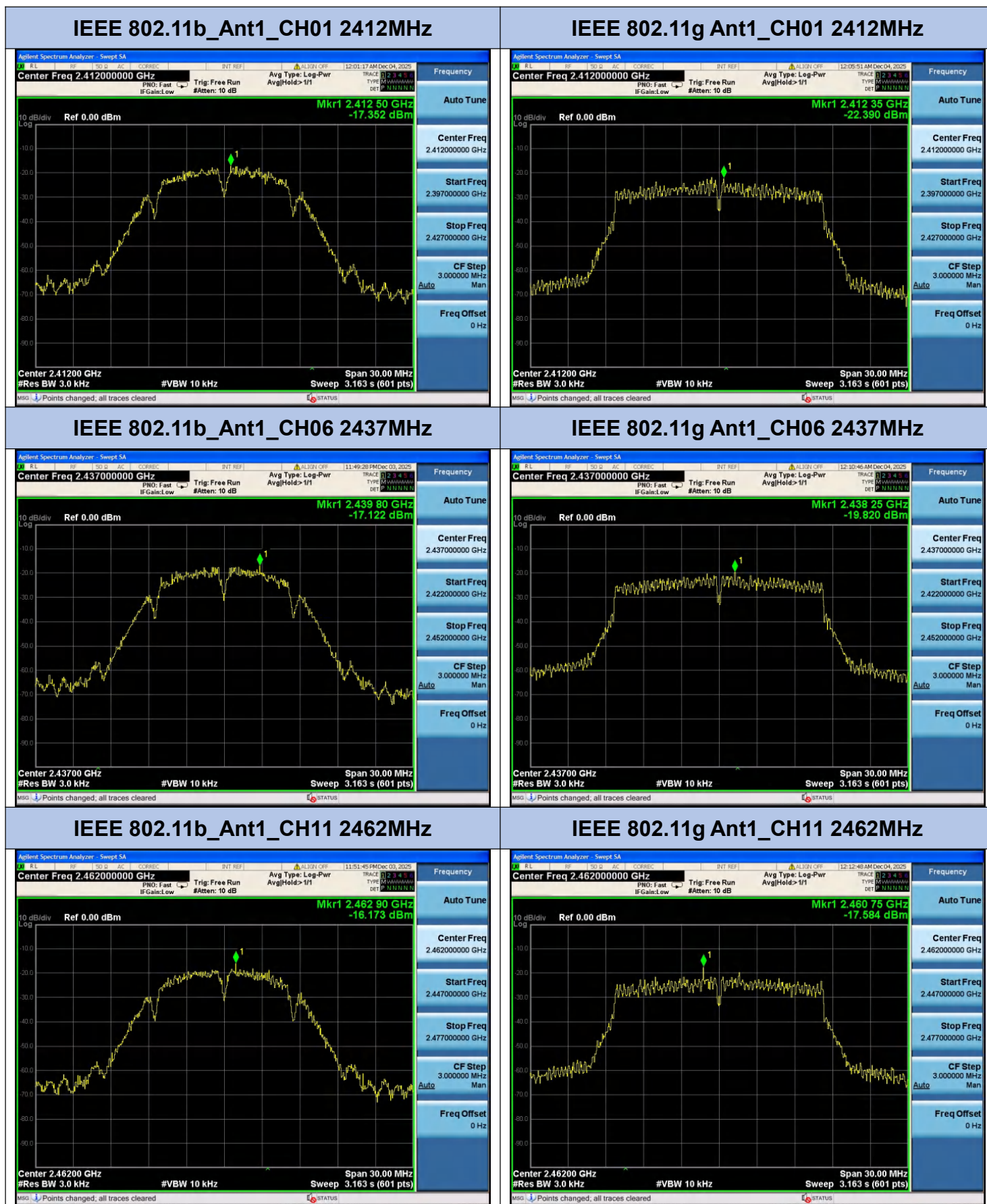
7.5. Test Result

Test Mode	Antenna	Channel& Frequency	Peak Power Spectral Density	Limit	Result
		MHz	dBm/3KHz	dBm/3KHz	
IEEE 802.11b	Ant1	CH01 2412	-17.35	8.00	PASS
		CH06 2437	-17.12		
		CH11 2462	-16.17		
IEEE 802.11g	Ant1	CH01 2412	-22.39	8.00	PASS
		CH06 2437	-19.82		
		CH11 2462	-17.58		
IEEE 802.11n HT20	Ant1	CH01 2422	-22.83	8.00	PASS
		CH06 2437	-19.48		
		CH11 2452	-20.49		
IEEE 802.11n HT40	Ant1	CH03 2422	-24.01	8.00	PASS
		CH06 2437	-23.49		
		CH09 2452	-24.00		

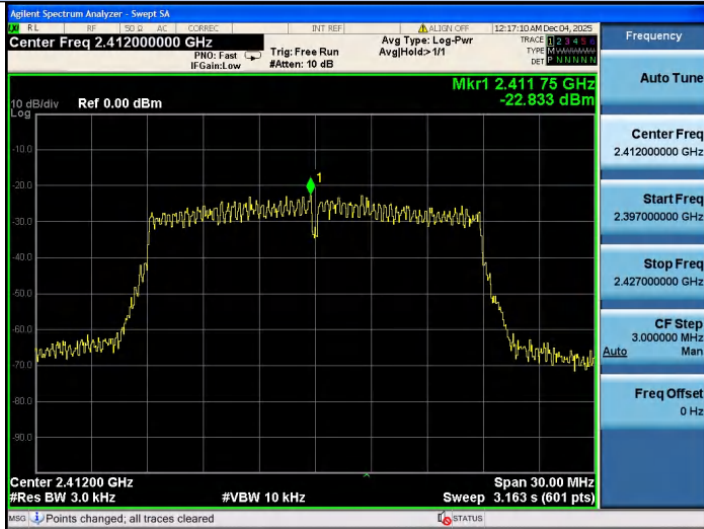
Note:

- If the test results under the Peak detector meet the limit requirements, then there is no need to consider the coefficient obtained by multiplying by the Duty cycle.

7.6. Original Test record



IEEE 802.11n HT20 Ant1_CH01 2412MHz



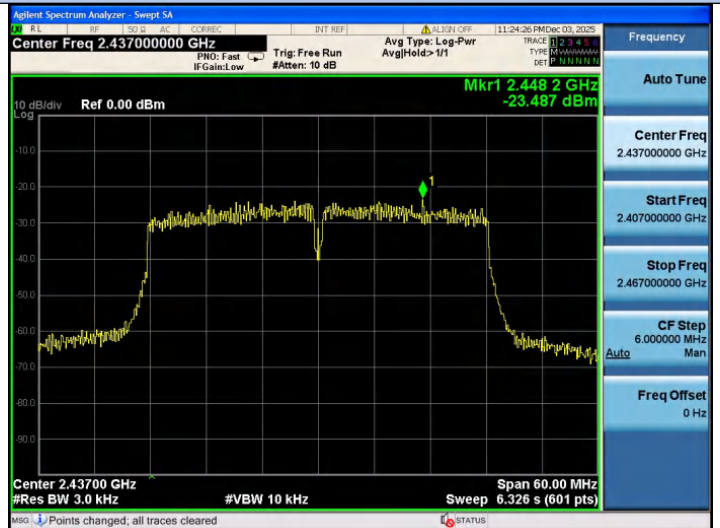
IEEE 802.11n HT40 Ant1_CH03 2422MHz



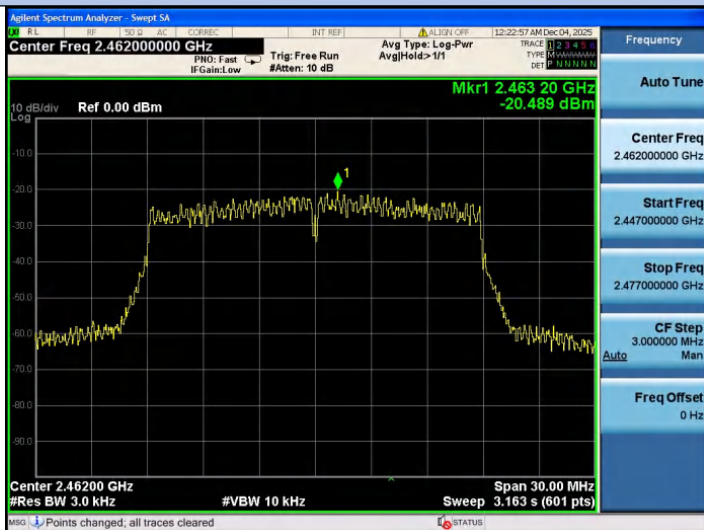
IEEE 802.11n HT20 Ant1_CH06 2437MHz



IEEE 802.11n HT40 Ant1_CH06 2437MHz



IEEE 802.11n HT20 Ant1_CH11 2462MHz



IEEE 802.11n HT40 Ant1_CH09 2452MHz

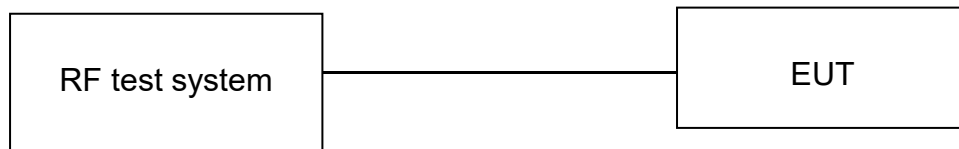


8. CONDUCTED BAND EDGE

8.1. Limit

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

8.2. Test Setup



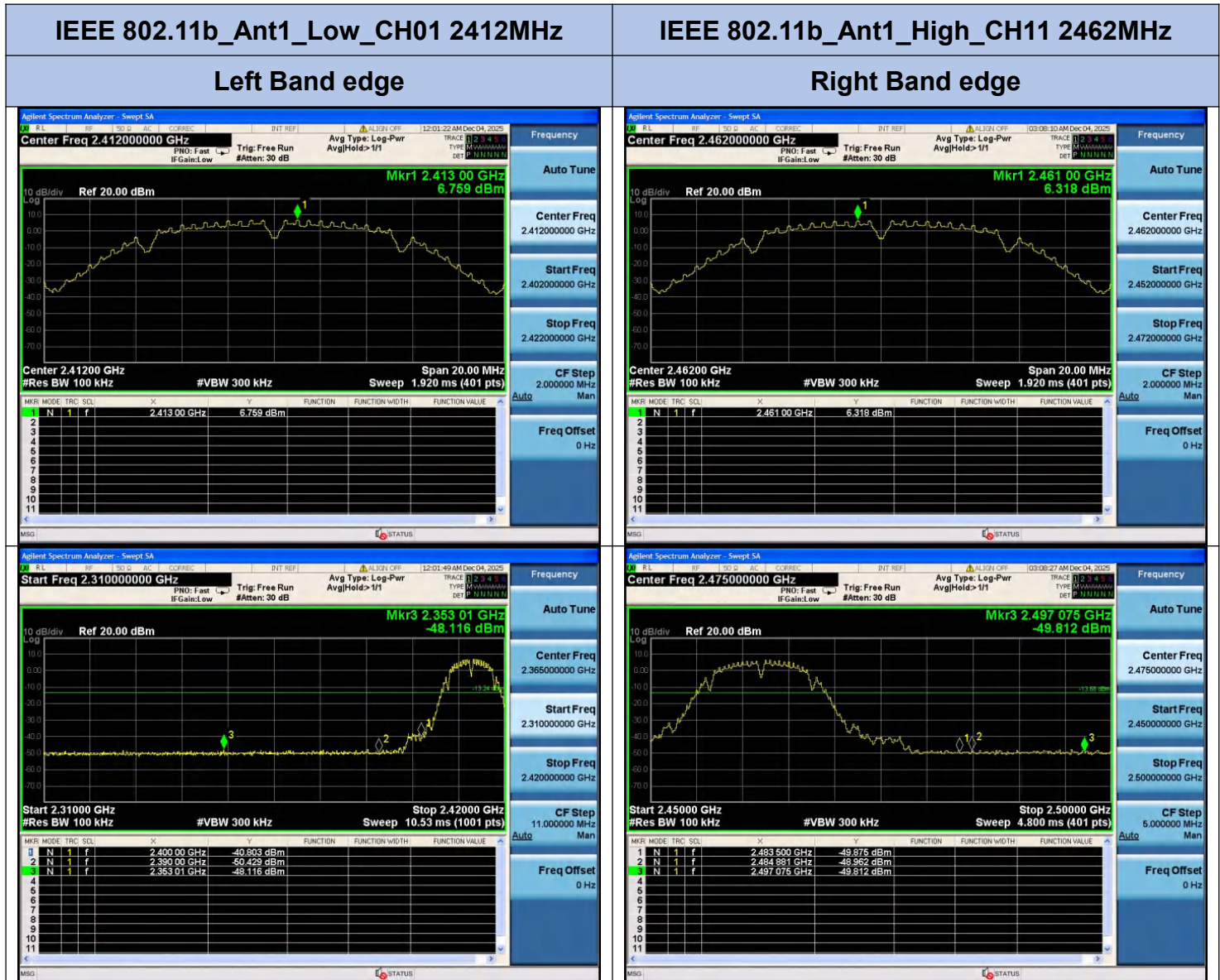
8.3. Spectrum Analyzer Setting

Spectrum Parameters	Setting
RBW	100KHz
VBW	300KHz
Span	Reference Span: 20MHz (20MHz Bandwidth mode) Reference Span: 40MHz (40MHz Bandwidth mode)
	Left Band edge: 2310-2420: 110MHz (20MHz Bandwidth mode) 2310-2440: 130MHz (40MHz Bandwidth mode) Right Band edge: 2450-2500MHz: 50MHz (20MHz Bandwidth mode) 2430-2500MHz: 70MHz (40MHz Bandwidth mode)
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

8.4. Test Procedure

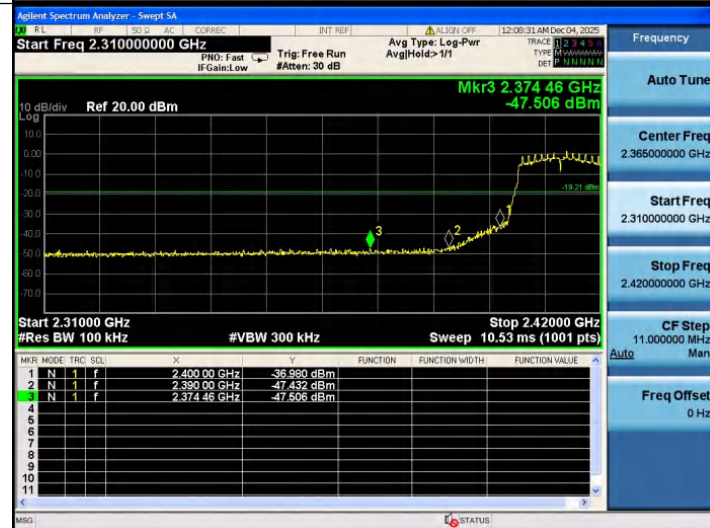
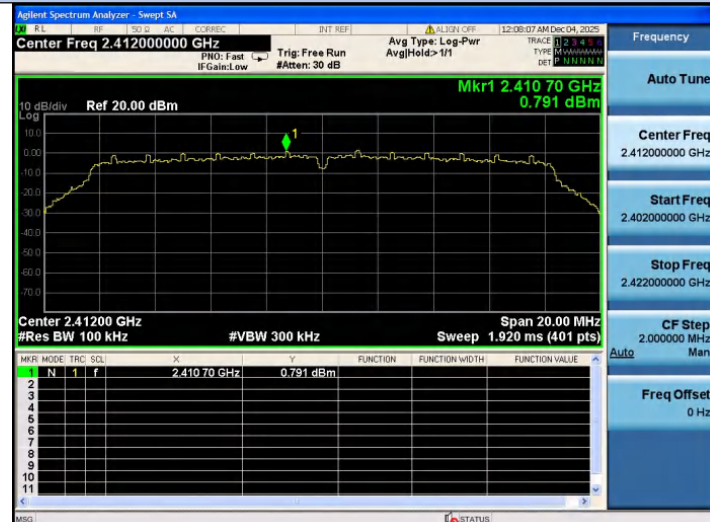
- Connect EUT antenna terminal to the spectrum analyzer with RF cable.
- Spectrum analyzer setting parameters in accordance with section 8.3.
- Set the EUT transmit continuously with maximum output power.
- Allow trace to stabilize, use the marker function to mark the highest emission level outside the authorized band.
- Repeat above procedures until all modes and channels were measured.
- Record the results in the test report
- IEEE 802.11b, IEEE 802.11g, IEEE 802.11nH20, IEEE 802.11nH40 all have been tested, the test data was recorded in report.

8.5. Test Result



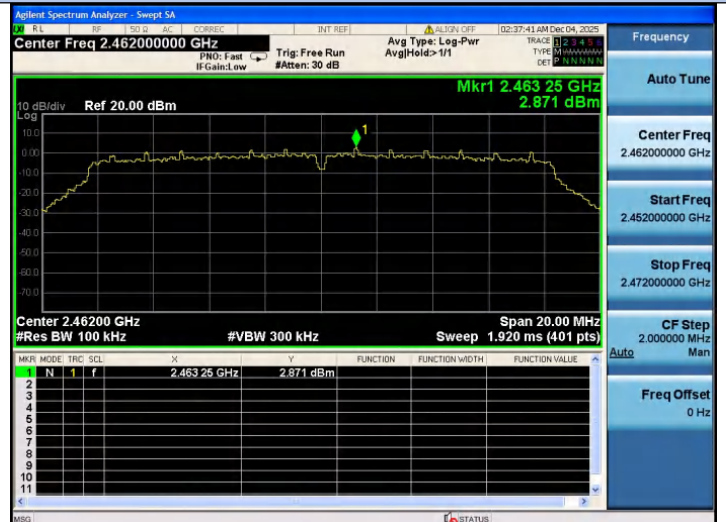
IEEE 802.11g_Ant1_Low_CH01 2412MHz

Left Band edge



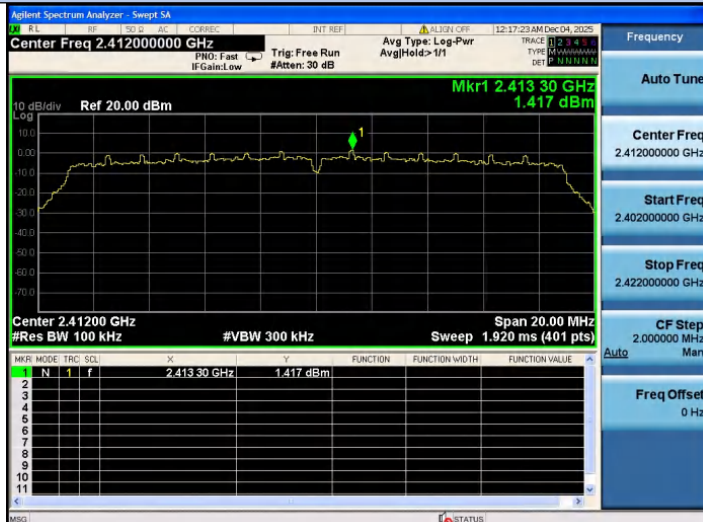
IEEE 802.11g_Ant1_High_CH11 2462MHz

Right Band edge



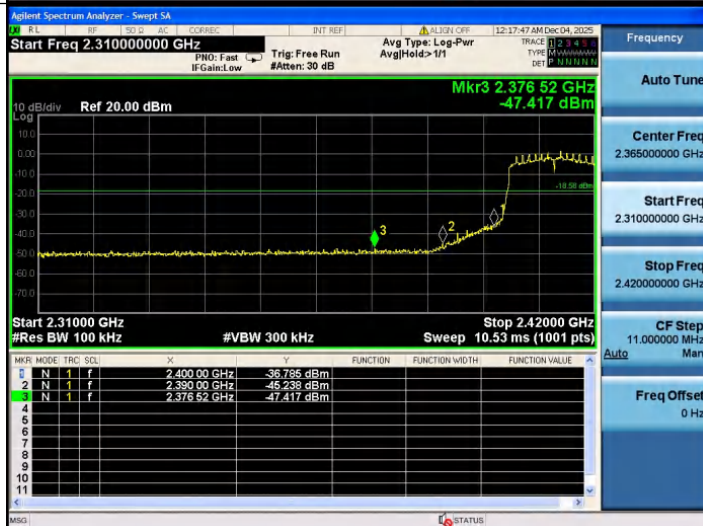
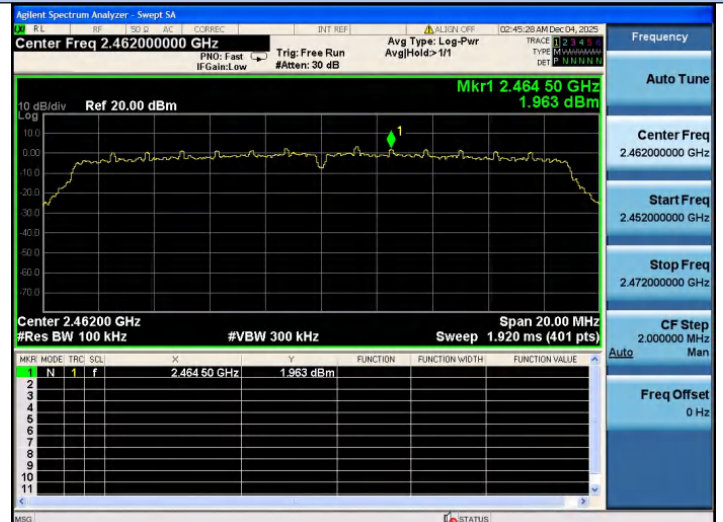
IEEE 802.11n HT20_Ant1_Low_CH01 2412MHz

Left Band edge



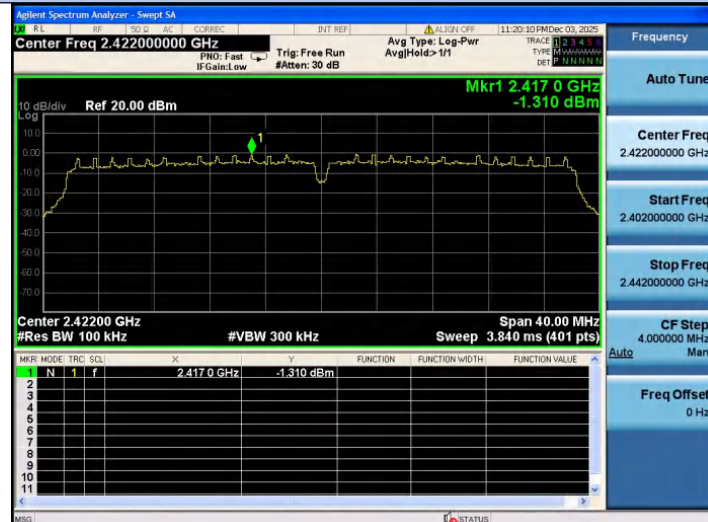
IEEE 802.11n HT20_Ant1_High_CH11 2462MHz

Right Band edge



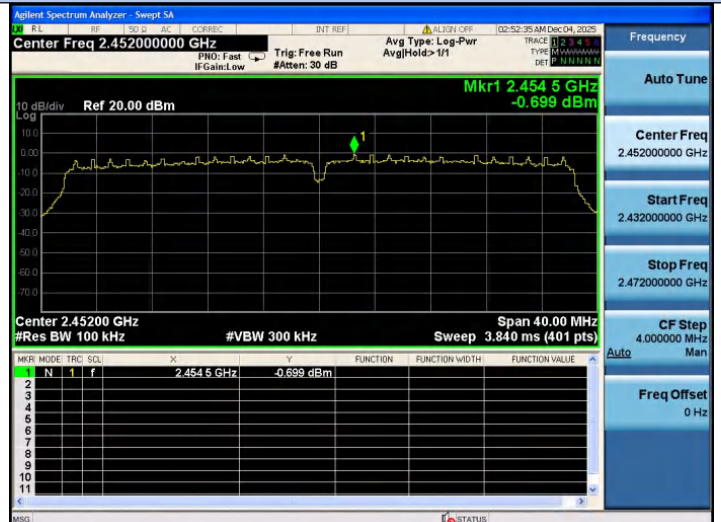
IEEE 802.11n HT40_Ant1_Low_2422

Left Band edge



IEEE 802.11n HT40_Ant1_High_CH09 2462MHz

Right Band edge

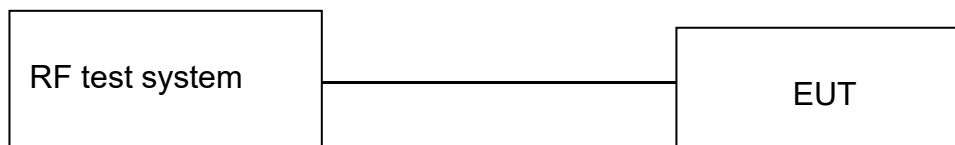


9. CONDUCTED SPURIOUS EMISSIONS

9.1. Limit

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

9.2. Test Setup



9.3. Spectrum Analyzer Setting

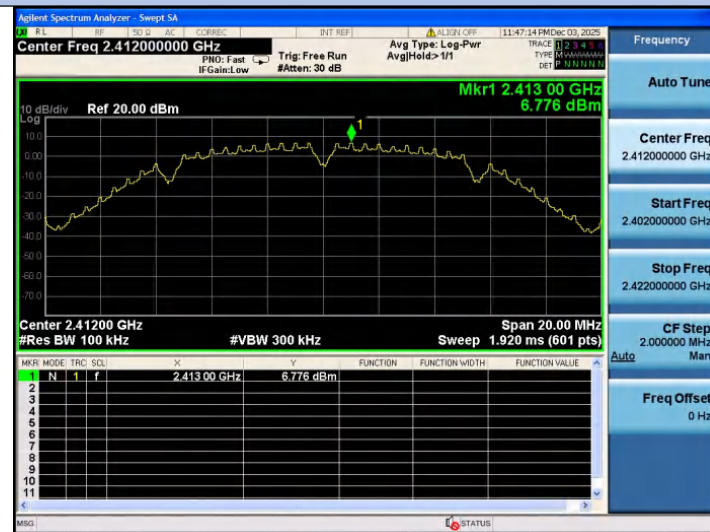
Spectrum Parameters	Setting	
RBW	100KHz	
VBW	300KHz	
Start frequency	30MHz	1.0GHz
Stop frequency	1000MHz	25.0GHz
Sweep Time	Auto	
Detector	Peak	
Trace Mode	Max Hold	

9.4. Test Procedure

- Connect EUT antenna terminal to the spectrum analyzer with RF cable.
- Spectrum analyzer setting parameters in accordance with section 9.3.
- Set the EUT transmit continuously with maximum output power.
- Allow trace to stabilize, use the marker function to mark the highest emission level outside the authorized band.
- Repeat above procedures until all modes and channels were measured.
- Record the results in the test report.
- IEEE 802.11b, IEEE 802.11g, IEEE 802.11n HT20, IEEE 802.11n HT40 all have been tested, the test data was recorded in report.

9.5. Test Result

IEEE 802.11b_Ant1_CH01 2412MHz_Reference



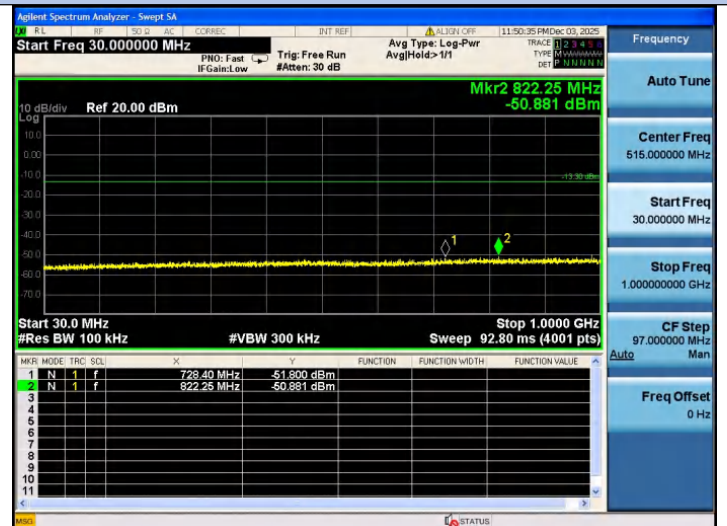
IEEE 802.11b_Ant1_CH06 2437MHz_Reference



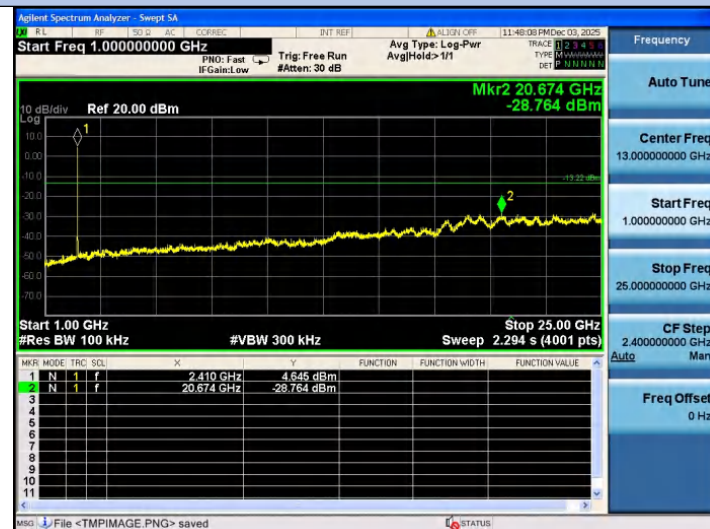
IEEE 802.11b_Ant1_CH01 2412MHz 30-1000MHz



IEEE 802.11b_Ant1_CH06 2437MHz 30-1000MHz



IEEE 802.11b_Ant1_CH01 2412MHz 1-25GHz



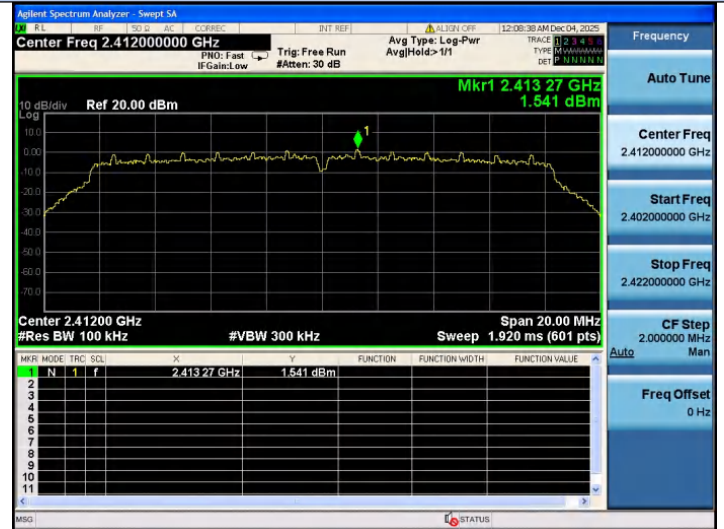
IEEE 802.11b_Ant1_CH06 2437MHz 1-25GHz



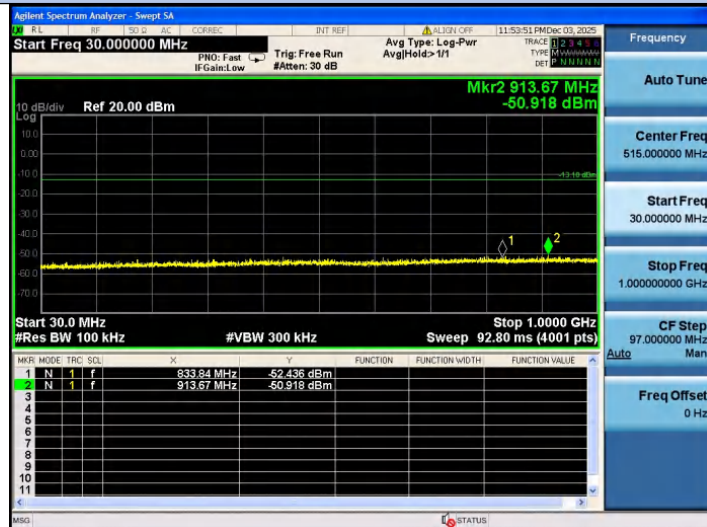
IEEE 802.11b_Ant1_CH11 2462MHz_Reference



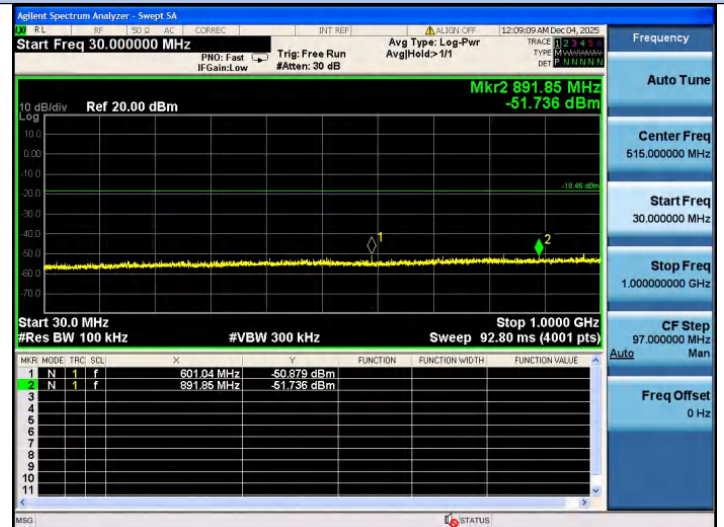
IEEE 802.11g_Ant1_CH01 2412MHz_Reference



IEEE 802.11b_Ant1_CH11 2462MHz 30-1000MHz



IEEE 802.11g_Ant1_CH01 2412MHz 30-1000MHz



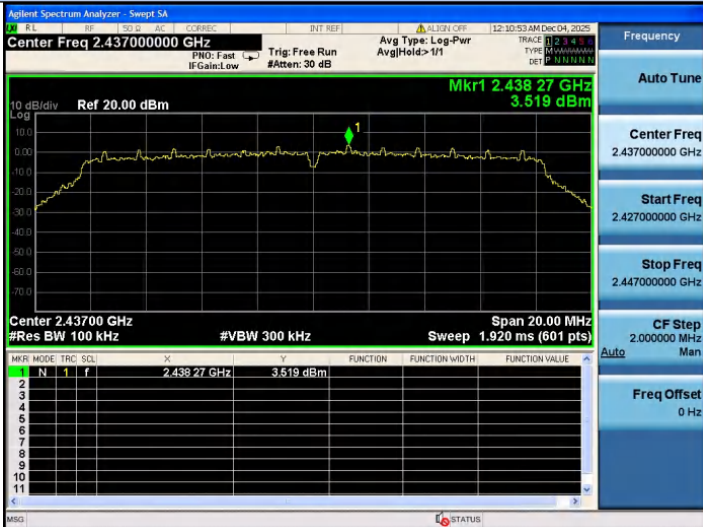
IEEE 802.11b_Ant1_CH11 2462MHz 1-25GHz



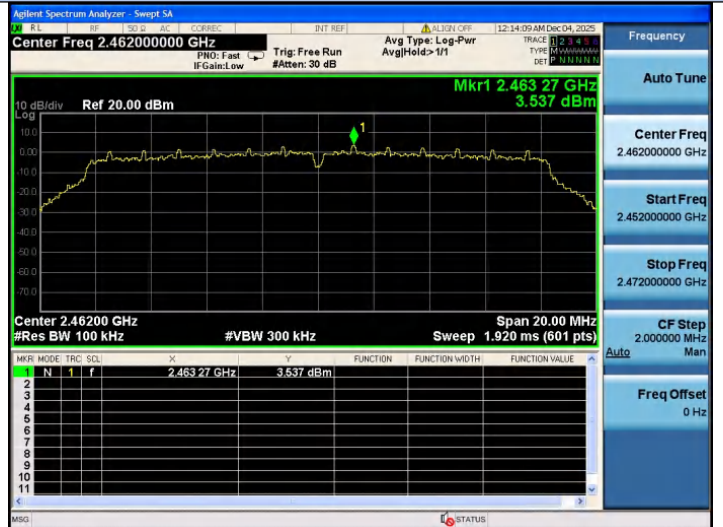
IEEE 802.11g_Ant1_CH01 2412MHz 1-25GHz



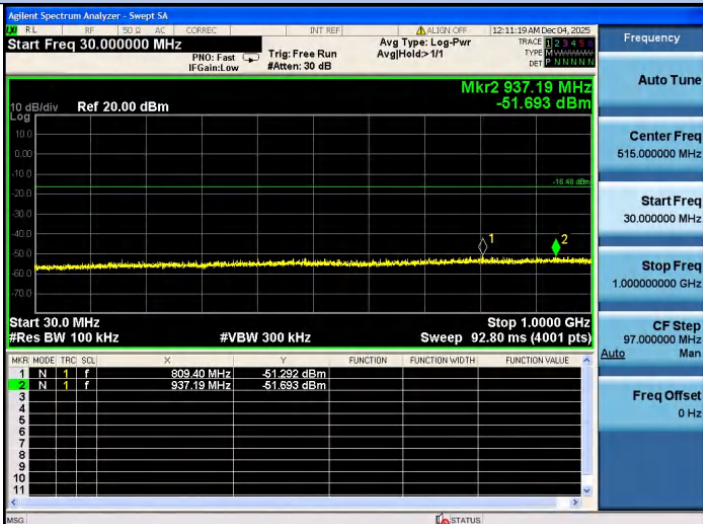
IEEE 802.11g_Ant1_CH06 2437MHz Reference



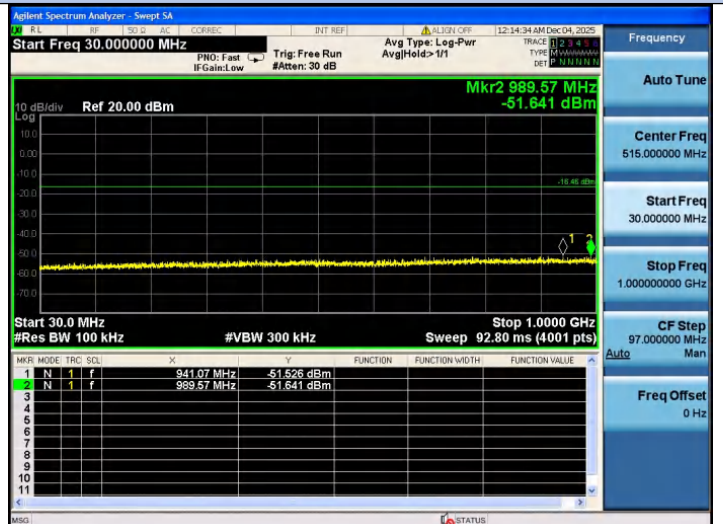
IEEE 802.11g_Ant1_CH11 2462MHz Reference



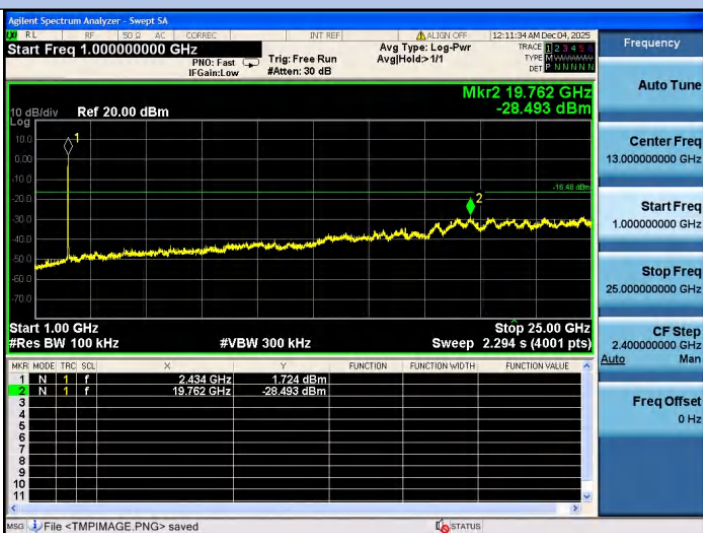
IEEE 802.11g_Ant1_CH06 2437MHz 30-1000MHz



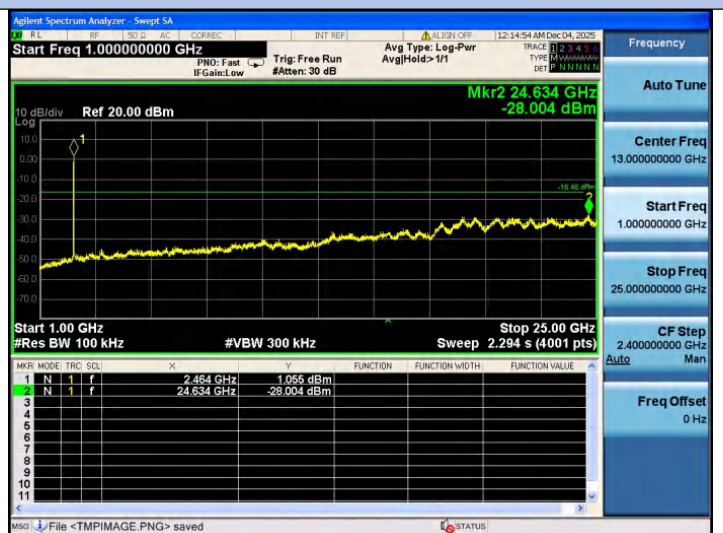
IEEE 802.11g_Ant1_CH11 2462MHz 30-1000MHz



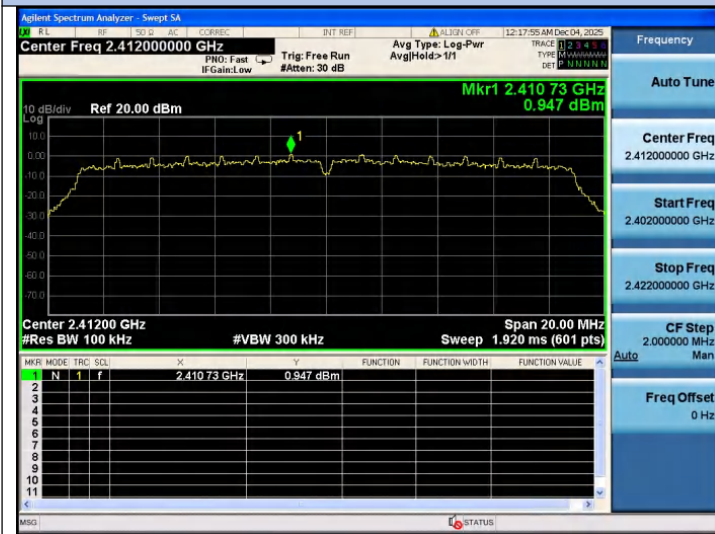
IEEE 802.11g_Ant1_CH06 2437MHz 1-25GHz



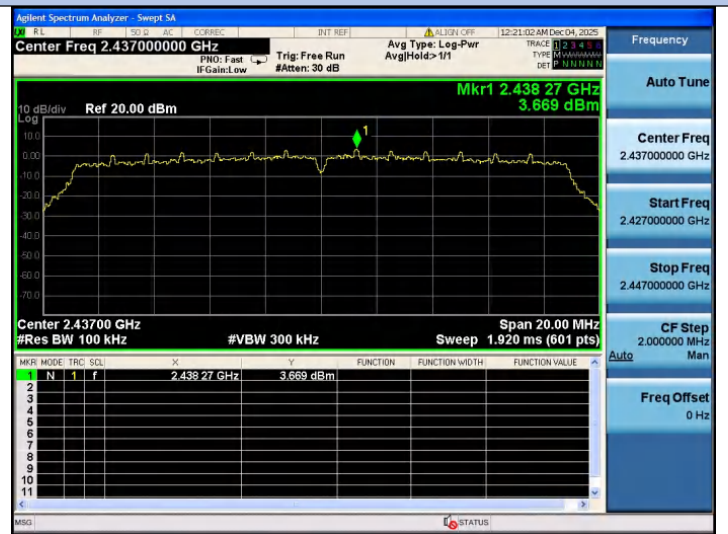
IEEE 802.11g_Ant1_CH11 2462MHz 1-25GHz



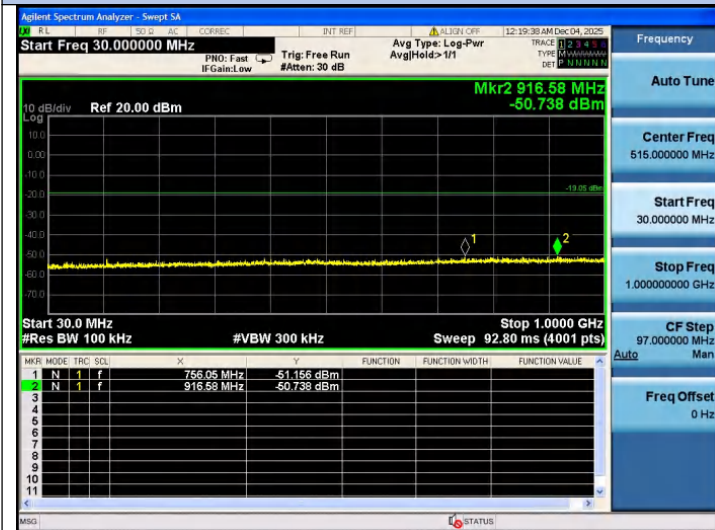
IEEE 802.11n HT20_Ant1_CH01 2412MHz Reference



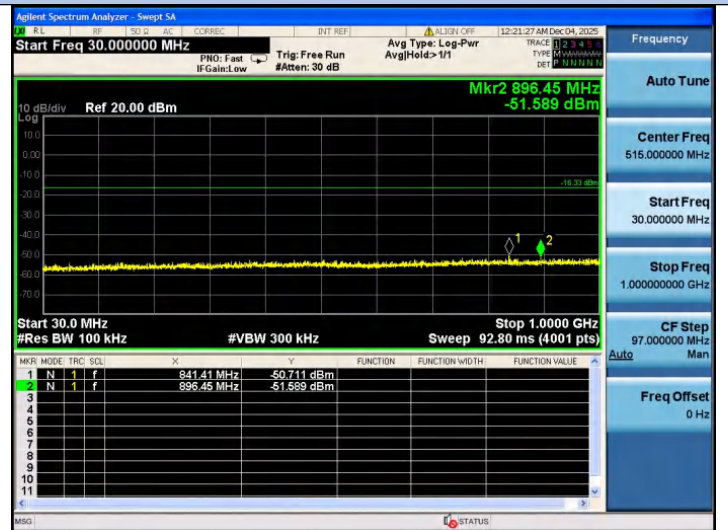
IEEE 802.11n HT20_Ant1_CH06 2437MHz Reference



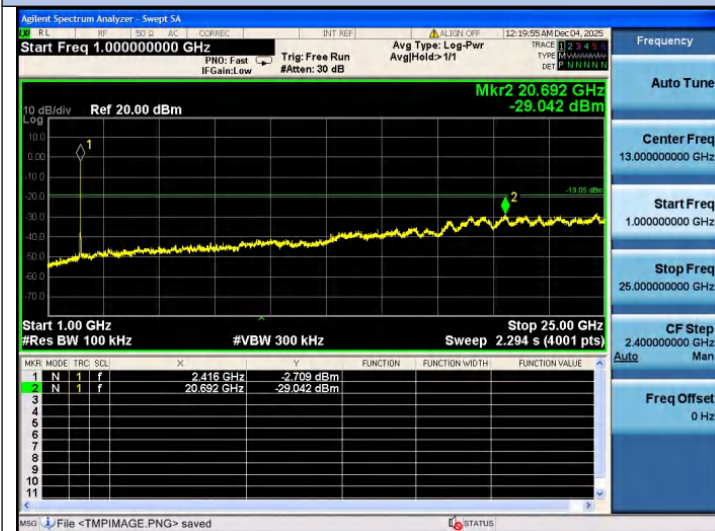
IEEE 802.11n HT20_Ant1_CH01 2412MHz 30-1000MHz



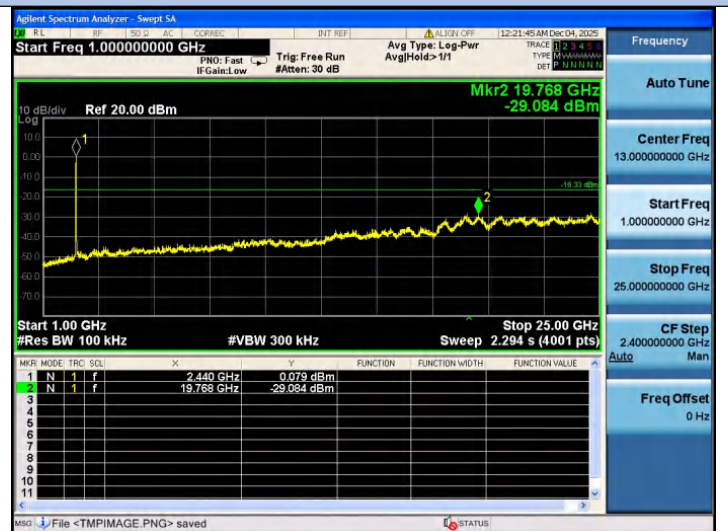
IEEE 802.11n HT20_Ant1_CH06 2437MHz 30-1000MHz



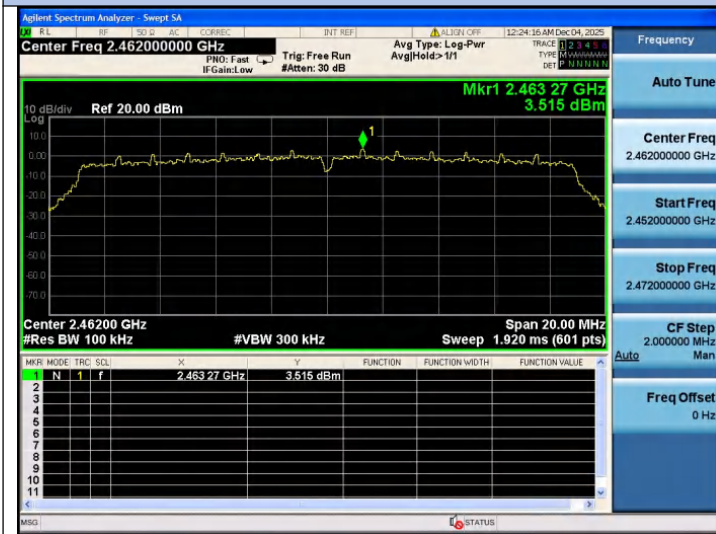
IEEE 802.11n HT20_Ant1_CH01 2412MHz 1-25GHz



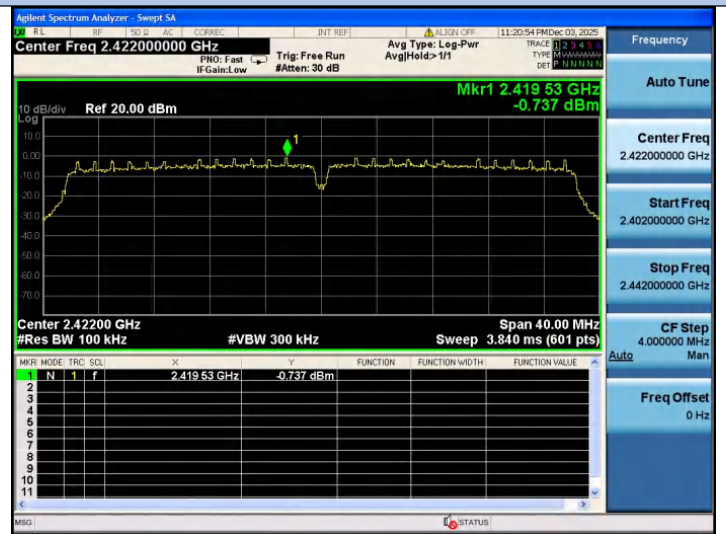
IEEE 802.11n HT20_Ant1_CH06 2437MHz 1-25GHz



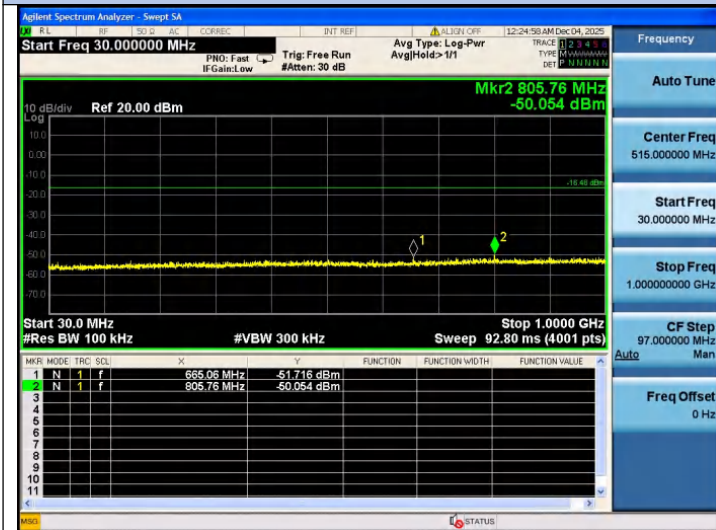
IEEE 802.11n HT20_Ant1_CH11 2462MHz Reference



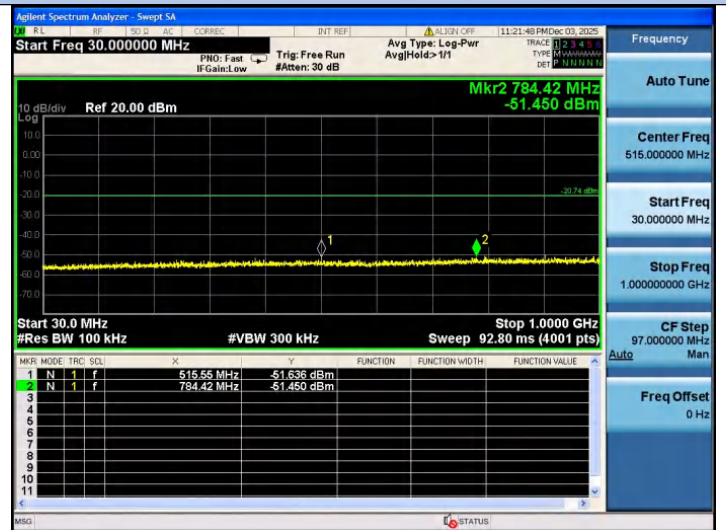
IEEE 802.11n HT40_Ant1_CH03 2422MHz Reference



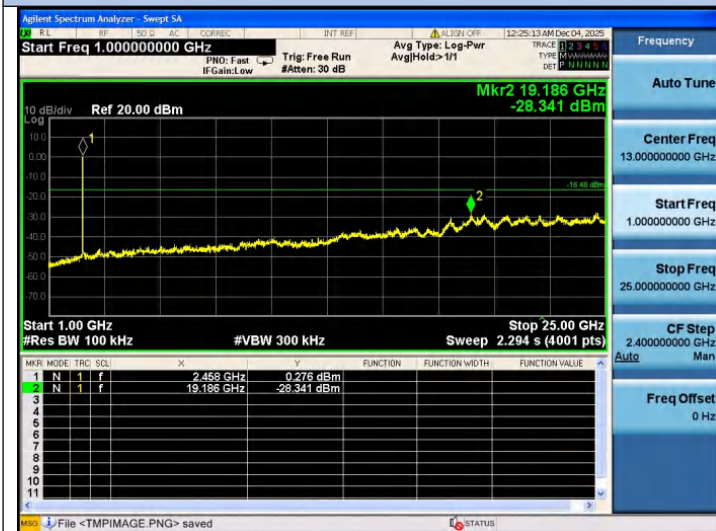
IEEE 802.11n HT20_Ant1_CH11 2462MHz 30-1000MHz



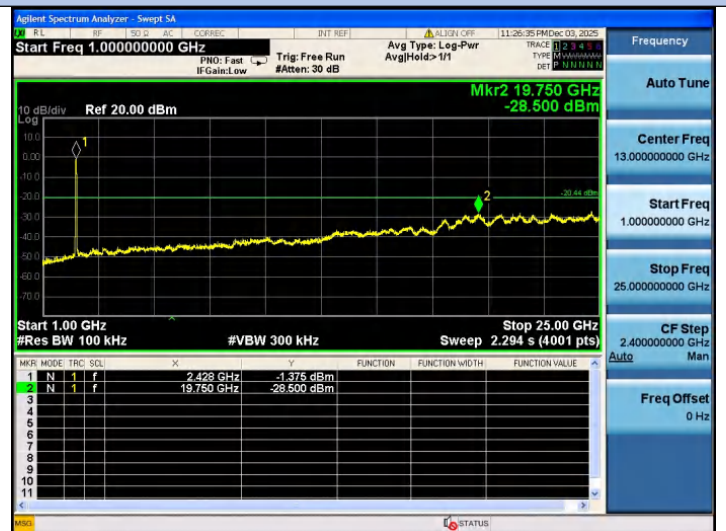
IEEE 802.11n HT40_Ant1_CH03 2422MHz 30-1000MHz

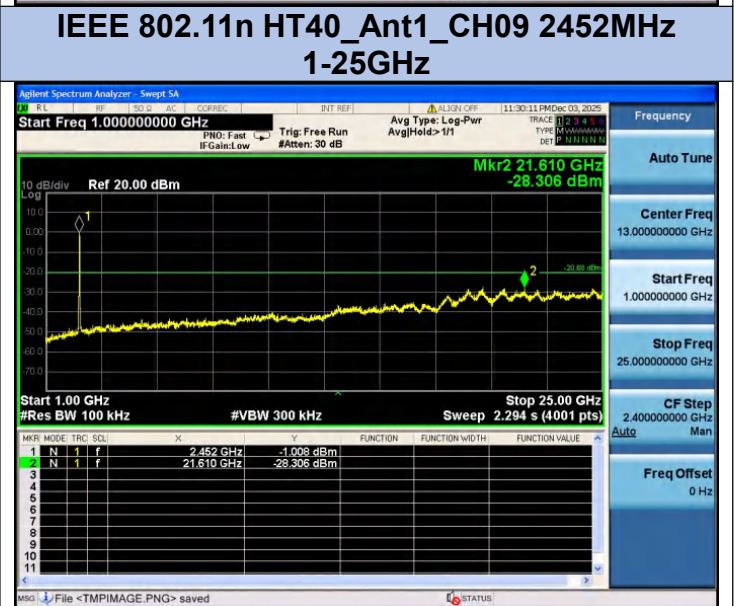
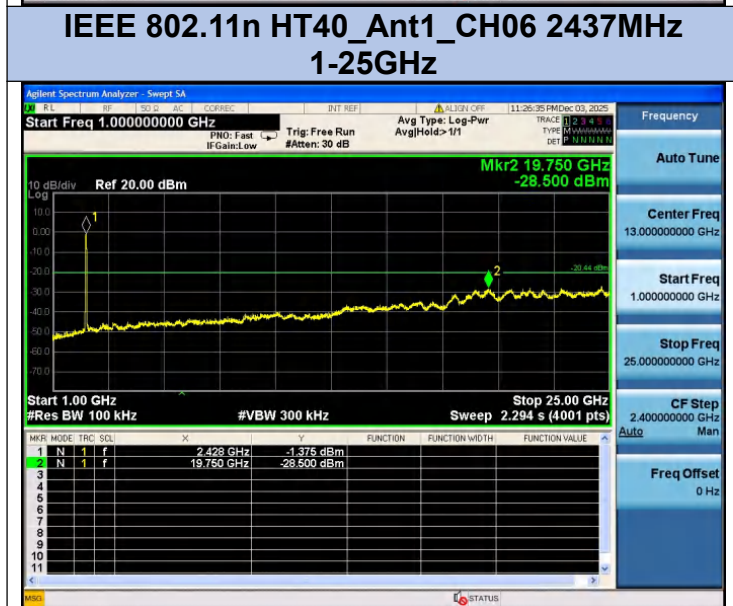
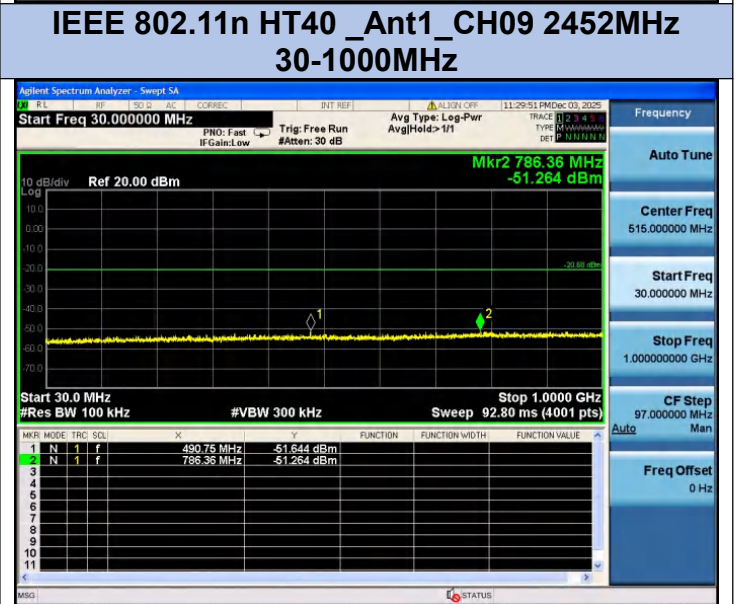
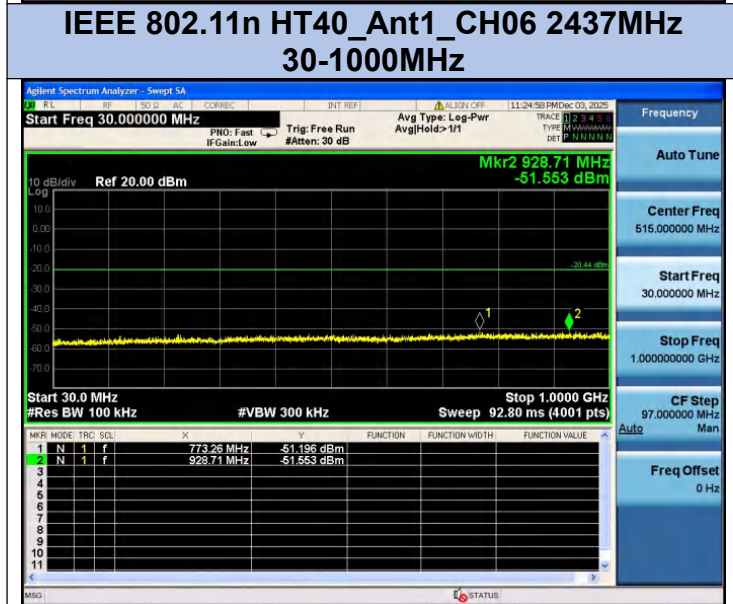
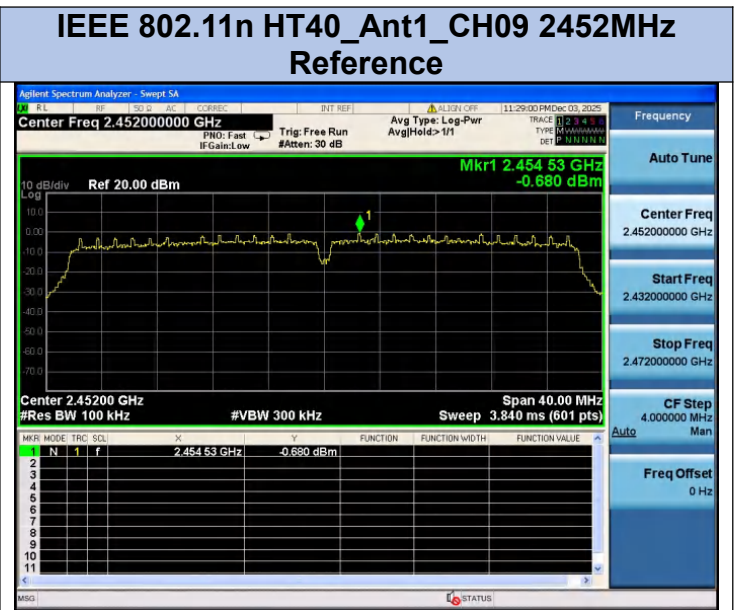
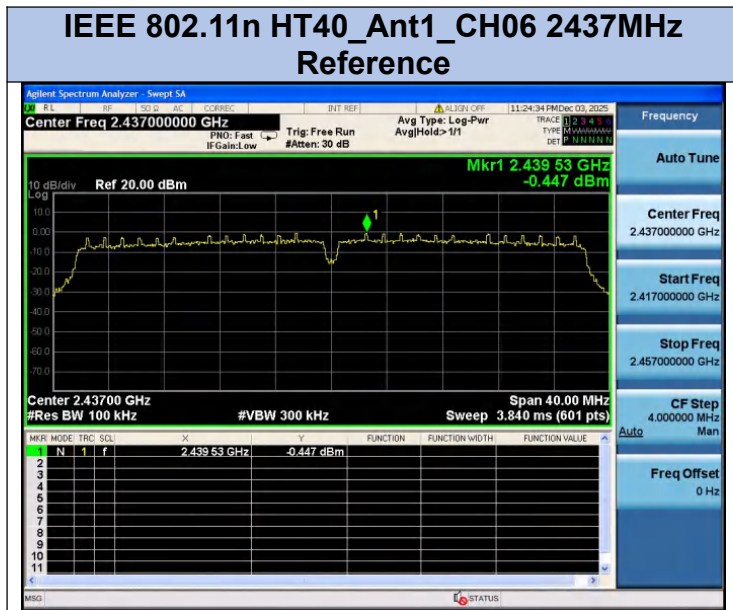


IEEE 802.11n HT20_Ant1_CH11 2462MHz 1-25GHz



IEEE 802.11n HT40_Ant1_CH03 2422MHz 1-25GHz





10. RADIATED SPURIOUS EMISSIONS AND BAND EDGE

10.1. Limit

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

15.205 Restricted frequency band

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)

15.209 Limit

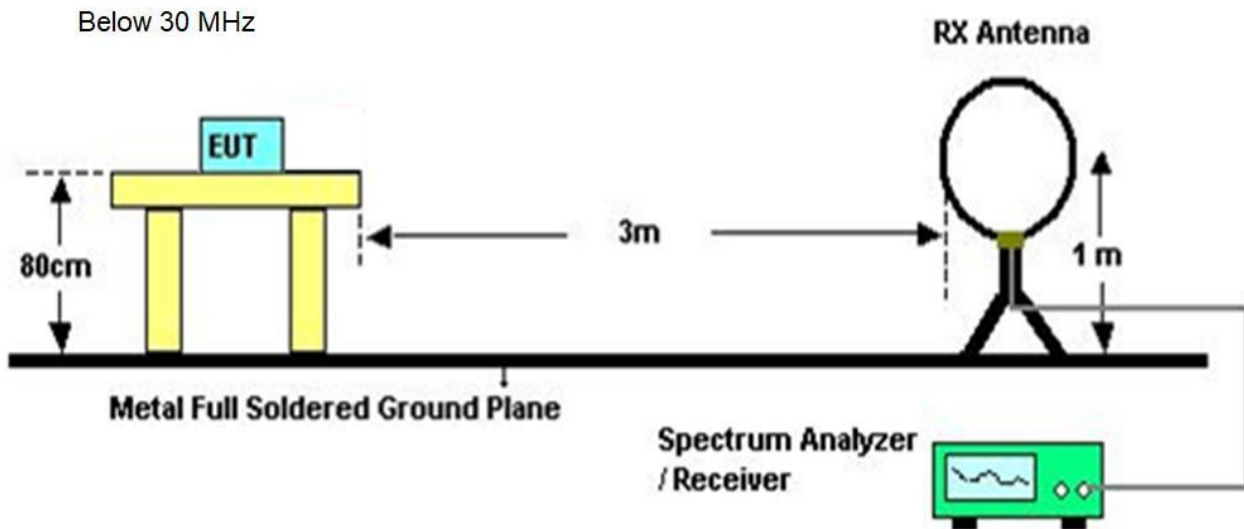
Frequency (MHz)	Field Strength(μ V/m)	Distance(m)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Note:

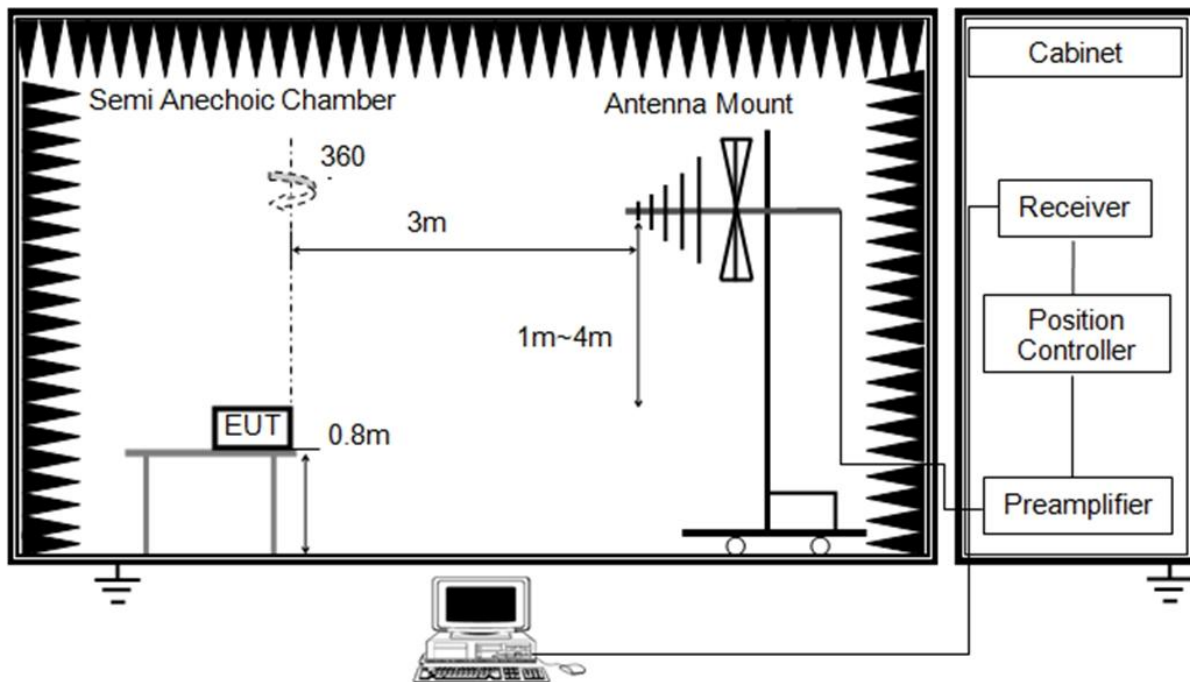
- (1) Emission level $\text{dB}\mu\text{V} = 20 \log \text{Emission level } \mu\text{V/m}$.
- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

10.2. Test Setup

(A) Radiated Emission Test Set-Up, Frequency Below 30MHz

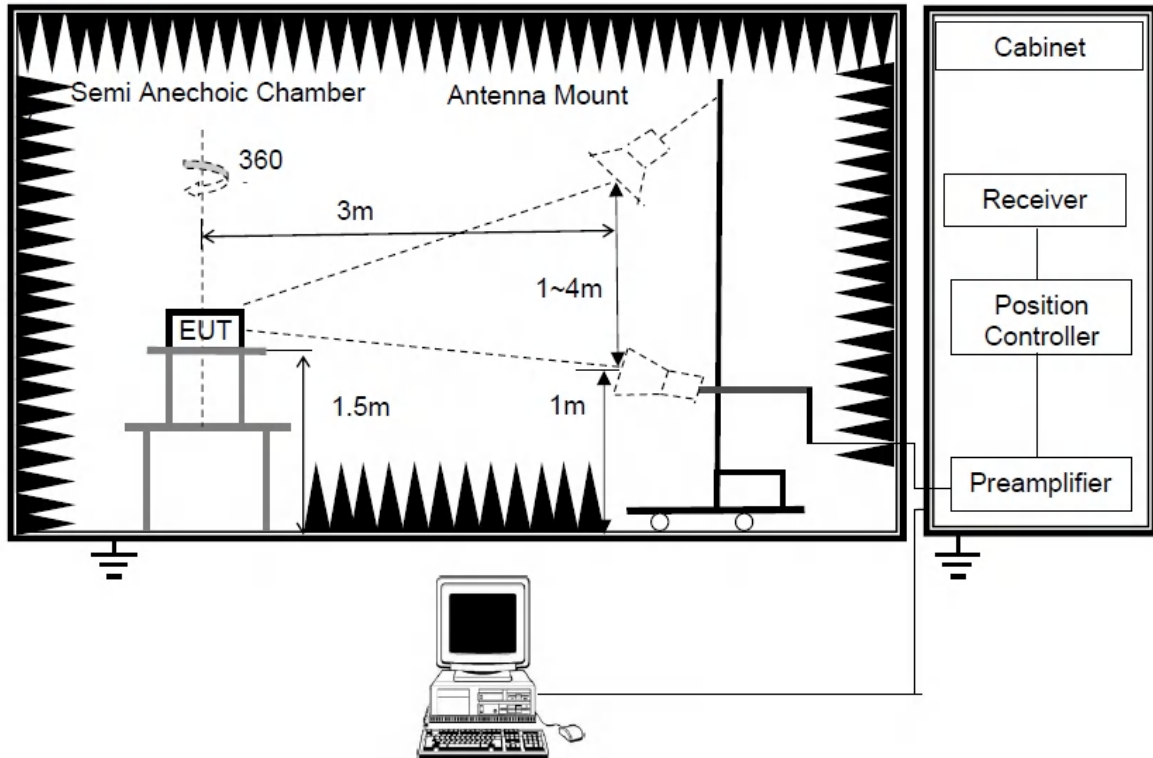


(B) Radiated Emission Test Set-Up, Frequency below 1000MHz Below 1 GHz and above 30 MHz



(C) Radiated Emission Test Set-Up, Frequency above 1GHz

Above 1GHz



10.3. Spectrum Analyzer Setting

For 9KHz-150KHz	
Spectrum Parameters	Setting
RBW	300Hz (for Peak&AVG)/CISPR 200Hz (for QP)
VBW	300Hz (for Peak&AVG)/CISPR 200Hz (for QP)
Start frequency	9KHz
Stop frequency	150KHz
Sweep Time	Auto
Detector	PEAK/QP/AVG
Trace Mode	Max Hold

Note: For 9KHz-90KHz&110KHz-150KHz,the detector is average,other frequency is CISPR QP detector.

For 150KHz-30MHz	
Spectrum Parameters	Setting
RBW	9KHz
VBW	9KHz
Start frequency	150KHz
Stop frequency	30MHz
Sweep Time	Auto
Detector	QP
Trace Mode	Max Hold

Note: For 150KHz-490KHz,the detector is average,other frequency is CISPR QP detector.

For 30MHz-1GHz	
Spectrum Parameters	Setting
RBW	120KHz
VBW	300KHz
Start frequency	30MHz
Stop frequency	1GHz
Sweep Time	Auto
Detector	QP
Trace Mode	Max Hold

For Above 1GHz		
Spectrum Parameters	Setting	
RBW	1MHz	
VBW	PEAK Measurement	AVG Measurement
	3MHz	Duty cycle $\geq$ 98%, VBW=10Hz Duty cycle<98%,VBW $\geq$ 1/T Video bandwidth mode-RMS (power averaging)
Start frequency	1GHz	
Stop frequency	40GHz	
Sweep Time	Auto	
Detector	PEAK	
Trace Mode	Max Hold	

Note: T is the on-time time of the duty cycle, when EUT transmit continuously with maximum output power, unit is seconds. reference section 3 for the on-time time.

10.4. Test Procedure

- a. EUT was placed on a turn table, which is 0.8-meter high above ground for below 1GHz test, and which is 1.5-meter high above ground for above 1GHz test.
- b. The diameter of the turntable is 2 meters. The EUT is located at the center of the edge of the test support table. Since the turntable is large enough, the EUT is placed at the center of the edge of the test support table as well as at the center of the turntable.
- c. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower.
- d. Set the EUT transmit continuously with maximum output power.
- e. The turn table can rotate 360 degrees to determine the position of the maximum emission level.
- f. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.
- g. Spectrum analyzer setting parameters in accordance with section 10.3.
- h. Repeat above procedures until all channels and test modes were measured.
- i. Record the results in the test report.

Note:

1. For emissions above 1GHz, if peak level complies with average limit, then the average level is deemed to comply with average limit.
2. The frequency 2412MHz ,2437MHz and 2462MHz is fundamental frequency which no limit, the limit on plots is automatically generated by the software, it's not fundamental limit, we can't remove it.
3. For 30-1000MHz Radiation emissions, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n HT20 and IEEE 802.11n HT40 mode all have been tested, only worse case: IEEE 802.11g mode with CH01 2412MHz is reported. it was conducted under both AC 120V/60Hz and AC 230V/50Hz input voltages. There was no significant change in radiation emission. Only the test data under AC 120V/60Hz voltage was recorded and included in the report.
4. Radiated emission test from 9KHz to 10th harmonic of fundamental was verified, and no emission found except system noise floor in 9KHz to 30MHz and not recorded in this report.
5. The amplitude of 18GHz to 25GHz spurious emission-that-is attenuated by more than 20dB below the-permissible-limit has no need-to-be-reported.

10.5. Test Result

Radiated Emissions 30-1000MHz

EUT: Bitcoin Miner

M/N: BIT144

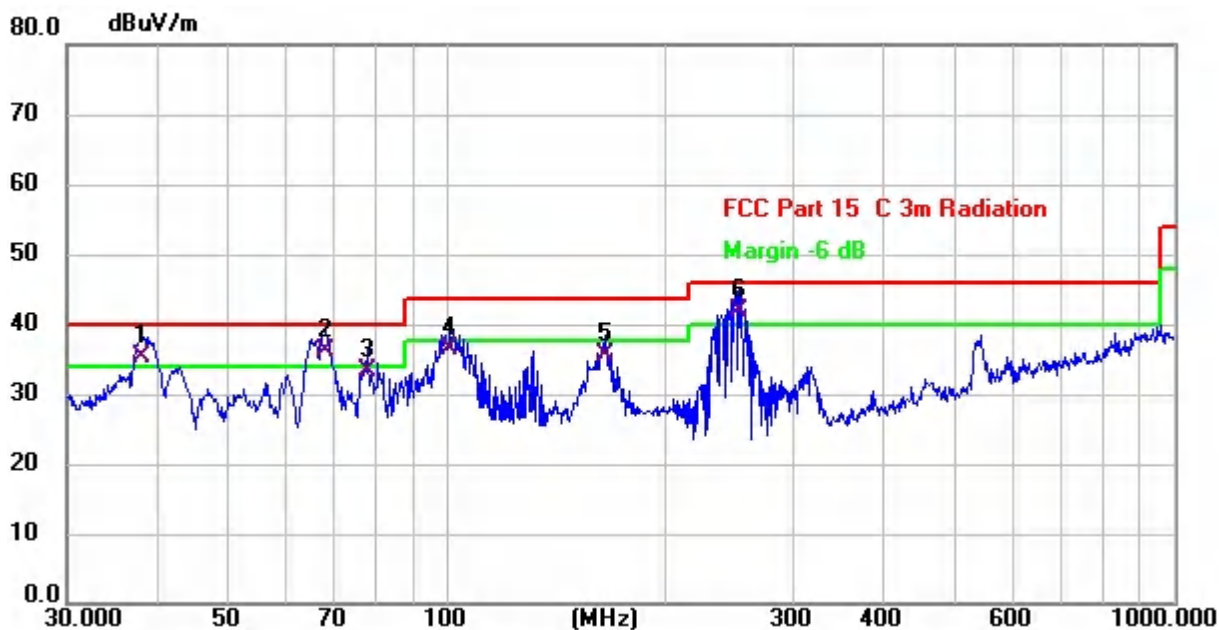
Test Voltage: DC 12V by Switching Power Supply Input: AC 120V/60Hz

Ant. Pol.: Vertical

Test Mode: TX Mode

Note: only worse case: IEEE 802.11g mode with CH01 2412MHz is reported

Detailed results are shown below



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 !	37.945	15.32	20.09	35.41	40.00	-4.59	QP			P	
2 *	67.913	18.65	17.41	36.06	40.00	-3.94	QP			P	
3	77.593	16.77	16.52	33.29	40.00	-6.71	QP			P	
4	100.934	19.80	16.73	36.53	43.50	-6.97	QP			P	
5	165.487	15.21	20.27	35.48	43.50	-8.02	QP			P	
6 !	252.063	23.39	18.48	41.87	46.00	-4.13	QP			P	

Remarks: 1). Level (dBuV/m) = Reading (dBuV/m) + Factor (dB/m)
 2). Factor(dB/m) =Antenna Factor (dB/m) + Cable loss (dB)
 3). Margin(dB) = Limit (dBuV/m) - Level (dBuV/m)

EUT: Bitcoin Miner

M/N: BIT144

Test Voltage: DC 12V by Switching Power Supply Input: AC 120V/60Hz

Ant. Pol.: Horizontal

Test Mode: TX Mode

Note: only worse case: IEEE 802.11g mode with CH01 2412MHz is reported

Detailed results are shown below



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	99.528	18.18	16.08	34.26	43.50	-9.24	QP			P	
2	131.758	15.72	18.85	34.57	43.50	-8.93	QP			P	
3	165.487	13.48	20.27	33.75	43.50	-9.75	QP			P	
4	226.893	18.02	17.55	35.57	46.00	-10.43	QP			P	
5 *	249.425	25.36	18.14	43.50	46.00	-2.50	QP			P	
6	317.701	14.70	20.18	34.88	46.00	-11.12	QP			P	

Remarks: 1). Level (dBμV/m) = Reading (dBμV/m) + Factor (dB/m)
 2). Factor(dB/m) = Antenna Factor (dB/m) + Cable loss (dB)
 3). Margin(dB) = Limit (dBμV/m) - Level (dBμV/m)

Radiated Emissions Above 1GHz - IEEE 802.11b

IEEE 802.11b-CH01 2412MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1996.000	40.25	-21.92	74.0	33.75	Peak	216.00	100	Vertical	Pass
1**	1996.000	31.36	-21.92	54.0	22.64	AV	216.00	100	Vertical	Pass
2	2874.800	45.50	-18.12	74.0	28.50	Peak	180.00	100	Vertical	Pass
2**	2874.800	34.92	-18.12	54.0	19.08	AV	180.00	100	Vertical	Pass
3	4823.750	45.81	-11.39	74.0	28.19	Peak	360.00	100	Vertical	Pass
3**	4823.750	40.63	-11.39	54.0	13.37	AV	360.00	100	Vertical	Pass
4	7236.000	47.31	-7.96	74.0	26.69	Peak	360.00	100	Vertical	Pass
4**	7236.000	40.78	-7.96	54.0	13.22	AV	360.00	100	Vertical	Pass
5	7996.000	51.50	-6.61	74.0	22.50	Peak	36.00	100	Vertical	Pass
5**	7996.000	42.46	-6.61	54.0	11.54	AV	36.00	100	Vertical	Pass
6	17836.724	53.41	0.54	74.0	20.59	Peak	144.00	100	Vertical	Pass
6**	17836.724	43.61	0.54	54.0	10.39	AV	144.00	100	Vertical	Pass

IEEE 802.11b-CH01 2412MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1934.500	40.43	-22.60	74.0	33.57	Peak	360.00	150	Horizontal	Pass
1**	1934.500	30.54	-22.60	54.0	23.46	AV	360.00	150	Horizontal	Pass
2	2804.800	45.36	-18.33	74.0	28.64	Peak	216.00	150	Horizontal	Pass
2**	2804.800	35.63	-18.33	54.0	18.37	AV	216.00	150	Horizontal	Pass
3	4823.750	48.86	-11.39	74.0	25.14	Peak	108.00	150	Horizontal	Pass
3**	4823.750	42.51	-11.39	54.0	11.49	AV	108.00	150	Horizontal	Pass
4	7236.000	49.56	-7.96	74.0	24.44	Peak	288.00	150	Horizontal	Pass
4**	7236.000	42.40	-7.96	54.0	11.60	AV	288.00	150	Horizontal	Pass
5	7917.500	51.38	-7.61	74.0	22.62	Peak	216.00	150	Horizontal	Pass
5**	7917.500	41.78	-7.61	54.0	12.22	AV	216.00	150	Horizontal	Pass
6	17925.974	53.95	1.34	74.0	20.05	Peak	180.00	150	Horizontal	Pass
6**	17925.974	44.28	1.34	54.0	9.72	AV	180.00	150	Horizontal	Pass

IEEE 802.11b-CH06 2437MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1916.000	39.72	-22.64	74.0	34.28	Peak	324.00	150	Vertical	Pass
1**	1916.000	30.18	-22.64	54.0	23.82	AV	324.00	150	Vertical	Pass
2	2997.000	44.75	-17.97	74.0	29.25	Peak	360.00	150	Vertical	Pass
2**	2997.000	36.28	-17.97	54.0	17.72	AV	360.00	150	Vertical	Pass
3	4874.000	44.92	-11.19	74.0	29.08	Peak	324.00	150	Vertical	Pass
3**	4874.000	38.16	-11.19	54.0	15.84	AV	324.00	150	Vertical	Pass
4	7310.750	46.46	-8.18	74.0	27.54	Peak	324.00	150	Vertical	Pass
4**	7310.750	41.00	-8.18	54.0	13.00	AV	324.00	150	Vertical	Pass
5	7894.000	51.81	-7.28	74.0	22.19	Peak	216.00	150	Vertical	Pass
5**	7894.000	41.99	-7.28	54.0	12.01	AV	216.00	150	Vertical	Pass
6	17481.038	52.87	1.44	74.0	21.13	Peak	288.00	150	Vertical	Pass
6**	17481.038	45.10	1.44	54.0	8.90	AV	288.00	150	Vertical	Pass

IEEE 802.11b-CH06 2437MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1877.700	40.01	-22.83	74.0	33.99	Peak	252.00	150	Horizontal	Pass
1**	1877.700	29.12	-22.83	54.0	24.88	AV	252.00	150	Horizontal	Pass
2	2984.600	45.16	-18.00	74.0	28.84	Peak	360.00	150	Horizontal	Pass
2**	2984.600	35.66	-18.00	54.0	18.34	AV	360.00	150	Horizontal	Pass
3	4874.000	44.51	-11.19	74.0	29.49	Peak	180.00	150	Horizontal	Pass
3**	4874.000	37.77	-11.19	54.0	16.23	AV	180.00	150	Horizontal	Pass
4	7310.750	47.03	-8.18	74.0	26.97	Peak	216.00	150	Horizontal	Pass
4**	7310.750	40.75	-8.18	54.0	13.25	AV	216.00	150	Horizontal	Pass
5	7986.500	51.13	-6.69	74.0	22.87	Peak	108.00	150	Horizontal	Pass
5**	7986.500	42.38	-6.69	54.0	11.62	AV	108.00	150	Horizontal	Pass
6	17942.249	54.24	1.43	74.0	19.76	Peak	216.00	150	Horizontal	Pass
6**	17942.249	44.39	1.43	54.0	9.61	AV	216.00	150	Horizontal	Pass

IEEE 802.11b-CH11 2462MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1972.100	40.05	-22.37	74.0	33.95	Peak	324.00	150	Horizontal	Pass
1**	1972.100	30.75	-22.37	54.0	23.25	AV	324.00	150	Horizontal	Pass
2	2979.000	44.94	-18.03	74.0	29.06	Peak	72.00	150	Horizontal	Pass
2**	2979.000	35.06	-18.03	54.0	18.94	AV	72.00	150	Horizontal	Pass
3	4923.750	43.92	-12.12	74.0	30.08	Peak	324.00	150	Horizontal	Pass
3**	4923.750	37.09	-12.12	54.0	16.91	AV	324.00	150	Horizontal	Pass
4	7386.000	48.25	-7.87	74.0	25.75	Peak	216.00	150	Horizontal	Pass
4**	7386.000	40.79	-7.87	54.0	13.21	AV	216.00	150	Horizontal	Pass
5	7670.000	51.42	-6.93	74.0	22.58	Peak	288.00	150	Horizontal	Pass
5**	7670.000	41.14	-6.93	54.0	12.86	AV	288.00	150	Horizontal	Pass
6	17915.214	53.26	0.63	74.0	20.74	Peak	288.00	150	Horizontal	Pass
6**	17915.214	44.07	0.63	54.0	9.93	AV	288.00	150	Horizontal	Pass

IEEE 802.11b-CH11 2462MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1833.600	40.74	-23.21	74.0	33.26	Peak	180.00	150	Vertical	Pass
1**	1833.600	29.53	-23.21	54.0	24.47	AV	180.00	150	Vertical	Pass
2	2823.200	45.07	-18.31	74.0	28.93	Peak	360.00	150	Vertical	Pass
2**	2823.200	35.85	-18.31	54.0	18.15	AV	360.00	150	Vertical	Pass
3	4923.750	44.26	-12.12	74.0	29.74	Peak	288.00	150	Vertical	Pass
3**	4923.750	37.57	-12.12	54.0	16.43	AV	288.00	150	Vertical	Pass
4	7386.000	47.20	-7.87	74.0	26.80	Peak	360.00	150	Vertical	Pass
4**	7386.000	40.99	-7.87	54.0	13.01	AV	360.00	150	Vertical	Pass
5	7990.250	51.11	-6.62	74.0	22.89	Peak	144.00	150	Vertical	Pass
5**	7990.250	42.14	-6.62	54.0	11.86	AV	144.00	150	Vertical	Pass
6	17494.688	53.36	0.60	74.0	20.64	Peak	36.00	150	Vertical	Pass
6**	17494.688	43.61	0.60	54.0	10.39	AV	36.00	150	Vertical	Pass

Radiated Emissions Above 1GHz-IEEE 802.11g

IEEE 802.11g-CH01 2412MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1945.500	40.05	-22.50	74.0	33.95	Peak	36.00	150	Vertical	Pass
1**	1945.500	30.24	-22.50	54.0	23.76	AV	36.00	150	Vertical	Pass
2	2813.700	45.20	-18.33	74.0	28.80	Peak	252.00	150	Vertical	Pass
2**	2813.700	35.31	-18.33	54.0	18.69	AV	252.00	150	Vertical	Pass
3	4823.750	44.28	-11.39	74.0	29.72	Peak	252.00	150	Vertical	Pass
3**	4823.750	37.80	-11.39	54.0	16.20	AV	252.00	150	Vertical	Pass
4	7236.000	46.80	-7.96	74.0	27.20	Peak	108.00	150	Vertical	Pass
4**	7236.000	39.81	-7.96	54.0	14.19	AV	108.00	150	Vertical	Pass
5	7976.250	51.17	-6.94	74.0	22.83	Peak	36.00	150	Vertical	Pass
5**	7976.250	42.08	-6.94	54.0	11.92	AV	36.00	150	Vertical	Pass
6	17813.887	53.28	0.87	74.0	20.72	Peak	108.00	150	Vertical	Pass
6**	17813.887	43.53	0.87	54.0	10.47	AV	108.00	150	Vertical	Pass

IEEE 802.11g-CH01 2412MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1922.600	40.03	-22.63	74.0	33.97	Peak	72.00	150	Horizontal	Pass
1**	1922.600	31.63	-22.63	54.0	22.37	AV	72.00	150	Horizontal	Pass
2	2947.000	46.29	-18.06	74.0	27.71	Peak	288.00	150	Horizontal	Pass
2**	2947.000	35.40	-18.06	54.0	18.60	AV	288.00	150	Horizontal	Pass
3	4823.750	46.04	-11.39	74.0	27.96	Peak	360.00	150	Horizontal	Pass
3**	4823.750	38.35	-11.39	54.0	15.65	AV	360.00	150	Horizontal	Pass
4	7236.000	48.37	-7.96	74.0	25.63	Peak	324.00	150	Horizontal	Pass
4**	7236.000	40.68	-7.96	54.0	13.32	AV	324.00	150	Horizontal	Pass
5	7667.500	50.86	-6.98	74.0	23.14	Peak	288.00	150	Horizontal	Pass
5**	7667.500	43.14	-6.98	54.0	10.86	AV	288.00	150	Horizontal	Pass
6	17943.300	53.81	1.38	74.0	20.19	Peak	216.00	150	Horizontal	Pass
6**	17943.300	44.13	1.38	54.0	9.87	AV	216.00	150	Horizontal	Pass

IEEE 802.11g-CH06 2437MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1996.300	39.88	-21.91	74.0	34.12	Peak	36.00	150	Horizontal	Pass
1**	1996.300	30.86	-21.91	54.0	23.14	AV	36.00	150	Horizontal	Pass
2	2495.900	45.63	-19.20	74.0	28.37	Peak	216.00	150	Horizontal	Pass
2**	2495.900	36.80	-19.20	54.0	17.20	AV	216.00	150	Horizontal	Pass
3	4874.000	44.08	-11.19	74.0	29.92	Peak	108.00	150	Horizontal	Pass
3**	4874.000	38.47	-11.19	54.0	15.53	AV	108.00	150	Horizontal	Pass
4	7310.750	48.99	-8.18	74.0	25.01	Peak	288.00	150	Horizontal	Pass
4**	7310.750	40.18	-8.18	54.0	13.82	AV	288.00	150	Horizontal	Pass
5	7987.500	51.08	-6.67	74.0	22.92	Peak	108.00	150	Horizontal	Pass
5**	7987.500	43.01	-6.67	54.0	10.99	AV	108.00	150	Horizontal	Pass
6	17938.313	53.37	1.55	74.0	20.63	Peak	360.00	150	Horizontal	Pass
6**	17938.313	44.39	1.55	54.0	9.61	AV	360.00	150	Horizontal	Pass

IEEE 802.11g-CH06 2437MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1965.300	40.07	-22.36	74.0	33.93	Peak	216.00	150	Vertical	Pass
1**	1965.300	30.40	-22.36	54.0	23.60	AV	216.00	150	Vertical	Pass
2	2771.600	45.11	-18.47	74.0	28.89	Peak	108.00	150	Vertical	Pass
2**	2771.600	34.80	-18.47	54.0	19.20	AV	108.00	150	Vertical	Pass
3	4874.000	43.74	-11.19	74.0	30.26	Peak	216.00	150	Vertical	Pass
3**	4874.000	37.29	-11.19	54.0	16.71	AV	216.00	150	Vertical	Pass
4	7310.750	46.59	-8.18	74.0	27.41	Peak	216.00	150	Vertical	Pass
4**	7310.750	40.20	-8.18	54.0	13.80	AV	216.00	150	Vertical	Pass
5	7668.750	50.99	-6.96	74.0	23.01	Peak	216.00	150	Vertical	Pass
5**	7668.750	41.73	-6.96	54.0	12.27	AV	216.00	150	Vertical	Pass
6	17482.875	53.46	1.36	74.0	20.54	Peak	360.00	150	Vertical	Pass
6**	17482.875	44.19	1.36	54.0	9.81	AV	360.00	150	Vertical	Pass

IEEE 802.11g-CH11 2462MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1973.400	40.00	-22.38	74.0	34.00	Peak	36.00	150	Vertical	Pass
1**	1973.400	30.65	-22.38	54.0	23.35	AV	36.00	150	Vertical	Pass
2	2855.700	45.16	-18.23	74.0	28.84	Peak	252.00	150	Vertical	Pass
2**	2855.700	34.74	-18.23	54.0	19.26	AV	252.00	150	Vertical	Pass
3	4923.750	45.42	-12.12	74.0	28.58	Peak	108.00	150	Vertical	Pass
3**	4923.750	37.18	-12.12	54.0	16.82	AV	108.00	150	Vertical	Pass
4	7386.000	48.58	-7.87	74.0	25.42	Peak	108.00	150	Vertical	Pass
4**	7386.000	40.12	-7.87	54.0	13.88	AV	108.00	150	Vertical	Pass
5	7933.000	50.93	-7.20	74.0	23.07	Peak	72.00	150	Vertical	Pass
5**	7933.000	41.03	-7.20	54.0	12.97	AV	72.00	150	Vertical	Pass
6	17977.426	53.31	0.95	74.0	20.69	Peak	360.00	150	Vertical	Pass
6**	17977.426	44.06	0.95	54.0	9.94	AV	360.00	150	Vertical	Pass

IEEE 802.11g-CH11 2462MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1958.600	40.62	-22.37	74.0	33.38	Peak	252.00	150	Horizontal	Pass
1**	1958.600	31.07	-22.37	54.0	22.93	AV	252.00	150	Horizontal	Pass
2	2492.000	46.18	-19.22	74.0	27.82	Peak	108.00	150	Horizontal	Pass
2**	2492.000	37.39	-19.22	54.0	16.61	AV	108.00	150	Horizontal	Pass
3	4923.750	44.71	-12.12	74.0	29.29	Peak	108.00	150	Horizontal	Pass
3**	4923.750	37.57	-12.12	54.0	16.43	AV	108.00	150	Horizontal	Pass
4	7386.000	47.21	-7.87	74.0	26.79	Peak	360.00	150	Horizontal	Pass
4**	7386.000	40.43	-7.87	54.0	13.57	AV	360.00	150	Horizontal	Pass
5	7982.750	51.49	-6.76	74.0	22.51	Peak	360.00	150	Horizontal	Pass
5**	7982.750	41.60	-6.76	54.0	12.40	AV	360.00	150	Horizontal	Pass
6	17948.287	53.54	1.18	74.0	20.46	Peak	144.00	150	Horizontal	Pass
6**	17948.287	44.12	1.18	54.0	9.88	AV	144.00	150	Horizontal	Pass

Radiated Emissions Above 1GHz - IEEE 802.11n HT20

IEEE 802.11n HT20-CH01 2412MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1977.700	40.32	-22.35	74.0	33.68	Peak	72.00	150	Horizontal	Pass
1**	1977.700	30.59	-22.35	54.0	23.41	AV	72.00	150	Horizontal	Pass
2	2489.500	45.36	-19.23	74.0	28.64	Peak	252.00	150	Horizontal	Pass
2**	2489.500	35.50	-19.23	54.0	18.50	AV	252.00	150	Horizontal	Pass
3	4823.750	45.04	-11.39	74.0	28.96	Peak	288.00	150	Horizontal	Pass
3**	4823.750	39.30	-11.39	54.0	14.70	AV	288.00	150	Horizontal	Pass
4	7236.000	47.39	-7.96	74.0	26.61	Peak	180.00	150	Horizontal	Pass
4**	7236.000	41.35	-7.96	54.0	12.65	AV	180.00	150	Horizontal	Pass
5	7805.500	51.41	-7.63	74.0	22.59	Peak	108.00	150	Horizontal	Pass
5**	7805.500	40.60	-7.63	54.0	13.40	AV	108.00	150	Horizontal	Pass
6	17521.463	53.82	0.98	74.0	20.18	Peak	36.00	150	Horizontal	Pass
6**	17521.463	43.24	0.98	54.0	10.76	AV	36.00	150	Horizontal	Pass

IEEE 802.11n HT20-CH01 2412MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1895.500	40.21	-22.59	74.0	33.79	Peak	252.00	150	Vertical	Pass
1**	1895.500	30.66	-22.59	54.0	23.34	AV	252.00	150	Vertical	Pass
2	2985.700	45.18	-18.00	74.0	28.82	Peak	108.00	150	Vertical	Pass
2**	2985.700	34.95	-18.00	54.0	19.05	AV	108.00	150	Vertical	Pass
3	4823.750	44.54	-11.39	74.0	29.46	Peak	72.00	150	Vertical	Pass
3**	4823.750	37.85	-11.39	54.0	16.15	AV	72.00	150	Vertical	Pass
4	7236.000	47.14	-7.96	74.0	26.86	Peak	144.00	150	Vertical	Pass
4**	7236.000	40.25	-7.96	54.0	13.75	AV	144.00	150	Vertical	Pass
5	7987.750	51.59	-6.66	74.0	22.41	Peak	180.00	150	Vertical	Pass
5**	7987.750	42.57	-6.66	54.0	11.43	AV	180.00	150	Vertical	Pass
6	17485.238	53.52	1.27	74.0	20.48	Peak	144.00	150	Vertical	Pass
6**	17485.238	44.82	1.27	54.0	9.18	AV	144.00	150	Vertical	Pass

IEEE 802.11n HT20-CH06 2437MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1968.400	39.91	-22.36	74.0	34.09	Peak	144.00	150	Vertical	Pass
1**	1968.400	30.58	-22.36	54.0	23.42	AV	144.00	150	Vertical	Pass
2	2980.700	46.24	-18.02	74.0	27.76	Peak	108.00	150	Vertical	Pass
2**	2980.700	35.47	-18.02	54.0	18.53	AV	108.00	150	Vertical	Pass
3	4874.000	44.56	-11.19	74.0	29.44	Peak	324.00	150	Vertical	Pass
3**	4874.000	38.85	-11.19	54.0	15.15	AV	324.00	150	Vertical	Pass
4	7310.750	47.18	-8.18	74.0	26.82	Peak	360.00	150	Vertical	Pass
4**	7310.750	40.89	-8.18	54.0	13.11	AV	360.00	150	Vertical	Pass
5	7986.750	50.54	-6.68	74.0	23.46	Peak	144.00	150	Vertical	Pass
5**	7986.750	41.76	-6.68	54.0	12.24	AV	144.00	150	Vertical	Pass
6	17935.950	52.83	1.59	74.0	21.17	Peak	324.00	150	Vertical	Pass
6**	17935.950	44.15	1.59	54.0	9.85	AV	324.00	150	Vertical	Pass

IEEE 802.11n HT20-CH06 2437MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1997.800	40.52	-21.87	74.0	33.48	Peak	324.00	150	Horizontal	Pass
1**	1997.800	30.97	-21.87	54.0	23.03	AV	324.00	150	Horizontal	Pass
2	2996.000	45.19	-17.97	74.0	28.81	Peak	108.00	150	Horizontal	Pass
2**	2996.000	35.64	-17.97	54.0	18.36	AV	108.00	150	Horizontal	Pass
3	4874.000	42.90	-11.19	74.0	31.10	Peak	36.00	150	Horizontal	Pass
3**	4874.000	37.62	-11.19	54.0	16.38	AV	36.00	150	Horizontal	Pass
4	7310.750	47.53	-8.18	74.0	26.47	Peak	324.00	150	Horizontal	Pass
4**	7310.750	40.23	-8.18	54.0	13.77	AV	324.00	150	Horizontal	Pass
5	7982.250	51.00	-6.77	74.0	23.00	Peak	72.00	150	Horizontal	Pass
5**	7982.250	42.04	-6.77	54.0	11.96	AV	72.00	150	Horizontal	Pass
6	17946.712	53.13	1.25	74.0	20.87	Peak	36.00	150	Horizontal	Pass
6**	17946.712	43.34	1.25	54.0	10.66	AV	36.00	150	Horizontal	Pass

IEEE 802.11n HT20-CH11 2462MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1982.800	40.12	-22.28	74.0	33.88	Peak	36.00	150	Horizontal	Pass
1**	1982.800	30.73	-22.28	54.0	23.27	AV	36.00	150	Horizontal	Pass
2	2913.700	45.31	-17.89	74.0	28.69	Peak	288.00	150	Horizontal	Pass
2**	2913.700	35.68	-17.89	54.0	18.32	AV	288.00	150	Horizontal	Pass
3	4923.750	44.02	-12.12	74.0	29.98	Peak	288.00	150	Horizontal	Pass
3**	4923.750	38.85	-12.12	54.0	15.15	AV	288.00	150	Horizontal	Pass
4	7386.000	46.43	-7.87	74.0	27.57	Peak	216.00	150	Horizontal	Pass
4**	7386.000	40.63	-7.87	54.0	13.37	AV	216.00	150	Horizontal	Pass
5	7977.500	50.90	-6.90	74.0	23.10	Peak	360.00	150	Horizontal	Pass
5**	7977.500	41.71	-6.90	54.0	12.29	AV	360.00	150	Horizontal	Pass
6	17929.650	53.02	1.62	74.0	20.98	Peak	36.00	150	Horizontal	Pass
6**	17929.650	44.92	1.62	54.0	9.08	AV	36.00	150	Horizontal	Pass

IEEE 802.11n HT20-CH11 2462MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1666.300	40.03	-23.93	74.0	33.97	Peak	360.00	150	Vertical	Pass
1**	1666.300	29.30	-23.93	54.0	24.70	AV	360.00	150	Vertical	Pass
2	2995.700	45.34	-17.97	74.0	28.66	Peak	360.00	150	Vertical	Pass
2**	2995.700	35.95	-17.97	54.0	18.05	AV	360.00	150	Vertical	Pass
3	4923.750	43.96	-12.12	74.0	30.04	Peak	36.00	150	Vertical	Pass
3**	4923.750	37.04	-12.12	54.0	16.96	AV	36.00	150	Vertical	Pass
4	7386.000	46.64	-7.87	74.0	27.36	Peak	180.00	150	Vertical	Pass
4**	7386.000	40.72	-7.87	54.0	13.28	AV	180.00	150	Vertical	Pass
5	7689.000	51.55	-6.97	74.0	22.45	Peak	108.00	150	Vertical	Pass
5**	7689.000	41.49	-6.97	54.0	12.51	AV	108.00	150	Vertical	Pass
6	17471.324	53.49	1.56	74.0	20.51	Peak	180.00	150	Vertical	Pass
6**	17471.324	43.60	1.56	54.0	10.40	AV	180.00	150	Vertical	Pass

Radiated Emissions Above 1GHz - IEEE 802.11n HT40

IEEE 802.11n HT40-CH03 2422MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1898.000	40.78	-22.55	74.0	33.22	Peak	360.00	150	Vertical	Pass
1**	1898.000	30.62	-22.55	54.0	23.38	AV	360.00	150	Vertical	Pass
2	2672.200	44.84	-18.87	74.0	29.16	Peak	108.00	150	Vertical	Pass
2**	2672.200	34.46	-18.87	54.0	19.54	AV	108.00	150	Vertical	Pass
3	4843.750	44.77	-11.61	74.0	29.23	Peak	360.00	150	Vertical	Pass
3**	4843.750	38.13	-11.61	54.0	15.87	AV	360.00	150	Vertical	Pass
4	7266.000	47.19	-7.99	74.0	26.81	Peak	36.00	150	Vertical	Pass
4**	7266.000	41.25	-7.99	54.0	12.75	AV	36.00	150	Vertical	Pass
5	7914.250	51.49	-7.65	74.0	22.51	Peak	108.00	150	Vertical	Pass
5**	7914.250	40.94	-7.65	54.0	13.06	AV	108.00	150	Vertical	Pass
6	17475.262	53.52	1.52	74.0	20.48	Peak	288.00	150	Vertical	Pass
6**	17475.262	43.89	1.52	54.0	10.11	AV	288.00	150	Vertical	Pass

IEEE 802.11n HT40-CH03 2422MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1991.900	40.06	-22.10	74.0	33.94	Peak	252.00	150	Horizontal	Pass
1**	1991.900	30.82	-22.10	54.0	23.18	AV	252.00	150	Horizontal	Pass
2	2503.600	47.64	-19.22	74.0	26.36	Peak	108.00	150	Horizontal	Pass
2**	2503.600	37.38	-19.22	54.0	16.62	AV	108.00	150	Horizontal	Pass
3	4843.750	45.92	-11.61	74.0	28.08	Peak	288.00	150	Horizontal	Pass
3**	4843.750	38.77	-11.61	54.0	15.23	AV	288.00	150	Horizontal	Pass
4	7266.000	47.88	-7.99	74.0	26.12	Peak	360.00	150	Horizontal	Pass
4**	7266.000	40.51	-7.99	54.0	13.49	AV	360.00	150	Horizontal	Pass
5	7604.500	50.77	-7.88	74.0	23.23	Peak	288.00	150	Horizontal	Pass
5**	7604.500	40.36	-7.88	54.0	13.64	AV	288.00	150	Horizontal	Pass
6	16894.875	53.28	0.21	74.0	20.72	Peak	360.00	150	Horizontal	Pass
6**	16894.875	43.61	0.21	54.0	10.39	AV	360.00	150	Horizontal	Pass

IEEE 802.11n HT40-CH06 2437MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1955.200	40.63	-22.38	74.0	33.37	Peak	288.00	150	Horizontal	Pass
1**	1955.200	30.59	-22.38	54.0	23.41	AV	288.00	150	Horizontal	Pass
2	2493.700	46.82	-19.21	74.0	27.18	Peak	252.00	150	Horizontal	Pass
2**	2493.700	38.12	-19.21	54.0	15.88	AV	252.00	150	Horizontal	Pass
3	4874.000	43.93	-11.19	74.0	30.07	Peak	108.00	150	Horizontal	Pass
3**	4874.000	38.21	-11.19	54.0	15.79	AV	108.00	150	Horizontal	Pass
4	7310.750	46.39	-8.18	74.0	27.61	Peak	108.00	150	Horizontal	Pass
4**	7310.750	40.87	-8.18	54.0	13.13	AV	108.00	150	Horizontal	Pass
5	7967.250	51.41	-7.21	74.0	22.59	Peak	252.00	150	Horizontal	Pass
5**	7967.250	41.84	-7.21	54.0	12.16	AV	252.00	150	Horizontal	Pass
6	17982.413	53.40	1.21	74.0	20.60	Peak	324.00	150	Horizontal	Pass
6**	17982.413	44.13	1.21	54.0	9.87	AV	324.00	150	Horizontal	Pass

IEEE 802.11n HT40-CH06 2437MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1999.000	40.10	-21.83	74.0	33.90	Peak	360.00	150	Vertical	Pass
1**	1999.000	29.84	-21.83	54.0	24.16	AV	360.00	150	Vertical	Pass
2	2693.500	45.71	-18.81	74.0	28.29	Peak	72.00	150	Vertical	Pass
2**	2693.500	35.46	-18.81	54.0	18.54	AV	72.00	150	Vertical	Pass
3	4874.000	43.32	-11.19	74.0	30.68	Peak	324.00	150	Vertical	Pass
3**	4874.000	38.34	-11.19	54.0	15.66	AV	324.00	150	Vertical	Pass
4	7310.750	47.01	-8.18	74.0	26.99	Peak	360.00	150	Vertical	Pass
4**	7310.750	40.24	-8.18	54.0	13.76	AV	360.00	150	Vertical	Pass
5	7981.000	51.96	-6.80	74.0	22.04	Peak	360.00	150	Vertical	Pass
5**	7981.000	40.97	-6.80	54.0	13.03	AV	360.00	150	Vertical	Pass
6	17819.136	52.84	1.09	74.0	21.16	Peak	72.00	150	Vertical	Pass
6**	17819.136	43.76	1.09	54.0	10.24	AV	72.00	150	Vertical	Pass

IEEE 802.11n HT40-CH09 2452MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1999.000	40.59	-21.83	74.0	33.41	Peak	72.00	150	Vertical	Pass
1**	1999.000	31.45	-21.83	54.0	22.55	AV	72.00	150	Vertical	Pass
2	2679.800	45.46	-18.81	74.0	28.54	Peak	360.00	150	Vertical	Pass
2**	2679.800	35.57	-18.81	54.0	18.43	AV	360.00	150	Vertical	Pass
3	4903.750	44.10	-12.05	74.0	29.90	Peak	180.00	150	Vertical	Pass
3**	4903.750	37.61	-12.05	54.0	16.39	AV	180.00	150	Vertical	Pass
4	7355.750	48.69	-8.10	74.0	25.31	Peak	216.00	150	Vertical	Pass
4**	7355.750	40.13	-8.10	54.0	13.87	AV	216.00	150	Vertical	Pass
5	7623.000	51.84	-7.70	74.0	22.16	Peak	72.00	150	Vertical	Pass
5**	7623.000	40.97	-7.70	54.0	13.03	AV	72.00	150	Vertical	Pass
6	17359.499	53.33	0.96	74.0	20.67	Peak	108.00	150	Vertical	Pass
6**	17359.499	43.65	0.96	54.0	10.35	AV	108.00	150	Vertical	Pass

IEEE 802.11n HT40-CH09 2452MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1993.200	40.09	-22.04	74.0	33.91	Peak	144.00	150	Horizontal	Pass
1**	1993.200	30.51	-22.04	54.0	23.49	AV	144.00	150	Horizontal	Pass
2	2495.500	46.69	-19.20	74.0	27.31	Peak	252.00	150	Horizontal	Pass
2**	2495.500	37.67	-19.20	54.0	16.33	AV	252.00	150	Horizontal	Pass
3	4903.750	42.45	-12.05	74.0	31.55	Peak	36.00	150	Horizontal	Pass
3**	4903.750	37.25	-12.05	54.0	16.75	AV	36.00	150	Horizontal	Pass
4	7355.750	48.27	-8.10	74.0	25.73	Peak	216.00	150	Horizontal	Pass
4**	7355.750	40.15	-8.10	54.0	13.85	AV	216.00	150	Horizontal	Pass
5	7845.250	50.59	-7.21	74.0	23.41	Peak	324.00	150	Horizontal	Pass
5**	7845.250	40.74	-7.21	54.0	13.26	AV	324.00	150	Horizontal	Pass
6	17931.749	53.52	1.63	74.0	20.48	Peak	360.00	150	Horizontal	Pass
6**	17931.749	43.92	1.63	54.0	10.08	AV	360.00	150	Horizontal	Pass

Note:

1. Results (dBuV/m) = Raw Value (dBuV) + Factor (dB/m)
2. Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - Pre-amplifier
3. Margin value = Limit - Results.

Radiated Band Edge - IEEE 802.11b

IEEE 802.11b-CH01 2412MHz-Low Band Edge

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2352.735	41.37	-19.67	74.0	32.63	Peak	108.00	150	Horizontal	Pass
1**	2352.735	29.94	-19.67	54.0	24.06	AV	108.00	150	Horizontal	Pass
2	2389.970	39.94	-19.56	74.0	34.06	Peak	72.00	150	Horizontal	Pass
2**	2389.970	30.17	-19.56	54.0	23.83	AV	72.00	150	Horizontal	Pass
3	2399.980	46.72	-19.64	74.0	27.28	Peak	108.00	150	Horizontal	Pass
3**	2399.980	39.36	-19.64	54.0	14.64	AV	108.00	150	Horizontal	Pass

IEEE 802.11b-CH01 2412MHz-Low Band Edge

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2369.785	40.98	-19.67	74.0	33.02	Peak	216.00	150	Vertical	Pass
1**	2369.785	29.36	-19.67	54.0	24.64	AV	216.00	150	Vertical	Pass
2	2389.970	39.63	-19.56	74.0	34.37	Peak	36.00	150	Vertical	Pass
2**	2389.970	29.62	-19.56	54.0	24.38	AV	36.00	150	Vertical	Pass
3	2399.980	44.31	-19.64	74.0	29.69	Peak	180.00	150	Vertical	Pass
3**	2399.980	37.03	-19.64	54.0	16.97	AV	180.00	150	Vertical	Pass

IEEE 802.11b-CH11 2462MHz-High Band Edge

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.475	40.05	-19.50	74.0	33.95	Peak	360.00	150	Vertical	Pass
1**	2483.475	30.17	-19.50	54.0	23.83	AV	360.00	150	Vertical	Pass
2	2498.625	41.34	-19.47	74.0	32.66	Peak	252.00	150	Vertical	Pass
2**	2498.625	30.36	-19.47	54.0	23.64	AV	252.00	150	Vertical	Pass

IEEE 802.11b-CH11 2462MHz-High Band Edge

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.475	42.51	-19.50	74.0	31.49	Peak	324.00	150	Horizontal	Pass
1**	2483.475	34.71	-19.50	54.0	19.29	AV	324.00	150	Horizontal	Pass
2	2491.450	44.35	-19.50	74.0	29.65	Peak	360.00	150	Horizontal	Pass
2**	2491.450	33.18	-19.50	54.0	20.82	AV	360.00	150	Horizontal	Pass

Radiated Band Edge - IEEE 802.11g

IEEE 802.11g-CH01 2412MHz-Low Band Edge

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2368.960	41.84	-19.67	74.0	32.16	Peak	216.00	150	Horizontal	Pass
1**	2368.960	29.78	-19.67	54.0	24.22	AV	216.00	150	Horizontal	Pass
2	2389.970	41.68	-19.56	74.0	32.32	Peak	216.00	150	Horizontal	Pass
2**	2389.970	31.16	-19.56	54.0	22.84	AV	216.00	150	Horizontal	Pass
3	2399.980	52.81	-19.64	74.0	21.19	Peak	216.00	150	Horizontal	Pass
3**	2399.980	40.64	-19.64	54.0	13.36	AV	216.00	150	Horizontal	Pass

IEEE 802.11g-CH01 2412MHz-Low Band Edge

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2335.960	41.09	-19.63	74.0	32.91	Peak	324.00	150	Vertical	Pass
1**	2335.960	29.64	-19.63	54.0	24.36	AV	324.00	150	Vertical	Pass
2	2389.970	39.98	-19.56	74.0	34.02	Peak	144.00	150	Vertical	Pass
2**	2389.970	30.36	-19.56	54.0	23.64	AV	144.00	150	Vertical	Pass
3	2399.980	53.26	-19.64	74.0	20.74	Peak	360.00	150	Vertical	Pass
3**	2399.980	38.57	-19.64	54.0	15.43	AV	360.00	150	Vertical	Pass

IEEE 802.11g-CH11 2462MHz-High Band Edge

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.475	43.10	-19.50	74.0	30.90	Peak	324.00	150	Vertical	Pass
1**	2483.475	31.44	-19.50	54.0	22.56	AV	324.00	150	Vertical	Pass
2	2483.650	44.21	-19.50	74.0	29.79	Peak	216.00	150	Vertical	Pass
2**	2483.650	31.23	-19.50	54.0	22.77	AV	216.00	150	Vertical	Pass

IEEE 802.11g-CH11 2462MHz-High Band Edge

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.475	64.15	-19.50	74.0	9.85	Peak	180.00	150	Horizontal	Pass
1**	2483.475	47.67	-19.50	54.0	6.33	AV	180.00	150	Horizontal	Pass
2	2483.675	66.34	-19.50	74.0	7.66	Peak	324.00	150	Horizontal	Pass
2**	2483.675	47.93	-19.50	54.0	6.07	AV	324.00	150	Horizontal	Pass

Radiated Band Edge - IEEE 802.11n HT20

IEEE 802.11n HT20 -CH01 2412MHz-Low Band Edge										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2388.595	46.06	-19.55	74.0	27.94	Peak	324.00	150	Horizontal	Pass
1**	2388.595	31.14	-19.55	54.0	22.86	AV	324.00	150	Horizontal	Pass
2	2389.970	44.97	-19.56	74.0	29.03	Peak	216.00	150	Horizontal	Pass
2**	2389.970	32.41	-19.56	54.0	21.59	AV	216.00	150	Horizontal	Pass
3	2399.980	56.60	-19.64	74.0	17.40	Peak	324.00	150	Horizontal	Pass
3**	2399.980	41.28	-19.64	54.0	12.72	AV	324.00	150	Horizontal	Pass

IEEE 802.11n HT20 -CH01 2412MHz-Low Band Edge										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2388.375	42.91	-19.55	74.0	31.09	Peak	360.00	150	Vertical	Pass
1**	2388.375	30.09	-19.55	54.0	23.91	AV	360.00	150	Vertical	Pass
2	2389.970	43.23	-19.56	74.0	30.77	Peak	36.00	150	Vertical	Pass
2**	2389.970	31.20	-19.56	54.0	22.80	AV	36.00	150	Vertical	Pass
3	2399.980	54.99	-19.64	74.0	19.01	Peak	36.00	150	Vertical	Pass
3**	2399.980	39.17	-19.64	54.0	14.83	AV	36.00	150	Vertical	Pass

IEEE 802.11n HT20 -CH11 2462MHz-Low Band Edge										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.475	45.69	-19.50	74.0	28.31	Peak	72.00	150	Vertical	Pass
1**	2483.475	32.02	-19.50	54.0	21.98	AV	72.00	150	Vertical	Pass
2	2483.900	46.71	-19.50	74.0	27.29	Peak	72.00	150	Vertical	Pass
2**	2483.900	31.64	-19.50	54.0	22.36	AV	72.00	150	Vertical	Pass

IEEE 802.11n HT20 -CH11 2462MHz-Low Band Edge										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.475	65.97	-19.50	74.0	8.03	Peak	72.00	150	Horizontal	Pass
1**	2483.475	50.33	-19.50	54.0	3.67	AV	72.00	150	Horizontal	Pass
2	2484.125	66.97	-19.50	74.0	7.03	Peak	108.00	150	Horizontal	Pass
2**	2484.125	48.46	-19.50	54.0	5.54	AV	108.00	150	Horizontal	Pass

Radiated Band Edge - IEEE 802.11n HT40

IEEE 802.11n HT40 -CH03 2422MHz-Low Band Edge										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2388.815	54.49	-19.55	74.0	19.51	Peak	360.00	150	Horizontal	Pass
1**	2388.815	40.17	-19.55	54.0	13.83	AV	360.00	150	Horizontal	Pass
2	2389.970	53.92	-19.56	74.0	20.08	Peak	180.00	150	Horizontal	Pass
2**	2389.970	41.61	-19.56	54.0	12.39	AV	180.00	150	Horizontal	Pass
3	2399.980	56.14	-19.64	74.0	17.86	Peak	180.00	150	Horizontal	Pass
3**	2399.980	42.75	-19.64	54.0	11.25	AV	180.00	150	Horizontal	Pass

IEEE 802.11n HT40 -CH03 2422MHz-Low Band Edge										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2388.210	52.34	-19.55	74.0	21.66	Peak	108.00	150	Vertical	Pass
1**	2388.210	38.35	-19.55	54.0	15.65	AV	108.00	150	Vertical	Pass
2	2389.970	50.85	-19.56	74.0	23.15	Peak	72.00	150	Vertical	Pass
2**	2389.970	38.54	-19.56	54.0	15.46	AV	72.00	150	Vertical	Pass
3	2399.980	55.35	-19.64	74.0	18.65	Peak	216.00	150	Vertical	Pass
3**	2399.980	42.00	-19.64	54.0	12.00	AV	216.00	150	Vertical	Pass

IEEE 802.11n HT40 -CH09 2422MHz -High Band Edge										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.475	50.86	-19.50	74.0	23.14	Peak	36.00	150	Vertical	Pass
1**	2483.475	34.82	-19.50	54.0	19.18	AV	36.00	150	Vertical	Pass
2	2484.825	51.32	-19.50	74.0	22.68	Peak	72.00	150	Vertical	Pass
2**	2484.825	34.95	-19.50	54.0	19.05	AV	72.00	150	Vertical	Pass

IEEE 802.11n HT40 -CH09 2422MHz -High Band Edge										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.475	68.47	-19.50	74.0	5.53	Peak	288.00	150	Horizontal	Pass
1**	2483.475	52.81	-19.50	54.0	1.19	AV	288.00	150	Horizontal	Pass
2	2483.625	68.54	-19.50	74.0	5.46	Peak	360.00	150	Horizontal	Pass
2**	2483.625	52.66	-19.50	54.0	1.34	AV	360.00	150	Horizontal	Pass

Note:

1. Results (dBuV/m) = Raw Value (dBuV) + Factor (dB/m)
2. Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - Pre-amplifier
3. Margin value = Limit - Results.

11. AC POWER LINE CONDUCTED EMISSIONS

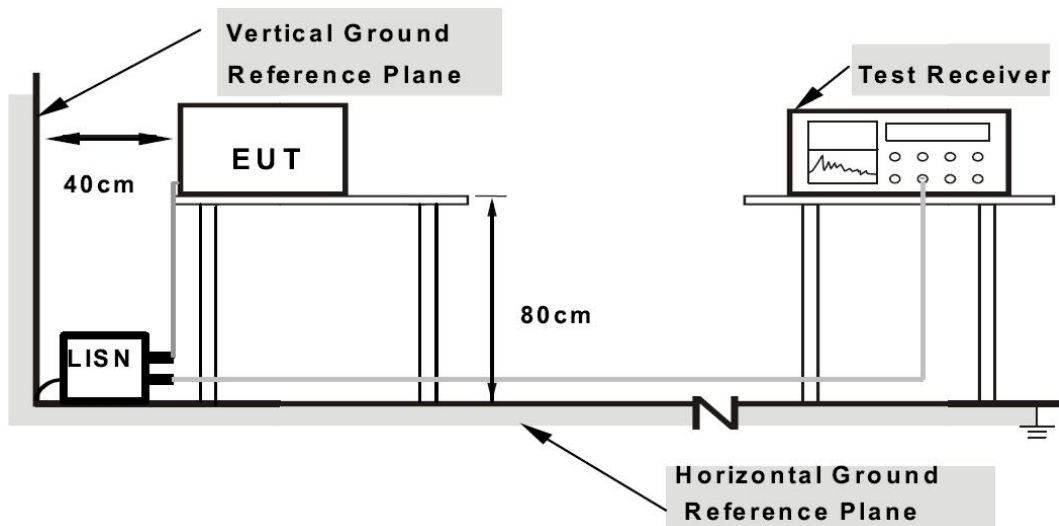
11.1. Limit

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

Note:

1. * Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

11.2. Test Setup



11.3. Spectrum Analyzer Setting

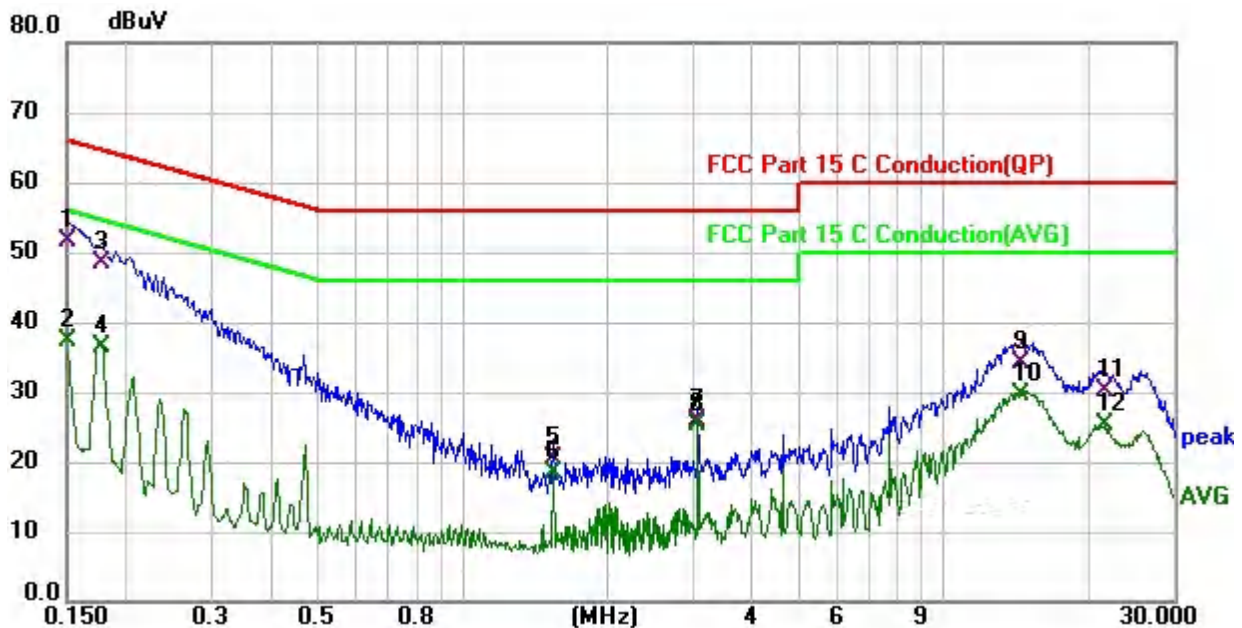
Spectrum Parameters	Setting
RBW	9KHz
VBW	9KHz
Start frequency	150KHz
Stop frequency	30MHz
Sweep Time	Auto
Detector	QP/AVG
Trace Mode	Max Hold

11.4. Test Procedure

- a. The EUT was placed on a non-metallic table, 80cm above the ground plane.
- b. The EUT Power connected to the power mains through a line impedance stabilization network.
- c. Provides a 50ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs).
- d. Set the EUT transmit continuously with maximum output power.
- e. Spectrum analyzer setting parameters in accordance with section 11.3.
- f. The AC line is checked to find out the maximum conducted emission. To find the maximum emission levels, the relative positions of equipment and all the interface cables shall be changed according to ANSI C63.10:2020 on Conducted Emission Test.
- g. Record the results in the test report. (only worse case: IEEE 802.11b mode with CH01 2412MHz is reported)

11.5. Test Result

EUT: Bitcoin Miner
M/N: BIT144
Test Voltage: DC 12V by Switching Power Supply Input: AC 240V/50Hz
Phase: Live
Test Mode: TX Mode
Note: only worse case: IEEE 802.11g mode with CH01 2412MHz is reported
Detailed results are shown below

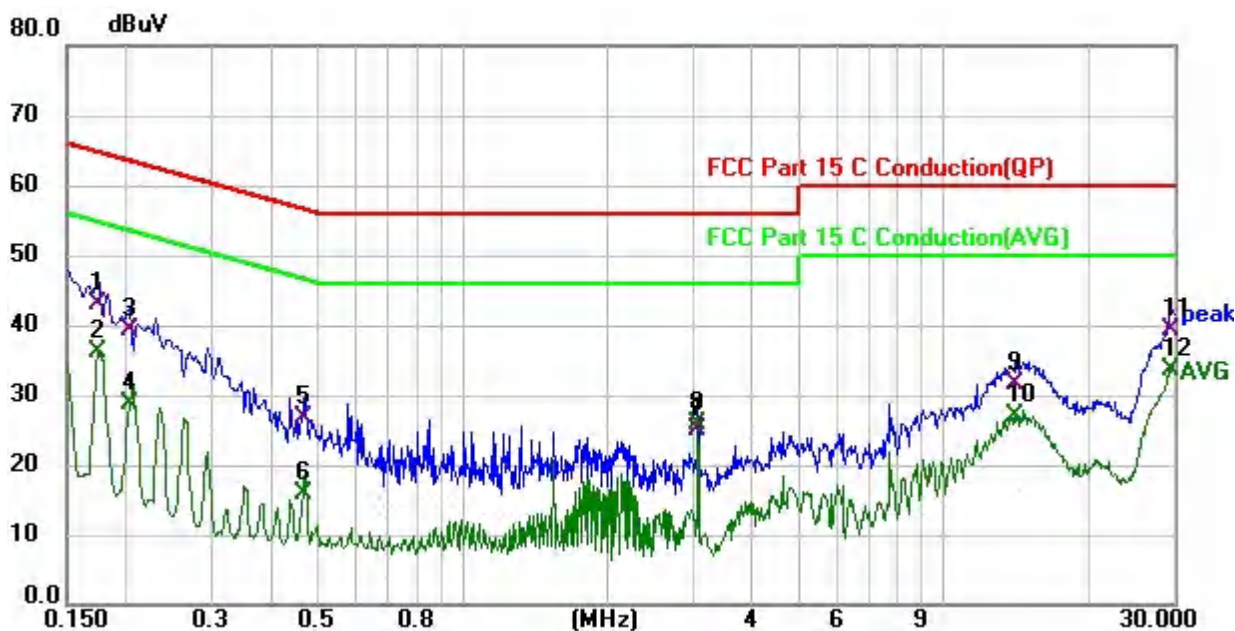


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.150	30.65	20.82	51.47	66.00	-14.53	QP	P	
2	0.150	16.45	20.82	37.27	56.00	-18.73	AVG	P	
3	0.178	27.57	20.84	48.41	64.58	-16.17	QP	P	
4	0.178	15.58	20.84	36.42	54.58	-18.16	AVG	P	
5	1.542	-0.61	20.98	20.37	56.00	-35.63	QP	P	
6	1.542	-2.61	20.98	18.37	46.00	-27.63	AVG	P	
7	3.086	4.76	20.97	25.73	56.00	-30.27	QP	P	
8	3.086	4.42	20.97	25.39	46.00	-20.61	AVG	P	
9	14.510	11.24	22.98	34.22	60.00	-25.78	QP	P	
10	14.510	6.58	22.98	29.56	50.00	-20.44	AVG	P	
11	21.626	6.42	23.71	30.13	60.00	-29.87	QP	P	
12	21.626	1.50	23.71	25.21	50.00	-24.79	AVG	P	

Remark: The test Result=Reading+ Lisn+ Cab L.

If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

EUT: Bitcoin Miner
M/N: BIT144
Test Voltage: DC 12V by Switching Power Supply Input: AC 240V/50Hz
Phase: Neutral
Test Mode: TX Mode
Note: only worse case: IEEE 802.11g mode with CH01 2412MHz is reported
Detailed results are shown below

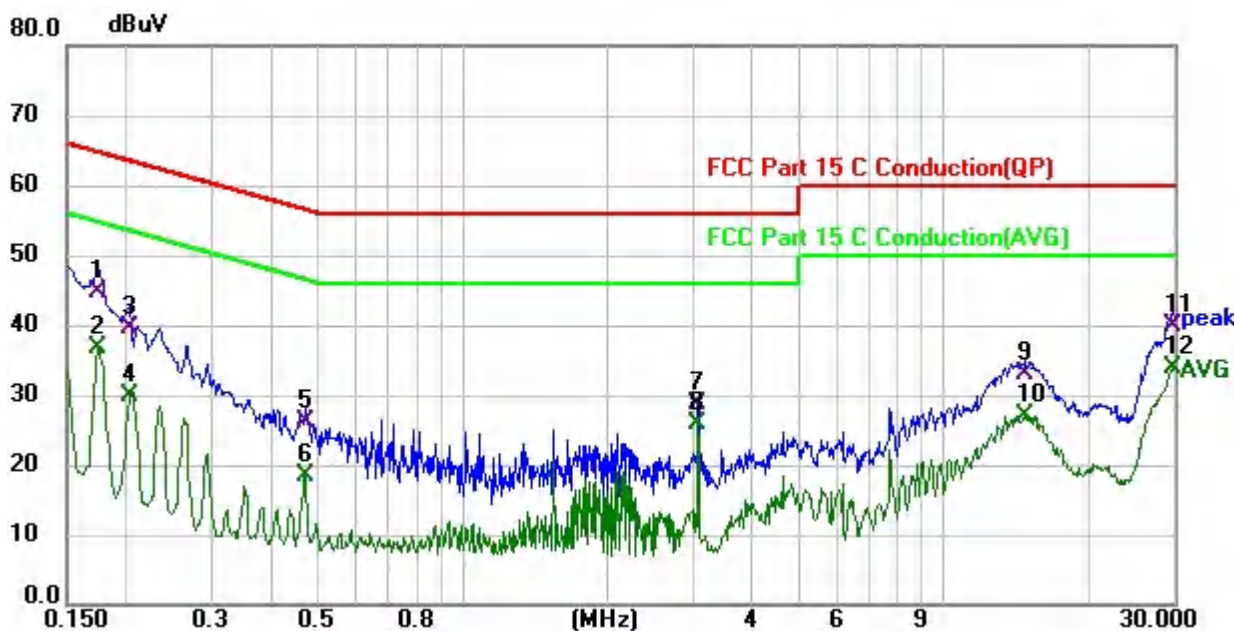


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.174	22.40	20.65	43.05	64.77	-21.72	QP	P	
2	0.174	15.53	20.65	36.18	54.77	-18.59	AVG	P	
3	0.202	18.76	20.66	39.42	63.53	-24.11	QP	P	
4	0.202	7.99	20.66	28.65	53.53	-24.88	AVG	P	
5	0.466	5.98	20.65	26.63	56.58	-29.95	QP	P	
6	0.466	-4.71	20.65	15.94	46.58	-30.64	AVG	P	
7	3.090	4.19	20.85	25.04	56.00	-30.96	QP	P	
8	3.090	5.15	20.85	26.00	46.00	-20.00	AVG	P	
9	14.130	8.58	23.09	31.67	60.00	-28.33	QP	P	
10	14.130	3.86	23.09	26.95	50.00	-23.05	AVG	P	
11	29.790	14.05	25.10	39.15	60.00	-20.85	QP	P	
12 *	29.790	8.59	25.10	33.69	50.00	-16.31	AVG	P	

Remark: The test Result=Reading+ Lisn+ Cab L.

If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

EUT: Bitcoin Miner
M/N: BIT144
Test Voltage: DC 12V by Switching Power Supply Input: AC 120V/60Hz
Phase: Neutral
Test Mode: TX Mode
Note: only worse case: IEEE 802.11g mode with CH01 2412MHz is reported
Detailed results are shown below

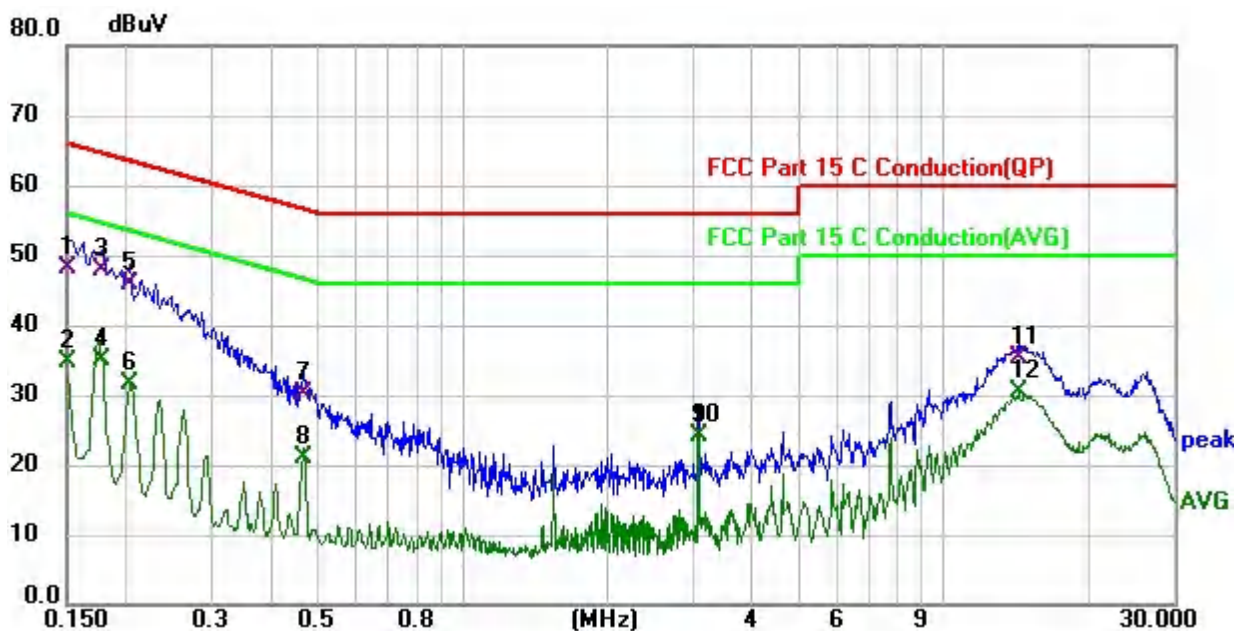


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.174	24.13	20.65	44.78	64.77	-19.99	QP	P	
2	0.174	15.98	20.65	36.63	54.77	-18.14	AVG	P	
3	0.202	19.04	20.66	39.70	63.53	-23.83	QP	P	
4	0.202	9.15	20.66	29.81	53.53	-23.72	AVG	P	
5	0.470	5.44	20.65	26.09	56.51	-30.42	QP	P	
6	0.470	-2.31	20.65	18.34	46.51	-28.17	AVG	P	
7	3.090	7.99	20.85	28.84	56.00	-27.16	QP	P	
8	3.090	4.88	20.85	25.73	46.00	-20.27	AVG	P	
9	14.802	9.64	23.26	32.90	60.00	-27.10	QP	P	
10	14.802	3.62	23.26	26.88	50.00	-23.12	AVG	P	
11	29.994	14.87	25.13	40.00	60.00	-20.00	QP	P	
12 *	29.994	8.79	25.13	33.92	50.00	-16.08	AVG	P	

Remark: The test Result=Reading+ Lisn+ Cab L.

If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

EUT: Bitcoin Miner
M/N: BIT144
Test Voltage: DC 12V by Switching Power Supply Input: AC 120V/60Hz
Phase: Live
Test Mode: TX Mode
Note: only worse case: IEEE 802.11g mode with CH01 2412MHz is reported
Detailed results are shown below



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.150	27.32	20.82	48.14	66.00	-17.86	QP	P	
2	0.150	13.84	20.82	34.66	56.00	-21.34	AVG	P	
3 *	0.178	26.88	20.84	47.72	64.58	-16.86	QP	P	
4	0.178	14.24	20.84	35.08	54.58	-19.50	AVG	P	
5	0.202	25.00	20.84	45.84	63.53	-17.69	QP	P	
6	0.202	10.64	20.84	31.48	53.53	-22.05	AVG	P	
7	0.466	9.23	20.82	30.05	56.58	-26.53	QP	P	
8	0.466	0.24	20.82	21.06	46.58	-25.52	AVG	P	
9	3.094	3.19	20.98	24.17	56.00	-31.83	QP	P	
10	3.094	3.23	20.98	24.21	46.00	-21.79	AVG	P	
11	14.310	12.26	22.94	35.20	60.00	-24.80	QP	P	
12	14.310	7.41	22.94	30.35	50.00	-19.65	AVG	P	

Remark: The test Result=Reading+ Lisn+ Cab L.

If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

12. ANTENNA REQUIREMENTS

12.1. Limit

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 shall be considered sufficient to comply with the provisions of this section. 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. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§15.211, 15.213, 15.217, 15.219, 15.221, or §15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

12.2. Test Result

The antennas used for this product is integral antenna, so compliance with antenna requirements. (Please refer to the EUT Internal Photos for details)

13.APPENDIX

"EUT of External Photos, EUT Internal Photos & Test Setup Photos" Please refer to the Annex A, Annex B& Annex C document.

CTSL2531120001ER Annex A. EUT External Photos

CTSL2531120001ER Annex B. EUT Internal Photos

CTSL2531120001ER Annex C. Test Setup Photos

-----*End of Test Report*-----