



# CFR 47 FCC PART 15 SUBPART E ISED RSS-247 ISSUE 2

#### **CERTIFICATION TEST REPORT**

For

WIFI+BT Module

**MODEL NUMBER: DCT2SM2501** 

FCC ID: 2AC23-DCT2S

IC: 12290A-DCT2S

REPORT NUMBER: 4790335848-1

ISSUE DATE: April 20, 2022

Prepared for

Hui Zhou Gaoshengda Technology Co.,LTD No.2,Jin-da Road,Huinan High-tech Industrial Park, Huizhou, Guangdong, China

## Prepared by

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REPORT NO.: 4790335848-1 Page 2 of 317

## **Revision History**

Rev.	Issue Date	Revisions	Revised By
V0	04/20/2022	Initial Issue	

Note: This is a report base on 4790089699.2-4 which is issued by UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch on October 22, 2021. The module DCT2RM2501 had already applied for single module approval and the FCC ID is 2AC23-DCT2S and IC is 12290A-DCT2S. Now the customer want to open UNII-2A and UNII-2C but the module remain unchanged. So we added all UNII-2A and UNII-2C test but other data refer to the original test report.



Summary of Test Results			
Clause	Test Items	FCC/IC Rules	Test Results
1	6dB/26dB Bandwidth	FCC 15.407 (a)&(e) RSS-247 Clause 6.2	PASS
2	99% Occupied Bandwidth	RSS-Gen Clause 6.7	PASS
3	Conducted Output Power	FCC 15.407 (a) RSS-247 Clause 6.2	PASS
4	Power Spectral Density	FCC 15.407 (a) RSS-247 Clause 6.2	PASS
5	Radiated Bandedge and Spurious Emission	FCC 15.407 (b) FCC 15.209 FCC 15.205 RSS-247 Clause 6.2 RSS-GEN Clause 8.9	PASS
6	Conducted Emission Test for AC Power Port	FCC 15.207 RSS-GEN Clause 8.8	PASS
7	Frequency Stability	FCC 15.407 (g)	PASS
8	Dynamic Frequency Selection	FCC 15.407 (h) RSS-247 Clause 6.3	PASS
9	Antenna Requirement	FCC 15.203 RSS-GEN Clause 6.8	PASS

#### Note:

<sup>1.</sup> This test report is only published to and used by the applicant, and it is not for evidence purpose in China.

<sup>2.</sup> The measurement result for the sample received is <Pass> according to < CFR 47 FCC PART 15 SUBPART E >< ISED RSS-247 > when <Accuracy Method> decision rule is applied.



## **TABLE OF CONTENTS**

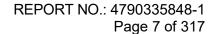
1.	ΑI	TESTATION OF TEST RESULTS	/
2.	TE	ST METHODOLOGY	8
3.	FA	CILITIES AND ACCREDITATION	8
4.	CA	LIBRATION AND UNCERTAINTY	9
	4.1.	MEASURING INSTRUMENT CALIBRATION	9
	4.2.	MEASUREMENT UNCERTAINTY	9
5.	EC	UIPMENT UNDER TEST	10
	5.1.	DESCRIPTION OF EUT	10
	5.2.	MAXIMUM OUTPUT POWER	11
	5.3.	CHANNEL LIST	12
	5.4.	DESCRIPTION OF AVAILABLE ANTENNAS	13
	5.5.	THE WORSE CASE POWER SETTING PARAMETER	14
	5.6.	THE WORSE CASE CONFIGURATIONS	16
	5.7.	DESCRIPTION OF TEST SETUP	17
6.	ME	EASURING INSTRUMENT AND SOFTWARE USED	18
7.	A١	ITENNA PORT TEST RESULTS	21
	7.1.	ITENNA PORT TEST RESULTSON TIME AND DUTY CYCLE	
			21
	7.1.	ON TIME AND DUTY CYCLE	21 22
	7.1. 7.2.	ON TIME AND DUTY CYCLE6/26 dB EMISSION BANDWIDTH AND 99 % OCCUPIED BANDWIDTH	21 22 24
	7.1. 7.2. 7.3. 7.4.	ON TIME AND DUTY CYCLE6/26 dB EMISSION BANDWIDTH AND 99 % OCCUPIED BANDWIDTH	21 22 24
8.	7.1. 7.2. 7.3. 7.4.	ON TIME AND DUTY CYCLE	212427
8.	7.1. 7.2. 7.3. 7.4. <b>RA</b> 8.1. 8.1	ON TIME AND DUTY CYCLE	21 22 24 27 29 36
8.	7.1. 7.2. 7.3. 7.4. RA 8.1. 8.1	ON TIME AND DUTY CYCLE	21 24 27 29 36 36
8.	7.1. 7.2. 7.3. 7.4. <b>RA</b> 8.1. 8.1 UN	ON TIME AND DUTY CYCLE	21242729363636
8.	7.1. 7.2. 7.3. 7.4. 8.1. 8.1. UN UN	ON TIME AND DUTY CYCLE	212427363636364042
8.	7.1. 7.2. 7.3. 7.4. <b>RA</b> 8.1. 8.1 UN UN UN 8.1	ON TIME AND DUTY CYCLE	212427363636404245
8.	7.1. 7.2. 7.3. 7.4. 8.1. 8.1. UN UN UN 8.1 UN	ON TIME AND DUTY CYCLE	21242936363640424547
8.	7.1. 7.2. 7.3. 7.4. 8.1. 8.1 UN UN UN UN UN UN	ON TIME AND DUTY CYCLE	2124273636364042454751
8.	7.1. 7.2. 7.3. 7.4. 8.1. 8.1. UN UN UN UN UN UN	ON TIME AND DUTY CYCLE  6/26 dB EMISSION BANDWIDTH AND 99 % OCCUPIED BANDWIDTH  CONDUCTED OUTPUT POWER	2124363636404547475153
8.	7.1. 7.2. 7.3. 7.4. 8.1. 8.1. UN UN 8.1 UN UN 8.1 UN UN UN UN UN UN UN 8.1	ON TIME AND DUTY CYCLE  6/26 dB EMISSION BANDWIDTH AND 99 % OCCUPIED BANDWIDTH  CONDUCTED OUTPUT POWER	21242936363640424547515356
8.	7.1. 7.2. 7.3. 7.4. 8.1. 8.1. UN UN 8.1 UN UN UN 8.1 UN UN UN UN	ON TIME AND DUTY CYCLE  6/26 dB EMISSION BANDWIDTH AND 99 % OCCUPIED BANDWIDTH  CONDUCTED OUTPUT POWER	2124293636364045474751535658



	UNII-1 BANDUNII-2A BAND	
	UNII-2C BAND	
	UNII-3 BAND	
8	3.2. SPURIOUS EMISSIONS (1 GHz ~ 7 GHz)	77
	8.2.1. 802.11n HT40 MIMO MODE	
	UNII-1 BAND	
	UNII-2A BAND	
	UNII-2C BAND	
	STRADDLE CHANNEL 142	
	UNII-3 BAND	
8	3.3. SPURIOUS EMISSIONS (7 GHz ~ 18 GHz)	
	8.3.1. 802.11a 20 MODE	
	UNII-1 BANDUNII-2A BAND	
	UNII-2C BAND	
	STRADDLE CHANNEL 144	
	UNII-3 BAND	
	8.3.2. 802.11n HT20 MIMO MODE	
	UNII-1 BAND	
	UNII-2A BAND	
	UNII-2C BAND	
	STRADDLE CHANNEL 144	
	UNII-3 BAND	143
	8.3.3. 802.11n HT40 MIMO MODE	
	UNII-1 BAND	
	UNII-2A BANDUNII-2C BAND	
	STRADDLE CHANNEL 142	
	UNII-3 BAND	
	8.3.4. 802.11ac VHT80 MIMO MODE	
	UNII-1 BAND	
	UNII-2A BAND	171
	UNII-2C BAND	
	STRADDLE CHANNEL 138	
	UNII-3 BAND	179
8	3.4. SPURIOUS EMISSIONS (18 GHz ~ 26 GHz)	181
	8.4.1. 802.11n HT40 MIMO MODE	
8	3.5. SPURIOUS EMISSIONS (26 GHz ~ 40 GHz)	183
	8.5.1. 802.11n HT40 MIMO MODE	183
_		
δ	3.6. SPURIOUS EMISSIONS (30 MHz ~ 1 GHz)	185 106
8	3.7. SPURIOUS EMISSIONS BELOW 30 MHz	
	8.7.1. 802.11n HT40 MIMO MODE	187
9.	AC POWER LINE CONDUCTED EMISSIONS	100
٥.		
	9.1.1. 802.11n HT40 MIMO MODE	191



10. FREQUENCY STABILITY	193
11. ANTENNA REQUIREMENTS	195
11.1. Appendix A1: Emission Bandwidth 11.1.1. Test Result 11.1.2. Test Graphs	196
11.2. Appendix A2: Occupied Channel Bandwidth	227
11.3. Appendix A3: Minimum Emission Bandwidth	260
11.4. Appendix B: Maximum Average Conducted Output F 11.4.1. Test Result	270
11.5. Appendix C: Maximum Power Spectral Density 11.5.1. Test Result	278
11.6. Appendix D: Duty Cycle	311
11.7. Appendix E: Frequency Stability11.7.1. Test Result	
11.1. Appendix F: Dynamic Frequency Selection	316





## 1. ATTESTATION OF TEST RESULTS

**Applicant Information** 

Company Name: Hui Zhou Gaoshengda Technology Co.,LTD

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**Manufacturer Information** 

Company Name: Hui Zhou Gaoshengda Technology Co.,LTD

Address: No.2, Jin-da Road, Huinan High-tech Industrial Park, Huizhou,

Guangdong, China

**EUT Information** 

EUT Name: WIFI+BT Module Model: DCT2SM2501

Brand: GSD

Sample Received Date: September 2, 2021

Sample Status: Normal Sample ID: 4194933

Date of Tested: September 6, 2021 ~ April 20, 2022

APPLICABLE STANDARDS		
STANDARD	TEST RESULTS	
CFR 47 FCC PART 15 SUBPART E	PASS	
ISED RSS-247 Issue 2	PASS	
ISED RSS-GEN Issue 5	PASS	

Prepared By:	Checked By:
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Denny Huang Project Engineer	Shawn Wen Laboratory Leader
•	

Stephen Guo Laboratory Manager



## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013, CFR 47 FCC Part 2, CFR 47 FCC Part 15, KDB 789033 D02 v02r01, KDB414788 D01 Radiated Test Site v01r01, KDB 662911 D01 Multiple Transmitter Output v02r01, KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02, KDB 905462 D03 UNII clients without radar detection New Rules v01r02, KDB 905462 D04 Operational Modes for DFS Testing New Rules v01 and KDB 905462 D06 802 11 Channel Plans New Rules v02, RSS-GEN Issue 5, RSS-247 Issue 2.

## 3. FACILITIES AND ACCREDITATION

	A2LA (Certificate No.: 4102.01)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	has been assessed and proved to be in compliance with A2LA.
	FCC (FCC Designation No.: CN1187)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	Has been recognized to perform compliance testing on equipment subject
	to the Commission's Delcaration of Conformity (DoC) and Certification
	rules
	ISED (Company No.: 21320)
Accreditation	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
Certificate	has been registered and fully described in a report filed with ISED.
	The Company Number is 21320 and the test lab Conformity Assessment
	Body Identifier (CABID) is CN0046.
	VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	has been assessed and proved to be in compliance with VCCI, the
	Membership No. is 3793.
	Facility Name:
	Chamber D, the VCCI registration No. is G-20019 and R-20004
	Shielding Room B , the VCCI registration No. is C-20012 and T-20011

Note 1: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

Note 2: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3: For below 30 MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30 MHz had been correlated to measurements performed on an OFS.



## 4. CALIBRATION AND UNCERTAINTY

## 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognize national standards.

## 4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Conduction emission	3.62 dB
Radiated Emission (Included Fundamental Emission) (9 kHz ~ 30 MHz)	2.2 dB
Radiated Emission (Included Fundamental Emission) (30 MHz ~ 1 GHz)	4.00 dB
D # 4 15 1 1	5.78 dB (1 GHz-18 GHz)
Radiated Emission (Included Fundamental Emission) (1 GHz to 40 GHz)	5.23dB (18 GHz-26 GHz)
Nets This was taken as a second of the secon	5.64 dB (26 GHz-40 GHz)

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



5. EQUIPMENT UNDER TEST

## 5.1. DESCRIPTION OF EUT

EUT Name	WIFI+BT Module
Model	DCT2SM2501
Radio Technology	WLAN (IEEE 802.11a/n HT20/n HT40/ac VHT20/VHT 40/VHT 80)
	UNII-1: 5150 ~ 5250 MHz
Operation	UNII-2A: 5250 ~ 5350 MHz
frequency	UNII-2C: 5470 ~ 5725 MHz
	UNII-3: 5725 ~ 5850 MHz
	IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK, BPSK)
<b>N.4</b>	IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK, BPSK)
Modulation	IEEE 802.11ac VHT20: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
	IEEE 802.11ac VHT40: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
	IEEE 802.11ac VHT80: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
Power Supply	DC 3.3 V



5.2. MAXIMUM OUTPUT POWER

## **UNII-1 BAND**

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)	Max Average EIRP (dBm)
a 20		14.30	16.60
n HT20	5150 ~ 5250	14.03	16.33
n HT40	0100 0200	16.68	18.98
ac VHT80		15.35	17.65

## **UNII-2A BAND**

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
a		15.02
n HT20	E250	16.17
n HT40	5250 ~ 5350	16.62
ac VHT80		15.36

## **UNII-2C BAND**

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
а		14.61
n HT20	5470 ~ 5725	15.40
n HT40	3470 - 3723	15.46
ac VHT80		13.69

## **UNII-3 BAND**

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
a 20		12.62
n HT20	5725 ~ 5850	14.73
n HT40	3723 * 3030	15.15
ac VHT80		12.10



## 5.3. CHANNEL LIST

UNII-1		UNII-1		UNII-1	
(For Bandwid	dth=20MHz)	(For Bandwi	idth=40MHz)	(For Bandwi	dth=80MHz)
Channel	Frequency (MHz)	Channel Frequency (MHz)		Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

UNII-2A		UNII-2A		UNII-2A	
(For Bandwid	dth=20MHz)	(For Bandwidth=40MHz)		(For Bandwidth=80MHz)	
Channel	Frequency (MHz)	Channel Frequency (MHz)		Channel	Frequency (MHz)
52	5260	54	5270	58	5290
56	5280	62	5310		
60	5300				
64	5320				

UNII-2C		UNII-2C		UNII-2C	
(For Bandwidth=20MHz)		(For Bandwidth=40MHz)		(For Bandwidth=80MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	102	5510	106	5530
104	5520	110	5550	122	5610
108	5540	118	5590	138	5690
112	5560	126	5630		
116	5580	134	5670		
120	5600	142	5710		
124	5620				
128	5640				
132	5660				
136	5680				
140	5700				
144	5720				

UNII-3 (For Bandwidth=20MHz)		UNII-3 (For Bandwidth=40MHz)		UNII-3 (For Bandwidth=80MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

Note: All channels in the 5600-5650MHz band were not operational in Canada.



5.4. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna No.	Frequency Band	Antenna Type	Max Antenna Gain (dBi)
1	5180 ~ 5825	PCB	2.3
2	5180 ~ 5825	PCB	2.3

The EUT support Cyclic Shift Diversity (CDD) mode.

MIMO output power port and MIMO PSD port summing was performed in accordance with KDB 662911 D01. For the CDD results the Directional Gain was calculated in accordance with the following mothed.

For output power measurements:

Directional gain= G<sub>ANT</sub> + Array Gain = 2.3 dBi

G<sub>ANT</sub>: equal to the gain of the antenna having the highest gain

Array Gain = 0 dB (i.e., no array gain) for N<sub>ANT</sub> ≤ 4

For power spectral density (PSD) measurements:

Directional gain= G<sub>ANT</sub> + Array Gain = 5.31 dBi

Array Gain = 10 log (N<sub>ANT</sub>/N<sub>SS</sub>) dB. N<sub>ANT</sub>: number of transmit antennas

 $N_{SS}$ : number of spatial streams, the worst case directional gain will occur when  $N_{SS}$  = 1

IEEE Std. 802.11	Transmit and Receive Mode	Description
a 20	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
n HT20	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
n HT40	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
ac VHT20	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
ac VHT40	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
ac VHT80	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.

#### Note:

1. 802.11a mode don't support MIMO mode.

2. BT&WLAN 2.4G, BT & WLAN 5G, WLAN 2.4G & WLAN 5G can't transmit simultaneously. (declared by client)

Note: The value of the antenna gain was declared by customer.



## 5.5. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter		
Test Software	QA tool	

## UNII-1

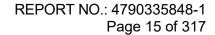
Mode	Rate	Channel	Soft set value	
Mode	Nate	Chame	ANT 1	ANT 2
		36	1D	1D
11a 20	6M	40	1D	1D
		48	1D	1D
	MCS0	36	19	19
11n HT20		40	19	19
		48	19	19
11n HT40	MCS0	38	1D	1D
		46	1D	1D
11ac VHT80	MCS0	42	1D	1D

## UNII-2A

IEEE Std. 802.11	Rate	Rate Channel	Soft se	Soft set value	
1EEE Std. 602.11	Rate	Charmer	ANT 1	ANT 2	
		52	Default	Default	
а	6M	60	Default	Default	
		64	Default	Default	
	MCS0	52	Default	Default	
n HT20		60	Default	Default	
		64	Default	Default	
n HT40	MCS0	54	Default	Default	
		62	Default	Default	
ac VHT80	MCS0	58	Default	Default	

## UNII-2C

IEEE Std. 802.11	Rate	Channel	Soft set value	
1EEE 3td. 802.11		Charmer	ANT 1	ANT 2
		100	Default	Default
а	6M	120	Default	Default
		140	Default	Default
	MCS0	100	Default	Default
n HT20		120	Default	Default
		140	Default	Default
	MCS0	102	Default	Default
n HT40		118	Default	Default
		134	Default	Default
ac VHT80	MCS0	106	Default	Default
	IVICSU	122	Default	Default
ac VHT160	MCS0	114	Default	Default





UNII-3

Mode	Dete	Channal	Soft set value		
Mode	Rate	Channel	ANT 1	ANT 2	
		149	1A	1A	
11a 20	6M	157	1A	1A	
		165	1A	1A	
	MCS0	149	1A	1A	
11n HT20		157	1A	1A	
		165	1A	1A	
11n UT10	MCCO	151	1A	1A	
11n HT40	MCS0	159	1A	1A	
11ac VHT80	MCS0	155	1A	1A	



#### 5.6. THE WORSE CASE CONFIGURATIONS

The EUT was tested in the following configuration(s):

Controlled in test mode using a software application on the EUT supplied by customer. The application was used to enable a continuous transmission and to select the mode, test channels, bandwidth, data rates as required.

Test channels referring to section 5.3.

Maximum power setting referring to section 5.5.

Worst case Data Rates declared by the customer:

802.11a 20 mode: 6 Mbps 802.11n HT20 mode: MCS0 802.11n HT40 mode: MCS0 802.11ac VHT20 mode: MCS0 802.11ac VHT40 mode: MCS0 802.11ac VHT80 mode: MCS0

802.11ac VHT20 and VHT40 mode are different from 802.11n HT20 and HT40 only in control messages, so for these 4 modes, only worst mode's data was recorded in the report.

SISO mode and MIMO mode have the same power setting, so only the worst case power mode (MIMO) will be recorded in the report.

The EUT has 2 separate antennas which correspond to 2 separate antenna ports. Core 1 and Core 2 correspond to antenna 1 and antenna 2 respectively.

Antenna 0 and Antenna 1 have the same power setting, but the power test data are different. (Declared by customer.)

The measured additional path loss was included in any path loss calculations for all RF cable used during tested.

The EUT support Cyclic Shift Diversity (CDD), They use the same conducted power per chain in any given mode, so we only chose the worst-case mode CDD 2TX for final testing.



5.7. DESCRIPTION OF TEST SETUP

#### **SUPPORT EQUIPMENT**

Item	Equipment	Brand Name	Model Name	Remarks
1	Laptop	Lenovo	XIAOXIN 5000	1
2	Power Adapter	Lenovo	ADLX65YAC3A	Input: AC 100 ~ 240 V, 1.8 A Output: DC 20 V, 2.25 A

## I/O CABLES

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	USB	1	/	0.3	1

#### **ACCESSORIES**

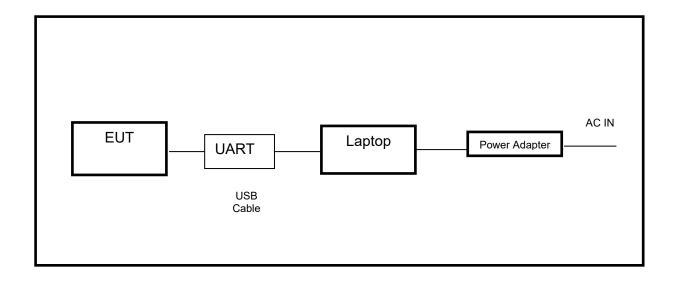
Item	Accessory	Brand Name	Model Name	Description
1	/	/	1	1

Note: The cable is provided by customer.

## **TEST SETUP**

The EUT can work in engineering mode with a software through a Laptop.

## **SETUP DIAGRAM FOR TESTS**

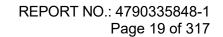




6. MEASURING INSTRUMENT AND SOFTWARE USED

Conducted Emissions							
Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Due Date	
EMI Test Receiver	R&S	ESR3	101961	Nov. 12, 2020	Oct.30, 2021	Oct.29, 2022	
Two-Line V- Network	R&S	ENV216	101983	Nov. 12, 2020	Oct.30, 2021	Oct.29, 2022	
	Software						
	Description		Manufacturer	Name	Ve	rsion	
Test Software for Conducted Emissions			Farad	EZ-EMC	Ver. l	JL-3A1	

Radiated Emissions							
Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Due Date	
MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Nov. 12, 2020	Oct.30, 2021	Oct.29, 2022	
Hybrid Log Periodic Antenna	TDK	HLP- 3003C	130960	1	Aug.02, 2021	Aug.01, 2024	
Preamplifier	HP	8447D	2944A09099	Nov. 12, 2020	Oct.30, 2021	Oct.29, 2022	
EMI Measurement Receiver	R&S	ESR26	101377	Nov. 12, 2020	Oct.30, 2021	Oct.29, 2022	
Horn Antenna	TDK	HRN-0118	130940	1	July 20, 2021	July 19, 2024	
Preamplifier	TDK	PA-02- 0118	TRS-305- 00067	Nov. 20, 2020	Oct.30, 2021	Oct.29, 2022	
Horn Antenna	Schwarzbeck	BBHA9170	#691	/	July 20, 2021	July 19, 2024	
Preamplifier	TDK	PA-02-2	TRS-307- 00003	Nov. 12, 2020	Oct.31, 2021	Oct.30, 2022	
Preamplifier	TDK	PA-02-3	TRS-308- 00002	Nov. 12, 2020	Oct.31, 2021	Oct.30, 2022	
Loop antenna	Schwarzbeck	1519B	80000	Jan.17, 2019	Dec.14, 2021	Dec.13, 2024	
Preamplifier	TDK	PA-02- 001-3000	TRS-302- 00050	Nov. 12, 2020	Oct.31, 2021	Oct.30, 2022	
Preamplifier	Mini-Circuits	ZX60- 83LN-S+	SUP01201941	Nov. 20, 2020	Oct.31, 2021	Oct.30, 2022	
Highpass Filter	Wainwright	WHKX10- 5850- 6500- 1800-40SS	4	Nov. 12, 2020	Oct.31, 2021	Oct.30, 2022	
Band Reject Filter	Wainwright	WRCJV12- 5695- 5725- 5850-	4	Nov. 12, 2020	Oct.31, 2021	Oct.30, 2022	





		5880-40SS				
Band Reject Filter	Wainwright	WRCJV20- 5120- 5150- 5350- 5380-60SS	2	Nov. 12, 2020	Oct.31, 2021	Oct.30, 2022
Band Reject Filter	Wainwright	WRCJV20- 5440- 5470- 5725- 5755-60SS	1	Nov. 12, 2020	Oct.31, 2021	Oct.30, 2022
Software						
Description			Manufacturer	Name	Version	
Test Software for Radiated Emissions		Farad	EZ-EMC	Ver. U	JL-3A1	

Tonsend RF Test System							
Equipment	Manufacturer	Model	Serial No.	Uppe	r Last al.	Last Cal.	Due. Date
Wideband Radio Communication Tester	R&S	CMW500	155523	Nov.20	0,2020	Oct.30, 2021	Oct.29, 2022
PXA Signal Analyzer	Keysight	N9030A	MY55410512	Nov.20	0,2020	Oct.30, 2021	Oct.29, 2022
MXG Vector Signal Generator	Keysight	N5182B	MY56200284	Nov.20	0,2020	Oct.30, 2021	Oct.29, 2022
MXG Vector Signal Generator	Keysight	N5172B	MY56200301	Nov.20	0,2020	Oct.30, 2021	Oct.29, 2022
DC power supply	Keysight	E3642A	MY55159130	Nov.24	4,2020	Oct.30, 2021	Oct.29, 2022
Temperature & Humidity Chamber	SANMOOD	SG-80- CC-2	2088	Nov.20	0,2020	Oct.30, 2021	Nov.19,2022
Software							
Description	rer	Name		Version			
Tonsend SRD Tes System	Tonsend	JS112	0-3 RF Test S	ystem	stem 2.6.77.0518		



Other Instruments Upper Last Manufacturer Model No. Serial No. Equipment Last Cal. Next Cal. Cal. **Dual Channel** Keysight N1912A MY55416024 Nov. 20, 2020 Oct.30, 2021 Oct.29, 2022 Power Meter USB Wideband Power Sensor Keysight MY5100022 Nov. 20, 2020 Oct.30, 2021 Oct.29, 2022 Power Sensor Signal & 1312.8000K26-Spectrum R&S **FSW** Nov.20,2020 Oct.31, 2021 Oct.30, 2022 103950-sj analyzer



## 7. ANTENNA PORT TEST RESULTS

## 7.1. ON TIME AND DUTY CYCLE

#### **LIMITS**

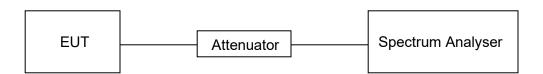
None; for reporting purposes only.

#### **PROCEDURE**

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.B.

The zero-span mode on a spectrum analyzer or EMI receiver, if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal. Set the center frequency of the instrument to the center frequency of the transmission. Set RBW  $\geq$  EBW if possible; otherwise, set RBW to the largest available value. Set VBW  $\geq$  RBW. Set detector = peak or average. The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T, where T is defined in II.B.1.a), and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if T  $\leq$  16.7 microseconds.)

#### **TEST SETUP**



#### **TEST ENVIRONMENT**

Temperature	25.9 °C	Relative Humidity	56.1%
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

## **RESULTS**

Please refer to appendix D.



7.2. 6/26 dB EMISSION BANDWIDTH AND 99 % OCCUPIED

#### **LIMITS**

**BANDWIDTH** 

CFR 47 FCC Part15, Subpart E ISED RSS-247 ISSUE 2					
Test Item	Limit	Frequency Range (MHz)			
26 dB Emission Bandwidth	For reporting purposes only.	5150 ~ 5250			
26 dB Emission Bandwidth	For reporting purposes only.	5250 ~ 5350			
26 dB Emission Bandwidth	For reporting purposes only.	5470 ~ 5725 (For FCC) 5470 ~ 5600 (For ISED) 5650 ~ 5725 (For ISED)			
6 dB Emission Bandwidth	The minimum 6 dB emission bandwidth shall be 500 kHz.	5725 ~ 5850			
99 % Occupied Bandwidth	For reporting purposes only.	5150 ~ 5825 (For ISED)			

#### **TEST PROCEDURE**

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.C1. for 26 dB Emission Bandwidth; section II.C2. for 6 dB Emission Bandwidth; section II.D. for 99 % Occupied Bandwidth.

Connect the EUT to the spectrum analyser and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	For 6 dB Emission Bandwidth: RBW=100 kHz For 26 dB Emission bandwidth: approximately 1 % of the EBW. For 99 % Occupied Bandwidth: approximately 1 % ~ 5 % of the OBW.
VBW	For 6 dB Bandwidth: ≥ 3*RBW For 26 dB Bandwidth: >3*RBW For 99 % Bandwidth: >3*RBW
Trace	Max hold
Sweep	Auto couple

- a) Use the  $99\ \%$  power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.
- b) Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6/26 dB relative to the maximum level measured in the fundamental emission.

#### Calculation for 99 % Bandwidth of UNII-2C and UNII-3 Straddle Channel:

For Example: Fundamental Frequency: 5720 MHz

99 % OBW: 21.00 MHz

Turning Frequency: 5725 MHz

99 % Bandwidth of UNII-2C Band Portion = (5725-(5720-(21.00/2)) = 15.50 MHz

99 % Bandwidth of UNII-3 Band Portion = (5720+(21.00/2)-5725) = 5.50 MHz

#### Calculation for 26 dB Bandwidth of UNII-2C Straddle Channel:

For Example: Fundamental frequency: 5720 MHz

26 dB BW: 20.00 MHz

FL: 5710.16 MHz FH: 5730.16 MHz

Turning Frequency: 5725 MHz

26 dB Bandwidth of UNII-2C Band Portion = 5725-5710.16=14.84 MHz

#### **Calculation for 6dB Bandwidth of UNII-3 Straddle Channel:**

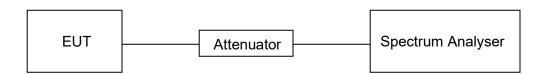
For Example: Fundamental frequency: 5720 MHz

6 dB BW: 16.44 MHz FL: 5711.76 MHz FH: 5728.2 MHz

Turning Frequency: 5725 MHz

6 dB Bandwidth of UNII-3 band Portion = 5728.2-5725=3.2 MHz

#### **TEST SETUP**



#### **TEST ENVIRONMENT**

Temperature	25.9 °C	Relative Humidity	56.1%
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

#### **RESULTS**

Please refer to Appendix A1&A2&A3.



## 7.3. CONDUCTED OUTPUT POWER

## **LIMITS**

CFR 47 FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Conducted	☐ Outdoor Access Point: 1 W (30 dBm) ☐ Indoor Access Point: 1 W (30 dBm) ☐ Fixed Point-To-Point Access Points: 1 W (30 dBm) ☐ Client Devices: 250 mW (24 dBm)	5150 ~ 5250
Output Power	Shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz.	5250 ~ 5350 5470 ~ 5725
	Shall not exceed 1 Watt (30 dBm).	5725 ~ 5850

ISED RSS-247 ISSUE 2		
Test Item	Limit	Frequency Range (MHz)
	The maximum e.i.r.p. shall not exceed 200 mW (23 dBm) or 10 + 10 log <sub>10</sub> B, dBm, whichever power is less. B is the 99 % emission bandwidth in megahertz.	5150 ~ 5250
Conducted Output Power or e.i.r.p.	<ul> <li>a. The maximum conducted output power shall not exceed 250 mW (24 dBm) or 11 + 10 log<sub>10</sub>B dBm, whichever is less.</li> <li>b. The maximum e.i.r.p. shall not exceed 1.0 W (30 dBm) or 17 + 10 log<sub>10</sub>B dBm, whichever is less. B is the 99 % emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.</li> </ul>	5250 ~ 5350 5470 ~ 5600 5650 ~ 5725
	Shall not exceed 1 Watt (30 dBm). The e.i.r.p. shall not exceed 4 W	5725 ~ 5850

#### Note

The above limits are based upon the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.



#### **TEST PROCEDURE**

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.E.

## Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep):

- (i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- (ii) Set RBW = 1 MHz.
- (iii) Set VBW ≥ 3 MHz.
- (iv) Number of points in sweep  $\geq 2 \times \text{span} / \text{RBW}$ . (This ensures that bin-to-bin spacing is  $\leq \text{RBW}/2$ , so that narrowband signals are not lost between frequency bins.)
- (v) Sweep time = auto.
- (vi) Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
- (vii) If transmit duty cycle < 98 %, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98 %, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run."
- (viii) Trace average at least 100 traces in power averaging (rms) mode.
- (ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

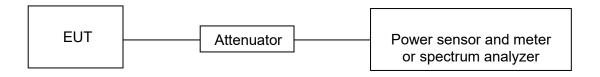
## Method PM (Measurement using an RF average power meter):

- (i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied:
- a. The EUT is configured to transmit continuously or to transmit with a constant duty cycle.
- b. At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.
- c. The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
- (ii) If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal as described in II.B.
- (iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
- (iv) Adjust the measurement in dBm by adding 10 log (1/x) where x is the duty cycle (e.g., 10 log (1/0.25) if the duty cycle is 25 %).

Straddle channel power was measured using spectrum analyzer.



## **TEST SETUP**



## **TEST ENVIRONMENT**

Temperature	25.9 °C	Relative Humidity	56.1%
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

## **RESULTS**

Please refer to Appendix B.

REPORT NO.: 4790335848-1

Page 27 of 317

#### **POWER SPECTRAL DENSITY** 7.4.

#### **LIMITS**

CFR 47 FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	☐ Outdoor Access Point: 17 dBm/MHz ☐ Indoor Access Point: 17 dBm/MHz ☐ Fixed Point-To-Point Access Points: 17 dBm/MHz ☐ Client Devices: 11 dBm/MHz	5150 ~ 5250
Deniency	11 dBm/MHz	5250 ~ 5350 5470 ~ 5725
	30 dBm/500kHz	5725 ~ 5850

ISED RSS-247 ISSUE 2			
Test Item	Limit	Frequency Range (MHz)	
	The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.	5150 ~ 5250	
Power Spectral Density	The power spectral density shall not exceed 11 dBm inany 1.0 MHz band.	5250 ~ 5350 5470 ~ 5600 5650 ~ 5725	
	30 dBm / 500 kHz	5725 ~ 5850	

The above limits are based upon the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### **TEST PROCEDURE**

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.F.



Connect the EUT to the spectrum analyser and use the following settings:

## For U-NII-1, U-NII-2A and U-NII-2C band:

Center Frequency	The center frequency of the channel under test	
Detector	RMS	
RBW	1 MHz	
VBW	≥3 × RBW	
Span	Encompass the entire emissions bandwidth (EBW) of the signal	
Trace	Max hold	
Sweep time	Auto	

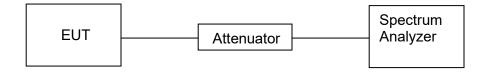
## For U-NII-3:

Center Frequency	The center frequency of the channel under test	
Detector	RMS	
RBW	500 kHz	
VBW	≥3 × RBW	
Span	Encompass the entire emissions bandwidth (EBW) of the signal	
Trace	Max hold	
Sweep time	Auto	

Allow trace to fully stabilize and Use the peak search function on the instrument to find the peak of the spectrum and record its value.

Add 10 log (1/x), where x is the duty cycle, to the peak of the spectrum, the result is the Maximum PSD over 1 MHz / 500 kHz reference bandwidth.

## **TEST SETUP**



#### **TEST ENVIRONMENT**

Temperature	25.9 °C	Relative Humidity	56.1%
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

## **RESULTS**

Please refer to Appendix C.



## 8. RADIATED TEST RESULTS

## **LIMITS**

Refer to CFR 47 FCC §15.205, §15.209 and §15.407 (b).

Refer to ISED RSS-GEN Clause 8.9, Clause 8.10 and ISED RSS-247 6.2.

Radiation Disturbance Test Limit for FCC (Class B) (9 kHz ~ 1 GHz)

Emissions radia	ated outside of the specified frequenc	cy bands above 30	MHz
Frequency Range	Field Strength Limit	Field Stren	gth Limit
(MHz)	(uV/m) at 3 m	(dBuV/m)	at 3 m
		Quasi-l	Peak
30 - 88	100	40	
88 - 216	150	43.	5
216 - 960	200	46	
Above 960	500	54	
Above 1000	500	Peak	Average
Above 1000	300	74	54

FCC Emissions radiated outside of the specified frequency bands below 30 MHz			
Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)	
0.009-0.490	2400/F(kHz)	300	
0.490-1.705	24000/F(kHz)	30	
1.705-30.0	30	30	

## ISED General field strength limits at frequencies below 30 MHz

Table 6 – General field strength limits at frequencies below 30 MHz		
Frequency	Magnetic field strength (H-Field) (μA/m)	Measurement distance (m)
9 - 490 kHz <sup>Note 1</sup>	6.37/F (F in kHz)	300
490 - 1705 kHz	63.7/F (F in kHz)	30
1.705 - 30 MHz	0.08	30

**Note 1:** The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.



## ISED Restricted bands refer to ISED RSS-GEN Clause 8.10

MHz	MHz	GHz
0.090 - 0.110	149.9 - 150.05	9.0 - 9.2
0.495 - 0.505	158.52475 - 158.52525	9.3 - 9.5
2.1735 - 2.1905	156.7 - 156.9	10.6 - 12.7
3.020 - 3.028	162.0125 - 167.17	13.25 - 13.4
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5
4.17725 - 4.17775	240 – 285	15.35 - 16.2
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4
5.677 - 5.683	399.9 - 410	22.01 - 23.12
3.215 - 6.218	608 - 614	23.6 - 24.0
3.28775 - 6.26825	980 - 1427	31.2 - 31.8
3.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5
3.291 - 8.294	1645.5 - 1646.5	Above 38.6
3.362 - 8.366	1680 - 1710	
3.37625 - 8.38675	1718.8 - 1722.2	
3.41425 - 8.41475	2200 - 2300	
12.29 - 12.293	2310 - 2390	
12.51975 - 12.52025	2483.5 - 2500	
12.57675 - 12.57725	2655 - 2900	
13.36 - 13.41	3280 - 3287	
16.42 - 16.423	3332 - 3339	
16.69475 - 16.69525	3345.8 - 3358	
16.80425 - 16.80475	3500 - 4400	
25.5 - 25.67	4500 - 5150	
37.5 - 38.25	5350 - 5480	
73 - 74.6	7250 - 7750	
74.8 - 75.2	8025 – 8500	
108 – 138		

## FCC Restricted bands of operation refer to FCC §15.205 (a):

MHz	MHz	MHz GHz		
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15	
<sup>1</sup> 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	( <sup>2</sup> )	
13.36-13.41				

Note: <sup>1</sup>Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz. <sup>2</sup>Above 38.6c



REPORT NO.: 4790335848-1 Page 31 of 317

Limits of unwanted/undesirable emission out of the restricted bands refer to CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.

LIMITS OF	RADIATED EMISSION MEASUREME	ENT (Above 1GHz)		
Frequency Range	FIDD Limit	Field Strength Limit		
(MHz)	EIRP Limit	(dBuV/m) at 3 m		
5150~5250 MHz				
5250~5350 MHz	PK: -27 (dBm/MHz)	PK:68.2(dBµV/m)		
5470~5725 MHz				
5725~5850 MHz	PK: -27 (dBm/MHz) *1	PK: 68.2(dBµV/m) *1		
	PK: 10 (dBm/MHz) *2	PK: 105.2 (dBµV/m) *2		
3723°3630 WI IZ	PK: 15.6 (dBm/MHz) *3	PK: 110.8(dBµV/m) *3		
	PK: 27 (dBm/MHz) *4	PK: 122.2 (dBµV/m) *4		

#### Note:

<sup>\*1</sup> beyond 75 MHz or more above of the band edge.

<sup>\*2</sup> below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

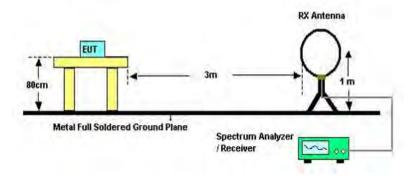
<sup>\*3</sup> below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

<sup>\*4</sup> from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.



#### **TEST SETUP AND PROCEDURE**

#### Below 30 MHz



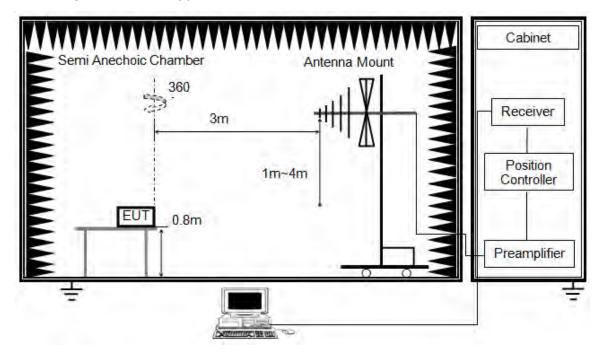
## The setting of the spectrum analyser

RBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz) 200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)	
VBW		
Sweep	Auto	
Trace	Max hold	

- 1. The testing follows the guidelines in ANSI C63.10-2013 clause 11.11 & 11.12.
- 2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.
- 3. The EUT was placed on a turntable with 80 cm above ground.
- 4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1 m height antenna tower.
- 5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
- 6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode remeasured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak and average detector and reported.
- 7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.
- 8. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377 ohm; For example, the measurement frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to Y-51.5 = Z dBuA/m, which has the same margin, W dB, to the corresponding RSS-GEN Table 6 limit as it has to be 15.209(a) limit.



Below 1 GHz and above 30 MHz



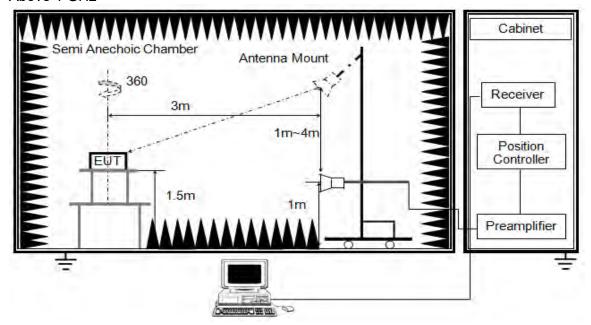
The setting of the spectrum analyser

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

- 1. The testing follows the guidelines in ANSI C63.10-2013 clause 11.11 & 11.12.
- 2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 3. The EUT was placed on a turntable with 80 cm above ground.
- 4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 5. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.



Above 1 GHz



The setting of the spectrum analyser

RBW	1 MHz	
VBW PEAK: 3 MHz AVG: see note 6		
Sweep	Auto	
Detector	Peak	
Trace	Max hold	

- 1. The testing follows the guidelines in KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.G.3 ~ II.G.6.
- 2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 3. The EUT was placed on a turntable with 1.5 m above ground.
- 4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 5. For measurement above 1 GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.
- 6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 7.1.ON TIME AND DUTY CYCLE.

REPORT NO.: 4790335848-1 Page 35 of 317

Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

Note 2: The EUT was fully exercised with external accessories during the test. In the case of multiple accessory external ports, an external accessory shall be connected to one of each type of port.

#### **TEST ENVIRONMENT**

Temperature	25.2 °C	Relative Humidity	48 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

## **RESULTS**



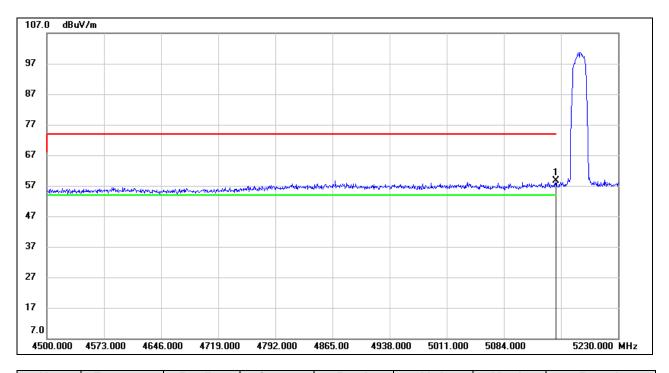
### 8.1. RESTRICTED BANDEDGE

## 8.1.1. 802.11a 20 MODE

## **UNII-1 BAND**

## RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

#### **PEAK**



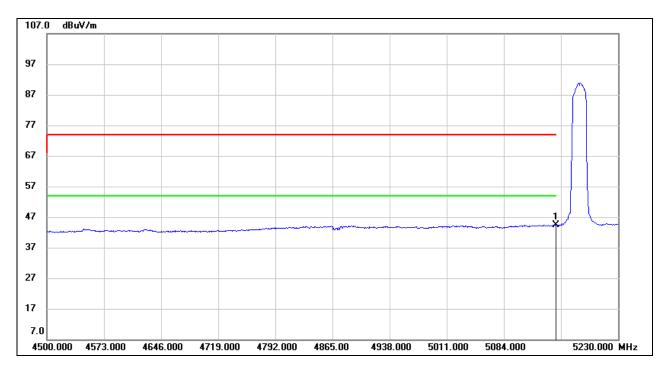
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	17.46	41.19	58.65	74.00	-15.35	peak

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



# <u>AVG</u>

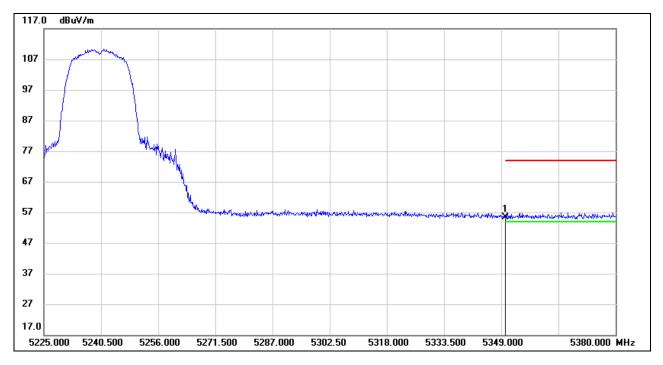


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	3.11	41.19	44.30	54.00	-9.70	AVG

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **PEAK**

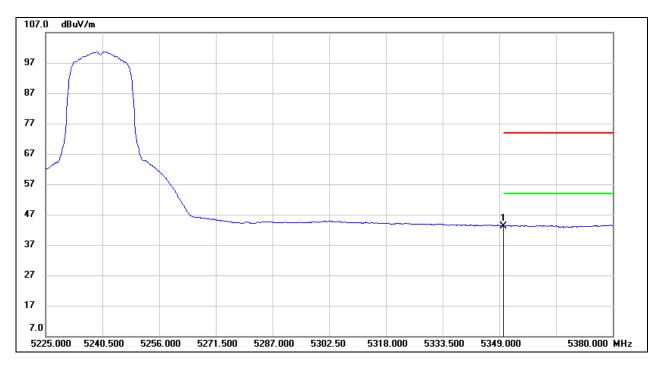


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	15.39	40.08	55.47	74.00	-18.53	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
- 5. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



## **AVG**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	3.07	40.08	43.15	54.00	-10.85	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

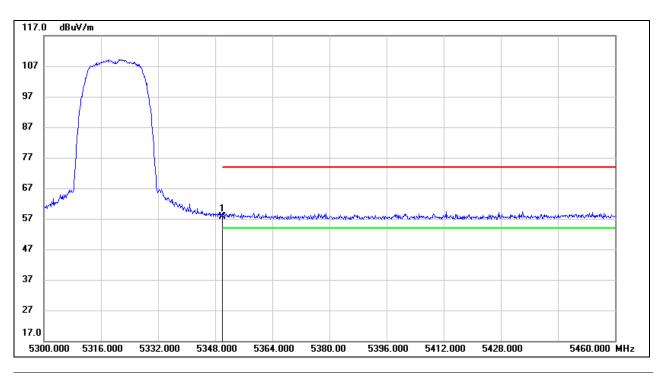
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **UNII-2A BAND**

# RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

# **PEAK**

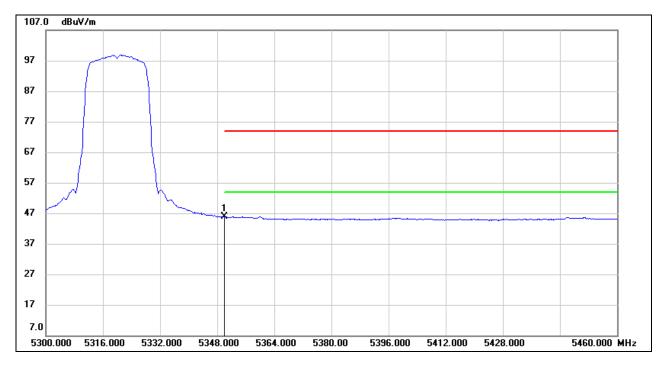


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	16.46	41.20	57.66	74.00	-16.34	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



#### **AVG**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	4.71	41.20	45.91	54.00	-8.09	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

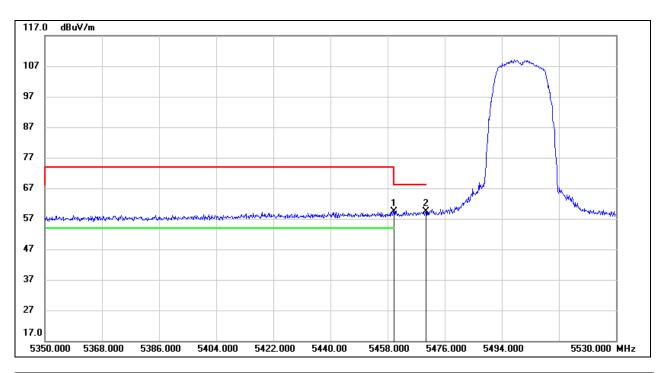
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **UNII-2C BAND**

## RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

# **PEAK**

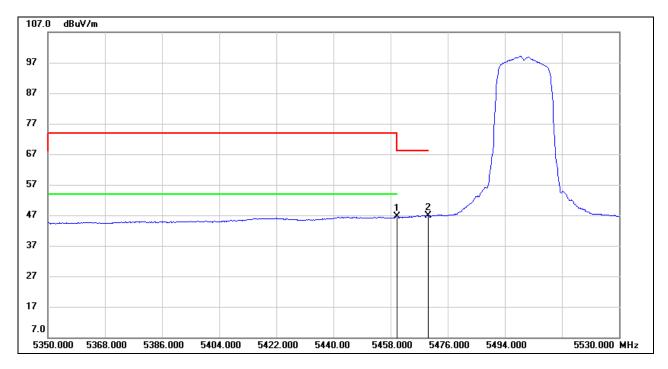


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	17.52	41.82	59.34	68.20	-8.86	peak
2	5470.000	17.39	41.87	59.26	68.20	-8.94	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



# **AVG**

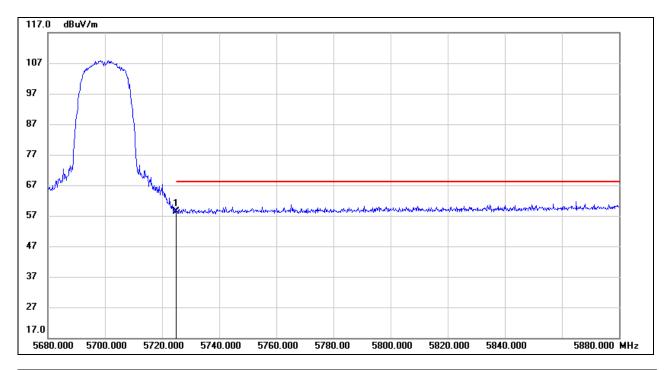


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	4.90	41.82	46.72	54.00	-7.28	AVG
2	5470.000	4.96	41.87	46.83	/	/	AVG

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	16.69	41.67	58.36	68.20	-9.84	peak

Note: 1. Measurement = Reading Level + Correct Factor.

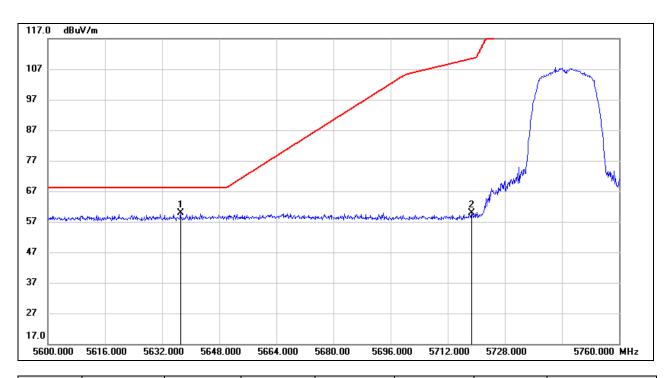
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **UNII-3 BAND**

# RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

#### **PEAK**

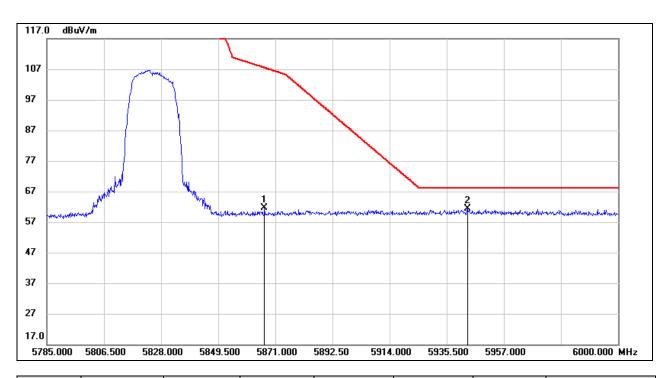


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5637.120	18.13	41.66	59.79	68.20	-8.41	peak
2	5718.720	18.30	41.64	59.94	110.44	-50.50	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



# **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5866.915	18.94	42.70	61.64	107.46	-45.82	peak
2	5943.240	18.52	42.82	61.34	68.20	-6.86	peak

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

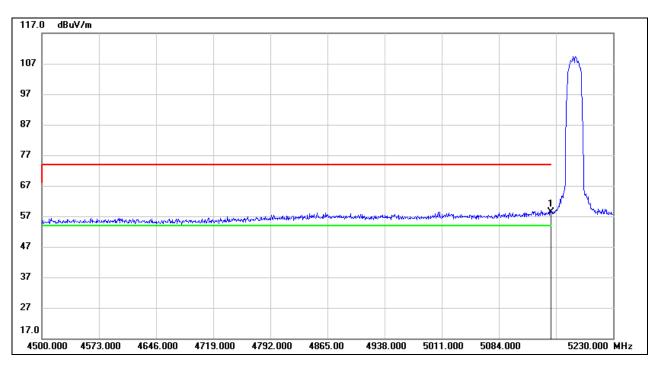


#### 8.1.1. 802.11n HT20 MIMO MODE

#### **UNII-1 BAND**

## RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

# **PEAK**

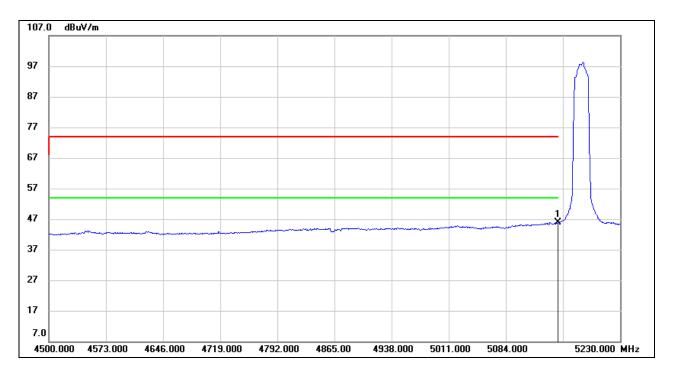


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	17.28	41.19	58.47	74.00	-15.53	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



# <u>AVG</u>

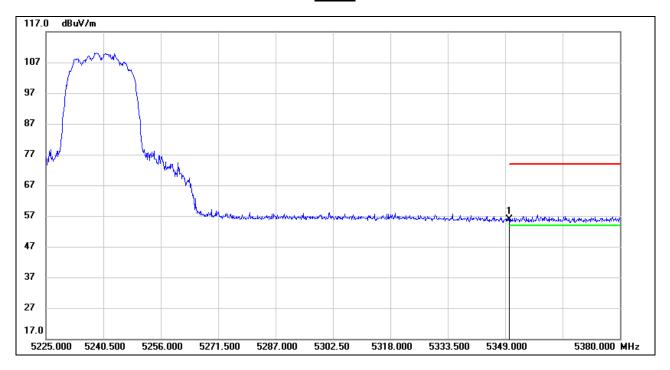


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	4.68	41.19	45.87	54.00	-8.13	AVG

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **PEAK**

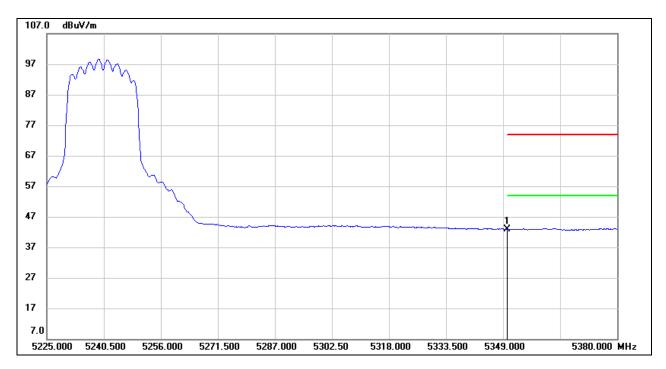


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	15.77	40.08	55.85	74.00	-18.15	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
- 5. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# <u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	2.69	40.08	42.77	54.00	-11.23	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

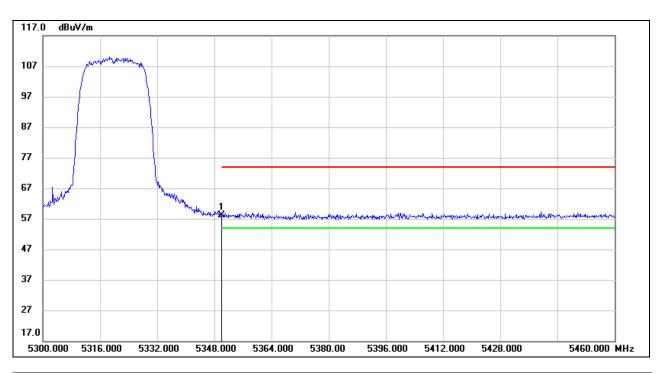
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **UNII-2A BAND**

# RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

# **PEAK**

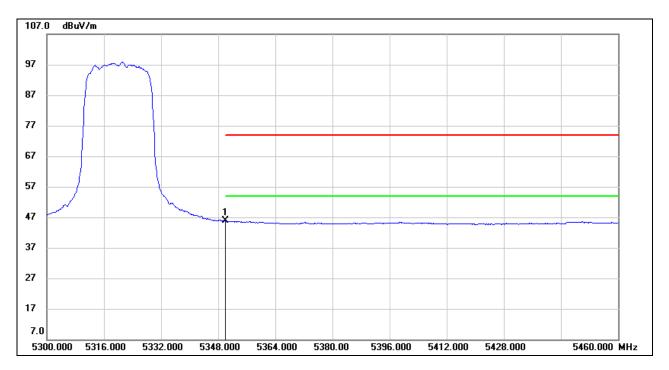


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	16.86	41.20	58.06	74.00	-15.94	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **AVG**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	4.68	41.20	45.88	54.00	-8.12	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

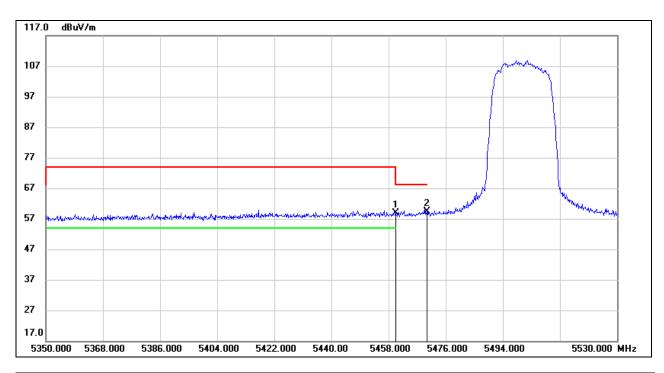
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **UNII-2C BAND**

# RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

## **PEAK**

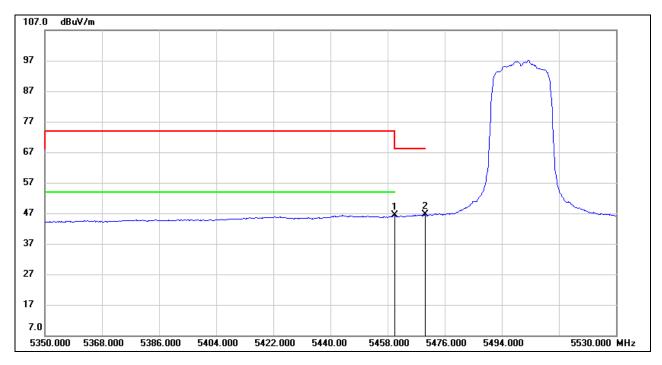


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	16.97	41.82	58.79	68.20	-9.41	peak
2	5470.000	17.40	41.87	59.27	68.20	-8.93	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



# **AVG**

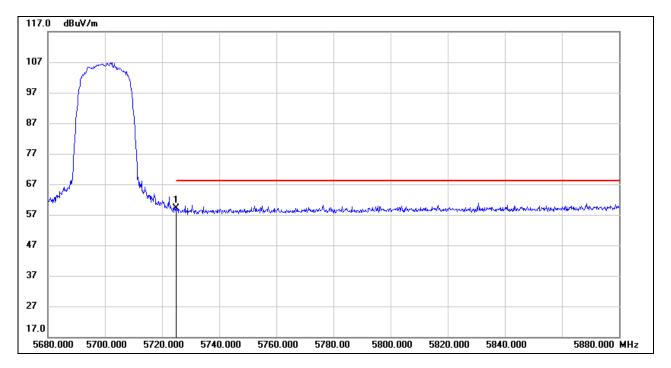


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	4.55	41.82	46.37	54.00	-7.63	AVG
2	5470.000	4.66	41.87	46.53	1	/	AVG

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	17.40	41.67	59.07	68.20	-9.13	peak

Note: 1. Measurement = Reading Level + Correct Factor.

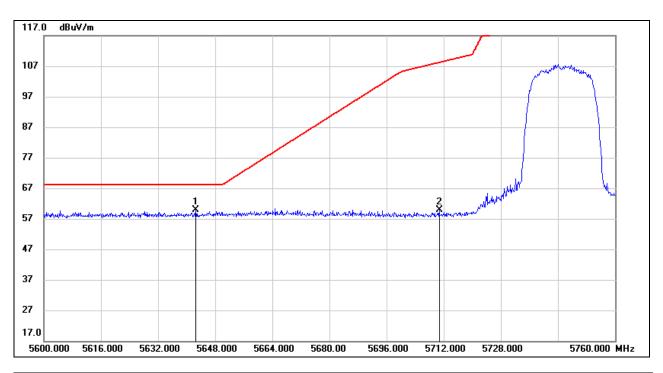
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **UNII-3 BAND**

# **RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)**

## **PEAK**

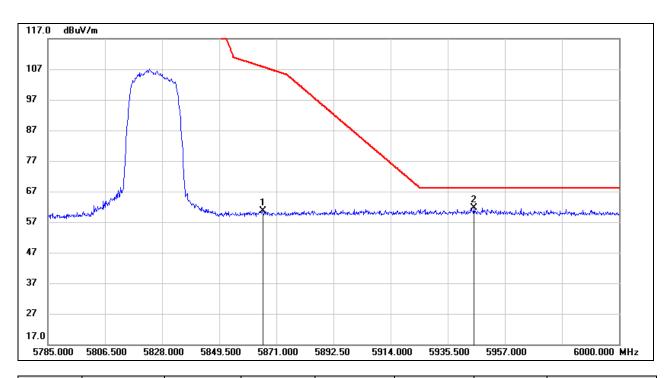


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5642.560	18.17	41.65	59.82	68.20	-8.38	peak
2	5710.720	18.19	41.60	59.79	108.20	-48.41	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5865.840	18.04	42.69	60.73	107.76	-47.03	peak
2	5945.390	18.83	42.81	61.64	68.20	-6.56	peak

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

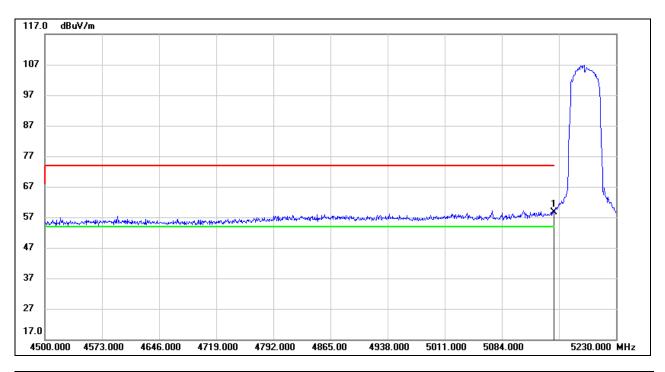


#### 8.1.2. 802.11n HT40 MIMO MODE

# **UNII-1 BAND**

# RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

# **PEAK**

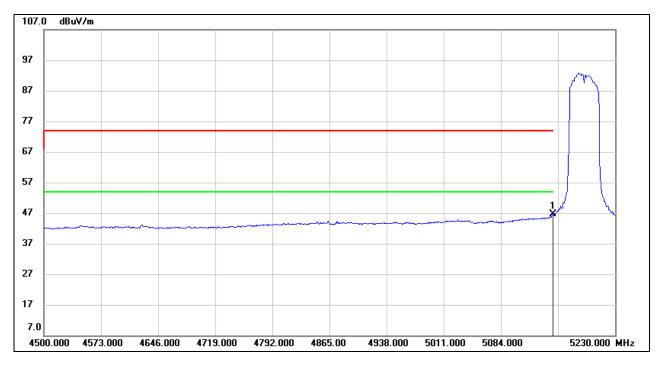


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	17.41	41.19	58.60	74.00	-15.40	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **AVG**

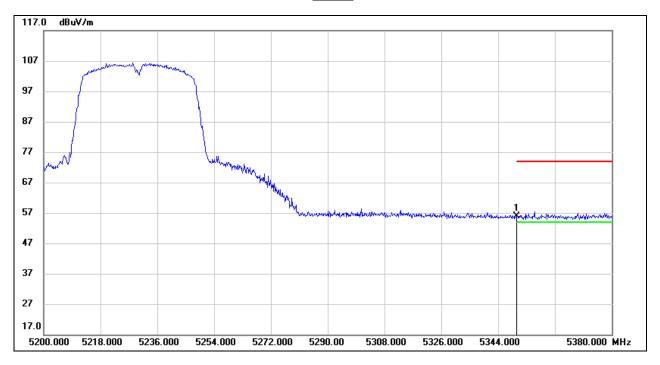


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	5.37	41.19	46.56	54.00	-7.44	AVG

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



#### **PEAK**

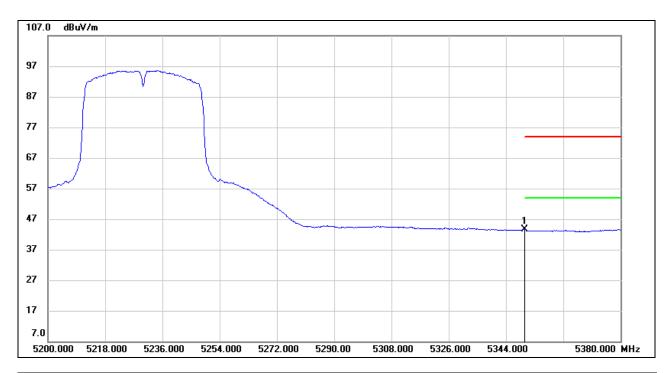


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	15.79	40.08	55.87	74.00	-18.13	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
- 5. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



## <u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	3.47	40.08	43.55	54.00	-10.45	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

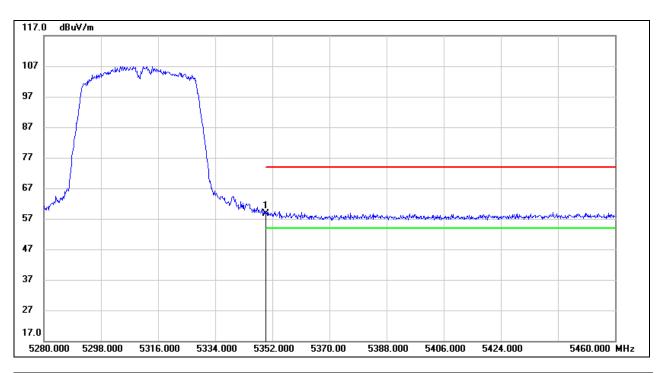
All the polarities (Horizontal and vertical) had been tested, only the worst data was recorded in the report



## **UNII-2A BAND**

# RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

## **PEAK**

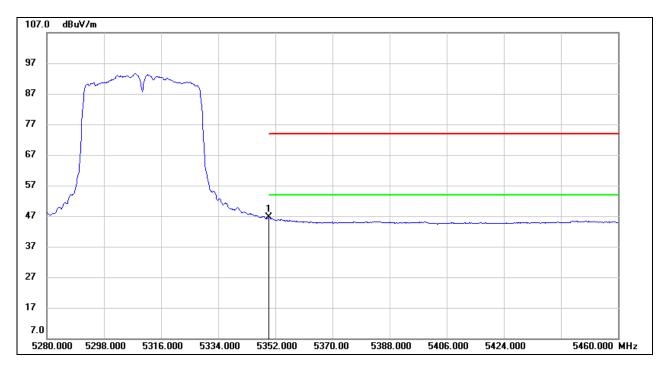


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	17.52	41.20	58.72	74.00	-15.28	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



# <u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	5.36	41.20	46.56	54.00	-7.44	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

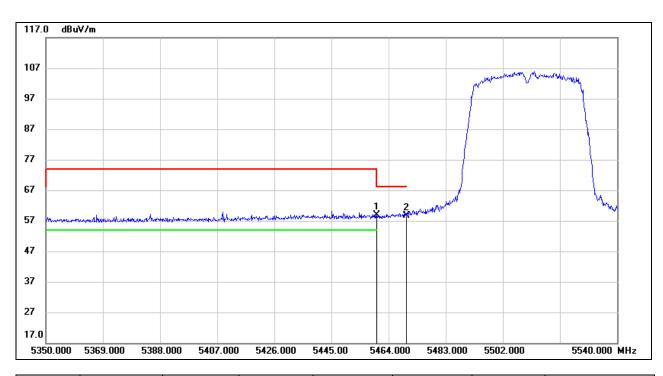
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **UNII-2C BAND**

# RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

## **PEAK**

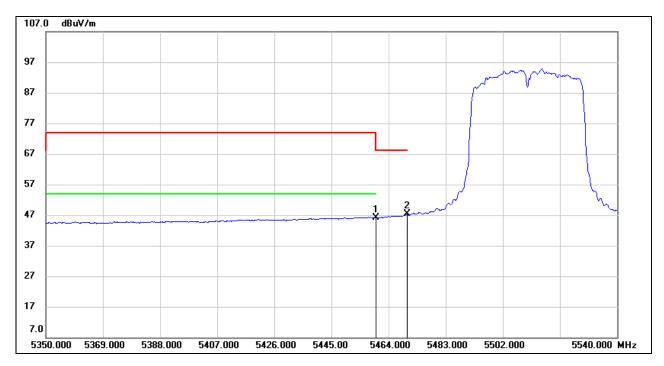


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	17.04	41.82	58.86	68.20	-9.34	peak
2	5470.000	16.73	41.87	58.60	68.20	-9.60	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



# <u>AVG</u>

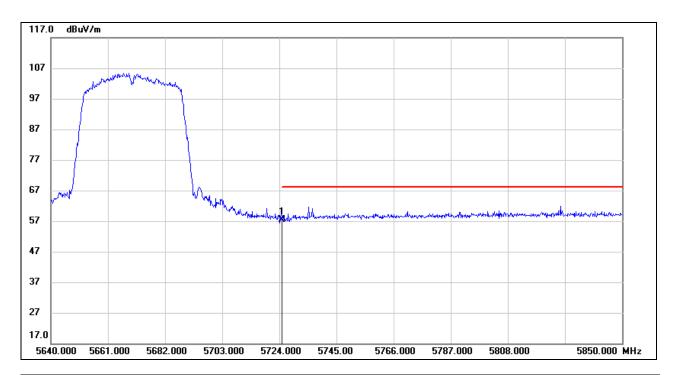


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	4.27	41.82	46.09	54.00	-7.91	AVG
2	5470.000	5.45	41.87	47.32	1	1	AVG

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	15.80	41.67	57.47	68.20	-10.73	peak

Note: 1. Measurement = Reading Level + Correct Factor.

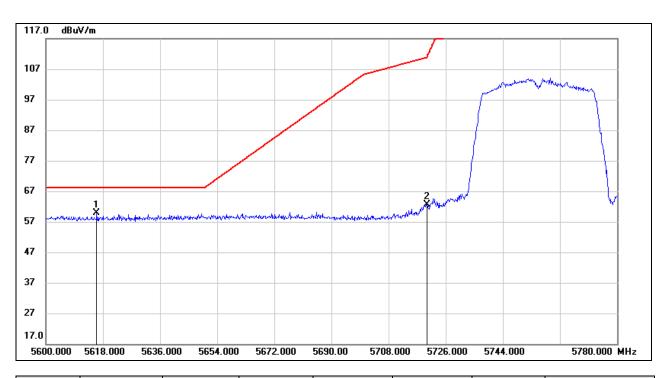
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **UNII-3 BAND**

# RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

## **PEAK**

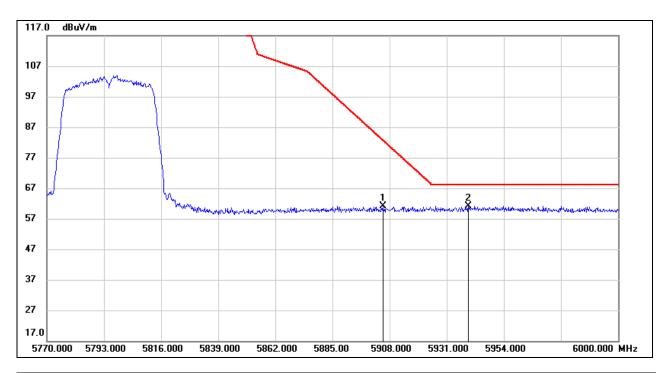


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5616.020	18.08	41.70	59.78	68.20	-8.42	peak
2	5720.060	20.95	41.64	62.59	110.94	-48.35	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5905.240	18.24	43.01	61.25	82.78	-21.53	peak
2	5939.740	18.38	42.85	61.23	68.20	-6.97	peak

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

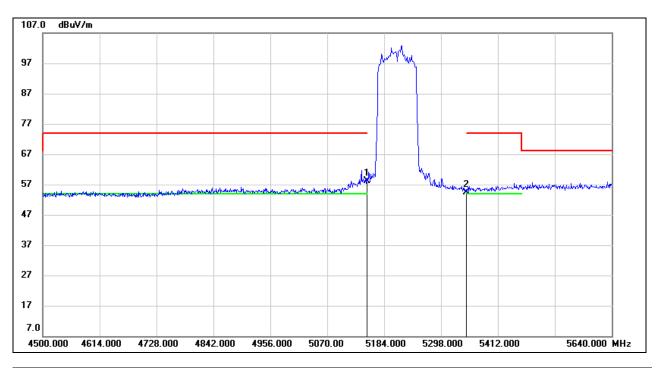


# 8.1.3. 802.11ac VHT80 MIMO MODE

#### **UNII-1 BAND**

# RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

## **PEAK**

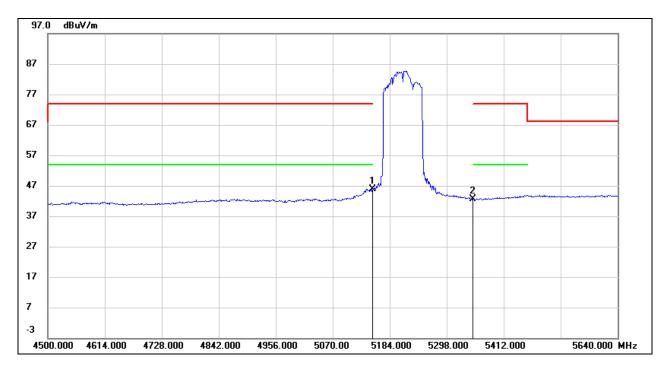


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	18.31	39.91	58.22	74.00	-15.78	peak
2	5350.000	14.32	40.08	54.40	74.00	-19.60	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
- 5. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



## <u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	6.03	39.91	45.94	54.00	-8.06	AVG
2	5350.000	2.47	40.08	42.55	54.00	-11.45	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

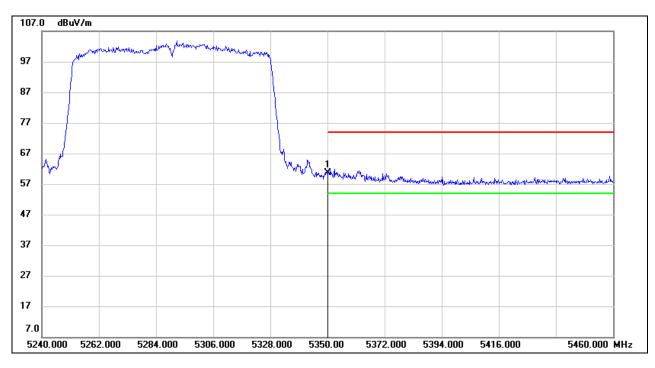
All the polarities (Horizontal and vertical) had been tested, only the worst data was recorded in the report



## **UNII-2A BAND**

# RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

# **PEAK**

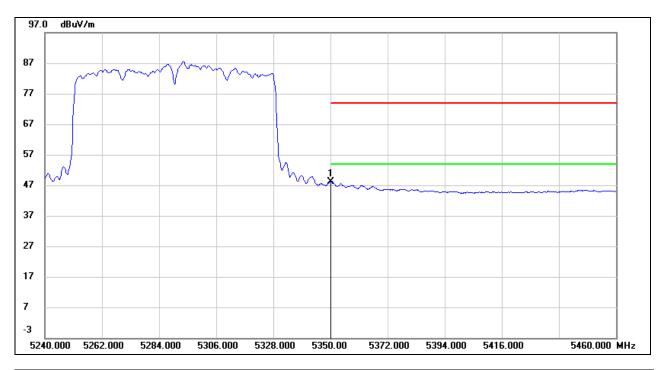


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	19.53	41.20	60.73	74.00	-13.27	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## **AVG**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	6.90	41.20	48.10	54.00	-5.90	AVG

Note: 1. Measurement = Reading Level + Correct Factor

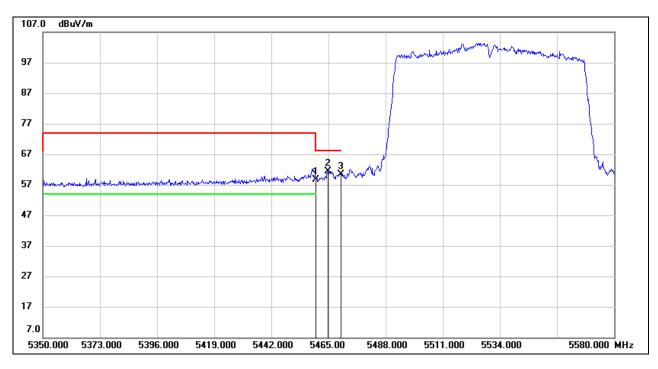
- 2. AVG: VBW=1/Ton where: ton is transmit duration.
- 3. For duty cycle, please refer to clause 7.1.
- 4. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.



# **UNII-2C BAND**

# RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

### **PEAK**

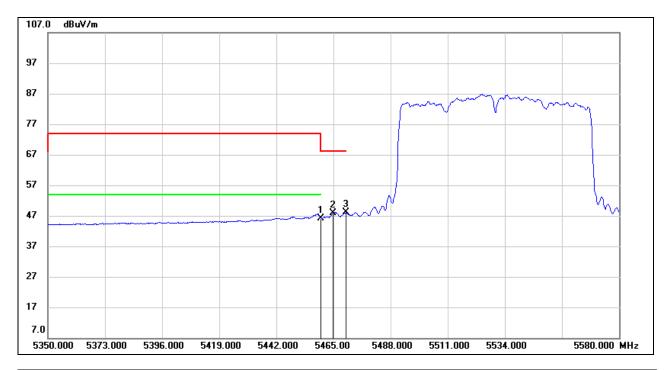


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	16.76	41.82	58.58	68.20	-9.62	peak
2	5464.770	19.58	41.85	61.43	68.20	-6.77	peak
3	5470.000	18.49	41.87	60.36	68.20	-7.84	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



### **AVG**



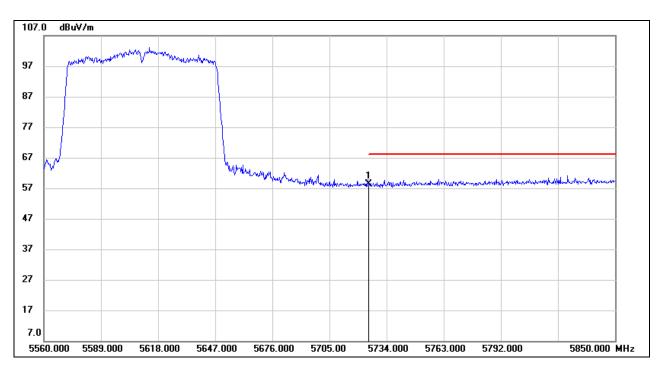
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	4.37	41.82	46.19	54.00	-7.81	AVG
2	5464.770	5.99	41.85	47.84	/	/	AVG
3	5470.000	6.15	41.87	48.02	/	/	AVG

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



# RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

### **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	16.75	41.67	58.42	68.20	-9.78	peak

Note: 1. Measurement = Reading Level + Correct Factor.

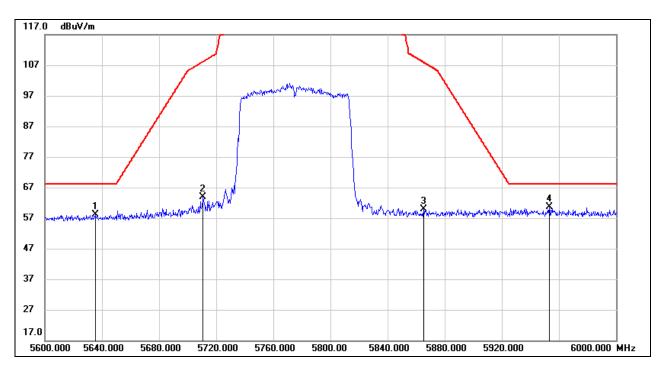
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Note: All the polarities (Vertical & Horizontal) had been tested, only the worst data was recorded in the report.



# **UNII-3 BAND**

# RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5635.200	16.47	41.66	58.13	68.20	-10.07	peak
2	5710.800	22.40	41.60	64.00	108.23	-44.23	peak
3	5865.200	17.21	42.68	59.89	107.94	-48.05	peak
4	5953.200	17.74	42.78	60.52	68.20	-7.68	peak

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Note: All the polarities (Vertical & Horizontal) had been tested, only the worst data was recorded in the report.

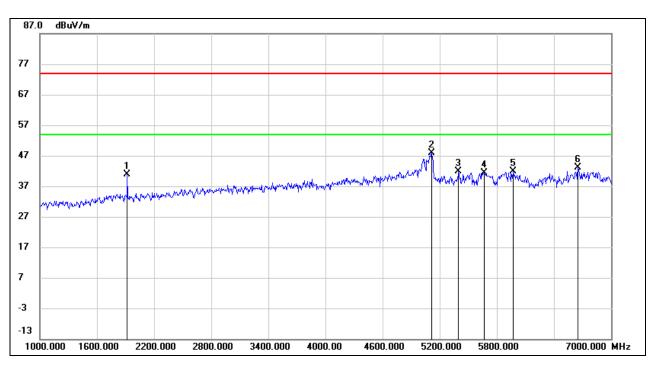


# 8.2. SPURIOUS EMISSIONS (1 GHz ~ 7 GHz)

#### 8.2.1. 802.11n HT40 MIMO MODE

### **UNII-1 BAND**

### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

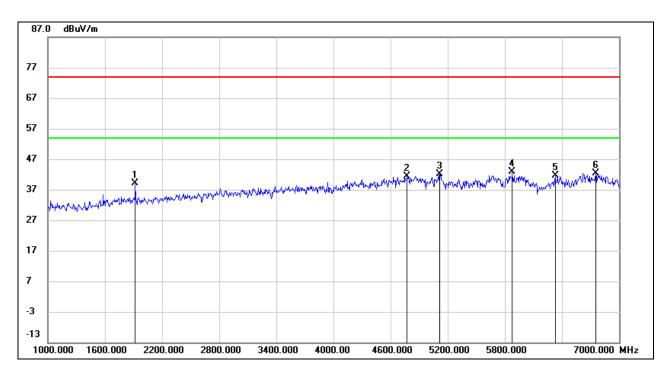


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	50.96	-10.13	40.83	74.00	-33.17	peak
2	5116.000	46.37	1.60	47.97	74.00	-26.03	peak
3	5398.000	40.05	1.88	41.93	74.00	-32.07	peak
4	5668.000	39.01	2.47	41.48	74.00	-32.52	peak
5	5968.000	38.81	3.17	41.98	74.00	-32.02	peak
6	6652.000	37.59	5.52	43.11	74.00	-30.89	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

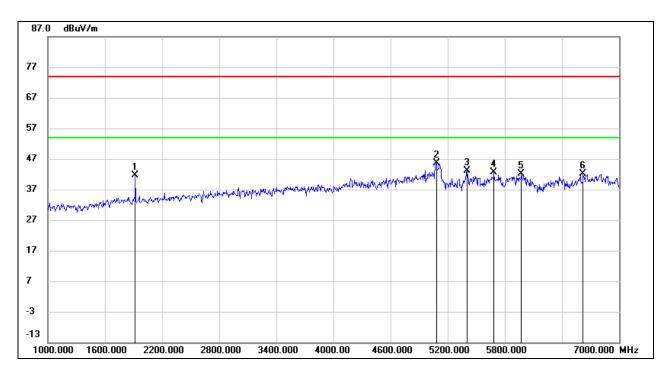


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.31	-10.13	39.18	74.00	-34.82	peak
2	4774.000	40.93	0.43	41.36	74.00	-32.64	peak
3	5116.000	40.54	1.60	42.14	74.00	-31.86	peak
4	5878.000	40.05	2.81	42.86	74.00	-31.14	peak
5	6328.000	37.59	3.97	41.56	74.00	-32.44	peak
6	6754.000	36.86	5.56	42.42	74.00	-31.58	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27 dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

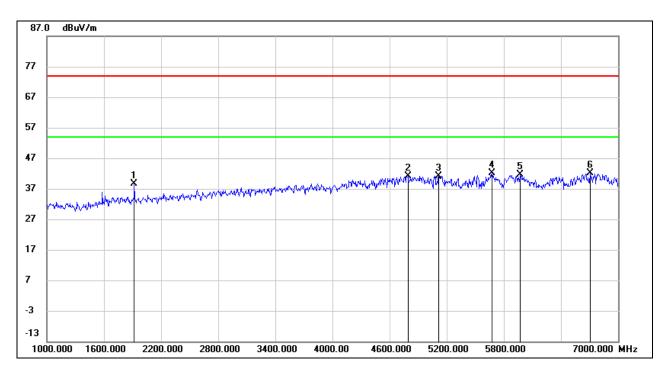


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	51.70	-10.13	41.57	74.00	-32.43	peak
2	5080.000	44.16	1.38	45.54	74.00	-28.46	peak
3	5404.000	41.22	1.89	43.11	74.00	-30.89	peak
4	5686.000	40.06	2.47	42.53	74.00	-31.47	peak
5	5974.000	38.87	3.20	42.07	74.00	-31.93	peak
6	6622.000	36.63	5.51	42.14	74.00	-31.86	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



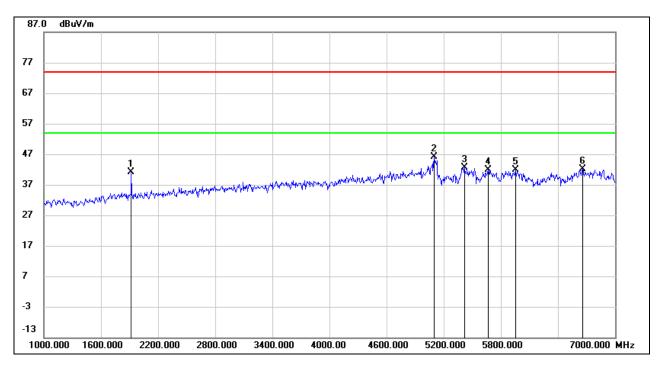
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.72	-10.13	38.59	74.00	-35.41	peak
2	4792.000	40.63	0.54	41.17	74.00	-32.83	peak
3	5116.000	39.65	1.60	41.25	74.00	-32.75	peak
4	5674.000	39.62	2.48	42.10	74.00	-31.90	peak
5	5974.000	38.48	3.20	41.68	74.00	-32.32	peak
6	6706.000	36.48	5.54	42.02	74.00	-31.98	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### **UNII-2A BAND**

# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

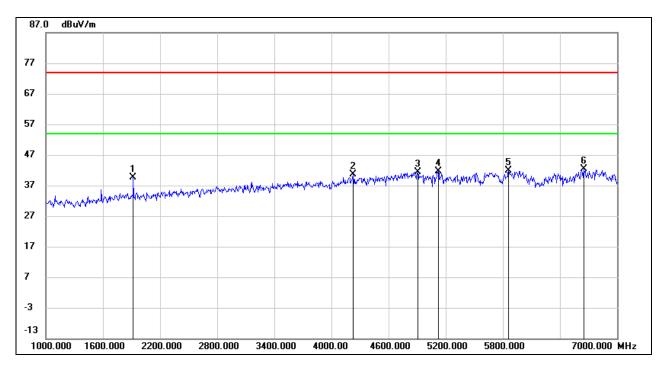


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	51.33	-10.13	41.20	74.00	-32.80	peak
2	5098.000	44.58	1.49	46.07	74.00	-27.93	peak
3	5416.000	40.76	1.92	42.68	74.00	-31.32	peak
4	5668.000	39.52	2.47	41.99	74.00	-32.01	peak
5	5956.000	38.67	3.13	41.80	74.00	-32.20	peak
6	6658.000	36.74	5.51	42.25	74.00	-31.75	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

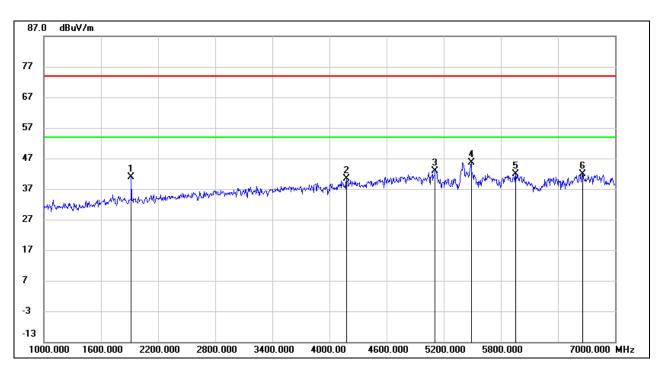


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.65	-10.13	39.52	74.00	-34.48	peak
2	4228.000	42.41	-1.70	40.71	74.00	-33.29	peak
3	4906.000	40.73	0.75	41.48	74.00	-32.52	peak
4	5122.000	39.99	1.64	41.63	74.00	-32.37	peak
5	5860.000	39.20	2.75	41.95	74.00	-32.05	peak
6	6652.000	36.81	5.52	42.33	74.00	-31.67	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

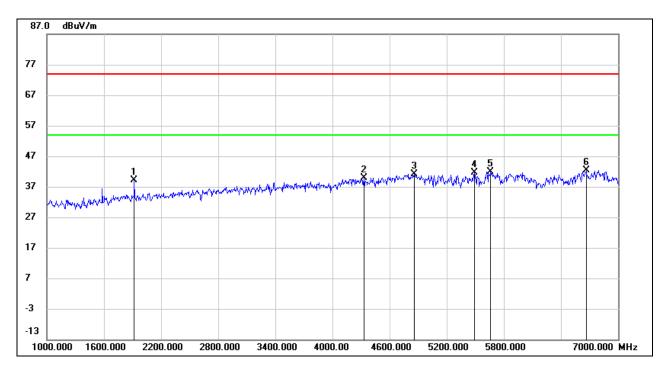


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	50.93	-10.13	40.80	74.00	-33.20	peak
2	4180.000	42.25	-1.87	40.38	74.00	-33.62	peak
3	5110.000	41.29	1.55	42.84	74.00	-31.16	peak
4	5488.000	43.55	2.13	45.68	74.00	-28.32	peak
5	5956.000	38.85	3.13	41.98	74.00	-32.02	peak
6	6658.000	36.31	5.51	41.82	74.00	-32.18	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



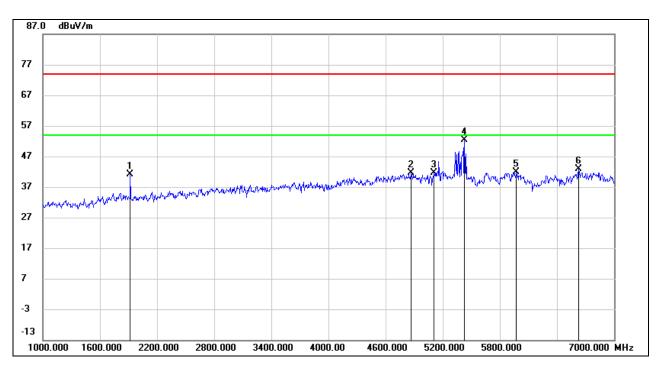
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.35	-10.13	39.22	74.00	-34.78	peak
2	4330.000	41.72	-1.80	39.92	74.00	-34.08	peak
3	4858.000	40.48	0.68	41.16	74.00	-32.84	peak
4	5494.000	39.54	2.14	41.68	74.00	-32.32	peak
5	5662.000	39.51	2.47	41.98	74.00	-32.02	peak
6	6664.000	36.93	5.53	42.46	74.00	-31.54	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### **UNII-2C BAND**

# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

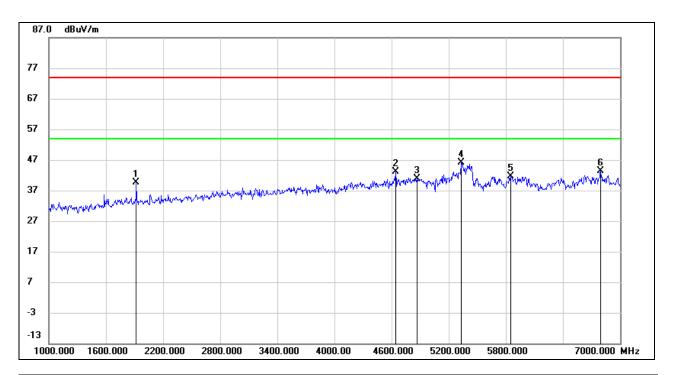


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	51.35	-10.13	41.22	74.00	-32.78	peak
2	4870.000	40.90	0.69	41.59	74.00	-32.41	peak
3	5110.000	40.05	1.55	41.60	74.00	-32.40	peak
4	5428.000	50.32	1.95	52.27	74.00	-21.73	peak
5	5974.000	38.62	3.20	41.82	74.00	-32.18	peak
6	6628.000	37.47	5.50	42.97	74.00	-31.03	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

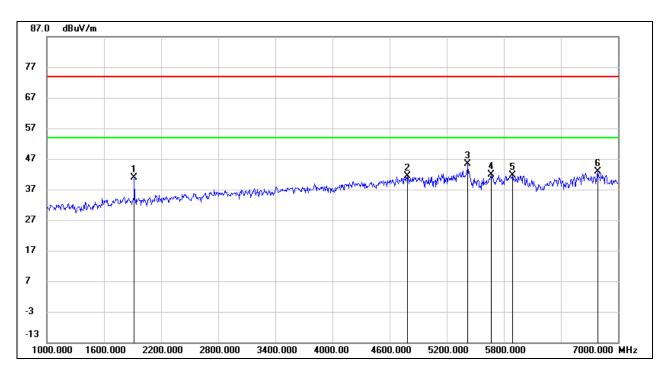


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.67	-10.13	39.54	74.00	-34.46	peak
2	4642.000	43.46	-0.33	43.13	74.00	-30.87	peak
3	4864.000	40.11	0.69	40.80	74.00	-33.20	peak
4	5332.000	44.13	1.95	46.08	74.00	-27.92	peak
5	5848.000	38.99	2.70	41.69	74.00	-32.31	peak
6	6796.000	37.81	5.57	43.38	74.00	-30.62	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

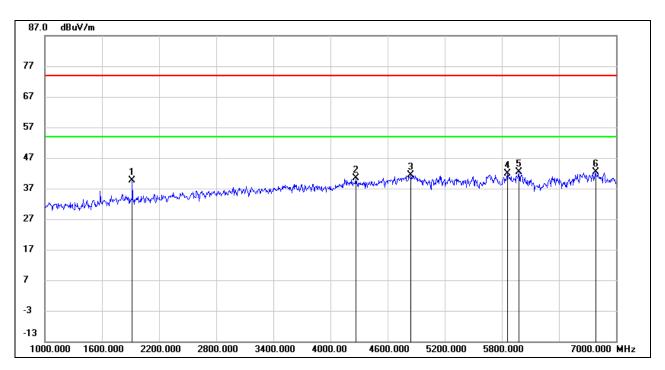


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	51.07	-10.13	40.94	74.00	-33.06	peak
2	4786.000	40.80	0.51	41.31	74.00	-32.69	peak
3	5422.000	43.34	1.94	45.28	74.00	-28.72	peak
4	5668.000	39.36	2.47	41.83	74.00	-32.17	peak
5	5890.000	38.86	2.87	41.73	74.00	-32.27	peak
6	6784.000	37.40	5.56	42.96	74.00	-31.04	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

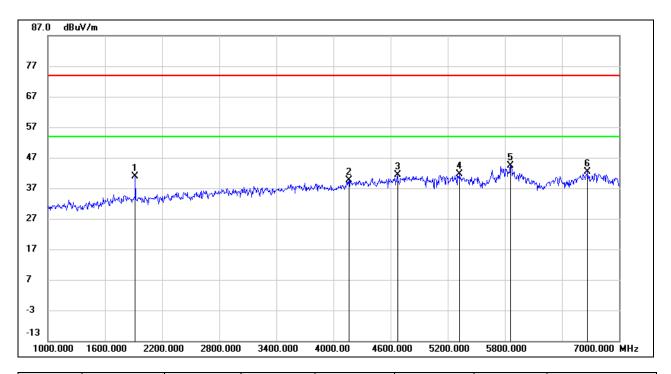


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.80	-10.13	39.67	74.00	-34.33	peak
2	4264.000	42.03	-1.73	40.30	74.00	-33.70	peak
3	4846.000	40.65	0.66	41.31	74.00	-32.69	peak
4	5860.000	39.21	2.75	41.96	74.00	-32.04	peak
5	5980.000	39.04	3.22	42.26	74.00	-31.74	peak
6	6784.000	36.77	5.56	42.33	74.00	-31.67	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

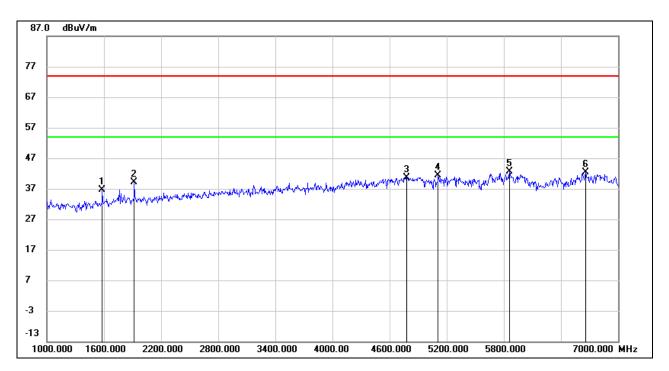


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	50.94	-10.13	40.81	74.00	-33.19	peak
2	4162.000	41.78	-2.04	39.74	74.00	-34.26	peak
3	4672.000	41.63	-0.15	41.48	74.00	-32.52	peak
4	5320.000	39.70	1.96	41.66	74.00	-32.34	peak
5	5860.000	41.72	2.75	44.47	74.00	-29.53	peak
6	6670.000	36.74	5.53	42.27	74.00	-31.73	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



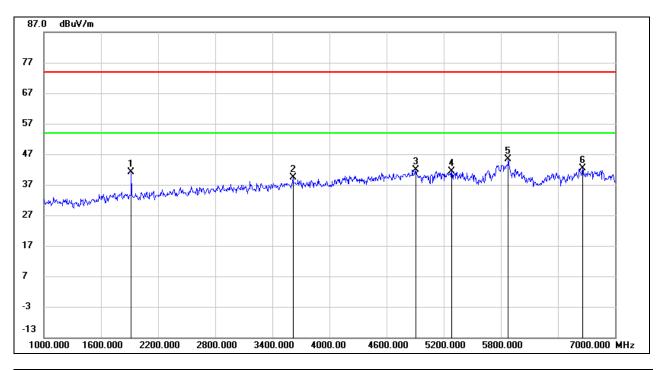
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1582.000	48.40	-11.68	36.72	74.00	-37.28	peak
2	1918.000	49.29	-10.13	39.16	74.00	-34.84	peak
3	4780.000	40.21	0.48	40.69	74.00	-33.31	peak
4	5110.000	39.95	1.55	41.50	74.00	-32.50	peak
5	5860.000	39.95	2.75	42.70	74.00	-31.30	peak
6	6658.000	36.77	5.51	42.28	74.00	-31.72	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# **STRADDLE CHANNEL 142**

# HARMONICS AND SPURIOUS EMISSIONS (HORIZONTAL)

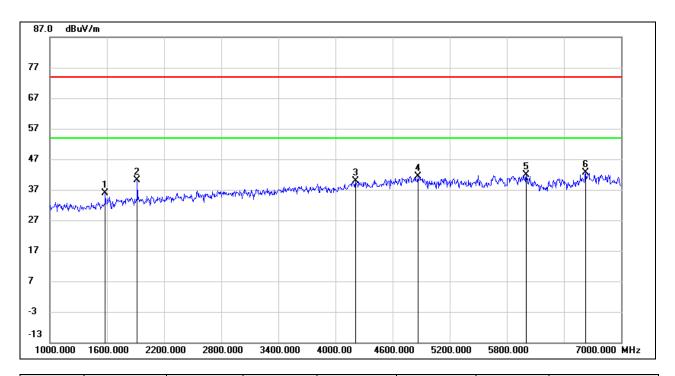


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	51.22	-10.13	41.09	74.00	-32.91	peak
2	3616.000	43.41	-4.12	39.29	74.00	-34.71	peak
3	4906.000	41.03	0.75	41.78	74.00	-32.22	peak
4	5284.000	39.47	2.01	41.48	74.00	-32.52	peak
5	5878.000	42.68	2.81	45.49	74.00	-28.51	peak
6	6658.000	36.85	5.51	42.36	74.00	-31.64	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# **HARMONICS AND SPURIOUS EMISSIONS (VERTICAL)**



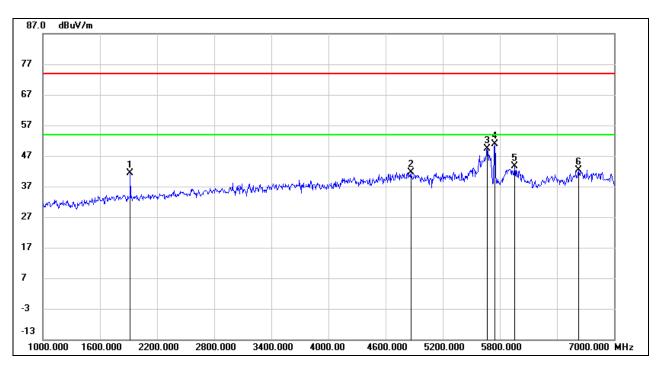
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1582.000	47.50	-11.68	35.82	74.00	-38.18	peak
2	1918.000	50.28	-10.13	40.15	74.00	-33.85	peak
3	4210.000	41.55	-1.67	39.88	74.00	-34.12	peak
4	4864.000	40.78	0.69	41.47	74.00	-32.53	peak
5	6004.000	38.46	3.30	41.76	74.00	-32.24	peak
6	6628.000	37.09	5.50	42.59	74.00	-31.41	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# **UNII-3 BAND**

# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

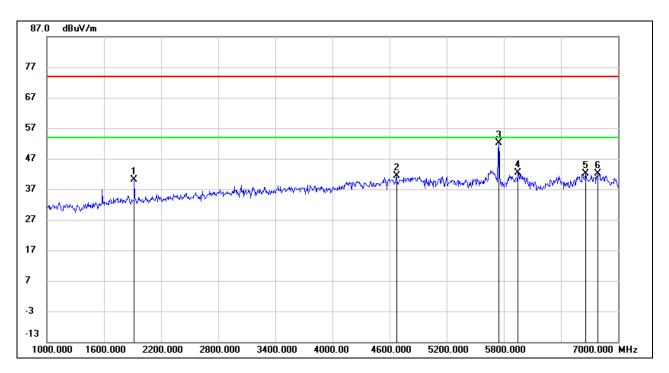


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	51.46	-10.13	41.33	74.00	-32.67	peak
2	4864.000	41.03	0.69	41.72	74.00	-32.28	peak
3	5668.000	46.87	2.47	49.34	74.00	-24.66	peak
4	5746.000	48.45	2.50	50.95	74.00	-23.05	peak
5	5956.000	40.45	3.13	43.58	74.00	-30.42	peak
6	6628.000	36.83	5.50	42.33	74.00	-31.67	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

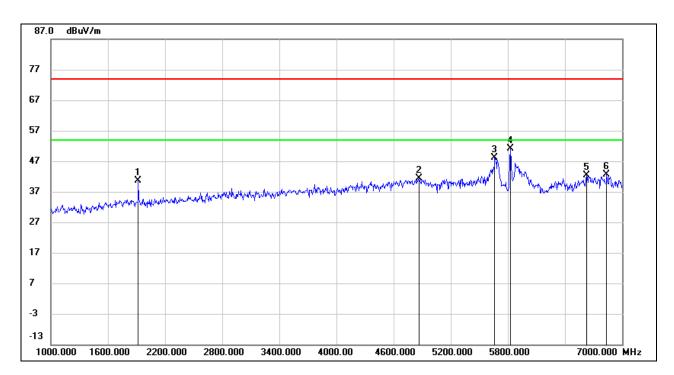


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	50.14	-10.13	40.01	74.00	-33.99	peak
2	4672.000	41.52	-0.15	41.37	74.00	-32.63	peak
3	5746.000	49.74	2.50	52.24	74.00	-21.76	peak
4	5950.000	39.18	3.10	42.28	74.00	-31.72	peak
5	6658.000	36.53	5.51	42.04	74.00	-31.96	peak
6	6790.000	36.50	5.57	42.07	74.00	-31.93	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

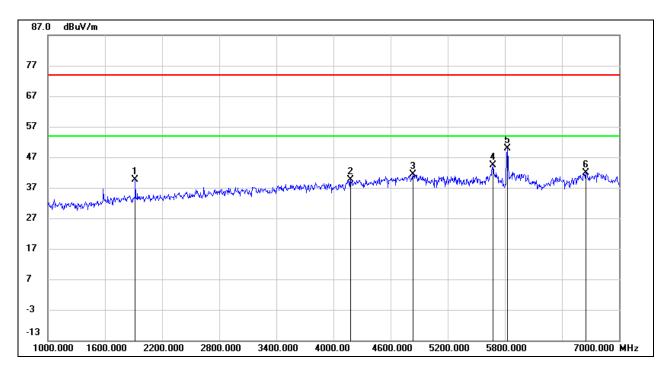


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	50.75	-10.13	40.62	74.00	-33.38	peak
2	4864.000	40.61	0.69	41.30	74.00	-32.70	peak
3	5662.000	45.55	2.47	48.02	74.00	-25.98	peak
4	5825.000	48.47	2.61	51.08	74.00	-22.92	peak
5	6628.000	36.99	5.50	42.49	74.00	-31.51	peak
6	6838.000	37.06	5.69	42.75	74.00	-31.25	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.72	-10.13	39.59	74.00	-34.41	peak
2	4180.000	41.41	-1.87	39.54	74.00	-34.46	peak
3	4834.000	40.71	0.63	41.34	74.00	-32.66	peak
4	5674.000	41.80	2.48	44.28	74.00	-29.72	peak
5	5825.000	47.18	2.61	49.79	74.00	-24.21	peak
6	6652.000	36.33	5.52	41.85	74.00	-32.15	peak

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

Note: All the modes and bands had been tested, but only the worst data was recorded in the report.

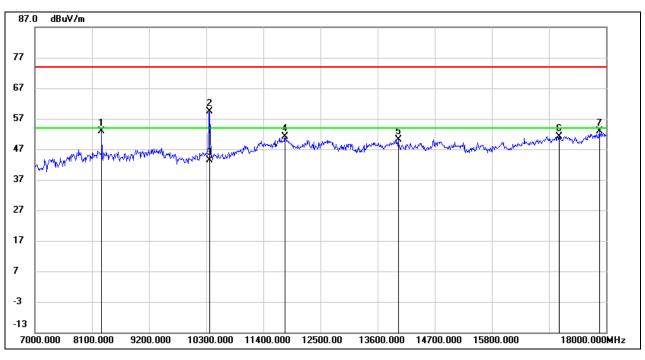


# 8.3. SPURIOUS EMISSIONS (7 GHz ~ 18 GHz)

### 8.3.1. 802.11a 20 MODE

### **UNII-1 BAND**

### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

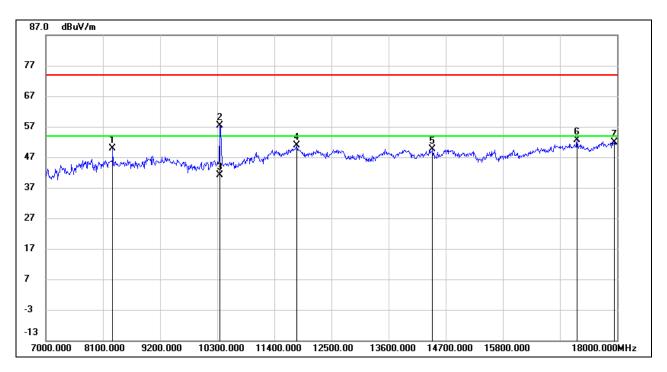


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8287.000	43.82	9.02	52.84	74.00	-21.16	peak
2	10366.000	48.02	11.33	59.35	74.00	-14.65	peak
3	10366.000	32.12	11.33	43.45	54.00	-10.55	AVG
4	11818.000	35.46	15.58	51.04	74.00	-22.96	peak
5	13996.000	33.39	16.85	50.24	74.00	-23.76	peak
6	17098.000	30.60	20.63	51.23	74.00	-22.77	peak
7	17868.000	30.05	22.71	52.76	74.00	-21.24	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

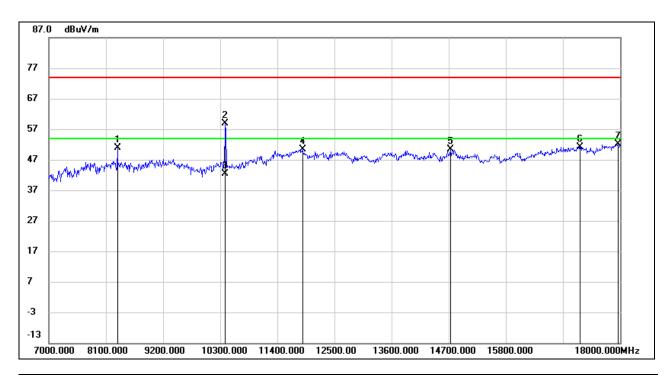


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8287.000	40.78	9.02	49.80	74.00	-24.20	peak
2	10355.000	46.14	11.29	57.43	74.00	-16.57	peak
3	10355.000	29.86	11.29	41.15	54.00	-12.85	AVG
4	11829.000	35.20	15.57	50.77	74.00	-23.23	peak
5	14447.000	32.81	16.77	49.58	74.00	-24.42	peak
6	17230.000	31.72	20.99	52.71	74.00	-21.29	peak
7	17945.000	29.16	22.68	51.84	74.00	-22.16	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

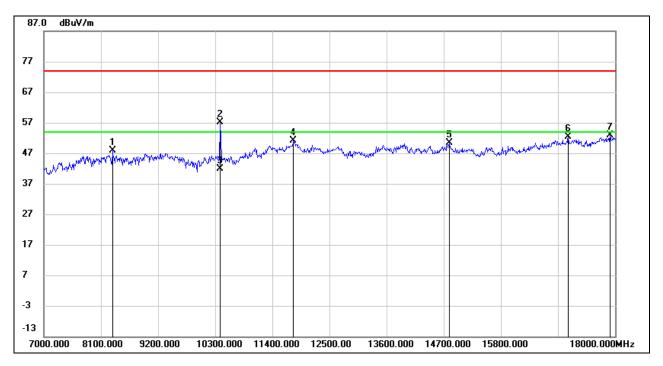


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8320.000	41.98	8.90	50.88	74.00	-23.12	peak
2	10399.000	47.46	11.45	58.91	74.00	-15.09	peak
3	10399.000	30.90	11.45	42.35	54.00	-11.65	AVG
4	11884.000	34.83	15.49	50.32	74.00	-23.68	peak
5	14733.000	33.78	16.69	50.47	74.00	-23.53	peak
6	17230.000	30.25	20.99	51.24	74.00	-22.76	peak
7	17956.000	29.50	22.68	52.18	74.00	-21.82	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

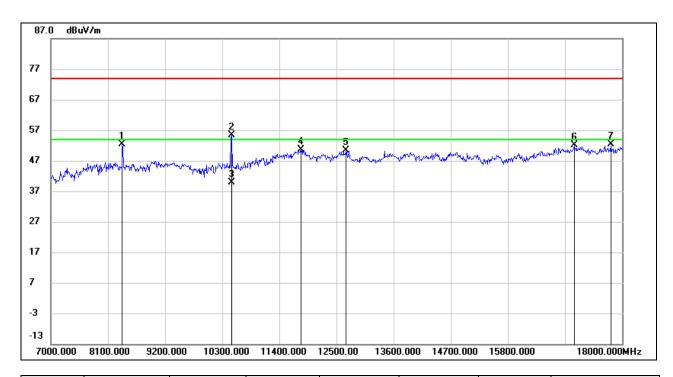


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8320.000	39.08	8.90	47.98	74.00	-26.02	peak
2	10399.000	45.75	11.45	57.20	74.00	-16.80	peak
3	10399.000	30.48	11.45	41.93	54.00	-12.07	AVG
4	11807.000	35.59	15.61	51.20	74.00	-22.80	peak
5	14810.000	33.69	16.80	50.49	74.00	-23.51	peak
6	17098.000	31.68	20.63	52.31	74.00	-21.69	peak
7	17901.000	30.08	22.69	52.77	74.00	-21.23	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

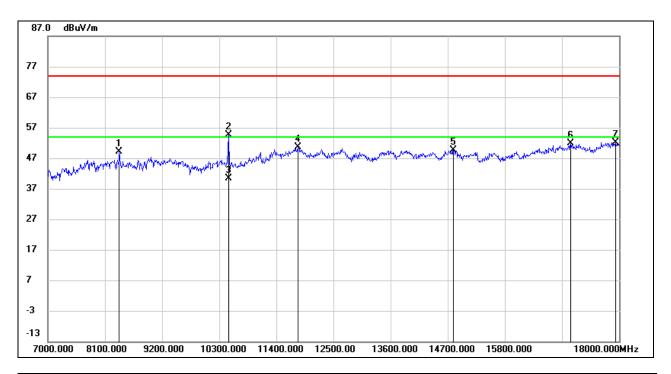


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8375.000	43.79	8.68	52.47	74.00	-21.53	peak
2	10476.000	43.55	11.83	55.38	74.00	-18.62	peak
3	10476.000	28.04	11.83	39.87	54.00	-14.13	AVG
4	11818.000	35.04	15.58	50.62	74.00	-23.38	peak
5	12687.000	35.00	15.45	50.45	74.00	-23.55	peak
6	17076.000	31.58	20.54	52.12	74.00	-21.88	peak
7	17780.000	29.87	22.57	52.44	74.00	-21.56	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



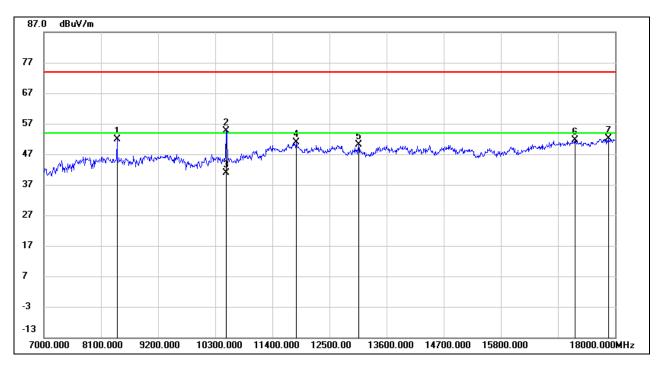
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8375.000	40.44	8.68	49.12	74.00	-24.88	peak
2	10476.000	42.88	11.83	54.71	74.00	-19.29	peak
3	10476.000	28.63	11.83	40.46	54.00	-13.54	AVG
4	11818.000	35.02	15.58	50.60	74.00	-23.40	peak
5	14810.000	32.93	16.80	49.73	74.00	-24.27	peak
6	17065.000	31.37	20.49	51.86	74.00	-22.14	peak
7	17934.000	29.51	22.69	52.20	74.00	-21.80	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### **UNII-2A BAND**

# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

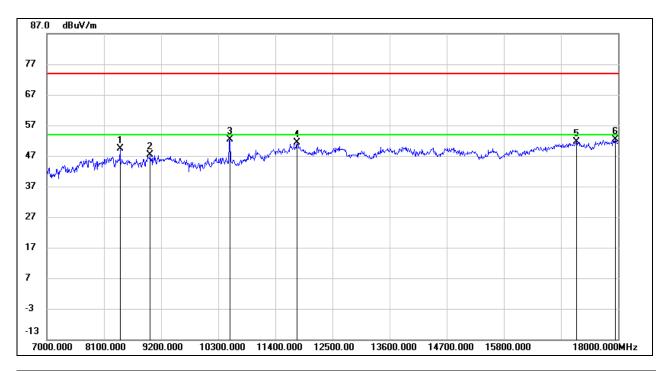


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8408.000	43.31	8.59	51.90	74.00	-22.10	peak
2	10509.000	42.52	11.99	54.51	74.00	-19.49	peak
3	10509.000	28.77	11.99	40.76	54.00	-13.24	AVG
4	11862.000	35.46	15.52	50.98	74.00	-23.02	peak
5	13061.000	34.65	15.47	50.12	74.00	-23.88	peak
6	17230.000	30.61	20.99	51.60	74.00	-22.40	peak
7	17868.000	29.48	22.71	52.19	74.00	-21.81	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

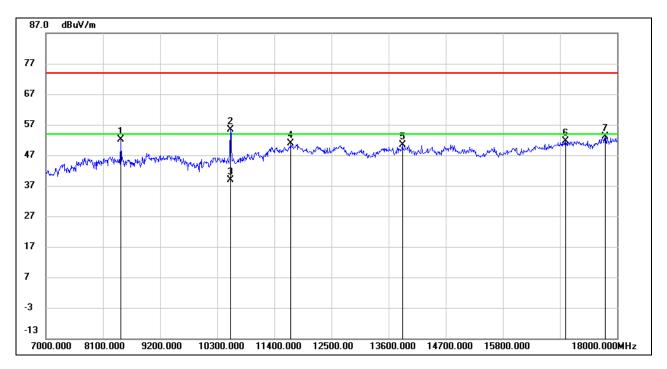


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8408.000	40.81	8.59	49.40	74.00	-24.60	peak
2	8991.000	36.95	10.53	47.48	74.00	-26.52	peak
3	10520.000	40.30	12.04	52.34	74.00	-21.66	peak
4	11818.000	35.76	15.58	51.34	74.00	-22.66	peak
5	17197.000	30.59	21.03	51.62	74.00	-22.38	peak
6	17945.000	29.77	22.68	52.45	74.00	-21.55	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27 dBm/MHz (68.2dBuV/m) limit.



# HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

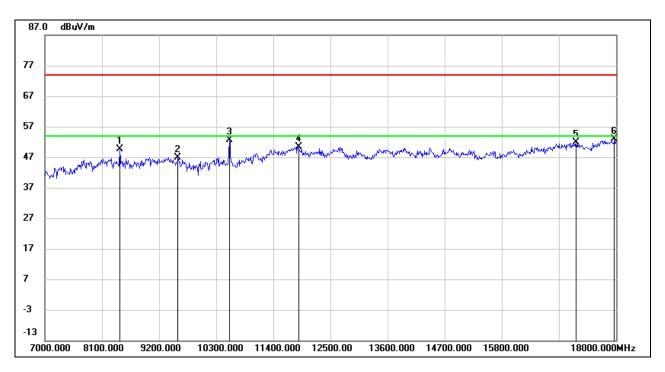


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8441.000	43.60	8.56	52.16	74.00	-21.84	peak
2	10553.000	43.20	12.17	55.37	74.00	-18.63	peak
3	10553.000	26.59	12.17	38.76	54.00	-15.24	AVG
4	11719.000	35.60	15.17	50.77	74.00	-23.23	peak
5	13864.000	33.44	16.92	50.36	74.00	-23.64	peak
6	17010.000	31.35	20.27	51.62	74.00	-22.38	peak
7	17769.000	30.71	22.48	53.19	74.00	-20.81	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

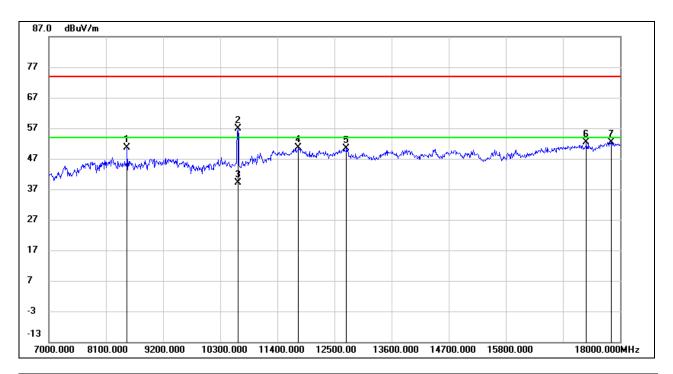


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8441.000	41.07	8.56	49.63	74.00	-24.37	peak
2	9563.000	36.46	10.45	46.91	74.00	-27.09	peak
3	10553.000	40.34	12.17	52.51	74.00	-21.49	peak
4	11884.000	34.97	15.49	50.46	74.00	-23.54	peak
5	17230.000	30.79	20.99	51.78	74.00	-22.22	peak
6	17967.000	30.29	22.67	52.96	74.00	-21.04	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

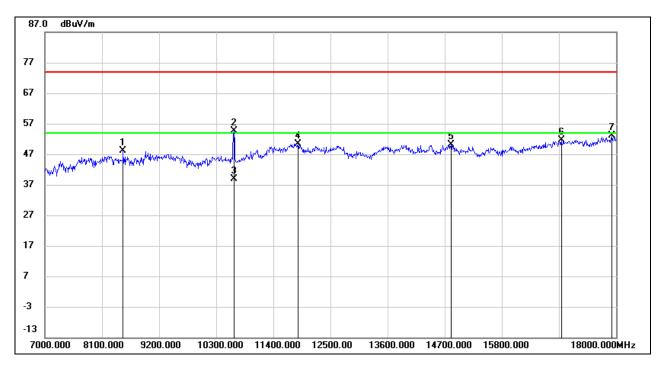


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8507.000	42.15	8.54	50.69	74.00	-23.31	peak
2	10641.000	44.55	12.42	56.97	74.00	-17.03	peak
3	10641.000	26.73	12.42	39.15	54.00	-14.85	AVG
4	11807.000	35.02	15.61	50.63	74.00	-23.37	peak
5	12731.000	34.97	15.53	50.50	74.00	-23.50	peak
6	17351.000	31.67	20.81	52.48	74.00	-21.52	peak
7	17835.000	29.69	22.71	52.40	74.00	-21.60	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



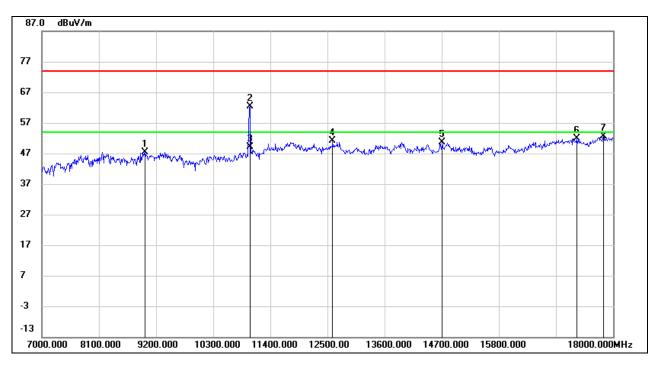
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8507.000	39.58	8.54	48.12	74.00	-25.88	peak
2	10641.000	42.21	12.42	54.63	74.00	-19.37	peak
3	10641.000	26.44	12.42	38.86	54.00	-15.14	AVG
4	11873.000	34.89	15.50	50.39	74.00	-23.61	peak
5	14821.000	33.29	16.81	50.10	74.00	-23.90	peak
6	16944.000	31.52	20.10	51.62	74.00	-22.38	peak
7	17923.000	30.37	22.69	53.06	74.00	-20.94	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



## **UNII-2C BAND**

# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

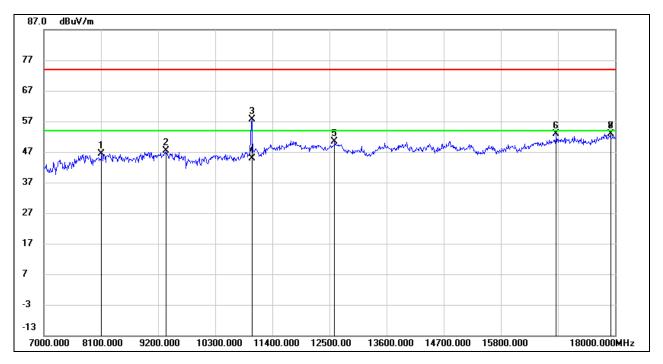


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8991.000	36.92	10.53	47.45	74.00	-26.55	peak
2	11004.000	49.19	13.26	62.45	74.00	-11.55	peak
3	11004.000	35.89	13.26	49.15	54.00	-4.85	AVG
4	12599.000	35.79	15.29	51.08	74.00	-22.92	peak
5	14711.000	33.94	16.65	50.59	74.00	-23.41	peak
6	17307.000	31.11	20.88	51.99	74.00	-22.01	peak
7	17813.000	29.93	22.72	52.65	74.00	-21.35	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

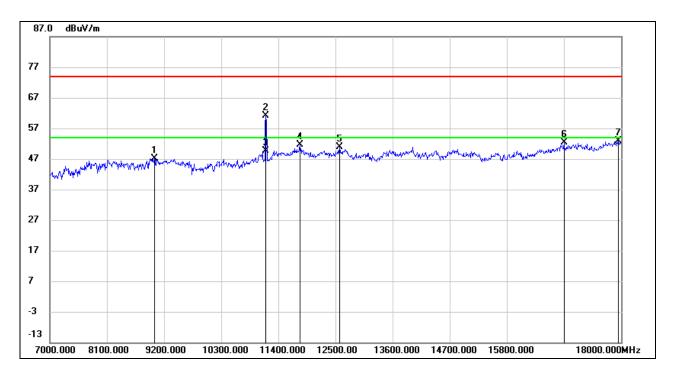


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	37.84	8.61	46.45	74.00	-27.55	peak
2	9354.000	37.25	10.07	47.32	74.00	-26.68	peak
3	11004.000	44.32	13.26	57.58	74.00	-16.42	peak
4	11004.000	31.60	13.26	44.86	54.00	-9.14	AVG
5	12599.000	35.02	15.29	50.31	74.00	-23.69	peak
6	16867.000	32.98	19.90	52.88	74.00	-21.12	peak
7	17912.000	30.24	22.69	52.93	74.00	-21.07	peak
8	17912.000	30.24	22.69	52.93	74.00	-21.07	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



## HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

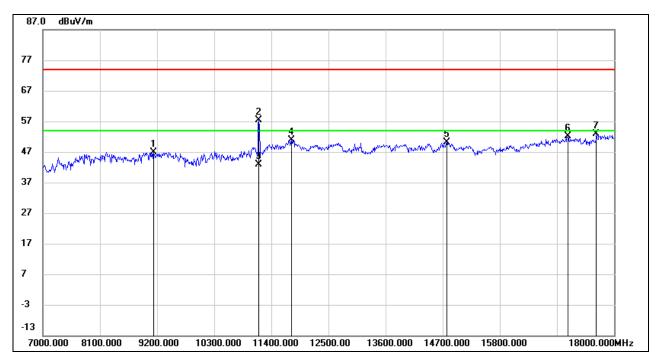


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9013.000	36.71	10.54	47.25	74.00	-26.75	peak
2	11158.000	47.64	13.56	61.20	74.00	-12.80	peak
3	11158.000	36.09	13.56	49.65	54.00	-4.35	AVG
4	11818.000	36.03	15.58	51.61	74.00	-22.39	peak
5	12577.000	35.51	15.31	50.82	74.00	-23.18	peak
6	16900.000	32.41	19.98	52.39	74.00	-21.61	peak
7	17945.000	30.10	22.68	52.78	74.00	-21.22	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

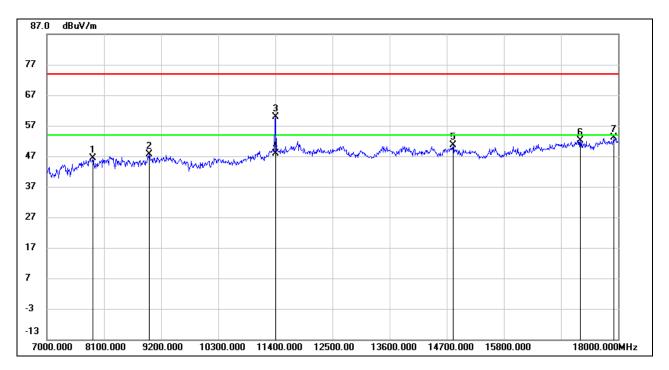


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9134.000	37.12	9.73	46.85	74.00	-27.15	peak
2	11158.000	43.87	13.56	57.43	74.00	-16.57	peak
3	11158.000	29.39	13.56	42.95	54.00	-11.05	AVG
4	11785.000	35.31	15.52	50.83	74.00	-23.17	peak
5	14777.000	33.45	16.76	50.21	74.00	-23.79	peak
6	17109.000	31.45	20.67	52.12	74.00	-21.88	peak
7	17659.000	31.16	21.63	52.79	74.00	-21.21	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



## HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

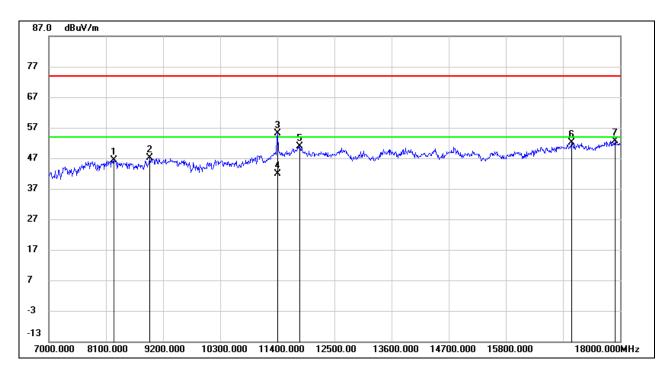


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7891.000	38.28	7.98	46.26	74.00	-27.74	peak
2	8969.000	37.24	10.31	47.55	74.00	-26.45	peak
3	11400.000	45.63	14.22	59.85	74.00	-14.15	peak
4	11400.000	33.76	14.22	47.98	54.00	-6.02	AVG
5	14821.000	33.71	16.81	50.52	74.00	-23.48	peak
6	17274.000	31.14	20.93	52.07	74.00	-21.93	peak
7	17923.000	30.52	22.69	53.21	74.00	-20.79	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



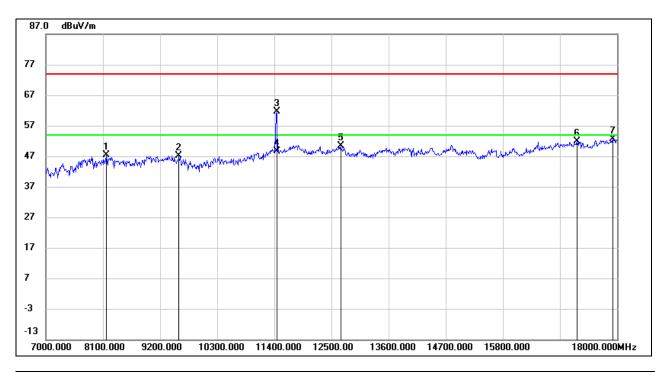
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8254.000	37.23	9.15	46.38	74.00	-27.62	peak
2	8947.000	37.03	10.07	47.10	74.00	-26.90	peak
3	11411.000	40.84	14.23	55.07	74.00	-18.93	peak
4	11411.000	27.72	14.23	41.95	54.00	-12.05	AVG
5	11829.000	35.28	15.57	50.85	74.00	-23.15	peak
6	17065.000	31.72	20.49	52.21	74.00	-21.79	peak
7	17901.000	29.97	22.69	52.66	74.00	-21.34	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



## **STRADDLE CHANNEL 144**

# HARMONICS AND SPURIOUS EMISSIONS (HORIZONTAL)

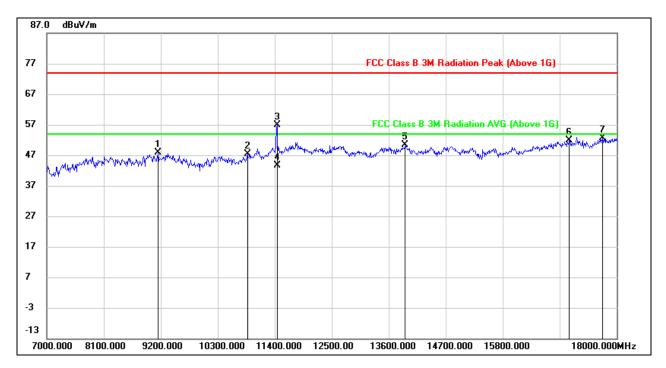


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8166.000	38.31	9.07	47.38	74.00	-26.62	peak
2	9563.000	36.68	10.45	47.13	74.00	-26.87	peak
3	11444.000	47.29	14.28	61.57	74.00	-12.43	peak
4	11444.000	34.37	14.28	48.65	54.00	-5.35	AVG
5	12676.000	34.92	15.42	50.34	74.00	-23.66	peak
6	17230.000	30.93	20.99	51.92	74.00	-22.08	peak
7	17923.000	29.84	22.69	52.53	74.00	-21.47	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# **HARMONICS AND SPURIOUS EMISSIONS (VERTICAL)**



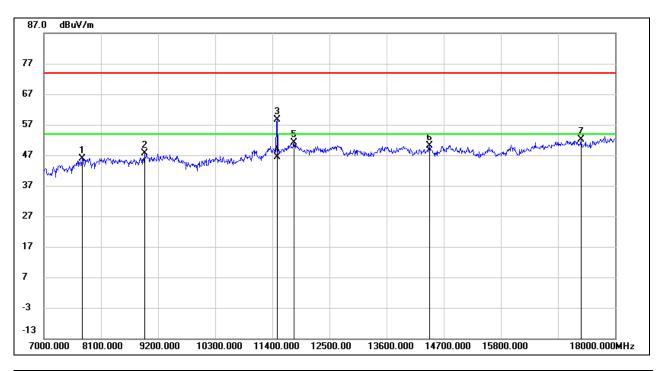
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9145.000	38.21	9.66	47.87	74.00	-26.13	peak
2	10872.000	34.39	12.89	47.28	74.00	-26.72	peak
3	11444.000	42.52	14.28	56.80	74.00	-17.20	peak
4	11444.000	29.37	14.28	43.65	54.00	-10.35	AVG
5	13919.000	33.49	16.89	50.38	74.00	-23.62	peak
6	17087.000	31.36	20.58	51.94	74.00	-22.06	peak
7	17725.000	30.54	22.13	52.67	74.00	-21.33	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# **UNII-3 BAND**

# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

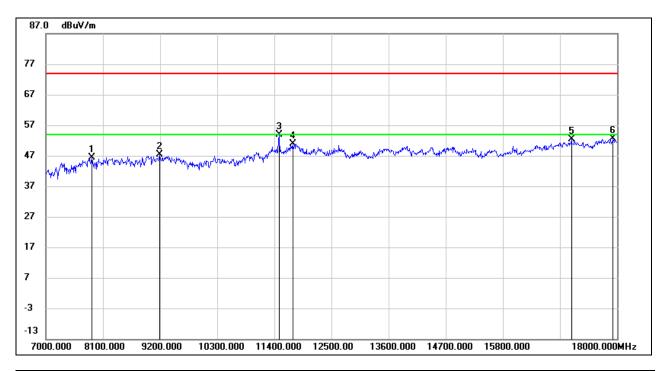


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7737.000	37.98	8.00	45.98	74.00	-28.02	peak
2	8936.000	37.71	9.96	47.67	74.00	-26.33	peak
3	11488.000	44.37	14.34	58.71	74.00	-15.29	peak
4	11488.000	31.94	14.34	46.28	54.00	-7.72	AVG
5	11818.000	35.59	15.58	51.17	74.00	-22.83	peak
6	14425.000	33.22	16.80	50.02	74.00	-23.98	peak
7	17340.000	31.42	20.82	52.24	74.00	-21.76	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

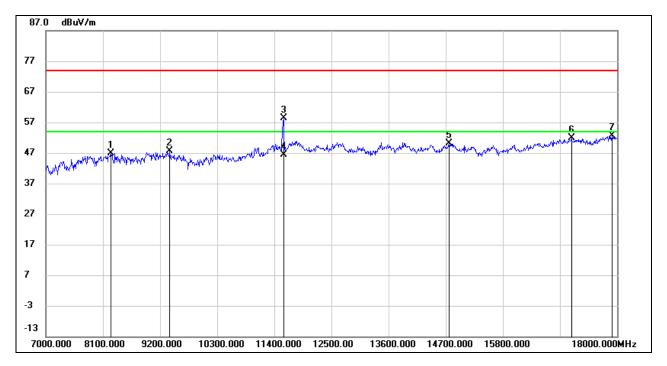


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	38.39	8.01	46.40	74.00	-27.60	peak
2	9189.000	38.05	9.36	47.41	74.00	-26.59	peak
3	11488.000	39.60	14.34	53.94	74.00	-20.06	peak
4	11752.000	35.59	15.35	50.94	74.00	-23.06	peak
5	17120.000	31.58	20.72	52.30	74.00	-21.70	peak
6	17923.000	29.86	22.69	52.55	74.00	-21.45	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



## HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

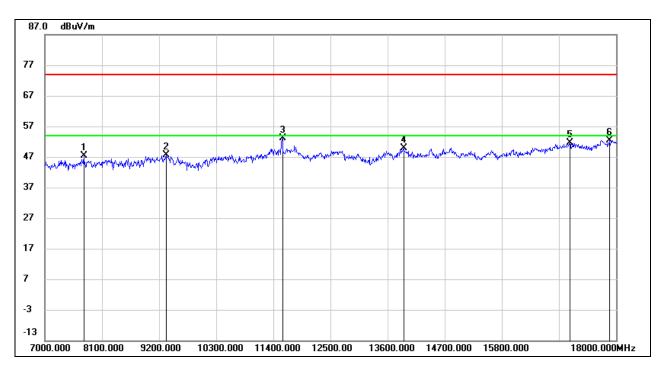


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8254.000	37.77	9.15	46.92	74.00	-27.08	peak
2	9387.000	37.38	10.24	47.62	74.00	-26.38	peak
3	11576.000	43.89	14.48	58.37	74.00	-15.63	peak
4	11576.000	31.87	14.48	46.35	54.00	-7.65	AVG
5	14766.000	33.28	16.74	50.02	74.00	-23.98	peak
6	17120.000	31.05	20.72	51.77	74.00	-22.23	peak
7	17901.000	29.84	22.69	52.53	74.00	-21.47	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

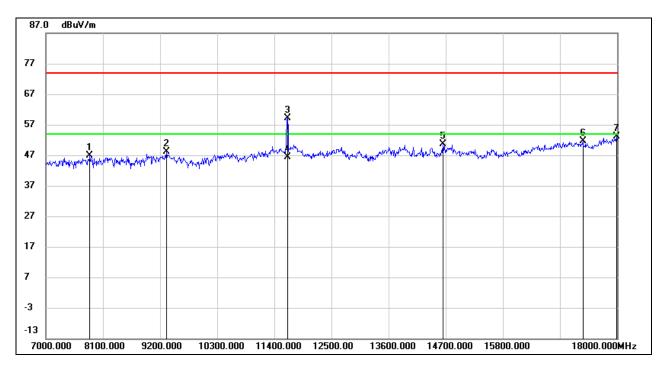


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7748.000	39.43	8.05	47.48	74.00	-26.52	peak
2	9332.000	37.59	9.97	47.56	74.00	-26.44	peak
3	11576.000	38.54	14.48	53.02	74.00	-20.98	peak
4	13908.000	32.98	16.90	49.88	74.00	-24.12	peak
5	17109.000	30.84	20.67	51.51	74.00	-22.49	peak
6	17868.000	29.64	22.71	52.35	74.00	-21.65	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



## HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

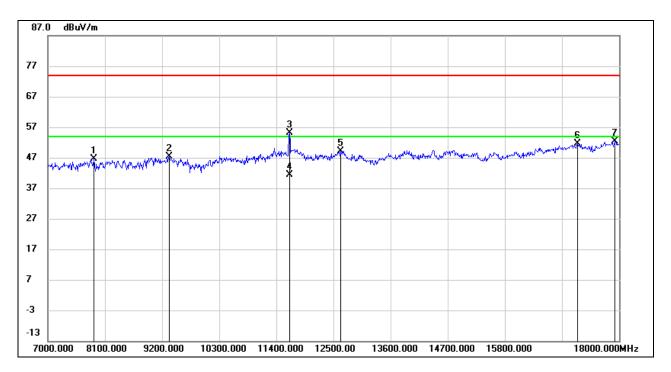


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7847.000	38.65	8.11	46.76	74.00	-27.24	peak
2	9321.000	38.32	9.91	48.23	74.00	-25.77	peak
3	11653.000	44.24	14.80	59.04	74.00	-14.96	peak
4	11653.000	31.52	14.80	46.32	54.00	-7.68	AVG
5	14645.000	34.00	16.54	50.54	74.00	-23.46	peak
6	17340.000	30.74	20.82	51.56	74.00	-22.44	peak
7	17989.000	30.34	22.67	53.01	74.00	-20.99	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7891.000	38.76	7.98	46.74	74.00	-27.26	peak
2	9343.000	37.44	10.02	47.46	74.00	-26.54	peak
3	11653.000	40.26	14.80	55.06	74.00	-18.94	peak
4	11653.000	26.55	14.80	41.35	54.00	-12.65	AVG
5	12643.000	33.77	15.36	49.13	74.00	-24.87	peak
6	17197.000	30.55	21.03	51.58	74.00	-22.42	peak
7	17923.000	29.61	22.69	52.30	74.00	-21.70	peak

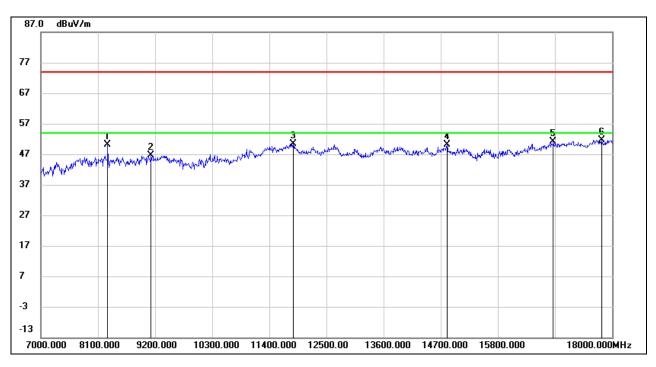
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# 8.3.2. 802.11n HT20 MIMO MODE

#### **UNII-1 BAND**

## HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

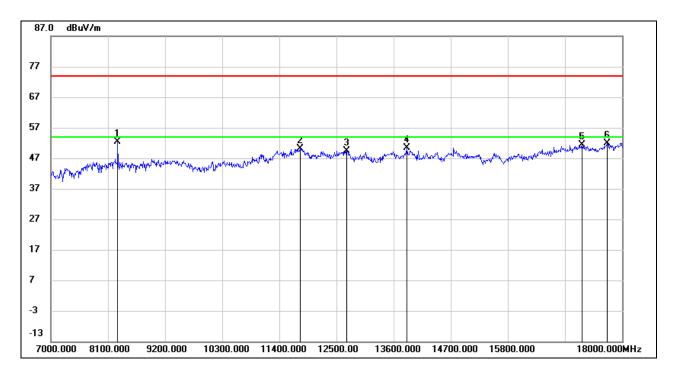


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8287.000	41.14	9.02	50.16	74.00	-23.84	peak
2	9123.000	36.84	9.81	46.65	74.00	-27.35	peak
3	11862.000	34.92	15.52	50.44	74.00	-23.56	peak
4	14821.000	33.37	16.81	50.18	74.00	-23.82	peak
5	16867.000	31.19	19.90	51.09	74.00	-22.91	peak
6	17802.000	28.89	22.72	51.61	74.00	-22.39	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

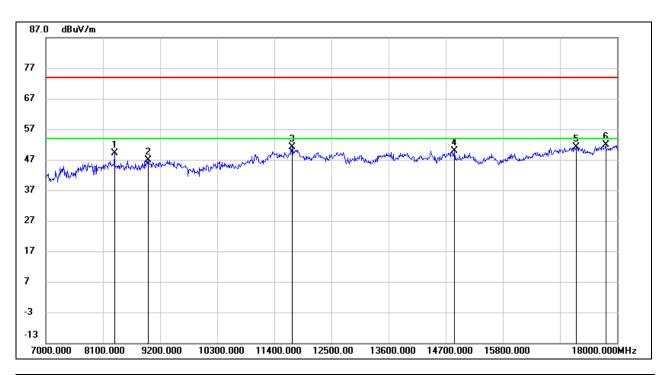


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8287.000	43.36	9.02	52.38	74.00	-21.62	peak
2	11807.000	34.54	15.61	50.15	74.00	-23.85	peak
3	12698.000	33.90	15.47	49.37	74.00	-24.63	peak
4	13853.000	33.49	16.93	50.42	74.00	-23.58	peak
5	17230.000	30.50	20.99	51.49	74.00	-22.51	peak
6	17714.000	29.86	22.04	51.90	74.00	-22.10	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

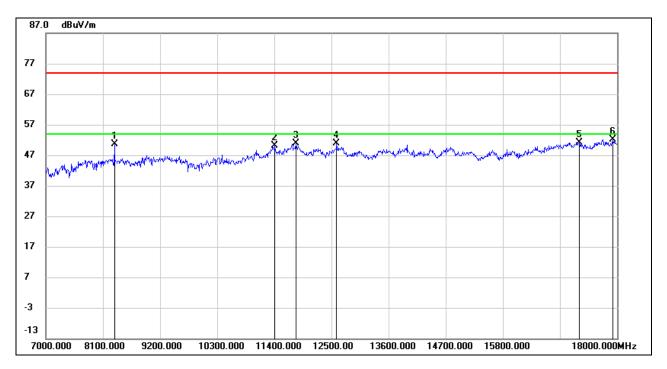


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8320.000	40.15	8.90	49.05	74.00	-24.95	peak
2	8969.000	36.59	10.31	46.90	74.00	-27.10	peak
3	11741.000	35.85	15.28	51.13	74.00	-22.87	peak
4	14865.000	33.05	16.83	49.88	74.00	-24.12	peak
5	17219.000	30.15	21.01	51.16	74.00	-22.84	peak
6	17780.000	29.20	22.57	51.77	74.00	-22.23	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

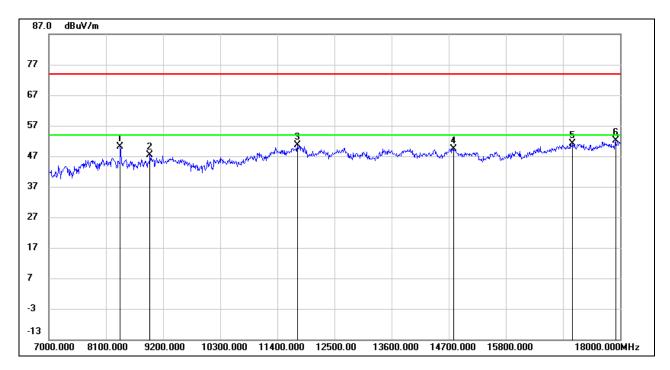


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8320.000	41.76	8.90	50.66	74.00	-23.34	peak
2	11411.000	35.79	14.23	50.02	74.00	-23.98	peak
3	11818.000	35.37	15.58	50.95	74.00	-23.05	peak
4	12599.000	35.55	15.29	50.84	74.00	-23.16	peak
5	17274.000	30.30	20.93	51.23	74.00	-22.77	peak
6	17923.000	29.40	22.69	52.09	74.00	-21.91	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



## HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

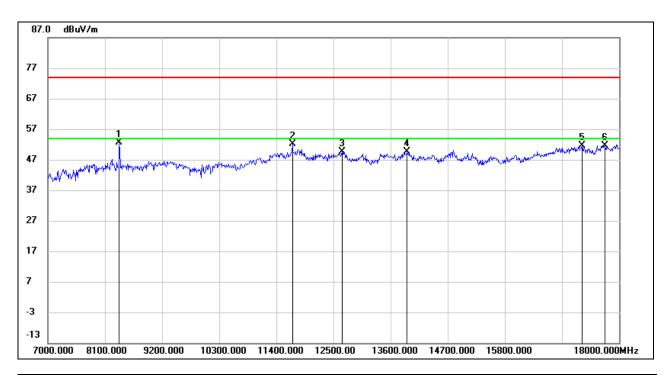


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8375.000	41.51	8.68	50.19	74.00	-23.81	peak
2	8947.000	37.35	10.07	47.42	74.00	-26.58	peak
3	11785.000	35.17	15.52	50.69	74.00	-23.31	peak
4	14799.000	32.60	16.80	49.40	74.00	-24.60	peak
5	17087.000	30.50	20.58	51.08	74.00	-22.92	peak
6	17912.000	29.36	22.69	52.05	74.00	-21.95	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



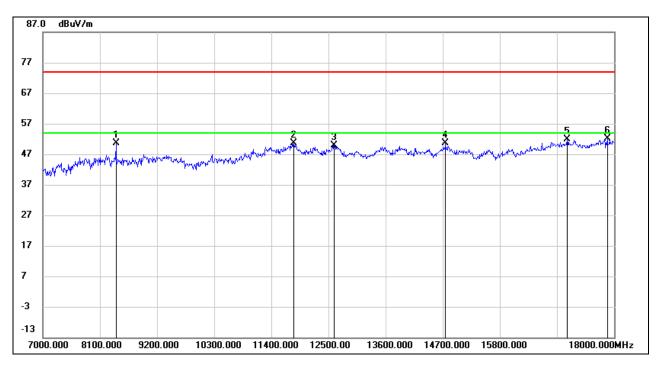
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8375.000	44.06	8.68	52.74	74.00	-21.26	peak
2	11708.000	37.00	15.11	52.11	74.00	-21.89	peak
3	12665.000	34.12	15.41	49.53	74.00	-24.47	peak
4	13919.000	32.71	16.89	49.60	74.00	-24.40	peak
5	17285.000	30.68	20.92	51.60	74.00	-22.40	peak
6	17725.000	29.52	22.13	51.65	74.00	-22.35	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



**UNII-2A BAND** 

# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

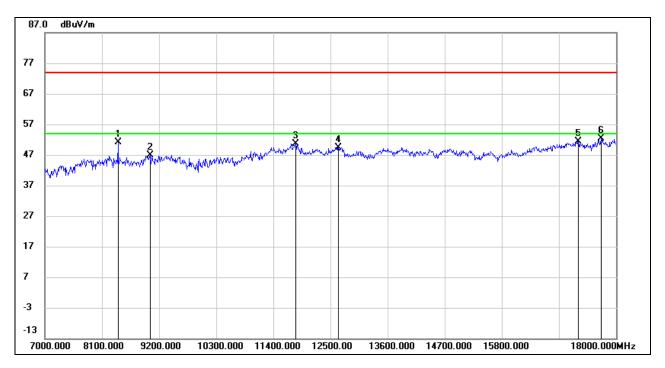


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8408.000	41.95	8.59	50.54	74.00	-23.46	peak
2	11829.000	34.97	15.57	50.54	74.00	-23.46	peak
3	12610.000	34.62	15.30	49.92	74.00	-24.08	peak
4	14755.000	33.83	16.72	50.55	74.00	-23.45	peak
5	17098.000	31.15	20.63	51.78	74.00	-22.22	peak
6	17868.000	29.35	22.71	52.06	74.00	-21.94	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

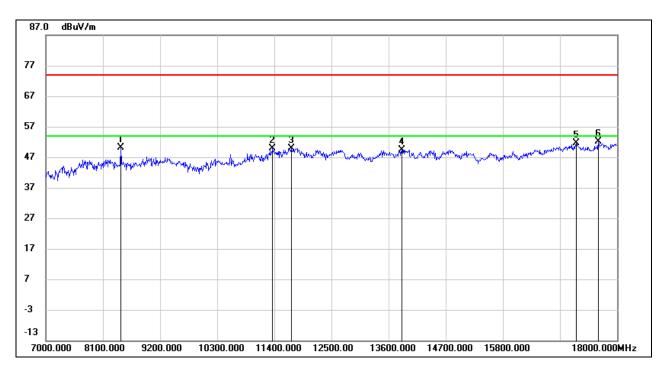


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8408.000	42.49	8.59	51.08	74.00	-22.92	peak
2	9024.000	36.50	10.47	46.97	74.00	-27.03	peak
3	11829.000	35.01	15.57	50.58	74.00	-23.42	peak
4	12654.000	34.12	15.38	49.50	74.00	-24.50	peak
5	17274.000	30.48	20.93	51.41	74.00	-22.59	peak
6	17714.000	30.45	22.04	52.49	74.00	-21.51	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



## HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

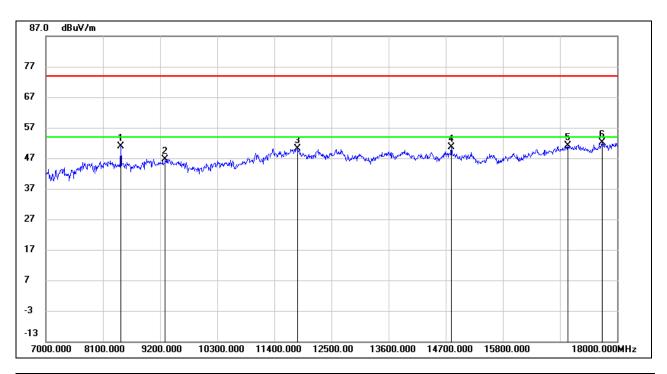


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8441.000	41.56	8.56	50.12	74.00	-23.88	peak
2	11367.000	35.66	14.11	49.77	74.00	-24.23	peak
3	11730.000	34.72	15.23	49.95	74.00	-24.05	peak
4	13853.000	32.54	16.93	49.47	74.00	-24.53	peak
5	17219.000	30.68	21.01	51.69	74.00	-22.31	peak
6	17637.000	30.63	21.46	52.09	74.00	-21.91	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

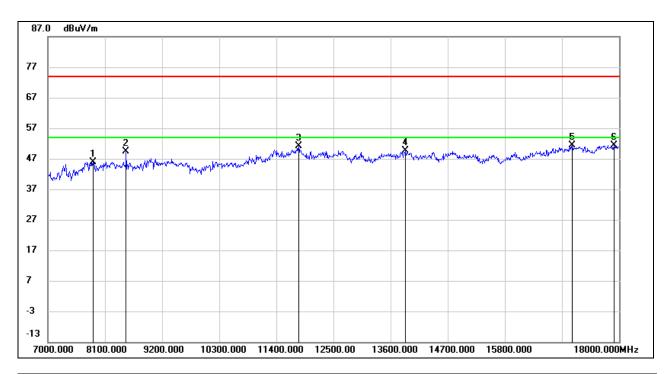


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8441.000	42.44	8.56	51.00	74.00	-23.00	peak
2	9299.000	36.95	9.80	46.75	74.00	-27.25	peak
3	11840.000	34.56	15.56	50.12	74.00	-23.88	peak
4	14810.000	33.72	16.80	50.52	74.00	-23.48	peak
5	17054.000	30.77	20.45	51.22	74.00	-22.78	peak
6	17714.000	30.10	22.04	52.14	74.00	-21.86	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

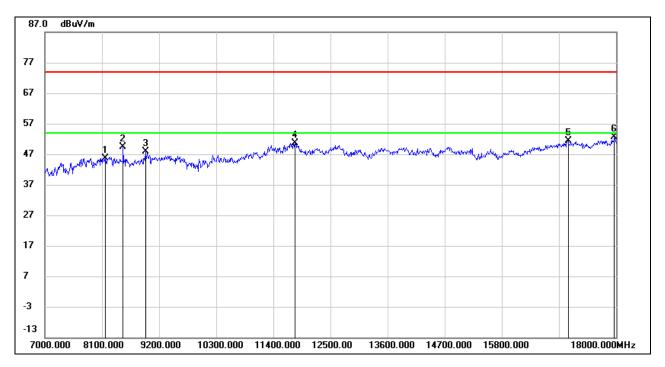


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7869.000	37.78	8.05	45.83	74.00	-28.17	peak
2	8507.000	40.93	8.54	49.47	74.00	-24.53	peak
3	11829.000	35.51	15.57	51.08	74.00	-22.92	peak
4	13886.000	32.62	16.91	49.53	74.00	-24.47	peak
5	17098.000	30.65	20.63	51.28	74.00	-22.72	peak
6	17901.000	28.76	22.69	51.45	74.00	-22.55	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



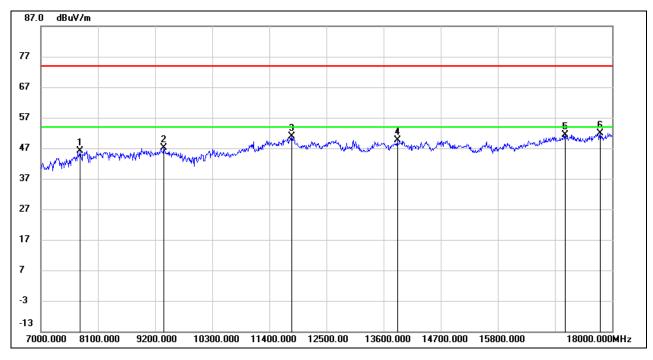
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8166.000	36.64	9.07	45.71	74.00	-28.29	peak
2	8507.000	40.82	8.54	49.36	74.00	-24.64	peak
3	8936.000	37.95	9.96	47.91	74.00	-26.09	peak
4	11818.000	35.07	15.58	50.65	74.00	-23.35	peak
5	17076.000	30.78	20.54	51.32	74.00	-22.68	peak
6	17967.000	29.86	22.67	52.53	74.00	-21.47	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



## **UNII-2C BAND**

# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

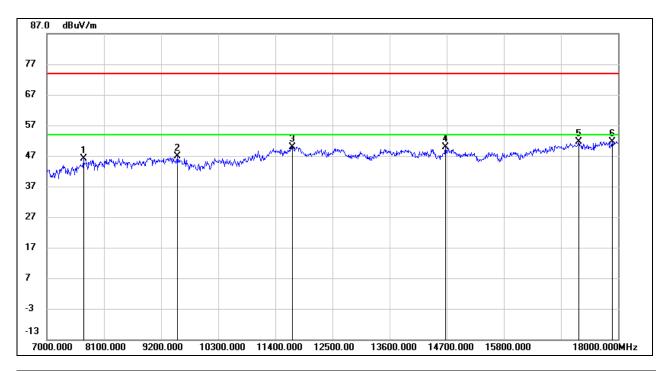


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7759.000	38.04	8.09	46.13	74.00	-27.87	peak
2	9365.000	37.00	10.13	47.13	74.00	-26.87	peak
3	11829.000	35.36	15.57	50.93	74.00	-23.07	peak
4	13864.000	32.71	16.92	49.63	74.00	-24.37	peak
5	17098.000	30.67	20.63	51.30	74.00	-22.70	peak
6	17769.000	29.42	22.48	51.90	74.00	-22.10	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



## HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

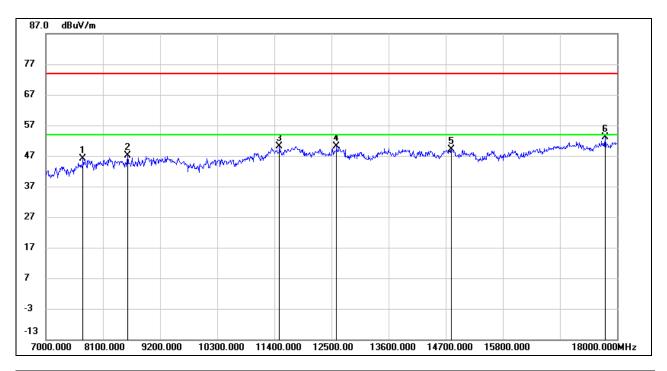


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7704.000	38.21	7.87	46.08	74.00	-27.92	peak
2	9508.000	36.47	10.45	46.92	74.00	-27.08	peak
3	11730.000	34.69	15.23	49.92	74.00	-24.08	peak
4	14678.000	33.27	16.59	49.86	74.00	-24.14	peak
5	17241.000	30.59	20.97	51.56	74.00	-22.44	peak
6	17890.000	29.04	22.70	51.74	74.00	-22.26	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

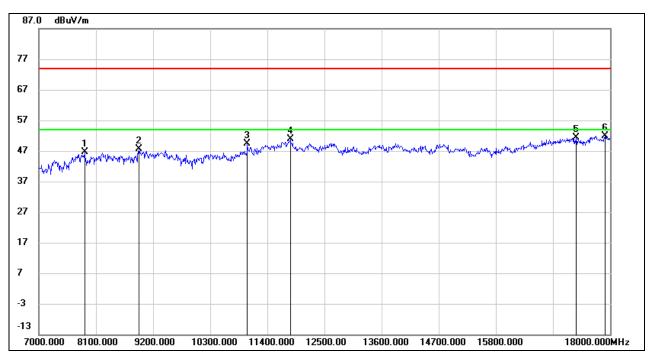


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7715.000	38.10	7.92	46.02	74.00	-27.98	peak
2	8573.000	38.47	8.55	47.02	74.00	-26.98	peak
3	11499.000	35.81	14.36	50.17	74.00	-23.83	peak
4	12599.000	34.84	15.29	50.13	74.00	-23.87	peak
5	14810.000	32.43	16.80	49.23	74.00	-24.77	peak
6	17769.000	30.64	22.48	53.12	74.00	-20.88	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



## HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

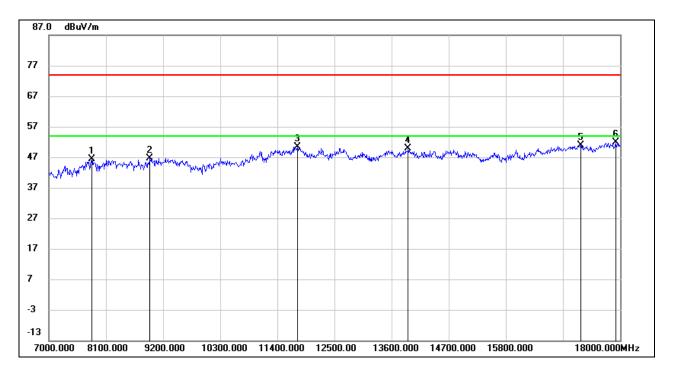


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	38.54	8.01	46.55	74.00	-27.45	peak
2	8925.000	37.83	9.84	47.67	74.00	-26.33	peak
3	11015.000	36.16	13.29	49.45	74.00	-24.55	peak
4	11840.000	35.34	15.56	50.90	74.00	-23.10	peak
5	17351.000	30.50	20.81	51.31	74.00	-22.69	peak
6	17901.000	29.27	22.69	51.96	74.00	-22.04	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



## HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

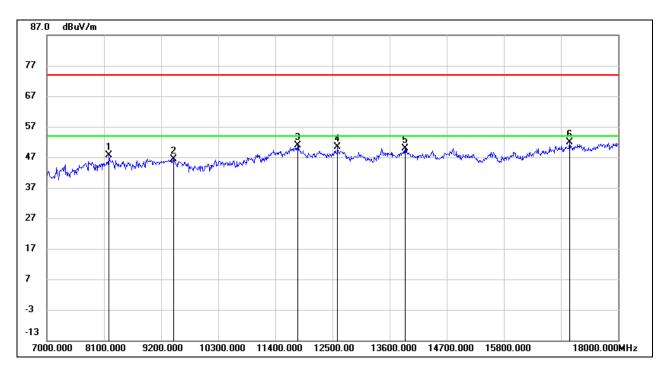


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7825.000	38.17	8.18	46.35	74.00	-27.65	peak
2	8947.000	36.59	10.07	46.66	74.00	-27.34	peak
3	11785.000	34.93	15.52	50.45	74.00	-23.55	peak
4	13919.000	32.90	16.89	49.79	74.00	-24.21	peak
5	17241.000	29.98	20.97	50.95	74.00	-23.05	peak
6	17923.000	29.16	22.69	51.85	74.00	-22.15	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



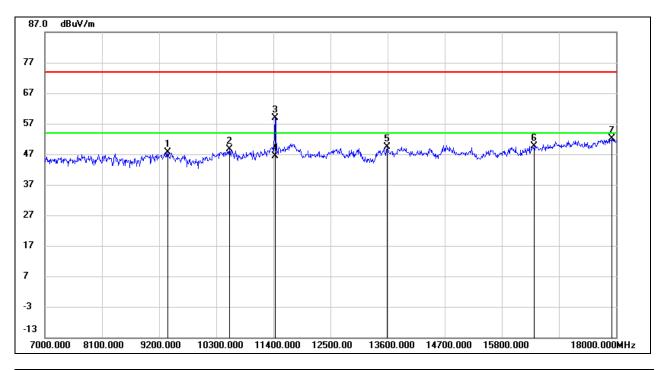
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8199.000	38.18	9.35	47.53	74.00	-26.47	peak
2	9442.000	36.05	10.37	46.42	74.00	-27.58	peak
3	11829.000	35.22	15.57	50.79	74.00	-23.21	peak
4	12599.000	35.01	15.29	50.30	74.00	-23.70	peak
5	13897.000	33.09	16.90	49.99	74.00	-24.01	peak
6	17065.000	31.27	20.49	51.76	74.00	-22.24	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### **STRADDLE CHANNEL 144**

## HARMONICS AND SPURIOUS EMISSIONS (HORIZONTAL)

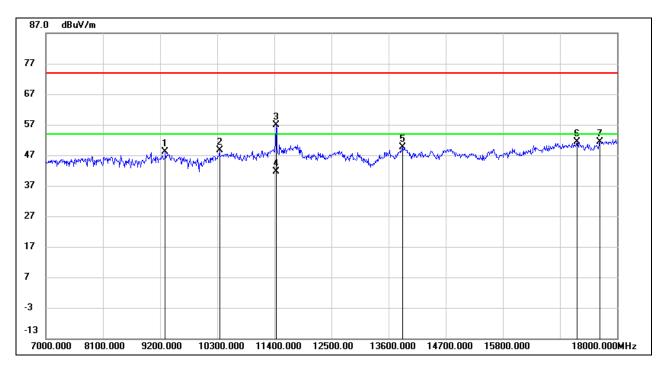


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9365.000	37.57	10.13	47.70	74.00	-26.30	peak
2	10553.000	36.55	12.17	48.72	74.00	-25.28	peak
3	11433.000	44.56	14.27	58.83	74.00	-15.17	peak
4	11433.000	32.15	14.27	46.42	54.00	-7.58	AVG
5	13589.000	32.90	16.42	49.32	74.00	-24.68	peak
6	16416.000	30.95	18.77	49.72	74.00	-24.28	peak
7	17912.000	29.45	22.69	52.14	74.00	-21.86	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



## HARMONICS AND SPURIOUS EMISSIONS (VERTICAL)



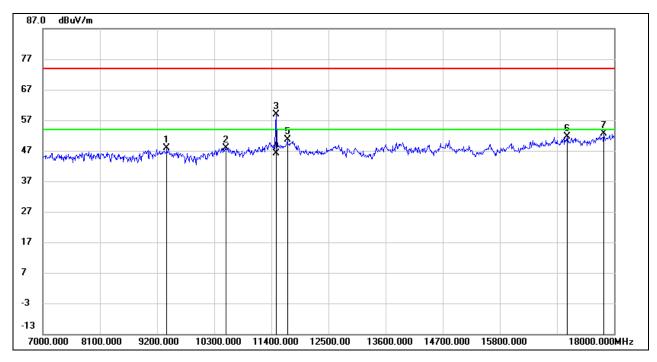
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9299.000	38.39	9.80	48.19	74.00	-25.81	peak
2	10344.000	37.38	11.25	48.63	74.00	-25.37	peak
3	11433.000	42.55	14.27	56.82	74.00	-17.18	peak
4	11433.000	27.38	14.27	41.65	54.00	-12.35	AVG
5	13875.000	32.77	16.92	49.69	74.00	-24.31	peak
6	17230.000	30.32	20.99	51.31	74.00	-22.69	peak
7	17670.000	29.70	21.70	51.40	74.00	-22.60	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# **UNII-3 BAND**

# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

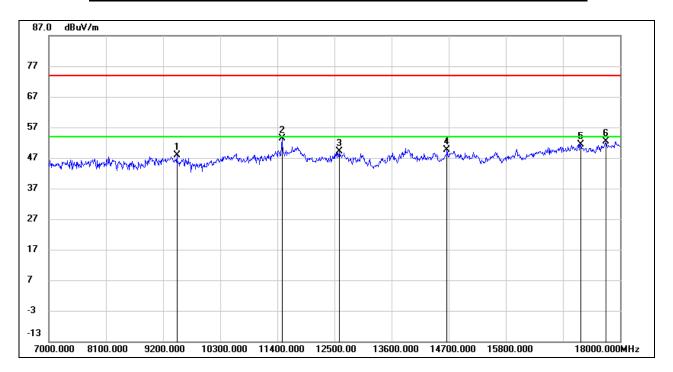


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9387.000	37.54	10.24	47.78	74.00	-26.22	peak
2	10520.000	35.95	12.04	47.99	74.00	-26.01	peak
3	11488.000	44.50	14.34	58.84	74.00	-15.16	peak
4	11488.000	31.81	14.34	46.15	54.00	-7.85	AVG
5	11708.000	35.41	15.11	50.52	74.00	-23.48	peak
6	17098.000	31.08	20.63	51.71	74.00	-22.29	peak
7	17802.000	29.89	22.72	52.61	74.00	-21.39	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

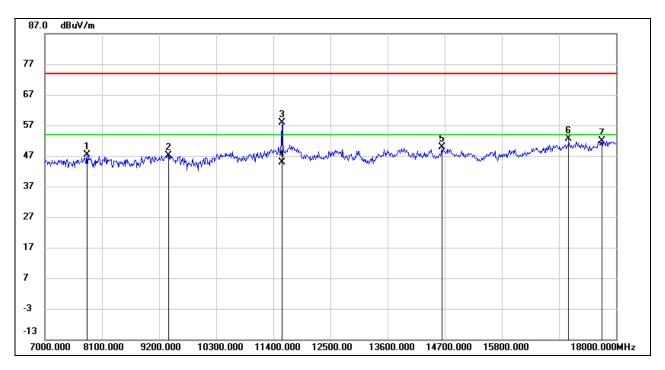


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9464.000	37.43	10.40	47.83	74.00	-26.17	peak
2	11488.000	39.02	14.34	53.36	74.00	-20.64	peak
3	12599.000	33.92	15.29	49.21	74.00	-24.79	peak
4	14667.000	33.05	16.57	49.62	74.00	-24.38	peak
5	17241.000	30.30	20.97	51.27	74.00	-22.73	peak
6	17725.000	30.32	22.13	52.45	74.00	-21.55	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

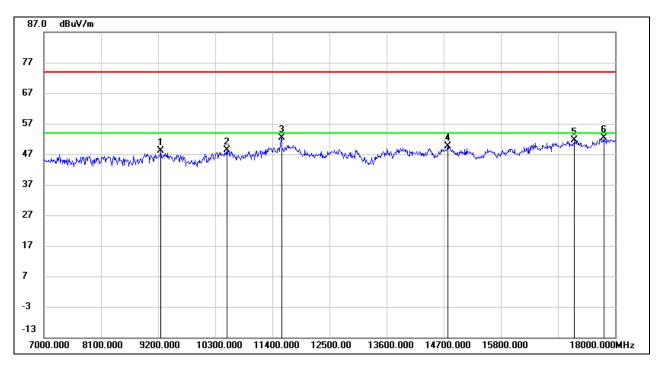


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7814.000	39.06	8.21	47.27	74.00	-26.73	peak
2	9376.000	36.94	10.19	47.13	74.00	-26.87	peak
3	11565.000	43.40	14.45	57.85	74.00	-16.15	peak
4	11565.000	30.31	14.45	44.76	54.00	-9.24	AVG
5	14645.000	33.32	16.54	49.86	74.00	-24.14	peak
6	17087.000	31.93	20.58	52.51	74.00	-21.49	peak
7	17725.000	29.87	22.13	52.00	74.00	-22.00	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

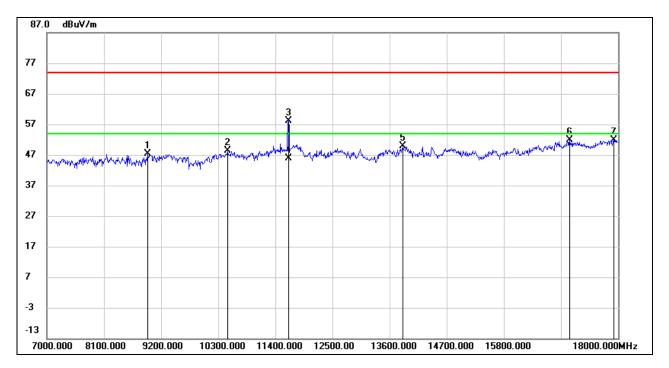


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9255.000	38.69	9.56	48.25	74.00	-25.75	peak
2	10520.000	36.45	12.04	48.49	74.00	-25.51	peak
3	11576.000	37.91	14.48	52.39	74.00	-21.61	peak
4	14777.000	32.96	16.76	49.72	74.00	-24.28	peak
5	17219.000	30.56	21.01	51.57	74.00	-22.43	peak
6	17780.000	29.81	22.57	52.38	74.00	-21.62	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

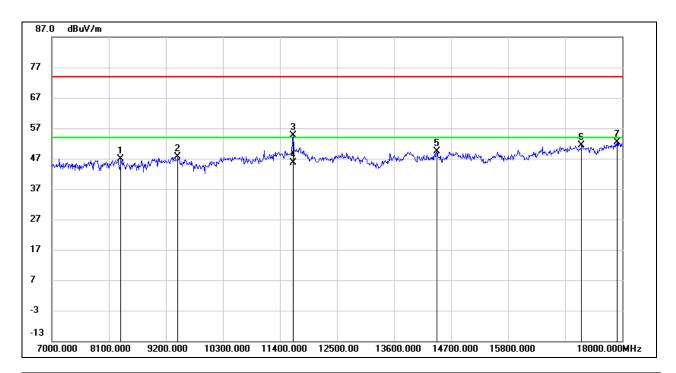


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8936.000	37.51	9.96	47.47	74.00	-26.53	peak
2	10476.000	36.59	11.83	48.42	74.00	-25.58	peak
3	11653.000	43.45	14.80	58.25	74.00	-15.75	peak
4	11653.000	30.96	14.80	45.76	54.00	-8.24	AVG
5	13853.000	32.91	16.93	49.84	74.00	-24.16	peak
6	17065.000	31.31	20.49	51.80	74.00	-22.20	peak
7	17912.000	29.29	22.69	51.98	74.00	-22.02	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8331.000	37.98	8.85	46.83	74.00	-27.17	peak
2	9431.000	37.29	10.35	47.64	74.00	-26.36	peak
3	11653.000	39.73	14.80	54.53	74.00	-19.47	peak
4	11653.000	30.95	14.80	45.75	54.00	-8.25	AVG
5	14425.000	32.57	16.80	49.37	74.00	-24.63	peak
6	17219.000	30.41	21.01	51.42	74.00	-22.58	peak
7	17901.000	29.81	22.69	52.50	74.00	-21.50	peak

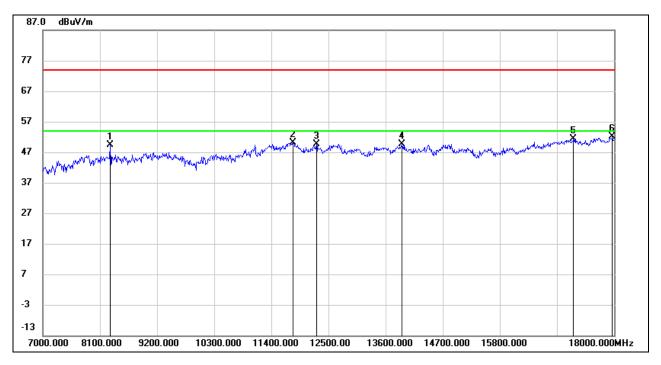
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### 8.3.3. 802.11n HT40 MIMO MODE

#### **UNII-1 BAND**

# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

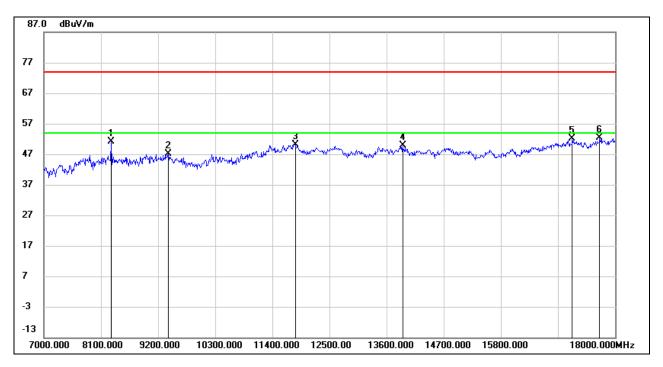


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8298.000	40.30	8.98	49.28	74.00	-24.72	peak
2	11818.000	34.60	15.58	50.18	74.00	-23.82	peak
3	12269.000	34.48	15.24	49.72	74.00	-24.28	peak
4	13919.000	32.62	16.89	49.51	74.00	-24.49	peak
5	17219.000	30.28	21.01	51.29	74.00	-22.71	peak
6	17967.000	29.56	22.67	52.23	74.00	-21.77	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

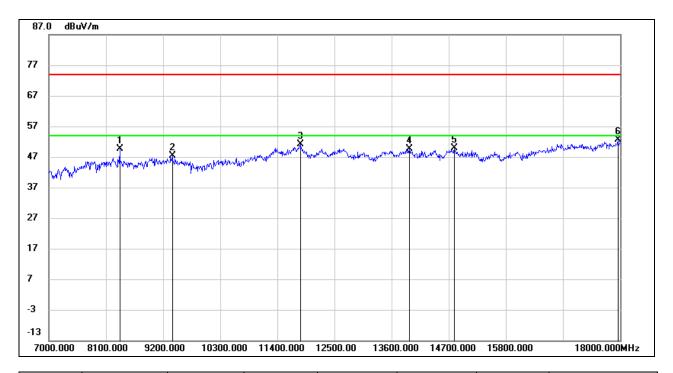


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8298.000	42.22	8.98	51.20	74.00	-22.80	peak
2	9398.000	36.80	10.30	47.10	74.00	-26.90	peak
3	11840.000	34.59	15.56	50.15	74.00	-23.85	peak
4	13908.000	32.89	16.90	49.79	74.00	-24.21	peak
5	17175.000	31.08	20.94	52.02	74.00	-21.98	peak
6	17703.000	30.43	21.96	52.39	74.00	-21.61	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

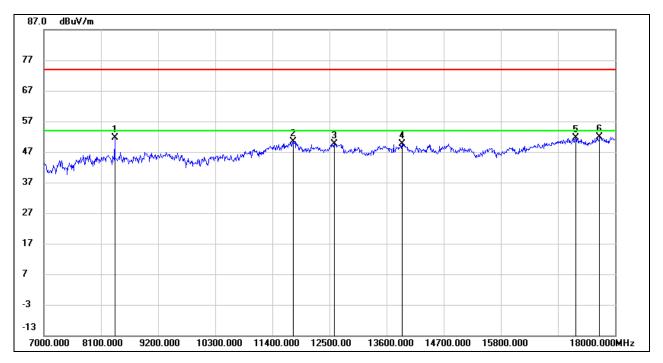


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8364.000	40.95	8.73	49.68	74.00	-24.32	peak
2	9376.000	37.15	10.19	47.34	74.00	-26.66	peak
3	11840.000	35.57	15.56	51.13	74.00	-22.87	peak
4	13941.000	32.74	16.88	49.62	74.00	-24.38	peak
5	14810.000	32.97	16.80	49.77	74.00	-24.23	peak
6	17956.000	29.99	22.68	52.67	74.00	-21.33	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



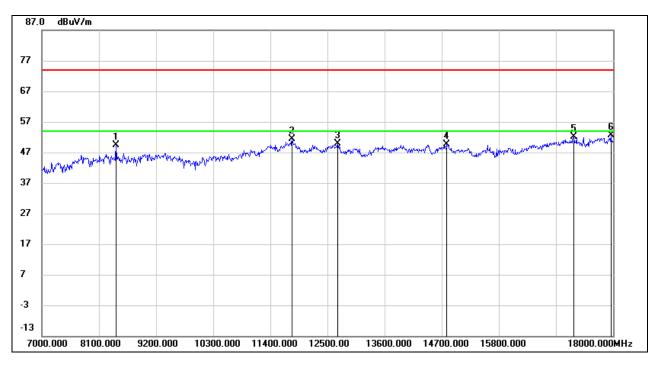
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8364.000	42.95	8.73	51.68	74.00	-22.32	peak
2	11796.000	34.69	15.59	50.28	74.00	-23.72	peak
3	12588.000	34.42	15.29	49.71	74.00	-24.29	peak
4	13897.000	32.72	16.90	49.62	74.00	-24.38	peak
5	17241.000	30.65	20.97	51.62	74.00	-22.38	peak
6	17703.000	29.92	21.96	51.88	74.00	-22.12	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### **UNII-2A BAND**

## HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

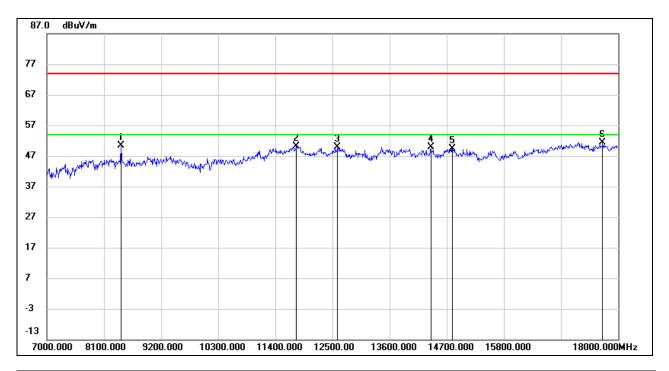


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8430.000	40.90	8.57	49.47	74.00	-24.53	peak
2	11818.000	35.71	15.58	51.29	74.00	-22.71	peak
3	12698.000	34.46	15.47	49.93	74.00	-24.07	peak
4	14799.000	32.75	16.80	49.55	74.00	-24.45	peak
5	17241.000	31.09	20.97	52.06	74.00	-21.94	peak
6	17956.000	30.02	22.68	52.70	74.00	-21.30	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

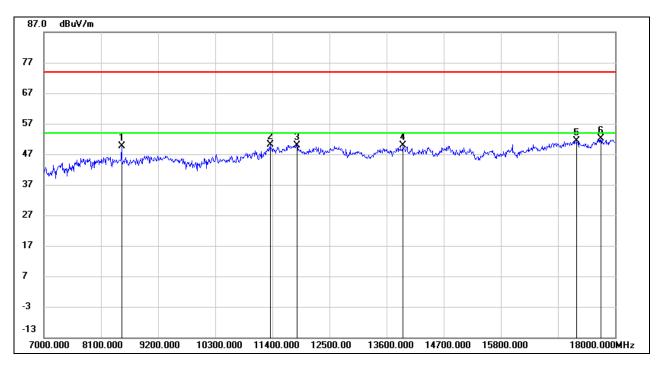


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8430.000	41.76	8.57	50.33	74.00	-23.67	peak
2	11807.000	34.52	15.61	50.13	74.00	-23.87	peak
3	12599.000	34.65	15.29	49.94	74.00	-24.06	peak
4	14392.000	33.15	16.84	49.99	74.00	-24.01	peak
5	14810.000	32.66	16.80	49.46	74.00	-24.54	peak
6	17703.000	29.38	21.96	51.34	74.00	-22.66	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

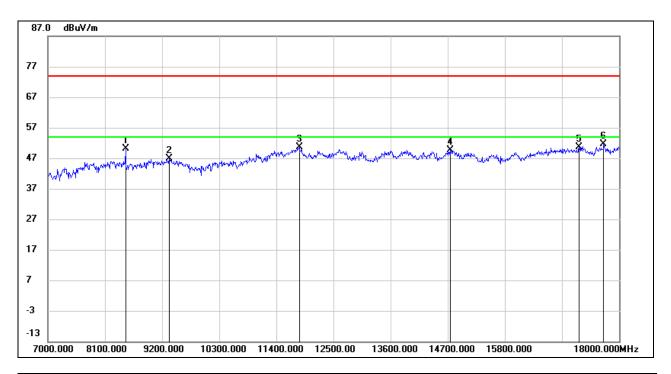


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8496.000	41.02	8.53	49.55	74.00	-24.45	peak
2	11356.000	35.93	14.09	50.02	74.00	-23.98	peak
3	11873.000	34.39	15.50	49.89	74.00	-24.11	peak
4	13919.000	32.90	16.89	49.79	74.00	-24.21	peak
5	17263.000	30.48	20.95	51.43	74.00	-22.57	peak
6	17725.000	29.94	22.13	52.07	74.00	-21.93	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



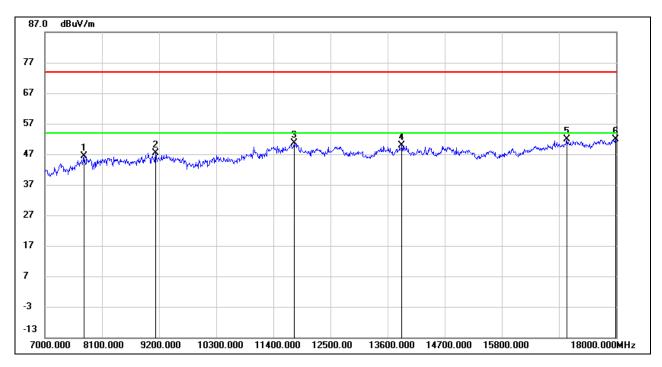
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8496.000	41.70	8.53	50.23	74.00	-23.77	peak
2	9332.000	37.00	9.97	46.97	74.00	-27.03	peak
3	11840.000	34.95	15.56	50.51	74.00	-23.49	peak
4	14744.000	32.97	16.70	49.67	74.00	-24.33	peak
5	17230.000	29.62	20.99	50.61	74.00	-23.39	peak
6	17703.000	29.56	21.96	51.52	74.00	-22.48	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### **UNII-2C BAND**

## HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

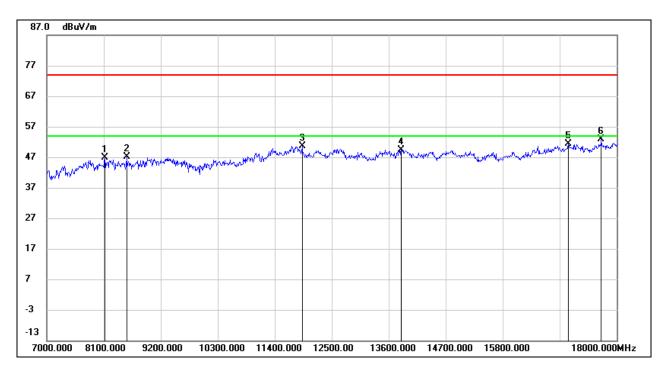


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7748.000	38.30	8.05	46.35	74.00	-27.65	peak
2	9134.000	37.64	9.73	47.37	74.00	-26.63	peak
3	11807.000	34.90	15.61	50.51	74.00	-23.49	peak
4	13875.000	33.00	16.92	49.92	74.00	-24.08	peak
5	17054.000	31.35	20.45	51.80	74.00	-22.20	peak
6	17989.000	29.09	22.67	51.76	74.00	-22.24	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8122.000	38.06	8.70	46.76	74.00	-27.24	peak
2	8540.000	38.70	8.53	47.23	74.00	-26.77	peak
3	11928.000	35.16	15.42	50.58	74.00	-23.42	peak
4	13842.000	32.49	16.94	49.43	74.00	-24.57	peak
5	17065.000	30.95	20.49	51.44	74.00	-22.56	peak
6	17703.000	30.86	21.96	52.82	74.00	-21.18	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.