FCC PART 15C TEST REPORT FOR CERTIFICATION
On Behalf of

Amino Communications Ltd

BCM dual band 2*2 WiFi

Model No.: 50-0102-BC-22

FCC ID: XVG500102BC22

Prepared for : Amino Communications Ltd
Buckingway Business Park Anderson Road Swavesey
Cambridgeshire CB24 4UQ

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
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Report Number	:	ACS-F19017
Date of Test	:	Jan.06~Feb.20,2019
Date of Report	:	Jun.26,2019

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TEST REPORT CERTIFICATION

Applicant	:	Amino Communications Ltd
Manufacturer	:	Xavi Technologies Corp.
Product	:	BCM dual band 2*2 WiFi
FCC ID	:	XVG500102BC22

(A) Model No. : 50-0102-BC-22
(B) Serial No. : N/A
(C) Test Voltage : AC 120V/60Hz

Tested for comply with:
FCC CFR 47 Part 15 Subpart C

Test procedure used:
ANSI C63.10: 2013
KDB 558074 D01v05

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC Part 15 Subpart C requirements. The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements. This report contains data that are not covered by the NVLAP accreditation.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Jan.06~Feb.20.2019 Report of date: Jun.26.2019

Prepared by : Brave Zhang / Assistant

Reviewed by : Sunny Lu / Deputy Manager

AUDIX® 信華科技（深圳）有限公司
Audix Technology (Shenzhen) Co., Ltd.
EMC 部門報告專用章
Stamp only for EMC Dept. Report
Signature: David Jin

Approved & Authorized Signer : David Jin / Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT has been tested according to the applicable standards as referenced below.

EMISSION		
Description of Test Item	**Standard**	**Results**
Power Line Conducted Emission	FCC Part 15: 15.207	PASS
Radiated Emission	FCC Part 15: 15.209 FCC Part 15: 15.205	PASS
Band Edge Compliance	FCC Part 15: 15.247(d)	PASS
Conducted spurious emissions	FCC Part 15: 15.247(d)	PASS
6dB Bandwidth	FCC Part 15: 15.247(a)(2)	PASS
Peak Output Power	FCC Part 15: 15.247(b)(3)	PASS
Power Spectral Density	FCC Part 15: 15.247(e)	PASS
Antenna requirement	FCC Part 15: 15.203	PASS

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

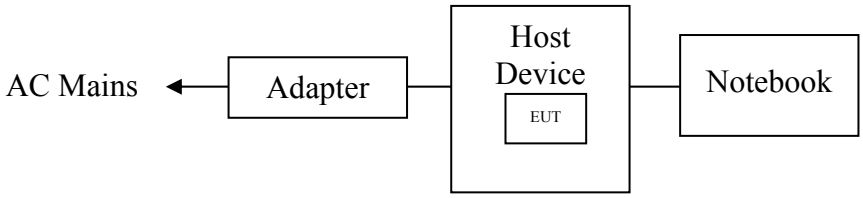
Product	:	BCM dual band 2*2 WiFi
Model No.	:	50-0102-BC-22
FCC ID	:	XVG500102BC22
Radio	:	IEEE802.11 a/b/g/n/ac
Operation Frequency	:	IEEE 802.11a: 5180MHz—5240MHz; 5260MHz—5320MHz 5500MHz—5700MHz; 5745MHz—5825MHz IEEE 802.11ac VHT20: 5180MHz—5240MHz; 5260MHz—5320MHz 5500MHz—5700MHz; 5745MHz—5825MHz IEEE 802.11ac VHT40: 5190MHz—5230MHz; 5270MHz—5310MHz 5510MHz—5670MHz; 5755MHz—5795MHz IEEE 802.11ac VHT80: 5210MHz, 5290MHz; 5530MHz—5610MHz; 5775MHz IEEE 802.11b: 2412MHz—2462MHz IEEE 802.11g: 2412MHz—2462MHz IEEE802.11nHT20: 2412MHz—2462MHz; 5180MHz—5240MHz; 5260MHz—5320MHz 5500MHz—5700MHz; 5745MHz—5825MHz IEEE802.11nHT40: 2422MHz—2452MHz 5190MHz—5230MHz; 5270MHz—5310MHz 5510MHz—5670MHz; 5755MHz—5795MHz
Modulation Technology	:	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE 802.11a/g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac VHT20, VHT40, VHT80: OFDM(16QAM, 64QAM, 256QAM, QPSK, BPSK) IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM,QPSK,BPSK)
Antenna Assembly Gain	:	PCB Antenna, WIFI 2.4GHz:ANT 0:4dBi; ANT 1: 2.4dBi WIFI 5GHz:ANT 0: 4.1dBi; ANT 1: 3.8dBi

Applicant	:	Amino Communications Ltd Buckingway Business Park Anderson Road Swavesey Cambridgeshire CB24 4UQ
Manufacturer	:	Xavi Technologies Corp. No.468, Gutang Road, Wujiang City, Jiangsu Province, China
Power Adapter	:	Manufacturer: MOSO M/N: MSA-C1000IC12.0-12W-DE; Input: 100-240V~, 50/60Hz, 0.5A Max Output: DC 12V, 1.0A DC Cable: Unshielded, Detachable, 1.8m
Date of Test	:	Jan.06~Feb.20,2019
Date of Receipt	:	Nov.10,2018
Sample Type	:	Prototype production

2.2.Tested Supporting System Details

No.	Description	ACS No.	Manufacturer	Model	Serial Number
1.	Notebook	N/A	DELL	PP09S	N/A
		LAN Cable: Unshielded, Detachabled, 1.2m			

2.3.Block diagram of connection between the EUT and simulators



Note: Host device is set top box.
(EUT: BCM dual band 2*2 WiFi)

2.4.Test Information

A special test software was used to control EUT work in Continuous TX mode(The duty cycle of the test signal is 100%), and select test channel, wireless mode and data rate.

Tested mode, channel, and data rate information			
Mode	data rate (Mbps)(see Note)	Channel	Frequency (MHz)
IEEE 802.11b	1	Low :CH1	2412
	1	Middle: CH6	2437
	1	High: CH11	2462
IEEE 802.11g	6	Low :CH1	2412
	6	Middle: CH6	2437
	6	High: CH11	2462
IEEE 802.11n HT20	MCS0	Low :CH1	2412
	MCS0	Middle: CH6	2437
	MCS0	High: CH11	2462
IEEE 802.11n HT40	MCS0	Low :CH3	2422
	MCS0	Middle: CH6	2437
	MCS0	High: CH9	2452
Note: 1. According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test. Note: 2. This is MIMO 2*2 device for 2.4GHz band，test compliance with KDB 662911 D01, The radiated emission and band edge tested with two antenna transmit simultaneously.			

2.5. Test Facility

Site Description

Name of Firm	:	Audix Technology (Shenzhen) Co., Ltd. No. 6, Kefeng Road, Science & Technology Park, Nanshan District , Shenzhen, Guangdong, China
EMC Lab.	:	Certificated by Industry Canada Registration Number: IC 5183A-1 Valid Date: May.07, 2020
	:	Certificated by DAkkS, Germany Registration No: D-PL-12151-01-00 Valid Date: Dec.07, 2021
	:	Accredited by NVLAP, USA NVLAP Code: 200372-0 Valid Date: Mar.31, 2019
	:	Certificated by FCC USA. Designation No.: CN5022 Valid Date: Mar.31, 2019

2.6.Measurement Uncertainty (95% confidence levels, k=2)

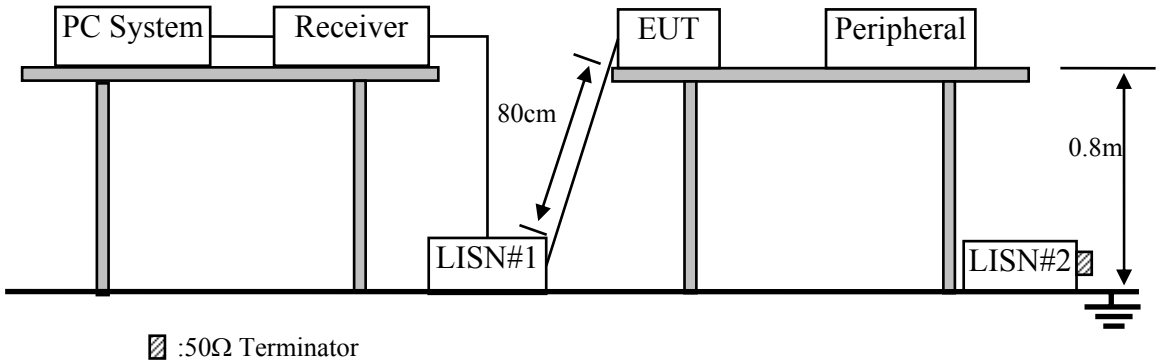
Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	2.6dB (150kHz to 30MHz)
Uncertainty for Radiation Emission test in 3m chamber	4.0dB(30~200MHz, Polarization: H)
	4.0dB(30~200MHz, Polarization: V)
	4.4dB(200M~1GHz, Polarization: H)
	4.4dB(200M~1GHz, Polarization: V)
Uncertainty for Radiation Emission test in 3m chamber	5.0dB (1~6GHz, Distance: 3m)
	5.4dB (6~18GHz, Distance: 3m)
	5.4dB (Above 18GHz, Distance: 3m)
Uncertainty for Radiated Spurious Emission test in RF chamber	3.6dB
Uncertainty for Conduction Spurious emission test	2.0dB
Uncertainty for Output power test	0.8dB
Uncertainty for Bandwidth test	83kHz
Uncertainty for DC power test	0.1 %
Uncertainty for test site temperature and humidity	0.6℃
	3%

3. POWER LINE CONDUCTED EMISSION TEST

3.1.Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	1# Shielding Room	AUDIX	N/A	N/A	May.17,18	1 Year
2.	Test Receiver	Rohde & Schwarz	ESCI	100842	Apr.23,18	1 Year
3.	L.I.S.N	Rohde & Schwarz	ENV216	102160	Dec.01,18	1 Year
4.	L.I.S.N.#2	Kyoritsu	K NW-403D	8-1750-2	Apr.23,18	1 Year
5.	Terminator	Hubersuhner	50Ω	No.1	Apr.23,18	1 Year
6.	Terminator	Hubersuhner	50Ω	No.2	Apr.23,18	1 Year
7.	RF Cable	Fujikura	RG-55/U	No.2	Apr.23,18	1 Year
8.	Coaxial Switch	Anritsu	MP59B	6201397223	Apr.23,18	1 Year
9.	Test Software	AUDIX	e3	6.100913a	N/A	N/A
Note: N/A means Not applicable.						

3.2.Block Diagram of Test Setup



3.3.Power Line Conducted Emission Test Limits

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

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

3.4. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1. BCM dual band 2*2 WiFi (EUT)

Model No. : 50-0102-BC-22
Serial No. : N/A

3.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.2.

3.5. Operating Condition of EUT

3.5.1. Setup the EUT and simulator as shown as Section 3.2.

3.5.2. Turn on the power of all equipments.

3.5.3. PC run test software to control EUT work in Tx (WiFi 2.4GHz) mode.

3.6. Test Procedure

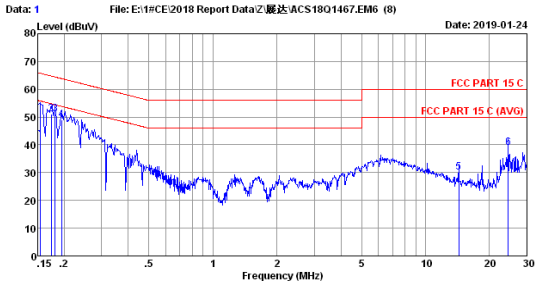
The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via PC connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESCI) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

3.7. Power Line Conducted Emission Test Results

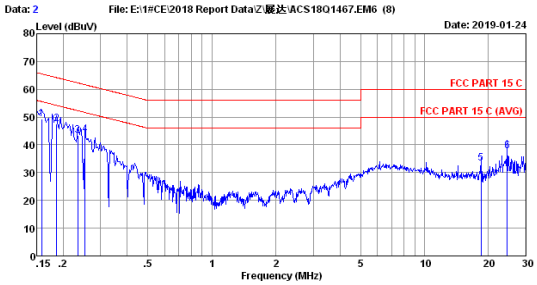
PASS. **(**All emissions not reported below are too low against the prescribed limits.)



Site no :1# CE Data No :1
Dis./Lisn :2018 ENV216-L
Limit :FCC PART 15 C
Env./Ins. :23.2*C/56% Engineer :Garry
EUT :BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power Rating :AC 120V/60Hz
Test Mode :2.4G TX

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.155	9.40	0.16	42.19	51.75	65.74	13.99	QP
2	0.174	9.40	0.16	41.50	51.06	64.77	13.71	QP
3	0.182	9.40	0.17	41.38	50.95	64.42	13.47	QP
4	0.194	9.40	0.17	39.52	49.09	63.84	14.75	QP
5	14.364	9.59	0.18	20.22	29.99	60.00	30.01	QP
6	24.529	9.60	0.19	29.28	39.07	60.00	20.93	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when using a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



Site no :1# CE Data No :2
Dis./Lisn :2018 ENV216-N
Limit :FCC PART 15 C
Env./Ins. :23.2*C/56% Engineer :Garry
EUT :BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power Rating :AC 120V/60Hz
Test Mode :2.4G TX

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.158	9.40	0.16	39.85	49.41	65.56	16.15	QP
2	0.186	9.40	0.17	38.03	47.60	64.20	16.60	QP
3	0.234	9.40	0.17	33.80	43.37	62.30	18.93	QP
4	0.253	9.40	0.18	34.11	43.69	61.64	17.95	QP
5	18.426	9.67	0.18	23.48	33.33	60.00	26.67	QP
6	24.529	9.75	0.19	27.77	37.71	60.00	22.29	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when using a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

4. RADIATED EMISSION TEST

4.1. Test Equipment

4.1.1. For frequency range 30MHz~1000MHz (In 3m Anechoic Chamber)

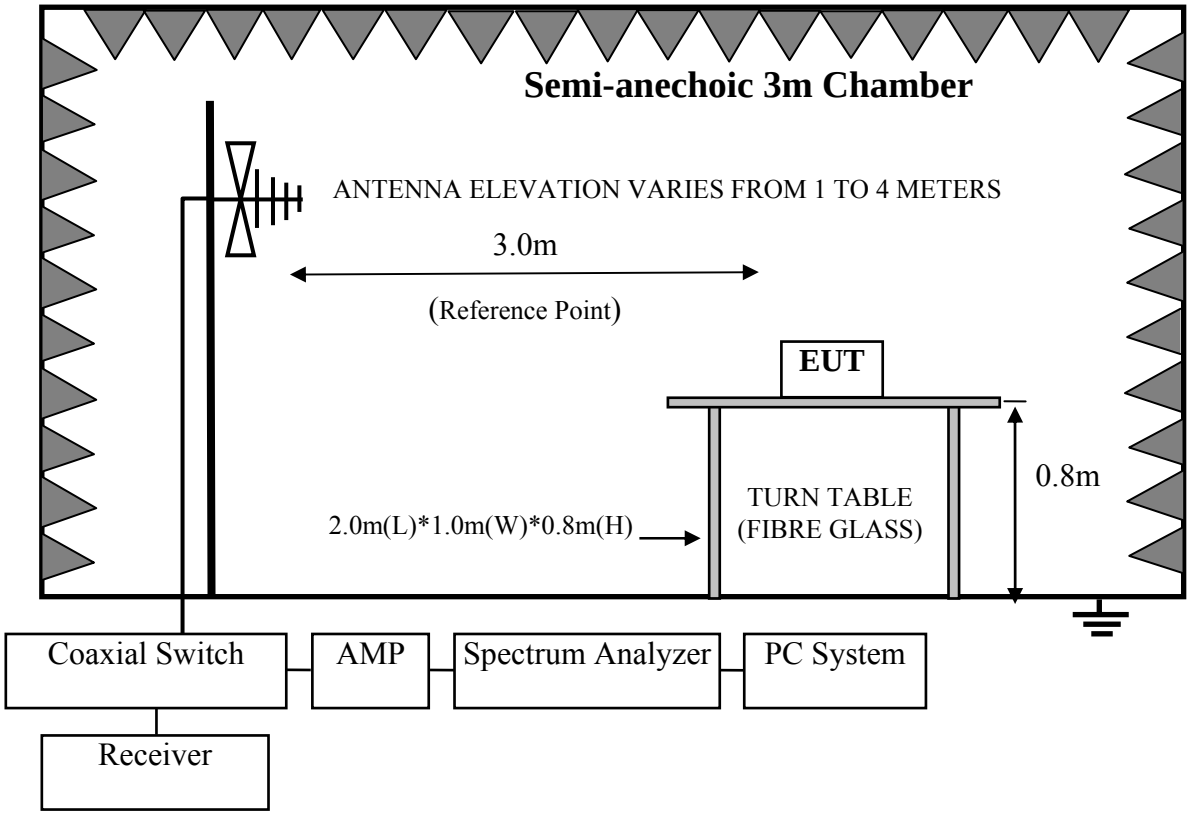
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	Jun.19,18	1 Year
2.	Signal Analyzer	Rohde & Schwarz	FSV30	104050	Apr.23,18	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESR7	101547	Apr.23,18	1 Year
4.	Amplifier	HP	8447D	2648A04738	Apr.23,18	1 Year
5.	Tri-log-Broadband Antenna	Schwarzbeck	VULB 9168	710	Aug.22,18	1 Year
6.	NSA Cable	HUBER+SUHNER	CFD400NL-LW	No.3	Dec.01,18	1 Year
7.	Coaxial Switch	Anritsu	MP59B	6201397222	Apr.23,18	1 Year
8.	Test Software	AUDIX	e3	6.2009-5-21a(n)	N/A	N/A
Note: N/A means Not applicable.						

4.1.2. For frequency range 1GHz~25GHz (In 3m Anechoic Chamber)

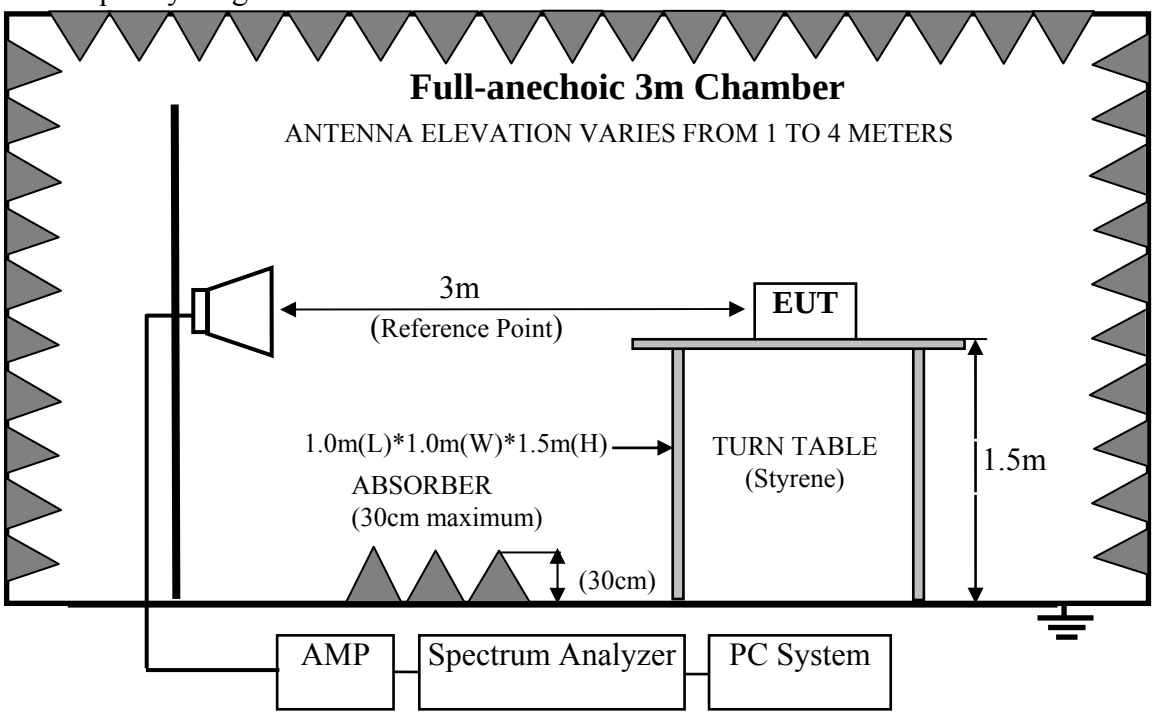
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	May.17,18	1 Year
2.	Signal Analyzer	Rohde & Schwarz	FSV30	104050	Apr.23,18	1 Year
3.	Horn Antenna	ETC	MCTD 1209	DRH15F03007	May.30,18	1 Year
4.	Horn Antenna	ETS	3116	00060089	Dec.13,18	1 Year
5.	Amplifier	Agilent	83017A	MY53270084	Oct.14,18	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX106	505239/6	Apr.23,18	1 Year
7.	Test Software	AUDIX	e3	6.2009-5-21a(n)	N/A	N/A
Note: N/A means Not applicable.						

4.2.Block Diagram of Test Setup

For frequency range 30MHz-1000MHz



For frequency range 1GHz-25GHz



4.3.Radiated Emission Limit

4.3.1. 15.247&209 limits

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

Remark： (1) Emission level dBμV = 20 log Emission level μV/m
(2) The smaller limit shall apply at the cross point between two frequency bands.
(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

4.3.2. 15.205 Restricted bands of operation

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

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

4.4.EUT Configuration on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

4.4.1. BCM dual band 2*2 WiFi (EUT)

Model No. : 50-0102-BC-22
Serial No. : N/A

4.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.2.

4.5. Operating Condition of EUT

4.5.1. Setup the EUT and simulator as shown as Section 4.2.

4.5.2. Turn on the power of all equipments.

4.5.3. Let EUT work in Tx(WiFi 2.4GHz) mode

4.6. Test Procedure

Frequency below 30MHz:
The EUT setup on the turn table which has 0.8 m height to the ground. The turn table rotated 360 degrees and antenna fixed to 1 m to find the maximum emission level. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10-2013 regulation.

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground for frequency 30MHz~1000MHz, 1.5 meter high above ground for frequency above 1GHz and put the absorbing with 2.4m(L)*2.4m(W)*0.3m(H) on the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it.EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna for frequency 30MHz~1000MHz, and the Horm antenna is used as receiving antenna for frequency above 1GHz. Both horizontal and vertical polarization of the antenna are set on test.

This test was performed with EUT in X, Y, Z position, and the worse case was found when EUT in X position as test photo indicated.

The bandwidth of the EMI test receiver (R&S ESR7) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

The frequency range from 30MHz to 10th harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25GHz, So the radiated emissions from 18GHz to 25GHz were not record.

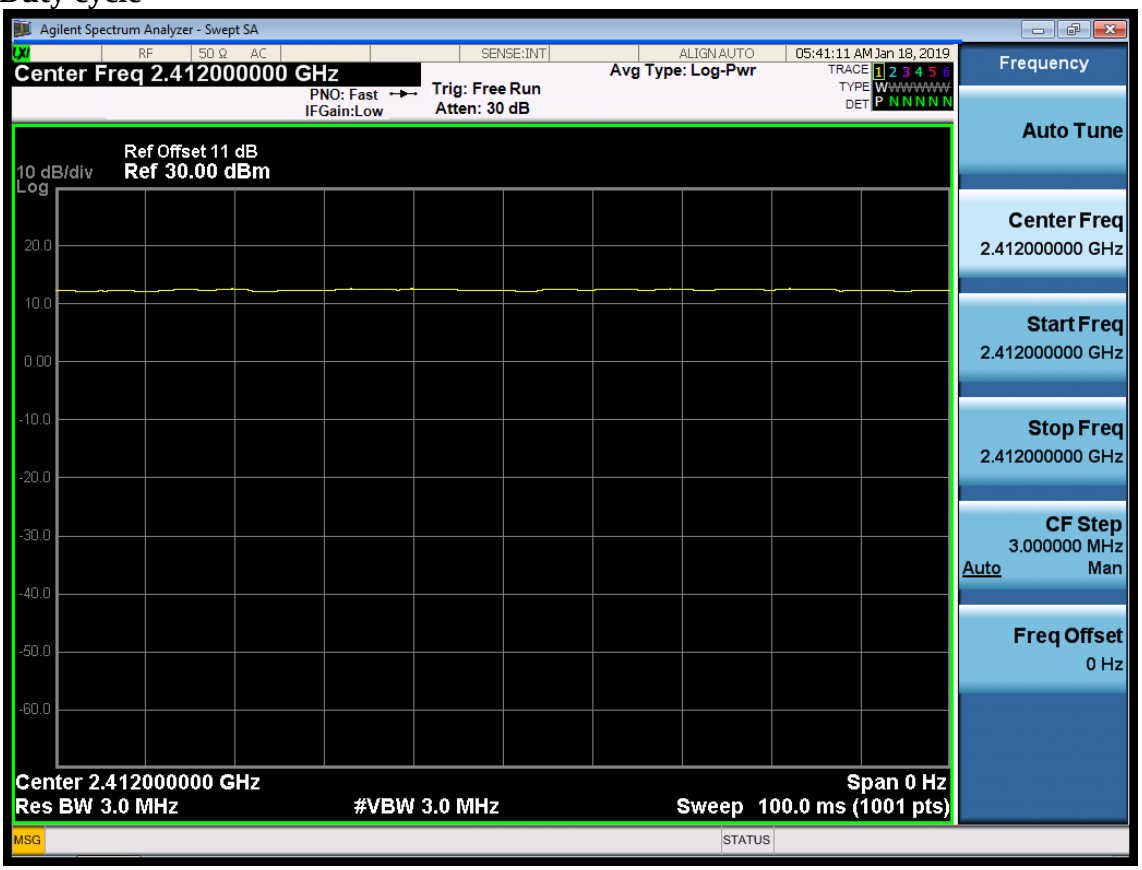
4.7. Radiated Emission Test Results

PASS.

All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.

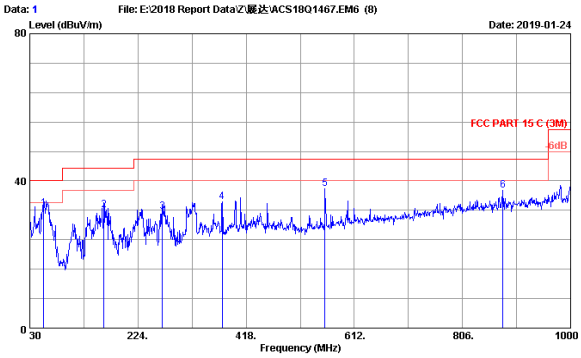
Note 1: For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.
Note 2: The emissions (9kHz~30MHz) not reported for there is no emission be found.

Duty cycle



Note: The duty cycle of the test signal is 100%.

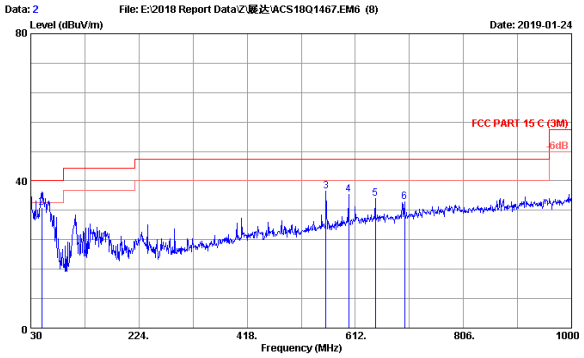
Frequency: 30MHz~1GHz



Site no. : 3m Chamber Data no. : 1
Dis. / Ant. : 3m 2018 VULB9168-710 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 23.2*C/53% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 2.4G TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	55.220	20.10	0.78	11.64	32.52	40.00	7.48	QP
2	162.890	19.80	1.45	10.78	32.03	43.50	11.47	QP
3	267.650	18.88	2.21	10.54	31.63	46.00	14.37	QP
4	375.320	21.70	2.96	9.74	34.40	46.00	11.60	QP
5	559.620	25.00	3.68	9.24	37.92	46.00	8.08	QP
6	878.750	28.80	5.15	3.47	37.42	46.00	8.58	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

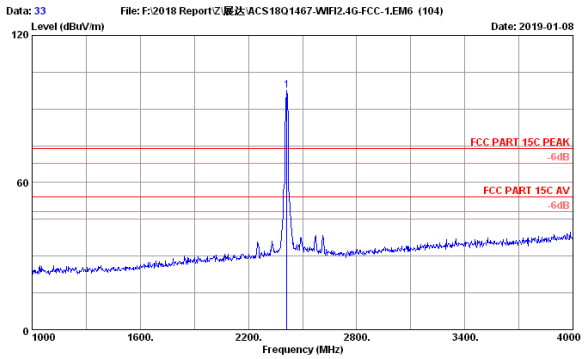


Site no. : 3m Chamber Data no. : 2
Dis. / Ant. : 3m 2018 VULB9168-710 Ant. pol. : VERTICAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 23.2*C/53% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 2.4G TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	19.10	0.58	9.30	28.98	40.00	11.02	QP
2	49.500	20.40	0.75	11.60	32.75	40.00	7.25	QP
3	559.620	25.00	3.68	8.64	37.32	46.00	8.68	QP
4	600.360	25.90	3.88	6.45	36.23	46.00	9.77	QP
5	647.890	26.30	4.08	4.81	35.19	46.00	10.81	QP
6	700.270	27.00	4.29	2.94	34.23	46.00	11.77	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

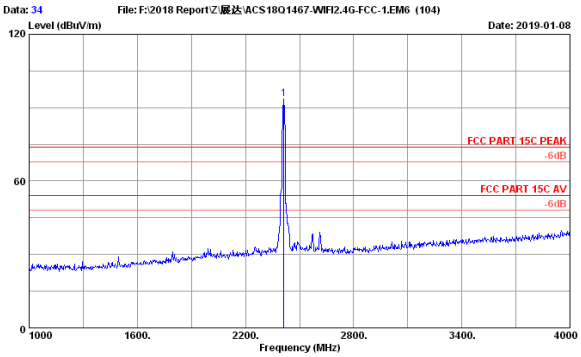
Frequency: 1GHz~18GHz



Site no. : 3m Chamber Data no. : 33
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	28.08	10.31	91.83	32.53	97.69	74.00	-23.69	Peak

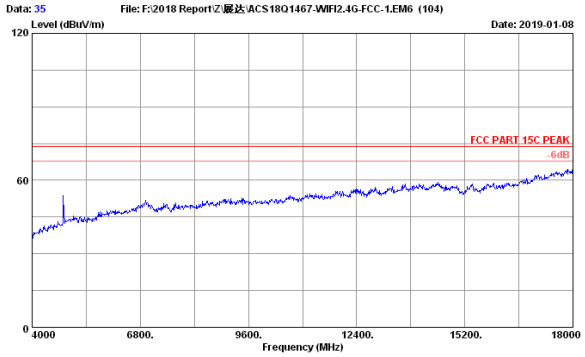
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.



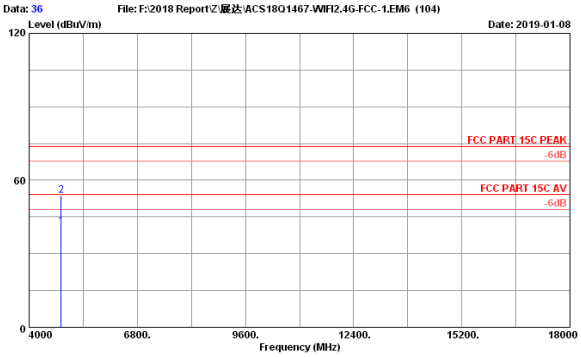
Site no. : 3m Chamber Data no. : 34
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	28.08	10.31	87.69	32.53	93.55	74.00	-19.55	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 35
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2412MHz Tx Mode

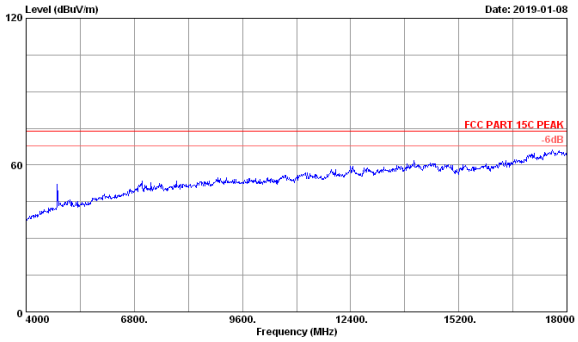


Site no. : 3m Chamber Data no. : 36
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	33.68	14.56	23.68	30.79	41.13	54.00	12.87	Average
2	4824.00	33.68	14.56	36.48	30.79	53.93	74.00	20.07	Peak

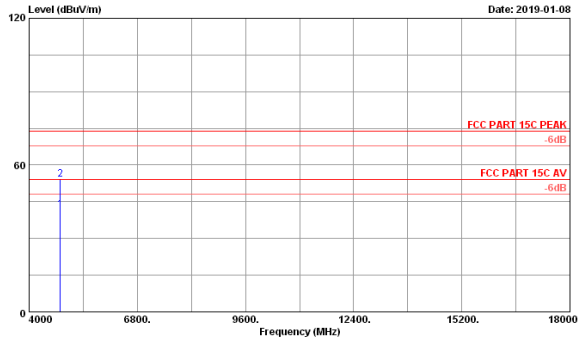
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 37 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 37
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2412MHz Tx Mode

Data: 38 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

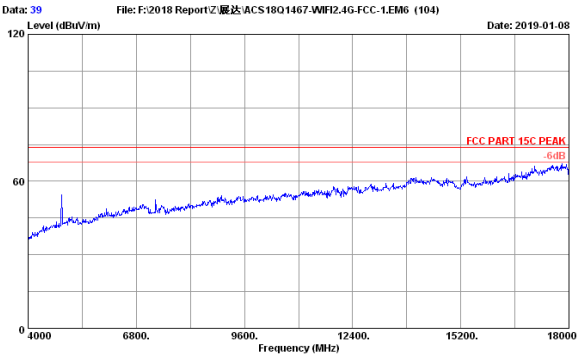


Site no. : 3m Chamber Data no. : 38
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4812.00	33.60	14.54	24.57	30.79	41.92	54.00	12.08	Average
2	4812.00	33.60	14.54	36.68	30.79	54.03	74.00	19.97	Peak

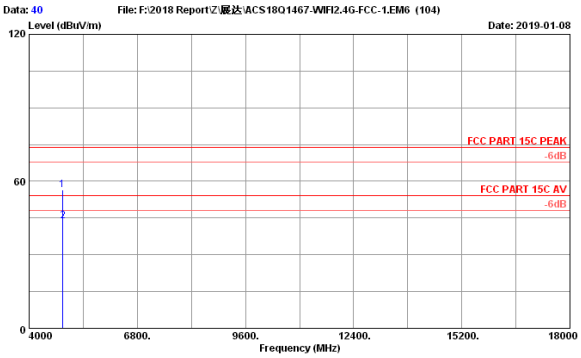
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 39 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 39
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2437MHz Tx Mode

Data: 40 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

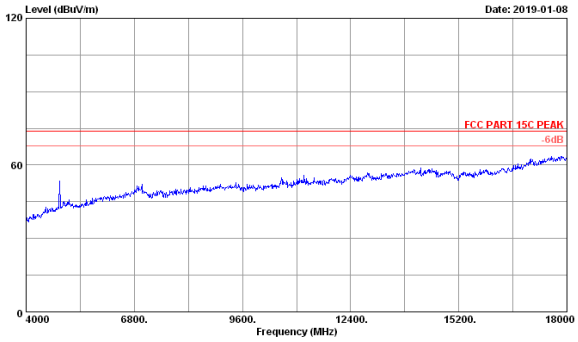


Site no. : 3m Chamber Data no. : 40
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2437MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4868.00	33.89	14.63	38.68	30.76	56.44	74.00	17.56	Peak
2	4874.00	33.89	14.63	26.14	30.76	43.90	54.00	10.10	Average

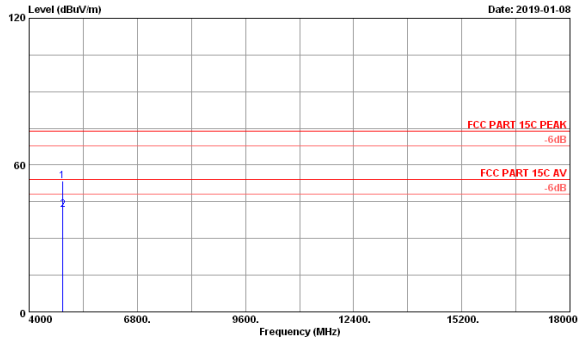
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 41 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 41
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2437MHz Tx Mode

Data: 42 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

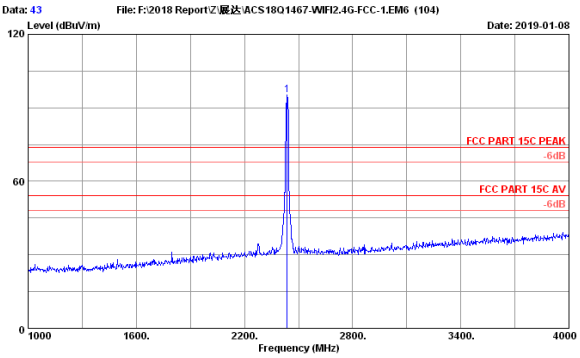


Site no. : 3m Chamber Data no. : 42
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2437MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4868.00	33.89	14.63	35.68	30.76	53.44	74.00	20.56	Peak
2	4874.00	33.89	14.63	24.14	30.76	41.90	54.00	12.10	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 43 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

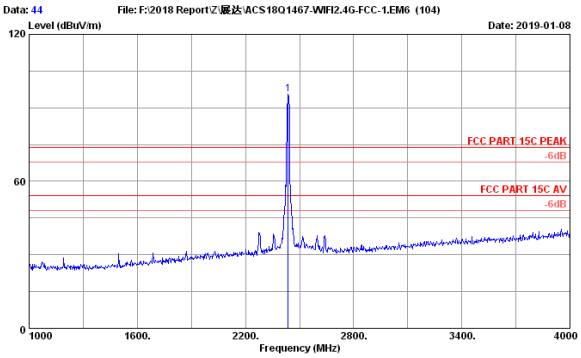


Site no. : 3m Chamber Data no. : 43
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2437MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.00	28.13	10.38	89.23	32.53	95.21	74.00	-21.21	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 44 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

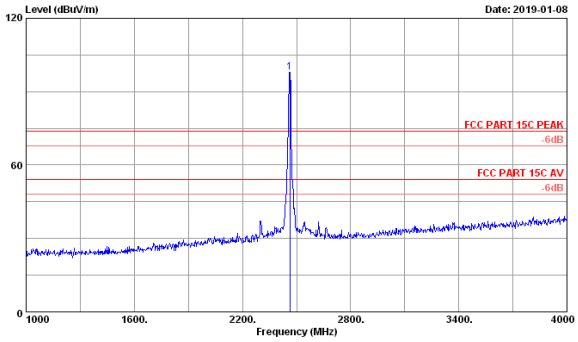


Site no. : 3m Chamber Data no. : 44
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2437MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.00	28.13	10.38	89.77	32.53	95.75	74.00	-21.75	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 45 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

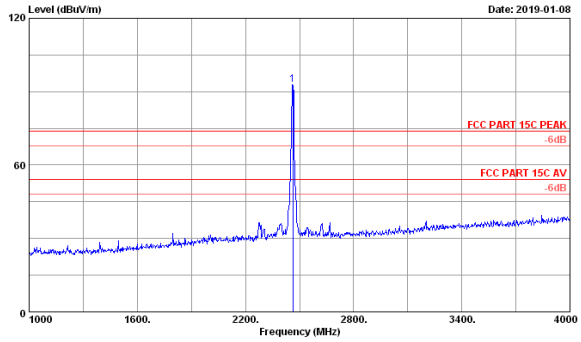


Site no. : 3m Chamber Data no. : 45
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.15	10.42	91.93	32.51	97.99	74.00	-23.99	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 46 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

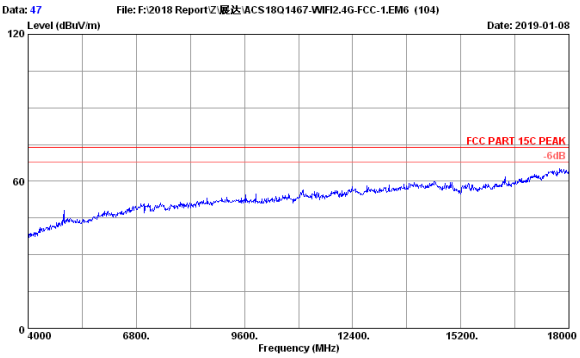


Site no. : 3m Chamber Data no. : 46
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.15	10.42	86.92	32.51	92.98	74.00	-18.98	Peak

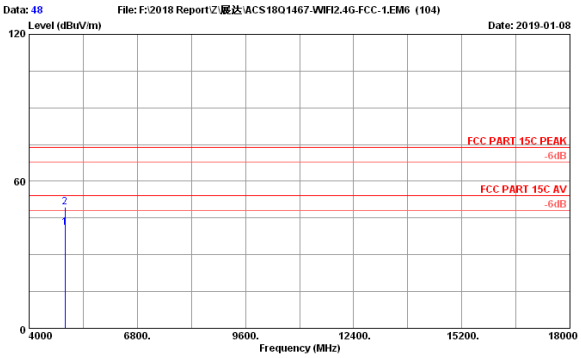
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 47 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 47
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2462MHz Tx Mode

Data: 48 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

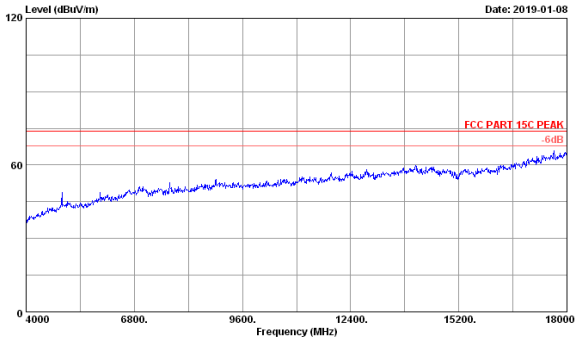


Site no. : 3m Chamber Data no. : 48
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.00	34.11	14.71	23.17	30.73	41.26	54.00	12.74	Average
2	4924.00	34.11	14.71	31.34	30.73	49.43	74.00	24.57	Peak

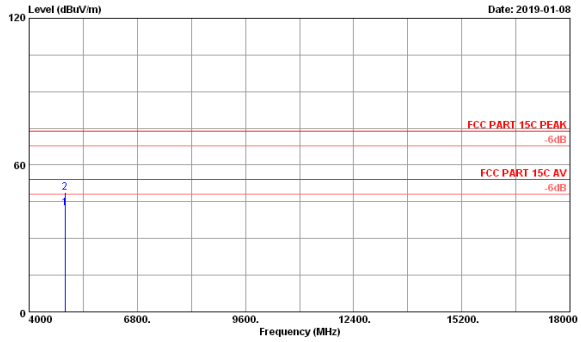
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 49 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 49
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2462MHz Tx Mode

Data: 50 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

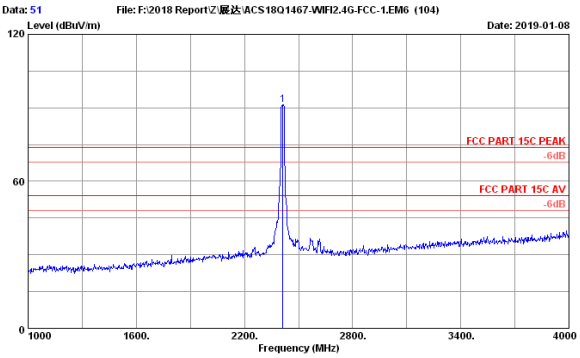


Site no. : 3m Chamber Data no. : 50
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11b 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.00	34.11	14.71	24.26	30.73	42.35	54.00	11.65	Average
2	4924.00	34.11	14.71	30.66	30.73	48.75	74.00	25.25	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 51 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

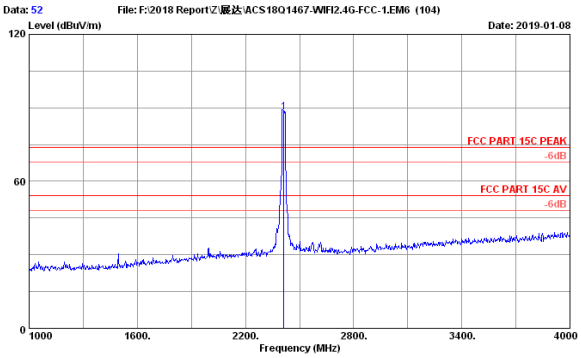


Site no. : 3m Chamber Data no. : 51
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	28.08	10.31	85.39	32.53	91.25	74.00	-17.25	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 52 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

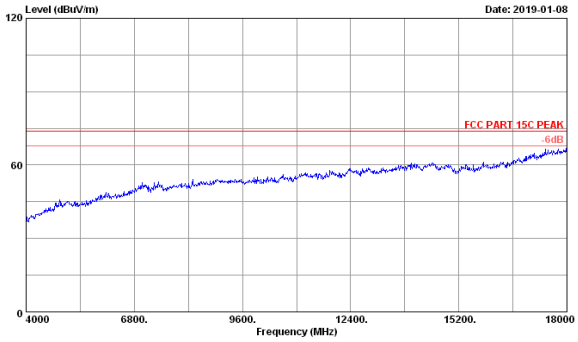


Site no. : 3m Chamber Data no. : 52
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	28.08	10.31	82.38	32.53	88.24	74.00	-14.24	Peak

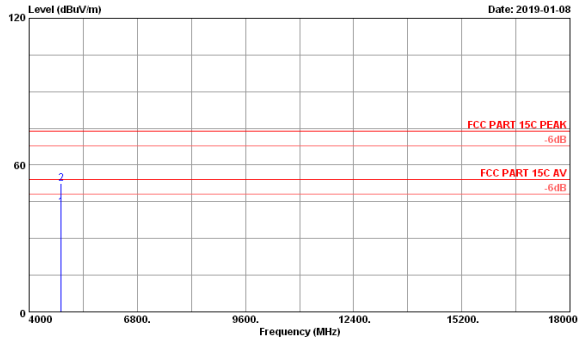
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 53 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 53
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2412MHz Tx Mode

Data: 54 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

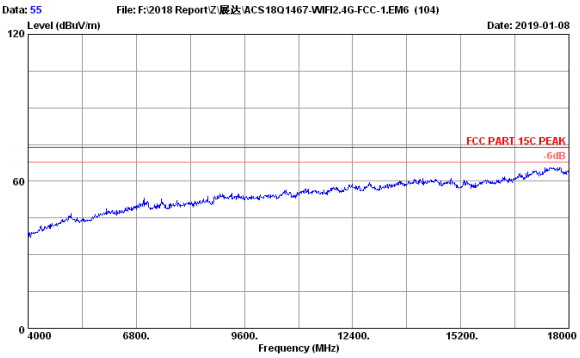


Site no. : 3m Chamber Data no. : 54
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	33.68	14.56	25.47	30.79	42.92	54.00	11.08	Average
2	4824.00	33.68	14.56	35.16	30.79	52.61	74.00	21.39	Peak

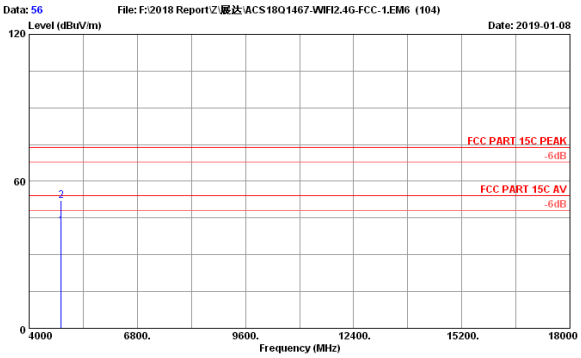
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 55 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 55
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2412MHz Tx Mode

Data: 56 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

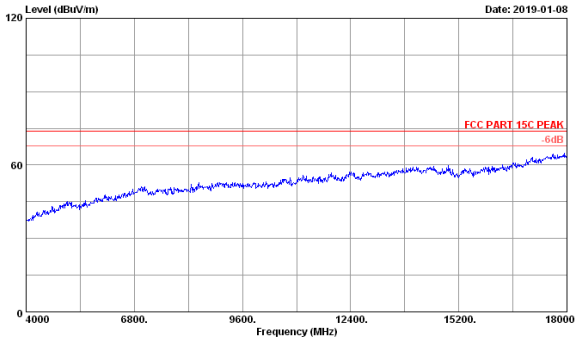


Site no. : 3m Chamber Data no. : 56
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	33.68	14.56	24.38	30.79	41.83	54.00	12.17	Average
2	4824.00	33.68	14.56	34.67	30.79	52.12	74.00	21.88	Peak

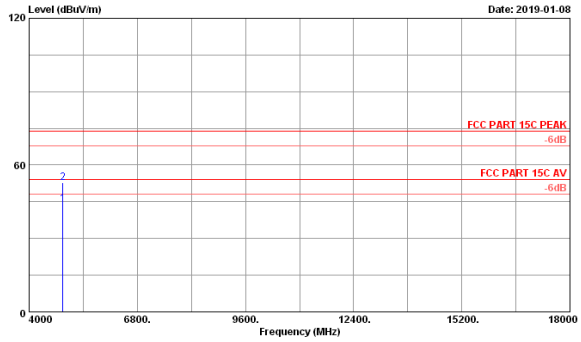
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 57 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 57
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2437MHz Tx Mode

Data: 58 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

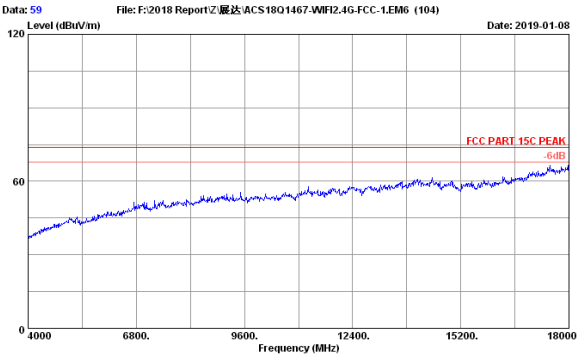


Site no. : 3m Chamber Data no. : 58
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2437MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	33.89	14.63	26.38	30.76	44.14	54.00	9.86	Average
2	4874.00	33.89	14.63	35.17	30.76	52.93	74.00	21.07	Peak

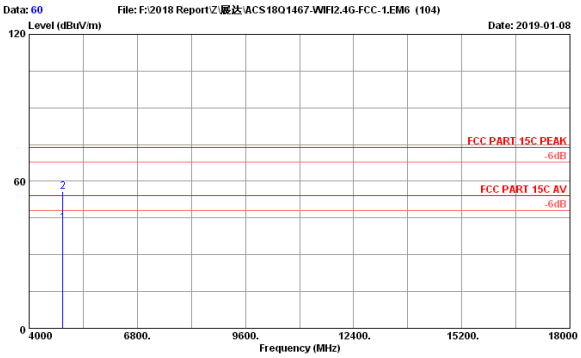
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 59 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 59
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2437MHz Tx Mode

Data: 60 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

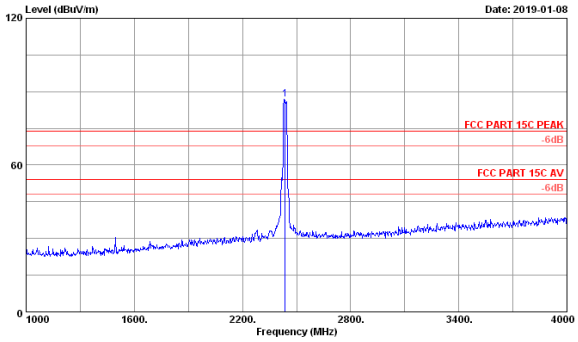


Site no. : 3m Chamber Data no. : 60
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2437MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	33.89	14.63	25.50	30.76	43.26	54.00	10.74	Average
2	4874.00	33.89	14.63	38.07	30.76	55.83	74.00	18.17	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 61 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

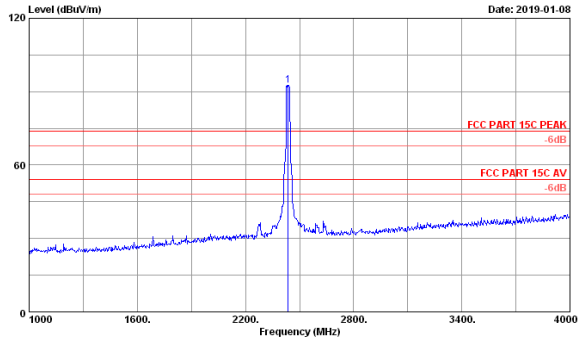


Site no. : 3m Chamber Data no. : 61
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2437MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.00	28.13	10.38	80.94	32.53	86.92	74.00	-12.92	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 62 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

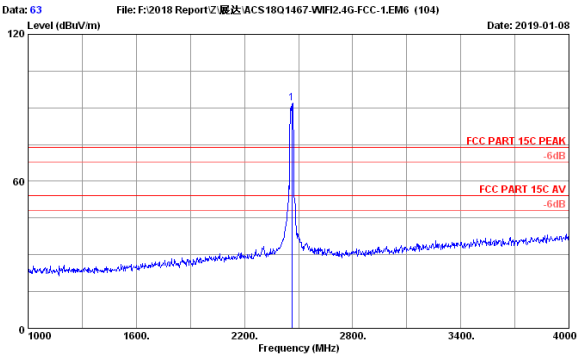


Site no. : 3m Chamber Data no. : 62
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2437MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.00	28.13	10.38	86.77	32.53	92.75	74.00	-18.75	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 63 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

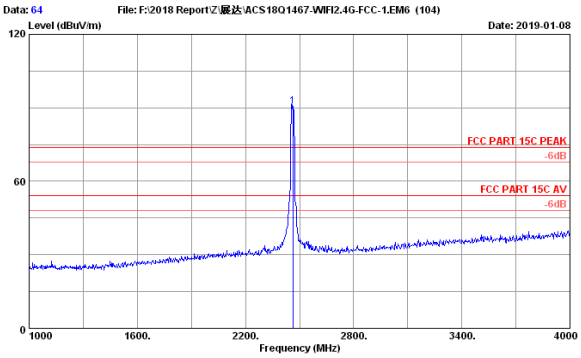


Site no. : 3m Chamber Data no. : 63
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.15	10.42	85.97	32.51	92.03	74.00	-18.03	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 64 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

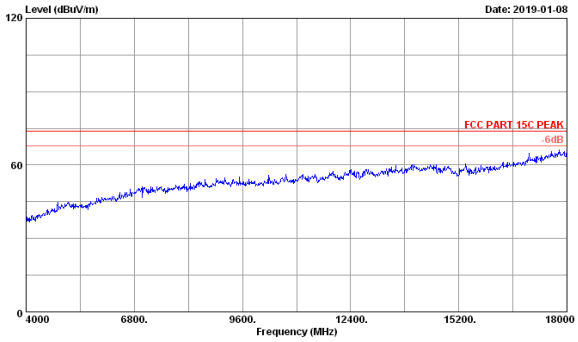


Site no. : 3m Chamber Data no. : 64
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.15	10.42	84.50	32.51	90.56	74.00	-16.56	Peak

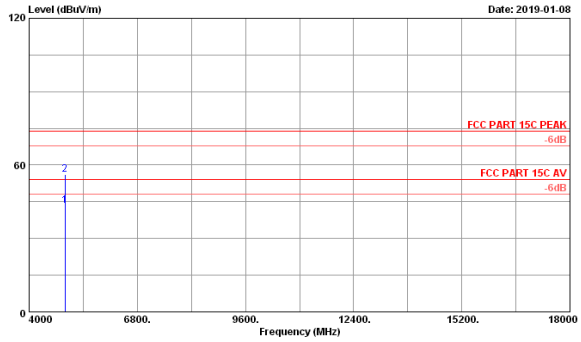
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 65 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 65
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2462MHz Tx Mode

Data: 66 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

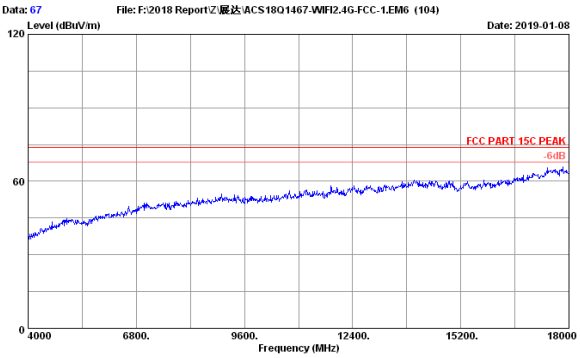


Site no. : 3m Chamber Data no. : 66
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.00	34.11	14.71	25.47	30.73	43.56	54.00	10.44	Average
2	4924.00	34.11	14.71	38.14	30.73	56.23	74.00	17.77	Peak

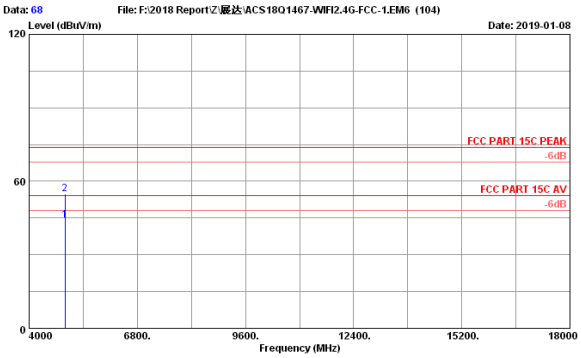
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 67 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 67
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2462MHz Tx Mode

Data: 68 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

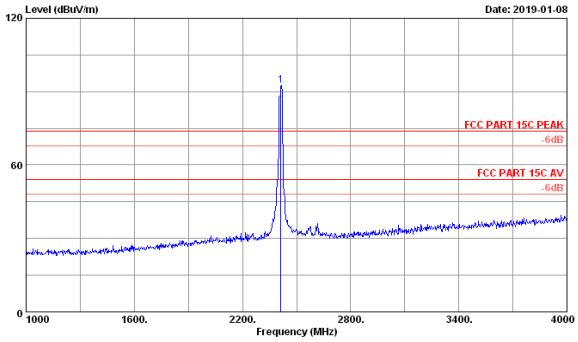


Site no. : 3m Chamber Data no. : 68
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11g 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.00	34.11	14.71	26.04	30.73	44.13	54.00	9.87	Average
2	4924.00	34.11	14.71	36.71	30.73	54.80	74.00	19.20	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 69 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

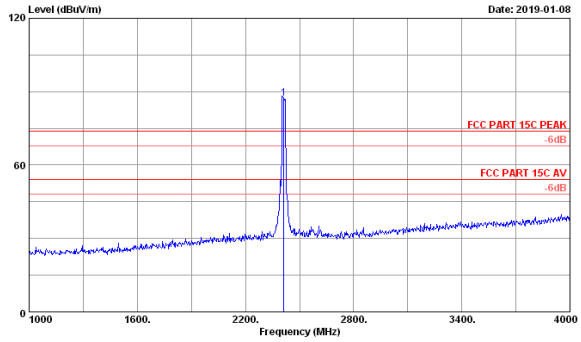


Site no. : 3m Chamber Data no. : 69
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	28.08	10.31	86.87	32.53	92.73	74.00	-18.73	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 70 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

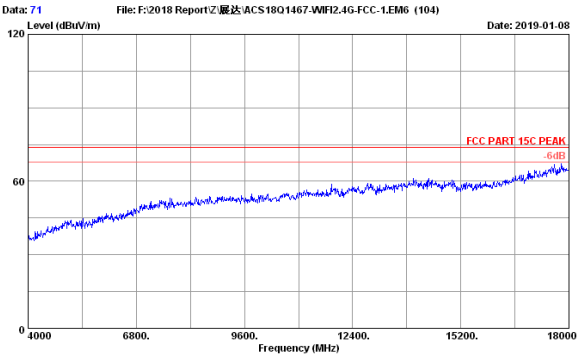


Site no. : 3m Chamber Data no. : 70
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	28.08	10.31	81.24	32.53	87.10	74.00	-13.10	Peak

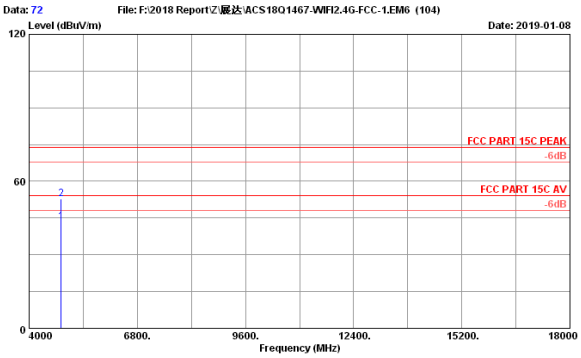
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 71 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 71
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2412MHz Tx Mode

Data: 72 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

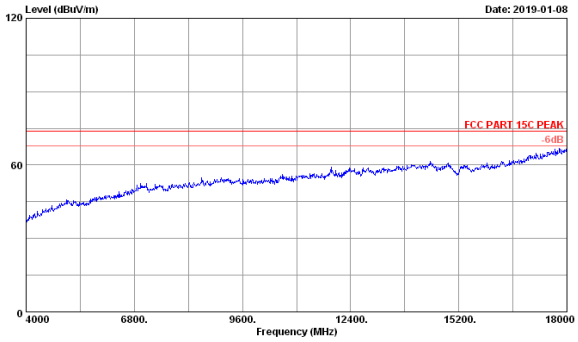


Site no. : 3m Chamber Data no. : 72
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	33.68	14.56	26.03	30.79	43.48	54.00	10.52	Average
2	4824.00	33.68	14.56	35.28	30.79	52.73	74.00	21.27	Peak

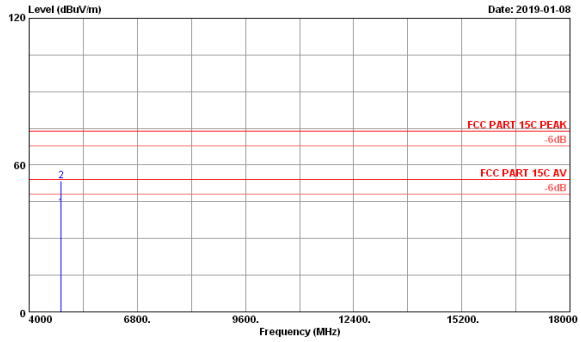
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 73 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 73
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2412MHz Tx Mode

Data: 74 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

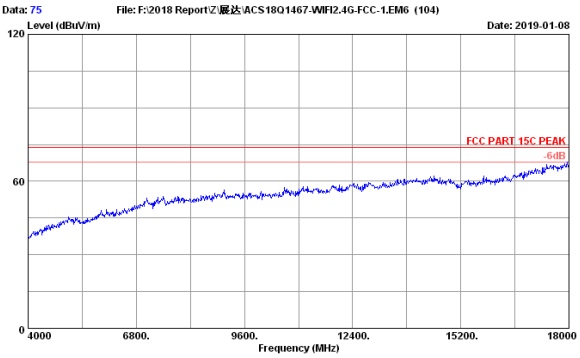


Site no. : 3m Chamber Data no. : 74
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	33.68	14.56	25.12	30.79	42.57	54.00	11.43	Average
2	4824.00	33.68	14.56	36.11	30.79	53.56	74.00	20.44	Peak

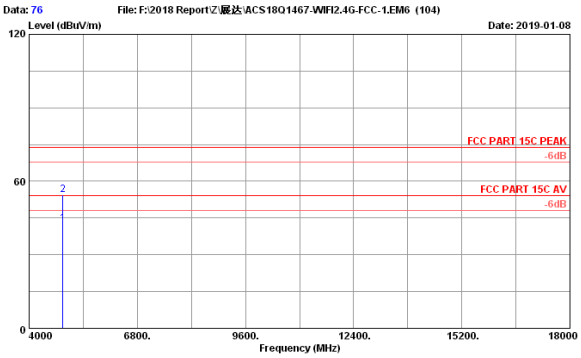
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 75 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 75
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2437MHz Tx Mode

Data: 76 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

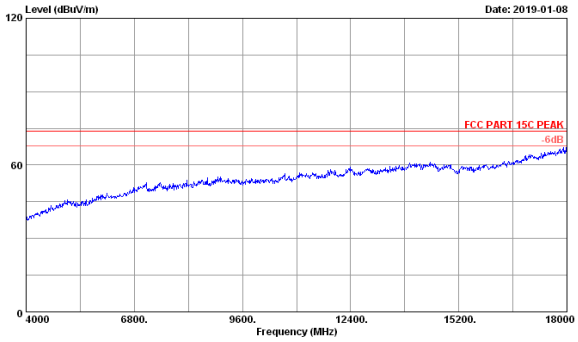


Site no. : 3m Chamber Data no. : 76
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2437MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	33.89	14.63	25.14	30.76	42.90	54.00	11.10	Average
2	4874.00	33.89	14.63	36.86	30.76	54.62	74.00	19.38	Peak

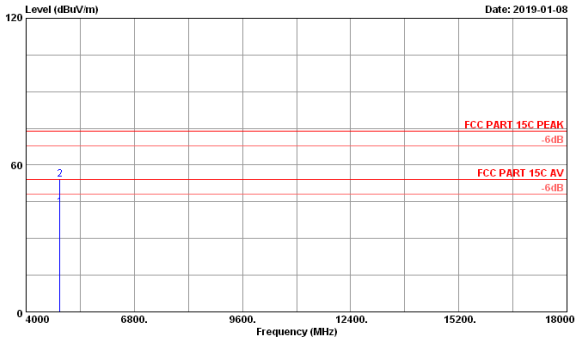
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 77 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 77
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2437MHz Tx Mode

Data: 78 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

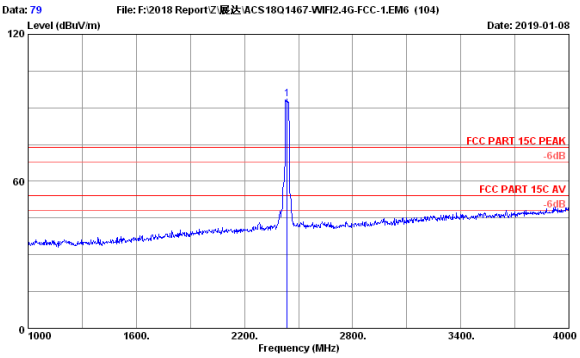


Site no. : 3m Chamber Data no. : 78
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2437MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	33.89	14.63	25.14	30.76	42.90	54.00	11.10	Average
2	4874.00	33.89	14.63	36.50	30.76	54.26	74.00	19.74	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 79 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

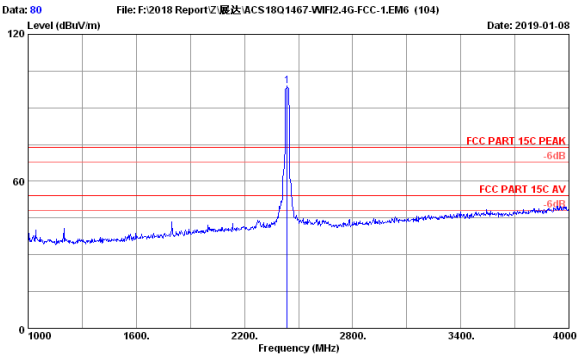


Site no. : 3m Chamber Data no. : 79
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2437MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.00	28.13	10.38	87.59	32.53	93.57	74.00	-19.57	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 80 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

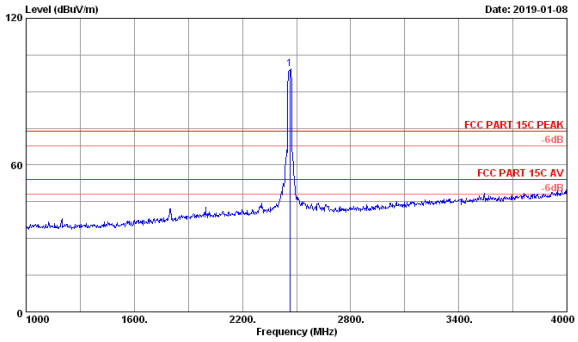


Site no. : 3m Chamber Data no. : 80
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2437MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.00	28.13	10.38	92.93	32.53	98.91	74.00	-24.91	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 81 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

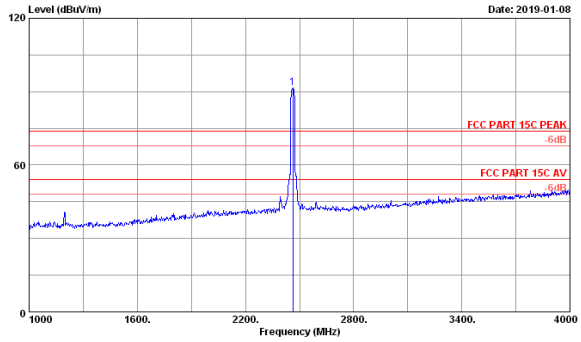


Site no. : 3m Chamber Data no. : 81
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.15	10.42	93.15	32.51	99.21	74.00	-25.21	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 82 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

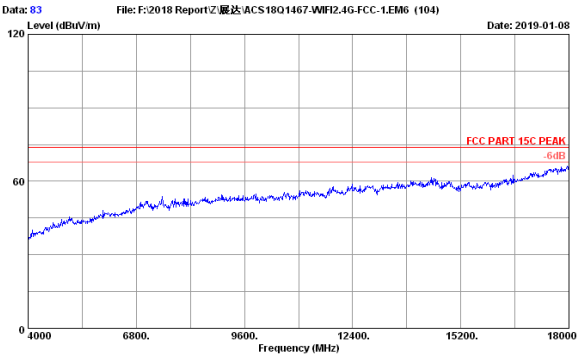


Site no. : 3m Chamber Data no. : 82
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.15	10.42	85.61	32.51	91.67	74.00	-17.67	Peak

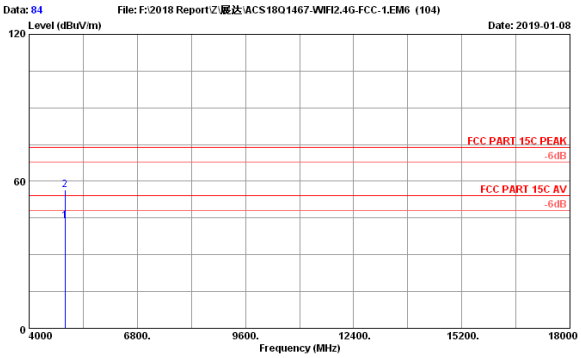
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 83 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 83
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2462MHz Tx Mode

Data: 84 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

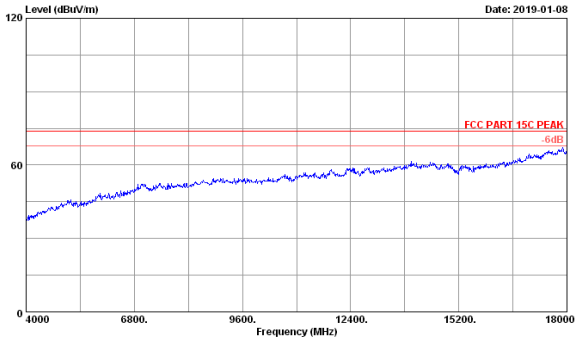


Site no. : 3m Chamber Data no. : 84
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.00	34.11	14.71	25.84	30.73	43.93	54.00	10.07	Average
2	4924.00	34.11	14.71	38.36	30.73	56.45	74.00	17.55	Peak

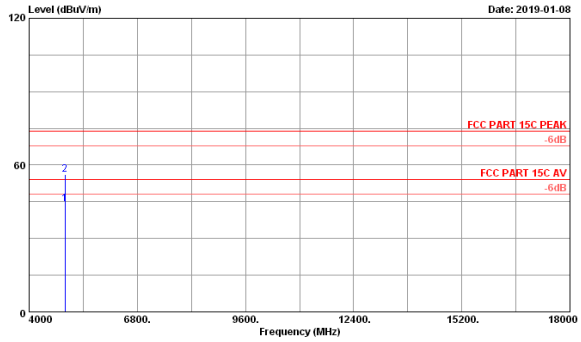
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 85 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 85
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2462MHz Tx Mode

Data: 86 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

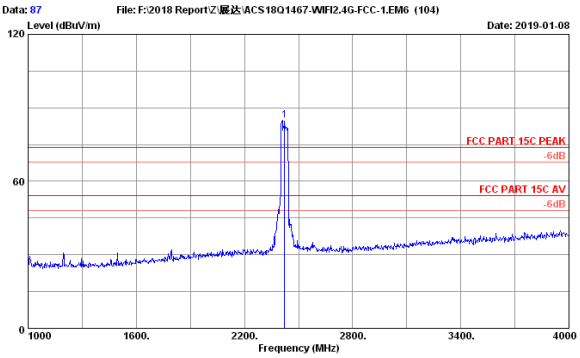


Site no. : 3m Chamber Data no. : 86
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT20 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.00	34.11	14.71	26.14	30.73	44.23	54.00	9.77	Average
2	4924.00	34.11	14.71	38.04	30.73	56.13	74.00	17.87	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 87 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

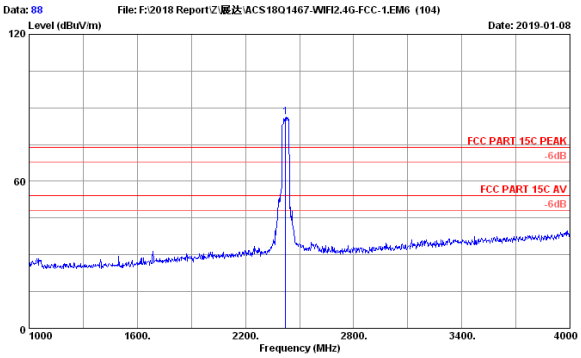


Site no. : 3m Chamber Data no. : 87
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2422MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2422.00	28.10	10.35	79.05	32.53	84.97	74.00	-10.97	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 88 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

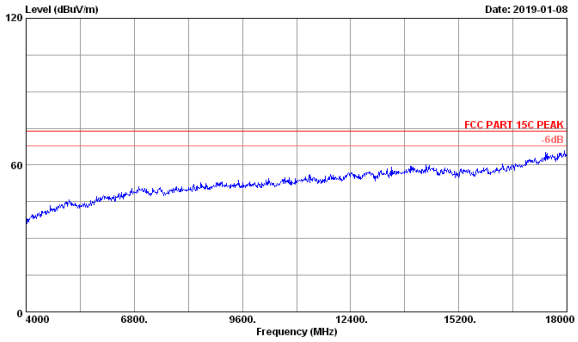


Site no. : 3m Chamber Data no. : 88
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2422MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2422.00	28.10	10.35	80.47	32.53	86.39	74.00	-12.39	Peak

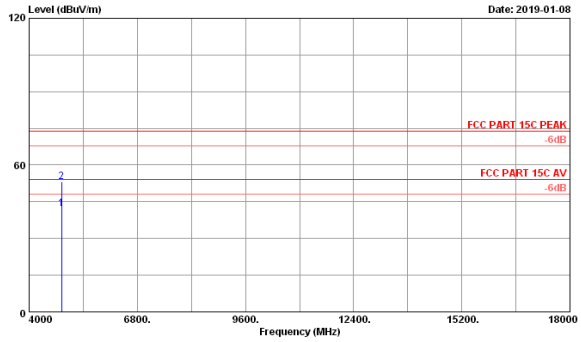
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 89 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 89
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2422MHz Tx Mode

Data: 90 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

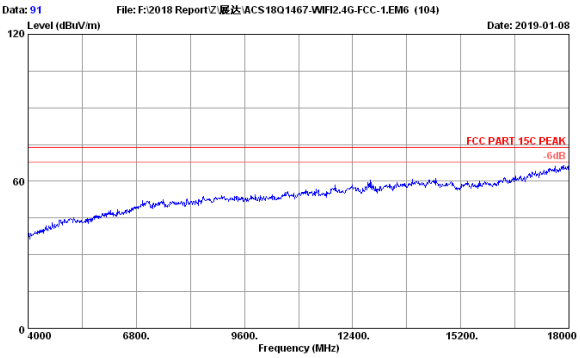


Site no. : 3m Chamber Data no. : 90
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2422MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4844.00	33.75	14.59	24.70	30.77	42.27	54.00	11.73	Average
2	4844.00	33.75	14.59	35.63	30.77	53.20	74.00	20.80	Peak

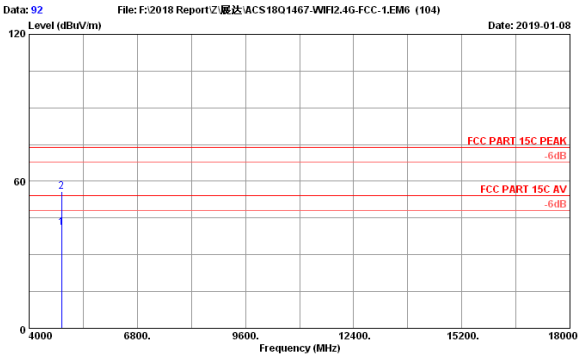
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 91 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 91
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2422MHz Tx Mode

Data: 92 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

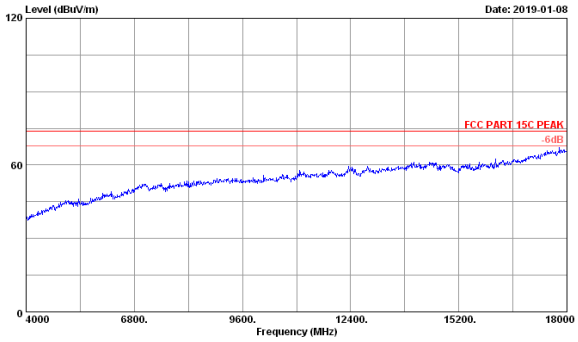


Site no. : 3m Chamber Data no. : 92
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2422MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4844.00	33.75	14.59	23.63	30.77	41.20	54.00	12.80	Average
2	4844.00	33.75	14.59	38.30	30.77	55.87	74.00	18.13	Peak

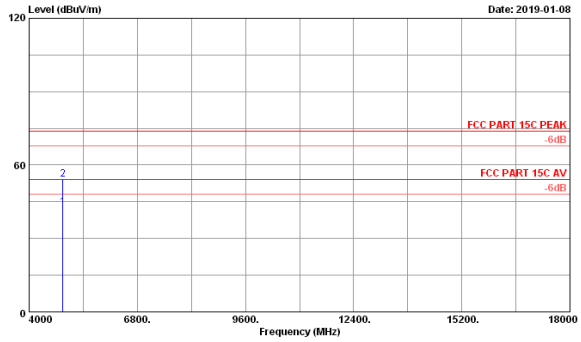
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 93 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 93
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2437MHz Tx Mode

Data: 94 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

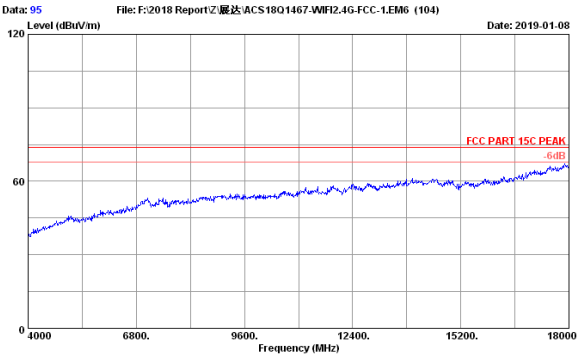


Site no. : 3m Chamber Data no. : 94
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2437MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	33.89	14.63	25.14	30.76	42.90	54.00	11.10	Average
2	4874.00	33.89	14.63	36.35	30.76	54.11	74.00	19.89	Peak

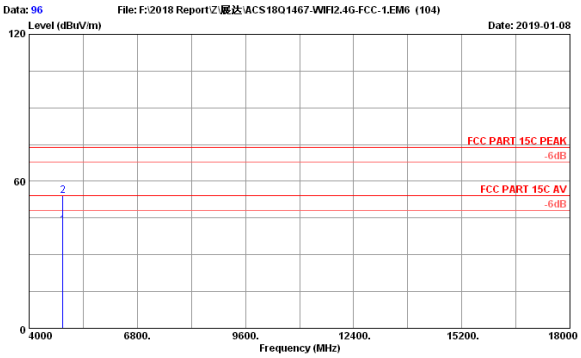
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 95 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 95
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2437MHz Tx Mode

Data: 96 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

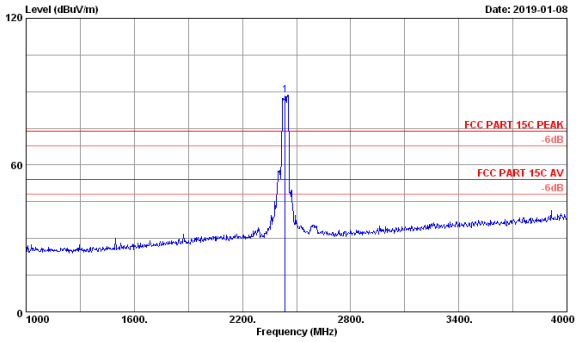


Site no. : 3m Chamber Data no. : 96
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2437MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	33.89	14.63	24.20	30.76	41.96	54.00	12.04	Average
2	4874.00	33.89	14.63	36.35	30.76	54.11	74.00	19.89	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 97 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

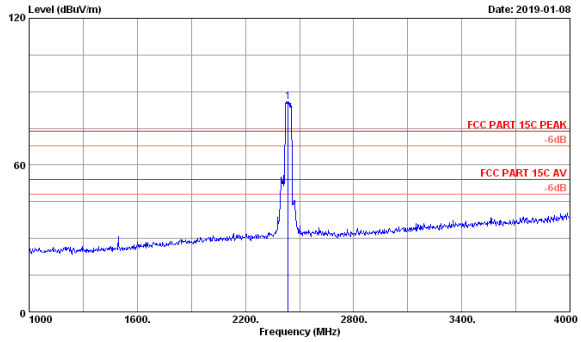


Site no. : 3m Chamber Data no. : 97
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2437MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.00	28.13	10.38	82.66	32.53	88.64	74.00	-14.64	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 98 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

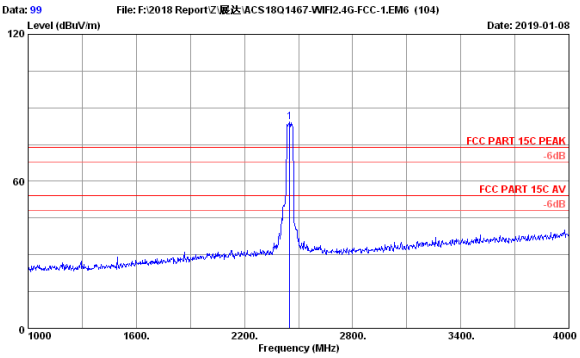


Site no. : 3m Chamber Data no. : 98
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2437MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.00	28.13	10.38	79.83	32.53	85.81	74.00	-11.81	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 99 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

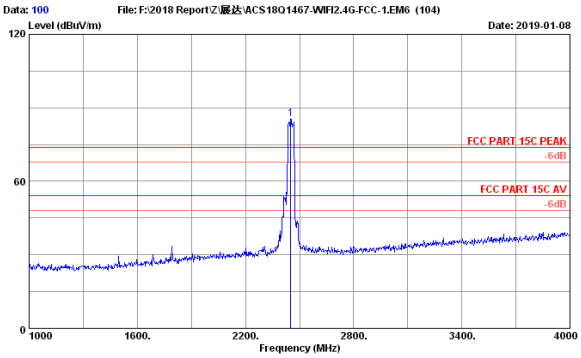


Site no. : 3m Chamber Data no. : 99
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2452MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2452.00	28.13	10.38	78.34	32.51	84.34	74.00	-10.34	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 100 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

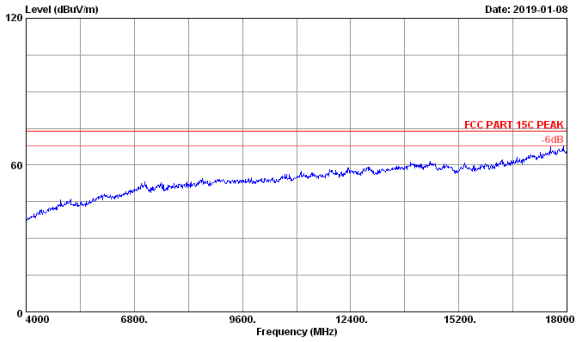


Site no. : 3m Chamber Data no. : 100
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2452MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2452.00	28.13	10.38	79.49	32.51	85.49	74.00	-11.49	Peak

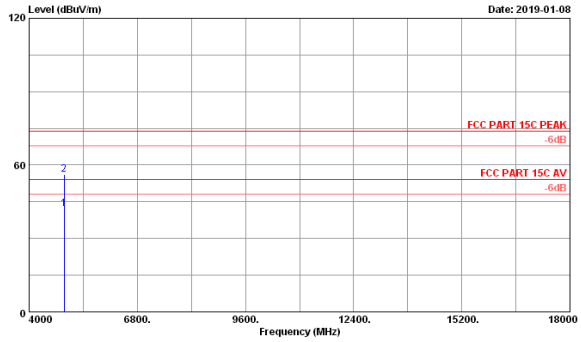
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 101 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 101
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2452MHz Tx Mode

Data: 102 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)

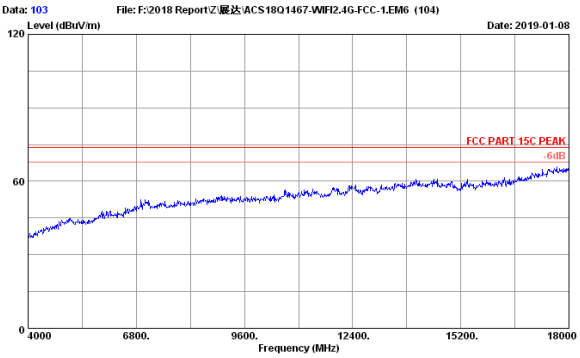


Site no. : 3m Chamber Data no. : 102
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2452MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4904.00	34.04	14.68	24.16	30.74	42.14	54.00	11.86	Average
2	4904.00	34.04	14.68	38.13	30.74	56.11	74.00	17.89	Peak

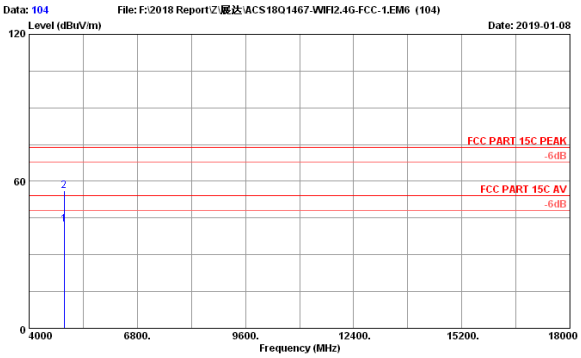
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

Data: 103 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 103
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2452MHz Tx Mode

Data: 104 File: F:\2018 Report\Z\展达\ACS18Q1467-WIFI2.4G-FCC-1.EM6 (104)



Site no. : 3m Chamber Data no. : 104
Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9% Engineer : Garry
EUT : BCM dual band 2*2 WIFI M/N:50-0102-BC-22
Power rating : AC 120V/60Hz
Test Mode : 11nHT40 2452MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4904.00	34.04	14.68	24.57	30.74	42.55	54.00	11.45	Average
2	4904.00	34.04	14.68	38.22	30.74	56.20	74.00	17.80	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
2. The emission levels that are 20dB below the official limit are not reported.

5. CONDUCTED SPURIOUS EMISSIONS

5.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMC Analyzer	Agilent	N9030A	MY51380221	Sep.08,18	1 Year
2.	Attenuator	Agilent	8491B	MY39269170	Oct.14,18	1 Year
3.	RF Cable	EMCI	EMC102-KM-KM-3500	170702	Oct.14,18	1 Year

5.2.Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

5.3.Test Procedure

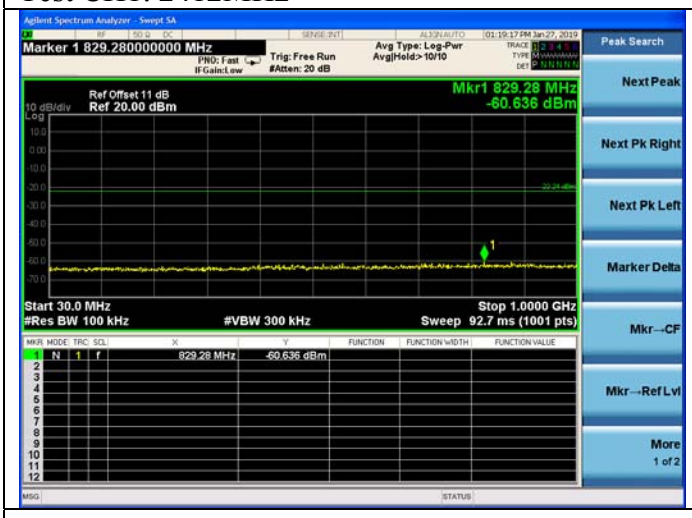
The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions with peak detector.

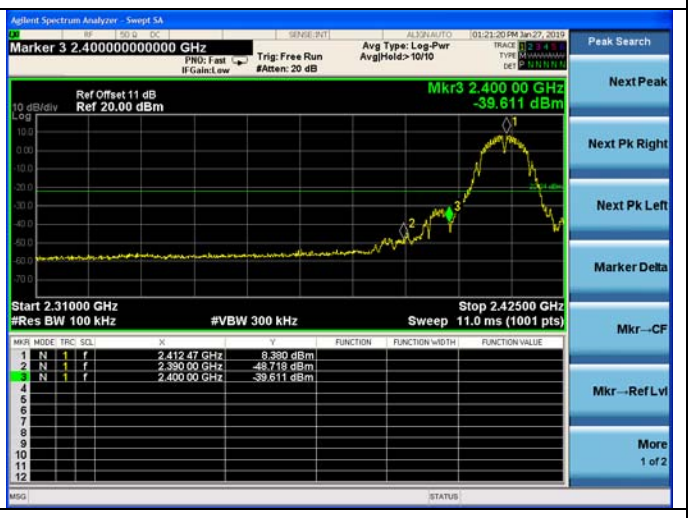
5.4.Test result

PASS (The testing data was attached in the next pages.)

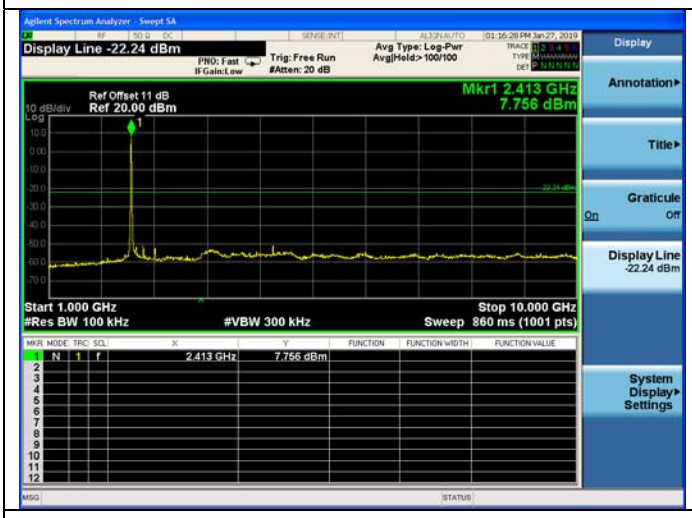
ANT0:

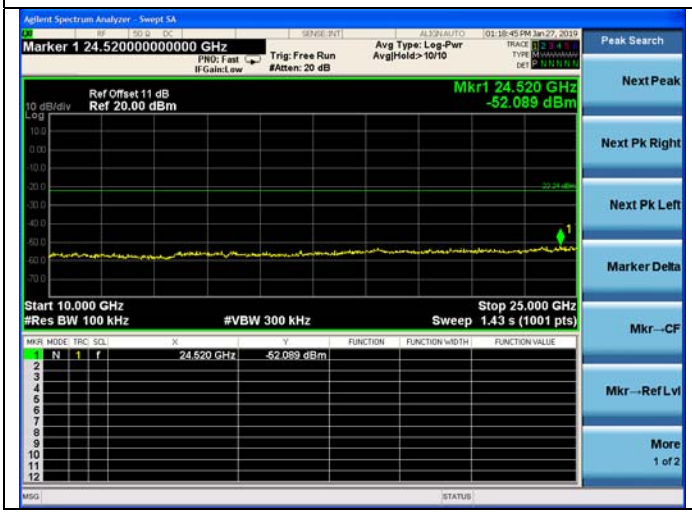
Test Mode: IEEE 802.11b
Test CH1: 2412MHz

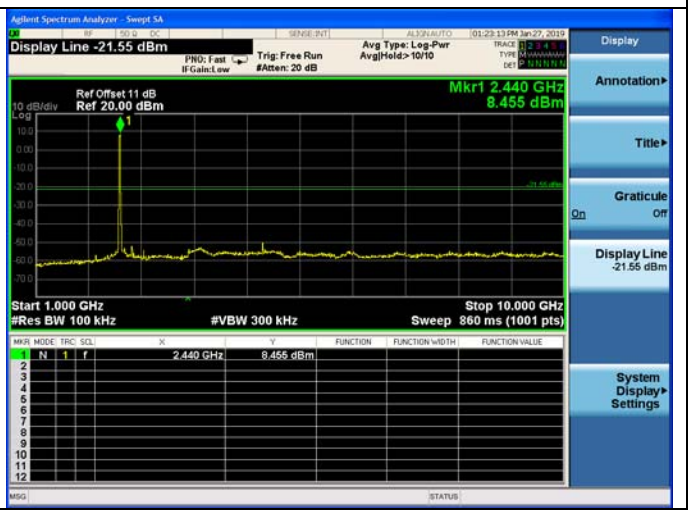


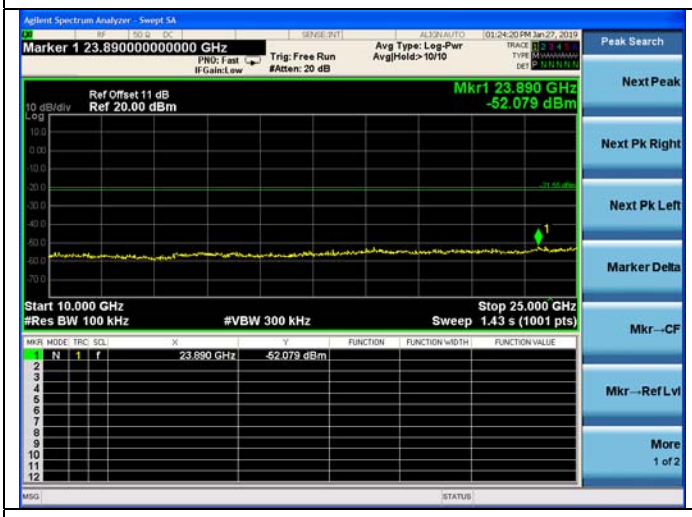


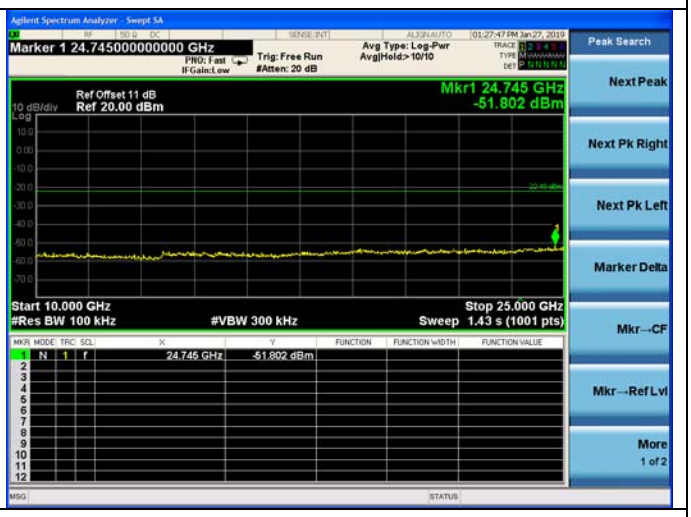
Test CH6: 2437MHz



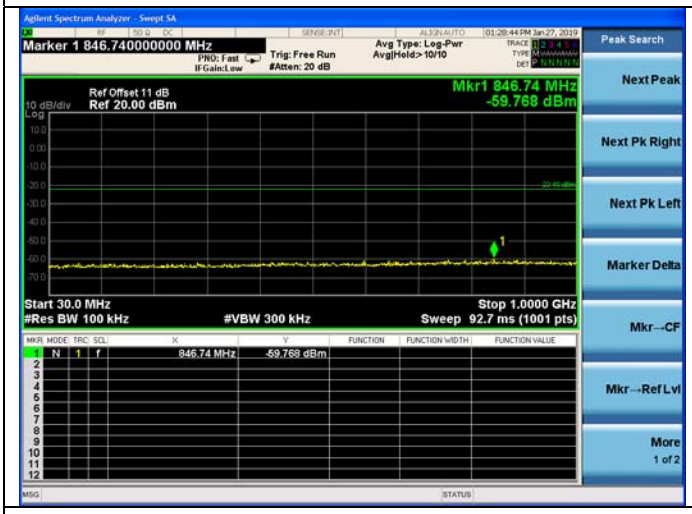




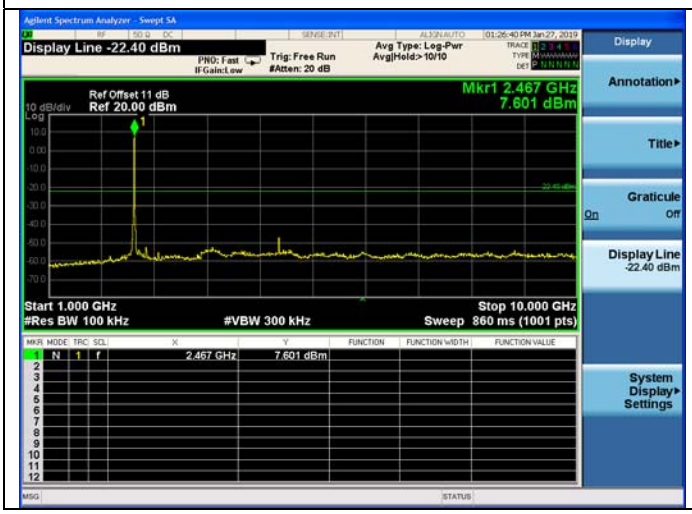


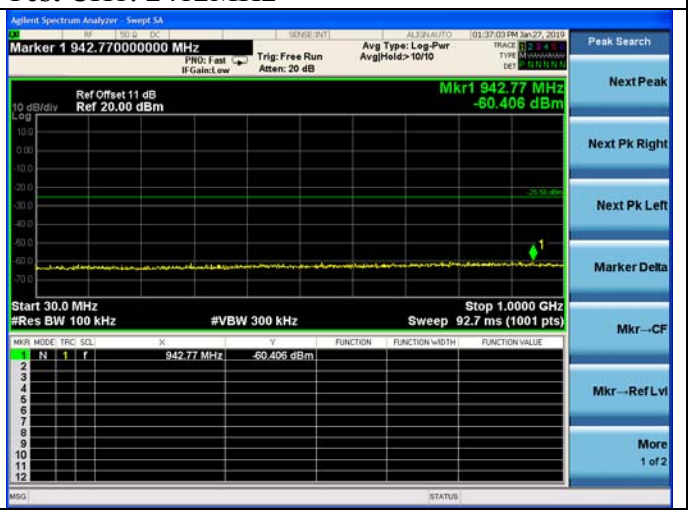


Test CH11: 2462MHz

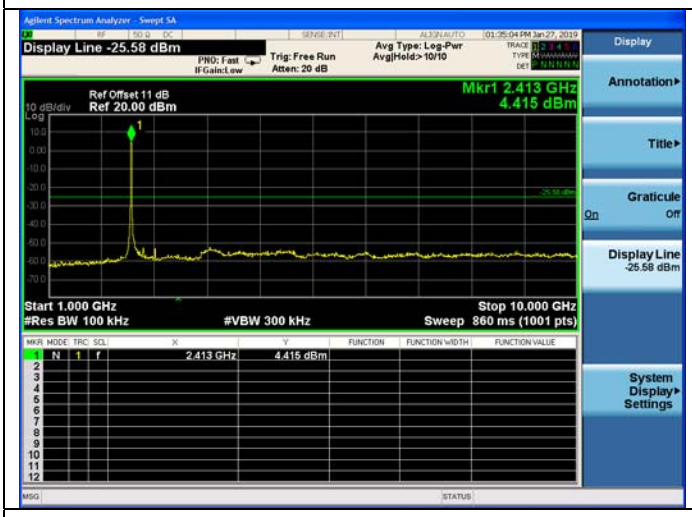


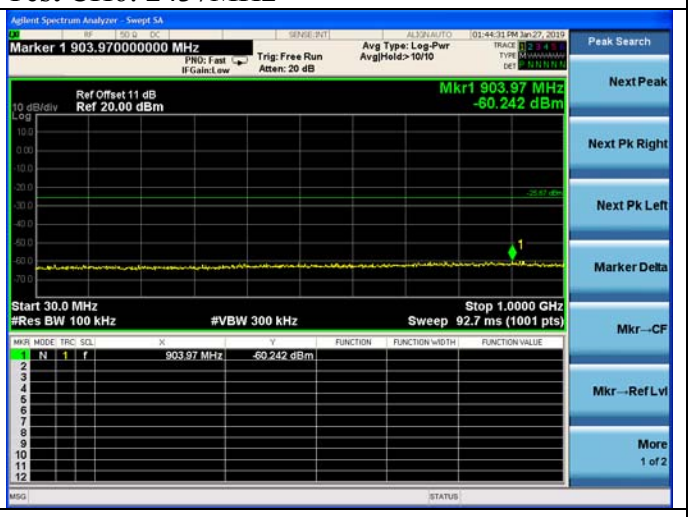
Test Mode: IEEE 802.11g
Test CH1: 2412MHz

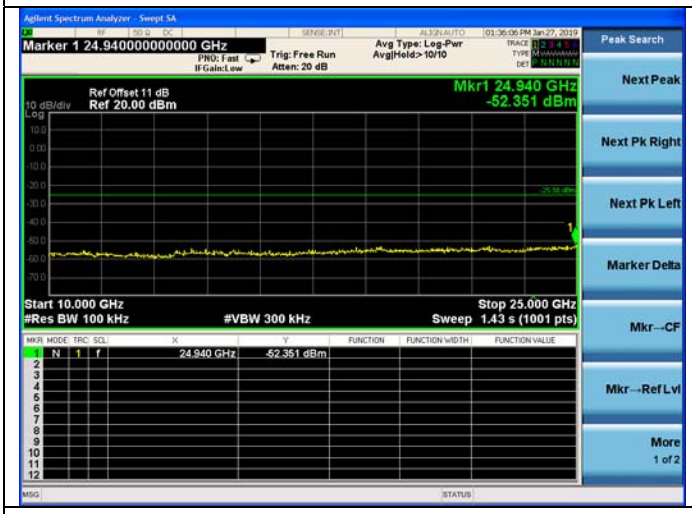


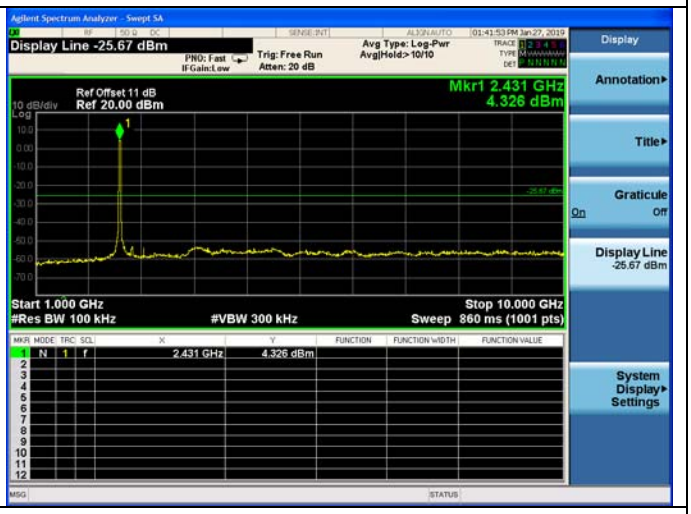


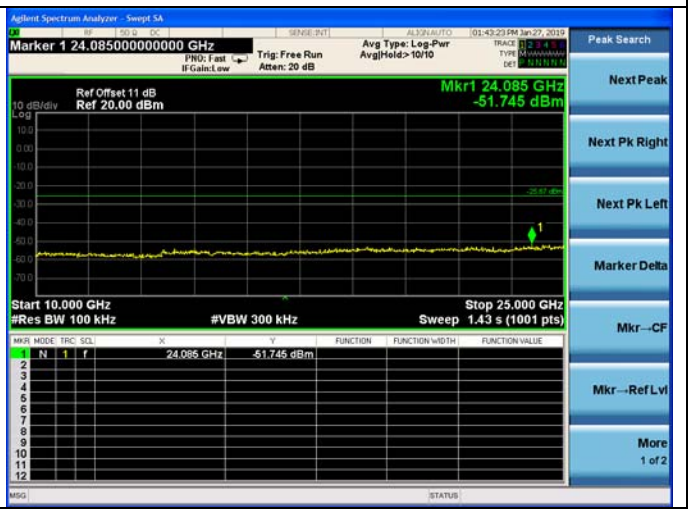
Test CH6: 2437MHz



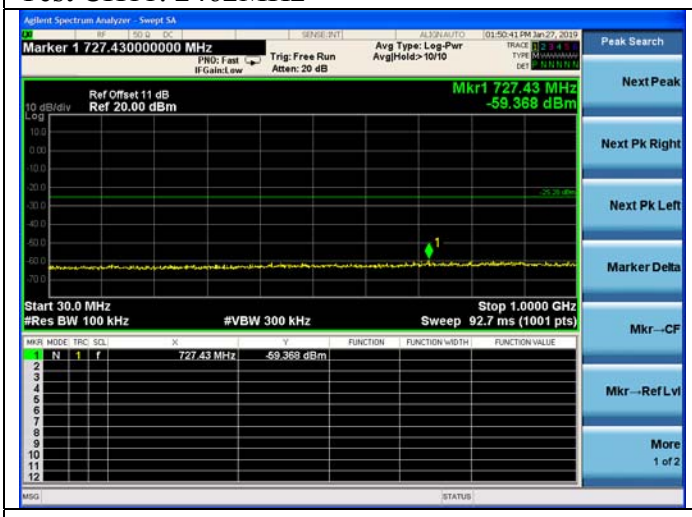




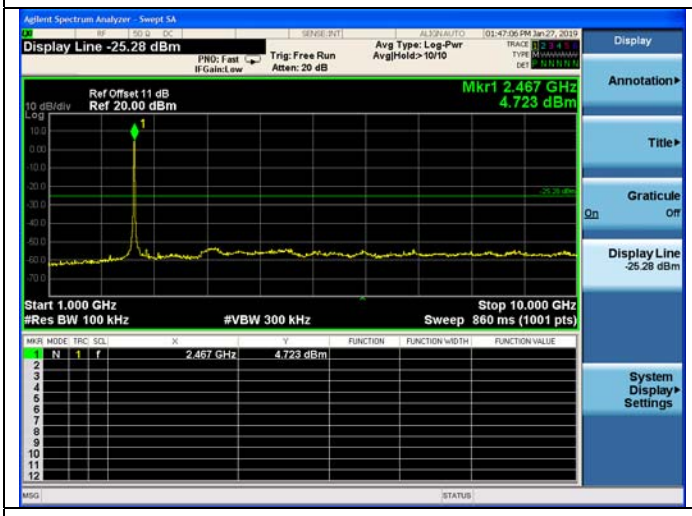


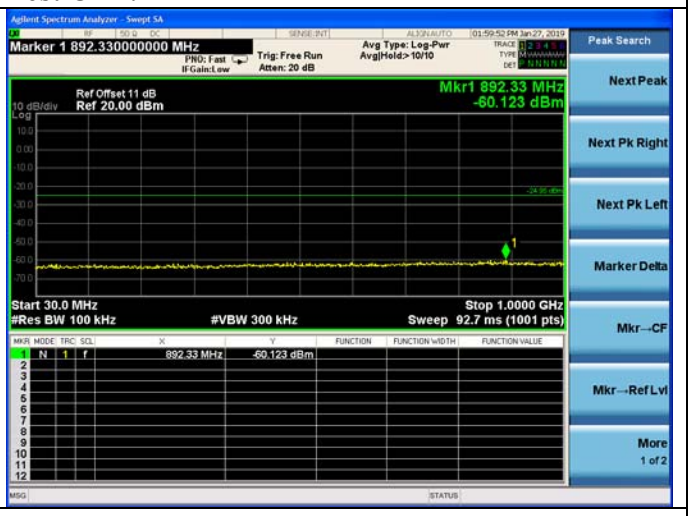


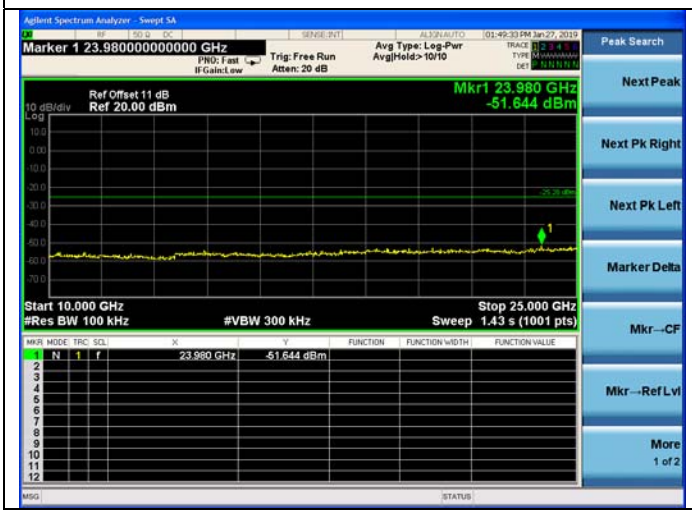
Test CH11: 2462MHz

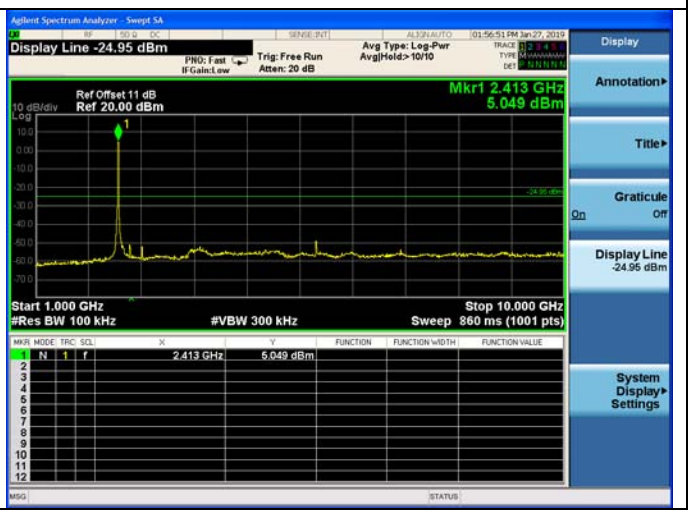


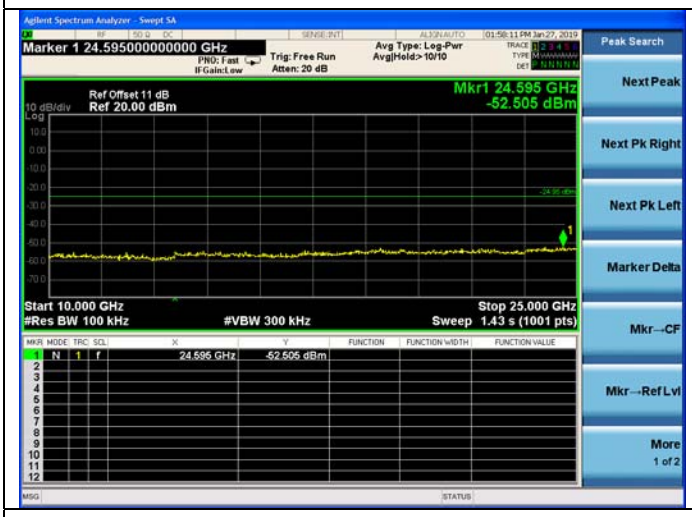
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz

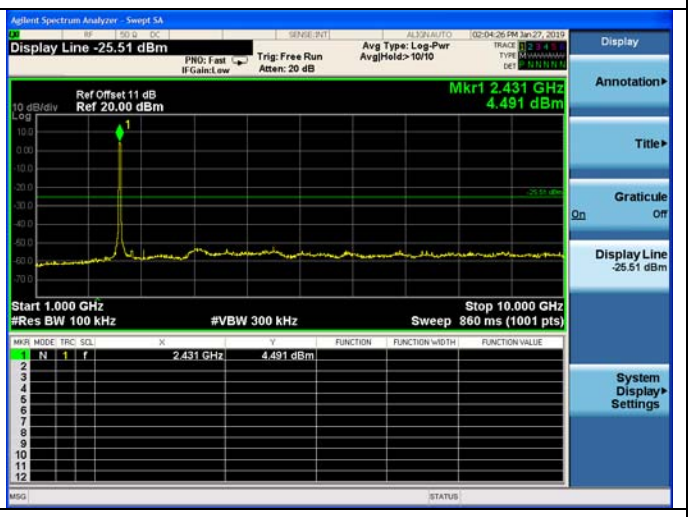


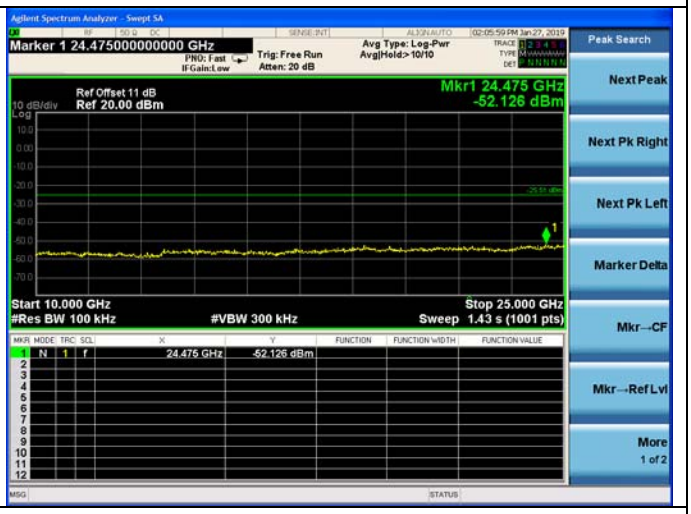




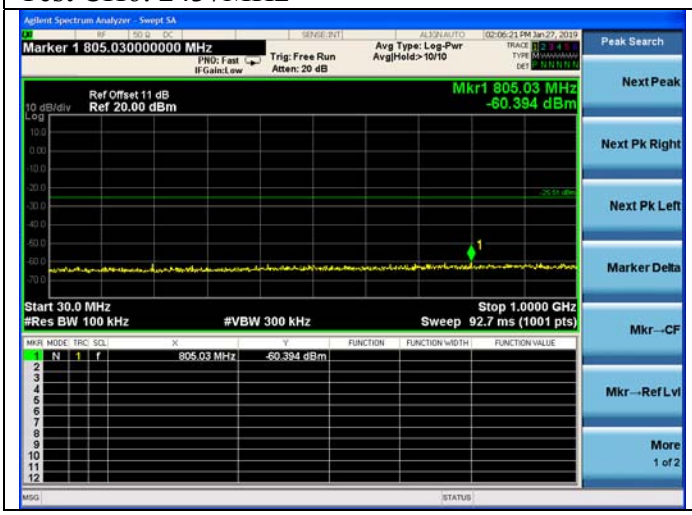




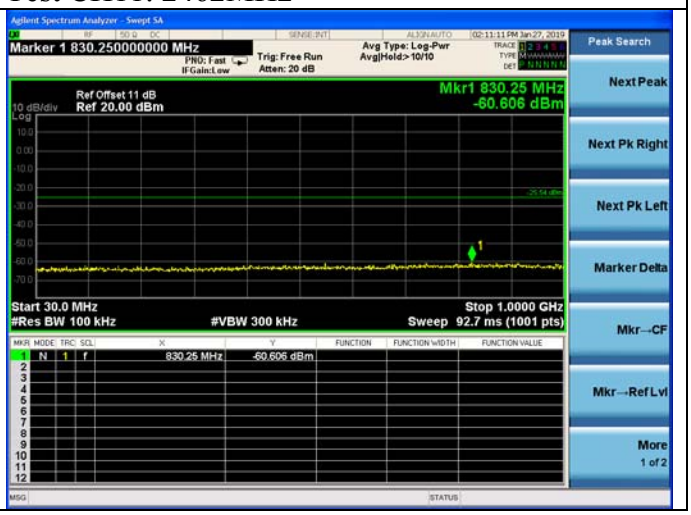




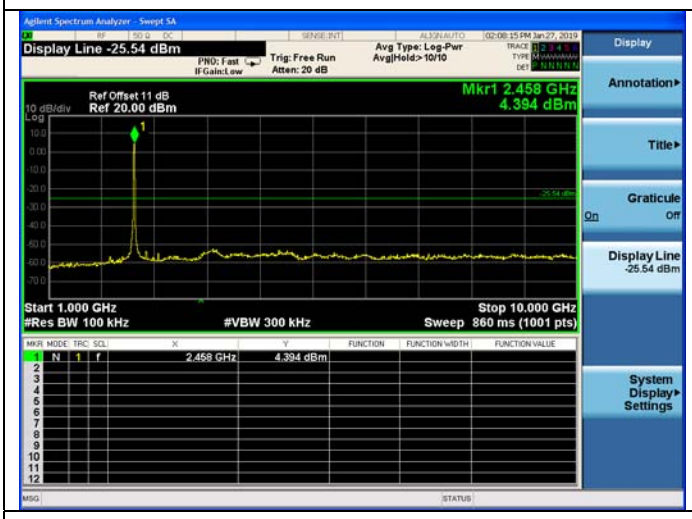
Test CH6: 2437MHz

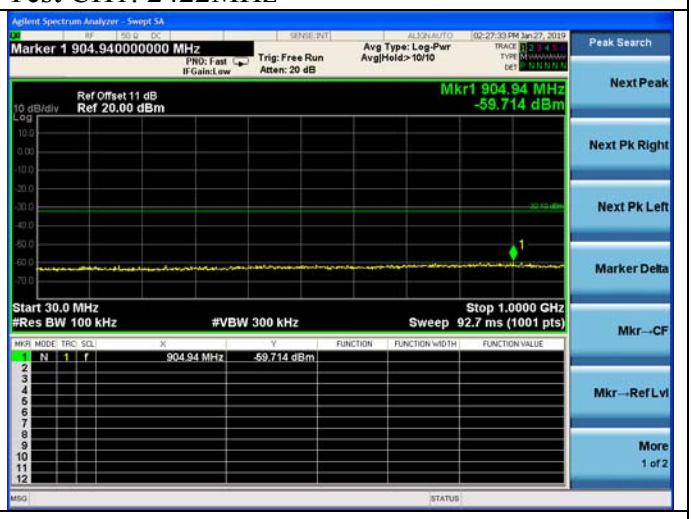


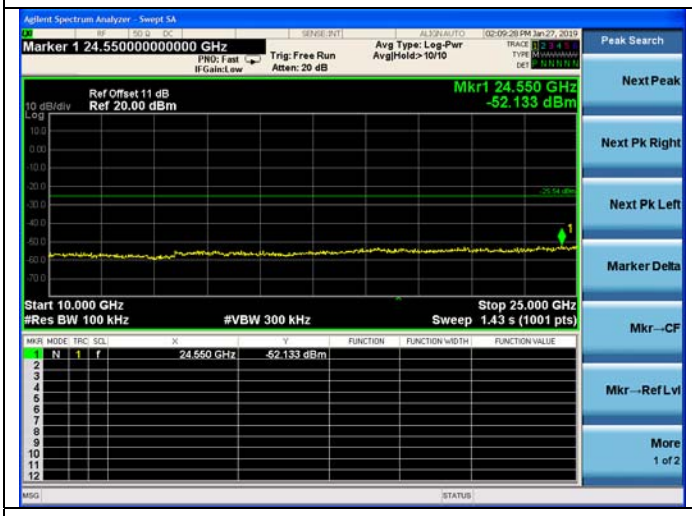
Test CH11: 2462MHz

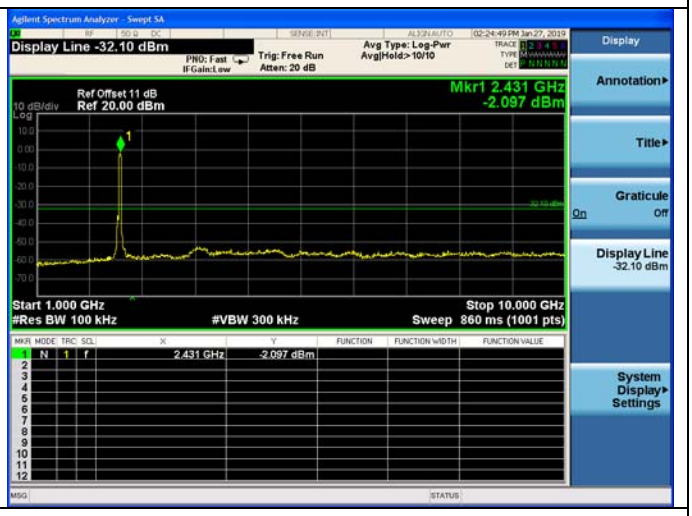


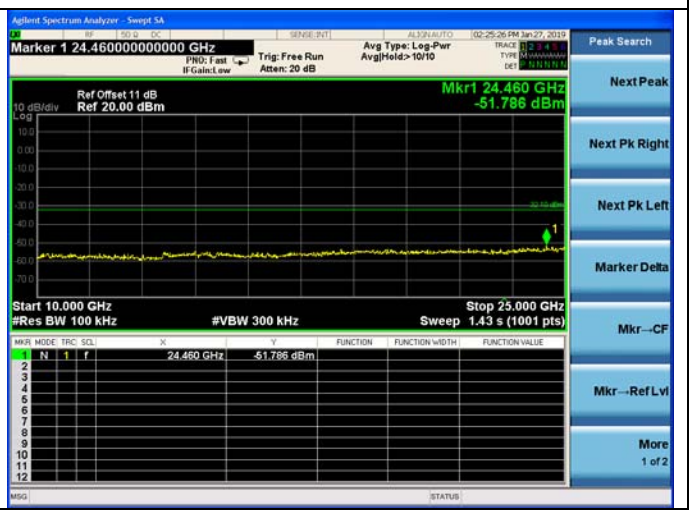
Test Mode: IEEE 802.11n HT40
Test CH1: 2422MHz





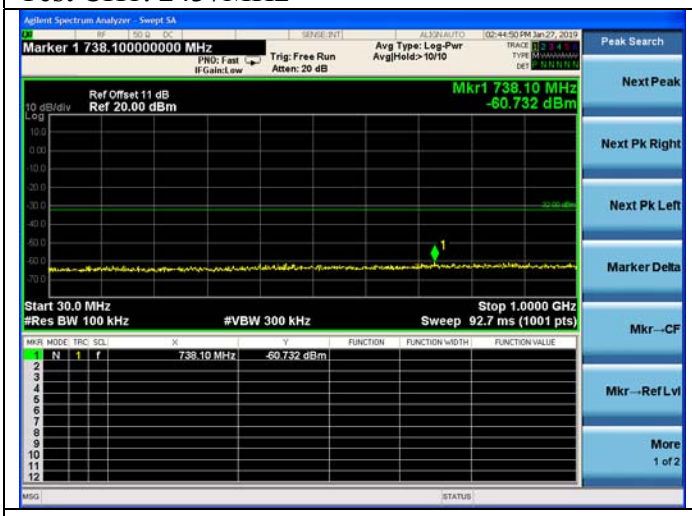


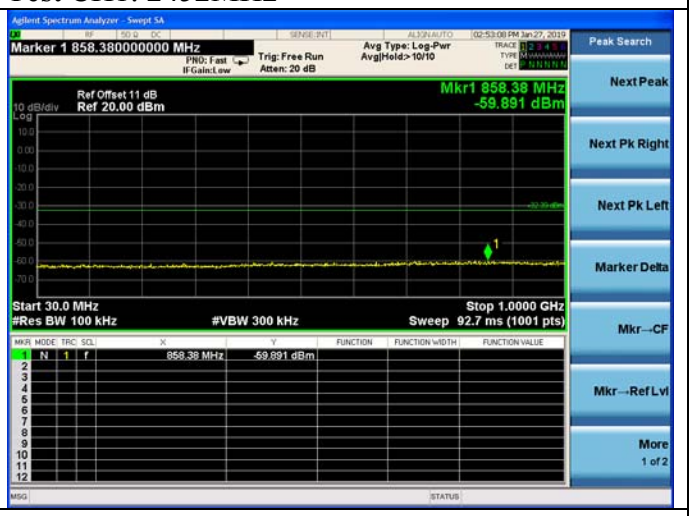


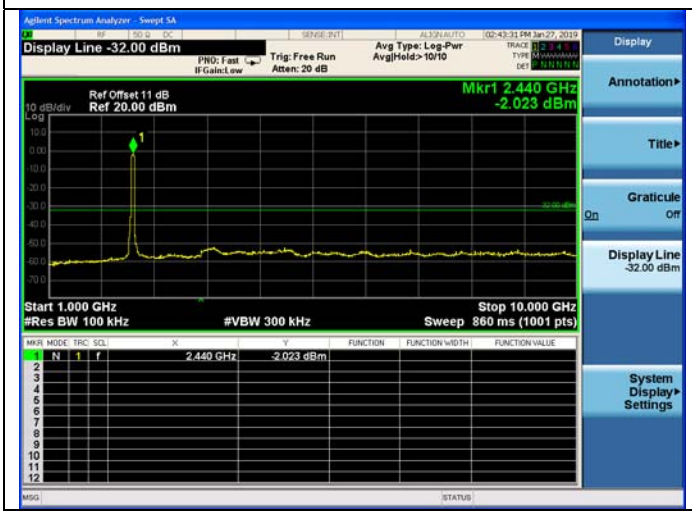


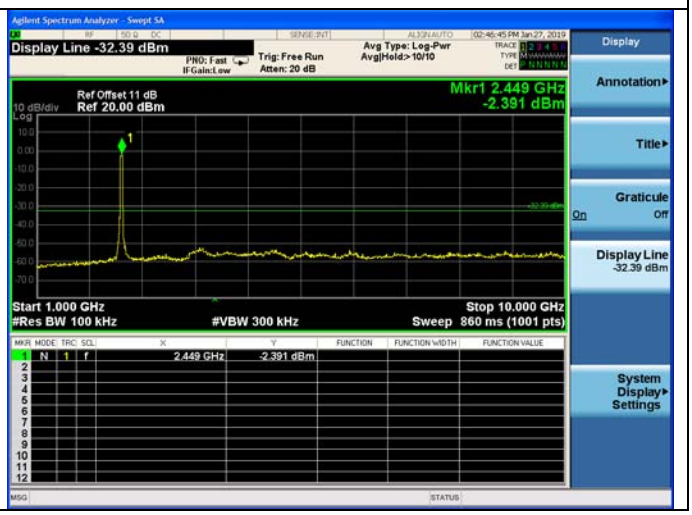
Test CH1: 2437MHz

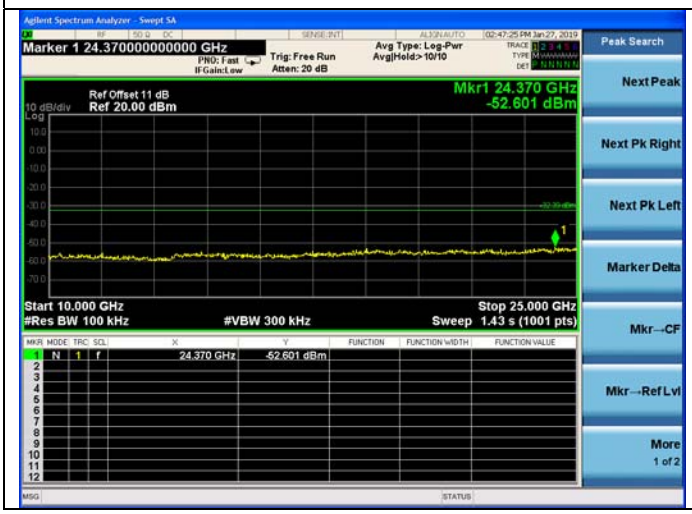
Test CH1: 2452MHz

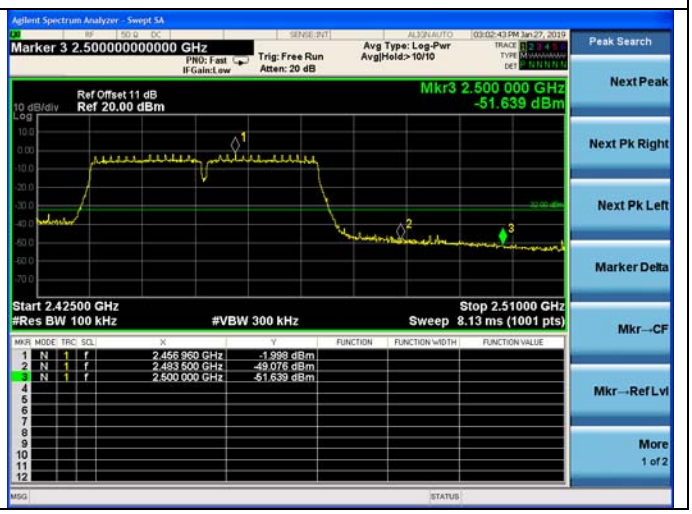









Agilent Spectrum Analyzer - Swept SA
Marker 1 24.370000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
Ref Offset 11 dB
10 dB/div
Ref 20.00 dBm
Mkr1 24.370 GHz
-52.601 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 24.370 GHz -52.601 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2


Agilent Spectrum Analyzer - Swept SA
Marker 3 2.500000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
Ref Offset 11 dB
10 dB/div
Ref 20.00 dBm
Mkr3 2.500 000 GHz
-51.639 dBm
Start 2.42500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.51000 GHz
Sweep 8.13 ms (1001 pts)
1 N 1 f 2.456 960 GHz -1.998 dBm
2 N 1 f 2.483 500 GHz -49.076 dBm
3 N 1 f 2.500 000 GHz -51.639 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2