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FCC PART 15 SUBPART C
FCC PART §15.247
TEST REPORT

FCC ID:2BWGJ-JYC-M3

Report No:	CTSL2620530068E02
Product Name:	Smart Planting Controller
Main Test Model:	JYC-M3
Series Models:	JYC-M3a, JYC-M3b, JYC-M3c, JYC-M3d, JYC-M3e, JYC-M3f, JYC-M4a, JYC-M4b, JYC-M4c, JYC-M4d, JYC-M4e, JYC-M4f, JYC-M5a, JYC-M5b, JYC-M5c, JYC-M5d, JYC-M5e, JYC-M5f, JYC-M7a, JYC-M7b, JYC-M7c, JYC-M7d, JYC-M7e, JYC-M7f, JYC-M9a, JYC-M9b, JYC-M9c, JYC-M9d, JYC-M9e, JYC-M9f (All models share same electric circuits except model name.)
Applicant:	Jiuyuan Environmental Technology(Zhongshan)Co., Ltd.

EXECUTIVE SUMMARY

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

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CTSL Testing (Dongguan) Co., Ltd.
Main company address: Building 1, Houjie Road, Houjie Town, Guangdong Province Dongguan City, China

Test Report

FCC ID:2BWGJ-JYC-M3

Applicant Name	Jiuyuan Environmental Technology(Zhongshan)Co., Ltd.				
Applicant Address	6th Floor, Building A, 238 South Dongfeng Avenue, Anle Village, Dongfeng Town, Zhongshan, Guangdong Province, China				
Manufacturer Name	Jiuyuan Environmental Technology(Zhongshan)Co., Ltd.				
Manufacturer Address	6th Floor, Building A, 238 South Dongfeng Avenue, Anle Village, Dongfeng Town, Zhongshan, Guangdong Province, China				
Trade Mark	-				
Product name	Smart Planting Controller				
Main Test Model	JYC-M3				
Series Models	JYC-M3a, JYC-M3b, JYC-M3c, JYC-M3d, JYC-M3e, JYC-M3f, JYC-M4a, JYC-M4b, JYC-M4c, JYC-M4d, JYC-M4e, JYC-M4f, JYC-M5a, JYC-M5b, JYC-M5c, JYC-M5d, JYC-M5e, JYC-M5f, JYC-M7a, JYC-M7b, JYC-M7c, JYC-M7d, JYC-M7e, JYC-M7f, JYC-M9a, JYC-M9b, JYC-M9c, JYC-M9d, JYC-M9e, JYC-M9f (All models share same electric circuits except model name.)				
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	2026.05.06	**Test period**	2026.05.06-2026.05.11	**Issue Date**	2026.05.12
Conclusion	**The equipment under test was found to be compliance with the requirements of the standards applied.**				
Performs Testing:	Ethan Zhao	Ethan Zhao			
Test Report Reviewer:	Steve Qin	Steve Qin			
Test Report Authorizer:	Alan Li	Alan Li			

(Special Seal)

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1. GENERAL INFORMATION

1.1. General Description of EUT (Equipment Under Test)

Product Information		
Product Name	:	Smart Planting Controller
Main Test Model	:	JYC-M3
Series Models	:	JYC-M3a, JYC-M3b, JYC-M3c, JYC-M3d, JYC-M3e, JYC-M3f, JYC-M4a, JYC-M4b, JYC-M4c, JYC-M4d, JYC-M4e, JYC-M4f, JYC-M5a, JYC-M5b, JYC-M5c, JYC-M5d, JYC-M5e, JYC-M5f, JYC-M7a, JYC-M7b, JYC-M7c, JYC-M7d, JYC-M7e, JYC-M7f, JYC-M9a, JYC-M9b, JYC-M9c, JYC-M9d, JYC-M9e, JYC-M9f (All models share same electric circuits except model name.)
Power supply	:	DC 12V From Type-C Port
Battery	:	-
Software Version	:	JYFarm Mainboard V2 - Type-C Motor Control Rev: 2.0
Hardware Version	:	JYFarm Mainboard V2 - Type-C Motor Control Rev: 2.0
Equipment Under Test		
Testing sample ID	:	CTSL2620530068-S1 (Engineer sample) CTSL2620530068-S2 (Normal sample)
Test supplied	:	☐ supplied by the manufacturer ☐ supplied by the lab (Auxiliary test supplied by test Lab)
Switching Power Supply information	:	DC 12V From the fan Type-C port, the fan provided by the manufacturer, fan ratings Input: AC100-240V, 50/60Hz 9W
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 & 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: 7.2/14.4/21.7/28.9/43.3/57.8/65/72.2Mbps IEEE 802.11n HT40: 15/30/45/60/90/120/135/150Mbps
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)	:	11.50dBm (11±1.0dBm)
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.	Band	Model Name	Antenna Type	Connector	Gain (dBi)
1	2.4G band	-	PCB	-	2.94

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	Jiuyuan Environmental Technology(Zhongshan)Co., Ltd.

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 Designation Number: CN1425;
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

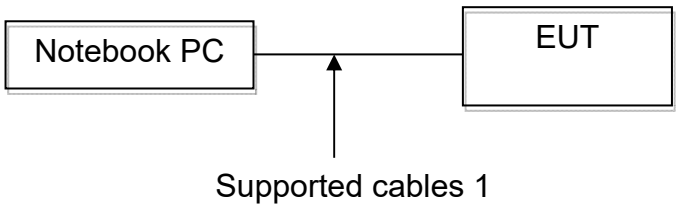
Test Item	Uncertainty
Uncertainty for Conduction emission test	±3.48dB
Uncertainty for spurious emissions test (Below 30MHz)	±1.62dB
Uncertainty for spurious emissions test (30MHz-1GHz)	±4.60dB (Polarize: H)
	±4.68dB (Polarize: V)
Uncertainty for spurious emissions test (1GHz to 25GHz)	±4.96dB
Uncertainty 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.

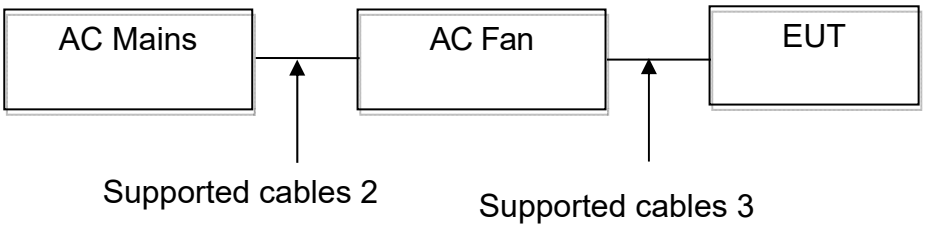
2.5. Block Diagram

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.

Connect EUT Antenna Terminal, Radiated Spurious Emissions& Band Edge Test



AC Power Line Conducted Emissions& Radiated Emission Test (30-1000MHz):



(**EUT**: Smart Planting Controller)

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	AC Fan	-	RF6 (Supplied by the manufacturer)	-	-

Supported cables				
Item	**Shielded Type**	**Ferrite Core**	**Length**	**Note**
1	NO	NO	0.5m	USB Extension Cable, supplied by the Lab.
2	NO	NO	2.0m	AC Line (for AC Fan), Supplied by the manufacturer.
3	NO	NO	3.0m	Type-C to Type-C Cable, 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	Date Rate	Test Channel
6dB Bandwidth & 99% 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**	04	2427	05	2432	**06**	**2437**
07	2442	08	2457	**09**	**2452**		

2.9. Power Setting of Test Software

Software Name	EspRFTestTool_v5.2		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b Setting	30	30	30
IEEE 802.11g Setting	30	30	30
IEEE 802.11n HT20 Setting	30	30	30
Frequency (MHz)	2422	2437	2452
IEEE 802.11n HT40 Setting	30	30	30

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-NMNM-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-NMNM-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	N/A	N/A
30-1000MHz Cable	Times Microwave Systems	LMR195UF-NMRNMR-3.00M+ LMR400UF-NMNM-3.00M+ LMR400UF-NMNM-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 24,27
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-NMNM-7.0M+ SFT205-NMNM-2.0M	AT057+ AT058	GUANGZHOU NEM	July 09,25	July 08,26

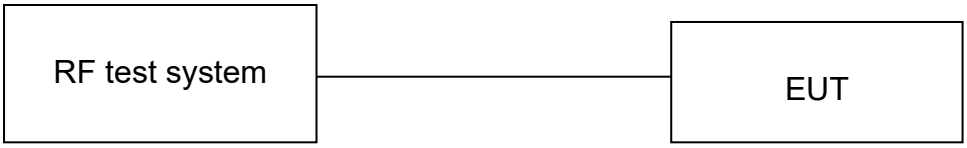
For Connect EUT Antenna Terminal Test (RF Test system)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
Spectrum analyzer	Keysight	N9020A	AT050	GUANGZHOU NEM	Jun 12,25	Jun 11,26
Analog signal source	Keysight	N5173B	AT051	GUANGZHOU NEM	Jun 12,25	Jun 11,26
WIDEBAND 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

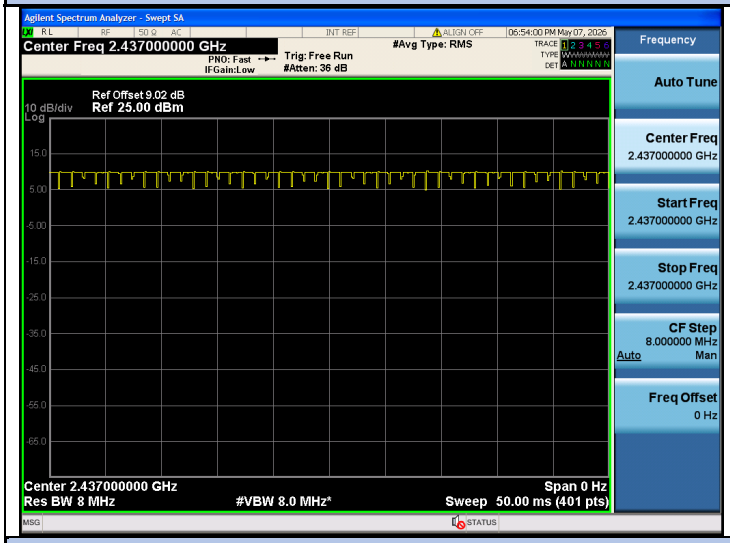
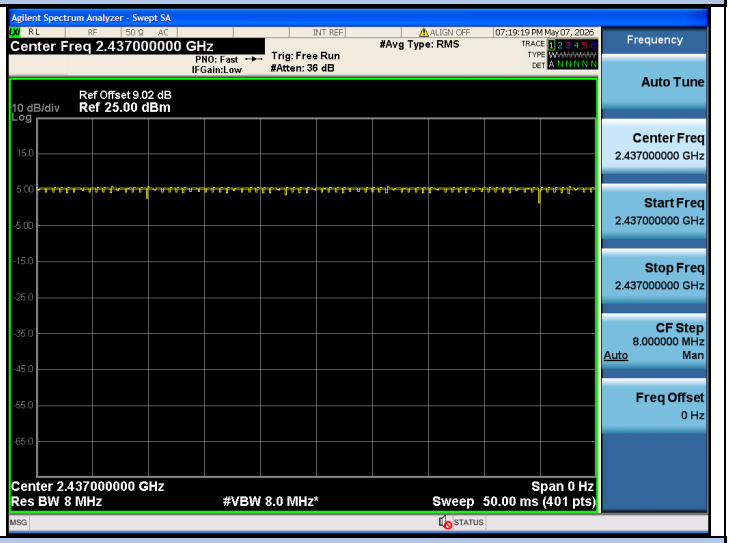
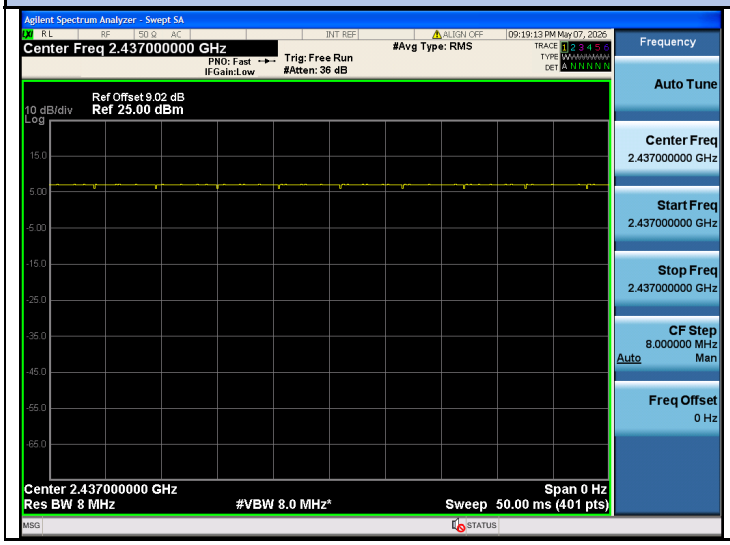
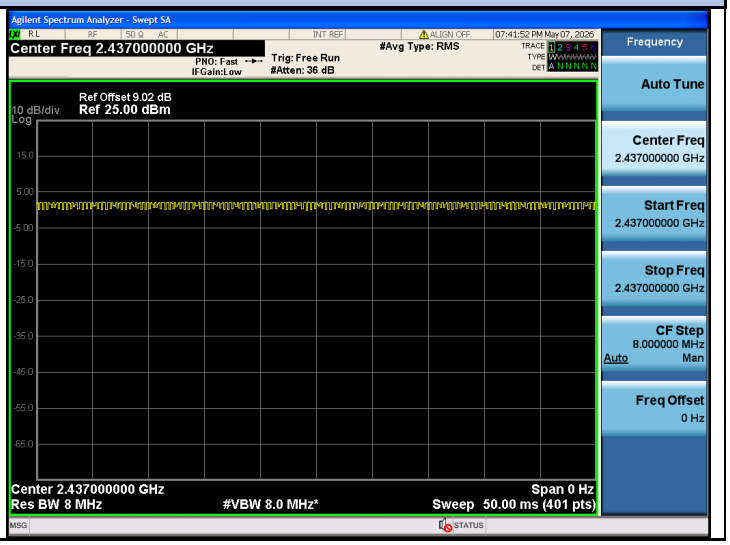
a. Connect EUT antenna terminal to the spectrum analyzer with RF cable.
b. Spectrum analyzer setting parameters in accordance with section 3.3.
c. When the trace is complete, measure the sending time of 1 burst and the duty cycle of 1 burst cycle.
d. Duty Cycle= Transmission Duration (Tx On (s))/ Transmission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

3.5. Test Result

Mode	Channel	Center Frequency	RBW	Detector	Tx On	Tx Off	Period	Duty Cycle
		(MHz)	(MHz)		(s)	(s)	(s)	%
IEEE 802.11b	CH06	2437	8	RMS	/	/	/	100
IEEE 802.11g	CH06	2437	8	RMS	/	/	/	100
IEEE 802.11n HT20	CH06	2437	8	RMS	/	/	/	100
IEEE 802.11n HT40	CH06	2437	8	RMS	/	/	/	100

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

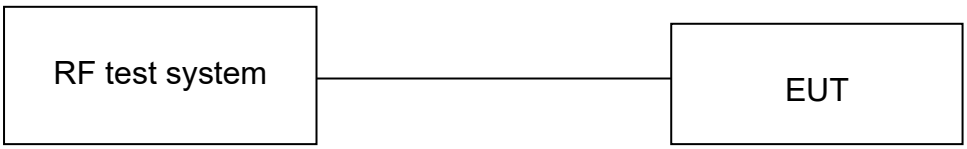
IEEE 802.11b_Ant1_CH06 2437MHz	IEEE 802.11n HT20_Ant1_CH06 2437MHz
	
IEEE 802.11g_Ant1_CH06 2437MHz	**IEEE 802.11n HT40_Ant1_CH06 2437MHz**
	

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	300KHz (20MHz Bandwidth mode) 510KHz (40MHz Bandwidth mode)
VBW	1MHz (20MHz Bandwidth mode) 1.6MHz (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

a. The test according to ANSI C63.10 clause 11.8.
b. Connect EUT antenna terminal to the spectrum analyzer with RF cable.
c. Spectrum analyzer setting parameters in accordance with section 4.3.
d. Set the EUT transmit continuously with maximum output power.
e. 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.
f. Repeat above procedures until all channels and test modes were measured.
g. Record the results in the test report.

4.5. Test Result

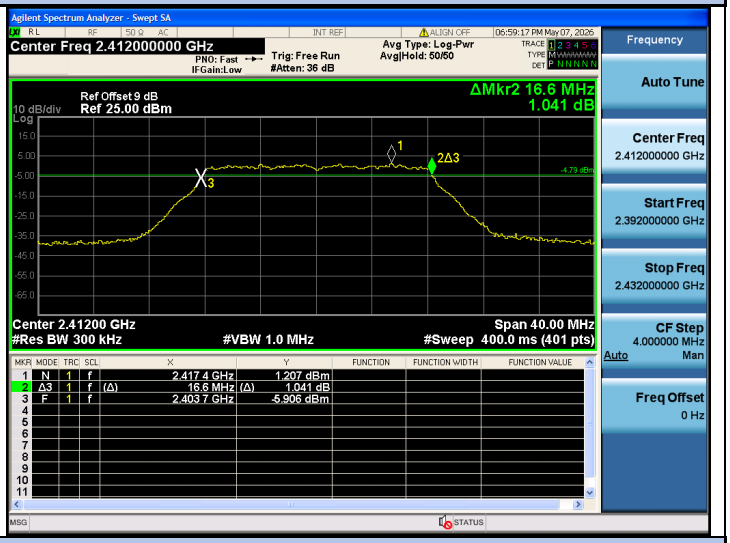
Test Mode	Antenna	Channel& Frequency	6dB Bandwidth	6dB Bandwidth Conducted Limit	Result
		MHz	MHz	KHz	
IEEE 802.11b	Ant1	CH01 2412	9.4	≥500	PASS
		CH06 2437	9.4		
		CH11 2462	9.4		
IEEE 802.11g	Ant1	CH01 2412	16.6	≥500	PASS
		CH06 2437	16.6		
		CH11 2462	16.6		
IEEE 802.11n HT20	Ant1	CH01 2412	17.9	≥500	PASS
		CH06 2437	17.9		
		CH11 2462	17.9		
IEEE 802.11n HT40	Ant1	CH03 2422	36.8	≥500	PASS
		CH06 2437	36.8		
		CH09 2452	36.8		

4.6. Original Test record

IEEE 802.11b_Ant1_CH01 2412MHz



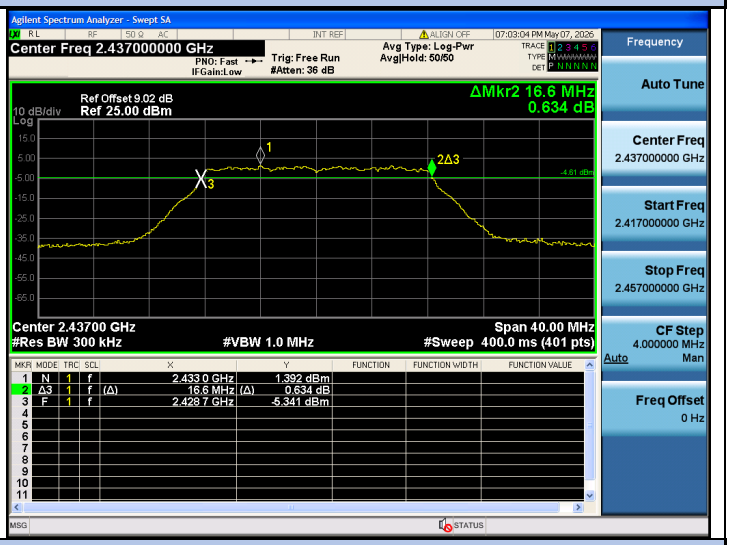
IEEE 802.11g_Ant1_CH01 2412MHz



IEEE 802.11b_Ant1_CH06 2437MHz



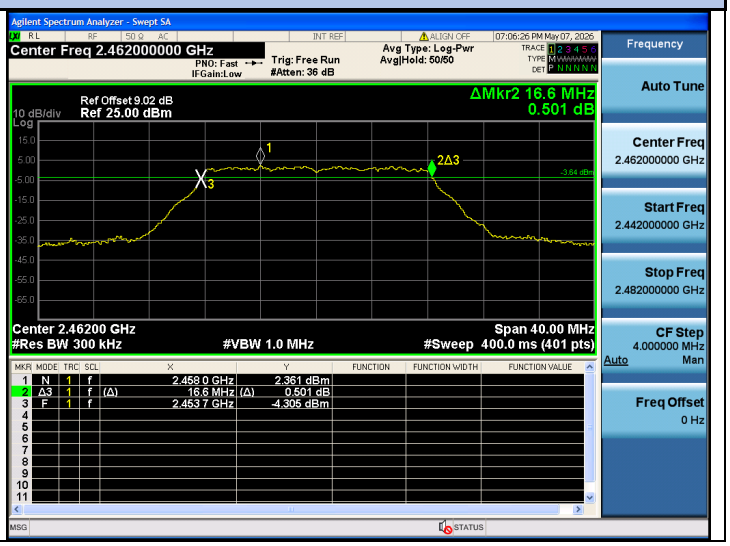
IEEE 802.11g_Ant1_CH06 2437MHz



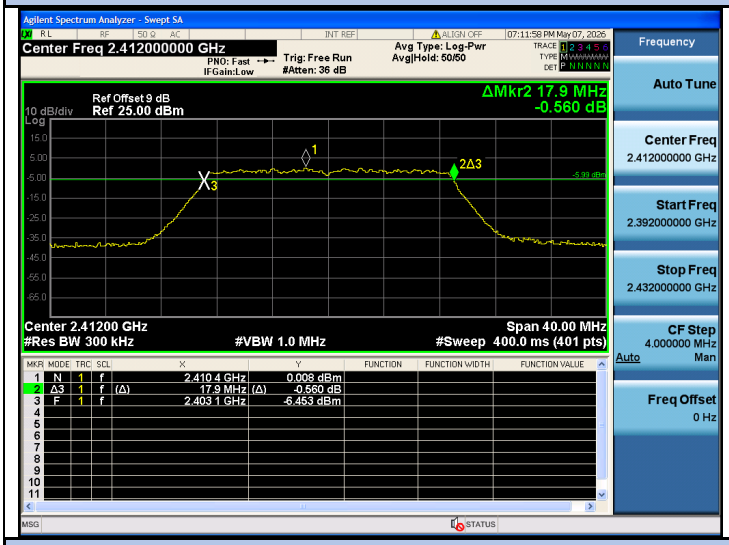
IEEE 802.11b_Ant1_CH11 2462MHz



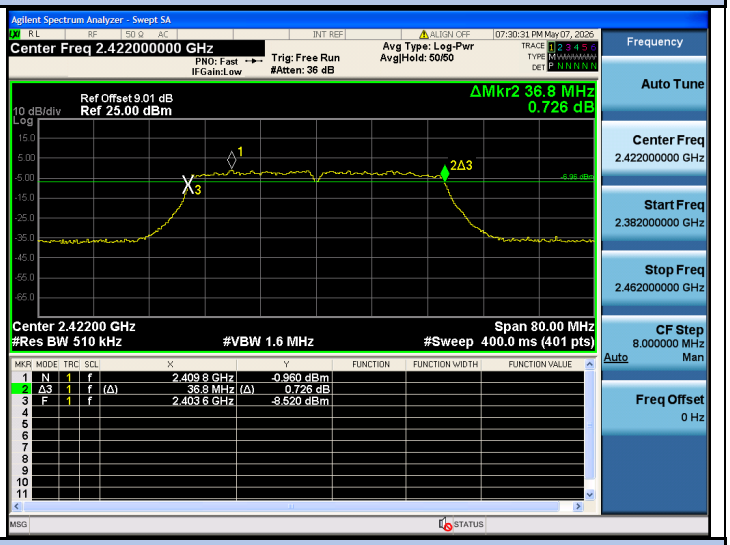
IEEE 802.11g_Ant1_CH11 2462MHz



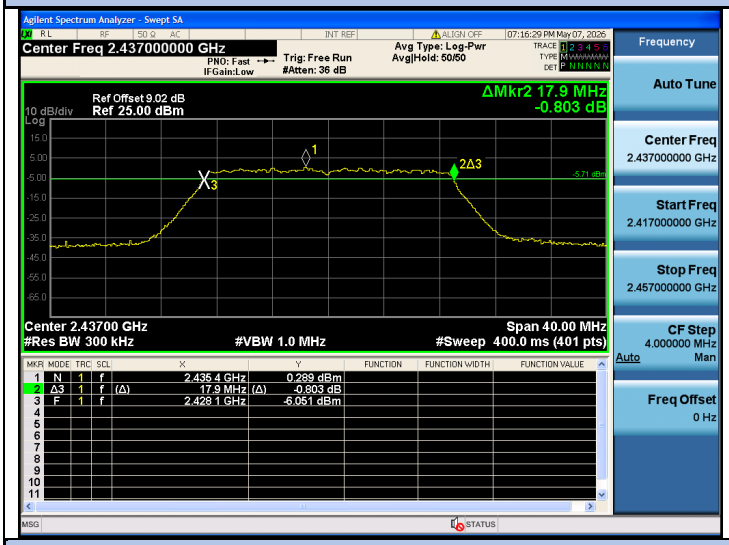
IEEE 802.11n HT20_Ant1_CH01 2412MHz



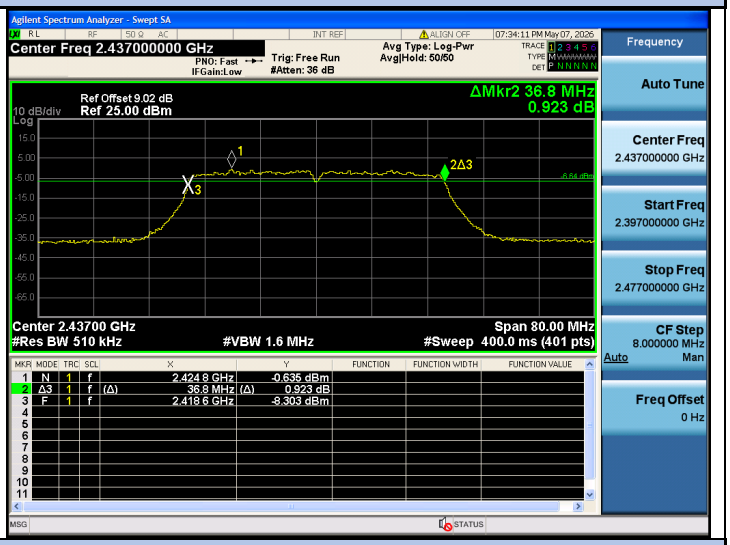
IEEE 802.11n HT40_Ant1_CH03 2422MHz



IEEE 802.11n HT20_Ant1_CH06 2437MHz



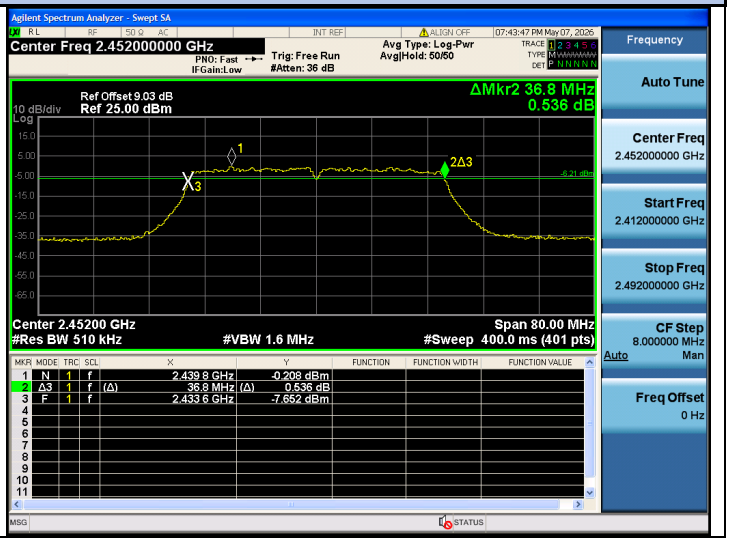
IEEE 802.11n HT40_Ant1_CH06 2437MHz



IEEE 802.11n HT20_Ant1_CH11 2462MHz



IEEE 802.11n HT40_Ant1_CH9 2452MHz

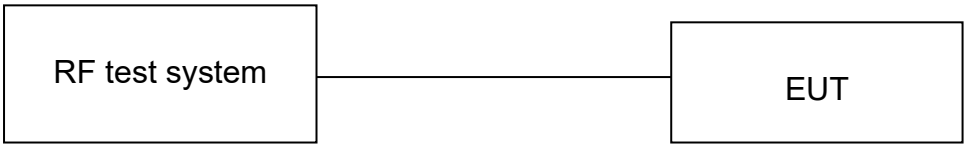


5. 99% BANDWIDTH

5.1.Limit

None; for reporting purpose only.

5.2. Test Setup



5.3. Spectrum Analyzer Setting

99% Occupied Bandwidth	
Spectrum Parameters	**Setting**
RBW	300KHz (20MHz Bandwidth mode) 1MHz (40MHz Bandwidth mode)
VBW	1MHz (20MHz Bandwidth mode) 3MHz (40MHz Bandwidth mode)
Span	40MHz (20MHz Bandwidth mode) 80MHz (40MHz Bandwidth mode)
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

5.4. Test Procedure

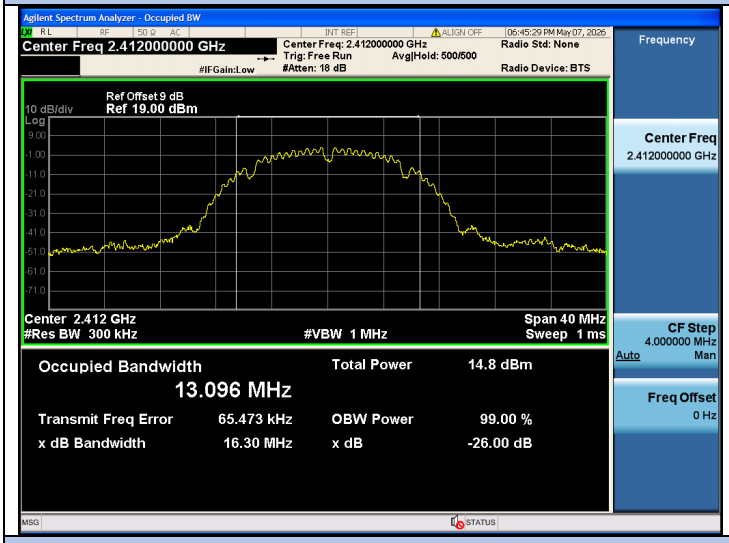
a. The test according to ANSI C63.10 clause 6.9.3.
b. Connect EUT antenna terminal to the spectrum analyzer with RF cable.
c. Spectrum analyzer setting parameters in accordance with section 5.3.
d. Set the EUT transmit continuously with maximum output power.
e. Repeat above procedures until all channels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

5.5.Test Data

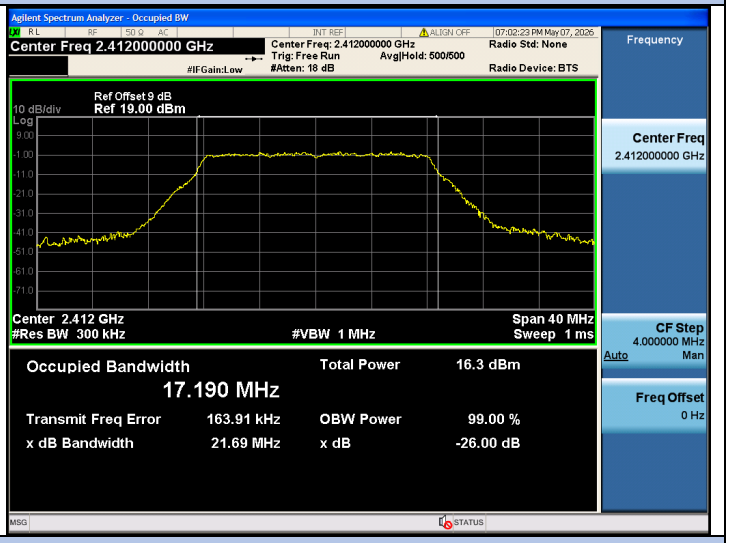
Test Mode	Antenna	Channel& Frequency	Occupied Channel Bandwidth
		MHz	MHz
IEEE 802.11b	Ant1	CH01 2412	13.096
		CH06 2437	13.097
		CH11 2462	13.081
IEEE 802.11g	Ant1	CH01 2412	17.190
		CH06 2437	17.171
		CH11 2462	17.180
IEEE 802.11n HT20	Ant1	CH01 2412	18.238
		CH06 2437	18.238
		CH11 2462	18.238
IEEE 802.11n HT40	Ant1	CH03 2422	37.024
		CH06 2437	37.071
		CH09 2452	37.001

5.6.Original Test record

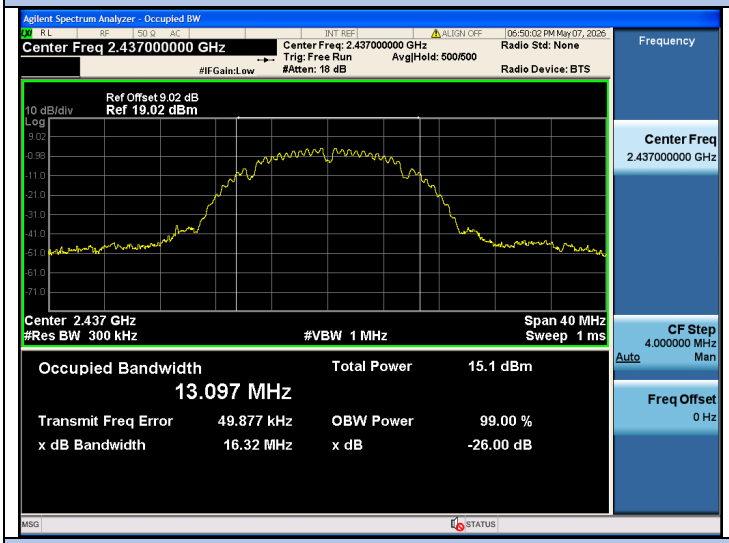
IEEE 802.11b_Ant1_CH01 2412MHz



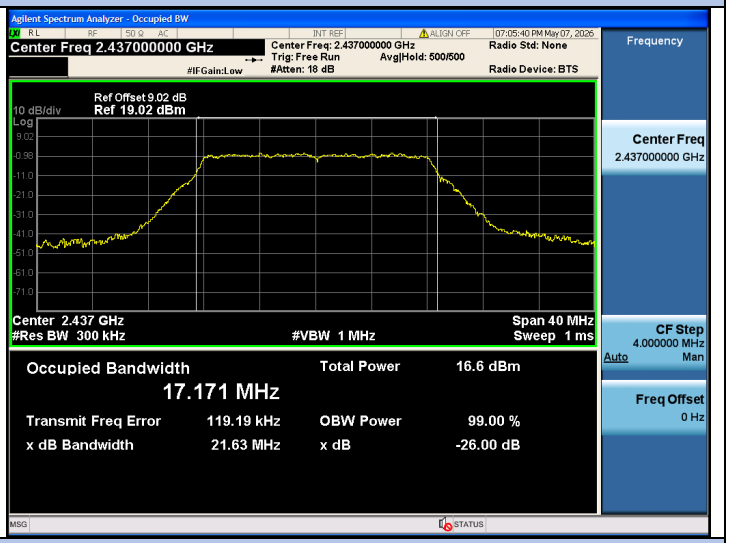
IEEE 802.11g Ant1_CH01 2412MHz



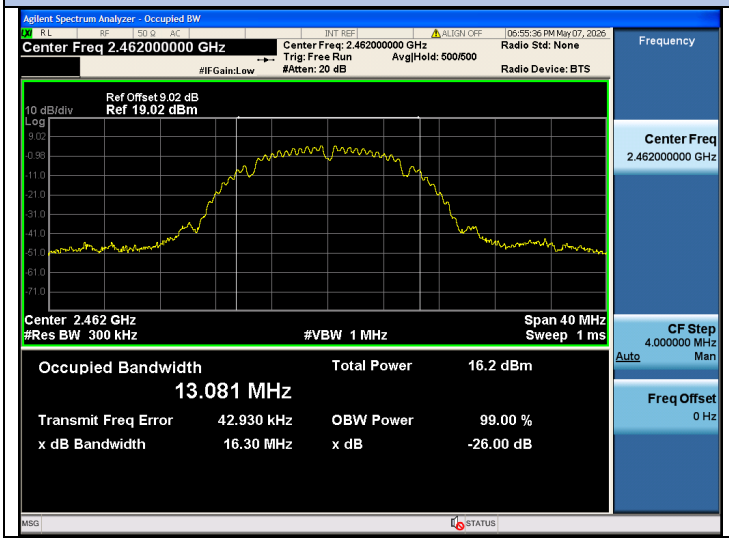
IEEE 802.11b_Ant1_CH06 2437MHz



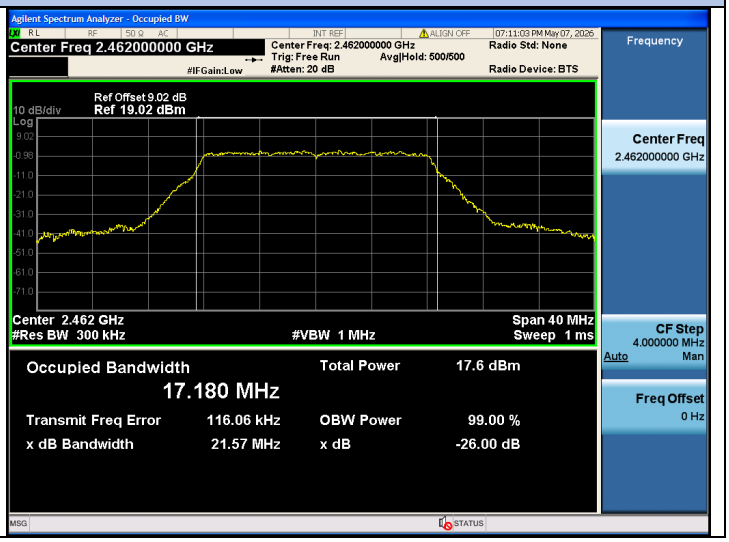
IEEE 802.11g Ant1_CH06 2437MHz



IEEE 802.11b_Ant1_CH11 2462MHz



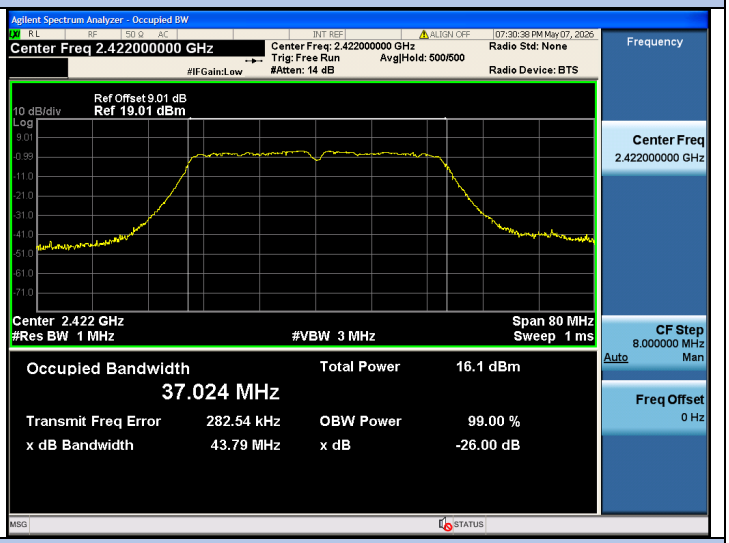
IEEE 802.11g Ant1_CH11 2462MHz



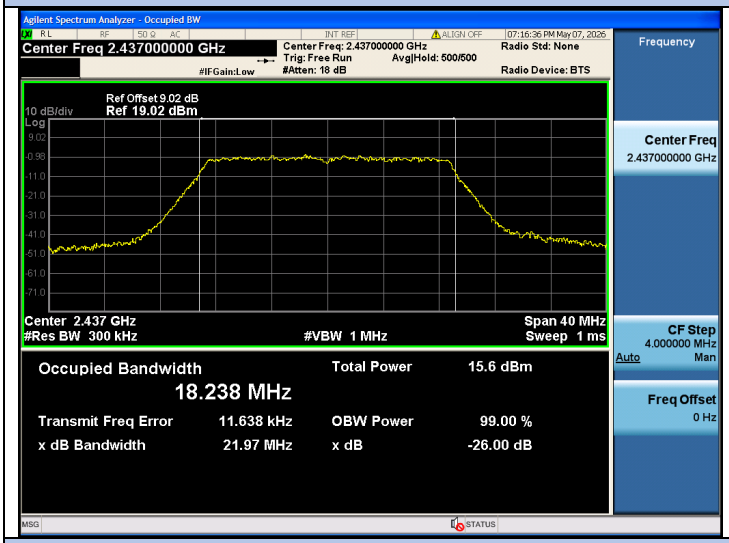
IEEE 802.11n HT20 Ant1_CH01 2412MHz



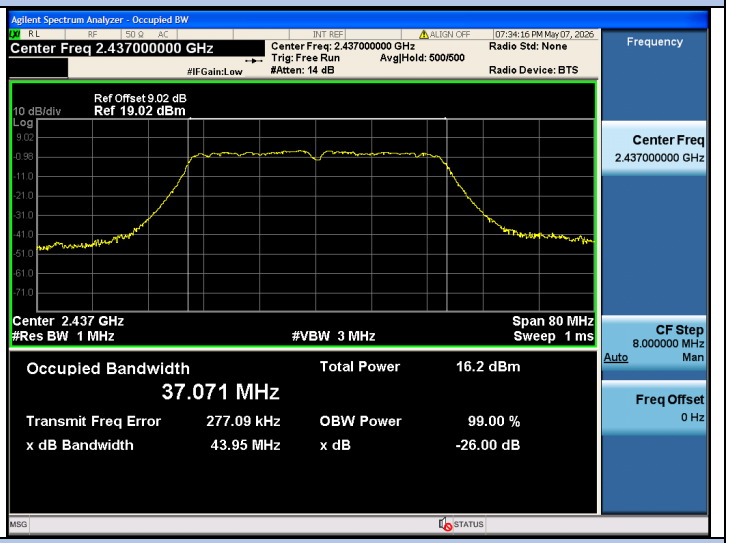
IEEE 802.11n HT40 Ant1_CH03 2422MHz



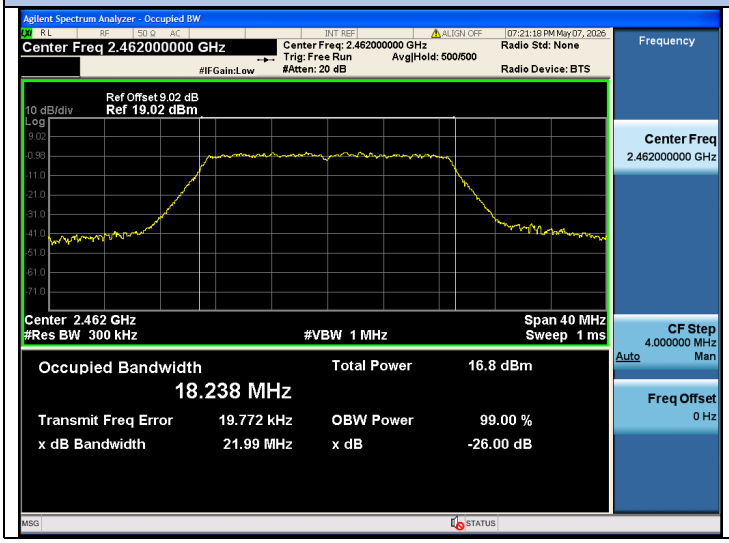
IEEE 802.11n HT20 Ant1_CH06 2437MHz



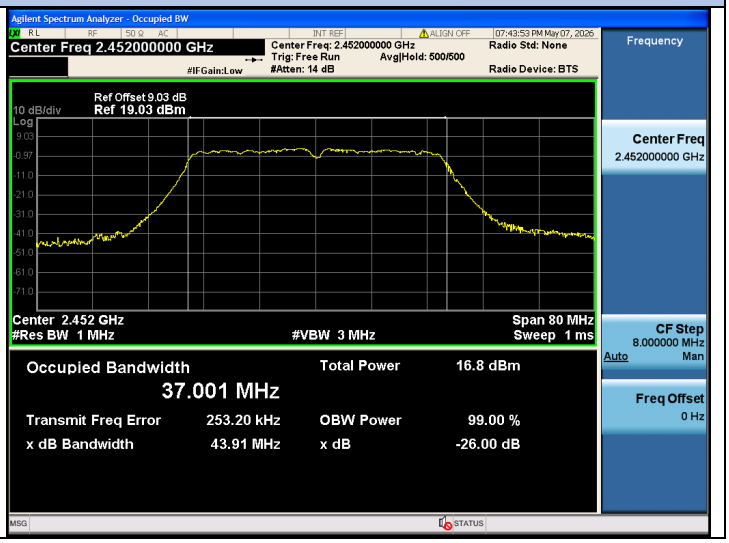
IEEE 802.11n HT40 Ant1_CH06 2437MHz



IEEE 802.11n HT20 Ant1_CH11 2462MHz



IEEE 802.11n HT40 Ant1_CH09 2452MHz

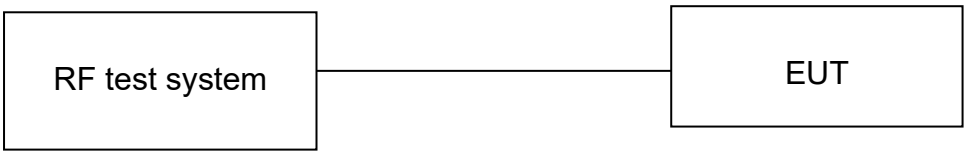


6. MAXIMUM CONDUCTED OUTPUT POWER

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	AV
Trace Mode	Max Hold

6.4. Test Procedure

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

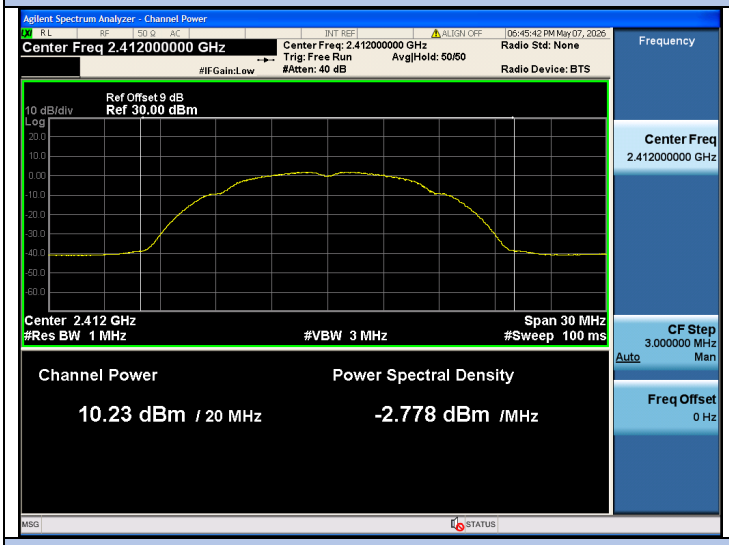
6.5. Test Result

Test Mode	Antenna	Channel& Frequency	AV Output Power Measurement	Duty Cycle Factor	Output Power Calculation	Limit	Result
		MHz	dBm	dB	dBm	dBm	
IEEE 802.11b	Ant1	CH01 2412	10.23	0	10.23	30	PASS
		CH06 2437	10.48		10.48		
		CH11 2462	11.50		11.50		
IEEE 802.11g	Ant1	CH01 2412	9.58	0	9.58	30	PASS
		CH06 2437	9.88		9.88		
		CH11 2462	10.88		10.88		
IEEE 802.11n HT20	Ant1	CH01 2412	8.64	0	8.64	30	PASS
		CH06 2437	8.93		8.93		
		CH11 2462	10.07		10.07		
IEEE 802.11n HT40	Ant1	CH03 2422	8.12	0	8.12	30	PASS
		CH06 2437	8.26		8.26		
		CH09 2452	8.86		8.86		

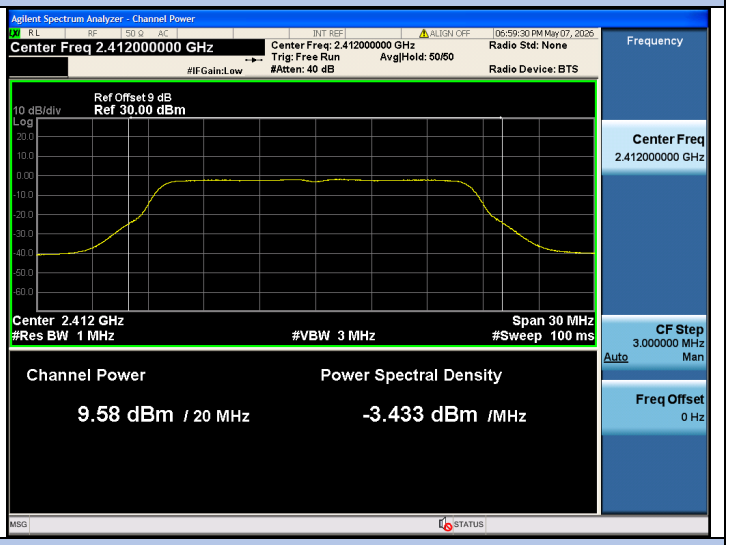
Note:
1) Duty Cycle Factor = 10*log(1/Duty Cycle).
2) Output Power Calculation= AV Output Power Measurement+ Duty Cycle Factor
3) Refer to Section 3 - Duty Cycle. The Duty Cycle is 100%, therefore the Duty Cycle Factor is 0.

6.6. Original Test record

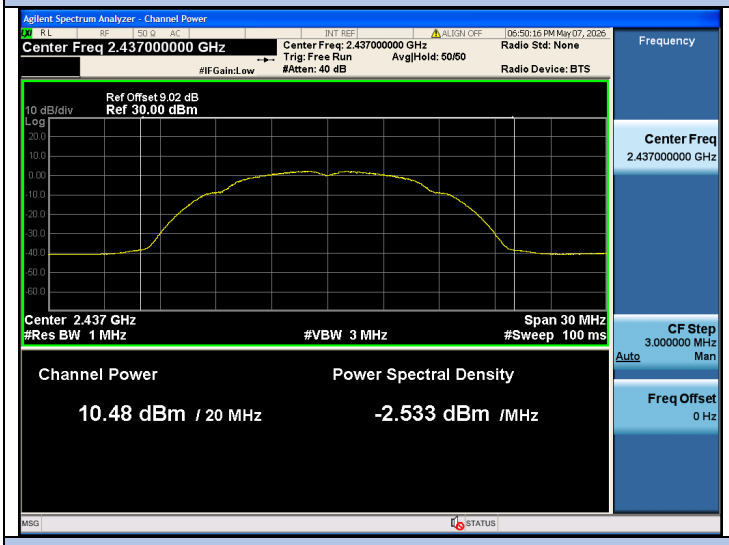
IEEE 802.11b_Ant1_CH01 2412MHz



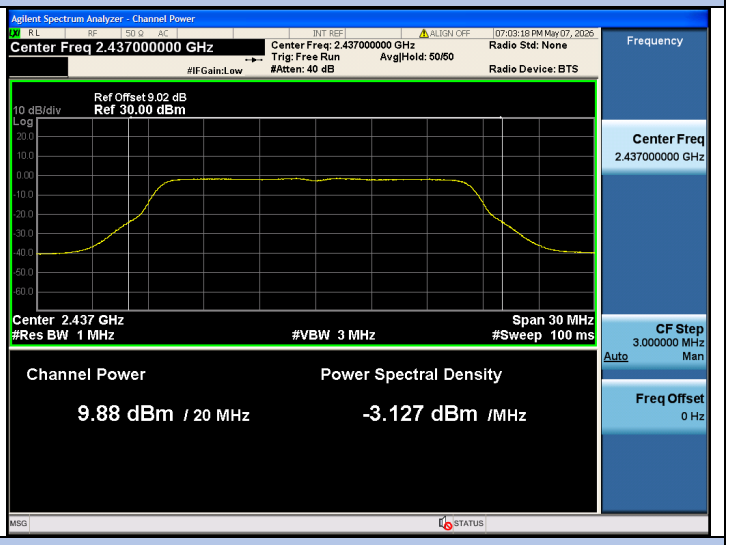
IEEE 802.11g Ant1_CH01 2412MHz



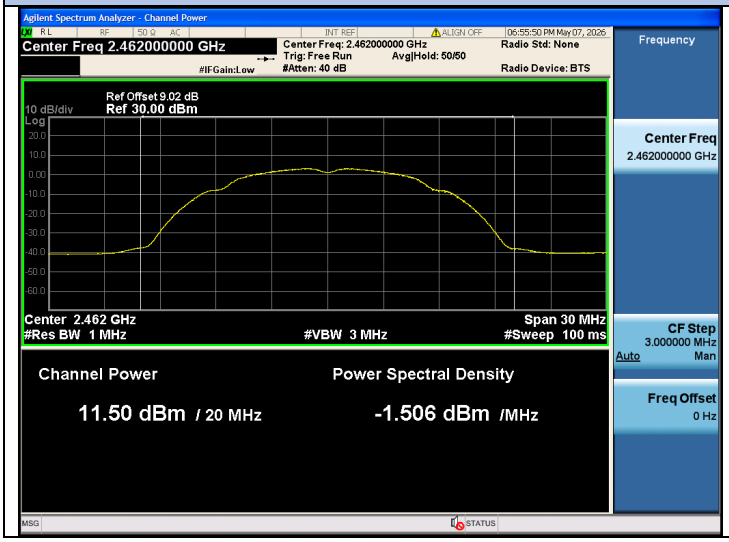
IEEE 802.11b_Ant1_CH06 2437MHz



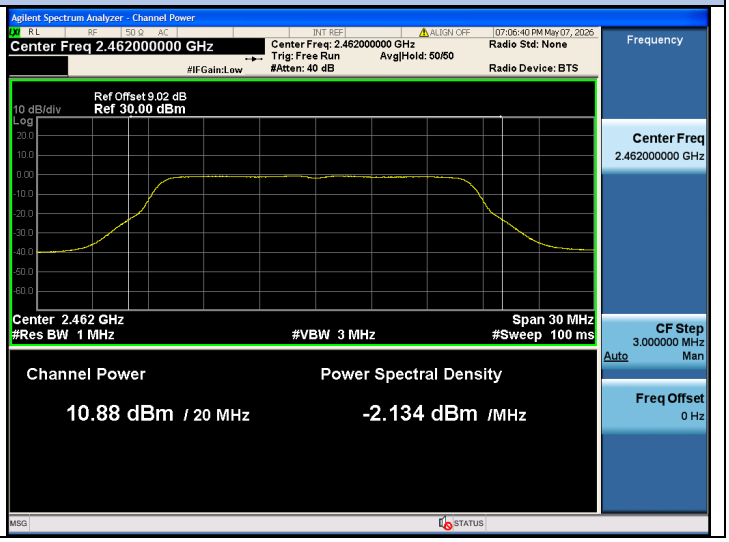
IEEE 802.11g Ant1_CH06 2437MHz



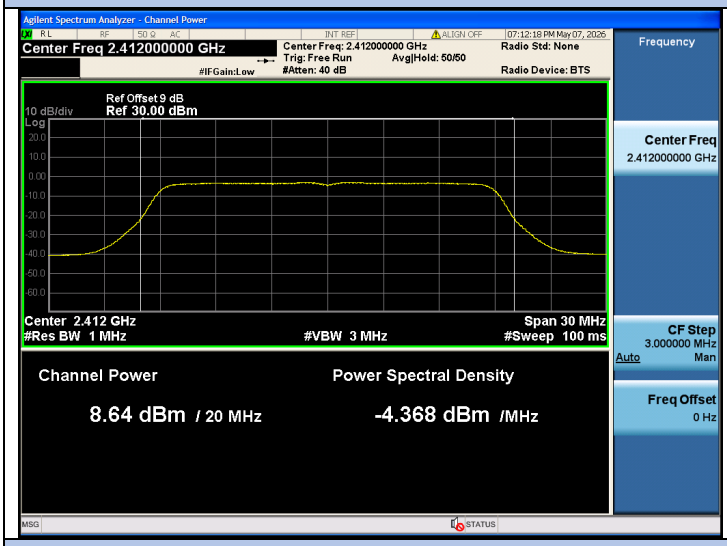
IEEE 802.11b_Ant1_CH11 2462MHz



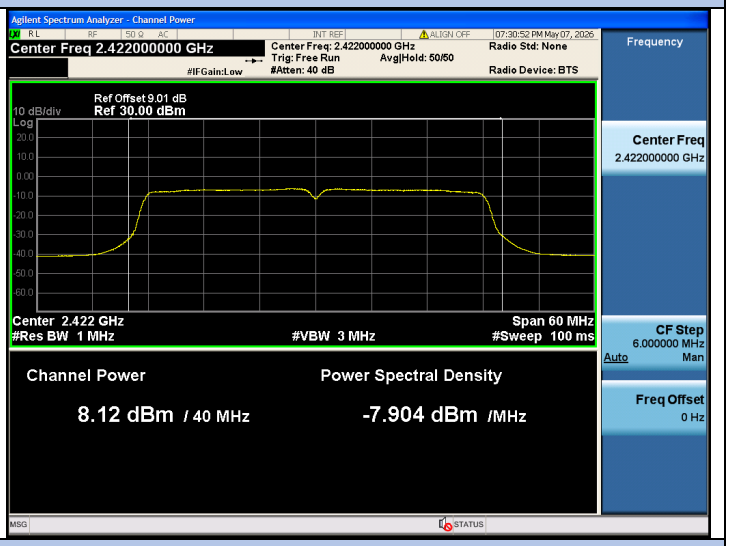
IEEE 802.11g Ant1_CH11 2462MHz



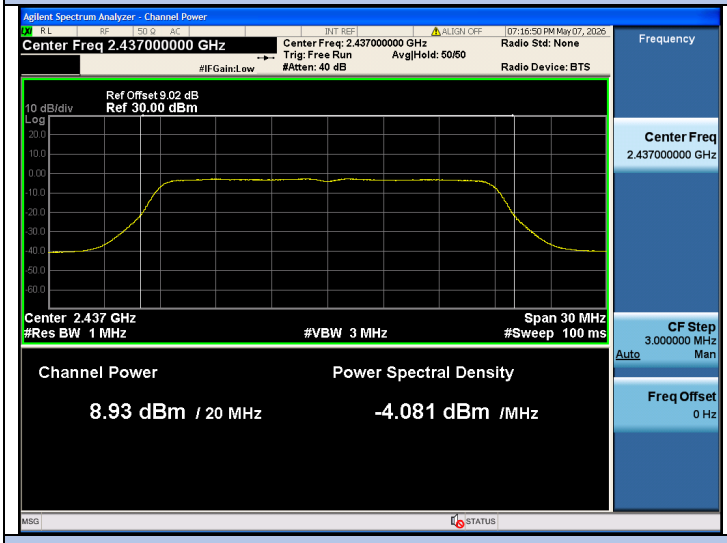
IEEE 802.11n HT20 Ant1_CH01 2412MHz



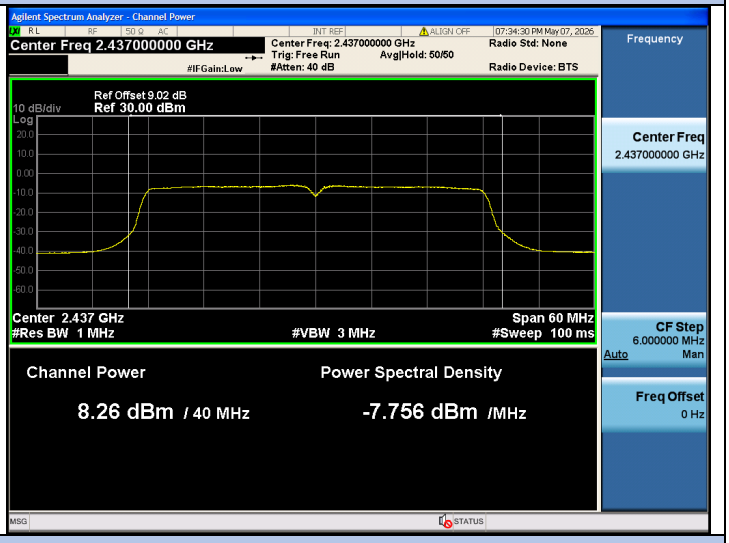
IEEE 802.11n HT40 Ant1_CH03 2422MHz



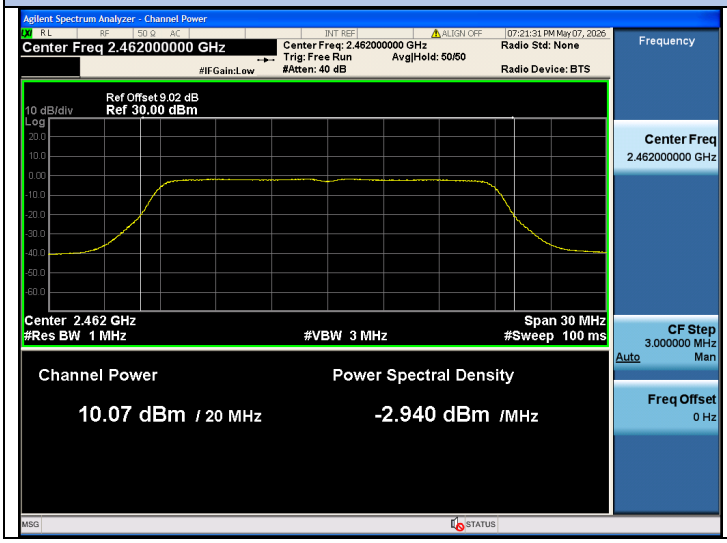
IEEE 802.11n HT20 Ant1_CH06 2437MHz



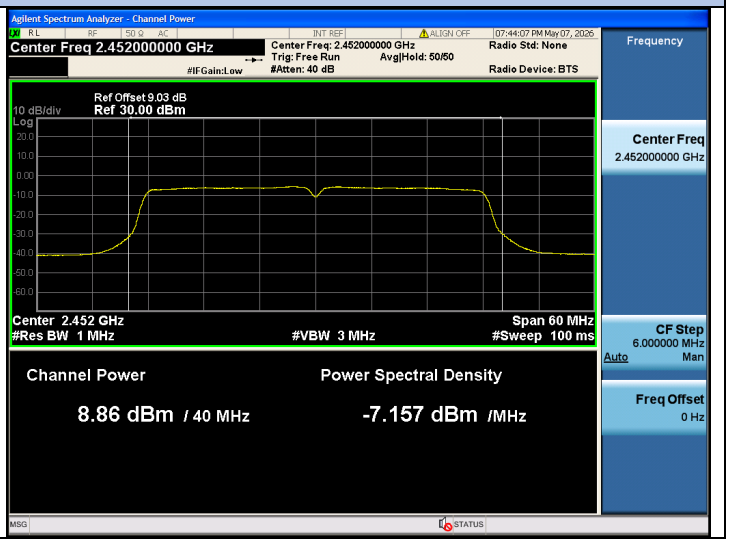
IEEE 802.11n HT40 Ant1_CH06 2437MHz



IEEE 802.11n HT20 Ant1_CH11 2462MHz



IEEE 802.11n HT40 Ant1_CH09 2452MHz

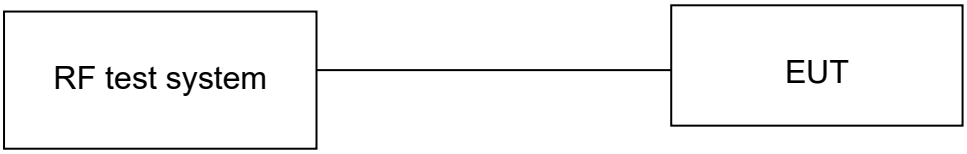


7. POWER SPECTRAL DENSITY

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	1.5*BW
Sweep Time	Auto
Detector	RMS
Trace Mode	Max Hold

7.4.Test Procedure

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

7.5.Test Result

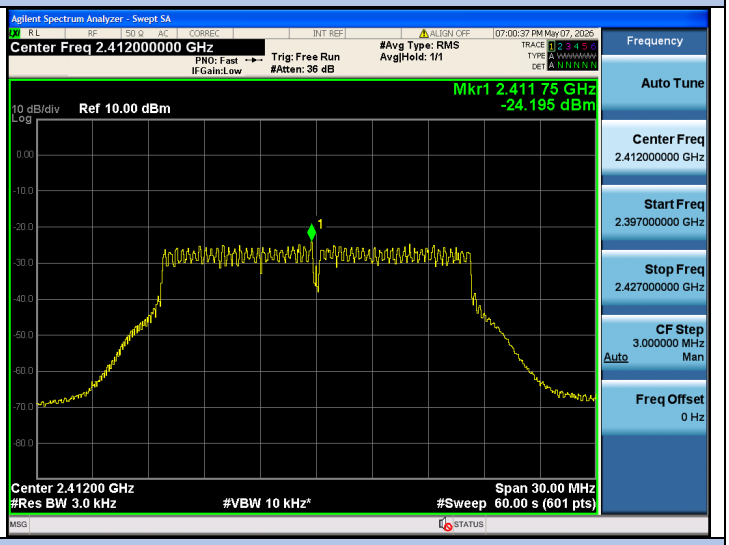
Test Mode	Antenna	Channel& Frequency	PSD (RMS)	Duty Cycle Factor	PSD Calculation	Limit	Result
		MHz	dBm/3KHz		dBm/3KHz	dBm/3KHz	
IEEE 802.11b	Ant1	CH01 2412	-21.60	0	-21.60	8.00	PASS
		CH06 2437	-21.40		-21.40		
		CH11 2462	-20.34		-20.34		
IEEE 802.11g	Ant1	CH01 2412	-24.20	0	-24.20	8.00	PASS
		CH06 2437	-23.89		-23.89		
		CH11 2462	-22.83		-22.83		
IEEE 802.11n HT20	Ant1	CH01 2422	-25.99	0	-25.99	8.00	PASS
		CH06 2437	-25.60		-25.60		
		CH11 2452	-24.50		-24.50		
IEEE 802.11n HT40	Ant1	CH03 2422	-28.68	0	-28.68	8.00	PASS
		CH06 2437	-28.63		-28.63		
		CH09 2452	-28.10		-28.10		

7.6.Original Test record

IEEE 802.11b_Ant1_CH01 2412MHz



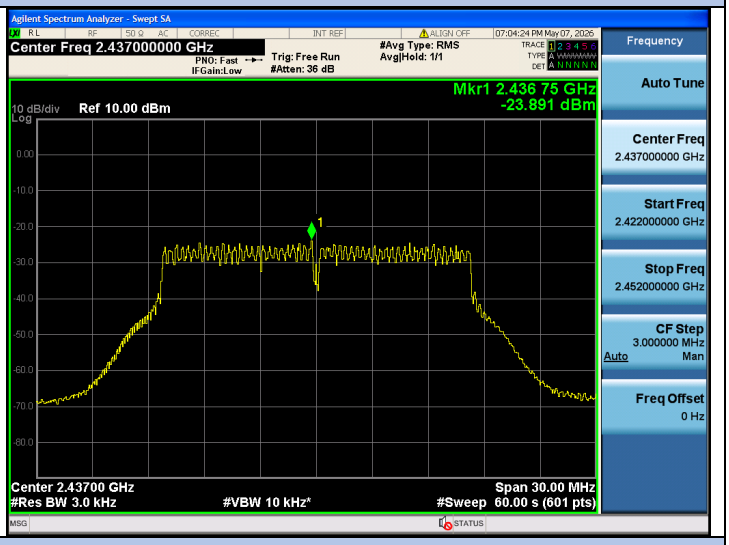
IEEE 802.11g Ant1_CH01 2412MHz



IEEE 802.11b_Ant1_CH06 2437MHz



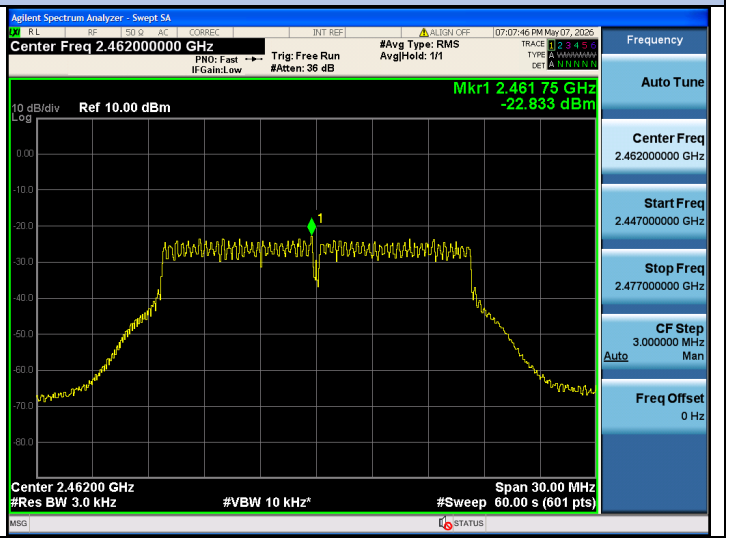
IEEE 802.11g Ant1_CH06 2437MHz



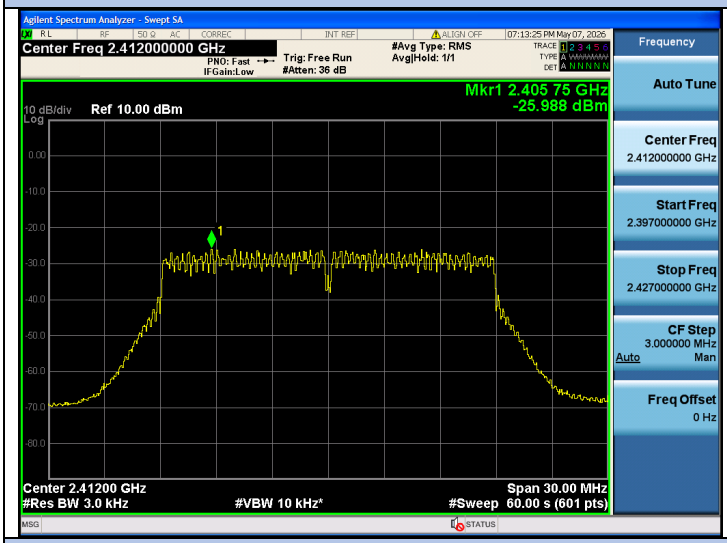
IEEE 802.11b_Ant1_CH11 2462MHz



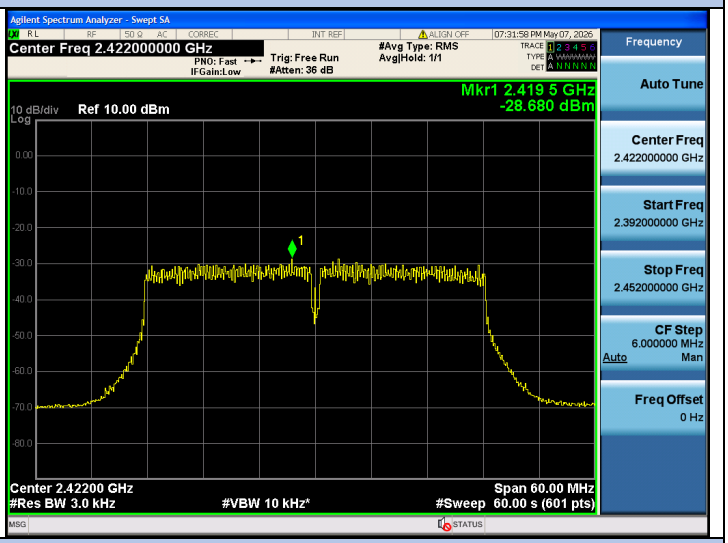
IEEE 802.11g Ant1_CH11 2462MHz



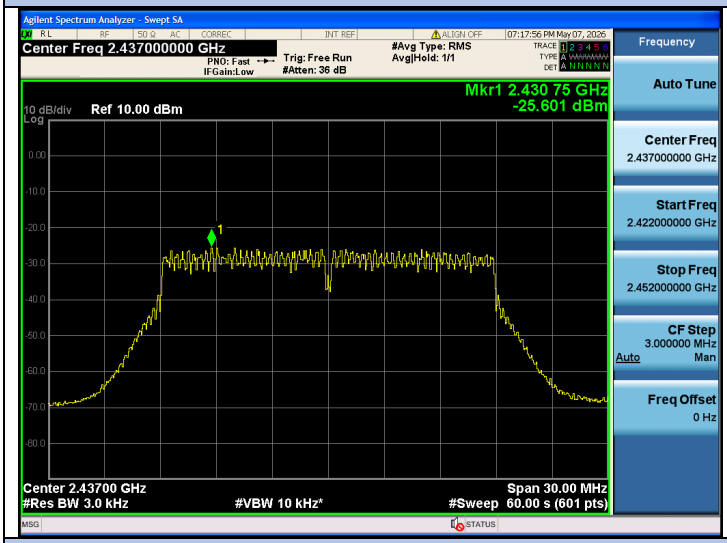
IEEE 802.11n HT20 Ant1_CH01 2412MHz



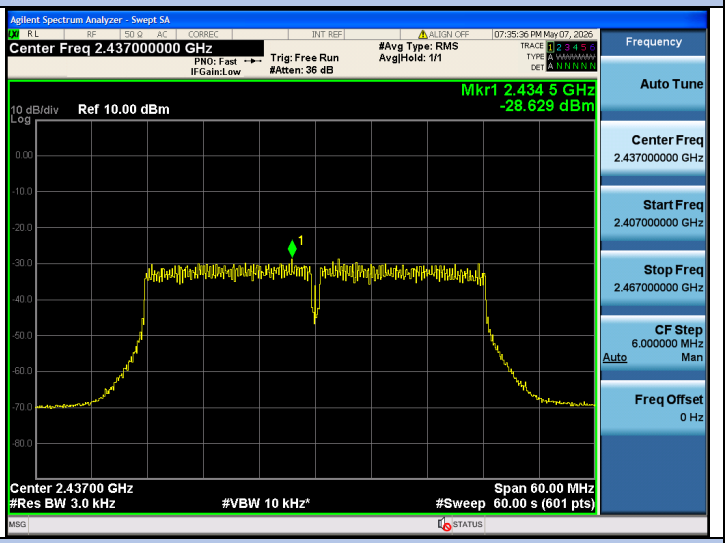
IEEE 802.11n HT40 Ant1_CH03 2422MHz



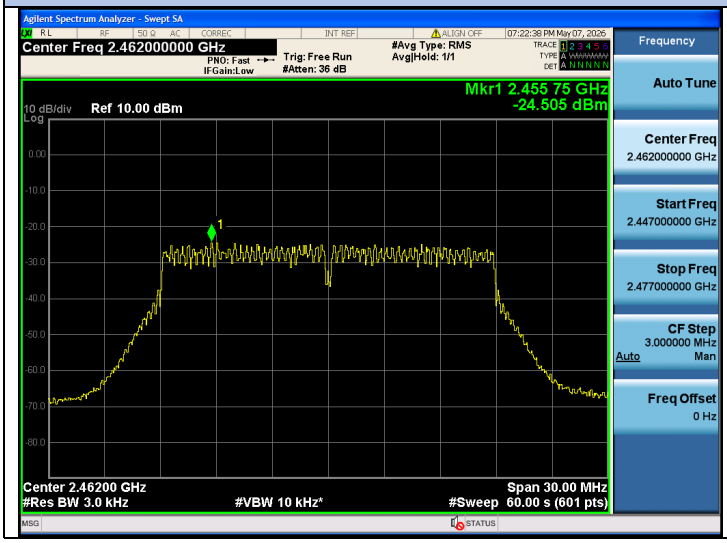
IEEE 802.11n HT20 Ant1_CH06 2437MHz



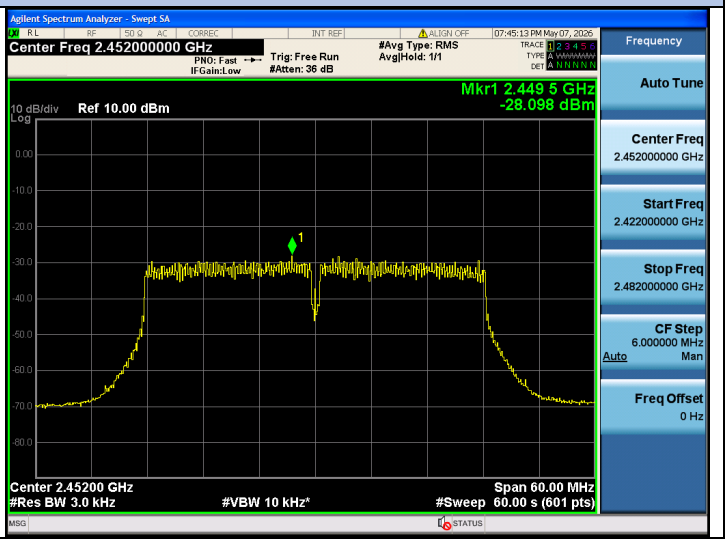
IEEE 802.11n HT40 Ant1_CH06 2437MHz



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



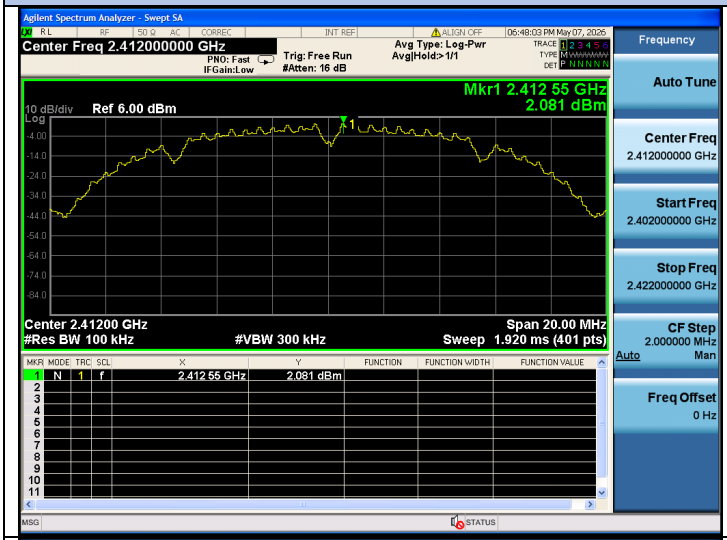
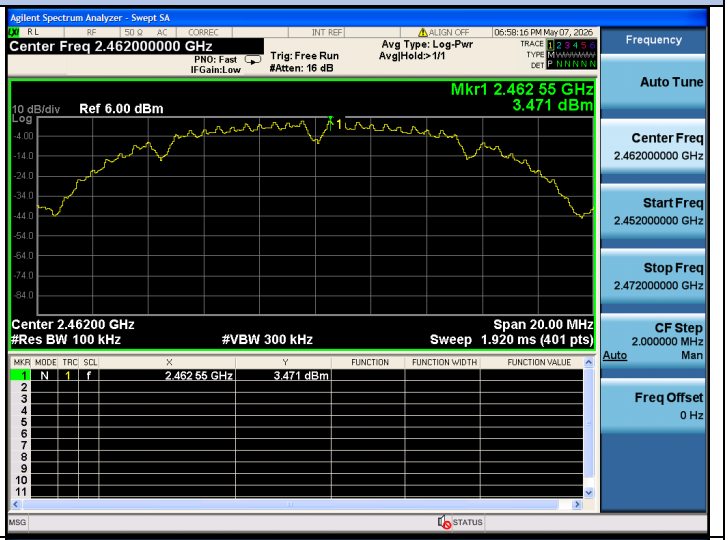
8.3. Spectrum Analyzer Setting

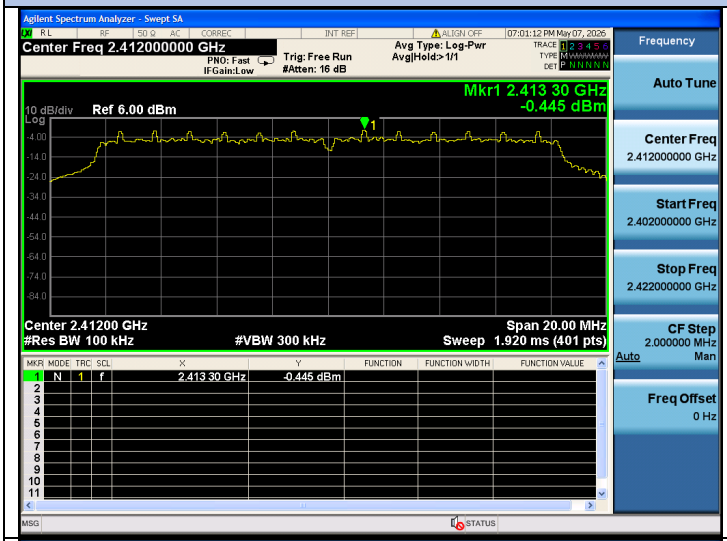
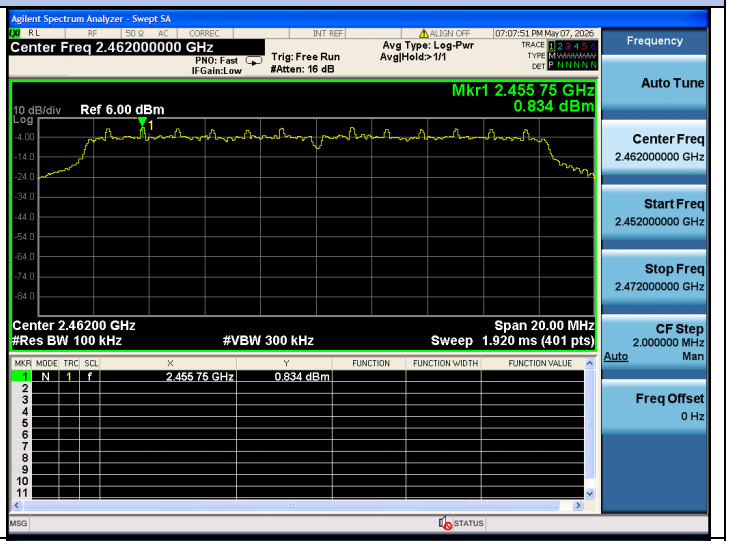
Spectrum Parameters	Setting
RBW	100KHz
VBW	300KHz
Span	Reference Span: 20MHz (20MHz Bandwidth mode) Reference Span: 40MHz (40MHz Bandwidth mode)
	Left Band edge: 2310-2420: 110MHz (20MHz Bandwidth mode) 2310-2440: 130MHz (40MHz Bandwidth mode) Right Band edge: 2450-2500MHz: 50MHz (20MHz Bandwidth mode)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

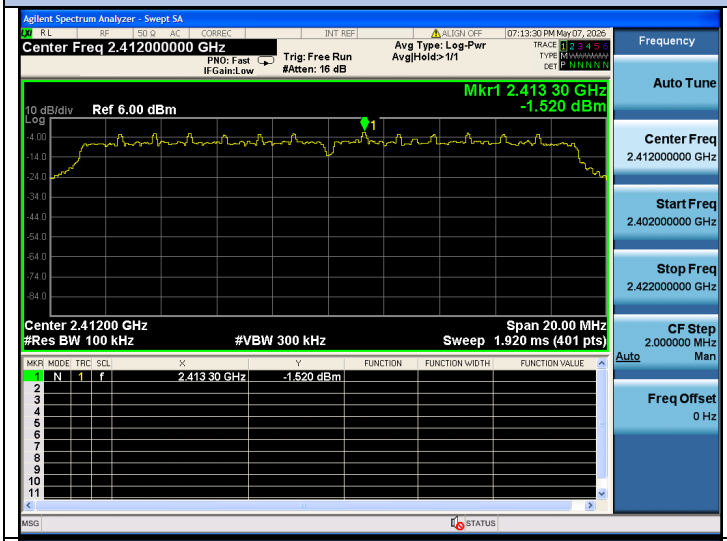
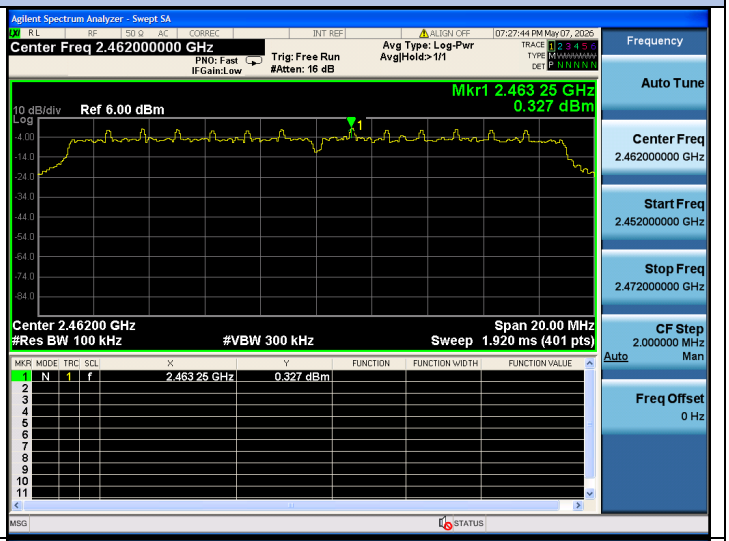
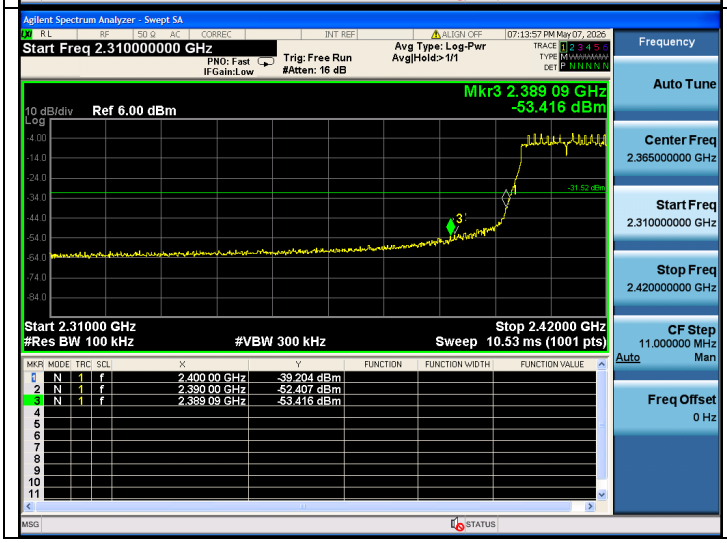
8.4. Test Procedure

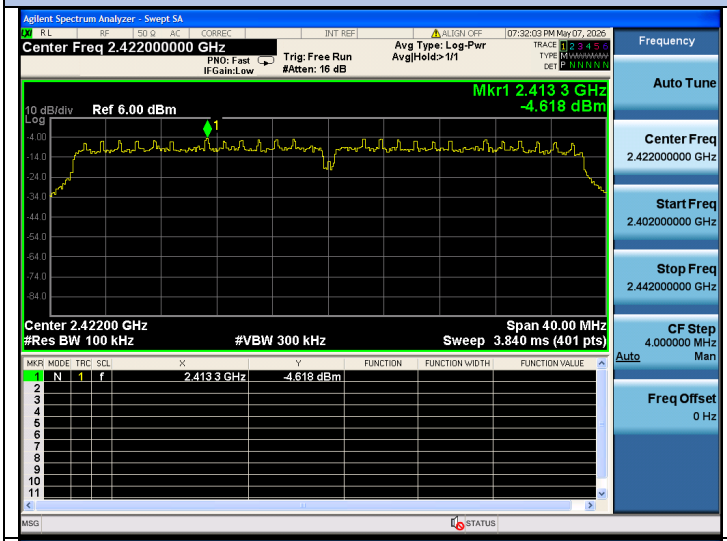
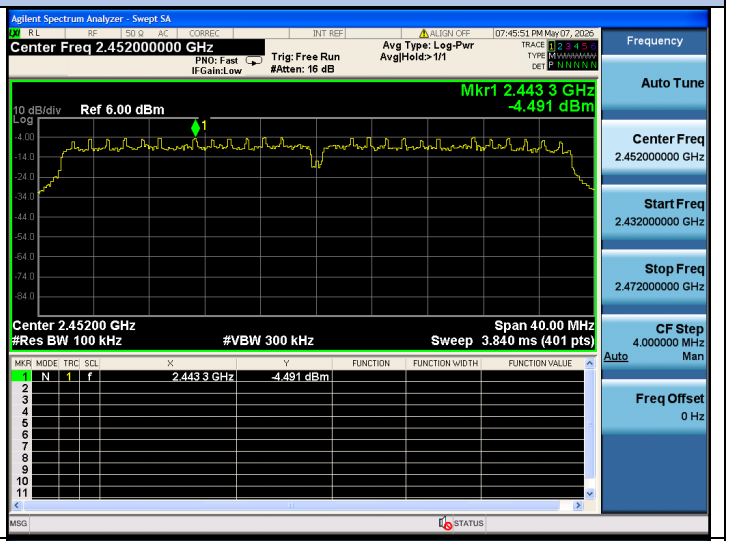
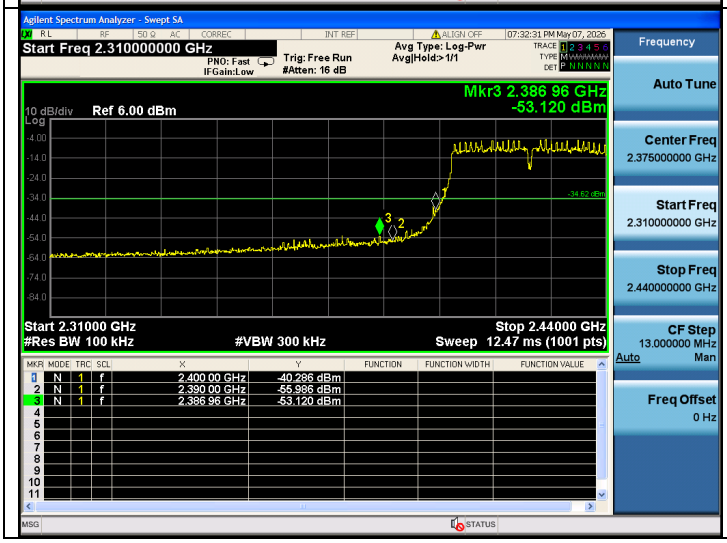
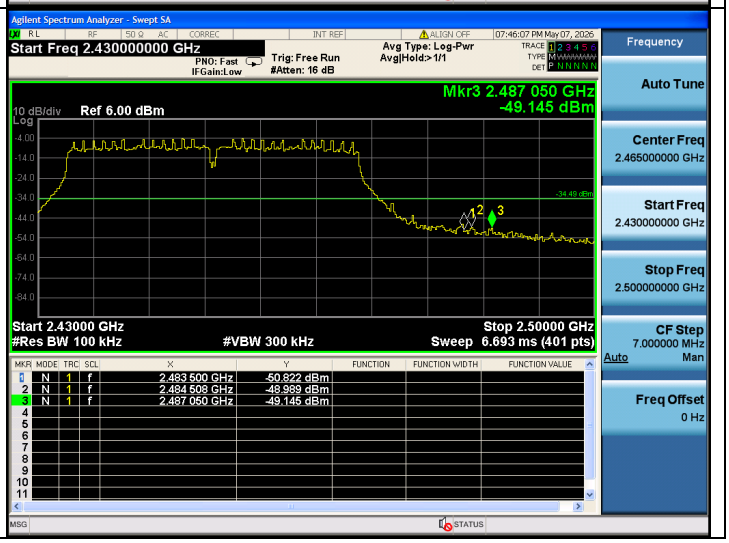
a. Connect EUT antenna terminal to the spectrum analyzer with RF cable.
b. Spectrum analyzer setting parameters in accordance with section 8.3.
c. Set the EUT transmit continuously with maximum output power.
d. Allow trace to stabilize, use the marker function to mark the highest emission level outside the authorized band.
e. Repeat above procedures until all modes and channels were measured.
f. Record the results in the test report
g. 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 802.11b_Ant1_Low_CH01 2412MHz	IEEE 802.11b_Ant1_High_CH11 2462MHz
Left Band edge	**Right Band edge**
	
	

IEEE 802.11g_Ant1_Low_CH01 2412MHz	IEEE 802.11g_Ant1_High_CH11 2462MHz
Left Band edge	Right Band edge
	
	

IEEE 802.11n HT20_Ant1_Low_CH01 2412MHz	IEEE 802.11n HT20_Ant1_High_CH11 2462MHz
Left Band edge	Right Band edge
	
	

IEEE 802.11n HT40_Ant1_Low_2422	IEEE 802.11n HT40_Ant1_High_CH09 2462MHz
Left Band edge	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

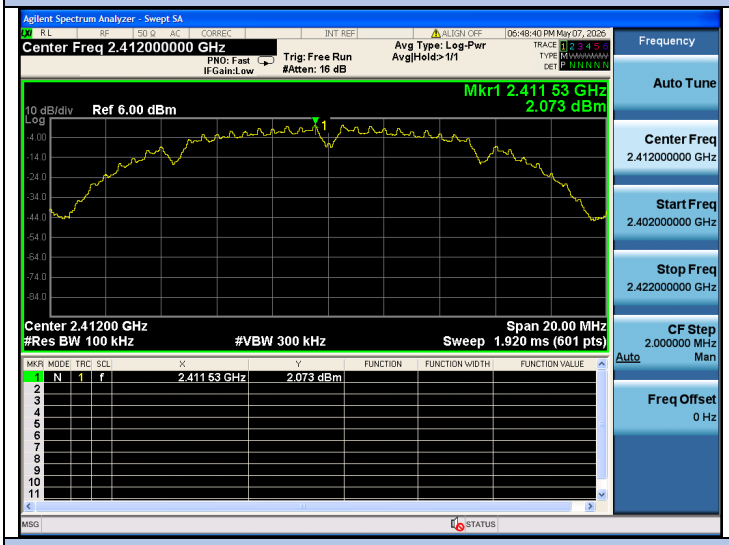
Spectrum Parameters	Setting	
RBW	100KHz	
VBW	300KHz	
Start frequency	30MHz	1.0GHz
Stop frequency	1000MHz	25.0GHz
Sweep Time	Auto	
Detector	Peak	
Trace Mode	Max Hold	

9.4. Test Procedure

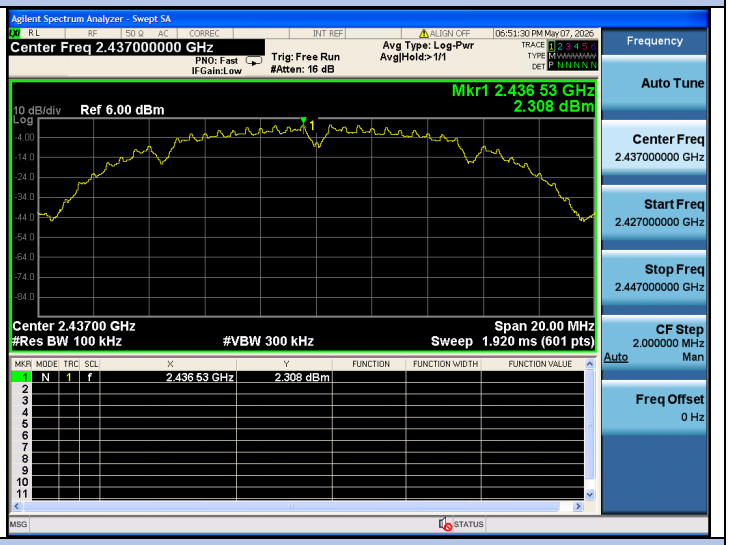
a. Connect EUT antenna terminal to the spectrum analyzer with RF cable.
b. Spectrum analyzer setting parameters in accordance with section 9.3.
c. Set the EUT transmit continuously with maximum output power.
d. Allow trace to stabilize, use the marker function to mark the highest emission level outside the authorized band.
e. Repeat above procedures until all modes and channels were measured.
f. Record the results in the test report.
g. 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

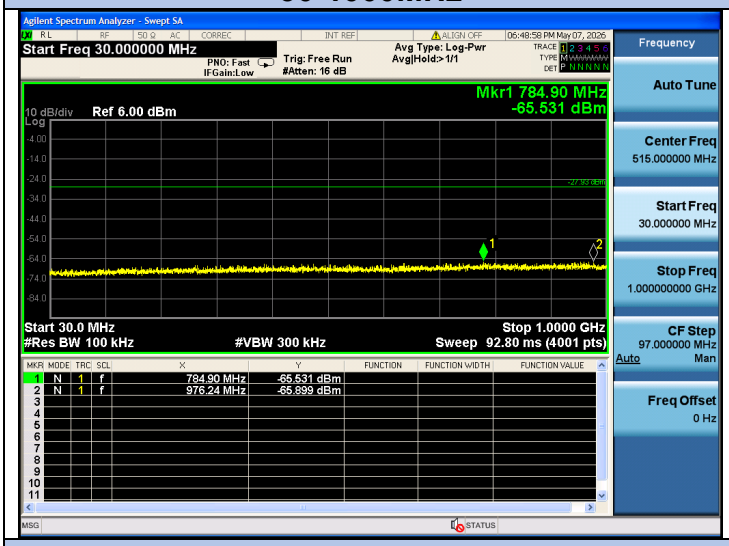
IEEE 802.11b_Ant1_CH01 2412MHz_Reference



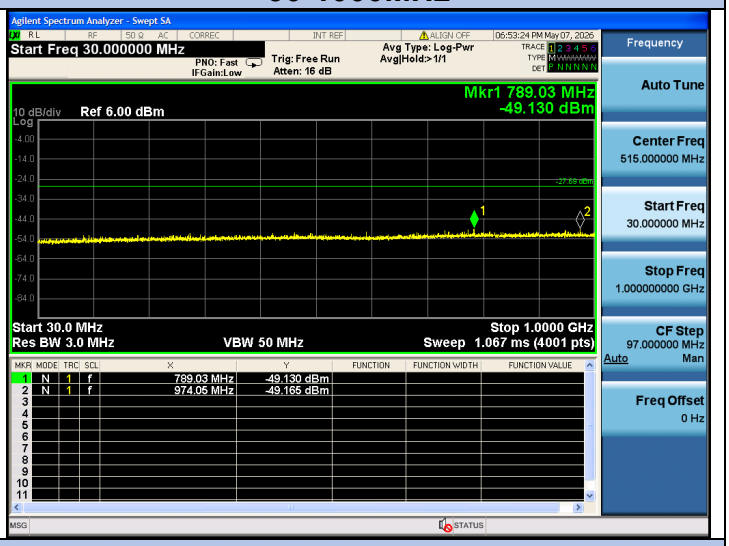
IEEE 802.11b_Ant1_CH06 2437MHz_Reference



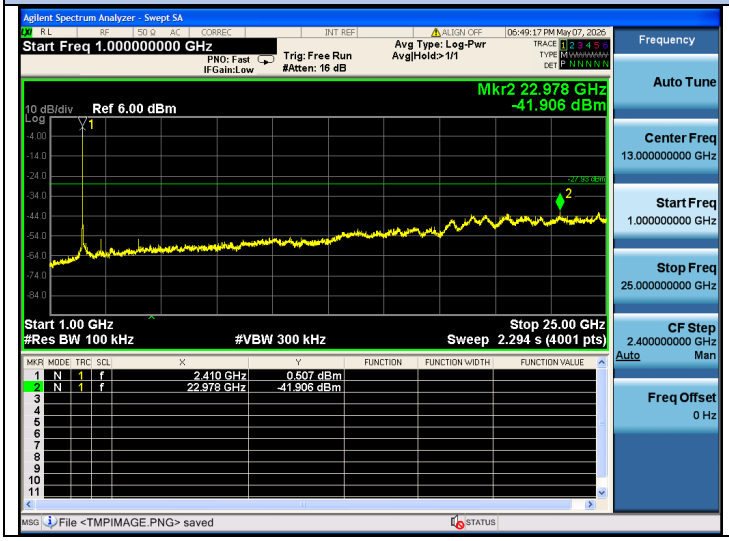
IEEE 802.11b_Ant1_CH01 2412MHz 30-1000MHz



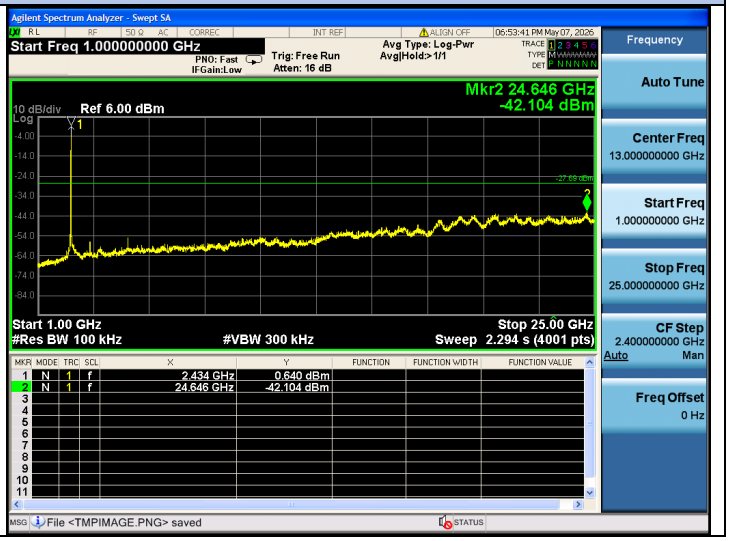
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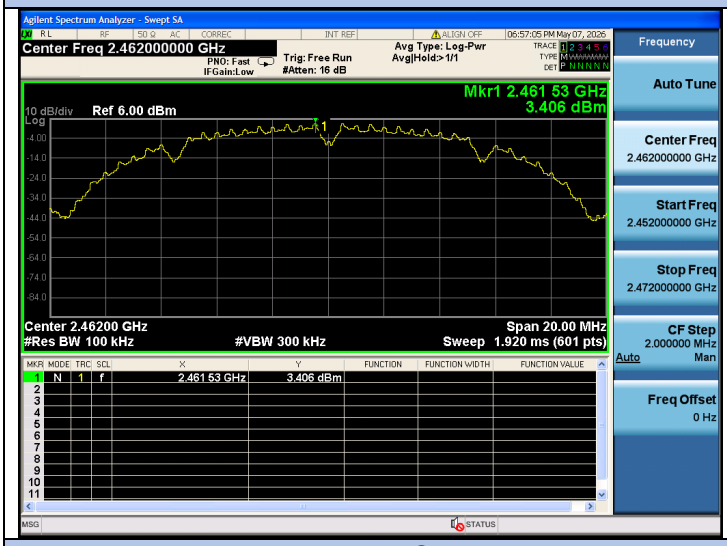
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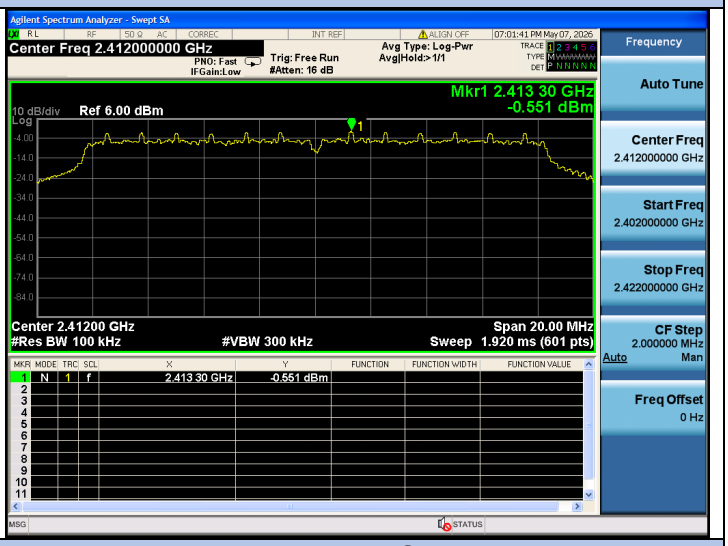
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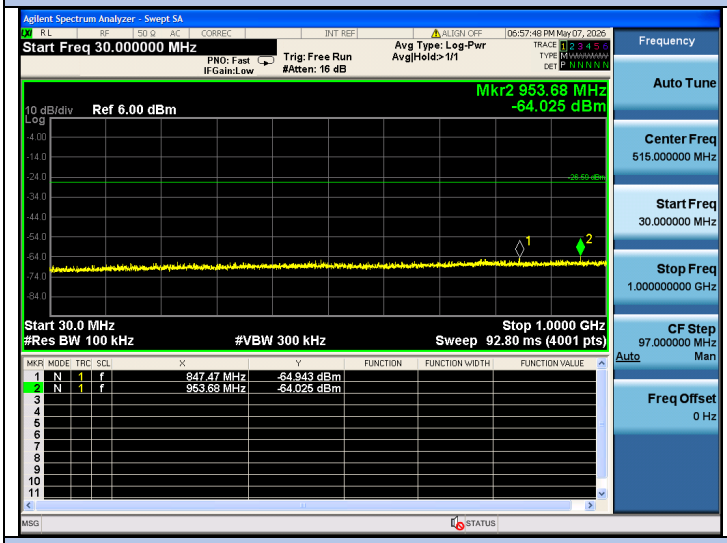
IEEE 802.11b_Ant1_CH11 2462MHz_Reference



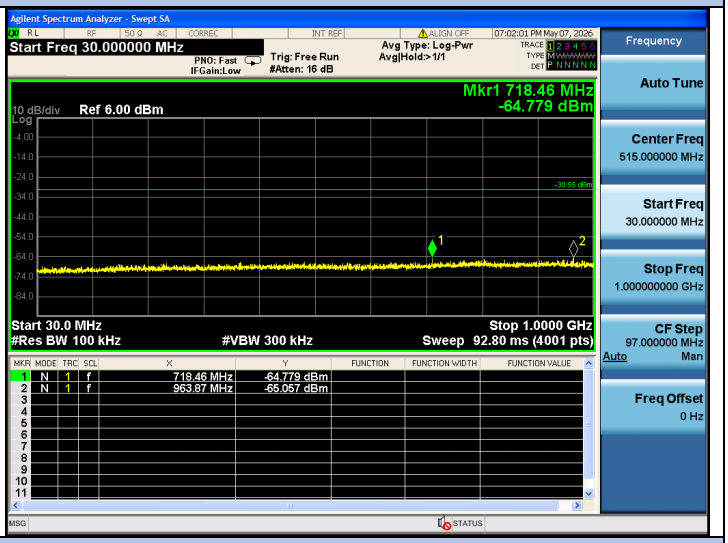
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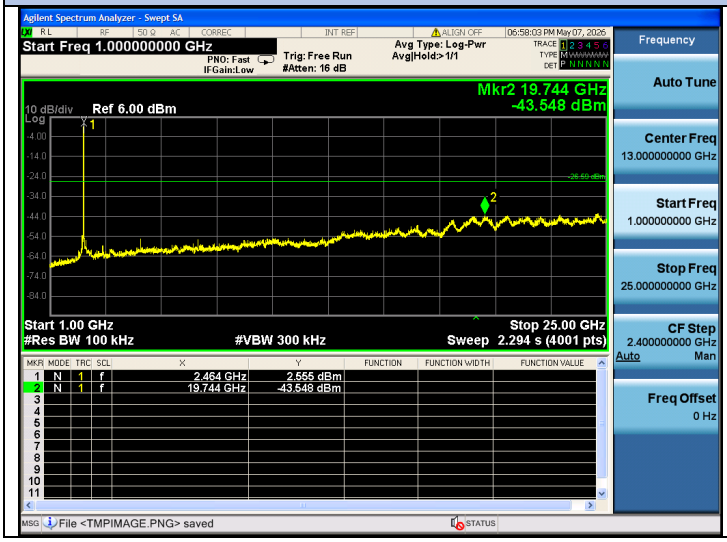
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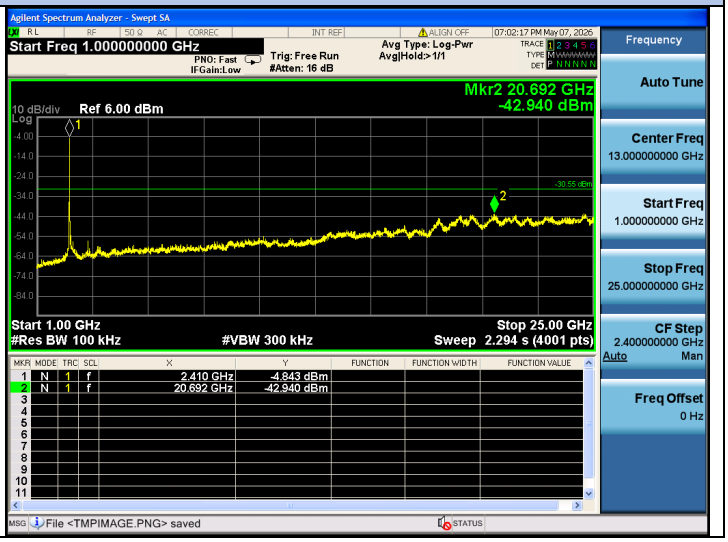
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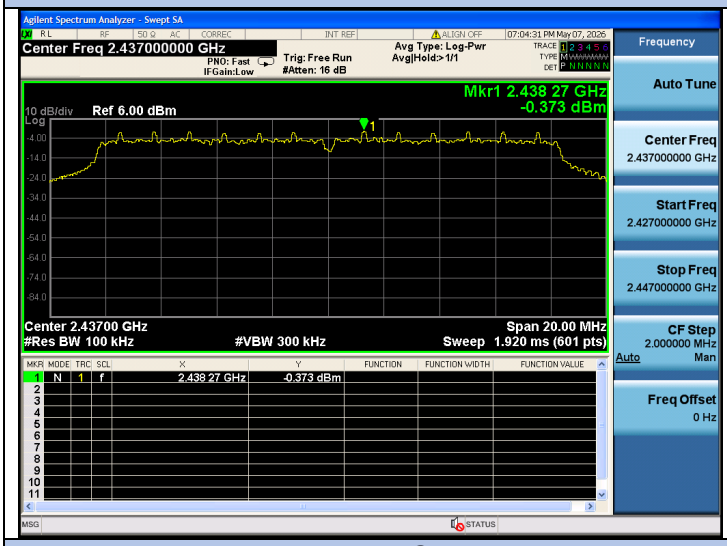
IEEE 802.11b_Ant1_CH11 2462MHz 1-25GHz



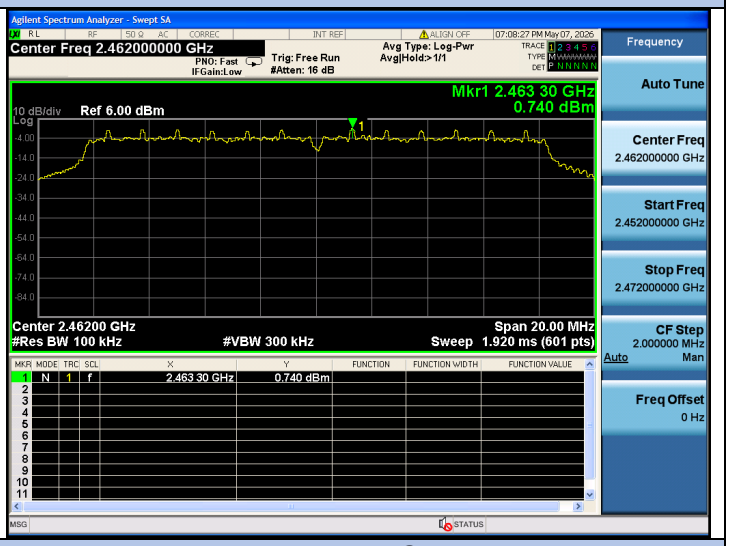
IEEE 802.11g_Ant1_CH01 2412MHz 1-25GHz



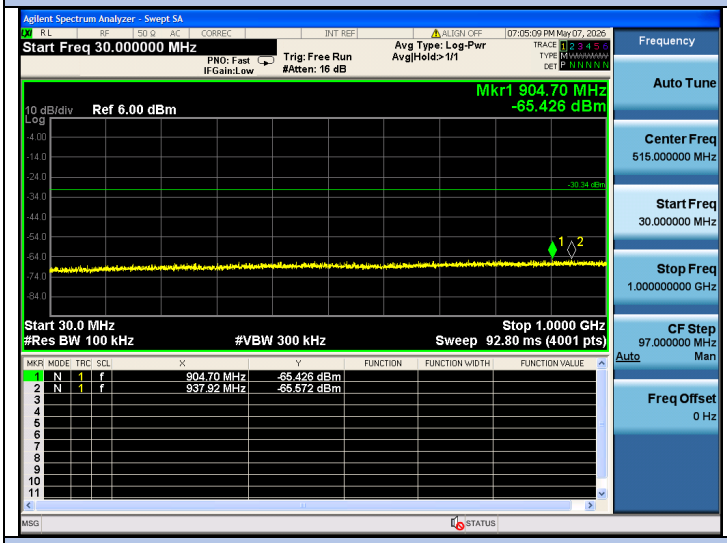
IEEE 802.11g_Ant1_CH06 2437MHz Reference



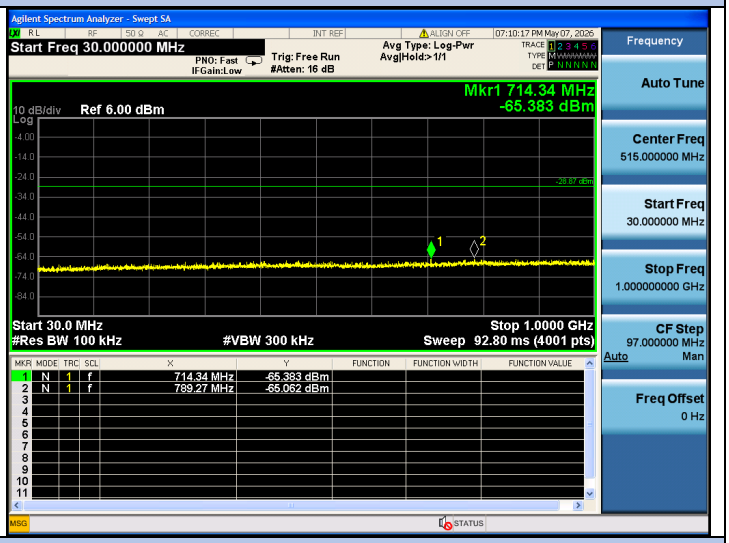
IEEE 802.11g_Ant1_CH11 2462MHz Reference



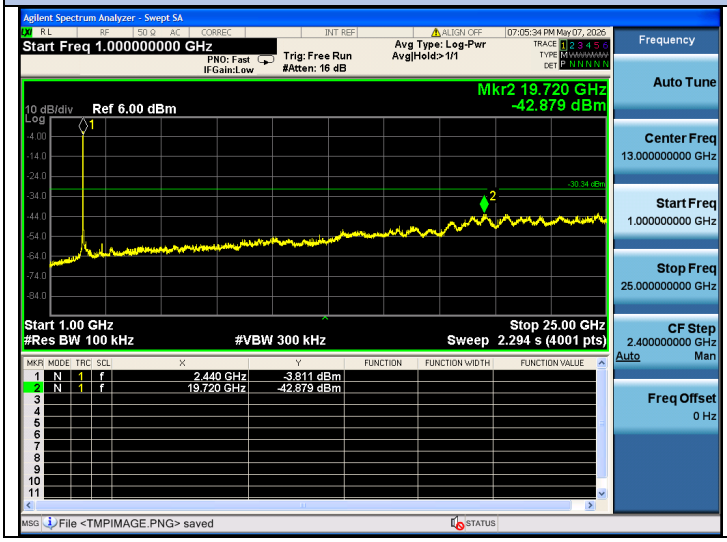
IEEE 802.11g_Ant1_CH06 2437MHz 30-1000MHz



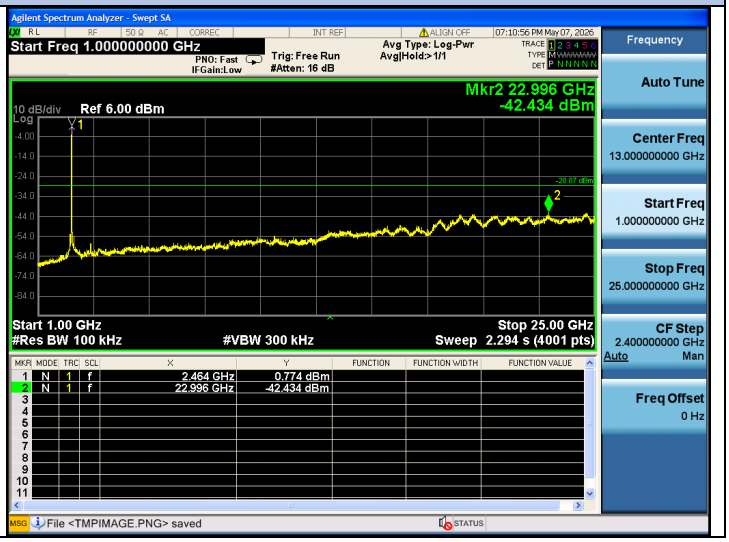
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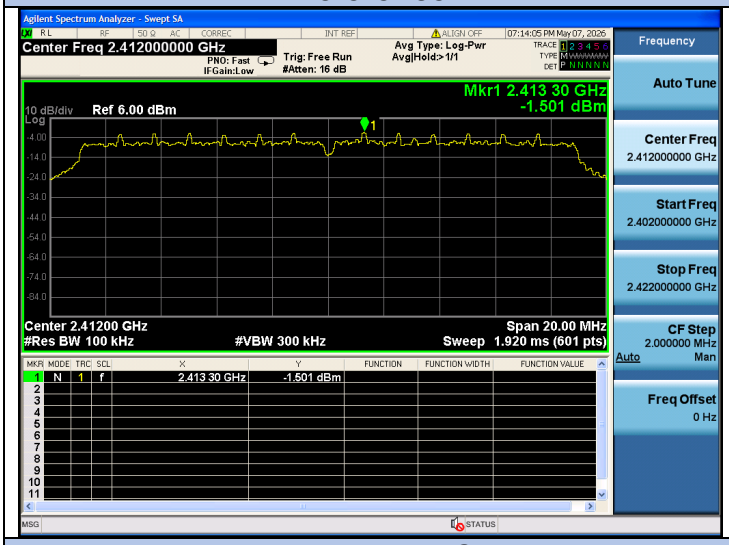
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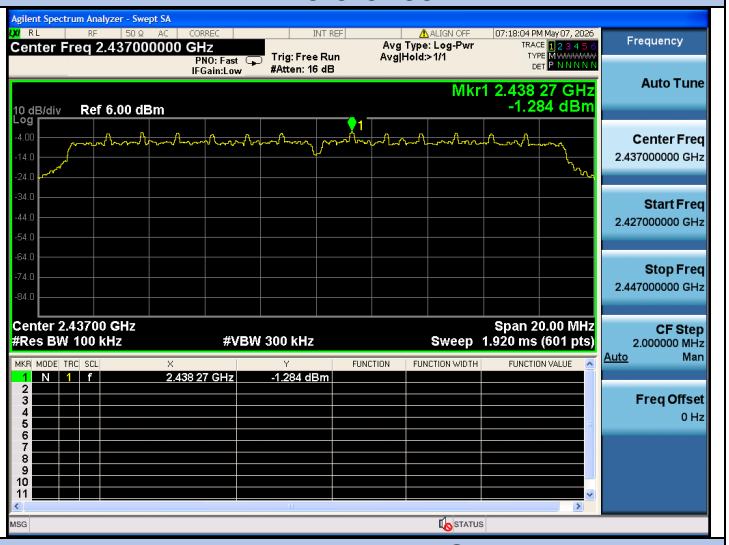
IEEE 802.11g_Ant1_CH11 2462MHz 1-25GHz



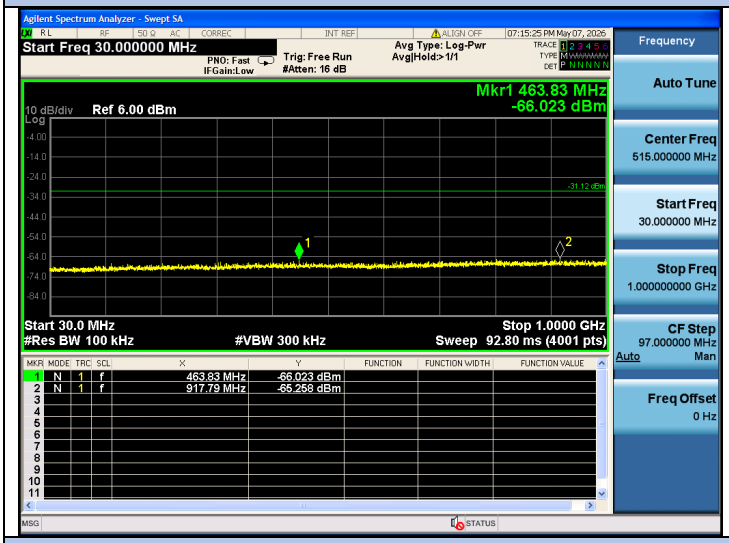
IEEE 802.11n HT20_Ant1_CH01 2412MHz Reference



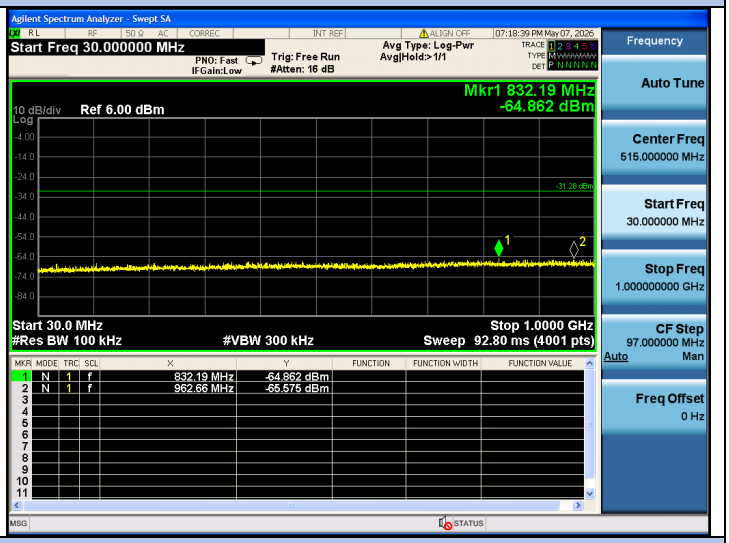
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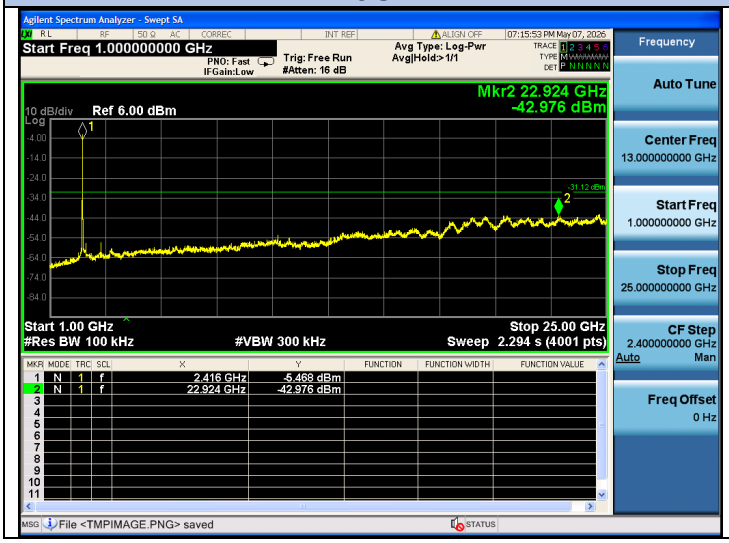
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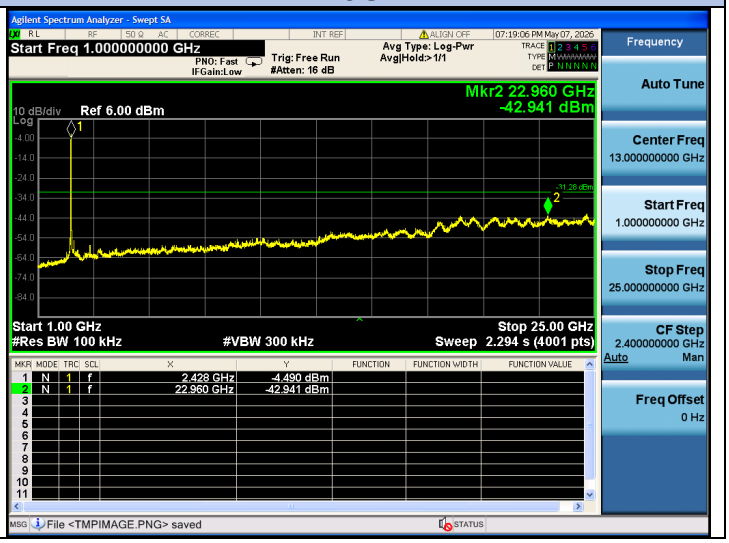
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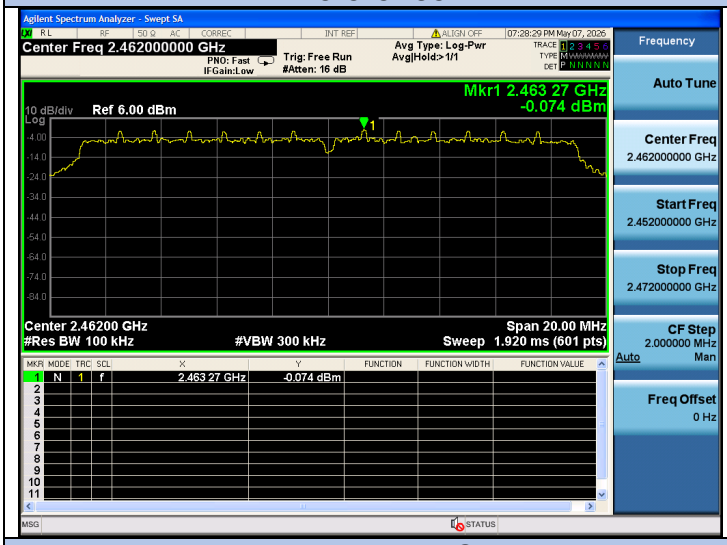
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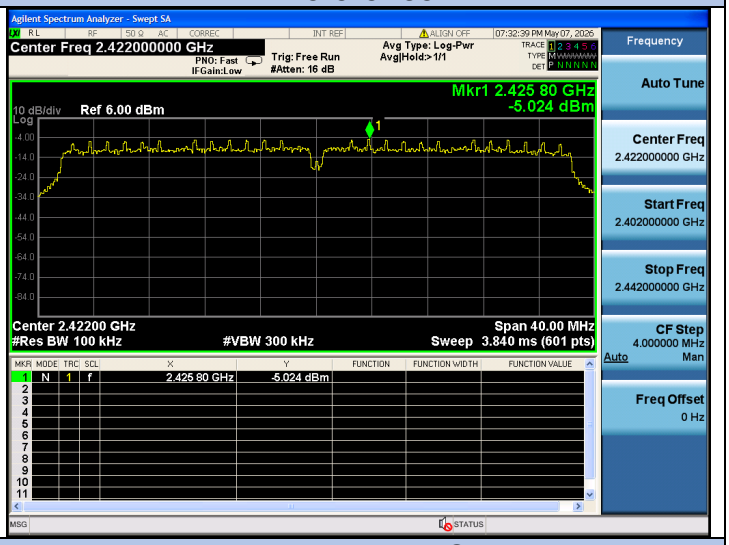
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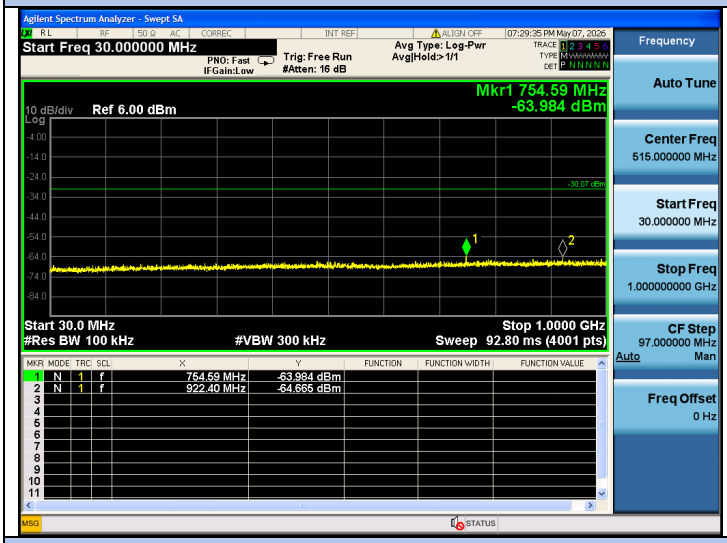
IEEE 802.11n HT20_Ant1_CH11 2462MHz Reference



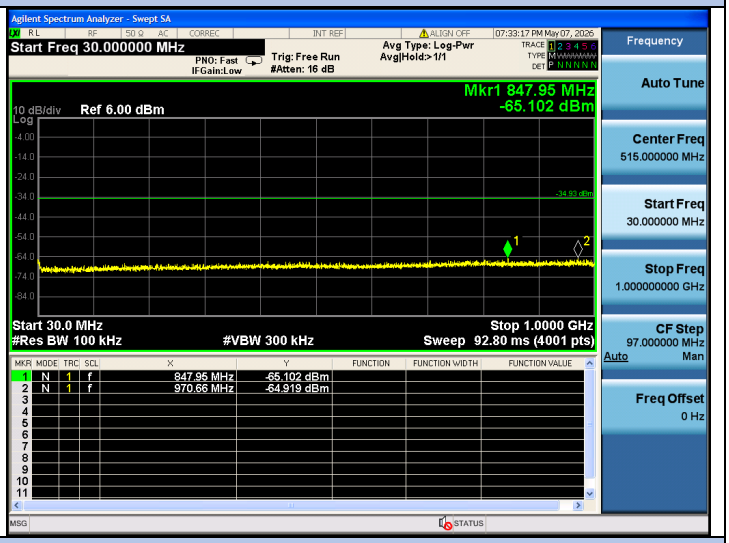
IEEE 802.11n HT40_Ant1_CH03 2422MHz Reference



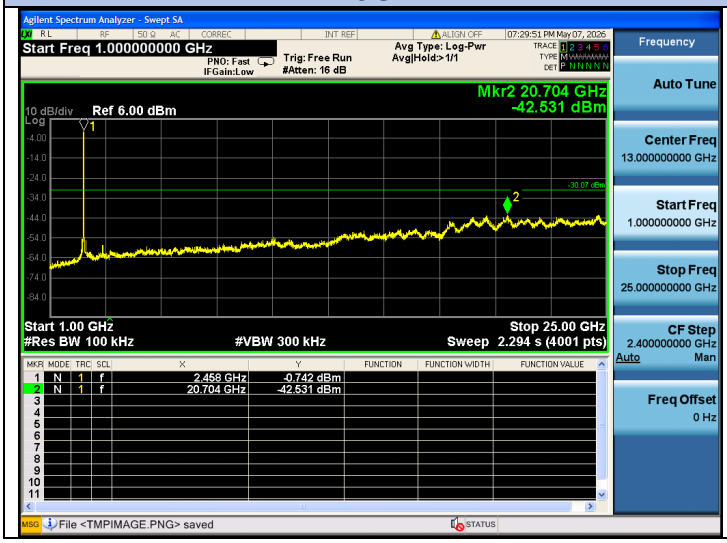
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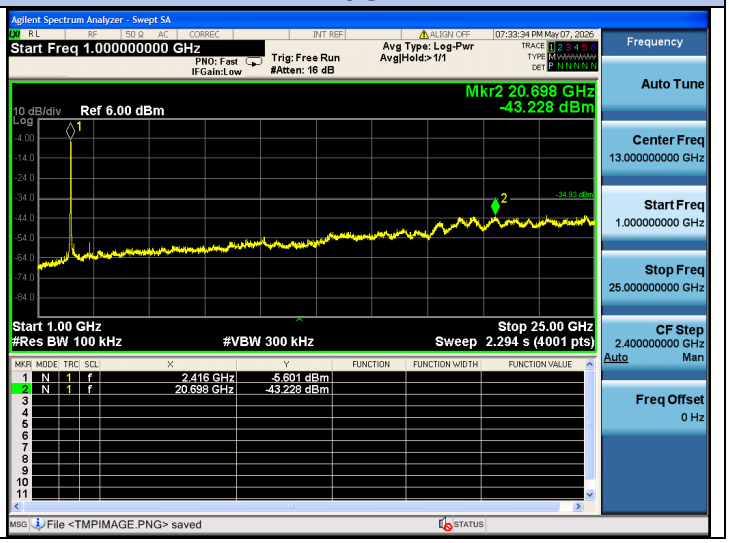
IEEE 802.11n HT40 _Ant1_CH03 2422MHz 30-1000MHz



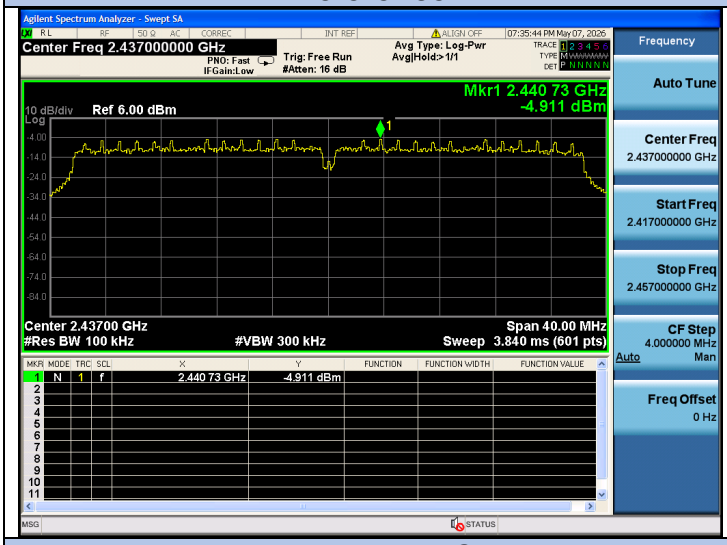
IEEE 802.11n HT20_Ant1_CH11 2462MHz 1-25GHz



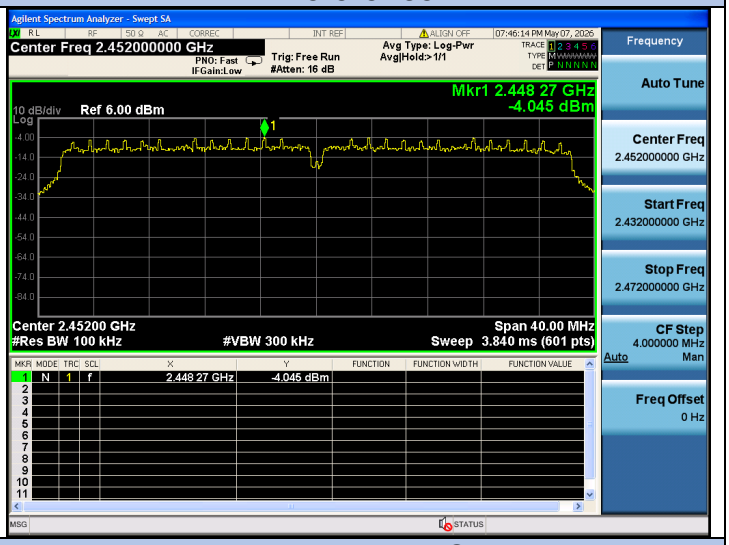
IEEE 802.11n HT40_Ant1_CH03 2422MHz 1-25GHz



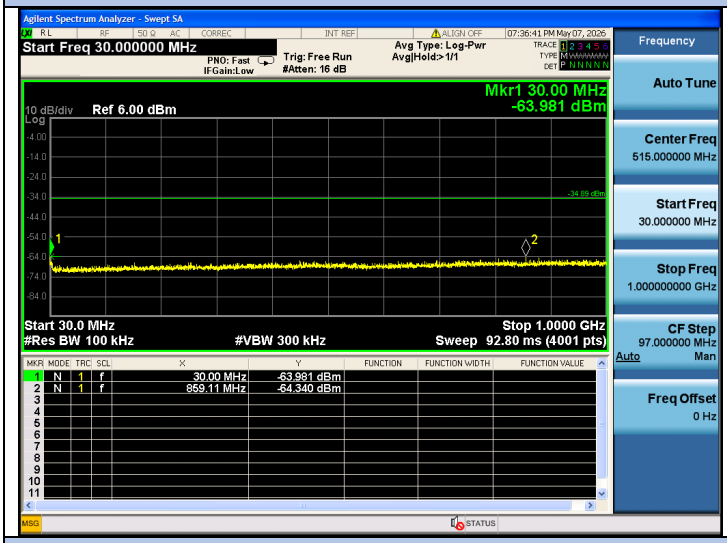
IEEE 802.11n HT40_Ant1_CH06 2437MHz Reference



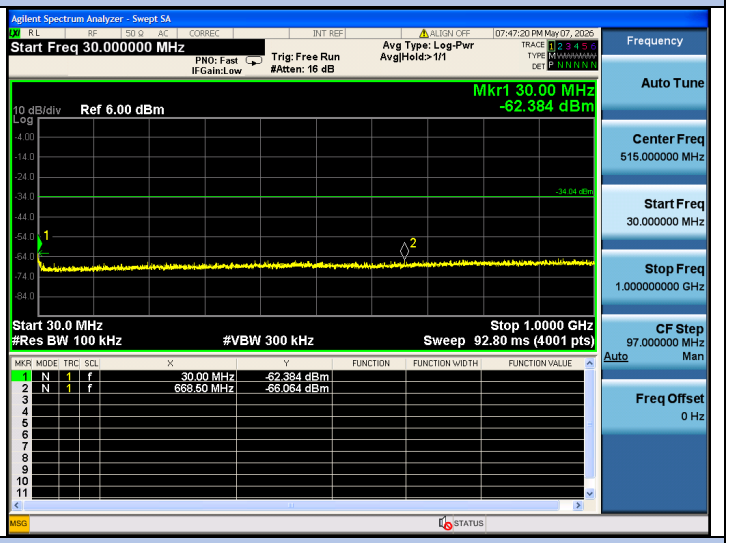
IEEE 802.11n HT40_Ant1_CH09 2452MHz Reference



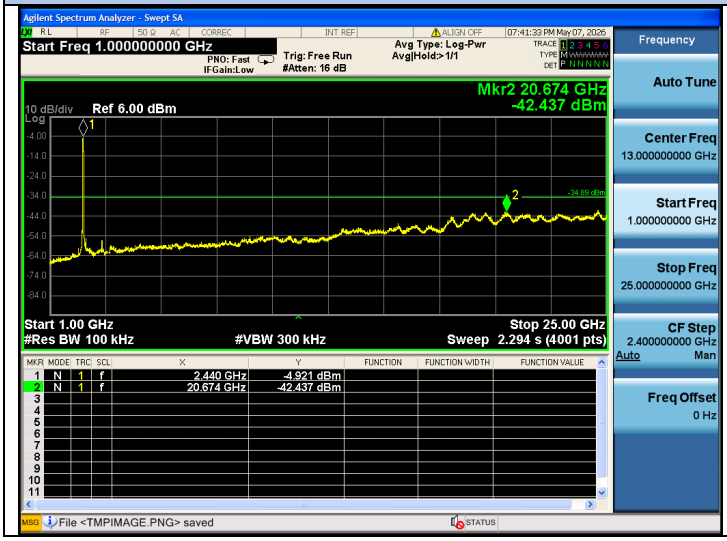
IEEE 802.11n HT40_Ant1_CH06 2437MHz 30-1000MHz



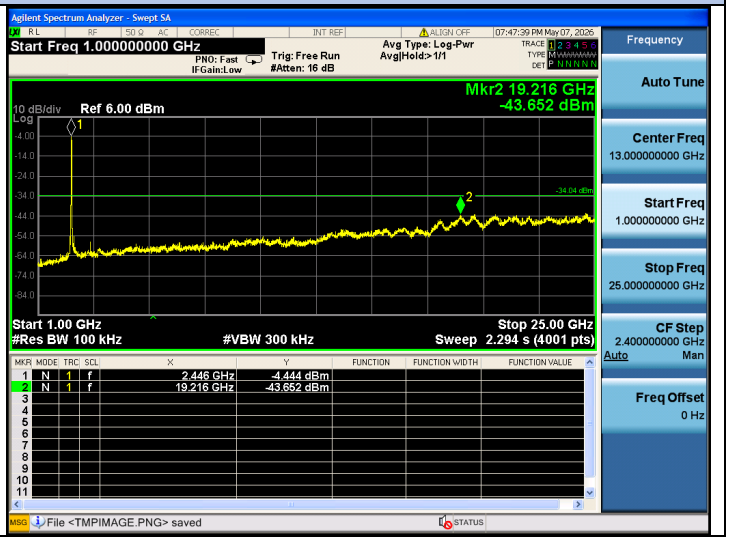
IEEE 802.11n HT40 _Ant1_CH09 2452MHz 30-1000MHz



IEEE 802.11n HT40_Ant1_CH06 2437MHz 1-25GHz



IEEE 802.11n HT40_Ant1_CH09 2452MHz 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
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(μV/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:

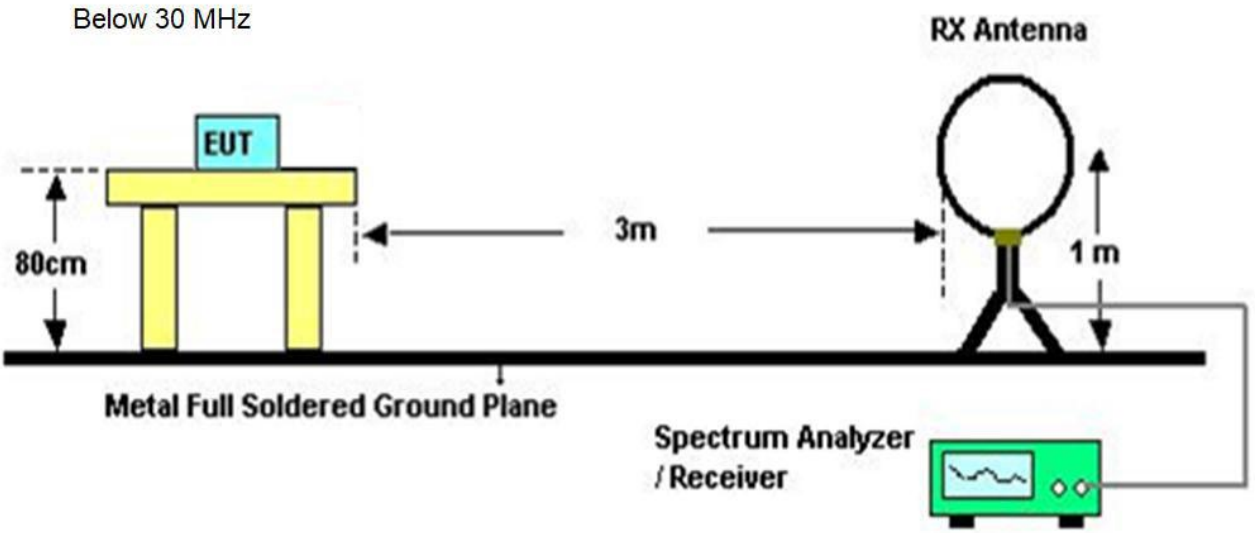
(1) Emission level dBμV = 20 log Emission level μV/m.

(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.

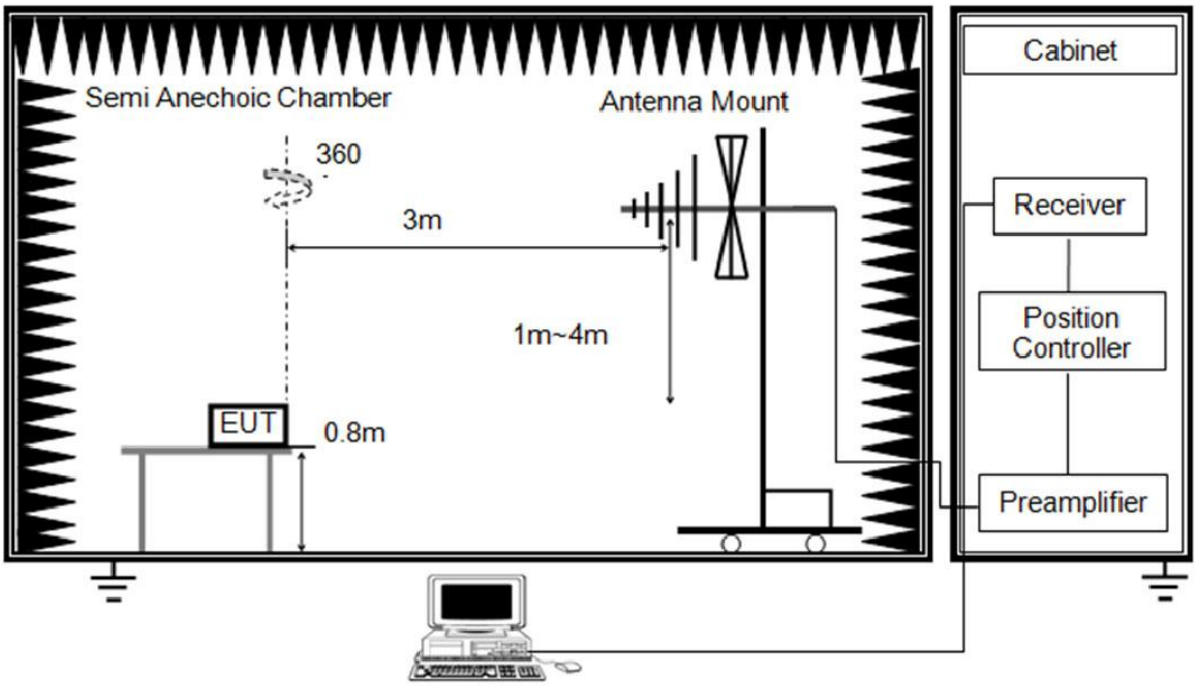
10.2. Test Setup

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



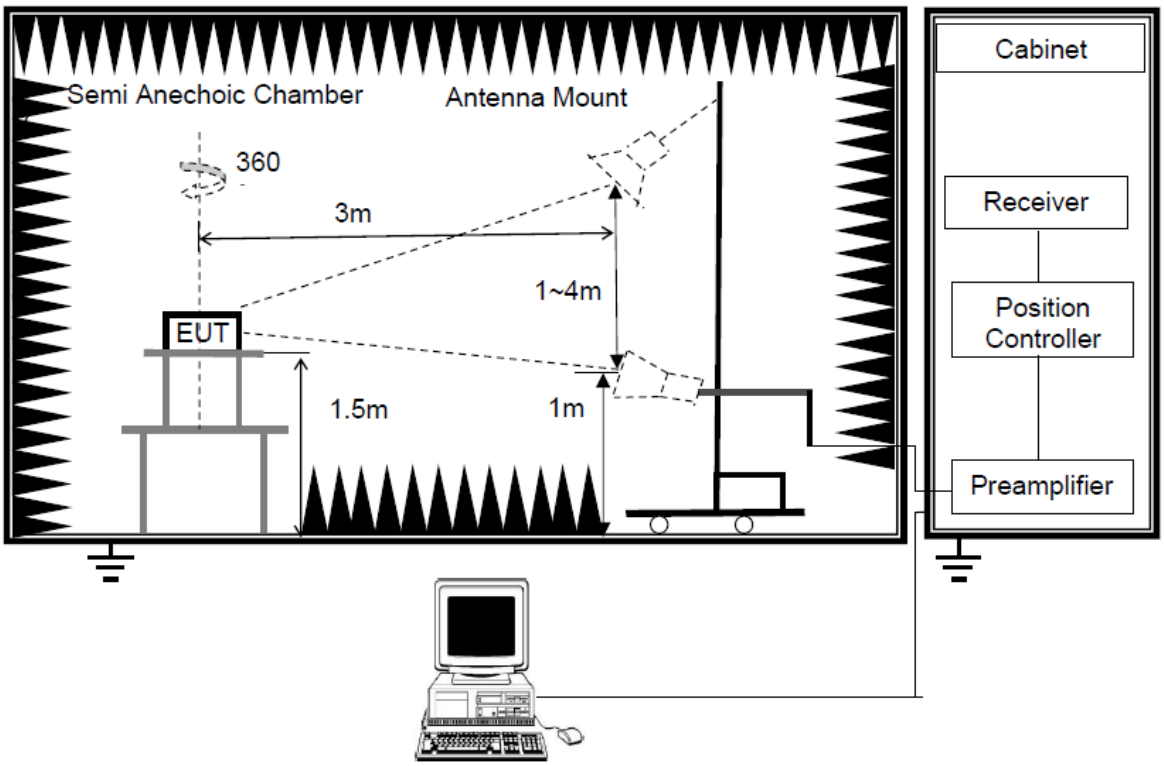
(B) Radiated Emission Test Set-Up, Frequency below 1000MHz

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≥98%, VBW=10Hz Duty cycle＜98%,VBW≥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. 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 DC 12V and AC 230V/50Hz input voltages. There was no significant change in radiation emission. Only the test data under DC 12V voltage was recorded and included in the report the test data for all other modes and channels do not exceed the results recorded for this worst-case mode. , the test data for all other modes and channels do not exceed the results recorded for this worst-case mode
3. 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.
4. 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.
5. Radiated emission test from 25GHz to 40GHz of fundamental was verified, and no emission found except system noise floor in 25GHz to 40GHz and not recorded in this report.

10.5. Test Result

Radiated Emissions 30-1000MHz

EUT: Smart Planting Controller

M/N: JYC-M3

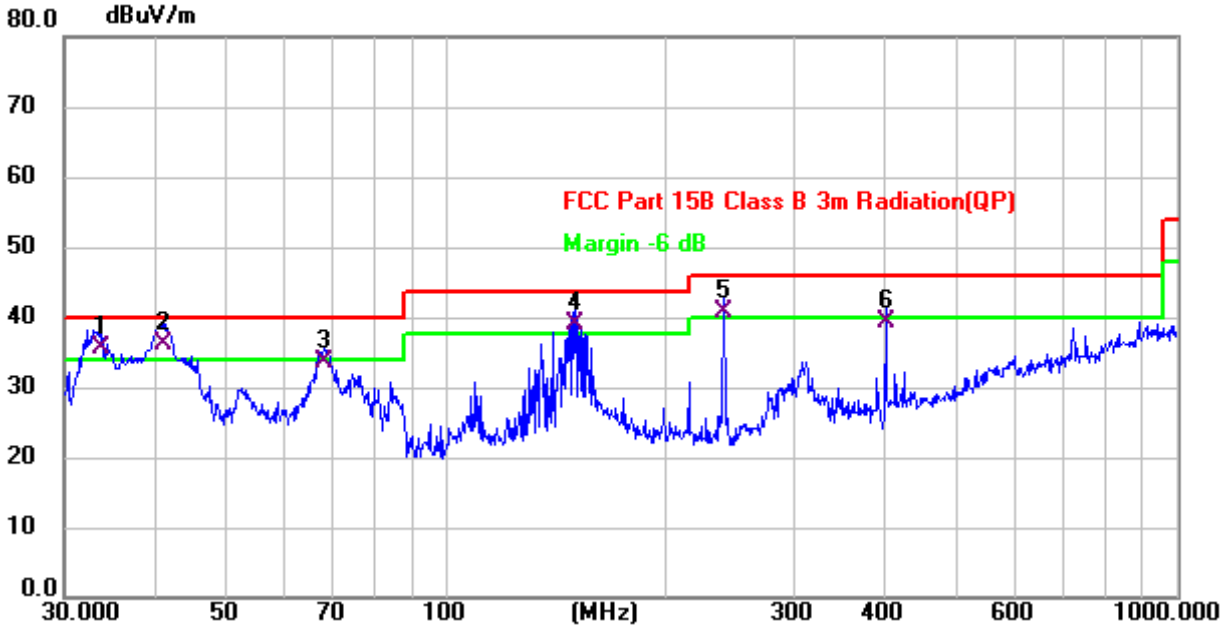
Test Voltage: DC 12V From Type-C Port

Ant. Pol.: Vertical

Test Mode: TX Mode

Note: only worse case: IEEE 802.11g mode with CH01 2412MHz is reported, the test data for all other modes and channels do not exceed the results recorded for this worst-case mode

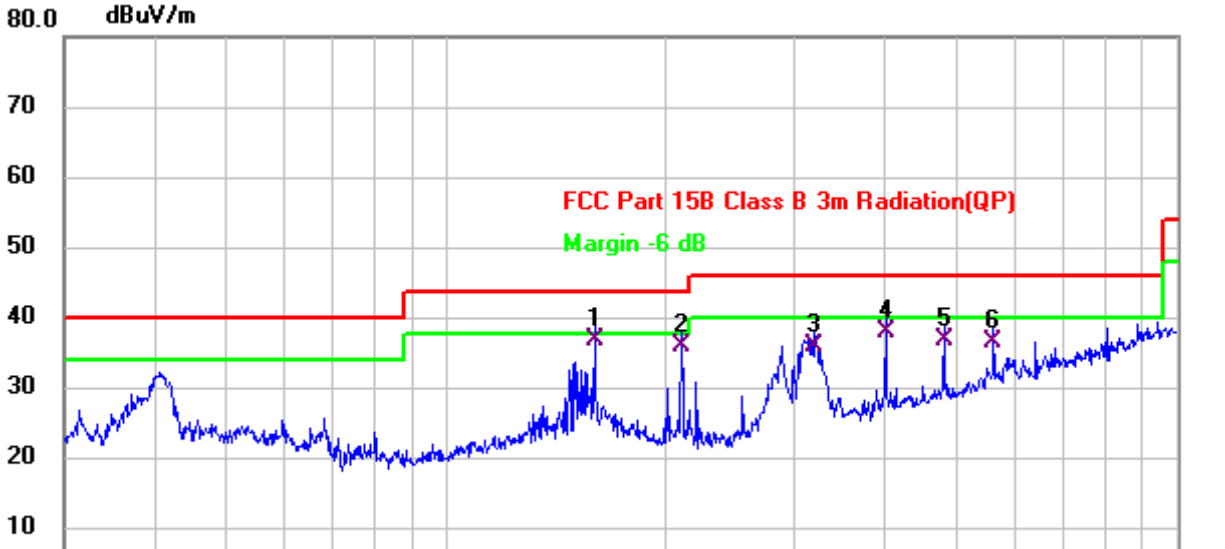
Detailed results are shown below



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 !	33.680	16.86	18.57	35.43	40.00	-4.57	QP			P	
2 *	40.988	16.63	19.61	36.24	40.00	-3.76	QP			P	
3	68.151	16.22	17.34	33.56	40.00	-6.44	QP			P	
4 !	150.538	19.12	19.80	38.92	43.50	-4.58	QP			P	
5 !	239.987	22.85	17.84	40.69	46.00	-5.31	QP			P	
6	400.432	16.55	22.61	39.16	46.00	-6.84	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)

EUT: Smart Planting Controller
M/N: JYC-M3
Test Voltage: DC 12V From Type-C Port
Ant. Pol.: Horizontal
Test Mode: TX Mode
Note: only worse case: IEEE 802.11g mode with CH01 2412MHz is reported, the test data for all other modes and channels do not exceed the results recorded for this worst-case mode
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 *	159.784	16.44	20.15	36.59	43.50	-6.91	QP			P	
2	210.048	18.28	17.46	35.74	43.50	-7.76	QP			P	
3	319.937	15.27	20.55	35.82	46.00	-10.18	QP			P	
4	400.432	15.21	22.61	37.82	46.00	-8.18	QP			P	
5	480.528	13.03	23.75	36.78	46.00	-9.22	QP			P	
6	560.693	10.78	25.69	36.47	46.00	-9.53	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	2217.509	41.00	-19.78	74.0	33.00	Peak	288.00	150	Vertical	Pass
1**	2217.509	30.65	-19.78	54.0	23.35	AV	288.00	150	Vertical	Pass
2	4766.500	49.22	-10.55	74.0	24.78	Peak	216.00	150	Vertical	Pass
2**	4766.500	39.72	-10.55	54.0	14.28	AV	216.00	150	Vertical	Pass
3	4823.750	52.68	-10.86	74.0	21.32	Peak	180.00	150	Vertical	Pass
3**	4823.750	44.49	-10.86	54.0	9.51	AV	180.00	150	Vertical	Pass
4	7091.750	53.24	-6.37	74.0	20.76	Peak	108.00	150	Vertical	Pass
4**	7091.750	43.65	-6.37	54.0	10.35	AV	108.00	150	Vertical	Pass
5	7300.000	50.63	-6.79	74.0	23.37	Peak	324.00	150	Vertical	Pass
5**	7300.000	43.06	-6.79	54.0	10.94	AV	324.00	150	Vertical	Pass
6	17927.000	53.33	1.41	74.0	20.67	Peak	36.00	150	Vertical	Pass
6**	17927.000	44.10	1.41	54.0	9.90	AV	36.00	150	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	2332.266	40.68	-19.70	74.0	33.32	Peak	360.00	150	Horizontal	Pass
1**	2332.266	31.73	-19.70	54.0	22.27	AV	360.00	150	Horizontal	Pass
2	4765.250	49.34	-10.56	74.0	24.66	Peak	324.00	150	Horizontal	Pass
2**	4765.250	40.20	-10.56	54.0	13.80	AV	324.00	150	Horizontal	Pass
3	4824.000	52.25	-10.86	74.0	21.75	Peak	180.00	150	Horizontal	Pass
3**	4824.000	46.08	-10.86	54.0	7.92	AV	180.00	150	Horizontal	Pass
4	5322.250	55.54	-9.62	74.0	18.46	Peak	288.00	150	Horizontal	Pass
4**	5322.250	43.40	-9.62	54.0	10.60	AV	288.00	150	Horizontal	Pass
5	7300.000	48.73	-6.79	74.0	25.27	Peak	252.00	150	Horizontal	Pass
5**	7300.000	42.27	-6.79	54.0	11.73	AV	252.00	150	Horizontal	Pass
6	17930.000	52.67	1.65	74.0	21.33	Peak	324.00	150	Horizontal	Pass
6**	17930.000	43.98	1.65	54.0	10.02	AV	324.00	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	2242.721	40.80	-19.72	74.0	33.20	Peak	288.00	150	Vertical	Pass
1**	2242.721	31.06	-19.72	54.0	22.94	AV	288.00	150	Vertical	Pass
2	2483.441	37.75	-19.23	74.0	36.25	Peak	108.00	150	Vertical	Pass
2**	2483.441	32.06	-19.23	54.0	21.94	AV	108.00	150	Vertical	Pass
3	4863.750	45.45	-10.53	74.0	28.55	Peak	216.00	150	Vertical	Pass
3**	4863.750	38.51	-10.53	54.0	15.49	AV	216.00	150	Vertical	Pass
4	7302.000	51.20	-6.81	74.0	22.80	Peak	324.00	150	Vertical	Pass
4**	7302.000	42.13	-6.81	54.0	11.87	AV	324.00	150	Vertical	Pass
5	7711.250	52.98	-6.35	74.0	21.02	Peak	252.00	150	Vertical	Pass
5**	7711.250	43.89	-6.35	54.0	10.11	AV	252.00	150	Vertical	Pass
6	17935.999	52.85	1.58	74.0	21.15	Peak	360.00	150	Vertical	Pass
6**	17935.999	44.17	1.58	54.0	9.83	AV	360.00	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	2181.591	40.86	-20.09	74.0	33.14	Peak	36.00	150	Horizontal	Pass
1**	2181.591	30.47	-20.09	54.0	23.53	AV	36.00	150	Horizontal	Pass
2	2483.441	37.78	-19.23	74.0	36.22	Peak	360.00	150	Horizontal	Pass
2**	2483.441	32.05	-19.23	54.0	21.95	AV	360.00	150	Horizontal	Pass
3	4863.750	47.28	-10.53	74.0	26.72	Peak	252.00	150	Horizontal	Pass
3**	4863.750	39.56	-10.53	54.0	14.44	AV	252.00	150	Horizontal	Pass
4	7306.500	51.53	-6.87	74.0	22.47	Peak	288.00	150	Horizontal	Pass
4**	7306.500	43.20	-6.87	54.0	10.80	AV	288.00	150	Horizontal	Pass
5	7779.000	52.44	-6.23	74.0	21.56	Peak	216.00	150	Horizontal	Pass
5**	7779.000	42.63	-6.23	54.0	11.37	AV	216.00	150	Horizontal	Pass
6	17929.501	52.81	1.61	74.0	21.19	Peak	288.00	150	Horizontal	Pass
6**	17929.501	44.87	1.61	54.0	9.13	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	2341.470	41.14	-19.71	74.0	32.86	Peak	108.00	150	Horizontal	Pass
1**	2341.470	31.08	-19.71	54.0	22.92	AV	108.00	150	Horizontal	Pass
2	2483.441	38.35	-19.23	74.0	35.65	Peak	72.00	150	Horizontal	Pass
2**	2483.441	32.37	-19.23	54.0	21.63	AV	72.00	150	Horizontal	Pass
3	4914.000	44.89	-11.18	74.0	29.11	Peak	216.00	150	Horizontal	Pass
3**	4914.000	38.14	-11.18	54.0	15.86	AV	216.00	150	Horizontal	Pass
4	7395.250	51.75	-6.79	74.0	22.25	Peak	360.00	150	Horizontal	Pass
4**	7395.250	43.01	-6.79	54.0	10.99	AV	360.00	150	Horizontal	Pass
5	7985.250	52.38	-6.23	74.0	21.62	Peak	180.00	150	Horizontal	Pass
5**	7985.250	42.86	-6.23	54.0	11.14	AV	180.00	150	Horizontal	Pass
6	17927.999	53.30	1.49	74.0	20.70	Peak	180.00	150	Horizontal	Pass
6**	17927.999	44.94	1.49	54.0	9.06	AV	180.00	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	2224.912	40.94	-19.78	74.0	33.06	Peak	180.00	150	Vertical	Pass
1**	2224.912	30.92	-19.78	54.0	23.08	AV	180.00	150	Vertical	Pass
2	2483.441	37.50	-19.23	74.0	36.50	Peak	288.00	150	Vertical	Pass
2**	2483.441	31.39	-19.23	54.0	22.61	AV	288.00	150	Vertical	Pass
3	4914.000	47.13	-11.18	74.0	26.87	Peak	288.00	150	Vertical	Pass
3**	4914.000	38.25	-11.18	54.0	15.75	AV	288.00	150	Vertical	Pass
4	7390.500	51.30	-6.72	74.0	22.70	Peak	288.00	150	Vertical	Pass
4**	7390.500	42.56	-6.72	54.0	11.44	AV	288.00	150	Vertical	Pass
5	7899.000	52.83	-6.17	74.0	21.17	Peak	360.00	150	Vertical	Pass
5**	7899.000	42.98	-6.17	54.0	11.02	AV	360.00	150	Vertical	Pass
6	17932.501	53.26	1.62	74.0	20.74	Peak	72.00	150	Vertical	Pass
6**	17932.501	44.57	1.62	54.0	9.43	AV	72.00	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	2261.631	40.82	-19.45	74.0	33.18	Peak	216.00	150	Horizontal	Pass
1**	2261.631	32.02	-19.45	54.0	21.98	AV	216.00	150	Horizontal	Pass
2	4783.250	48.85	-10.50	74.0	25.15	Peak	288.00	150	Horizontal	Pass
2**	4783.250	39.79	-10.50	54.0	14.21	AV	288.00	150	Horizontal	Pass
3	4825.750	49.65	-10.87	74.0	24.35	Peak	324.00	150	Horizontal	Pass
3**	4825.750	40.95	-10.87	54.0	13.05	AV	324.00	150	Horizontal	Pass
4	5243.750	53.77	-9.80	74.0	20.23	Peak	360.00	150	Horizontal	Pass
4**	5243.750	48.11	-9.80	54.0	5.89	AV	360.00	150	Horizontal	Pass
5	7300.000	49.74	-6.79	74.0	24.26	Peak	288.00	150	Horizontal	Pass
5**	7300.000	42.45	-6.79	54.0	11.55	AV	288.00	150	Horizontal	Pass
6	17933.001	52.37	1.62	74.0	21.63	Peak	180.00	150	Horizontal	Pass
6**	17933.001	44.42	1.62	54.0	9.58	AV	180.00	150	Horizontal	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	2341.070	41.11	-19.71	74.0	32.89	Peak	324.00	150	Vertical	Pass
1**	2341.070	31.97	-19.71	54.0	22.03	AV	324.00	150	Vertical	Pass
2	4776.000	49.12	-10.50	74.0	24.88	Peak	108.00	150	Vertical	Pass
2**	4776.000	39.71	-10.50	54.0	14.29	AV	108.00	150	Vertical	Pass
3	4823.750	48.29	-10.86	74.0	25.71	Peak	72.00	150	Vertical	Pass
3**	4823.750	39.41	-10.86	54.0	14.59	AV	72.00	150	Vertical	Pass
4	7002.500	53.08	-5.57	74.0	20.92	Peak	252.00	150	Vertical	Pass
4**	7002.500	43.88	-5.57	54.0	10.12	AV	252.00	150	Vertical	Pass
5	7300.000	49.12	-6.79	74.0	24.88	Peak	360.00	150	Vertical	Pass
5**	7300.000	42.74	-6.79	54.0	11.26	AV	360.00	150	Vertical	Pass
6	17934.000	53.52	1.61	74.0	20.48	Peak	360.00	150	Vertical	Pass
6**	17934.000	43.93	1.61	54.0	10.07	AV	360.00	150	Vertical	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	2257.428	40.40	-19.52	74.0	33.60	Peak	324.00	150	Vertical	Pass
1**	2257.428	30.63	-19.52	54.0	23.37	AV	324.00	150	Vertical	Pass
2	2483.441	38.40	-19.23	74.0	35.60	Peak	180.00	150	Vertical	Pass
2**	2483.441	31.50	-19.23	54.0	22.50	AV	180.00	150	Vertical	Pass
3	4863.750	44.84	-10.53	74.0	29.16	Peak	72.00	150	Vertical	Pass
3**	4863.750	39.23	-10.53	54.0	14.77	AV	72.00	150	Vertical	Pass
4	7315.000	51.79	-6.85	74.0	22.21	Peak	144.00	150	Vertical	Pass
4**	7315.000	42.97	-6.85	54.0	11.03	AV	144.00	150	Vertical	Pass
5	7957.250	53.50	-6.40	74.0	20.50	Peak	36.00	150	Vertical	Pass
5**	7957.250	42.70	-6.40	54.0	11.30	AV	36.00	150	Vertical	Pass
6	17937.500	53.02	1.56	74.0	20.98	Peak	216.00	150	Vertical	Pass
6**	17937.500	44.32	1.56	54.0	9.68	AV	216.00	150	Vertical	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	2384.192	40.85	-19.28	74.0	33.15	Peak	216.00	150	Horizontal	Pass
1**	2384.192	30.63	-19.28	54.0	23.37	AV	216.00	150	Horizontal	Pass
2	2483.441	38.74	-19.23	74.0	35.26	Peak	144.00	150	Horizontal	Pass
2**	2483.441	31.37	-19.23	54.0	22.63	AV	144.00	150	Horizontal	Pass
3	4863.750	47.05	-10.53	74.0	26.95	Peak	144.00	150	Horizontal	Pass
3**	4863.750	40.09	-10.53	54.0	13.91	AV	144.00	150	Horizontal	Pass
4	7316.250	51.27	-6.84	74.0	22.73	Peak	180.00	150	Horizontal	Pass
4**	7316.250	43.65	-6.84	54.0	10.35	AV	180.00	150	Horizontal	Pass
5	7955.750	52.57	-6.37	74.0	21.43	Peak	324.00	150	Horizontal	Pass
5**	7955.750	42.63	-6.37	54.0	11.37	AV	324.00	150	Horizontal	Pass
6	17924.000	53.29	1.18	74.0	20.71	Peak	360.00	150	Horizontal	Pass
6**	17924.000	43.27	1.18	54.0	10.73	AV	360.00	150	Horizontal	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	2197.699	41.01	-19.92	74.0	32.99	Peak	360.00	150	Horizontal	Pass
1**	2197.699	30.78	-19.92	54.0	23.22	AV	360.00	150	Horizontal	Pass
2	2483.441	39.50	-19.23	74.0	34.50	Peak	360.00	150	Horizontal	Pass
2**	2483.441	31.96	-19.23	54.0	22.04	AV	360.00	150	Horizontal	Pass
3	4914.000	46.33	-11.18	74.0	27.67	Peak	360.00	150	Horizontal	Pass
3**	4914.000	39.11	-11.18	54.0	14.89	AV	360.00	150	Horizontal	Pass
4	7376.500	51.07	-6.85	74.0	22.93	Peak	180.00	150	Horizontal	Pass
4**	7376.500	42.73	-6.85	54.0	11.27	AV	180.00	150	Horizontal	Pass
5	7842.500	52.97	-6.24	74.0	21.03	Peak	324.00	150	Horizontal	Pass
5**	7842.500	42.95	-6.24	54.0	11.05	AV	324.00	150	Horizontal	Pass
6	17945.000	52.58	1.32	74.0	21.42	Peak	288.00	150	Horizontal	Pass
6**	17945.000	43.44	1.32	54.0	10.56	AV	288.00	150	Horizontal	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	2381.690	40.49	-19.29	74.0	33.51	Peak	288.00	150	Vertical	Pass
1**	2381.690	30.67	-19.29	54.0	23.33	AV	288.00	150	Vertical	Pass
2	2483.441	38.19	-19.23	74.0	35.81	Peak	360.00	150	Vertical	Pass
2**	2483.441	31.29	-19.23	54.0	22.71	AV	360.00	150	Vertical	Pass
3	4914.000	45.30	-11.18	74.0	28.70	Peak	360.00	150	Vertical	Pass
3**	4914.000	38.84	-11.18	54.0	15.16	AV	360.00	150	Vertical	Pass
4	7386.000	52.21	-6.76	74.0	21.79	Peak	252.00	150	Vertical	Pass
4**	7386.000	42.19	-6.76	54.0	11.81	AV	252.00	150	Vertical	Pass
5	7654.500	52.95	-6.42	74.0	21.05	Peak	324.00	150	Vertical	Pass
5**	7654.500	43.57	-6.42	54.0	10.43	AV	324.00	150	Vertical	Pass
6	17924.000	52.84	1.18	74.0	21.16	Peak	360.00	150	Vertical	Pass
6**	17924.000	44.18	1.18	54.0	9.82	AV	360.00	150	Vertical	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	2340.970	40.80	-19.71	74.0	33.20	Peak	108.00	150	Horizontal	Pass
1**	2340.970	30.61	-19.71	54.0	23.39	AV	108.00	150	Horizontal	Pass
2	4756.000	49.63	-10.49	74.0	24.37	Peak	36.00	150	Horizontal	Pass
2**	4756.000	40.52	-10.49	54.0	13.48	AV	36.00	150	Horizontal	Pass
3	4827.250	50.09	-10.87	74.0	23.91	Peak	108.00	150	Horizontal	Pass
3**	4827.250	39.88	-10.87	54.0	14.12	AV	108.00	150	Horizontal	Pass
4	7100.000	52.96	-6.68	74.0	21.04	Peak	324.00	150	Horizontal	Pass
4**	7100.000	42.85	-6.68	54.0	11.15	AV	324.00	150	Horizontal	Pass
5	7300.000	48.86	-6.79	74.0	25.14	Peak	288.00	150	Horizontal	Pass
5**	7300.000	42.95	-6.79	54.0	11.05	AV	288.00	150	Horizontal	Pass
6	17927.999	53.06	1.49	74.0	20.94	Peak	144.00	150	Horizontal	Pass
6**	17927.999	45.13	1.49	54.0	8.87	AV	144.00	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	2261.931	41.01	-19.44	74.0	32.99	Peak	324.00	150	Vertical	Pass
1**	2261.931	31.34	-19.44	54.0	22.66	AV	324.00	150	Vertical	Pass
2	4770.000	48.73	-10.54	74.0	25.27	Peak	180.00	150	Vertical	Pass
2**	4770.000	40.73	-10.54	54.0	13.27	AV	180.00	150	Vertical	Pass
3	4833.750	47.31	-10.94	74.0	26.69	Peak	324.00	150	Vertical	Pass
3**	4833.750	39.55	-10.94	54.0	14.45	AV	324.00	150	Vertical	Pass
4	7082.750	53.56	-6.35	74.0	20.44	Peak	72.00	150	Vertical	Pass
4**	7082.750	43.71	-6.35	54.0	10.29	AV	72.00	150	Vertical	Pass
5	7300.000	49.82	-6.79	74.0	24.18	Peak	36.00	150	Vertical	Pass
5**	7300.000	42.10	-6.79	54.0	11.90	AV	36.00	150	Vertical	Pass
6	17934.000	53.24	1.61	74.0	20.76	Peak	144.00	150	Vertical	Pass
6**	17934.000	44.21	1.61	54.0	9.79	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	2393.496	40.60	-19.29	74.0	33.40	Peak	36.00	150	Horizontal	Pass
1**	2393.496	31.42	-19.29	54.0	22.58	AV	36.00	150	Horizontal	Pass
2	2483.441	39.26	-19.23	74.0	34.74	Peak	360.00	150	Horizontal	Pass
2**	2483.441	31.36	-19.23	54.0	22.64	AV	360.00	150	Horizontal	Pass
3	4863.750	46.81	-10.53	74.0	27.19	Peak	108.00	150	Horizontal	Pass
3**	4863.750	39.93	-10.53	54.0	14.07	AV	108.00	150	Horizontal	Pass
4	7307.750	51.57	-6.89	74.0	22.43	Peak	180.00	150	Horizontal	Pass
4**	7307.750	43.02	-6.89	54.0	10.98	AV	180.00	150	Horizontal	Pass
5	7894.500	53.05	-6.11	74.0	20.95	Peak	144.00	150	Horizontal	Pass
5**	7894.500	43.59	-6.11	54.0	10.41	AV	144.00	150	Horizontal	Pass
6	17958.500	52.72	0.46	74.0	21.28	Peak	288.00	150	Horizontal	Pass
6**	17958.500	43.89	0.46	54.0	10.11	AV	288.00	150	Horizontal	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	2297.849	41.94	-19.51	74.0	32.06	Peak	288.00	150	Vertical	Pass
1**	2297.849	31.00	-19.51	54.0	23.00	AV	288.00	150	Vertical	Pass
2	2483.441	38.43	-19.23	74.0	35.57	Peak	36.00	150	Vertical	Pass
2**	2483.441	31.44	-19.23	54.0	22.56	AV	36.00	150	Vertical	Pass
3	4863.750	45.57	-10.53	74.0	28.43	Peak	108.00	150	Vertical	Pass
3**	4863.750	39.86	-10.53	54.0	14.14	AV	108.00	150	Vertical	Pass
4	7311.750	51.11	-6.89	74.0	22.89	Peak	144.00	150	Vertical	Pass
4**	7311.750	42.51	-6.89	54.0	11.49	AV	144.00	150	Vertical	Pass
5	7898.500	52.77	-6.17	74.0	21.23	Peak	360.00	150	Vertical	Pass
5**	7898.500	42.62	-6.17	54.0	11.38	AV	360.00	150	Vertical	Pass
6	17931.000	53.19	1.64	74.0	20.81	Peak	288.00	150	Vertical	Pass
6**	17931.000	44.75	1.64	54.0	9.25	AV	288.00	150	Vertical	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	2349.474	40.60	-19.68	74.0	33.40	Peak	144.00	150	Vertical	Pass
1**	2349.474	31.34	-19.68	54.0	22.66	AV	144.00	150	Vertical	Pass
2	2483.441	38.57	-19.23	74.0	35.43	Peak	360.00	150	Vertical	Pass
2**	2483.441	31.71	-19.23	54.0	22.29	AV	360.00	150	Vertical	Pass
3	4914.000	45.13	-11.18	74.0	28.87	Peak	216.00	150	Vertical	Pass
3**	4914.000	38.56	-11.18	54.0	15.44	AV	216.00	150	Vertical	Pass
4	7395.250	50.80	-6.79	74.0	23.20	Peak	288.00	150	Vertical	Pass
4**	7395.250	42.70	-6.79	54.0	11.30	AV	288.00	150	Vertical	Pass
5	7939.750	53.26	-6.00	74.0	20.74	Peak	252.00	150	Vertical	Pass
5**	7939.750	43.33	-6.00	54.0	10.67	AV	252.00	150	Vertical	Pass
6	17931.000	53.13	1.64	74.0	20.87	Peak	144.00	150	Vertical	Pass
6**	17931.000	45.02	1.64	54.0	8.98	AV	144.00	150	Vertical	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	2215.107	40.79	-19.79	74.0	33.21	Peak	36.00	150	Horizontal	Pass
1**	2215.107	31.20	-19.79	54.0	22.80	AV	36.00	150	Horizontal	Pass
2	2483.441	37.83	-19.23	74.0	36.17	Peak	252.00	150	Horizontal	Pass
2**	2483.441	32.39	-19.23	54.0	21.61	AV	252.00	150	Horizontal	Pass
3	4914.000	44.71	-11.18	74.0	29.29	Peak	252.00	150	Horizontal	Pass
3**	4914.000	39.46	-11.18	54.0	14.54	AV	252.00	150	Horizontal	Pass
4	7390.250	50.77	-6.72	74.0	23.23	Peak	108.00	150	Horizontal	Pass
4**	7390.250	42.84	-6.72	54.0	11.16	AV	108.00	150	Horizontal	Pass
5	7894.000	52.53	-6.10	74.0	21.47	Peak	72.00	150	Horizontal	Pass
5**	7894.000	43.55	-6.10	54.0	10.45	AV	72.00	150	Horizontal	Pass
6	17930.000	52.79	1.65	74.0	21.21	Peak	360.00	150	Horizontal	Pass
6**	17930.000	44.65	1.65	54.0	9.35	AV	360.00	150	Horizontal	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	2361.180	40.67	-19.69	74.0	33.33	Peak	36.00	150	Vertical	Pass
1**	2361.180	30.40	-19.69	54.0	23.60	AV	36.00	150	Vertical	Pass
2	2483.441	39.41	-19.23	74.0	34.59	Peak	36.00	150	Vertical	Pass
2**	2483.441	31.50	-19.23	54.0	22.50	AV	36.00	150	Vertical	Pass
3	4834.000	45.04	-10.94	74.0	28.96	Peak	324.00	150	Vertical	Pass
3**	4834.000	38.84	-10.94	54.0	15.16	AV	324.00	150	Vertical	Pass
4	7273.500	51.75	-6.73	74.0	22.25	Peak	216.00	150	Vertical	Pass
4**	7273.500	42.83	-6.73	54.0	11.17	AV	216.00	150	Vertical	Pass
5	7300.000	49.23	-6.79	74.0	24.77	Peak	360.00	150	Vertical	Pass
5**	7300.000	43.03	-6.79	54.0	10.97	AV	360.00	150	Vertical	Pass
6	17937.500	53.29	1.56	74.0	20.71	Peak	324.00	150	Vertical	Pass
6**	17937.500	45.00	1.56	54.0	9.00	AV	324.00	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	2225.613	40.41	-19.79	74.0	33.59	Peak	72.00	150	Horizontal	Pass
1**	2225.613	31.52	-19.79	54.0	22.48	AV	72.00	150	Horizontal	Pass
2	2483.441	37.17	-19.23	74.0	36.83	Peak	180.00	150	Horizontal	Pass
2**	2483.441	32.48	-19.23	54.0	21.52	AV	180.00	150	Horizontal	Pass
3	4834.000	48.06	-10.94	74.0	25.94	Peak	216.00	150	Horizontal	Pass
3**	4834.000	38.45	-10.94	54.0	15.55	AV	216.00	150	Horizontal	Pass
4	7258.000	51.04	-6.76	74.0	22.96	Peak	144.00	150	Horizontal	Pass
4**	7258.000	42.68	-6.76	54.0	11.32	AV	144.00	150	Horizontal	Pass
5	7300.000	49.41	-6.79	74.0	24.59	Peak	288.00	150	Horizontal	Pass
5**	7300.000	43.26	-6.79	54.0	10.74	AV	288.00	150	Horizontal	Pass
6	17933.001	53.28	1.62	74.0	20.72	Peak	360.00	150	Horizontal	Pass
6**	17933.001	44.50	1.62	54.0	9.50	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	2263.131	40.47	-19.43	74.0	33.53	Peak	216.00	150	Vertical	Pass
1**	2263.131	31.38	-19.43	54.0	22.62	AV	216.00	150	Vertical	Pass
2	2483.441	38.82	-19.23	74.0	35.18	Peak	144.00	150	Vertical	Pass
2**	2483.441	31.27	-19.23	54.0	22.73	AV	144.00	150	Vertical	Pass
3	4863.750	46.21	-10.53	74.0	27.79	Peak	216.00	150	Vertical	Pass
3**	4863.750	39.40	-10.53	54.0	14.60	AV	216.00	150	Vertical	Pass
4	7306.500	51.86	-6.87	74.0	22.14	Peak	324.00	150	Vertical	Pass
4**	7306.500	42.96	-6.87	54.0	11.04	AV	324.00	150	Vertical	Pass
5	7656.500	52.59	-6.39	74.0	21.41	Peak	144.00	150	Vertical	Pass
5**	7656.500	42.68	-6.39	54.0	11.32	AV	144.00	150	Vertical	Pass
6	17922.001	52.47	1.03	74.0	21.53	Peak	216.00	150	Vertical	Pass
6**	17922.001	44.26	1.03	54.0	9.74	AV	216.00	150	Vertical	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	2223.812	40.59	-19.78	74.0	33.41	Peak	108.00	150	Horizontal	Pass
1**	2223.812	31.28	-19.78	54.0	22.72	AV	108.00	150	Horizontal	Pass
2	2483.441	38.39	-19.23	74.0	35.61	Peak	252.00	150	Horizontal	Pass
2**	2483.441	31.71	-19.23	54.0	22.29	AV	252.00	150	Horizontal	Pass
3	4863.750	46.18	-10.53	74.0	27.82	Peak	180.00	150	Horizontal	Pass
3**	4863.750	39.57	-10.53	54.0	14.43	AV	180.00	150	Horizontal	Pass
4	7320.250	51.43	-6.79	74.0	22.57	Peak	324.00	150	Horizontal	Pass
4**	7320.250	43.21	-6.79	54.0	10.79	AV	324.00	150	Horizontal	Pass
5	7860.500	52.85	-6.58	74.0	21.15	Peak	288.00	150	Horizontal	Pass
5**	7860.500	42.04	-6.58	54.0	11.96	AV	288.00	150	Horizontal	Pass
6	16752.500	52.80	-0.22	74.0	21.20	Peak	252.00	150	Horizontal	Pass
6**	16752.500	42.07	-0.22	54.0	11.93	AV	252.00	150	Horizontal	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	2240.120	40.92	-19.73	74.0	33.08	Peak	108.00	150	Horizontal	Pass
1**	2240.120	30.80	-19.73	54.0	23.20	AV	108.00	150	Horizontal	Pass
2	2483.441	39.83	-19.23	74.0	34.17	Peak	108.00	150	Horizontal	Pass
2**	2483.441	31.29	-19.23	54.0	22.71	AV	108.00	150	Horizontal	Pass
3	4893.750	46.31	-11.22	74.0	27.69	Peak	360.00	150	Horizontal	Pass
3**	4893.750	39.35	-11.22	54.0	14.65	AV	360.00	150	Horizontal	Pass
4	7346.000	48.94	-6.93	74.0	25.06	Peak	288.00	150	Horizontal	Pass
4**	7346.000	42.59	-6.93	54.0	11.41	AV	288.00	150	Horizontal	Pass
5	7608.000	52.80	-6.65	74.0	21.20	Peak	360.00	150	Horizontal	Pass
5**	7608.000	42.56	-6.65	54.0	11.44	AV	360.00	150	Horizontal	Pass
6	17923.000	53.50	1.11	74.0	20.50	Peak	360.00	150	Horizontal	Pass
6**	17923.000	43.56	1.11	54.0	10.44	AV	360.00	150	Horizontal	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	2304.552	41.04	-19.52	74.0	32.96	Peak	360.00	150	Vertical	Pass
1**	2304.552	30.64	-19.52	54.0	23.36	AV	360.00	150	Vertical	Pass
2	2483.441	38.20	-19.23	74.0	35.80	Peak	108.00	150	Vertical	Pass
2**	2483.441	31.98	-19.23	54.0	22.02	AV	108.00	150	Vertical	Pass
3	4893.750	45.07	-11.22	74.0	28.93	Peak	324.00	150	Vertical	Pass
3**	4893.750	39.03	-11.22	54.0	14.97	AV	324.00	150	Vertical	Pass
4	7346.000	48.62	-6.93	74.0	25.38	Peak	144.00	150	Vertical	Pass
4**	7346.000	41.79	-6.93	54.0	12.21	AV	144.00	150	Vertical	Pass
5	7661.000	52.81	-6.34	74.0	21.19	Peak	36.00	150	Vertical	Pass
5**	7661.000	43.46	-6.34	54.0	10.54	AV	36.00	150	Vertical	Pass
6	17938.000	53.45	1.55	74.0	20.55	Peak	180.00	150	Vertical	Pass
6**	17938.000	43.73	1.55	54.0	10.27	AV	180.00	150	Vertical	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	2349.710	41.75	-19.66	74.0	32.25	Peak	288.00	150	Horizontal	Pass
1**	2349.710	30.29	-19.66	54.0	23.71	AV	288.00	150	Horizontal	Pass
2	2389.970	38.88	-19.56	74.0	35.12	Peak	144.00	150	Horizontal	Pass
2**	2389.970	29.66	-19.56	54.0	24.34	AV	144.00	150	Horizontal	Pass
3	2399.980	39.12	-19.64	74.0	34.88	Peak	180.00	150	Horizontal	Pass
3**	2399.980	29.86	-19.64	54.0	24.14	AV	180.00	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	2347.290	41.28	-19.65	74.0	32.72	Peak	324.00	150	Vertical	Pass
1**	2347.290	30.00	-19.65	54.0	24.00	AV	324.00	150	Vertical	Pass
2	2389.970	39.33	-19.56	74.0	34.67	Peak	36.00	150	Vertical	Pass
2**	2389.970	29.74	-19.56	54.0	24.26	AV	36.00	150	Vertical	Pass
3	2399.980	38.66	-19.64	74.0	35.34	Peak	216.00	150	Vertical	Pass
3**	2399.980	29.54	-19.64	54.0	24.46	AV	216.00	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	39.14	-19.50	74.0	34.86	Peak	36.00	100	Vertical	Pass
1**	2483.475	30.40	-19.50	54.0	23.60	AV	36.00	100	Vertical	Pass
2	2487.675	41.78	-19.50	74.0	32.22	Peak	36.00	100	Vertical	Pass
2**	2487.675	30.43	-19.50	54.0	23.57	AV	36.00	100	Vertical	Pass
3	2498.975	42.13	-19.47	74.0	31.87	Peak	288.00	100	Vertical	Pass
3**	2498.975	30.64	-19.47	54.0	23.36	AV	288.00	100	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	39.96	-19.50	74.0	34.04	Peak	360.00	150	Horizontal	Pass
1**	2483.475	30.35	-19.50	54.0	23.65	AV	360.00	150	Horizontal	Pass
2	2487.600	41.69	-19.50	74.0	32.31	Peak	180.00	150	Horizontal	Pass
2**	2487.600	30.54	-19.50	54.0	23.46	AV	180.00	150	Horizontal	Pass
3	2497.925	41.32	-19.47	74.0	32.68	Peak	288.00	150	Horizontal	Pass
3**	2497.925	30.71	-19.47	54.0	23.29	AV	288.00	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	2323.365	41.19	-19.51	74.0	32.81	Peak	180.00	100	Horizontal	Pass
1**	2323.365	30.36	-19.51	54.0	23.64	AV	180.00	100	Horizontal	Pass
2	2389.970	38.58	-19.56	74.0	35.42	Peak	36.00	100	Horizontal	Pass
2**	2389.970	29.85	-19.56	54.0	24.15	AV	36.00	100	Horizontal	Pass
3	2399.980	43.86	-19.64	74.0	30.14	Peak	36.00	100	Horizontal	Pass
3**	2399.980	30.82	-19.64	54.0	23.18	AV	36.00	100	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	2378.970	42.00	-19.61	74.0	32.00	Peak	360.00	150	Vertical	Pass
1**	2378.970	29.83	-19.61	54.0	24.17	AV	360.00	150	Vertical	Pass
2	2389.970	39.16	-19.56	74.0	34.84	Peak	324.00	150	Vertical	Pass
2**	2389.970	29.71	-19.56	54.0	24.29	AV	324.00	150	Vertical	Pass
3	2399.980	39.08	-19.64	74.0	34.92	Peak	144.00	150	Vertical	Pass
3**	2399.980	29.94	-19.64	54.0	24.06	AV	144.00	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	39.31	-19.50	74.0	34.69	Peak	216.00	150	Vertical	Pass
1**	2483.475	30.34	-19.50	54.0	23.66	AV	216.00	150	Vertical	Pass
2	2488.425	41.74	-19.51	74.0	32.26	Peak	216.00	150	Vertical	Pass
2**	2488.425	30.45	-19.51	54.0	23.55	AV	216.00	150	Vertical	Pass
3	2491.325	42.14	-19.50	74.0	31.86	Peak	360.00	150	Vertical	Pass
3**	2491.325	30.62	-19.50	54.0	23.38	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	41.23	-19.50	74.0	32.77	Peak	216.00	150	Horizontal	Pass
1**	2483.475	31.05	-19.50	54.0	22.95	AV	216.00	150	Horizontal	Pass
2	2485.275	41.35	-19.50	74.0	32.65	Peak	180.00	150	Horizontal	Pass
2**	2485.275	30.58	-19.50	54.0	23.42	AV	180.00	150	Horizontal	Pass
3	2496.675	41.41	-19.48	74.0	32.59	Peak	360.00	150	Horizontal	Pass
3**	2496.675	30.43	-19.48	54.0	23.57	AV	360.00	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	2348.885	41.88	-19.66	74.0	32.12	Peak	216.00	150	Vertical	Pass
1**	2348.885	30.42	-19.66	54.0	23.58	AV	216.00	150	Vertical	Pass
2	2389.970	38.78	-19.56	74.0	35.22	Peak	252.00	150	Vertical	Pass
2**	2389.970	29.66	-19.56	54.0	24.34	AV	252.00	150	Vertical	Pass
3	2399.980	39.27	-19.64	74.0	34.73	Peak	360.00	150	Vertical	Pass
3**	2399.980	29.56	-19.64	54.0	24.44	AV	360.00	150	Vertical	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	2360.655	41.15	-19.71	74.0	32.85	Peak	108.00	150	Horizontal	Pass
1**	2360.655	29.61	-19.71	54.0	24.39	AV	108.00	150	Horizontal	Pass
2	2389.970	39.71	-19.56	74.0	34.29	Peak	288.00	150	Horizontal	Pass
2**	2389.970	29.60	-19.56	54.0	24.40	AV	288.00	150	Horizontal	Pass
3	2399.980	43.91	-19.64	74.0	30.09	Peak	180.00	150	Horizontal	Pass
3**	2399.980	30.71	-19.64	54.0	23.29	AV	180.00	150	Horizontal	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	40.99	-19.50	74.0	33.01	Peak	360.00	150	Horizontal	Pass
1**	2483.475	30.73	-19.50	54.0	23.27	AV	360.00	150	Horizontal	Pass
2	2486.000	41.58	-19.50	74.0	32.42	Peak	360.00	150	Horizontal	Pass
2**	2486.000	30.34	-19.50	54.0	23.66	AV	360.00	150	Horizontal	Pass
3	2496.275	41.95	-19.48	74.0	32.05	Peak	360.00	150	Horizontal	Pass
3**	2496.275	30.50	-19.48	54.0	23.50	AV	360.00	150	Horizontal	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	40.08	-19.50	74.0	33.92	Peak	144.00	150	Vertical	Pass
1**	2483.475	30.47	-19.50	54.0	23.53	AV	144.00	150	Vertical	Pass
2	2487.125	41.98	-19.50	74.0	32.02	Peak	144.00	150	Vertical	Pass
2**	2487.125	30.50	-19.50	54.0	23.50	AV	144.00	150	Vertical	Pass
3	2493.325	42.59	-19.49	74.0	31.41	Peak	36.00	150	Vertical	Pass
3**	2493.325	30.25	-19.49	54.0	23.75	AV	36.00	150	Vertical	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	2325.510	41.71	-19.53	74.0	32.29	Peak	180.00	150	Horizontal	Pass
1**	2325.510	30.06	-19.53	54.0	23.94	AV	180.00	150	Horizontal	Pass
2	2389.970	38.81	-19.56	74.0	35.19	Peak	72.00	150	Horizontal	Pass
2**	2389.970	29.72	-19.56	54.0	24.28	AV	72.00	150	Horizontal	Pass
3	2399.980	39.88	-19.64	74.0	34.12	Peak	36.00	150	Horizontal	Pass
3**	2399.980	29.75	-19.64	54.0	24.25	AV	36.00	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	2369.455	41.59	-19.67	74.0	32.41	Peak	360.00	150	Vertical	Pass
1**	2369.455	29.82	-19.67	54.0	24.18	AV	360.00	150	Vertical	Pass
2	2389.970	38.66	-19.56	74.0	35.34	Peak	216.00	150	Vertical	Pass
2**	2389.970	29.66	-19.56	54.0	24.34	AV	216.00	150	Vertical	Pass
3	2399.980	38.87	-19.64	74.0	35.13	Peak	288.00	150	Vertical	Pass
3**	2399.980	29.67	-19.64	54.0	24.33	AV	288.00	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	40.43	-19.50	74.0	33.57	Peak	324.00	150	Vertical	Pass
1**	2483.475	30.36	-19.50	54.0	23.64	AV	324.00	150	Vertical	Pass
2	2489.475	41.54	-19.51	74.0	32.46	Peak	288.00	150	Vertical	Pass
2**	2489.475	30.36	-19.51	54.0	23.64	AV	288.00	150	Vertical	Pass
3	2493.975	41.84	-19.49	74.0	32.16	Peak	288.00	150	Vertical	Pass
3**	2493.975	30.36	-19.49	54.0	23.64	AV	288.00	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	40.36	-19.50	74.0	33.64	Peak	288.00	150	Horizontal	Pass
1**	2483.475	30.55	-19.50	54.0	23.45	AV	288.00	150	Horizontal	Pass
2	2485.975	41.32	-19.50	74.0	32.68	Peak	252.00	150	Horizontal	Pass
2**	2485.975	30.87	-19.50	54.0	23.13	AV	252.00	150	Horizontal	Pass
3	2496.125	41.49	-19.48	74.0	32.51	Peak	360.00	150	Horizontal	Pass
3**	2496.125	30.44	-19.48	54.0	23.56	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.

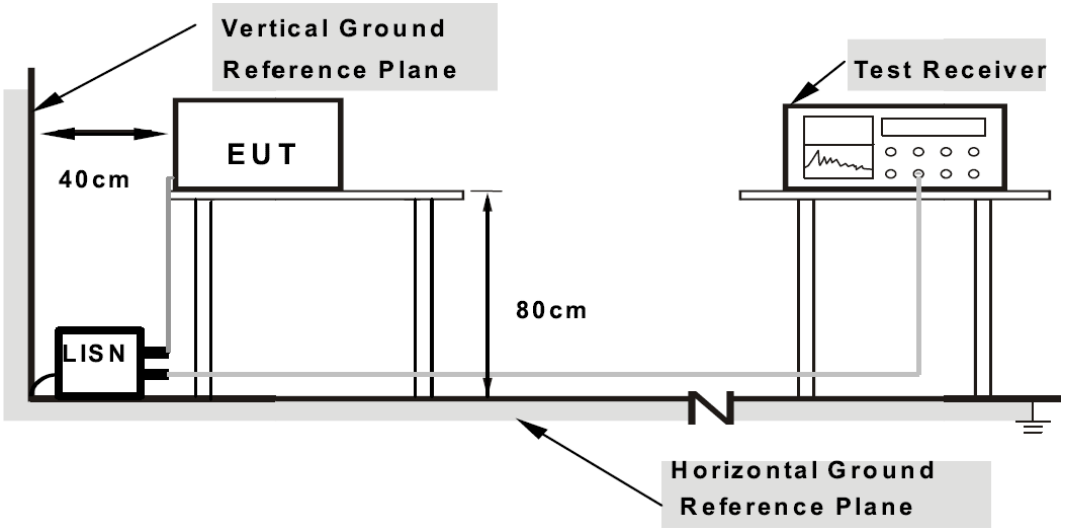
11. AC POWER LINE CONDUCTED EMISSIONS

11.1. Limit

Frequency			Maximum RF Line Voltage	
			Quasi-Peak Level dB(μV)	Average Level dB(μV)
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

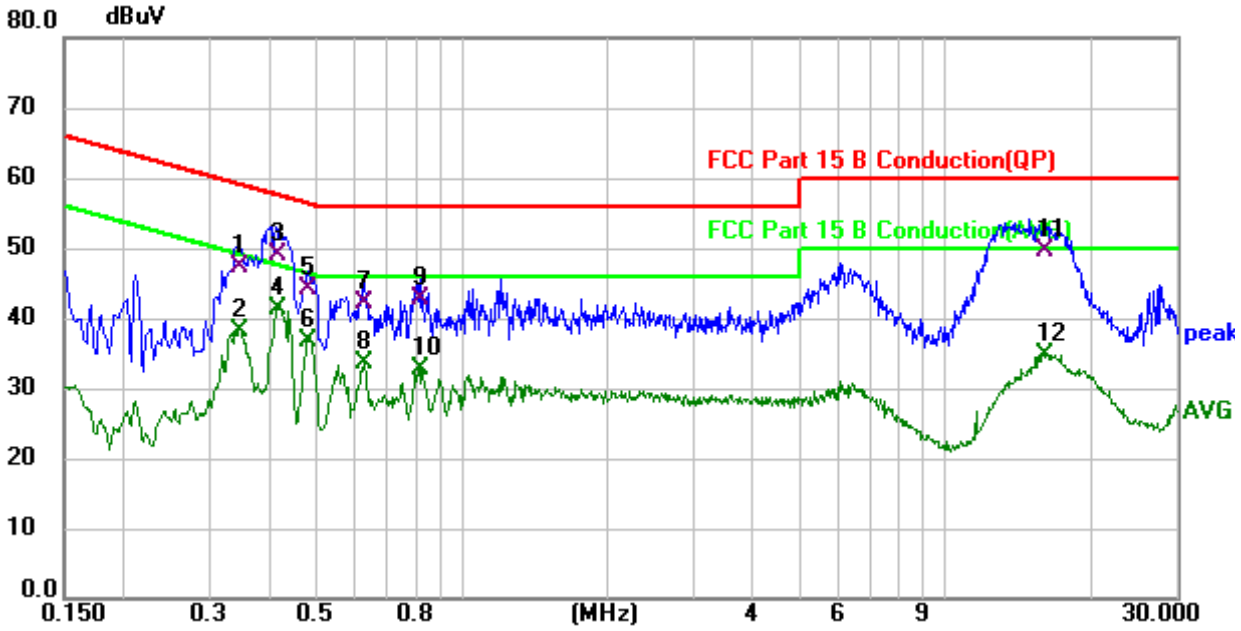
11.4. Test Procedure

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, the test data for all other modes and channels do not exceed the results recorded for this worst-case mode)

11.5. Test Result

EUT: Smart Planting Controller
M/N: JYC-M3
Test Voltage: DC 12V From Type-C Port
Phase: Live
Test Mode: TX Mode
Note: only worse case: IEEE 802.11g mode with CH01 2412MHz is reported, the test data for all other modes and channels do not exceed the results recorded for this worst-case mode

Detailed results are shown below

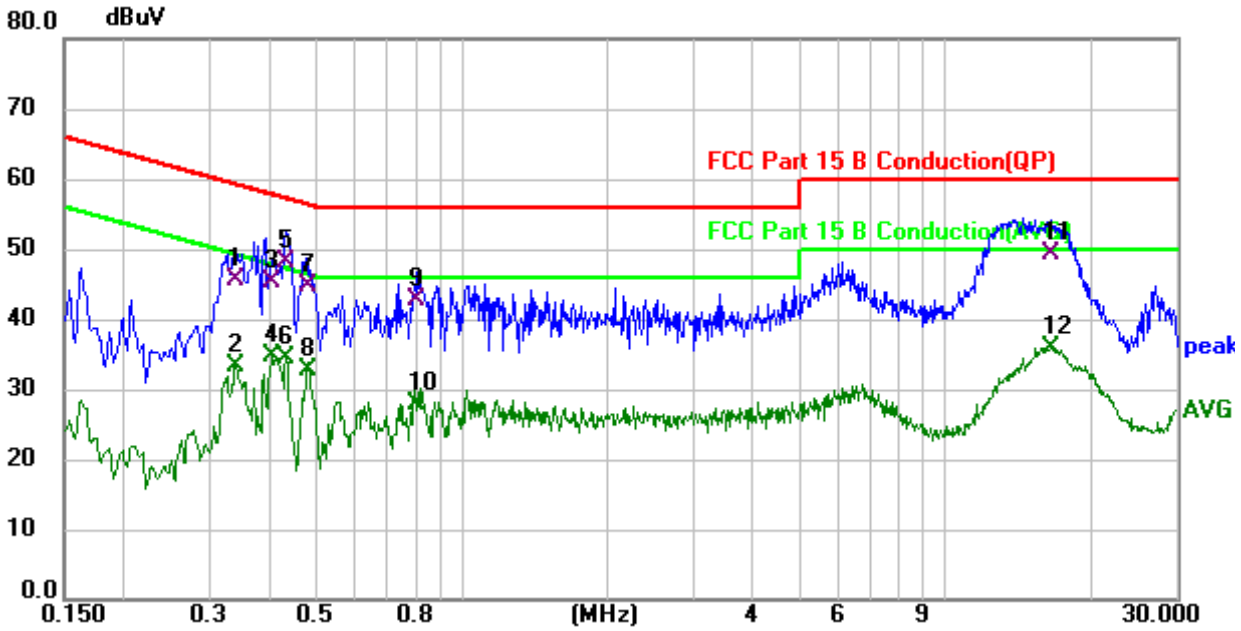


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.346	26.35	20.82	47.17	59.06	-11.89	QP	P	
2	0.346	17.39	20.82	38.21	49.06	-10.85	AVG	P	
3	0.414	28.23	20.82	49.05	57.57	-8.52	QP	P	
4 *	0.414	20.33	20.82	41.15	47.57	-6.42	AVG	P	
5	0.478	23.23	20.82	44.05	56.37	-12.32	QP	P	
6	0.478	15.81	20.82	36.63	46.37	-9.74	AVG	P	
7	0.626	21.22	20.84	42.06	56.00	-13.94	QP	P	
8	0.626	12.85	20.84	33.69	46.00	-12.31	AVG	P	
9	0.822	21.75	20.86	42.61	56.00	-13.39	QP	P	
10	0.822	11.95	20.86	32.81	46.00	-13.19	AVG	P	
11	16.006	26.28	23.15	49.43	60.00	-10.57	QP	P	
12	16.006	11.44	23.15	34.59	50.00	-15.41	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: Smart Planting Controller
M/N: JYC-M3
Test Voltage: DC 12V From Type-C Port
Phase: Neutral
Test Mode: TX Mode
Note: only worse case: IEEE 802.11g mode with CH01 2412MHz is reported, the test data for all other modes and channels do not exceed the results recorded for this worst-case mode

Detailed results are shown below



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.338	24.93	20.66	45.59	59.25	-13.66	QP	P	
2	0.338	12.73	20.66	33.39	49.25	-15.86	AVG	P	
3	0.402	24.72	20.66	45.38	57.81	-12.43	QP	P	
4	0.402	14.11	20.66	34.77	47.81	-13.04	AVG	P	
5 *	0.433	27.55	20.66	48.21	57.19	-8.98	QP	P	
6	0.433	13.89	20.66	34.55	47.19	-12.64	AVG	P	
7	0.478	24.19	20.65	44.84	56.37	-11.53	QP	P	
8	0.478	12.04	20.65	32.69	46.37	-13.68	AVG	P	
9	0.806	21.99	20.66	42.65	56.00	-13.35	QP	P	
10	0.806	7.32	20.66	27.98	46.00	-18.02	AVG	P	
11	16.554	25.84	23.38	49.22	60.00	-10.78	QP	P	
12	16.554	12.35	23.38	35.73	50.00	-14.27	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 internal antenna (PCB antenna), so compliance with antenna requirements. (Please refer to the **Annex B. 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.

CTSL2620530068E Annex A. EUT External Photos
CTSL2620530068E Annex B. EUT Internal Photos
CTSL2620530068E Annex C. Test Setup Photos

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