



FCC PART 15 SUBPART C FCC PART §15.247 TEST REPORT

FCC ID:2BYGT-WP-006

Report No: CTSL2610730335E02

Product Name: Car Radio GPS

Main Test Model: WP-006

Series Models: -

Applicant: Shenzhen Wenzhi Tech 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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be reproduced without permission from CTSL. All Test Data Presented in this report is only
applicable to presented Test sample.

CTSL Testing (Dongguan) Co., Ltd.

Main company address: Building 1, Houjie Road, Houjie Town, Guangdong
Province Dongguan City, China

Test Report

FCC ID:2BYGT-WP-006

Applicant Name	Shenzhen Wenzhi Tech Co., Ltd				
Applicant Address	CN 1052, East 10th floor, 4rd Building, SEG Technology Park, Huaqiangbei Street, Futian District, Shenzhen City, Guangdong Province, China				
Manufacturer Name	Shenzhen Wenzhi Tech Co., Ltd				
Manufacturer Address	CN 1052, East 10th floor, 4rd Building, SEG Technology Park, Huaqiangbei Street, Futian District, Shenzhen City, Guangdong Province, China				
Trade Mark	WPSKIS				
Product name	Car Radio GPS				
Main Test Model	WP-006				
Series Models	-				
Standard	FCC Part 15 Subpart C (15.247) ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024 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. 1/F, Building 1, No. 15, Jiaoyuansongshan Hetian Village, Houjie Town Dongguan City, Guangdong, People's Republic of China				
Receipt Date	2026.07.28	Test period	2026.07.30-2026.08.15	Issue Date	2026.08.18
Conclusion	The equipment under test was found to be compliance with the requirements of the standards applied.				
Performs Testing:	Ethan Zhao				
Test Report Reviewer:	Steve Qin				
Test Report Authorizer:	Alan Li				

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1. GENERAL INFORMATION

1.1. General Description of EUT (Equipment Under Test)

Product Information	
Product Name	: Car Radio GPS
Main Test Model	: WP-006
Series Models	: -
Power supply	: 12V DC (Supplied by storage battery)
Battery	: -
Software Version	: V1.0
Hardware Version	: V1.0
Equipment Under Test	
Testing sample ID	: CTSL2610730335-S1 (Engineer sample) CTSL2610730335-S2 (Normal sample)
Test supplied	: ☐ supplied by the manufacturer ☒ supplied by the lab (Auxiliary test supplied by test Lab)
Power Supply information	: DC 12V storage battery
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)	: 16.15dBm (16.0±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.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	/	2.4G Antenna - Straight Line	whip antenna	SMA-JW	2
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	Shenzhen Wenzhi Tech 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 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024: 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	N/A (Note 1)
8	Antenna Requirement	15.203	PASS

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

Note 1: The EUT is designed for vehicular use and is powered exclusively by a 12V DC storage battery. It has no AC mains input port and cannot be directly or indirectly connected to the public AC power supply network. Therefore, the AC power line conducted emissions test per FCC 15.207 is not applicable.

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.

Main company address:

Building 1, Houjie Road, Houjie Town, Guangdong Province Dongguan City, China

EMC test location/satellite location:

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

2.4. Measurement uncertainty

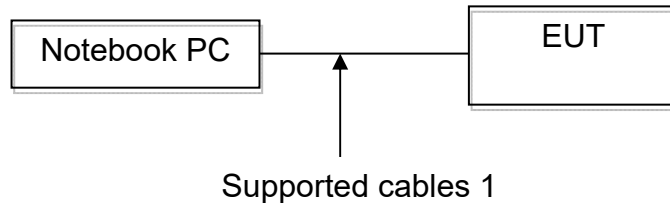
Item	Uncertainty
Uncertainty for Conduction emission test	3.72dB (9kHz-150kHz) 3.24dB (150kHz-30MHz)
Uncertainty for spurious emissions test	3.18dB (Below 30MHz) 4.90dB (30-1000MHz) 5.61dB (Above 1GHz)
Uncertainty for radio frequency	1.0 ppm
Uncertainty for conducted RF Power	0.7dB
Uncertainty for Power density test	0.6dB
Uncertainty of bandwidth test	0.34 dB
Uncertainty for Temperature	0.5°C
Uncertainty for Relative Humidity	1.8%RH
Uncertainty for Atmospheric Pressure	0.16 kPa

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

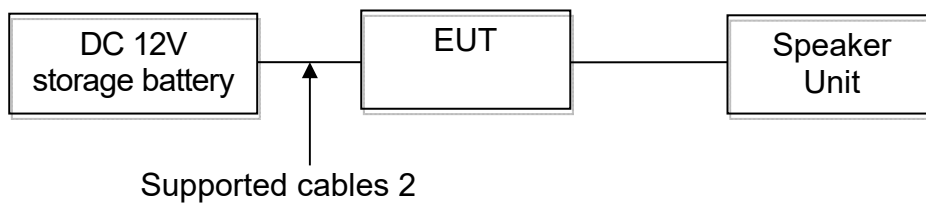
2.5. Block Diagram

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



Radiated Emission Test (30-1000MHz):



(EUT: Car Radio GPS)

2.6. Assistant equipment used for test

Item	Equipment	Brand	Model Name/Type No.	FCC ID	Series No.
1	Notebook PC	Dell	Inspiron 14R-5421 (Manufacturer: Dell)	-	25TZHW1
2	DC 12V storage battery (supplied by the Lab.)	-	-	-	-
3	Speaker Unit*3 (supplied by the Lab.)	-	-	-	-

Supported cables				
Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	0.5m	USB Extension Cable (supplied by the Lab.)
2	NO	NO	0.8m	DC Cable (supplied by the Lab.)

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)	only worse case: IEEE 802.11g mode with CH01 2412MHz is reported		
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	N/A		

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

2.8. Channel List

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

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

2.9. RF Power Setting of Test Software

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

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 28,26	May 27,27
LISN	Rohde & Schwarz	ENV216	AT006	GUANGZHOU NEM	May 28,26	May 27,27
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	AT007	GUANGZHOU NEM	May 28,26	May 27,27
CE Cable	Times Microwave	LMR195UF-N MNM-1.50M	AT041	GUANGZHOU NEM	May 28,26	May 27,27
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	GUANGZHOU NEM	May 28,26	May 27,27
Active Loop Antenna	HCT	6505	AT064	GRG METROLOGY	Mar 22,26	Mar 21,27
Test Software	FARAD	EZ-EMC Ver.3A1.1+	N/A	N/A	N/A	N/A
9kHz-30MHz Cable	Times Microwave	LMR195UF-N MNM-9M	AT045	GUANGZHOU NEM	May 28,26	May 27,27

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	GUANGZHOU NEM	May 28,26	May 27,27
Trilog-Broadband Antenna (Includes 6db attenuator)	SCHWARZBECK	VULB 9168	AT002	LISAI	May 30,26	May 29,27
Test Software	FARAD	EZ-EMC Ver.3A1.1+	N/A	N/A	N/A	N/A
30-1000MHz Cable	Times Microwave Systems	LMR195UF-N MRNMR-3.00M+ LMR400UF-N MNM-3.00M+ LMR400UF-N MNM-3.00M	AT042+AT043+AT044	GUANGZHOU NEM	May 28,26	May 27,27

For Radiated Emission test (Above 1000MHz)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
Horn Antenna 1-18G	SCHWARZBEC K	BBHA 9120 D	AT003	LISAI	May 30,26	May 29,27
Horn Antenna 18-40GHz	XIBAO	XB-WDB18-40K	AT064	LISAI	May 30,26	May 29,27
Broadband Preamplifier	SCHWARZBEC K	BBV 9718 D	AT004	GUANGZHOU NEM	May 28,26	May 27,27
Low Noise Amplifier	MWRFTest	DLA8-18-40G-2078	AT065	GUANGZHOU NEM	May 28,26	May 27,27
Spectrum Analyzer 40G	Keysight	N9020B	AT066	GUANGZHOU NEM	May 28,26	May 27,27
Spectrum Analyzer 26.5G	Keysight	N9020A	AT050	GUANGZHOU NEM	May 28,26	May 27,27
Radio switching unit	TiGroup	SU319	AT055	N/A	N/A	N/A
Filtering unit	TiGroup	SU319F	AT056	N/A	N/A	N/A
Test Software	BL	BL410-E V25.5 en	N/A	N/A	N/A	N/A
Above 1GHz Cable	Times Microwave Systems	SFT205-NMN M-7.0M+ SFT205-NMN M-2.0M	AT057+ AT058	GUANGZHOU NEM	May 28,26	May 27,27

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	May 28,26	May 27,27
Analog signal source	Keysight	N5173B	AT051	GUANGZHOU NEM	May 28,26	May 27,27
WIDEBAND RADIO COMMUNICATION TESTER	Rohde&Schwarz	CMW500	AT052	GUANGZHOU NEM	May 28,26	May 27,27
Power probe unit	Ti Group	SU319P	AT053	GUANGZHOU NEM	May 28,26	May 27,27
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	RMS
Trace Mode	Single hold

3.4. Test Procedure

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

3.5. Test Conditions

EUT:	Car Radio GPS	M/N:	WP-006
Test Voltage:	12V DC (Supplied by storage battery)		
Temperature:	24.4℃	Humidity:	50 % RH
Atmosphere Pressure:	100.6kPa		

3.6. 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).

3.7. Original Test record



4. 6dB BANDWIDTH

4.1. Limit

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

4.2. Test Setup



4.3. Spectrum Analyzer Setting

6dB Bandwidth	
Spectrum Parameters	Setting
RBW	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

- The test according to ANSI C63.10 clause 11.8.
- Connect EUT antenna terminal to the spectrum analyzer with RF cable.
- Spectrum analyzer setting parameters in accordance with section 4.3.
- Set the EUT transmit continuously with maximum output power.
- Allow trace to stabilize, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.
- Repeat above procedures until all channels and test modes were measured.
- Record the results in the test report.

4.5. Test Conditions

EUT:	Car Radio GPS	M/N:	WP-006
Test Voltage:	12V DC (Supplied by storage battery)		
Temperature:	24.4°C	Humidity:	50 % RH
Atmosphere Pressure:	100.6kPa		

4.6. 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	14.9	≥500	PASS
		CH06 2437	14.4		
		CH11 2462	14.5		
IEEE 802.11n HT20	Ant1	CH01 2412	15.4	≥500	PASS
		CH06 2437	15.4		
		CH11 2462	15.4		
IEEE 802.11n HT40	Ant1	CH03 2422	26.6	≥500	PASS
		CH06 2437	26.6		
		CH09 2452	26.6		

4.7. 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

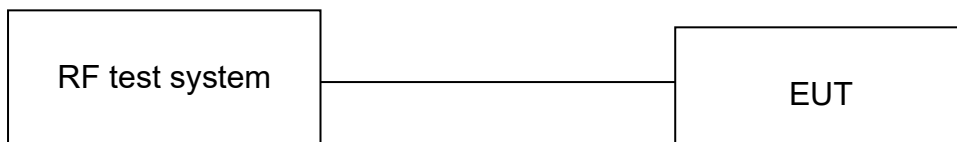


5. 99% BANDWIDTH

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

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

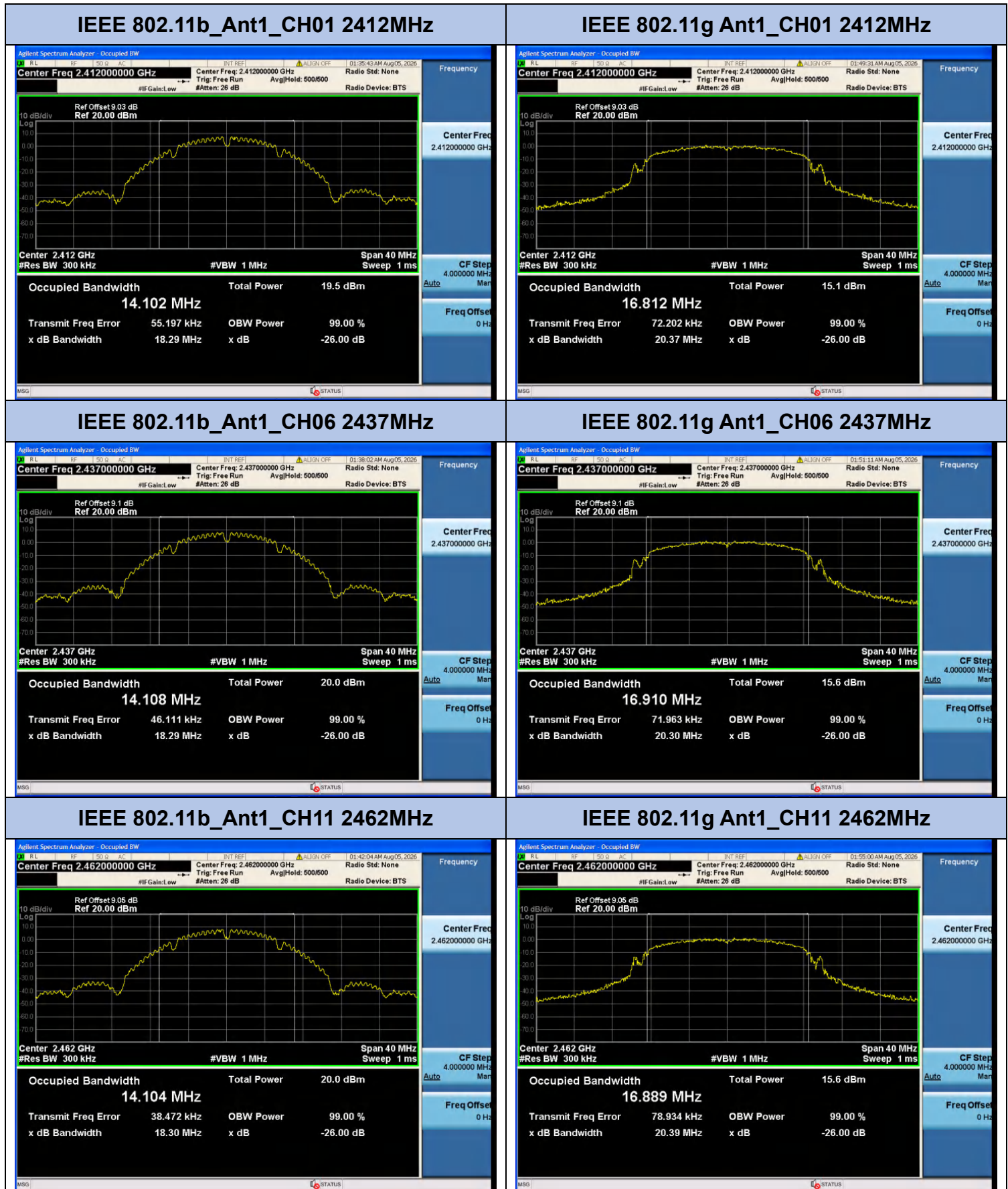
5.5. Test Conditions

EUT:	Car Radio GPS	M/N:	WP-006
Test Voltage:	12V DC (Supplied by storage battery)		
Temperature:	24.4℃	Humidity:	50 % RH
Atmosphere Pressure:	100.6kPa		

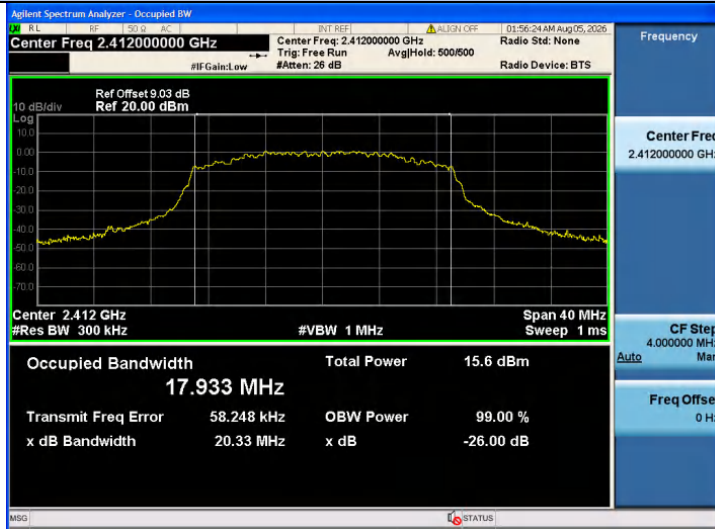
5.6.Test Data

Test Mode	Antenna	Channel& Frequency	Occupied Channel Bandwidth
		MHz	MHz
IEEE 802.11b	Ant1	CH01 2412	14.102
		CH06 2437	14.108
		CH11 2462	14.104
IEEE 802.11g	Ant1	CH01 2412	16.812
		CH06 2437	16.910
		CH11 2462	16.889
IEEE 802.11n HT20	Ant1	CH01 2412	17.933
		CH06 2437	17.921
		CH11 2462	17.923
IEEE 802.11n HT40	Ant1	CH03 2422	34.643
		CH06 2437	34.629
		CH09 2452	34.636

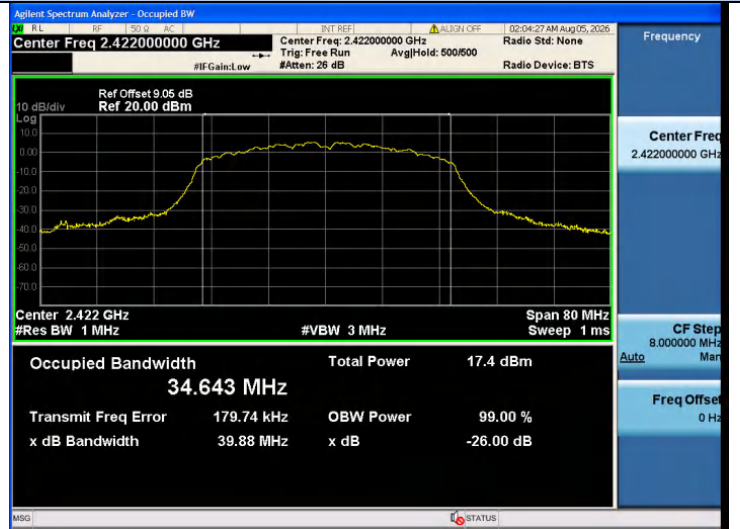
5.7.Original Test record



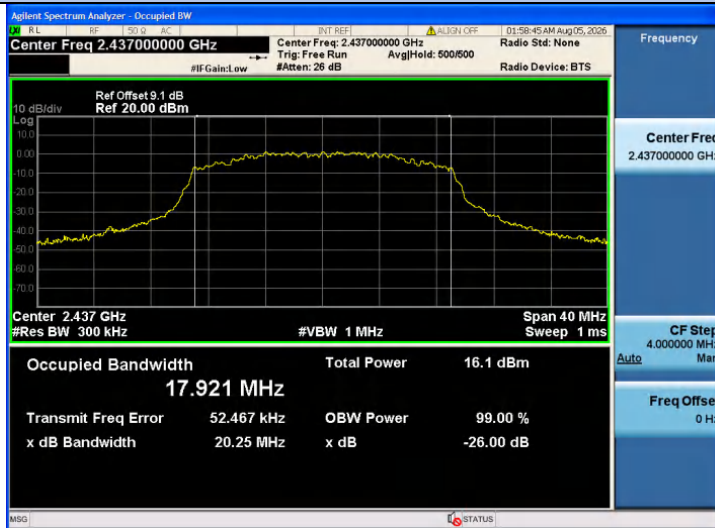
IEEE 802.11n HT20 Ant1_CH01 2412MHz



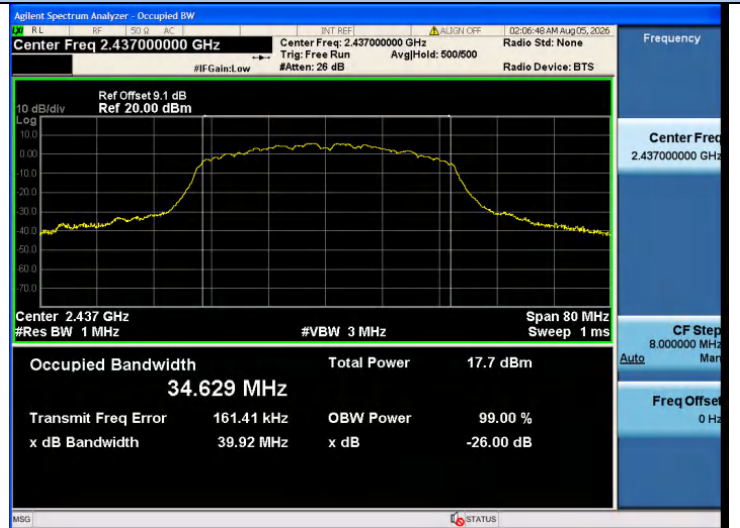
IEEE 802.11n HT40 Ant1_CH03 2422MHz



IEEE 802.11n HT20 Ant1_CH06 2437MHz



IEEE 802.11n HT40 Ant1_CH06 2437MHz



IEEE 802.11n HT20 Ant1_CH11 2462MHz



IEEE 802.11n HT40 Ant1_CH09 2452MHz



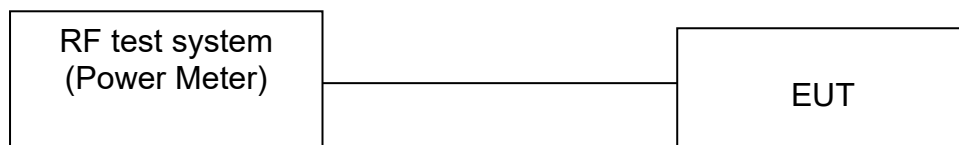
6. MAXIMUM CONDUCTED OUTPUT POWER

6.1. Limit

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

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

6.2. Test Setup



6.3. Spectrum Analyzer Setting

Power meter RMS measurement.

6.4. Test Procedure

- The test according to ANSI C63.10 clause 11.9.2.3.
- Connect EUT antenna terminal to the RF test system (Power Meter) with RF cable.
- Set the EUT transmit continuously with maximum output power.
- Use the Power meter RMS function to measure maximum AVG(RMS) output power.
- Repeat above procedures until all modes and channels were measured.
- Record the results in the test report.

6.5. Test Conditions

EUT:	Car Radio GPS	M/N:	WP-006
Test Voltage:	12V DC (Supplied by storage battery)		
Temperature:	24.4°C	Humidity:	50 % RH
Atmosphere Pressure:	100.6kPa		

6.6. 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	15.39	0	15.39	30	PASS
		CH06 2437	15.93		15.93		
		CH11 2462	16.15		16.15		
IEEE 802.11g	Ant1	CH01 2412	8.31	0	8.31	30	PASS
		CH06 2437	8.85		8.85		
		CH11 2462	9.03		9.03		
IEEE 802.11n HT20	Ant1	CH01 2412	9.52	0	9.52	30	PASS
		CH06 2437	10.03		10.03		
		CH11 2462	10.22		10.22		
IEEE 802.11n HT40	Ant1	CH03 2422	9.24	0	9.24	30	PASS
		CH06 2437	9.61		9.61		
		CH09 2452	9.76		9.76		

Note:

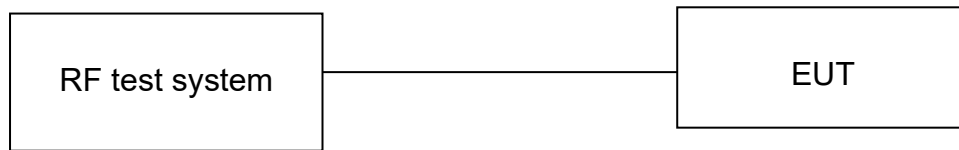
- 1) Duty Cycle Factor = $10 \cdot \log(1/\text{Duty Cycle})$.
- 2) Output Power Calculation= AV Output Power Measurement+ Duty Cycle Factor
- 3) Refer to Section 3 - Duty Cycle.

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	$3\text{ kHz} \leq \text{RBW} \leq 100\text{ kHz}$
VBW	$\text{VBW} \geq 3 \times \text{RBW}$
Span	$1.5 \times \text{BW}$
Sweep Time	Auto
Detector	RMS
Trace Mode	Max Hold

7.4.Test Procedure

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

7.5. Test Conditions

EUT:	Car Radio GPS	M/N:	WP-006
Test Voltage:	12V DC (Supplied by storage battery)		
Temperature:	24.4°C	Humidity:	50 % RH
Atmosphere Pressure:	100.6kPa		

7.6. 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	-14.54	0	-14.54	8.00	PASS
		CH06 2437	-14.16		-14.16		
		CH11 2462	-13.42		-13.42		
IEEE 802.11g	Ant1	CH01 2412	-17.36	0	-17.36	8.00	PASS
		CH06 2437	-18.08		-18.08		
		CH11 2462	-17.52		-17.52		
IEEE 802.11n HT20	Ant1	CH01 2422	-17.62	0	-17.62	8.00	PASS
		CH06 2437	-18.77		-18.77		
		CH11 2452	-17.96		-17.96		
IEEE 802.11n HT40	Ant1	CH03 2422	-21.20	0	-21.20	8.00	PASS
		CH06 2437	-21.91		-21.91		
		CH09 2452	-21.16		-21.16		

Note: PSD Calculation= PSD (RMS)+ Duty Cycle Factor

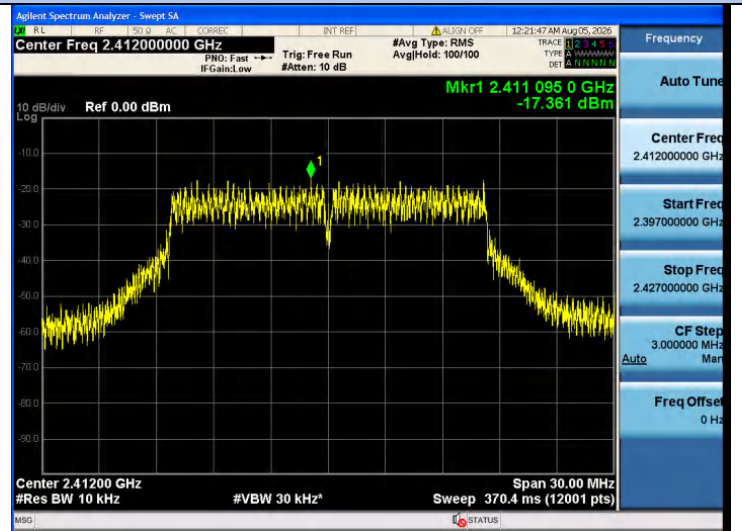
Note 1: PSD Test Declaration: The PSD measurement was performed with RBW = 10 kHz in accordance with FCC KDB 558074 D01 (within the permissible range of 3 kHz to 100 kHz). A wider RBW of 10 kHz captures more power than a 3 kHz RBW, thereby imposing a more stringent test condition. Additionally, the bandwidth correction factor from 10 kHz to 3 kHz is -5.23 dB, meaning the converted value is lower than the 10 kHz reading. Accordingly, all test channels measured at 10 kHz RBW comply with the 8 dBm/3 kHz limit, and the equivalent results at 3 kHz RBW are inherently in compliance.

7.7.Original Test record

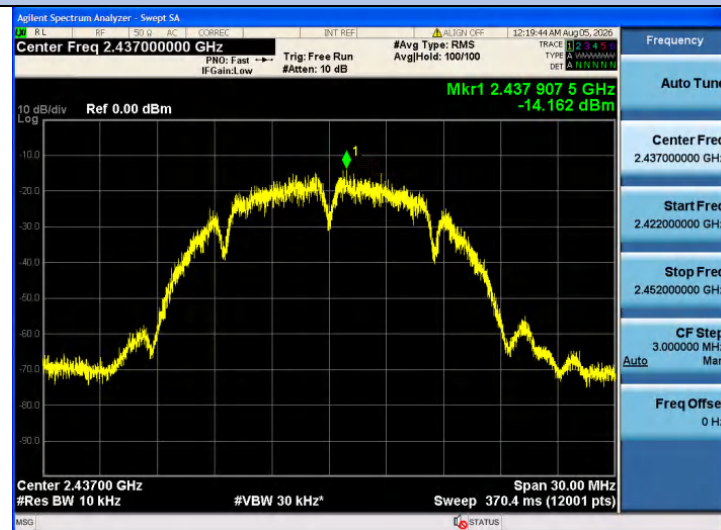
IEEE 802.11b_Ant1_CH01 2412MHz



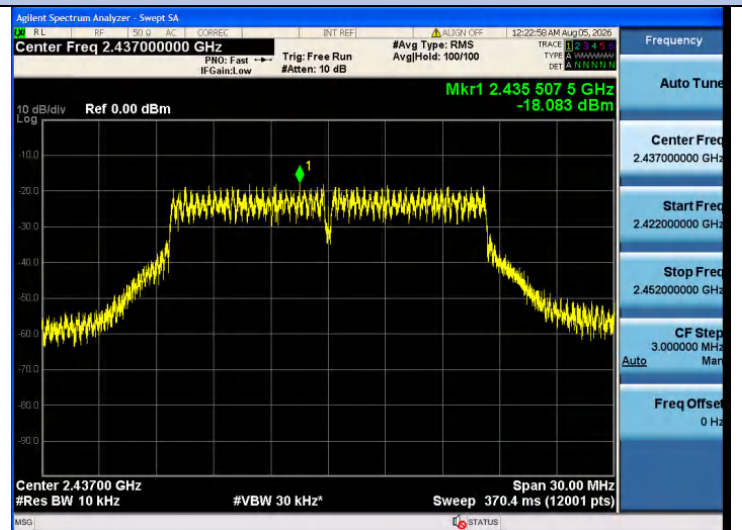
IEEE 802.11g Ant1_CH01 2412MHz



IEEE 802.11b_Ant1_CH06 2437MHz



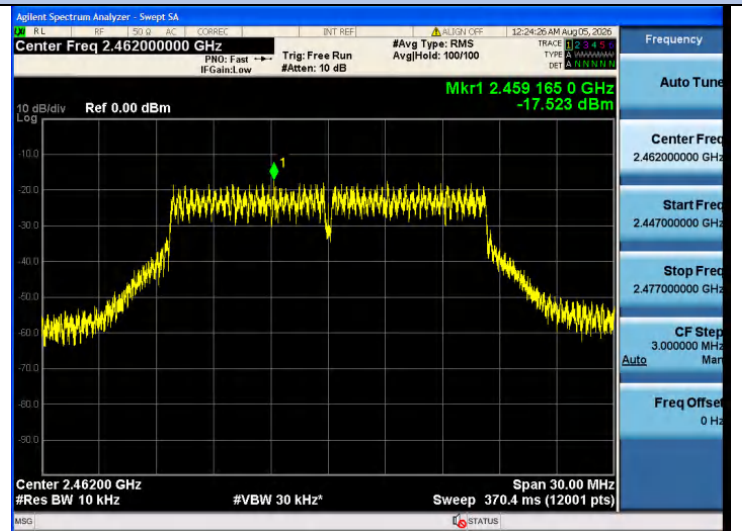
IEEE 802.11g Ant1_CH06 2437MHz



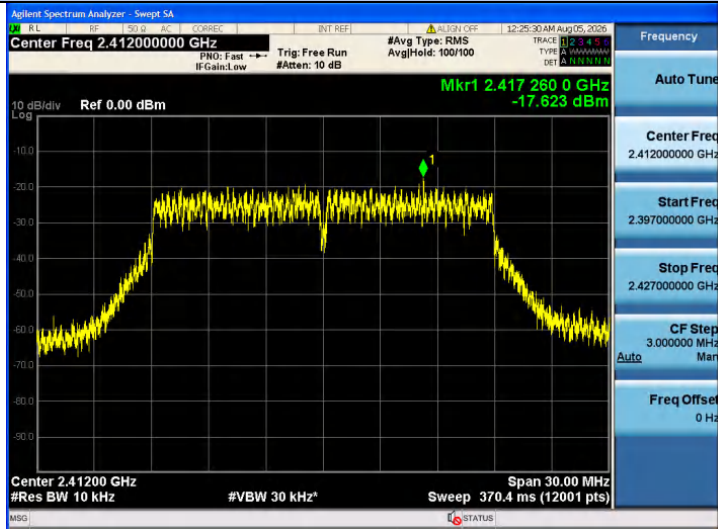
IEEE 802.11b_Ant1_CH11 2462MHz



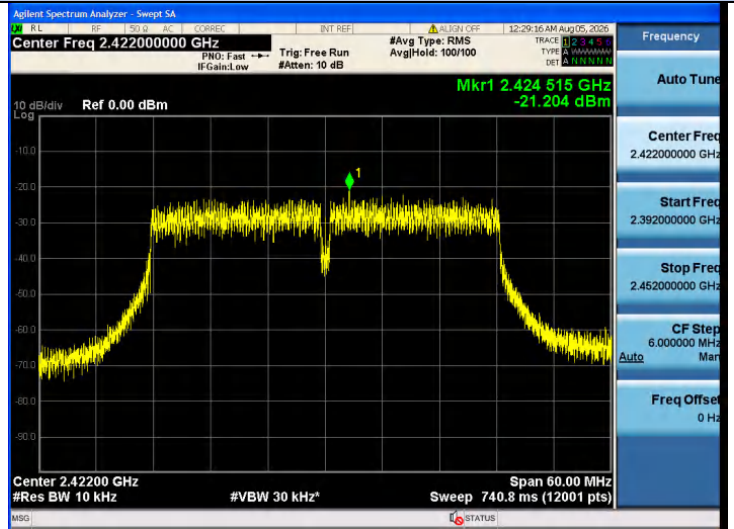
IEEE 802.11g Ant1_CH11 2462MHz



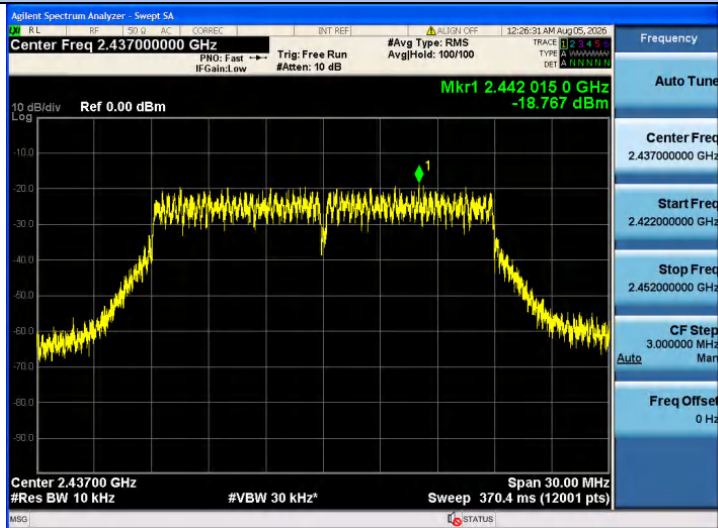
IEEE 802.11n HT20 Ant1_CH01 2412MHz



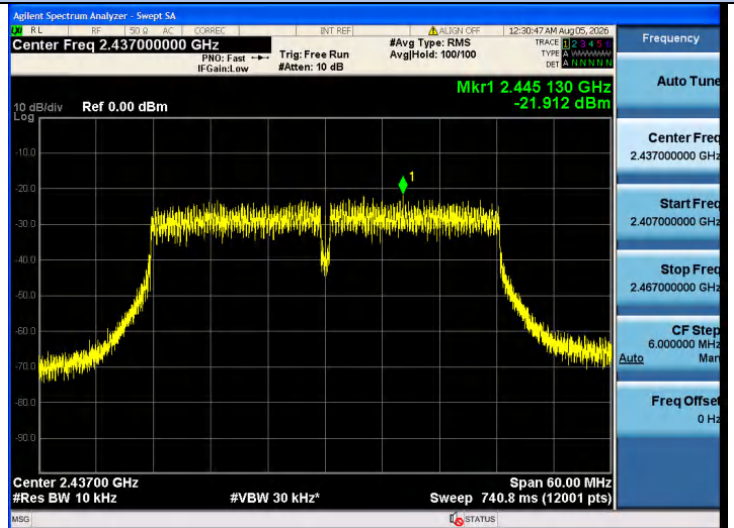
IEEE 802.11n HT40 Ant1_CH03 2422MHz



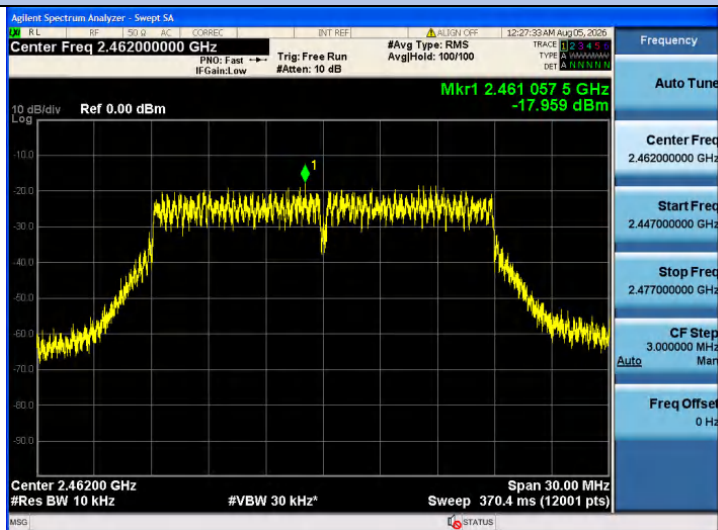
IEEE 802.11n HT20 Ant1_CH06 2437MHz



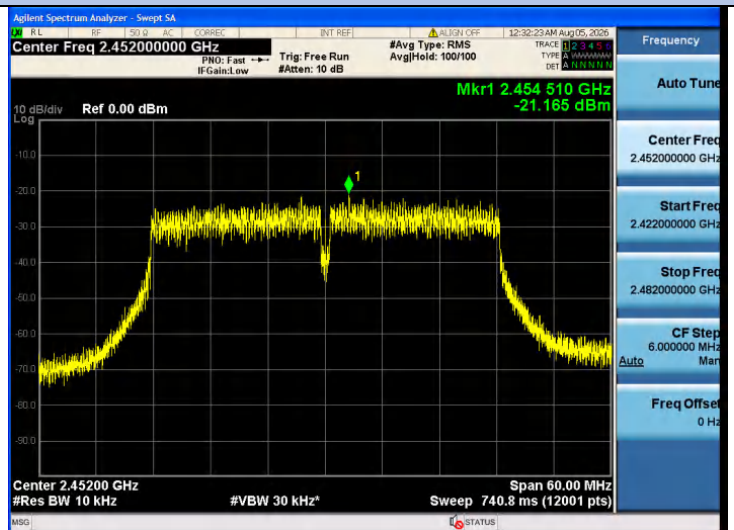
IEEE 802.11n HT40 Ant1_CH06 2437MHz



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

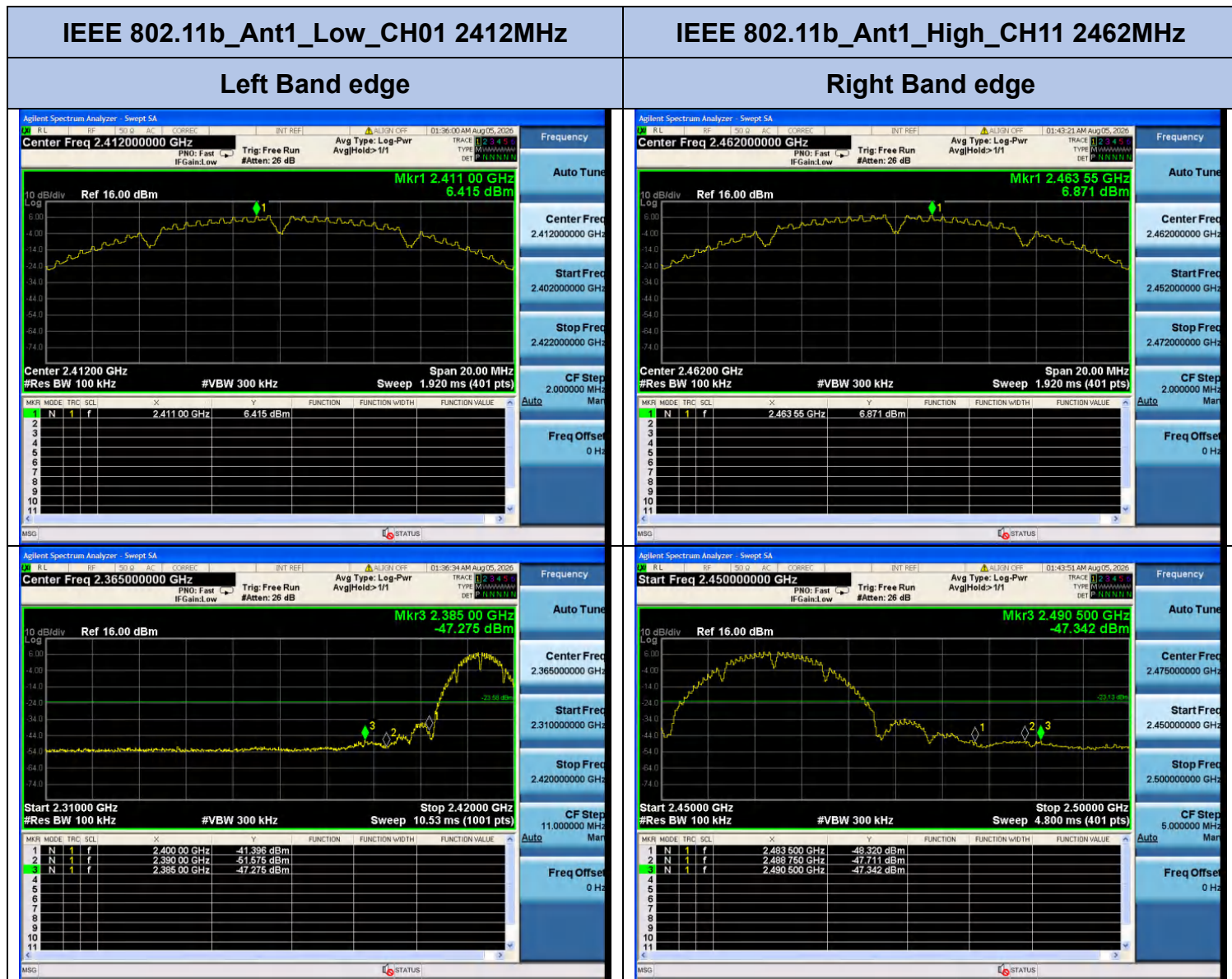
- Connect EUT antenna terminal to the spectrum analyzer with RF cable.
- Spectrum analyzer setting parameters in accordance with section 8.3.
- Set the EUT transmit continuously with maximum output power.
- Allow trace to stabilize, use the marker function to mark the highest emission level outside the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

IEEE 802.11b, IEEE 802.11g, IEEE 802.11nH20, IEEE 802.11nH40 all have been tested, the test data was recorded in report.

8.5. Test Conditions

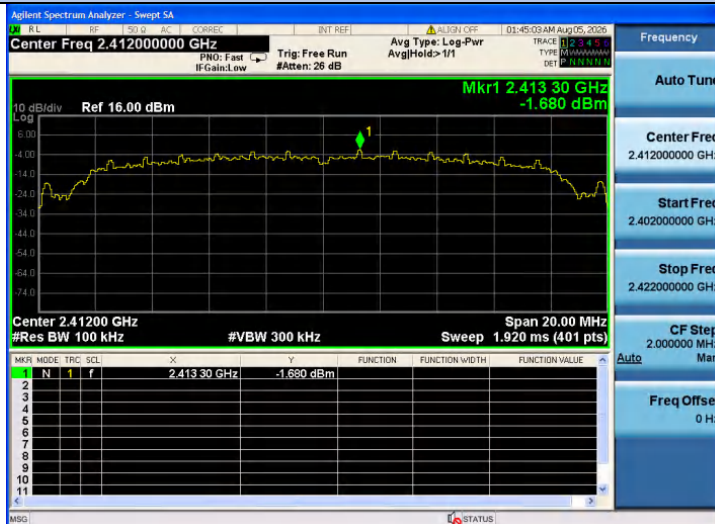
EUT:	Car Radio GPS	M/N:	WP-006
Test Voltage:	12V DC (Supplied by storage battery)		
Temperature:	24.4°C	Humidity:	50 % RH
Atmosphere Pressure:	100.6kPa		

8.6. Test Result



IEEE 802.11g_Ant1_Low_CH01 2412MHz

Left Band edge



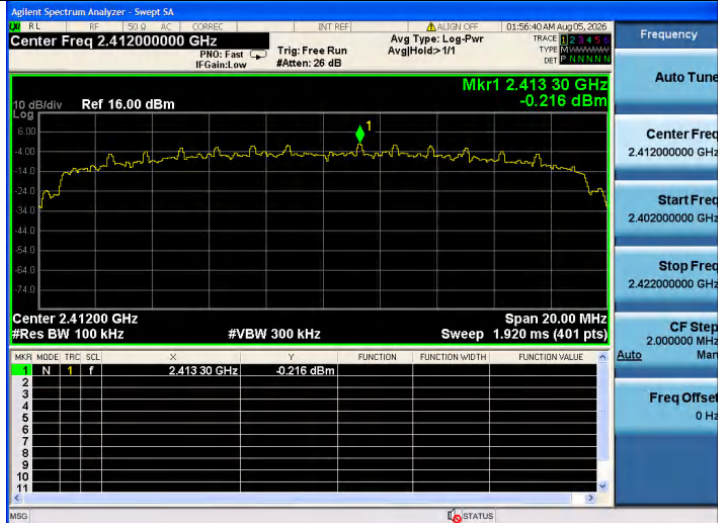
IEEE 802.11g_Ant1_High_CH11 2462MHz

Right Band edge



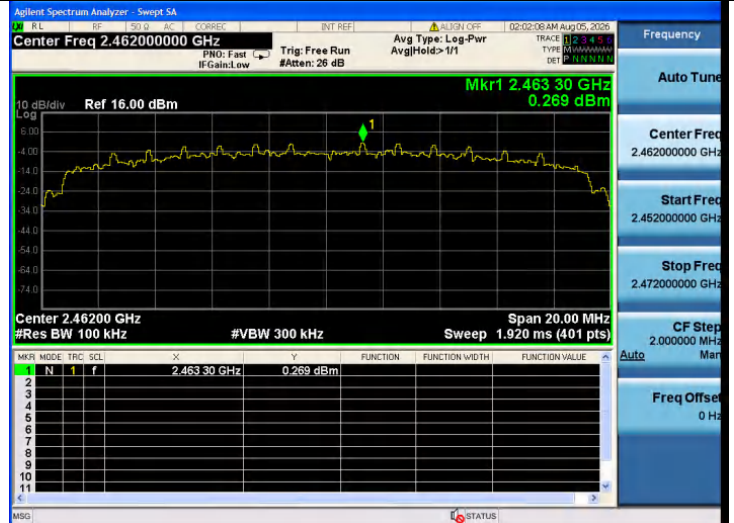
IEEE 802.11n HT20_Ant1_Low_CH01 2412MHz

Left Band edge



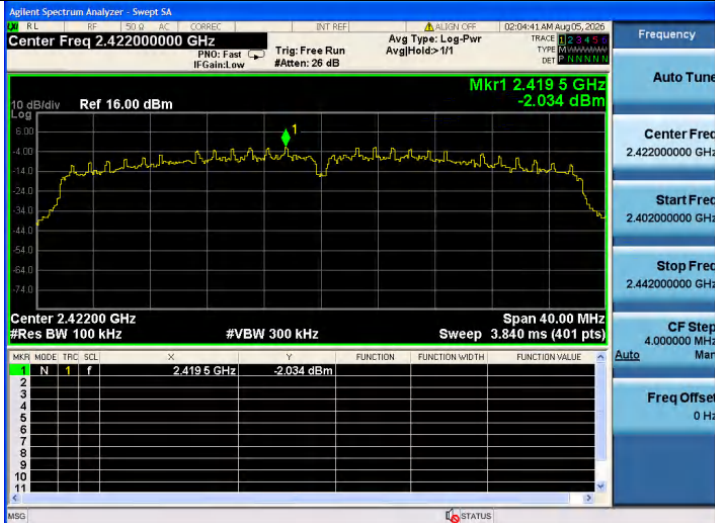
IEEE 802.11n HT20_Ant1_High_CH11 2462MHz

Right Band edge



IEEE 802.11n HT40_Ant1_Low_CH03 2422MHz

Left Band edge



IEEE 802.11n HT40_Ant1_High_CH09 2452MHz

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

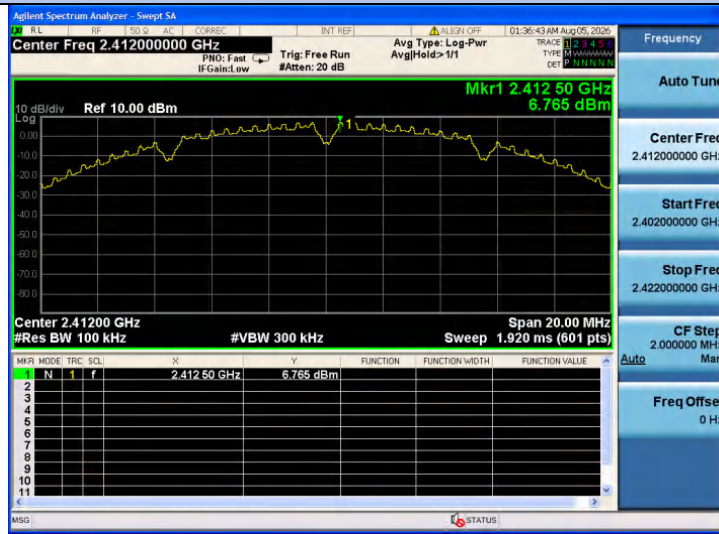
- a. Connect EUT antenna terminal to the spectrum analyzer with RF cable.
- b. Spectrum analyzer setting parameters in accordance with section 9.3.
- c. Set the EUT transmit continuously with maximum output power.
- d. Allow trace to stabilize, use the marker function to mark the highest emission level 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 Conditions

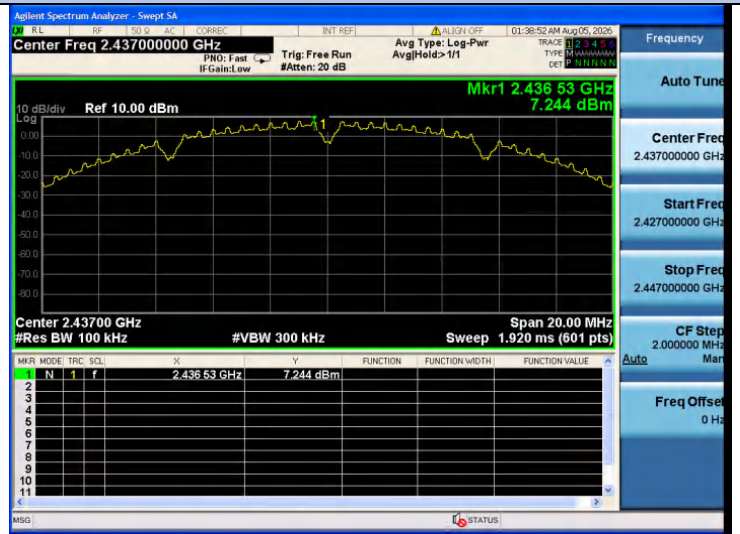
EUT:	Car Radio GPS	M/N:	WP-006
Test Voltage:	12V DC (Supplied by storage battery)		
Temperature:	24.4°C	Humidity:	50 % RH
Atmosphere Pressure:	100.6kPa		

9.6. Test Result

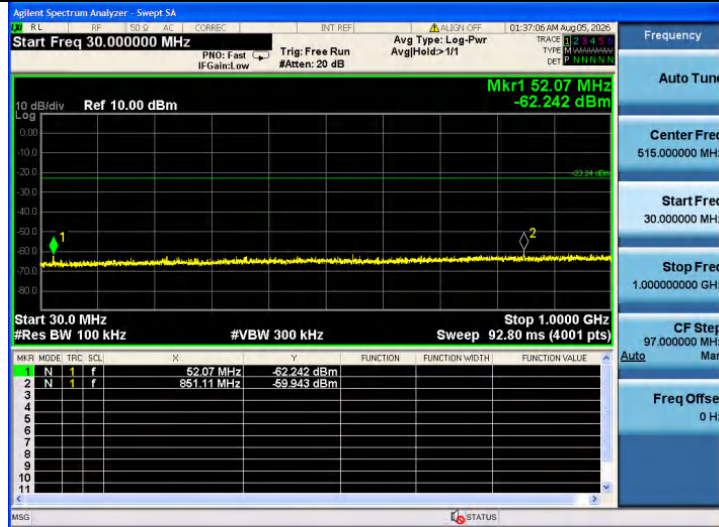
IEEE 802.11b_Ant1_CH01 2412MHz_Reference



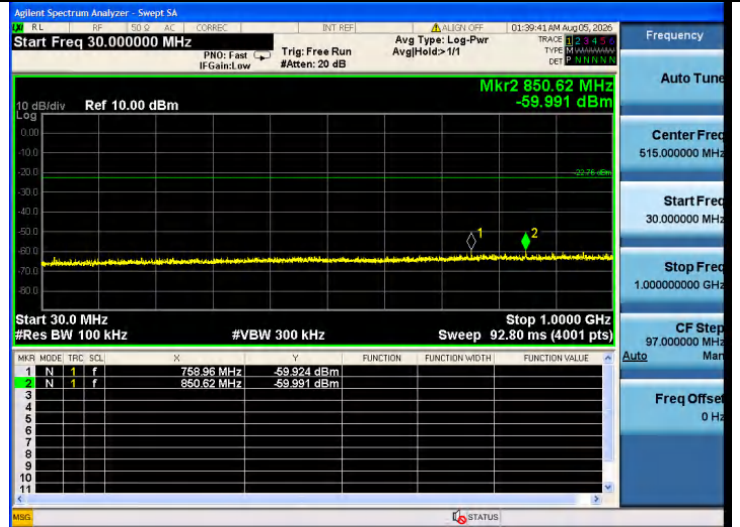
IEEE 802.11b_Ant1_CH06 2437MHz_Reference



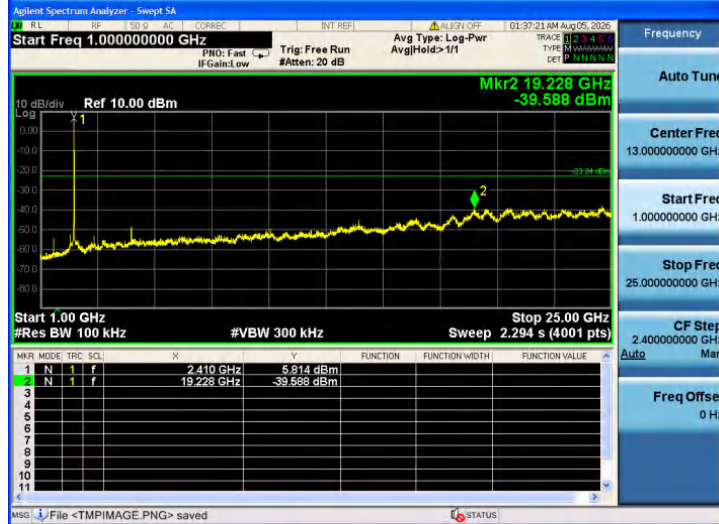
IEEE 802.11b_Ant1_CH01 2412MHz 30-1000MHz



IEEE 802.11b_Ant1_CH06 2437MHz 30-1000MHz



IEEE 802.11b_Ant1_CH01 2412MHz 1-25GHz



IEEE 802.11b_Ant1_CH06 2437MHz 1-25GHz



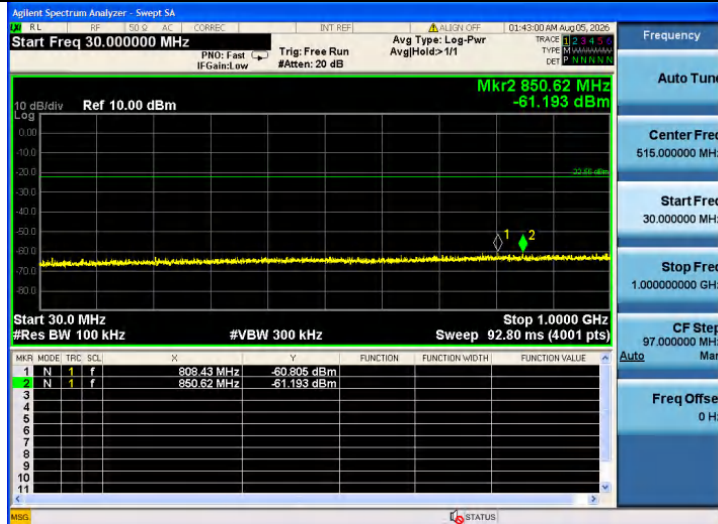
IEEE 802.11b_Ant1_CH11 2462MHz_Reference



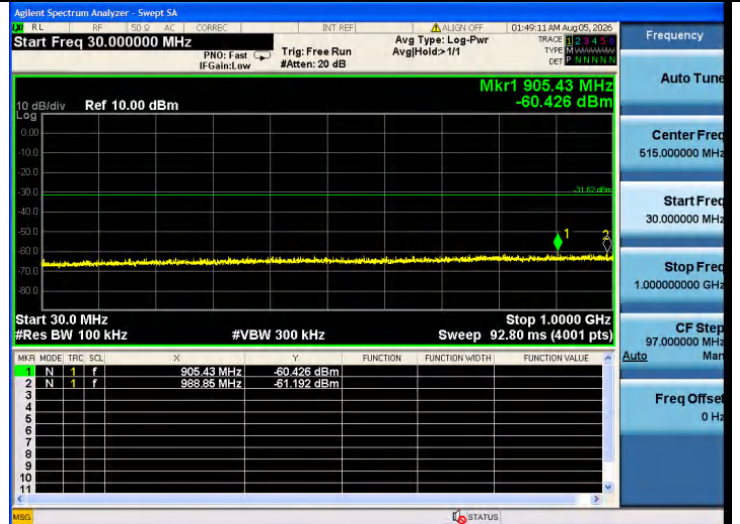
IEEE 802.11g_Ant1_CH01 2412MHz_Reference



IEEE 802.11b_Ant1_CH11 2462MHz 30-1000MHz



IEEE 802.11g_Ant1_CH01 2412MHz 30-1000MHz



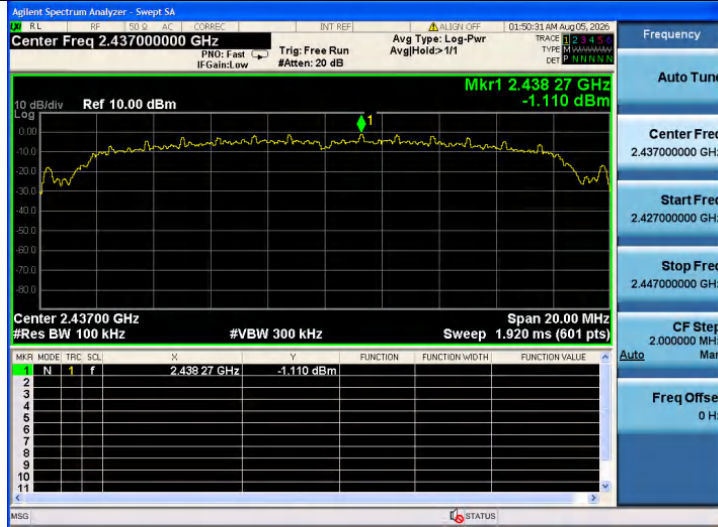
IEEE 802.11b_Ant1_CH11 2462MHz 1-25GHz



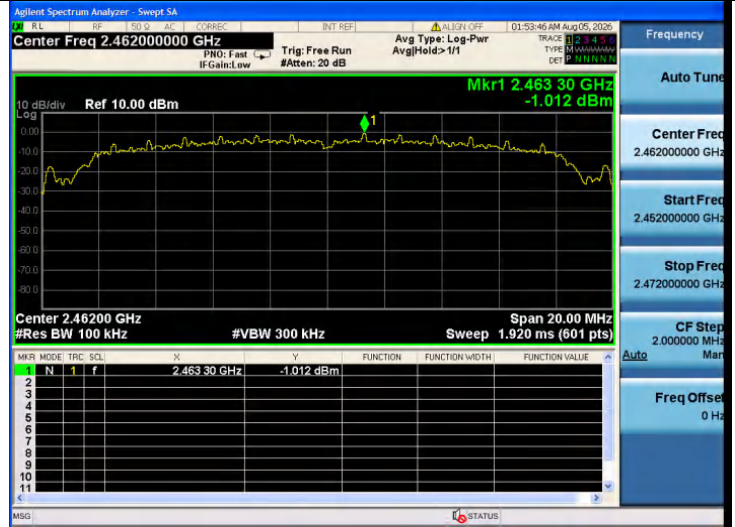
IEEE 802.11g_Ant1_CH01 2412MHz 1-25GHz



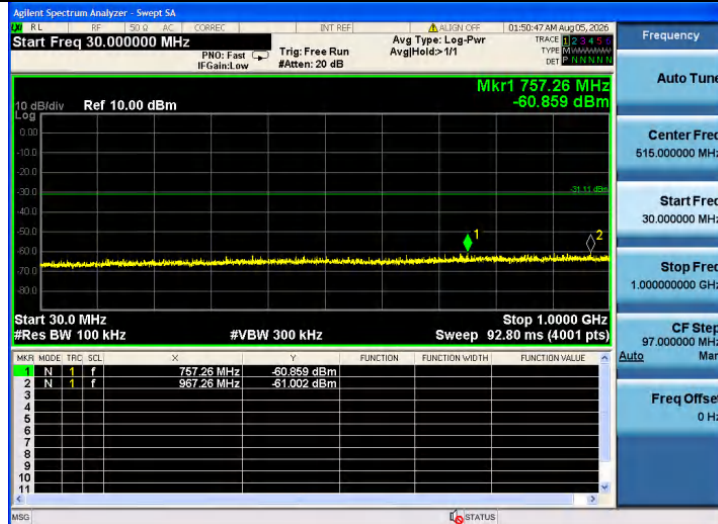
IEEE 802.11g_Ant1_CH06 2437MHz Reference



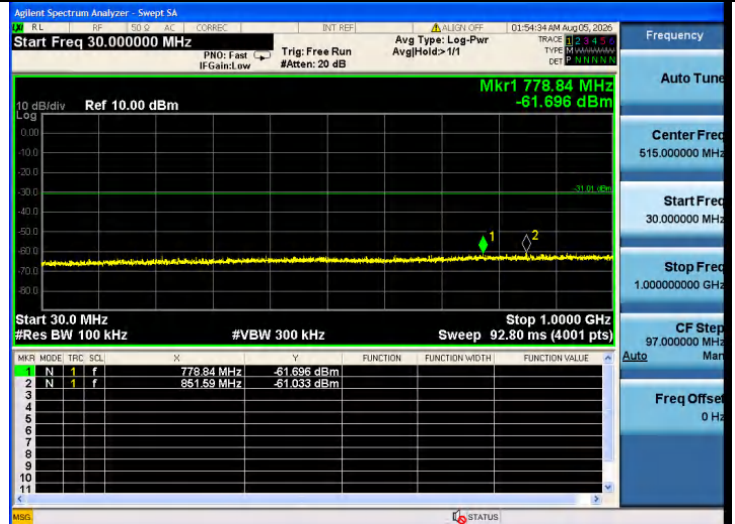
IEEE 802.11g_Ant1_CH11 2462MHz Reference



IEEE 802.11g_Ant1_CH06 2437MHz 30-1000MHz



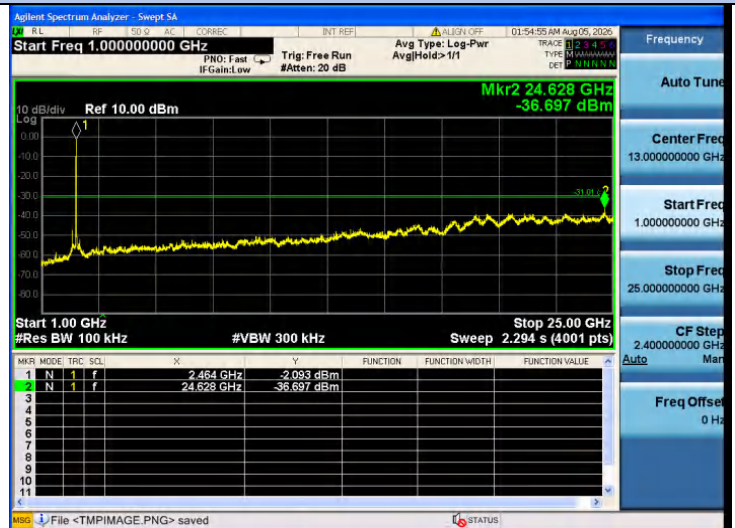
IEEE 802.11g_Ant1_CH11 2462MHz 30-1000MHz



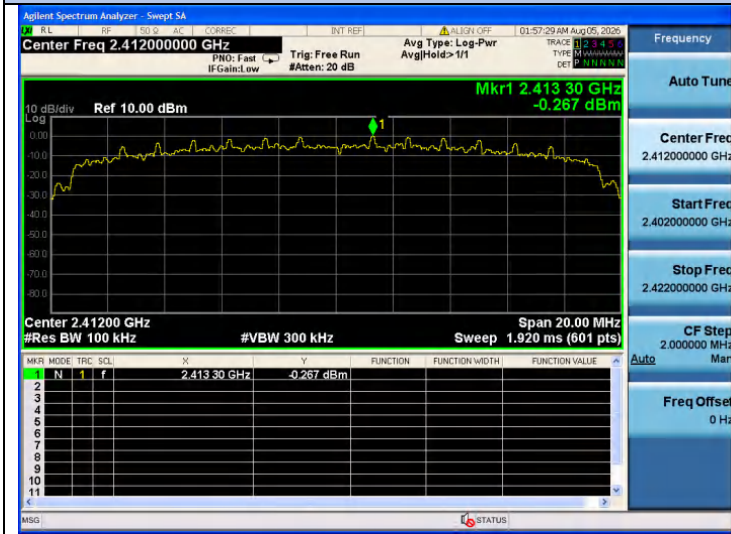
IEEE 802.11g_Ant1_CH06 2437MHz 1-25GHz



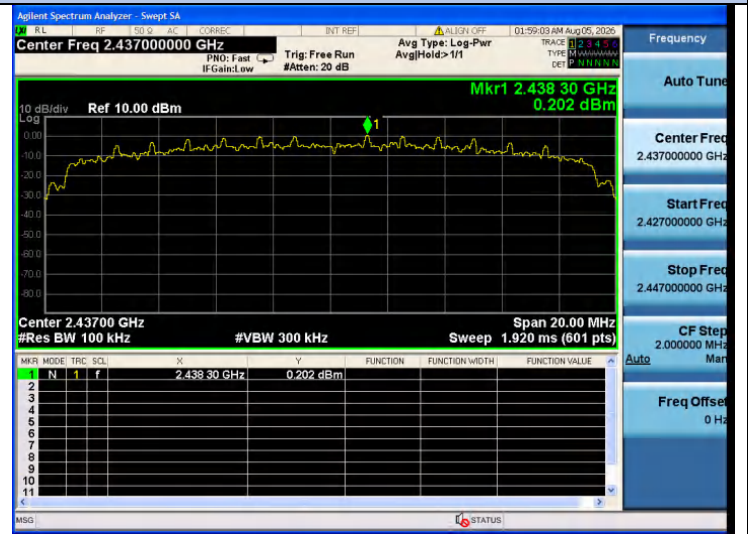
IEEE 802.11g_Ant1_CH11 2462MHz 1-25GHz



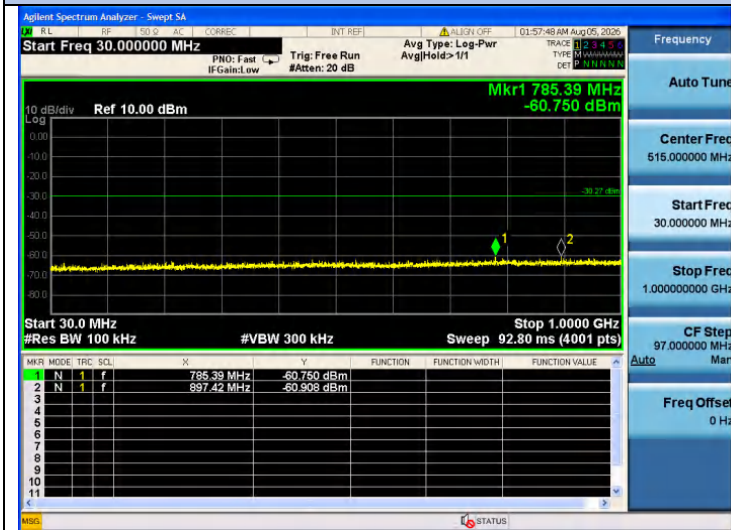
IEEE 802.11n HT20_Ant1_CH01 2412MHz Reference



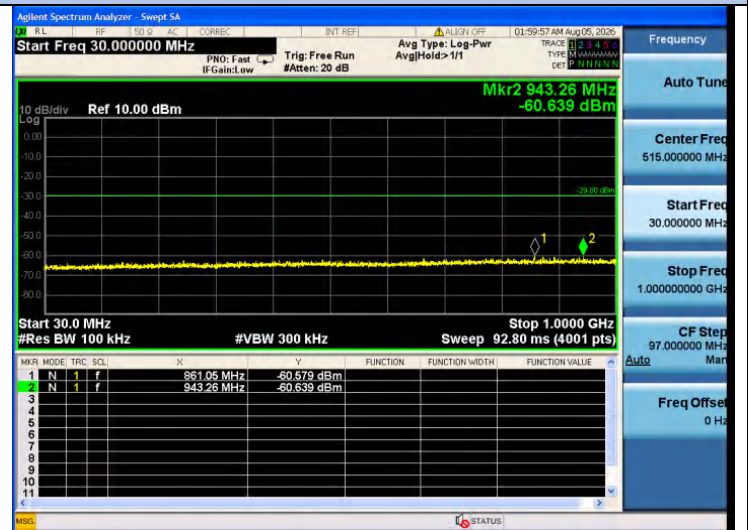
IEEE 802.11n HT20_Ant1_CH06 2437MHz Reference



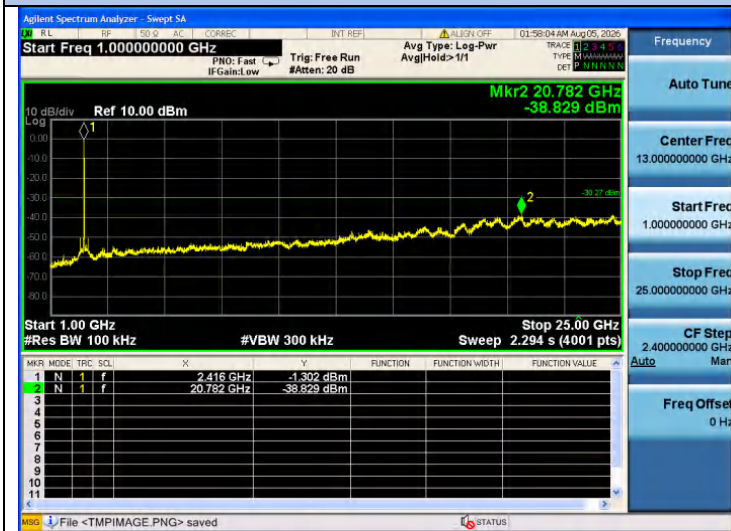
IEEE 802.11n HT20_Ant1_CH01 2412MHz 30-1000MHz



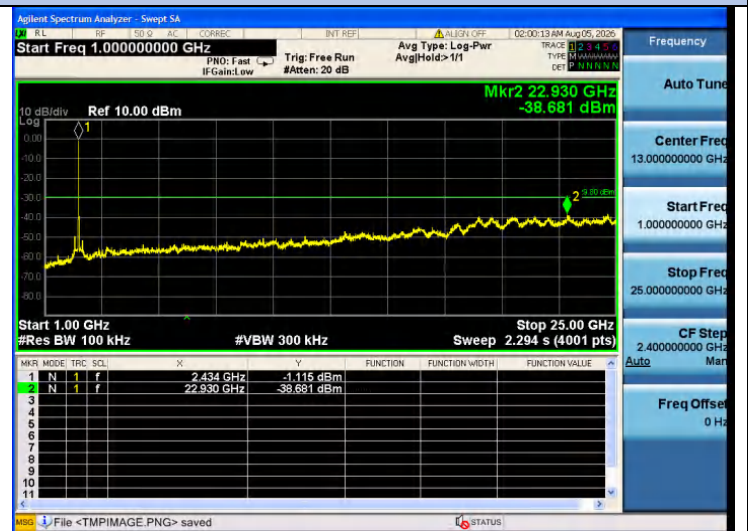
IEEE 802.11n HT20_Ant1_CH06 2437MHz 30-1000MHz



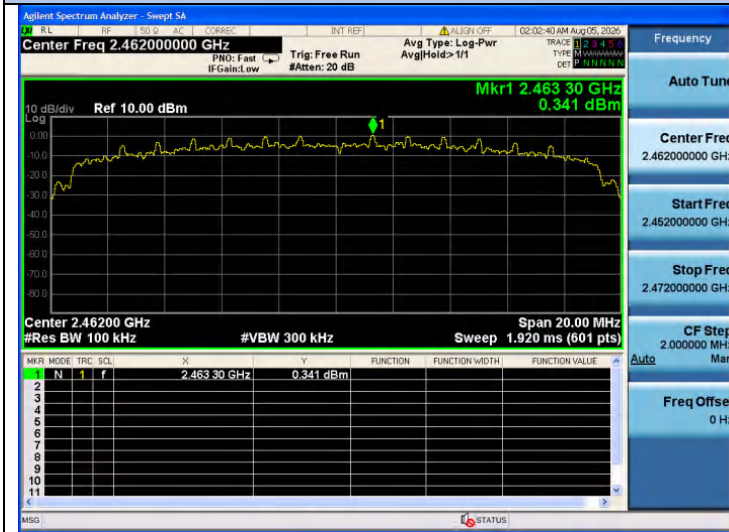
IEEE 802.11n HT20_Ant1_CH01 2412MHz 1-25GHz



IEEE 802.11n HT20_Ant1_CH06 2437MHz 1-25GHz



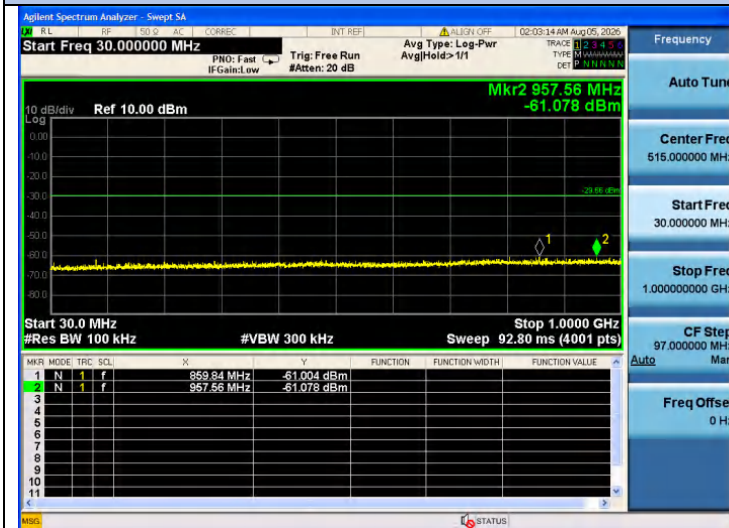
IEEE 802.11n HT20_Ant1_CH11 2462MHz Reference



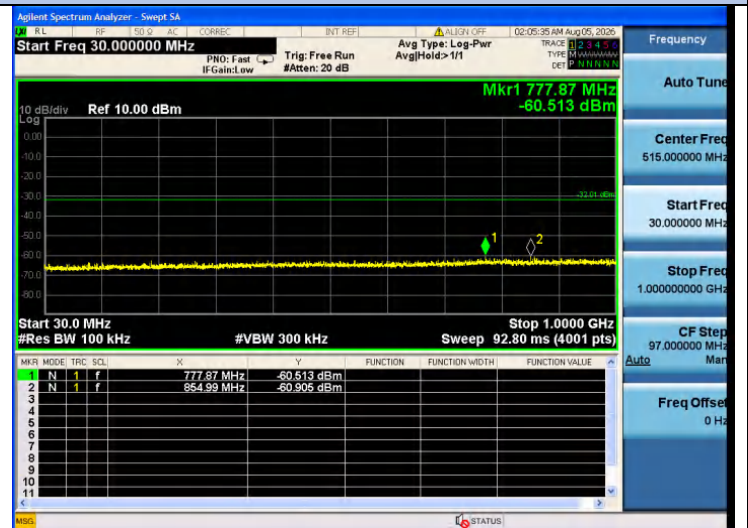
IEEE 802.11n HT40_Ant1_CH03 2422MHz Reference



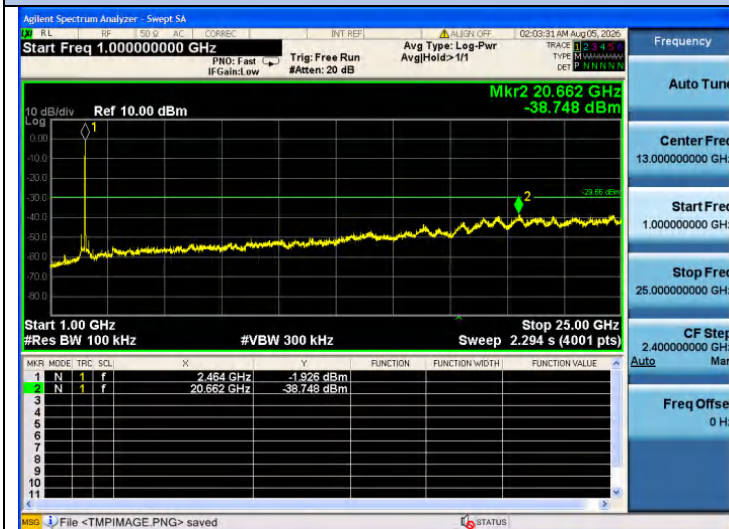
IEEE 802.11n HT20_Ant1_CH11 2462MHz 30-1000MHz



IEEE 802.11n HT40_Ant1_CH03 2422MHz 30-1000MHz



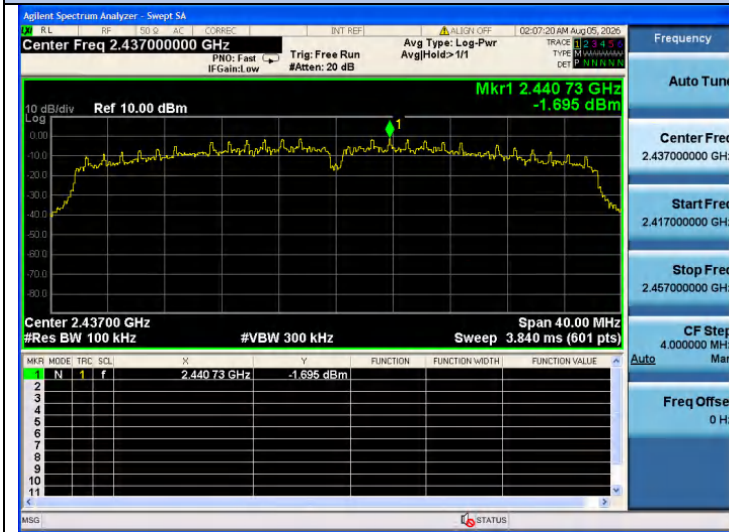
IEEE 802.11n HT20_Ant1_CH11 2462MHz 1-25GHz



IEEE 802.11n HT40_Ant1_CH03 2422MHz 1-25GHz



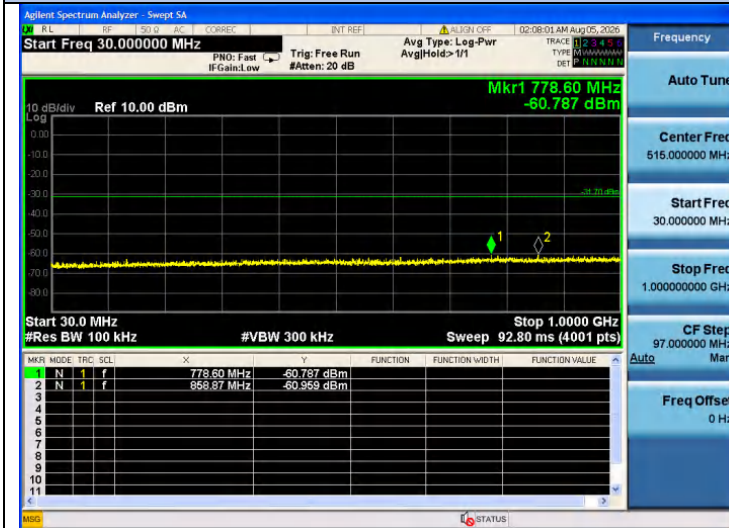
IEEE 802.11n HT40_Ant1_CH06 2437MHz Reference



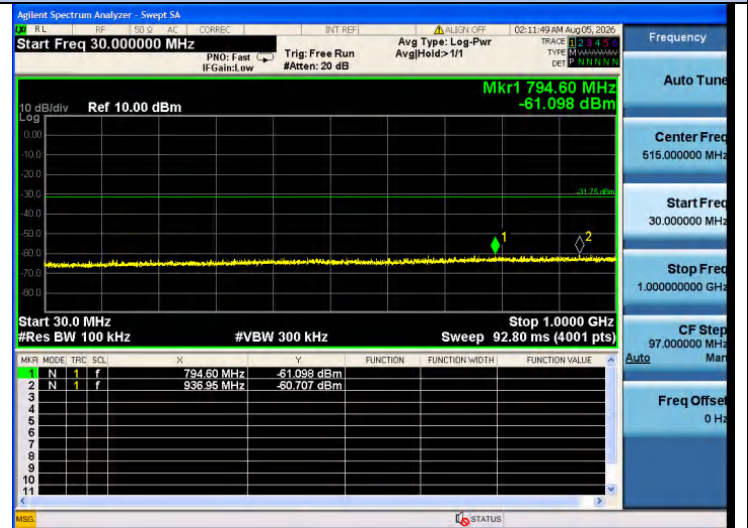
IEEE 802.11n HT40_Ant1_CH09 2452MHz Reference



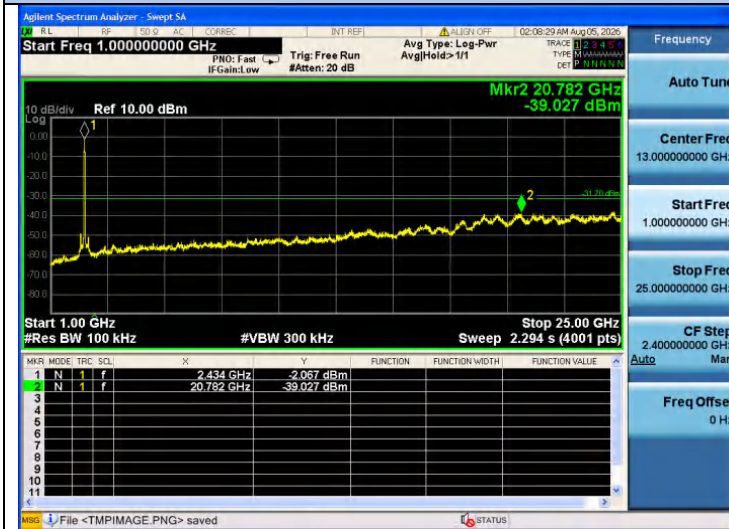
IEEE 802.11n HT40_Ant1_CH06 2437MHz 30-1000MHz



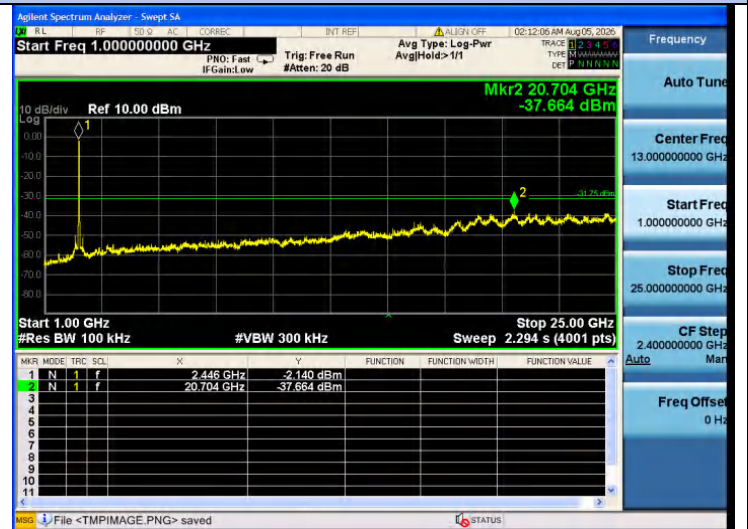
IEEE 802.11n HT40_Ant1_CH09 2452MHz 30-1000MHz



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)

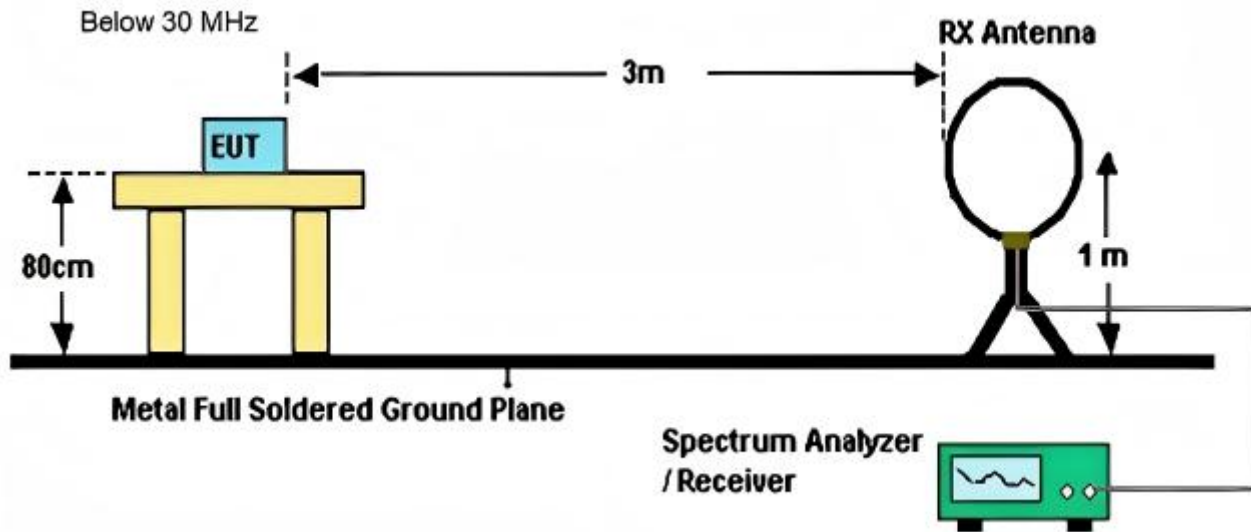
15.209 Limit		
Frequency (MHz)	Field Strength($\mu\text{V/m}$)	Distance(m)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Note:

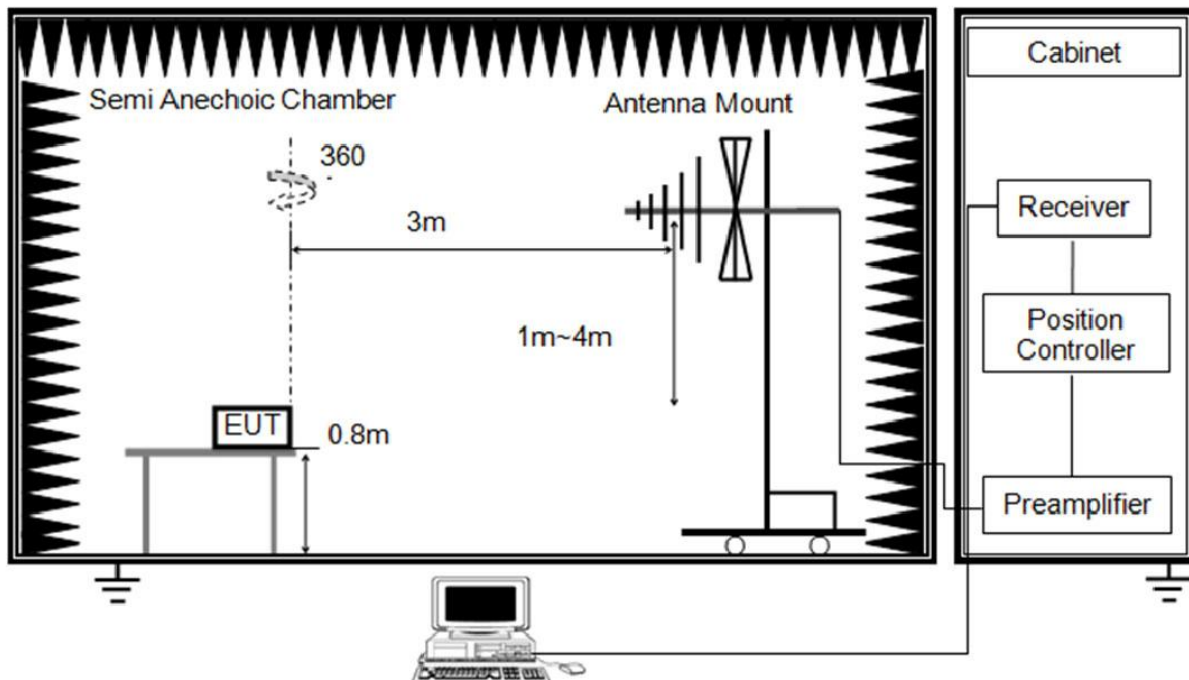
- (1) Emission level $\text{dB}\mu\text{V} = 20 \log \text{Emission level } \mu\text{V/m}$.
- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device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

10.2. Test Setup

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

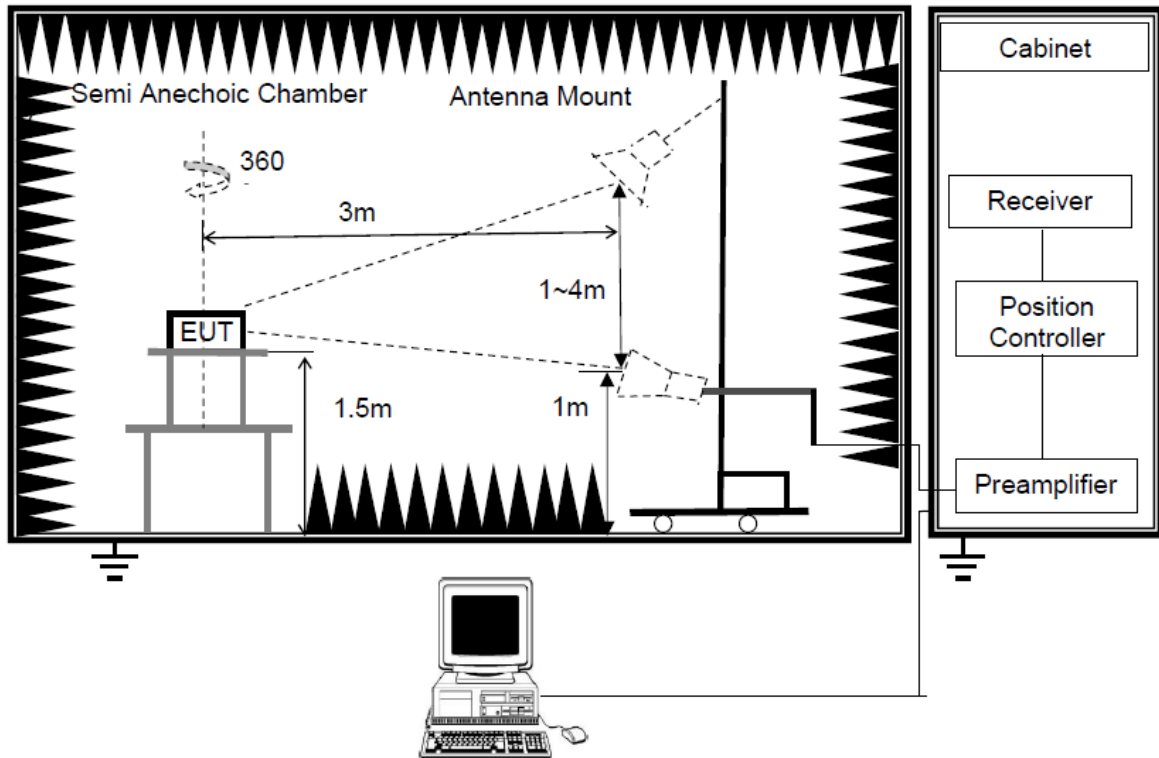


(B) Radiated Emission Test Set-Up, Frequency below 1000MHz Below 1 GHz and above 30 MHz



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

Above 1GHz



10.3. Spectrum Analyzer Setting

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

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

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

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

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

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

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

10.4. Test Procedure

- 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.
- 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.
- EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower.
- Set the EUT transmit continuously with maximum output power.
- The turn table can rotate 360 degrees to determine the position of the maximum emission level.
- 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.
- Spectrum analyzer setting parameters in accordance with section 10.3.
- Repeat above procedures until all channels and test modes were measured.
- Record the results in the test report.

10.5. Test Conditions

EUT:	Car Radio GPS	M/N:	WP-006
Test Voltage:	12V DC (Supplied by storage battery)		
Temperature:	24.4°C	Humidity:	50 % RH
Atmosphere Pressure:	100.6kPa		

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 AC 120V/60Hz and AC 230V/50Hz input voltages. There was no significant change in radiation emission. Only the test data under AC 120V/60Hz voltage was recorded and included in the report 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.

10.6. Test Conditions

Radiated Emissions 30-1000MHz			
EUT:	Car Radio GPS	M/N:	WP-006
Test Voltage:	12V DC (Supplied by storage battery)		
Temperature:	24.1°C	Humidity:	58 % RH
Atmosphere Pressure:	100.6kPa		

Radiated Emissions Above 1GHz & Radiated Band Edge			
EUT:	Car Radio GPS	M/N:	WP-006
Test Voltage:	12V DC (Supplied by storage battery)		
Temperature:	24.1°C	Humidity:	58 % RH
Atmosphere Pressure:	100.6kPa		

10.7. Test Result

Radiated Emissions 30-1000MHz

EUT: Car Radio GPS

M/N: WP-006

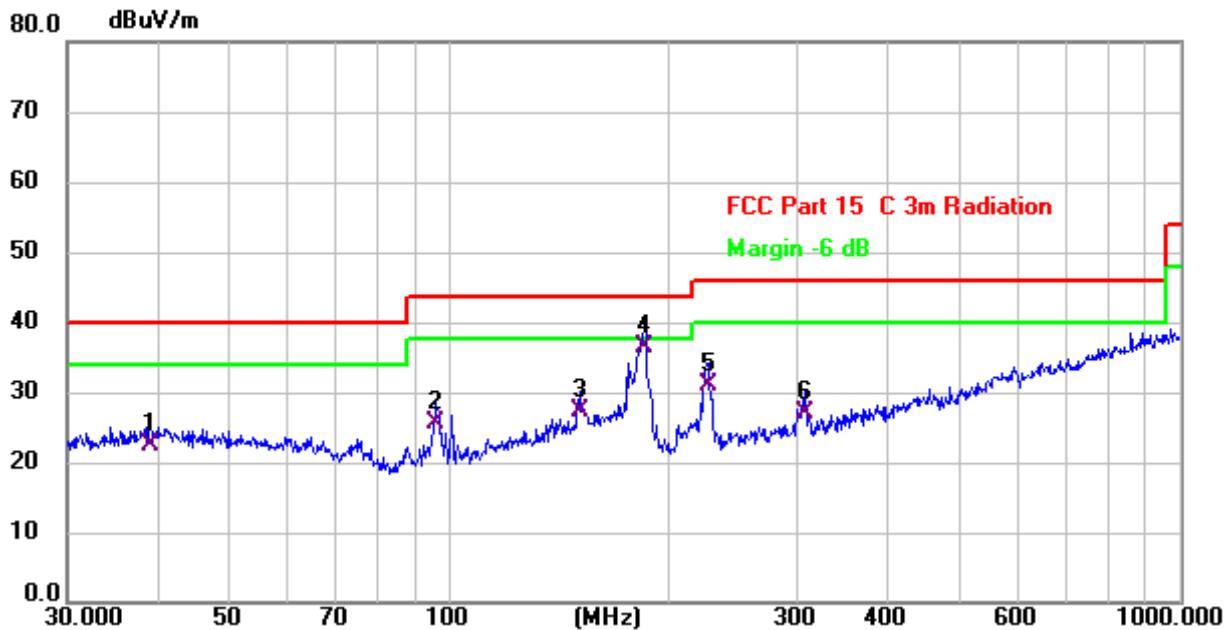
Test Voltage: 12V DC (Supplied by storage battery)

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
1	39.024	2.72	19.57	22.29	40.00	17.71	QP
2	96.099	9.22	16.22	25.44	43.50	18.06	QP
3	151.066	6.92	20.25	27.17	43.50	16.33	QP
4 *	185.138	19.48	17.07	36.55	43.50	6.95	QP
5	226.099	13.08	18.01	31.09	46.00	14.91	QP
6	306.754	6.61	20.42	27.03	46.00	18.97	QP

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

EUT: Car Radio GPS

M/N: WP-006

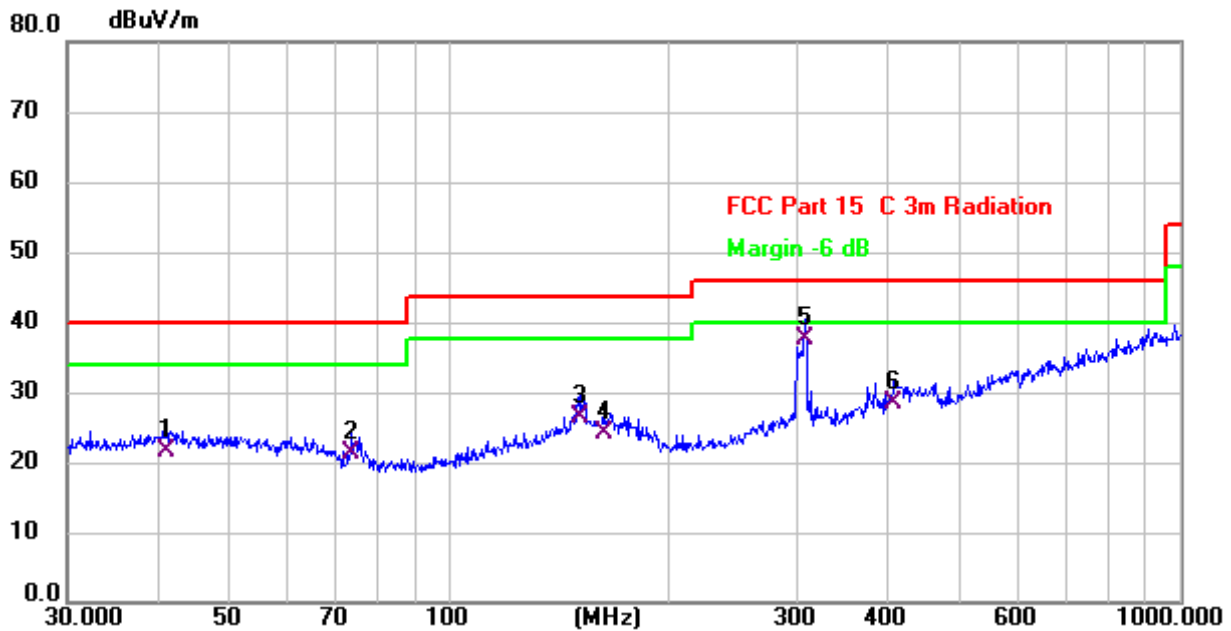
Test Voltage: 12V DC (Supplied by storage battery)

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
1	41.132	1.62	19.96	21.58	40.00	18.42	QP
2	73.617	4.86	16.29	21.15	40.00	18.85	QP
3	151.066	6.23	20.25	26.48	43.50	17.02	QP
4	162.611	3.97	20.27	24.24	43.50	19.26	QP
5 *	307.831	16.97	20.46	37.43	46.00	8.57	QP
6	406.088	6.18	22.26	28.44	46.00	17.56	QP

Remarks: 1). Level (dBuV/m) = Reading (dBuV/m) + Factor (dB/m)
 2). Factor(dB/m) = Antenna Factor (dB/m) + Cable loss (dB)
 3). Margin(dB) = Level (dBuV/m) - Limit (dBuV/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	2388.194	44.45	-19.28	74.0	29.55	Peak	180.00	150	Horizontal	Pass
1**	2388.194	33.76	-19.28	54.0	20.24	AV	180.00	150	Horizontal	Pass
2	4278.500	48.88	-12.35	74.0	25.12	Peak	324.00	150	Horizontal	Pass
2**	4278.500	38.98	-12.35	54.0	15.02	AV	324.00	150	Horizontal	Pass
3	4823.750	46.42	-10.86	74.0	27.58	Peak	288.00	150	Horizontal	Pass
3**	4823.750	38.94	-10.86	54.0	15.06	AV	288.00	150	Horizontal	Pass
4	7236.000	49.13	-6.74	74.0	24.87	Peak	36.00	150	Horizontal	Pass
4**	7236.000	42.66	-6.74	54.0	11.34	AV	36.00	150	Horizontal	Pass
5	7736.250	52.91	-6.34	74.0	21.09	Peak	288.00	150	Horizontal	Pass
5**	7736.250	43.32	-6.34	54.0	10.68	AV	288.00	150	Horizontal	Pass
6	17939.499	52.78	1.53	74.0	21.22	Peak	72.00	150	Horizontal	Pass
6**	17939.499	44.10	1.53	54.0	9.90	AV	72.00	150	Horizontal	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	1742.271	43.44	-23.63	74.0	30.56	Peak	360.00	150	Vertical	Pass
1**	1742.271	38.73	-23.63	54.0	15.27	AV	360.00	150	Vertical	Pass
2	4752.000	49.00	-10.42	74.0	25.00	Peak	36.00	150	Vertical	Pass
2**	4752.000	39.62	-10.42	54.0	14.38	AV	36.00	150	Vertical	Pass
3	4823.750	45.92	-10.86	74.0	28.08	Peak	360.00	150	Vertical	Pass
3**	4823.750	38.54	-10.86	54.0	15.46	AV	360.00	150	Vertical	Pass
4	7236.000	50.12	-6.74	74.0	23.88	Peak	288.00	150	Vertical	Pass
4**	7236.000	42.40	-6.74	54.0	11.60	AV	288.00	150	Vertical	Pass
5	7901.000	52.62	-6.21	74.0	21.38	Peak	216.00	150	Vertical	Pass
5**	7901.000	43.51	-6.21	54.0	10.49	AV	216.00	150	Vertical	Pass
6	17940.001	52.70	1.52	74.0	21.30	Peak	180.00	150	Vertical	Pass
6**	17940.001	43.74	1.52	54.0	10.26	AV	180.00	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	2209.505	40.82	-19.82	74.0	33.18	Peak	324.00	150	Vertical	Pass
1**	2209.505	31.59	-19.82	54.0	22.41	AV	324.00	150	Vertical	Pass
2	4316.500	49.15	-12.29	74.0	24.85	Peak	288.00	150	Vertical	Pass
2**	4316.500	39.16	-12.29	54.0	14.84	AV	288.00	150	Vertical	Pass
3	4874.000	45.07	-10.43	74.0	28.93	Peak	180.00	150	Vertical	Pass
3**	4874.000	39.26	-10.43	54.0	14.74	AV	180.00	150	Vertical	Pass
4	7310.750	48.94	-6.90	74.0	25.06	Peak	324.00	150	Vertical	Pass
4**	7310.750	42.61	-6.90	54.0	11.39	AV	324.00	150	Vertical	Pass
5	7723.250	53.63	-6.30	74.0	20.37	Peak	108.00	150	Vertical	Pass
5**	7723.250	44.03	-6.30	54.0	9.97	AV	108.00	150	Vertical	Pass
6	17931.999	52.99	1.63	74.0	21.01	Peak	360.00	150	Vertical	Pass
6**	17931.999	44.15	1.63	54.0	9.85	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	2388.994	44.36	-19.28	74.0	29.64	Peak	324.00	150	Horizontal	Pass
1**	2388.994	33.69	-19.28	54.0	20.31	AV	324.00	150	Horizontal	Pass
2	4338.000	49.13	-12.14	74.0	24.87	Peak	324.00	150	Horizontal	Pass
2**	4338.000	39.73	-12.14	54.0	14.27	AV	324.00	150	Horizontal	Pass
3	4874.000	47.94	-10.43	74.0	26.06	Peak	360.00	150	Horizontal	Pass
3**	4874.000	42.04	-10.43	54.0	11.96	AV	360.00	150	Horizontal	Pass
4	7310.750	48.94	-6.90	74.0	25.06	Peak	216.00	150	Horizontal	Pass
4**	7310.750	42.31	-6.90	54.0	11.69	AV	216.00	150	Horizontal	Pass
5	7796.000	52.72	-6.45	74.0	21.28	Peak	360.00	150	Horizontal	Pass
5**	7796.000	42.93	-6.45	54.0	11.07	AV	360.00	150	Horizontal	Pass
6	17930.000	53.38	1.65	74.0	20.62	Peak	180.00	150	Horizontal	Pass
6**	17930.000	43.91	1.65	54.0	10.09	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	2388.994	44.36	-19.28	74.0	29.64	Peak	324.00	150	Horizontal	Pass
1**	2388.994	33.69	-19.28	54.0	20.31	AV	324.00	150	Horizontal	Pass
2	4338.000	49.13	-12.14	74.0	24.87	Peak	324.00	150	Horizontal	Pass
2**	4338.000	39.73	-12.14	54.0	14.27	AV	324.00	150	Horizontal	Pass
3	4923.750	44.54	-11.13	74.0	29.46	Peak	360.00	150	Horizontal	Pass
3**	4923.750	39.29	-11.13	54.0	14.71	AV	360.00	150	Horizontal	Pass
4	7386.000	49.11	-6.76	74.0	24.89	Peak	252.00	150	Horizontal	Pass
4**	7386.000	42.41	-6.76	54.0	11.59	AV	252.00	150	Horizontal	Pass
5	7796.000	52.72	-6.45	74.0	21.28	Peak	360.00	150	Horizontal	Pass
5**	7796.000	42.93	-6.45	54.0	11.07	AV	360.00	150	Horizontal	Pass
6	17930.000	53.38	1.65	74.0	20.62	Peak	180.00	150	Horizontal	Pass
6**	17930.000	43.91	1.65	54.0	10.09	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	2244.322	40.79	-19.71	74.0	33.21	Peak	288.00	150	Vertical	Pass
1**	2244.322	31.11	-19.71	54.0	22.89	AV	288.00	150	Vertical	Pass
2	4862.750	48.64	-10.56	74.0	25.36	Peak	108.00	150	Vertical	Pass
2**	4862.750	38.89	-10.56	54.0	15.11	AV	108.00	150	Vertical	Pass
3	4923.750	44.99	-11.13	74.0	29.01	Peak	360.00	150	Vertical	Pass
3**	4923.750	38.61	-11.13	54.0	15.39	AV	360.00	150	Vertical	Pass
4	7386.000	49.62	-6.76	74.0	24.38	Peak	216.00	150	Vertical	Pass
4**	7386.000	43.50	-6.76	54.0	10.50	AV	216.00	150	Vertical	Pass
5	7882.500	52.44	-6.03	74.0	21.56	Peak	216.00	150	Vertical	Pass
5**	7882.500	43.46	-6.03	54.0	10.54	AV	216.00	150	Vertical	Pass
6	17930.500	52.75	1.64	74.0	21.25	Peak	180.00	150	Vertical	Pass
6**	17930.500	44.50	1.64	54.0	9.50	AV	180.00	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	2294.647	40.75	-19.51	74.0	33.25	Peak	360.00	150	Vertical	Pass
1**	2294.647	30.44	-19.51	54.0	23.56	AV	360.00	150	Vertical	Pass
2	4722.250	48.99	-10.85	74.0	25.01	Peak	108.00	150	Vertical	Pass
2**	4722.250	39.03	-10.85	54.0	14.97	AV	108.00	150	Vertical	Pass
3	4823.750	45.24	-10.86	74.0	28.76	Peak	72.00	150	Vertical	Pass
3**	4823.750	39.05	-10.86	54.0	14.95	AV	72.00	150	Vertical	Pass
4	7236.000	48.84	-6.74	74.0	25.16	Peak	144.00	150	Vertical	Pass
4**	7236.000	42.45	-6.74	54.0	11.55	AV	144.00	150	Vertical	Pass
5	7727.000	52.88	-6.31	74.0	21.12	Peak	360.00	150	Vertical	Pass
5**	7727.000	43.57	-6.31	54.0	10.43	AV	360.00	150	Vertical	Pass
6	17934.000	52.70	1.61	74.0	21.30	Peak	216.00	150	Vertical	Pass
6**	17934.000	44.46	1.61	54.0	9.54	AV	216.00	150	Vertical	Pass

IEEE 802.11g-CH01 2412MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2392.696	45.56	-19.29	74.0	28.44	Peak	216.00	150	Horizontal	Pass
1**	2392.696	33.81	-19.29	54.0	20.19	AV	216.00	150	Horizontal	Pass
2	4757.500	48.78	-10.52	74.0	25.22	Peak	324.00	150	Horizontal	Pass
2**	4757.500	41.00	-10.52	54.0	13.00	AV	324.00	150	Horizontal	Pass
3	4823.750	46.51	-10.86	74.0	27.49	Peak	360.00	150	Horizontal	Pass
3**	4823.750	38.26	-10.86	54.0	15.74	AV	360.00	150	Horizontal	Pass
4	7236.000	48.66	-6.74	74.0	25.34	Peak	36.00	150	Horizontal	Pass
4**	7236.000	42.79	-6.74	54.0	11.21	AV	36.00	150	Horizontal	Pass
5	7617.500	52.53	-6.55	74.0	21.47	Peak	36.00	150	Horizontal	Pass
5**	7617.500	43.25	-6.55	54.0	10.75	AV	36.00	150	Horizontal	Pass
6	17927.000	52.84	1.41	74.0	21.16	Peak	252.00	150	Horizontal	Pass
6**	17927.000	44.20	1.41	54.0	9.80	AV	252.00	150	Horizontal	Pass

IEEE 802.11g-CH06 2437MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2392.696	45.56	-19.29	74.0	28.44	Peak	216.00	150	Horizontal	Pass
1**	2392.696	33.81	-19.29	54.0	20.19	AV	216.00	150	Horizontal	Pass
2	4757.500	48.78	-10.52	74.0	25.22	Peak	324.00	150	Horizontal	Pass
2**	4757.500	41.00	-10.52	54.0	13.00	AV	324.00	150	Horizontal	Pass
3	4874.000	46.51	-10.86	74.0	27.49	Peak	360.00	150	Horizontal	Pass
3**	4874.000	38.26	-10.86	54.0	15.74	AV	360.00	150	Horizontal	Pass
4	7310.750	48.66	-6.74	74.0	25.34	Peak	36.00	150	Horizontal	Pass
4**	7310.750	42.79	-6.74	54.0	11.21	AV	36.00	150	Horizontal	Pass
5	7617.500	52.53	-6.55	74.0	21.47	Peak	36.00	150	Horizontal	Pass
5**	7617.500	43.25	-6.55	54.0	10.75	AV	36.00	150	Horizontal	Pass
6	17927.000	52.84	1.41	74.0	21.16	Peak	252.00	150	Horizontal	Pass
6**	17927.000	44.20	1.41	54.0	9.80	AV	252.00	150	Horizontal	Pass

IEEE 802.11g-CH06 2437MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1738.369	42.59	-23.62	74.0	31.41	Peak	324.00	150	Vertical	Pass
1**	1738.369	37.45	-23.62	54.0	16.55	AV	324.00	150	Vertical	Pass
2	4769.250	48.83	-10.54	74.0	25.17	Peak	288.00	150	Vertical	Pass
2**	4769.250	39.86	-10.54	54.0	14.14	AV	288.00	150	Vertical	Pass
3	4874.000	46.71	-10.43	74.0	27.29	Peak	360.00	150	Vertical	Pass
3**	4874.000	39.18	-10.43	54.0	14.82	AV	360.00	150	Vertical	Pass
4	7310.750	49.06	-6.90	74.0	24.94	Peak	324.00	150	Vertical	Pass
4**	7310.750	42.18	-6.90	54.0	11.82	AV	324.00	150	Vertical	Pass
5	7727.000	52.20	-6.31	74.0	21.80	Peak	180.00	150	Vertical	Pass
5**	7727.000	43.00	-6.31	54.0	11.00	AV	180.00	150	Vertical	Pass
6	17927.000	53.99	1.41	74.0	20.01	Peak	288.00	150	Vertical	Pass
6**	17927.000	44.62	1.41	54.0	9.38	AV	288.00	150	Vertical	Pass

IEEE 802.11g-CH11 2462MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1736.268	49.44	-23.62	74.0	24.56	Peak	180.00	150	Vertical	Pass
1**	1736.268	43.69	-23.62	54.0	10.31	AV	180.00	150	Vertical	Pass
2	4590.750	49.25	-11.62	74.0	24.75	Peak	108.00	150	Vertical	Pass
2**	4590.750	38.79	-11.62	54.0	15.21	AV	108.00	150	Vertical	Pass
3	4923.750	44.29	-11.13	74.0	29.71	Peak	180.00	150	Vertical	Pass
3**	4923.750	38.18	-11.13	54.0	15.82	AV	180.00	150	Vertical	Pass
4	7386.000	50.69	-6.76	74.0	23.31	Peak	108.00	150	Vertical	Pass
4**	7386.000	42.08	-6.76	54.0	11.92	AV	108.00	150	Vertical	Pass
5	7939.750	53.56	-6.00	74.0	20.44	Peak	108.00	150	Vertical	Pass
5**	7939.750	42.78	-6.00	54.0	11.22	AV	108.00	150	Vertical	Pass
6	17940.001	52.68	1.52	74.0	21.32	Peak	360.00	150	Vertical	Pass
6**	17940.001	44.19	1.52	54.0	9.81	AV	360.00	150	Vertical	Pass

IEEE 802.11g-CH11 2462MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1736.368	48.08	-23.62	74.0	25.92	Peak	108.00	150	Horizontal	Pass
1**	1736.368	43.53	-23.62	54.0	10.47	AV	108.00	150	Horizontal	Pass
2	4868.500	49.05	-10.38	74.0	24.95	Peak	324.00	150	Horizontal	Pass
2**	4868.500	39.41	-10.38	54.0	14.59	AV	324.00	150	Horizontal	Pass
3	4923.750	48.19	-11.13	74.0	25.81	Peak	252.00	150	Horizontal	Pass
3**	4923.750	39.31	-11.13	54.0	14.69	AV	252.00	150	Horizontal	Pass
4	7386.000	50.80	-6.76	74.0	23.20	Peak	288.00	150	Horizontal	Pass
4**	7386.000	42.59	-6.76	54.0	11.41	AV	288.00	150	Horizontal	Pass
5	7796.000	52.59	-6.45	74.0	21.41	Peak	72.00	150	Horizontal	Pass
5**	7796.000	43.35	-6.45	54.0	10.65	AV	72.00	150	Horizontal	Pass
6	17932.501	52.92	1.62	74.0	21.08	Peak	216.00	150	Horizontal	Pass
6**	17932.501	44.66	1.62	54.0	9.34	AV	216.00	150	Horizontal	Pass

Radiated Emissions Above 1GHz - IEEE 802.11n HT20

IEEE 802.11n HT20-CH01 2412MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2392.696	45.50	-19.29	74.0	28.50	Peak	360.00	150	Horizontal	Pass
1**	2392.696	35.94	-19.29	54.0	18.06	AV	360.00	150	Horizontal	Pass
2	4314.750	49.43	-12.35	74.0	24.57	Peak	288.00	150	Horizontal	Pass
2**	4314.750	39.61	-12.35	54.0	14.39	AV	288.00	150	Horizontal	Pass
3	4823.750	45.48	-10.86	74.0	28.52	Peak	72.00	150	Horizontal	Pass
3**	4823.750	38.19	-10.86	54.0	15.81	AV	72.00	150	Horizontal	Pass
4	7236.000	49.49	-6.74	74.0	24.51	Peak	144.00	150	Horizontal	Pass
4**	7236.000	42.34	-6.74	54.0	11.66	AV	144.00	150	Horizontal	Pass
5	7609.500	52.39	-6.64	74.0	21.61	Peak	252.00	150	Horizontal	Pass
5**	7609.500	42.93	-6.64	54.0	11.07	AV	252.00	150	Horizontal	Pass
6	17931.500	52.84	1.63	74.0	21.16	Peak	36.00	150	Horizontal	Pass
6**	17931.500	44.57	1.63	54.0	9.43	AV	36.00	150	Horizontal	Pass

IEEE 802.11n HT20-CH01 2412MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1746.573	51.64	-23.64	74.0	22.36	Peak	360.00	150	Vertical	Pass
1**	1746.573	48.05	-23.64	54.0	5.95	AV	360.00	150	Vertical	Pass
2	4772.750	49.86	-10.52	74.0	24.14	Peak	324.00	150	Vertical	Pass
2**	4772.750	39.41	-10.52	54.0	14.59	AV	324.00	150	Vertical	Pass
3	4823.750	46.05	-10.86	74.0	27.95	Peak	360.00	150	Vertical	Pass
3**	4823.750	38.45	-10.86	54.0	15.55	AV	360.00	150	Vertical	Pass
4	7236.000	48.93	-6.74	74.0	25.07	Peak	252.00	150	Vertical	Pass
4**	7236.000	43.44	-6.74	54.0	10.56	AV	252.00	150	Vertical	Pass
5	7656.000	52.76	-6.40	74.0	21.24	Peak	36.00	150	Vertical	Pass
5**	7656.000	43.88	-6.40	54.0	10.12	AV	36.00	150	Vertical	Pass
6	17938.999	52.30	1.53	74.0	21.70	Peak	288.00	150	Vertical	Pass
6**	17938.999	43.80	1.53	54.0	10.20	AV	288.00	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	2378.389	41.54	-19.33	74.0	32.46	Peak	108.00	150	Vertical	Pass
1**	2378.389	32.28	-19.33	54.0	21.72	AV	108.00	150	Vertical	Pass
2	4783.000	48.66	-10.50	74.0	25.34	Peak	180.00	150	Vertical	Pass
2**	4783.000	40.98	-10.50	54.0	13.02	AV	180.00	150	Vertical	Pass
3	4874.000	46.25	-10.43	74.0	27.75	Peak	36.00	150	Vertical	Pass
3**	4874.000	38.97	-10.43	54.0	15.03	AV	36.00	150	Vertical	Pass
4	7310.750	50.08	-6.90	74.0	23.92	Peak	144.00	150	Vertical	Pass
4**	7310.750	43.09	-6.90	54.0	10.91	AV	144.00	150	Vertical	Pass
5	7828.500	53.13	-6.14	74.0	20.87	Peak	360.00	150	Vertical	Pass
5**	7828.500	42.74	-6.14	54.0	11.26	AV	360.00	150	Vertical	Pass
6	17483.500	53.05	1.34	74.0	20.95	Peak	36.00	150	Vertical	Pass
6**	17483.500	43.50	1.34	54.0	10.50	AV	36.00	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	2387.694	44.18	-19.28	74.0	29.82	Peak	180.00	150	Horizontal	Pass
1**	2387.694	34.40	-19.28	54.0	19.60	AV	180.00	150	Horizontal	Pass
2	4788.250	49.35	-10.55	74.0	24.65	Peak	180.00	150	Horizontal	Pass
2**	4788.250	40.11	-10.55	54.0	13.89	AV	180.00	150	Horizontal	Pass
3	4874.000	46.13	-10.43	74.0	27.87	Peak	288.00	150	Horizontal	Pass
3**	4874.000	39.47	-10.43	54.0	14.53	AV	288.00	150	Horizontal	Pass
4	7310.750	49.44	-6.90	74.0	24.56	Peak	180.00	150	Horizontal	Pass
4**	7310.750	43.40	-6.90	54.0	10.60	AV	180.00	150	Horizontal	Pass
5	7875.250	53.00	-6.20	74.0	21.00	Peak	252.00	150	Horizontal	Pass
5**	7875.250	43.01	-6.20	54.0	10.99	AV	252.00	150	Horizontal	Pass
6	17932.501	53.64	1.62	74.0	20.36	Peak	72.00	150	Horizontal	Pass
6**	17932.501	44.07	1.62	54.0	9.93	AV	72.00	150	Horizontal	Pass

IEEE 802.11n HT20-CH11 2462MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2388.294	43.77	-19.28	74.0	30.23	Peak	144.00	150	Horizontal	Pass
1**	2388.294	34.32	-19.28	54.0	19.68	AV	144.00	150	Horizontal	Pass
2	4763.250	49.46	-10.56	74.0	24.54	Peak	360.00	150	Horizontal	Pass
2**	4763.250	39.42	-10.56	54.0	14.58	AV	360.00	150	Horizontal	Pass
3	4923.750	45.21	-11.13	74.0	28.79	Peak	324.00	150	Horizontal	Pass
3**	4923.750	39.09	-11.13	54.0	14.91	AV	324.00	150	Horizontal	Pass
4	7386.000	48.57	-6.76	74.0	25.43	Peak	252.00	150	Horizontal	Pass
4**	7386.000	42.21	-6.76	54.0	11.79	AV	252.00	150	Horizontal	Pass
5	7891.250	53.19	-6.06	74.0	20.81	Peak	360.00	150	Horizontal	Pass
5**	7891.250	42.97	-6.06	54.0	11.03	AV	360.00	150	Horizontal	Pass
6	17929.001	53.24	1.57	74.0	20.76	Peak	144.00	150	Horizontal	Pass
6**	17929.001	44.78	1.57	54.0	9.22	AV	144.00	150	Horizontal	Pass

IEEE 802.11n HT20-CH11 2462MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2241.220	40.58	-19.73	74.0	33.42	Peak	360.00	150	Vertical	Pass
1**	2241.220	30.98	-19.73	54.0	23.02	AV	360.00	150	Vertical	Pass
2	4279.500	48.98	-12.27	74.0	25.02	Peak	108.00	150	Vertical	Pass
2**	4279.500	39.39	-12.27	54.0	14.61	AV	108.00	150	Vertical	Pass
3	4923.750	45.67	-11.13	74.0	28.33	Peak	144.00	150	Vertical	Pass
3**	4923.750	38.14	-11.13	54.0	15.86	AV	144.00	150	Vertical	Pass
4	7386.000	49.16	-6.76	74.0	24.84	Peak	180.00	150	Vertical	Pass
4**	7386.000	43.19	-6.76	54.0	10.81	AV	180.00	150	Vertical	Pass
5	7899.500	52.93	-6.18	74.0	21.07	Peak	360.00	150	Vertical	Pass
5**	7899.500	43.03	-6.18	54.0	10.97	AV	360.00	150	Vertical	Pass
6	17922.001	52.92	1.03	74.0	21.08	Peak	216.00	150	Vertical	Pass
6**	17922.001	43.44	1.03	54.0	10.56	AV	216.00	150	Vertical	Pass

Radiated Emissions Above 1GHz - IEEE 802.11n HT40

IEEE 802.11n HT40-CH03 2422MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2201.601	41.19	-19.88	74.0	32.81	Peak	72.00	150	Vertical	Pass
1**	2201.601	31.51	-19.88	54.0	22.49	AV	72.00	150	Vertical	Pass
2	4335.000	49.02	-12.03	74.0	24.98	Peak	360.00	150	Vertical	Pass
2**	4335.000	39.74	-12.03	54.0	14.26	AV	360.00	150	Vertical	Pass
3	4843.750	45.79	-10.94	74.0	28.21	Peak	36.00	150	Vertical	Pass
3**	4843.750	37.77	-10.94	54.0	16.23	AV	36.00	150	Vertical	Pass
4	7266.000	48.48	-6.74	74.0	25.52	Peak	360.00	150	Vertical	Pass
4**	7266.000	42.68	-6.74	54.0	11.32	AV	360.00	150	Vertical	Pass
5	7967.750	52.38	-6.44	74.0	21.62	Peak	108.00	150	Vertical	Pass
5**	7967.750	43.26	-6.44	54.0	10.74	AV	108.00	150	Vertical	Pass
6	17941.000	53.19	1.48	74.0	20.81	Peak	108.00	150	Vertical	Pass
6**	17941.000	43.93	1.48	54.0	10.07	AV	108.00	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	2387.994	45.32	-19.28	74.0	28.68	Peak	216.00	150	Horizontal	Pass
1**	2387.994	34.50	-19.28	54.0	19.50	AV	216.00	150	Horizontal	Pass
2	4727.750	49.10	-10.77	74.0	24.90	Peak	144.00	150	Horizontal	Pass
2**	4727.750	40.01	-10.77	54.0	13.99	AV	144.00	150	Horizontal	Pass
3	4843.750	44.75	-10.94	74.0	29.25	Peak	72.00	150	Horizontal	Pass
3**	4843.750	38.75	-10.94	54.0	15.25	AV	72.00	150	Horizontal	Pass
4	7266.000	49.20	-6.74	74.0	24.80	Peak	216.00	150	Horizontal	Pass
4**	7266.000	42.34	-6.74	54.0	11.66	AV	216.00	150	Horizontal	Pass
5	7748.750	54.61	-6.35	74.0	19.39	Peak	216.00	150	Horizontal	Pass
5**	7748.750	42.63	-6.35	54.0	11.37	AV	216.00	150	Horizontal	Pass
6	17931.999	52.98	1.63	74.0	21.02	Peak	252.00	150	Horizontal	Pass
6**	17931.999	44.17	1.63	54.0	9.83	AV	252.00	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	2387.393	44.75	-19.28	74.0	29.25	Peak	252.00	150	Horizontal	Pass
1**	2387.393	32.25	-19.28	54.0	21.75	AV	252.00	150	Horizontal	Pass
2	4768.250	49.92	-10.55	74.0	24.08	Peak	252.00	150	Horizontal	Pass
2**	4768.250	40.40	-10.55	54.0	13.60	AV	252.00	150	Horizontal	Pass
3	4874.000	46.71	-10.43	74.0	27.29	Peak	360.00	150	Horizontal	Pass
3**	4874.000	40.15	-10.43	54.0	13.85	AV	360.00	150	Horizontal	Pass
4	7310.750	48.96	-6.90	74.0	25.04	Peak	324.00	150	Horizontal	Pass
4**	7310.750	43.46	-6.90	54.0	10.54	AV	324.00	150	Horizontal	Pass
5	7915.250	52.97	-6.30	74.0	21.03	Peak	180.00	150	Horizontal	Pass
5**	7915.250	43.77	-6.30	54.0	10.23	AV	180.00	150	Horizontal	Pass
6	17935.000	52.76	1.60	74.0	21.24	Peak	252.00	150	Horizontal	Pass
6**	17935.000	44.69	1.60	54.0	9.31	AV	252.00	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	2214.307	40.65	-19.80	74.0	33.35	Peak	360.00	150	Vertical	Pass
1**	2214.307	30.61	-19.80	54.0	23.39	AV	360.00	150	Vertical	Pass
2	4790.000	48.51	-10.59	74.0	25.49	Peak	180.00	150	Vertical	Pass
2**	4790.000	39.97	-10.59	54.0	14.03	AV	180.00	150	Vertical	Pass
3	4874.000	45.90	-10.43	74.0	28.10	Peak	180.00	150	Vertical	Pass
3**	4874.000	39.81	-10.43	54.0	14.19	AV	180.00	150	Vertical	Pass
4	7310.750	50.18	-6.90	74.0	23.82	Peak	360.00	150	Vertical	Pass
4**	7310.750	43.46	-6.90	54.0	10.54	AV	360.00	150	Vertical	Pass
5	7876.500	52.63	-6.15	74.0	21.37	Peak	252.00	150	Vertical	Pass
5**	7876.500	43.43	-6.15	54.0	10.57	AV	252.00	150	Vertical	Pass
6	17935.999	52.67	1.58	74.0	21.33	Peak	108.00	150	Vertical	Pass
6**	17935.999	44.72	1.58	54.0	9.28	AV	108.00	150	Vertical	Pass

IEEE 802.11n HT40-CH09 2452MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2223.712	40.81	-19.78	74.0	33.19	Peak	360.00	150	Vertical	Pass
1**	2223.712	31.62	-19.78	54.0	22.38	AV	360.00	150	Vertical	Pass
2	4859.750	50.09	-10.66	74.0	23.91	Peak	252.00	150	Vertical	Pass
2**	4859.750	40.67	-10.66	54.0	13.33	AV	252.00	150	Vertical	Pass
3	4903.750	45.45	-11.24	74.0	28.55	Peak	252.00	150	Vertical	Pass
3**	4903.750	39.81	-11.24	54.0	14.19	AV	252.00	150	Vertical	Pass
4	7355.750	48.34	-7.01	74.0	25.66	Peak	216.00	150	Vertical	Pass
4**	7355.750	43.00	-7.01	54.0	11.00	AV	216.00	150	Vertical	Pass
5	7650.500	53.03	-6.47	74.0	20.97	Peak	108.00	150	Vertical	Pass
5**	7650.500	43.78	-6.47	54.0	10.22	AV	108.00	150	Vertical	Pass
6	17927.000	53.15	1.41	74.0	20.85	Peak	72.00	150	Vertical	Pass
6**	17927.000	44.19	1.41	54.0	9.81	AV	72.00	150	Vertical	Pass

IEEE 802.11n HT40-CH09 2452MHz										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2388.194	44.52	-19.28	74.0	29.48	Peak	252.00	150	Horizontal	Pass
1**	2388.194	35.08	-19.28	54.0	18.92	AV	252.00	150	Horizontal	Pass
2	4324.000	50.03	-12.15	74.0	23.97	Peak	360.00	150	Horizontal	Pass
2**	4324.000	39.73	-12.15	54.0	14.27	AV	360.00	150	Horizontal	Pass
3	4903.750	46.27	-11.24	74.0	27.73	Peak	144.00	150	Horizontal	Pass
3**	4903.750	38.59	-11.24	54.0	15.41	AV	144.00	150	Horizontal	Pass
4	7355.750	48.90	-7.01	74.0	25.10	Peak	72.00	150	Horizontal	Pass
4**	7355.750	42.60	-7.01	54.0	11.40	AV	72.00	150	Horizontal	Pass
5	7728.000	53.05	-6.31	74.0	20.95	Peak	360.00	150	Horizontal	Pass
5**	7728.000	42.96	-6.31	54.0	11.04	AV	360.00	150	Horizontal	Pass
6	17930.000	53.90	1.65	74.0	20.10	Peak	252.00	150	Horizontal	Pass
6**	17930.000	44.22	1.65	54.0	9.78	AV	252.00	150	Horizontal	Pass

Note:

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

Radiated Band Edge - IEEE 802.11b

IEEE 802.11b-CH01 2412MHz-Low Band Edge										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2387.770	50.53	-19.55	74.0	23.47	Peak	194.40	150	Horizontal	Pass
1**	2387.770	36.04	-19.55	54.0	17.96	AV	194.40	150	Horizontal	Pass
2	2389.970	48.98	-19.56	74.0	25.02	Peak	196.80	150	Horizontal	Pass
2**	2389.970	36.18	-19.56	54.0	17.82	AV	196.80	150	Horizontal	Pass
3	2399.980	52.71	-19.64	74.0	21.29	Peak	78.80	150	Horizontal	Pass
3**	2399.980	38.29	-19.64	54.0	15.71	AV	78.80	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	2354.055	45.11	-19.68	74.0	28.89	Peak	241.10	150	Vertical	Pass
1**	2354.055	30.05	-19.68	54.0	23.95	AV	241.10	150	Vertical	Pass
2	2389.970	41.60	-19.56	74.0	32.40	Peak	203.30	150	Vertical	Pass
2**	2389.970	31.43	-19.56	54.0	22.57	AV	203.30	150	Vertical	Pass
3	2399.980	49.92	-19.64	74.0	24.08	Peak	17.90	150	Vertical	Pass
3**	2399.980	33.72	-19.64	54.0	20.28	AV	17.90	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	2483.497	41.58	-19.50	74.0	32.42	Peak	95.60	150	Horizontal	Pass
1**	2483.497	32.96	-19.50	54.0	21.04	AV	95.60	150	Horizontal	Pass
2	2488.065	51.61	-19.50	74.0	22.39	Peak	20.10	150	Horizontal	Pass
2**	2488.065	32.31	-19.50	54.0	21.69	AV	20.10	150	Horizontal	Pass
3	2490.095	49.85	-19.51	74.0	24.15	Peak	76.40	150	Horizontal	Pass
3**	2490.095	32.00	-19.51	54.0	22.00	AV	76.40	150	Horizontal	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	2483.497	43.11	-19.50	74.0	30.89	Peak	198.50	150	Vertical	Pass
1**	2483.497	34.13	-19.50	54.0	19.87	AV	198.50	150	Vertical	Pass
2	2485.423	51.96	-19.50	74.0	22.04	Peak	142.30	150	Vertical	Pass
2**	2485.423	32.52	-19.50	54.0	21.48	AV	142.30	150	Vertical	Pass
3	2496.045	50.33	-19.48	74.0	23.67	Peak	206.50	150	Vertical	Pass
3**	2496.045	34.51	-19.48	54.0	19.49	AV	206.50	150	Vertical	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	2388.210	43.30	-19.55	74.0	30.70	Peak	311.70	150	Vertical	Pass
1**	2388.210	31.35	-19.55	54.0	22.65	AV	311.70	150	Vertical	Pass
2	2389.970	40.59	-19.56	74.0	33.41	Peak	359.20	150	Vertical	Pass
2**	2389.970	30.80	-19.56	54.0	23.20	AV	359.20	150	Vertical	Pass
3	2399.980	45.90	-19.64	74.0	28.10	Peak	359.40	150	Vertical	Pass
3**	2399.980	32.14	-19.64	54.0	21.86	AV	359.40	150	Vertical	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	2387.990	49.30	-19.55	74.0	24.70	Peak	196.10	150	Horizontal	Pass
1**	2387.990	35.98	-19.55	54.0	18.02	AV	196.10	150	Horizontal	Pass
2	2389.970	48.20	-19.56	74.0	25.80	Peak	198.50	150	Horizontal	Pass
2**	2389.970	35.00	-19.56	54.0	19.00	AV	198.50	150	Horizontal	Pass
3	2399.980	48.18	-19.64	74.0	25.82	Peak	196.10	150	Horizontal	Pass
3**	2399.980	36.94	-19.64	54.0	17.06	AV	196.10	150	Horizontal	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	2483.497	48.62	-19.50	74.0	25.38	Peak	73.90	150	Horizontal	Pass
1**	2483.497	35.33	-19.50	54.0	18.67	AV	73.90	150	Horizontal	Pass
2	2484.408	48.77	-19.50	74.0	25.23	Peak	82.00	150	Horizontal	Pass
2**	2484.408	33.35	-19.50	54.0	20.65	AV	82.00	150	Horizontal	Pass
3	2491.128	42.15	-19.50	74.0	31.85	Peak	263.50	150	Horizontal	Pass
3**	2491.128	30.77	-19.50	54.0	23.23	AV	263.50	150	Horizontal	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	2483.497	48.34	-19.50	74.0	25.66	Peak	227.40	150	Vertical	Pass
1**	2483.497	35.36	-19.50	54.0	18.64	AV	227.40	150	Vertical	Pass
2	2484.425	49.24	-19.50	74.0	24.76	Peak	222.60	150	Vertical	Pass
2**	2484.425	34.24	-19.50	54.0	19.76	AV	222.60	150	Vertical	Pass
3	2490.253	44.51	-19.51	74.0	29.49	Peak	227.40	150	Vertical	Pass
3**	2490.253	31.26	-19.51	54.0	22.74	AV	227.40	150	Vertical	Pass

Radiated Band Edge - IEEE 802.11n HT20

IEEE 802.11n HT20 -CH01 2412MHz-Low Band Edge										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2388.815	43.67	-19.55	74.0	30.33	Peak	301.30	150	Vertical	Pass
1**	2388.815	30.85	-19.55	54.0	23.15	AV	301.30	150	Vertical	Pass
2	2389.970	41.42	-19.56	74.0	32.58	Peak	301.30	150	Vertical	Pass
2**	2389.970	30.82	-19.56	54.0	23.18	AV	301.30	150	Vertical	Pass
3	2399.980	43.83	-19.64	74.0	30.17	Peak	225.80	150	Vertical	Pass
3**	2399.980	32.30	-19.64	54.0	21.70	AV	225.80	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	2388.100	50.07	-19.55	74.0	23.93	Peak	200.90	150	Horizontal	Pass
1**	2388.100	36.41	-19.55	54.0	17.59	AV	200.90	150	Horizontal	Pass
2	2389.970	47.92	-19.56	74.0	26.08	Peak	192.90	150	Horizontal	Pass
2**	2389.970	35.39	-19.56	54.0	18.61	AV	192.90	150	Horizontal	Pass
3	2399.980	48.40	-19.64	74.0	25.60	Peak	192.90	150	Horizontal	Pass
3**	2399.980	37.64	-19.64	54.0	16.36	AV	192.90	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	2483.497	50.57	-19.50	74.0	23.43	Peak	266.70	150	Horizontal	Pass
1**	2483.497	38.44	-19.50	54.0	15.56	AV	266.70	150	Horizontal	Pass
2	2485.072	53.62	-19.50	74.0	20.38	Peak	22.50	150	Horizontal	Pass
2**	2485.072	35.00	-19.50	54.0	19.00	AV	22.50	150	Horizontal	Pass
3	2496.220	42.52	-19.48	74.0	31.48	Peak	98.00	150	Horizontal	Pass
3**	2496.220	31.04	-19.48	54.0	22.96	AV	98.00	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	2483.497	54.25	-19.50	74.0	19.75	Peak	244.30	150	Vertical	Pass
1**	2483.497	36.79	-19.50	54.0	17.21	AV	244.30	150	Vertical	Pass
2	2484.337	54.47	-19.50	74.0	19.53	Peak	198.50	150	Vertical	Pass
2**	2484.337	36.50	-19.50	54.0	17.50	AV	198.50	150	Vertical	Pass
3	2496.692	42.72	-19.48	74.0	31.28	Peak	112.60	150	Vertical	Pass
3**	2496.692	31.74	-19.48	54.0	22.26	AV	112.60	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	2388.155	42.97	-19.55	74.0	31.03	Peak	287.90	150	Vertical	Pass
1**	2388.155	31.39	-19.55	54.0	22.61	AV	287.90	150	Vertical	Pass
2	2389.970	40.89	-19.56	74.0	33.11	Peak	301.30	150	Vertical	Pass
2**	2389.970	30.95	-19.56	54.0	23.05	AV	301.30	150	Vertical	Pass
3	2399.980	42.62	-19.64	74.0	31.38	Peak	4.80	150	Vertical	Pass
3**	2399.980	31.23	-19.64	54.0	22.77	AV	4.80	150	Vertical	Pass

IEEE 802.11n HT40 -CH03 2422MHz-Low Band Edge										
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2388.155	49.40	-19.55	74.0	24.60	Peak	200.90	150	Horizontal	Pass
1**	2388.155	35.66	-19.55	54.0	18.34	AV	200.90	150	Horizontal	Pass
2	2389.970	47.90	-19.56	74.0	26.10	Peak	198.50	150	Horizontal	Pass
2**	2389.970	34.73	-19.56	54.0	19.27	AV	198.50	150	Horizontal	Pass
3	2399.980	49.33	-19.64	74.0	24.67	Peak	198.50	150	Horizontal	Pass
3**	2399.980	36.98	-19.64	54.0	17.02	AV	198.50	150	Horizontal	Pass

IEEE 802.11n HT40 -CH09 2452MHz -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	2483.497	52.16	-19.50	74.0	21.84	Peak	89.50	150	Horizontal	Pass
1**	2483.497	37.54	-19.50	54.0	16.46	AV	89.50	150	Horizontal	Pass
2	2486.875	55.64	-19.50	74.0	18.36	Peak	25.20	150	Horizontal	Pass
2**	2486.875	35.92	-19.50	54.0	18.08	AV	25.20	150	Horizontal	Pass
3	2490.988	49.73	-19.50	74.0	24.27	Peak	22.50	150	Horizontal	Pass
3**	2490.988	34.19	-19.50	54.0	19.81	AV	22.50	150	Horizontal	Pass

IEEE 802.11n HT40 -CH09 2452MHz -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	2483.497	50.76	-19.50	74.0	23.24	Peak	200.90	150	Vertical	Pass
1**	2483.497	38.26	-19.50	54.0	15.74	AV	200.90	150	Vertical	Pass
2	2485.580	54.97	-19.50	74.0	19.03	Peak	200.90	150	Vertical	Pass
2**	2485.580	38.61	-19.50	54.0	15.39	AV	200.90	150	Vertical	Pass
3	2492.947	52.12	-19.49	74.0	21.88	Peak	227.40	150	Vertical	Pass
3**	2492.947	34.83	-19.49	54.0	19.17	AV	227.40	150	Vertical	Pass

Note:

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

11. AC POWER LINE CONDUCTED EMISSIONS

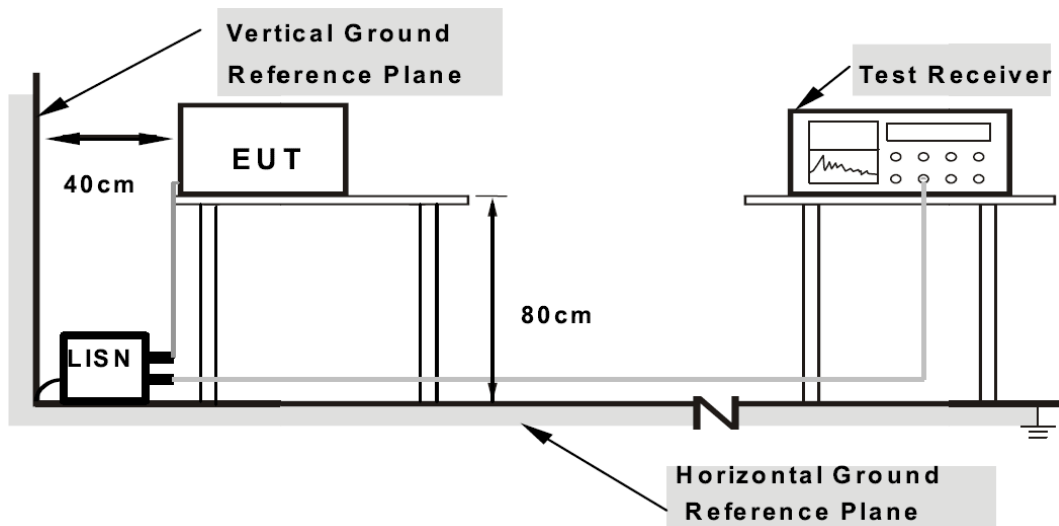
11.1. Limit

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

Note:

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

11.2. Test Setup



11.3. Spectrum Analyzer Setting

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

11.4. Test Procedure

- The EUT was placed on a non-metallic table, 80cm above the ground plane.
- The EUT Power connected to the power mains through a line impedance stabilization network.
- Provides a 50ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs).
- Set the EUT transmit continuously with maximum output power.
- Spectrum analyzer setting parameters in accordance with section 11.3.
- 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 on Conducted Emission Test.
- 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 Conditions

EUT:		M/N:	
Test Voltage:			
Temperature:		Humidity:	
Atmosphere Pressure:			

11.6. Test Result

N/A



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 whip antenna (Connector: SMA-JW), 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.

CTSL2610730335E Annex A. EUT External Photos

CTSL2610730335E Annex B. EUT Internal Photos

CTSL2610730335E Annex C. Test Setup Photos

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

