FCC Test Report

Product Name	：	Active Mobile Gateway-with Comm
Trade Name	：	Omnitracs
Model No.	：	CV90-JE103
FCC ID.	：	2AE8ZAMGC

Applicant	：	Omnitracs, LLC
Address	：	9276 Scranton Road, Suite 200 San Diego California 92121 USA

Date of Receipt	：	Mar. 15, 2019
Issued Date	：	Apr. 25, 2019
Report No.	：	1930232R-RFUSP02V00-A
Report Version	：	V1.0

Test Report Certification

Issued Date : Apr. 25, 2019
Report No. : 1930232R-RFUSP02V00-A

Product Name	:	Active Mobile Gateway-with Comm
Applicant	:	Omnitracs, LLC
Address	:	9276 Scranton Road, Suite 200 San Diego California 92121 USA
Manufacturer	:	PCI Private Limited
Model No.	:	CV90-JE103
FCC ID.	:	2AE8ZAMGC
EUT Test Voltage	:	DC 12V
Testing Voltage	:	DC 12V
Trade Name	:	Omnitracs
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2018 ANSI C63.10: 2013
Laboratory Name	:	Hsin Chu Laboratory
Address	:	No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 310, Taiwan, R.O.C. TEL: +886-3-582-8001 / FAX: +886-3-582-8958
Test Result	:	Complied

Documented By : Fonbo Fang

(Fonbo Fang / Engineering Adm. Specialist)

Tested By : Scott Chang

(Scott Chang / Engineer)

Approved By : Louis Hsu

(Louis Hsu / Deputy Manager)

Revision History

Report No.	Version	Description	Issued Date
1930232R-RFUSP02V00-A	V1.0	Initial issue of report	Apr. 25, 2019

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1. General Information

1.1. EUT Description

Product Name	Active Mobile Gateway-with Comm	
Trade Name	Omnitracs	
Model No.	CV90-JE103	
Frequency Range/ Channel Number	IEEE 802.11b/g IEEE 802.11n (20MHz)	2412~2462MHz / 11 Channels
	IEEE 802.11n (40MHz)	2422~2452MHz / 7 Channels
Type of Modulation	IEEE 802.11b	Direct Sequence Spread Spectrum
	IEEE 802.11g/n	Orthogonal Frequency Division Multiplexing
Data Speed	IEEE 802.11b	1, 2, 5.5, 11Mbps
	IEEE 802.11g	6, 12, 18, 24, 36, 48, 54Mbps
	IEEE 802.11n	Support a subset of the combination of GI, MCS 0~MCS 7 and bandwidth defined in 802.11n

Antenna Information	
Antenna Type	inverted F antenna
Effective Antenna Gain	2.87 dBi

IEEE 802.11n

MCS Index	Modulation	R	N_{BPSCS}	N_{CBPS}		N_{DBPS}		Data Rate(Mb/s)			
				20MHz	40MHz	20MHz	40MHz	800ns GI		400ns GI	
								20MHz	40MHz	20MHz	40MHz
0	BPSK	1/2	1	52	108	26	54	6.5	13.5	7.2	15.0
1	QPSK	1/2	2	104	216	52	108	13.0	27.0	14.4	30.0
2	QPSK	3/4	2	104	216	78	162	19.5	40.5	21.7	45.0
3	16-QAM	1/2	4	208	432	104	216	26.0	54.0	28.9	60.0
4	16-QAM	3/4	4	208	432	156	324	39.0	81.0	43.3	90.0
5	64-QAM	2/3	6	312	648	208	432	52.0	108.0	57.8	120.0
6	64-QAM	3/4	6	312	648	234	486	58.5	121.5	65.0	135.0
7	64-QAM	5/6	6	312	648	260	540	65.0	135.0	72.2	150.0
Note 1: Support of 400ns GI is optional on transmit and receive.											

Table 1 – MCS parameters for TX Antenna number = 1

Symbol	Explanation
R	Code rate
N_{BPSC}	Number of coded bits per single carrier
N_{CBPS}	Number of coded bits per symbol
N_{DBPS}	Number of data bits per symbol
GI	guard interval

IEEE 802.11b/g, IEEE 802.11n (20MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
001	2412 MHz	002	2417 MHz	003	2422 MHz	004	2427 MHz
005	2432 MHz	006	2437 MHz	007	2442 MHz	008	2447 MHz
009	2452 MHz	010	2457 MHz	011	2462 MHz	-	-

IEEE 802.11n (40MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
003	2422 MHz	004	2427 MHz	005	2432 MHz	006	2437 MHz
007	2442 MHz	008	2447 MHz	009	2452 MHz	-	-

Note:

1. This device is a Active Mobile Gateway-with Comm including 2.4GHz b/g/n, 5GHz a/n/ac, BT2.0/BT 4.0 and WWAN 3G/4G transmitting and receiving functions.
2. This device contain module that FCC ID: 2AE8ZIVG02.
3. These test results on a sample of the device are for the purpose of demonstrating Compliance with Part 15 Subpart C Paragraph 15.247.
4. Regards to the frequency band operation; the lowest, middle and highest frequency of channel were selected to perform the test, and then shown on this report.
5. The laptop was used to configure the EUT to continuously transmit at a specified output power in all channels with different modes and modulations schemes, testing software power setting as below.

Mode	Power setting parameter		
	Low Channel	Middle Channel	High Channel
802.11b	20.5	18.0	18.0
802.11g	18.5	27.0	18.5
802.11n (20MHz)	19.5	27.0	19.5
802.11n (40MHz)	16.0	20.0	15.0

1.2. Test Mode

DEKRA has verified the construction and function in typical operation. The preliminary tests were performed in different data rate, and to find the worst condition, which was shown in this test report. The following table is the final test mode.

Test Mode	Mode 1: Transmit Mode

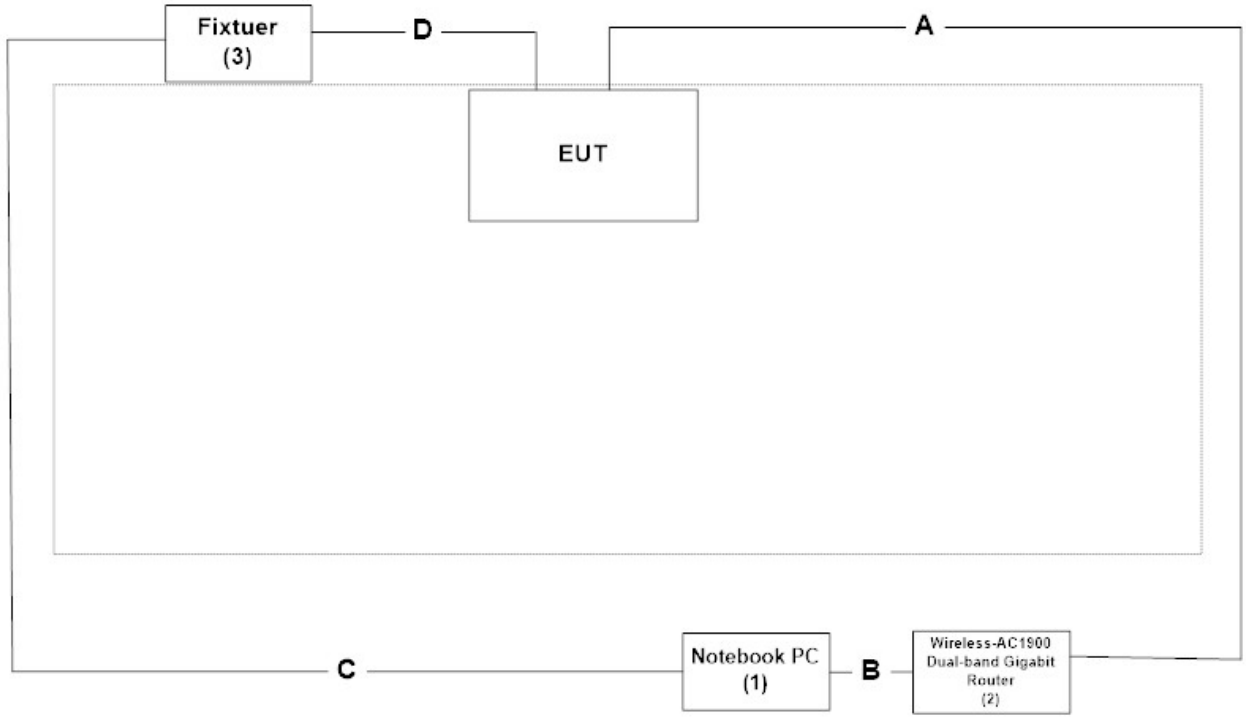
Test Items	Modulation	Channel	Antenna	Result
Conducted Emission	11n(40MHz)	6	0	N/A
Maximum peak conducted output power	11b/g	1/6/11	0	Complies
	11n(20MHz)	1/6/11	0	Complies
	11n(40MHz)	3/6/9	0	Complies
Radiated Emission	11b/g	1/6/11	0	Complies
	11n(20MHz)	1/6/11	0	Complies
	11n(40MHz)	3/6/9	0	Complies
RF antenna conducted test	11b/g	1/6/11	0	Complies
	11n(20MHz)	1/6/11	0	Complies
	11n(40MHz)	3/6/9	0	Complies
Radiated Emission Band Edge	11b/g	1/6/11	0	Complies
	11n(20MHz)	1/6/11	0	Complies
	11n(40MHz)	3/6/9	0	Complies
DTS Bandwidth	11b/g	1/6/11	0	Complies
	11n(20MHz)	1/6/11	0	Complies
	11n(40MHz)	3/6/9	0	Complies
Occupied Bandwidth	11b/g	1/6/11	0	Complies
	11n(20MHz)	1/6/11	0	Complies
	11n(40MHz)	3/6/9	0	Complies
Power Density	11b/g	1/6/11	0	Complies
	11n(20MHz)	1/6/11	0	Complies
	11n(40MHz)	3/6/9	0	Complies

1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1	Notebook PC	HP Compaq	NX6320FF	CNU7020 BXT	DoC	Non-Shielded, 1.8m
2	Wireless-AC1900 Dual-band Gigabit Router	ASUS	RT-AC68R	E31BG000 017	DoC	Non-Shielded, 1.8m
3	Fixtuer	PCI	--	--	DoC	--

1.4. Configuration of tested System

Connection Diagram


Signal Cable Type		Signal cable Description
A	RJ45 Cable	Non-Shielded, 10m
B	RJ45 Cable	Non-Shielded, 1m
C	USB	Shielded, 10m
D	Signal	Non-Shielded, 0.15

1.5. EUT Exercise Software

1	Set the EUT as shown in Section 1.4.
2	Execute the "Tera Term" and keyin command on the laptop.
3	Execute QCA software.
4	Configure test mode, test channel and data rate.
5	EUT start transmitting or receiving continuously.
6	Verify that the device is working properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual	Test Site
Temperature (°C)	FCC PART 15 C 15.207 Conducted Emission	15 - 35	20	--
Humidity (%RH)		25 - 75	50	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 Maximum peak conducted output power	15 - 35	25	3
Humidity (%RH)		25 - 75	45	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 Radiated Emission	15 - 35	25	2
Humidity (%RH)		25 - 75	65	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 RF antenna conducted test	15 - 35	25	3
Humidity (%RH)		25 - 75	45	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 Radiated Emission Band Edge	15 - 35	25	2
Humidity (%RH)		25 - 75	48	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 Occupied Bandwidth & DTS Bandwidth	15 - 35	25	3
Humidity (%RH)		25 - 75	45	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 Power Density	15 - 35	25	3
Humidity (%RH)		25 - 75	45	
Barometric pressure (mbar)		860 - 1060	950-1000	

Note: Test Site information refers to Laboratory Information.

Laboratory Information

USA	**:**	**FCC Registration Number: TW3024**
Canada		**IC Registration Number: 22397-1 / 22397-2 / 22397-3**

The related certificate for our laboratories about the test site and management system can be downloaded from DEKRA Testing and Certification Co., Ltd. Web Site:
http://www.dekra.com.tw/english/about/certificates.aspx?bval=5
The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site: http://www.dekra.com.tw/index_en.aspx

If you have any comments, please don't hesitate to contact us. Our test sites as below:

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1.7. List of Test Equipment

Maximum peak conducted output power / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
High Speed Peak Power Meter Dual Input	Anritsu	ML2496A	1602004	2018/12/17	2019/12/16
Pulse Power Sensor	Anritsu	MA2411B	1531043	2018/12/17	2019/12/16
Pulse Power Sensor	Anritsu	MA2411B	1531044	2018/12/17	2019/12/16
Power Meter	Keysight	8990B	MY51000248	2018/06/07	2019/06/06
Power Sensor	Keysight	N1923A	MY57240005	2018/06/07	2019/06/06

Radiated Emission / CB2H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2018/11/05	2019/11/04
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/12/21	2019/12/20
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2019/03/15	2020/03/14
Bilog Antenna	Teseq	CBL6112D	23191	2018/06/26	2019/06/25
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2018/06/01	2019/05/31
Horn Antenna	Schwarzbeck	BBHA 9170	202	2019/01/16	2020/01/15
Pre-Amplifier	Dekra	AP-025C	201801236	2019/02/18	2020/02/17
Pre-Amplifier	EMCI	EMC11830I	980366	2018/12/21	2019/12/20
Pre-Amplifier	Dekra	AP-400C	201801231	2018/12/05	2019/12/04
Horn Antenna	Schwarzbeck	BBHA 9120D	01656	2018/10/17	2019/10/16
Band Reject Filter	Micro-Tronics	BRM50702	G192	2019/03/27	2020/03/26
Signal Analyzer	R&S	FSV40	101435	2018/07/19	2019/07/18
Coaxial Cable	Huber+Suhner	SF104_SF104_ SF104_SF104(16.0m)	CB2-H	2018/08/21	2019/08/20

RF antenna conducted test / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2018/06/26	2019/06/25
Spectrum Analyzer	Keysight	N9010B	MY57110159	2018/05/25	2019/05/24
Spectrum Analyzer	Agilent	N9010A	US47140172	2018/07/18	2019/07/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/12/21	2019/12/20

Radiated Emission Band Edge / CB2-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2018/11/05	2019/11/04
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/12/21	2019/12/20
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2019/03/15	2020/03/14
Bilog Antenna	Teseq	CBL6112D	23191	2018/06/26	2019/06/25
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2018/06/01	2019/05/31
Horn Antenna	Schwarzbeck	BBHA 9170	202	2019/01/16	2020/01/15
Pre-Amplifier	Dekra	AP-025C	201801236	2019/02/18	2020/02/17
Pre-Amplifier	EMCI	EMC11830I	980366	2018/12/21	2019/12/20
Pre-Amplifier	Dekra	AP-400C	201801231	2018/12/05	2019/12/04
Horn Antenna	Schwarzbeck	BBHA 9120D	01656	2018/10/17	2019/10/16
Band Reject Filter	Micro-Tronics	BRM50702	G192	2019/03/27	2020/03/26
Signal Analyzer	R&S	FSV40	101435	2018/07/19	2019/07/18
Coaxial Cable	Huber+Suhner	SF104_SF104_ SF104_SF104(16.0m)	CB2-H	2018/08/21	2019/08/20

Occupied Bandwidth / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2018/06/26	2019/06/25
Spectrum Analyzer	Keysight	N9010B	MY57110159	2018/05/25	2019/05/24
Spectrum Analyzer	Agilent	N9010A	US47140172	2018/07/18	2019/07/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/12/21	2019/12/20

DTS Bandwidth / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2018/06/26	2019/06/25
Spectrum Analyzer	Keysight	N9010B	MY57110159	2018/05/25	2019/05/24
Spectrum Analyzer	Agilent	N9010A	US47140172	2018/07/18	2019/07/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/12/21	2019/12/20

Power Density / SR10-H

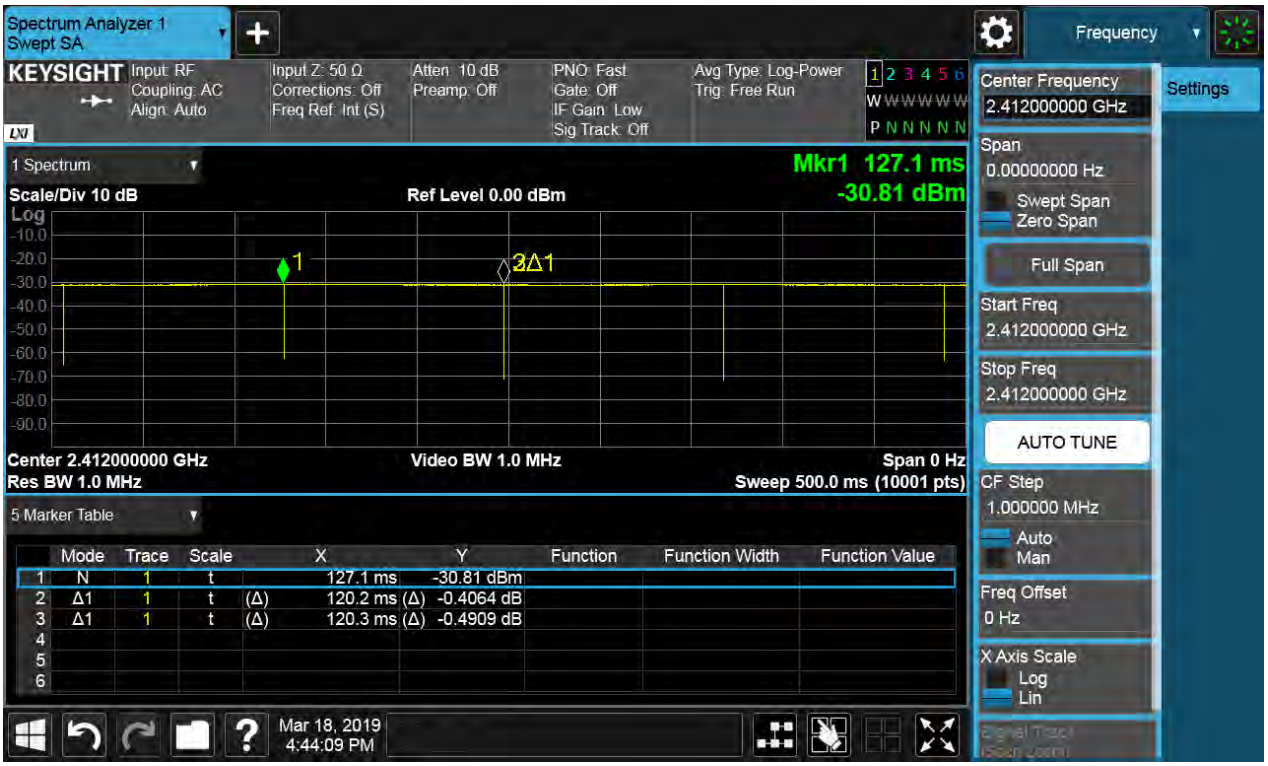
Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2018/06/26	2019/06/25
Spectrum Analyzer	Keysight	N9010B	MY57110159	2018/05/25	2019/05/24
Spectrum Analyzer	Agilent	N9010A	US47140172	2018/07/18	2019/07/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/12/21	2019/12/20

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

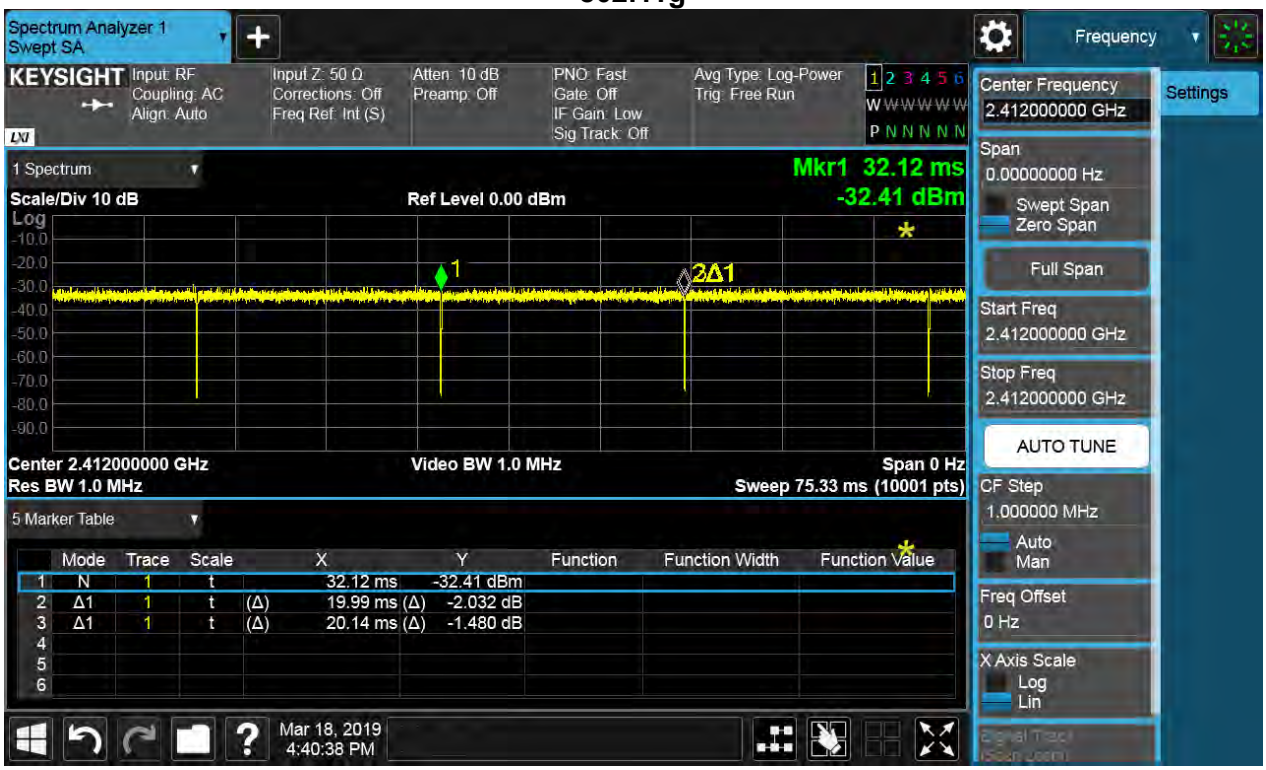
1.8. Duty Cycle

2.4GHz mode					
Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor(dB) linear voltage	1/T Minimum VBW (kHz)
b	120.200	120.300	99.92%	0.007223	0.010
g	19.990	20.140	99.26%	0.064933	0.010
HT20	18.500	18.610	99.41%	0.051493	0.010
HT40	8.858	9.050	97.88%	0.186258	0.113

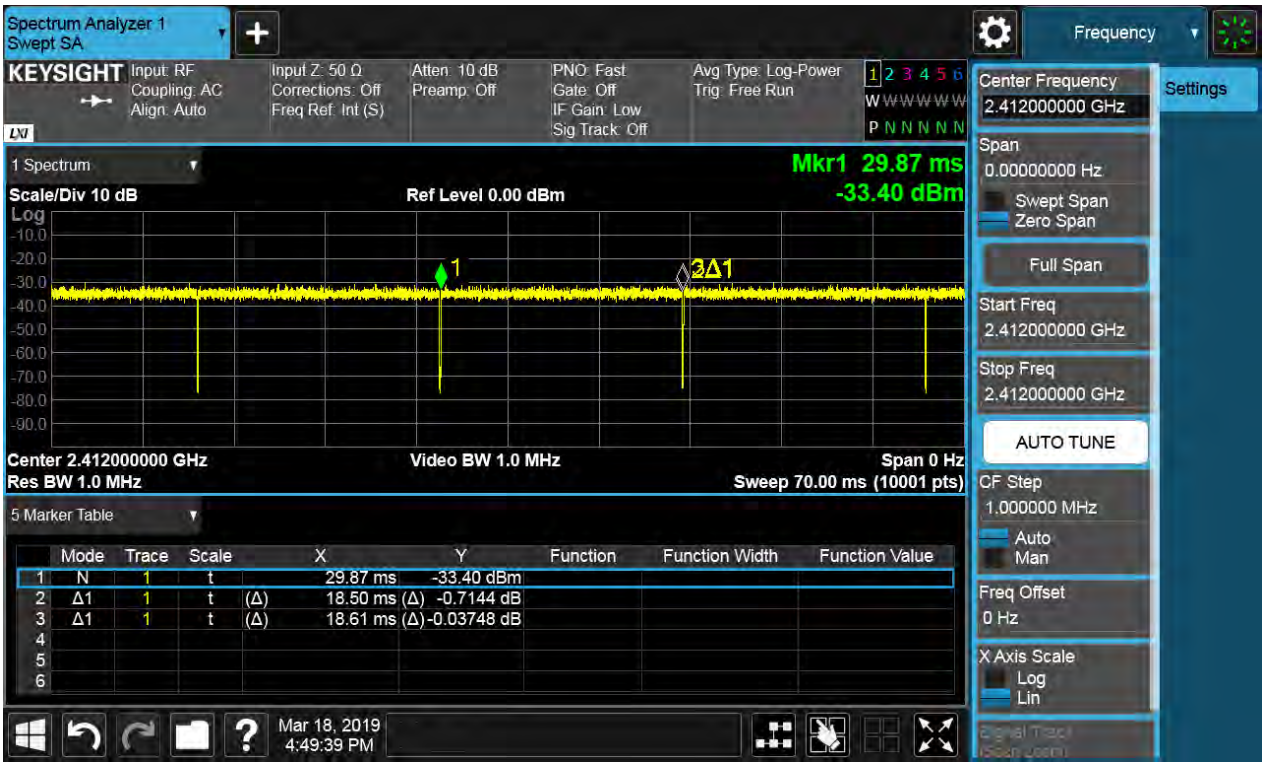
802.11b



802.11g



802.11n (20M)



802.11n (40M)


Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: AC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
Atten: 10 dB
Preamp: Off
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Log-Power
Trig: Free Run
Frequency
Settings
1 Spectrum
Mkr1 19.88 ms
-38.64 dBm
Scale/Div 10 dB
Ref Level 0.00 dBm
Log
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
Center 2.422000000 GHz
Res BW 1.0 MHz
Video BW 1.0 MHz
Span 0 Hz
Sweep 50.00 ms (10001 pts)
5 Marker Table
Mode Trace Scale X Y Function Function Width Function Value
1 N 1 t 19.88 ms -38.64 dBm
2 Δ1 1 t (Δ) 8.858 ms (Δ) -4.423 dB
3 Δ1 1 t (Δ) 9.050 ms (Δ) -3.698 dB
4
5
6
Mar 18, 2019
4:59:43 PM
Center Frequency
2.422000000 GHz
Span
0.00000000 Hz
Swept Span
Zero Span
Full Span
Start Freq
2.422000000 GHz
Stop Freq
2.422000000 GHz
AUTO TUNE
CF Step
1.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin

1.9. Uncertainty

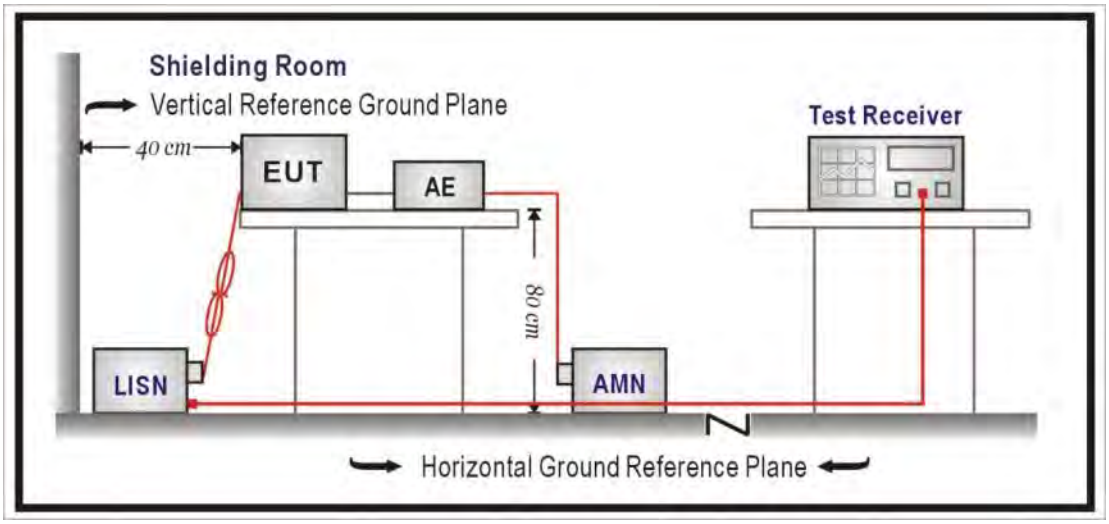
Test item	Uncertainty
Maximum peak conducted output power	± 1.27 dB
Radiated Emission	30MHz～1GHz as ± 3.43 dB 1GHz～26.5GHz as ± 3.65 dB
RF antenna conducted test	± 1.27dB
Radiated Emission Band Edge	± 3.9 dB
DTS Bandwidth	± 50 Hz
Occupied Bandwidth	± 50 Hz
Power Density	± 1.27 dB

2. Aetenna Requirements

According to FCC 47CFR 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator 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.

3. Conducted Emission

3.1. Test Setup



3.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 Limits (dBuV)		
Frequency MHz	QP	AV
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

3.3. Test Procedure

The EUT was setup according to ANSI C63.4: 2013 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs.)
Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

3.4. Test Specification

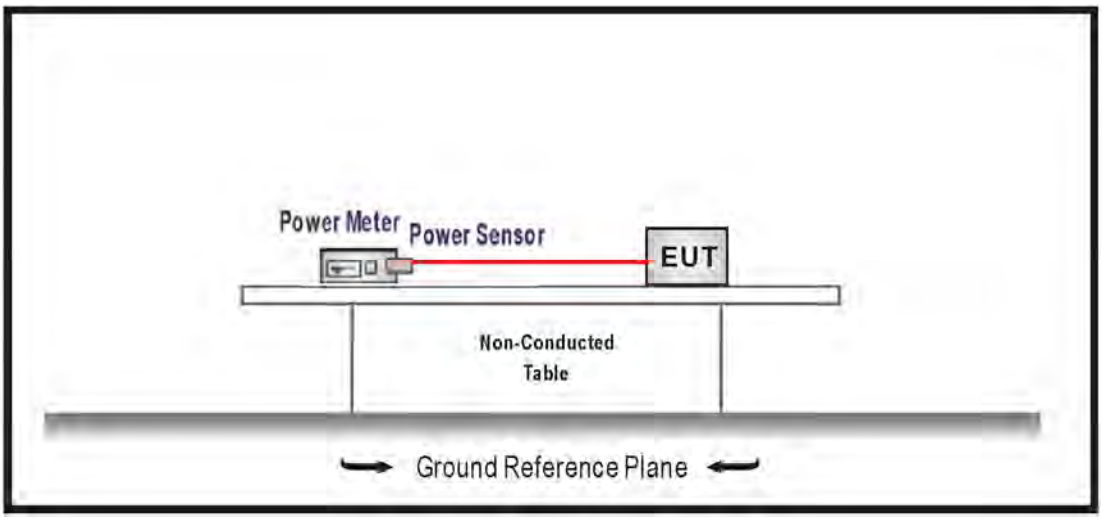
According to FCC Part 15 Subpart C Paragraph 15.207: 2018

3.5. Test Result

Owing to the DC operation of EUT, this test item is not performed.

4. Maximum peak conducted output power

4.1. Test Setup



4.2. Test procedures

The EUT was tested according to DTS test procedure section 9.1.2 of KDB 558074 D01 V05 Measurement to FCC 47CFR 15.247 requirements.

4.3. Limits

The maximum peak power shall be less 1 Watt.

4.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2018

4.5. Test Result

Product	Active Mobile Gateway-with Comm		
Test Item	Maximum peak conducted output power		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

IEEE 802.11b (ANT 0)			
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)
1	2412	23.850	≦30
6	2437	21.900	≦30
11	2462	22.030	≦30

The worst emission of data rate is 1 Mbps

Maximum peak conducted output power (dBm)						
Channel No.	Frequency (MHz)	Data Rate (Mbps)				Limit (dBm)
		1	2	5.5	11	
1	2412	23.850	--	--	--	≦30
6	2437	21.900	21.750	21.600	21.470	≦30
11	2462	22.030	--	--	--	≦30

Product	Active Mobile Gateway-with Comm		
Test Item	Maximum peak conducted output power		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

IEEE 802.11g (ANT 0)			
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)
1	2412	24.100	≦30
6	2437	26.910	≦30
11	2462	24.460	≦30

The worst emission of data rate is 6Mbps

Maximum peak conducted output power (dBm)									
Channel No	Frequency (MHz)	Data Rate (Mbps)							Limit (dBm)
		6	12	18	24	36	48	54	
1	2412	24.100	--	--	--	--	--	--	≦30
6	2437	26.910	26.760	26.630	26.500	26.360	26.230	26.080	≦30
11	2462	24.460	--	--	--	--	--	--	≦30

Product	Active Mobile Gateway-with Comm		
Test Item	Maximum peak conducted output power		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

IEEE 802.11n20M (ANT 0)			
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)
1	2412	24.930	≦30
6	2437	26.850	≦30
11	2462	24.910	≦30

The worst emission of data rate is MCS 0

Maximum peak conducted output power (dBm)										
Channel No	Frequency (MHz)	MCS Index								Limit (dBm)
		0	1	2	3	4	5	6	7	
1	2412	24.930	--	--	--	--	--	--	--	≦30
6	2437	26.850	26.710	26.560	26.430	26.290	26.140	25.990	25.850	≦30
11	2462	24.910	--	--	--	--	--	--	--	≦30

Product	Active Mobile Gateway-with Comm		
Test Item	Maximum peak conducted output power		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

IEEE 802.11n 40M (ANT 0)			
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)
3	2422	22.850	≦30
6	2437	25.110	≦30
9	2452	21.900	≦30

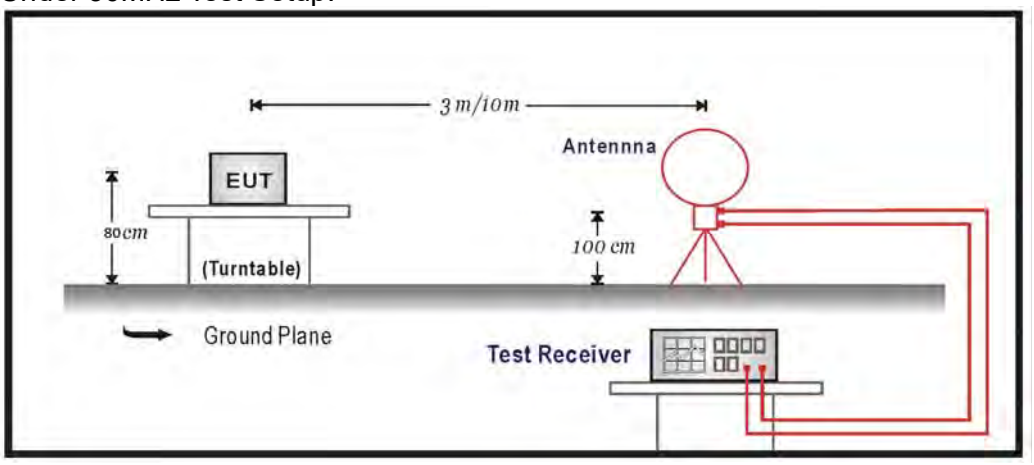
The worst emission of data rate is MCS 0

Maximum peak conducted output power (dBm)										
Channel No	Frequency (MHz)	MCS Index								Limit (dBm)
		0	1	2	3	4	5	6	7	
3	2412	22.850	--	--	--	--	--	--	--	≦30
6	2437	25.110	24.970	24.830	24.680	24.550	24.410	24.270	24.130	≦30
9	2452	21.900	--	--	--	--	--	--	--	≦30

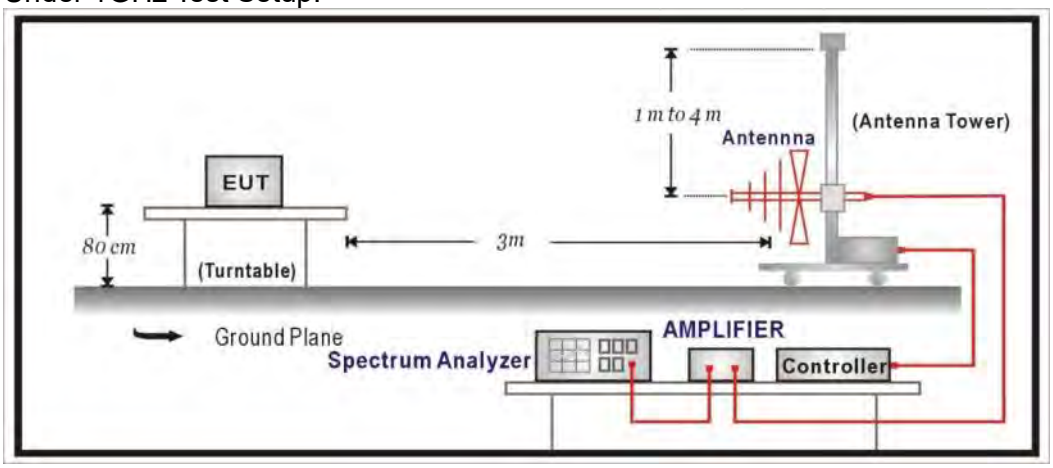
5. Radiated Emission

5.1. Test Setup

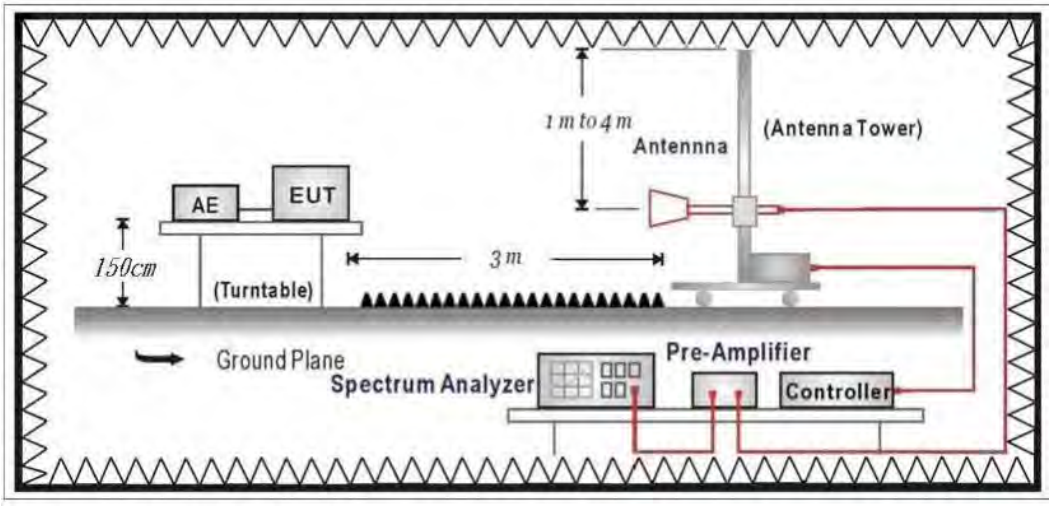
Under 30MHz Test Setup:



Under 1GHz Test Setup:



Above 1GHz Test Setup:



5.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency (MHz)	uV/m	dBuV/m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks: E field strength (dBuV/m) = 20 log E field strength (uV/m)

5.3. Test Procedure

The EUT was setup according to ANSI C63.10:2013 and tested according to DTS test procedure of KDB 558074 D01 V05 for compliance to FCC 47CFR 15.247 requirements.
The EUT and its simulators are placed on a turn table which is 1.5 meter above ground(under 1GHz) or 1.5 meter above ground (above 1GHz). The turn table can rotate 360 degrees to determine the position of the maximum emission level.
The antenna can move 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 measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated measurement.
On any frequency or frequencies below or equal to 1000 MHz, the limits shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.
The bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

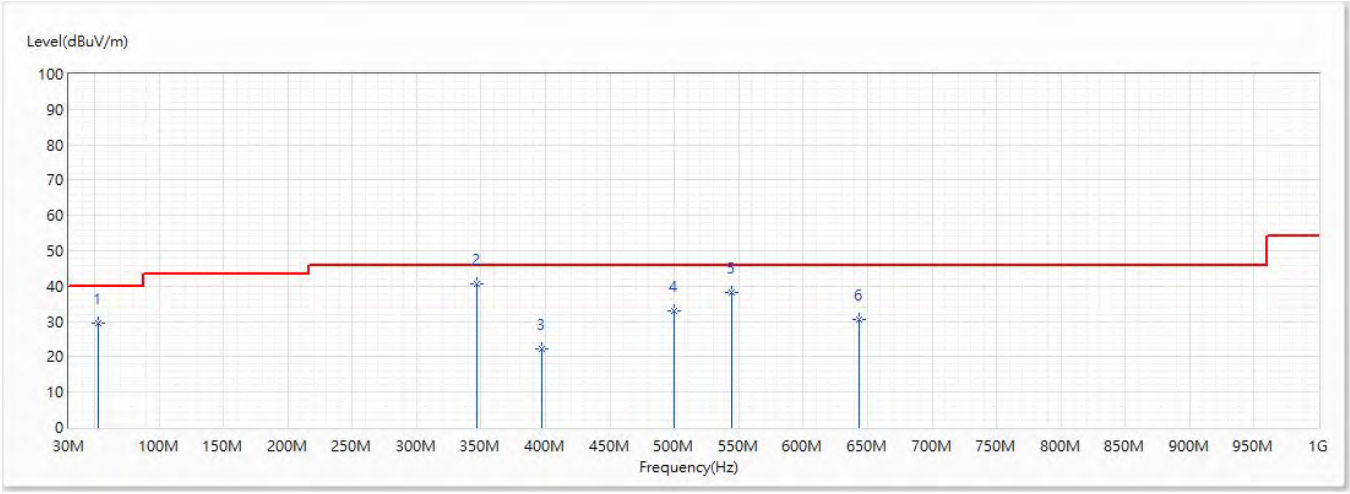
5.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2018

5.5. Test Result

30MHz-1GHz Spurious

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/3/28
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2437MHz		

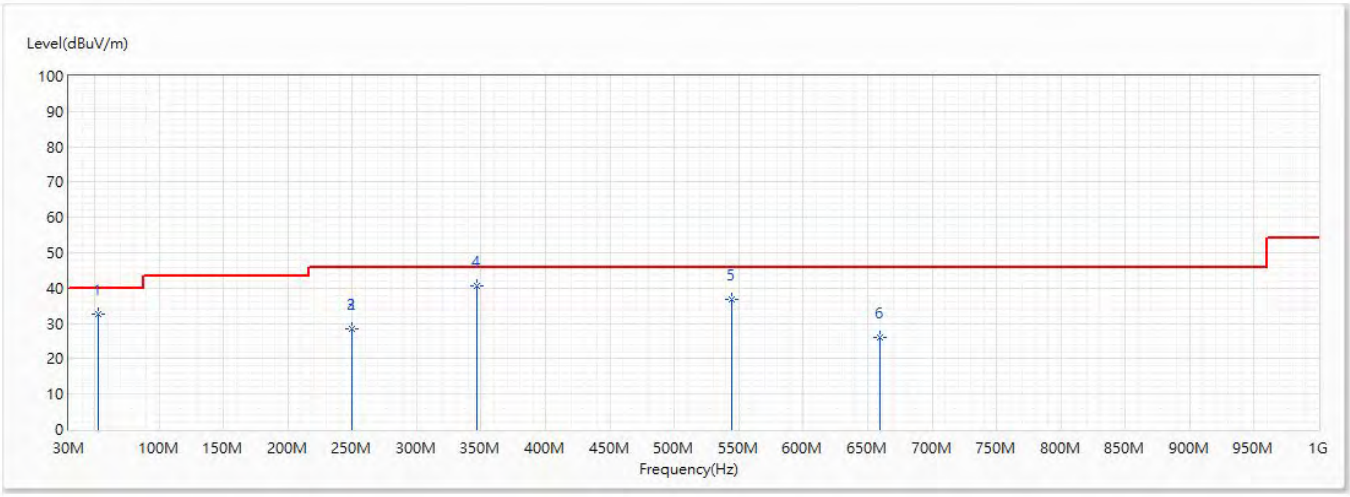


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	52.601	29.43	40.00	-10.57	55.75	-26.32	QP
* 2	346.511	40.51	46.00	-5.49	59.03	-18.52	QP
3	396.757	22.25	46.00	-23.75	39.01	-16.76	QP
4	500.062	32.93	46.00	-13.07	47.77	-14.84	QP
5	544.488	38.09	46.00	-7.91	52.46	-14.37	QP
6	643.525	30.47	46.00	-15.53	43.71	-13.24	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/3/28
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2437MHz		

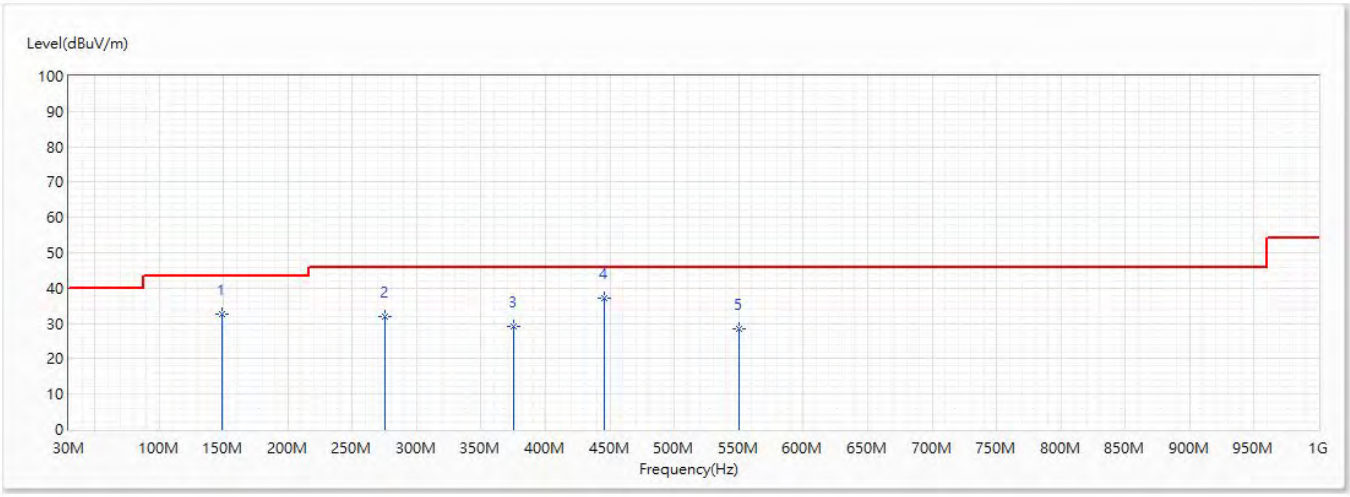


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	52.407	32.52	40.00	-7.48	58.77	-26.25	QP
2	249.996	28.54	46.00	-17.46	49.61	-21.07	QP
3	249.996	28.54	46.00	-17.46	49.61	-21.07	QP
* 4	346.511	40.51	46.00	-5.49	59.03	-18.52	QP
5	544.585	36.75	46.00	-9.25	51.12	-14.37	QP
6	659.239	26.11	46.00	-19.89	39.18	-13.07	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/3/28
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2437MHz		

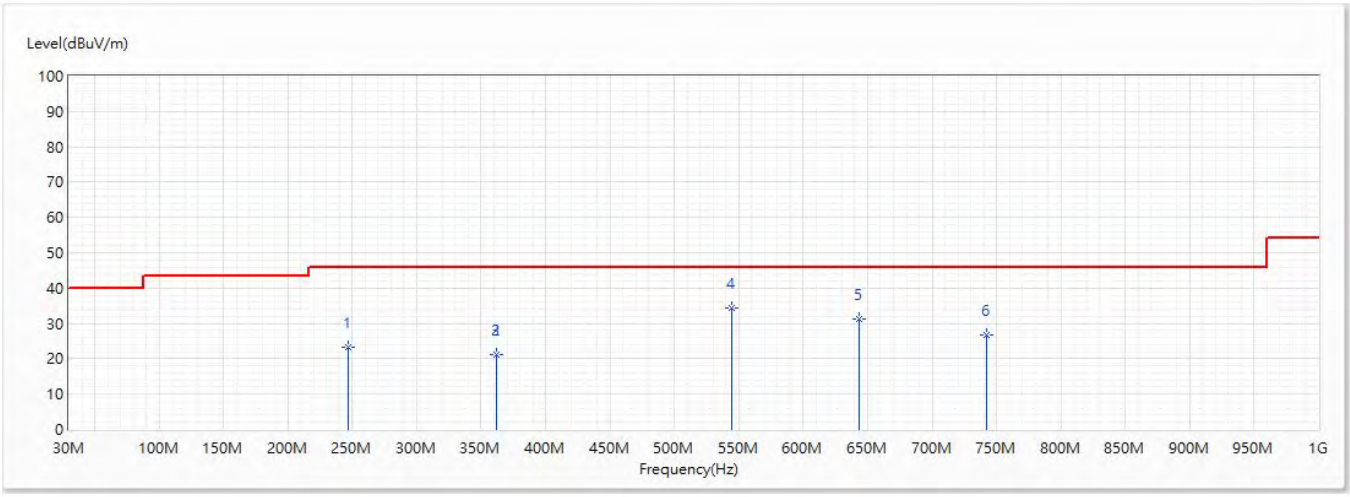


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	148.534	32.54	43.50	-10.96	55.18	-22.64	QP
2	275.022	31.80	46.00	-14.20	52.33	-20.53	QP
3	375.029	29.13	46.00	-16.87	46.65	-17.52	QP
* 4	445.548	37.06	46.00	-8.94	52.83	-15.77	QP
5	550.017	28.32	46.00	-17.68	42.63	-14.31	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/3/28
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2437MHz		

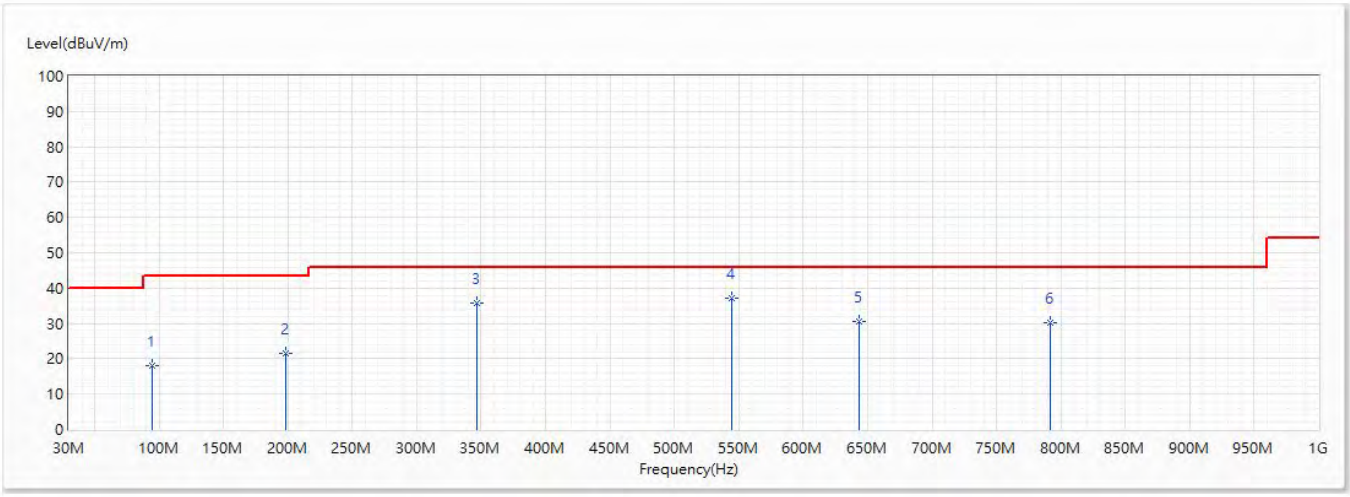


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	246.892	23.16	46.00	-22.84	44.37	-21.21	QP
2	361.837	21.15	46.00	-24.85	39.14	-17.99	QP
3	361.837	21.15	46.00	-24.85	39.14	-17.99	QP
* 4	544.488	34.40	46.00	-11.60	48.77	-14.37	QP
5	643.525	31.14	46.00	-14.86	44.38	-13.24	QP
6	742.659	26.76	46.00	-19.24	38.85	-12.09	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/3/28
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2437MHz		

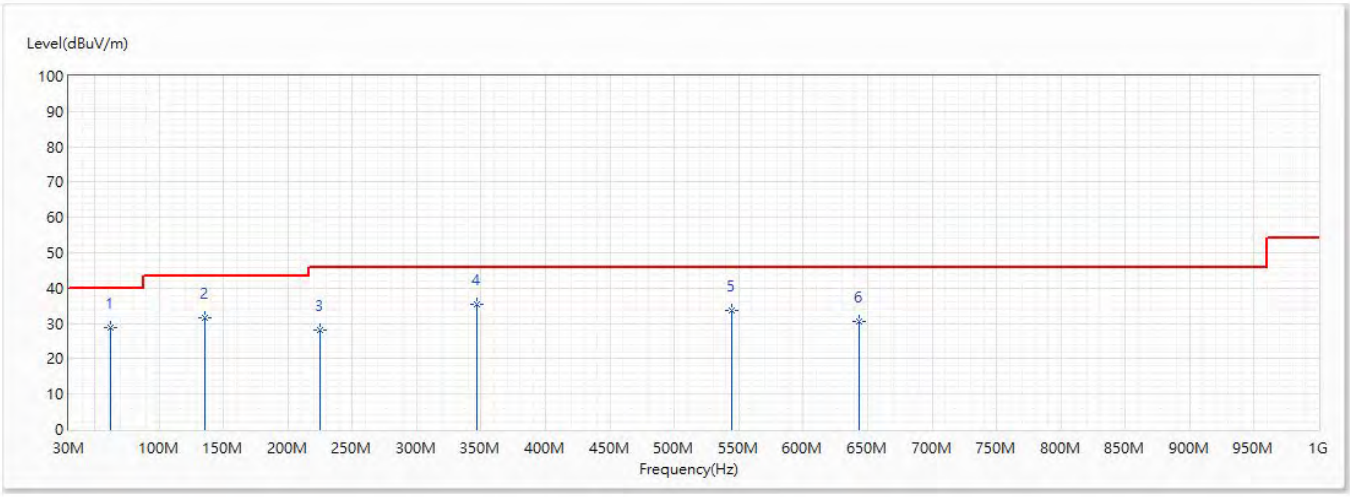


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	94.796	18.08	43.50	-25.42	42.88	-24.80	QP
2	197.907	21.56	43.50	-21.94	45.52	-23.96	QP
3	346.608	35.91	46.00	-10.09	54.42	-18.51	QP
* 4	544.585	37.01	46.00	-8.99	51.38	-14.37	QP
5	643.525	30.61	46.00	-15.39	43.85	-13.24	QP
6	792.032	30.27	46.00	-15.73	41.81	-11.54	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/3/28
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2437MHz		

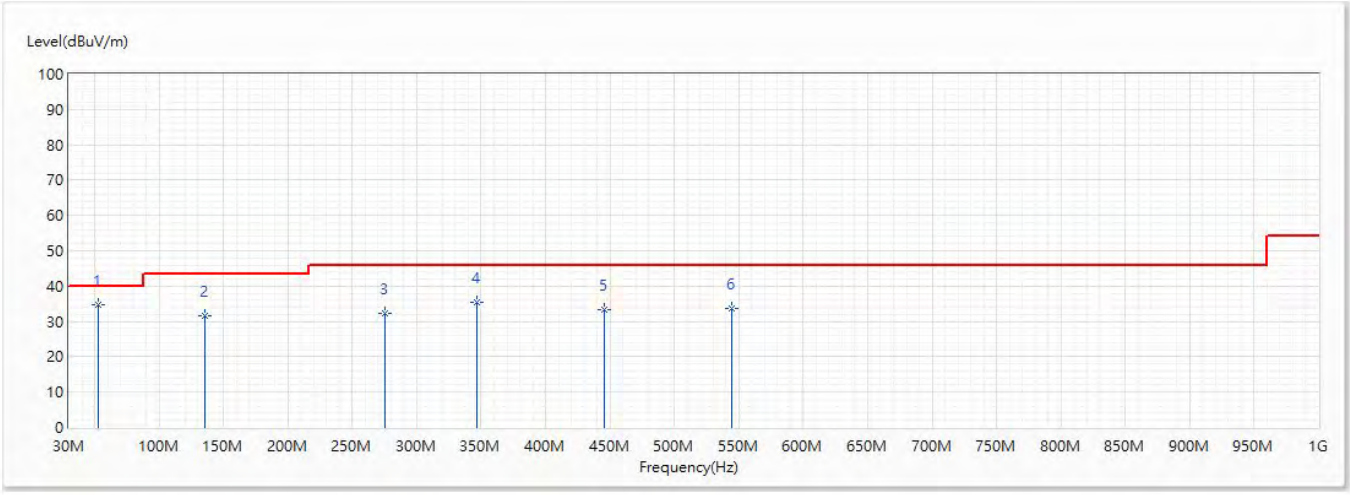


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	62.204	28.95	40.00	-11.05	57.16	-28.21	QP
2	135.148	31.72	43.50	-11.78	53.74	-22.02	QP
3	224.97	28.25	46.00	-17.75	50.72	-22.47	QP
* 4	346.511	35.32	46.00	-10.68	53.84	-18.52	QP
5	544.488	33.84	46.00	-12.16	48.21	-14.37	QP
6	643.525	30.67	46.00	-15.33	43.91	-13.24	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/3/28
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2437MHz		

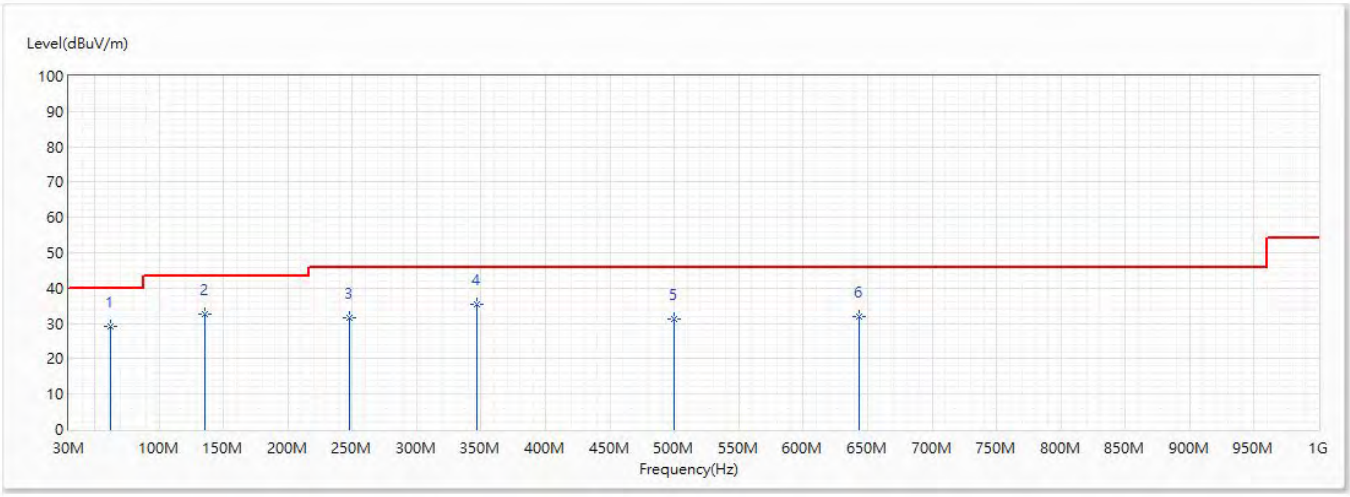


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	52.601	34.87	40.00	-5.13	61.19	-26.32	QP
2	135.148	31.72	43.50	-11.78	53.74	-22.02	QP
3	275.022	32.19	46.00	-13.81	52.72	-20.53	QP
4	346.511	35.32	46.00	-10.68	53.84	-18.52	QP
5	445.548	33.26	46.00	-12.74	49.03	-15.77	QP
6	544.488	33.84	46.00	-12.16	48.21	-14.37	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/3/28
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2437MHz		



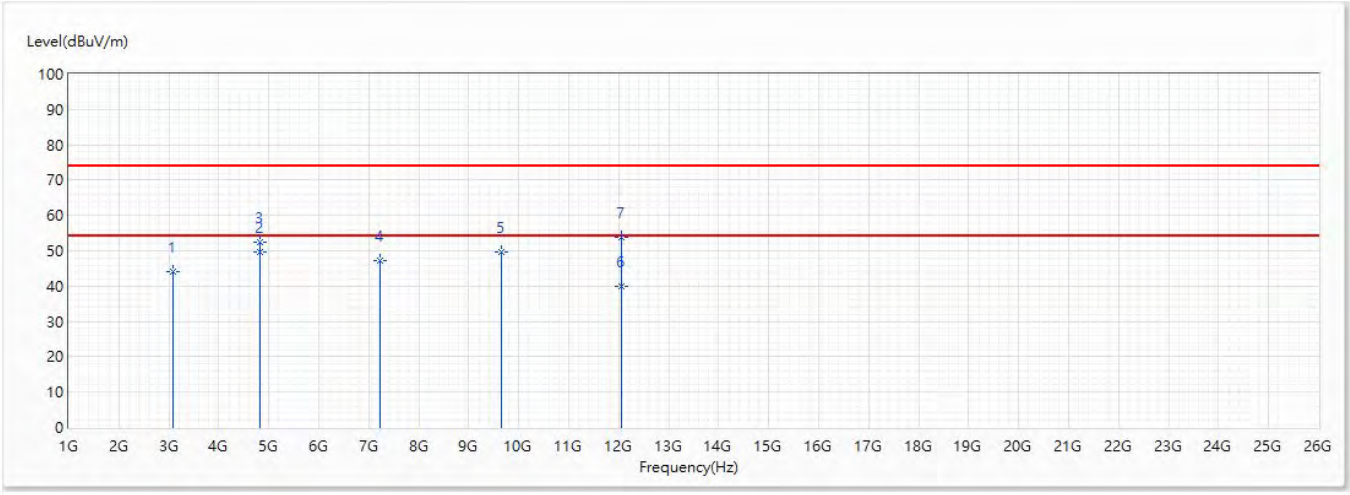
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	62.592	29.33	40.00	-10.67	57.57	-28.24	QP
2	135.148	32.52	43.50	-10.98	54.54	-22.02	QP
3	247.474	31.70	46.00	-14.30	52.87	-21.17	QP
* 4	346.511	35.59	46.00	-10.41	54.11	-18.52	QP
5	500.062	31.40	46.00	-14.60	46.24	-14.84	QP
6	643.525	32.07	46.00	-13.93	45.31	-13.24	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Above 1GHz Spurious

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/3
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2412MHz		

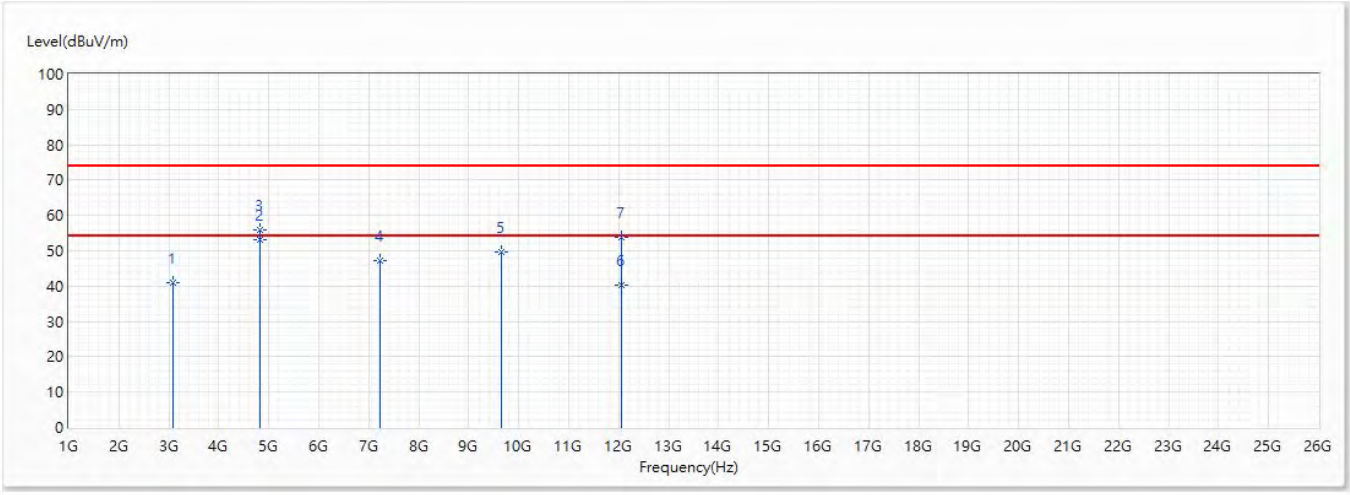


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072	44.09	74.00	-29.91	48.98	-4.89	PK
* 2	4824	49.70	54.00	-4.30	49.11	0.59	AV
3	4824	52.33	74.00	-21.67	51.74	0.59	PK
4	7236	47.17	74.00	-26.83	37.39	9.78	PK
5	9648	49.67	74.00	-24.33	34.86	14.81	PK
6	12060	40.05	54.00	-13.95	21.67	18.38	AV
7	12060	53.69	74.00	-20.31	35.31	18.38	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/3
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2412MHz		

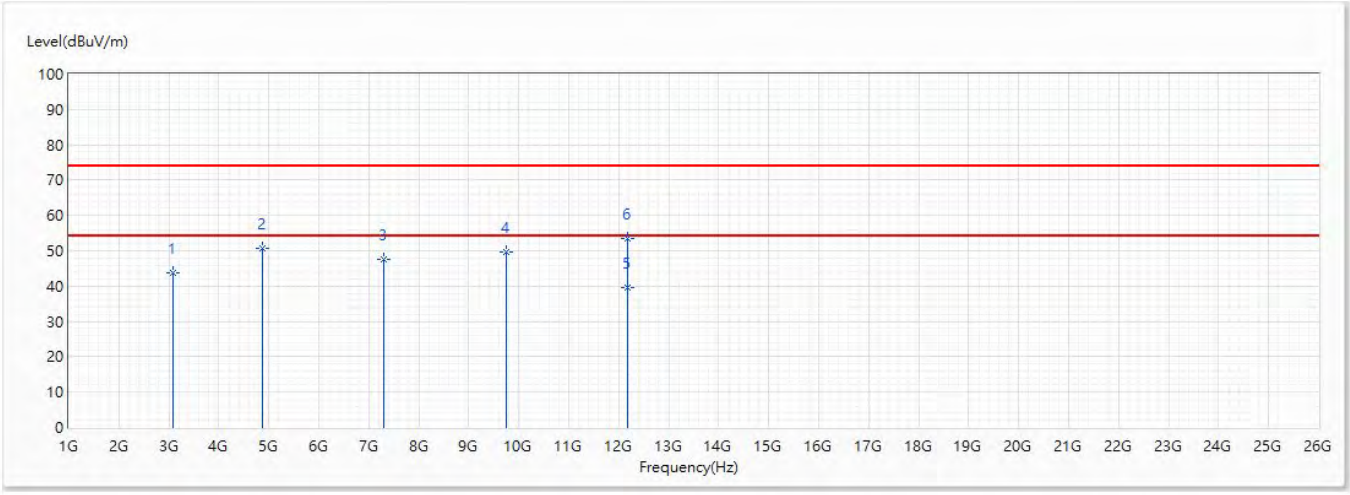


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072	41.09	74.00	-32.91	45.98	-4.89	PK
* 2	4824	53.16	54.00	-0.84	52.57	0.59	AV
3	4824	55.88	74.00	-18.12	55.29	0.59	PK
4	7236	47.20	74.00	-26.80	37.42	9.78	PK
5	9648	49.65	74.00	-24.35	34.84	14.81	PK
6	12060	40.11	54.00	-13.89	21.73	18.38	AV
7	12060	53.70	74.00	-20.30	35.32	18.38	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/3
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2437MHz		

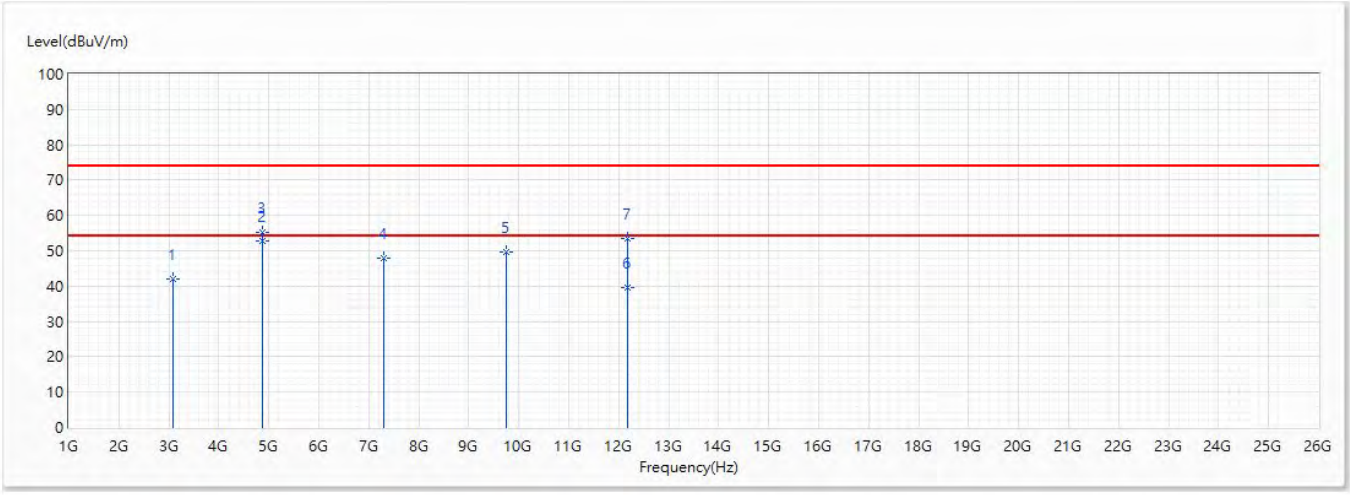


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072	43.80	74.00	-30.20	48.69	-4.89	PK
2	4874	50.55	74.00	-23.45	49.74	0.81	PK
3	7311	47.50	74.00	-26.50	37.29	10.21	PK
4	9748	49.57	74.00	-24.43	34.49	15.08	PK
* 5	12185	39.65	54.00	-14.35	21.44	18.21	AV
6	12185	53.47	74.00	-20.53	35.26	18.21	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/3
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2437MHz		

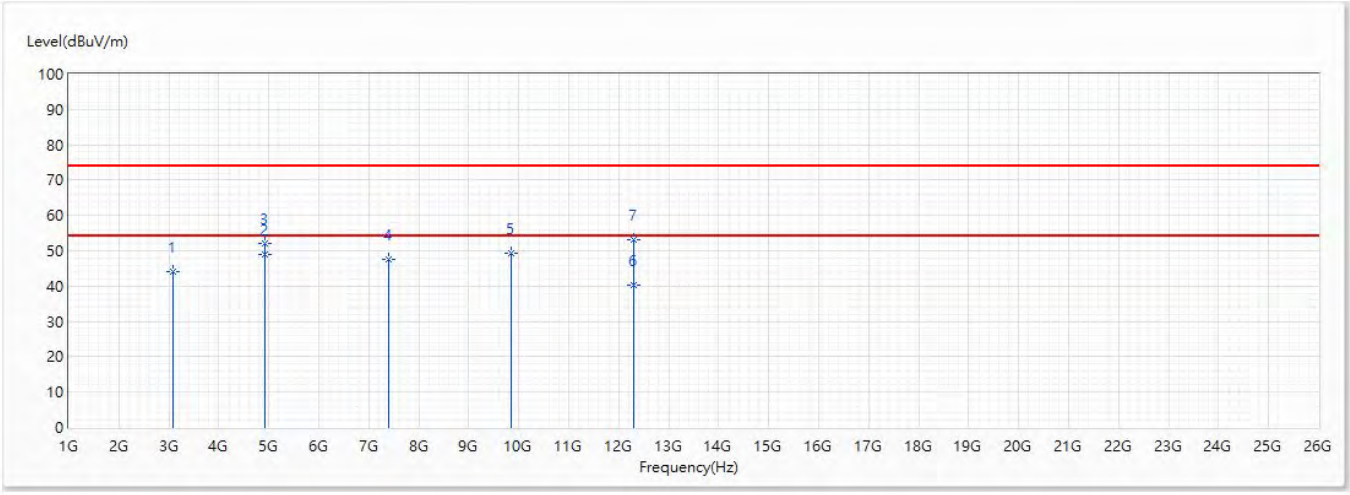


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072.5	42.00	74.00	-32.00	46.89	-4.89	PK
* 2	4874	52.95	54.00	-1.05	52.14	0.81	AV
3	4874	55.14	74.00	-18.86	54.33	0.81	PK
4	7311	47.80	74.00	-26.20	37.59	10.21	PK
5	9748	49.51	74.00	-24.49	34.43	15.08	PK
6	12185	39.64	54.00	-14.36	21.43	18.21	AV
7	12185	53.49	74.00	-20.51	35.28	18.21	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/3
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2462MHz		

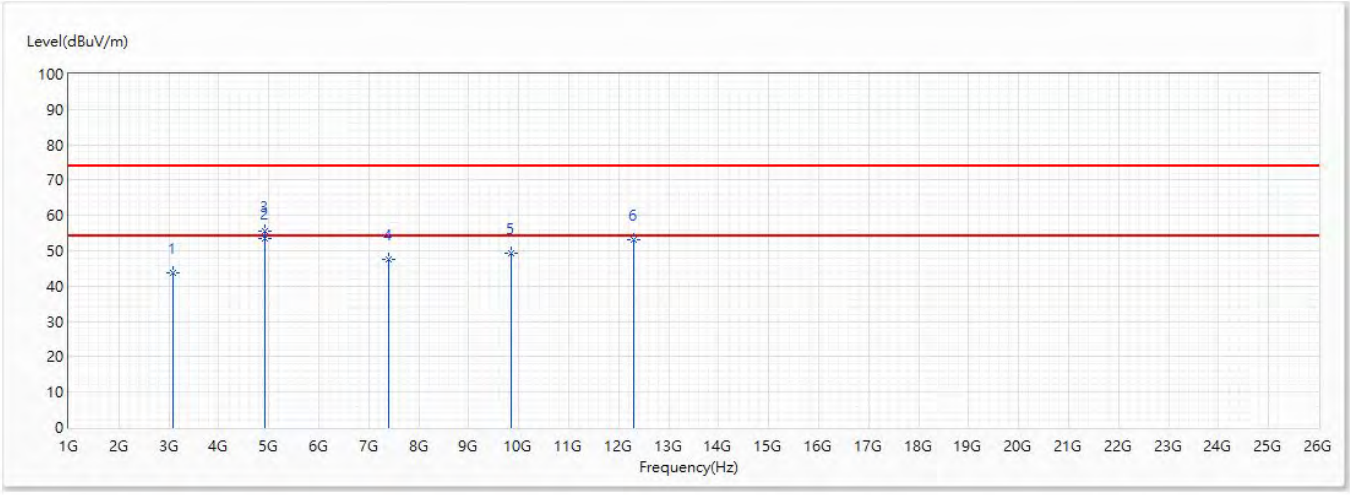


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072.6	44.03	74.00	-29.97	48.92	-4.89	PK
* 2	4924	48.79	54.00	-5.21	47.77	1.02	AV
3	4924	52.03	74.00	-21.97	51.01	1.02	PK
4	7386	47.45	74.00	-26.55	36.87	10.58	PK
5	9848	49.43	74.00	-24.57	34.18	15.25	PK
6	12310	40.38	54.00	-13.62	22.35	18.03	AV
7	12310	52.97	74.00	-21.03	34.94	18.03	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/3
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2462MHz		

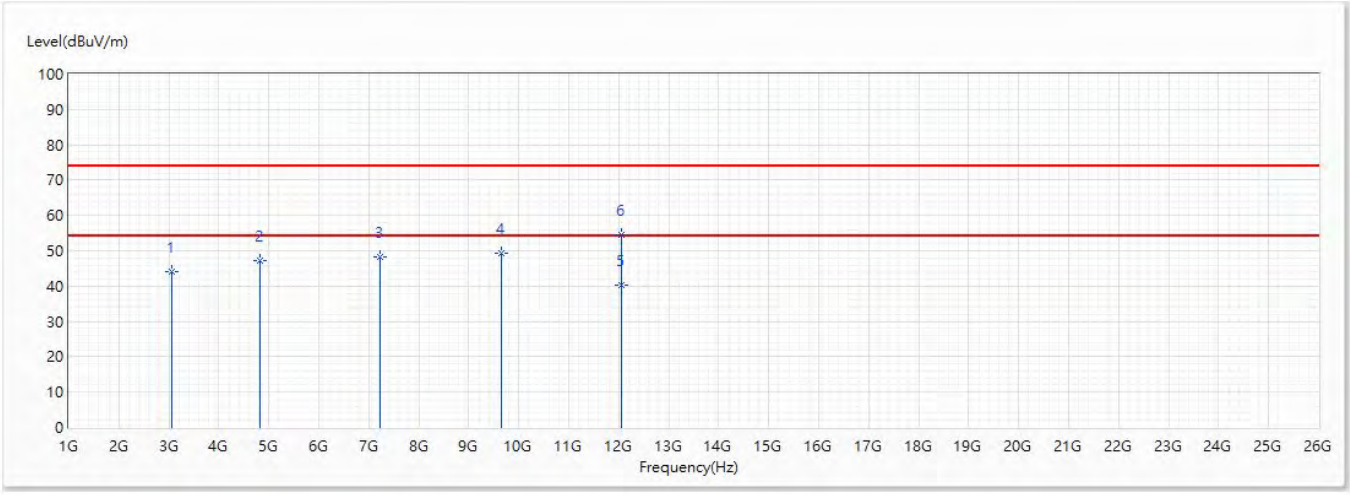


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072	43.91	74.00	-30.09	48.80	-4.89	PK
* 2	4924	53.37	54.00	-0.63	52.35	1.02	AV
3	4924	55.68	74.00	-18.32	54.66	1.02	PK
4	7386	47.61	74.00	-26.39	37.03	10.58	PK
5	9848	49.36	74.00	-24.64	34.11	15.25	PK
6	12310	53.05	74.00	-20.95	35.02	18.03	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/3
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2412MHz		

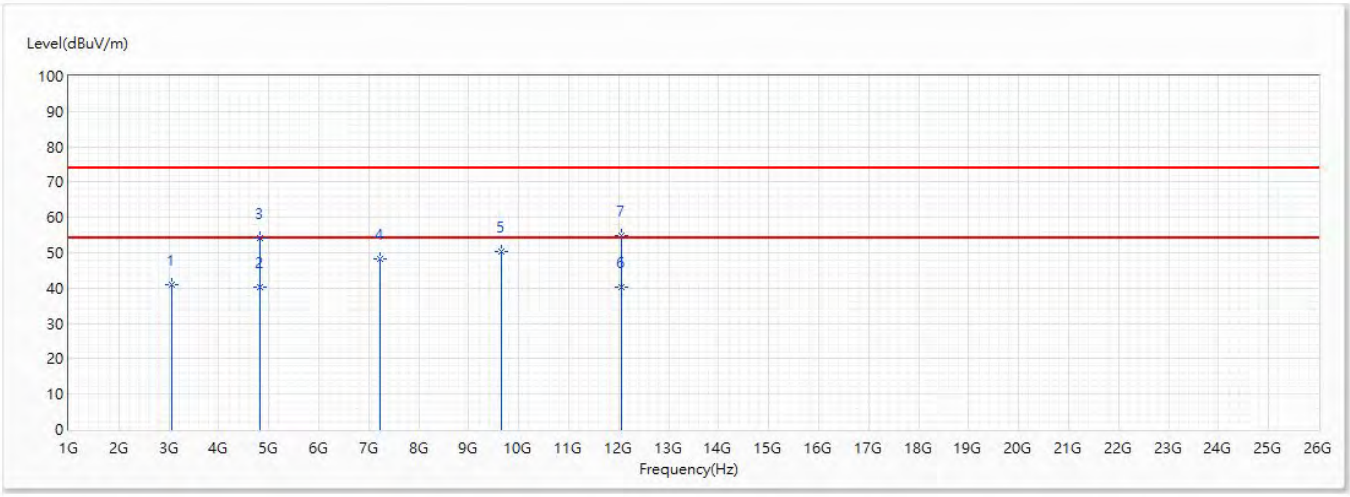


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3071	43.98	74.00	-30.02	48.87	-4.89	PK
2	4824	47.31	74.00	-26.69	46.72	0.59	PK
3	7236	48.26	74.00	-25.74	38.48	9.78	PK
4	9648	49.37	74.00	-24.63	34.56	14.81	PK
* 5	12060	40.25	54.00	-13.75	21.87	18.38	AV
6	12060	54.55	74.00	-19.45	36.17	18.38	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/3
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2412MHz		

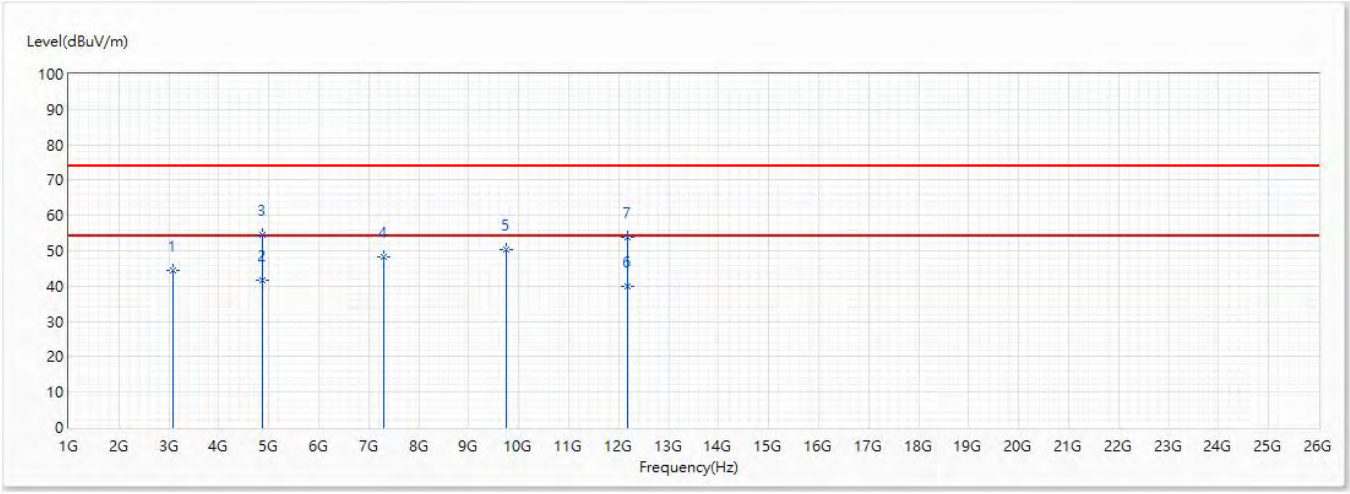


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3071	41.07	74.00	-32.93	45.96	-4.89	PK
2	4824	40.15	54.00	-13.85	39.56	0.59	AV
3	4824	54.13	74.00	-19.87	53.54	0.59	PK
4	7236	48.12	74.00	-25.88	38.34	9.78	PK
5	9648	50.33	74.00	-23.67	35.52	14.81	PK
* 6	12060	40.45	54.00	-13.55	22.07	18.38	AV
7	12060	54.76	74.00	-19.24	36.38	18.38	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/8
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2437MHz		

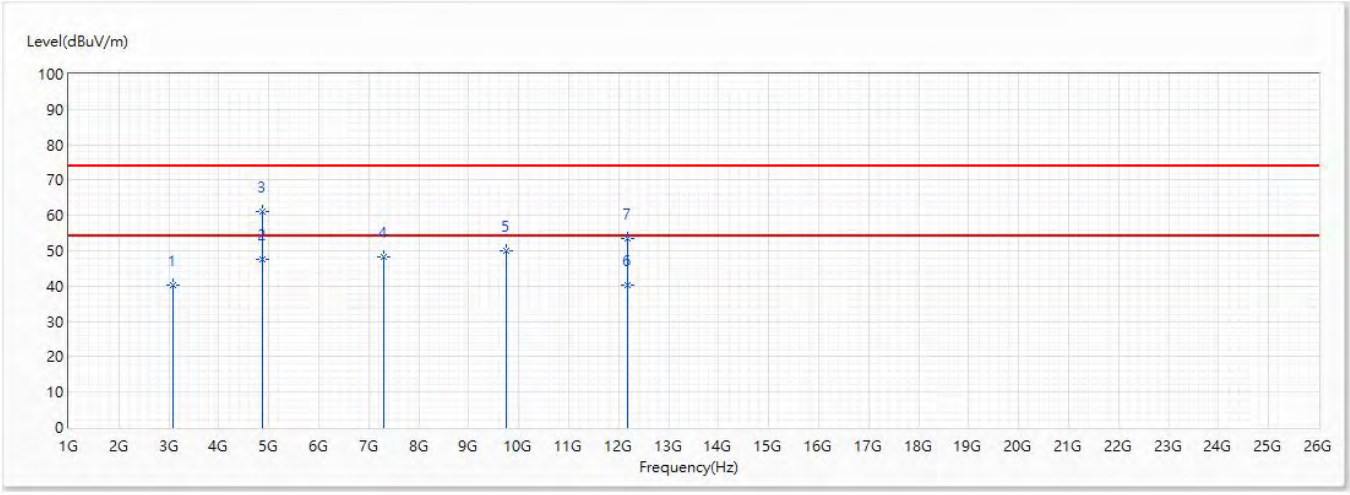


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072.1	44.32	74.00	-29.68	49.21	-4.89	PK
* 2	4874	41.82	54.00	-12.18	41.01	0.81	AV
3	4874	54.35	74.00	-19.65	53.54	0.81	PK
4	7311	48.26	74.00	-25.74	38.05	10.21	PK
5	9748	50.25	74.00	-23.75	35.17	15.08	PK
6	12185	39.83	54.00	-14.17	21.62	18.21	AV
7	12185	53.65	74.00	-20.35	35.44	18.21	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/8
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2437MHz		

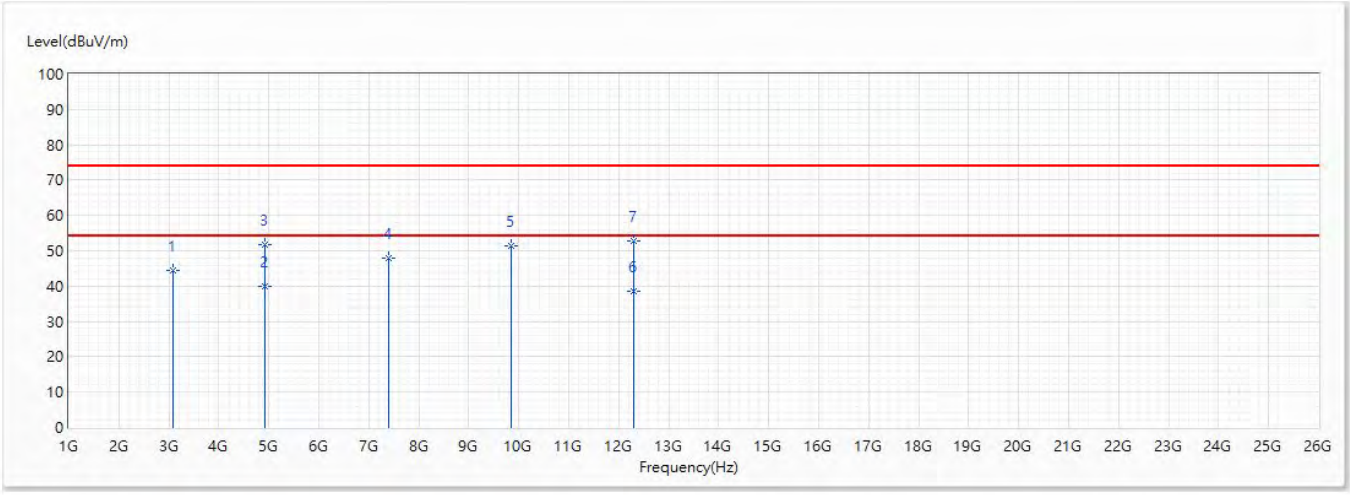


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072.1	40.28	74.00	-33.72	45.17	-4.89	PK
* 2	4874	47.66	54.00	-6.34	46.85	0.81	AV
3	4874	61.05	74.00	-12.95	60.24	0.81	PK
4	7311	48.25	74.00	-25.75	38.04	10.21	PK
5	9748	50.15	74.00	-23.85	35.07	15.08	PK
6	12185	40.11	54.00	-13.89	21.90	18.21	AV
7	12185	53.45	74.00	-20.55	35.24	18.21	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/8
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2462MHz		

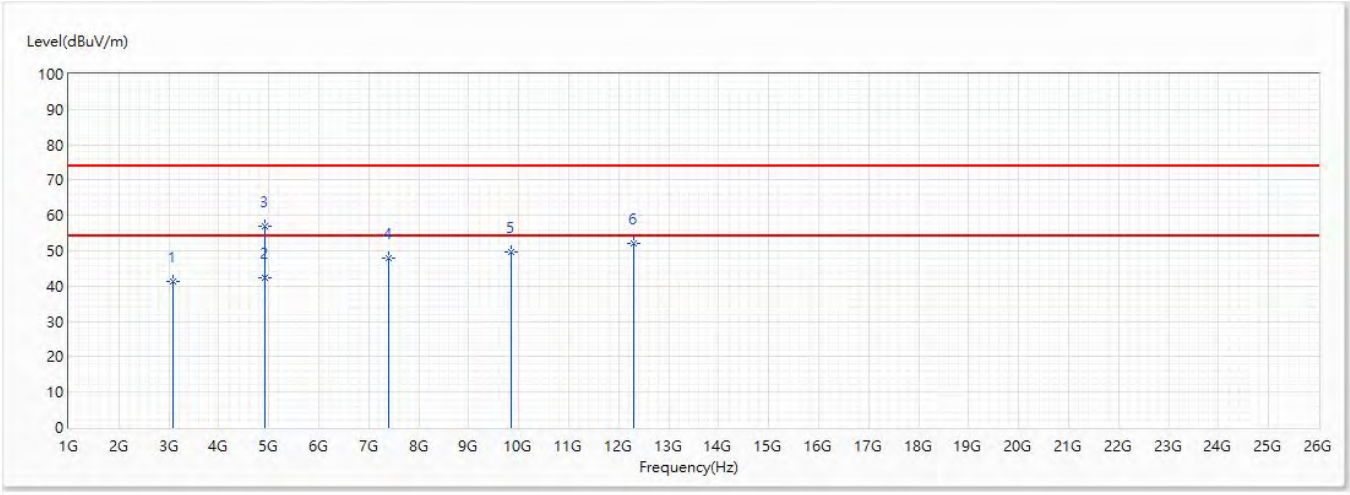


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072	44.51	74.00	-29.49	49.40	-4.89	PK
* 2	4924	39.81	54.00	-14.19	38.79	1.02	AV
3	4924	51.87	74.00	-22.13	50.85	1.02	PK
4	7386	48.06	74.00	-25.94	37.48	10.58	PK
5	9848	51.39	74.00	-22.61	36.14	15.25	PK
6	12310	38.59	54.00	-15.41	20.56	18.03	AV
7	12310	52.73	74.00	-21.27	34.70	18.03	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/8
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2462MHz		

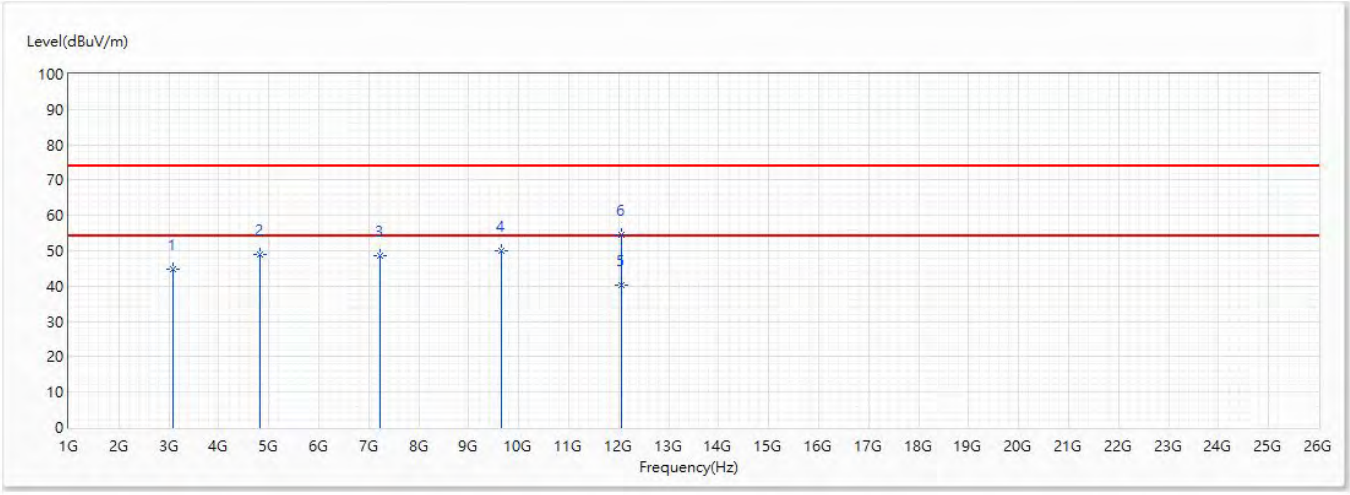


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072	41.37	74.00	-32.63	46.26	-4.89	PK
* 2	4924	42.28	54.00	-11.72	41.26	1.02	AV
3	4924	57.02	74.00	-16.98	56.00	1.02	PK
4	7386	47.88	74.00	-26.12	37.30	10.58	PK
5	9848	49.78	74.00	-24.22	34.53	15.25	PK
6	12310	52.13	74.00	-21.87	34.10	18.03	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/8
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2412MHz		

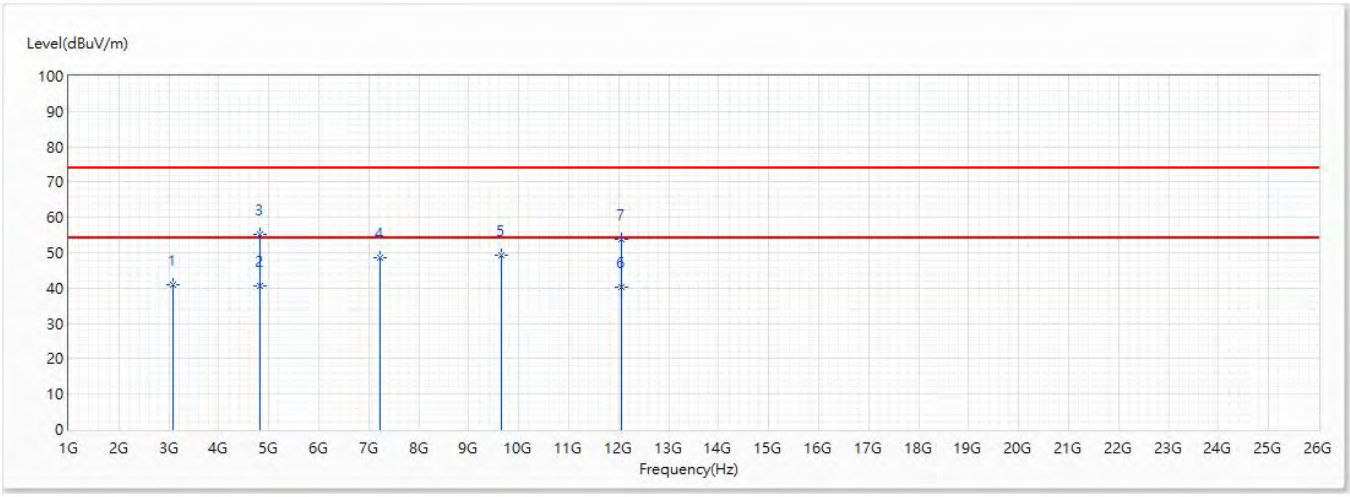


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072	44.64	74.00	-29.36	49.53	-4.89	PK
2	4824	48.87	74.00	-25.13	48.28	0.59	PK
3	7236	48.74	74.00	-25.26	38.96	9.78	PK
4	9648	50.01	74.00	-23.99	35.20	14.81	PK
* 5	12060	40.31	54.00	-13.69	21.93	18.38	AV
6	12060	54.54	74.00	-19.46	36.16	18.38	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/8
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2412MHz		

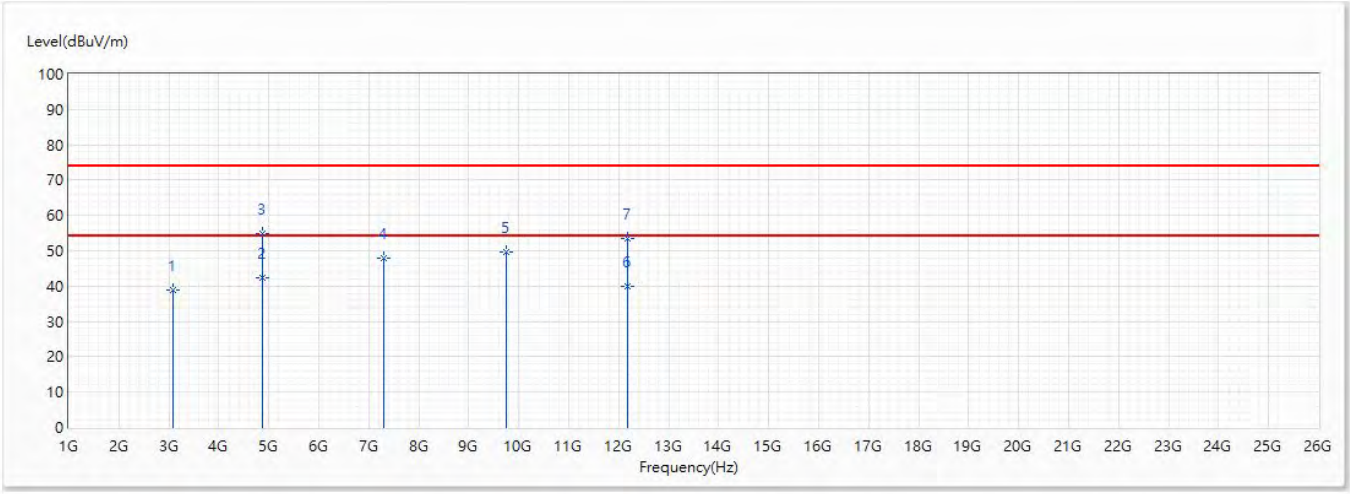


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072	41.06	74.00	-32.94	45.95	-4.89	PK
* 2	4824	40.52	54.00	-13.48	39.93	0.59	AV
3	4824	55.25	74.00	-18.75	54.66	0.59	PK
4	7236	48.49	74.00	-25.51	38.71	9.78	PK
5	9648	49.35	74.00	-24.65	34.54	14.81	PK
6	12060	40.42	54.00	-13.58	22.04	18.38	AV
7	12060	53.93	74.00	-20.07	35.55	18.38	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/8
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2437MHz		

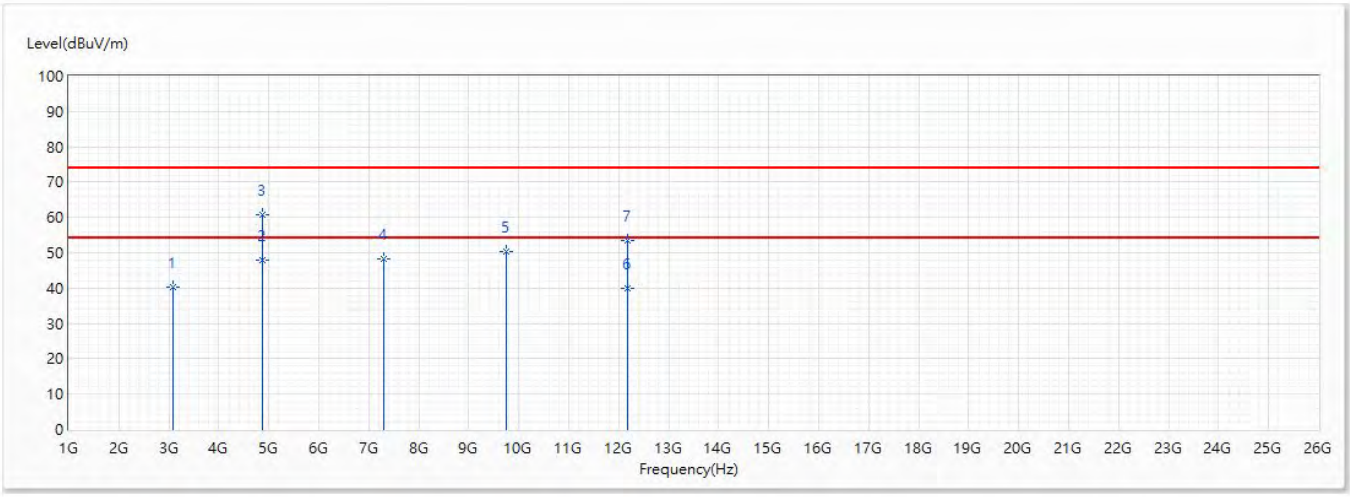


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072	38.91	74.00	-35.09	43.80	-4.89	PK
* 2	4874	42.37	54.00	-11.63	41.56	0.81	AV
3	4874	54.86	74.00	-19.14	54.05	0.81	PK
4	7311	47.87	74.00	-26.13	37.66	10.21	PK
5	9748	49.57	74.00	-24.43	34.49	15.08	PK
6	12185	39.83	54.00	-14.17	21.62	18.21	AV
7	12185	53.60	74.00	-20.40	35.39	18.21	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/8
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2437MHz		

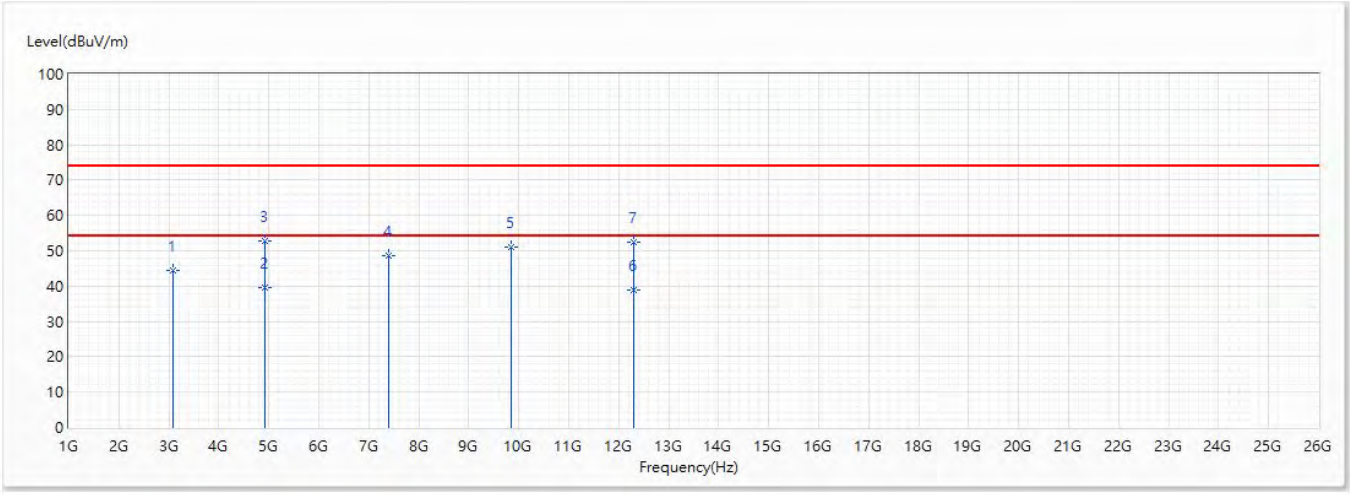


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072	40.24	74.00	-33.76	45.13	-4.89	PK
* 2	4874	47.75	54.00	-6.25	46.94	0.81	AV
3	4874	60.60	74.00	-13.40	59.79	0.81	PK
4	7311	48.41	74.00	-25.59	38.20	10.21	PK
5	9748	50.27	74.00	-23.73	35.19	15.08	PK
6	12185	39.81	54.00	-14.19	21.60	18.21	AV
7	12185	53.38	74.00	-20.62	35.17	18.21	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/8
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2462MHz		

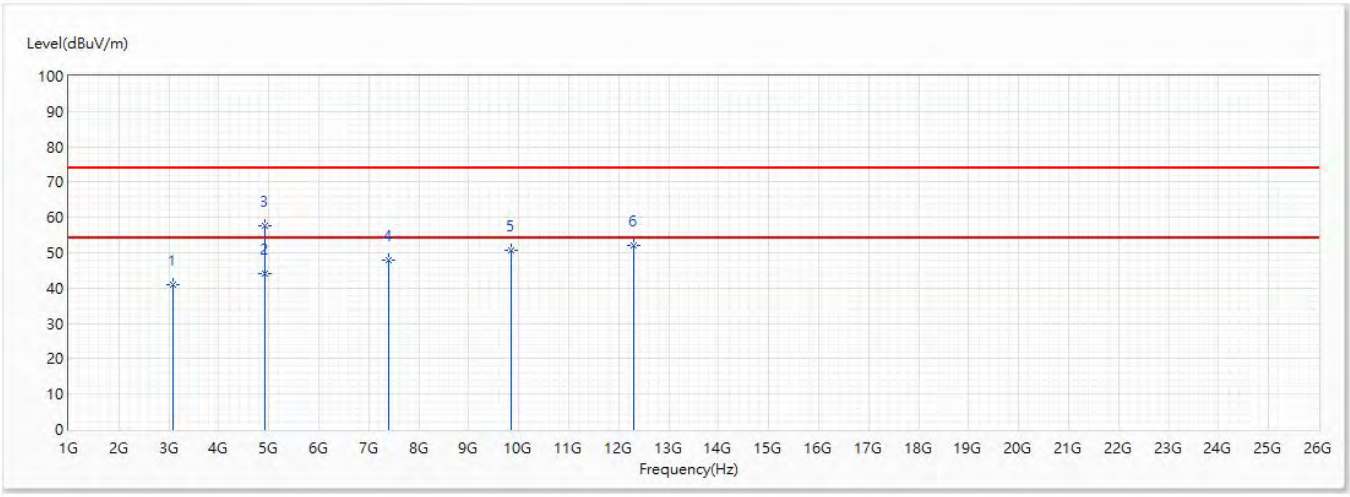


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072	44.60	74.00	-29.40	49.49	-4.89	PK
* 2	4924	39.48	54.00	-14.52	38.46	1.02	AV
3	4924	52.80	74.00	-21.20	51.78	1.02	PK
4	7386	48.55	74.00	-25.45	37.97	10.58	PK
5	9848	50.89	74.00	-23.11	35.64	15.25	PK
6	12310	38.74	54.00	-15.26	20.71	18.03	AV
7	12310	52.39	74.00	-21.61	34.36	18.03	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/8
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2462MHz		

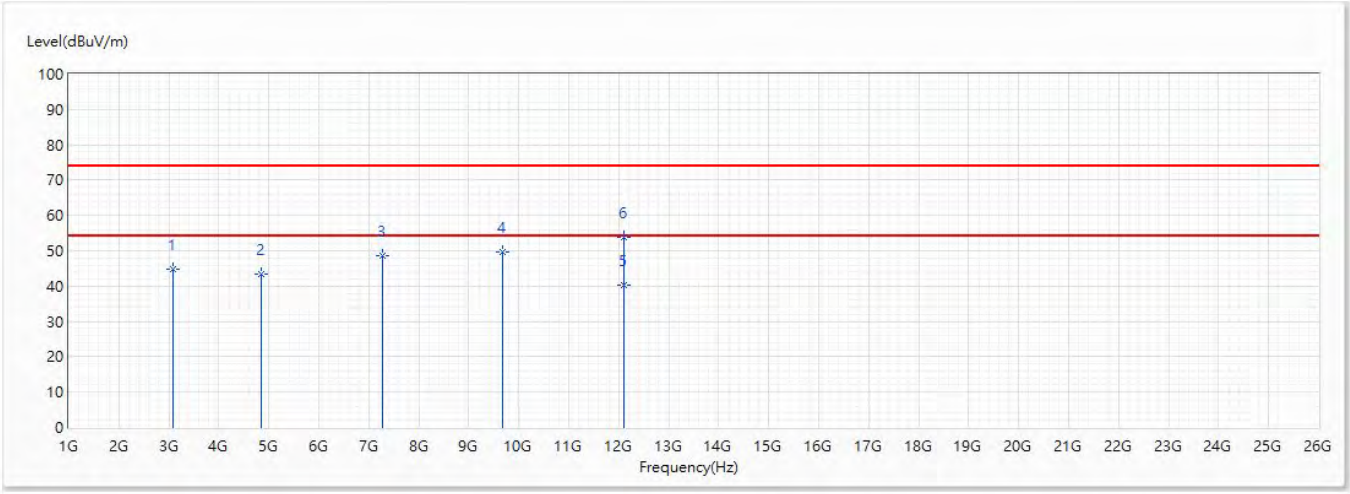


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072	40.96	74.00	-33.04	45.85	-4.89	PK
* 2	4924	44.21	54.00	-9.79	43.19	1.02	AV
3	4924	57.68	74.00	-16.32	56.66	1.02	PK
4	7386	47.88	74.00	-26.12	37.30	10.58	PK
5	9848	50.61	74.00	-23.39	35.36	15.25	PK
6	12310	52.22	74.00	-21.78	34.19	18.03	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/8
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2422MHz		

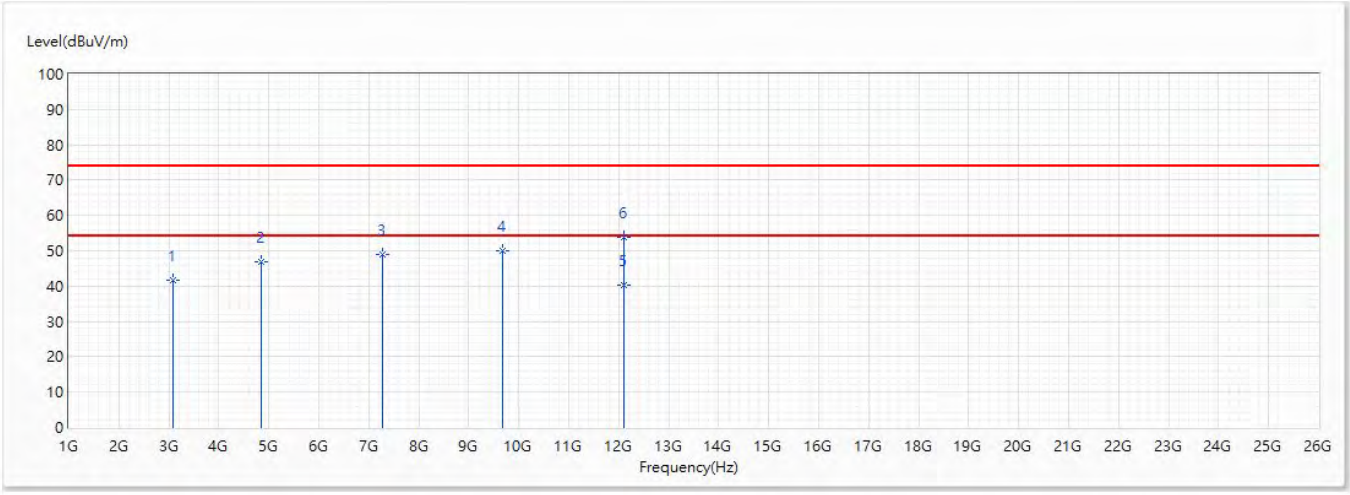


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072	44.66	74.00	-29.34	49.55	-4.89	PK
2	4844	43.54	74.00	-30.46	42.86	0.68	PK
3	7266	48.74	74.00	-25.26	38.78	9.96	PK
4	9688	49.73	74.00	-24.27	34.84	14.89	PK
* 5	12110	40.32	54.00	-13.68	22.00	18.32	AV
6	12110	53.78	74.00	-20.22	35.46	18.32	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/8
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2422MHz		

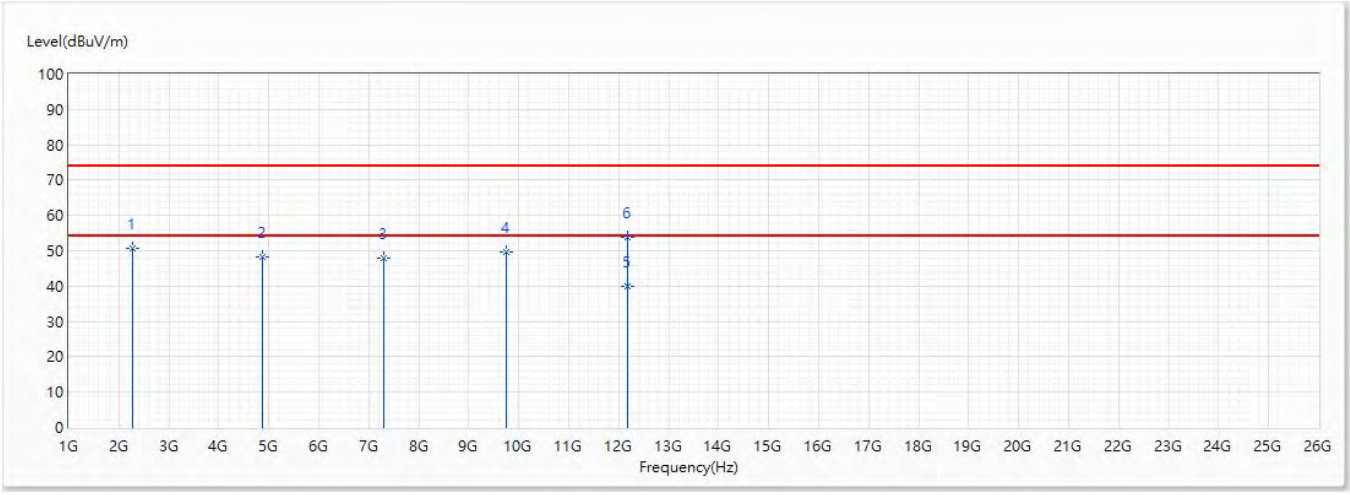


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	3072	41.81	74.00	-32.19	46.70	-4.89	PK
2	4844	46.87	74.00	-27.13	46.19	0.68	PK
3	7266	49.02	74.00	-24.98	39.06	9.96	PK
4	9688	50.07	74.00	-23.93	35.18	14.89	PK
* 5	12110	40.36	54.00	-13.64	22.04	18.32	AV
6	12110	53.92	74.00	-20.08	35.60	18.32	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/8
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2437MHz		

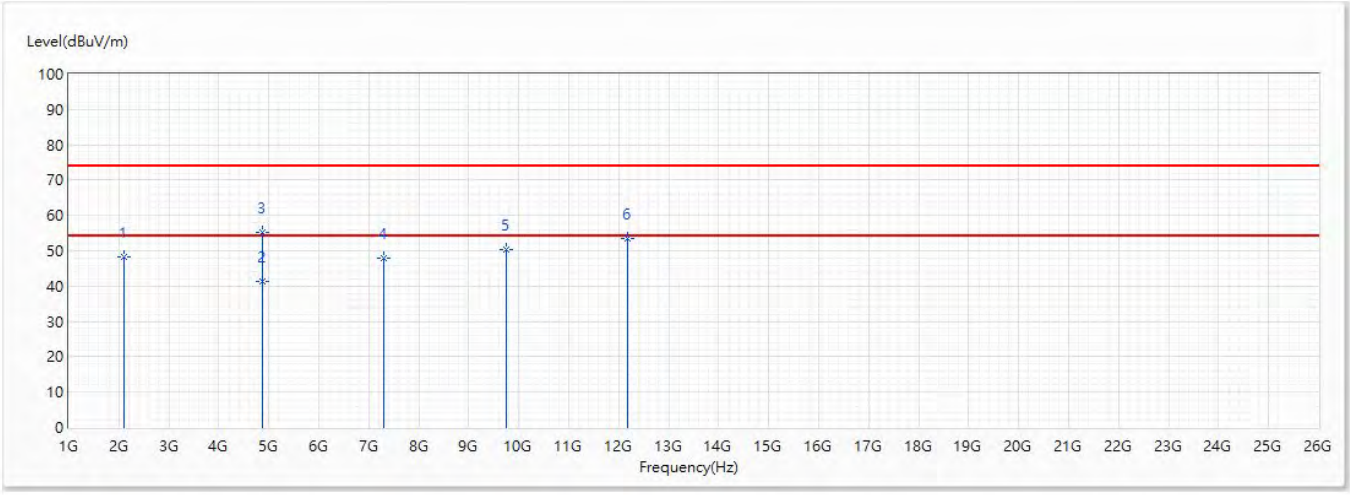


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2269	50.80	74.00	-23.20	58.64	-7.84	PK
2	4874	48.24	74.00	-25.76	47.43	0.81	PK
3	7311	47.85	74.00	-26.15	37.64	10.21	PK
4	9748	49.49	74.00	-24.51	34.41	15.08	PK
* 5	12185	39.87	54.00	-14.13	21.66	18.21	AV
6	12185	53.68	74.00	-20.32	35.47	18.21	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/8
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2437MHz		

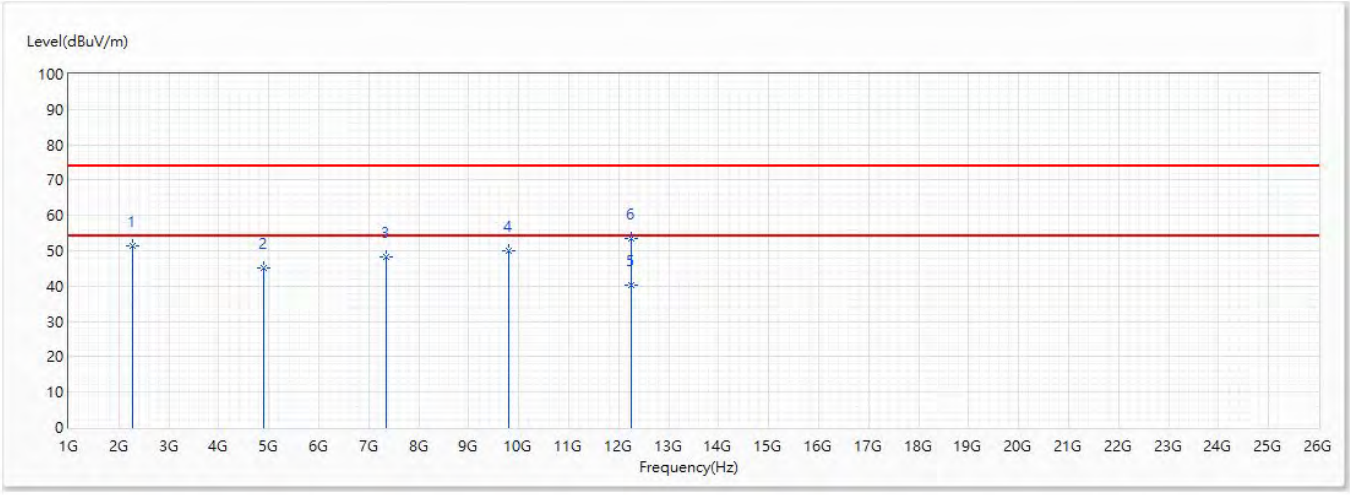


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2108	48.43	74.00	-25.57	57.18	-8.75	PK
* 2	4874	41.15	54.00	-12.85	40.34	0.81	AV
3	4874	55.33	74.00	-18.67	54.52	0.81	PK
4	7311	47.99	74.00	-26.01	37.78	10.21	PK
5	9748	50.50	74.00	-23.50	35.42	15.08	PK
6	12185	53.51	74.00	-20.49	35.30	18.21	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/8
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2452MHz		

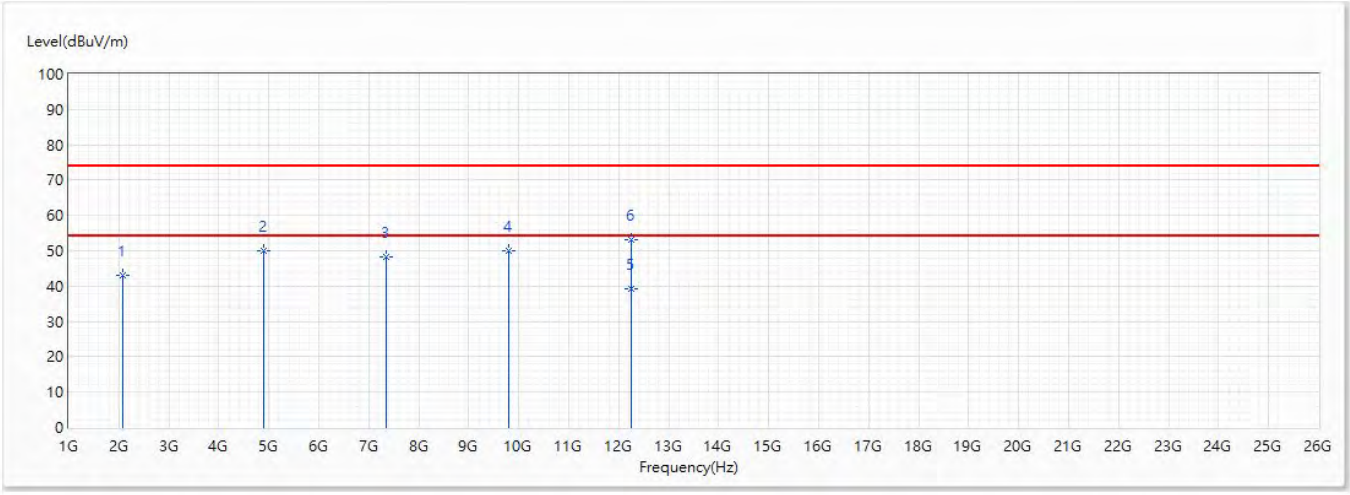


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2270	51.37	74.00	-22.63	59.21	-7.84	PK
2	4904	45.21	74.00	-28.79	44.27	0.94	PK
3	7356	48.43	74.00	-25.57	37.99	10.44	PK
4	9808	50.11	74.00	-23.89	34.93	15.18	PK
* 5	12260	40.22	54.00	-13.78	22.11	18.11	AV
6	12260	53.35	74.00	-20.65	35.24	18.11	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

Site :	CB2-H	Engineer :	Scott
Model No :	CV90-JE103	Test Date :	2019/4/8
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2452MHz		



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2087	42.94	74.00	-31.06	51.81	-8.87	PK
2	4904	50.11	74.00	-23.89	49.17	0.94	PK
3	7356	48.13	74.00	-25.87	37.69	10.44	PK
4	9808	50.17	74.00	-23.83	34.99	15.18	PK
* 5	12260	39.40	54.00	-14.60	21.29	18.11	AV
6	12260	53.28	74.00	-20.72	35.17	18.11	PK

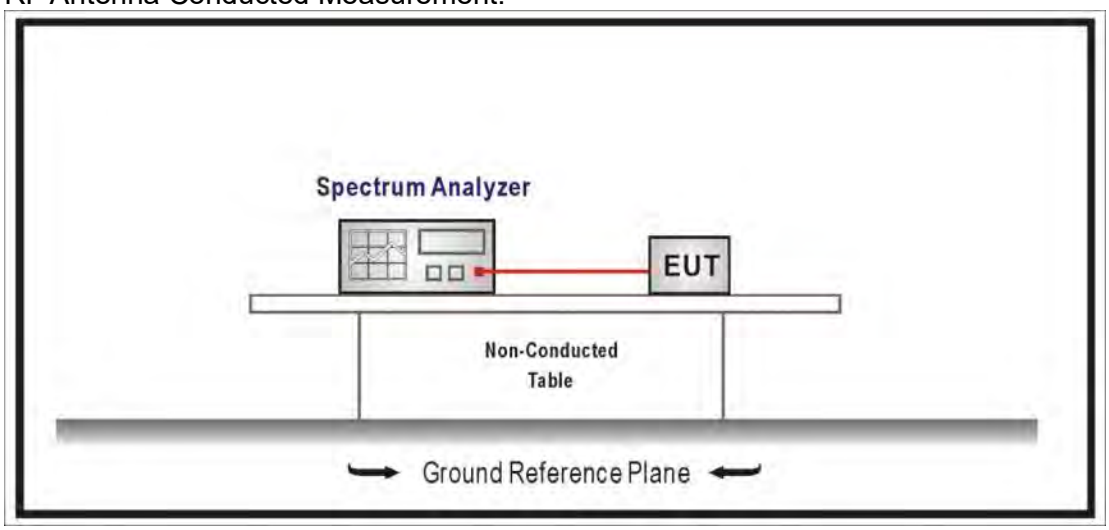
Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limt.

6. RF antenna conducted test

6.1. Test Setup

RF Antenna Conducted Measurement:



6.2. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on an RF conducted or radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

6.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure section 11.2 of KDB 558074 D01 V05 for compliance to FCC 47CFR 15.247 requirements. Set RBW = 100 kHz, Set VBW> RBW, scan up through 10th harmonic.

6.4. Test Specification

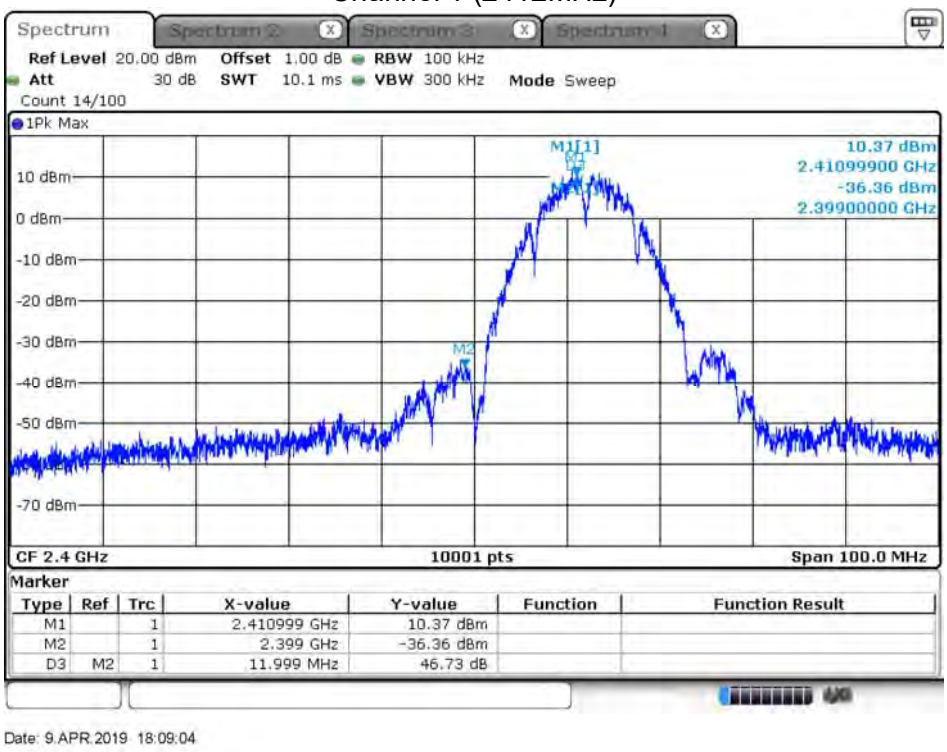
According to FCC Part 15 Subpart C Paragraph 15.247: 2018

6.5. Test Result

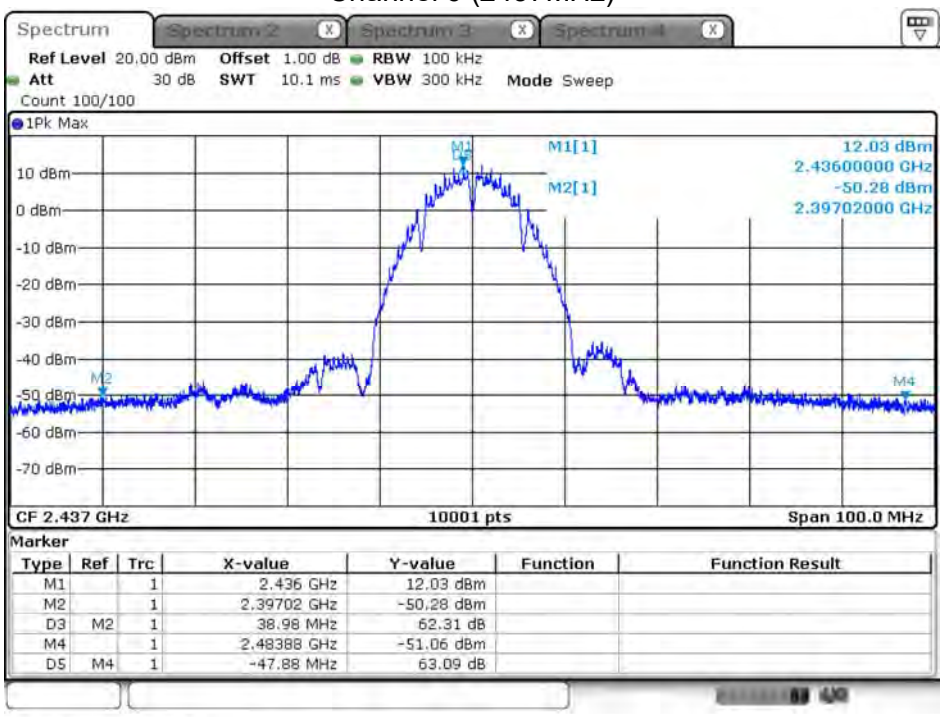
Product	Active Mobile Gateway-with Comm		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

IEEE 802.11b (ANT 0)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	46.73	≧30	Pass
6	2437	48.03	≧30	Pass
11	2462	45.31	≧30	Pass

Channel 1 (2412MHz)

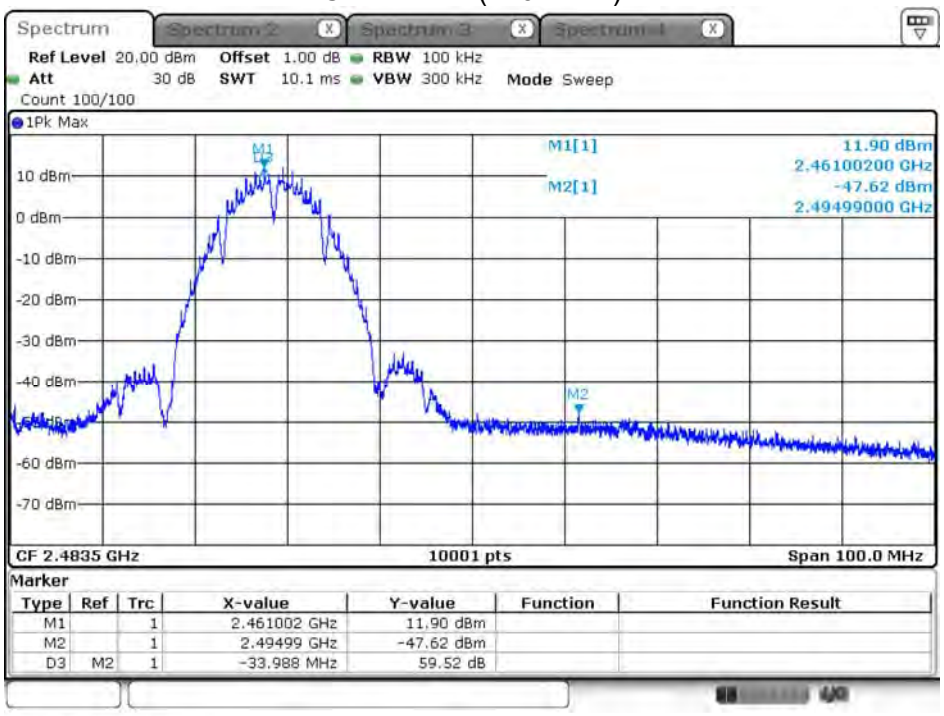


Channel 6 (2437MHz)



Date: 9.APR.2019 18:09:46

Channel 11 (2462MHz)

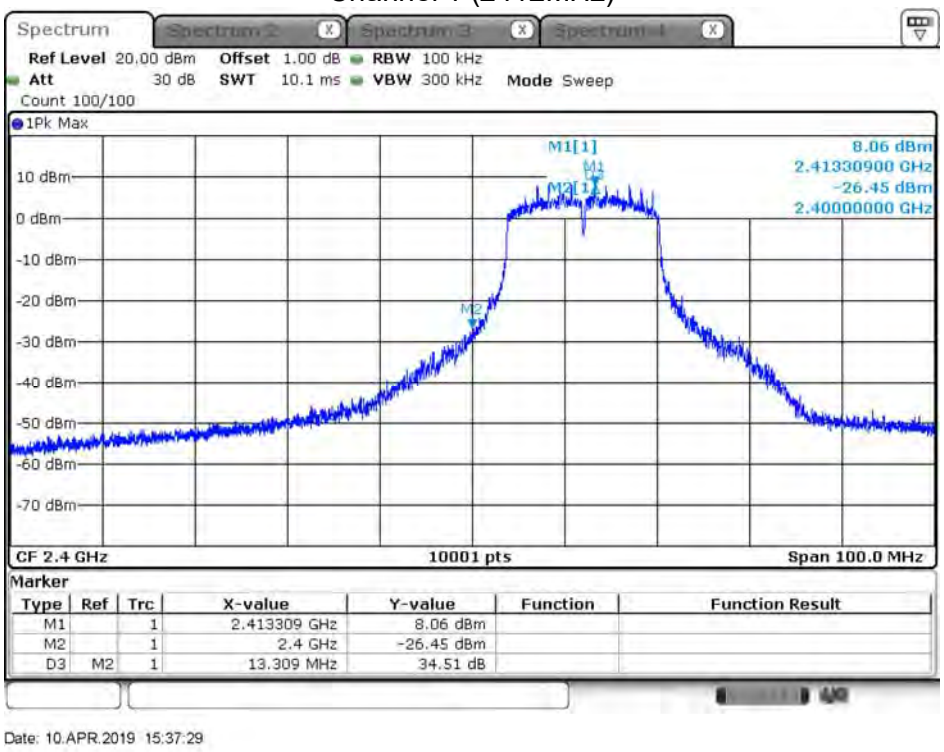


Date: 9.APR.2019 19:58:11

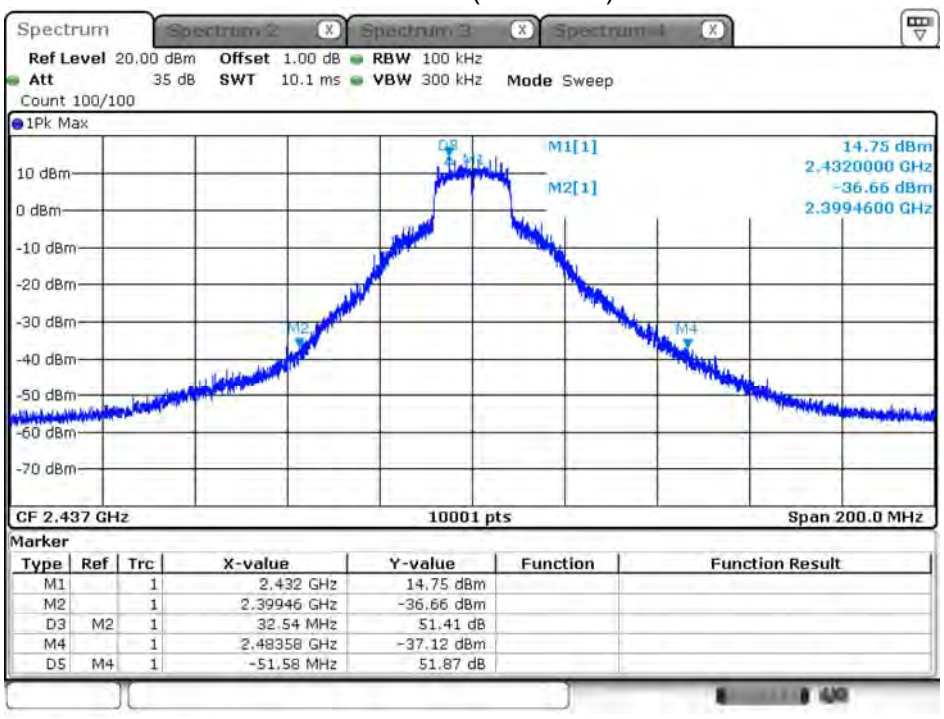
Product	Active Mobile Gateway-with Comm		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

IEEE 802.11g (ANT 0)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	34.51	≧30	Pass
6	2437	51.14	≧30	Pass
11	2462	46.10	≧30	Pass

Channel 1 (2412MHz)

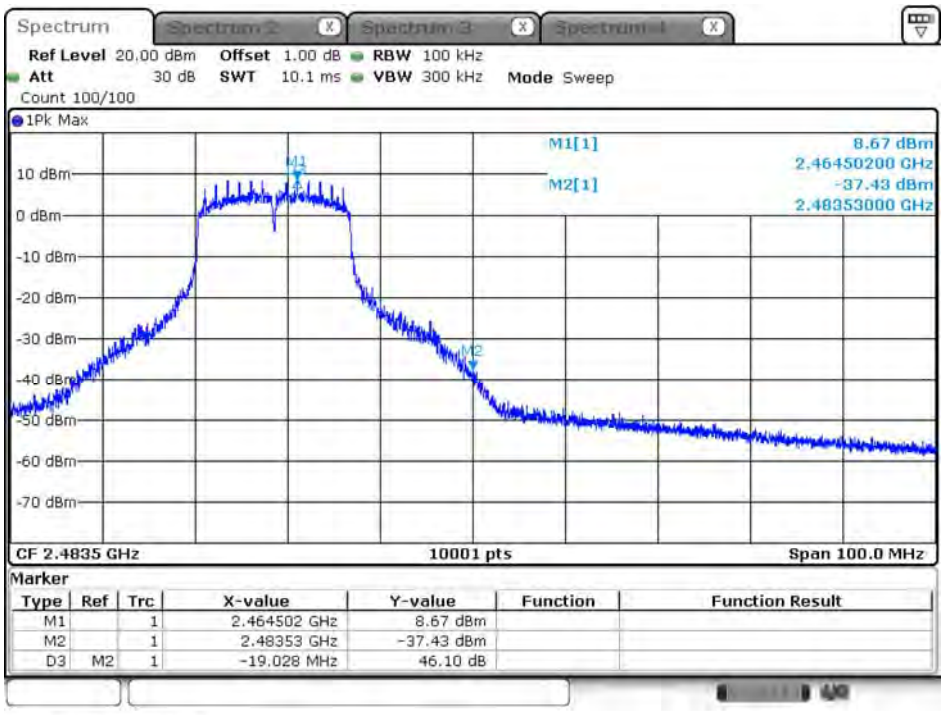


Channel 6 (2437MHz)



Date: 10.APR.2019 15:41:58

Channel 11 (2462MHz)

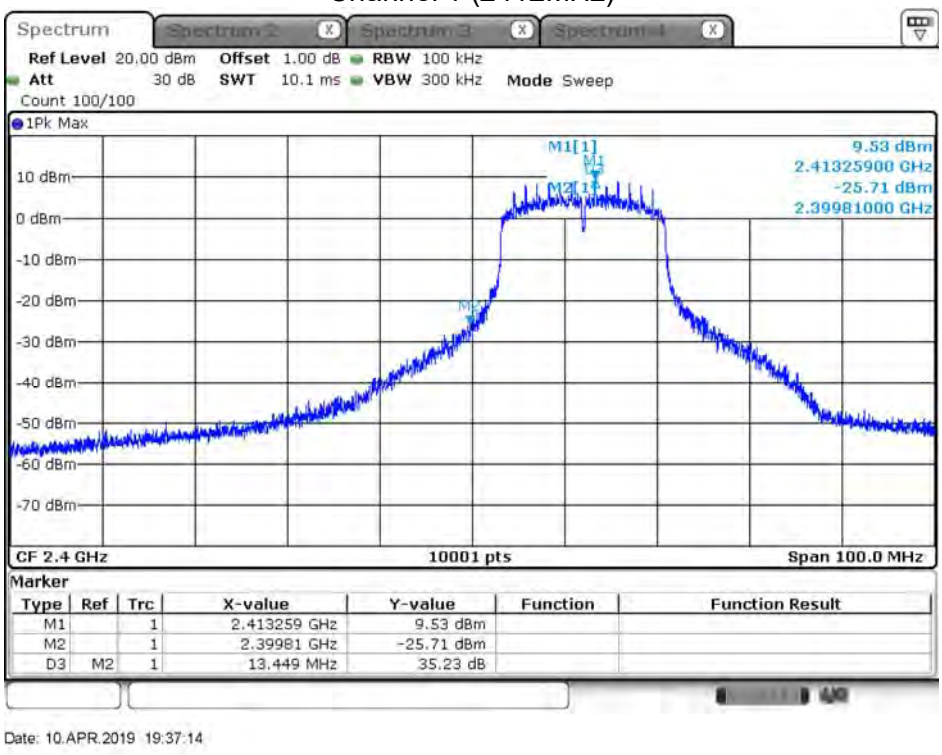


Date: 10.APR.2019 20:04:00

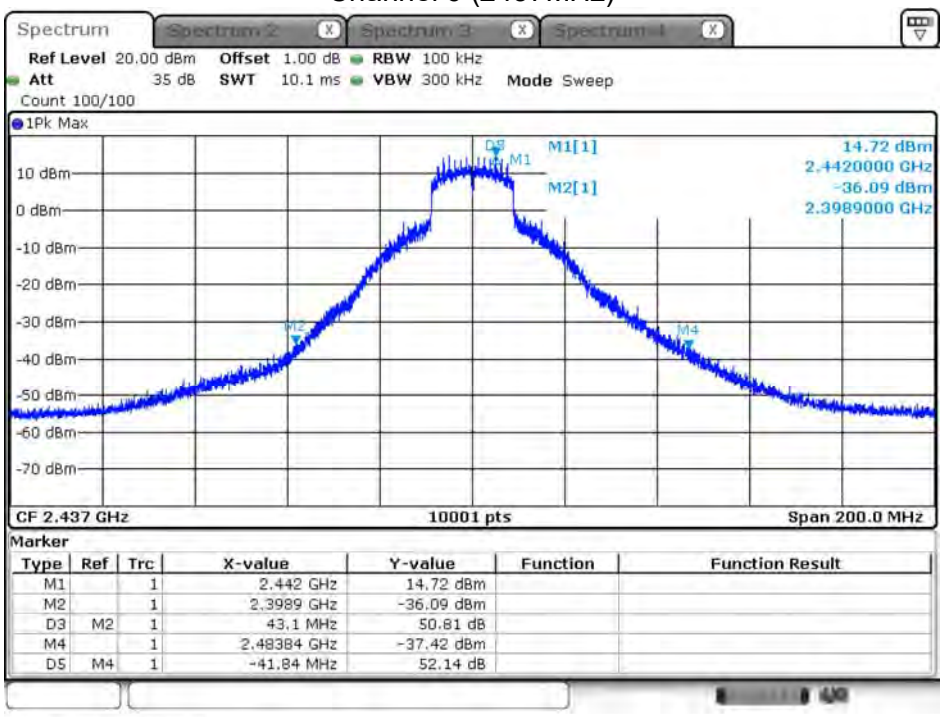
Product	Active Mobile Gateway-with Comm		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

IEEE 802.11n 20M (ANT 0)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	35.23	≧30	Pass
6	2437	50.81	≧30	Pass
11	2462	42.24	≧30	Pass

Channel 1 (2412MHz)



Channel 6 (2437MHz)



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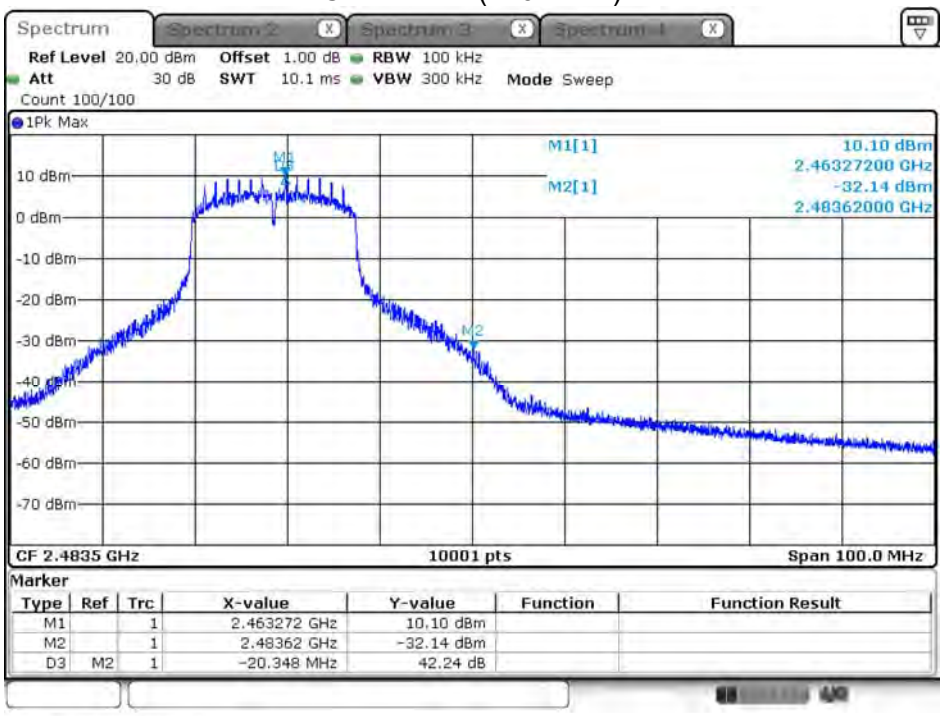
Channel 11 (2462MHz)

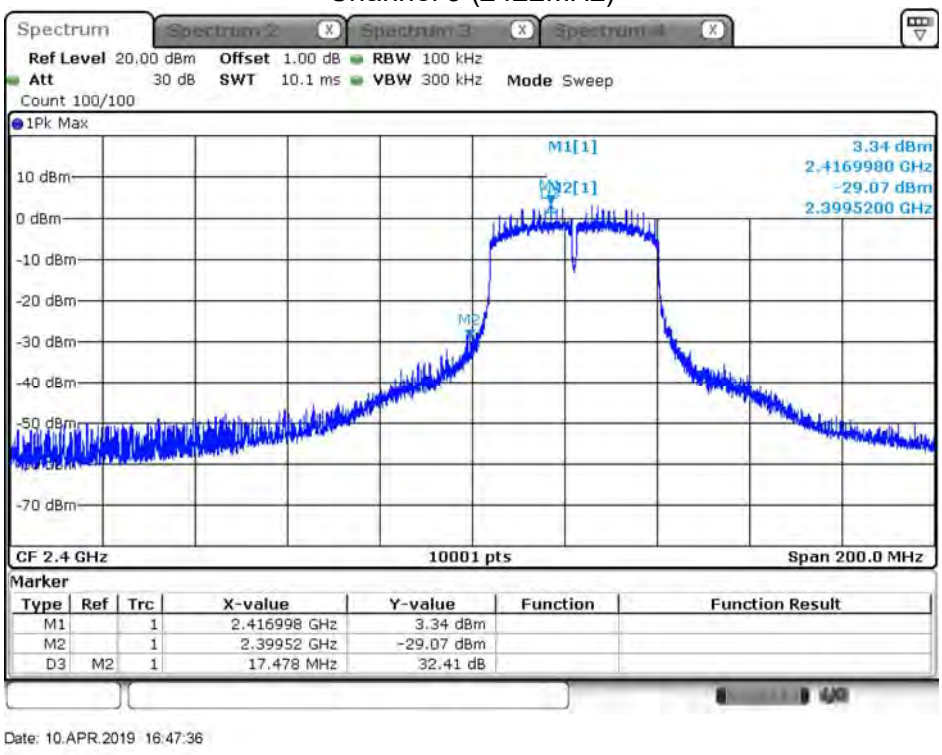


Date: 10.APR.2019 19:40:11

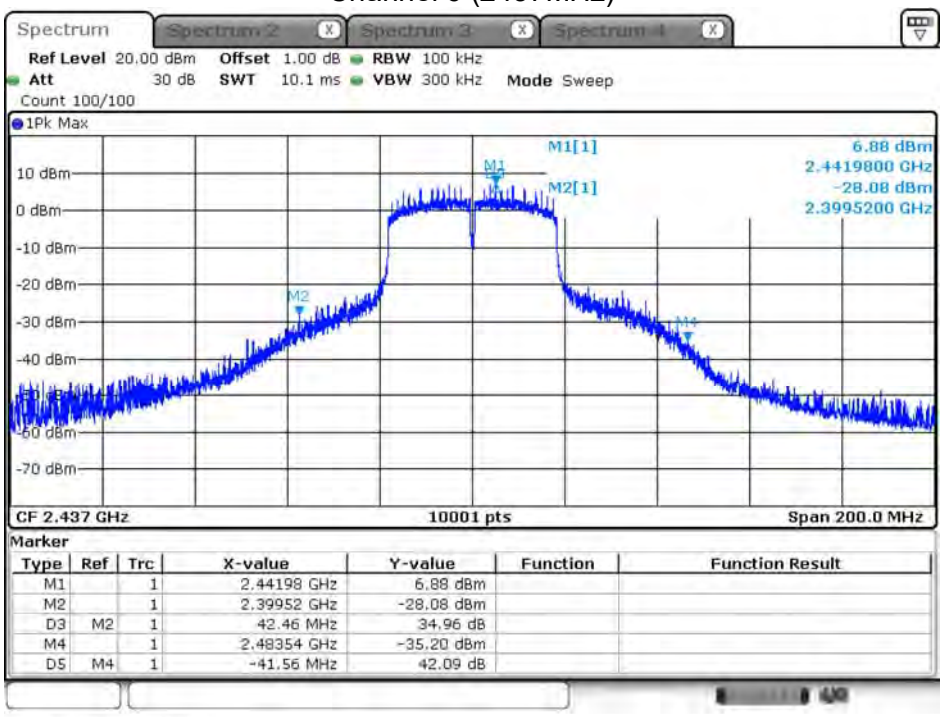
Product	Active Mobile Gateway-with Comm		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

IEEE 802.11n 40M (ANT 0)				
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
3	2422	32.41	≧30	Pass
6	2437	34.96	≧30	Pass
9	2452	40.53	≧30	Pass

Channel 3 (2422MHz)



Channel 6 (2437MHz)



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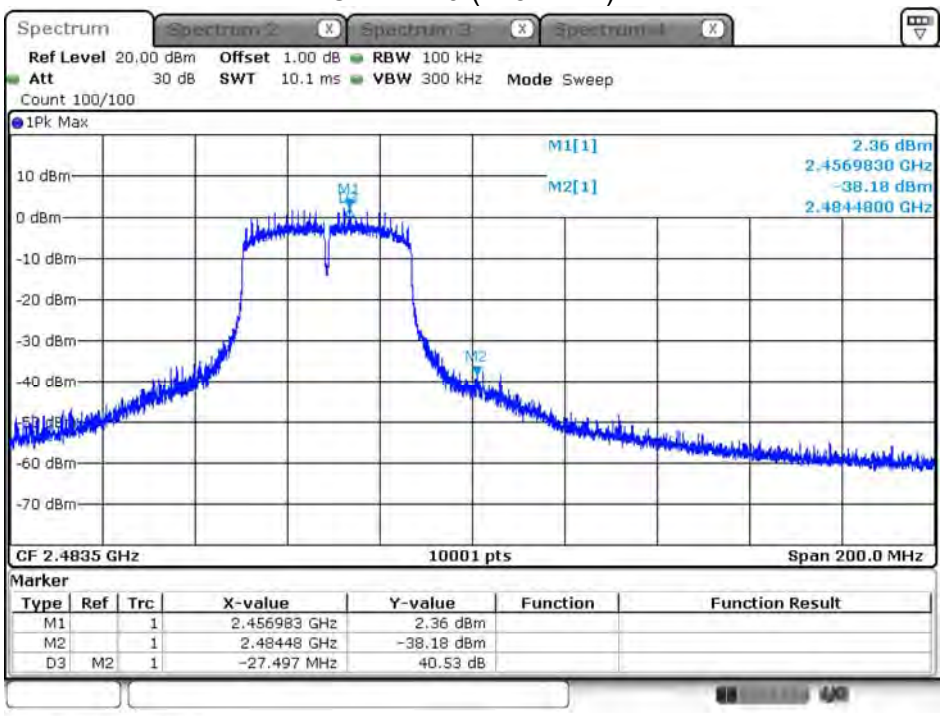
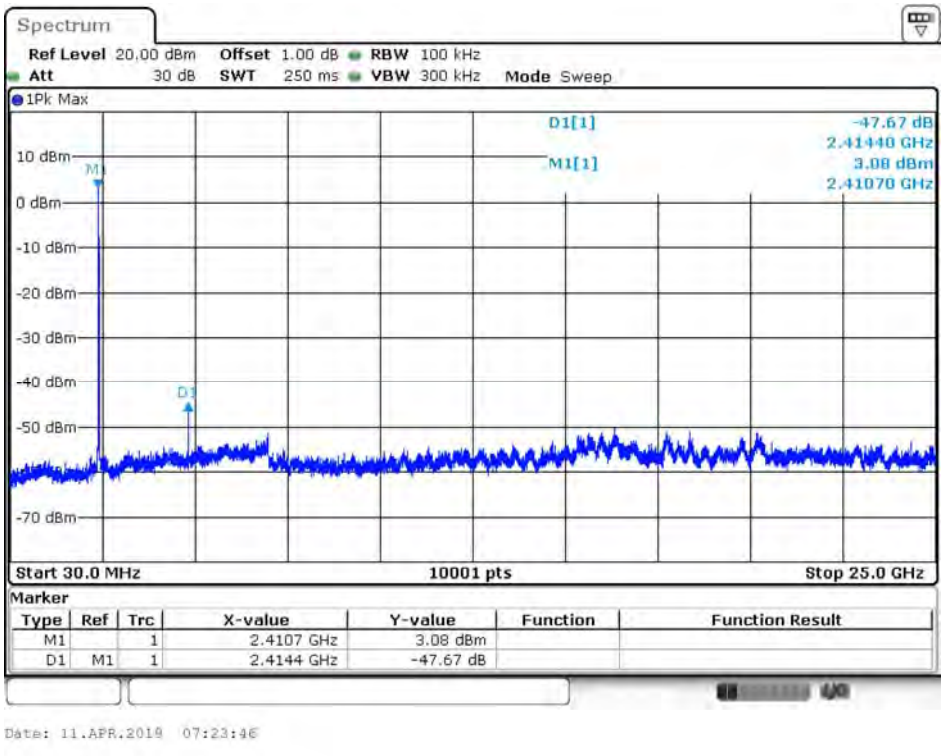
Channel 9 (2452MHz)



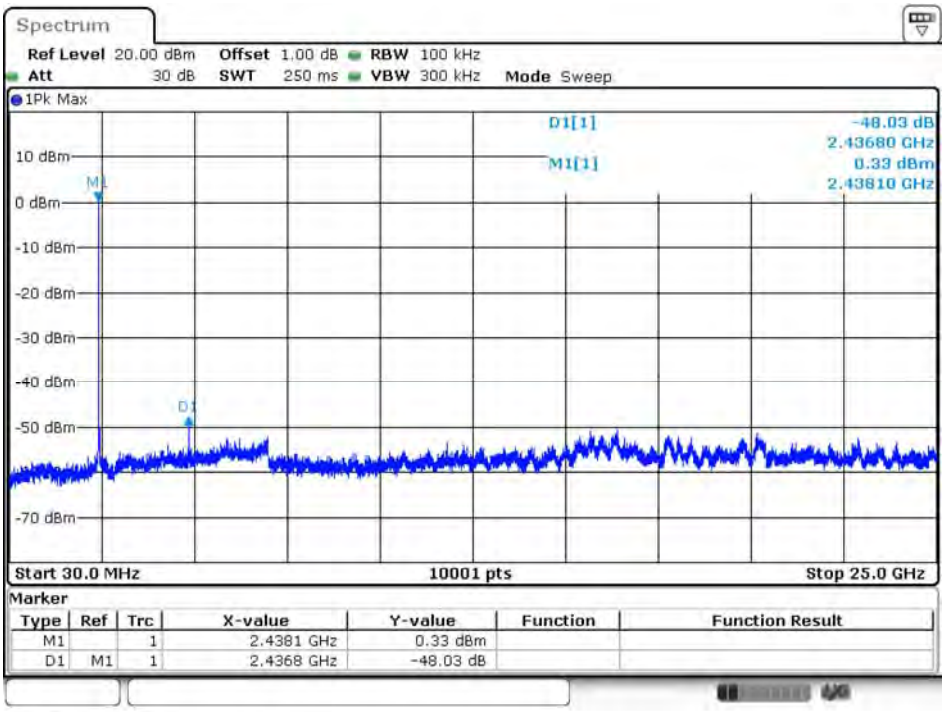
Date: 10.APR.2019 16:53:45

Product	Active Mobile Gateway-with Comm		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

2412MHz (30MHz-25GHz)-802.11b-ANT 0

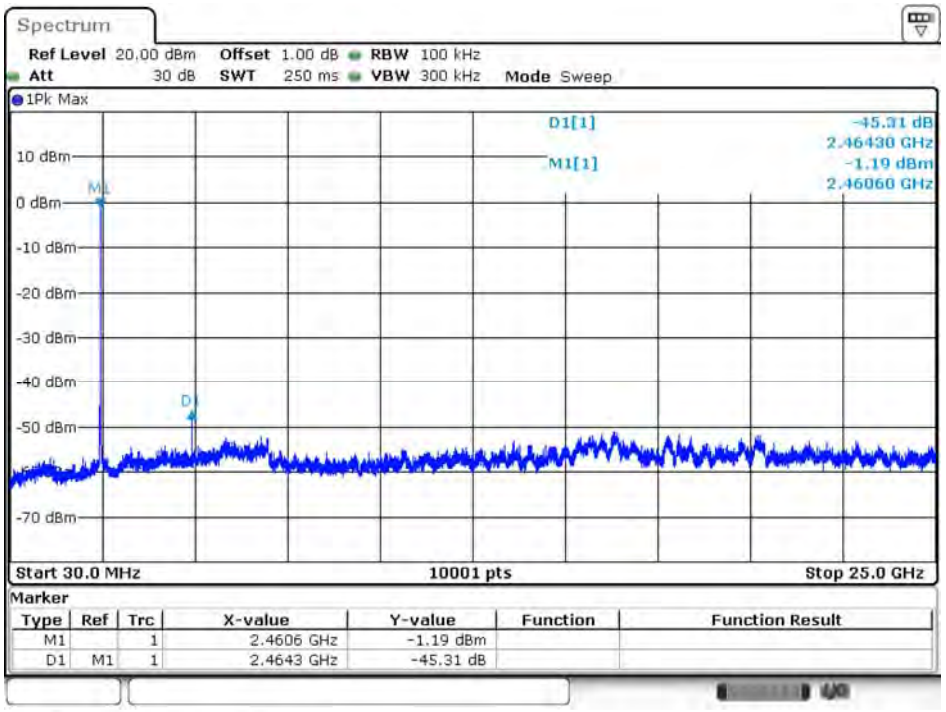


2437MHz (30MHz-25GHz)-802.11b-ANT 0



Date: 11.APR.2019 07:24:10

2462MHz (30MHz-25GHz)-802.11b-ANT 0



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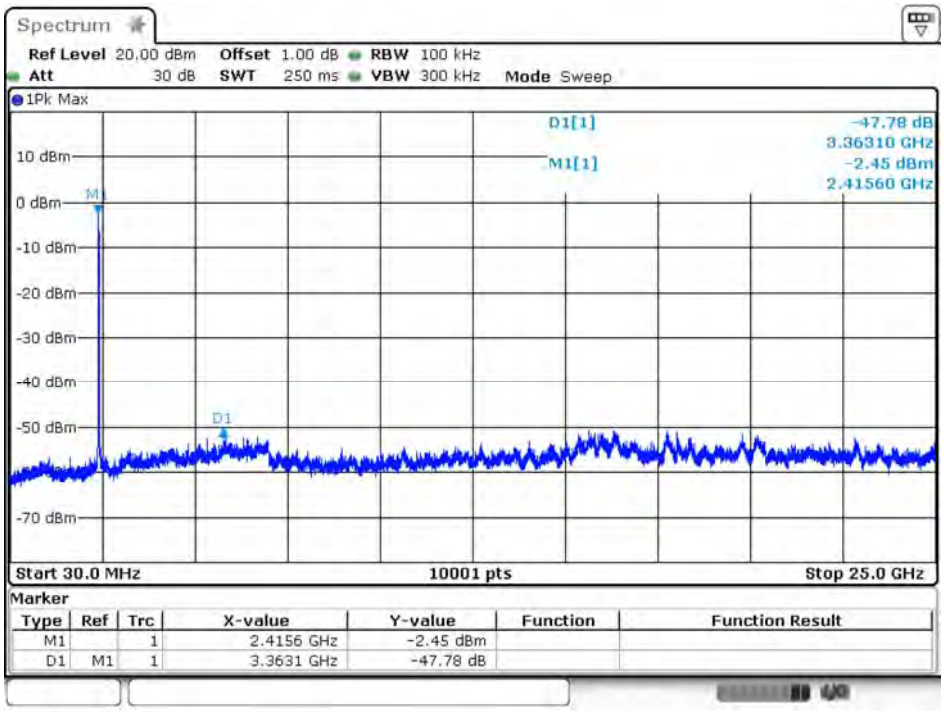
2412MHz (30MHz-25GHz)-802.11g-ANT 0



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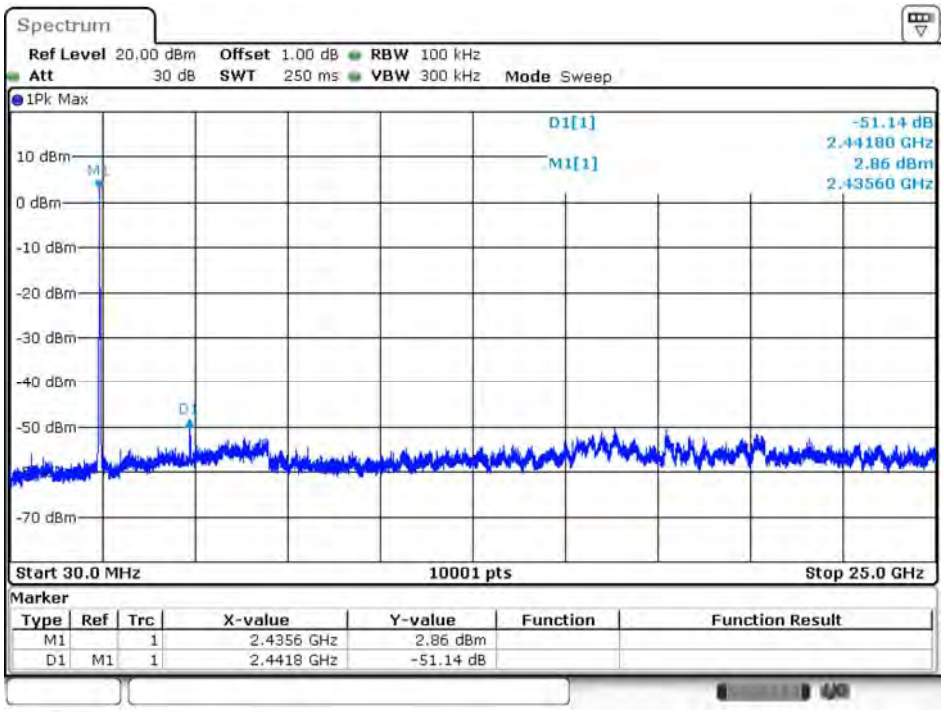
2437MHz (30MHz-25GHz)-802.11g-ANT 0



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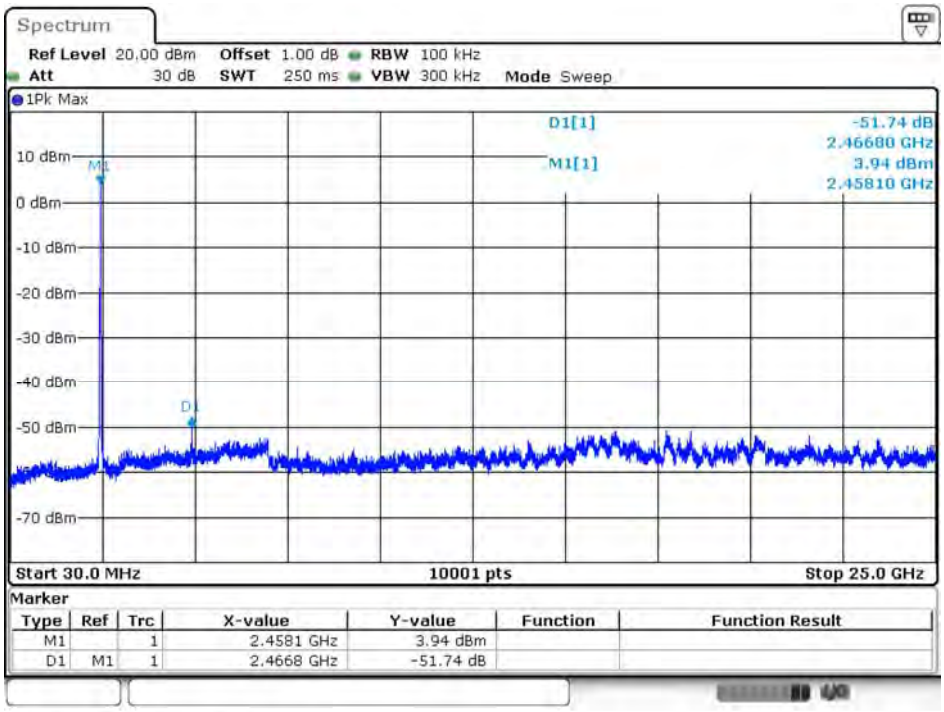
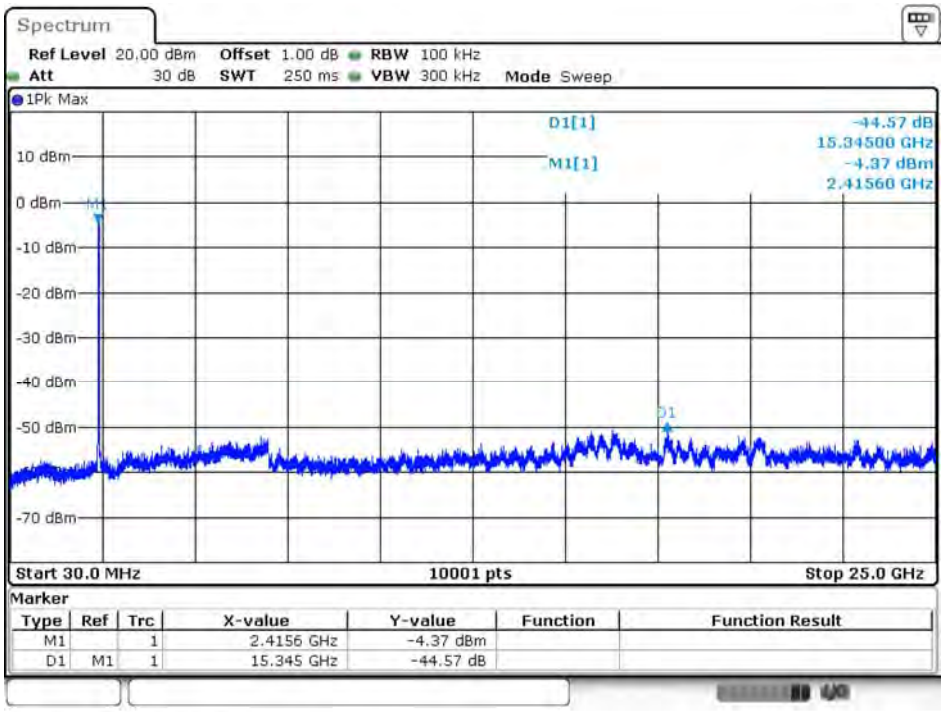
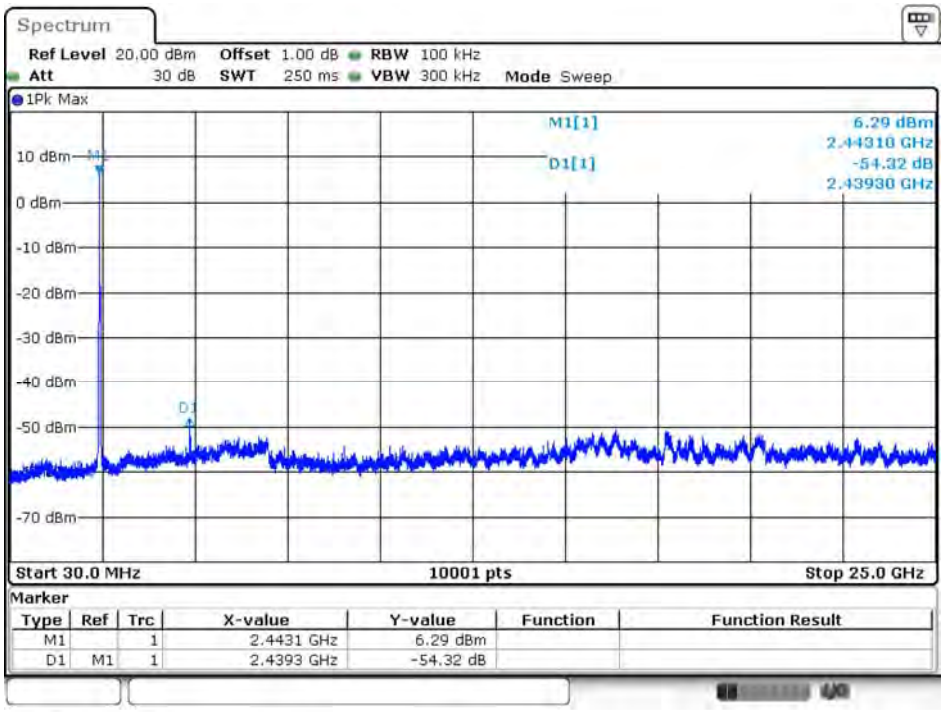
2462MHz (30MHz-25GHz)-802.11g-ANT 0



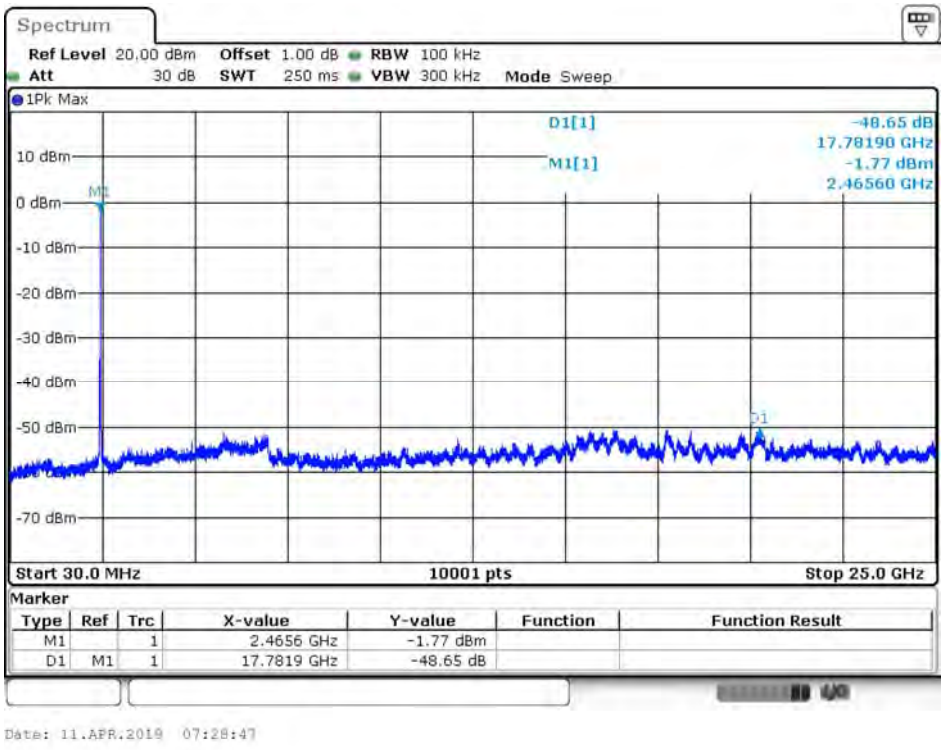
2412MHz (30MHz-25GHz)-802.11n(20MHz)-ANT 0



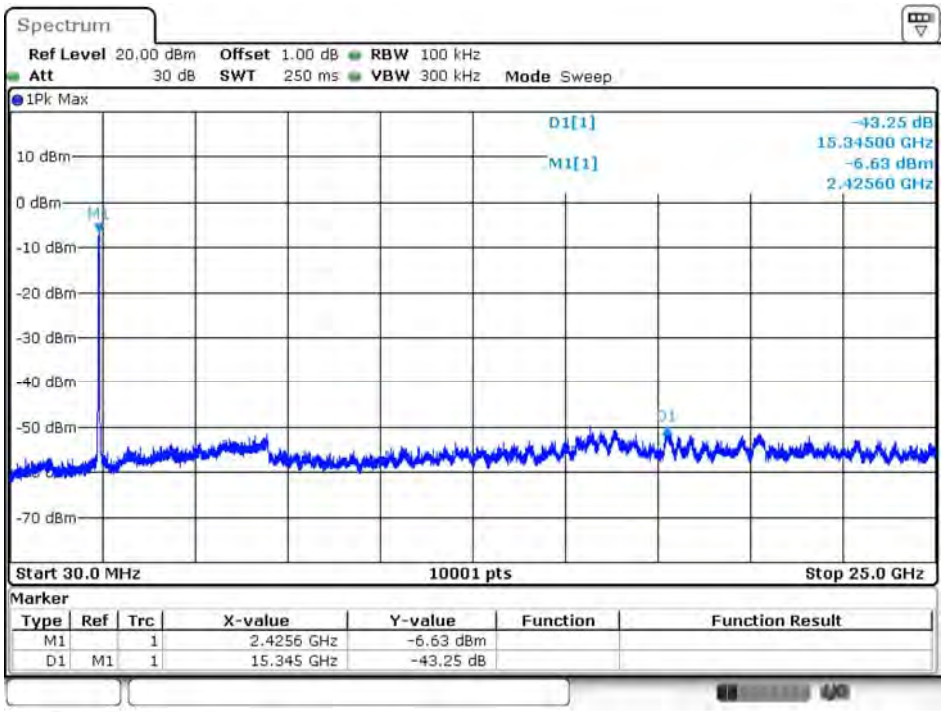
2437MHz (30MHz-25GHz)-802.11n(20MHz)-ANT 0



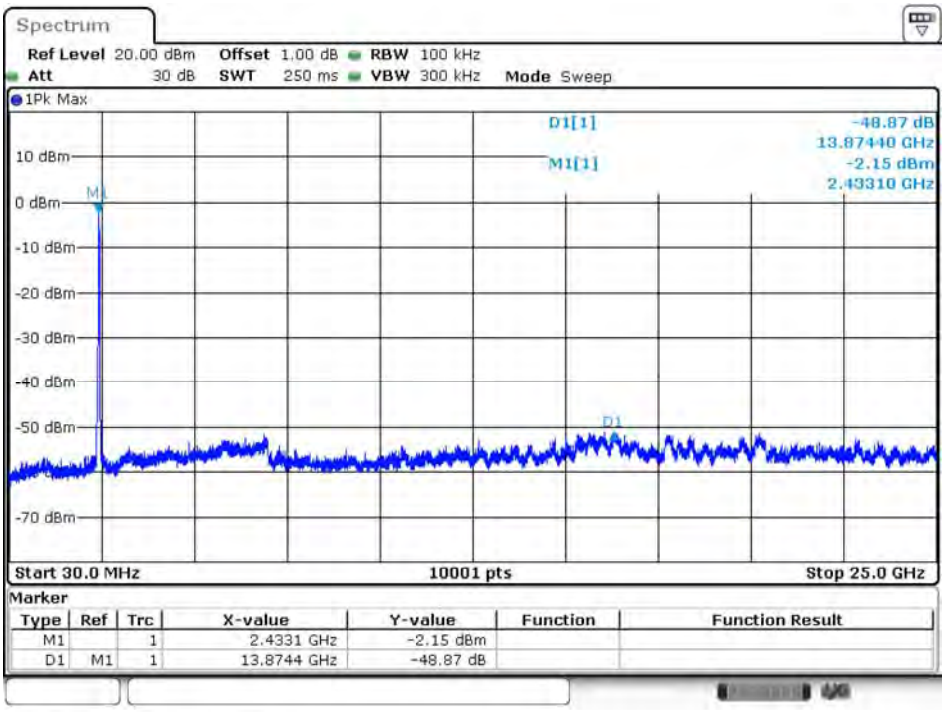
2462MHz (30MHz-25GHz)-802.11n(20MHz)-ANT 0



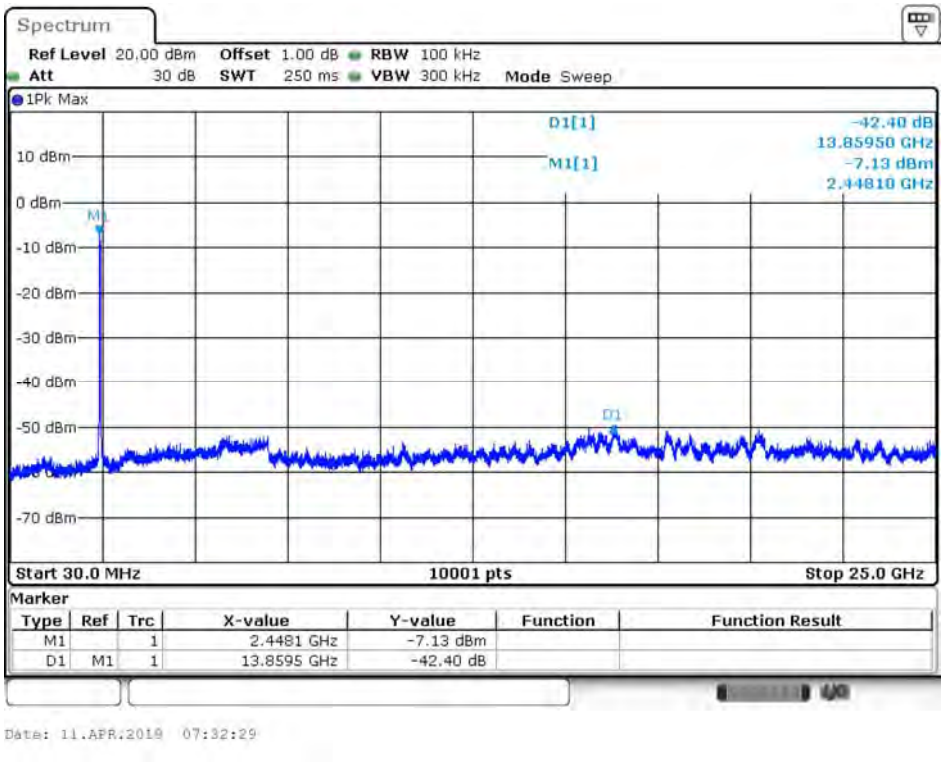
2422MHz (30MHz-25GHz)-802.11n(40MHz)-ANT 0



2437MHz (30MHz-25GHz)-802.11n(40MHz)-ANT 0

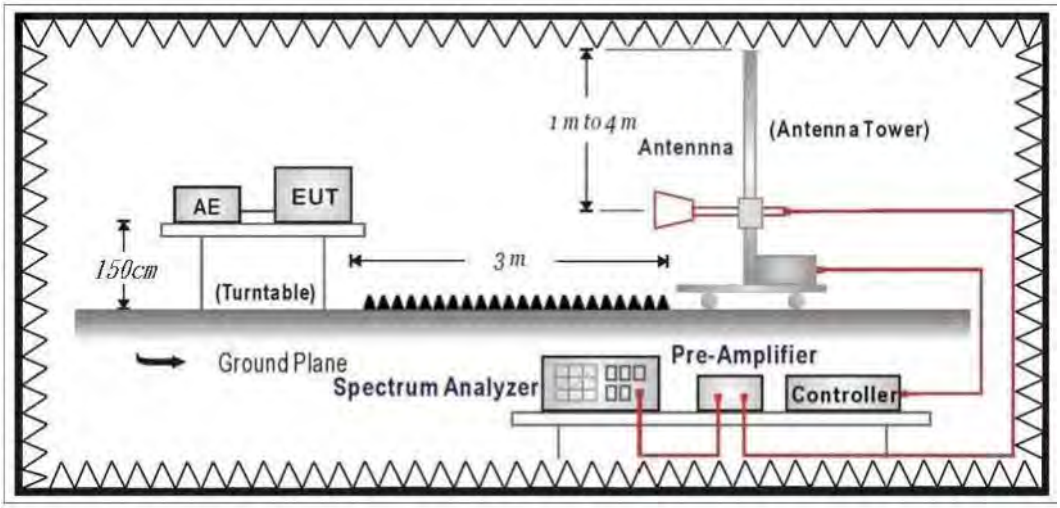


2452MHz (30MHz-25GHz)-802.11n(40MHz)-ANT 0



7. Radiated Emission Band Edge

7.1. Test Setup



7.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

7.3. Test Procedure

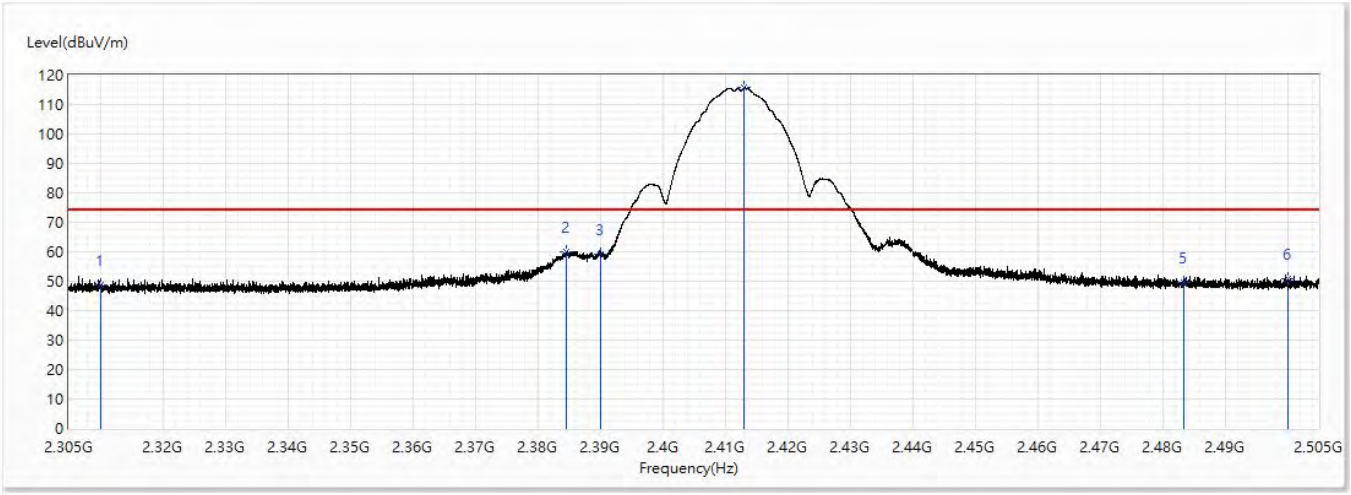
The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB 558074 D01 V05 for compliance to FCC 47CFR 15.247 requirements.
The EUT and its simulators are placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level.
The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna can move 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 measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

7.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2018

7.5. Test Result

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2412MHz		

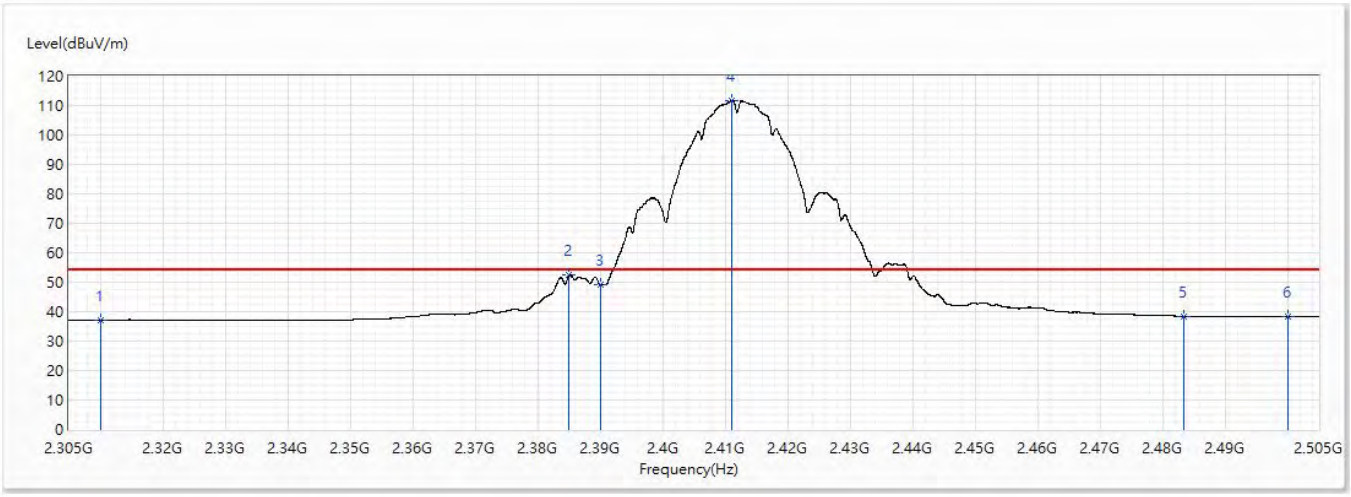


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	48.68	74.00	-25.32	34.44	14.24	PK
2	2384.54	59.95	74.00	-14.05	45.18	14.77	PK
3	2390	59.16	74.00	-14.84	44.35	14.81	PK
! 4	2413.1	115.64	74.00	41.64	100.64	15.00	PK
5	2483.5	49.43	74.00	-24.57	33.95	15.48	PK
6	2500	50.82	74.00	-23.18	35.23	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2412MHz		

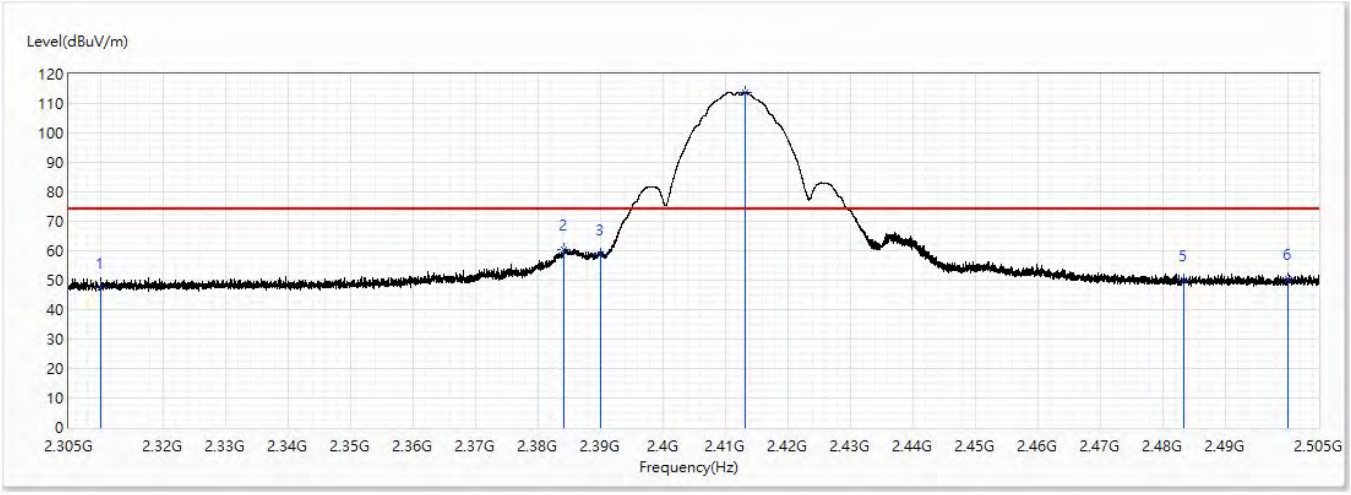


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.26	54.00	-16.74	23.02	14.24	AV
2	2385.06	52.40	54.00	-1.60	37.60	14.80	AV
3	2390	49.29	54.00	-4.71	34.48	14.81	AV
! 4	2411.06	111.79	54.00	57.79	96.81	14.98	AV
5	2483.5	38.44	54.00	-15.56	22.96	15.48	AV
6	2500	38.30	54.00	-15.70	22.71	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2412MHz		

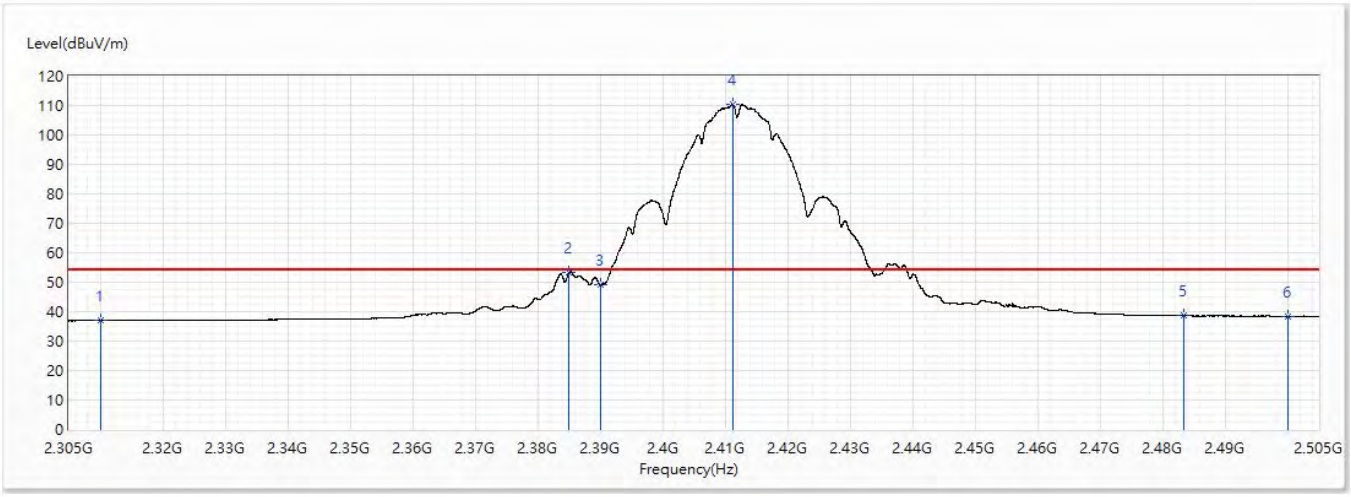


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	47.48	74.00	-26.52	33.24	14.24	PK
2	2384.3	60.25	74.00	-13.75	45.48	14.77	PK
3	2390	58.58	74.00	-15.42	43.77	14.81	PK
! 4	2413.14	113.89	74.00	39.89	98.89	15.00	PK
5	2483.5	49.89	74.00	-24.11	34.41	15.48	PK
6	2500	50.27	74.00	-23.73	34.68	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2412MHz		

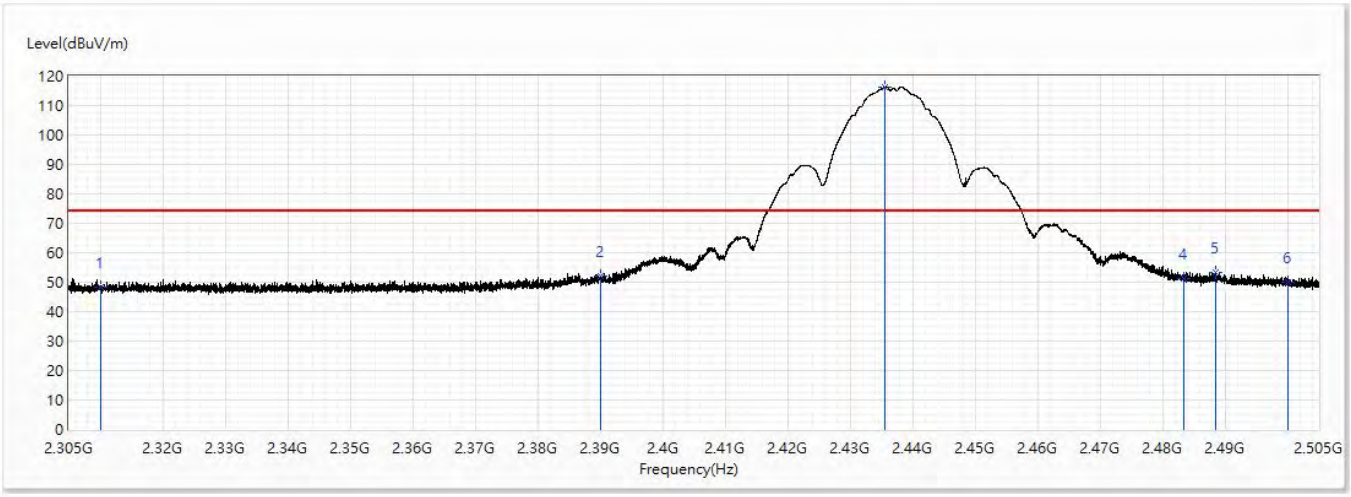


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	36.96	54.00	-17.04	22.72	14.24	AV
2	2385.02	53.24	54.00	-0.76	38.44	14.80	AV
3	2390	49.03	54.00	-4.97	34.22	14.81	AV
! 4	2411.18	110.35	54.00	56.35	95.37	14.98	AV
5	2483.5	38.60	54.00	-15.40	23.12	15.48	AV
6	2500	38.51	54.00	-15.49	22.92	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2437MHz		

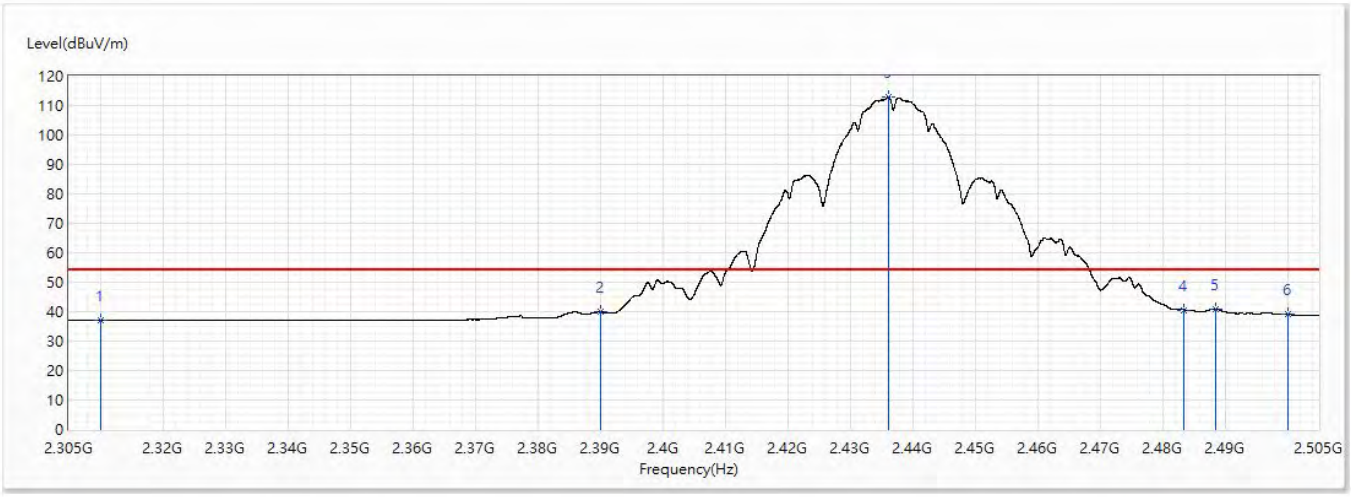


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	48.16	74.00	-25.84	33.92	14.24	PK
2	2390	52.16	74.00	-21.84	37.35	14.81	PK
! 3	2435.68	116.28	74.00	42.28	101.11	15.17	PK
4	2483.5	51.13	74.00	-22.87	35.65	15.48	PK
5	2488.58	53.48	74.00	-20.52	37.96	15.52	PK
6	2500	50.06	74.00	-23.94	34.47	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2437MHz		

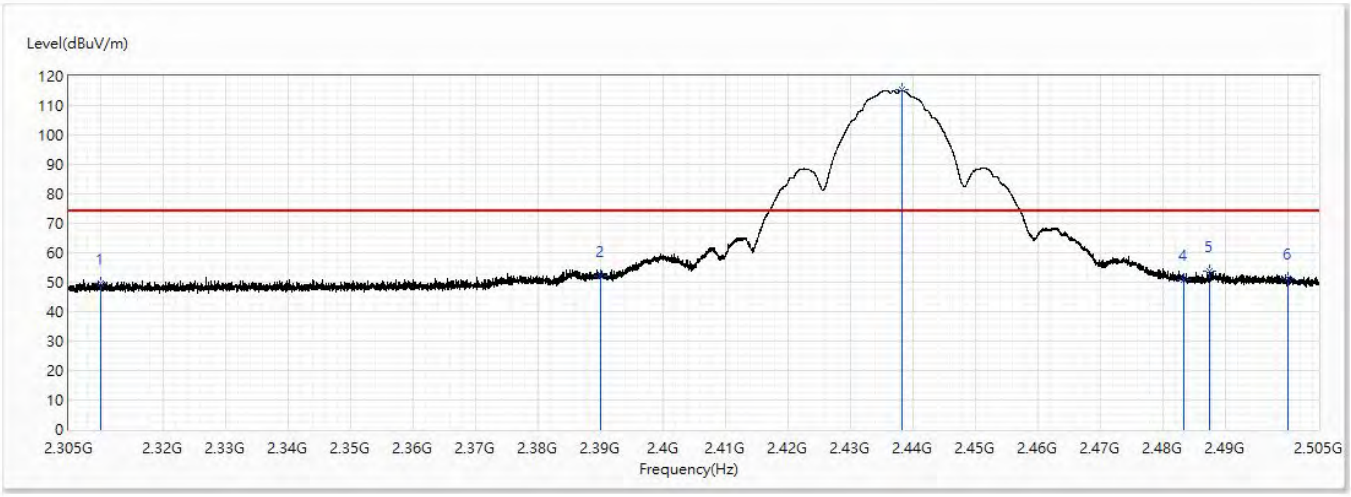


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.14	54.00	-16.86	22.90	14.24	AV
2	2390	40.13	54.00	-13.87	25.32	14.81	AV
! 3	2436.22	112.83	54.00	58.83	97.66	15.17	AV
4	2483.5	40.62	54.00	-13.38	25.14	15.48	AV
5	2488.52	40.89	54.00	-13.11	25.38	15.51	AV
6	2500	39.14	54.00	-14.86	23.55	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2437MHz		

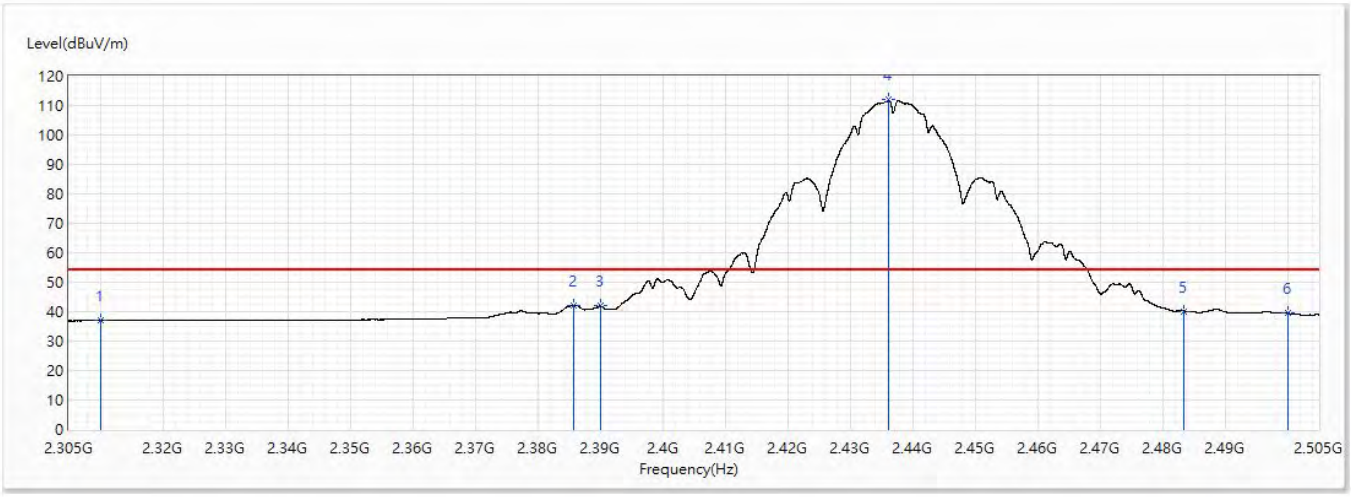


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	49.40	74.00	-24.60	35.16	14.24	PK
2	2390	52.18	74.00	-21.82	37.37	14.81	PK
! 3	2438.24	115.21	74.00	41.21	100.03	15.18	PK
4	2483.5	50.68	74.00	-23.32	35.20	15.48	PK
5	2487.6	53.82	74.00	-20.18	38.31	15.51	PK
6	2500	51.12	74.00	-22.88	35.53	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2437MHz		

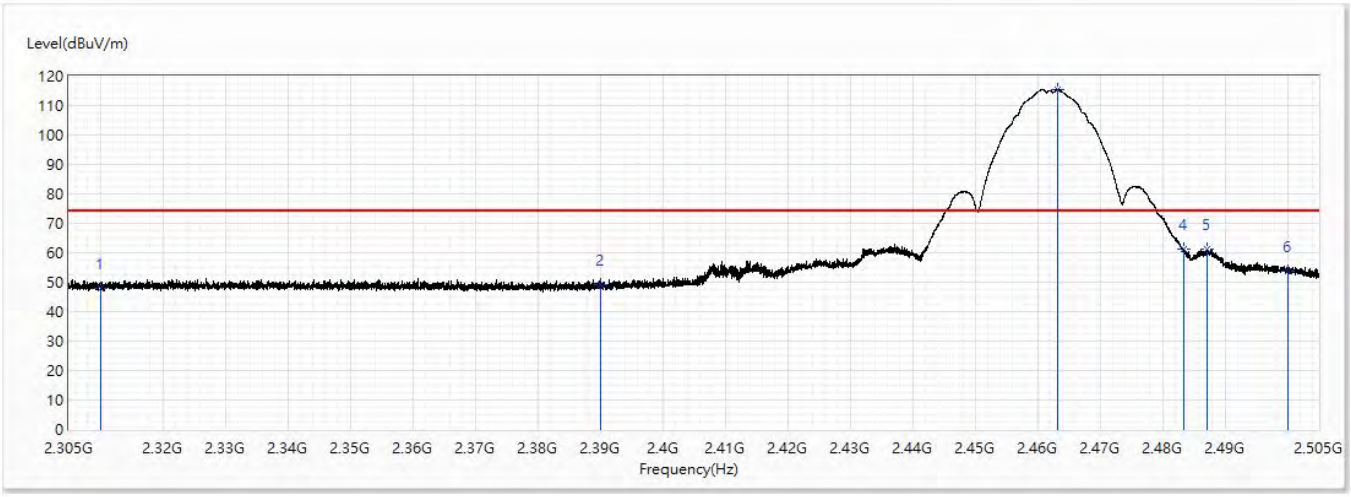


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	36.96	54.00	-17.04	22.72	14.24	AV
2	2385.82	42.14	54.00	-11.86	27.34	14.80	AV
3	2390	41.89	54.00	-12.11	27.08	14.81	AV
! 4	2436.2	111.95	54.00	57.95	96.78	15.17	AV
5	2483.5	40.15	54.00	-13.85	24.67	15.48	AV
6	2500	39.44	54.00	-14.56	23.85	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2462MHz		

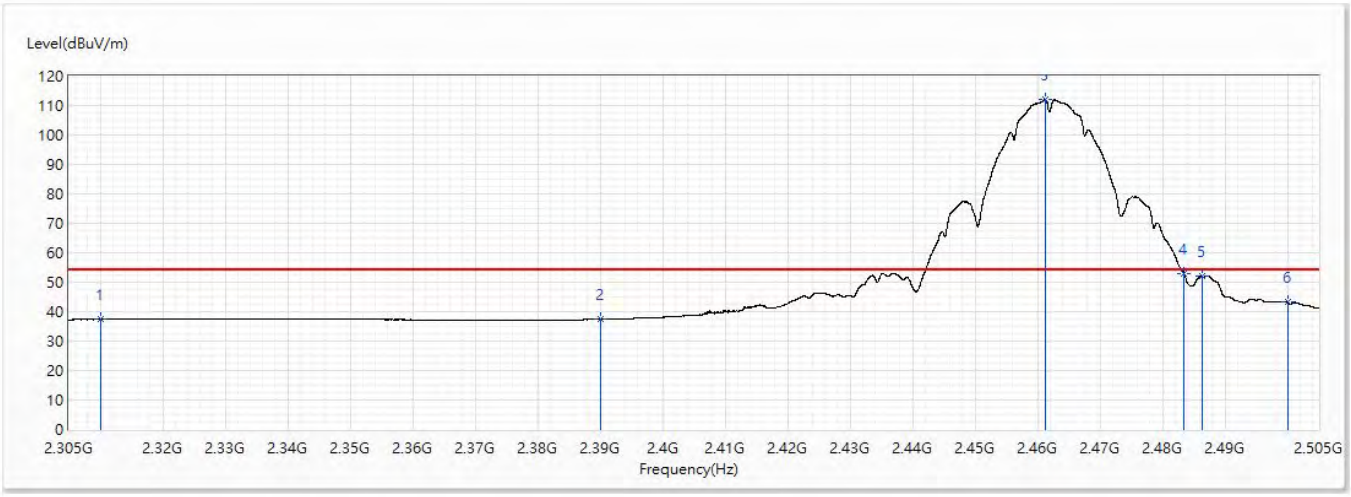


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	48.05	74.00	-25.95	33.81	14.24	PK
2	2390	49.22	74.00	-24.78	34.41	14.81	PK
! 3	2463.18	115.42	74.00	41.42	100.07	15.35	PK
4	2483.5	61.06	74.00	-12.94	45.58	15.48	PK
5	2487.24	61.30	74.00	-12.70	45.79	15.51	PK
6	2500	53.75	74.00	-20.25	38.16	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2462MHz		

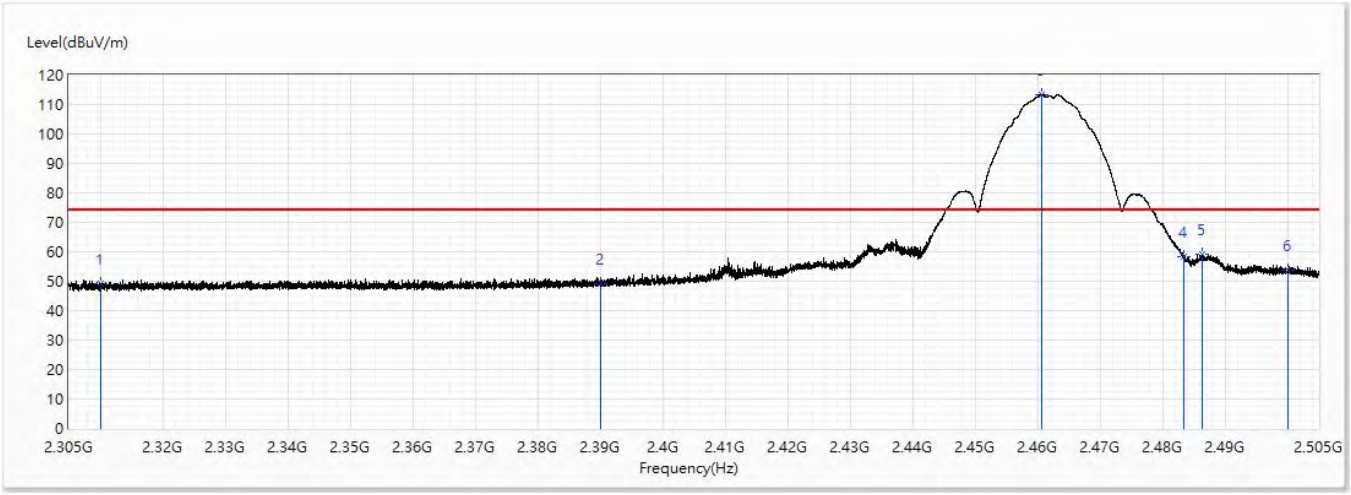


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.33	54.00	-16.67	23.09	14.24	AV
2	2390	37.38	54.00	-16.62	22.57	14.81	AV
! 3	2461.2	112.15	54.00	58.15	96.81	15.34	AV
4	2483.5	52.83	54.00	-1.17	37.35	15.48	AV
5	2486.32	52.00	54.00	-2.00	36.49	15.51	AV
6	2500	43.14	54.00	-10.86	27.55	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2462MHz		

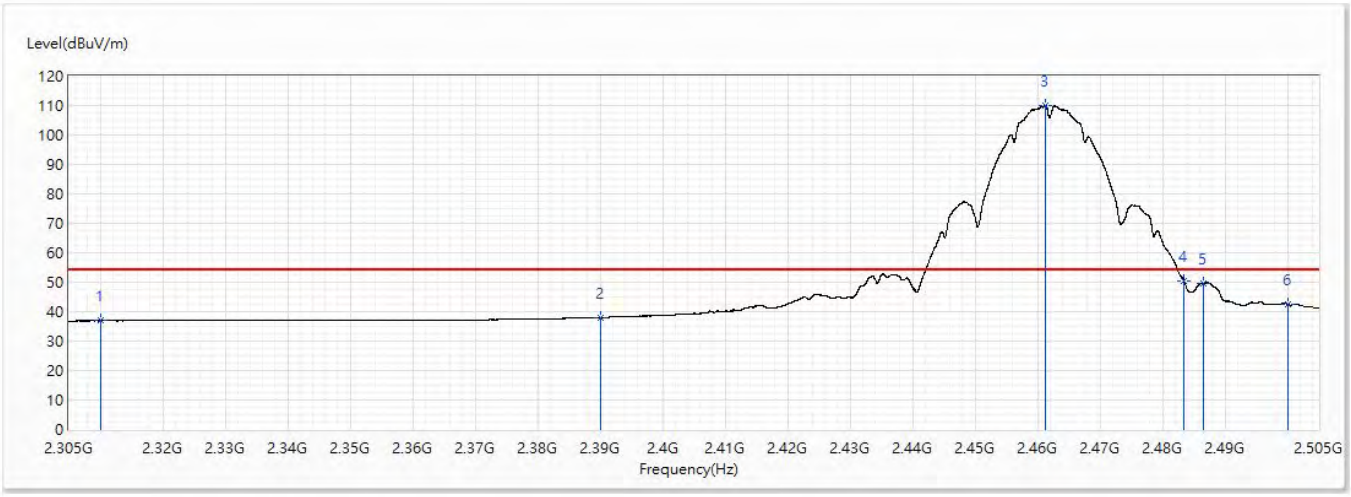


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	49.04	74.00	-24.96	34.80	14.24	PK
2	2390	49.05	74.00	-24.95	34.24	14.81	PK
! 3	2460.76	113.44	74.00	39.44	98.10	15.34	PK
4	2483.5	58.46	74.00	-15.54	42.98	15.48	PK
5	2486.4	59.22	74.00	-14.78	43.71	15.51	PK
6	2500	53.61	74.00	-20.39	38.02	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11b_2462MHz		

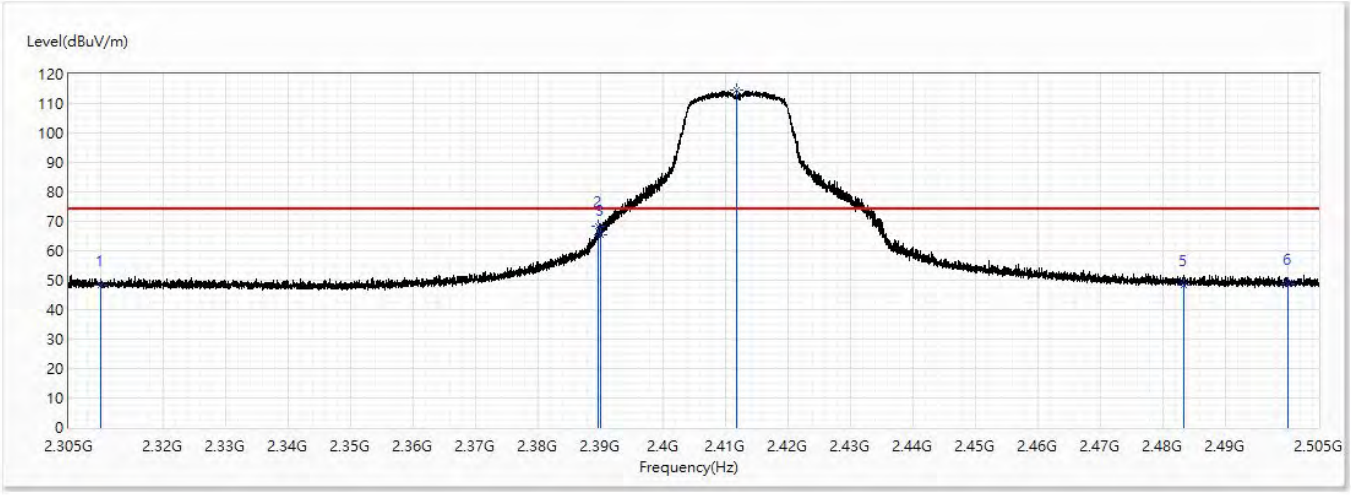


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	36.92	54.00	-17.08	22.68	14.24	AV
2	2390	37.99	54.00	-16.01	23.18	14.81	AV
! 3	2461.2	110.14	54.00	56.14	94.80	15.34	AV
4	2483.5	50.31	54.00	-3.69	34.83	15.48	AV
5	2486.54	49.55	54.00	-4.45	34.04	15.51	AV
6	2500	42.64	54.00	-11.36	27.05	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2412MHz		

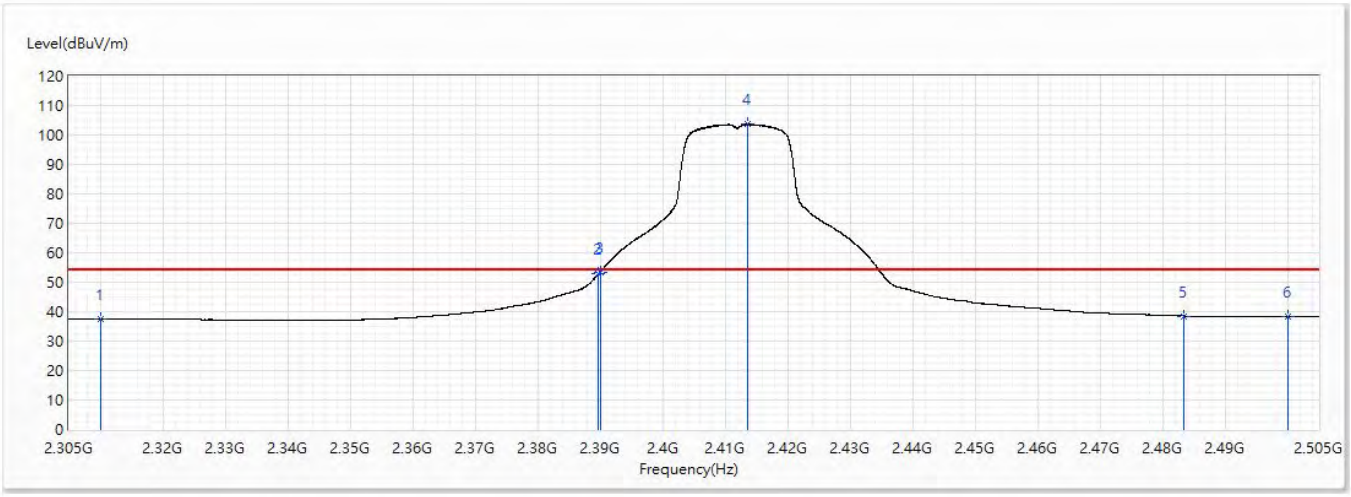


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	48.32	74.00	-25.68	34.08	14.24	PK
2	2389.74	68.28	74.00	-5.72	53.47	14.81	PK
3	2390	65.39	74.00	-8.61	50.58	14.81	PK
! 4	2411.96	114.67	74.00	40.67	99.69	14.98	PK
5	2483.5	48.52	74.00	-25.48	33.04	15.48	PK
6	2500	48.80	74.00	-25.20	33.21	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2412MHz		

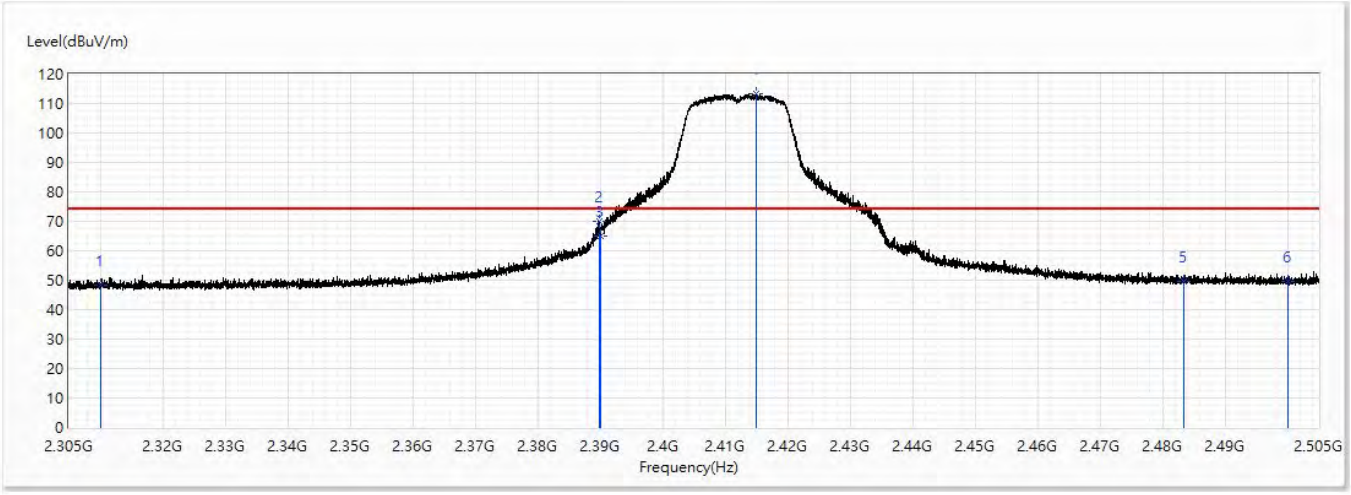


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.56	54.00	-16.44	23.32	14.24	AV
2	2389.8	52.86	54.00	-1.14	38.05	14.81	AV
3	2390	53.32	54.00	-0.68	38.51	14.81	AV
! 4	2413.68	103.67	54.00	49.67	88.67	15.00	AV
5	2483.5	38.51	54.00	-15.49	23.03	15.48	AV
6	2500	38.26	54.00	-15.74	22.67	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2412MHz		

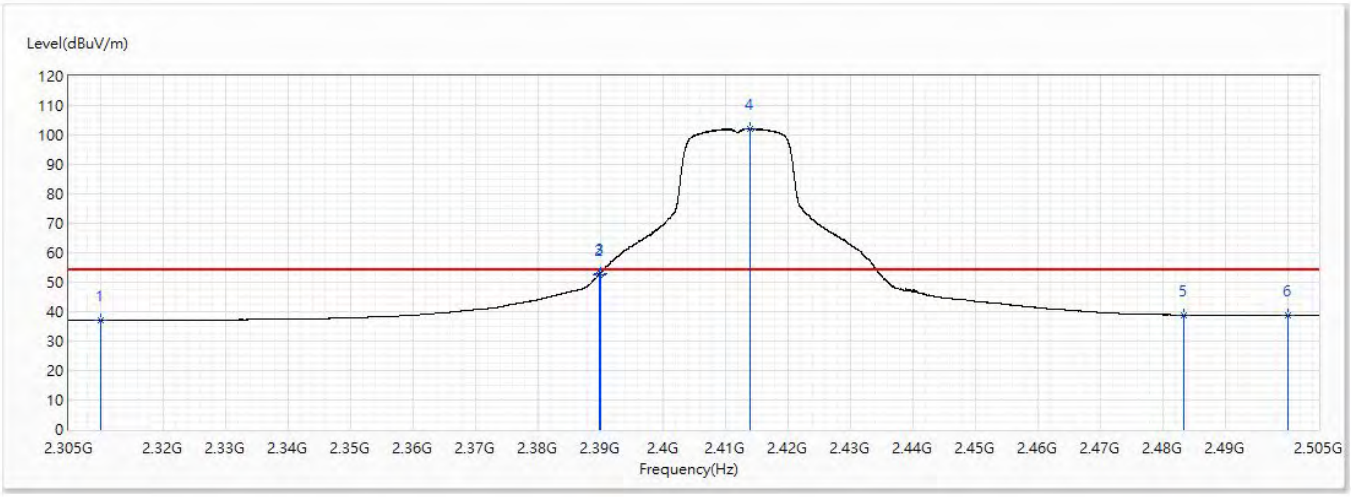


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	48.38	74.00	-25.62	34.14	14.24	PK
2	2389.84	70.14	74.00	-3.86	55.33	14.81	PK
3	2390	65.09	74.00	-8.91	50.28	14.81	PK
! 4	2415.06	113.41	74.00	39.41	98.41	15.00	PK
5	2483.5	49.43	74.00	-24.57	33.95	15.48	PK
6	2500	49.79	74.00	-24.21	34.20	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2412MHz		

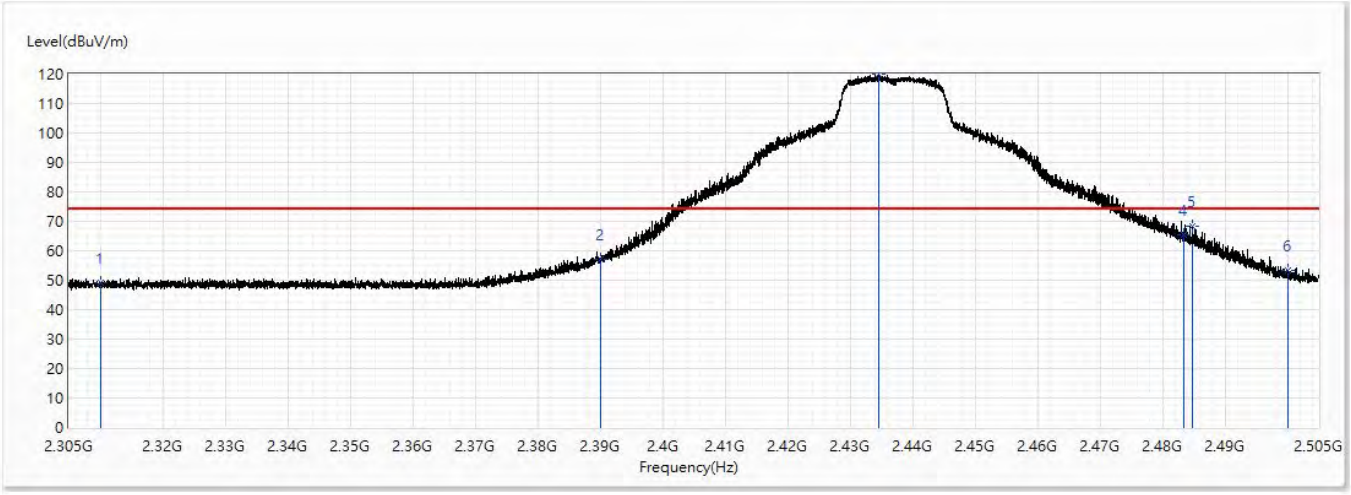


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.00	54.00	-17.00	22.76	14.24	AV
2	2389.88	52.46	54.00	-1.54	37.65	14.81	AV
3	2390	52.75	54.00	-1.25	37.94	14.81	AV
! 4	2414	102.19	54.00	48.19	87.19	15.00	AV
5	2483.5	38.83	54.00	-15.17	23.35	15.48	AV
6	2500	38.62	54.00	-15.38	23.03	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2437MHz		

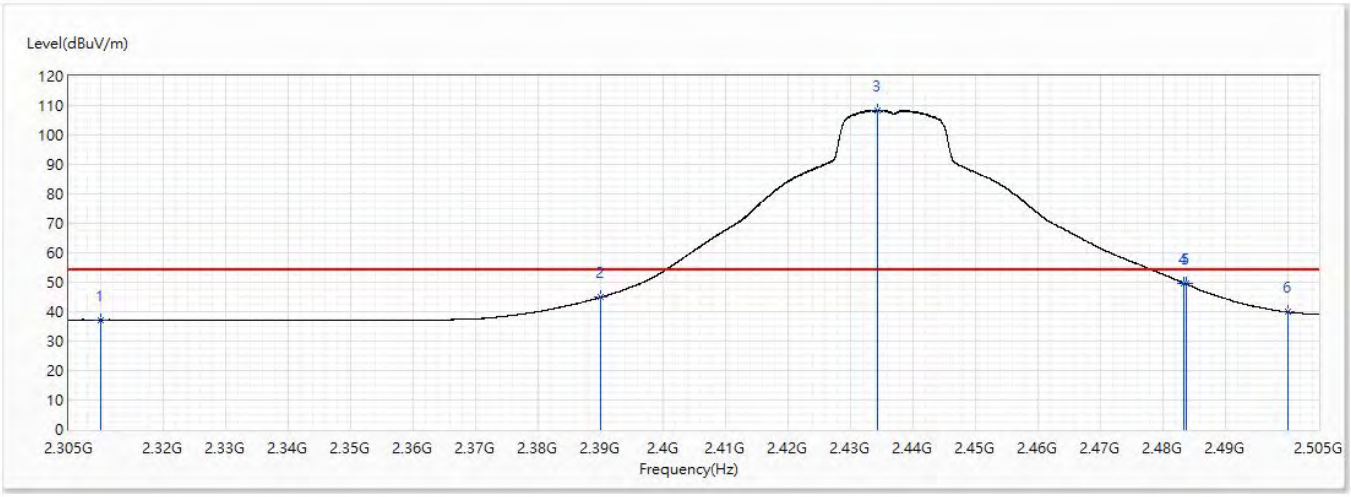


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	49.33	74.00	-24.67	35.09	14.24	PK
2	2390	57.24	74.00	-16.76	42.43	14.81	PK
! 3	2434.56	119.86	74.00	45.86	104.72	15.14	PK
4	2483.5	65.30	74.00	-8.70	49.82	15.48	PK
5	2484.8	68.17	74.00	-5.83	52.69	15.48	PK
6	2500	53.13	74.00	-20.87	37.54	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2437MHz		

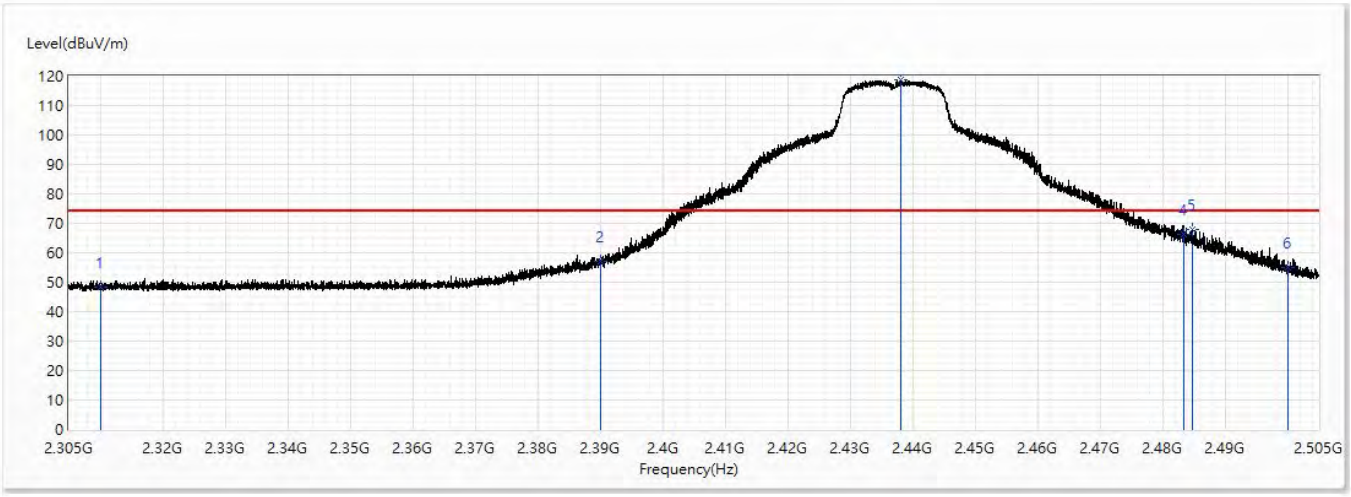


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.21	54.00	-16.79	22.97	14.24	AV
2	2390	44.84	54.00	-9.16	30.03	14.81	AV
! 3	2434.5	108.50	54.00	54.50	93.36	15.14	AV
4	2483.5	49.61	54.00	-4.39	34.13	15.48	AV
5	2483.76	49.38	54.00	-4.62	33.90	15.48	AV
6	2500	39.83	54.00	-14.17	24.24	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2437MHz		

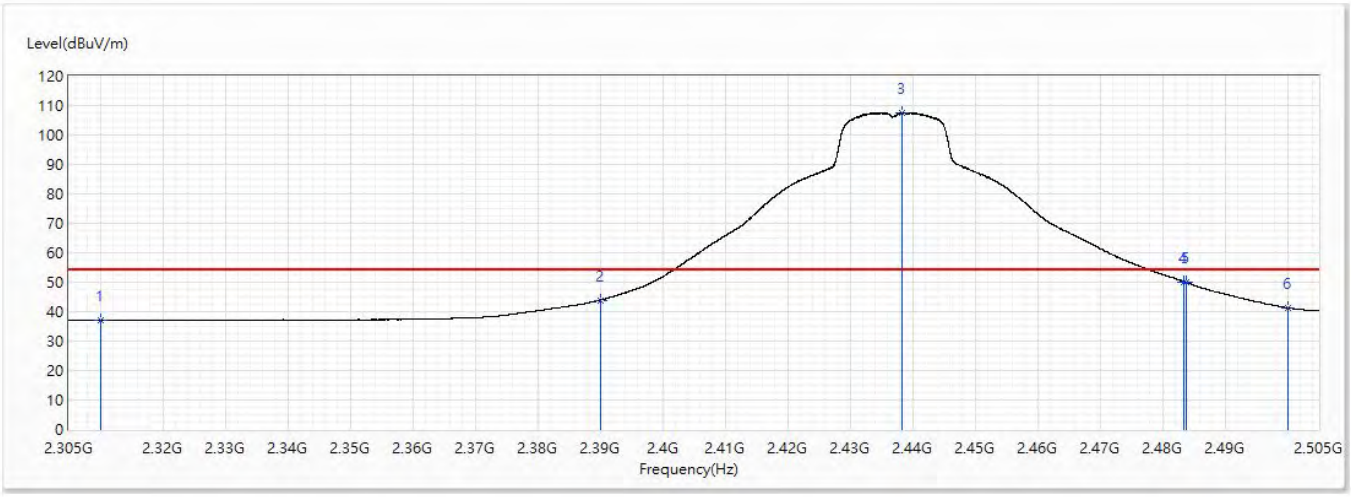


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	48.28	74.00	-25.72	34.04	14.24	PK
2	2390	57.16	74.00	-16.84	42.35	14.81	PK
! 3	2438.1	118.65	74.00	44.65	103.47	15.18	PK
4	2483.5	66.22	74.00	-7.78	50.74	15.48	PK
5	2484.84	68.02	74.00	-5.98	52.54	15.48	PK
6	2500	54.89	74.00	-19.11	39.30	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2437MHz		

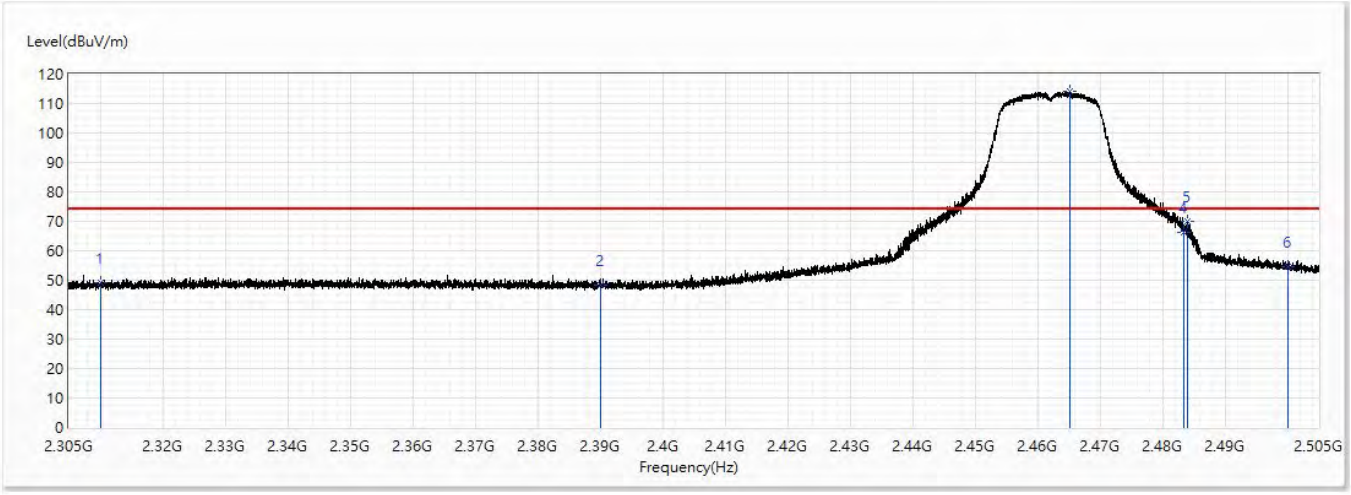


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.01	54.00	-16.99	22.77	14.24	AV
2	2390	43.91	54.00	-10.09	29.10	14.81	AV
! 3	2438.32	107.60	54.00	53.60	92.42	15.18	AV
4	2483.5	50.12	54.00	-3.88	34.64	15.48	AV
5	2483.76	49.94	54.00	-4.06	34.46	15.48	AV
6	2500	41.33	54.00	-12.67	25.74	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2462MHz		

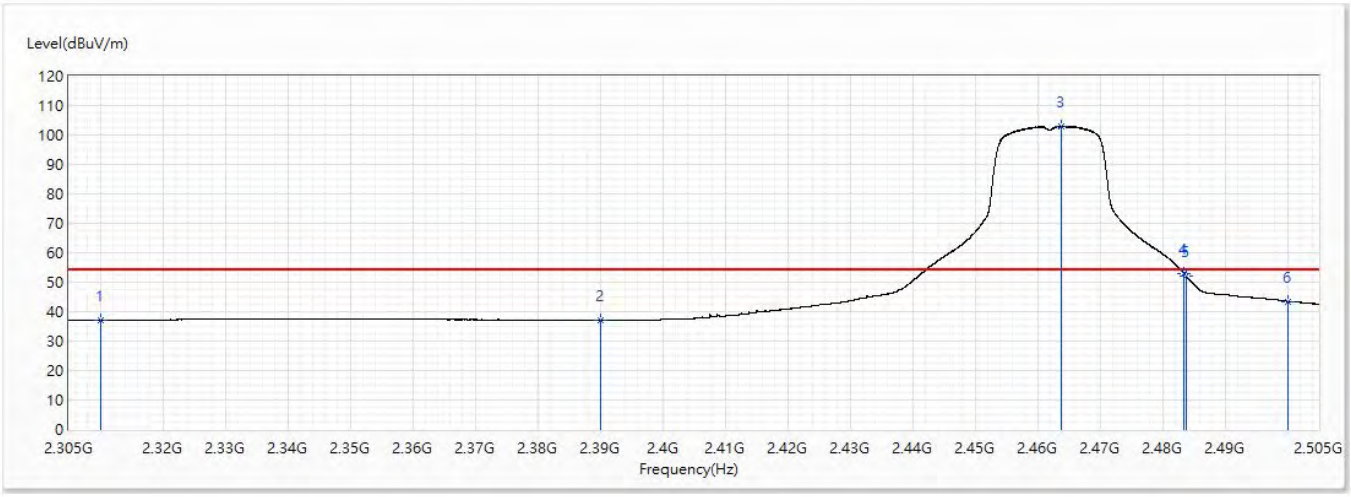


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	49.27	74.00	-24.73	35.03	14.24	PK
2	2390	48.34	74.00	-25.66	33.53	14.81	PK
! 3	2465.2	113.98	74.00	39.98	98.62	15.36	PK
4	2483.5	66.29	74.00	-7.71	50.81	15.48	PK
5	2483.98	69.80	74.00	-4.20	54.32	15.48	PK
6	2500	54.60	74.00	-19.40	39.01	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2462MHz		

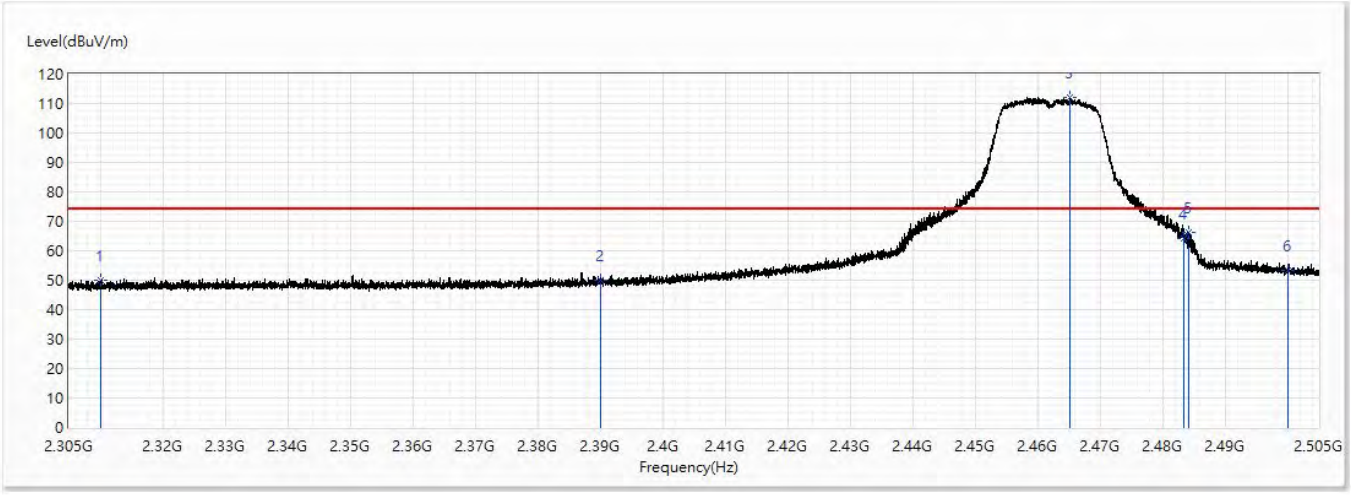


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.09	54.00	-16.91	22.85	14.24	AV
2	2390	37.13	54.00	-16.87	22.32	14.81	AV
! 3	2463.78	103.06	54.00	49.06	87.70	15.36	AV
4	2483.5	52.80	54.00	-1.20	37.32	15.48	AV
5	2483.88	51.91	54.00	-2.09	36.43	15.48	AV
6	2500	43.51	54.00	-10.49	27.92	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2462MHz		

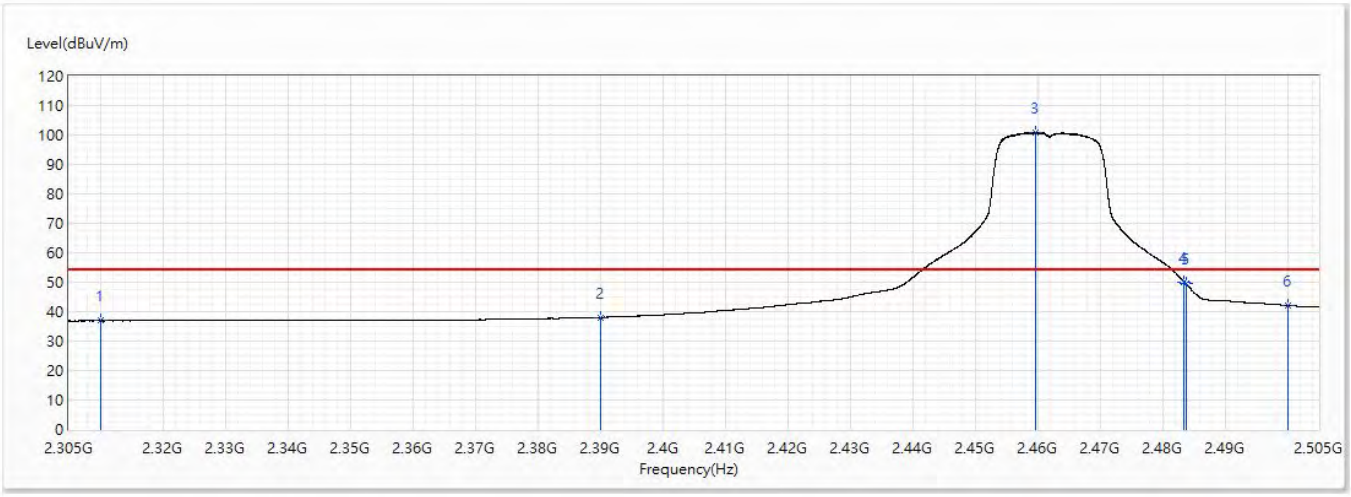


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	49.82	74.00	-24.18	35.58	14.24	PK
2	2390	50.11	74.00	-23.89	35.30	14.81	PK
! 3	2465.16	112.07	74.00	38.07	96.71	15.36	PK
4	2483.5	64.23	74.00	-9.77	48.75	15.48	PK
5	2484.2	66.19	74.00	-7.81	50.71	15.48	PK
6	2500	53.45	74.00	-20.55	37.86	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11g_2462MHz		

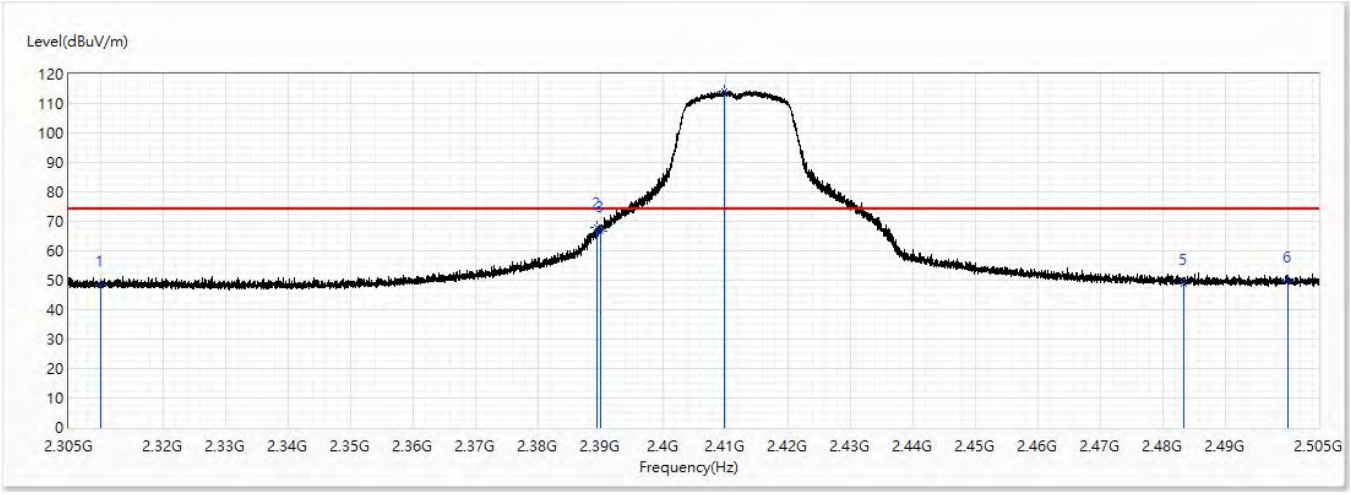


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	36.91	54.00	-17.09	22.67	14.24	AV
2	2390	38.04	54.00	-15.96	23.23	14.81	AV
! 3	2459.76	100.82	54.00	46.82	85.50	15.32	AV
4	2483.5	50.06	54.00	-3.94	34.58	15.48	AV
5	2483.76	49.50	54.00	-4.50	34.02	15.48	AV
6	2500	42.07	54.00	-11.93	26.48	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2412MHz		

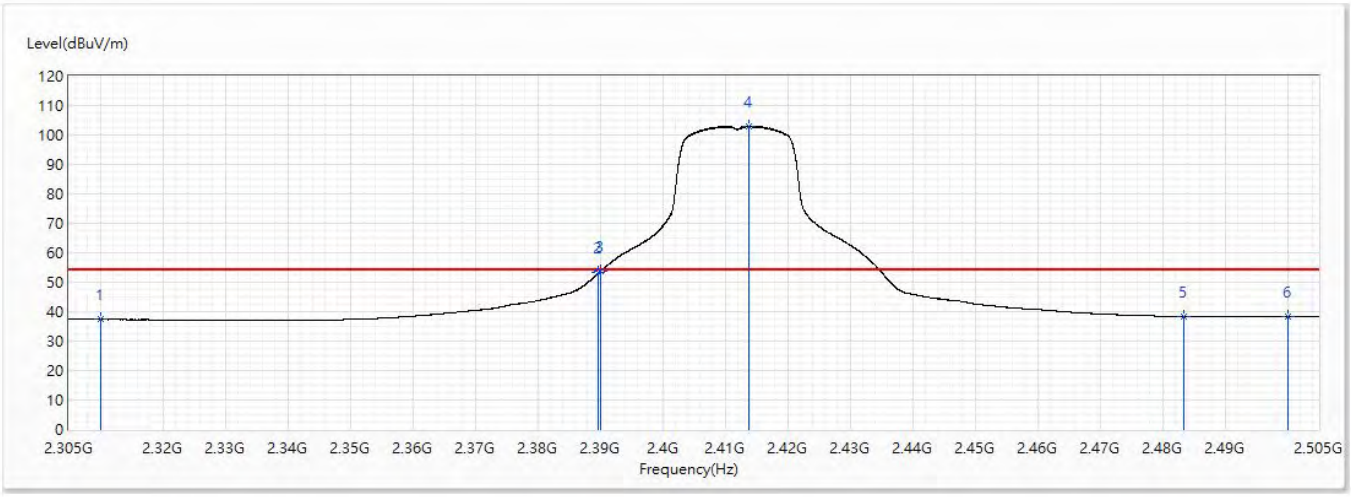


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	48.43	74.00	-25.57	34.19	14.24	PK
2	2389.56	68.11	74.00	-5.89	53.30	14.81	PK
3	2390	66.46	74.00	-7.54	51.65	14.81	PK
! 4	2409.88	114.25	74.00	40.25	99.28	14.97	PK
5	2483.5	48.70	74.00	-25.30	33.22	15.48	PK
6	2500	49.64	74.00	-24.36	34.05	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2412MHz		

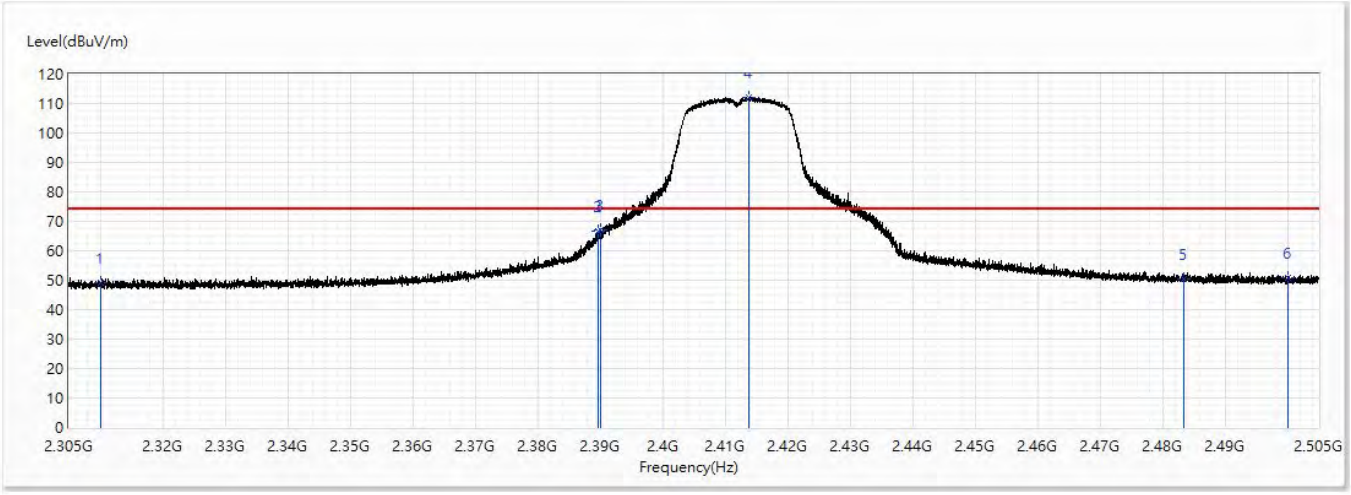


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.36	54.00	-16.64	23.12	14.24	AV
2	2389.8	53.24	54.00	-0.76	38.43	14.81	AV
3	2390	53.59	54.00	-0.41	38.78	14.81	AV
! 4	2413.9	103.08	54.00	49.08	88.08	15.00	AV
5	2483.5	38.27	54.00	-15.73	22.79	15.48	AV
6	2500	38.26	54.00	-15.74	22.67	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2412MHz		

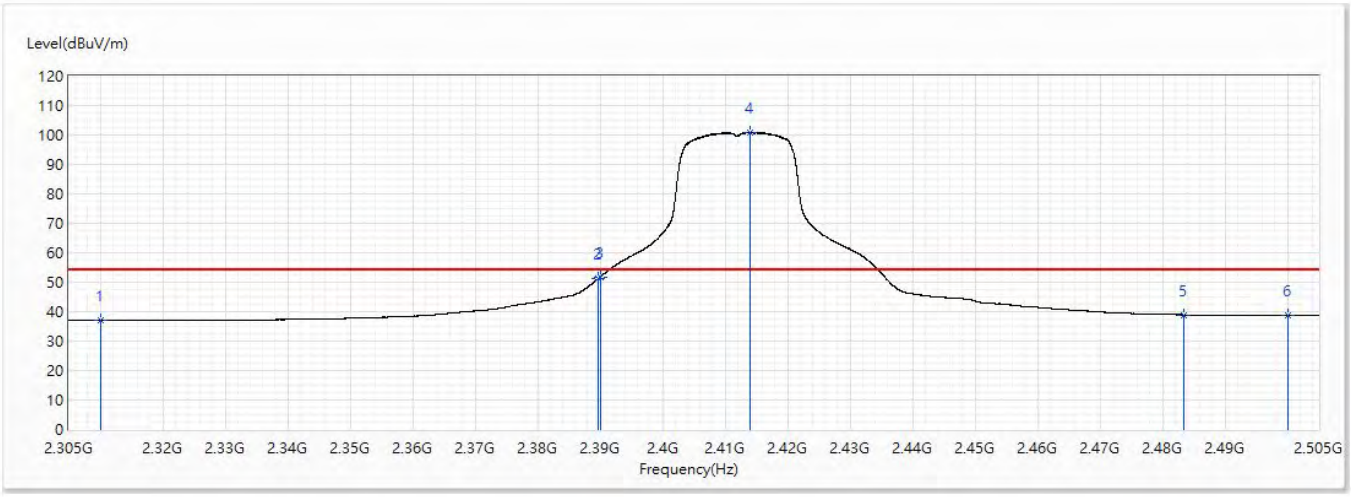


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	49.16	74.00	-24.84	34.92	14.24	PK
2	2389.68	66.86	74.00	-7.14	52.05	14.81	PK
3	2390	66.94	74.00	-7.06	52.13	14.81	PK
! 4	2413.82	112.09	74.00	38.09	97.09	15.00	PK
5	2483.5	50.61	74.00	-23.39	35.13	15.48	PK
6	2500	50.99	74.00	-23.01	35.40	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2412MHz		

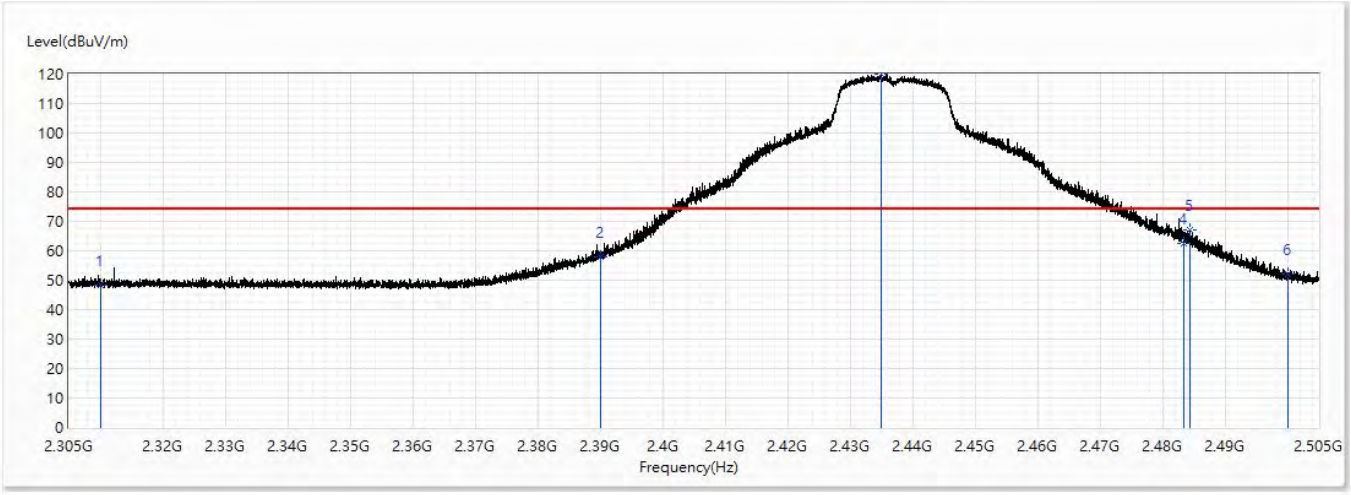


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	36.93	54.00	-17.07	22.69	14.24	AV
2	2389.7	51.20	54.00	-2.80	36.39	14.81	AV
3	2390	51.73	54.00	-2.27	36.92	14.81	AV
! 4	2413.96	100.97	54.00	46.97	85.97	15.00	AV
5	2483.5	38.91	54.00	-15.09	23.43	15.48	AV
6	2500	38.65	54.00	-15.35	23.06	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2437MHz		

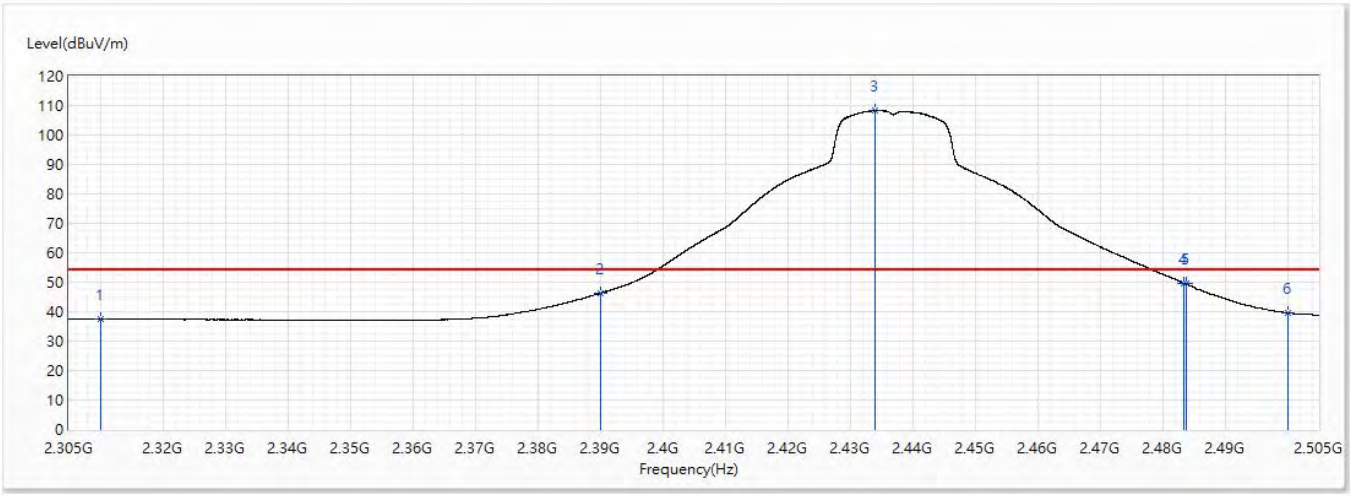


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	48.14	74.00	-25.86	33.90	14.24	PK
2	2390	57.71	74.00	-16.29	42.90	14.81	PK
! 3	2434.98	119.96	74.00	45.96	104.81	15.15	PK
4	2483.5	62.54	74.00	-11.46	47.06	15.48	PK
5	2484.48	67.26	74.00	-6.74	51.78	15.48	PK
6	2500	52.10	74.00	-21.90	36.51	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2437MHz		

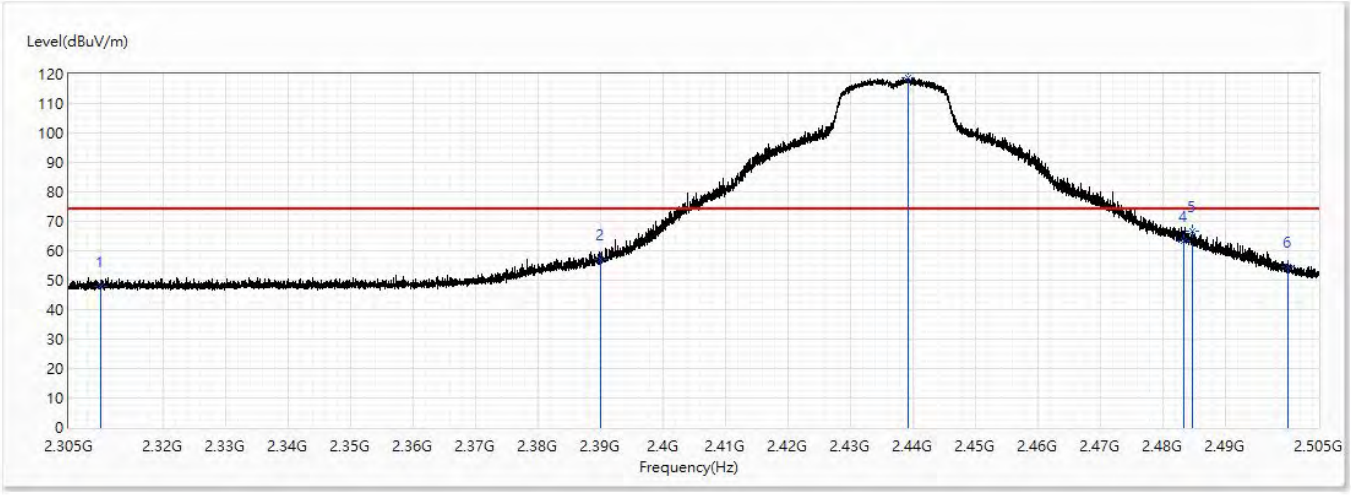


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.40	54.00	-16.60	23.16	14.24	AV
2	2390	46.23	54.00	-7.77	31.42	14.81	AV
! 3	2433.96	108.31	54.00	54.31	93.17	15.14	AV
4	2483.5	49.68	54.00	-4.32	34.20	15.48	AV
5	2483.76	49.44	54.00	-4.56	33.96	15.48	AV
6	2500	39.65	54.00	-14.35	24.06	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2437MHz		

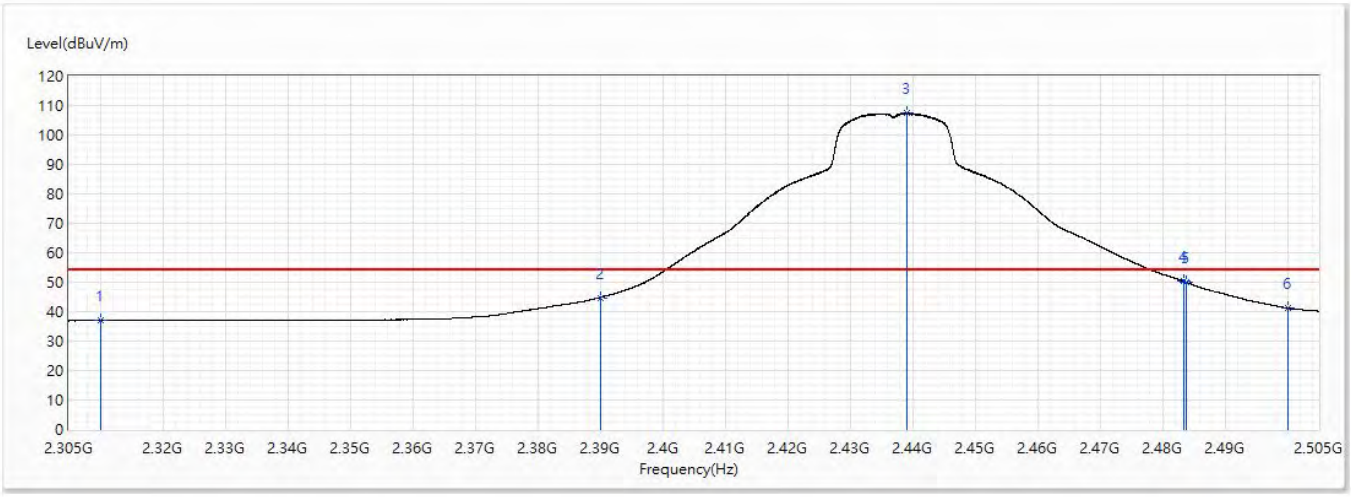


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	48.09	74.00	-25.91	33.85	14.24	PK
2	2390	57.04	74.00	-16.96	42.23	14.81	PK
! 3	2439.36	118.56	74.00	44.56	103.38	15.18	PK
4	2483.5	63.24	74.00	-10.76	47.76	15.48	PK
5	2484.88	66.77	74.00	-7.23	51.29	15.48	PK
6	2500	54.61	74.00	-19.39	39.02	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2437MHz		

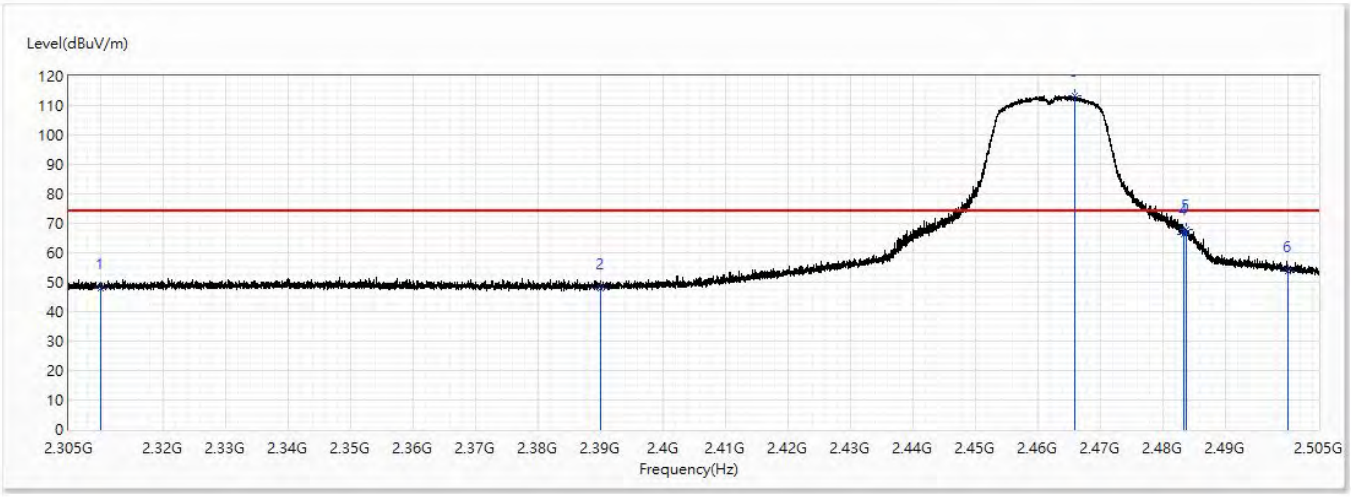


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	36.97	54.00	-17.03	22.73	14.24	AV
2	2390	44.76	54.00	-9.24	29.95	14.81	AV
! 3	2439.06	107.37	54.00	53.37	92.19	15.18	AV
4	2483.5	50.22	54.00	-3.78	34.74	15.48	AV
5	2483.76	50.00	54.00	-4.00	34.52	15.48	AV
6	2500	41.21	54.00	-12.79	25.62	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2462MHz		

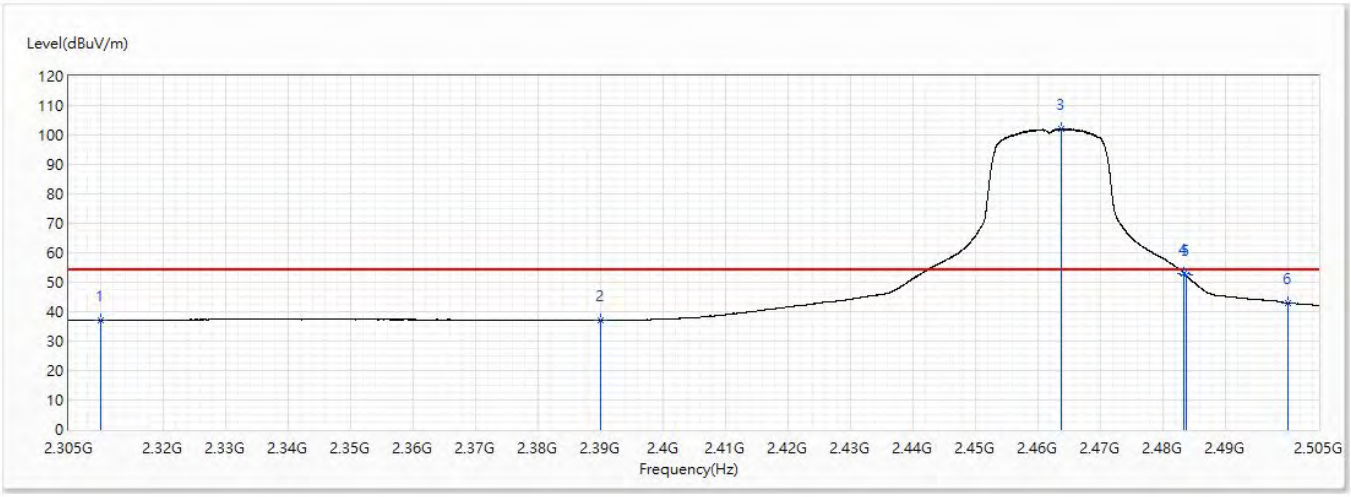


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	48.05	74.00	-25.95	33.81	14.24	PK
2	2390	48.02	74.00	-25.98	33.21	14.81	PK
! 3	2465.96	113.51	74.00	39.51	98.14	15.37	PK
4	2483.5	66.21	74.00	-7.79	50.73	15.48	PK
5	2483.8	67.78	74.00	-6.22	52.30	15.48	PK
6	2500	53.85	74.00	-20.15	38.26	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2462MHz		

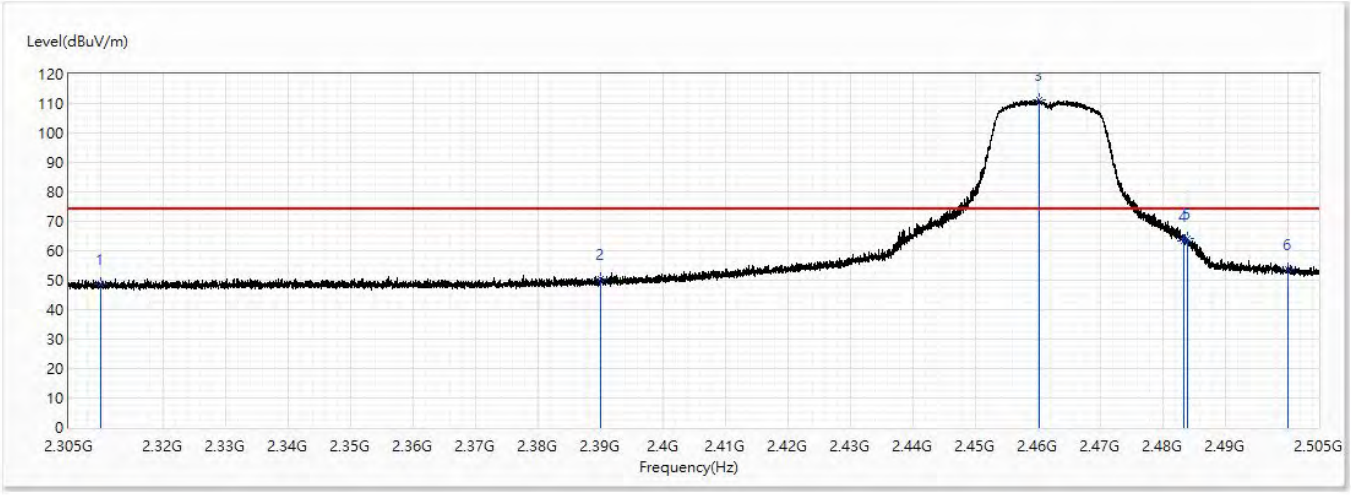


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.03	54.00	-16.97	22.79	14.24	AV
2	2390	37.08	54.00	-16.92	22.27	14.81	AV
! 3	2463.88	102.09	54.00	48.09	86.73	15.36	AV
4	2483.5	52.88	54.00	-1.12	37.40	15.48	AV
5	2483.76	52.38	54.00	-1.62	36.90	15.48	AV
6	2500	43.01	54.00	-10.99	27.42	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2462MHz		

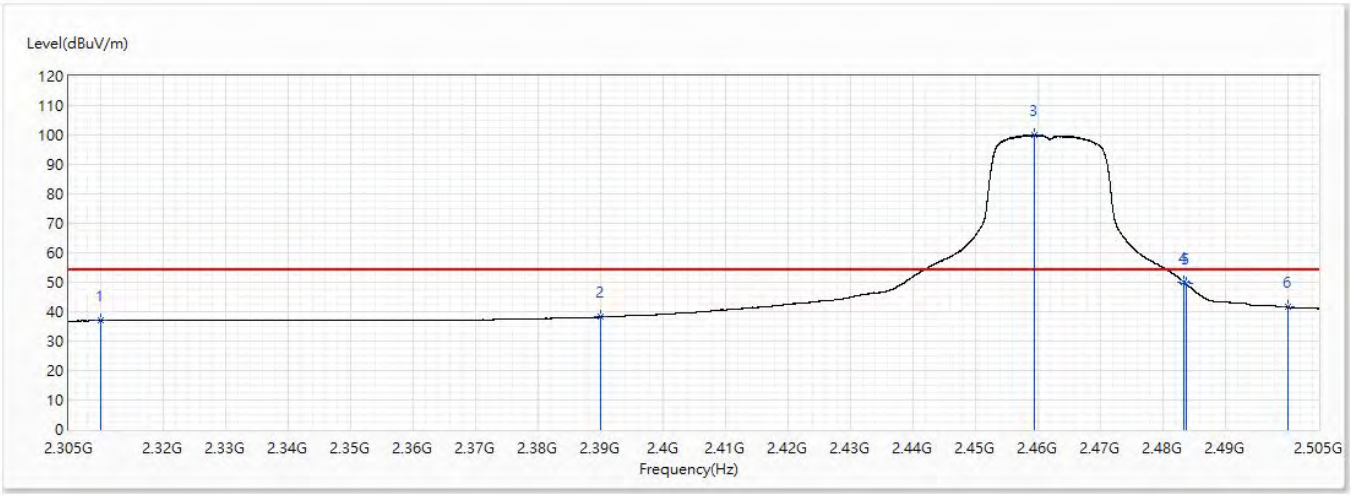


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	48.65	74.00	-25.35	34.41	14.24	PK
2	2390	50.39	74.00	-23.61	35.58	14.81	PK
! 3	2460.28	111.25	74.00	37.25	95.92	15.33	PK
4	2483.5	63.52	74.00	-10.48	48.04	15.48	PK
5	2484.1	64.10	74.00	-9.90	48.62	15.48	PK
6	2500	53.76	74.00	-20.24	38.17	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(20M)_2462MHz		

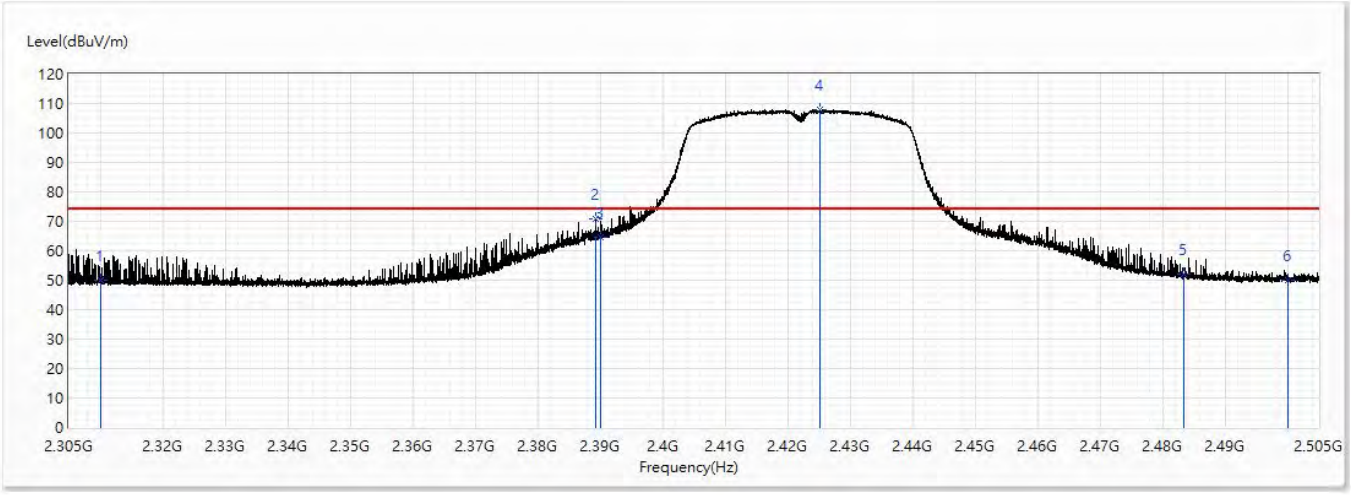


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	36.91	54.00	-17.09	22.67	14.24	AV
2	2390	38.18	54.00	-15.82	23.37	14.81	AV
! 3	2459.54	99.98	54.00	45.98	84.66	15.32	AV
4	2483.5	49.98	54.00	-4.02	34.50	15.48	AV
5	2483.76	49.57	54.00	-4.43	34.09	15.48	AV
6	2500	41.46	54.00	-12.54	25.87	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2422MHz		

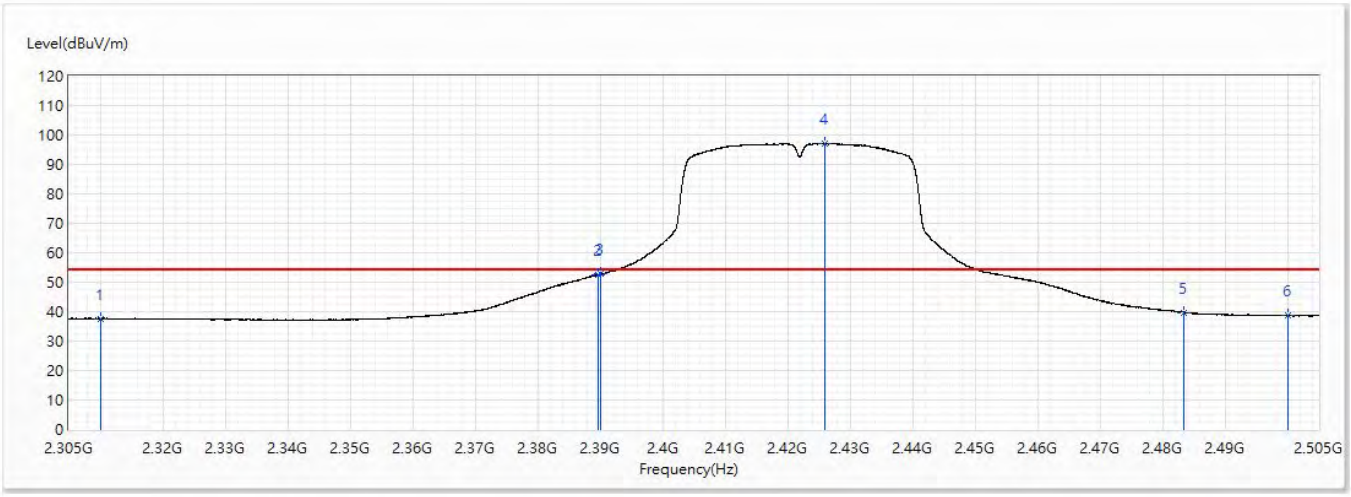


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	49.87	74.00	-24.13	35.63	14.24	PK
2	2389.24	70.94	74.00	-3.06	56.13	14.81	PK
3	2390	64.64	74.00	-9.36	49.83	14.81	PK
! 4	2425.12	108.10	74.00	34.10	93.02	15.08	PK
5	2483.5	51.97	74.00	-22.03	36.49	15.48	PK
6	2500	49.87	74.00	-24.13	34.28	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2422MHz		

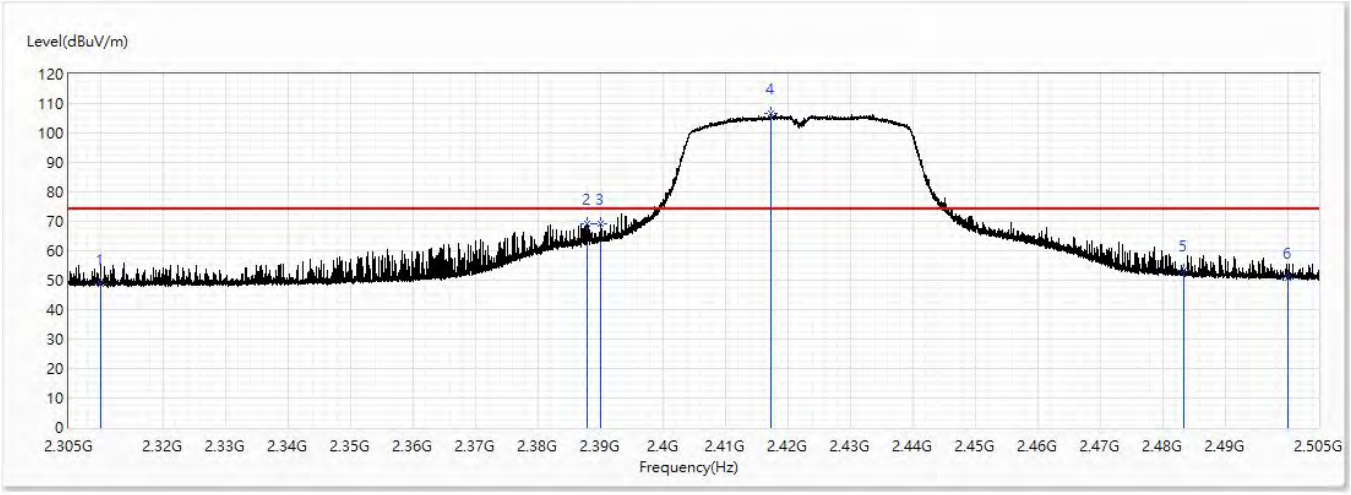


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.58	54.00	-16.42	23.34	14.24	AV
2	2389.68	52.44	54.00	-1.56	37.63	14.81	AV
3	2390	52.82	54.00	-1.18	38.01	14.81	AV
! 4	2426	97.12	54.00	43.12	82.03	15.09	AV
5	2483.5	39.79	54.00	-14.21	24.31	15.48	AV
6	2500	38.68	54.00	-15.32	23.09	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2422MHz		

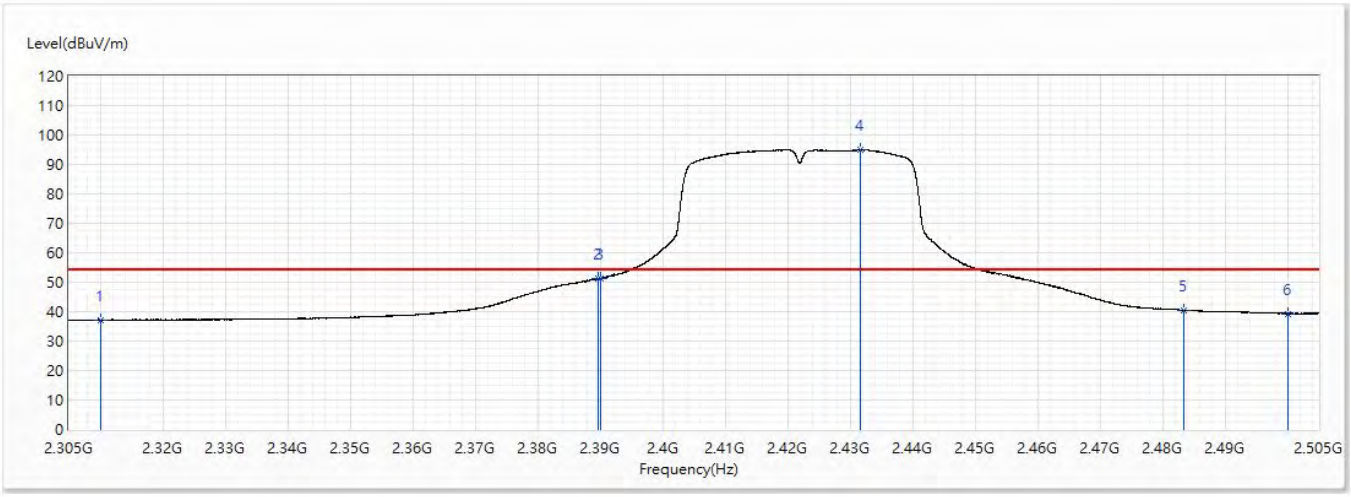


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	48.73	74.00	-25.27	34.49	14.24	PK
2	2387.88	69.05	74.00	-4.95	54.24	14.81	PK
3	2390	69.34	74.00	-4.66	54.53	14.81	PK
! 4	2417.44	106.46	74.00	32.46	91.44	15.02	PK
5	2483.5	53.23	74.00	-20.77	37.75	15.48	PK
6	2500	50.66	74.00	-23.34	35.07	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2422MHz		

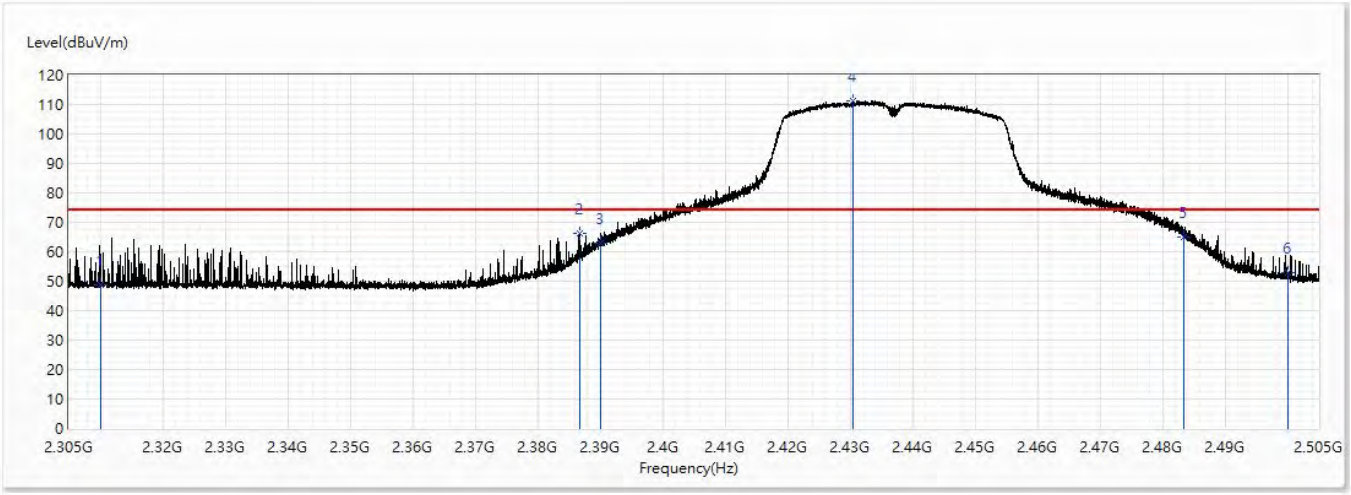


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.12	54.00	-16.88	22.88	14.24	AV
2	2389.68	51.09	54.00	-2.91	36.28	14.81	AV
3	2390	51.25	54.00	-2.75	36.44	14.81	AV
! 4	2431.7	95.00	54.00	41.00	79.87	15.13	AV
5	2483.5	40.53	54.00	-13.47	25.05	15.48	AV
6	2500	39.35	54.00	-14.65	23.76	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2437MHz		

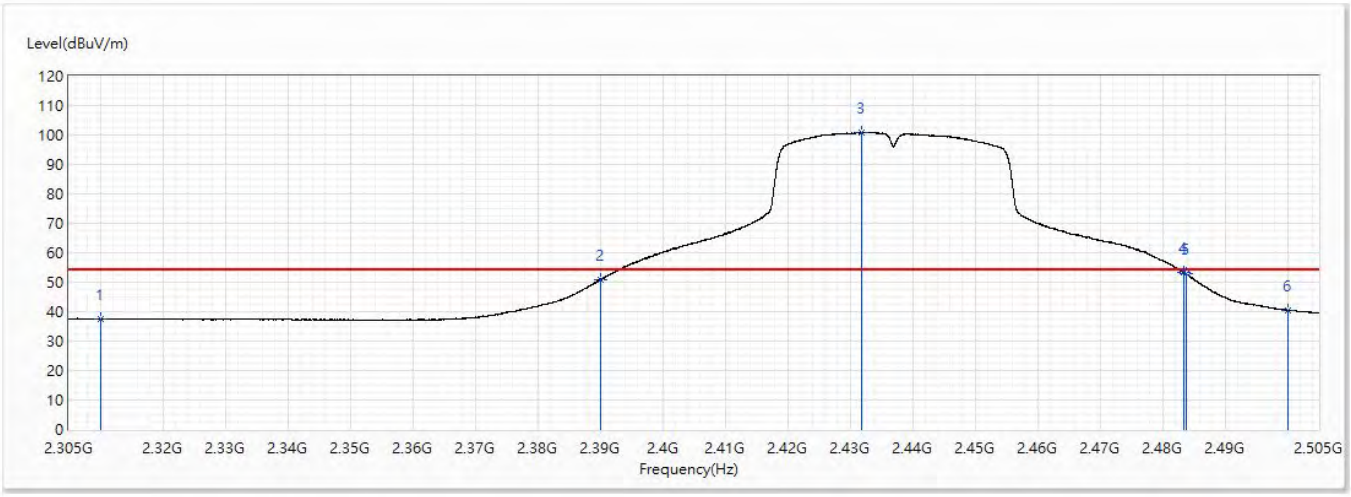


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	48.64	74.00	-25.36	34.40	14.24	PK
2	2386.86	66.14	74.00	-7.86	51.34	14.80	PK
3	2390	63.04	74.00	-10.96	48.23	14.81	PK
! 4	2430.54	111.33	74.00	37.33	96.20	15.13	PK
5	2483.5	65.13	74.00	-8.87	49.65	15.48	PK
6	2500	52.93	74.00	-21.07	37.34	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2437MHz		

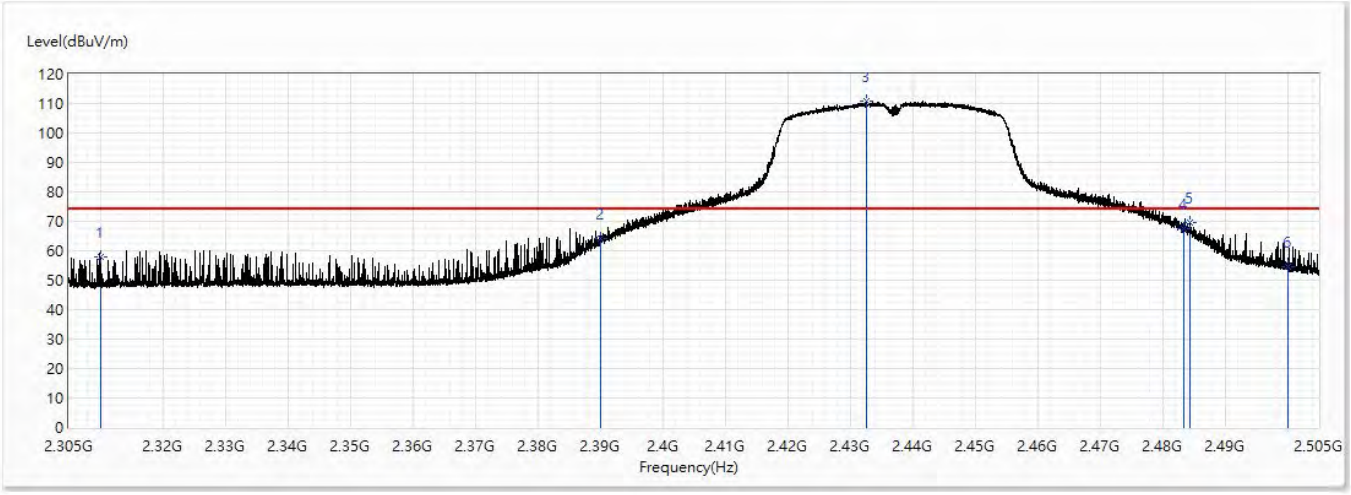


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.60	54.00	-16.40	23.36	14.24	AV
2	2390	50.92	54.00	-3.08	36.11	14.81	AV
! 3	2431.78	100.94	54.00	46.94	85.81	15.13	AV
4	2483.5	53.13	54.00	-0.87	37.65	15.48	AV
5	2483.76	52.78	54.00	-1.22	37.30	15.48	AV
6	2500	40.62	54.00	-13.38	25.03	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2437MHz		

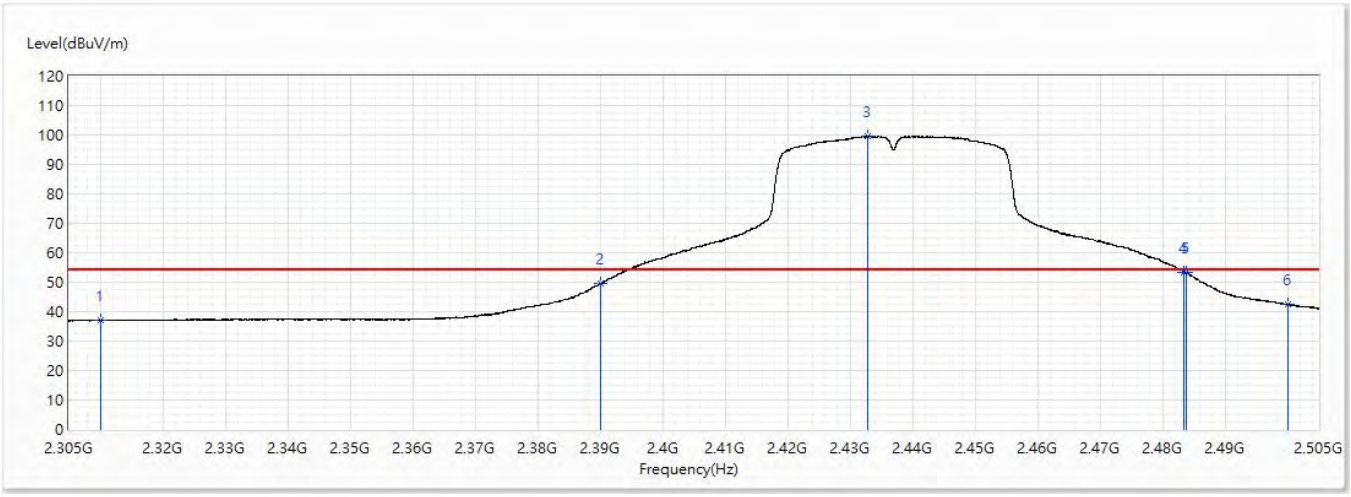


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	57.97	74.00	-16.03	43.73	14.24	PK
2	2390	64.03	74.00	-9.97	49.22	14.81	PK
! 3	2432.66	110.72	74.00	36.72	95.58	15.14	PK
4	2483.5	67.65	74.00	-6.35	52.17	15.48	PK
5	2484.46	69.42	74.00	-4.58	53.94	15.48	PK
6	2500	54.40	74.00	-19.60	38.81	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2437MHz		

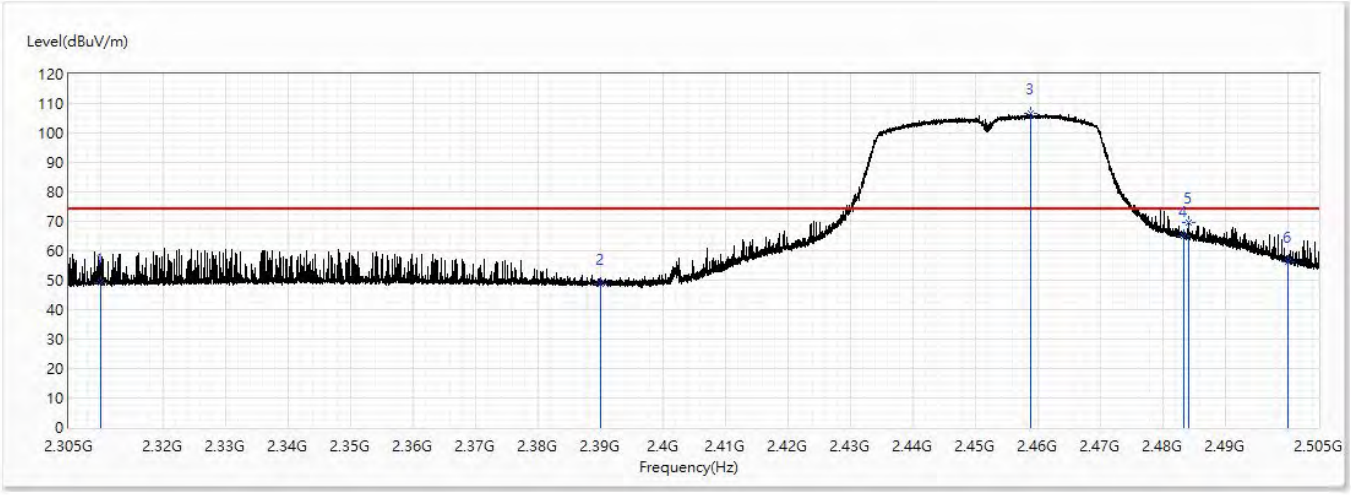


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.01	54.00	-16.99	22.77	14.24	AV
2	2390	49.55	54.00	-4.45	34.74	14.81	AV
! 3	2432.92	99.56	54.00	45.56	84.42	15.14	AV
4	2483.5	53.54	54.00	-0.46	38.06	15.48	AV
5	2483.88	53.15	54.00	-0.85	37.67	15.48	AV
6	2500	42.58	54.00	-11.42	26.99	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2452MHz		

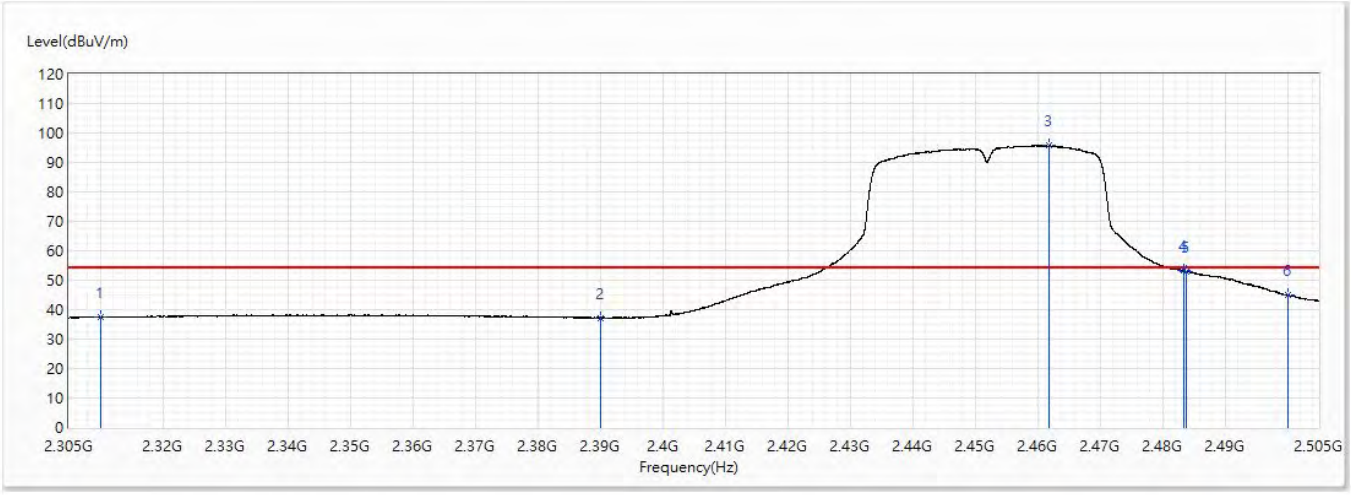


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	48.97	74.00	-25.03	34.73	14.24	PK
2	2390	48.90	74.00	-25.10	34.09	14.81	PK
! 3	2458.94	106.55	74.00	32.55	91.23	15.32	PK
4	2483.5	64.96	74.00	-9.04	49.48	15.48	PK
5	2484.12	69.51	74.00	-4.49	54.03	15.48	PK
6	2500	56.24	74.00	-17.76	40.65	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Horizontal
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2452MHz		

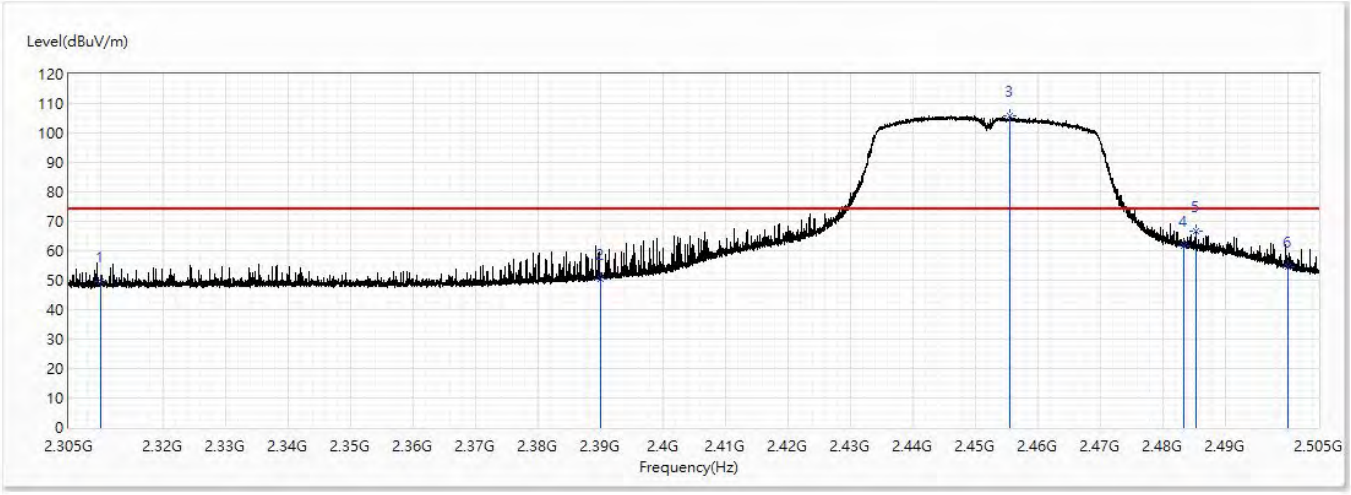


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.43	54.00	-16.57	23.19	14.24	AV
2	2390	37.18	54.00	-16.82	22.37	14.81	AV
! 3	2461.92	95.77	54.00	41.77	80.43	15.34	AV
4	2483.5	53.14	54.00	-0.86	37.66	15.48	AV
5	2483.76	53.10	54.00	-0.90	37.62	15.48	AV
6	2500	45.00	54.00	-9.00	29.41	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2452MHz		

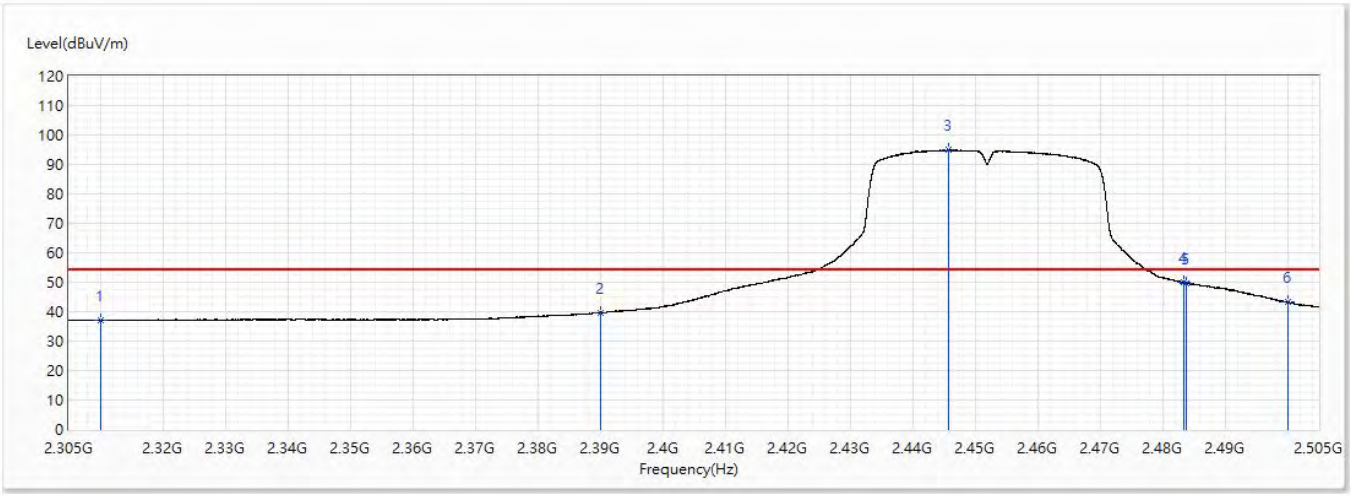


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	49.62	74.00	-24.38	35.38	14.24	PK
2	2390	50.35	74.00	-23.65	35.54	14.81	PK
! 3	2455.64	105.93	74.00	31.93	90.64	15.29	PK
4	2483.5	61.58	74.00	-12.42	46.10	15.48	PK
5	2485.38	66.87	74.00	-7.13	51.38	15.49	PK
6	2500	54.73	74.00	-19.27	39.14	15.59	PK

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

Site :	CB2-H	Engineer :	Elwin
Model No :	CV90-JE103	Test Date :	2019/3/29
Test Voltage :	DC 12V	Polarity :	Vertical
Test Mode :	Mode 1: Transmit Mode		
Note :	802.11n(40M)_2452MHz		



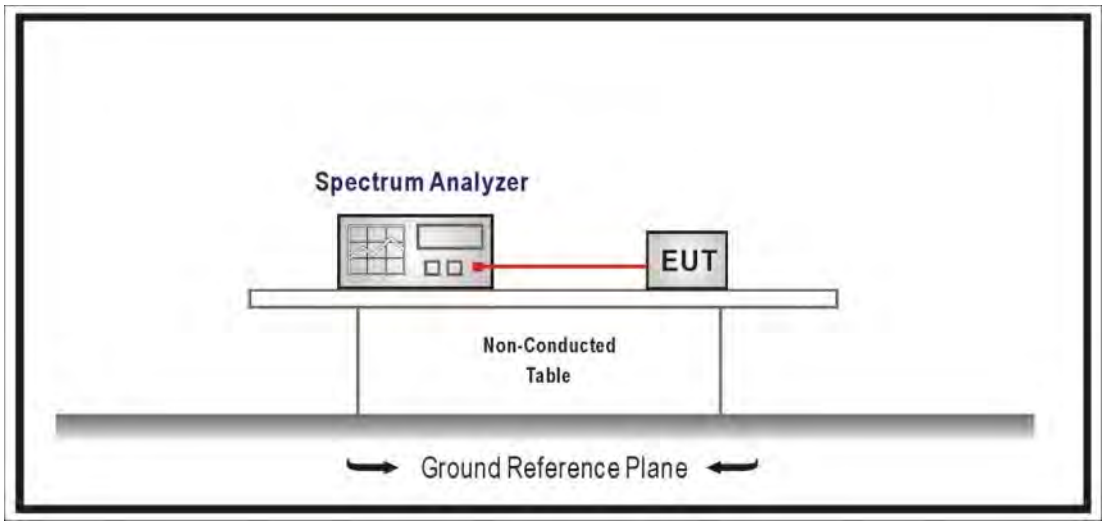
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	37.10	54.00	-16.90	22.86	14.24	AV
2	2390	39.65	54.00	-14.35	24.84	14.81	AV
! 3	2445.76	94.98	54.00	40.98	79.75	15.23	AV
4	2483.5	49.81	54.00	-4.19	34.33	15.48	AV
5	2483.76	49.71	54.00	-4.29	34.23	15.48	AV
6	2500	43.32	54.00	-10.68	27.73	15.59	AV

Note:

1. All reading above 1GHz is performed with peak measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it’s not restricted by unwanted emission limit.

8. DTS Bandwidth

8.1. Test Setup



8.2. Test Procedures

The EUT was setup according to ANSI C63.10: 2013; tested procedure section 8.1 of KDB 558074 D01 V05 for compliance to FCC 47CFR 15.247 requirements. Set RBW = 100KHz, Set the VBW≧3xRBW, Sweep Time=Auto, Set Peak Detector.

8.3. Limits

The 6 dB bandwidth must be greater than 500 kHz.

8.4. Test Specification

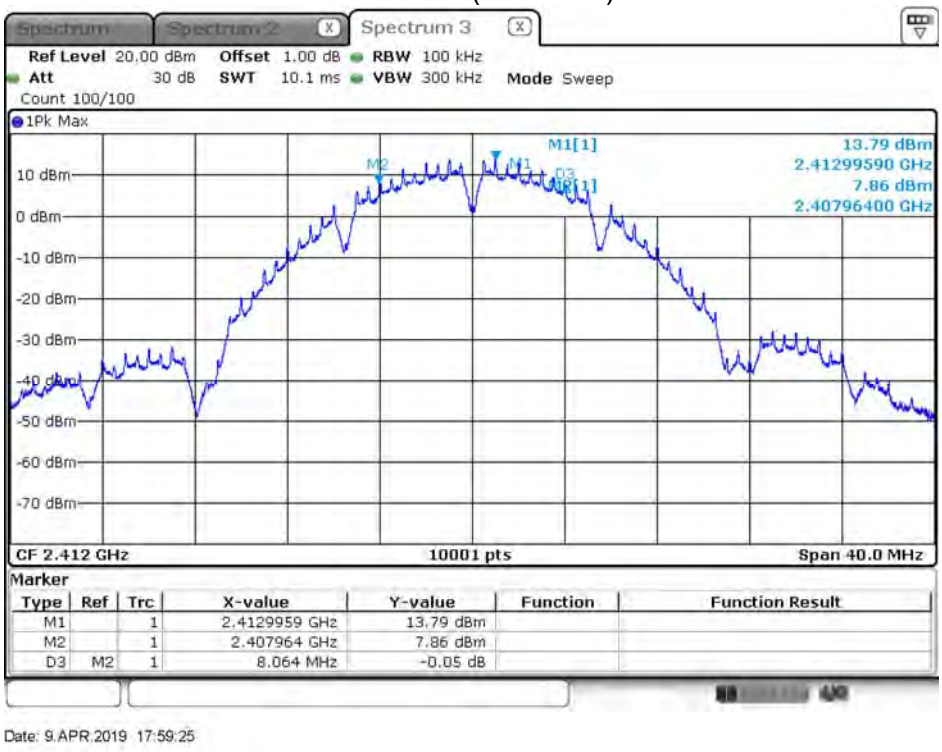
According to FCC Part 15 Subpart C Paragraph 15.247: 2018

8.5. Test Result

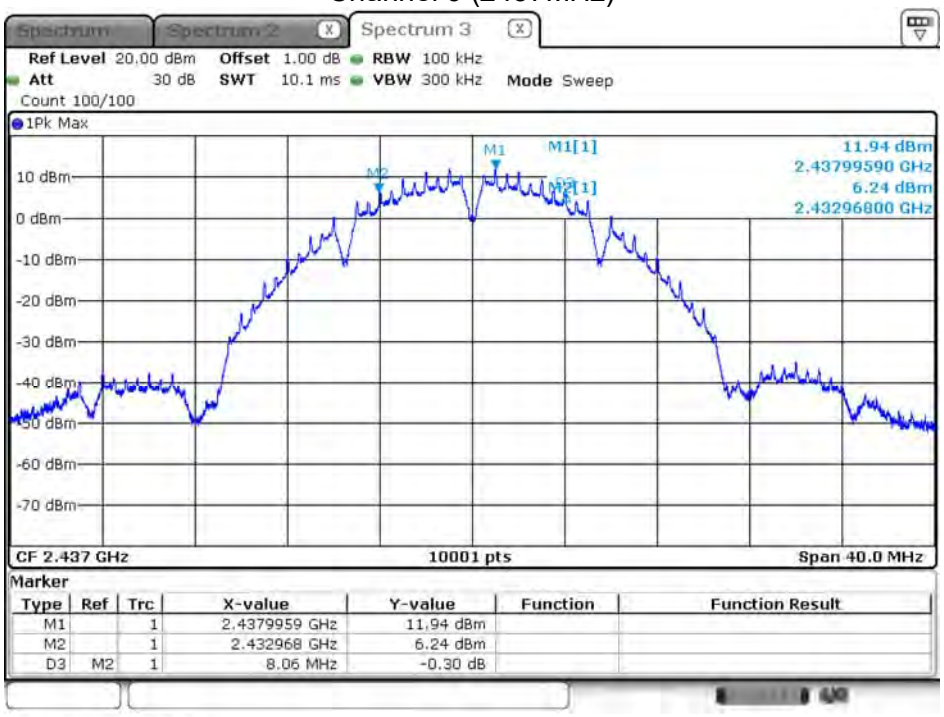
Product	Active Mobile Gateway-with Comm		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

802.11b (ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
1	2412	8.064	≧0.5	Pass
6	2437	8.060	≧0.5	Pass
11	2462	8.064	≧0.5	Pass

Channel 1 (2412MHz)

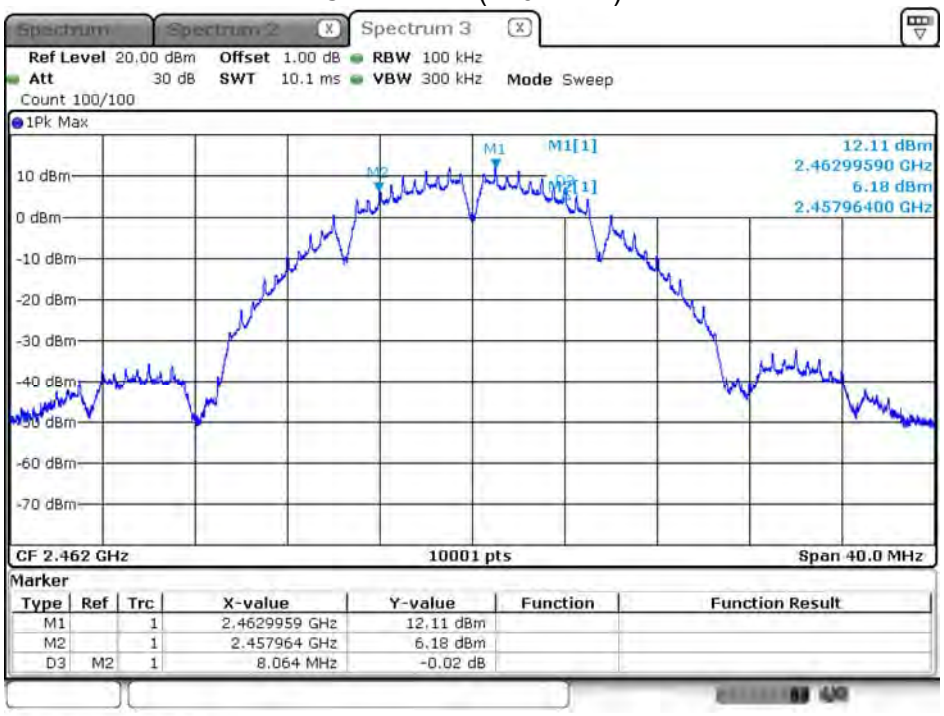


Channel 6 (2437MHz)



Date: 9.APR.2019 18:00:33

Channel 11 (2462MHz)

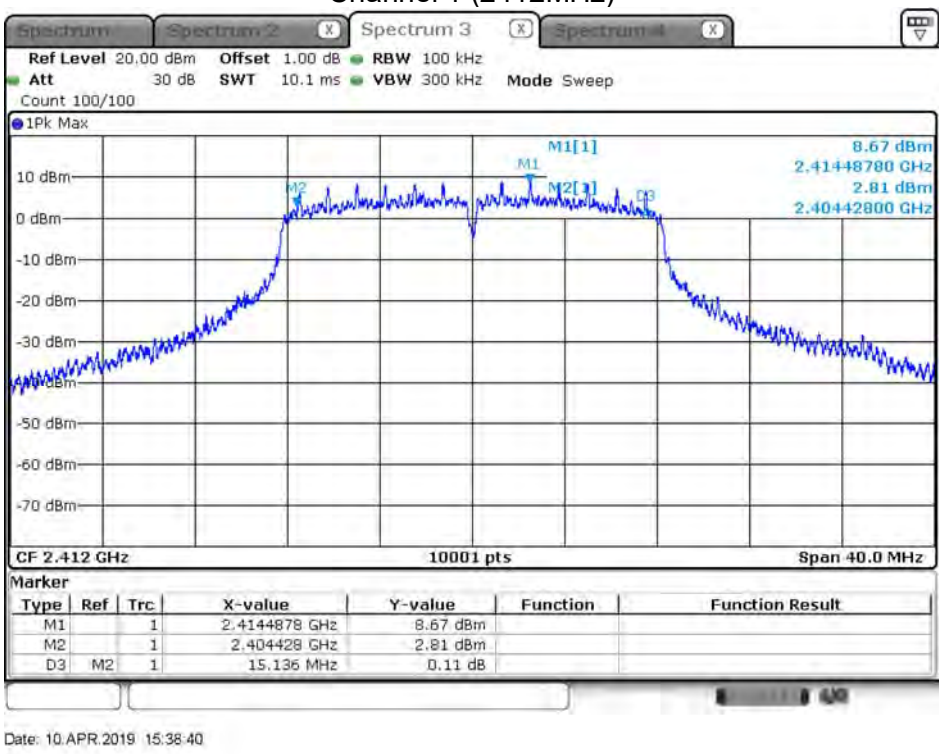


Date: 9.APR.2019 18:01:34

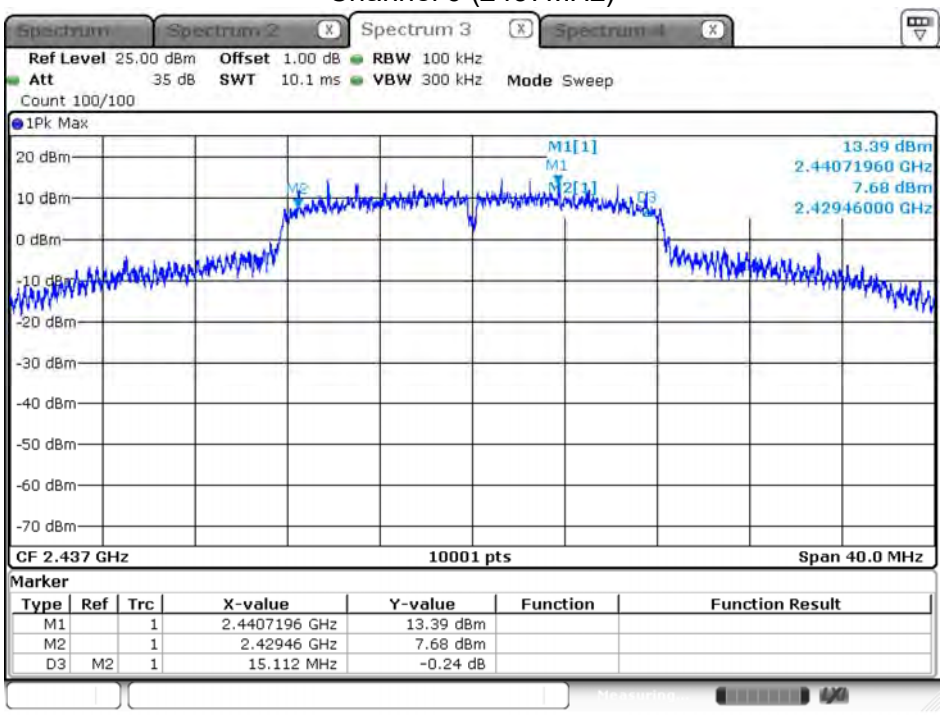
Product	Active Mobile Gateway-with Comm		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

802.11g (ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
1	2412	15.136	≧0.5	Pass
6	2437	15.112	≧0.5	Pass
11	2462	15.092	≧0.5	Pass

Channel 1 (2412MHz)

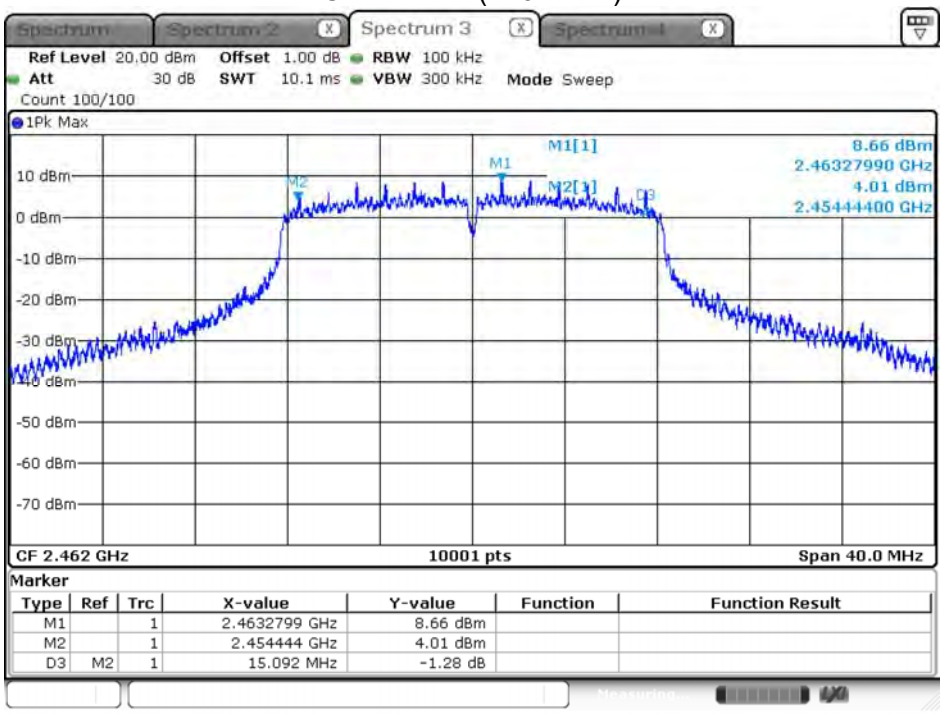


Channel 6 (2437MHz)



Date: 10.APR.2019 15:43:31

Channel 11 (2462MHz)

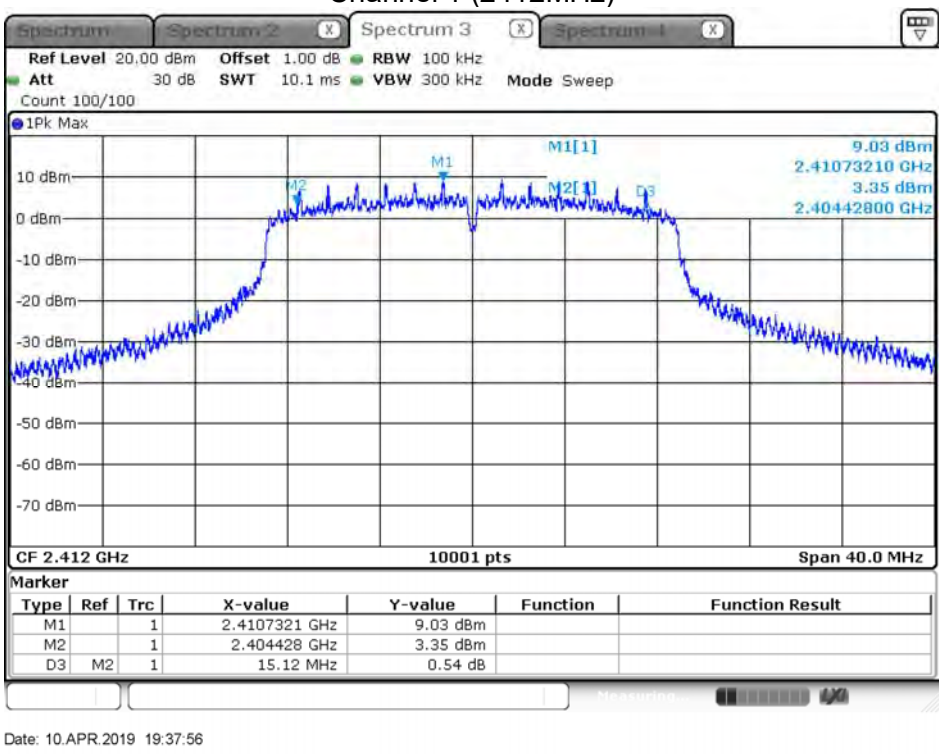


Date: 10.APR.2019 20:03:15

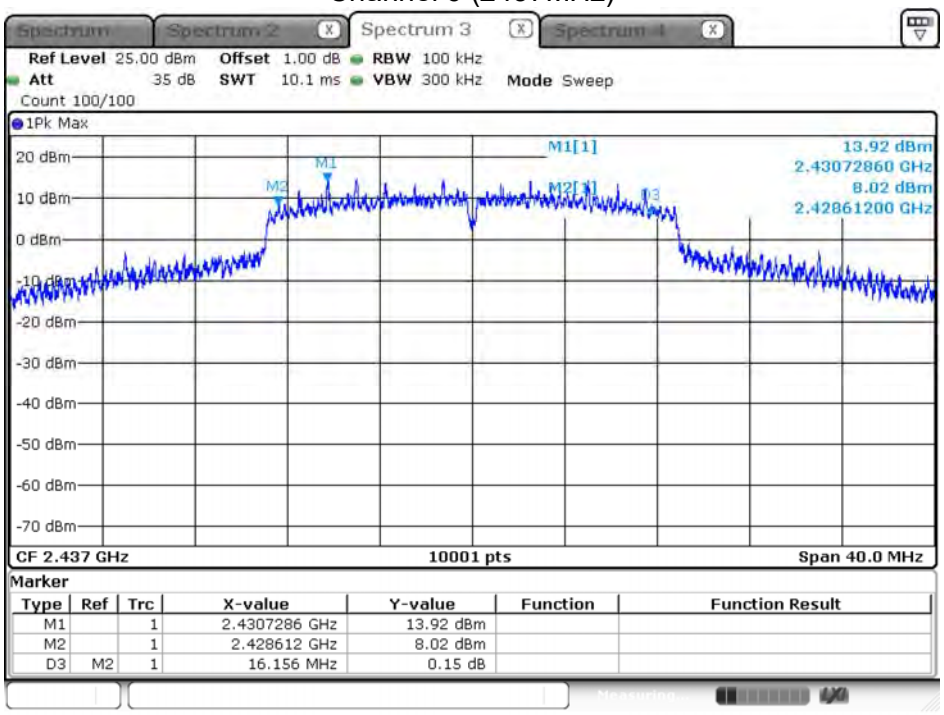
Product	Active Mobile Gateway-with Comm		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

IEEE 802.11n 20M (ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
1	2412	15.120	≧0.5	Pass
6	2437	16.156	≧0.5	Pass
11	2462	15.136	≧0.5	Pass

Channel 1 (2412MHz)

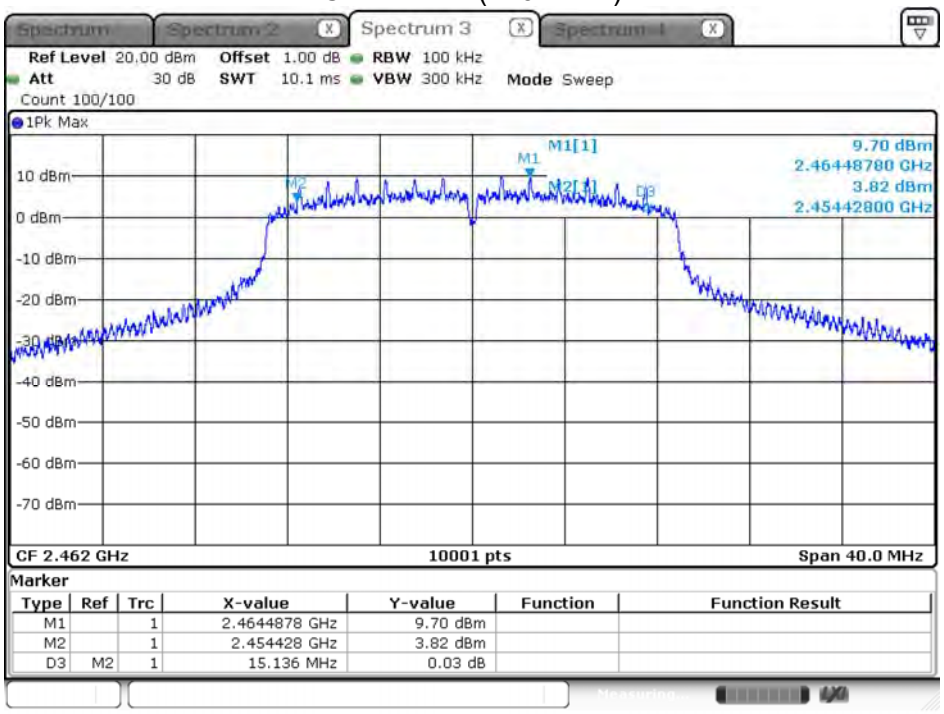


Channel 6 (2437MHz)



Date: 10.APR.2019 15:51:35

Channel 11 (2462MHz)

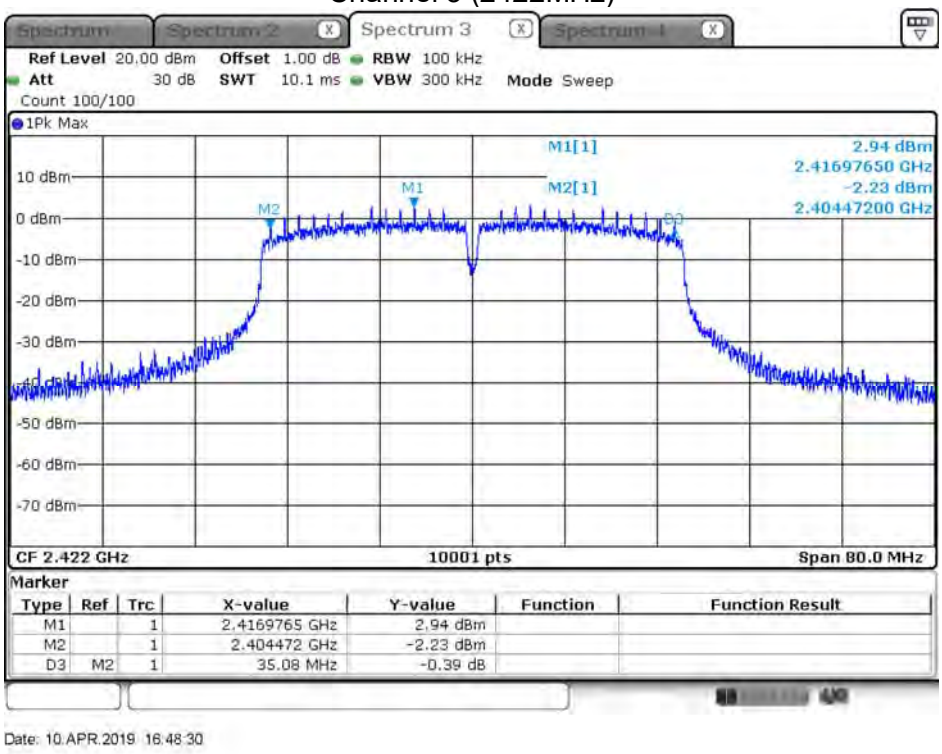


Date: 10.APR.2019 20:01:16

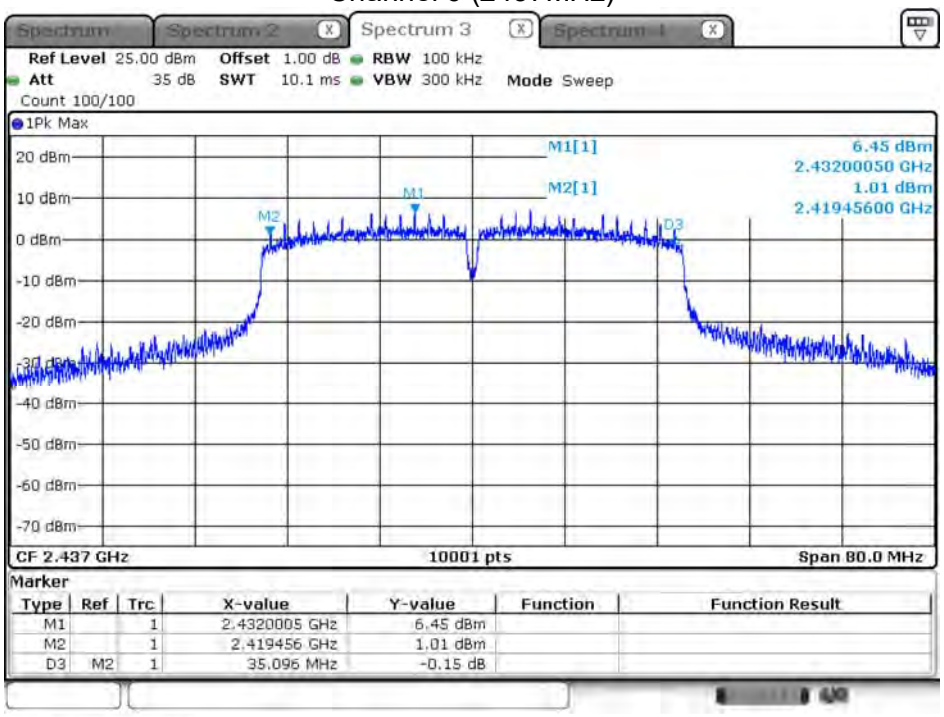
Product	Active Mobile Gateway-with Comm		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

IEEE 802.11n 40M (ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
3	2422	35.080	≧0.5	Pass
6	2437	35.096	≧0.5	Pass
9	2452	35.096	≧0.5	Pass

Channel 3 (2422MHz)

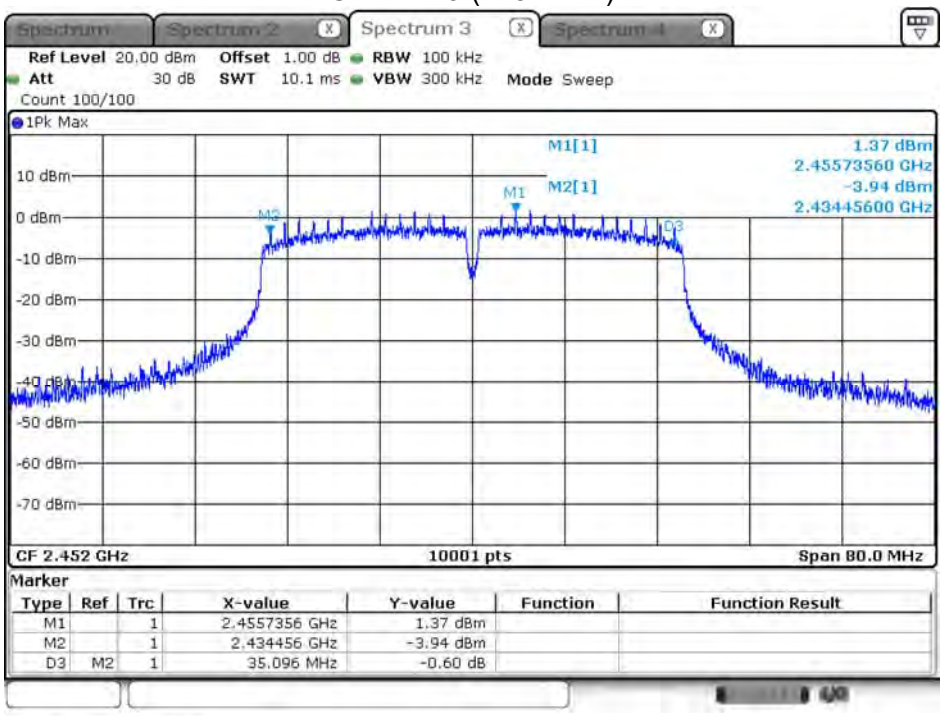


Channel 6 (2437MHz)



Date: 10.APR.2019 16:34:57

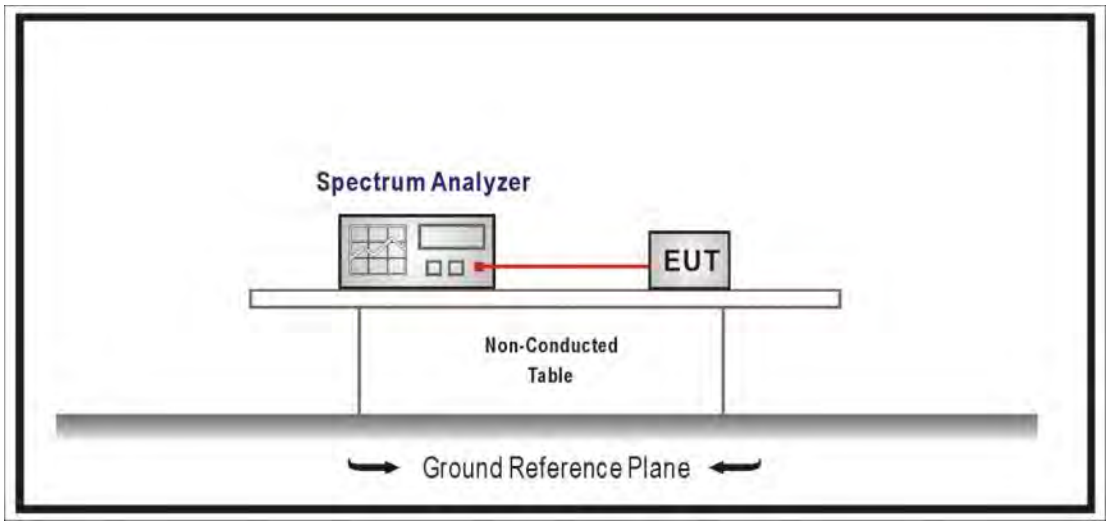
Channel 9 (2452MHz)



Date: 10.APR.2019 18:29:56

9. Occupied Bandwidth

9.1. Test Setup



9.2. Test Procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074 D01 V05 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 1-5% of the OBW, Set the VBW≧3xRBW, Sweep Time=Auto.

9.3. Limits

N/A

9.4. Test Specification

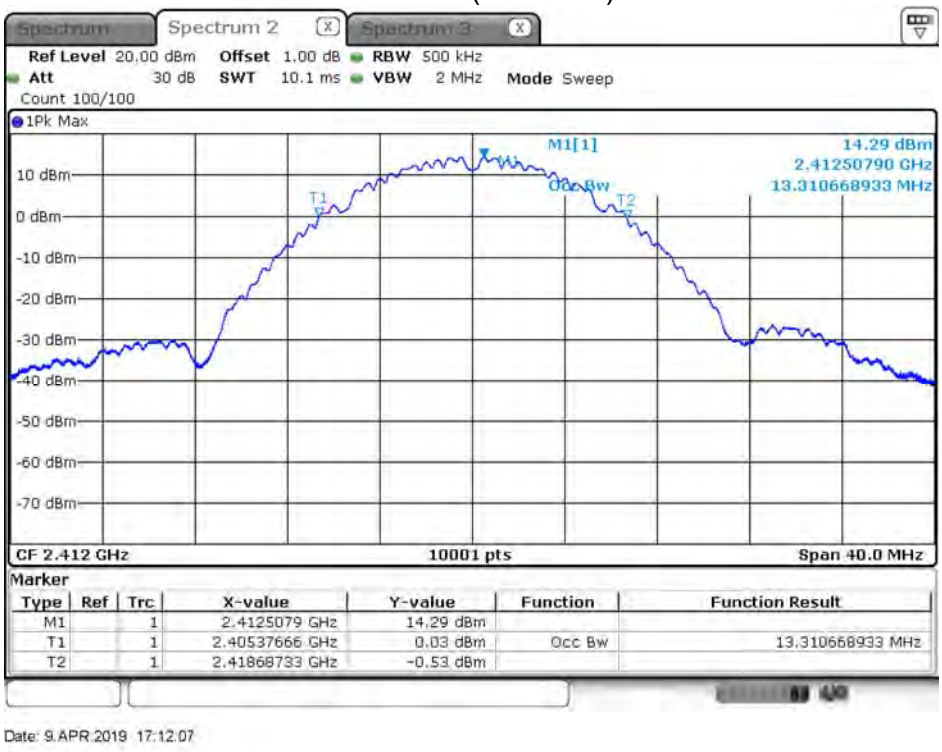
According to FCC Part 15 Subpart C Paragraph 15.247: 2018

9.5. Test Result

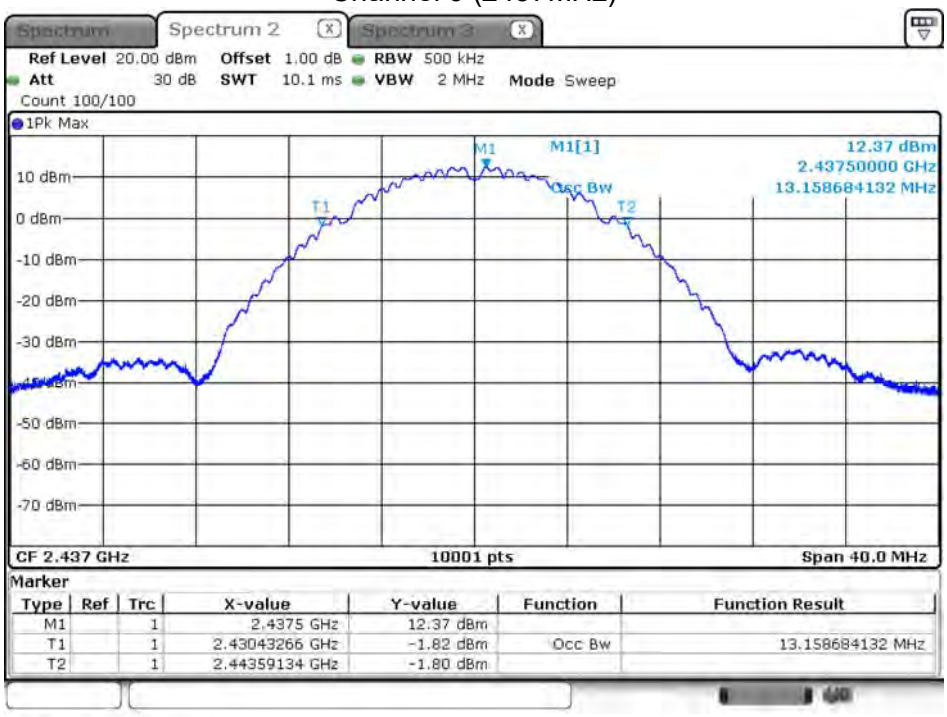
Product	Active Mobile Gateway-with Comm		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

802.11b (ANT 0)			
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1	2412	13.310	---
6	2437	13.158	---
11	2462	13.190	---

Channel 1 (2412MHz)

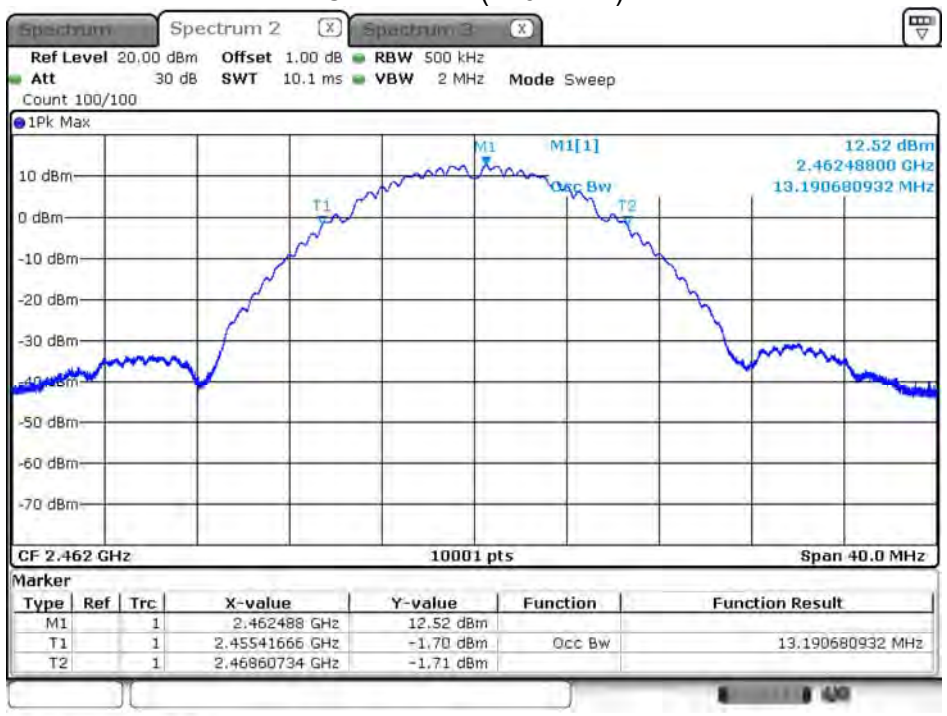


Channel 6 (2437MHz)



Date: 9.APR.2019 17:18:15

Channel 11 (2462MHz)

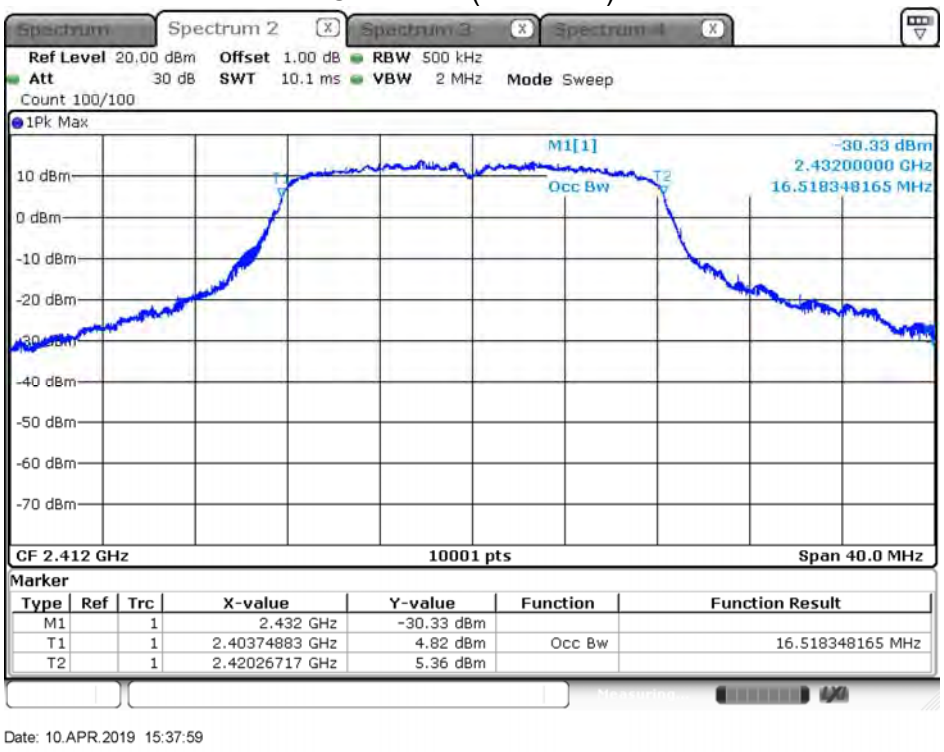


Date: 9.APR.2019 17:20:56

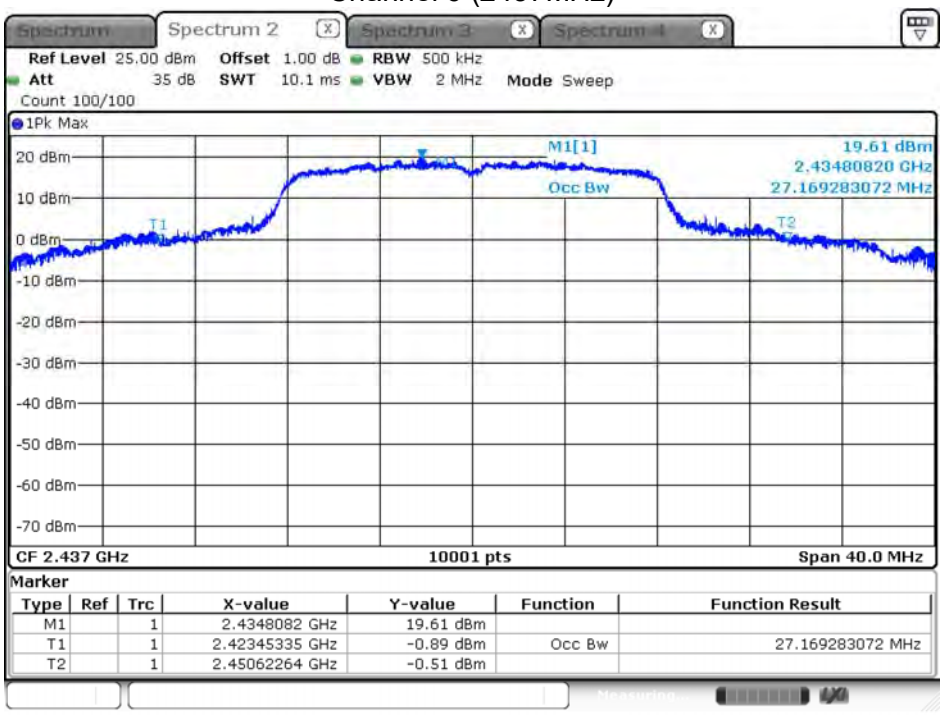
Product	Active Mobile Gateway-with Comm		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

802.11g (ANT 0)			
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1	2412	16.518	---
6	2437	27.169	---
11	2462	16.538	---

Channel 1 (2412MHz)

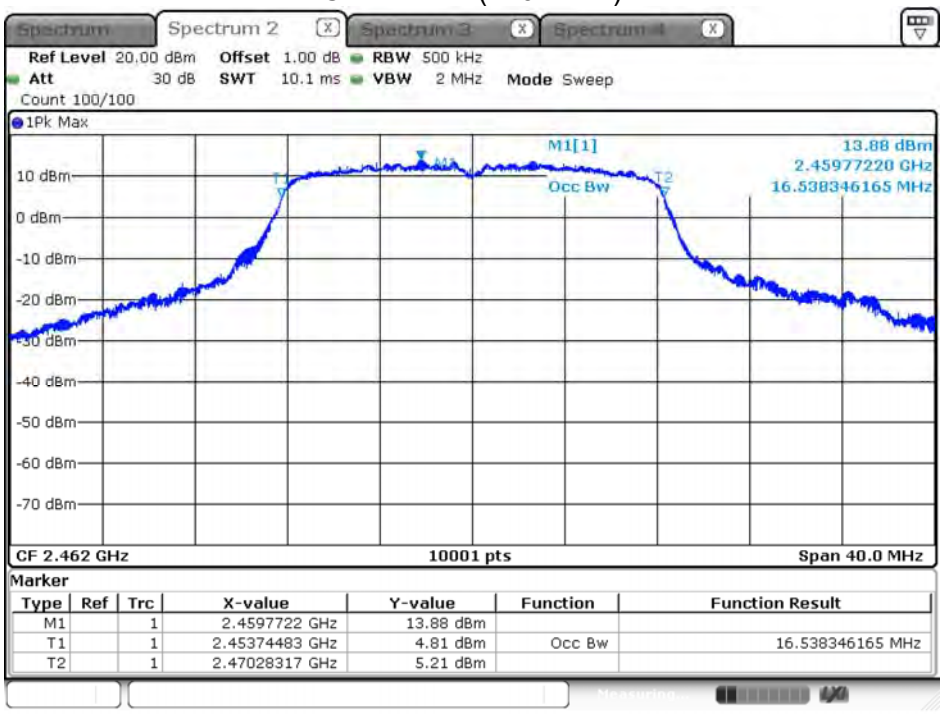


Channel 6 (2437MHz)



Date: 10.APR.2019 15:43:49

Channel 11 (2462MHz)

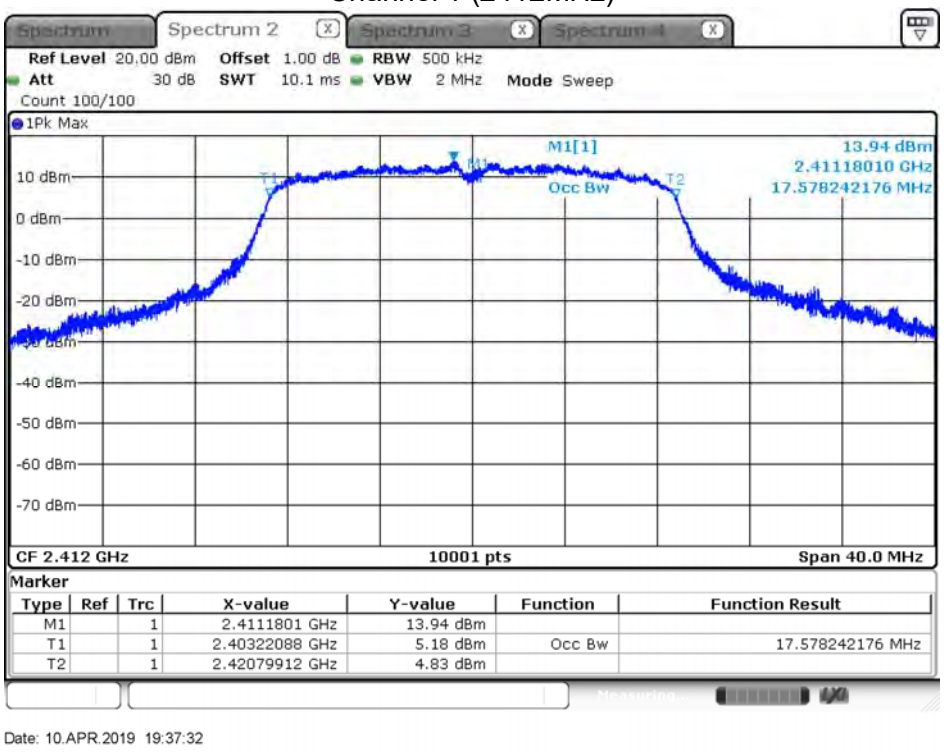


Date: 10.APR.2019 20:03:38

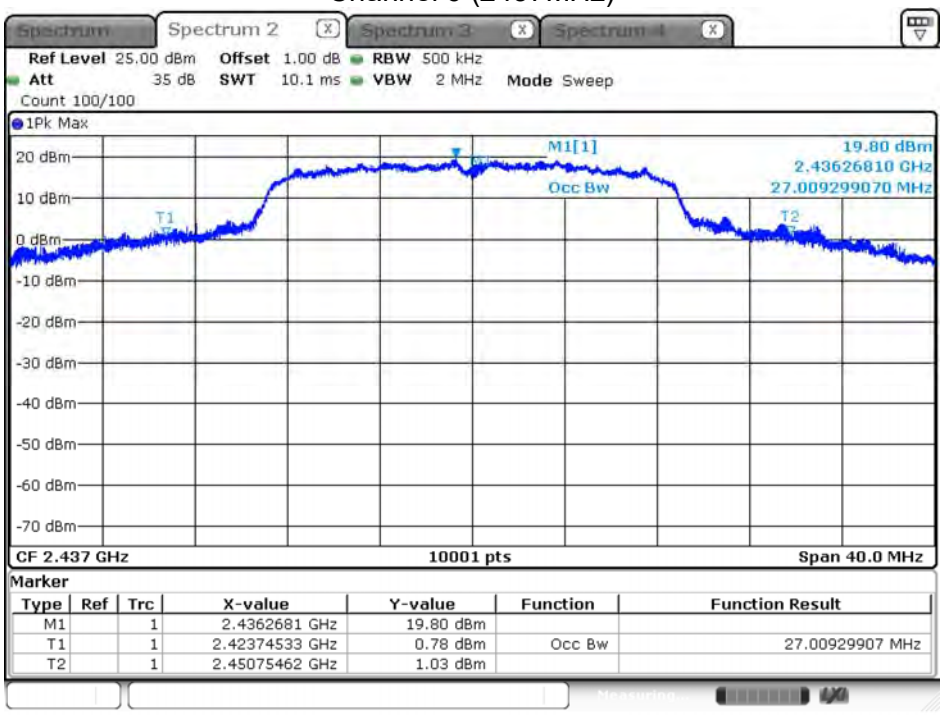
Product	Active Mobile Gateway-with Comm		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

IEEE 802.11n 20M (ANT 0)			
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1	2412	17.578	---
6	2437	27.009	---
11	2462	17.626	---

Channel 1 (2412MHz)

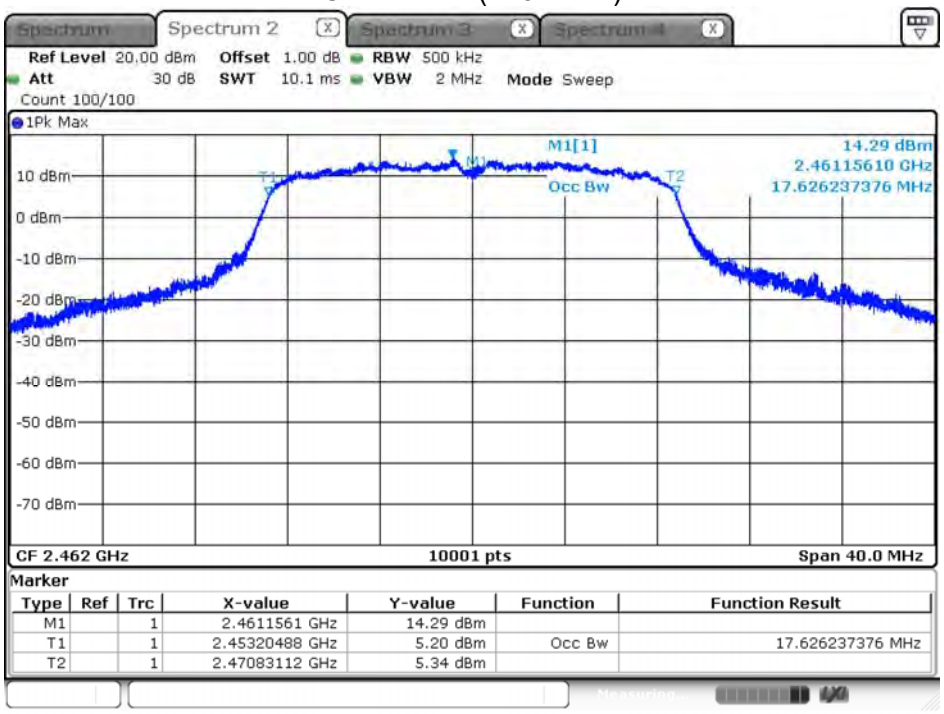


Channel 6 (2437MHz)



Date: 10.APR.2019 15:51:16

Channel 11 (2462MHz)

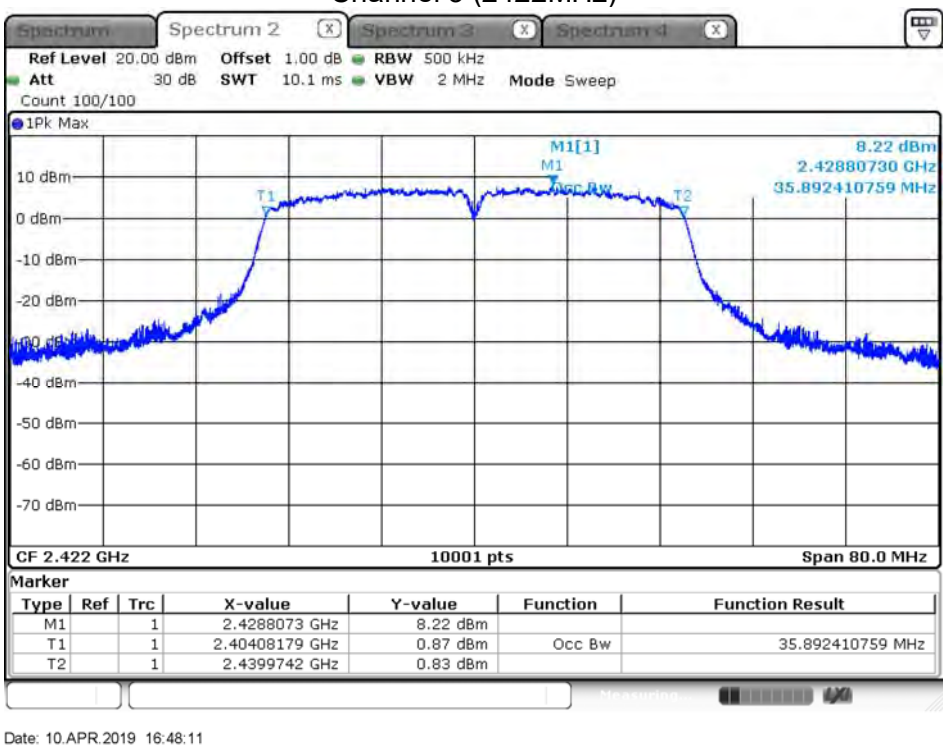


Date: 10.APR.2019 19:40:27

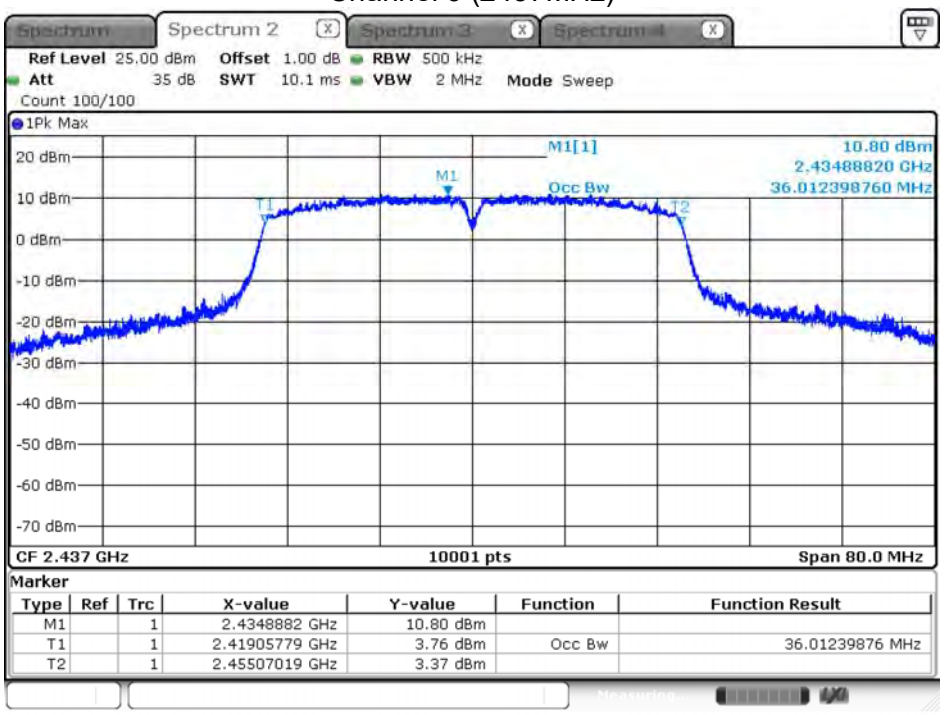
Product	Active Mobile Gateway-with Comm		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

IEEE 802.11n 40M (ANT 0)			
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
3	2422	35.892	---
6	2437	36.012	---
9	2452	35.940	---

Channel 3 (2422MHz)

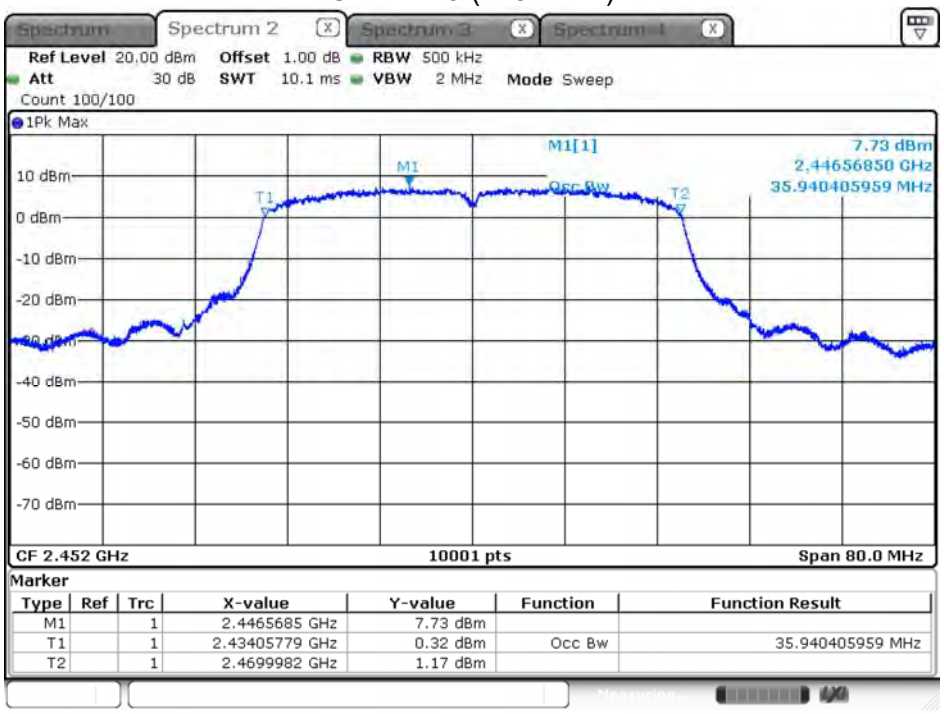


Channel 6 (2437MHz)



Date: 10.APR.2019 16:34:41

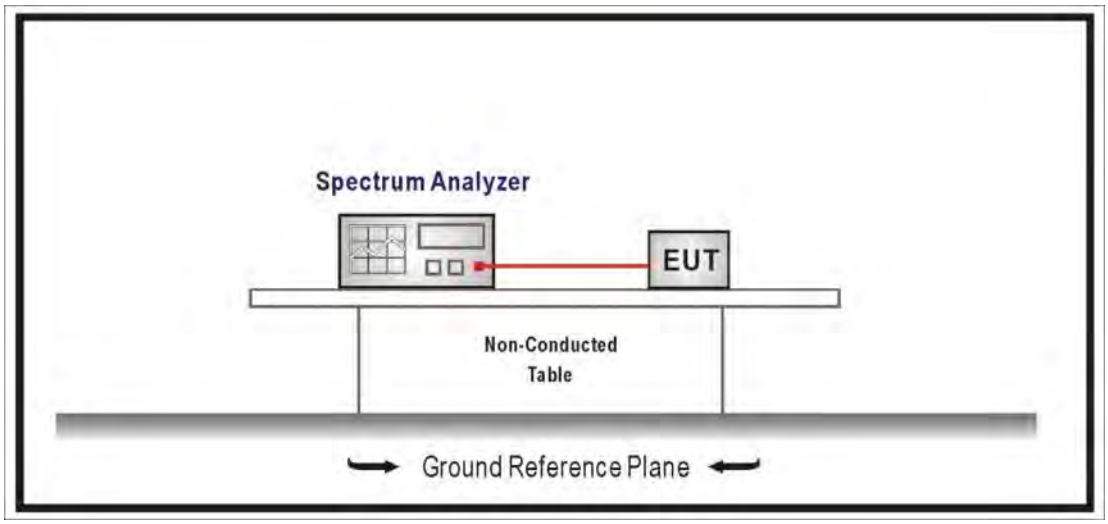
Channel 9 (2452MHz)



Date: 10.APR.2019 18:29:34

10. Power Density

10.1. Test Setup



10.2. Limits

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8dBm in any 3kHz band during any time interval of continuous transmission.

10.3. Test Procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure section 10.2 of KDB 558074 D01 V05 for compliance to FCC 47CFR 15.247 requirements. Set 3KHz ≦RBW≦100 kHz, Set VBW≧3xRBW, Sweep time=Auto, Set Peak detector.

10.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2018

10.5. Uncertainty

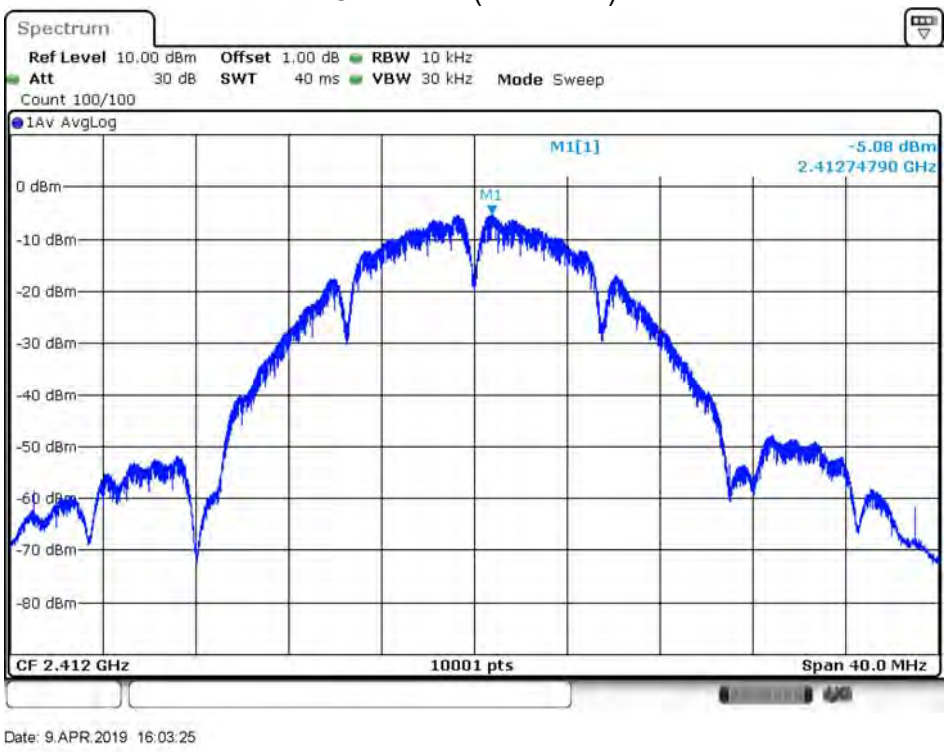
The measurement uncertainty is defined as ±1.27dB.

10.6. Test Result

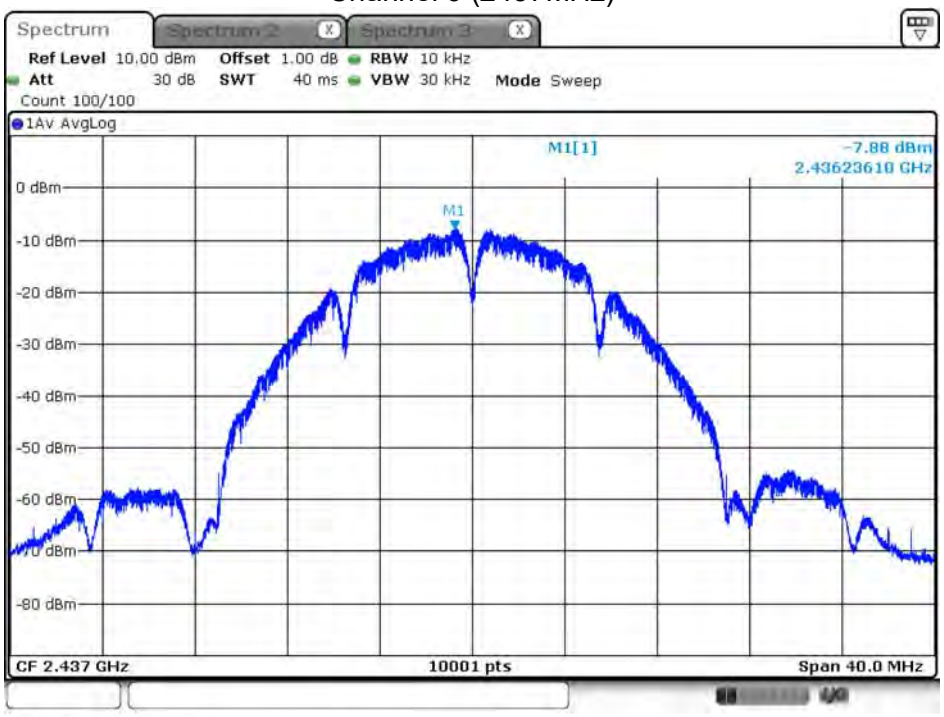
Product	Active Mobile Gateway-with Comm		
Test Item	Power Density		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

IEEE 802.11b (ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (dBm/3kHz)	Limit (dBm/3kHz)	Result
1	2412	-5.08	≦8	Pass
6	2437	-7.88	≦8	Pass
11	2462	-7.14	≦8	Pass

Channel 1 (2412MHz)

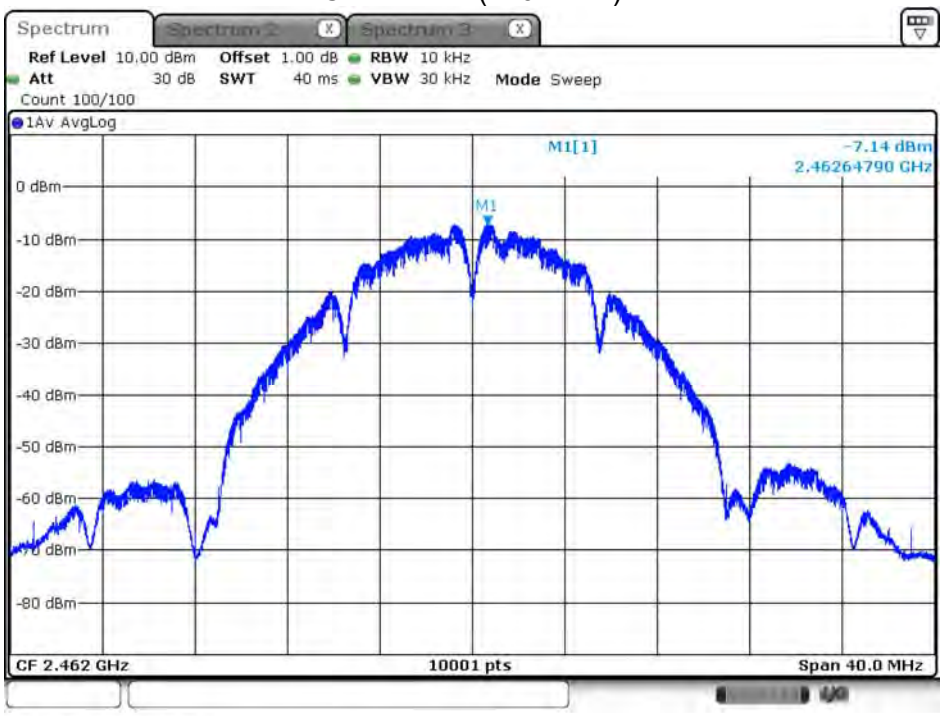


Channel 6 (2437MHz)



Date: 9.APR.2019 17:17:18

Channel 11 (2462MHz)

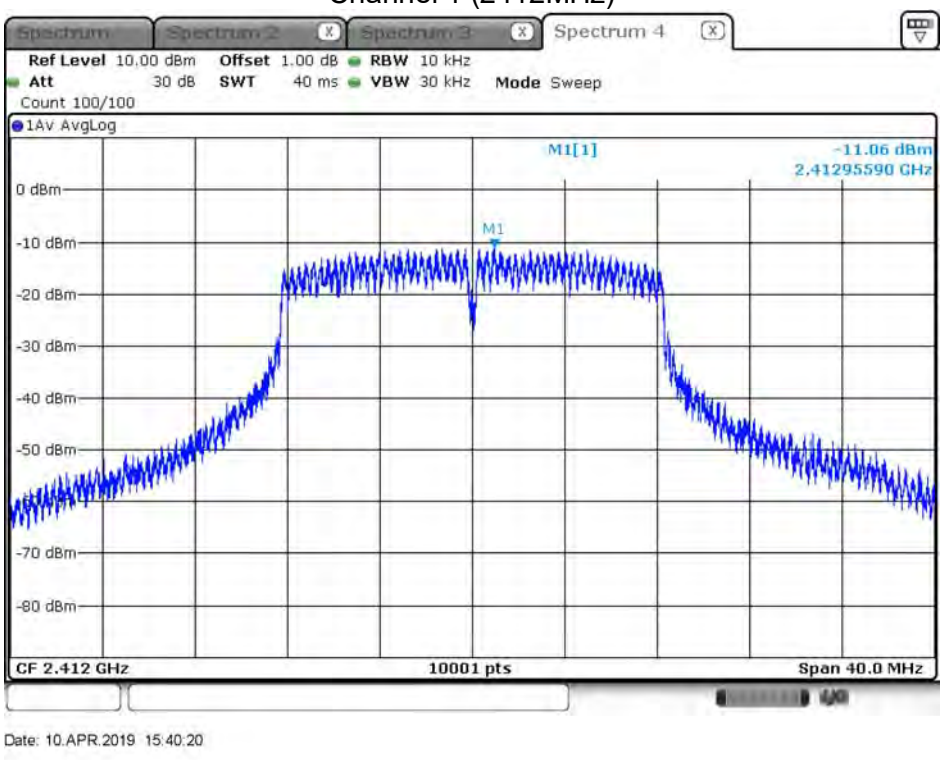


Date: 9.APR.2019 17:20:31

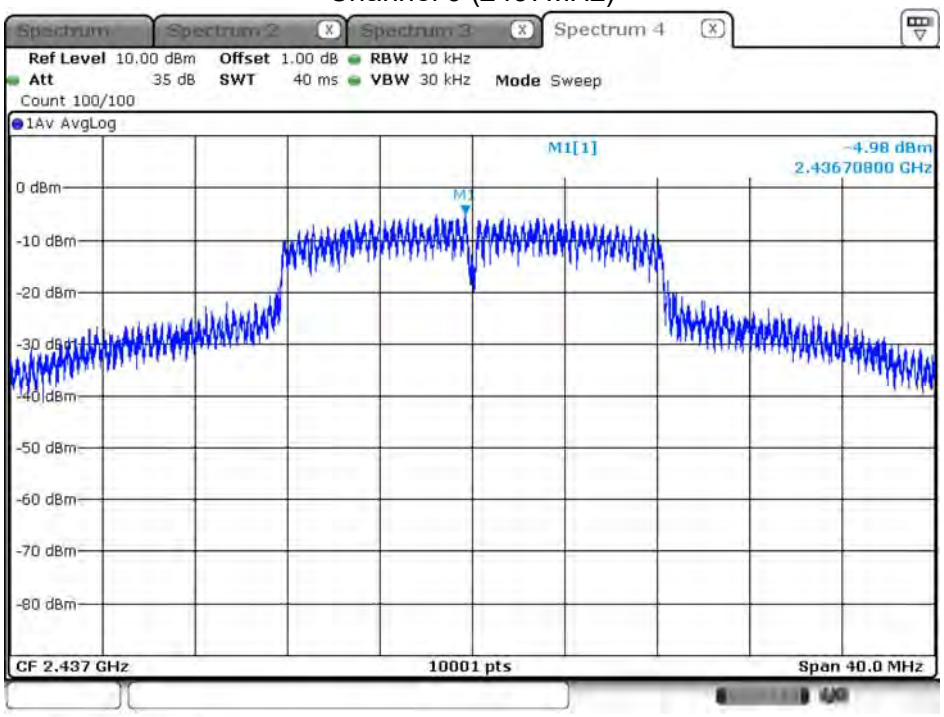
Product	Active Mobile Gateway-with Comm		
Test Item	Power Density		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

IEEE 802.11g (ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (dBm/3kHz)	Limit (dBm/3kHz)	Result
1	2412	-11.06	≦8	Pass
6	2437	-4.98	≦8	Pass
11	2462	-10.88	≦8	Pass

Channel 1 (2412MHz)

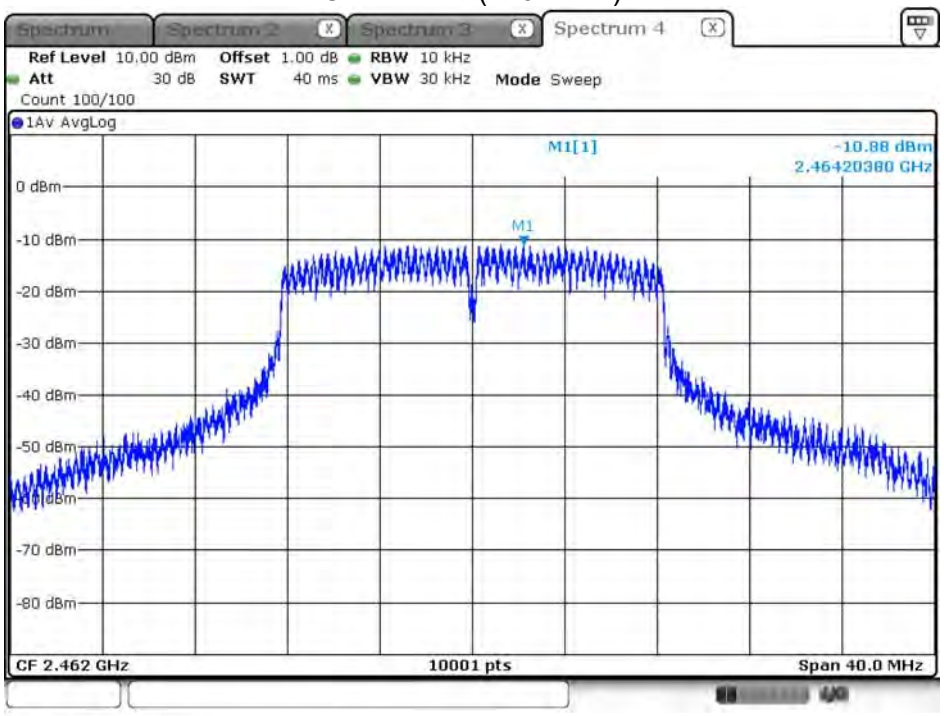


Channel 6 (2437MHz)



Date: 10.APR.2019 15:49:43

Channel 11 (2462MHz)

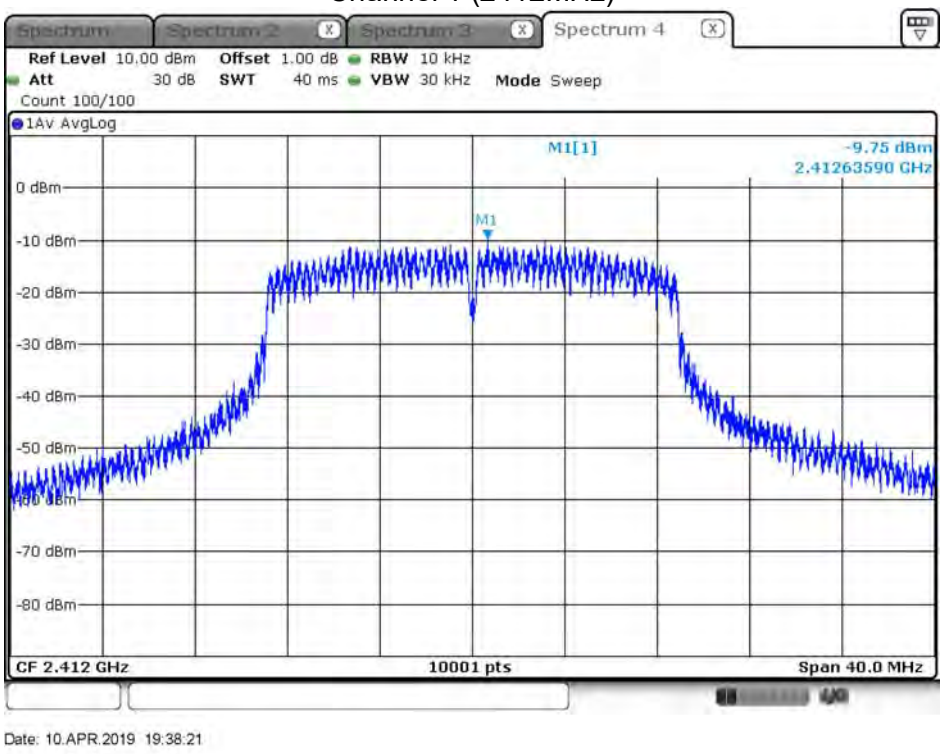


Date: 10.APR.2019 20:02:39

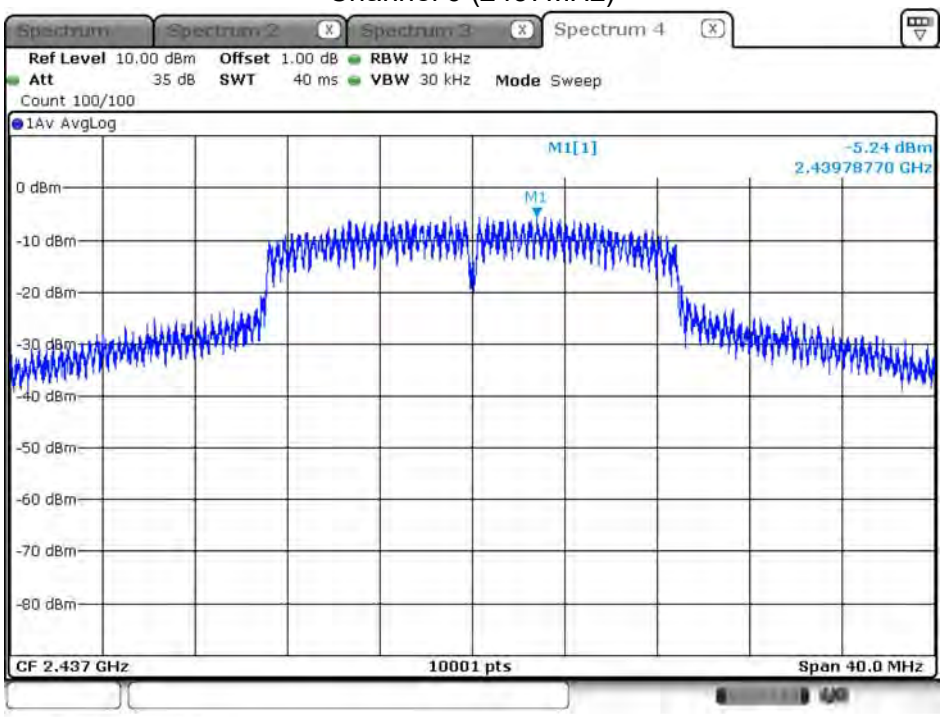
Product	Active Mobile Gateway-with Comm		
Test Item	Power Density		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

IEEE 802.11n 20M (ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (dBm/3kHz)	Limit (dBm/3kHz)	Result
1	2412	-9.75	≦8	Pass
6	2437	-5.24	≦8	Pass
11	2462	-10.07	≦8	Pass

Channel 1 (2412MHz)

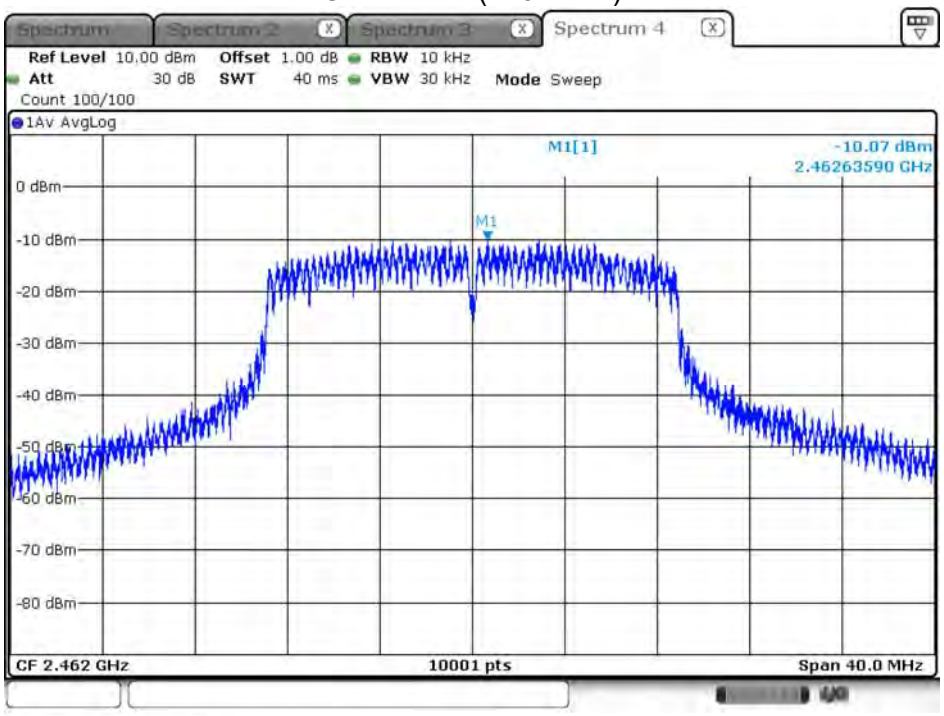


Channel 6 (2437MHz)



Date: 10.APR.2019 16:32:56

Channel 11 (2462MHz)

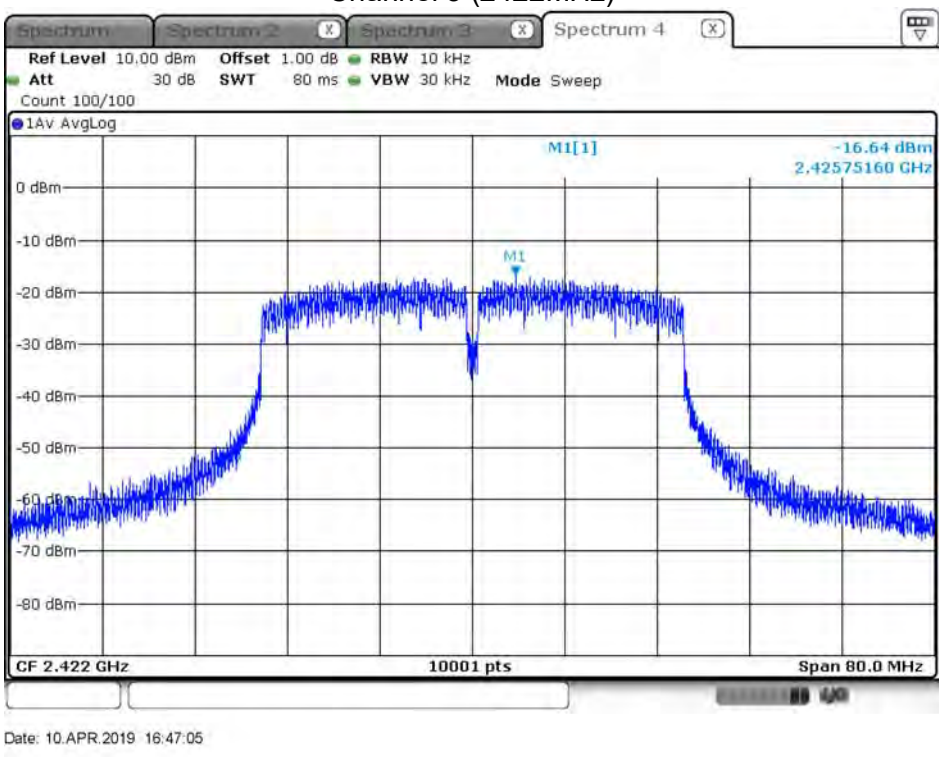


Date: 10.APR.2019 20:01:43

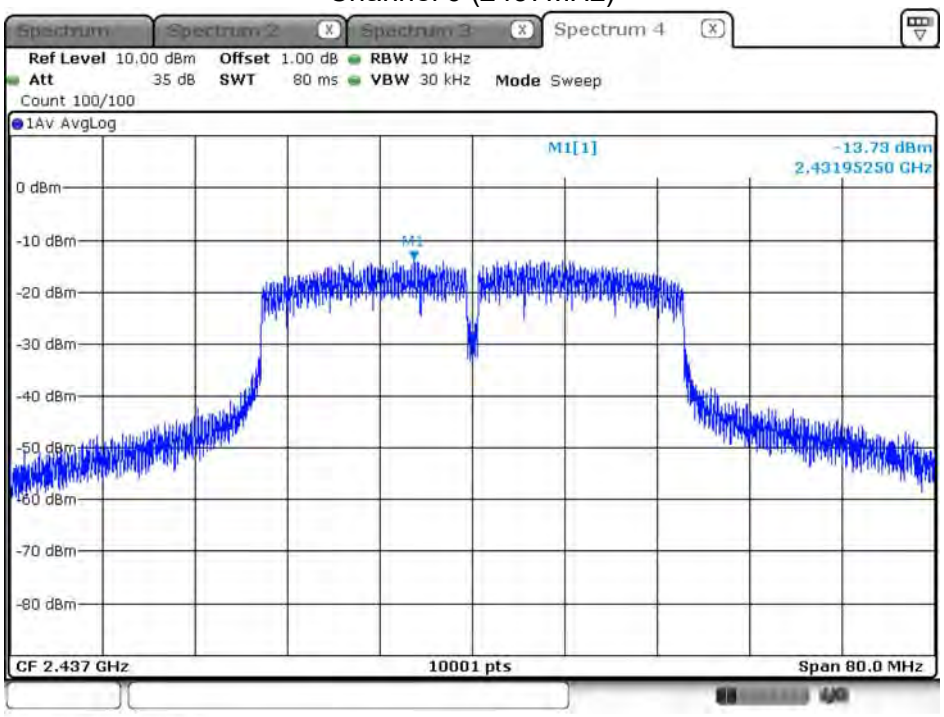
Product	Active Mobile Gateway-with Comm		
Test Item	Power Density		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2019/04/10	Test Site	SR10-H

IEEE 802.11n 40M (ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (dBm/3kHz)	Limit (dBm/3kHz)	Result
3	2422	-16.64	≦8	Pass
6	2437	-13.73	≦8	Pass
9	2452	-18.42	≦8	Pass

Channel 3 (2422MHz)



Channel 6 (2437MHz)



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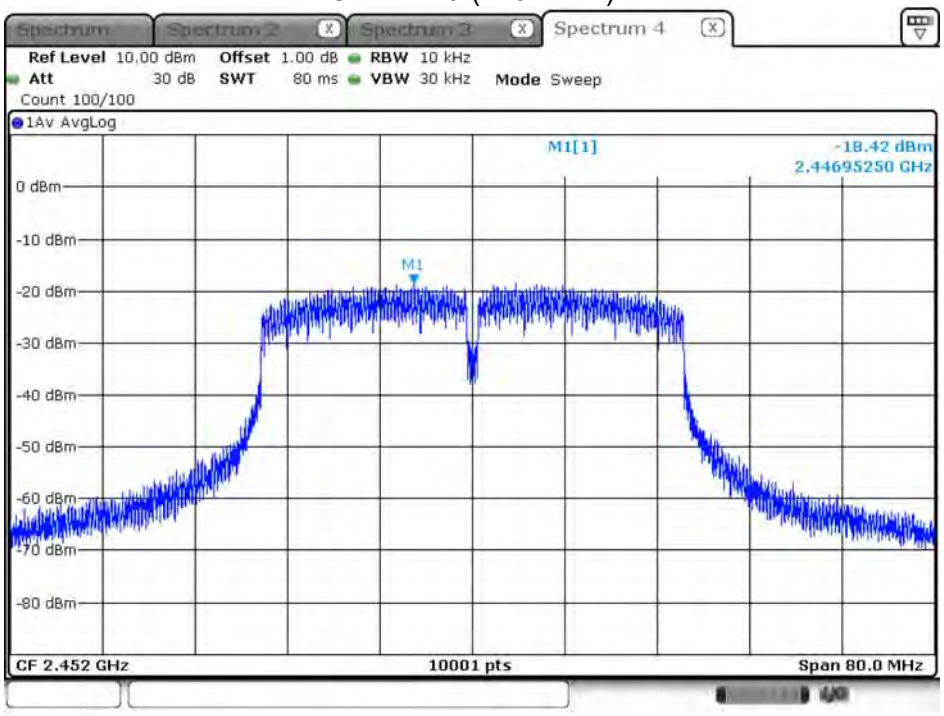
Channel 9 (2452MHz)



Date: 10.APR.2019 19:35:16