



CFR 47 FCC PART 15 SUBPART E

CERTIFICATION TEST REPORT

For

WIFI+BT Module

MODEL NUMBER: DCT2EM2101

FCC ID: 2AC23-DCT2E

REPORT NUMBER: 4790071769.2-4

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Prepared for

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	09/01/2021	Initial Issue	



Summary of Test Results			
Clause	Test Items	FCC Rules	Test Results
1	6dB/26dB Bandwidth	FCC 15.407 (a)&(e)	PASS
2	99% Occupied Bandwidth	RSS-Gen Clause 6.6	PASS
3	Conducted Output Power	FCC 15.407 (a)	PASS
4	Power Spectral Density	FCC 15.407 (a)	PASS
5	Radiated Bandedge and Spurious Emission	FCC 15.407 (b) FCC 15.209 FCC 15.205	PASS
6	Conducted Emission Test for AC Power Port	FCC 15.207	PASS
7	Frequency Stability	FCC 15.407 (g)	PASS
8	Dynamic Frequency Selection	FCC 15.407 (h)	PASS
9	Antenna Requirement	FCC 15.203	PASS

Note:

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

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



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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Address:	Hui Zhou Gaoshengda Technology Co.,LTD No.2,Jin-da Road,Huinan High-tech Industrial Park,Hui-ao Avenue,Huizhou City,Guangdong,China
Manufacturer Information Company Name:	Hui Zhou Caashanada Tashnalagu Ca. LTD
Address:	Hui Zhou Gaoshengda Technology Co.,LTD No.2,Jin-da Road,Huinan High-tech Industrial Park,Hui-ao Avenue,Huizhou City,Guangdong,China
EUT Information	
EUT Name:	WIFI+BT Module
Model:	DCT2EM2101
Brand:	GSD
Sample Received Date:	August 19, 2021
Sample Status:	Normal
Sample ID:	4158685

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	

August 20, 2021 ~ August 31, 2021

Prepared By:

Date of Tested:

Mick Zhong

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Shenny les

Shawn Wen Laboratory Leader



2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013, CFR 47 FCC Part 2, CFR 47 FCC Part 15, KDB 789033 D02 v02r01, KDB414788 D01 Radiated Test Site 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	
	5.78 dB (1 GHz-18 GHz)	
Radiated Emission (Included Fundamental Emission) (1 GHz to 40 GHz)	5.23dB (18 GHz-26 GHz)	
	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	DCT2EM2101
Radio Technology	IEEE802.11a 20 IEEE802.11n HT20/n HT40 IEEE802.11ac VHT20/ac VHT40/ac VHT80
Operation frequency	UNII-1: 5150 ~ 5250 MHz UNII-2A: 5250 ~ 5350 MHz UNII-2C: 5470 ~ 5725 MHz UNII-3: 5725 ~ 5850 MHz
Modulation	IEEE 802.11a 20: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK, BPSK) 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)
Supply Voltage	5V DC



5.2. MAXIMUM OUTPUT POWER

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
a 20		16.09
n HT20	5150 ~ 5250	18.74
n HT40		19.31
ac VHT20		19.89
ac VHT40		20.04
ac VHT80		15.40

UNII-1 BAND

UNII-2A BAND

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
a 20		15.60
n HT20	5250 ~ 5350	18.66
n HT40		18.77
ac VHT20		19.10
ac VHT40		19.34
ac VHT80		15.11

UNII-2C BAND

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
a 20		16.14
n HT20		19.57
n HT40	5470 ~ 5725	18.98
ac VHT20		19.76
ac VHT40		19.97
ac VHT80		16.24

UNII-3 BAND

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
a 20		14.93
n HT20		18.12
n HT40	5725 ~ 5850	18.41
ac VHT20		18.26
ac VHT40		17.25
ac VHT80		14.91

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5.3. CHANNEL LIST

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

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

-	UNII-2C (For Bandwidth=20MHz)		UNII-2C (For Bandwidth=40MHz)		UNII-2C (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					

UNI	I-3	UN	II-3	UN	II-3
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				

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5.4. TEST CHANNEL CONFIGURATION

	UNII-1 Test Channel Configuration			
IEEE Std.	Test Channel Number	Frequency		
802.11a 20	CH 36(Low Channel), CH 40(MID Channel), CH 48(High Channel)	5180 MHz, 5200 MHz, 5240 MHz		
802.11n HT20	CH 36(Low Channel), CH 40(MID Channel), CH 48(High Channel)	5180 MHz, 5200 MHz, 5240 MHz		
802.11n HT40	CH 38(Low Channel), CH 46(High Channel)	5190 MHz, 5230 MHz		
802.11ac VHT20	CH 36(Low Channel), CH 40(MID Channel), CH 48(High Channel)	5180 MHz, 5200 MHz, 5240 MHz		
802.11ac VHT40	CH 38(Low Channel), CH 46(High Channel)	5190 MHz, 5230 MHz		
802.11ac VHT80	CH 42(Low Channel)	5210 MHz		

	UNII-2A Test Channel Configuration			
IEEE Std.	Test Channel Number	Frequency		
802.11a 20	CH 52(Low Channel), CH 56(MID Channel), CH 64(High Channel)	5260 MHz, 5280 MHz, 5320 MHz		
802.11n HT20	CH 52(Low Channel), CH 56(MID Channel), CH 64(High Channel)	5260 MHz, 5280 MHz, 5320 MHz		
802.11n HT40	CH 54(Low Channel), CH 62(High Channel)	5270 MHz, 5310 MHz		
802.11ac VHT20	CH 52(Low Channel), CH 56(MID Channel), CH 64(High Channel)	5260 MHz, 5280 MHz, 5320 MHz		
802.11ac VHT40	CH 54(Low Channel), CH 62(High Channel)	5270 MHz, 5310 MHz		
802.11ac VHT80	CH 58(Low Channel)	5290 MHz		

	UNII-2C Test Channel Configuration				
IEEE Std.	Test Channel Number	Frequency			
802.11a 20	CH 100(Low Channel), CH 120(MID Channel), CH 140(High Channel)	5500 MHz, 5600 MHz, 5700 MHz			
802.11n VHT20	CH 100(Low Channel), CH 120(MID Channel), CH 140(High Channel)	5500 MHz, 5600 MHz, 5700 MHz			
802.11n VHT40	CH 102(Low Channel), CH 118(MID Channel), CH 134(High Channel)	5510 MHz, 5590 MHz, 5670 MHz			
802.11ac VHT20	CH 100(Low Channel), CH 120(MID Channel), CH 140(High Channel)	5500MHz, 5600 MHz, 5700MHz			
802.11ac VHT40	CH 102(Low Channel), CH 118(MID Channel), CH 134(High Channel)	5510 MHz, 5590 MHz, 5670 MHz			
802.11ac VHT80	CH 102(Low Channel), CH 122(High Channel)	5530 MHz, 5610 MHz			



	UNII-3 Test Channel Configuration			
IEEE Std.	Test Channel Number	Frequency		
802.11a 20	CH 149(Low Channel), CH 157(MID Channel), CH 165(High Channel)	5745 MHz, 5785 MHz, 5825 MHz		
802.11n HT20	CH 149(Low Channel), CH 157(MID Channel), CH 165(High Channel)	5745 MHz, 5785 MHz, 5825 MHz		
802.11n HT40	CH 151(Low Channel), CH 159(High Channel)	5755MHz, 5795MHz		
802.11ac VHT20	CH 149(Low Channel), CH 157(MID Channel), CH 165(High Channel)	5745 MHz, 5785 MHz, 5825 MHz		
802.11ac VHT40	CH 151(Low Channel), CH 159(High Channel)	5755 MHz, 5795 MHz		
802.11ac VHT80	CH 155(Low Channel)	5775 MHz		

DESCRIPTION OF AVAILABLE ANTENNAS 5.5.

Antenna No.	Frequency (MHz)	Antenna Type	Max Antenna Gain (dBi)
1	5150-5850	PIFA antenna	2.57
2	5150-5850	PIFA antenna	2.57

Note: Mode Directional gain= GANT + 10 log (NANT) = 5.58 dBi G_{ANT}: Average of the Antenna Gain

N_{ANT}: Antenna numbers

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

IEE Std. 802.11	Transmit and Receive Mode	Description
802.11a	⊠1TX, 1RX	ANT1,2 can be used as transmitting/receiving antenna.
802.11n HT20	⊠2TX, 2RX	ANT1,2 can be used as transmitting/receiving antenna.
802.11n HT40	⊠2TX, 2RX	ANT1,2 can be used as transmitting/receiving antenna.
802.11ac VHT20	⊠2TX, 2RX	ANT1,2 can be used as transmitting/receiving antenna.
802.11ac VHT40	⊠2TX, 2RX	ANT1,2 can be used as transmitting/receiving antenna.
802.11ac VHT80		
Note: 1. BT&WLAN 2.4G, BT & WLAN 5G, WLAN 2.4G & WLAN 5G can't transmit simultaneously. (declared by client)		



5.6. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter				
Test Software	QATool_Dbg			
Frequency Band	mode channel setting			

UNII-1/ UNII-2A/ UNII-2C/ UNII-3

Mode	Rate	Channel	Soft set value		
Mode	Trate	Gliaillei	ANT 1	ANT 2	
11a 20	6M		Default	Default	
11n HT20	MCS0		Default	Default	
11n HT40	MCS0	All	Default	Default	
11ac VHT20	MCS0	All	Default	Default	
11ac VHT40	MCS0		Default	Default	
11ac VHT80	MCS0		Default	Default	



5.7. 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 5.4.

Maximum power setting referring to section 5.6.

Worst case Data Rates declared by the customer:

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

802.11ac VHT20 and VHT40 mode are different from 802.11nHT20 and HT40 only in control messages, so for these 4 modes, only 802.11ac VHT20 and 802.11ac VHT40 worst case power modes radiated emission test data are recorded in the report .

802.11ac&n SISO mode and MIMO mode have the same power setting, so only the worst case power mode(MIMO) will be record in the report.

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

Antenna 1 and Antenna 2 have the same power setting, and the power test data are the same. (Declared by customer.)

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

Conducted output power, power spectral density tests separately on each port with all supported SISO & MIMO port combinations.

Radiated emissions tests were performed with the MIMO modes. These were found to be the worst modulation scheme with regards to emissions after preliminary investigations and, as this mode emits the highest conducted output power level, it was deemed to be the worst case.

The EUT support rotating antennas, we have done pre-tests under different angle combinations. so only the worst measurement position (X axis) was recorded in the report only the worst as shown in the setup photo

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5.8. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	Remarks
1	Laptop	ThinkPad	X230i	/
2	Adaptor	Lenovo	ADLX65YCC3D	Input:AC100-240V ~1.8A 50-60Hz
3	USB TO UART	/	/	/

I/O CABLES

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	USB	/	/	1.0	/

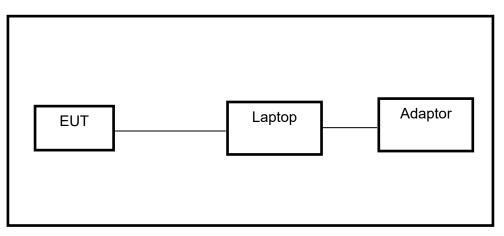
ACCESSORIES

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

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		
	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	Nov. 12, 2020	Nov. 11, 2021		
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130959	April 24, 2020	April 23, 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	#697	July 20, 2021	July 19, 2024		
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	00008	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- 5350-5380- 60SS	2	Nov. 12, 2020	Nov. 11, 2021		

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Band Reject Filter	Wainwright	WRCJV20- 5440-5470- 5725-5755- 60SS		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	C	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	N	15182B	MY56200284	Nov.20	0,2020	Nov.19,2021
MXG Vector Signal Generator	Keysight	Ν	I5172B	MY56200301	Nov.20	0,2020	Nov.19,2021
DC power supply	Keysight	E	3642A	MY55159130	Nov.24	4,2020	Nov.23,2021
Temperature & Humidity Chamber	SANMOOD	SG	-80-CC-2	2088	Nov.20	0,2020	Nov.19,2021
Software							
Description	Manufactu	turer		Name		`	Version
Tonsend SRD Test Syste	m Tonsend	ł	JS1120	-3 RF Test Sys	stem	2.6	6.77.0518

Other Instruments					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power sensor, Power Meter	R&S	OSP120	100921	Mar.23,2020	Mar.22,2021



7. ANTENNA PORT TEST RESULTS

7.1. ON TIME AND DUTY CYCLE

LIMITS

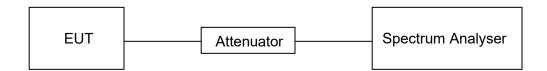
None; for reporting purposes only.

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	26.7 C	Relative Humidity	60.2 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

RESULTS

Please refer to appendix D.



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

<u>LIMITS</u>

CFR 47 FCC Part15, Subpart E					
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: >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:

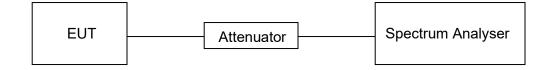
For Example: Fundamental frequency: 5720 MHz

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	26.7 C	Relative Humidity	60.2 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 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

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 $\ge 2 \times \text{span} / \text{RBW}$. (This ensures that bin-to-bin spacing is $\le \text{RBW}/2$, 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 \ge 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 %).

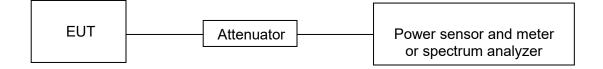
Method PM-G (Measurement using a gated RF average power meter):

Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

Straddle channel power was measured using spectrum analyzer.



TEST SETUP



TEST ENVIRONMENT

Temperature	26.7 C	Relative Humidity	60.2 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

RESULTS

Please refer to Appendix B.



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	

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:

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

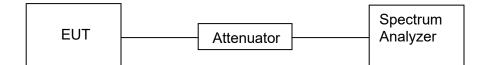
For U-NII-3:

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	26.7 C	Relative Humidity	60.2 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 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).

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 (MHz)	Field Strength Limit (uV/m) at 3 m	Field Stren (dBuV/m)	0
		Quasi-l	Peak
30 - 88	100	40	
88 - 216	150	43.	5
216 - 960	200	46	
Above 960	500	54	
Above 1000	500	Peak	Average
	500	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



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
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

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

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		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:

*1 beyond 75 MHz or more above of the band edge.

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

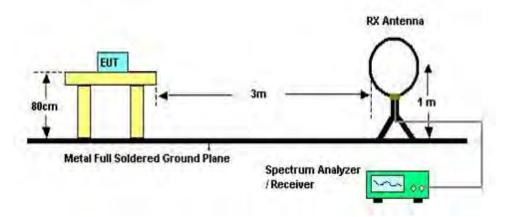
*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

*4 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.

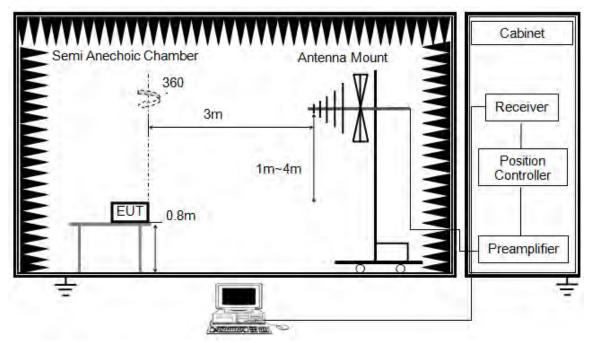
6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode remeasured. If the emission level of the EUT measured 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.

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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.

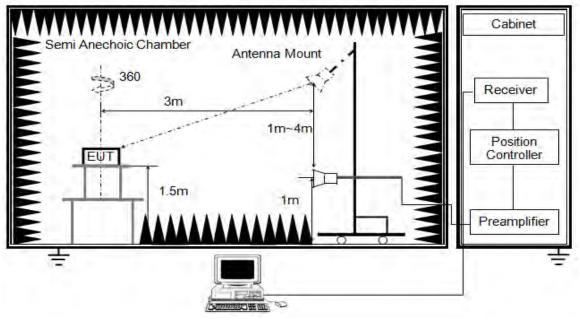
3. The EUT was placed on a turntable with 80 cm above ground.

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
IV B W	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.

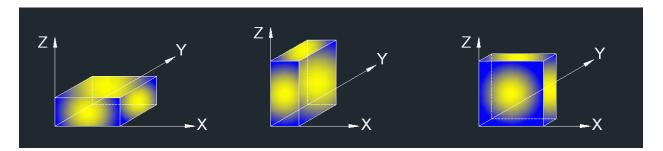
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

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.



X axis, Y axis, Z axis positions:



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 5 V

RESULTS



8.1. RESTRICTED BANDEDGE

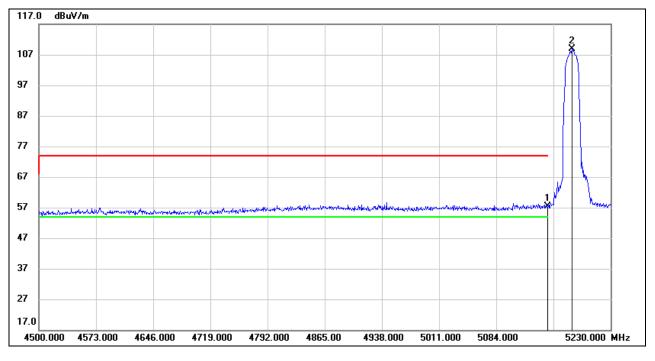
8.1.1. 802.11a 20 SISO MODE

UNII-1 BAND

ANTENNA 1 TEST RESULTS (WORST CASE)

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

<u>PEAK</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	16.19	41.19	57.38	74.00	-16.62	peak
2	5180.360	67.33	41.45	108.78	/	/	fundamental

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

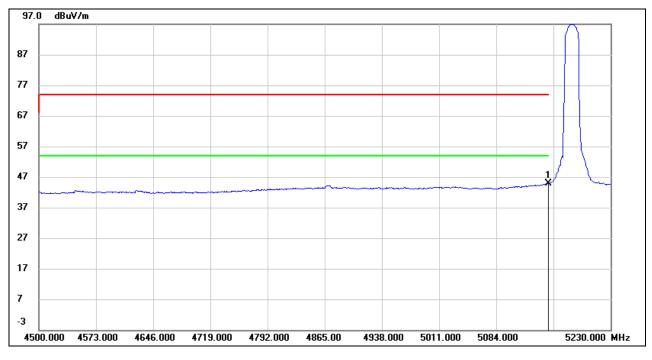
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	3.81	41.19	45.00	74.00	-29.00	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. 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.

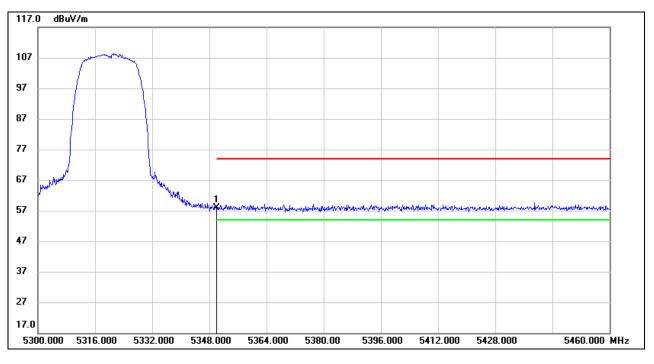


UNII-2A BAND

ANTENNA 1 TEST RESULTS (WORST CASE)

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

<u>PEAK</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	16.72	41.20	57.92	74.00	-16.08	peak

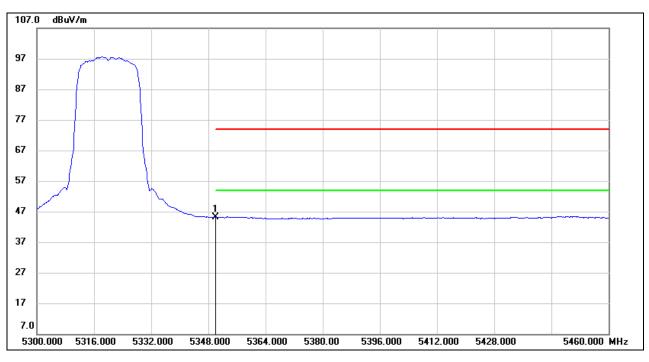
Note: 1. Measurement = Reading Level + Correct Factor.

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	3.91	41.20	45.11	54.00	-8.89	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.

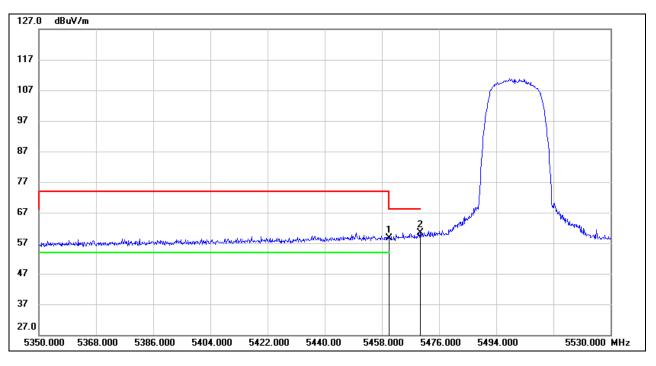


UNII-2C BAND

ANTENNA 1 TEST RESULTS (WORST CASE)

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

<u>PEAK</u>



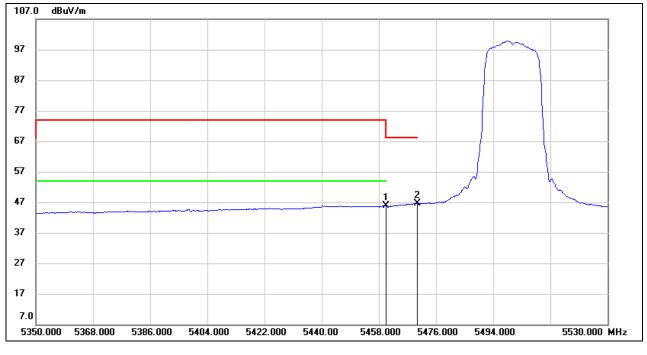
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	16.79	41.82	58.61	68.20	-9.59	peak
2	5470.000	18.44	41.87	60.31	68.20	-7.89	peak

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	4.03	41.82	45.85	54.00	-8.15	AVG
2	5470.000	4.65	41.87	46.52	/	/	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.

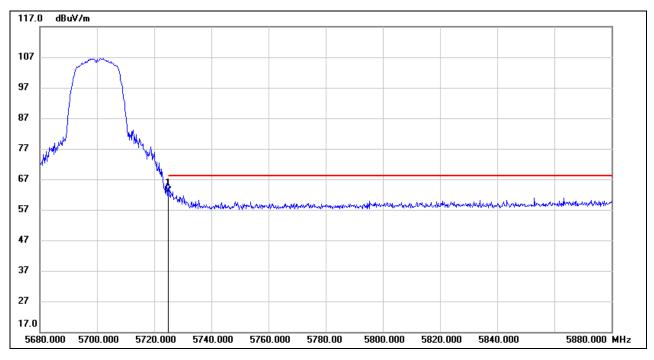
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

4. For the transmitting duration, please refer to clause 7.1.



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

<u>PEAK</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	21.34	41.67	63.01	68.20	-5.19	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.

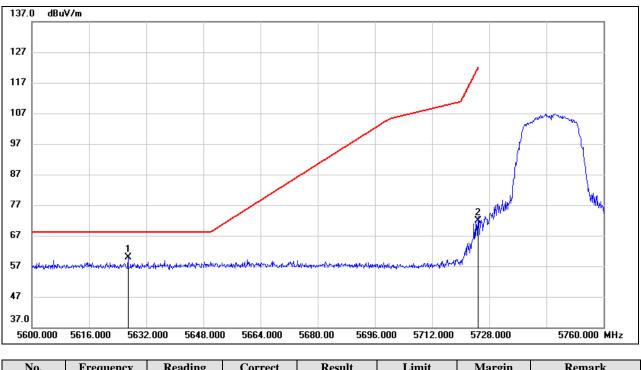


UNII-3 BAND

ANTENNA 1 TEST RESULTS (WORST CASE)

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

<u>PEAK</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5626.880	18.31	41.68	59.99	68.20	-8.21	peak
2	5725.000	30.17	41.67	71.84	122.20	-50.36	peak

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

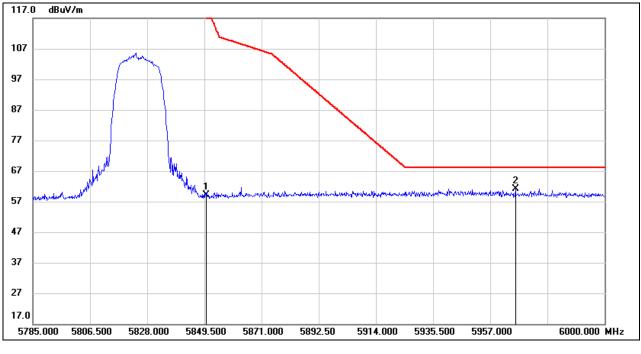
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.000	16.55	42.52	59.07	122.20	-63.13	peak
2	5966.460	18.53	42.72	61.25	68.20	-6.95	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) and Antennas had been tested, only the worst data was recorded in the report.

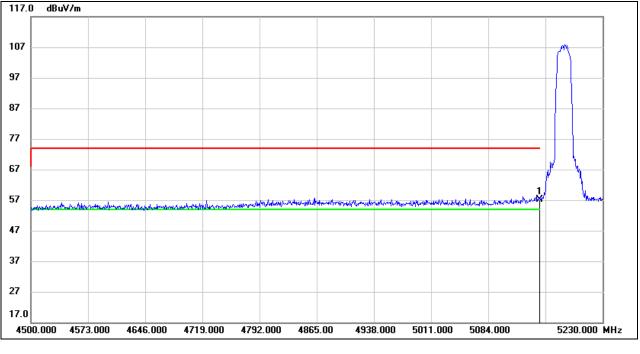


8.1.2. 802.11n HT20 MIMO MODE

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

PEAK



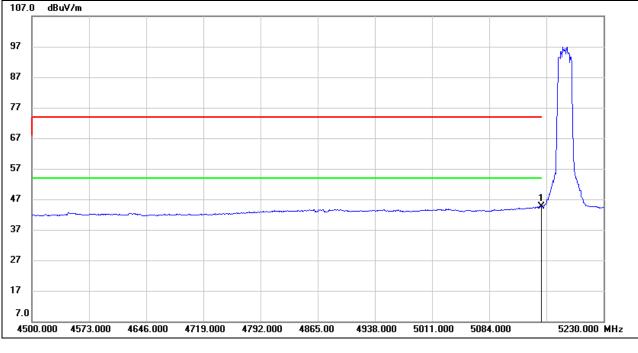
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	15.85	41.19	57.04	74.00	-16.96	peak

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	3.44	41.19	44.63	54.00	-9.37	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.

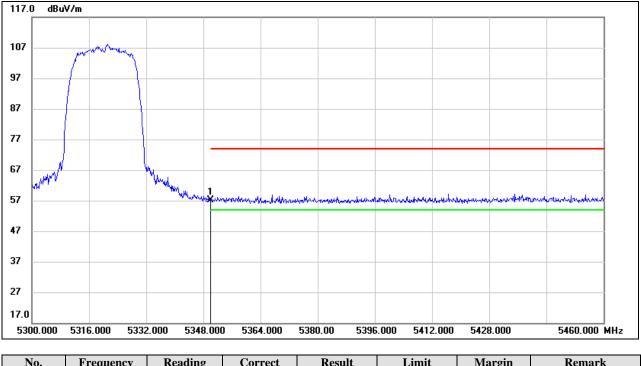
4. For the transmitting duration, please refer to clause 7.1.



UNII-2A BAND

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

<u>PEAK</u>



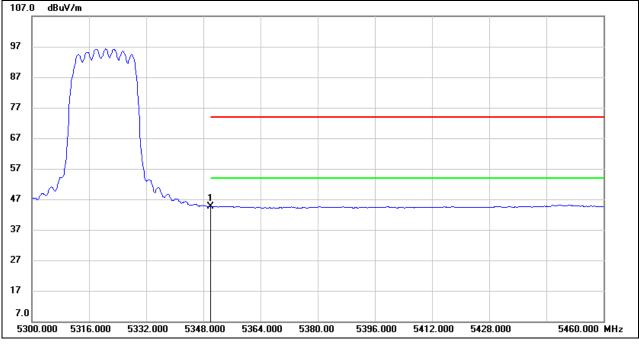
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	15.90	41.20	57.10	74.00	-16.90	peak

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	3.47	41.20	44.67	54.00	-9.33	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.

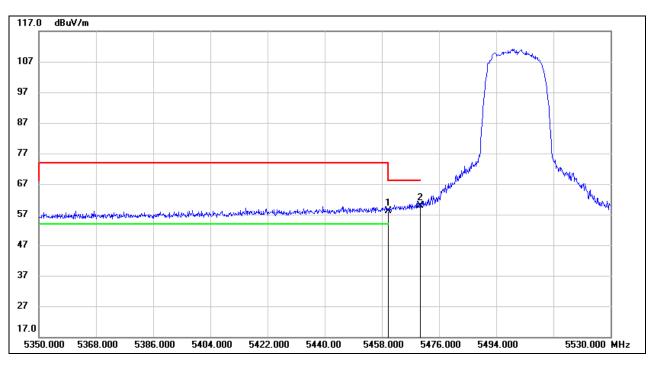
4. For the transmitting duration, please refer to clause 7.1.



UNII-2C BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

<u>PEAK</u>



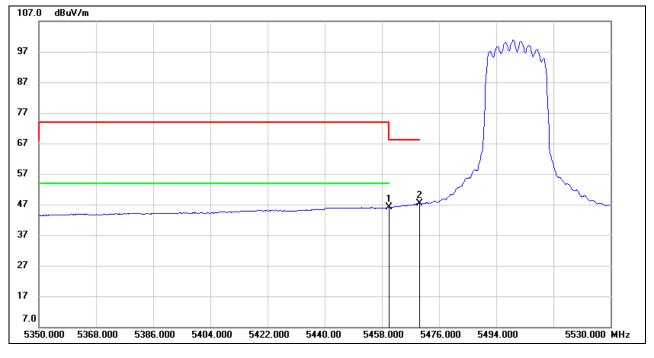
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	16.32	41.82	58.14	68.20	-10.06	peak
2	5470.000	17.99	41.87	59.86	68.20	-8.34	peak

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	4.39	41.82	46.21	54.00	-7.79	AVG
2	5470.000	5.49	41.87	47.36	/	/	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.

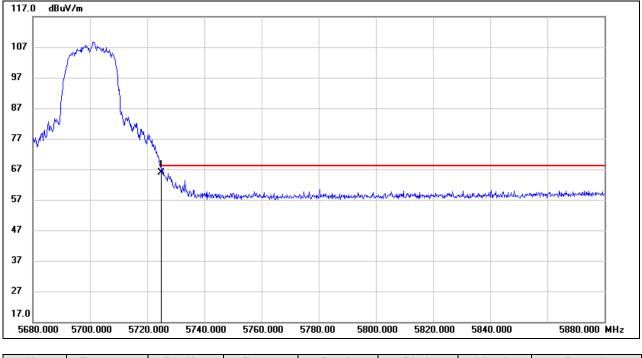
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

4. For the transmitting duration, please refer to clause 7.1.



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

<u>PEAK</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	24.11	41.67	65.78	68.20	-2.42	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.

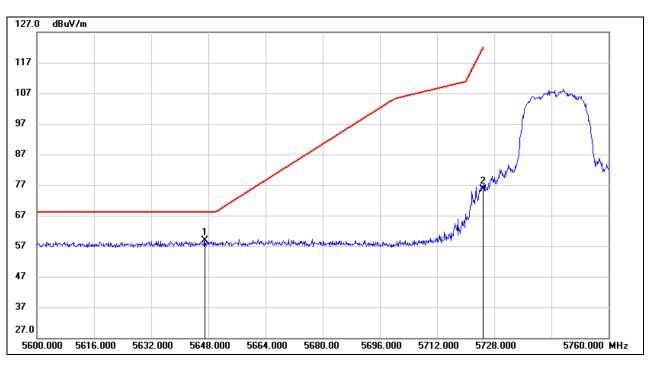
3. Peak: Peak detector.



UNII-3 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

<u>PEAK</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5647.040	17.26	41.65	58.91	68.20	-9.29	peak
2	5725.000	33.94	41.67	75.61	122.20	-46.59	peak

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

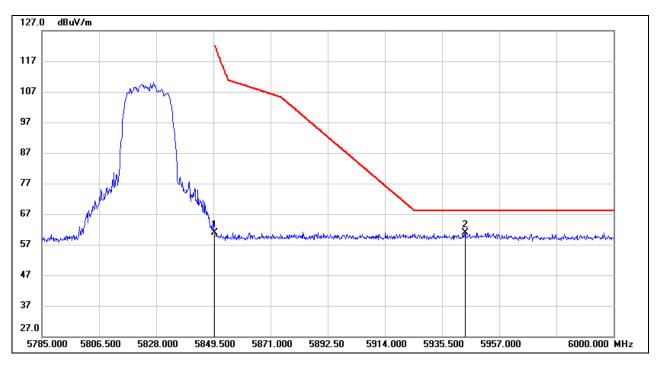
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.000	18.36	42.52	60.88	122.20	-61.32	peak
2	5944.315	18.10	42.82	60.92	68.20	-7.28	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.

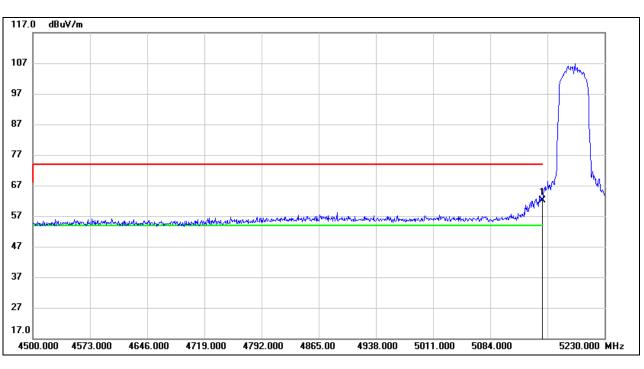
Note: All the polarities (Vertical & Horizontal) had been tested, only the worst data was recorded in the report.



8.1.3. 802.11n HT40 MIMO MODE

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



<u>PEAK</u>

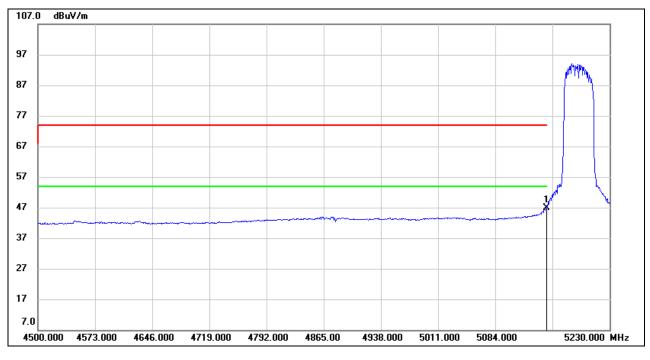
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	21.04	41.19	62.23	74.00	-11.77	peak

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	5.77	41.19	46.96	74.00	-27.04	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

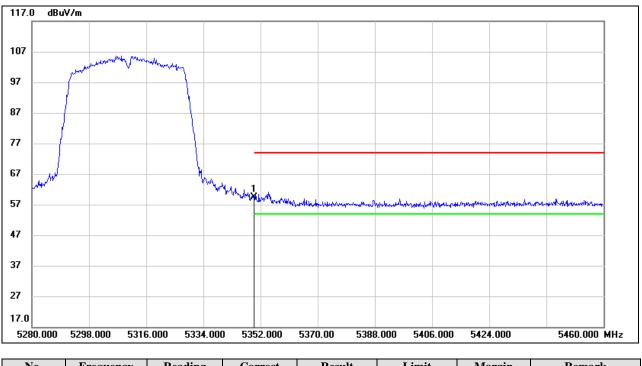
4. For the transmitting duration, please refer to clause 7.1.



UNII-2A BAND

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

<u>PEAK</u>



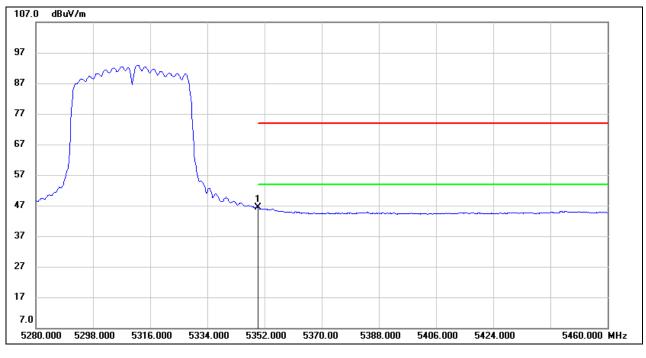
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	18.16	41.20	59.36	74.00	-14.64	peak

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	5.17	41.20	46.37	54.00	-7.63	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.

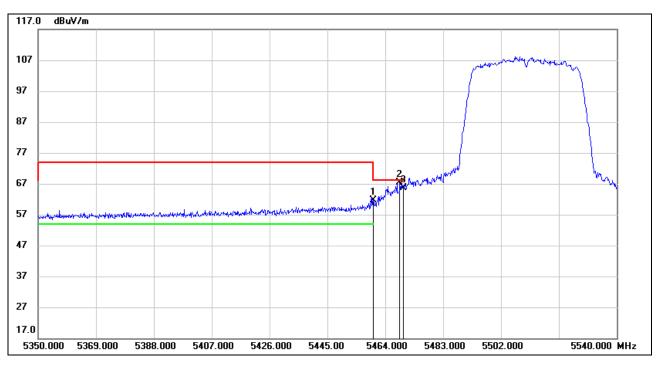
4. For the transmitting duration, please refer to clause 7.1.



UNII-2C BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

<u>PEAK</u>



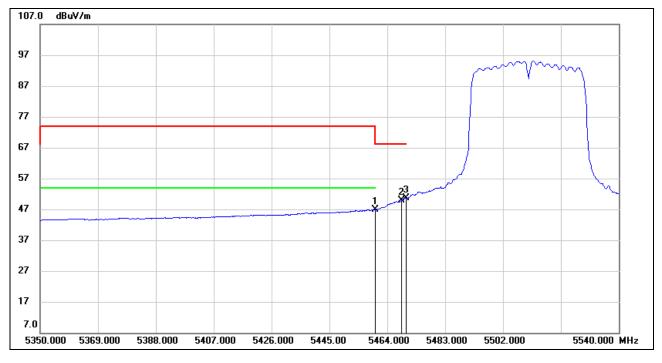
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	19.73	41.82	61.55	68.20	-6.65	peak
2	5468.750	25.50	41.87	67.37	68.20	-0.83	peak
3	5470.000	23.64	41.87	65.51	68.20	-2.69	peak

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	5.09	41.82	46.91	54.00	-7.09	AVG
2	5468.750	8.11	41.87	49.98	/	/	AVG
3	5470.000	8.74	41.87	50.61	/	/	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.

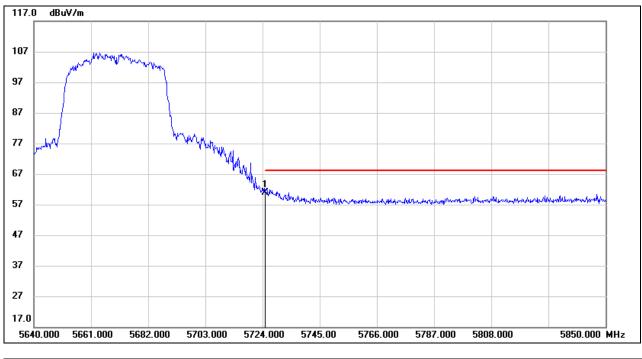
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

4. For the transmitting duration, please refer to clause 7.1.



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

<u>PEAK</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	19.33	41.67	61.00	68.20	-7.20	peak

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

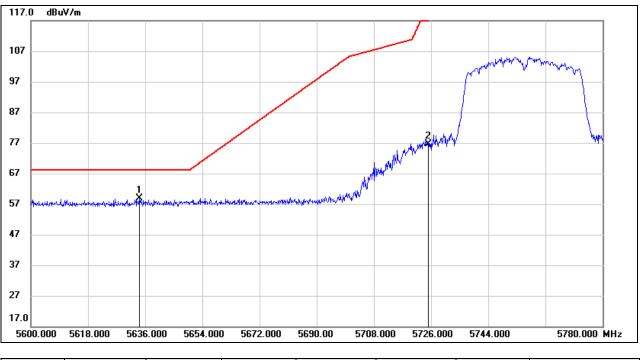
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



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	5634.200	17.17	41.67	58.84	68.20	-9.36	peak
2	5725.000	34.89	41.67	76.56	122.20	-45.64	peak

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

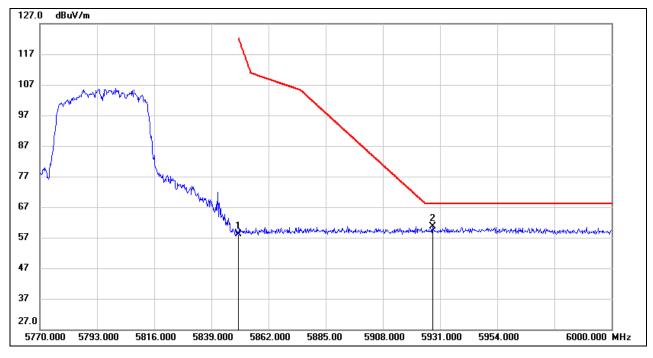
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.000	15.61	42.52	58.13	122.20	-64.07	peak
2	5928.010	17.86	42.89	60.75	68.20	-7.45	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.

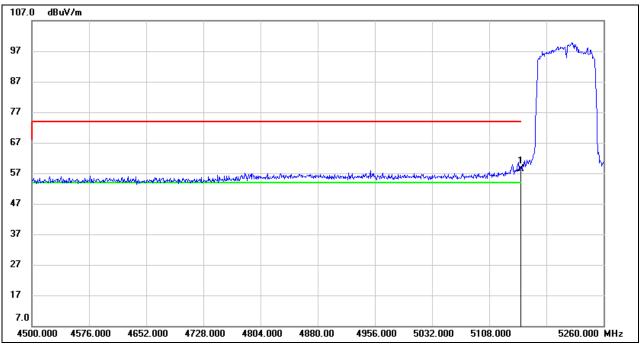


8.1.4. 802.11ac VHT80 MIMO MODE

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

<u>PEAK</u>



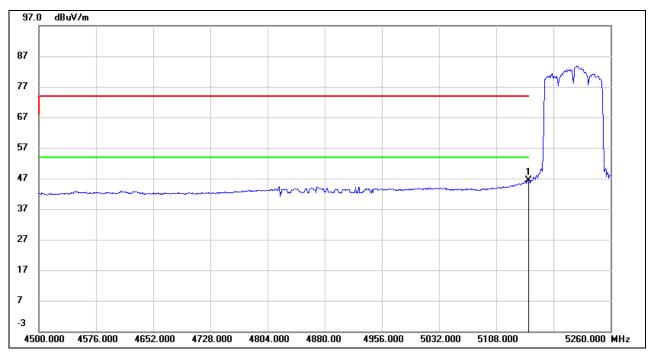
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	17.10	41.19	58.29	74.00	-15.71	peak

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	5.13	41.19	46.32	54.00	-7.68	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.

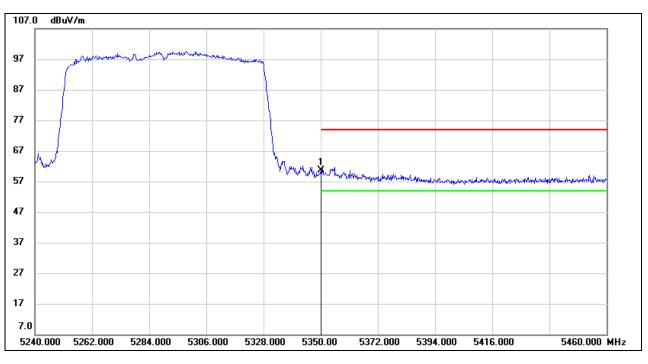
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

4. For the transmitting duration, please refer to clause 7.1.



UNII-2A BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



<u>PEAK</u>

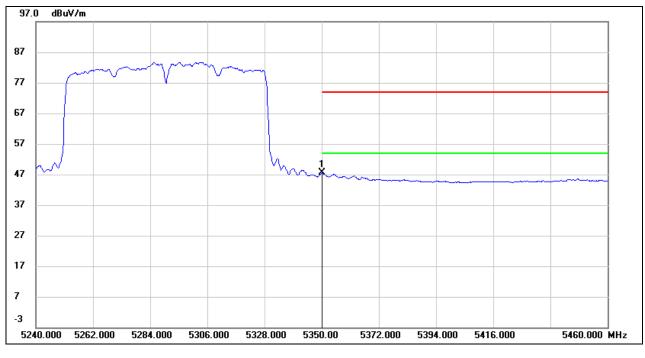
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	19.42	41.20	60.62	74.00	-13.38	peak

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	6.31	41.20	47.51	54.00	-6.49	AVG

Note: 1. Measurement = Reading Level + Correct Factor

2. AVG: VBW=1/Ton where: ton is transmit duration.

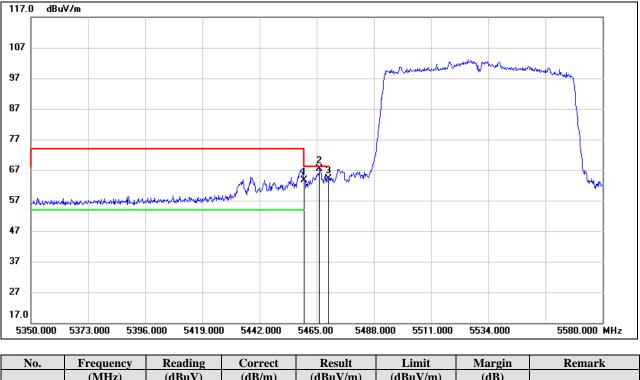
3. For duty cycle, please refer to clause 7.1.



UNII-2C BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

<u>PEAK</u>



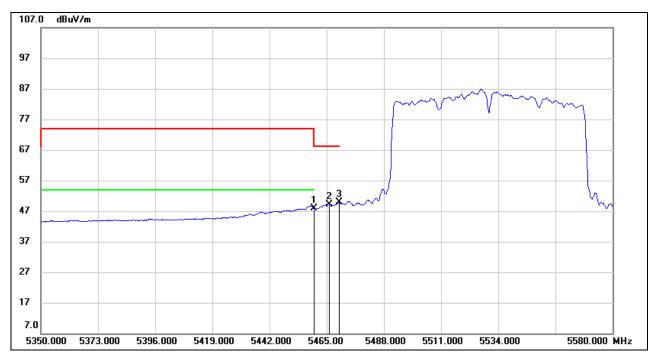
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	21.84	41.82	63.66	68.20	-4.54	peak
2	5466.150	25.49	41.86	67.35	68.20	-0.85	peak
3	5470.000	22.25	41.87	64.12	68.20	-4.08	peak

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	5.95	41.82	47.77	54.00	-6.23	AVG
2	5466.150	7.27	41.86	49.13	/	/	AVG
3	5470.000	7.93	41.87	49.80	/	/	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.

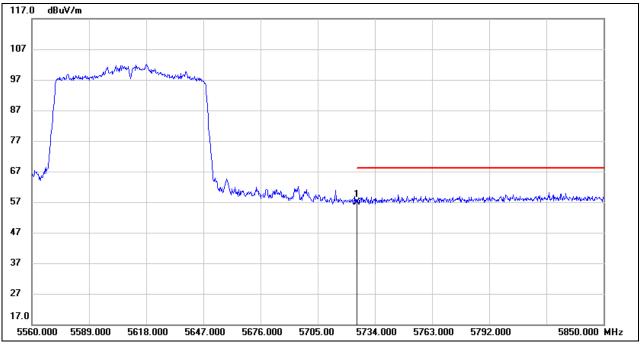
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

4. For the transmitting duration, please refer to clause 7.1.



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

<u>PEAK</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	15.27	41.67	56.94	68.20	-11.26	peak

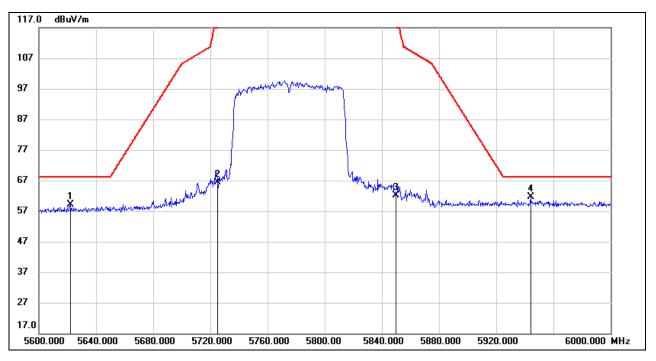
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



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	5622.000	17.43	41.69	59.12	68.20	-9.08	peak
2	5725.000	24.78	41.67	66.45	122.20	-55.75	peak
3	5850.000	19.70	42.52	62.22	122.20	-59.98	peak
4	5944.000	18.73	42.82	61.55	68.20	-6.65	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.



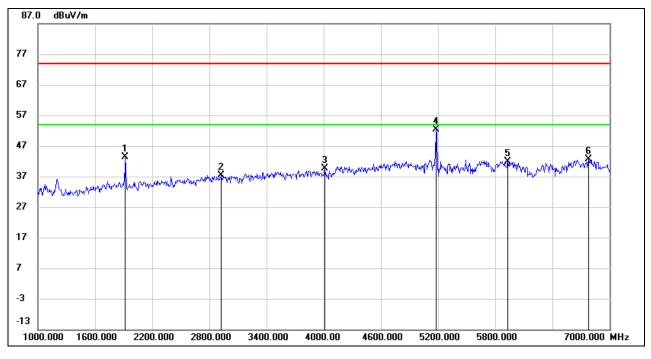
8.2. SPURIOUS EMISSIONS (1 GHz ~ 7 GHz)

8.2.1. 802.11a 20 SISO MODE

UNII-1 BAND

ANTENNA 1 MODE TEST RESULTS (WORST CASE)

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	53.47	-10.13	43.34	74.00	-30.66	peak
2	2926.000	43.34	-5.95	37.39	74.00	-36.61	peak
3	4012.000	43.02	-3.49	39.53	74.00	-34.47	peak
4	5182.000	50.35	2.00	52.35	74.00	-21.65	peak
5	5932.000	38.88	3.03	41.91	74.00	-32.09	peak
6	6778.000	37.17	5.56	42.73	74.00	-31.27	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.

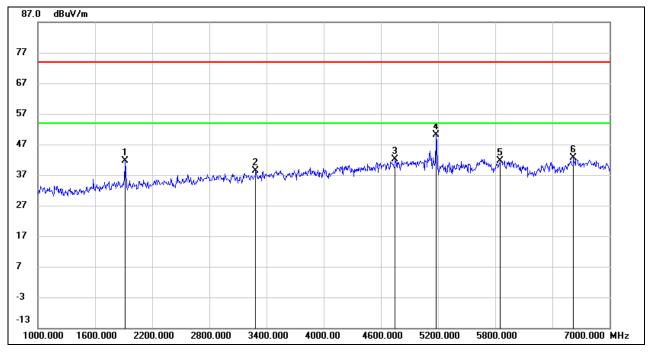
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.

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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	51.64	-10.13	41.51	74.00	-32.49	peak
2	3286.000	43.60	-5.19	38.41	74.00	-35.59	peak
3	4750.000	41.87	0.30	42.17	74.00	-31.83	peak
4	5182.000	48.09	2.00	50.09	74.00	-23.91	peak
5	5854.000	39.04	2.71	41.75	74.00	-32.25	peak
6	6622.000	37.00	5.51	42.51	74.00	-31.49	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.

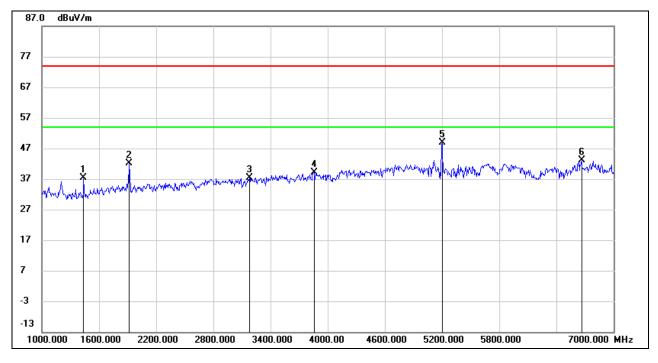
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	1438.000	49.92	-12.52	37.40	74.00	-36.60	peak
2	1918.000	52.35	-10.13	42.22	74.00	-31.78	peak
3	3178.000	42.67	-5.29	37.38	74.00	-36.62	peak
4	3856.000	42.45	-3.36	39.09	74.00	-34.91	peak
5	5200.000	46.87	2.10	48.97	/	/	fundamental
6	6664.000	37.70	5.53	43.23	74.00	-30.77	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.

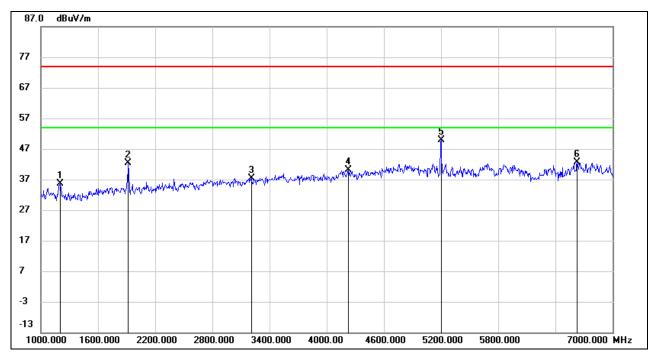
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	1204.000	48.67	-12.98	35.69	74.00	-38.31	peak
2	1918.000	52.60	-10.13	42.47	74.00	-31.53	peak
3	3208.000	42.74	-5.24	37.50	74.00	-36.50	peak
4	4228.000	41.80	-1.70	40.10	74.00	-33.90	peak
5	5200.000	47.66	2.10	49.76	/	/	fundamental
6	6628.000	37.05	5.50	42.55	74.00	-31.45	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.

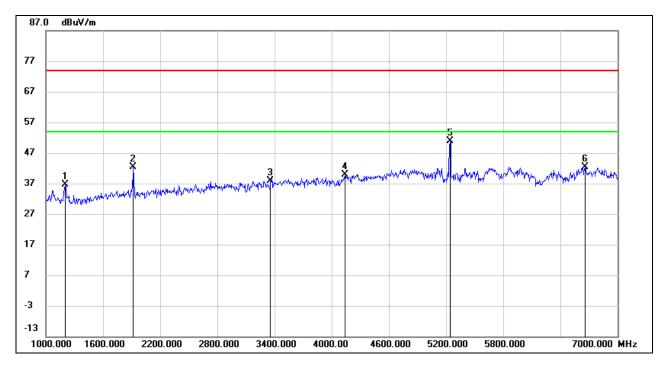
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.

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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	1204.000	49.70	-12.98	36.72	74.00	-37.28	peak
2	1918.000	52.46	-10.13	42.33	74.00	-31.67	peak
3	3358.000	42.95	-5.14	37.81	74.00	-36.19	peak
4	4138.000	42.25	-2.27	39.98	74.00	-34.02	peak
5	5242.000	48.90	2.06	50.96	74.00	-23.04	peak
6	6658.000	36.93	5.51	42.44	74.00	-31.56	peak

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

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

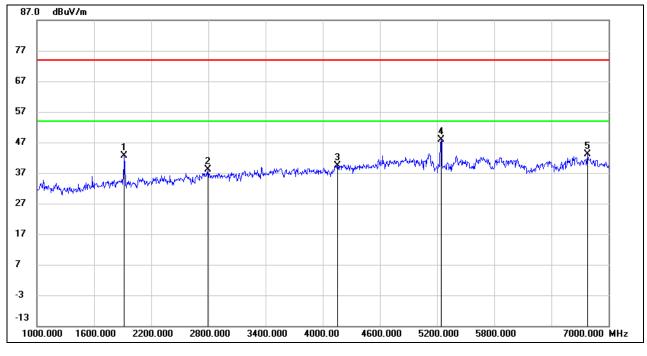
3. Peak: Peak detector.

4. 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.



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	52.64	-10.13	42.51	74.00	-31.49	peak
2	2794.000	44.68	-6.59	38.09	74.00	-35.91	peak
3	4156.000	41.37	-2.10	39.27	74.00	-34.73	peak
4	5242.000	45.89	2.06	47.95	74.00	-26.05	peak
5	6778.000	37.55	5.56	43.11	74.00	-30.89	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.

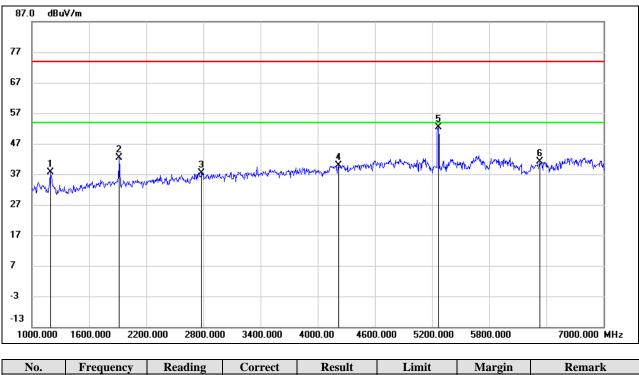
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



UNII-2A BAND

ANTENNA 1 MODE TEST RESULTS (WORST CASE)

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	1192.000	50.55	-13.03	37.52	74.00	-36.48	peak
2	1918.000	52.46	-10.13	42.33	74.00	-31.67	peak
3	2782.000	44.10	-6.67	37.43	74.00	-36.57	peak
4	4222.000	41.51	-1.69	39.82	74.00	-34.18	peak
5	5266.000	50.24	2.03	52.27	74.00	-21.73	peak
6	6328.000	37.24	3.97	41.21	74.00	-32.79	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.

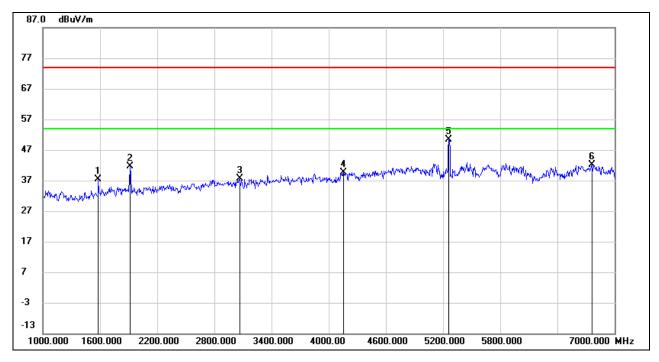
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	1582.000	48.98	-11.68	37.30	74.00	-36.70	peak
2	1918.000	51.70	-10.13	41.57	74.00	-32.43	peak
3	3064.000	43.08	-5.48	37.60	74.00	-36.40	peak
4	4156.000	41.61	-2.10	39.51	74.00	-34.49	peak
5	5260.000	48.36	2.03	50.39	/	/	fundamental
6	6760.000	36.52	5.56	42.08	74.00	-31.92	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.

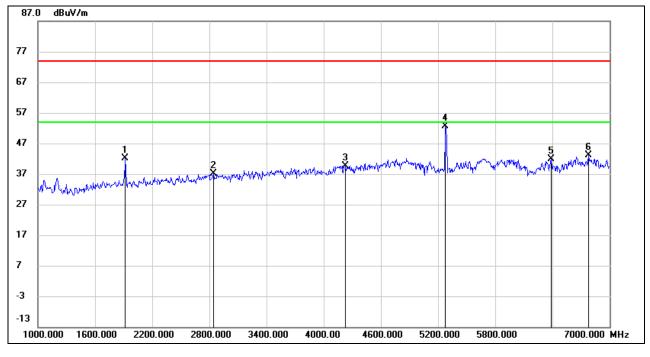
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	52.31	-10.13	42.18	74.00	-31.82	peak
2	2842.000	43.52	-6.35	37.17	74.00	-36.83	peak
3	4228.000	41.31	-1.70	39.61	74.00	-34.39	peak
4	5278.000	50.57	2.01	52.58	74.00	-21.42	peak
5	6388.000	37.55	4.31	41.86	74.00	-32.14	peak
6	6778.000	37.50	5.56	43.06	74.00	-30.94	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.

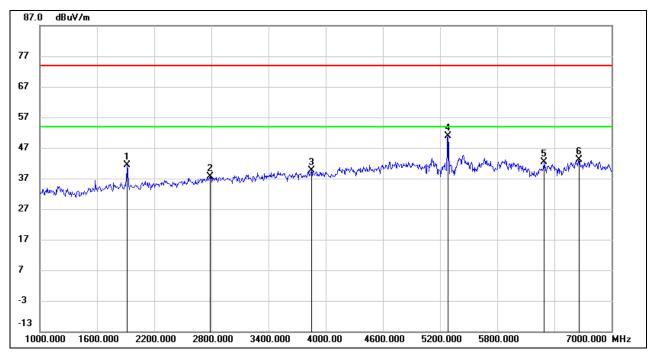
3. Peak: Peak detector.

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.



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	51.54	-10.13	41.41	74.00	-32.59	peak
2	2788.000	44.29	-6.62	37.67	74.00	-36.33	peak
3	3850.000	43.08	-3.35	39.73	74.00	-34.27	peak
4	5284.000	48.82	2.01	50.83	74.00	-23.17	peak
5	6292.000	38.71	3.77	42.48	74.00	-31.52	peak
6	6658.000	37.62	5.51	43.13	74.00	-30.87	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.

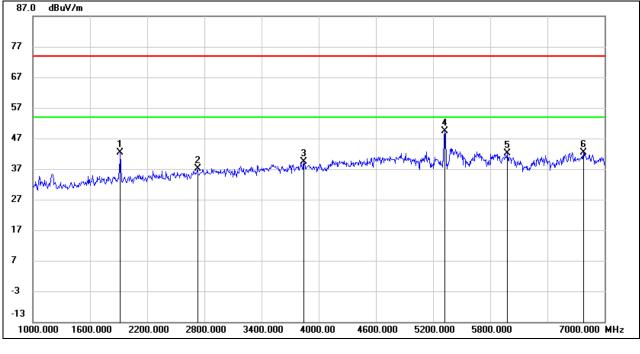
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	52.47	-10.13	42.34	74.00	-31.66	peak
2	2728.000	44.03	-7.02	37.01	74.00	-36.99	peak
3	3844.000	42.66	-3.33	39.33	74.00	-34.67	peak
4	5320.000	47.31	1.96	49.27	/	/	fundamental
5	5980.000	39.01	3.22	42.23	74.00	-31.77	peak
6	6778.000	36.85	5.56	42.41	74.00	-31.59	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.

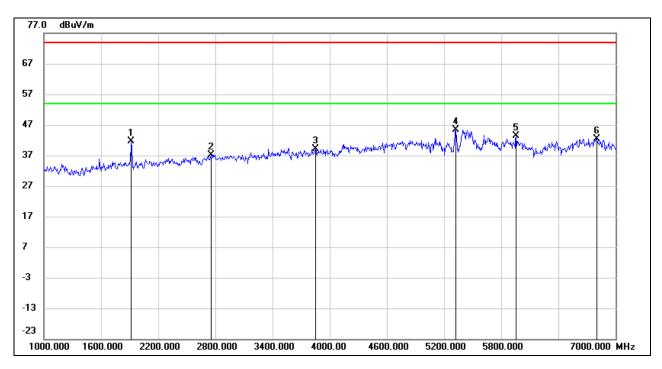
3. Peak: Peak detector.

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.



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	51.64	-10.13	41.51	74.00	-32.49	peak
2	2752.000	44.09	-6.87	37.22	74.00	-36.78	peak
3	3850.000	42.48	-3.35	39.13	74.00	-34.87	peak
4	5320.000	43.44	1.96	45.40	/	/	fundamental
5	5956.000	40.37	3.13	43.50	74.00	-30.50	peak
6	6802.000	36.92	5.58	42.50	74.00	-31.50	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.

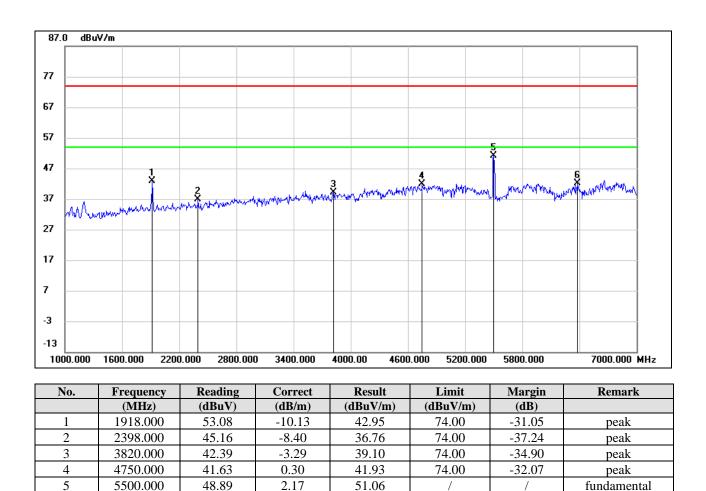
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



UNII-2C BAND

ANTENNA 1 MODE TEST RESULTS (WORST CASE)

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



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

4.27

37.95

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

42.22

74.00

-31.78

peak

3. Peak: Peak detector.

6382.000

6

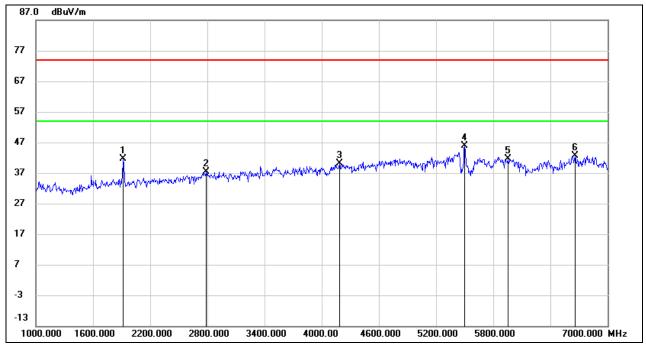
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	51.78	-10.13	41.65	74.00	-32.35	peak
2	2788.000	43.98	-6.62	37.36	74.00	-36.64	peak
3	4186.000	41.85	-1.81	40.04	74.00	-33.96	peak
4	5500.000	43.59	2.17	45.76	/	/	fundamental
5	5956.000	38.49	3.13	41.62	74.00	-32.38	peak
6	6658.000	37.07	5.51	42.58	74.00	-31.42	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.

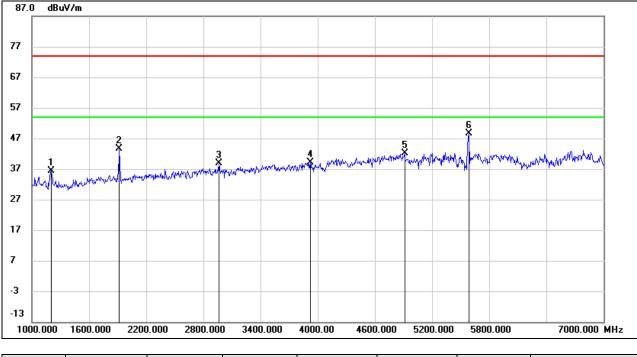
3. Peak: Peak detector.

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.



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	1204.000	49.29	-12.98	36.31	74.00	-37.69	peak
2	1918.000	53.66	-10.13	43.53	74.00	-30.47	peak
3	2962.000	44.56	-5.78	38.78	74.00	-35.22	peak
4	3922.000	42.57	-3.47	39.10	74.00	-34.90	peak
5	4912.000	41.24	0.77	42.01	74.00	-31.99	peak
6	5584.000	46.12	2.41	48.53	74.00	-25.47	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.

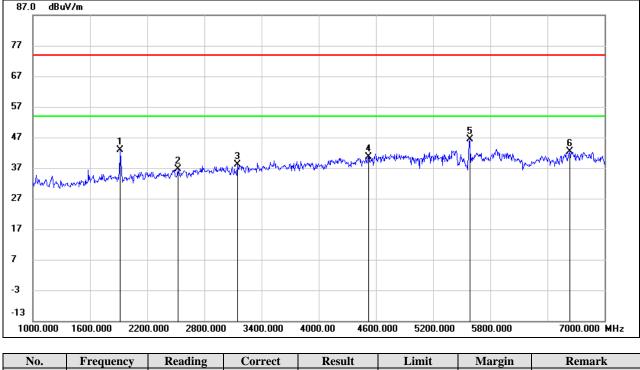
3. Peak: Peak detector.

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.



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	53.11	-10.13	42.98	74.00	-31.02	peak
2	2524.000	44.84	-8.13	36.71	74.00	-37.29	peak
3	3148.000	43.54	-5.34	38.20	74.00	-35.80	peak
4	4522.000	41.69	-1.09	40.60	74.00	-33.40	peak
5	5584.000	44.08	2.41	46.49	74.00	-27.51	peak
6	6634.000	36.75	5.51	42.26	74.00	-31.74	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.

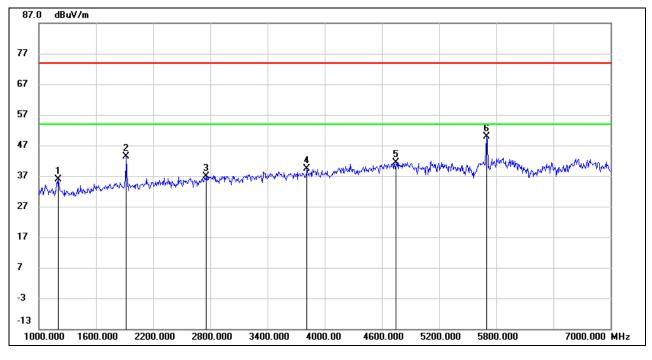
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §1 5.407 (b) and ISED RSS-247 6.2.



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	1204.000	48.96	-12.98	35.98	74.00	-38.02	peak
2	1918.000	53.53	-10.13	43.40	74.00	-30.60	peak
3	2758.000	43.66	-6.82	36.84	74.00	-37.16	peak
4	3814.000	42.58	-3.28	39.30	74.00	-34.70	peak
5	4750.000	41.12	0.30	41.42	74.00	-32.58	peak
6	5698.000	47.29	2.49	49.78	74.00	-24.22	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.

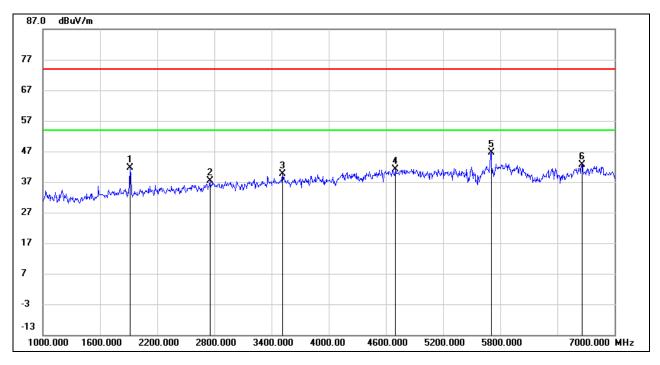
3. Peak: Peak detector.

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.



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	51.65	-10.13	41.52	74.00	-32.48	peak
2	2752.000	44.33	-6.87	37.46	74.00	-36.54	peak
3	3514.000	44.23	-4.64	39.59	74.00	-34.41	peak
4	4702.000	41.06	0.01	41.07	74.00	-32.93	peak
5	5704.000	44.11	2.48	46.59	74.00	-27.41	peak
6	6658.000	37.02	5.51	42.53	74.00	-31.47	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.

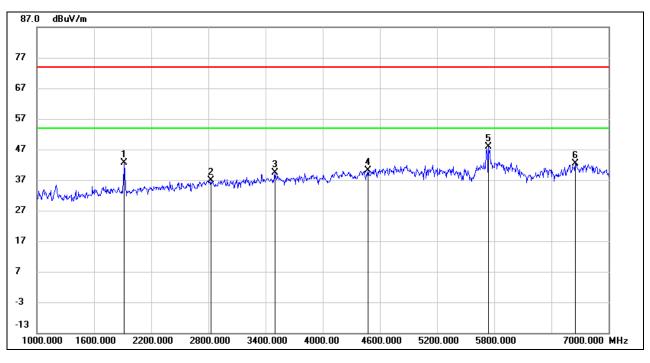
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



STRADDLE CHANNEL 144

ANTENNA 1 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	52.85	-10.13	42.72	74.00	-31.28	peak
2	2824.000	43.33	-6.43	36.90	74.00	-37.10	peak
3	3496.000	44.19	-4.72	39.47	74.00	-34.53	peak
4	4474.000	41.43	-1.41	40.02	74.00	-33.98	peak
5	5740.000	45.45	2.49	47.94	74.00	-26.06	peak
6	6652.000	36.83	5.52	42.35	74.00	-31.65	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.

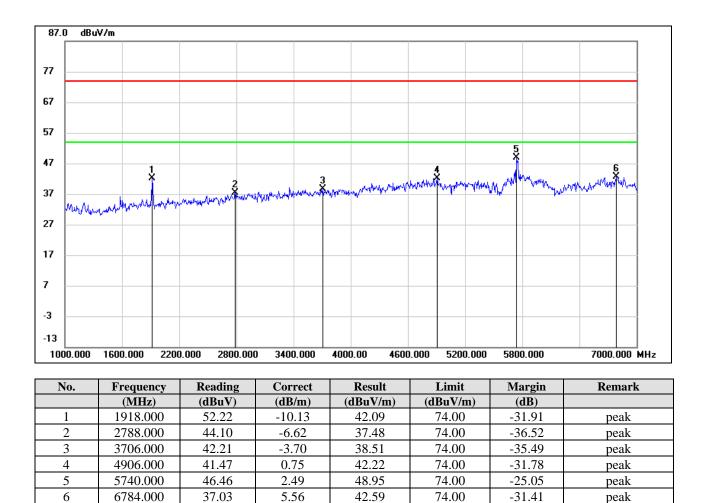
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



HARMONICS AND SPURIOUS EMISSIONS (VERTICAL)



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.

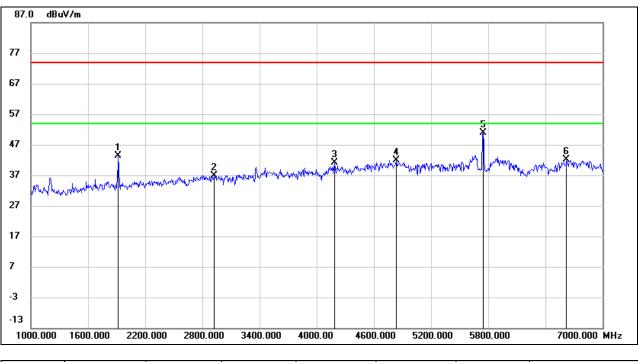
6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



UNII-3 BAND

ANTENNA 1 MODE TEST RESULTS (WORST CASE)

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	53.49	-10.13	43.36	74.00	-30.64	peak
2	2926.000	42.81	-5.95	36.86	74.00	-37.14	peak
3	4186.000	42.95	-1.81	41.14	74.00	-32.86	peak
4	4834.000	41.35	0.63	41.98	74.00	-32.02	peak
5	5746.000	48.44	2.50	50.94	74.00	-23.06	peak
6	6622.000	36.68	5.51	42.19	74.00	-31.81	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. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



4

5

6

-33.91

-22.11

-30.93

peak

peak

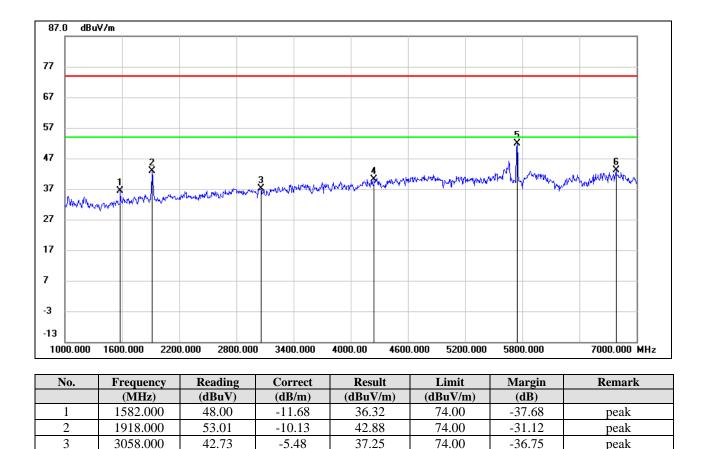
peak

74.00

74.00

74.00

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



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

41.81

49.39

37.51

-1.72

2.50

5.56

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

40.09

51.89

43.07

3. Peak: Peak detector.

4246.000

5746.000

6784.000

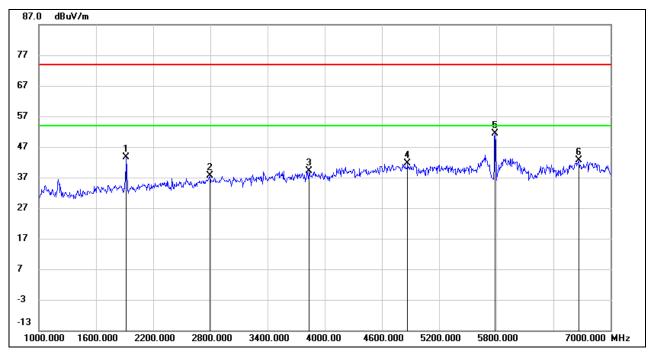
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	53.83	-10.13	43.70	74.00	-30.30	peak
2	2794.000	44.14	-6.59	37.55	74.00	-36.45	peak
3	3838.000	42.50	-3.32	39.18	74.00	-34.82	peak
4	4870.000	40.95	0.69	41.64	74.00	-32.36	peak
5	5788.000	48.95	2.50	51.45	74.00	-22.55	peak
6	6664.000	37.06	5.53	42.59	74.00	-31.41	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.

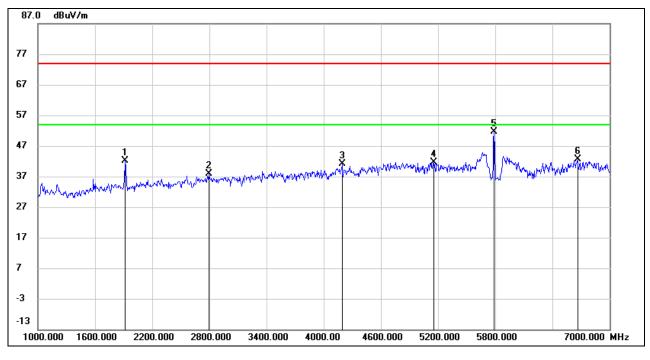
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	52.33	-10.13	42.20	74.00	-31.80	peak
2	2794.000	44.40	-6.59	37.81	74.00	-36.19	peak
3	4192.000	42.78	-1.74	41.04	74.00	-32.96	peak
4	5152.000	39.72	1.81	41.53	74.00	-32.47	peak
5	5788.000	49.17	2.50	51.67	74.00	-22.33	peak
6	6664.000	37.04	5.53	42.57	74.00	-31.43	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.

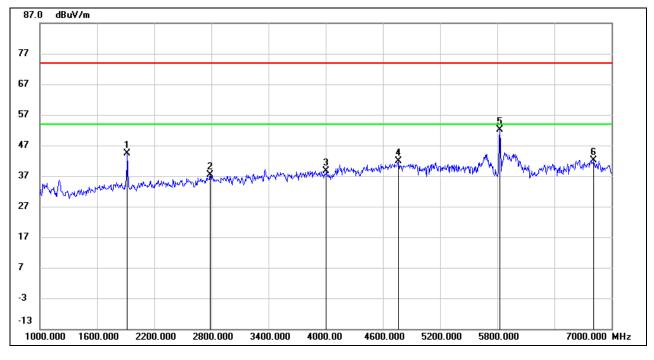
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	54.49	-10.13	44.36	74.00	-29.64	peak
2	2788.000	43.99	-6.62	37.37	74.00	-36.63	peak
3	4006.000	42.19	-3.55	38.64	74.00	-35.36	peak
4	4762.000	41.49	0.38	41.87	74.00	-32.13	peak
5	5830.000	49.57	2.63	52.20	74.00	-21.80	peak
6	6814.000	36.58	5.62	42.20	74.00	-31.80	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.

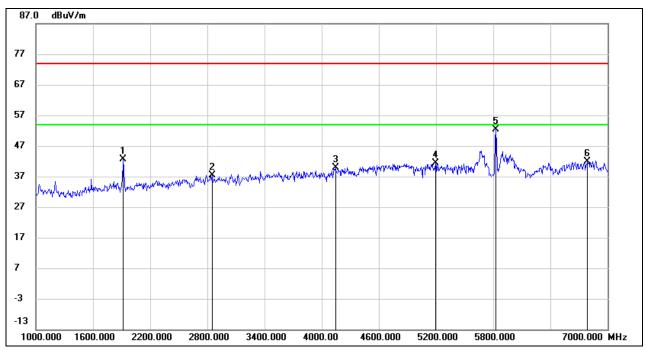
3. Peak: Peak detector.

4. 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.



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	52.72	-10.13	42.59	74.00	-31.41	peak
2	2848.000	43.77	-6.33	37.44	74.00	-36.56	peak
3	4144.000	42.08	-2.21	39.87	74.00	-34.13	peak
4	5194.000	39.20	2.06	41.26	74.00	-32.74	peak
5	5830.000	49.70	2.63	52.33	74.00	-21.67	peak
6	6790.000	36.42	5.57	41.99	74.00	-32.01	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. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.

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

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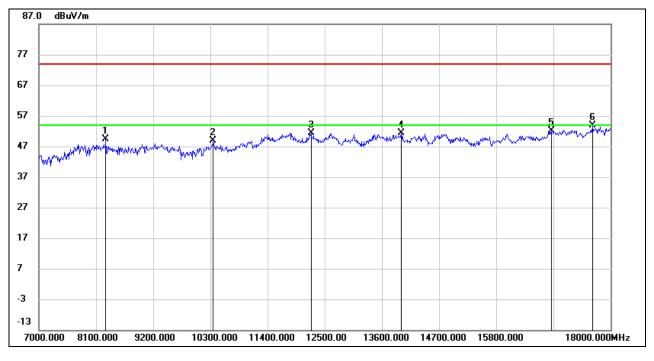
8.3. SPURIOUS EMISSIONS (7 GHz ~ 18 GHz)

8.3.1. 802.11a SISO MODE

UNII-1 BAND

ANTENNA 1 TEST RESULTS (WORST CASE)

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	39.74	9.70	49.44	74.00	-24.56	peak
2	10355.000	36.74	12.04	48.78	74.00	-25.22	peak
3	12236.000	35.39	16.01	51.40	74.00	-22.60	peak
4	13974.000	33.73	17.62	51.35	74.00	-22.65	peak
5	16856.000	31.05	21.19	52.24	74.00	-21.76	peak
6	17648.000	30.81	23.08	53.89	74.00	-20.11	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.

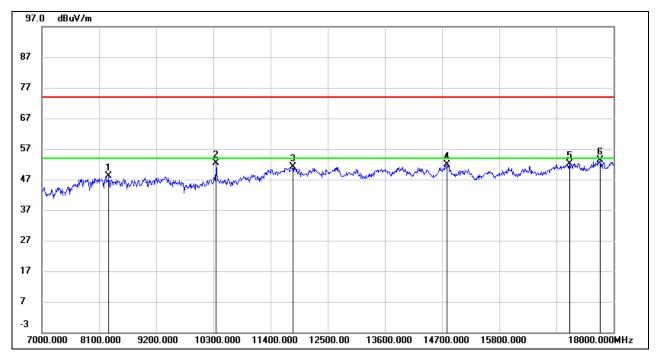
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	38.33	9.70	48.03	74.00	-25.97	peak
2	10355.000	40.37	12.04	52.41	74.00	-21.59	peak
3	11829.000	35.76	15.32	51.08	74.00	-22.92	peak
4	14799.000	33.77	18.04	51.81	74.00	-22.19	peak
5	17153.000	30.16	21.95	52.11	74.00	-21.89	peak
6	17747.000	29.63	23.75	53.38	74.00	-20.62	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.

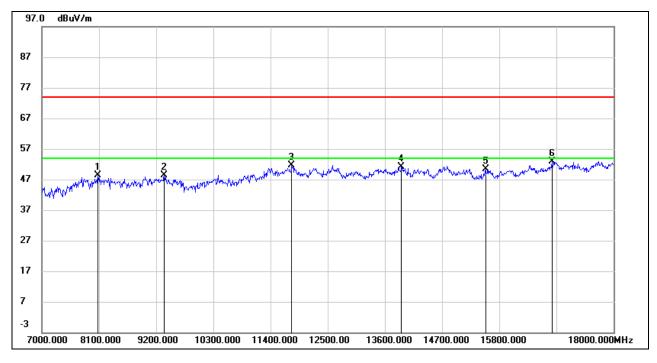
3. Peak: Peak detector.

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.



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	8078.000	38.65	9.83	48.48	74.00	-25.52	peak
2	9354.000	37.61	10.70	48.31	74.00	-25.69	peak
3	11807.000	36.46	15.27	51.73	74.00	-22.27	peak
4	13919.000	33.66	17.55	51.21	74.00	-22.79	peak
5	15536.000	33.13	17.28	50.41	74.00	-23.59	peak
6	16812.000	32.13	20.81	52.94	74.00	-21.06	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.

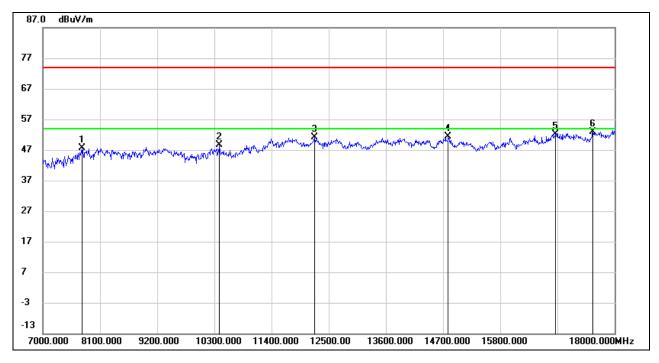
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7748.000	38.80	8.88	47.68	74.00	-26.32	peak
2	10399.000	36.30	12.23	48.53	74.00	-25.47	peak
3	12225.000	35.11	15.99	51.10	74.00	-22.90	peak
4	14799.000	33.40	18.04	51.44	74.00	-22.56	peak
5	16867.000	30.72	21.29	52.01	74.00	-21.99	peak
6	17582.000	30.25	22.60	52.85	74.00	-21.15	peak

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

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

3. Peak: Peak detector.

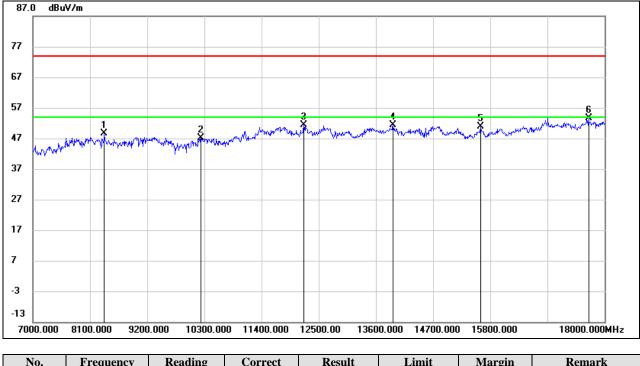
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8375.000	39.09	9.42	48.51	74.00	-25.49	peak
2	10234.000	35.49	11.60	47.09	74.00	-26.91	peak
3	12214.000	35.34	15.97	51.31	74.00	-22.69	peak
4	13930.000	33.74	17.57	51.31	74.00	-22.69	peak
5	15613.000	33.09	17.72	50.81	74.00	-23.19	peak
6	17692.000	30.32	23.41	53.73	74.00	-20.27	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.

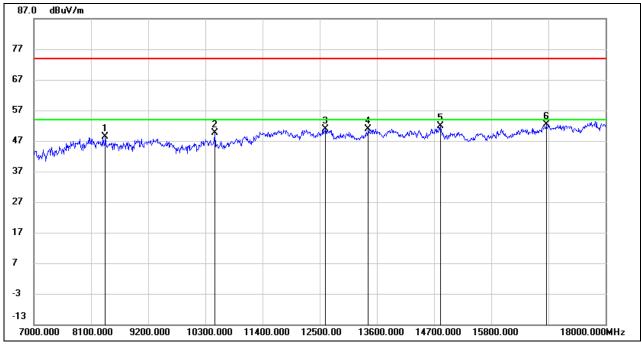
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8375.000	39.01	9.42	48.43	74.00	-25.57	peak
2	10487.000	37.28	12.35	49.63	74.00	-24.37	peak
3	12610.000	35.01	15.76	50.77	74.00	-23.23	peak
4	13435.000	33.71	17.09	50.80	74.00	-23.20	peak
5	14821.000	34.10	17.90	52.00	74.00	-22.00	peak
6	16856.000	31.11	21.19	52.30	74.00	-21.70	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.

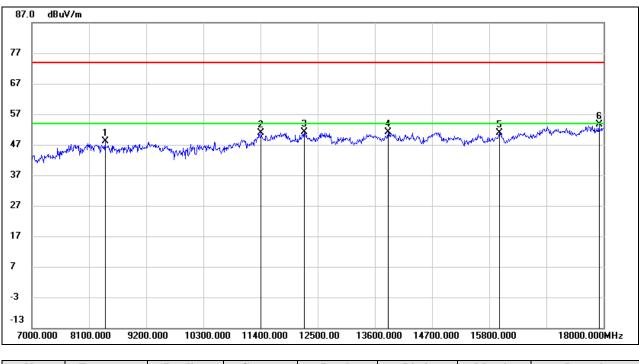
6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



UNII-2A BAND

ANTENNA 1 TEST RESULTS (WORST CASE)

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8408.000	38.76	9.32	48.08	74.00	-25.92	peak
2	11411.000	36.12	14.74	50.86	74.00	-23.14	peak
3	12236.000	35.15	16.01	51.16	74.00	-22.84	peak
4	13853.000	33.57	17.56	51.13	74.00	-22.87	peak
5	15998.000	32.43	18.42	50.85	74.00	-23.15	peak
6	17912.000	29.76	23.94	53.70	74.00	-20.30	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.

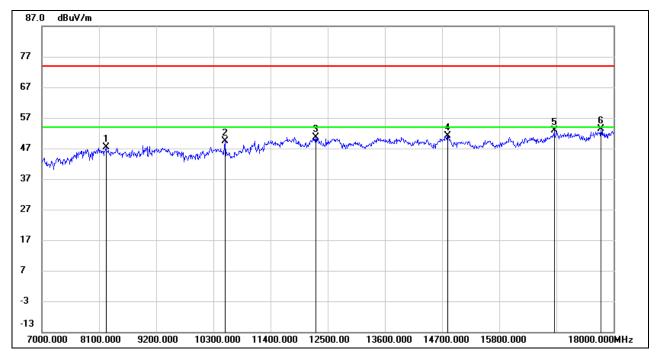
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	8232.000	37.61	9.77	47.38	74.00	-26.62	peak
2	10520.000	37.00	12.43	49.43	74.00	-24.57	peak
3	12269.000	34.52	16.04	50.56	74.00	-23.44	peak
4	14810.000	33.12	17.97	51.09	74.00	-22.91	peak
5	16856.000	31.66	21.19	52.85	74.00	-21.15	peak
6	17758.000	29.51	23.81	53.32	74.00	-20.68	peak

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

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

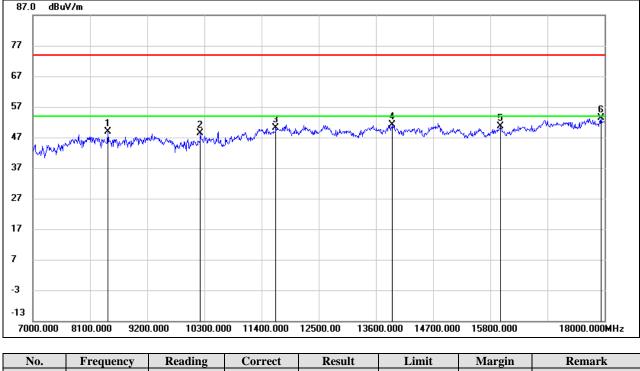
3. Peak: Peak detector.

4. 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.



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	39.60	9.25	48.85	74.00	-25.15	peak
2	10223.000	36.79	11.56	48.35	74.00	-25.65	peak
3	11675.000	34.86	15.18	50.04	74.00	-23.96	peak
4	13919.000	33.58	17.55	51.13	74.00	-22.87	peak
5	15998.000	32.12	18.42	50.54	74.00	-23.46	peak
6	17934.000	29.36	24.02	53.38	74.00	-20.62	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.

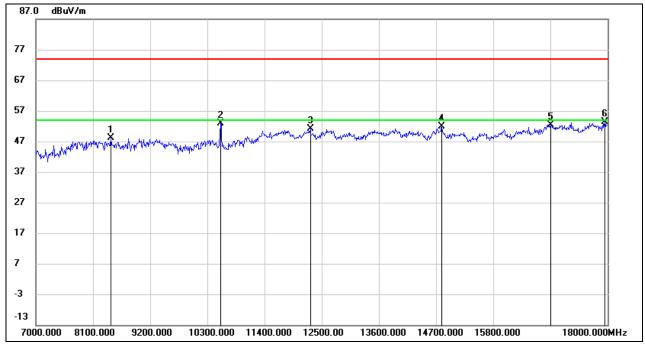
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8441.000	38.99	9.25	48.24	74.00	-25.76	peak
2	10553.000	40.24	12.53	52.77	74.00	-21.23	peak
3	12280.000	35.08	16.07	51.15	74.00	-22.85	peak
4	14810.000	33.94	17.97	51.91	74.00	-22.09	peak
5	16911.000	30.84	21.54	52.38	74.00	-21.62	peak
6	17945.000	29.43	24.06	53.49	74.00	-20.51	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.

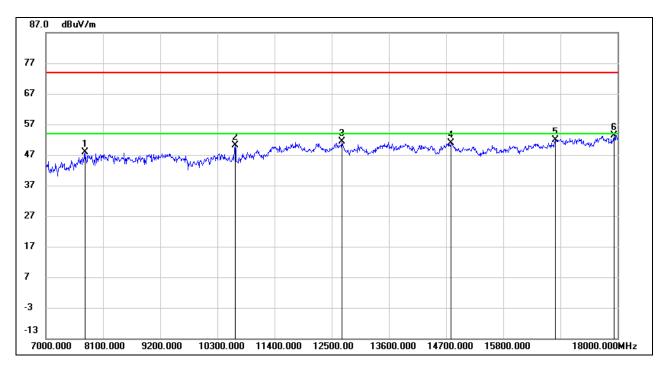
3. Peak: Peak detector.

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.



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	7748.000	39.07	8.88	47.95	74.00	-26.05	peak
2	10641.000	37.48	12.77	50.25	74.00	-23.75	peak
3	12698.000	35.78	15.62	51.40	74.00	-22.60	peak
4	14799.000	32.96	18.04	51.00	74.00	-23.00	peak
5	16801.000	31.14	20.72	51.86	74.00	-22.14	peak
6	17934.000	29.39	24.02	53.41	74.00	-20.59	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.

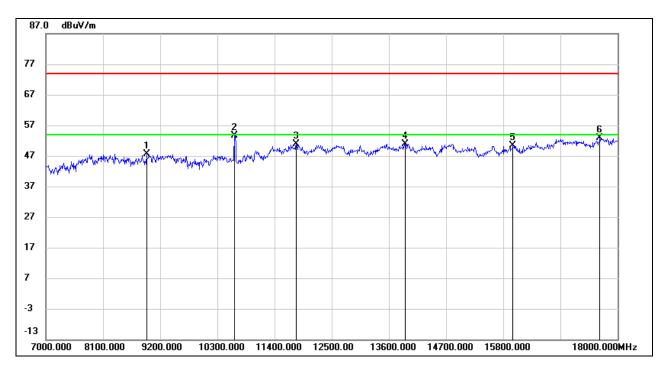
3. Peak: Peak detector.

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.



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	8936.000	37.53	10.06	47.59	74.00	-26.41	peak
2	10630.000	40.96	12.75	53.71	74.00	-20.29	peak
3	11818.000	35.61	15.29	50.90	74.00	-23.10	peak
4	13919.000	33.45	17.55	51.00	74.00	-23.00	peak
5	15987.000	32.09	18.37	50.46	74.00	-23.54	peak
6	17659.000	29.64	23.17	52.81	74.00	-21.19	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.

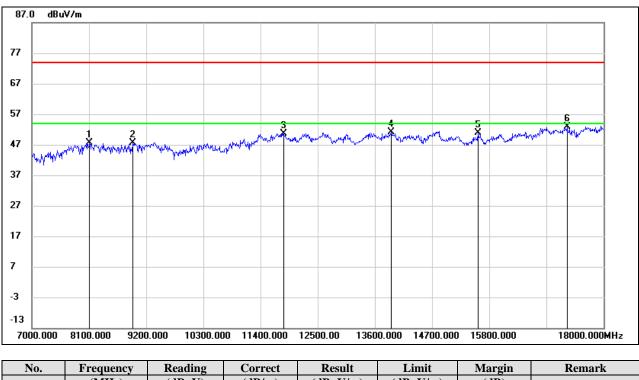
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



UNII-2C BAND

ANTENNA 1 TEST RESULTS (WORST CASE)

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	8111.000	37.46	10.14	47.60	74.00	-26.40	peak
2	8936.000	37.64	10.06	47.70	74.00	-26.30	peak
3	11840.000	35.34	15.35	50.69	74.00	-23.31	peak
4	13908.000	33.52	17.54	51.06	74.00	-22.94	peak
5	15580.000	33.31	17.57	50.88	74.00	-23.12	peak
6	17296.000	30.32	22.59	52.91	74.00	-21.09	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.

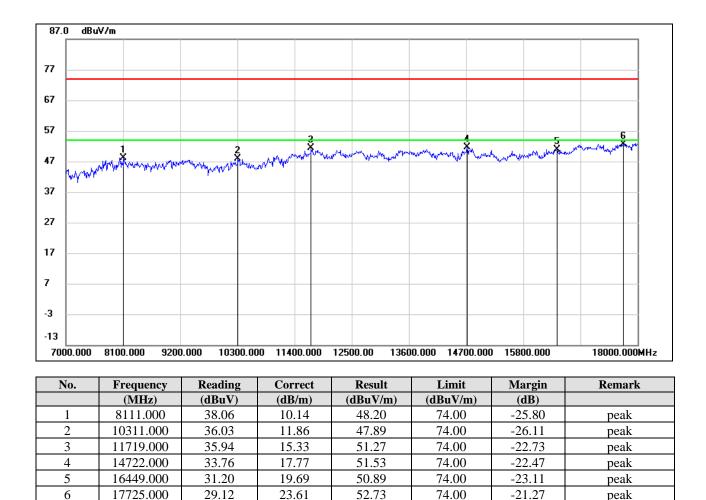
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



peak

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



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.

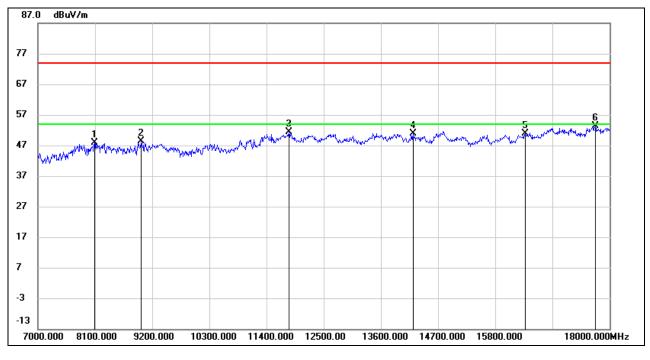
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	8089.000	37.83	10.01	47.84	74.00	-26.16	peak
2	8991.000	37.33	11.10	48.43	74.00	-25.57	peak
3	11829.000	35.95	15.32	51.27	74.00	-22.73	peak
4	14216.000	33.16	17.84	51.00	74.00	-23.00	peak
5	16372.000	31.20	19.67	50.87	74.00	-23.13	peak
6	17725.000	29.85	23.61	53.46	74.00	-20.54	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.

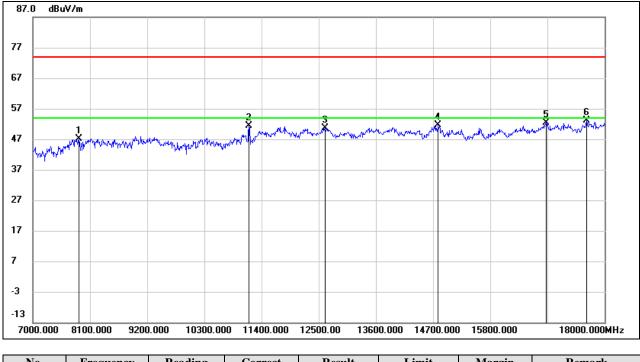
3. Peak: Peak detector.

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.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	38.19	8.95	47.14	74.00	-26.86	peak
2	11158.000	37.68	13.79	51.47	74.00	-22.53	peak
3	12621.000	34.85	15.75	50.60	74.00	-23.40	peak
4	14799.000	33.53	18.04	51.57	74.00	-22.43	peak
5	16878.000	31.00	21.38	52.38	74.00	-21.62	peak
6	17659.000	30.08	23.17	53.25	74.00	-20.75	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.

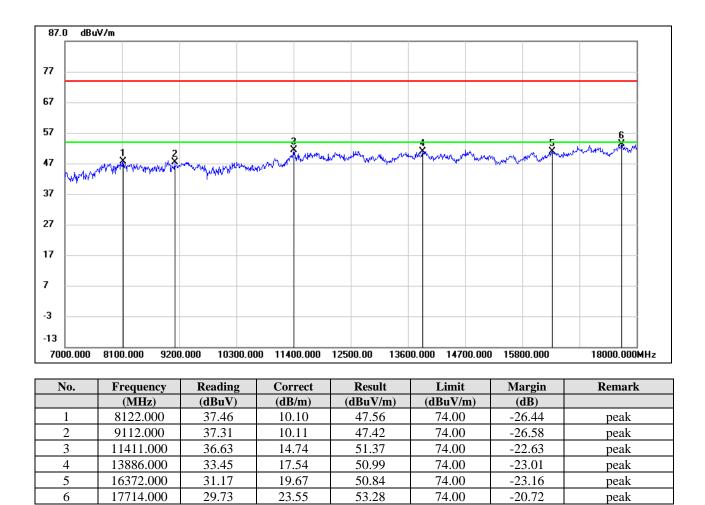
3. Peak: Peak detector.

4. 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.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



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.

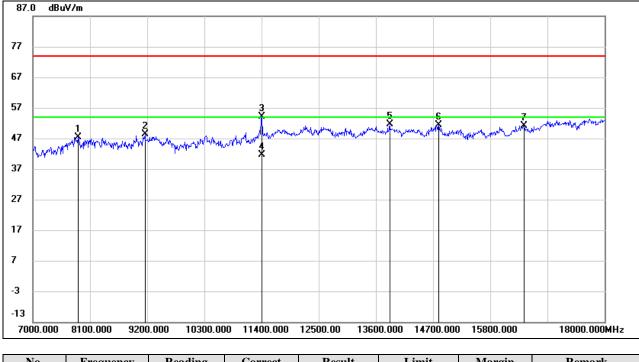
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	7869.000	38.40	9.02	47.42	74.00	-26.58	peak
2	9156.000	38.34	10.01	48.35	74.00	-25.65	peak
3	11400.000	39.43	14.76	54.19	74.00	-19.81	peak
4	11400.000	26.81	14.76	41.57	54.00	-12.43	AVG
5	13864.000	34.11	17.55	51.66	74.00	-22.34	peak
6	14810.000	33.47	17.97	51.44	74.00	-22.56	peak
7	16449.000	31.41	19.69	51.10	74.00	-22.90	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.

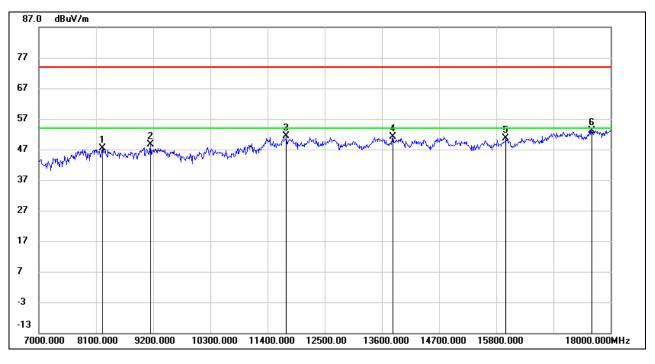
6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



STRADDLE CHANNEL 144

ANTENNA 1 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	8221.000	37.70	9.79	47.49	74.00	-26.51	peak
2	9145.000	38.48	10.04	48.52	74.00	-25.48	peak
3	11763.000	36.11	15.28	51.39	74.00	-22.61	peak
4	13809.000	33.46	17.60	51.06	74.00	-22.94	peak
5	15987.000	32.14	18.37	50.51	74.00	-23.49	peak
6	17637.000	30.20	23.01	53.21	74.00	-20.79	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.

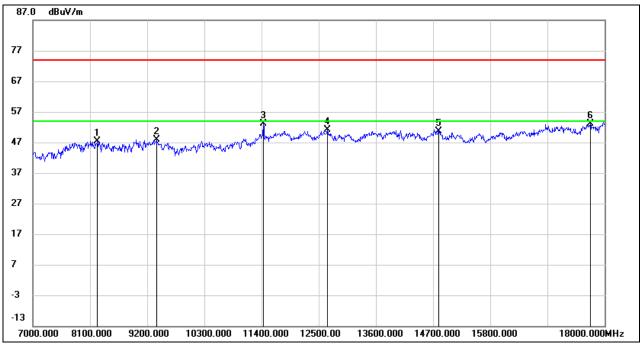
3. Peak: Peak detector.

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.



HARMONICS AND SPURIOUS EMISSIONS (VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8243.000	37.71	9.76	47.47	74.00	-26.53	peak
2	9376.000	37.01	10.84	47.85	74.00	-26.15	peak
3	11433.000	38.40	14.73	53.13	74.00	-20.87	peak
4	12665.000	35.33	15.68	51.01	74.00	-22.99	peak
5	14810.000	32.70	17.97	50.67	74.00	-23.33	peak
6	17725.000	29.50	23.61	53.11	74.00	-20.89	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.

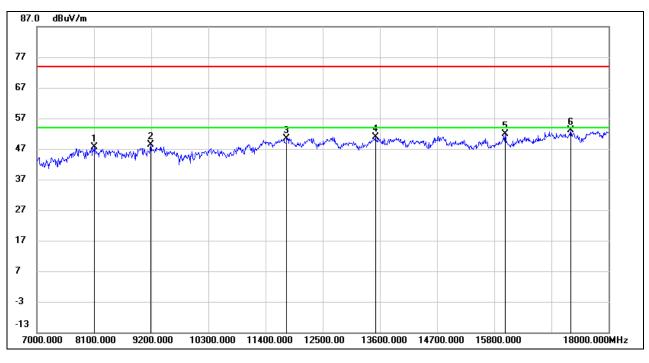
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



UNII-3 BAND

ANTENNA 1 TEST RESULTS (WORST CASE)

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	8111.000	37.44	10.14	47.58	74.00	-26.42	peak
2	9189.000	38.38	9.93	48.31	74.00	-25.69	peak
3	11807.000	35.18	15.27	50.45	74.00	-23.55	peak
4	13512.000	33.68	17.20	50.88	74.00	-23.12	peak
5	16009.000	33.42	18.41	51.83	74.00	-22.17	peak
6	17274.000	30.75	22.45	53.20	74.00	-20.80	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.

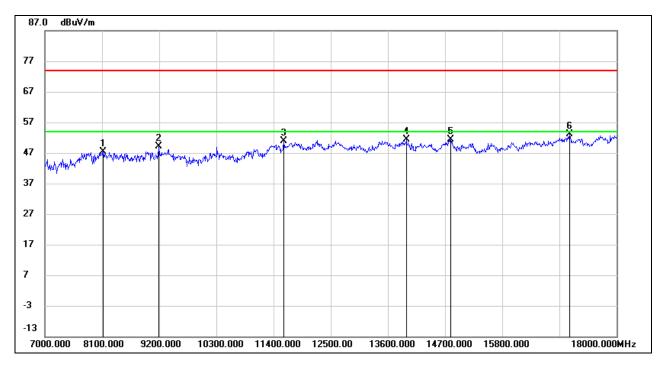
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8122.000	37.30	10.10	47.40	74.00	-26.60	peak
2	9189.000	39.26	9.93	49.19	74.00	-24.81	peak
3	11598.000	36.06	14.72	50.78	74.00	-23.22	peak
4	13952.000	33.72	17.60	51.32	74.00	-22.68	peak
5	14810.000	33.32	17.97	51.29	74.00	-22.71	peak
6	17098.000	31.15	21.89	53.04	74.00	-20.96	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.

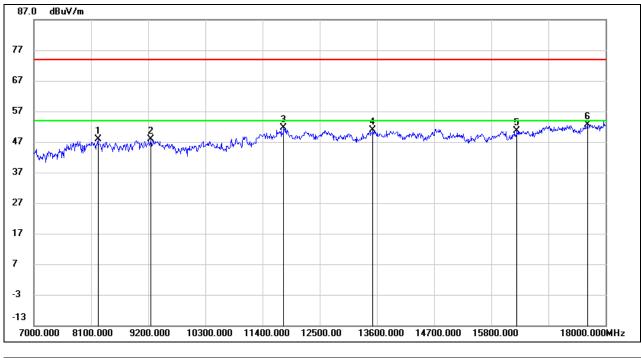
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	8232.000	38.14	9.77	47.91	74.00	-26.09	peak
2	9255.000	37.61	10.17	47.78	74.00	-26.22	peak
3	11807.000	36.24	15.27	51.51	74.00	-22.49	peak
4	13523.000	33.61	17.19	50.80	74.00	-23.20	peak
5	16295.000	31.12	19.58	50.70	74.00	-23.30	peak
6	17648.000	29.48	23.08	52.56	74.00	-21.44	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.

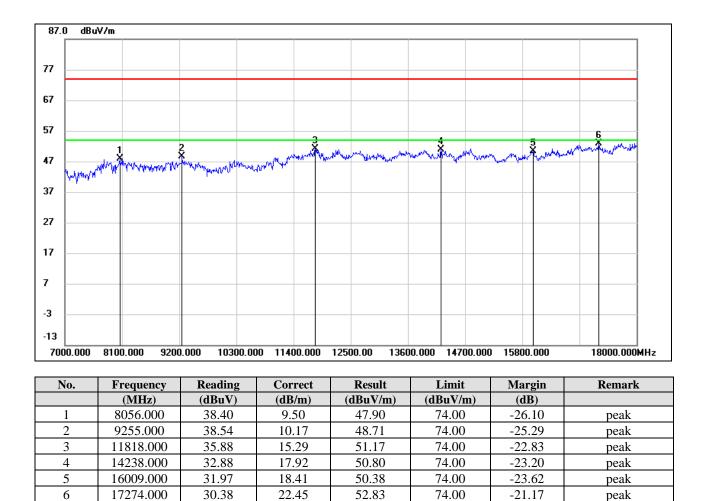
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)



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.

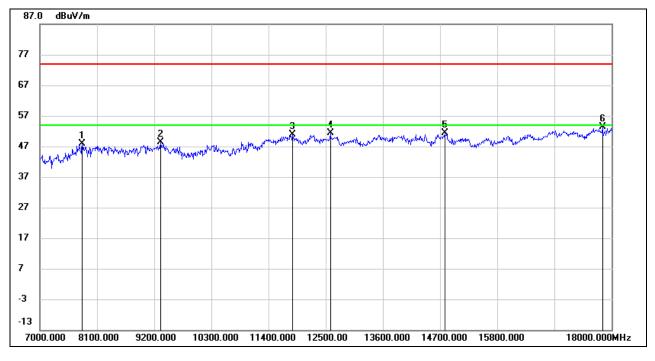
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	7814.000	38.55	9.28	47.83	74.00	-26.17	peak
2	9321.000	37.92	10.52	48.44	74.00	-25.56	peak
3	11862.000	35.38	15.41	50.79	74.00	-23.21	peak
4	12588.000	35.68	15.76	51.44	74.00	-22.56	peak
5	14788.000	33.45	18.00	51.45	74.00	-22.55	peak
6	17824.000	29.40	24.01	53.41	74.00	-20.59	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.

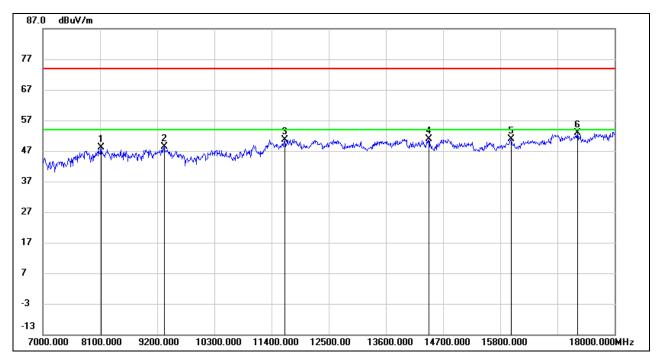
3. Peak: Peak detector.

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.



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	8122.000	37.93	10.10	48.03	74.00	-25.97	peak
2	9332.000	37.67	10.59	48.26	74.00	-25.74	peak
3	11653.000	35.54	15.05	50.59	74.00	-23.41	peak
4	14425.000	33.64	17.34	50.98	74.00	-23.02	peak
5	16009.000	32.46	18.41	50.87	74.00	-23.13	peak
6	17285.000	30.36	22.52	52.88	74.00	-21.12	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.

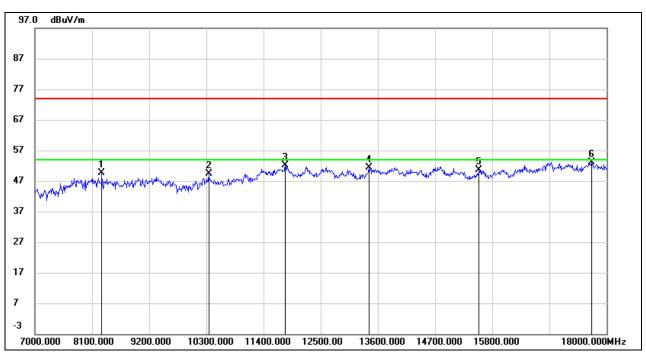
6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	39.87	9.70	49.57	74.00	-24.43	peak
2	10344.000	37.28	11.99	49.27	74.00	-24.73	peak
3	11818.000	36.79	15.29	52.08	74.00	-21.92	peak
4	13424.000	34.25	17.07	51.32	74.00	-22.68	peak
5	15547.000	33.17	17.36	50.53	74.00	-23.47	peak
6	17714.000	29.58	23.55	53.13	74.00	-20.87	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.

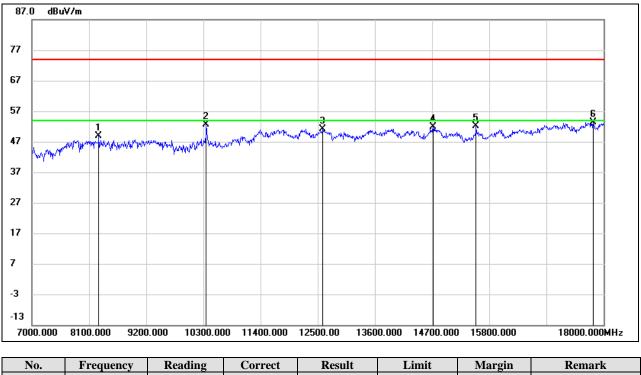
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	39.08	9.70	48.78	74.00	-25.22	peak
2	10355.000	40.69	12.04	52.73	74.00	-21.27	peak
3	12599.000	35.35	15.78	51.13	74.00	-22.87	peak
4	14722.000	34.12	17.77	51.89	74.00	-22.11	peak
5	15547.000	34.73	17.36	52.09	74.00	-21.91	peak
6	17802.000	29.22	24.05	53.27	74.00	-20.73	peak

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

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.

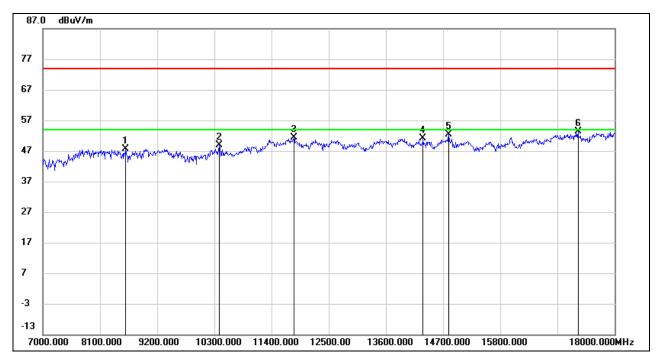
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	8595.000	38.35	9.17	47.52	74.00	-26.48	peak
2	10399.000	36.70	12.23	48.93	74.00	-25.07	peak
3	11829.000	35.99	15.32	51.31	74.00	-22.69	peak
4	14315.000	33.17	18.02	51.19	74.00	-22.81	peak
5	14810.000	34.45	17.97	52.42	74.00	-21.58	peak
6	17296.000	30.83	22.59	53.42	74.00	-20.58	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.

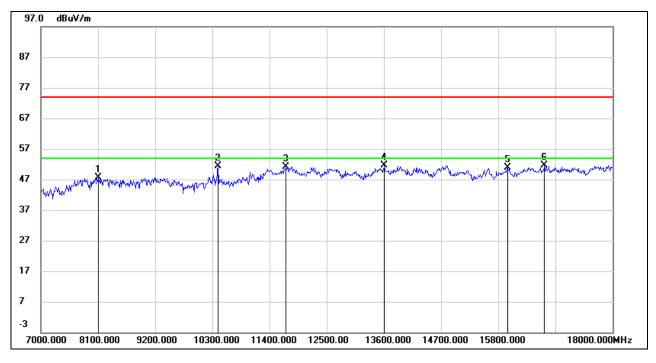
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	8111.000	37.52	10.14	47.66	74.00	-26.34	peak
2	10410.000	39.20	12.25	51.45	74.00	-22.55	peak
3	11719.000	35.84	15.33	51.17	74.00	-22.83	peak
4	13611.000	34.40	17.15	51.55	74.00	-22.45	peak
5	15976.000	32.47	18.34	50.81	74.00	-23.19	peak
6	16691.000	31.57	19.96	51.53	74.00	-22.47	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.

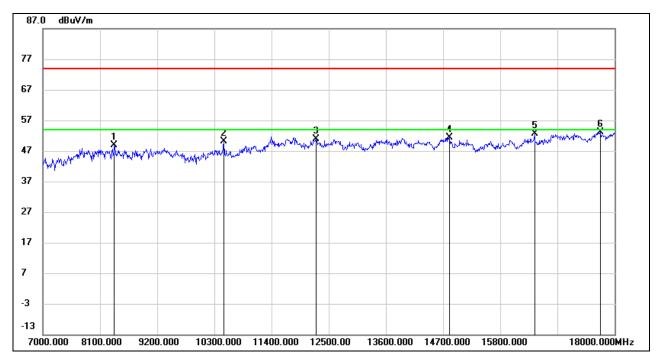
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8375.000	39.40	9.42	48.82	74.00	-25.18	peak
2	10476.000	37.91	12.33	50.24	74.00	-23.76	peak
3	12258.000	34.75	16.03	50.78	74.00	-23.22	peak
4	14821.000	33.60	17.90	51.50	74.00	-22.50	peak
5	16460.000	32.87	19.69	52.56	74.00	-21.44	peak
6	17725.000	29.52	23.61	53.13	74.00	-20.87	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.

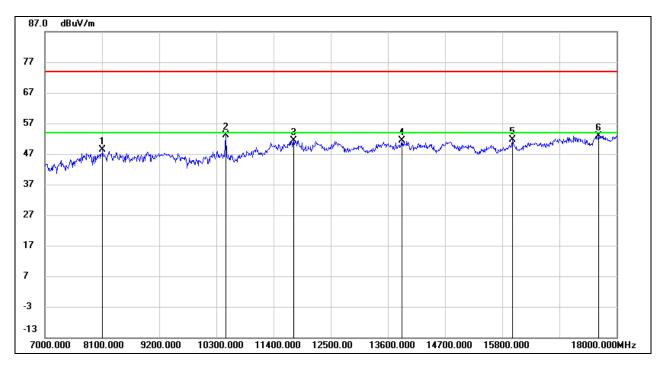
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	8111.000	38.18	10.14	48.32	74.00	-25.68	peak
2	10487.000	40.67	12.35	53.02	74.00	-20.98	peak
3	11785.000	36.21	15.25	51.46	74.00	-22.54	peak
4	13875.000	33.79	17.55	51.34	74.00	-22.66	peak
5	15998.000	33.20	18.42	51.62	74.00	-22.38	peak
6	17659.000	29.77	23.17	52.94	74.00	-21.06	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.

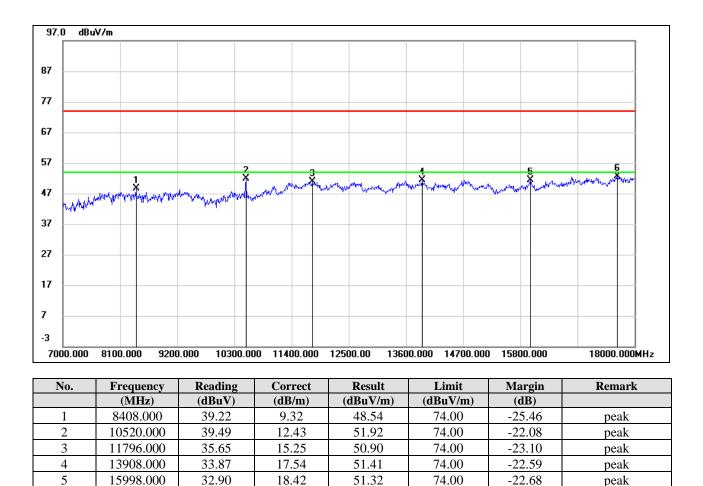
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



UNII-2A BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



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

29.39

23.24

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

52.63

74.00

-21.37

peak

3. Peak: Peak detector.

17670.000

6

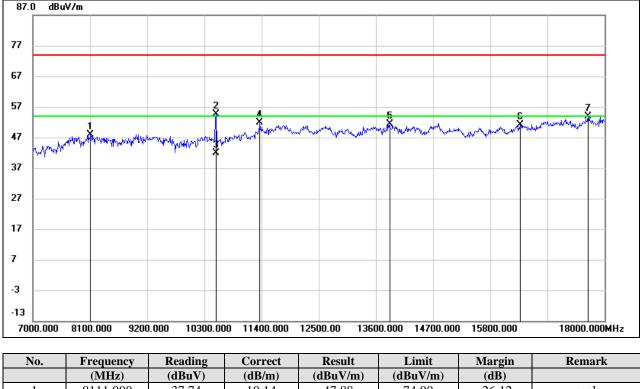
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	37.74	10.14	47.88	74.00	-26.12	peak
2	10520.000	42.25	12.43	54.68	74.00	-19.32	peak
3	10520.000	29.52	12.43	41.95	54.00	-12.05	AVG
4	11367.000	37.41	14.45	51.86	74.00	-22.14	peak
5	13864.000	33.77	17.55	51.32	74.00	-22.68	peak
6	16372.000	31.38	19.67	51.05	74.00	-22.95	peak
7	17681.000	30.52	23.33	53.85	74.00	-20.15	peak

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

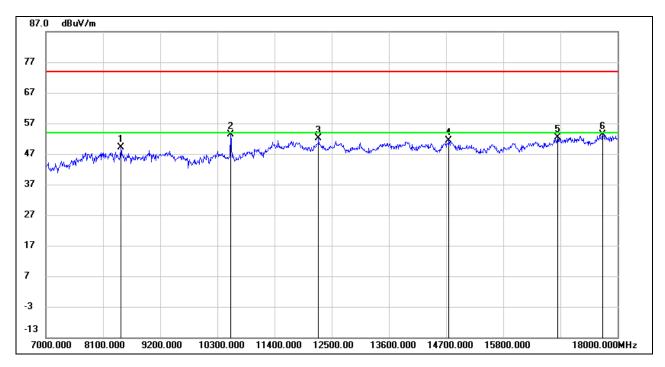
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 5. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.

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.



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	39.96	9.25	49.21	74.00	-24.79	peak
2	10553.000	40.95	12.53	53.48	74.00	-20.52	peak
3	12247.000	36.14	16.02	52.16	74.00	-21.84	peak
4	14755.000	33.42	17.88	51.30	74.00	-22.70	peak
5	16845.000	31.34	21.10	52.44	74.00	-21.56	peak
6	17714.000	29.71	23.55	53.26	74.00	-20.74	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.

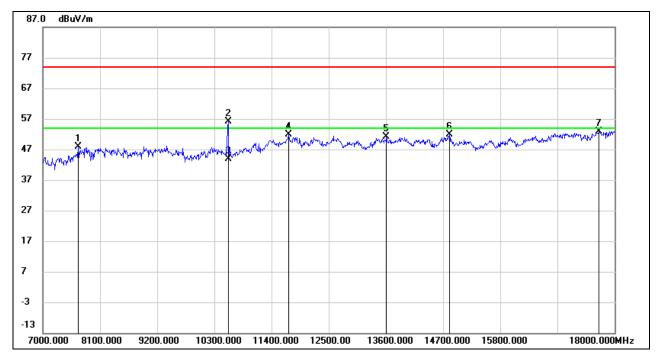
3. Peak: Peak detector.

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.



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	7682.000	39.57	8.36	47.93	74.00	-26.07	peak
2	10564.000	43.51	12.57	56.08	74.00	-17.92	peak
3	10564.000	31.32	12.57	43.89	54.00	-10.11	AVG
4	11730.000	36.63	15.32	51.95	74.00	-22.05	peak
5	13611.000	33.96	17.15	51.11	74.00	-22.89	peak
6	14821.000	33.90	17.90	51.80	74.00	-22.20	peak
7	17703.000	29.49	23.49	52.98	74.00	-21.02	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.

5. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

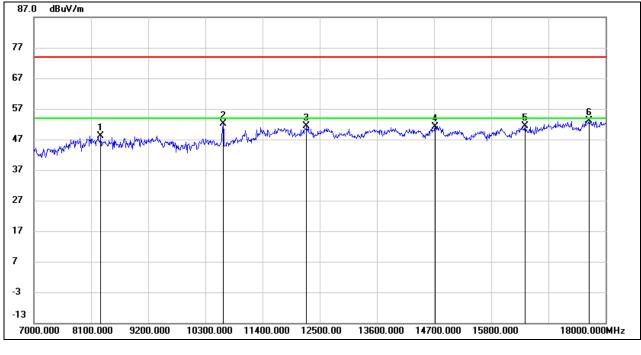
4. For the transmitting duration, please refer to clause 7.1.

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.



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	8287.000	38.43	9.70	48.13	54.00	-5.87	CAV
2	10641.000	39.42	12.77	52.19	74.00	-21.81	peak
3	12247.000	35.26	16.02	51.28	74.00	-22.72	peak
4	14722.000	33.41	17.77	51.18	74.00	-22.82	peak
5	16449.000	31.60	19.69	51.29	74.00	-22.71	peak
6	17681.000	29.76	23.33	53.09	74.00	-20.91	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.

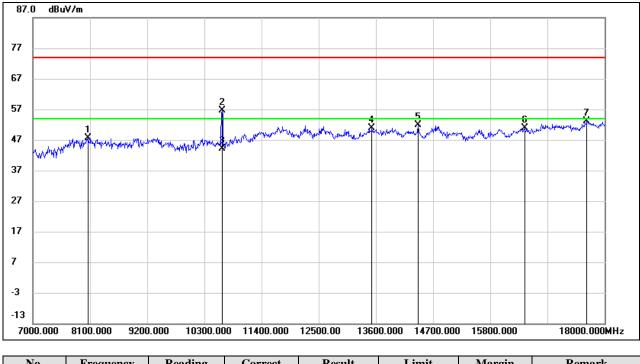
3. Peak: Peak detector.

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.



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	8056.000	38.05	9.50	47.55	74.00	-26.45	peak
2	10641.000	43.84	12.77	56.61	74.00	-17.39	peak
3	10641.000	31.36	12.77	44.13	54.00	-9.87	AVG
4	13523.000	33.58	17.19	50.77	74.00	-23.23	peak
5	14414.000	34.52	17.36	51.88	74.00	-22.12	peak
6	16460.000	31.26	19.69	50.95	74.00	-23.05	peak
7	17659.000	29.88	23.17	53.05	74.00	-20.95	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.

- 5. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.

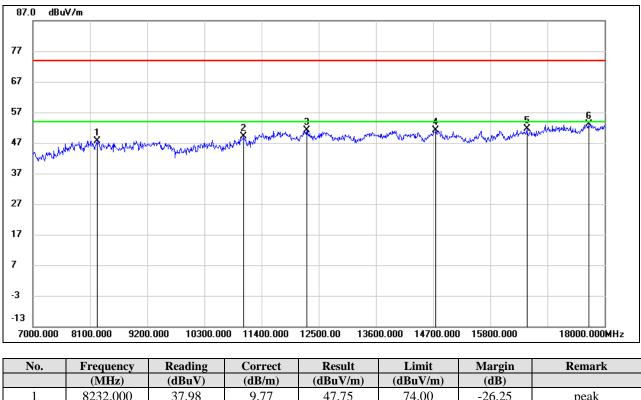
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



UNII-2C BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



		00					
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8232.000	37.98	9.77	47.75	74.00	-26.25	peak
2	11048.000	35.56	13.54	49.10	74.00	-24.90	peak
3	12269.000	35.05	16.04	51.09	74.00	-22.91	peak
4	14755.000	33.14	17.88	51.02	74.00	-22.98	peak
5	16504.000	31.88	19.70	51.58	74.00	-22.42	peak
6	17692.000	29.65	23.41	53.06	74.00	-20.94	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.

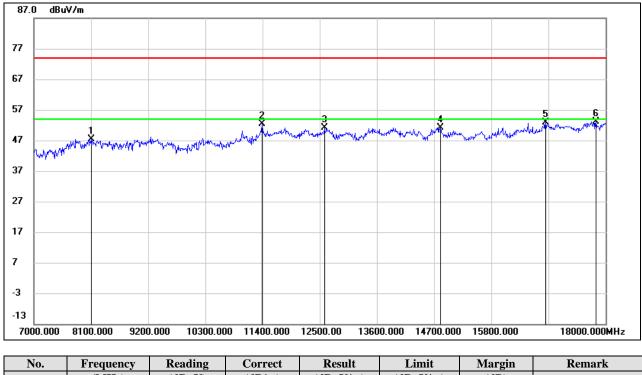
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	37.33	10.14	47.47	74.00	-26.53	peak
2	11389.000	37.74	14.66	52.40	74.00	-21.60	peak
3	12588.000	35.33	15.76	51.09	74.00	-22.91	peak
4	14821.000	33.26	17.90	51.16	74.00	-22.84	peak
5	16845.000	31.86	21.10	52.96	74.00	-21.04	peak
6	17813.000	29.18	24.03	53.21	74.00	-20.79	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.

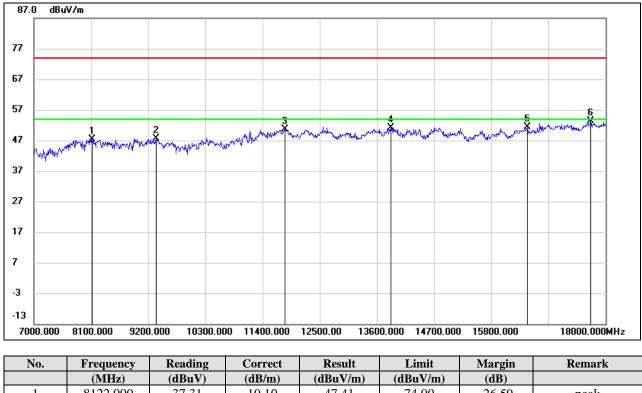
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



110.	rrequency	Keaung	Correct	Kesuit	Linnt	Margin	Kellial K
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8122.000	37.31	10.10	47.41	74.00	-26.59	peak
2	9354.000	37.05	10.70	47.75	74.00	-26.25	peak
3	11829.000	35.33	15.32	50.65	74.00	-23.35	peak
4	13864.000	33.58	17.55	51.13	74.00	-22.87	peak
5	16493.000	31.63	19.69	51.32	74.00	-22.68	peak
6	17714.000	29.83	23.55	53.38	74.00	-20.62	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.

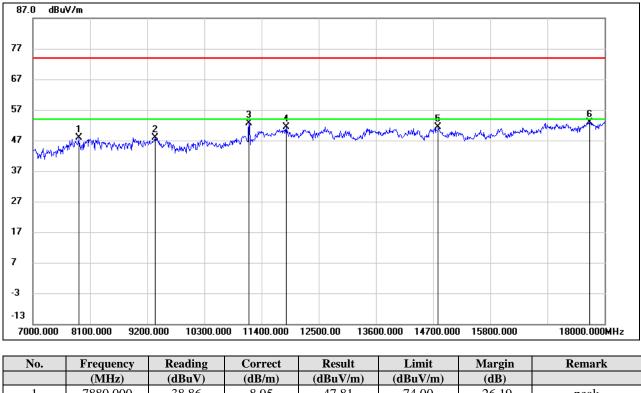
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)



INO.	Frequency	Reading	Correct	Result	Limit	Margin	кетагк
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	38.86	8.95	47.81	74.00	-26.19	peak
2	9354.000	37.30	10.70	48.00	74.00	-26.00	peak
3	11158.000	38.95	13.79	52.74	74.00	-21.26	peak
4	11873.000	35.90	15.44	51.34	74.00	-22.66	peak
5	14799.000	33.43	18.04	51.47	74.00	-22.53	peak
6	17714.000	29.45	23.55	53.00	74.00	-21.00	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.

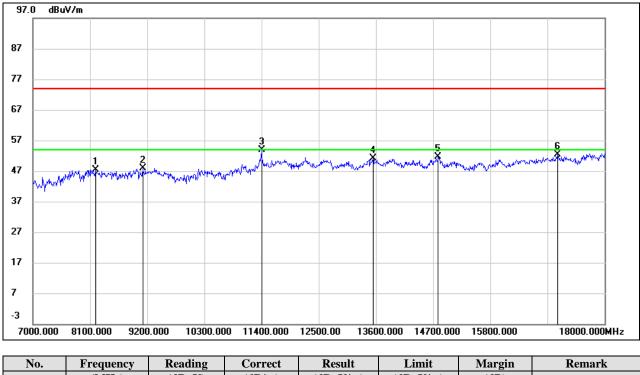
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	8210.000	37.69	9.80	47.49	74.00	-26.51	peak
2	9112.000	37.69	10.11	47.80	74.00	-26.20	peak
3	11400.000	39.11	14.76	53.87	74.00	-20.13	peak
4	13545.000	34.01	17.16	51.17	74.00	-22.83	peak
5	14799.000	33.59	18.04	51.63	74.00	-22.37	peak
6	17098.000	30.55	21.89	52.44	74.00	-21.56	peak

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

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

3. Peak: Peak detector.

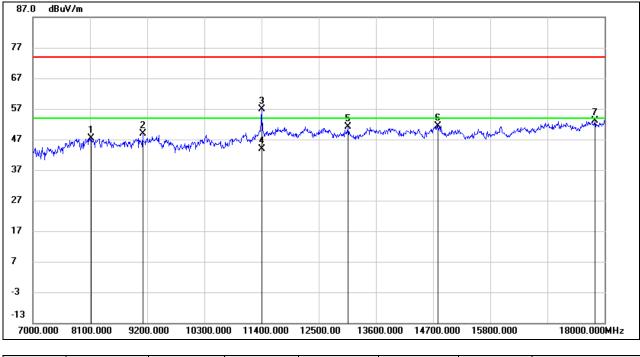
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	8122.000	37.19	10.10	47.29	74.00	-26.71	peak
2	9112.000	38.79	10.11	48.90	74.00	-25.10	peak
3	11400.000	42.01	14.76	56.77	74.00	-17.23	peak
4	11400.000	29.07	14.76	43.83	54.00	-10.17	AVG
5	13061.000	35.00	16.01	51.01	74.00	-22.99	peak
6	14799.000	33.46	18.04	51.50	74.00	-22.50	peak
7	17813.000	28.98	24.03	53.01	74.00	-20.99	peak

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

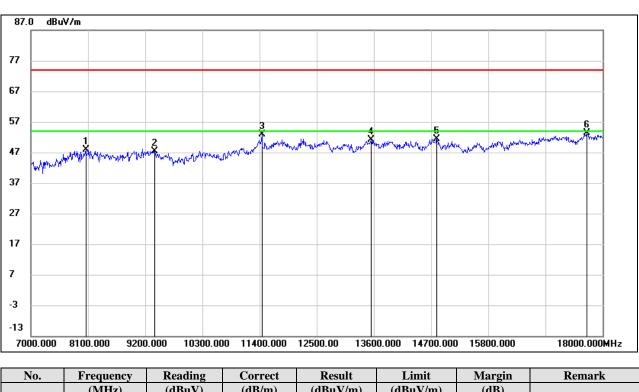
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 5. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.

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.



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	8056.000	38.49	9.50	47.99	74.00	-26.01	peak
2	9387.000	36.52	10.89	47.41	74.00	-26.59	peak
3	11444.000	38.19	14.71	52.90	74.00	-21.10	peak
4	13545.000	34.09	17.16	51.25	74.00	-22.75	peak
5	14810.000	33.41	17.97	51.38	74.00	-22.62	peak
6	17692.000	29.90	23.41	53.31	74.00	-20.69	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.

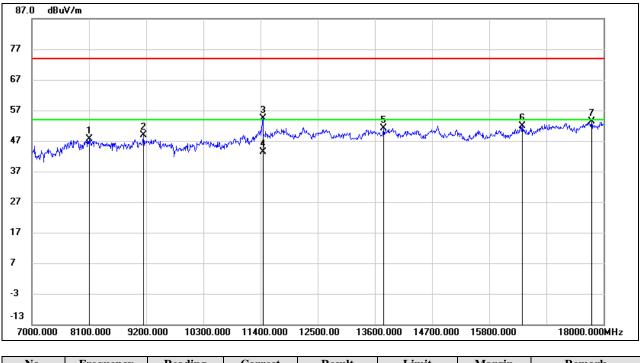
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	37.54	10.14	47.68	74.00	-26.32	peak
2	9145.000	38.93	10.04	48.97	74.00	-25.03	peak
3	11444.000	39.64	14.71	54.35	74.00	-19.65	peak
4	11444.000	28.63	14.71	43.34	54.00	-10.66	AVG
5	13765.000	33.63	17.61	51.24	74.00	-22.76	peak
6	16438.000	32.29	19.68	51.97	74.00	-22.03	peak
7	17769.000	29.56	23.87	53.43	74.00	-20.57	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.
- 5. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. 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.

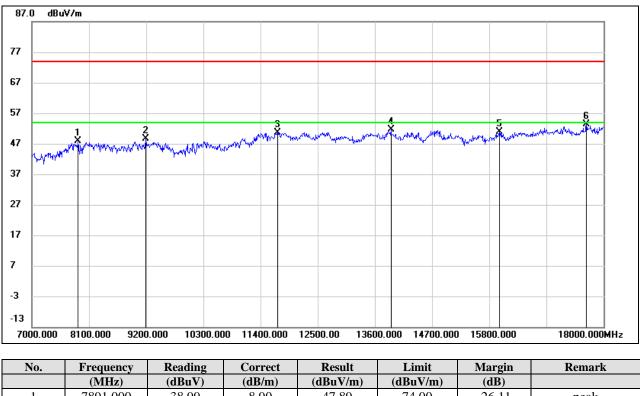
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	7891.000	38.99	8.90	47.89	74.00	-26.11	peak
2	9189.000	38.70	9.93	48.63	54.00	-5.37	CAV
3	11730.000	35.40	15.32	50.72	74.00	-23.28	peak
4	13908.000	33.98	17.54	51.52	74.00	-22.48	peak
5	15998.000	32.50	18.42	50.92	74.00	-23.08	peak
6	17670.000	30.09	23.24	53.33	74.00	-20.67	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.

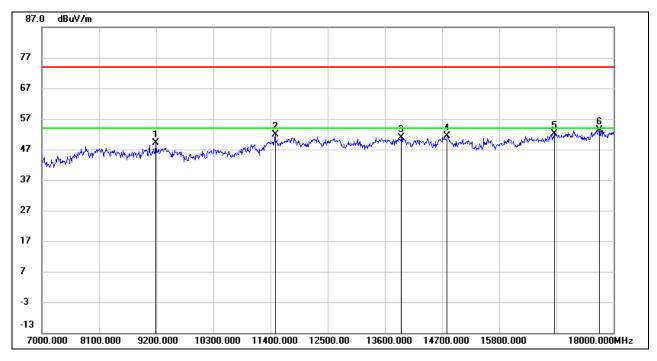
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	9189.000	39.26	9.93	49.19	74.00	-24.81	peak
2	11488.000	37.22	14.66	51.88	74.00	-22.12	peak
3	13919.000	33.39	17.55	50.94	74.00	-23.06	peak
4	14799.000	33.46	18.04	51.50	74.00	-22.50	peak
5	16856.000	31.02	21.19	52.21	74.00	-21.79	peak
6	17725.000	29.71	23.61	53.32	74.00	-20.68	peak

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

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

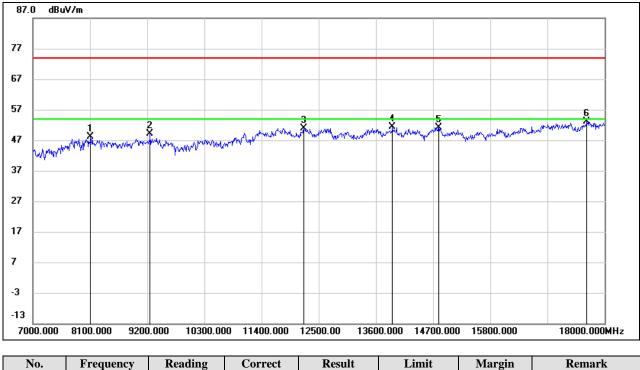
3. Peak: Peak detector.

4. 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.



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	8111.000	37.96	10.14	48.10	74.00	-25.90	peak
2	9255.000	39.02	10.17	49.19	74.00	-24.81	peak
3	12214.000	34.96	15.97	50.93	74.00	-23.07	peak
4	13919.000	33.79	17.55	51.34	74.00	-22.66	peak
5	14810.000	33.13	17.97	51.10	74.00	-22.90	peak
6	17659.000	29.97	23.17	53.14	74.00	-20.86	peak

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

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

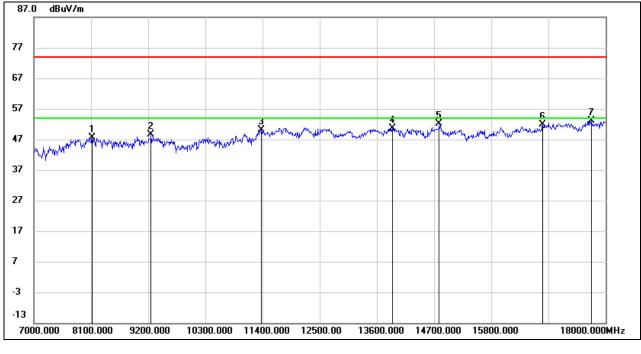
3. Peak: Peak detector.

4. 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.



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	8122.000	37.60	10.10	47.70	74.00	-26.30	peak
2	9255.000	38.46	10.17	48.63	74.00	-25.37	peak
3	11378.000	35.50	14.55	50.05	74.00	-23.95	peak
4	13897.000	33.16	17.52	50.68	74.00	-23.32	peak
5	14799.000	34.06	18.04	52.10	74.00	-21.90	peak
6	16790.000	31.15	20.64	51.79	74.00	-22.21	peak
7	17725.000	29.43	23.61	53.04	74.00	-20.96	peak

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

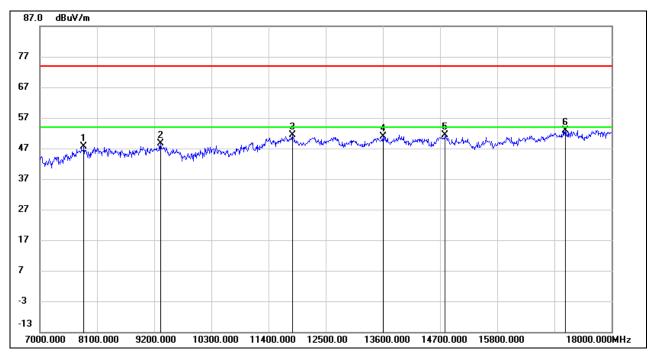
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7847.000	38.50	9.12	47.62	74.00	-26.38	peak
2	9321.000	38.07	10.52	48.59	74.00	-25.41	peak
3	11862.000	35.89	15.41	51.30	74.00	-22.70	peak
4	13600.000	33.76	17.10	50.86	74.00	-23.14	peak
5	14799.000	33.45	18.04	51.49	74.00	-22.51	peak
6	17109.000	31.08	21.91	52.99	74.00	-21.01	peak

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

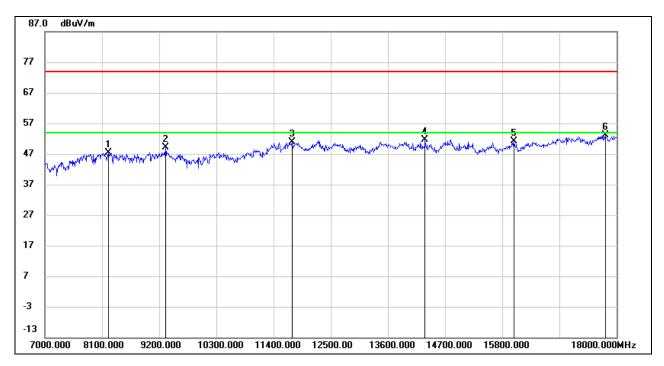
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8221.000	37.68	9.79	47.47	74.00	-26.53	peak
2	9321.000	38.56	10.52	49.08	74.00	-24.92	peak
3	11752.000	35.52	15.29	50.81	74.00	-23.19	peak
4	14315.000	33.52	18.02	51.54	74.00	-22.46	peak
5	16020.000	32.60	18.41	51.01	74.00	-22.99	peak
6	17780.000	29.11	23.94	53.05	74.00	-20.95	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.

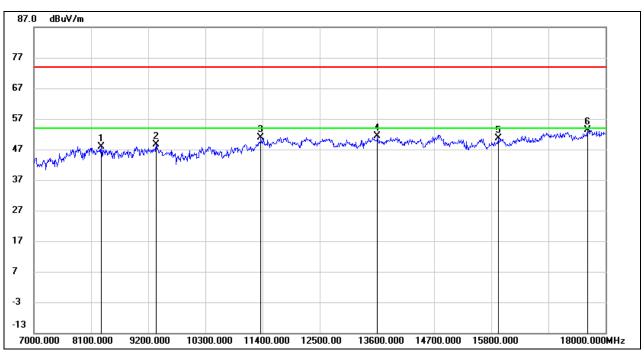
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



8.3.3. 802.11n HT40 MIMO MODE

UNII-1 BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8298.000	38.23	9.69	47.92	74.00	-26.08	peak
2	9354.000	37.95	10.70	48.65	74.00	-25.35	peak
3	11367.000	36.51	14.45	50.96	74.00	-23.04	peak
4	13611.000	34.20	17.15	51.35	74.00	-22.65	peak
5	15932.000	32.39	18.17	50.56	74.00	-23.44	peak
6	17648.000	30.42	23.08	53.50	74.00	-20.50	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.

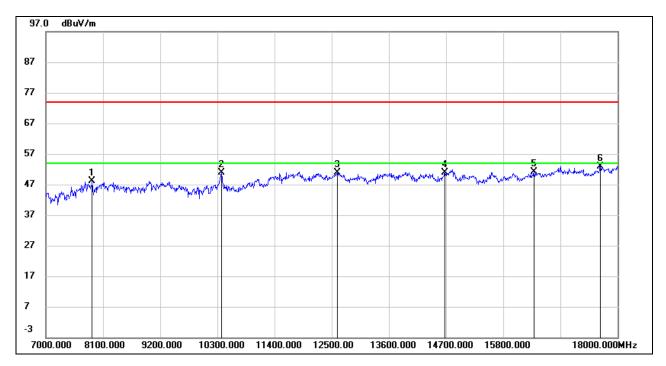
3. Peak: Peak detector.

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. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7891.000	39.18	8.90	48.08	74.00	-25.92	peak
2	10377.000	38.86	12.13	50.99	74.00	-23.01	peak
3	12610.000	35.17	15.76	50.93	74.00	-23.07	peak
4	14678.000	33.31	17.62	50.93	74.00	-23.07	peak
5	16394.000	31.52	19.67	51.19	74.00	-22.81	peak
6	17670.000	29.67	23.24	52.91	74.00	-21.09	peak

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

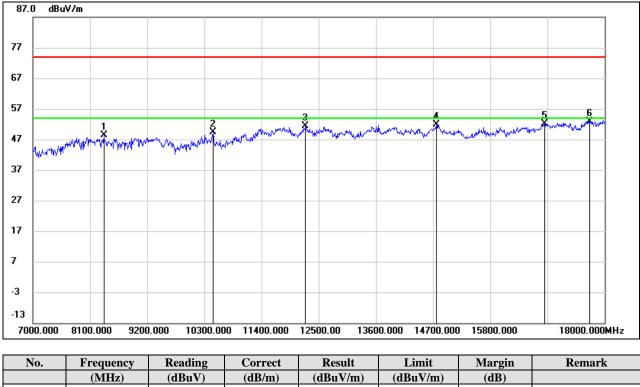
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8364.000	38.86	9.47	48.33	74.00	-25.67	peak
2	10465.000	37.01	12.32	49.33	74.00	-24.67	peak
3	12247.000	35.32	16.02	51.34	74.00	-22.66	peak
4	14766.000	34.03	17.92	51.95	74.00	-22.05	peak
5	16845.000	30.99	21.10	52.09	74.00	-21.91	peak
6	17714.000	29.44	23.55	52.99	74.00	-21.01	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.

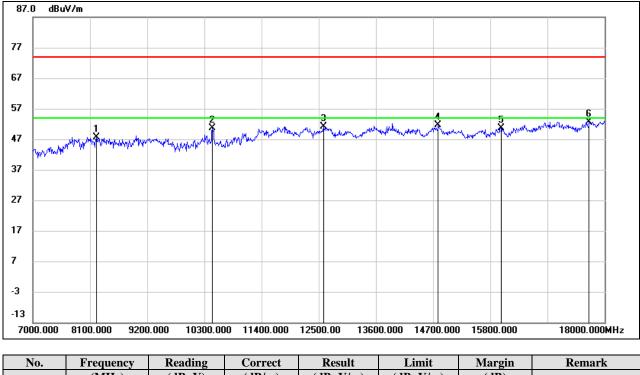
3. Peak: Peak detector.

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. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8221.000	37.95	9.79	47.74	74.00	-26.26	peak
2	10454.000	38.21	12.31	50.52	74.00	-23.48	peak
3	12599.000	35.35	15.78	51.13	74.00	-22.87	peak
4	14799.000	33.50	18.04	51.54	74.00	-22.46	peak
5	16009.000	32.33	18.41	50.74	74.00	-23.26	peak
6	17703.000	29.26	23.49	52.75	74.00	-21.25	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.

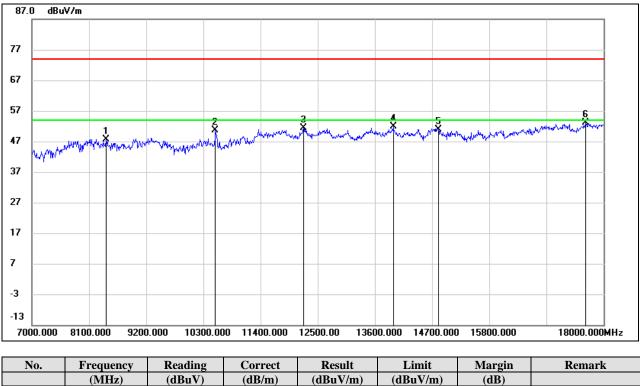
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



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	38.47	9.27	47.74	74.00	-26.26	peak
2	10531.000	38.25	12.47	50.72	74.00	-23.28	peak
3	12225.000	35.34	15.99	51.33	74.00	-22.67	peak
4	13952.000	34.20	17.60	51.80	74.00	-22.20	peak
5	14821.000	32.87	17.90	50.77	74.00	-23.23	peak
6	17648.000	30.11	23.08	53.19	74.00	-20.81	peak

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

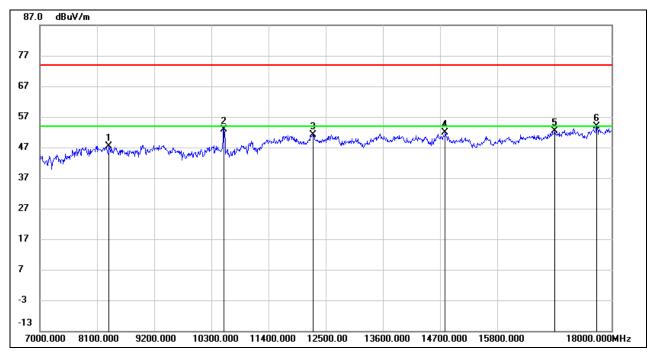
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8331.000	37.87	9.58	47.45	74.00	-26.55	peak
2	10542.000	40.50	12.50	53.00	74.00	-21.00	peak
3	12258.000	35.18	16.03	51.21	74.00	-22.79	peak
4	14799.000	33.94	18.04	51.98	74.00	-22.02	peak
5	16900.000	30.90	21.57	52.47	74.00	-21.53	peak
6	17714.000	30.34	23.55	53.89	74.00	-20.11	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.

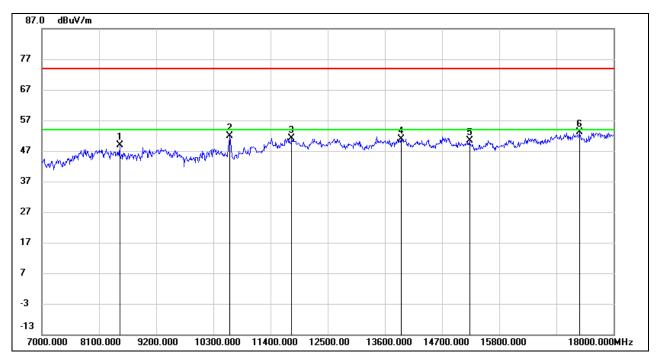
3. Peak: Peak detector.

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. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8496.000	39.80	9.13	48.93	74.00	-25.07	peak
2	10619.000	39.19	12.72	51.91	74.00	-22.09	peak
3	11807.000	35.89	15.27	51.16	74.00	-22.84	peak
4	13908.000	33.44	17.54	50.98	74.00	-23.02	peak
5	15228.000	33.55	16.90	50.45	74.00	-23.55	peak
6	17340.000	30.71	22.31	53.02	74.00	-20.98	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.

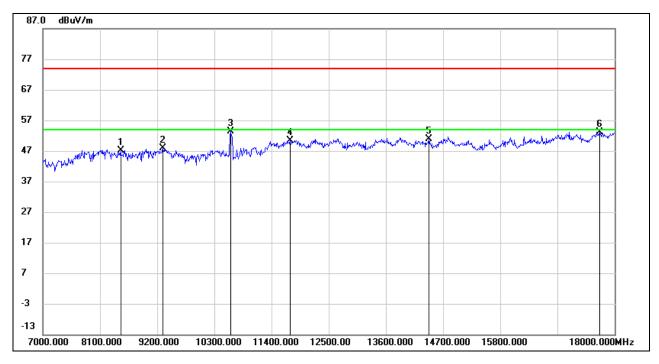
3. Peak: Peak detector.

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. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8496.000	38.12	9.13	47.25	74.00	-26.75	peak
2	9310.000	37.44	10.46	47.90	74.00	-26.10	peak
3	10619.000	40.78	12.72	53.50	74.00	-20.50	peak
4	11752.000	35.20	15.29	50.49	74.00	-23.51	peak
5	14425.000	33.61	17.34	50.95	74.00	-23.05	peak
6	17714.000	29.63	23.55	53.18	74.00	-20.82	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.

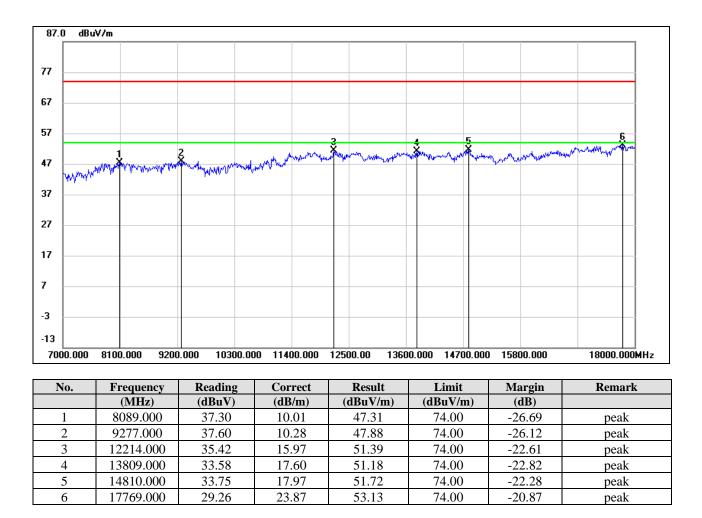
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



UNII-2C BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



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

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

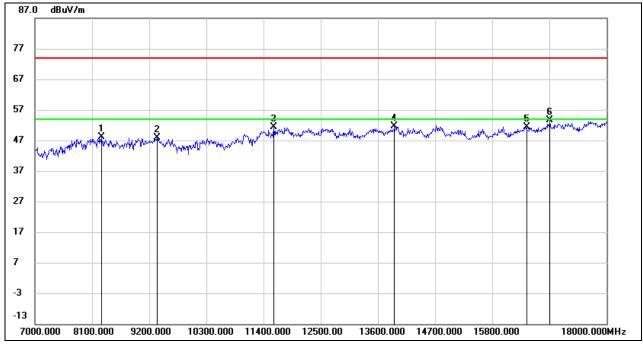
3. Peak: Peak detector.

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. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8276.000	38.34	9.71	48.05	74.00	-25.95	peak
2	9354.000	37.28	10.70	47.98	74.00	-26.02	peak
3	11598.000	36.60	14.72	51.32	74.00	-22.68	peak
4	13919.000	33.97	17.55	51.52	74.00	-22.48	peak
5	16460.000	31.70	19.69	51.39	74.00	-22.61	peak
6	16911.000	32.04	21.54	53.58	74.00	-20.42	peak

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

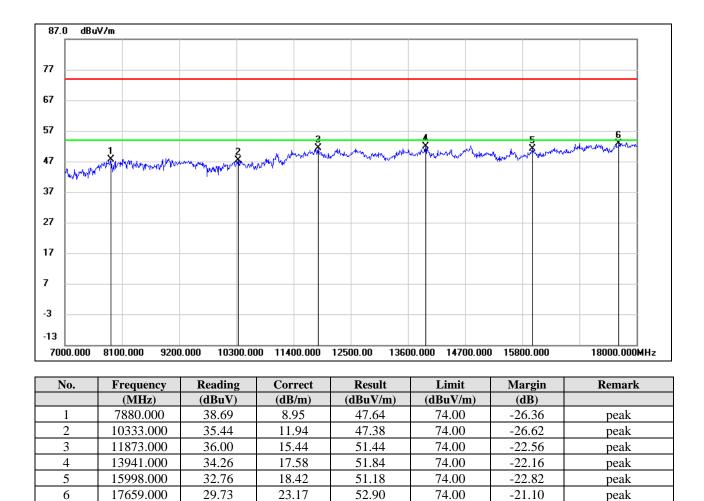
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

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.





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

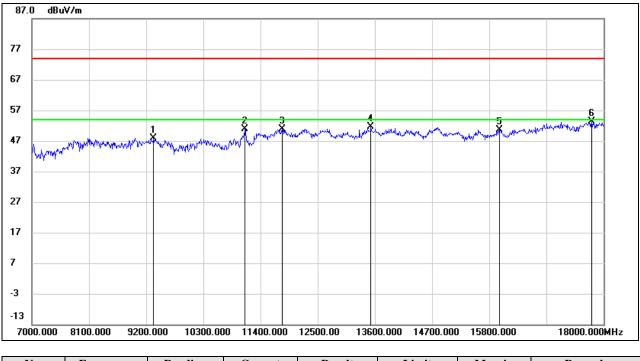
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.

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. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9343.000	37.21	10.64	47.85	74.00	-26.15	peak
2	11103.000	37.02	13.80	50.82	74.00	-23.18	peak
3	11818.000	35.58	15.29	50.87	74.00	-23.13	peak
4	13523.000	34.33	17.19	51.52	74.00	-22.48	peak
5	15998.000	32.17	18.42	50.59	74.00	-23.41	peak
6	17769.000	29.54	23.87	53.41	74.00	-20.59	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.

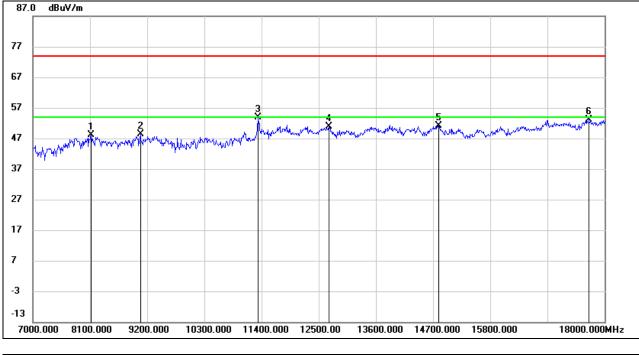
3. Peak: Peak detector.

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. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8122.000	37.99	10.10	48.09	74.00	-25.91	peak
2	9068.000	37.82	10.50	48.32	74.00	-25.68	peak
3	11334.000	39.78	14.15	53.93	74.00	-20.07	peak
4	12698.000	35.33	15.62	50.95	74.00	-23.05	peak
5	14810.000	33.21	17.97	51.18	74.00	-22.82	peak
6	17703.000	29.62	23.49	53.11	74.00	-20.89	peak

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

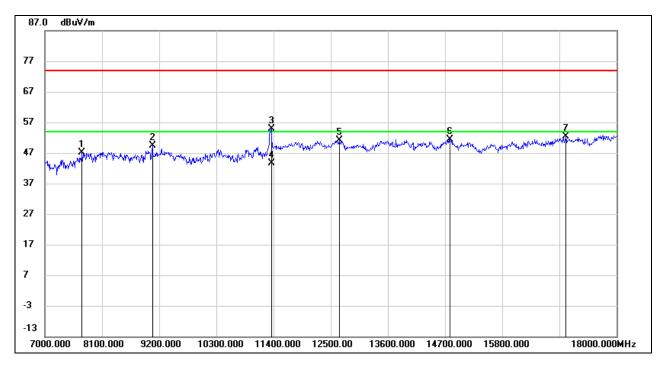
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7715.000	38.64	8.59	47.23	74.00	-26.77	peak
2	9068.000	38.81	10.50	49.31	74.00	-24.69	peak
3	11356.000	40.46	14.35	54.81	74.00	-19.19	peak
4	11356.000	29.35	14.35	43.70	54.00	-10.30	AVG
5	12665.000	35.35	15.68	51.03	74.00	-22.97	peak
6	14799.000	33.38	18.04	51.42	74.00	-22.58	peak
7	17021.000	30.89	21.38	52.27	74.00	-21.73	peak

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

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 5. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. 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.

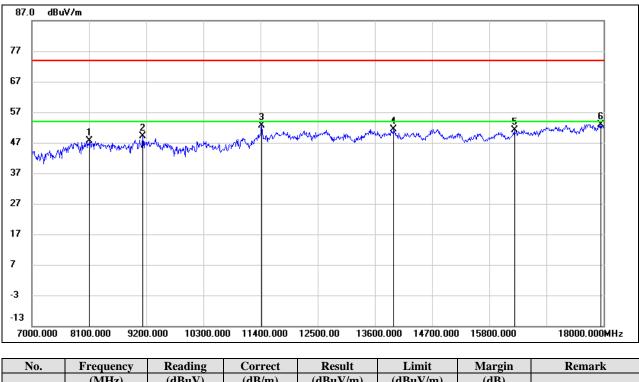
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



STRADDLE CHANNEL 142

HARMONICS AND SPURIOUS EMISSIONS (HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	37.44	10.14	47.58	74.00	-26.42	peak
2	9134.000	38.99	10.06	49.05	74.00	-24.95	QP
3	11422.000	37.83	14.73	52.56	74.00	-21.44	peak
4	13963.000	33.85	17.61	51.46	74.00	-22.54	peak
5	16284.000	31.62	19.47	51.09	74.00	-22.91	peak
6	17945.000	28.93	24.06	52.99	74.00	-21.01	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.

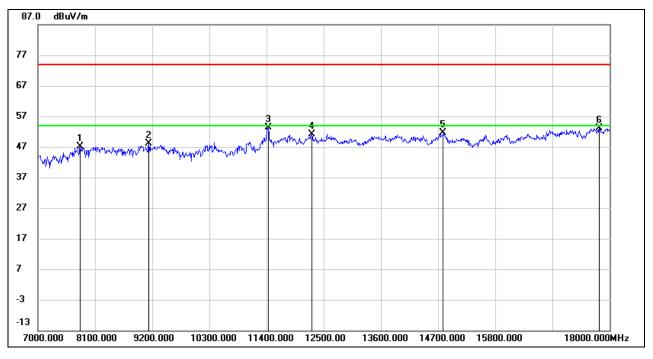
3. Peak: Peak detector.

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. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.





HARMONICS AND SPURIOUS EMISSIONS (VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7814.000	37.81	9.28	47.09	74.00	-26.91	peak
2	9134.000	38.12	10.06	48.18	74.00	-25.82	peak
3	11433.000	38.62	14.73	53.35	74.00	-20.65	peak
4	12269.000	35.20	16.04	51.24	74.00	-22.76	peak
5	14799.000	33.67	18.04	51.71	74.00	-22.29	peak
6	17802.000	29.10	24.05	53.15	74.00	-20.85	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.

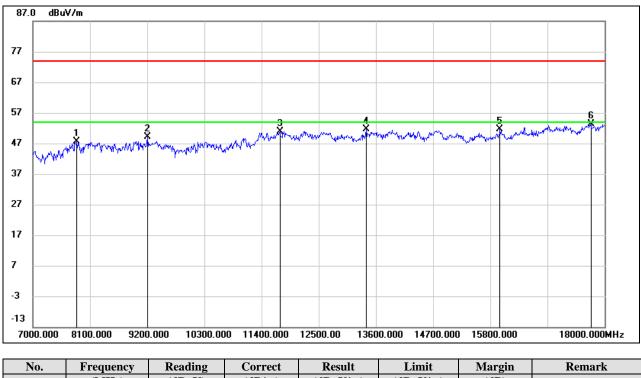
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

6. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.



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	7847.000	38.49	9.12	47.61	74.00	-26.39	peak
2	9200.000	39.28	9.91	49.19	74.00	-24.81	peak
3	11752.000	35.54	15.29	50.83	74.00	-23.17	peak
4	13413.000	34.59	17.06	51.65	74.00	-22.35	peak
5	15987.000	33.14	18.37	51.51	74.00	-22.49	peak
6	17736.000	29.65	23.68	53.33	74.00	-20.67	peak

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

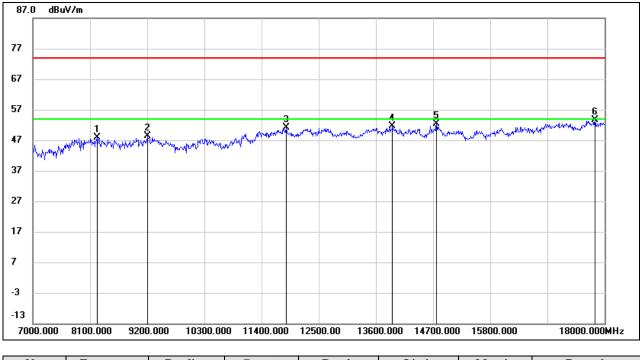
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8232.000	38.22	9.77	47.99	74.00	-26.01	peak
2	9200.000	38.40	9.91	48.31	74.00	-25.69	peak
3	11873.000	35.75	15.44	51.19	74.00	-22.81	peak
4	13919.000	33.97	17.55	51.52	74.00	-22.48	peak
5	14766.000	34.56	17.92	52.48	74.00	-21.52	peak
6	17813.000	29.53	24.03	53.56	74.00	-20.44	peak

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

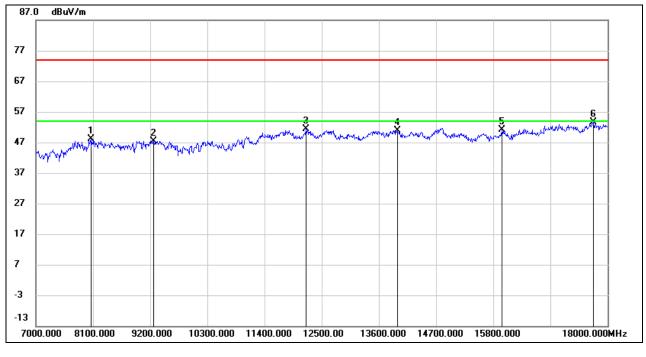
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8056.000	38.75	9.50	48.25	74.00	-25.75	peak
2	9266.000	37.25	10.23	47.48	74.00	-26.52	peak
3	12192.000	35.45	15.91	51.36	74.00	-22.64	peak
4	13952.000	33.27	17.60	50.87	74.00	-23.13	peak
5	15965.000	32.79	18.29	51.08	74.00	-22.92	peak
6	17725.000	30.02	23.61	53.63	74.00	-20.37	peak

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

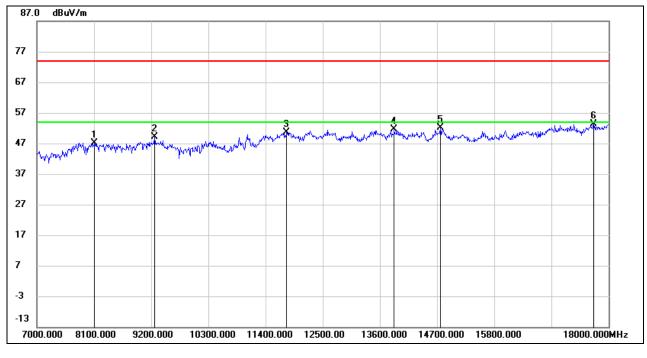
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB / m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	37.02	10.14	47.16	74.00	-26.84	peak
2	9266.000	38.93	10.23	49.16	74.00	-24.84	peak
3	11807.000	35.24	15.27	50.51	74.00	-23.49	peak
4	13875.000	34.01	17.55	51.56	74.00	-22.44	peak
5	14766.000	34.25	17.92	52.17	74.00	-21.83	peak
6	17714.000	29.78	23.55	53.33	74.00	-20.67	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.

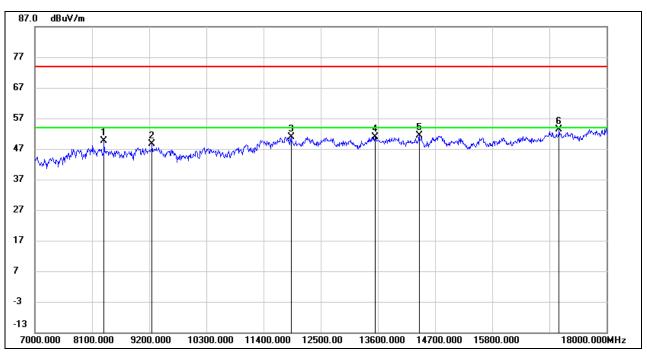
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



8.3.4. 802.11ac VHT80 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	8331.000	40.02	9.58	49.60	74.00	-24.40	peak
2	9255.000	38.52	10.17	48.69	74.00	-25.31	peak
3	11928.000	35.39	15.53	50.92	74.00	-23.08	peak
4	13545.000	33.68	17.16	50.84	74.00	-23.16	peak
5	14392.000	33.82	17.44	51.26	74.00	-22.74	peak
6	17087.000	31.62	21.81	53.43	74.00	-20.57	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. Owing to the highest peak level of unwanted emission out of the restricted bands are lower than the line(54dBuV/m) in the graph, so all the peak test point was deemed to comply with the limits -27dBm/MHz (68.2dBuV/m) list in the standard CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.