



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

#### **CERTIFICATION TEST REPORT**

For

WIFI+BT Module

**MODEL NUMBER: DCT2RM2501** 

FCC ID: 2AC23-DCT2R

IC: 12290A-DCT2R

REPORT NUMBER: 4790335846-1

ISSUE DATE: April 18, 2022

Prepared for

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# Revision History

Rev.	Issue Date	Revisions	Revised By
V0	04/18/2022	Initial Issue	

Note: This is a report base on 4790076800.2-4 which is issued by UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch on September 17, 2021. The module DCT2RM2501 had already applied for single module approval and the FCC ID is 2AC23-DCT2R and IC is 12290A-DCT2R. 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 6.6	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.



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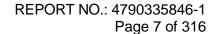
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# 1. ATTESTATION OF TEST RESULTS

**Applicant Information** 

Company Name: Hui Zhou Gaoshengda Technology Co.,LTD

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

Guangdong, China

**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** 

Stephen Guo

Laboratory Manager

EUT Name: WIFI+BT Module
Model: DCT2RM2501
Sample Received Date: August 23, 2021

Sample Status: Normal Sample ID: 4165024

Date of Tested: August 24, 2021 ~ April 15, 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:  Danny Guary	Checked By:
Denny Huang Project Engineer	Shawn Wen Laboratory Leader
Approved By:	
Lephenbuo	



# 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, RSS-GEN Issue 5, RSS-247 Issue 2, KDB414788 D01 Radiated Test Site v01, 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.

# 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)
Note: This was entainty assessment on a was also do as sent	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	DCT2RM2501		
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)		
	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)
а		15.20	19.50
n HT20	5150 ~ 5250	11.94	16.24
n HT40	3130 ~ 3230	15.22	19.52
ac VHT80		17.19	21.49

# **UNII-2A BAND**

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
а		14.93
n HT20 n HT40	5250 ~ 5350	16.79
		16.82
ac VHT80		16.66

# **UNII-2C BAND**

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
а		15.40
n HT20	5470 ~ 5725	17.04
n HT40	3470 ~ 3723	17.17
ac VHT80		17.19

# **UNII-3 BAND**

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
а		15.08
n HT20	5725 ~ 5850	16.90
n HT40	3723 ~ 3630	17.15
ac VHT80		17.13



# 5.3. CHANNEL LIST

UNII-1		UNII-1		UNII-1	
(For Bandwidth=20MHz)		(For Bandwidth=40MHz)		(For Bandwidth=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 Bandwi	dth=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				



5.4. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna No.	Frequency Band	Antenna Type	Max Antenna Gain (dBi)
1	5180 ~ 5825 MHz	PCB	4.3
2	5180 ~ 5825 MHz	PCB	4.3

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 = 4.3 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  $N_{ANT} \le 4$ 

For power spectral density (PSD) measurements:

Directional gain= G<sub>ANT</sub> + Array Gain = 7.3 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
а	⊠1TX, 1RX	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

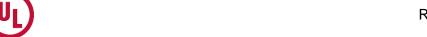
Mode	Rate	Channel	Soft set value	
Mode	Nate	Onaninei	ANT 1	ANT 2
		36	1F	1F
11a	6M	40	1F	1F
		48	1F	1F
	MCS0	36	15	15
11n HT20		40	15	15
		48	1F	1F
11n HT40	MCS0	38	1B	1B
		46	1B	1B

### UNII-2A

Mode	Rate	Channel	Soft se	Soft set value	
iviode	Rale	Channel	ANT 1	ANT 2	
		52	1F	1F	
11a	6M	60	1F	1F	
		64	1F	1F	
	MCS0	52	1F	1F	
11n HT20		60	1F	1F	
		64	1F	1F	
11n HT40	MCS0	54	1F	1F	
1111 1140		62	1F	1F	
11ac VHT80	MCS0	58	1F	1F	

# UNII-2C

Mode	Rate	Channel	Soft set value	
Mode	Nale	Charlie	ANT 1	ANT 2
		100	1F	1F
11a	6M	120	1F	1F
		140	1F	1F
	MCS0	100	1F	1F
11n HT20		120	1F	1F
		140	1F	1F
	MCS0	102	1F	1F
11n HT40		118	1F	1F
		134	1F	1F
11ac VHT80	MCS0	106	1F	1F
TIAC VIIIOU	IVICSU	122	1F	1F



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# UNII-3

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



#### 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 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 0 and antenna 1 respectively.

Antenna 1 and Antenna 2 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	/

# **I/O CABLES**

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

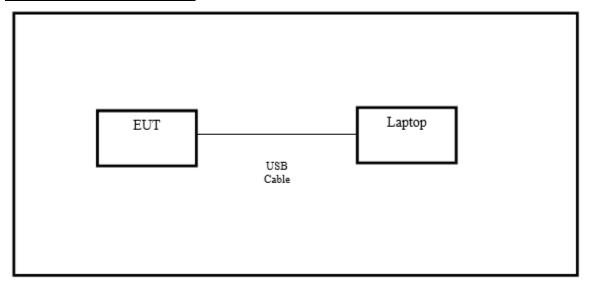
# **ACCESSORIES**

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

#### **TEST SETUP**

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

# **SETUP DIAGRAM FOR TESTS**



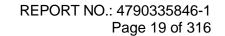


# 6. MEASURING INSTRUMENT AND SOFTWARE USED

Last time calibrate information:

	0 1 / 15 : :									
Conducted Emissions										
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date					
EMI Test Receiver	R&S	ESR3	101961	Nov. 12, 2020	Nov. 11, 2021					
Two-Line V- Network	R&S	ENV216	101983	Nov. 12, 2020	Nov. 11, 2021					
		So	ftware							
	Description		Manufacturer	Name	Version					
Test Software	for Conducted	Emissions	Farad	EZ-EMC	Ver. UL-3A1					

	Radiated Emissions									
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date					
MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Nov. 12, 2020	Nov. 11, 2021					
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	Aug. 2, 2021	Aug. 1, 2023					
Preamplifier	HP	8447D	2944A09099	Nov. 12, 2020	Nov. 11, 2021					
EMI Measurement Receiver	R&S	ESR26	101377	Nov. 12, 2020	Nov. 11, 2021					
Horn Antenna	TDK	HRN-0118	130939	Sept. 17, 2018	Sept. 17, 2021					
Preamplifier	TDK	PA-02-0118	TRS-305- 00067	Nov. 20, 2020	Nov. 19, 2021					
Horn Antenna	Schwarzbeck	BBHA9170	#691	Jul. 20, 2021	Jul. 20, 2023					
Preamplifier	TDK	PA-02-2	TRS-307- 00003	Nov. 12, 2020	Nov. 11, 2021					
Preamplifier	TDK	PA-02-3	TRS-308- 00002	Nov. 12, 2020	Nov. 11, 2021					
Loop antenna	Schwarzbeck	1519B	80000	Jan.17, 2019	Jan.17,2022					
Preamplifier	TDK	PA-02-001- 3000	TRS-302- 00050	Nov. 12, 2020	Nov. 11, 2021					
Preamplifier	Mini-Circuits	ZX60-83LN- S+	SUP01201941	Nov. 20, 2020	Nov. 19, 2021					
Highpass Filter	Wainwright	WHKX10- 5850-6500- 1800-40SS	4	Nov. 12, 2020	Nov. 11, 2021					
Band Reject Filter	Wainwright	WRCJV12- 5695-5725- 5850-5880- 40SS	4	Nov. 12, 2020	Nov. 11, 2021					
Band Reject Filter	Wainwright	WRCJV20- 5120-5150-	2	Nov. 12, 2020	Nov. 11, 2021					





		5350-5380- 60SS							
Band Reject Filter	Wainwright	WRCJV20- 5440-5470- 5725-5755- 60SS	1	Nov. 12, 2020	Nov. 11, 2021				
	Software								
Description			Manufacturer	Name	Version				
Test Software for Radiated Emissions			Farad	EZ-EMC	Ver. UL-3A1				

Tonsend RF Test System										
Equipment	Manufacturer	Мо	odel No.	Serial No.	Last	Cal.	Due. Date			
Wideband Radio Communication Tester	R&S	CI	MW500	155523	Nov.20	0,2020	Nov.19,2021			
PXA Signal Analyzer	Keysight	Ν	19030A	MY55410512	Nov.20	0,2020	Nov.19,2021			
MXG Vector Signal Generator	Keysight	Keysight N		MY56200284	Nov.20	0,2020	Nov.19,2021			
MXG Vector Signal Generator	Keysight	Ν	5172B	MY56200301	Nov.20	0,2020	Nov.19,2021			
DC power supply	Keysight	Е	3642A	MY55159130	Nov.2	4,2020	Nov.23,2021			
Temperature & Humidity Chamber	SANMOOD	SG	-80-CC-2	2088	Nov.20	0,2020	Nov.19,2021			
Software										
Description	Manufactu	ırer Name		Name		,	Version			
Tonsend SRD Test System Tonsend		t	JS1120	-3 RF Test Sys	stem	2.6	6.77.0518			

	Other Instruments										
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.						
Dual Channel Power Meter	Keysight	N1912A	MY55416024	Nov. 20, 2020	Nov. 19, 2021						
Power Sensor	Keysight	USB Wideband Power Sensor	MY5100022	Nov. 20, 2020	Nov. 19, 2021						



This time calibrate information:

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

Radiated Emissions									
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date				
MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Oct.30, 2021	Oct.29, 2022				
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130959	Aug.02, 2021	Aug.01, 2024				
Preamplifier	HP	8447D	2944A09099	Oct.30, 2021	Oct.29, 2022				
EMI Measurement Receiver	R&S	ESR26	101377	Oct.30, 2021	Oct.29, 2022				
Horn Antenna	TDK	HRN-0118	130940	July 20, 2021	July 19, 2024				
Preamplifier	TDK	PA-02-0118	TRS-305- 00067	Oct.30, 2021	Oct.29, 2022				
Horn Antenna	Schwarzbeck	BBHA9170	697	July 20, 2021	July 19, 2024				
Preamplifier	TDK	PA-02-2	TRS-307- 00003	Oct.31, 2021	Oct.30, 2022				
Preamplifier	TDK	PA-02-3	TRS-308- 00002	Oct.31, 2021	Oct.30, 2022				
Loop antenna	Schwarzbeck	1519B	80000	Dec.14, 2021	Dec.13, 2024				
Preamplifier	TDK	PA-02-001- 3000	TRS-302- 00050	Oct.31, 2021	Oct.30, 2022				
Preamplifier	Mini-Circuits	ZX60-83LN- S+	SUP01201941	Oct.31, 2021	Oct.30, 2022				
High Pass Filter	Wi	WHKX10- 2700-3000- 18000-40SS	23	Oct.31, 2021	Oct.30, 2022				
Highpass Filter	Wainwright	WHKX10- 5850-6500- 1800-40SS	4	Oct.31, 2021	Oct.30, 2022				
Band Reject Filter	Wainwright	WRCJV12- 5695-5725- 5850-5880- 40SS	4	Oct.31, 2021	Oct.30, 2022				



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

Tonsend RF Test System								
Equipment	Mar	nufacturer	l	del No.	Serial No.	Last C	al.	Due. Date
Wideband Radio Communication Tester		R&S	CM	IW500	155523	Oct.30, 2	2021	Oct.29, 2022
Wireless Connectivity Tester		R&S	CM	IW270	1201.0002N75- 102	Sep.29, 2	2021	Sep.28, 2022
PXA Signal Analyzer	K	eysight	NS	030A	MY55410512	Oct.30, 2	2021	Oct.29, 2022
MXG Vector Signal Generator	K	eysight	N5	182B	MY56200284	Oct.30, 2	2021	Oct.29, 2022
MXG Vector Signal Generator	K	eysight	N5	172B	MY56200301	Oct.30, 2	2021	Oct.29, 2022
DC power supply	K	Keysight		642A	MY55159130	Oct.30, 2	2021	Oct.29, 2022
Temperature & Humidity Chamber	SA	NMOOD	SG-8	30-CC-2	2088	Nov.20,2	2020	Nov.19,2022
Software								
Description		Manufacturer			Name			Version
Tonsend SRD Test Sys	tem	Tonser	nd	d JS1120-3 RF Test Sy		ystem	2	.6.77.0518

	Other Instruments				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Dual Channel Power Meter	Keysight	N1912A	MY55416024	Oct.30, 2021	Oct.29, 2022
Power Sensor	Keysight	USB Wideband Power Sensor	MY5100022	Oct.30, 2021	Oct.29, 2022



7. ANTENNA PORT TEST RESULTS

# 7.1. ON TIME AND DUTY CYCLE

## **LIMITS**

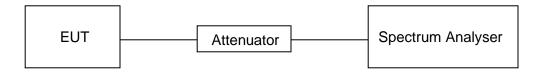
None; for reporting purposes only.

#### **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	26.0 °C	Relative Humidity	55.3 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

#### **RESULTS**

Please refer to appendix E.



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

#### **LIMITS**

	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:

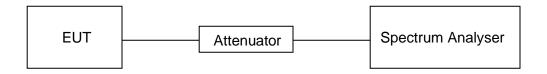
For Example: Fundamental frequency: 5720 MHz

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	26.0 °C	Relative Humidity	55.3 %
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.

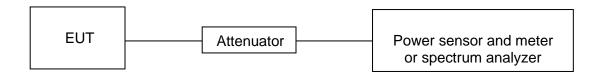
# Method PM (Measurement using an RF average power meter):

- (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	26.0 °C	Relative Humidity	55.3 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

# **RESULTS**

Please refer to Appendix B.

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7.4. POWER SPECTRAL DENSITY

#### **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	
Density	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

#### 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, 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	26.0 °C	Relative Humidity	55.3 %
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 radiated outside of the specified frequency bands above 30 MHz			
Frequency Range	Field Strength Limit	Field Stren (dBuV/m)	
(MHz)	(uV/m) at 3 m		Peak
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	
Above 1000	500	Peak	Average
		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	156.52475 - 156.52525	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
6.215 - 6.218	608 - 614	23.6 - 24.0
6.26775 - 6.26825	960 - 1427	31.2 - 31.8
6.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5
8.291 - 8.294	1645.5 - 1646.5	Above 38.6
8.362 - 8.366	1680 - 1710	
8.37625 - 8.38675	1718.8 - 1722.2	
8.41425 - 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 - 5460	
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:  $^1$ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.  $^2$ Above 38.6c



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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 MEASUREMENT (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			
	PK: -27 (dBm/MHz) *1	PK: 68.2(dBµV/m) *1	
5725~5850 MHz	PK: 10 (dBm/MHz) *2	PK: 105.2 (dBµV/m) *2	
	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.

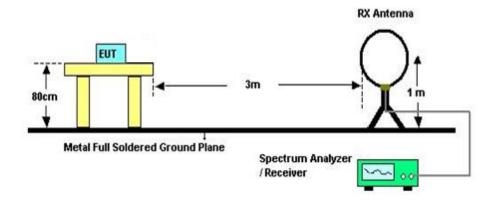
<sup>\*3</sup> below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

<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



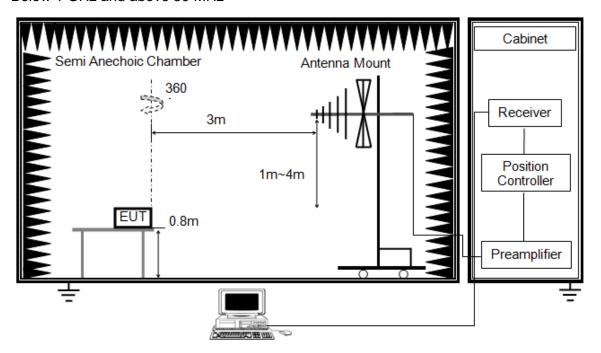
#### The setting of the spectrum analyser

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

- 1. The testing follows the guidelines in ANSI C63.10-2013 clause 11.11.
- 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 30 m 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.



Below 1 GHz and above 30 MHz



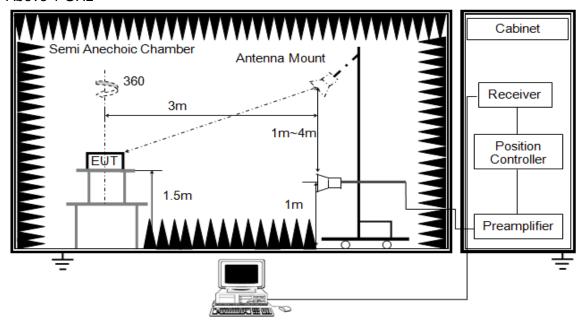
The setting of the spectrum analyser

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.
- 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
1V/BW/	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 (1.5 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.



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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	23.5 °C	Relative Humidity	60 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

# **RESULTS**



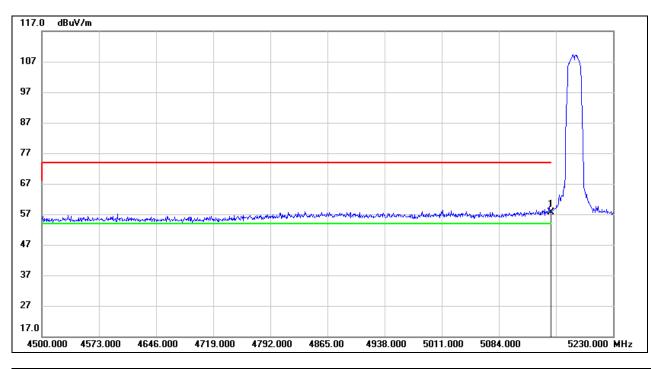
### 8.1. RESTRICTED BANDEDGE

### 8.1.1. 802.11a MODE

### **UNII-1 BAND**

### RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

# **PEAK**

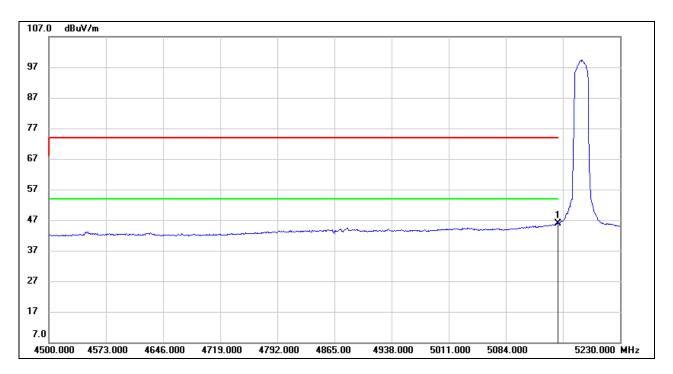


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	16.49	41.19	57.68	74.00	-16.32	peak

- 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	4.71	41.19	45.90	54.00	-8.10	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.

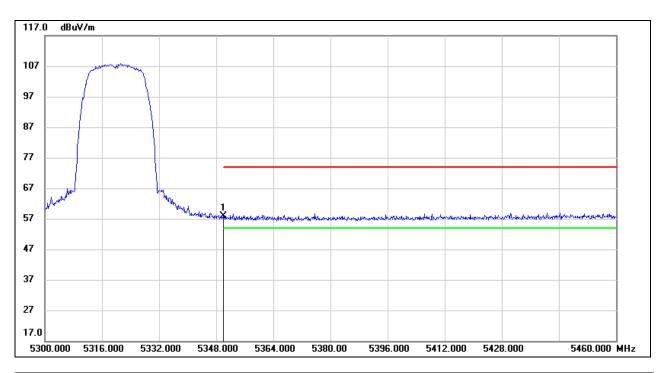
Note: All the polarities (Vertical & Horizontal) had been tested, only the worst data was recorded in the report.



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

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

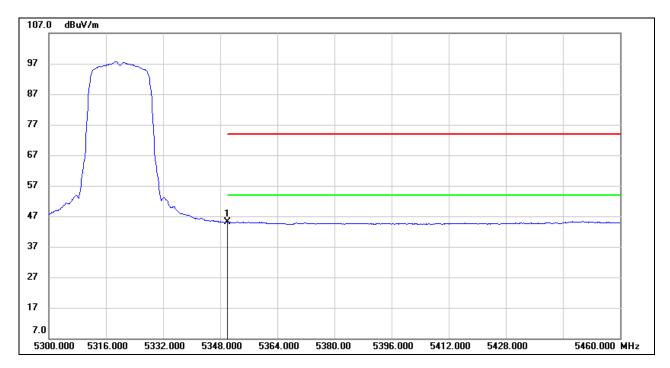
# **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	16.62	41.20	57.82	74.00	-16.18	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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	3.94	41.20	45.14	54.00	-8.86	AVG

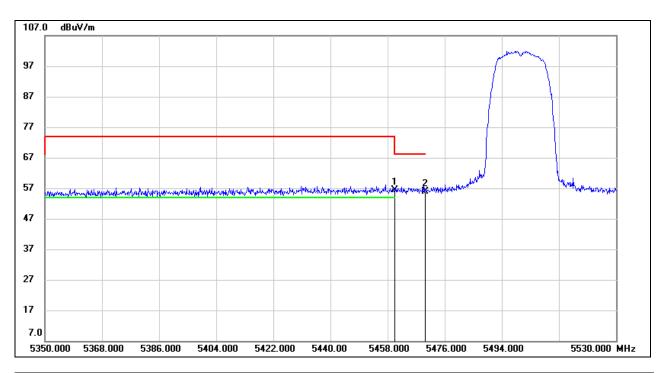
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions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



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

## RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

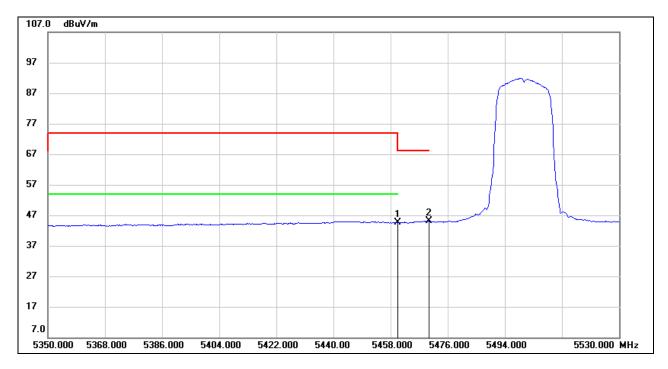
### **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	14.67	41.82	56.49	74.00	-17.51	peak
2	5470.000	14.00	41.87	55.87	68.20	-12.33	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.





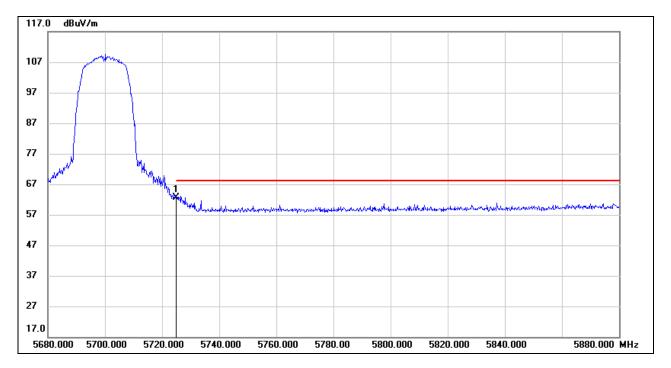
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	2.81	41.82	44.63	54.00	-9.37	AVG
2	5470.000	3.17	41.87	45.04	68.20	-23.16	AVG

- 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	20.99	41.67	62.66	68.20	-5.54	peak

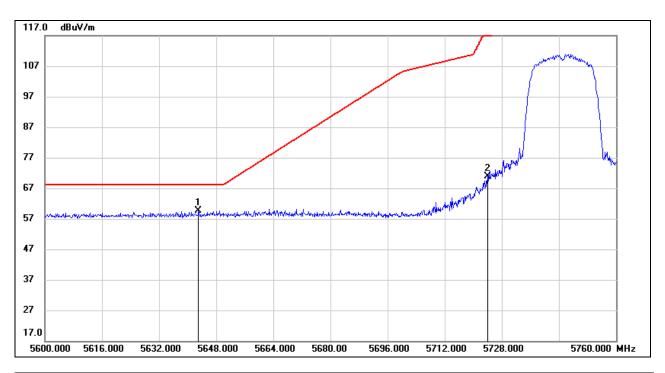
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



### **UNII-3 BAND**

## RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

# **PEAK**



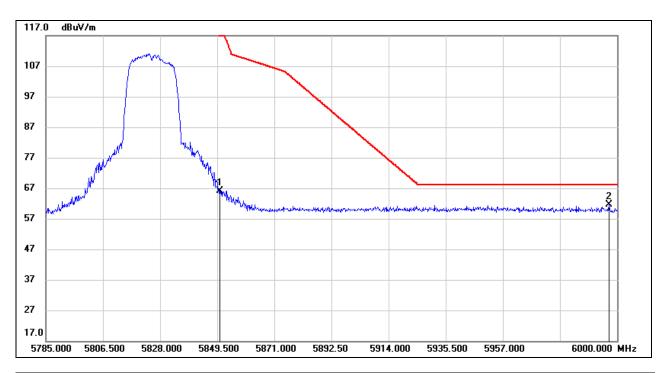
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5643.040	18.01	41.65	59.66	68.20	-8.54	peak
2	5724.000	29.28	41.66	70.94	119.92	-48.98	peak

- 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.



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

### **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.360	23.68	42.53	66.21	121.38	-55.17	peak
2	5996.990	19.07	42.58	61.65	68.20	-6.55	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.

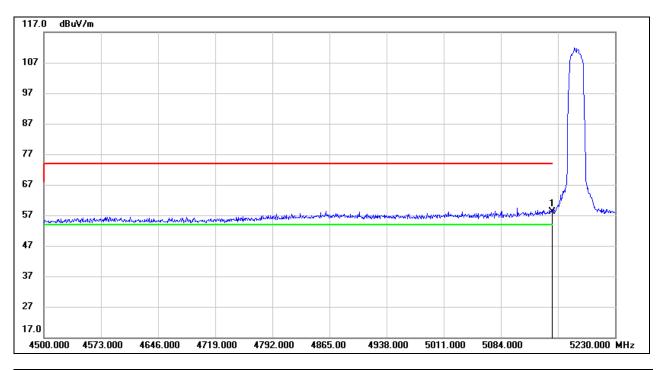


### 8.1.1. 802.11n HT20 MIMO MODE

### **UNII-1 BAND**

### RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

### **PEAK**

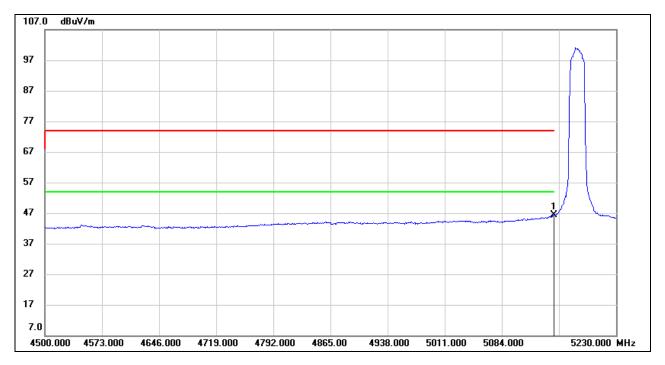


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	16.88	41.19	58.07	74.00	-15.93	peak

- 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.



# <u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	5.12	41.19	46.31	54.00	-7.69	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.

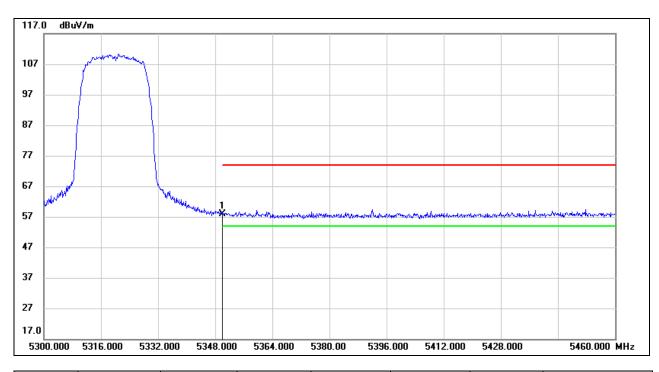
Note: All the polarities (Vertical & Horizontal) had been tested, only the worst data was recorded in the report.



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

## RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

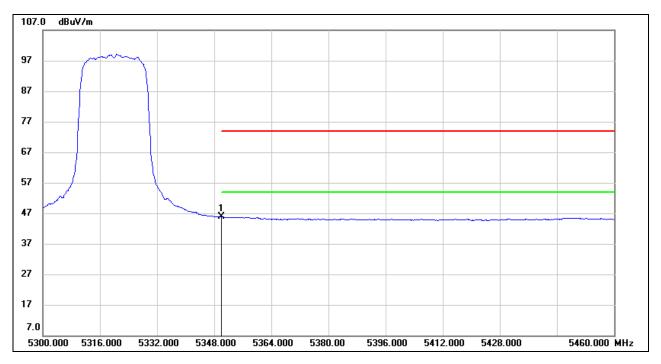
### **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	16.78	41.20	57.98	74.00	-16.02	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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	4.65	41.20	45.85	54.00	-8.15	AVG

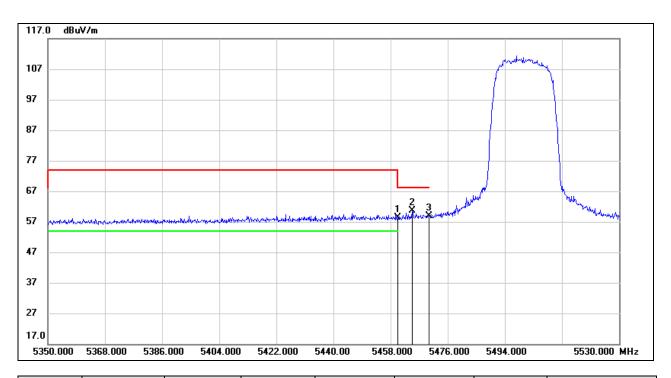
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions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



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

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

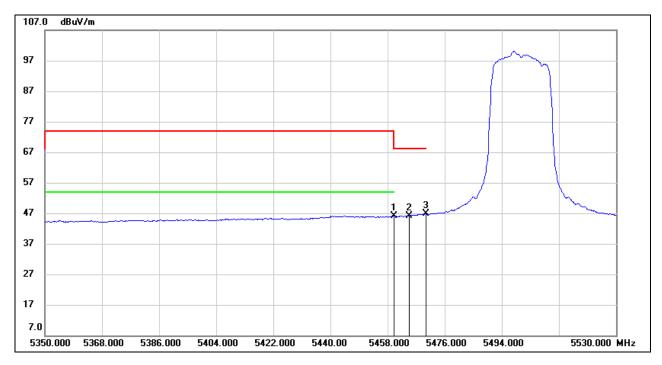
### **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	16.50	41.82	58.32	74.00	-15.68	peak
2	5464.840	18.88	41.85	60.73	68.20	-7.47	peak
3	5470.000	17.07	41.87	58.94	68.20	-9.26	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.





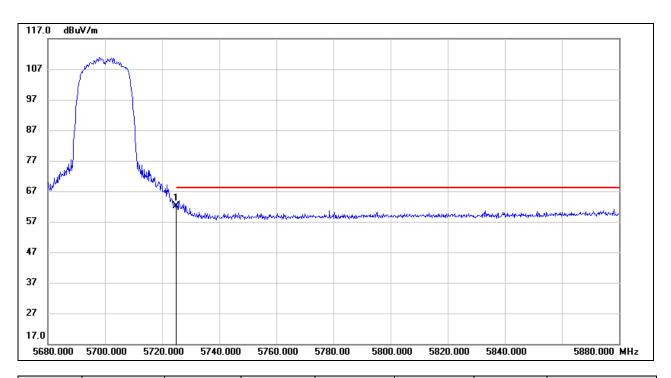
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	4.20	41.82	46.02	54.00	-7.98	AVG
2	5464.840	4.33	41.85	46.18	68.20	-22.02	AVG
3	5470.000	5.01	41.87	46.88	68.20	-21.32	AVG

- 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	20.41	41.67	62.08	68.20	-6.12	peak

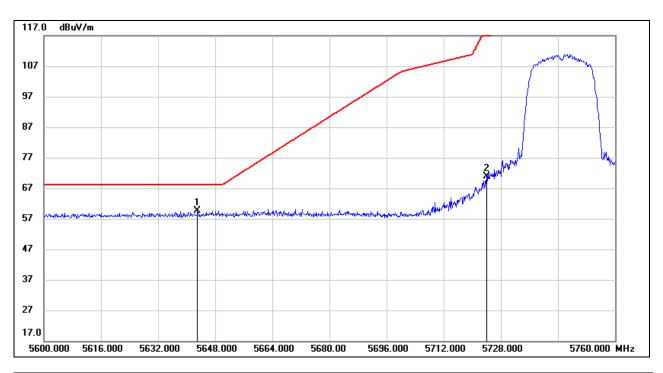
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



### **UNII-3 BAND**

## RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

# **PEAK**



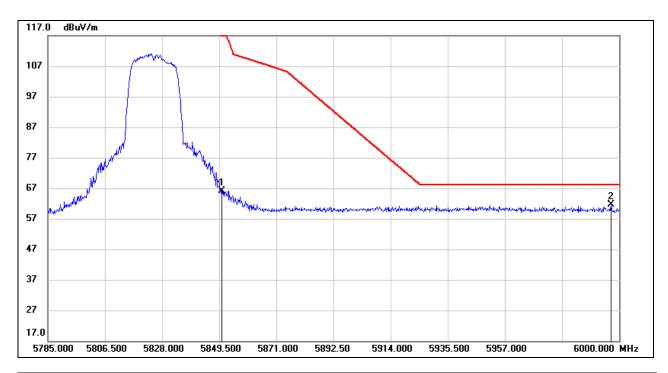
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5643.040	18.01	41.65	59.66	68.20	-8.54	peak
2	5724.000	29.28	41.66	70.94	119.92	-48.98	peak

- 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.



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

## **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.360	23.68	42.53	66.21	121.38	-55.17	peak
2	5996.990	19.07	42.58	61.65	68.20	-6.55	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.

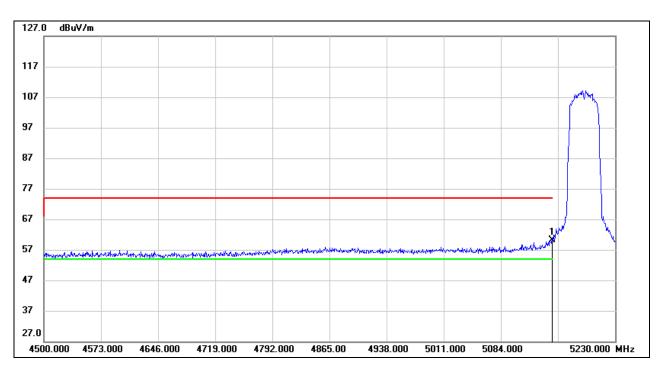


### 8.1.2. 802.11n HT40 MIMO MODE

# **UNII-1 BAND**

# RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

### **PEAK**

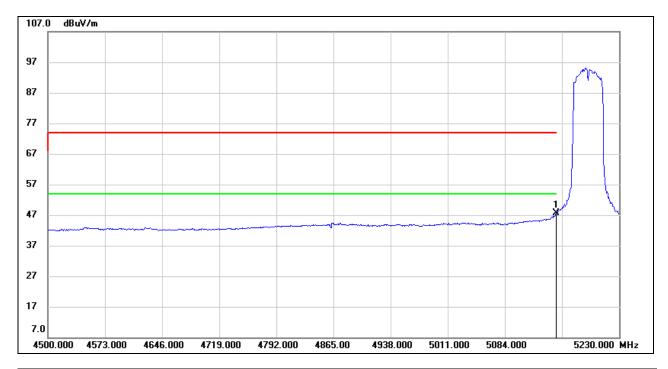


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	18.86	41.19	60.05	74.00	-13.95	peak

- 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	6.46	41.19	47.65	54.00	-6.35	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.

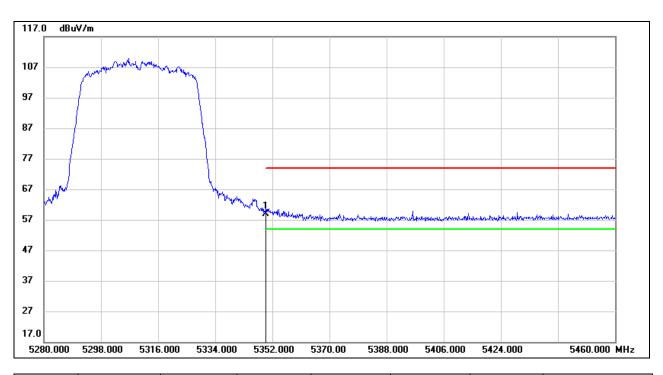
All the polarities (Horizontal and vertical) had been tested, only the worst data was recorded in the report



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

## RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

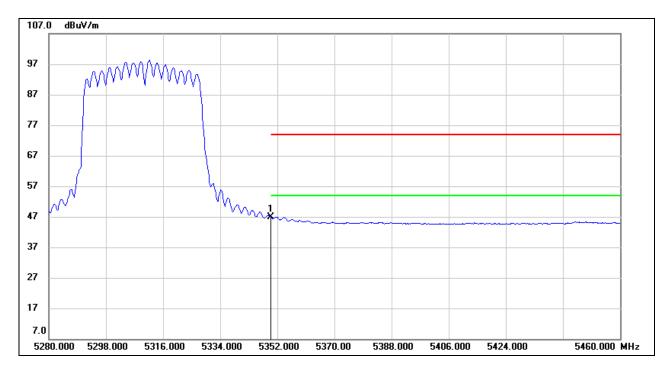
### **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	17.78	41.20	58.98	74.00	-15.02	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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	5.63	41.20	46.83	54.00	-7.17	AVG

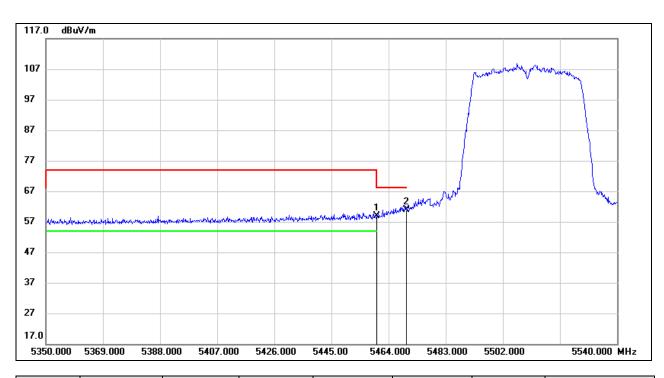
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions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



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

## RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

### **PEAK**

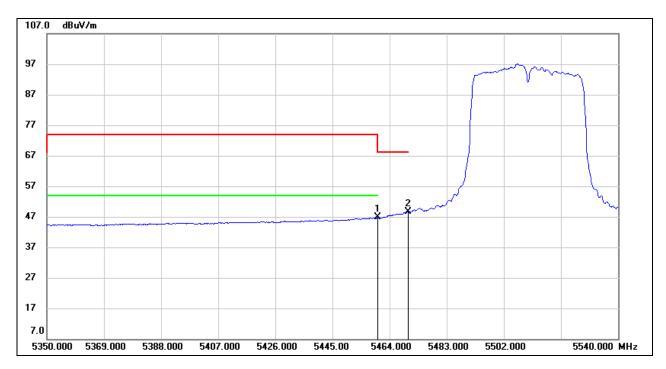


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	16.98	41.82	58.80	74.00	-15.20	peak
2	5470.000	19.01	41.87	60.88	68.20	-7.32	peak

- 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>



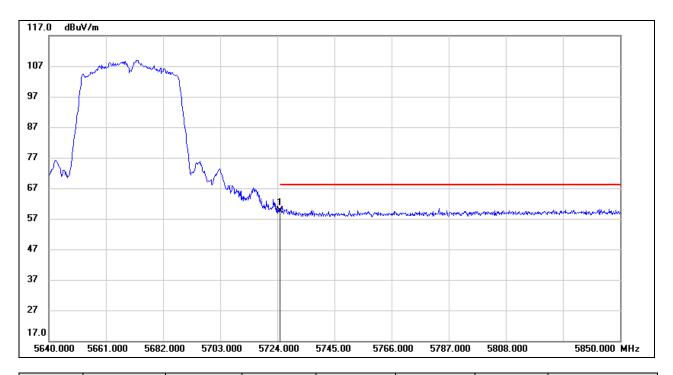
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	4.96	41.82	46.78	54.00	-7.22	AVG
2	5470.000	6.83	41.87	48.70	68.20	-19.50	AVG

- 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	17.93	41.67	59.60	68.20	-8.60	peak

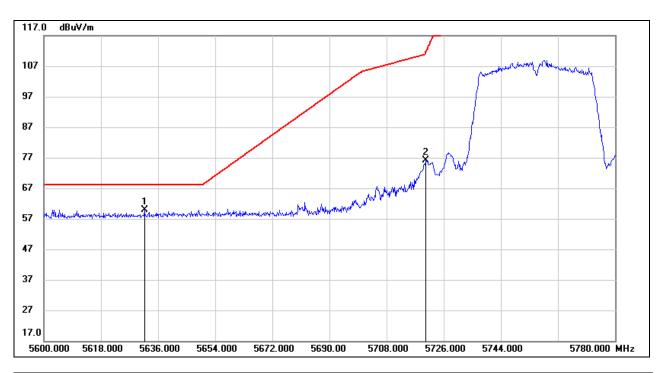
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



### **UNII-3 BAND**

## RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

### **PEAK**



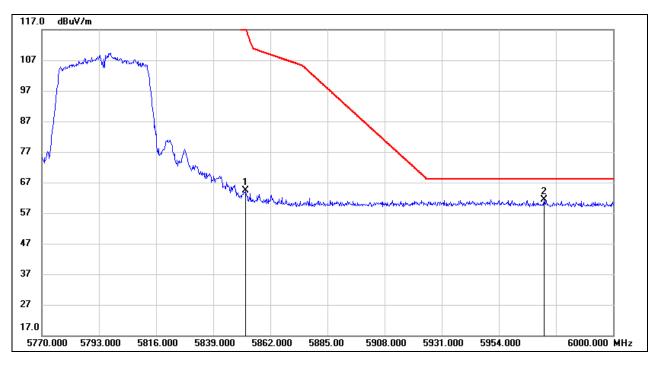
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5631.680	18.18	41.67	59.85	68.20	-8.35	peak
2	5720.420	34.57	41.64	76.21	111.76	-35.55	peak

- 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.



## RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

### **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5851.880	21.82	42.54	64.36	117.91	-53.55	peak
2	5972.170	18.76	42.69	61.45	68.20	-6.75	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.

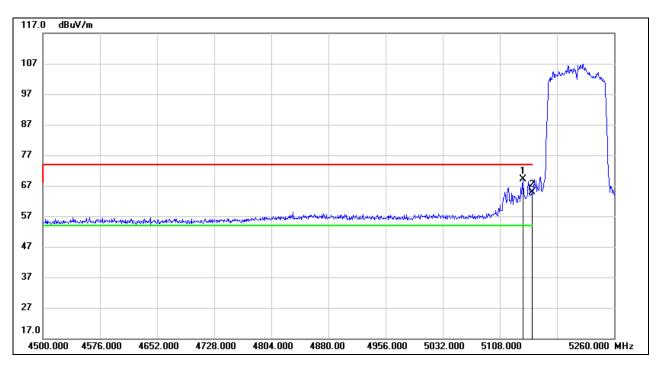


# 8.1.3. 802.11ac VHT80 MIMO MODE

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

### RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

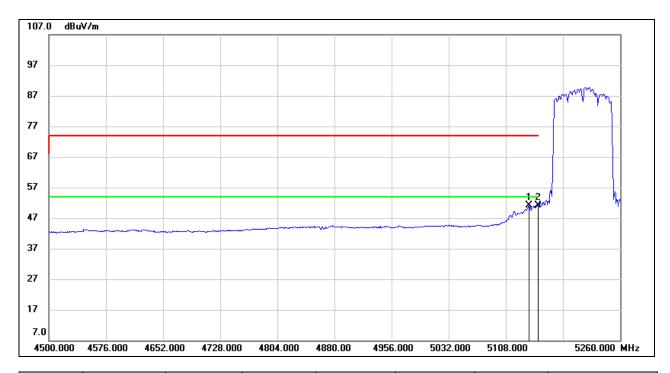
# **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5138.400	28.03	41.09	69.12	74.00	-4.88	peak
2	5150.000	23.58	41.19	64.77	74.00	-9.23	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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5138.400	10.15	41.09	51.24	54.00	-2.76	AVG
2	5150.000	9.86	41.19	51.05	54.00	-2.95	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.

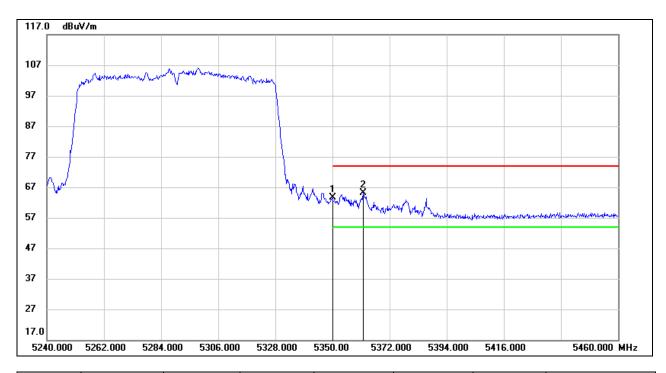
All the polarities (Horizontal and vertical) had been tested, only the worst data was recorded in the report



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

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

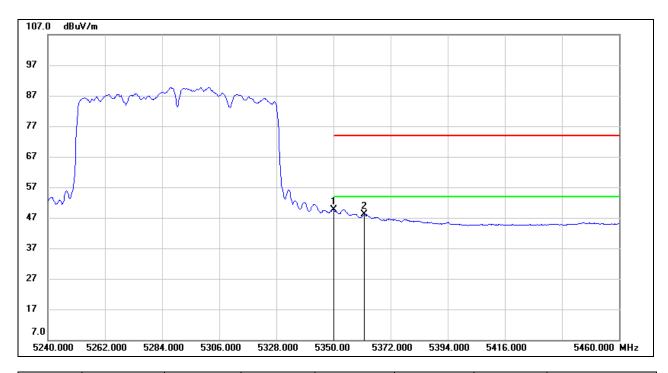
### **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	22.54	41.20	63.74	74.00	-10.26	peak
2	5361.880	23.92	41.27	65.19	74.00	-8.81	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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	8.47	41.20	49.67	54.00	-4.33	AVG
2	5361.880	6.91	41.27	48.18	54.00	-5.82	AVG

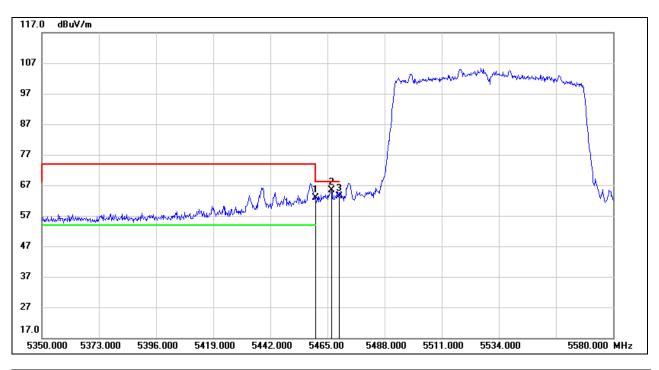
- 2. AVG: VBW=1/Ton where: ton is transmit duration.
- 3. For duty cycle, please refer to clause 7.1.
- 4. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.



## **UNII-2C BAND**

# RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

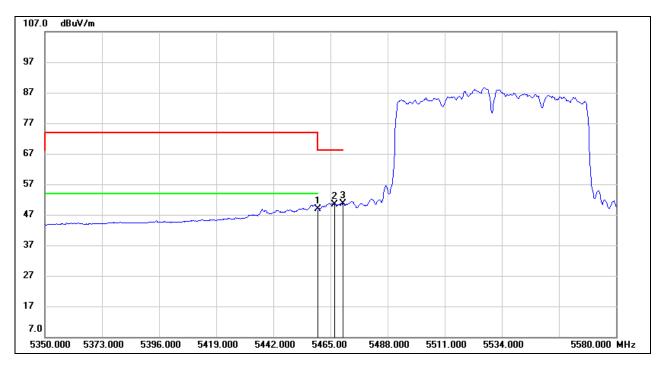
### **PEAK**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	21.10	41.82	62.92	74.00	-11.08	peak
2	5466.610	23.44	41.86	65.30	68.20	-2.90	peak
3	5470.000	21.50	41.87	63.37	68.20	-4.83	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.





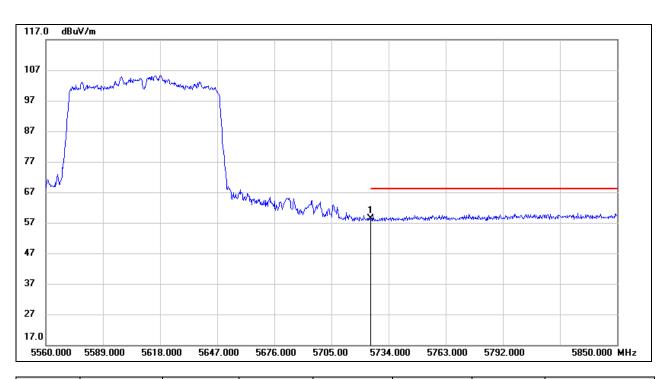
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	7.09	41.82	48.91	54.00	-5.09	AVG
2	5466.610	8.44	41.86	50.30	68.20	-17.90	AVG
3	5470.000	8.69	41.87	50.56	68.20	-17.64	AVG

- 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**



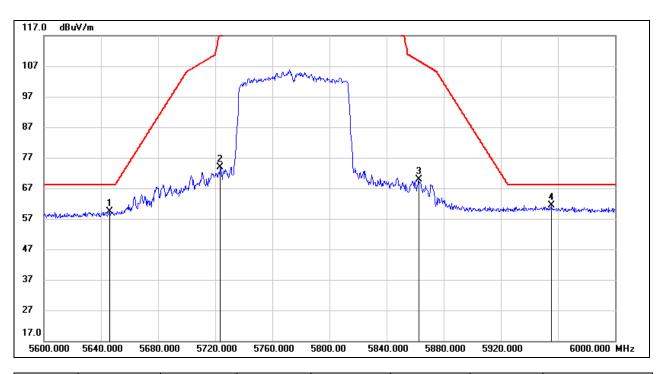
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	16.70	41.67	58.37	68.20	-9.83	peak

- 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.



# **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	5646.000	17.68	41.65	59.33	68.20	-8.87	peak
2	5723.600	32.24	41.66	73.90	119.01	-45.11	peak
3	5862.400	27.25	42.65	69.90	108.73	-38.83	peak
4	5955.200	18.63	42.77	61.40	68.20	-6.80	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.

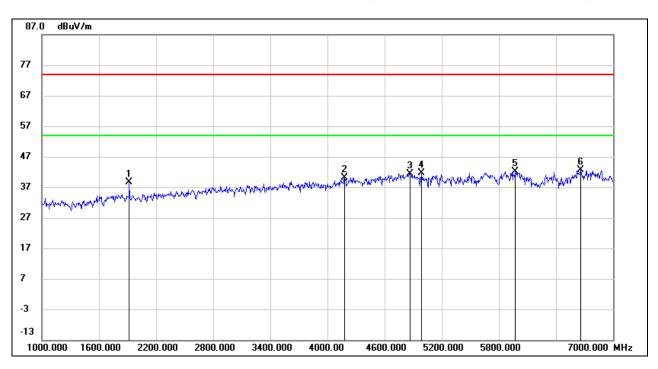


# 8.2. SPURIOUS EMISSIONS (1 GHz ~ 7 GHz)

### 8.2.1. 802.11ac VHT80 MODE

### **UNII-1 BAND**

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

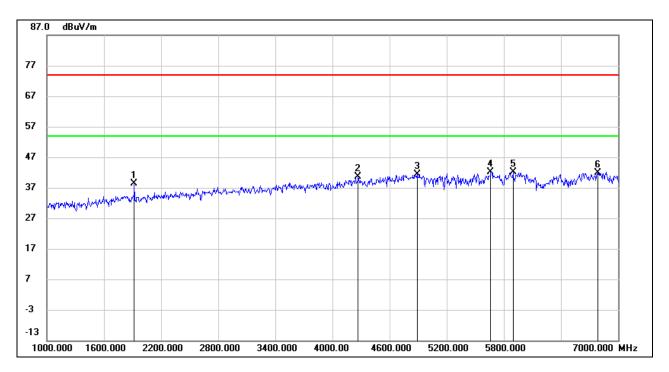


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.85	-10.13	38.72	74.00	-35.28	peak
2	4180.000	42.00	-1.87	40.13	74.00	-33.87	peak
3	4864.000	40.75	0.69	41.44	74.00	-32.56	peak
4	4990.000	40.85	0.89	41.74	74.00	-32.26	peak
5	5974.000	38.98	3.20	42.18	74.00	-31.82	peak
6	6658.000	37.12	5.51	42.63	74.00	-31.37	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)

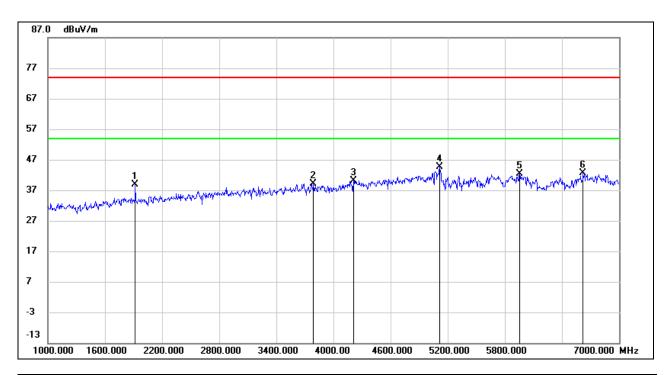


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.63	-10.13	38.50	74.00	-35.50	peak
2	4270.000	42.43	-1.73	40.70	74.00	-33.30	peak
3	4888.000	40.74	0.72	41.46	74.00	-32.54	peak
4	5662.000	39.62	2.47	42.09	74.00	-31.91	peak
5	5896.000	39.15	2.90	42.05	74.00	-31.95	peak
6	6784.000	36.20	5.56	41.76	74.00	-32.24	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 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 (MID CHANNEL, HORIZONTAL)

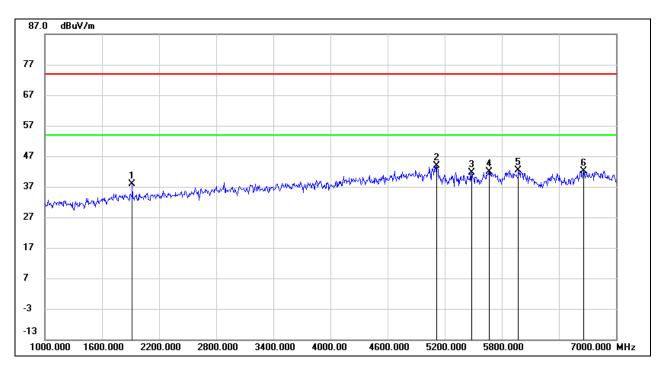


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.89	-10.13	38.76	74.00	-35.24	peak
2	3790.000	42.51	-3.31	39.20	74.00	-34.80	peak
3	4210.000	41.83	-1.67	40.16	74.00	-33.84	peak
4	5116.000	42.92	1.60	44.52	74.00	-29.48	peak
5	5956.000	39.17	3.13	42.30	74.00	-31.70	peak
6	6622.000	37.18	5.51	42.69	74.00	-31.31	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 (MID CHANNEL, VERTICAL)

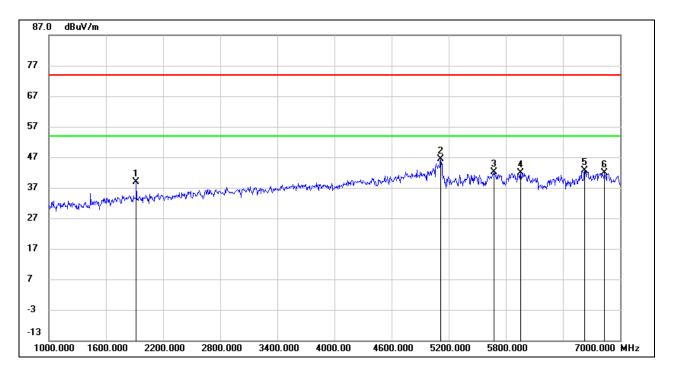


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.06	-10.13	37.93	74.00	-36.07	peak
2	5116.000	42.29	1.60	43.89	74.00	-30.11	peak
3	5482.000	39.63	2.11	41.74	74.00	-32.26	peak
4	5668.000	39.53	2.47	42.00	74.00	-32.00	peak
5	5974.000	39.15	3.20	42.35	74.00	-31.65	peak
6	6658.000	36.73	5.51	42.24	74.00	-31.76	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 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)

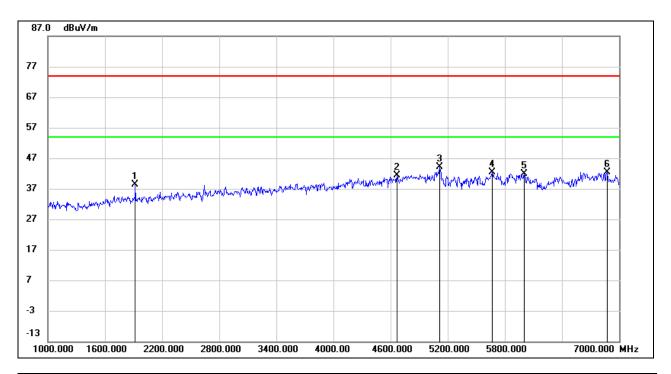


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.92	-10.13	38.79	74.00	-35.21	peak
2	5116.000	44.77	1.60	46.37	74.00	-27.63	peak
3	5674.000	39.60	2.48	42.08	74.00	-31.92	peak
4	5956.000	38.73	3.13	41.86	74.00	-32.14	peak
5	6628.000	37.21	5.50	42.71	74.00	-31.29	peak
6	6838.000	36.25	5.69	41.94	74.00	-32.06	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)



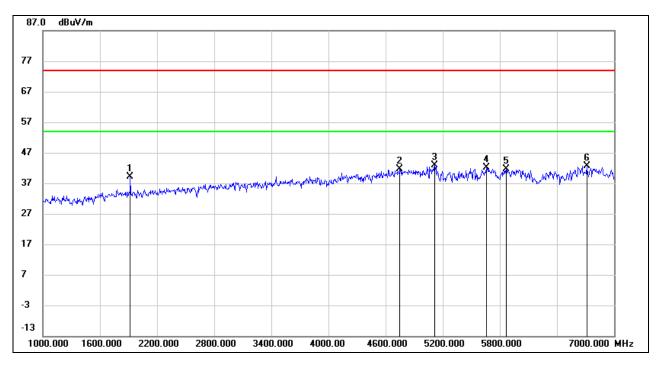
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.58	-10.13	38.45	74.00	-35.55	peak
2	4666.000	41.55	-0.17	41.38	74.00	-32.62	peak
3	5116.000	42.48	1.60	44.08	74.00	-29.92	peak
4	5668.000	39.95	2.47	42.42	74.00	-31.58	peak
5	6004.000	38.62	3.30	41.92	74.00	-32.08	peak
6	6874.000	36.60	5.78	42.38	74.00	-31.62	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 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)

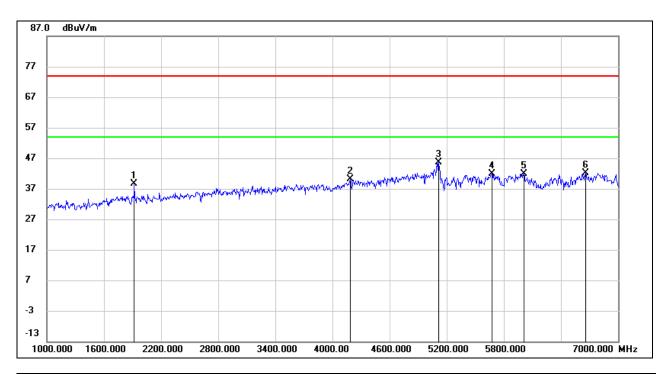


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.22	-10.13	39.09	74.00	-34.91	peak
2	4750.000	41.23	0.30	41.53	74.00	-32.47	peak
3	5116.000	41.40	1.60	43.00	74.00	-31.00	peak
4	5656.000	39.57	2.47	42.04	74.00	-31.96	peak
5	5866.000	38.86	2.77	41.63	74.00	-32.37	peak
6	6712.000	37.17	5.54	42.71	74.00	-31.29	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)

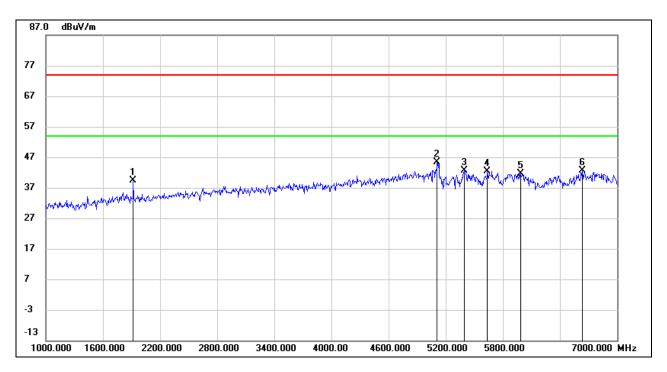


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.75	-10.13	38.62	74.00	-35.38	peak
2	4186.000	41.84	-1.81	40.03	74.00	-33.97	peak
3	5116.000	44.15	1.60	45.75	74.00	-28.25	peak
4	5674.000	39.30	2.48	41.78	74.00	-32.22	peak
5	6010.000	38.57	3.31	41.88	74.00	-32.12	peak
6	6658.000	36.55	5.51	42.06	74.00	-31.94	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 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 (MID CHANNEL, HORIZONTAL)

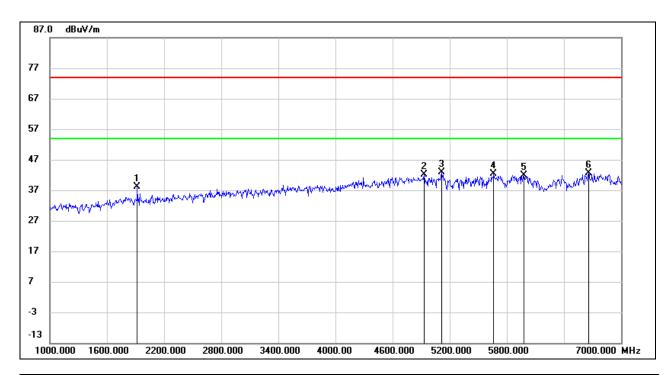


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.55	-10.13	39.42	74.00	-34.58	peak
2	5110.000	43.78	1.55	45.33	74.00	-28.67	peak
3	5398.000	40.86	1.88	42.74	74.00	-31.26	peak
4	5638.000	39.91	2.47	42.38	74.00	-31.62	peak
5	5986.000	38.46	3.25	41.71	74.00	-32.29	peak
6	6634.000	37.19	5.51	42.70	74.00	-31.30	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 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 (MID CHANNEL, VERTICAL)

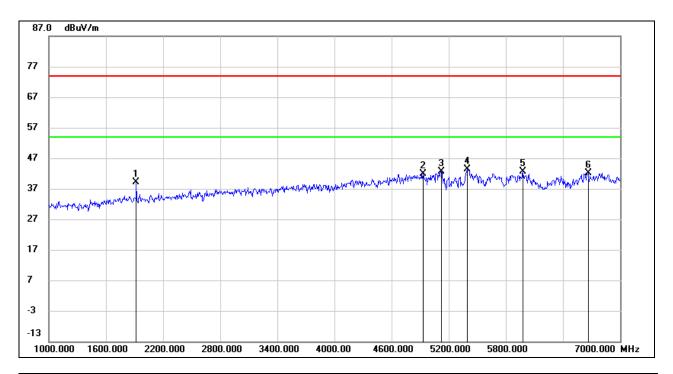


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.27	-10.13	38.14	74.00	-35.86	peak
2	4930.000	41.41	0.79	42.20	74.00	-31.80	peak
3	5116.000	41.40	1.60	43.00	74.00	-31.00	peak
4	5662.000	40.01	2.47	42.48	74.00	-31.52	peak
5	5980.000	38.74	3.22	41.96	74.00	-32.04	peak
6	6658.000	37.02	5.51	42.53	74.00	-31.47	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 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)

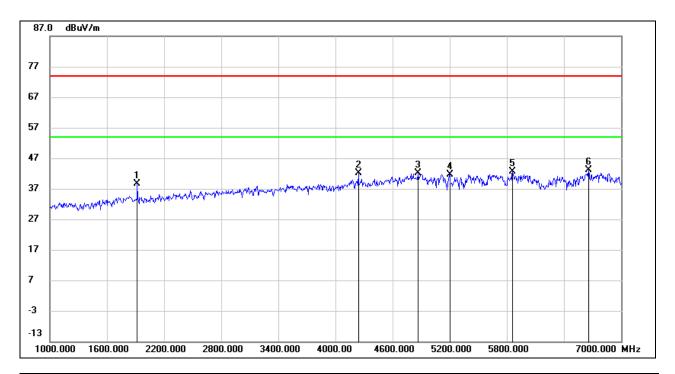


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.33	-10.13	39.20	74.00	-34.80	peak
2	4930.000	40.99	0.79	41.78	74.00	-32.22	peak
3	5122.000	41.05	1.64	42.69	74.00	-31.31	peak
4	5398.000	41.56	1.88	43.44	74.00	-30.56	peak
5	5980.000	39.39	3.22	42.61	74.00	-31.39	peak
6	6664.000	36.58	5.53	42.11	74.00	-31.89	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 (HIGH CHANNEL, VERTICAL)



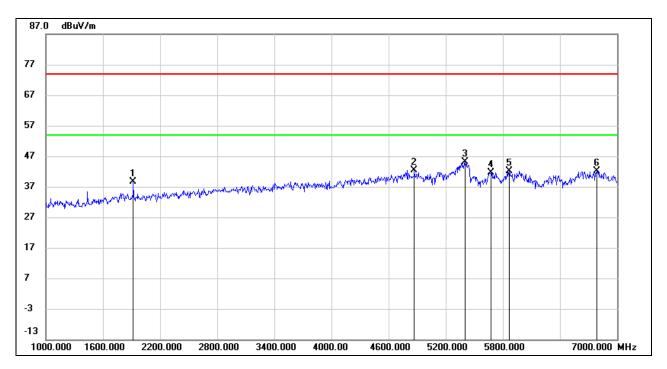
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.74	-10.13	38.61	74.00	-35.39	peak
2	4240.000	43.84	-1.71	42.13	74.00	-31.87	peak
3	4870.000	41.55	0.69	42.24	74.00	-31.76	peak
4	5200.000	39.63	2.10	41.73	74.00	-32.27	peak
5	5860.000	39.79	2.75	42.54	74.00	-31.46	peak
6	6658.000	37.71	5.51	43.22	74.00	-30.78	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-2C BAND**

# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

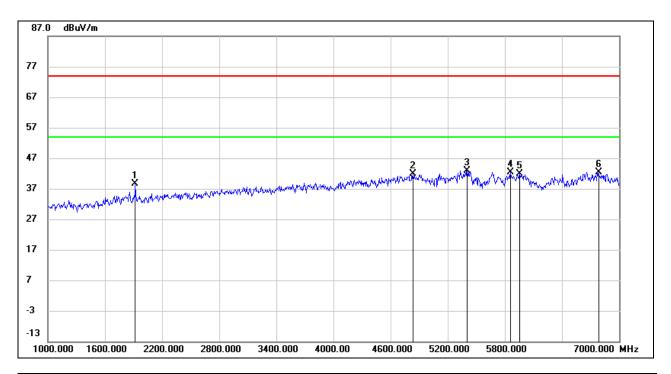


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.83	-10.13	38.70	74.00	-35.30	peak
2	4870.000	41.75	0.69	42.44	74.00	-31.56	peak
3	5404.000	43.31	1.89	45.20	74.00	-28.80	peak
4	5674.000	39.15	2.48	41.63	74.00	-32.37	peak
5	5866.000	39.41	2.77	42.18	74.00	-31.82	peak
6	6790.000	36.66	5.57	42.23	74.00	-31.77	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 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)

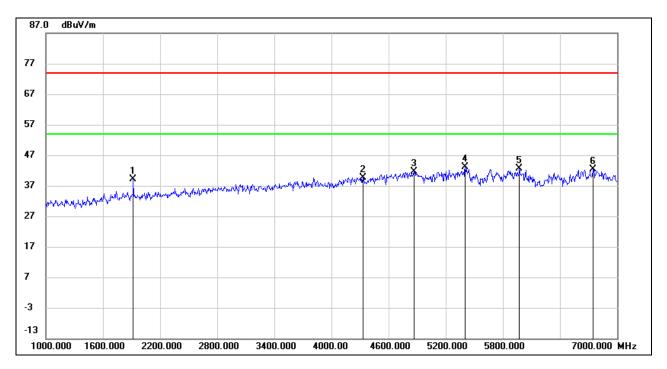


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.69	-10.13	38.56	74.00	-35.44	peak
2	4834.000	41.26	0.63	41.89	74.00	-32.11	peak
3	5404.000	41.10	1.89	42.99	74.00	-31.01	peak
4	5860.000	39.65	2.75	42.40	74.00	-31.60	peak
5	5956.000	38.65	3.13	41.78	74.00	-32.22	peak
6	6784.000	36.83	5.56	42.39	74.00	-31.61	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 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 (MID CHANNEL, HORIZONTAL)

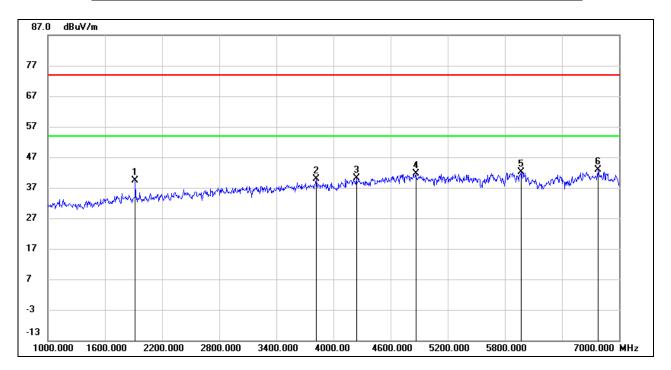


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.16	-10.13	39.03	74.00	-34.97	peak
2	4330.000	41.55	-1.80	39.75	74.00	-34.25	peak
3	4864.000	40.95	0.69	41.64	74.00	-32.36	peak
4	5404.000	41.32	1.89	43.21	74.00	-30.79	peak
5	5974.000	39.31	3.20	42.51	74.00	-31.49	peak
6	6748.000	36.81	5.55	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 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 (MID CHANNEL, VERTICAL)

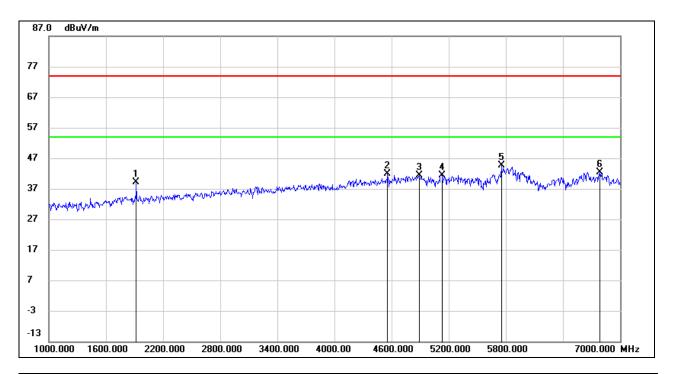


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.44	-10.13	39.31	74.00	-34.69	peak
2	3820.000	43.23	-3.29	39.94	74.00	-34.06	peak
3	4240.000	41.77	-1.71	40.06	74.00	-33.94	peak
4	4864.000	40.98	0.69	41.67	74.00	-32.33	peak
5	5974.000	38.84	3.20	42.04	74.00	-31.96	peak
6	6778.000	37.34	5.56	42.90	74.00	-31.10	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 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)

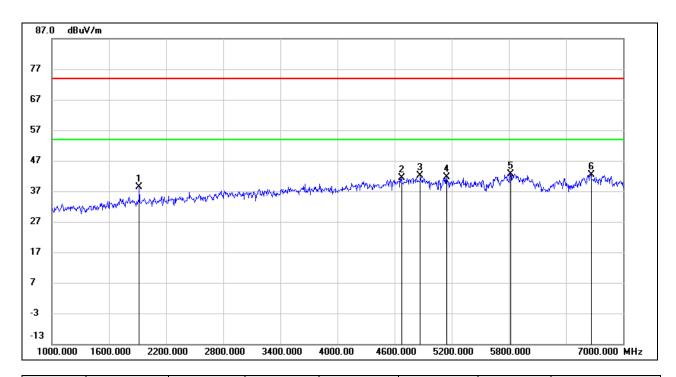


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.22	-10.13	39.09	74.00	-34.91	peak
2	4558.000	42.64	-0.84	41.80	74.00	-32.20	peak
3	4888.000	40.62	0.72	41.34	74.00	-32.66	peak
4	5128.000	39.73	1.67	41.40	74.00	-32.60	peak
5	5752.000	42.12	2.49	44.61	74.00	-29.39	peak
6	6790.000	36.81	5.57	42.38	74.00	-31.62	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 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	48.41	-10.13	38.28	74.00	-35.72	peak
2	4672.000	41.51	-0.15	41.36	74.00	-32.64	peak
3	4870.000	41.45	0.69	42.14	74.00	-31.86	peak
4	5146.000	39.75	1.79	41.54	74.00	-32.46	peak
5	5818.000	40.18	2.57	42.75	74.00	-31.25	peak
6	6664.000	36.94	5.53	42.47	74.00	-31.53	peak

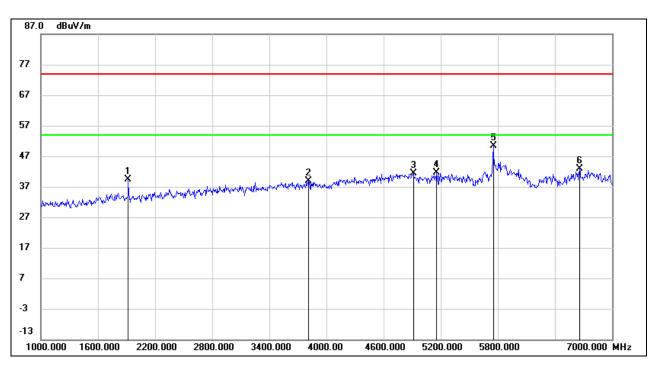
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter 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.



#### **STRADDLE CHANNEL 138**

# MIMO MODE TEST RESULTS (WORST CASE)

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

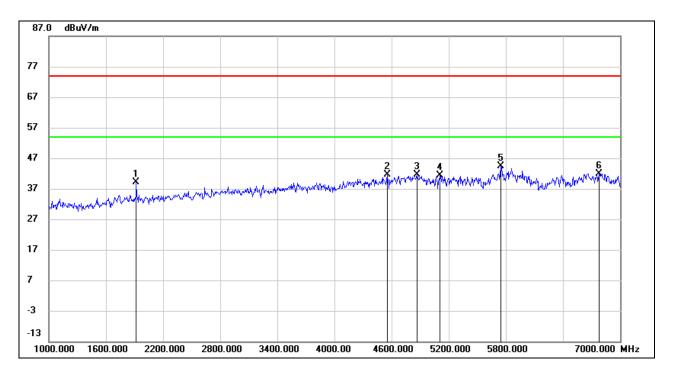


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.42	-10.13	39.29	74.00	-34.71	peak
2	3814.000	42.09	-3.28	38.81	74.00	-35.19	peak
3	4912.000	40.54	0.77	41.31	74.00	-32.69	peak
4	5158.000	39.86	1.85	41.71	74.00	-32.29	peak
5	5752.000	47.83	2.49	50.32	74.00	-23.68	peak
6	6658.000	37.31	5.51	42.82	74.00	-31.18	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 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 (VERTICAL)**



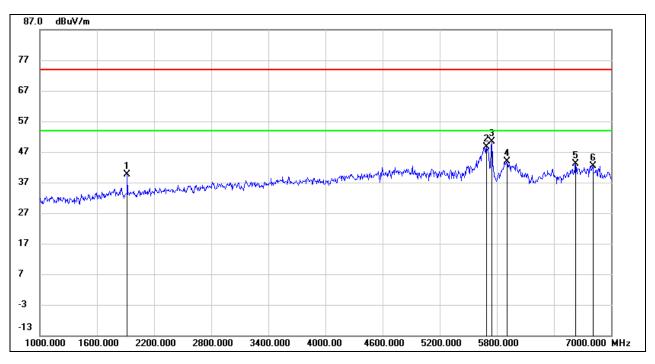
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.35	-10.13	39.22	74.00	-34.78	peak
2	4552.000	42.44	-0.89	41.55	74.00	-32.45	peak
3	4864.000	41.04	0.69	41.73	74.00	-32.27	peak
4	5110.000	39.80	1.55	41.35	74.00	-32.65	peak
5	5746.000	41.93	2.50	44.43	74.00	-29.57	peak
6	6778.000	36.43	5.56	41.99	74.00	-32.01	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-3 BAND**

# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

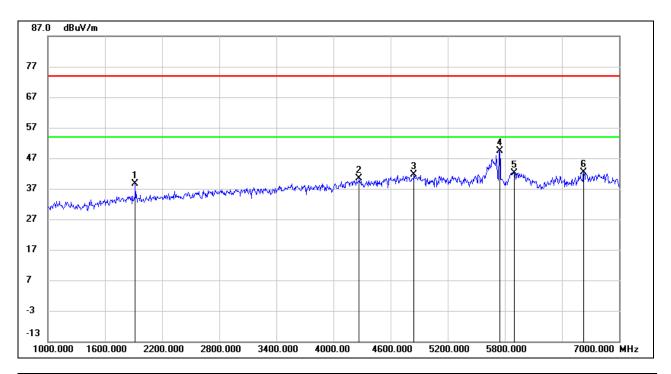


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.64	-10.13	39.51	74.00	-34.49	peak
2	5692.000	46.07	2.47	48.54	74.00	-25.46	peak
3	5746.000	47.83	2.50	50.33	74.00	-23.67	peak
4	5908.000	41.03	2.93	43.96	74.00	-30.04	peak
5	6628.000	37.67	5.50	43.17	74.00	-30.83	peak
6	6808.000	36.77	5.59	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 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)

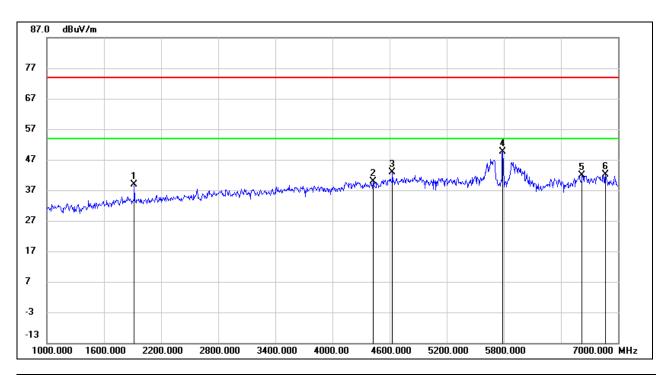


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.85	-10.13	38.72	74.00	-35.28	peak
2	4270.000	42.13	-1.73	40.40	74.00	-33.60	peak
3	4846.000	40.89	0.66	41.55	74.00	-32.45	peak
4	5746.000	46.95	2.50	49.45	74.00	-24.55	peak
5	5896.000	39.30	2.90	42.20	74.00	-31.80	peak
6	6628.000	36.98	5.50	42.48	74.00	-31.52	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 (MID CHANNEL, HORIZONTAL)

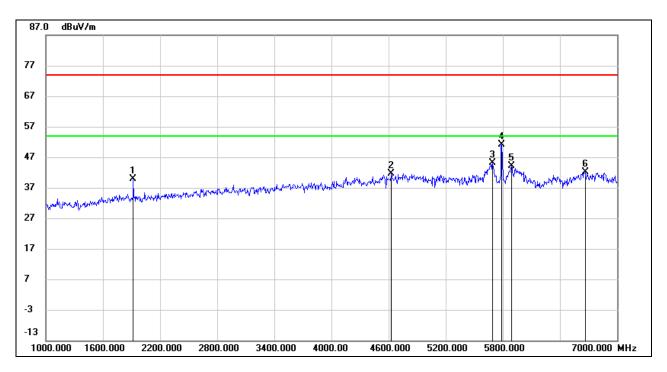


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.00	-10.13	38.87	74.00	-35.13	peak
2	4426.000	41.58	-1.70	39.88	74.00	-34.12	peak
3	4630.000	43.29	-0.38	42.91	74.00	-31.09	peak
4	5788.000	47.21	2.50	49.71	74.00	-24.29	peak
5	6622.000	36.32	5.51	41.83	74.00	-32.17	peak
6	6868.000	36.41	5.76	42.17	74.00	-31.83	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 (MID CHANNEL, VERTICAL)

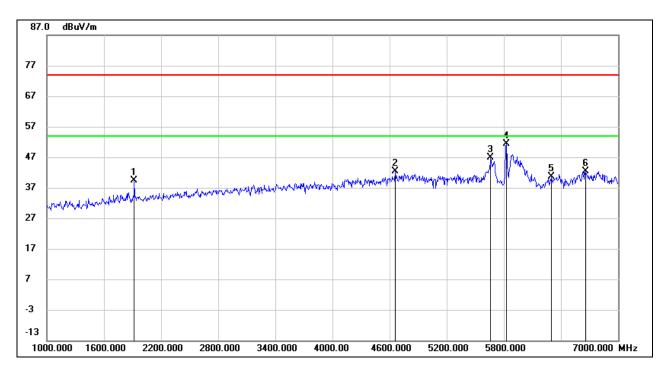


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.89	-10.13	39.76	74.00	-34.24	peak
2	4630.000	41.98	-0.38	41.60	74.00	-32.40	peak
3	5692.000	42.67	2.47	45.14	74.00	-28.86	peak
4	5788.000	48.53	2.50	51.03	74.00	-22.97	peak
5	5890.000	41.15	2.87	44.02	74.00	-29.98	peak
6	6664.000	36.49	5.53	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.



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

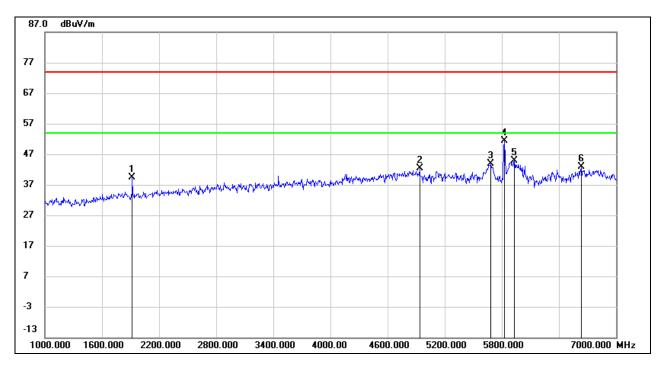


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.41	-10.13	39.28	74.00	-34.72	peak
2	4660.000	42.60	-0.22	42.38	74.00	-31.62	peak
3	5662.000	44.49	2.47	46.96	74.00	-27.04	peak
4	5825.000	48.65	2.61	51.26	74.00	-22.74	peak
5	6298.000	36.75	3.80	40.55	74.00	-33.45	peak
6	6658.000	36.86	5.51	42.37	74.00	-31.63	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	49.50	-10.13	39.37	74.00	-34.63	peak
2	4936.000	41.57	0.80	42.37	74.00	-31.63	peak
3	5686.000	41.34	2.47	43.81	74.00	-30.19	peak
4	5825.000	48.70	2.61	51.31	74.00	-22.69	peak
5	5932.000	41.82	3.03	44.85	74.00	-29.15	peak
6	6634.000	37.28	5.51	42.79	74.00	-31.21	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.

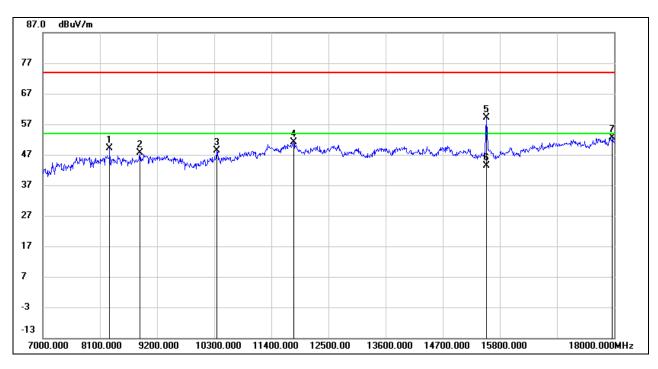


# 8.3. SPURIOUS EMISSIONS (7 GHz ~ 18 GHz)

# 8.3.1. 802.11a MODE

### **UNII-1 BAND**

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

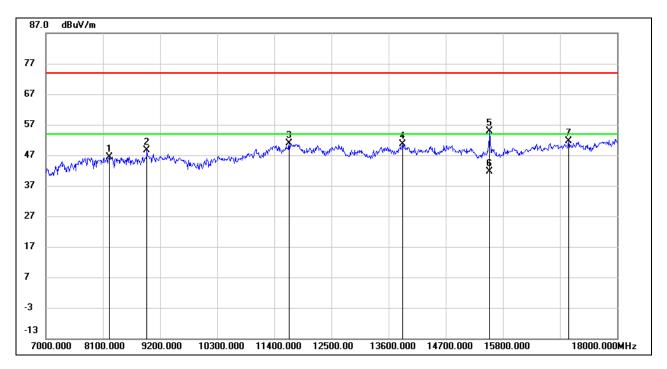


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8287.000	40.10	9.02	49.12	74.00	-24.88	peak
2	8870.000	38.46	9.26	47.72	74.00	-26.28	peak
3	10355.000	37.18	11.29	48.47	74.00	-25.53	peak
4	11829.000	35.45	15.57	51.02	74.00	-22.98	peak
5	15536.000	42.70	16.55	59.25	74.00	-14.75	peak
6	15536.000	26.80	16.55	43.35	54.00	-10.65	AVG
7	17967.000	29.85	22.67	52.52	74.00	-21.48	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.



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

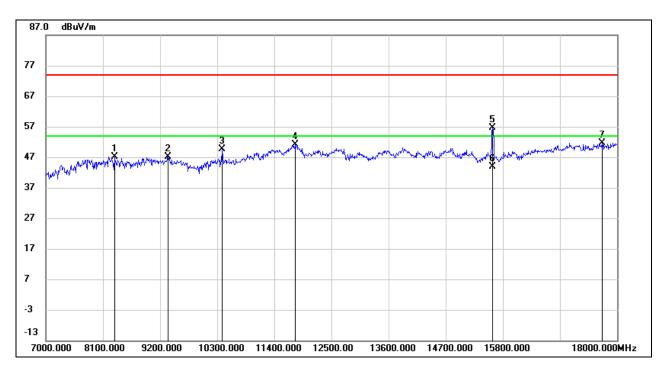


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8221.000	37.02	9.28	46.30	74.00	-27.70	peak
2	8947.000	38.66	10.07	48.73	74.00	-25.27	peak
3	11686.000	35.77	14.99	50.76	74.00	-23.24	peak
4	13864.000	33.71	16.92	50.63	74.00	-23.37	peak
5	15547.000	38.27	16.58	54.85	74.00	-19.15	peak
6	15547.000	25.10	16.58	41.68	54.00	-12.32	AVG
7	17065.000	31.03	20.49	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.



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

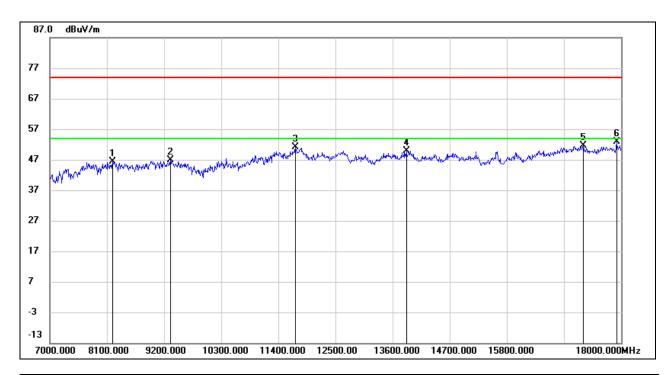


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8320.000	38.23	8.90	47.13	74.00	-26.87	peak
2	9354.000	37.17	10.07	47.24	74.00	-26.76	peak
3	10399.000	38.08	11.45	49.53	74.00	-24.47	peak
4	11796.000	35.56	15.59	51.15	74.00	-22.85	peak
5	15602.000	40.04	16.70	56.74	74.00	-17.26	peak
6	15602.000	27.06	16.70	43.76	54.00	-10.24	AVG
7	17714.000	29.59	22.04	51.63	74.00	-22.37	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)

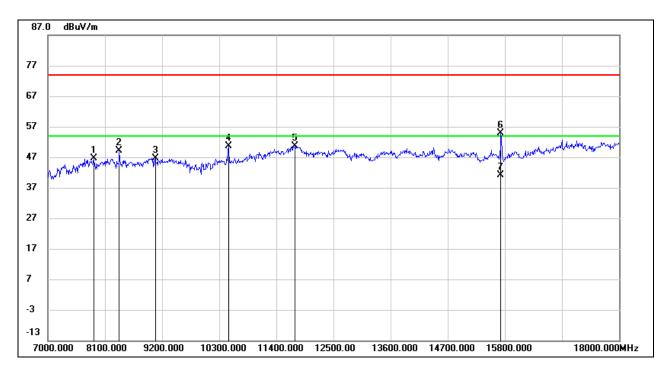


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8210.000	37.11	9.32	46.43	74.00	-27.57	peak
2	9321.000	36.93	9.91	46.84	74.00	-27.16	peak
3	11730.000	35.90	15.23	51.13	74.00	-22.87	peak
4	13864.000	33.01	16.92	49.93	74.00	-24.07	peak
5	17274.000	30.66	20.93	51.59	74.00	-22.41	peak
6	17912.000	30.10	22.69	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)

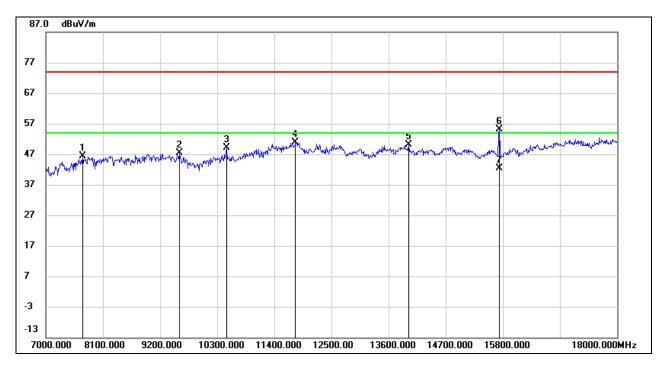


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	38.52	8.01	46.53	74.00	-27.47	peak
2	8375.000	40.47	8.68	49.15	74.00	-24.85	peak
3	9068.000	36.44	10.17	46.61	74.00	-27.39	peak
4	10476.000	38.71	11.83	50.54	74.00	-23.46	peak
5	11752.000	35.18	15.35	50.53	74.00	-23.47	peak
6	15723.000	38.08	16.77	54.85	74.00	-19.15	peak
7	15723.000	24.35	16.77	41.12	54.00	-12.88	AVG

- 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)



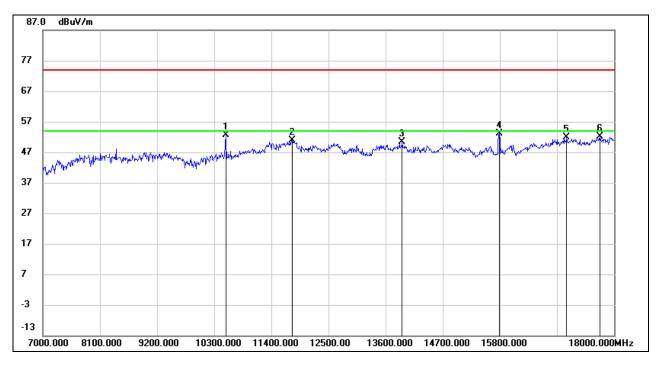
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7704.000	38.53	7.87	46.40	74.00	-27.60	peak
2	9574.000	36.84	10.46	47.30	74.00	-26.70	peak
3	10476.000	37.24	11.83	49.07	74.00	-24.93	peak
4	11807.000	35.16	15.61	50.77	74.00	-23.23	peak
5	13985.000	33.23	16.86	50.09	74.00	-23.91	peak
6	15734.000	38.35	16.78	55.13	74.00	-18.87	peak
7	15734.000	25.54	16.78	42.32	54.00	-11.68	AVG

- 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)

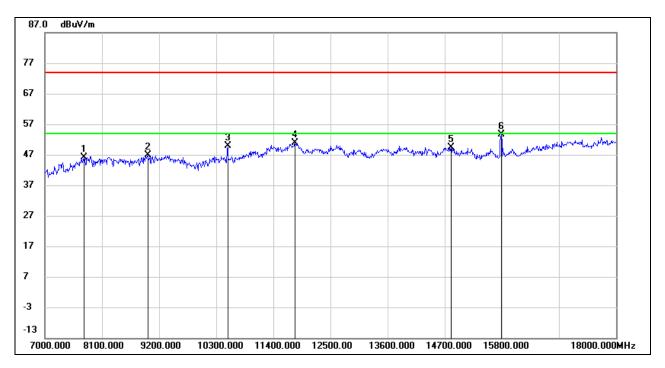


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	10520.000	40.69	12.04	52.73	74.00	-21.27	peak
2	11807.000	35.21	15.61	50.82	74.00	-23.18	peak
3	13919.000	33.53	16.89	50.42	74.00	-23.58	peak
4	15789.000	36.30	16.82	53.12	74.00	-20.88	peak
5	17087.000	31.25	20.58	51.83	74.00	-22.17	peak
6	17725.000	29.95	22.13	52.08	74.00	-21.92	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)

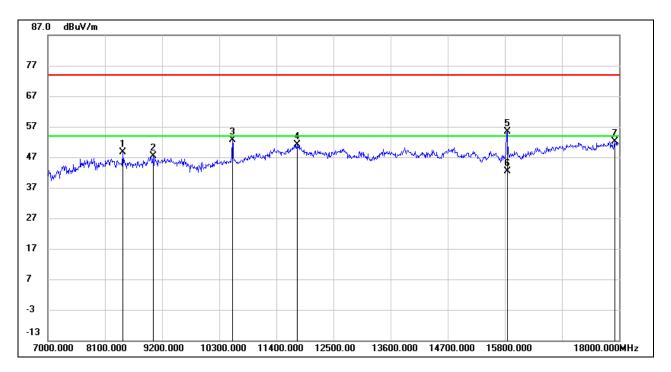


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7759.000	38.04	8.09	46.13	74.00	-27.87	peak
2	8980.000	36.41	10.41	46.82	74.00	-27.18	peak
3	10520.000	37.94	12.04	49.98	74.00	-24.02	peak
4	11818.000	35.25	15.58	50.83	74.00	-23.17	peak
5	14821.000	32.66	16.81	49.47	74.00	-24.53	peak
6	15789.000	36.79	16.82	53.61	74.00	-20.39	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)

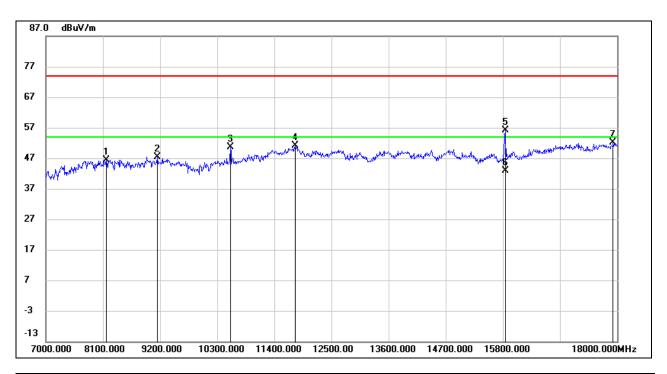


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8441.000	40.10	8.56	48.66	74.00	-25.34	peak
2	9024.000	36.89	10.47	47.36	74.00	-26.64	peak
3	10553.000	40.51	12.17	52.68	74.00	-21.32	peak
4	11796.000	35.57	15.59	51.16	74.00	-22.84	peak
5	15844.000	38.46	16.92	55.38	74.00	-18.62	peak
6	15844.000	25.40	16.92	42.32	54.00	-11.68	AVG
7	17912.000	29.44	22.69	52.13	74.00	-21.87	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)

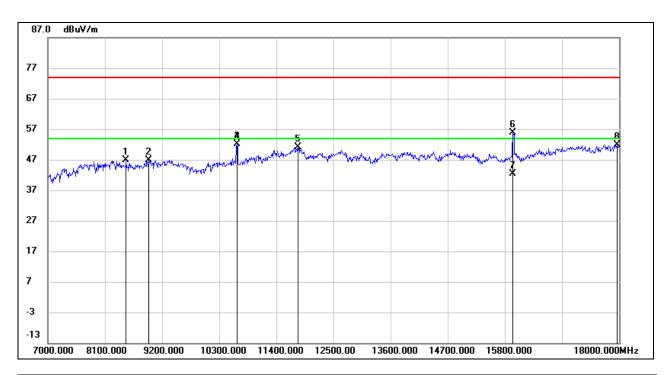


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8166.000	37.24	9.07	46.31	74.00	-27.69	peak
2	9145.000	37.63	9.66	47.29	74.00	-26.71	peak
3	10553.000	38.47	12.17	50.64	74.00	-23.36	peak
4	11807.000	35.54	15.61	51.15	74.00	-22.85	peak
5	15844.000	39.24	16.92	56.16	74.00	-17.84	peak
6	15844.000	25.91	16.92	42.83	54.00	-11.17	AVG
7	17923.000	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. 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)

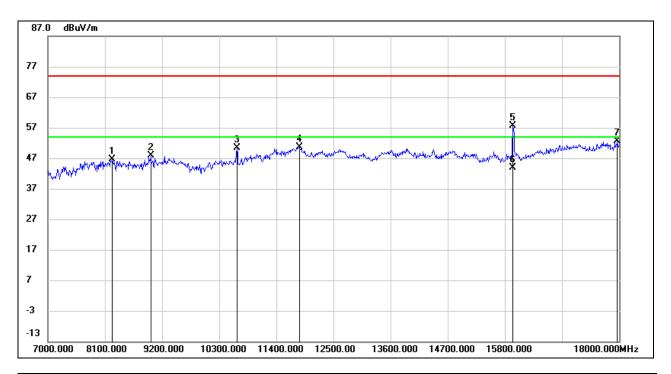


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8507.000	38.30	8.54	46.84	74.00	-27.16	peak
2	8947.000	36.85	10.07	46.92	74.00	-27.08	peak
3	10641.000	39.59	12.42	52.01	74.00	-21.99	peak
4	10641.000	39.59	12.42	52.01	74.00	-21.99	peak
5	11818.000	35.51	15.58	51.09	74.00	-22.91	peak
6	15954.000	38.74	17.14	55.88	74.00	-18.12	peak
7	15954.000	25.21	17.14	42.35	54.00	-11.65	AVG
8	17956.000	29.20	22.68	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.



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



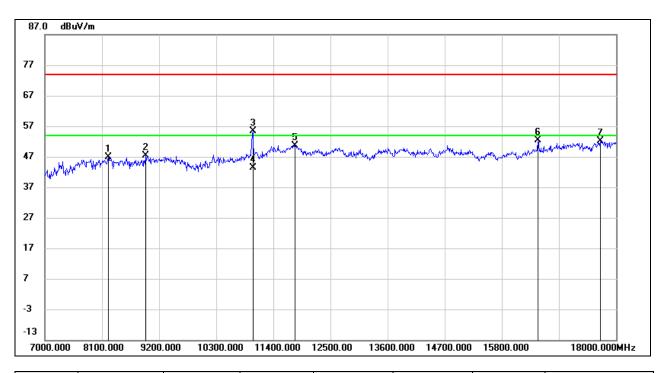
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8243.000	37.48	9.19	46.67	74.00	-27.33	peak
2	8980.000	37.55	10.41	47.96	74.00	-26.04	peak
3	10641.000	37.97	12.42	50.39	74.00	-23.61	peak
4	11840.000	34.96	15.56	50.52	74.00	-23.48	peak
5	15954.000	40.38	17.14	57.52	74.00	-16.48	peak
6	15954.000	26.70	17.14	43.84	54.00	-10.16	AVG
7	17967.000	30.04	22.67	52.71	74.00	-21.29	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)

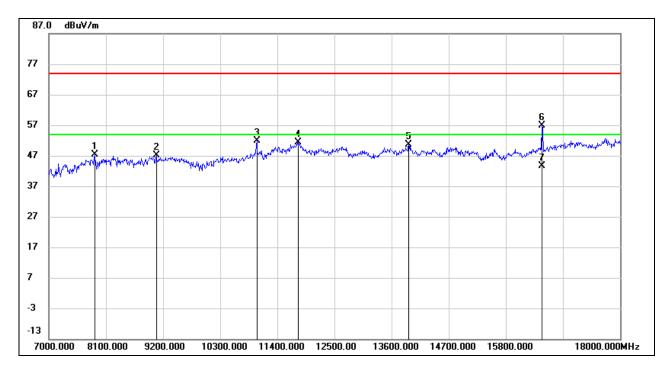


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8221.000	37.63	9.28	46.91	74.00	-27.09	peak
2	8936.000	37.44	9.96	47.40	74.00	-26.60	peak
3	11004.000	42.16	13.26	55.42	74.00	-18.58	peak
4	11004.000	30.16	13.26	43.42	54.00	-10.58	AVG
5	11818.000	35.09	15.58	50.67	74.00	-23.33	peak
6	16493.000	33.31	19.09	52.40	74.00	-21.60	peak
7	17692.000	30.16	21.87	52.03	74.00	-21.97	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)

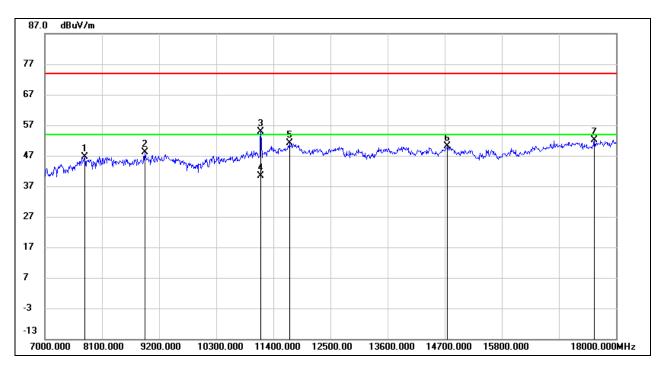


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	39.27	8.01	47.28	74.00	-26.72	peak
2	9068.000	36.99	10.17	47.16	74.00	-26.84	peak
3	11004.000	38.62	13.26	51.88	74.00	-22.12	peak
4	11807.000	35.71	15.61	51.32	74.00	-22.68	peak
5	13930.000	33.86	16.89	50.75	74.00	-23.25	peak
6	16493.000	37.74	19.09	56.83	74.00	-17.17	peak
7	16493.000	24.56	19.09	43.65	54.00	-10.35	AVG

- 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)

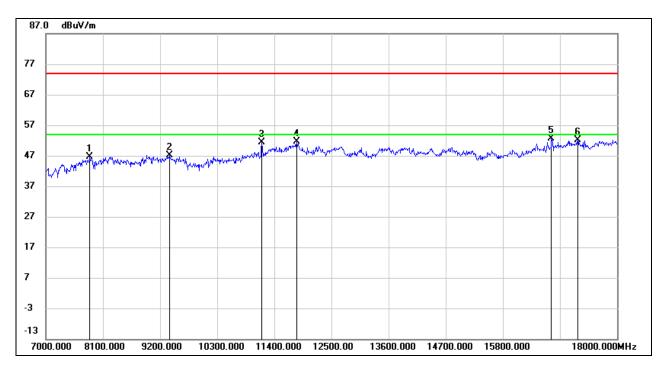


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7770.000	38.46	8.14	46.60	74.00	-27.40	peak
2	8925.000	38.28	9.84	48.12	74.00	-25.88	peak
3	11158.000	41.30	13.56	54.86	74.00	-19.14	peak
4	11158.000	26.87	13.56	40.43	54.00	-13.57	AVG
5	11708.000	35.93	15.11	51.04	74.00	-22.96	peak
6	14755.000	33.36	16.72	50.08	74.00	-23.92	peak
7	17582.000	31.12	21.11	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 (MID CHANNEL, VERTICAL)

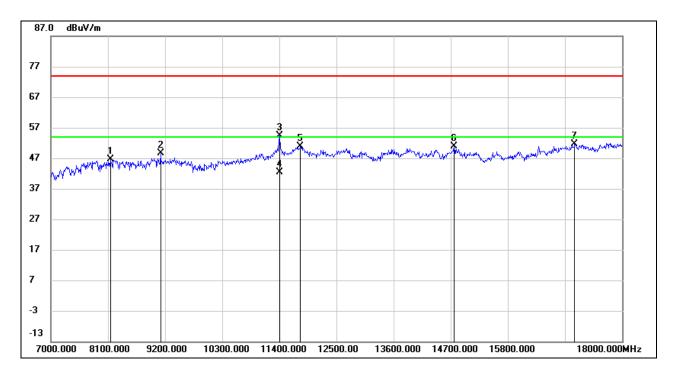


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7847.000	38.44	8.11	46.55	74.00	-27.45	peak
2	9387.000	36.89	10.24	47.13	74.00	-26.87	peak
3	11158.000	37.84	13.56	51.40	74.00	-22.60	peak
4	11829.000	36.09	15.57	51.66	74.00	-22.34	peak
5	16735.000	32.94	19.66	52.60	74.00	-21.40	peak
6	17241.000	31.20	20.97	52.17	74.00	-21.83	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)

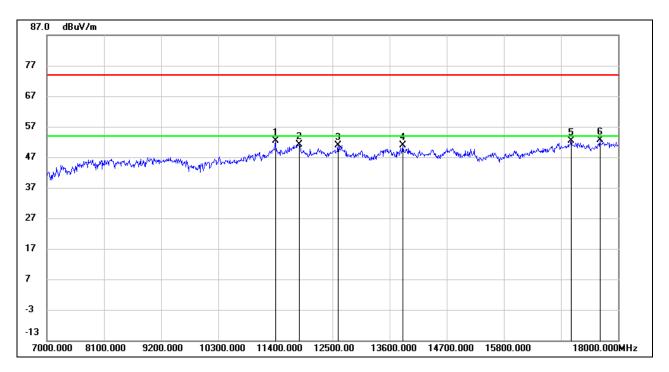


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8144.000	37.82	8.88	46.70	74.00	-27.30	peak
2	9112.000	38.83	9.88	48.71	74.00	-25.29	peak
3	11411.000	40.15	14.23	54.38	74.00	-19.62	peak
4	11411.000	28.03	14.23	42.26	54.00	-11.74	AVG
5	11807.000	35.23	15.61	50.84	74.00	-23.16	peak
6	14766.000	34.10	16.74	50.84	74.00	-23.16	peak
7	17087.000	30.96	20.58	51.54	74.00	-22.46	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)



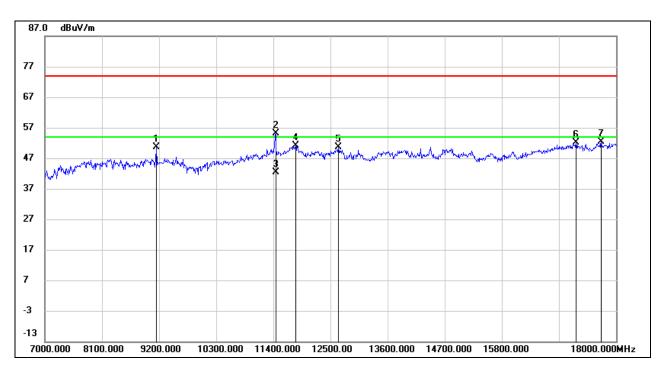
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	11400.000	38.07	14.22	52.29	74.00	-21.71	peak
2	11862.000	35.71	15.52	51.23	74.00	-22.77	peak
3	12610.000	35.49	15.30	50.79	74.00	-23.21	peak
4	13853.000	33.93	16.93	50.86	74.00	-23.14	peak
5	17098.000	31.81	20.63	52.44	74.00	-21.56	peak
6	17648.000	31.09	21.54	52.63	74.00	-21.37	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)

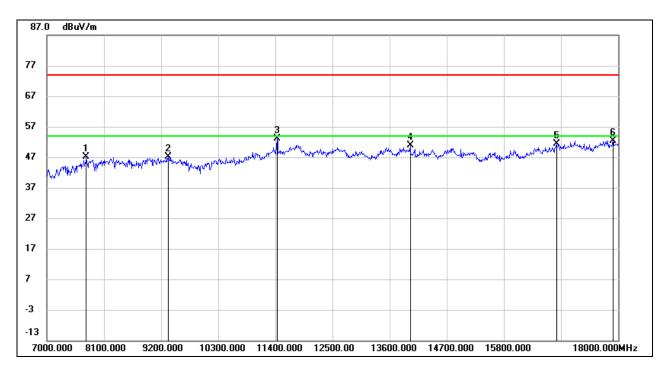


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9145.000	40.92	9.66	50.58	74.00	-23.42	peak
2	11444.000	40.83	14.28	55.11	74.00	-18.89	peak
3	11444.000	28.17	14.28	42.45	54.00	-11.55	AVG
4	11829.000	35.51	15.57	51.08	74.00	-22.92	peak
5	12654.000	35.21	15.38	50.59	74.00	-23.41	peak
6	17230.000	31.05	20.99	52.04	74.00	-21.96	peak
7	17714.000	30.22	22.04	52.26	74.00	-21.74	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)**



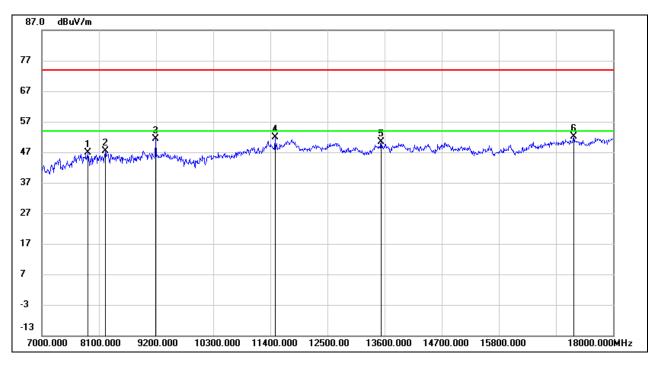
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7759.000	38.93	8.09	47.02	74.00	-26.98	peak
2	9332.000	37.07	9.97	47.04	74.00	-26.96	peak
3	11433.000	38.80	14.27	53.07	74.00	-20.93	peak
4	13996.000	34.00	16.85	50.85	74.00	-23.15	peak
5	16812.000	31.73	19.77	51.50	74.00	-22.50	peak
6	17901.000	29.77	22.69	52.46	74.00	-21.54	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)

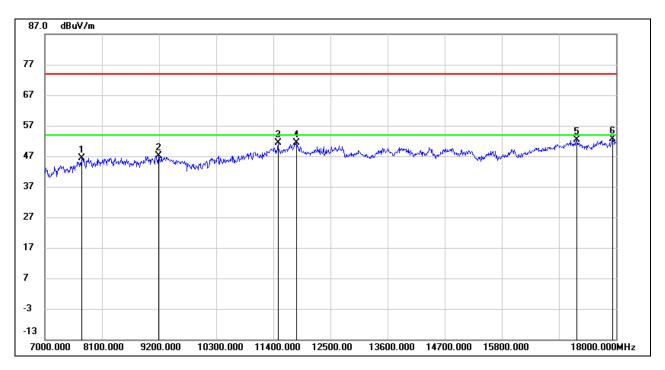


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	38.75	8.01	46.76	74.00	-27.24	peak
2	8221.000	38.19	9.28	47.47	74.00	-26.53	peak
3	9189.000	42.02	9.36	51.38	74.00	-22.62	peak
4	11488.000	37.42	14.34	51.76	74.00	-22.24	peak
5	13534.000	33.91	16.42	50.33	74.00	-23.67	peak
6	17241.000	31.24	20.97	52.21	74.00	-21.79	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 (LOW CHANNEL, VERTICAL)

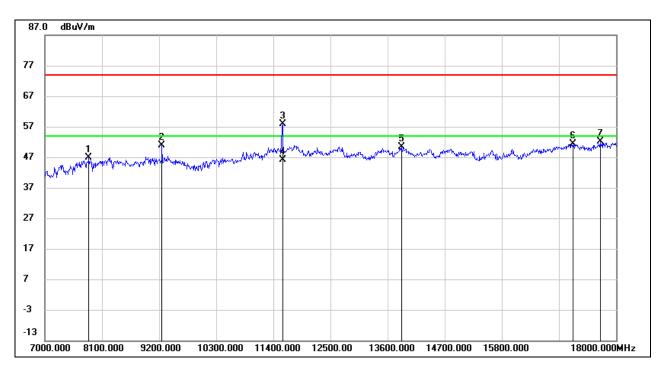


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7715.000	38.53	7.92	46.45	74.00	-27.55	peak
2	9189.000	37.83	9.36	47.19	74.00	-26.81	peak
3	11488.000	37.12	14.34	51.46	74.00	-22.54	peak
4	11840.000	35.78	15.56	51.34	74.00	-22.66	peak
5	17241.000	31.37	20.97	52.34	74.00	-21.66	peak
6	17934.000	29.95	22.69	52.64	74.00	-21.36	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)

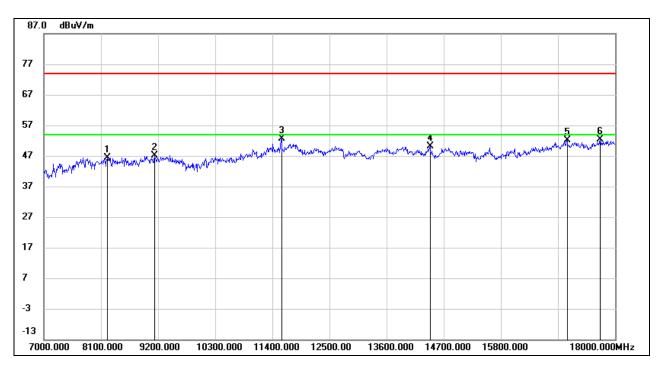


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7847.000	38.83	8.11	46.94	74.00	-27.06	peak
2	9255.000	41.23	9.56	50.79	74.00	-23.21	peak
3	11576.000	43.36	14.48	57.84	74.00	-16.16	peak
4	11576.000	31.77	14.48	46.25	54.00	-7.75	AVG
5	13864.000	33.36	16.92	50.28	74.00	-23.72	peak
6	17164.000	30.38	20.89	51.27	74.00	-22.73	peak
7	17692.000	30.14	21.87	52.01	74.00	-21.99	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 (MID CHANNEL, VERTICAL)

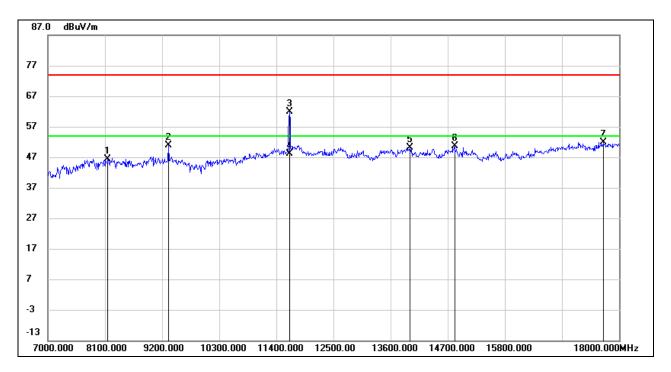


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8221.000	37.20	9.28	46.48	74.00	-27.52	peak
2	9134.000	37.38	9.73	47.11	74.00	-26.89	peak
3	11576.000	38.08	14.48	52.56	74.00	-21.44	peak
4	14436.000	33.36	16.79	50.15	74.00	-23.85	peak
5	17076.000	31.64	20.54	52.18	74.00	-21.82	peak
6	17714.000	30.27	22.04	52.31	74.00	-21.69	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)

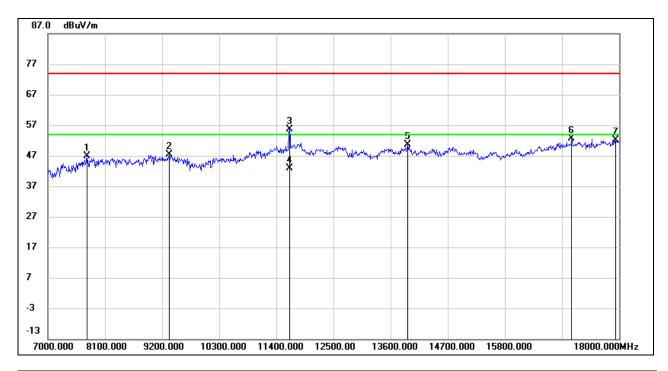


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8155.000	37.47	8.98	46.45	74.00	-27.55	peak
2	9321.000	40.99	9.91	50.90	74.00	-23.10	peak
3	11653.000	47.04	14.80	61.84	74.00	-12.16	peak
4	11653.000	33.43	14.80	48.23	54.00	-5.77	AVG
5	13974.000	33.24	16.86	50.10	74.00	-23.90	peak
6	14832.000	33.80	16.82	50.62	74.00	-23.38	peak
7	17692.000	30.11	21.87	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. 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	7748.000	38.89	8.05	46.94	74.00	-27.06	peak
2	9332.000	37.51	9.97	47.48	74.00	-26.52	peak
3	11653.000	40.89	14.80	55.69	74.00	-18.31	peak
4	11653.000	28.03	14.80	42.83	54.00	-11.17	AVG
5	13930.000	33.66	16.89	50.55	74.00	-23.45	peak
6	17087.000	32.07	20.58	52.65	74.00	-21.35	peak
7	17934.000	29.43	22.69	52.12	74.00	-21.88	peak

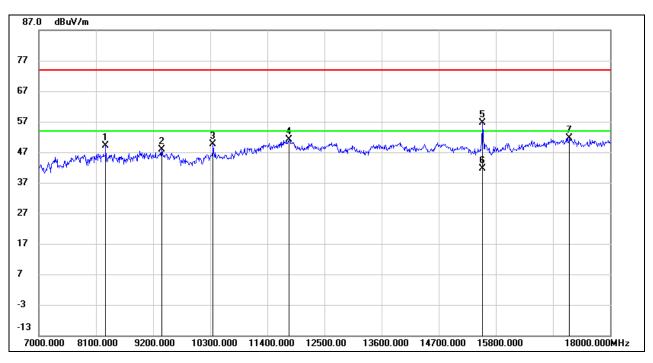
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency 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)

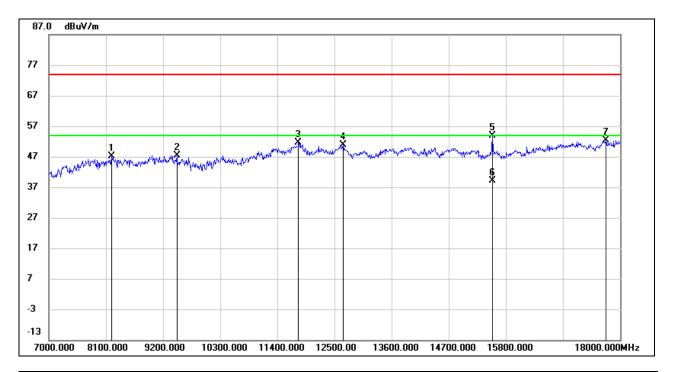


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8287.000	40.12	9.02	49.14	74.00	-24.86	peak
2	9365.000	37.73	10.13	47.86	74.00	-26.14	peak
3	10355.000	38.45	11.29	49.74	74.00	-24.26	peak
4	11818.000	35.44	15.58	51.02	74.00	-22.98	peak
5	15547.000	39.94	16.58	56.52	74.00	-17.48	peak
6	15547.000	24.94	16.58	41.52	54.00	-12.48	AVG
7	17219.000	30.71	21.01	51.72	74.00	-22.28	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)

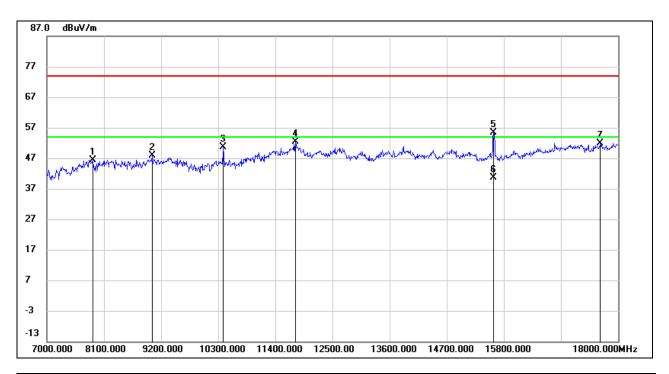


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8210.000	37.69	9.32	47.01	74.00	-26.99	peak
2	9464.000	37.05	10.40	47.45	74.00	-26.55	peak
3	11807.000	36.13	15.61	51.74	74.00	-22.26	peak
4	12665.000	35.42	15.41	50.83	74.00	-23.17	peak
5	15536.000	37.42	16.55	53.97	74.00	-20.03	peak
6	15536.000	22.68	16.55	39.23	54.00	-14.77	AVG
7	17725.000	30.33	22.13	52.46	74.00	-21.54	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)

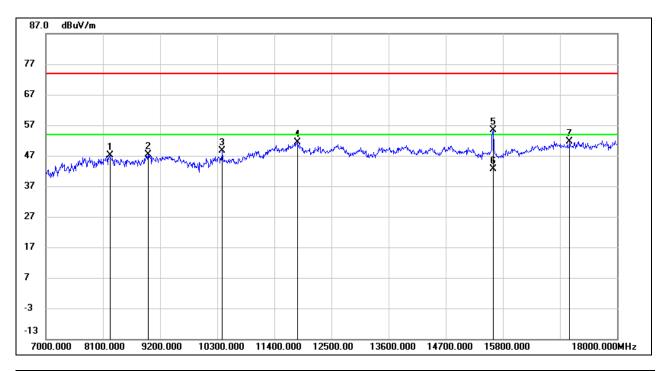


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	38.44	8.01	46.45	74.00	-27.55	peak
2	9024.000	37.37	10.47	47.84	74.00	-26.16	peak
3	10399.000	39.28	11.45	50.73	74.00	-23.27	peak
4	11785.000	36.78	15.52	52.30	74.00	-21.70	peak
5	15602.000	38.70	16.70	55.40	74.00	-18.60	peak
6	15602.000	23.93	16.70	40.63	54.00	-13.37	AVG
7	17659.000	30.37	21.63	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)

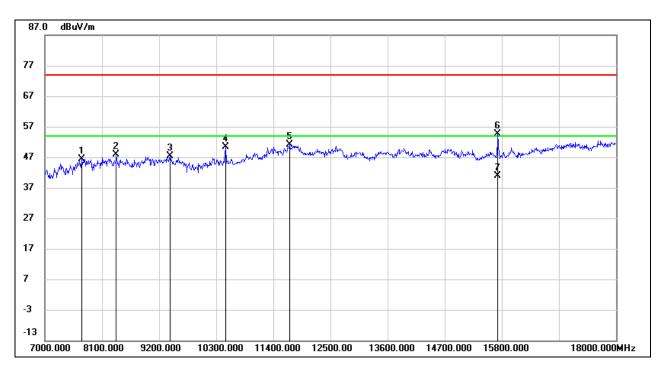


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8232.000	37.99	9.23	47.22	74.00	-26.78	peak
2	8969.000	36.98	10.31	47.29	74.00	-26.71	peak
3	10399.000	37.08	11.45	48.53	74.00	-25.47	peak
4	11840.000	35.73	15.56	51.29	74.00	-22.71	peak
5	15613.000	38.57	16.71	55.28	74.00	-18.72	peak
6	15613.000	25.91	16.71	42.62	54.00	-11.38	AVG
7	17087.000	31.03	20.58	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. 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)

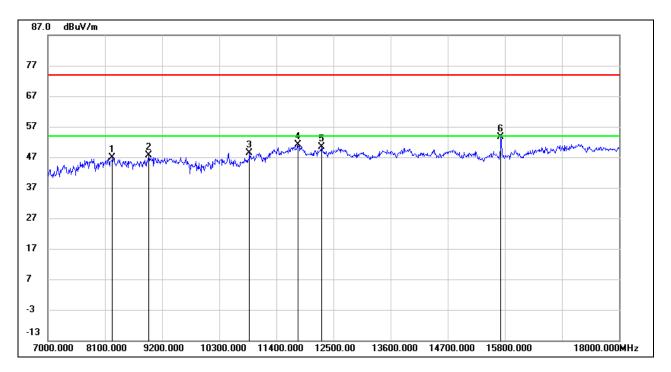


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7715.000	38.50	7.92	46.42	74.00	-27.58	peak
2	8375.000	39.13	8.68	47.81	74.00	-26.19	peak
3	9409.000	36.94	10.33	47.27	74.00	-26.73	peak
4	10487.000	38.39	11.89	50.28	74.00	-23.72	peak
5	11719.000	35.96	15.17	51.13	74.00	-22.87	peak
6	15723.000	37.89	16.77	54.66	74.00	-19.34	peak
7	15723.000	24.08	16.77	40.85	54.00	-13.15	AVG

- 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)



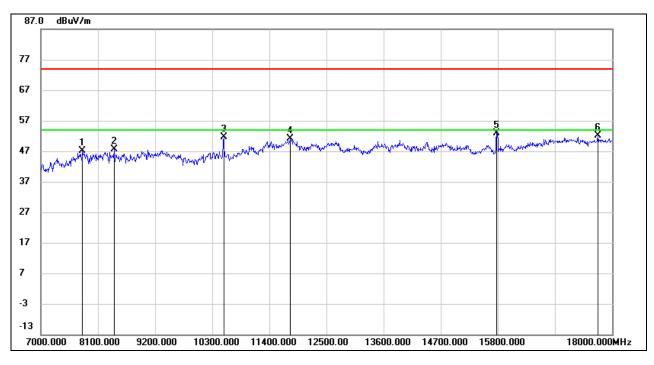
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8243.000	37.69	9.19	46.88	74.00	-27.12	peak
2	8947.000	37.64	10.07	47.71	74.00	-26.29	peak
3	10883.000	35.52	12.92	48.44	74.00	-25.56	peak
4	11818.000	35.63	15.58	51.21	74.00	-22.79	peak
5	12269.000	35.08	15.24	50.32	74.00	-23.68	peak
6	15723.000	36.76	16.77	53.53	74.00	-20.47	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-2A BAND**

# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

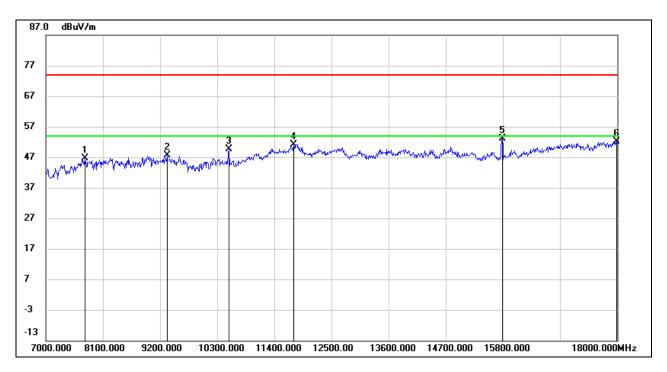


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7803.000	38.80	8.24	47.04	74.00	-26.96	peak
2	8408.000	39.00	8.59	47.59	74.00	-26.41	peak
3	10520.000	39.66	12.04	51.70	74.00	-22.30	peak
4	11796.000	35.55	15.59	51.14	74.00	-22.86	peak
5	15778.000	35.94	16.82	52.76	74.00	-21.24	peak
6	17725.000	29.93	22.13	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)

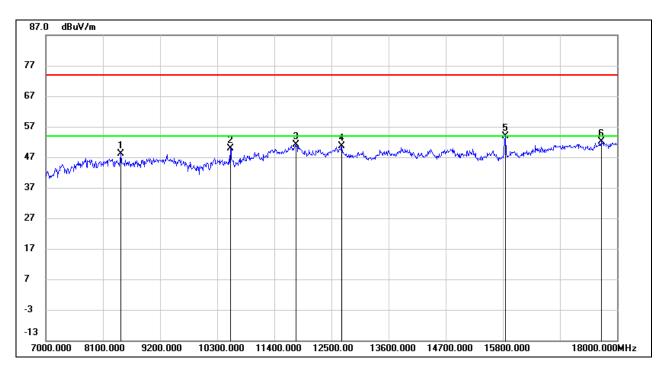


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7748.000	38.48	8.05	46.53	74.00	-27.47	peak
2	9332.000	37.54	9.97	47.51	74.00	-26.49	peak
3	10520.000	37.54	12.04	49.58	74.00	-24.42	peak
4	11774.000	35.66	15.47	51.13	74.00	-22.87	peak
5	15789.000	36.34	16.82	53.16	74.00	-20.84	peak
6	17989.000	29.42	22.67	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 (MID CHANNEL, HORIZONTAL)

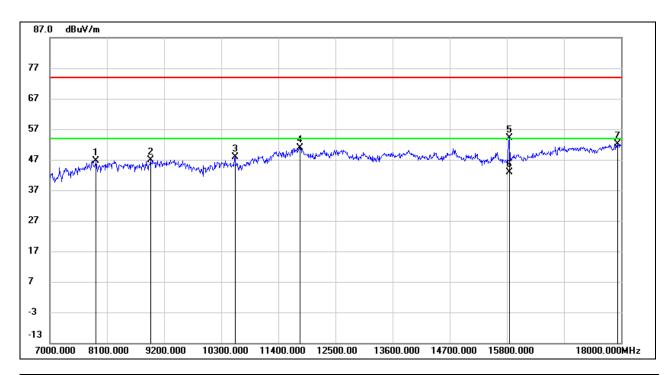


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8441.000	39.49	8.56	48.05	74.00	-25.95	peak
2	10553.000	37.73	12.17	49.90	74.00	-24.10	peak
3	11818.000	35.50	15.58	51.08	74.00	-22.92	peak
4	12698.000	35.18	15.47	50.65	74.00	-23.35	peak
5	15855.000	36.92	16.94	53.86	74.00	-20.14	peak
6	17692.000	30.14	21.87	52.01	74.00	-21.99	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 (MID CHANNEL, VERTICAL)

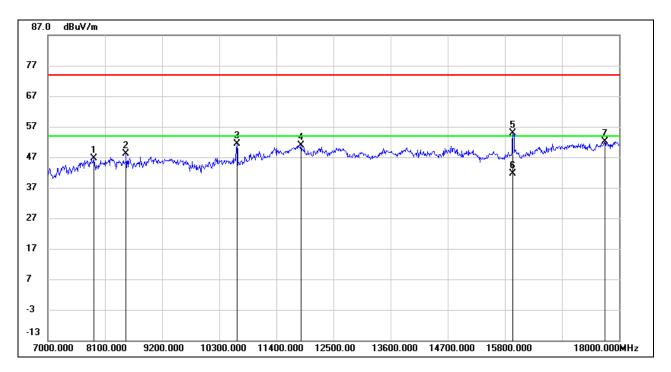


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7891.000	38.56	7.98	46.54	74.00	-27.46	peak
2	8936.000	37.04	9.96	47.00	74.00	-27.00	peak
3	10564.000	35.73	12.21	47.94	74.00	-26.06	peak
4	11818.000	35.24	15.58	50.82	74.00	-23.18	peak
5	15844.000	37.32	16.92	54.24	74.00	-19.76	peak
6	15844.000	25.95	16.92	42.87	54.00	-11.13	AVG
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.



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

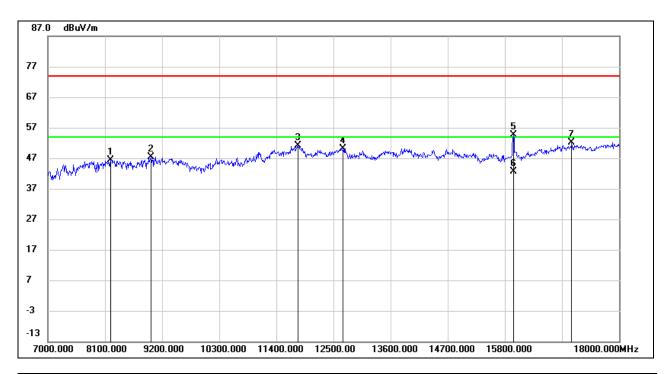


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	38.69	8.01	46.70	74.00	-27.30	peak
2	8507.000	39.71	8.54	48.25	74.00	-25.75	peak
3	10641.000	38.98	12.42	51.40	74.00	-22.60	peak
4	11873.000	35.33	15.50	50.83	74.00	-23.17	peak
5	15954.000	37.68	17.14	54.82	74.00	-19.18	peak
6	15954.000	24.44	17.14	41.58	54.00	-12.42	AVG
7	17725.000	30.05	22.13	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 (HIGH CHANNEL, VERTICAL)



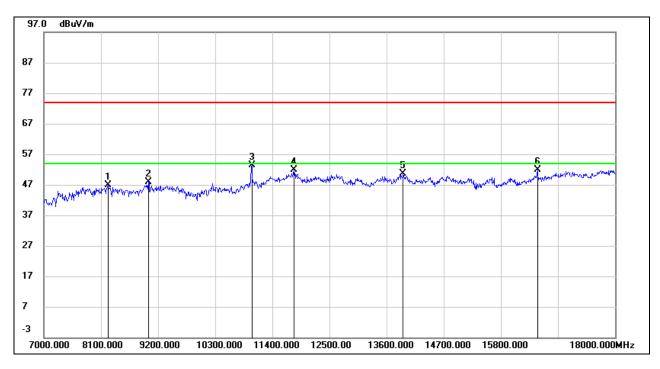
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8210.000	37.06	9.32	46.38	74.00	-27.62	peak
2	8991.000	36.76	10.53	47.29	74.00	-26.71	peak
3	11818.000	35.46	15.58	51.04	74.00	-22.96	peak
4	12687.000	34.58	15.45	50.03	74.00	-23.97	peak
5	15965.000	37.44	17.16	54.60	74.00	-19.40	peak
6	15965.000	25.48	17.16	42.64	54.00	-11.36	AVG
7	17087.000	31.62	20.58	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. 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)

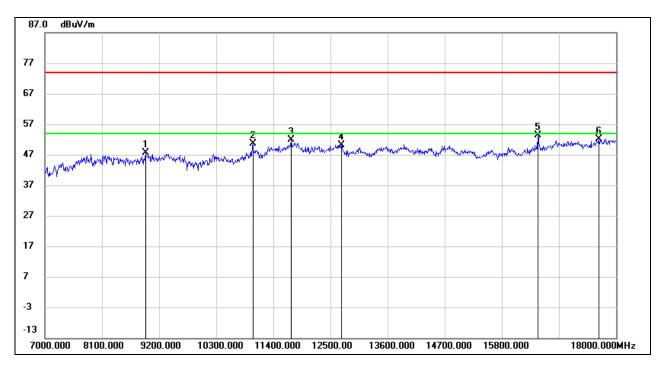


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8232.000	37.74	9.23	46.97	74.00	-27.03	peak
2	9013.000	37.36	10.54	47.90	74.00	-26.10	peak
3	11004.000	40.08	13.26	53.34	74.00	-20.66	peak
4	11818.000	36.36	15.58	51.94	74.00	-22.06	peak
5	13919.000	33.69	16.89	50.58	74.00	-23.42	peak
6	16504.000	32.67	19.14	51.81	74.00	-22.19	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)

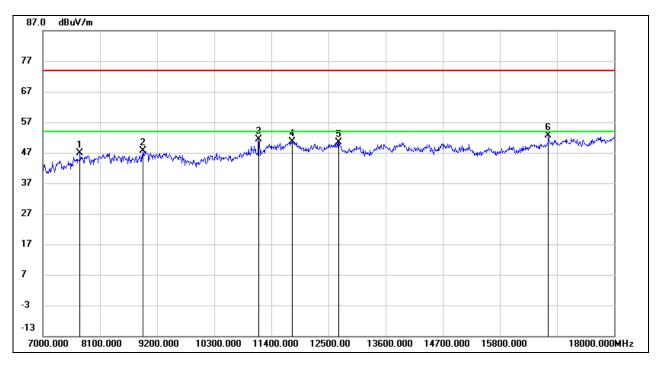


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8936.000	37.74	9.96	47.70	74.00	-26.30	peak
2	11004.000	37.43	13.26	50.69	74.00	-23.31	peak
3	11741.000	36.59	15.28	51.87	74.00	-22.13	peak
4	12709.000	34.69	15.49	50.18	74.00	-23.82	peak
5	16493.000	34.33	19.09	53.42	74.00	-20.58	peak
6	17670.000	30.50	21.70	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.



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

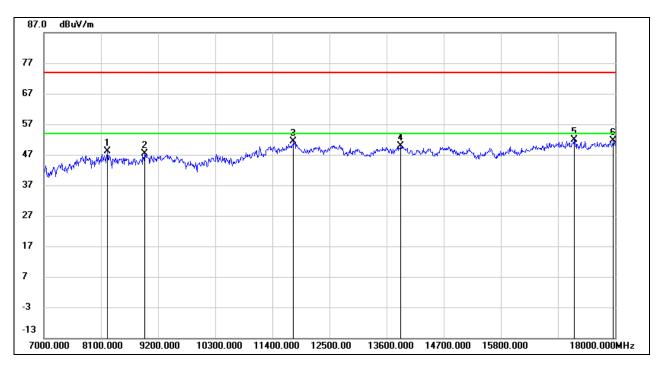


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7715.000	38.97	7.92	46.89	74.00	-27.11	peak
2	8925.000	37.86	9.84	47.70	74.00	-26.30	peak
3	11158.000	37.88	13.56	51.44	74.00	-22.56	peak
4	11807.000	34.90	15.61	50.51	74.00	-23.49	peak
5	12698.000	34.82	15.47	50.29	74.00	-23.71	peak
6	16735.000	33.06	19.66	52.72	74.00	-21.28	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)

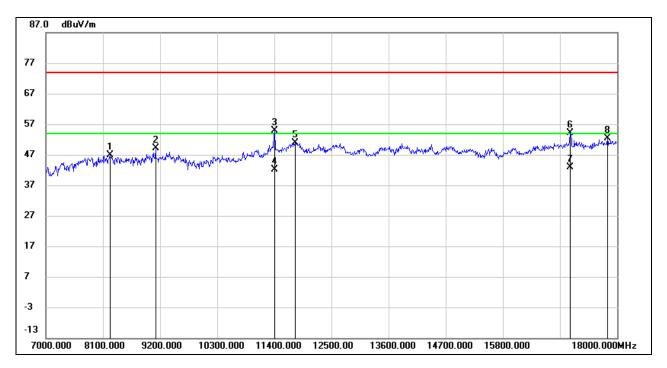


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8221.000	38.73	9.28	48.01	74.00	-25.99	peak
2	8947.000	37.36	10.07	47.43	74.00	-26.57	peak
3	11807.000	35.69	15.61	51.30	74.00	-22.70	peak
4	13875.000	32.92	16.92	49.84	74.00	-24.16	peak
5	17208.000	30.83	21.03	51.86	74.00	-22.14	peak
6	17967.000	28.95	22.67	51.62	74.00	-22.38	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)

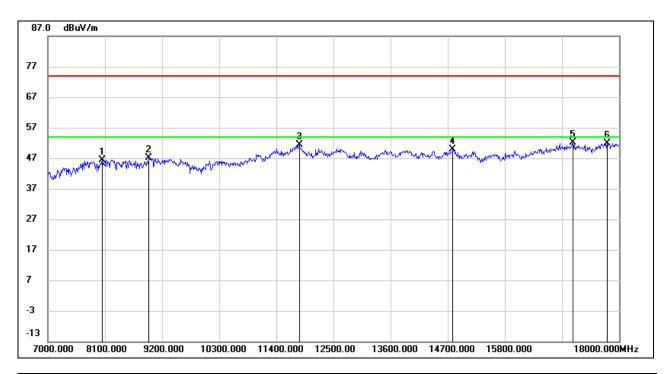


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8232.000	37.58	9.23	46.81	74.00	-27.19	peak
2	9112.000	39.28	9.88	49.16	74.00	-24.84	peak
3	11411.000	40.67	14.23	54.90	74.00	-19.10	peak
4	11411.000	27.90	14.23	42.13	54.00	-11.87	AVG
5	11807.000	35.23	15.61	50.84	74.00	-23.16	peak
6	17098.000	33.38	20.63	54.01	74.00	-19.99	peak
7	17098.000	22.21	20.63	42.84	54.00	-11.16	AVG
8	17813.000	29.59	22.72	52.31	74.00	-21.69	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)



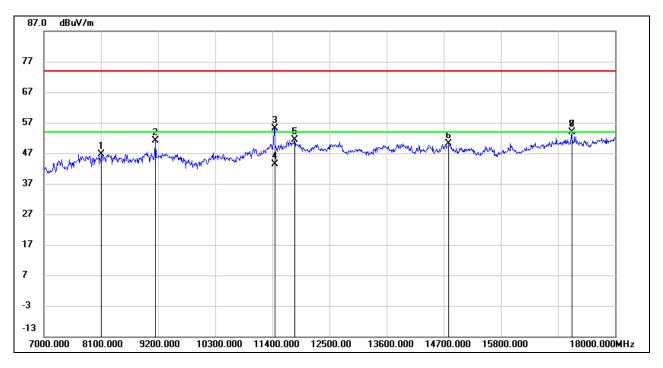
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8045.000	38.27	8.04	46.31	74.00	-27.69	peak
2	8947.000	37.18	10.07	47.25	74.00	-26.75	peak
3	11840.000	35.73	15.56	51.29	74.00	-22.71	peak
4	14799.000	33.07	16.80	49.87	74.00	-24.13	peak
5	17109.000	31.40	20.67	52.07	74.00	-21.93	peak
6	17769.000	29.41	22.48	51.89	74.00	-22.11	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.



## **STRADDLE CHANNEL 144**

## HARMONICS AND SPURIOUS EMISSIONS (HORIZONTAL)

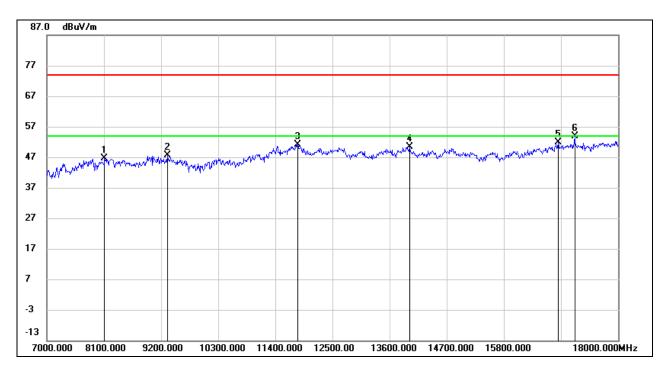


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	38.08	8.61	46.69	74.00	-27.31	peak
2	9145.000	41.52	9.66	51.18	74.00	-22.82	peak
3	11444.000	40.89	14.28	55.17	74.00	-18.83	peak
4	11444.000	29.07	14.28	43.35	54.00	-10.65	AVG
5	11829.000	35.91	15.57	51.48	74.00	-22.52	peak
6	14799.000	33.29	16.80	50.09	74.00	-23.91	peak
7	17164.000	32.93	20.89	53.82	74.00	-20.18	peak
8	17164.000	32.93	20.89	53.82	74.00	-20.18	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 (VERTICAL)**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	38.02	8.61	46.63	74.00	-27.37	peak
2	9321.000	37.63	9.91	47.54	74.00	-26.46	peak
3	11829.000	35.54	15.57	51.11	74.00	-22.89	peak
4	13985.000	33.55	16.86	50.41	74.00	-23.59	peak
5	16845.000	31.96	19.85	51.81	74.00	-22.19	peak
6	17164.000	32.95	20.89	53.84	74.00	-20.16	peak

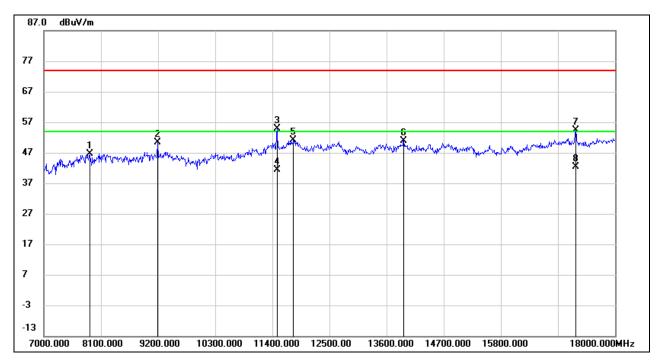
Note: 1. Measurement = Reading Level + Correct Factor.

- 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 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)



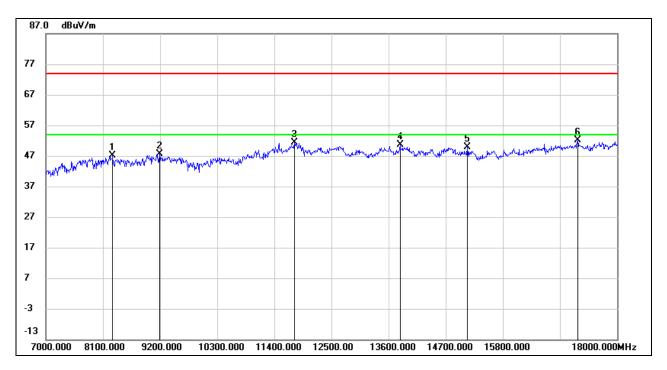


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	38.65	8.01	46.66	74.00	-27.34	peak
2	9189.000	41.08	9.36	50.44	74.00	-23.56	peak
3	11488.000	40.63	14.34	54.97	74.00	-19.03	peak
4	11488.000	27.08	14.34	41.42	54.00	-12.58	AVG
5	11807.000	35.45	15.61	51.06	74.00	-22.94	peak
6	13930.000	33.98	16.89	50.87	74.00	-23.13	peak
7	17241.000	33.43	20.97	54.40	74.00	-19.60	peak
8	17241.000	21.51	20.97	42.48	54.00	-11.52	AVG

- 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)

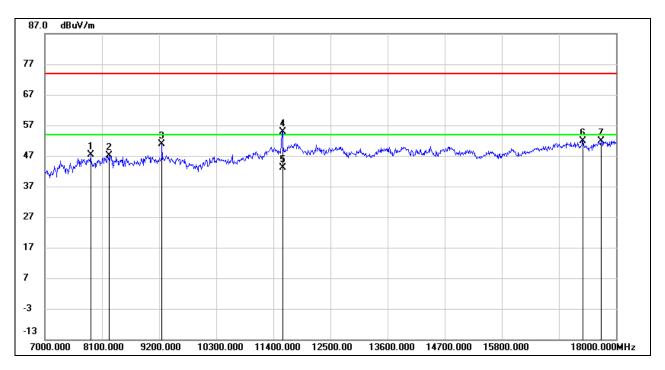


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8287.000	38.05	9.02	47.07	74.00	-26.93	peak
2	9189.000	38.29	9.36	47.65	74.00	-26.35	peak
3	11785.000	35.82	15.52	51.34	74.00	-22.66	peak
4	13820.000	33.58	16.94	50.52	74.00	-23.48	peak
5	15118.000	33.30	16.48	49.78	74.00	-24.22	peak
6	17241.000	31.20	20.97	52.17	74.00	-21.83	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)

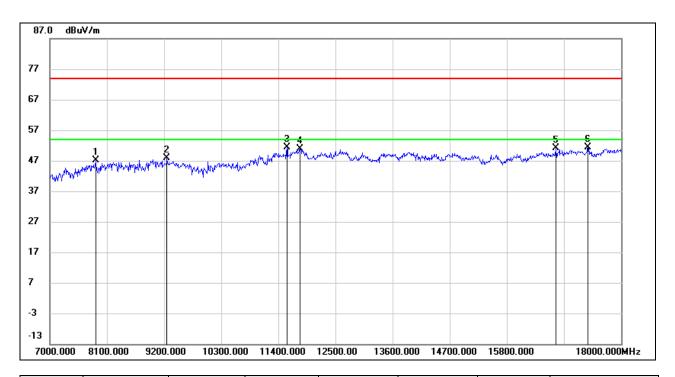


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	39.41	8.01	47.42	74.00	-26.58	peak
2	8232.000	37.96	9.23	47.19	74.00	-26.81	peak
3	9255.000	41.41	9.56	50.97	74.00	-23.03	peak
4	11576.000	40.52	14.48	55.00	74.00	-19.00	peak
5	11576.000	28.77	14.48	43.25	54.00	-10.75	AVG
6	17362.000	31.16	20.79	51.95	74.00	-22.05	peak
7	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, VERTICAL)

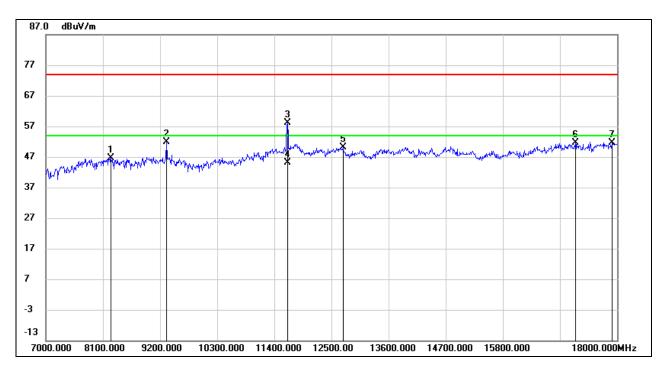


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	39.19	8.01	47.20	74.00	-26.80	peak
2	9255.000	38.40	9.56	47.96	74.00	-26.04	peak
3	11565.000	36.90	14.45	51.35	74.00	-22.65	peak
4	11818.000	35.42	15.58	51.00	74.00	-23.00	peak
5	16746.000	31.43	19.68	51.11	74.00	-22.89	peak
6	17362.000	30.63	20.79	51.42	74.00	-22.58	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 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)

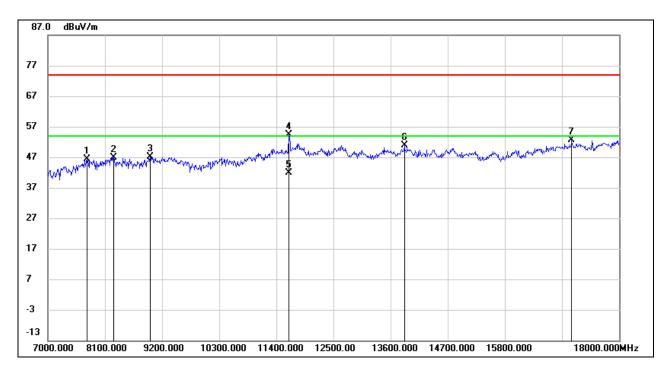


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8254.000	37.48	9.15	46.63	74.00	-27.37	peak
2	9321.000	42.01	9.91	51.92	74.00	-22.08	peak
3	11653.000	43.24	14.80	58.04	74.00	-15.96	peak
4	11653.000	30.44	14.80	45.24	54.00	-8.76	AVG
5	12720.000	34.50	15.51	50.01	74.00	-23.99	peak
6	17197.000	30.67	21.03	51.70	74.00	-22.30	peak
7	17901.000	28.86	22.69	51.55	74.00	-22.45	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 (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7759.000	38.31	8.09	46.40	74.00	-27.60	peak
2	8265.000	37.74	9.11	46.85	74.00	-27.15	peak
3	8969.000	36.70	10.31	47.01	74.00	-26.99	peak
4	11642.000	39.72	14.74	54.46	74.00	-19.54	peak
5	11642.000	27.11	14.74	41.85	54.00	-12.15	AVG
6	13864.000	33.86	16.92	50.78	74.00	-23.22	peak
7	17087.000	31.98	20.58	52.56	74.00	-21.44	peak

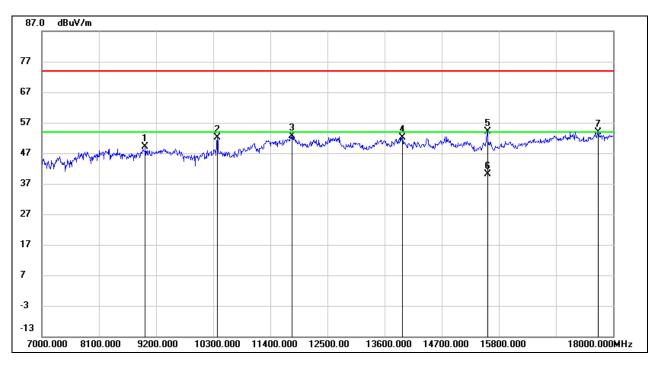
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency 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)

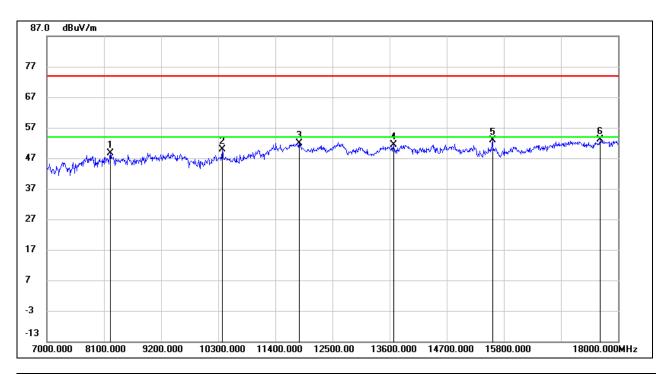


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8991.000	37.39	11.63	49.02	74.00	-24.98	peak
2	10377.000	39.66	12.52	52.18	74.00	-21.82	peak
3	11818.000	35.91	16.68	52.59	74.00	-21.41	peak
4	13941.000	34.16	17.95	52.11	74.00	-21.89	peak
5	15580.000	36.21	17.87	54.08	74.00	-19.92	peak
6	15580.000	22.34	17.87	40.21	54.00	-13.79	AVG
7	17714.000	30.57	23.34	53.91	74.00	-20.09	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)

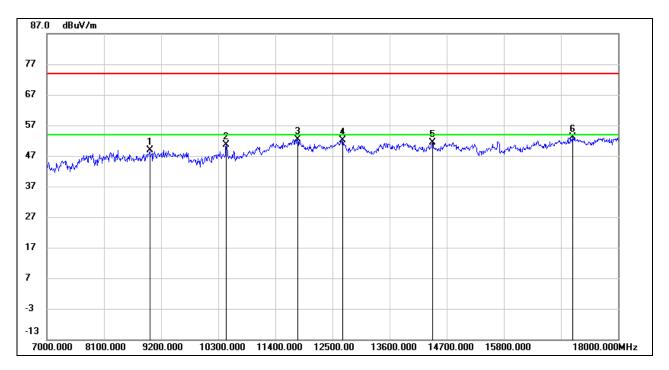


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8221.000	38.28	10.46	48.74	74.00	-25.26	peak
2	10377.000	37.28	12.52	49.80	74.00	-24.20	peak
3	11862.000	35.21	16.64	51.85	74.00	-22.15	peak
4	13677.000	33.75	17.70	51.45	54.00	-2.55	peak
5	15580.000	34.90	17.87	52.77	74.00	-21.23	peak
6	17659.000	30.13	22.97	53.10	74.00	-20.90	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)

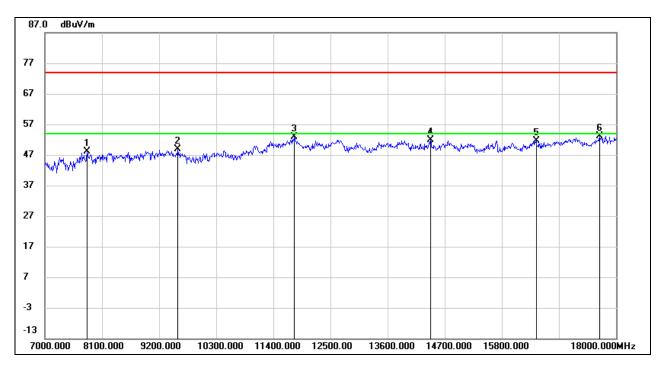


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8980.000	37.39	11.52	48.91	74.00	-25.09	peak
2	10454.000	37.82	12.88	50.70	74.00	-23.30	peak
3	11829.000	35.78	16.67	52.45	74.00	-21.55	peak
4	12698.000	35.44	16.81	52.25	74.00	-21.75	peak
5	14425.000	33.55	17.89	51.44	74.00	-22.56	peak
6	17120.000	31.10	22.03	53.13	74.00	-20.87	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)



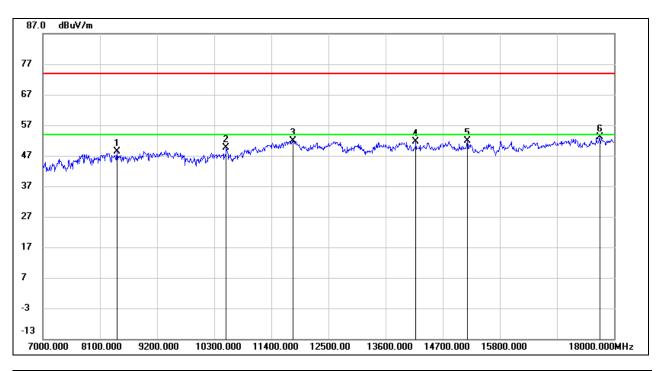
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7814.000	38.67	9.44	48.11	74.00	-25.89	peak
2	9563.000	37.09	11.87	48.96	74.00	-25.04	peak
3	11807.000	36.07	16.70	52.77	74.00	-21.23	peak
4	14425.000	33.94	17.89	51.83	74.00	-22.17	peak
5	16460.000	31.62	20.10	51.72	74.00	-22.28	peak
6	17681.000	29.96	23.12	53.08	74.00	-20.92	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)

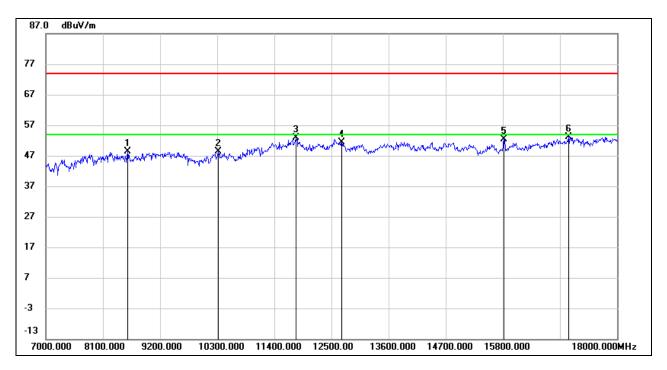


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8430.000	38.49	9.78	48.27	74.00	-25.73	peak
2	10531.000	36.38	13.21	49.59	74.00	-24.41	peak
3	11818.000	35.21	16.68	51.89	74.00	-22.11	peak
4	14183.000	33.61	17.91	51.52	74.00	-22.48	peak
5	15173.000	34.41	17.43	51.84	74.00	-22.16	peak
6	17725.000	29.67	23.42	53.09	74.00	-20.91	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 (LOW CHANNEL, VERTICAL)

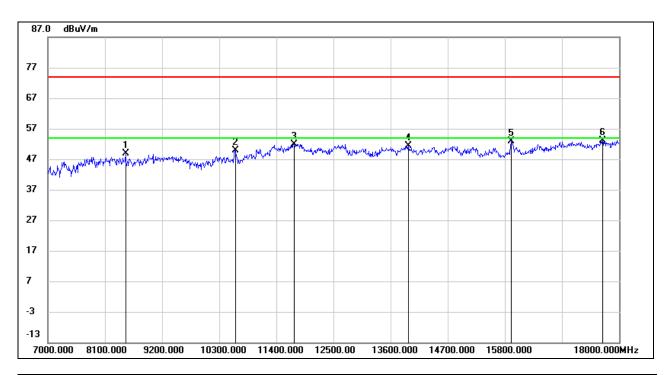


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8573.000	38.76	9.71	48.47	74.00	-25.53	peak
2	10322.000	36.00	12.30	48.30	74.00	-25.70	peak
3	11818.000	36.09	16.68	52.77	74.00	-21.23	peak
4	12698.000	34.65	16.81	51.46	74.00	-22.54	peak
5	15822.000	34.56	17.94	52.50	74.00	-21.50	peak
6	17065.000	31.43	21.73	53.16	74.00	-20.84	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	39.27	9.72	48.99	74.00	-25.01	peak
2	10608.000	36.36	13.47	49.83	74.00	-24.17	peak
3	11741.000	35.50	16.43	51.93	74.00	-22.07	peak
4	13941.000	33.41	17.95	51.36	74.00	-22.64	peak
5	15921.000	34.62	18.26	52.88	74.00	-21.12	peak
6	17681.000	30.00	23.12	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.