



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

CERTIFICATION TEST REPORT

For

IEEE 802.11b/g/n/a/ac 2T2R USB WiFi Module Integrated BT 2.1+EDR/4.2/5.0

MODEL NUMBER: SKI.WB638BU.2_668BU

FCC ID: 2AR82-SKIWB668BU2

IC: 24728-SKIWB668BU2

REPORT NUMBER: 4789861913-4

ISSUE DATE: March 23, 2021

Prepared for

Guangzhou Shikun Electronics Co., Ltd NO.6 Liankun Road,Huangpu District,Guangzhou,China

Prepared by

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People's Republic of China

> Tel: +86 769 22038881 Fax: +86 769 33244054 Website: www.ul.com

The results reported herein have been performed in accordance with the laboratory's terms of accreditation. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report apply to the test sample(s) mentioned above at the time of the testing period only and are not to be used to indicate applicability to other similar products.



Revision History

Rev.	Issue Date	Revisions	Revised By
V0	03/23/2021	Initial Issue	

Note: This report is based on 4789476783-4 which is issued by UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch at June 3, 2020. The EUT had already applied for the FCC ID, the customer changed two kinds of antenna, one is called KTC antenna and the other one called INNO-LINK antenna. So we only added the Radiated Unwanted Emissions and conducted output power tests in this report. For other data, please refer to the original report.

Summary of Test Results			
Clause	Test Items	FCC/IC Rules	Test Results
1	Conducted Output Power	FCC 15.407 (a) RSS-247 Clause 6.2	PASS
2	Radiated Bandedge and Spurious Emission	FCC 15.407 (b) FCC 15.209 FCC 15.205 RSS-247 Clause 6.2 RSS-GEN Clause 8.9	PASS
3	Antenna Requirement	FCC 15.203 RSS-GEN Clause 6.8	PASS
Note:	•	•	•

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 C >< ISED RSS-247 > when <Accuracy Method> decision rule is applied.



TABLE OF CONTENTS

1.	. ATTESTATION OF TEST RESULTS7		
2.	. TEST METHODOLOGY8		
3.	FA	CILITIES AND ACCREDITATION	8
4.	СА	LIBRATION AND UNCERTAINTY	9
4	4.1.	MEASURING INSTRUMENT CALIBRATION	9
4	4.2.	MEASUREMENT UNCERTAINTY	9
5.	EQ	UIPMENT UNDER TEST	10
Ę	5.1.	DESCRIPTION OF EUT	10
Ę	5.1.	MAXIMUM EIRP	11
Ę	5.2.	CHANNEL LIST	12
5	5.3.	DESCRIPTION OF AVAILABLE ANTENNAS	14
5	5.4.	THE WORSE CASE POWER SETTING PARAMETER	16
Ę	5.5.	THE WORSE CASE CONFIGURATIONS	18
Ę	5.6.	DESCRIPTION OF TEST SETUP	19
6.	ME	ASURING INSTRUMENT AND SOFTWARE USED	20
7.	AN	TENNA PORT TEST RESULTS	22
	AN 7.1.	TENNA PORT TEST RESULTS ON TIME AND DUTY CYCLE	
	7.1.		22
7	7.1. Tes 7.2.	ON TIME AND DUTY CYCLE at Graphs CONDUCTED OUTPUT POWER	22 24 26
7	7.1. Tes 7.2.	ON TIME AND DUTY CYCLEst Graphs	22 24 26
7	7.1. Tes 7.2. 7.2	ON TIME AND DUTY CYCLE at Graphs CONDUCTED OUTPUT POWER	22 24 26 32
7 7 8.	7.1. Tes 7.2. 7.2	ON TIME AND DUTY CYCLEst Graphs CONDUCTED OUTPUT POWER 1. Test Graphs DIATED TEST RESULTS	22 24 26 32 40
7 7 8.	7.1. Tes 7.2. 7.2 RA 3.1. 8.1	ON TIME AND DUTY CYCLE st Graphs CONDUCTED OUTPUT POWER 1. Test Graphs DIATED TEST RESULTS RESTRICTED BANDEDGE 1. 802.11a20 SISO MODE	22 24 26 32 40 47 47
7 7 8.	7.1. Tes 7.2. 7.2 RA 3.1. 8.1 UN	ON TIME AND DUTY CYCLE st Graphs CONDUCTED OUTPUT POWER 1. Test Graphs DIATED TEST RESULTS RESTRICTED BANDEDGE 1. 802.11a20 SISO MODE II-1 BAND	22 24 26 32 40 47 47 47
7 7 8.	7.1. Tes 7.2. 7.2 RA 3.1. 8.1 UN UN	ON TIME AND DUTY CYCLE st Graphs CONDUCTED OUTPUT POWER 1. Test Graphs DIATED TEST RESULTS RESTRICTED BANDEDGE 1. 802.11a20 SISO MODE	22 24 26 32 40 47 47 47 49
7 7 8.	7.1. Tes 7.2. 7.2 RA 3.1. 8.1 UN UN UN UN	ON TIME AND DUTY CYCLEst Graphs	22 24 26 32 40 47 47 47 47 49 51 54
7 7 8.	7.1. Tes 7.2. 7.2 RA 3.1. 8.1 UN UN UN UN UN 8.1	ON TIME AND DUTY CYCLEst Graphs CONDUCTED OUTPUT POWER	22 24 26 32 40 47 47 47 47 49 51 54 56
7 7 8.	7.1. Tes 7.2. 7.2 8.1 8.1 UN UN UN UN UN UN	ON TIME AND DUTY CYCLEst Graphs	22 24 26 32 40 47 47 47 49 51 54 56 56
7 7 8.	7.1. Tes 7.2. 7.2 RA 3.1. 8.1 UN UN UN 8.1 UN UN UN UN	ON TIME AND DUTY CYCLE	22 24 26 32 40 47 47 47 47 51 54 56 56 58 60
7 7 8.	7.1. Tes 7.2. 7.2 RA 3.1. 8.1 UN UN UN UN UN UN UN UN	ON TIME AND DUTY CYCLE	22 24 26 32 40 47 47 47 49 51 56 56 56 60 63
7 7 8.	7.1. Tes 7.2. 7.2 RA 3.1. 8.1 UN UN UN UN UN UN UN UN UN UN 8.1	ON TIME AND DUTY CYCLE st Graphs CONDUCTED OUTPUT POWER 1. Test Graphs DIATED TEST RESULTS RESTRICTED BANDEDGE 1. 802.11a20 SISO MODE II-1 BAND II-2A BAND II-2A BAND 2. 802.11ac VHT20 MIMO MODE II-1 BAND II-2A BAND	22 24 26 32 40 47 47 49 51 54 56 56 56 60 63 65
7 7 8.	7.1. Tes 7.2. 7.2 RA 8.1. UN UN UN UN UN UN UN UN UN UN UN UN	ON TIME AND DUTY CYCLE	22 24 26 32 40 47 47 49 51 54 56 58 60 65 65 67
7 7 8.	7.1. Tes 7.2. 7.2 8.1. 8.1 UN UN UN UN UN UN UN UN UN UN UN UN UN	ON TIME AND DUTY CYCLE	22 24 26 32 40 47 47 47 49 514 556 58 60 63 65 66 65 69



	8.1.4. 802.11ac VHT80 MIMO MODE	
	UNII-1 BAND	
	UNII-2A BAND	
	UNII-2C BAND	
	UNII-3 BAND	
	8.1.5. 802.11a20 SISO MODE	
	UNII-1 BAND	
	UNII-2A BAND	
	UNII-2C BAND	
	UNII-3 BAND	
	8.1.6. 802.11ac VHT20 MIMO MODE	
	UNII-1 BAND	
	UNII-2A BAND	
	UNII-2C BAND	
	UNII-3 BAND	
	UNII-1 BAND	
	UNII-2A BAND	
	UNII-2C BAND	-
	UNII-2C BAND	
	8.1.8. 802.11ac VHT80 MIMO MODE	
	UNII-1 BAND	
	UNII-2A BAND	
	UNII-2C BAND	
	UNII-3 BAND	
_		
	2. SPURIOUS EMISSIONS (1 GHz ~ 7 GHz)	117
	8.2.1. 802.11a20 SISO MODE	
	UNII-1 BAND	
	UNII-2A BAND	-
	UNII-2C BAND	
	UNII-3 BAND	
	8.2.2. 802.11a20 SISO MODE	
	UNII-1 BAND	
	UNII-2A BAND	
	UNII-2C BAND	
	STRADDLE CHANNEL 144	
	UNII-3 BAND	
_		
8.	3. SPURIOUS EMISSIONS (7 GHz ~ 18 GHz)	
	8.3.1. 802.11a SISO MODE	
	UNII-1 BAND	
	UNII-2A BAND	
	UNII-2C BAND	
	STRADDLE CHANNEL 144	
	8.3.2. 802.11ac VHT20 MIMO MODE	
	UNII-1 BAND	
	UNII-2A BAND	
	STRADDLE CHANNEL 144	
	UNII-3 BAND	
	עוורט טיורם טיוורט	<u> 10</u>



9.

8.3.3. 802.11ac VHT40 MIMO MODE UNII-1 BAND UNII-2A BAND	
UNII-2C BAND STRADDLE CHANNEL 142 UNII-3 BAND	235 237
8.3.4. 802.11ac VHT80 MIMO MODE UNII-1 BAND UNII-2A BAND	241
UNII-2C BAND STRADDLE CHANNEL 138	
UNII-3 BAND	
UNII-1 BAND UNII-2A BAND UNII-2C BAND	259
STRADDLE CHANNEL 144 UNII-3 BAND	271
8.3.2. 802.11n HT20 MIMO MODE UNII-1 BAND	279 279
UNII-2A BAND UNII-2C BAND STRADDLE CHANNEL 144	
UNII-3 BAND	
UNII-1 BAND UNII-2A BAND	
UNII-2C BAND STRADDLE CHANNEL 142 UNII-3 BAND	
8.3.4. 802.11ac VHT80 MIMO MODE UNII-1 BAND	
UNII-2A BAND UNII-2C BAND	
STRADDLE CHANNEL 138 UNII-3 BAND	
8.4. SPURIOUS EMISSIONS FOR SIMULTANEOUS TRANSMISSION 8.4.1. BT 8DPSK MODE AND 802.11n HT20 MODE	
8.5. SPURIOUS EMISSIONS (18 GHz ~ 26 GHz) 8.5.1. 802.11a20 MODE	
8.6. SPURIOUS EMISSIONS (26 GHz ~ 40 GHz) 8.6.1. 802.11a20 MODE	
8.7. SPURIOUS EMISSIONS (30 MHz ~ 1 GHz) 8.7.1. 802.11a20 MODE	
8.8. SPURIOUS EMISSIONS BELOW 30 MHz 8.8.1. 802.11a20 MODE	
ANTENNA REQUIREMENTS	



1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name:	Guangzhou Shikun Electronics Co., Ltd
Address:	NO.6 Liankun Road,Huangpu District,Guangzhou,China
Manufacturer Information	Guangzhou Shikun Electronics Co., Ltd

Company Name:	Guangzhou Shikun Electronics Co., Ltd
Address:	NO.6 Liankun Road, Huangpu District, Guangzhou, China

EUT Description

EUT Name	IEEE 802.11b/g/n/a/ac 2T2R USB WiFi Module
LOT Mame	Integrated BT 2.1+EDR/4.2/5.0
Model	SKI.WB638BU.2_668BU
Sample Status	Normal
Sample ID	3722611
Sample Received date	March 2, 2021
Date Tested	March 2 ~ 23, 2021

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

Prepared By:

Kebo. zhung.

Checked By:

Shawn Wen

Laboratory Leader

Shema les

Kebo Zhang Project Engineer

Approved By:

Aephenbus

Stephen Guo Laboratory Manager



2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013, CFR 47 FCC Part 2, CFR 47 FCC Part 15, KDB 789033 D02 v02r01, RSS-GEN Issue 5, RSS-247 Issue 2, KDB414788 D01 Radiated Test Site v01 and KDB 662911 D01 Multiple Transmitter Output v02r01.

3. FACILITIES AND ACCREDITATION

	A2LA (Certificate No.: 4102.01)
Accreditation Certificate	 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) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. 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
Radiated Emission	5.78 dB (1 GHz ~ 18 GHz)
(Included Fundamental Emission) (1 GHz to 26 GHz)	5.23 dB (18 GHz ~ 26 GHz)
Duty Cycle	±0.028%
Emission Bandwidth and 99% Occupied Bandwidth	±0.0196%
Maximum Conducted Output Power	±0.766 dB
Maximum Power Spectral Density Level	±1.22 dB
Frequency Stability	±2.76%
Conducted Band-edge Compliance	±1.328 dB
Conducted Unwanted Emissions In Non-restricted	±0.746 dB (9 kHz ~ 1 GHz)
Frequency Bands	±1.328dB (1 GHz ~ 26 GHz)
Note: This uncertainty represents an expanded uncerta 95% confidence level using a coverage factor of k=2.	ainty expressed at approximately the



5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name	IEEE 802.11b/g/n/a/ac 2T2R USB WiFi Module Integrated BT 2.1+EDR/4.2/5.0
Model	SKI.WB638BU.2_668BU
Radio Technology	IEEE802.11a 20 IEEE802.11n HT20/n HT40 IEEE802.11ac VHT20/VHT40/VHT80
Operation frequency	UNII-1/UNII-2A/UNII-2C/UNII-3
Modulation	OFDM(BPSK,QPSK,16QAM,64QAM, 256QAM only for 11 ac mode)
Rated Input	DC 3.3V
Permissive Change	C2PC



5.1. MAXIMUM EIRP

UNII-1 BAND				
IEE Std.	Frequency (MHz)	Max Power (dBm)	Max EIRP (dBm)	
802.11a 20	5150-5250	12.58	17.78	
802.11n HT20	5150-5250	11.53	19.74	
802.11n HT40	5150-5250	11.72	19.93	
802.11ac VHT20	5150-5250	10.99	19.20	
802.11ac VHT40	5150-5250	11.75	19.96	
802.11ac VHT80	5150-5250	13.02	21.23	

UNII-2A BAND

IEE Std.	Frequency (MHz)	Max Power (dBm)
802.11a 20	5250-5350	14.01
802.11n HT20	5250-5350	15.41
802.11n HT40	5250-5350	15.27
802.11ac VHT20	5250-5350	16.30
802.11ac VHT40	5250-5350	15.26
802.11ac VHT80	5250-5350	14.73

UNII-2C BAND

IEE Std.	Frequency (MHz)	Max Power (dBm)
802.11a 20	5470-5725	14.84
802.11n HT20	5470-5725	16.23
802.11n HT40	5470-5725	14.70
802.11ac VHT20	5470-5725	17.45
802.11ac VHT40	5470-5725	14.66
802.11ac VHT80	5470-5725	13.42

UNII-3 BAND

IEE Std. 802.11	Frequency (MHz)	Max Power (dBm)
802.11a 20	5725-5850	14.34
802.11n HT20	5725-5850	15.37
802.11n HT40	5725-5850	13.89
802.11ac VHT20	5725-5850	16.46
802.11ac VHT40	5725-5850	14.40
802.11ac VHT80	5725-5850	13.57



5.2. CHANNEL LIST

20 MHz Bandwidth Channel frequencies			
Band	Channel	Frequency (MHz)	
	36	5180	
UNII-1	40	5200	
	44	5220	
	48	5240	
	52	5260	
UNII-2A	56	5280	
UNII-2A	60	5300	
	64	5320	
	100	5500	
	104	5520	
	108	5540	
UNII-2C	112	5560	
	116	5580	
	132	5660	
	136	5680	
	140	5700	
UNII-3	149	5745	
	153	5765	
	157	5785	
	161	5805	
	165	5825	

40 MHz Bandwidth Channel frequencies		
Band	Channel	Frequency (MHz)
UNII-1	38	5190
UNII-1	46	5230
UNII-2	54	5270
	62	5310
UNII-2C	102	5510
	110	5550
	134	5670
UNII-3	151	5755
	159	5795



	80 MHz Bandwidth Channel frequencies		
Band	Channel	Frequency (MHz)	
UNII-1	42	5210	
UNII-2A	58	5290	
	106	5530	
UNII-2C	122	5610	
UNII-3 155		5775	

Straddle Channel frequencies		
Bandwidth Channel Frequency (MHz)		
20MHz	144	5720
40MHz 142		5710
80MHz	138	5690



5.3. DESCRIPTION OF AVAILABLE ANTENNAS

KTC ANTENNA:

Antenna model	SN.	Frequency (MHz)	Antenna Type	MAX. Antenna Gain (dBi)
1(WIFI0)	A100-0062	UNII-1&UNII-2A& UNII-3C&UNII-3	Dipole Antenna	5
2(WIFI1)	A100-0062	UNII-1&UNII-2A& UNII-3C&UNII-3	Dipole Antenna	5

Note:

Directional gain= G_{ANT} + 10 log[N_{ANT}]=8.0 dBi G_{ANT} : Average of the Antenna Gain N_{ANT} : Antenna numbers

IEE Std. 802.11	Transmit and Receive Mode	Description
802.11a	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
802.11n HT20	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
802.11n HT40	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
802.11ac VHT20	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
802.11ac VHT40	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
802.11ac VHT80	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
Note: 1. Only 802.11a does not support MIMO mode		



INNO-LINK ANTENNA:

Antenna model	SN.	Frequency (MHz)	Antenna Type	MAX. Antenna Gain (dBi)
1(WIFI0)	INNO-EWFDKT- 237	UNII-1&UNII-2A& UNII-3C&UNII-3	Dipole Antenna	5.2
2(WIFI1)	INNO-EWFDKT- 237	UNII-1&UNII-2A& UNII-3C&UNII-3	Dipole Antenna	5.2

Note:

Directional gain= GANT + 10 log[NANT]=8.21 dBi

G_{ANT} : Average of the Antenna Gain

N_{ANT} : Antenna numbers

IEE Std. 802.11	Transmit and Receive Mode	Description
802.11a	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
802.11n HT20	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
802.11n HT40	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
802.11ac VHT20	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
802.11ac VHT40	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
802.11ac VHT80	⊠2TX, 2RX	ANT 1, 2 can be used as transmitting/receiving antenna.
Note: 1. Only 802.11a does not support MIMO mode		

Note:

1. The value of the antenna gain was declared by customer.

2. BT&WLAN 2.4G, BT& WLAN 5G can transmit simultaneously. (declared by client)

3. The EUT have two kinds of antennas, one is called KTC antenna and the other one called INNO-LINK antenna.



5.4. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter		
Test Software	QA tool	

UNII-1					
Mode	Rate	Channel	Soft se	et value	
IVIOUE	Trate	Channel	ANT1	ANT2	
		36	1C	1C	
11a	6M	40	1C	1C	
		48	1B	1B	
		36	18	18	
11n HT20	MCS0	40	17	17	
		48	18	18	
11n HT40	MCS0	38	17	17	
	IVICSU	46	17	17	
		36	18	18	
11ac VHT20	MCS0	40	17	17	
		48	18	18	
	MCS0	38	17	17	
11ac VHT40	IVICSU	46	17	17	
11ac VHT80	MCS0	42	1A	1A	

UNII-2A

UNII-2A						
Mode	Poto	Channel	Soft se	et value		
Iviode	Rate	Channel	ANT1	ANT2		
		52	1A	1A		
11a	6M	60	1A	1A		
		64	1A	1A		
		52	19	19		
11n HT20	MCS0	60	1A	1A		
		64	19	19		
11n HT40	MCS0	54	18	18		
1111 1140		62	18	18		
		52	19	19		
11ac VHT20	MCS0	60	1A	1A		
		64	1A	1A		
	MCS0	54	18	18		
11ac VHT40	10030	62	16	16		
11ac VHT80	MCS0	58	1B	1B		

Mode	Rate	Channel	Soft set value		
wode	Nale	Channel	ANT1	ANT2	
		100	19	19	
11a	6M	120	19	19	
		140	1A	1A	
		100	19	19	
11n HT20	MCS0	120	19	19	
		140	19	19	
	MCS0	102	16	16	
11n HT40		118	16	16	
		134	16	16	
		100	1B	1B	
11ac VHT20	MCS0	120	1B	1B	
		140	1C	1C	
		102	16	16	
11ac VHT40	MCS0	118	16	16	
		134	16	16	
11ac VHT80	MCS0	106	18	18	
	10000	122	18	18	

UNII-2C

UNII-3

UNII-3						
Mada	Dete	Channel	Soft set value			
Mode	Rate	Channel	ANT1	ANT2		
		149	19	19		
11a	6M	157	19	19		
		165	19	19		
		149	1A	1A		
11n HT20	MCS0	157	1A	1A		
		165	1A	1A		
11n HT40	MCS0	151	16	16		
1111 1140		159	16	16		
		149	1B	1B		
11ac VHT20	MCS0	157	1B	1B		
		165	1B	1B		
11ac VHT40	MCS0	151	16	16		
	NIC30	159	16	16		
11ac VHT80	MCS0	155	18	18		



5.5. THE WORSE CASE CONFIGURATIONS

For SISO modes, there are two transmission antennas. The antenna used in any given time can be either ANTENNA 1 or ANTENNA 2. The output power measurement for SISO modes on both antennas are reported.

For 2TX MIMO modes, ANTENNA 1 and ANTENNA 2, used at the same time.

SISO mode and MIMO mode have the same power setting, so only the worst-case MIMO mode will be record in the report.

Worst-case data rates as provided by the client were:

802.11a 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 data are recorded in the report.

802.11ac VHT20/VHT40 SISO mode and MIMO mode have the same power setting, so only the worst case MIMO mode will be record in the report.

802.11a support SISO mode, two antenna have the same power setting, so only the worst data for antenna 1 are recorded in the report.



5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	Remarks
1	Laptop	ThinkPad	X230i	/
2	Test fixture	/	/	/
3	AC/DC adapter	HUAWEI	HW-120150E2W	INPUT:100- 240V~50/60Hz, 0.5A OUTPUT:12.0V, 1.5A

I/O CABLES

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

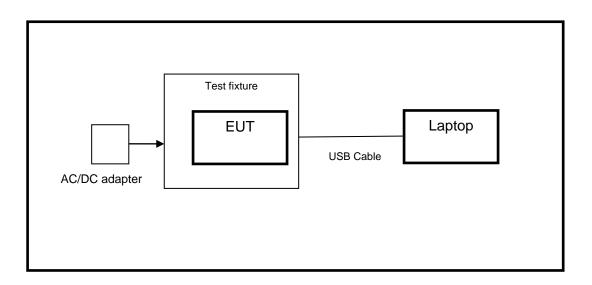
ACCESSORIES

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

	Radiated Emissions						
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date		
MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Nov. 12, 2020	Nov. 11, 2021		
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	Aug. 11, 2018	Aug. 10, 2021		
Preamplifier	HP	8447D	2944A09099	Nov. 12, 2020	Nov. 11, 2021		
EMI Measurement Receiver	R&S	ESR26	101377	Nov. 12, 2020	Nov. 11, 2021		
Horn Antenna	TDK	HRN-0118	130939	Sept. 17, 2018	Sept. 17, 2021		
Preamplifier	TDK	PA-02-0118	TRS-305- 00067	Nov. 20, 2020	Nov. 19, 2021		
Horn Antenna	Schwarzbeck	BBHA9170	#691	Aug. 11, 2018	Aug. 11, 2021		
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		
Band Reject Filter	Wainwright	WRCJV20- 5440-5470- 5725-5755- 60SS	1	Nov. 12, 2020	Nov. 11, 2021		
		So	ftware				
[Description		Manufacturer	Name	Version		
Test Software	for Radiated E	missions	Farad	EZ-EMC	Ver. UL-3A1		



Tonsend RF Test System								
Equipment	Manufacturer	Мс	del No.	Serial No.	Last	Cal.	Due. Date	е
Wideband Radio Communication Tester	R&S	CI	MW500	155523	Nov.20	0,2020	Nov.19,202	21
PXA Signal Analyzer	Keysight	Ν	9030A	MY55410512	Nov.20	0,2020	Nov.19,202	21
MXG Vector Signal Generator	Keysight	N	5182B	MY56200284	Nov.20	0,2020	Nov.19,202	21
MXG Vector Signal Generator	Keysight	Ν	5172B	MY56200301	Nov.20	0,2020	Nov.19,20	21
DC power supply	Keysight	Keysight E3642A		MY55159130	Nov.24	4,2020	Nov.23,202	21
Temperature & Humidity Chamber	SANMOOD	SANMOOD SG-80-CC-2		2088	Nov.20	0,2020	Nov.19,202	21
Software								
Description	Manufactu	Manufacturer		Name		Y	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.		
Dual Channel Power Meter	Keysight	N1912A	MY55416024	Nov. 20, 2020	Nov. 19, 2021		
Power Sensor	Keysight	USB Wideband Power Sensor	MY5100022	Nov. 20, 2020	Nov. 19, 2021		



7. ANTENNA PORT TEST RESULTS

7.1. ON TIME AND DUTY CYCLE

<u>LIMITS</u>

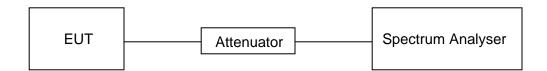
None; for reporting purposes only.

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	23.1 °C	Relative Humidity	52 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

RESULTS



Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (db)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11A	1.38	1.42	0.97	97%	0.13	0.72	1
11N20MIMO	1.29	1.34	0.96	96%	0.18	0.78	1
11N40MIMO	0.61	0.68	0.90	90 %	0.46	1.64	2
11AC80MIMO	0.90	1.56	0.58	58 %	2.37	1.11	2

Note:

Duty Cycle Correction Factor=10log(1/x).

Where: x is Duty Cycle (Linear)

Where: T is On Time (transmit duration)

If that calculated VBW is not available on the analyzer then the next higher value should be used.



Test Graphs









7.2. CONDUCTED OUTPUT POWER

LIMITS

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

ISED RSS-247 ISSUE 2								
Test Item	Limit	Frequency Range (MHz)						
	The maximum e.i.r.p. shall not exceed 200 mW (23 dBm) or 10 + 10 log ₁₀ B, dBm, whichever power is less. B is the 99 % emission bandwidth in megahertz.	5150 ~ 5250						
Conducted Output Power or e.i.r.p.	 a. The maximum conducted output power shall not exceed 250 mW (24 dBm) or 11 + 10 log₁₀B dBm, whichever is less. b. The maximum e.i.r.p. shall not exceed 1.0 W (30 dBm) or 17 + 10 log₁₀B dBm, whichever is less. B is the 99 % emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W. 	5250 ~ 5350 5470 ~ 5600 5650 ~ 5725						
	Shall not exceed 1 Watt (30 dBm). The e.i.r.p. shall not exceed 4 W	5725 ~ 5850						

Note:

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



TEST PROCEDURE

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

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

(i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.

(ii) Set RBW = 1 MHz.

(iii) Set VBW ≥ 3 MHz.

(iv) Number of points in sweep $\ge 2 \times \text{span} / \text{RBW}$. (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 \geq 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 %).

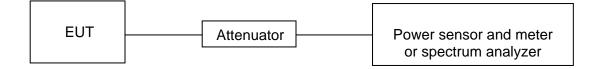
Method PM-G (Measurement using a gated RF average power meter):

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	23.2 °C	Relative Humidity	52 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

RESULTS



Mode	Freq (MHz)	Av.Power (dBm) ANT1 ANT2 Total			FCC Limit (dBm)	Limit (dBm)				Verdict
	5180	11.12	11.82	/	24.00	16.32	17.02	/	22.24	PASS
	5200	11.76	12.44	/	24.00	16.96	17.64	/	22.24	PASS
	5240	11.96	12.58	/	24.00	17.16	17.78	/	22.24	PASS
	5260	13.64	13.98	/	24.00	18.84	19.18	/	23.23	PASS
	5280	13.84	14.01	/	24.00	19.04	19.21	/	23.23	PASS
	5320	14.40	13.91	,	24.00	19.60	19.11	/	23.23	PASS
	5500	13.97	14.23	/	24.00	19.17	19.43	/	23.24	PASS
802.11a20	5580	13.98	14.84	/	24.00	19.18	20.04	,	23.24	PASS
	5700	12.97	14.27	/	24.00	18.17	19.47	/	23.24	PASS
	5720-2C	11.68	12.26	/	24.00	16.88	17.46	/	22.31	PASS
	5720-3	4.06	4.61	/	30.00	9.26	9.81	/	30.00	PASS
	5745	12.57	14.12	/	30.00	17.77	19.32	/	30.00	PASS
	5785	12.18	14.34	/	30.00	17.38	19.54	/	30.00	PASS
	5825	11.77	13.41	/	30.00	16.97	18.61	/	30.00	PASS
	5180	7.55	8.87	11.27	21.79	12.75	14.07	19.48	22.44	PASS
	5200	7.81	8.75	11.32	21.79	13.01	13.95	19.53	22.44	PASS
	5240	8.05	8.95	11.53	21.79	13.25	14.15	19.74	22.44	PASS
	5260	12.07	12.19	15.14	21.79	17.27	17.39	23.35	29.44	PASS
	5280	12.63	12.56	15.61	21.79	17.83	17.76	23.82	29.44	PASS
	5320	12.88	11.85	15.41	21.79	18.08	17.05	23.62	29.44	PASS
802.11n 20M	5500	12.71	13.09	15.91	21.79	17.91	18.29	24.12	29.44	PASS
002.1111 20101	5580	12.84	13.56	16.23	21.79	18.04	18.76	24.44	29.44	PASS
	5700	11.98	13.04	15.55	21.79	17.18	18.24	23.76	29.44	PASS
	5720-2C	11.06	11.65	14.38	22.79	16.26	16.85	22.59	29.44	PASS
	5720-3	3.39	4.84	7.19	26.79	8.59	10.04	15.40	28.81	PASS
	5745	11.53	13.06	15.37	27.79	/	/	/	28.81	PASS
	5785	11.09	13.23	15.30	27.79	/	/	/	28.81	PASS
	5825	10.85	12.36	14.68	27.79	/	/	/	28.81	PASS

U

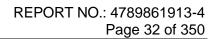
T				1	r	1	r	r		
	5190	8.27	9.10	11.72	21.79	13.47	14.30	19.93	23.00	PASS
	5230	8.33	9.04	11.71	21.79	13.53	14.24	19.92	23.00	PASS
	5270	11.94	12.36	15.17	21.79	17.14	17.56	23.38	30.00	PASS
	5310	12.50	12.01	15.27	21.79	17.70	17.21	23.48	30.00	PASS
	5510	10.45	11.07	13.78	21.79	15.65	16.27	21.99	30.00	PASS
802.11n 40M	5550	11.40	11.96	14.70	21.79	16.60	17.16	22.91	30.00	PASS
	5670	11.06	10.88	13.98	21.79	16.26	16.08	22.19	30.00	PASS
-	5710-2C	10.51	11.01	13.78	22.79	15.71	16.21	21.99	30.00	PASS
-	5710-3	-1.56	-0.80	1.85	26.79	3.64	4.40	10.06	28.81	PASS
-	5755	9.88	11.69	13.89	27.79	/	/	/	28.81	PASS
	5795	9.74	11.78	13.89	27.79	/	/	/	28.81	PASS
	5180	7.45	8.39	10.96	21.79	12.65	13.59	19.17	22.43	PASS
-	5200	7.43	8.46	10.99	21.79	12.63	13.66	19.20	22.43	PASS
-	5240	7.59	8.02	10.82	21.79	12.79	13.22	19.03	22.43	PASS
-	5260	12.65	13.37	16.04	21.79	17.85	18.57	24.25	29.43	PASS
-	5280	13.59	12.96	16.30	21.79	18.79	18.16	24.51	29.43	PASS
-	5320	13.76	12.74	16.29	21.79	18.96	17.94	24.50	29.43	PASS
	5500	14.47	14.09	17.29	21.79	19.67	19.29	25.50	29.43	PASS
802.11ac 20M	5580	14.36	14.52	17.45	21.79	19.56	19.72	25.66	29.43	PASS
	5700	13.51	13.99	16.77	21.79	18.71	19.19	24.98	29.43	PASS
-	5720-2C	11.71	12.31	15.03	22.79	16.91	17.51	23.24	29.43	PASS
	5720-3	4.86	5.57	8.24	26.79	10.06	10.77	16.45	28.81	PASS
-	5745	12.70	14.09	16.46	27.79	/	/	/	28.81	PASS
	5785	12.27	14.15	16.32	27.79	/	/	/	28.81	PASS
	5825	12.04	12.95	15.53	27.79	/	/	/	28.81	PASS
	5190	8.15	9.12	11.67	21.79	13.35	14.32	19.88	23.00	PASS
	5230	8.29	9.14	11.75	21.79	13.49	14.34	19.96	23.00	PASS
	5270	12.37	12.13	15.26	21.79	17.57	17.33	23.47	24.00	PASS
-	5310	12.17	11.15	14.70	21.79	17.37	16.35	22.91	30.00	PASS
	5510	10.09	10.79	13.46	21.79	15.29	15.99	21.67	30.00	PASS
802.11ac 40M	5550	11.89	11.40	14.66	21.79	17.09	16.60	22.87	30.00	PASS
	5670	11.65	11.34	14.51	21.79	16.85	16.54	22.72	30.00	PASS
	5710-2C	10.56	11.02	13.81	22.79	15.76	16.22	22.02	30.00	PASS
	5710-3	-1.47	-0.70	1.94	26.79	3.73	4.5	10.15	28.81	PASS
	5755	10.52	12.12	14.40	27.79	/	/	/	28.81	PASS
		1	1		1		-			

	5210	9.77	10.24	13.02	21.79	14.97	15.44	21.23	23.00	PASS
	5290	12.12	11.28	14.73	21.79	17.32	16.48	22.94	30.00	PASS
	5530	9.46	10.28	12.90	21.79	14.66	15.48	21.11	30.00	PASS
802.11ac 80M	5610	10.51	10.30	13.42	21.79	15.71	15.50	21.63	30.00	PASS
	5690-2C	10.06	9.88	12.98	22.79	15.26	15.08	21.19	30.00	PASS
	5690-3	-4.31	-3.92	-1.10	26.79	0.89	1.28	7.11	28.81	PASS
	5775	9.85	11.17	13.57	27.79	/	/	/	28.81	PASS

Note: 1. Conducted Power=Meas. Level+ Correction Factor

2.EIRP=conducted Power + Antenna Gain

3. The test results have already included the duty cycle correction factor. About correction Factor please refer to section 7.1 $\,$

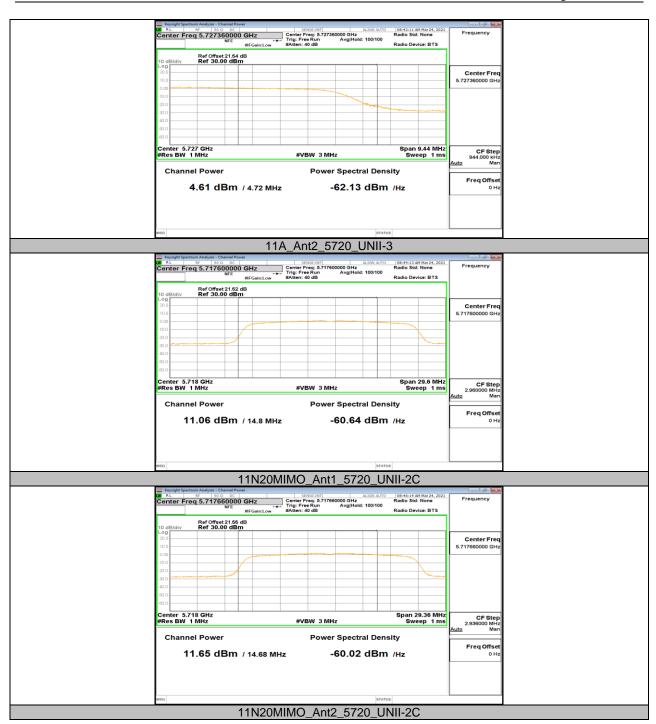




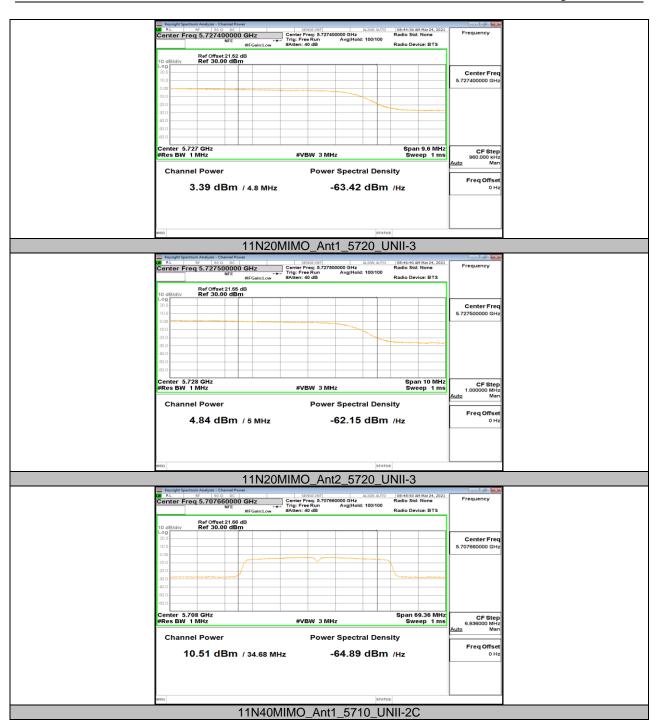
7.2.1. Test Graphs



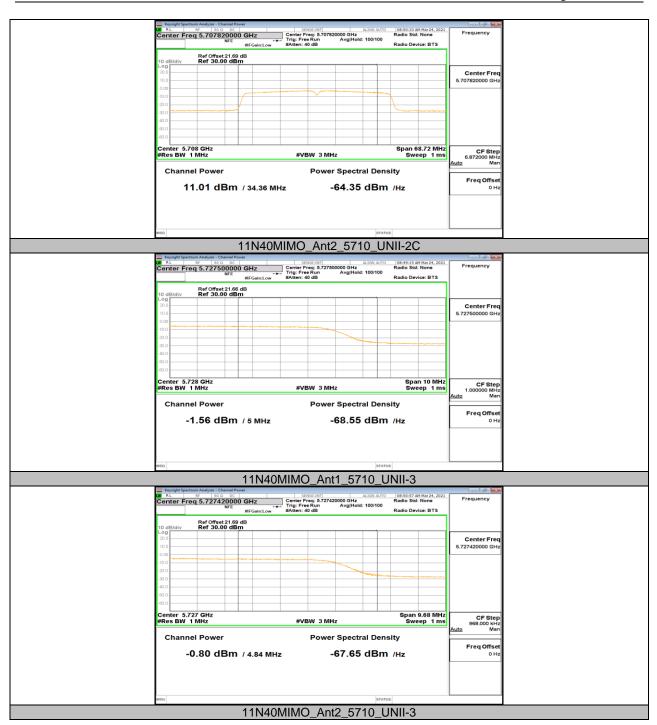




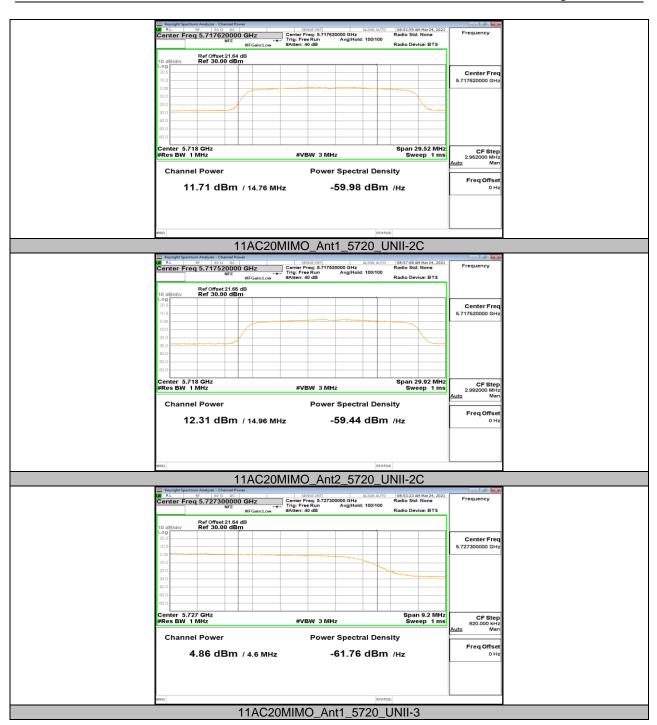




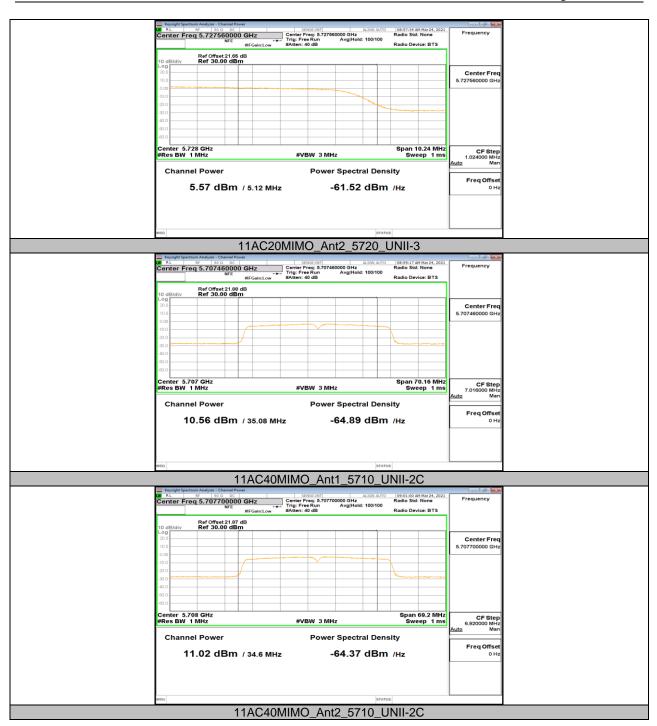




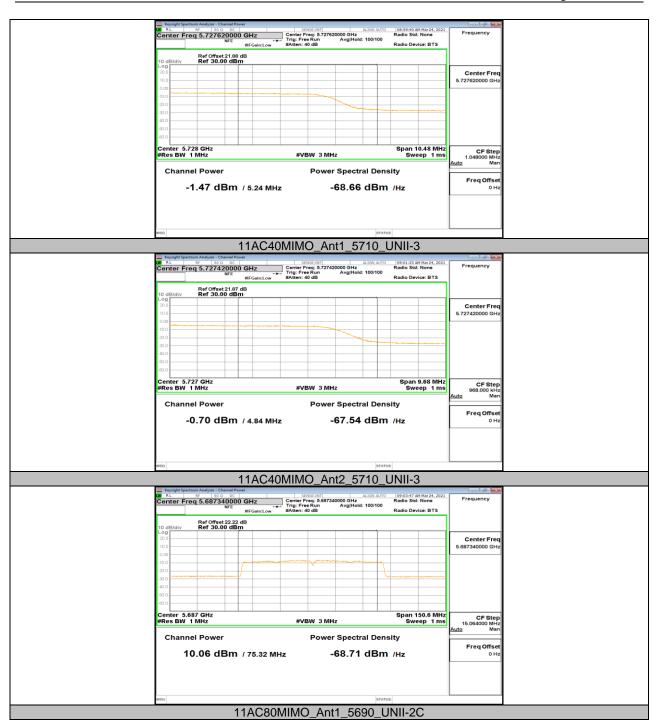




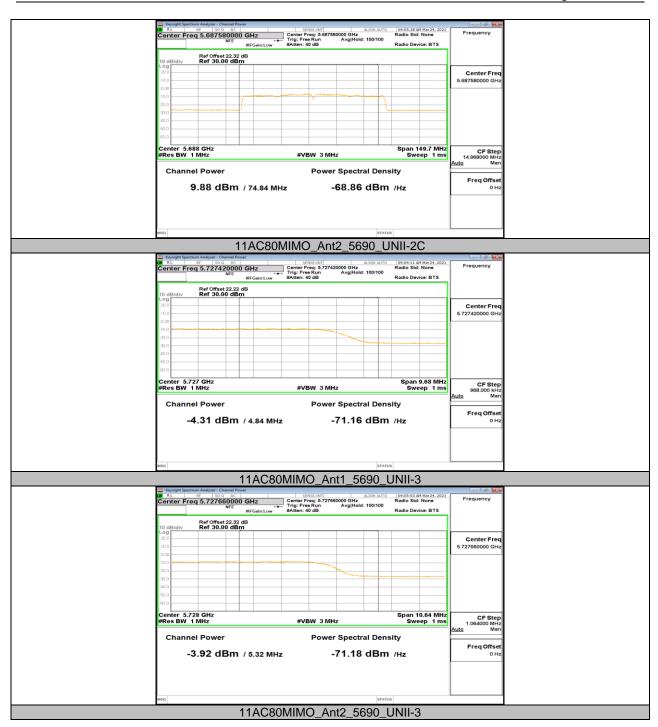














8. RADIATED TEST RESULTS

LIMITS

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

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

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

Emissions radiated outside of the specified frequency bands above 30 MHz						
Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Stren (dBuV/m)	•			
			Peak			
30 - 88	100	40				
88 - 216	150	43.5				
216 - 960	200	46				
Above 960	500	54				
Above 1000	500	Peak	Average			
Above 1000	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					

ISED General field strength limits at frequencies below 30 MHz



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

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

ISED Restricted bands refer to ISED RSS-GEN Clause 8.10

MHz	MHz	GHz
0.090 - 0.110	149.9 - 150.05	9.0 - 9.2
0.495 - 0.505	158.52475 - 158.52525	9.3 - 9.5
2.1735 - 2.1905	156.7 - 156.9	10.6 - 12.7
3.020 - 3.026	182.0125 - 187.17	13.25 - 13.4
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5
4.17725 - 4.17775	240 - 285	15.35 - 18.2
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4
5.677 - 5.683	399.9 - 410	22.01 - 23.12
8.215 - 6.218	608 - 614	23.6 - 24.0
8.26775 - 6.26825	960 - 1427	31.2 - 31.8
8.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5
8.291 - 8.294	1845.5 - 1846.5	Above 38.6
8.362 - 8.366	1660 - 1710	
8.37625 - 8.38675	1718.8 - 1722.2	
8.41425 - 8.41475	2200 - 2300	
12.29 - 12.293	2310 - 2390	
12.51975 - 12.52025	2483.5 - 2500	
12.57675 - 12.57725	2655 - 2900	
13.36 - 13.41	3260 - 3267	
16.42 - 16.423	3332 - 3339	
16.69475 - 16.69525	3345.8 - 3358	
16.80425 - 16.80475	3500 - 4400	
25.5 - 25.87	4500 - 5150	
37.5 - 38.25	5350 - 5460	
73 - 74.6	7250 - 7750	
74.8 - 75.2	8025 - 8500	
108 – 138		

where it certain requericy bands issee in table 7 and in bands above 35.6 GHz are designated to incertice-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

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	EIRP Limit	Field Strength Limit				
(MHz)		(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				
5725~5650 MITZ	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.

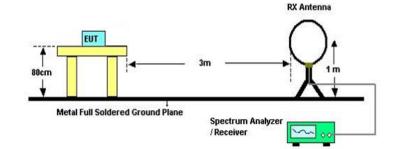
*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

*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 6.4.

2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.

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

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1 m height antenna tower.

5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode remeasured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak and average detector and reported.

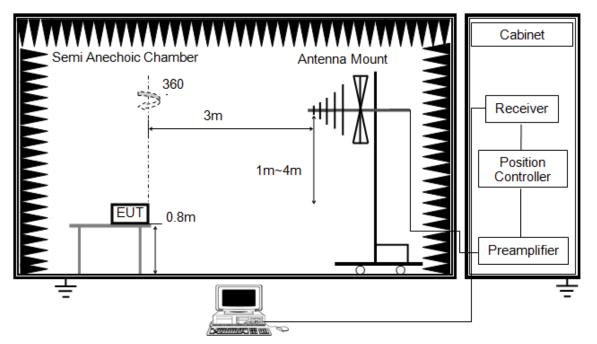
7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.

8. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377Ω . For example, the measurement frequency X KHz resulted in a level of Y dBuV/m, which is equivalent to Y-51.5 = Z dBuA/m, which has the same margin, W dB, to the corresponding RSS-GEN Table 6 limit as it has to be 15.209(a) limit.

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



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 6.5.

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.

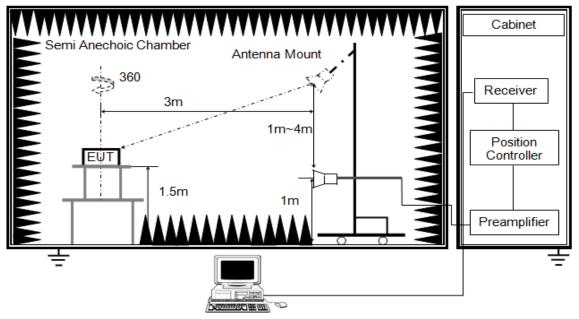
3. The EUT was placed on a turntable with 80 cm above ground.

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 BW	PEAK: 3 MHz AVG: see note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.6.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 1.5 m above ground.

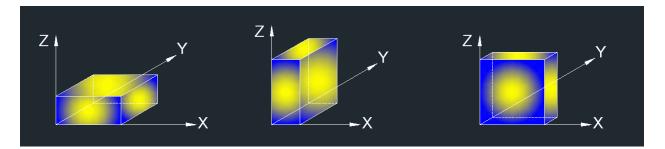
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement above 1 GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.

6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 7.1.ON TIME AND DUTY CYCLE.



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: All the EUT's emissions had been evaluated for simultaneous transmission with the other WIFI 2.4GHz, WIFI 5GHz and BT transmitter and there were not any additional or worse emissions found. The worst case data has been recorded in the WIFI test report. (4789861913-3/-4).

TEST ENVIRONMENT

Temperature	23.2 °C	Relative Humidity	52 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

RESULTS



8.1. RESTRICTED BANDEDGE

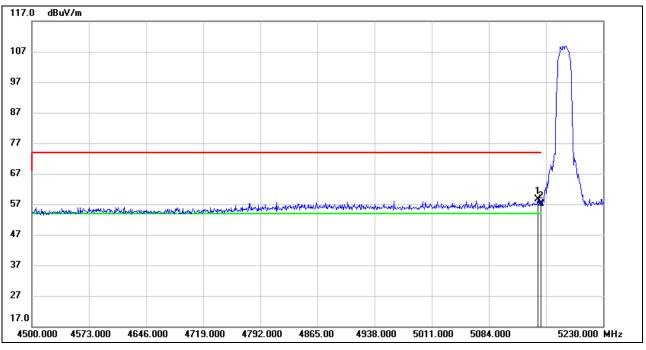
KTC ANTENNA:

8.1.1. 802.11a20 SISO MODE

ANTENNA 1 TEST RESULTS (WORST CASE)

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5146.780	17.45	41.16	58.61	74.00	-15.39	peak
2	5150 000	15 89	41 19	57.08	74 00	-16 92	neak

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

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

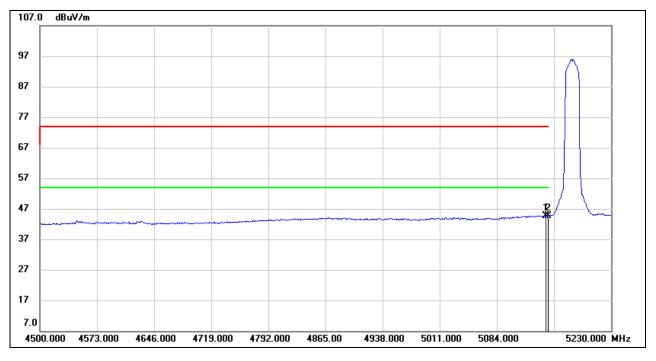
3. Peak: Peak detector.

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

<u>PEAK</u>



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5146.780	3.53	41.16	44.69	54.00	-9.31	AVG
2	5150.000	3.52	41.19	44.71	54.00	-9.29	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.

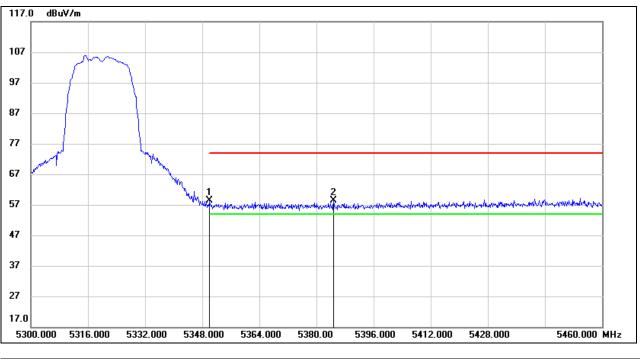
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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



UNII-2A BAND

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



<u>PEAK</u>

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	17.06	41.20	58.26	74.00	-15.74	peak
2	5384.800	16.87	41.39	58.26	74.00	-15.74	peak

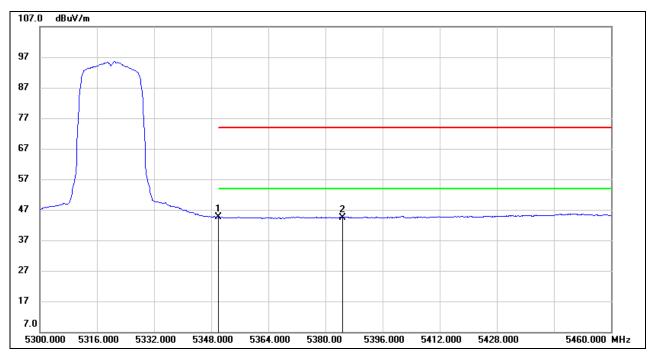
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	3.36	41.20	44.56	54.00	-9.44	AVG
2	5384.800	2.99	41.39	44.38	54.00	-9.62	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.

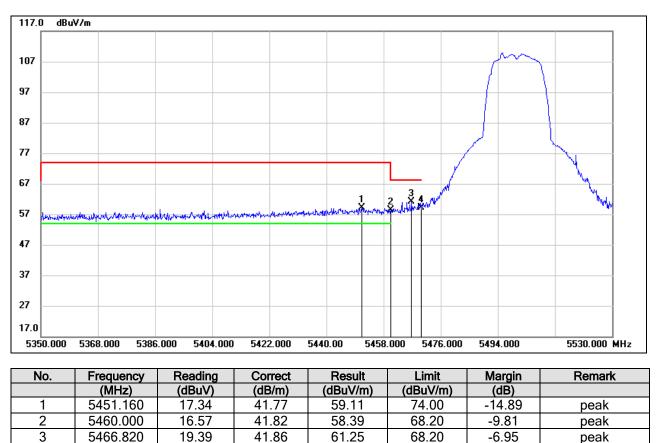
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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



UNII-2C BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



<u>PEAK</u>

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

17.22

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

59.09

68.20

-9.11

peak

3. Peak: Peak detector.

5470.000

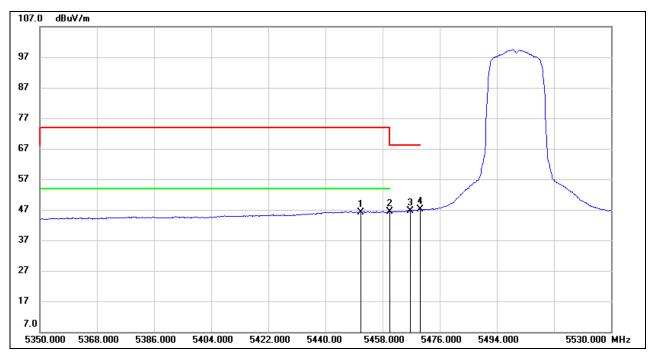
4

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

41.87



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5451.160	4.34	41.77	46.11	54.00	-7.89	AVG
2	5460.000	4.58	41.82	46.40	54.00	-7.60	AVG
3	5466.820	4.82	41.86	46.68	68.20	-21.52	AVG
4	5470.000	5.16	41.87	47.03	68.20	-21.17	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.

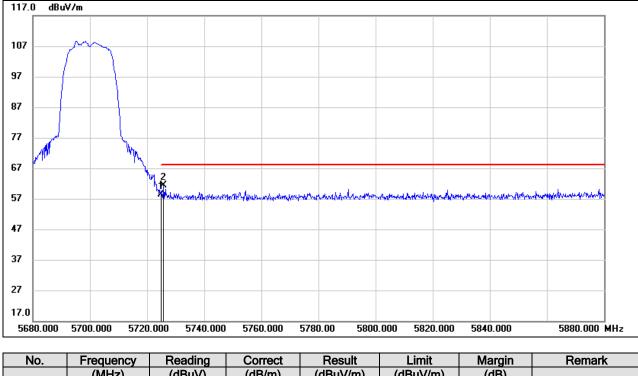
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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



RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

<u>PEAK</u>



I`	۱ υ.	Frequency	Reaulity	Coneci	Nesuit	LIIIIL	Iviaryin	Nellialk
		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
	1	5725.000	16.67	41.67	58.34	68.20	-9.86	peak
	2	5725.800	19.73	41.67	61.40	68.20	-6.80	peak

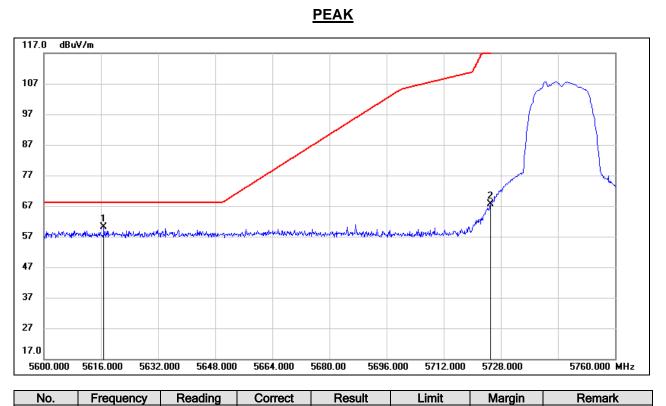
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



UNII-3 BAND



RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5616.800	18.34	41.70	60.04	68.20	-8.16	peak
2	5725.000	25.86	41.67	67.53	122.20	-54.67	peak
	-	·		•	•	·	· · · · ·

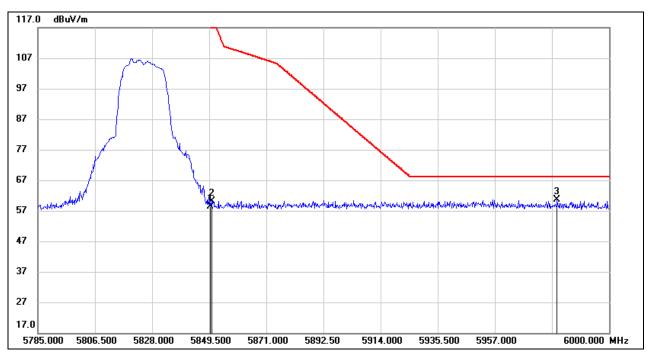
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



<u>PEAK</u>

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.000	15.87	42.52	58.39	122.20	-63.81	peak
2	5850.360	17.63	42.53	60.16	121.38	-61.22	peak
3	5980.435	18.01	42.66	60.67	68.20	-7.53	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.

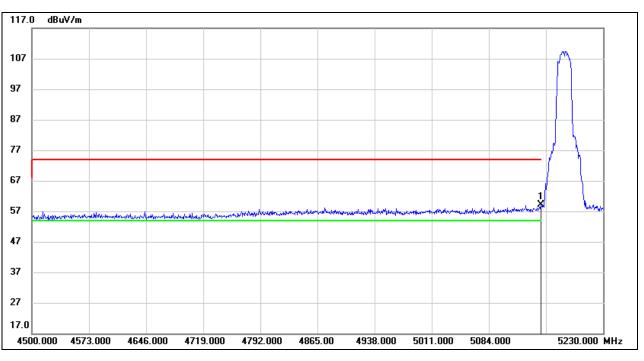
Note: Both the two antennas had been tested, but only the worst data was recorded in the report.

Note: Horizontal and Vertical have been tested, only the worst data was recorded in the report.



8.1.2. 802.11ac VHT20 MIMO MODE

UNII-1 BAND



RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	17.88	41.19	59.07	74.00	-14.93	peak

<u>PEAK</u>

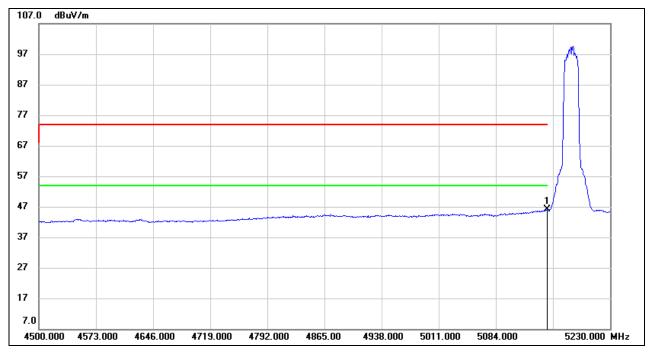
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	5.00	41.19	46.19	54.00	-7.81	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.

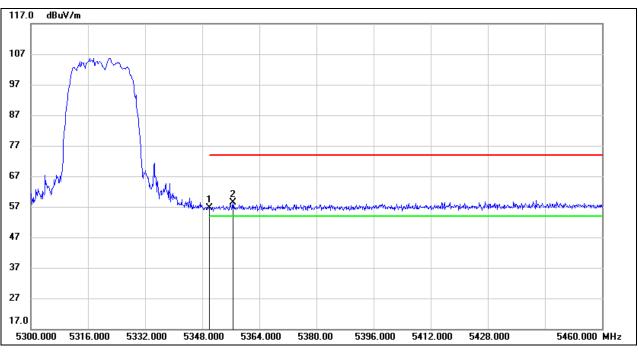
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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



UNII-2A BAND





<u>PEAK</u>

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	15.40	41.20	56.60	74.00	-17.40	peak
2	5356.640	17.05	41.24	58.29	74.00	-15.71	peak

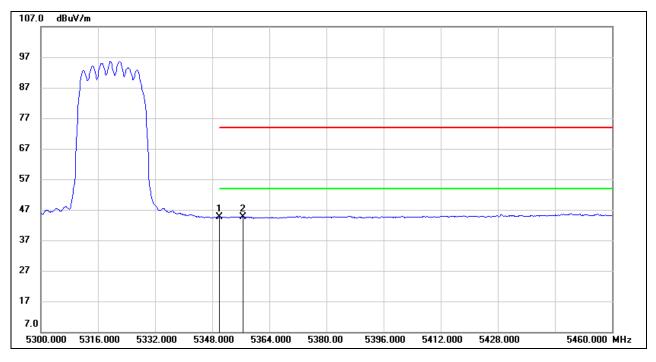
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	3.37	41.20	44.57	54.00	-9.43	AVG
2	5356.640	3.35	41.24	44.59	54.00	-9.41	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.

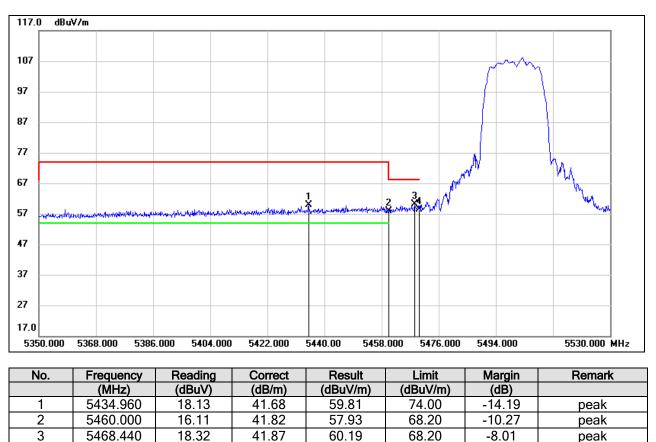


peak

peak

UNII-2C BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



PEAK

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

16.48

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

58.35

68.20

-9.85

3. Peak: Peak detector.

5470.000

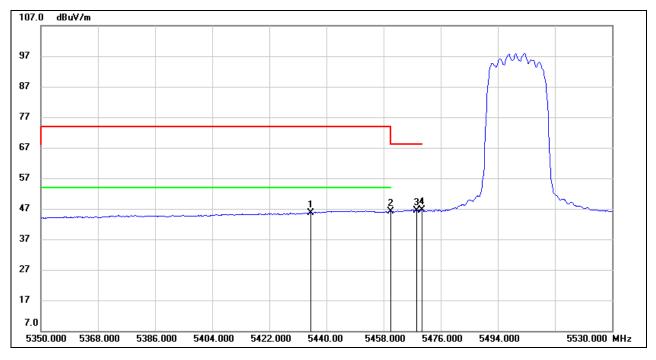
4

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

41.87



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5434.960	3.92	41.68	45.60	54.00	-8.40	AVG
2	5460.000	4.26	41.82	46.08	54.00	-7.92	AVG
3	5468.440	4.53	41.87	46.40	68.20	-21.80	AVG
4	5470.000	4.78	41.87	46.65	68.20	-21.55	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.

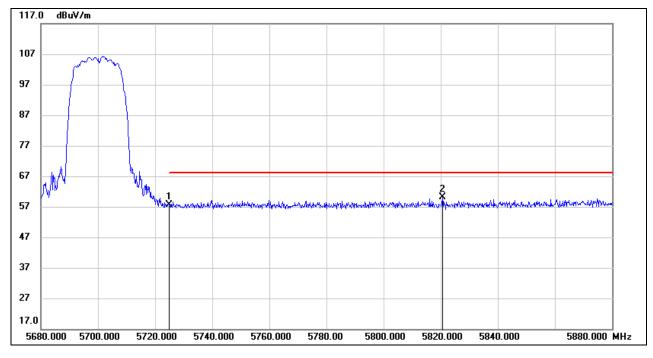
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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



RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

<u>PEAK</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	16.06	41.67	57.73	68.20	-10.47	peak
2	5820.600	17.84	42.22	60.06	68.20	-8.14	peak

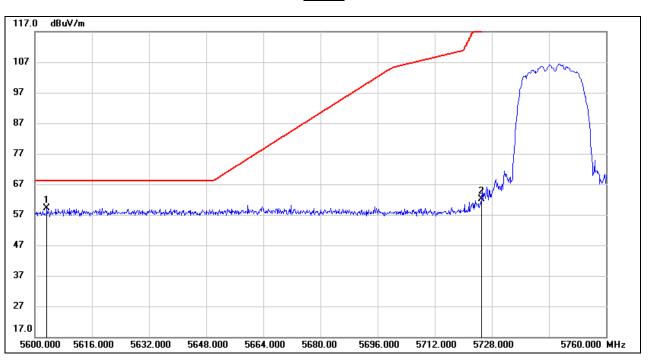
Note: 1. Measurement = Reading Level + Correct Factor.

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, HORIZONTAL)

INO.	Frequency	Reading	Conect	Result	LITTIL	margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5603.360	17.39	41.72	59.11	68.20	-9.09	peak
2	5725.000	20.42	41.67	62.09	122.20	-60.11	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.

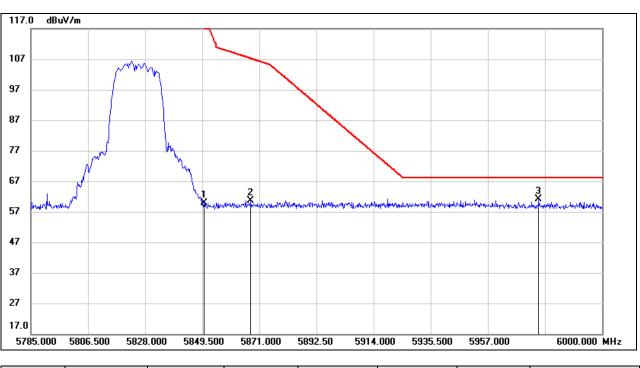
3. Peak: Peak detector.

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

PEAK



RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



PEAK

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.000	17.46	42.52	59.98	122.20	-62.22	peak
2	5867.775	18.00	42.70	60.70	107.22	-46.52	peak
3	5976.135	18.46	42.67	61.13	68.20	-7.07	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.

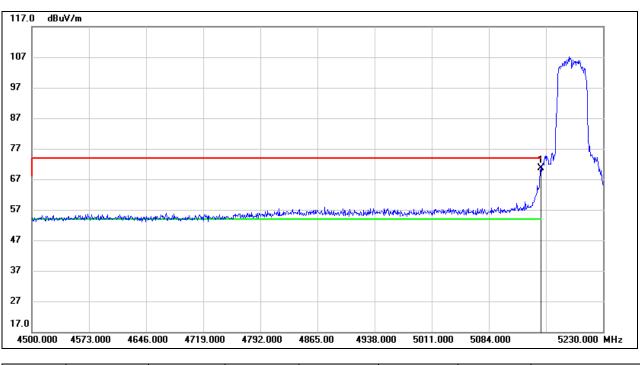
Note: Both the two antennas had been tested, but only the worst data was recorded in the report.

Note: Horizontal and Vertical have been tested, only the worst data was recorded in the report.

8.1.3. 802.11ac VHT40 MIMO MODE

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



PEAK

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	29.39	41.19	70.58	74.00	-3.42	peak

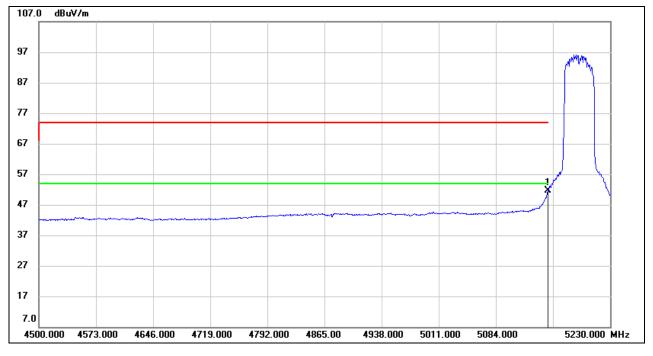
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	10.34	41.19	51.53	54.00	-2.47	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.

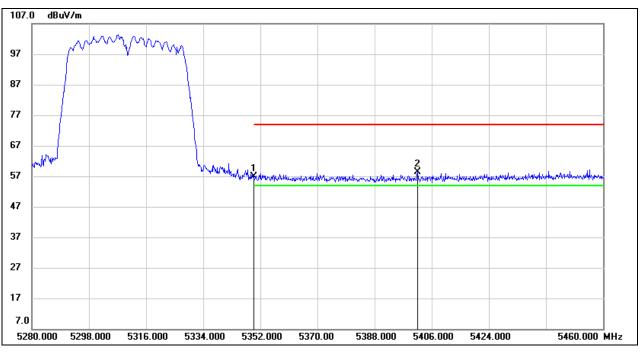
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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



UNII-2A BAND

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



<u>PEAK</u>

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	15.70	41.20	56.90	74.00	-17.10	peak
2	5401.500	16.83	41.49	58.32	74.00	-15.68	peak

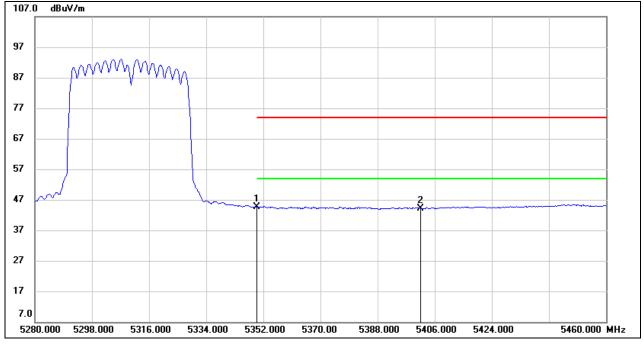
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	3.43	41.20	44.63	54.00	-9.37	AVG
2	5401.500	2.65	41.49	44.14	54.00	-9.86	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.

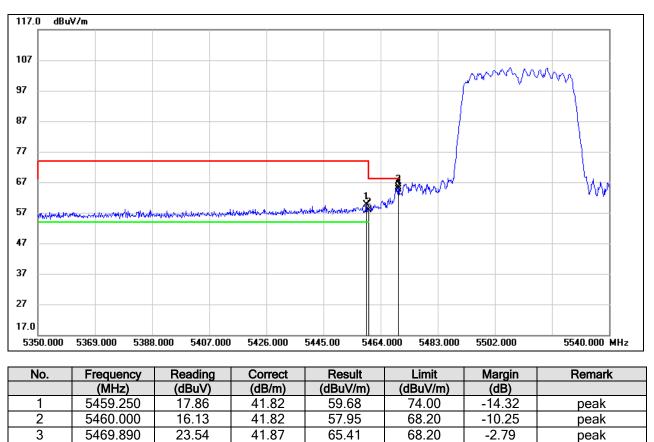
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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



UNII-2C BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



<u>PEAK</u>

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

22.80

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

64.67

68.20

-3.53

peak

3. Peak: Peak detector.

5470.000

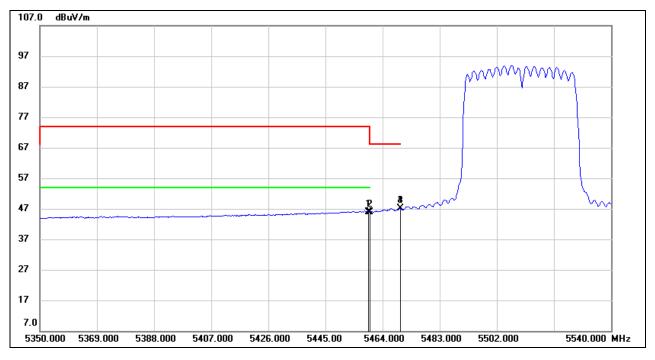
4

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

41.87



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5459.250	4.15	41.82	45.97	54.00	-8.03	AVG
2	5460.000	4.17	41.82	45.99	54.00	-8.01	AVG
3	5469.890	5.17	41.87	47.04	68.20	-21.16	AVG
4	5470.000	5.16	41.87	47.03	68.20	-21.17	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.

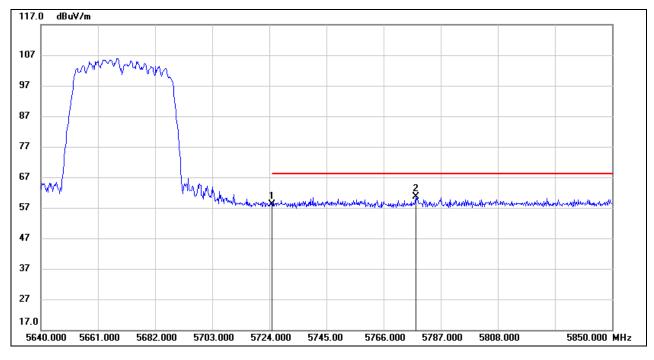
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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



RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	16.41	41.67	58.08	68.20	-10.12	peak
2	5777.760	18.69	41.91	60.60	68.20	-7.60	peak

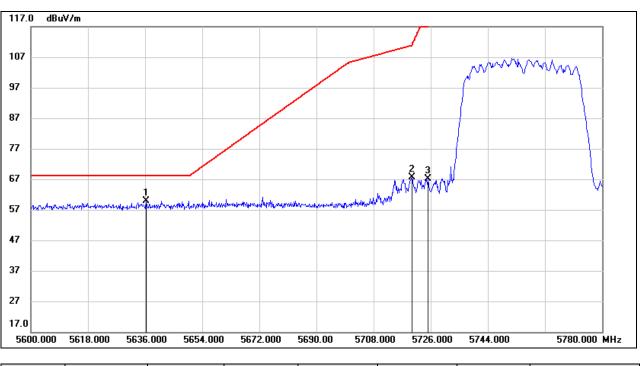
Note: 1. Measurement = Reading Level + Correct Factor.

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, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5636.360	18.15	41.66	59.81	68.20	-8.39	peak
2	5720.060	25.90	41.64	67.54	110.94	-43.40	peak
3	5725.000	25.58	41.67	67.25	122.20	-54.95	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.

PEAK



1

2

3

-63.48

-45.06

-6.52

peak

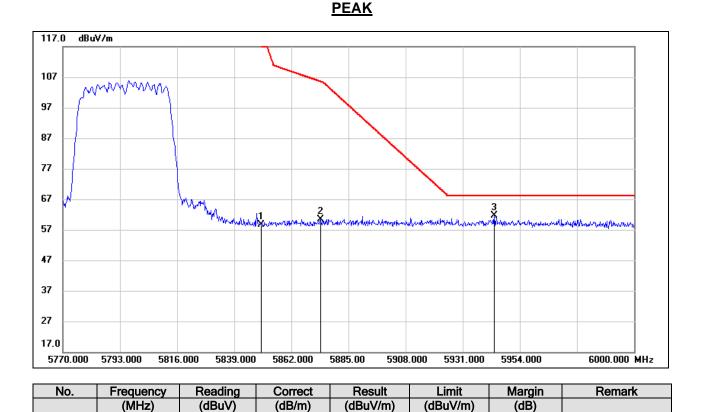
peak

peak

122.20

105.56

68.20



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

16.20

17.73

18.86

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

58.72

60.50

61.68

3. Peak: Peak detector.

5850.000

5873.730

5943.650

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

42.52

42.77

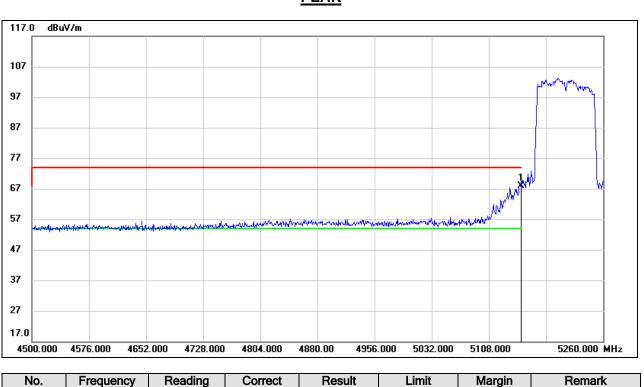
42.82

Note: Horizontal and Vertical have been tested, only the worst data was recorded in the report.



8.1.4. 802.11ac VHT80 MIMO MODE

UNII-1 BAND



<u>PEAK</u>

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

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

(dBuV)

26.80

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

(dBuV/m)

67.99

(dBuV/m)

74.00

(dB)

-6.01

peak

3. Peak: Peak detector.

(MHz)

5150.000

1

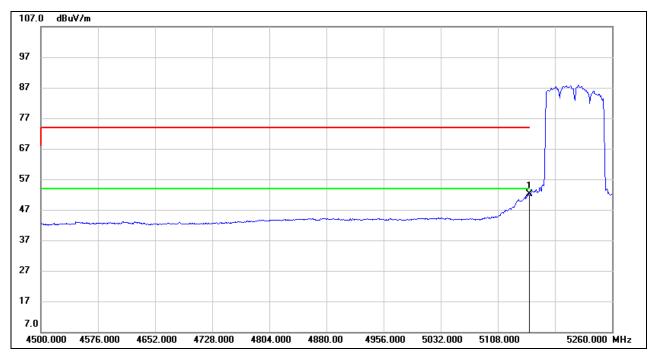
4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

(dB/m)

41.19



AVG



	No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
ſ		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
	1	5150.000	10.87	41.19	52.06	54.00	-1.94	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.

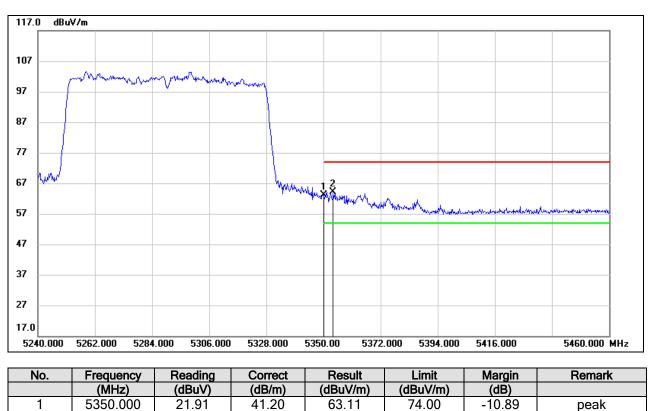
4. For the transmitting duration, please refer to clause 7.1.



2

UNII-2A BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



PEAK

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

23.03

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

64.25

74.00

-9.75

peak

3. Peak: Peak detector.

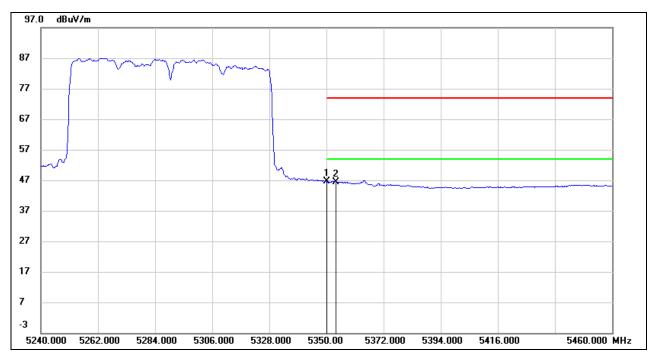
5353.740

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

41.22



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	5.51	41.20	46.71	54.00	-7.29	AVG
2	5353.740	5.22	41.22	46.44	54.00	-7.56	AVG

Note: 1. Measurement = Reading Level + Correct Factor

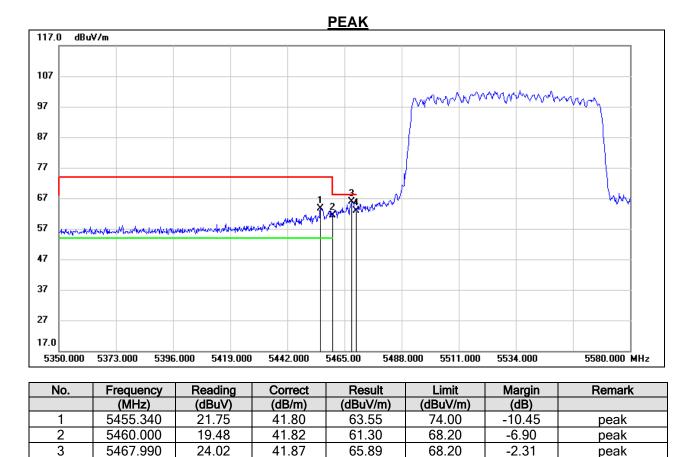
2. AVG: VBW=1/Ton where: ton is transmit duration.

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



UNII-2C BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



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

20.97

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

62.84

68.20

-5.36

peak

3. Peak: Peak detector.

5470.000

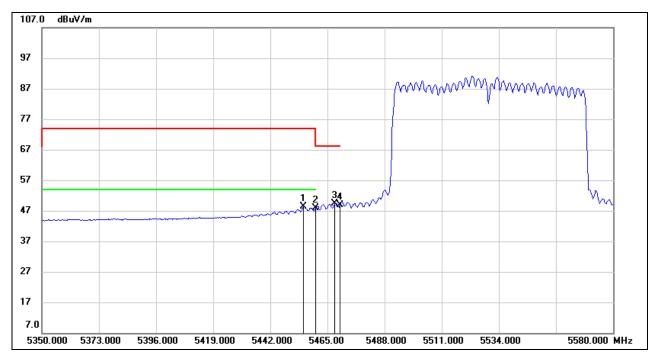
4

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

41.87



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5455.340	6.47	41.80	48.27	54.00	-5.73	AVG
2	5460.000	6.03	41.82	47.85	54.00	-6.15	AVG
3	5467.990	7.52	41.87	49.39	68.20	-18.81	AVG
4	5470.000	6.96	41.87	48.83	68.20	-19.37	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.

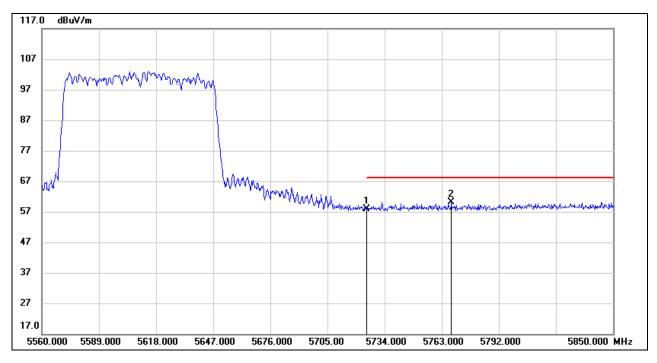
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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



RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

<u>PEAK</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	16.26	41.67	57.93	68.20	-10.27	peak
2	5767.930	18.34	41.87	60.21	68.20	-7.99	peak

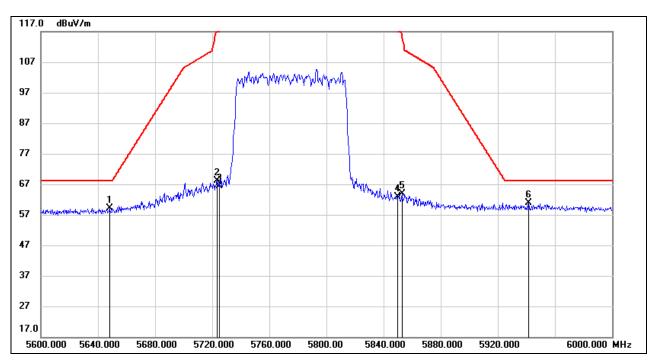
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



UNII-3 BAND



RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5648.000	17.56	41.65	59.21	68.20	-8.99	peak
2	5723.200	26.56	41.66	68.22	118.10	-49.88	peak
3	5725.000	24.78	41.67	66.45	122.20	-55.75	peak
4	5850.000	20.31	42.52	62.83	122.20	-59.37	peak
5	5852.800	21.28	42.55	63.83	115.81	-51.98	peak
6	5941.600	18.15	42.83	60.98	68.20	-7.22	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. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Note: Horizontal and Vertical have been tested, only the worst data was recorded in the report.



INNO-LINK ANTENNA:

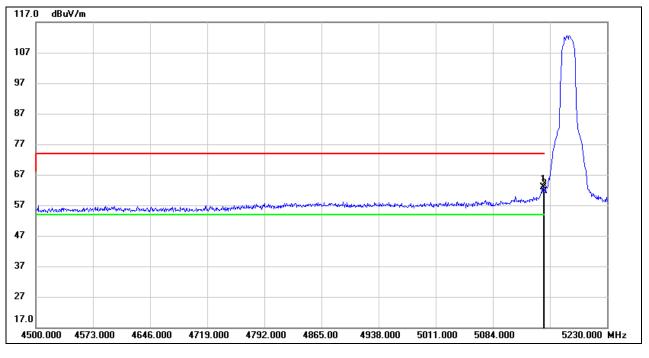
8.1.5. 802.11a20 SISO MODE

ANTENNA 1 TEST RESULTS (WORST CASE)

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	5148.240	21.83	41.17	63.00	74.00	-11.00	peak
2	5150.000	20.38	41.19	61.57	74.00	-12.43	peak

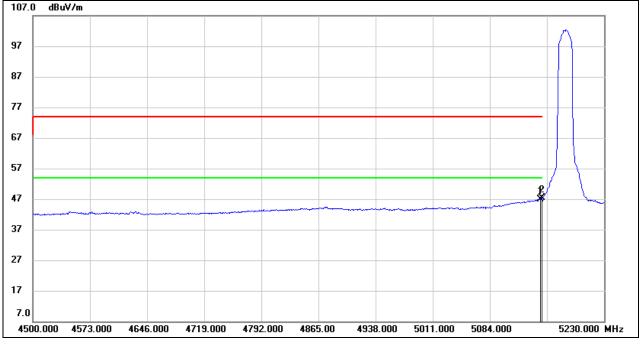
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5148.240	5.81	41.17	46.98	54.00	-7.02	AVG
2	5150.000	6.24	41.19	47.43	54.00	-6.57	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.

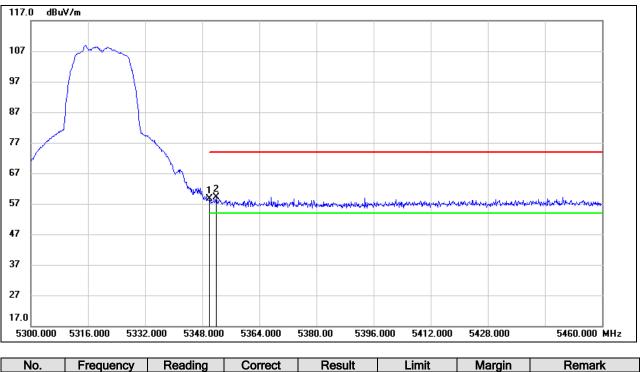
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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



UNII-2A BAND

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



PEAK

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	17.34	41.20	58.54	74.00	-15.46	peak
2	5352.000	17.91	41.21	59.12	74.00	-14.88	peak

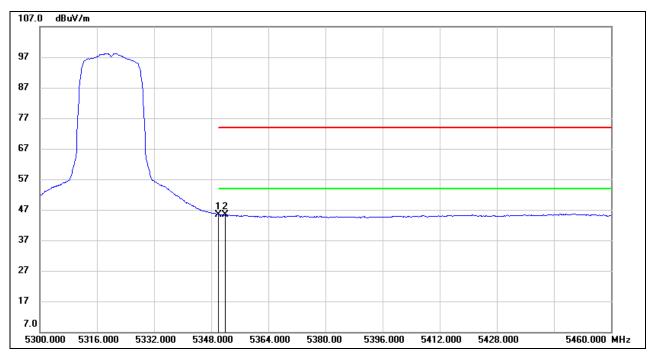
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	4.18	41.20	45.38	54.00	-8.62	AVG
2	5352.000	4.05	41.21	45.26	54.00	-8.74	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.

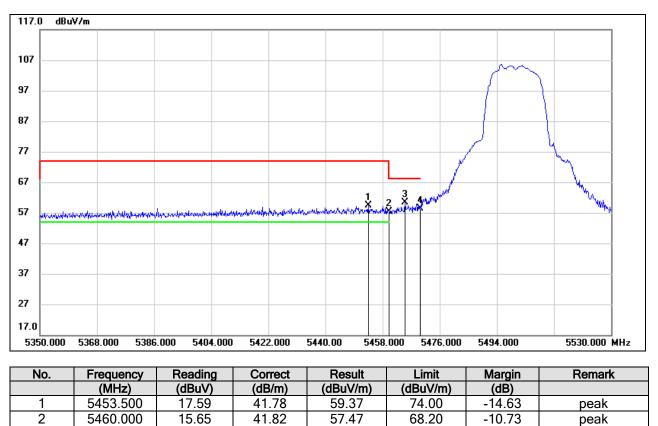


3

4

UNII-2C BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



<u>PEAK</u>

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

18.53

16.51

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

60.38

58.38

68.20

68.20

-7.82

-9.82

peak

peak

3. Peak: Peak detector.

5465.020

5470.000

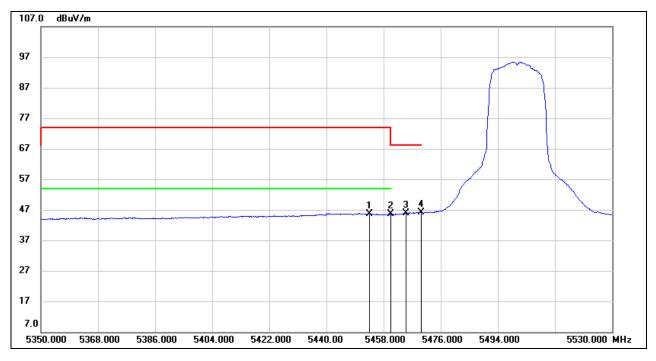
4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

41.85

41.87



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5453.500	3.88	41.78	45.66	54.00	-8.34	AVG
2	5460.000	3.69	41.82	45.51	54.00	-8.49	AVG
3	5465.020	4.02	41.85	45.87	68.20	-22.33	AVG
4	5470.000	4.23	41.87	46.10	68.20	-22.10	AVG

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

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

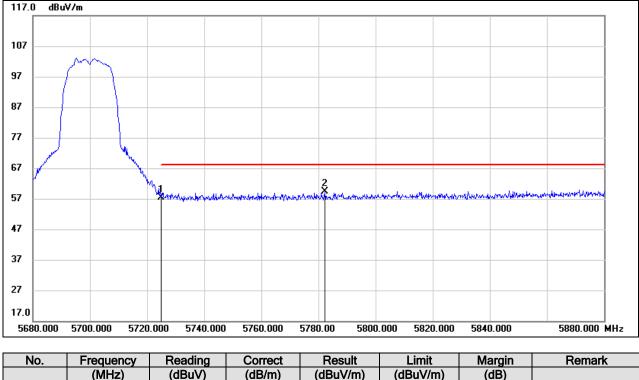
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

<u>PEAK</u>



NU.	Frequency	Reaulity	Conect	Nesuit	LIIIIL	Iviaryiri	Nelliaik
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	15.83	41.67	57.50	68.20	-10.70	peak
2	5782.200	17.36	41.94	59.30	68.20	-8.90	peak

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

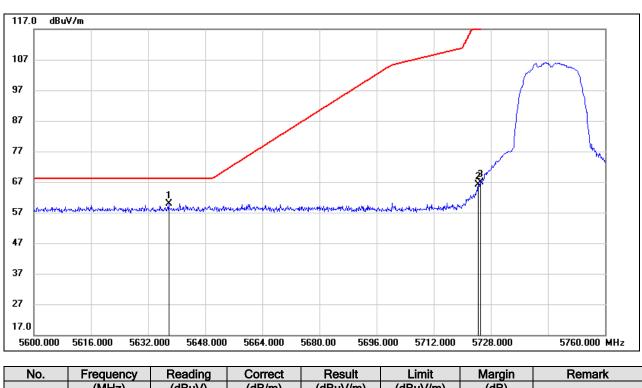
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



UNII-3 BAND





PEAK

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5637.760	18.16	41.67	59.83	68.20	-8.37	peak
2	5724.480	24.35	41.67	66.02	121.01	-54.99	peak
3	5725.000	25.10	41.67	66.77	122.20	-55.43	peak

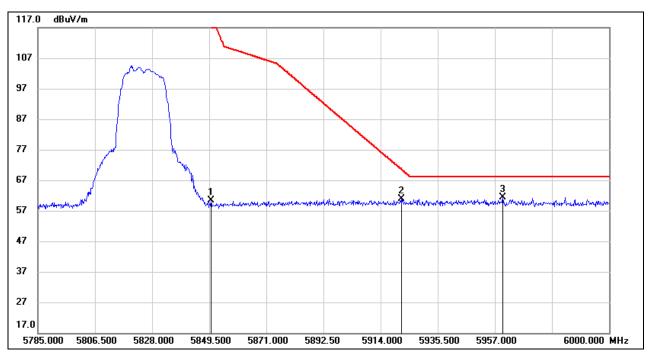
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



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	5850.000	17.86	42.52	60.38	122.20	-61.82	peak
2	5921.740	18.07	42.93	61.00	70.60	-9.60	peak
3	5960.010	18.52	42.75	61.27	68.20	-6.93	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.

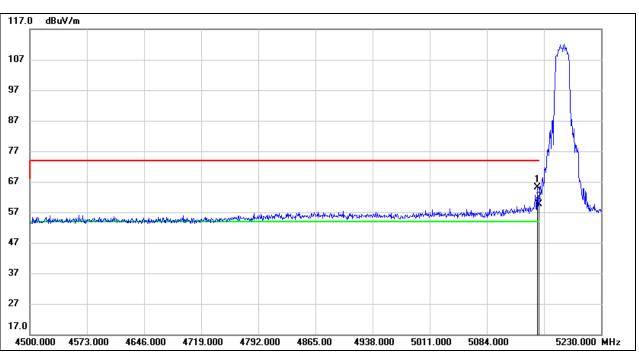
Note: Both the two antennas had been tested, but only the worst data was recorded in the report.

Note: Horizontal and Vertical have been tested, only the worst data was recorded in the report.



8.1.6. 802.11ac VHT20 MIMO MODE

UNII-1 BAND



RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5148.970	23.96	41.18	65.14	74.00	-8.86	peak
2	5150.000	18.40	41.19	59.59	74.00	-14.41	peak

<u>PEAK</u>

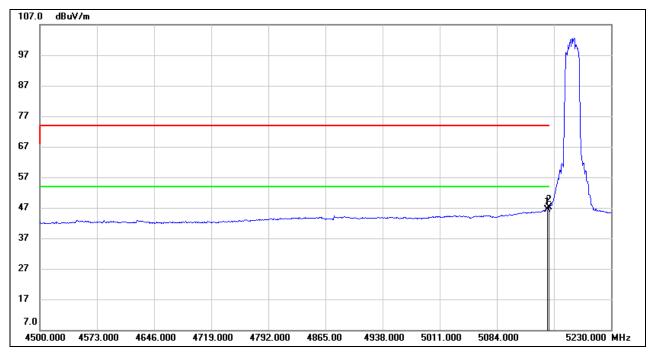
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5148.970	5.32	41.18	46.50	54.00	-7.50	AVG
2	5150.000	5.94	41.19	47.13	54.00	-6.87	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.

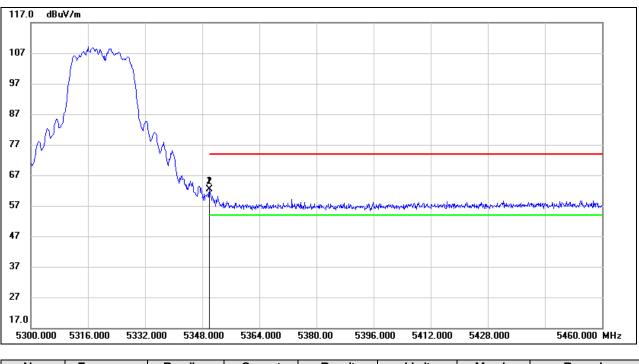
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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	21.21	41.20	62.41	74.00	-11.59	peak
2	5350.080	21.20	41.21	62.41	74.00	-11.59	peak

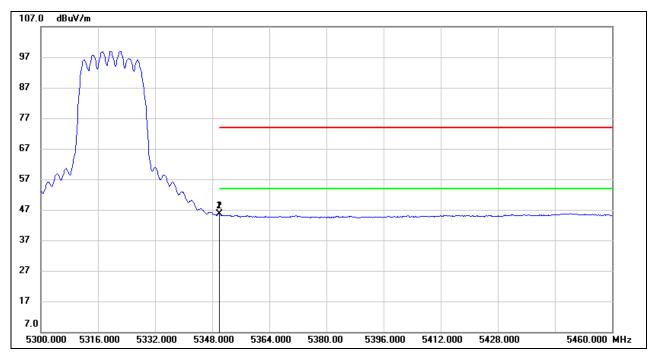
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	4.41	41.20	45.61	54.00	-8.39	AVG
2	5350.080	4.40	41.21	45.61	54.00	-8.39	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.

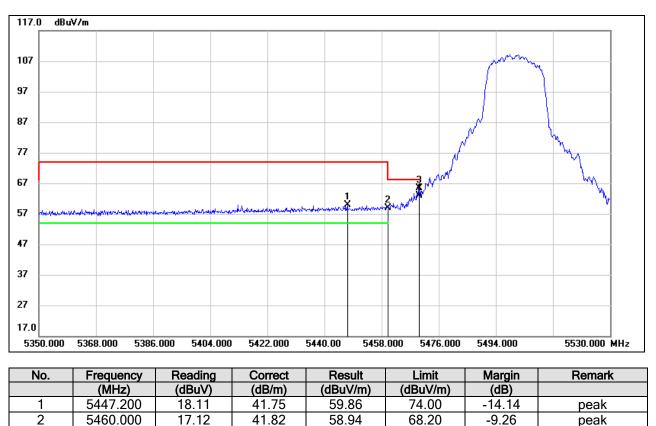


3

4

UNII-2C BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



<u>PEAK</u>

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

23.44

21.10

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

65.31

62.97

68.20

68.20

-2.89

-5.23

peak

peak

3. Peak: Peak detector.

5469.880

5470.000

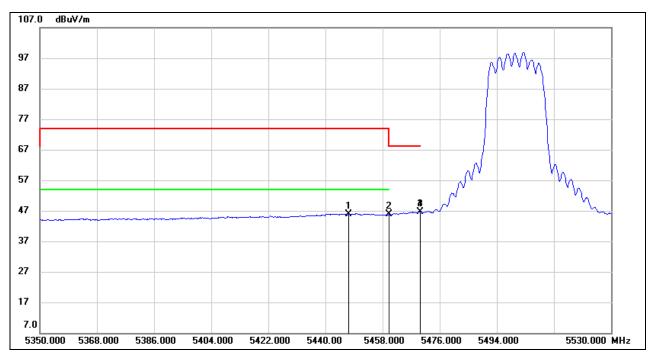
4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

41.87

41.87



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5447.200	4.03	41.75	45.78	54.00	-8.22	AVG
2	5460.000	3.96	41.82	45.78	54.00	-8.22	AVG
3	5469.880	4.86	41.87	46.73	68.20	-21.47	AVG
4	5470.000	4.83	41.87	46.70	68.20	-21.50	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.

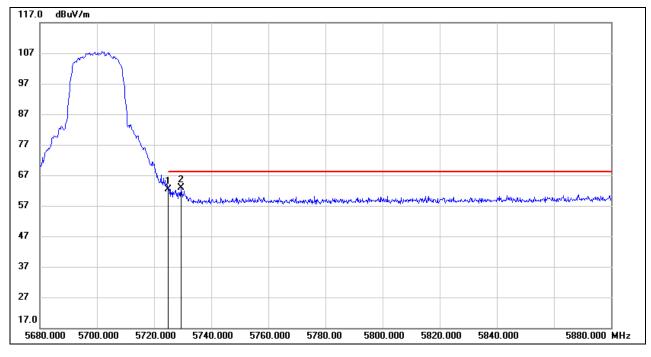
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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	20.69	41.67	62.36	68.20	-5.84	peak
2	5729.400	21.28	41.69	62.97	68.20	-5.23	peak

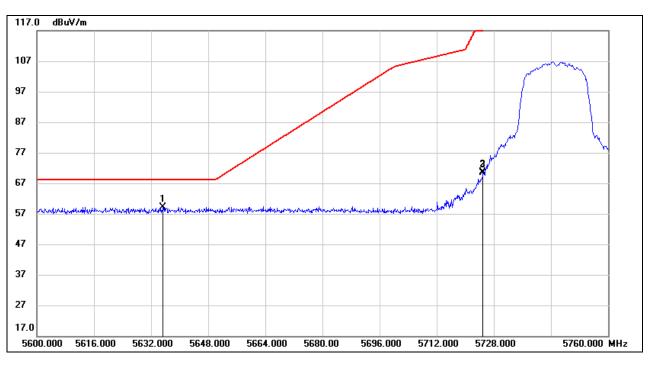
Note: 1. Measurement = Reading Level + Correct Factor.

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	5635.360	17.49	41.66	59.15	68.20	-9.05	peak
2	5724.960	29.06	41.67	70.73	122.11	-51.38	peak
3	5725.000	28.80	41.67	70.47	122.20	-51.73	peak

<u>PEAK</u>

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

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

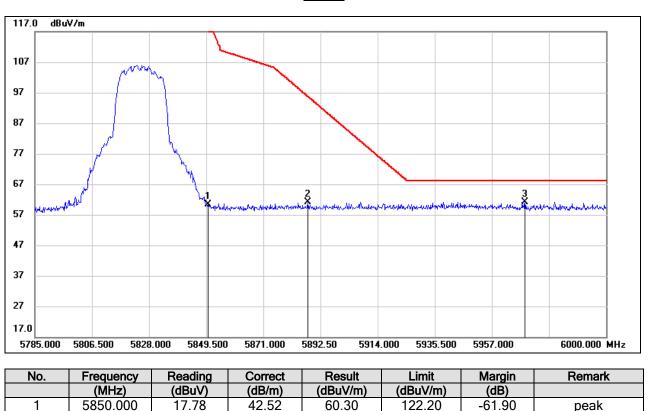
3. Peak: Peak detector.



2

3

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



PEAK

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

18.27

18.50

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

61.18

61.20

95.72

68.20

-34.54

-7.00

peak

peak

3. Peak: Peak detector.

5887.770

5969.470

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

42.91

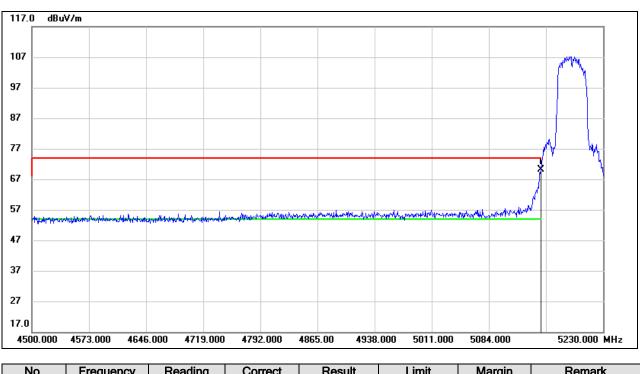
42.70

Note: Horizontal and Vertical have been tested, only the worst data was recorded in the report.

8.1.7. 802.11a VHT40 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	28.83	41.19	70.02	74.00	-3.98	peak

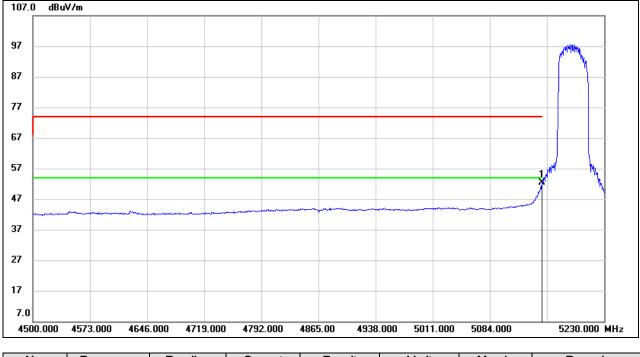
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	11.20	41.19	52.39	54.00	-1.61	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.

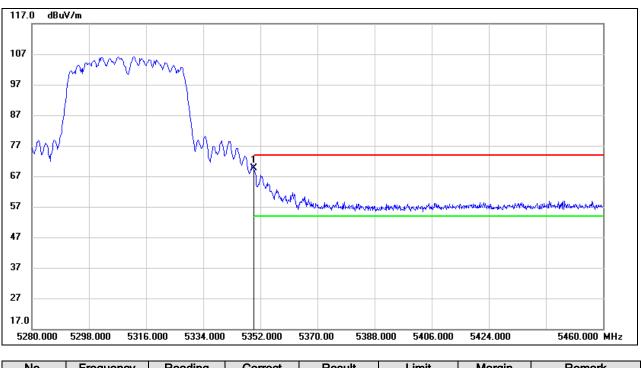
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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



UNII-2A BAND





PEAK

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	28.52	41.20	69.72	74.00	-4.28	peak

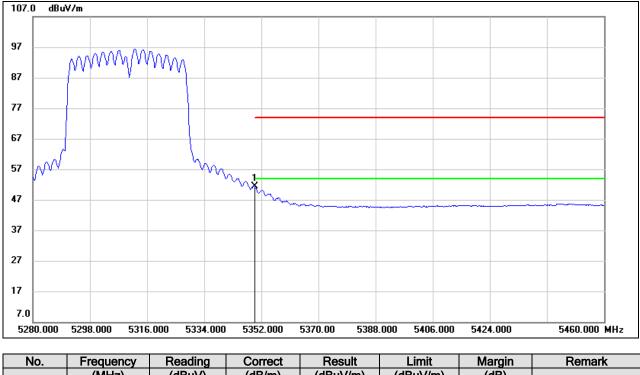
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	10.19	41.20	51.39	54.00	-2.61	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.

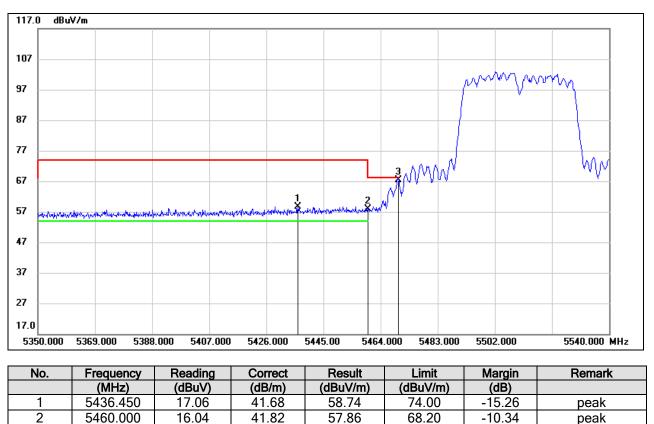
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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



UNII-2C BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



<u>PEAK</u>

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

25.49

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

67.36

68.20

-0.84

peak

3. Peak: Peak detector.

5470.000

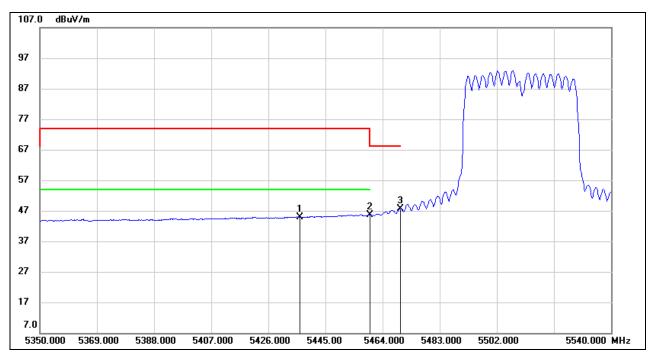
3

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

41.87



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5436.450	3.21	41.68	44.89	54.00	-9.11	AVG
2	5460.000	3.75	41.82	45.57	54.00	-8.43	AVG
3	5470.000	5.88	41.87	47.75	68.20	-20.45	AVG

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

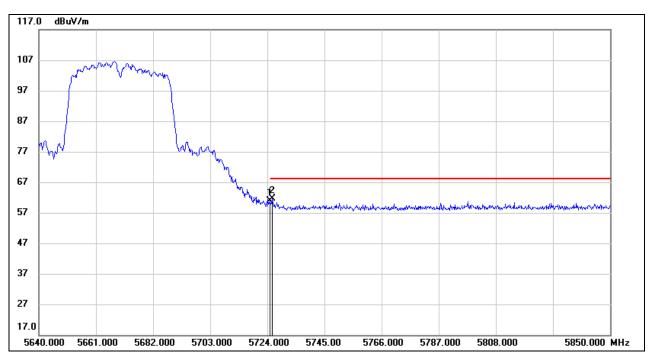
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

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

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



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	19.10	41.67	60.77	68.20	-7.43	peak
2	5725.680	20.00	41.67	61.67	68.20	-6.53	peak

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

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

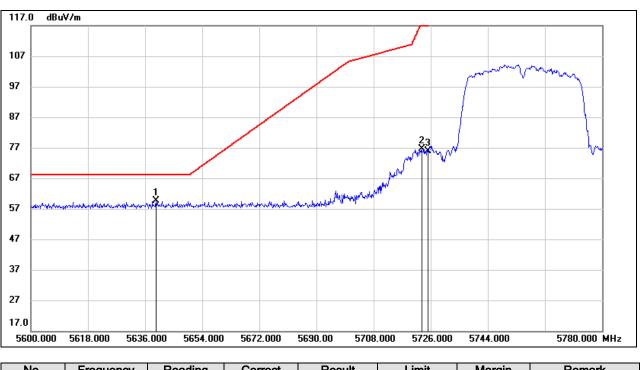
3. Peak: Peak detector.

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

<u>PEAK</u>



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	5639.420	17.91	41.66	59.57	68.20	-8.63	peak
2	5723.120	34.95	41.66	76.61	117.91	-41.30	peak
3	5725.000	34.25	41.67	75.92	122.20	-46.28	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.

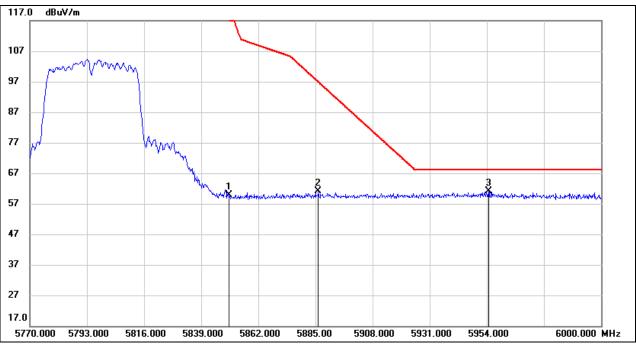
4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

PEAK



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.000	17.35	42.52	59.87	122.20	-62.33	peak
2	5886.150	18.15	42.89	61.04	96.92	-35.88	peak
3	5954.690	18.36	42.78	61.14	68.20	-7.06	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. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

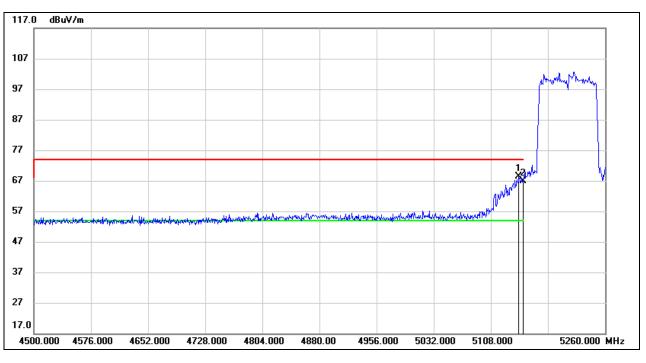
Note: Horizontal and Vertical have been tested, only the worst data was recorded in the report.



8.1.8. 802.11ac VHT80 MIMO MODE

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



PEAK

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5145.240	27.22	41.14	68.36	74.00	-5.64	peak
2	5150.000	25.70	41.19	66.89	74.00	-7.11	peak

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

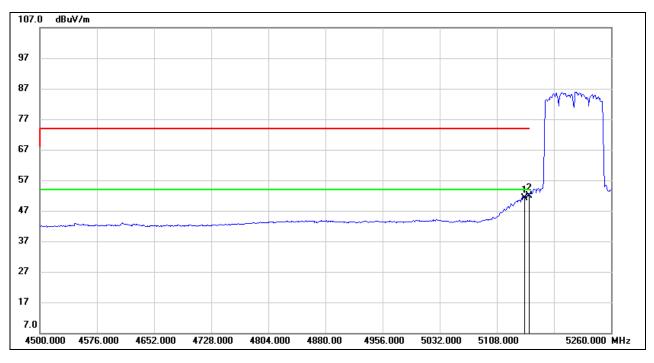
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



.

<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5145.240	9.99	41.14	51.13	54.00	-2.87	AVG
2	5150.000	10.65	41.19	51.84	54.00	-2.16	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.

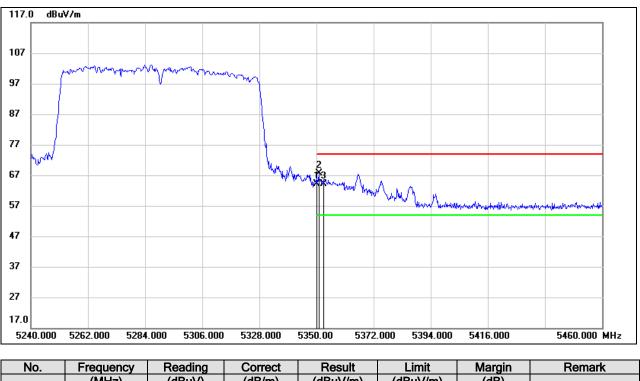
3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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



UNII-2A BAND





PEAK

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	22.99	41.20	64.19	74.00	-9.81	peak
2	5350.880	26.47	41.21	67.68	74.00	-6.32	peak
3	5352.640	23.00	41.22	64.22	74.00	-9.78	peak

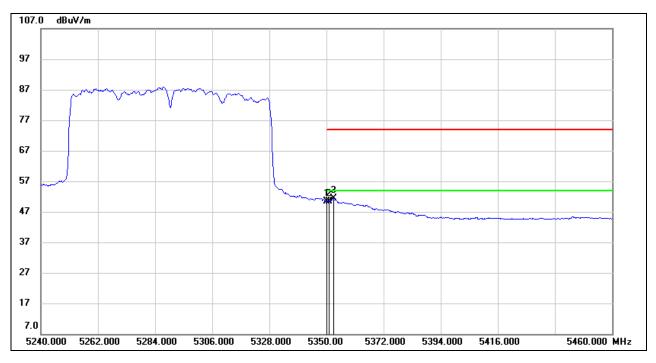
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	9.22	41.20	50.42	54.00	-3.58	AVG
2	5350.880	9.26	41.21	50.47	54.00	-3.53	AVG
3	5352.640	10.11	41.22	51.33	54.00	-2.67	AVG

Note: 1. Measurement = Reading Level + Correct Factor

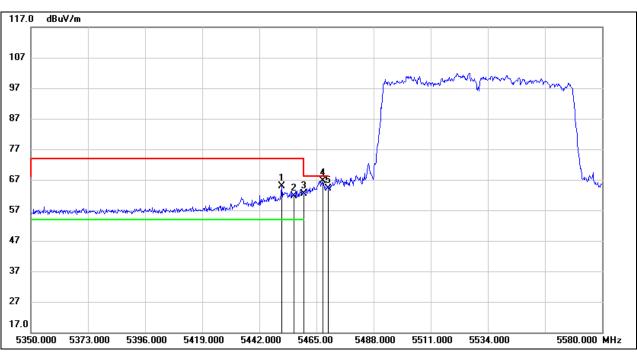
2. AVG: VBW=1/Ton where: ton is transmit duration.

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



UNII-2C BAND





PEAK

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5450.970	23.22	41.77	64.99	74.00	-9.01	peak
2	5455.800	19.78	41.80	61.58	74.00	-12.42	peak
3	5460.000	20.56	41.82	62.38	68.20	-5.82	peak
4	5467.530	24.83	41.86	66.69	68.20	-1.51	peak
5	5470.000	22.15	41.87	64.02	68.20	-4.18	peak

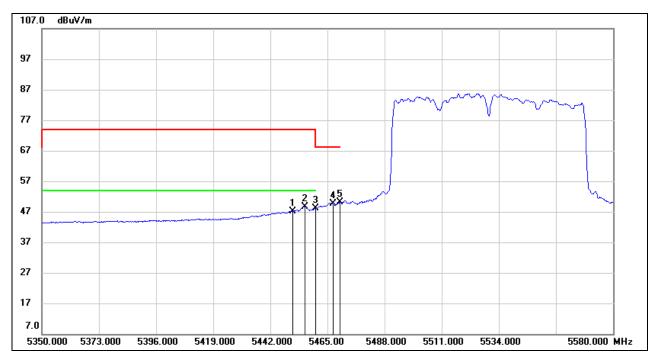
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5450.970	5.46	41.77	47.23	54.00	-6.77	AVG
2	5455.800	6.90	41.80	48.70	54.00	-5.30	AVG
3	5460.000	6.39	41.82	48.21	54.00	-5.79	AVG
4	5467.530	7.81	41.86	49.67	68.20	-18.53	AVG
5	5470.000	8.18	41.87	50.05	68.20	-18.15	AVG

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

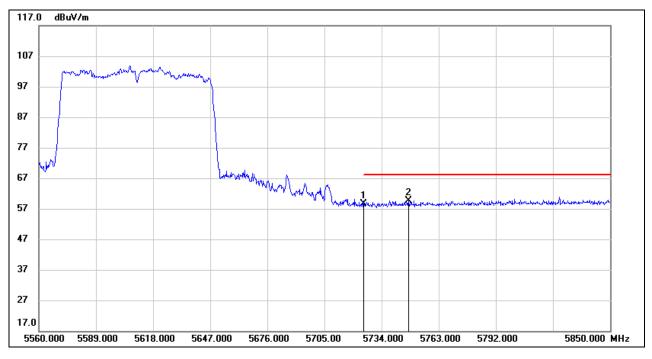
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

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)



Ρ	Ε	A	Κ
			_

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	17.00	41.67	58.67	68.20	-9.53	peak
2	5747.630	17.91	41.78	59.69	68.20	-8.51	peak

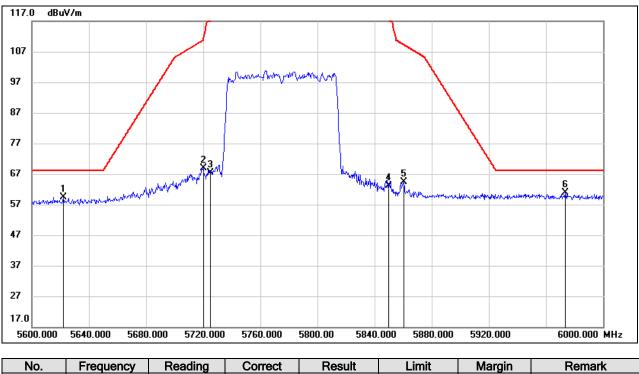
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



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	17.66	41.69	59.35	68.20	-8.85	peak
2	5720.000	27.17	41.64	68.81	110.80	-41.99	peak
3	5725.000	25.74	41.67	67.41	122.20	-54.79	peak
4	5850.000	20.59	42.52	63.11	122.20	-59.09	peak
5	5860.400	21.82	42.63	64.45	109.29	-44.84	peak
6	5973.600	18.20	42.69	60.89	68.20	-7.31	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: Horizontal and Vertical have been tested, only the worst data was recorded in the report.



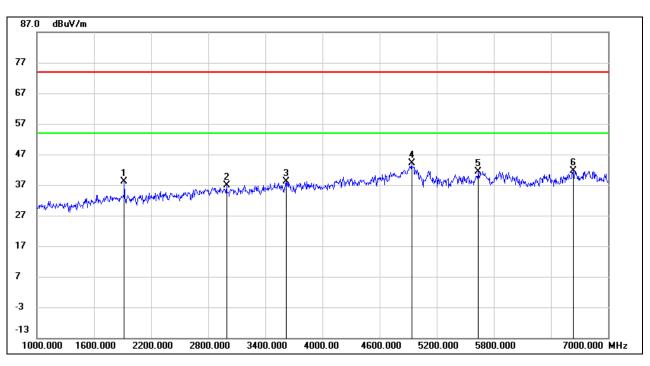
8.2. SPURIOUS EMISSIONS (1 GHz ~ 7 GHz)

KTC ANTENNA:

8.2.1. 802.11a20 SISO MODE

ANTENNA 1 TEST RESULTS (WORST CASE)

UNII-1 BAND



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.36	-10.13	38.23	74.00	-35.77	peak
2	2992.000	42.54	-5.63	36.91	74.00	-37.09	peak
3	3616.000	42.24	-4.12	38.12	74.00	-35.88	peak
4	4936.000	43.26	0.80	44.06	74.00	-29.94	peak
5	5638.000	38.91	2.47	41.38	74.00	-32.62	peak
6	6634.000	36.19	5.51	41.70	74.00	-32.30	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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

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

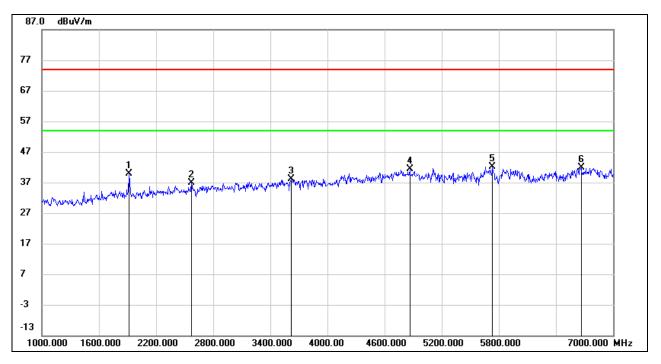
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	50.02	-10.13	39.89	74.00	-34.11	peak
2	2572.000	44.73	-7.96	36.77	74.00	-37.23	peak
3	3616.000	42.27	-4.12	38.15	74.00	-35.85	peak
4	4864.000	40.64	0.69	41.33	74.00	-32.67	peak
5	5734.000	39.62	2.49	42.11	74.00	-31.89	peak
6	6664.000	36.34	5.53	41.87	74.00	-32.13	peak

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

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

3. Peak: Peak detector.

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

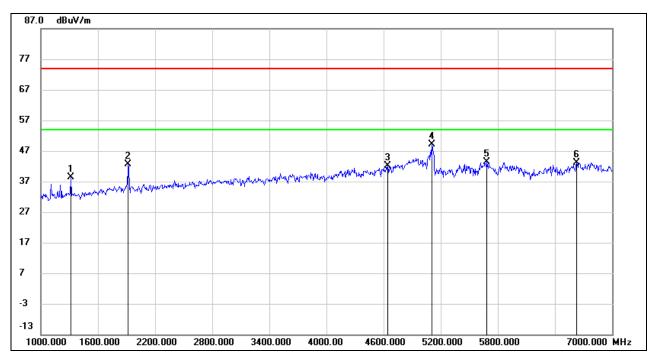
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject 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	1318.000	51.32	-12.83	38.49	74.00	-35.51	peak
2	1918.000	52.86	-10.13	42.73	74.00	-31.27	peak
3	4642.000	42.44	-0.33	42.11	74.00	-31.89	peak
4	5110.000	47.47	1.55	49.02	74.00	-24.98	peak
5	5686.000	40.92	2.47	43.39	74.00	-30.61	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

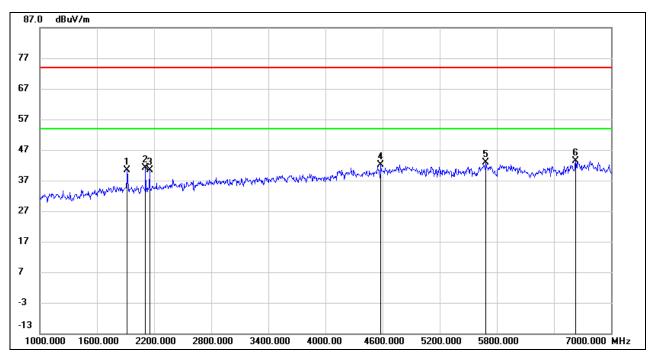
5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	50.49	-10.13	40.36	74.00	-33.64	peak
2	2110.000	50.57	-9.56	41.01	74.00	-32.99	peak
3	2152.000	49.75	-9.32	40.43	74.00	-33.57	peak
4	4582.000	42.87	-0.69	42.18	74.00	-31.82	peak
5	5686.000	40.37	2.47	42.84	74.00	-31.16	peak
6	6628.000	37.76	5.50	43.26	74.00	-30.74	peak

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

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

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

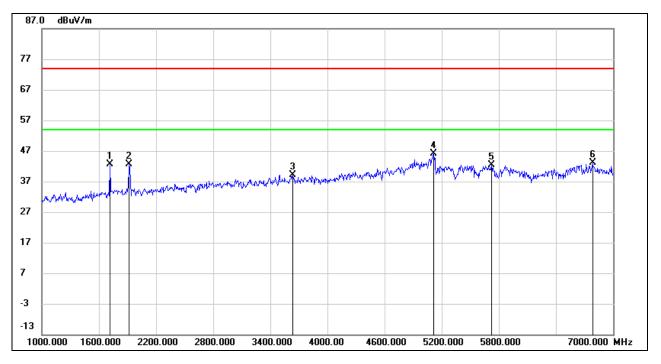
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject 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	1714.000	53.40	-10.70	42.70	74.00	-31.30	peak
2	1918.000	52.67	-10.13	42.54	74.00	-31.46	peak
3	3634.000	43.16	-4.03	39.13	74.00	-34.87	peak
4	5116.000	44.50	1.60	46.10	74.00	-27.90	peak
5	5722.000	39.93	2.49	42.42	74.00	-31.58	peak
6	6784.000	37.49	5.56	43.05	74.00	-30.95	peak

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

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

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

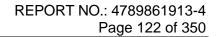
5. For the transmitting duration, please refer to clause 7.1.

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

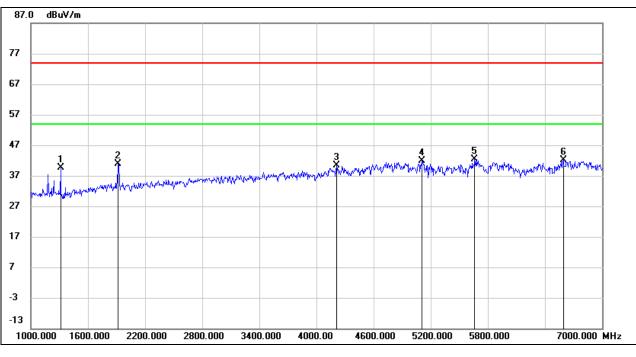
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)







No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1312.000	52.44	-12.84	39.60	74.00	-34.40	peak
2	1918.000	50.94	-10.13	40.81	74.00	-33.19	peak
3	4210.000	42.15	-1.67	40.48	74.00	-33.52	peak
4	5110.000	40.23	1.55	41.78	74.00	-32.22	peak
5	5662.000	39.97	2.47	42.44	74.00	-31.56	peak
6	6592.000	36.61	5.45	42.06	74.00	-31.94	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

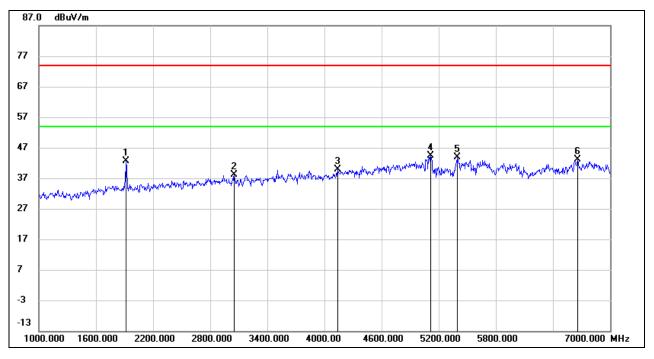
5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	1918.000	52.72	-10.13	42.59	74.00	-31.41	peak
2	3052.000	43.59	-5.50	38.09	74.00	-35.91	peak
3	4138.000	42.21	-2.27	39.94	74.00	-34.06	peak
4	5116.000	42.87	1.60	44.47	74.00	-29.53	peak
5	5398.000	41.96	1.88	43.84	74.00	-30.16	peak
6	6658.000	37.50	5.51	43.01	74.00	-30.99	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.

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

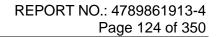
5. For the transmitting duration, please refer to clause 7.1.

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

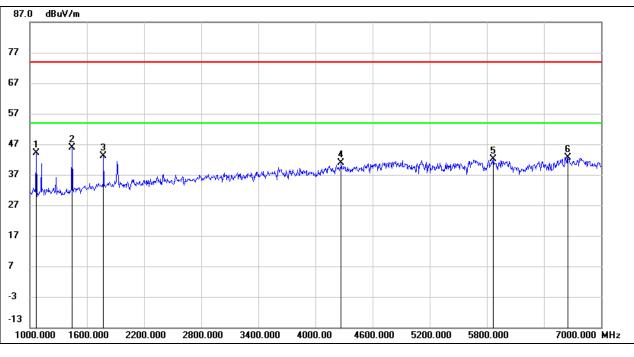
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27 dBm/MHz (68.2 dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)







No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1066.000	57.69	-13.65	44.04	74.00	-29.96	peak
2	1444.000	58.29	-12.49	45.80	74.00	-28.20	peak
3	1774.000	53.44	-10.24	43.20	74.00	-30.80	peak
4	4270.000	42.50	-1.73	40.77	74.00	-33.23	peak
5	5866.000	39.39	2.77	42.16	74.00	-31.84	peak
6	6652.000	37.20	5.52	42.72	74.00	-31.28	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

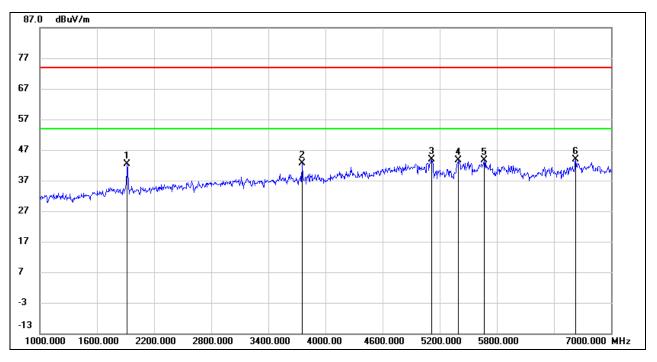
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject 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	1918.000	52.40	-10.13	42.27	74.00	-31.73	peak
2	3754.000	46.19	-3.47	42.72	74.00	-31.28	peak
3	5116.000	42.30	1.60	43.90	74.00	-30.10	peak
4	5398.000	41.85	1.88	43.73	74.00	-30.27	peak
5	5668.000	41.26	2.47	43.73	74.00	-30.27	peak
6	6628.000	38.31	5.50	43.81	74.00	-30.19	peak

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

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

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

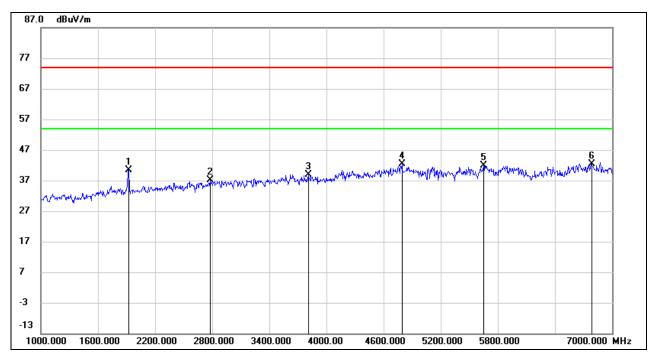
5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	1924.000	50.62	-10.13	40.49	74.00	-33.51	peak
2	2776.000	43.89	-6.72	37.17	74.00	-36.83	peak
3	3808.000	42.27	-3.27	39.00	74.00	-35.00	peak
4	4792.000	41.74	0.54	42.28	74.00	-31.72	peak
5	5650.000	39.45	2.47	41.92	74.00	-32.08	peak
6	6784.000	36.85	5.56	42.41	74.00	-31.59	peak

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

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

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

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

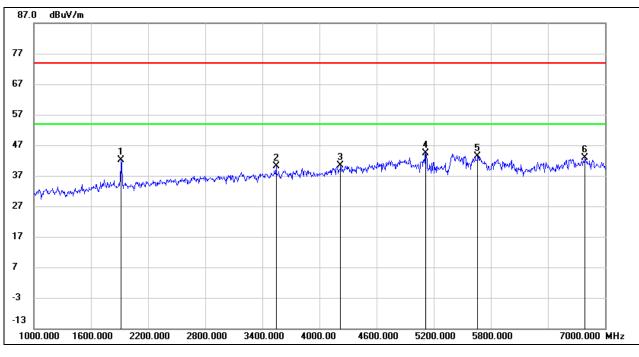
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

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

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	52.23	-10.13	42.10	74.00	-31.90	peak
2	3544.000	44.64	-4.48	40.16	74.00	-33.84	peak
3	4222.000	42.02	-1.69	40.33	74.00	-33.67	peak
4	5116.000	42.72	1.60	44.32	74.00	-29.68	peak
5	5662.000	41.01	2.47	43.48	74.00	-30.52	peak
6	6790.000	37.34	5.57	42.91	74.00	-31.09	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

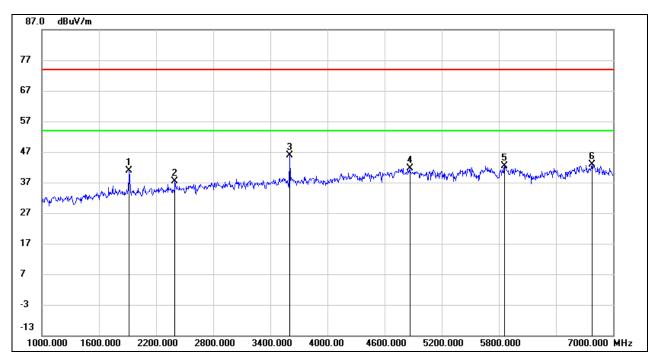
5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	51.11	-10.13	40.98	74.00	-33.02	peak
2	2398.000	45.77	-8.40	37.37	74.00	-36.63	peak
3	3604.000	50.16	-4.17	45.99	74.00	-28.01	peak
4	4864.000	41.03	0.69	41.72	74.00	-32.28	peak
5	5860.000	39.62	2.75	42.37	74.00	-31.63	peak
6	6778.000	37.36	5.56	42.92	74.00	-31.08	peak

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

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

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

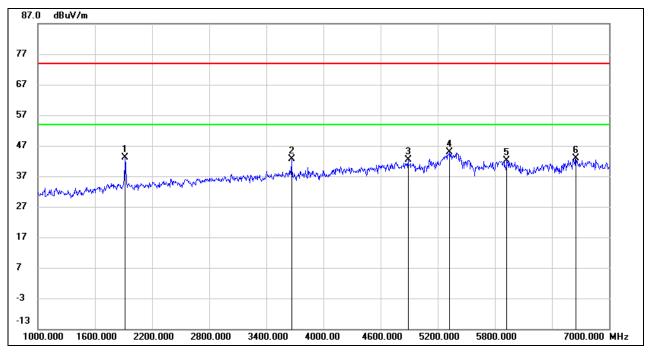
5. For the transmitting duration, please refer to clause 7.1.

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

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	53.22	-10.13	43.09	74.00	-30.91	peak
2	3664.000	46.60	-3.89	42.71	74.00	-31.29	peak
3	4888.000	41.64	0.72	42.36	74.00	-31.64	peak
4	5320.000	42.83	1.96	44.79	74.00	-29.21	peak
5	5926.000	39.14	3.01	42.15	74.00	-31.85	peak
6	6652.000	37.29	5.52	42.81	74.00	-31.19	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.

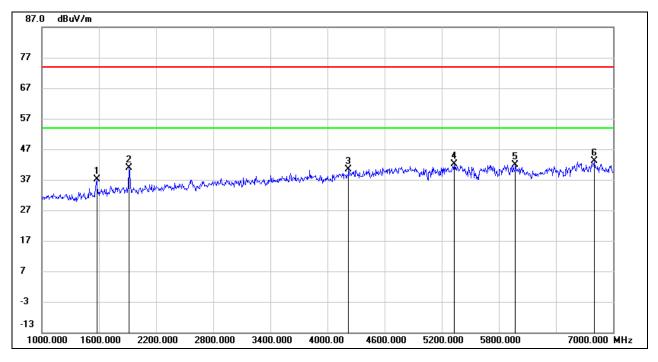
4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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

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

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

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	1576.000	48.97	-11.72	37.25	74.00	-36.75	peak
2	1918.000	50.96	-10.13	40.83	74.00	-33.17	peak
3	4222.000	41.96	-1.69	40.27	74.00	-33.73	peak
4	5332.000	40.23	1.95	42.18	74.00	-31.82	peak
5	5974.000	38.65	3.20	41.85	74.00	-32.15	peak
6	6802.000	37.49	5.58	43.07	74.00	-30.93	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

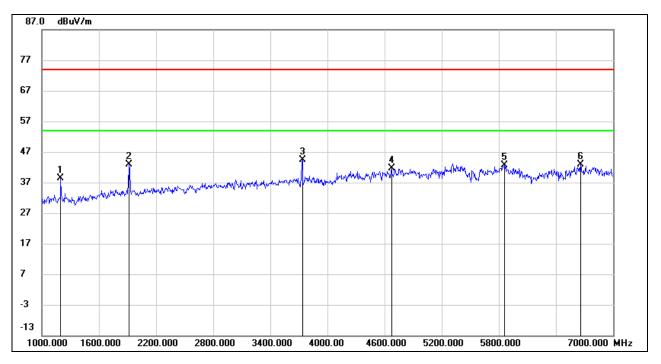
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject 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	1198.000	51.33	-13.00	38.33	74.00	-35.67	peak
2	1918.000	52.97	-10.13	42.84	74.00	-31.16	peak
3	3736.000	47.94	-3.56	44.38	74.00	-29.62	peak
4	4672.000	41.72	-0.15	41.57	74.00	-32.43	peak
5	5860.000	39.90	2.75	42.65	74.00	-31.35	peak
6	6658.000	37.28	5.51	42.79	74.00	-31.21	peak

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

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

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

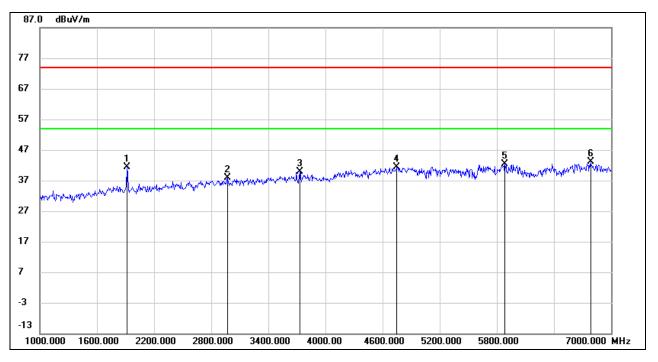
5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	51.43	-10.13	41.30	74.00	-32.70	peak
2	2968.000	43.63	-5.75	37.88	74.00	-36.12	peak
3	3730.000	43.36	-3.58	39.78	74.00	-34.22	peak
4	4750.000	41.11	0.30	41.41	74.00	-32.59	peak
5	5884.000	39.64	2.84	42.48	74.00	-31.52	peak
6	6784.000	37.66	5.56	43.22	74.00	-30.78	peak

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

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

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

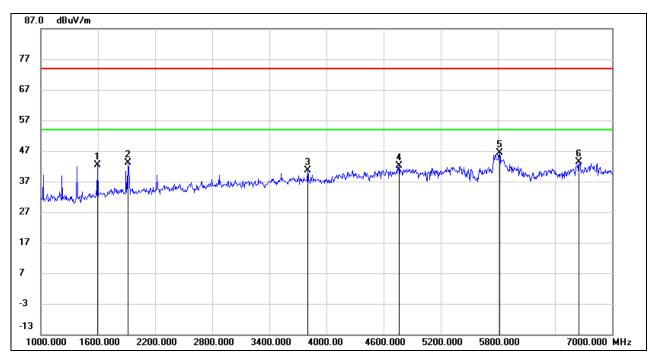
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject 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	1594.000	53.88	-11.59	42.29	74.00	-31.71	peak
2	1918.000	53.31	-10.13	43.18	74.00	-30.82	peak
3	3802.000	43.89	-3.27	40.62	74.00	-33.38	peak
4	4762.000	41.63	0.38	42.01	74.00	-31.99	peak
5	5818.000	43.78	2.57	46.35	74.00	-27.65	peak
6	6652.000	37.87	5.52	43.39	74.00	-30.61	peak

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

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

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

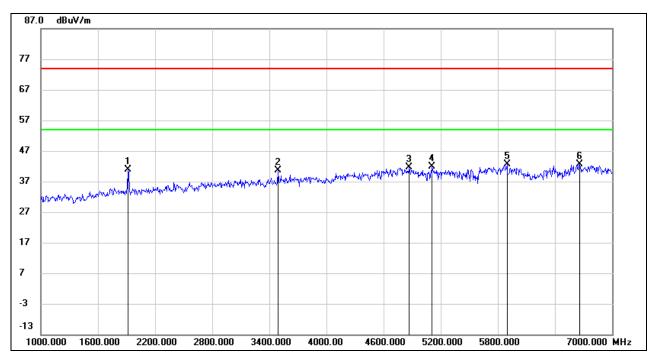
5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	50.91	-10.13	40.78	74.00	-33.22	peak
2	3490.000	45.26	-4.75	40.51	74.00	-33.49	peak
3	4870.000	40.83	0.69	41.52	74.00	-32.48	peak
4	5110.000	40.25	1.55	41.80	74.00	-32.20	peak
5	5896.000	39.63	2.90	42.53	74.00	-31.47	peak
6	6658.000	37.04	5.51	42.55	74.00	-31.45	peak

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

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

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

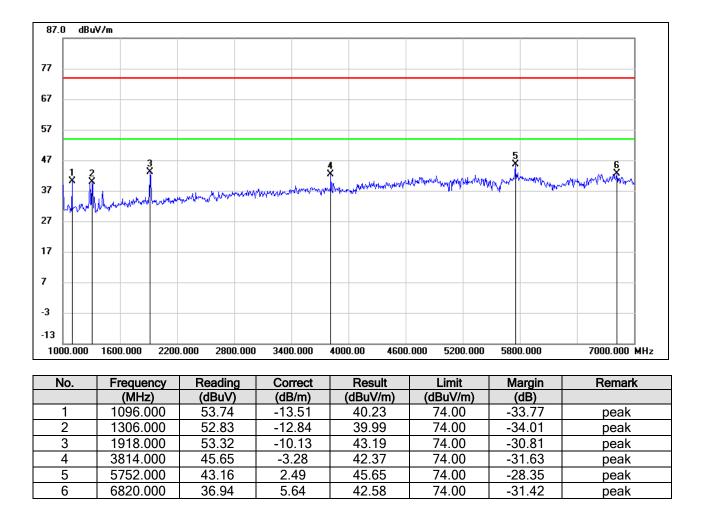
5. For the transmitting duration, please refer to clause 7.1.

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

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.

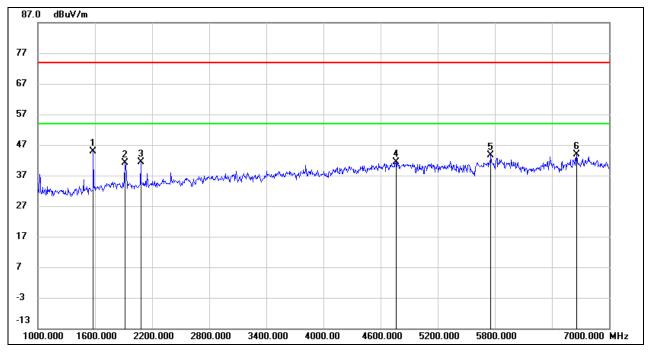
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	1582.000	56.57	-11.68	44.89	74.00	-29.11	peak
2	1918.000	51.28	-10.13	41.15	74.00	-32.85	peak
3	2080.000	51.04	-9.73	41.31	74.00	-32.69	peak
4	4762.000	40.88	0.38	41.26	74.00	-32.74	peak
5	5758.000	41.05	2.50	43.55	74.00	-30.45	peak
6	6658.000	38.30	5.51	43.81	74.00	-30.19	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

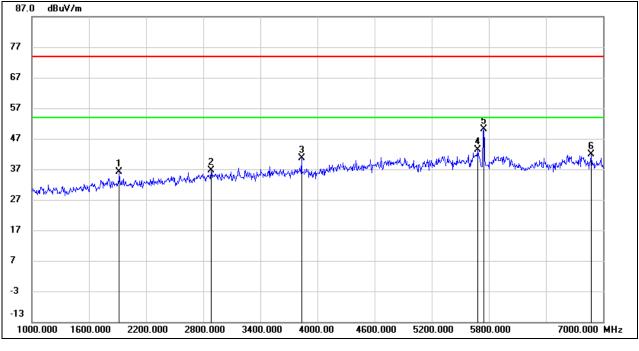
5. For the transmitting duration, please refer to clause 7.1.

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

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



UNII-3 BAND



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	46.23	-10.13	36.10	74.00	-37.90	peak
2	2884.000	42.69	-6.15	36.54	74.00	-37.46	peak
3	3832.000	43.94	-3.32	40.62	74.00	-33.38	peak
4	5686.000	40.88	2.47	43.35	74.00	-30.65	peak
5	5745.000	47.61	2.49	50.10	74.00	-23.90	peak
6	6874.000	36.02	5.78	41.80	74.00	-32.20	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.

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

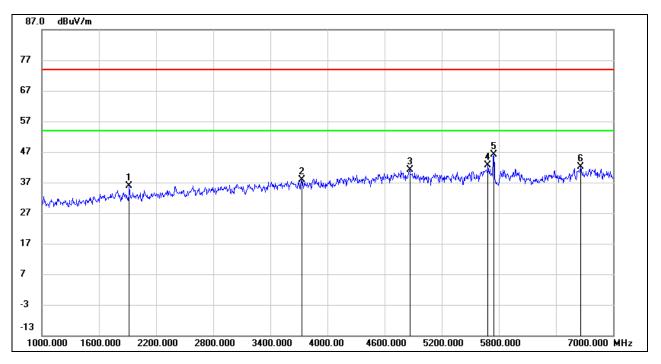
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	45.89	-10.13	35.76	74.00	-38.24	peak
2	3730.000	41.37	-3.58	37.79	74.00	-36.21	peak
3	4864.000	40.46	0.69	41.15	74.00	-32.85	peak
4	5686.000	40.05	2.47	42.52	74.00	-31.48	peak
5	5745.000	43.60	2.49	46.09	74.00	-27.91	peak
6	6658.000	36.64	5.51	42.15	74.00	-31.85	peak

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

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

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

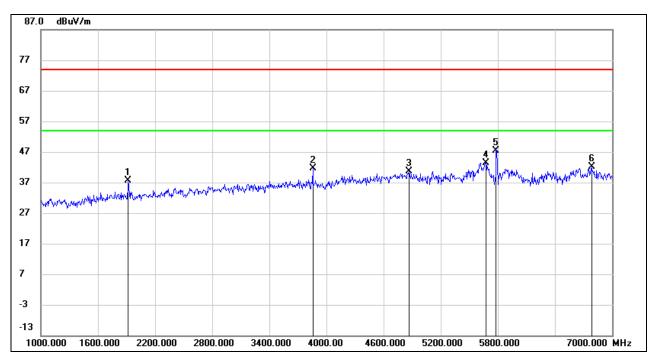
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject 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	1918.000	47.87	-10.13	37.74	74.00	-36.26	peak
2	3856.000	44.96	-3.36	41.60	74.00	-32.40	peak
3	4870.000	39.85	0.69	40.54	74.00	-33.46	peak
4	5674.000	40.91	2.48	43.39	74.00	-30.61	peak
5	5785.000	44.90	2.50	47.40	74.00	-26.60	peak
6	6784.000	36.50	5.56	42.06	74.00	-31.94	peak

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

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

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

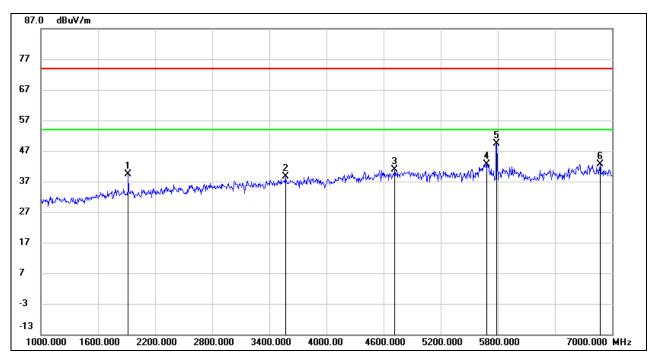
5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	49.48	-10.13	39.35	74.00	-34.65	peak
2	3568.000	42.88	-4.35	38.53	74.00	-35.47	peak
3	4714.000	40.91	0.09	41.00	74.00	-33.00	peak
4	5686.000	40.21	2.47	42.68	74.00	-31.32	peak
5	5785.000	46.85	2.50	49.35	74.00	-24.65	peak
6	6874.000	36.90	5.78	42.68	74.00	-31.32	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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

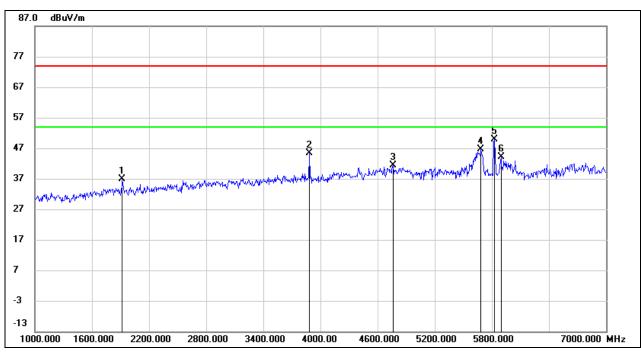
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

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

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	47.12	-10.13	36.99	74.00	-37.01	peak
2	3886.000	48.69	-3.41	45.28	74.00	-28.72	peak
3	4762.000	40.96	0.38	41.34	74.00	-32.66	peak
4	5686.000	44.25	2.47	46.72	74.00	-27.28	peak
5	5825.000	47.39	2.61	50.00	74.00	-24.00	peak
6	5896.000	41.16	2.90	44.06	74.00	-29.94	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

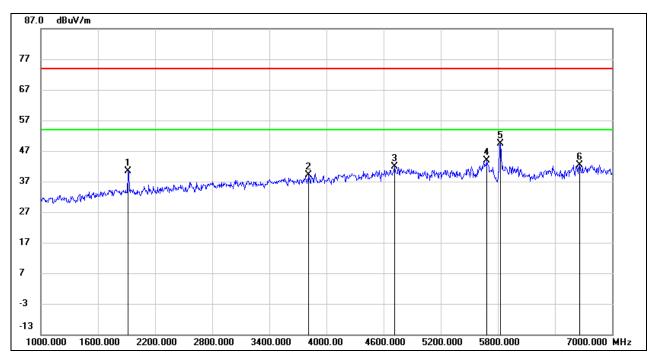
5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	50.62	-10.13	40.49	74.00	-33.51	peak
2	3814.000	42.49	-3.28	39.21	74.00	-34.79	peak
3	4714.000	41.78	0.09	41.87	74.00	-32.13	peak
4	5686.000	41.39	2.47	43.86	74.00	-30.14	peak
5	5825.000	46.77	2.61	49.38	74.00	-24.62	peak
6	6658.000	36.93	5.51	42.44	74.00	-31.56	peak

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

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

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

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

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

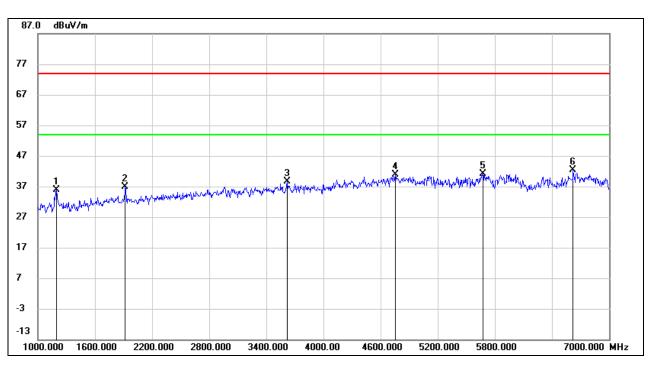
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



INNO-LINK ANTENNA:

8.2.2. 802.11a20 SISO 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	1192.000	48.79	-13.03	35.76	74.00	-38.24	peak
2	1918.000	46.96	-10.13	36.83	74.00	-37.17	peak
3	3616.000	42.87	-4.12	38.75	74.00	-35.25	peak
4	4756.000	40.48	0.33	40.81	74.00	-33.19	peak
5	5674.000	38.58	2.48	41.06	74.00	-32.94	peak
6	6622.000	36.80	5.51	42.31	74.00	-31.69	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

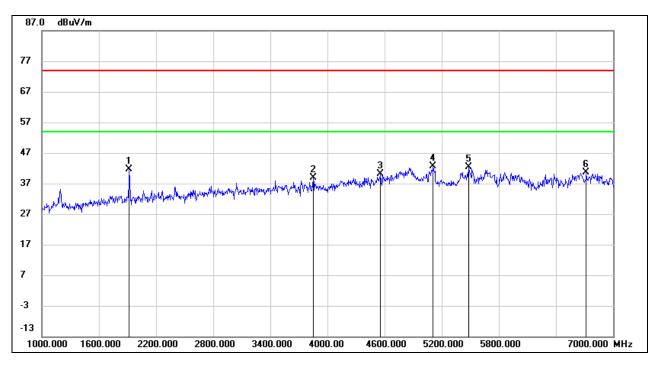
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	51.77	-10.13	41.64	74.00	-32.36	peak
2	3850.000	42.20	-3.35	38.85	74.00	-35.15	peak
3	4558.000	40.91	-0.84	40.07	74.00	-33.93	peak
4	5110.000	41.19	1.55	42.74	74.00	-31.26	peak
5	5482.000	40.24	2.11	42.35	74.00	-31.65	peak
6	6718.000	35.09	5.54	40.63	74.00	-33.37	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

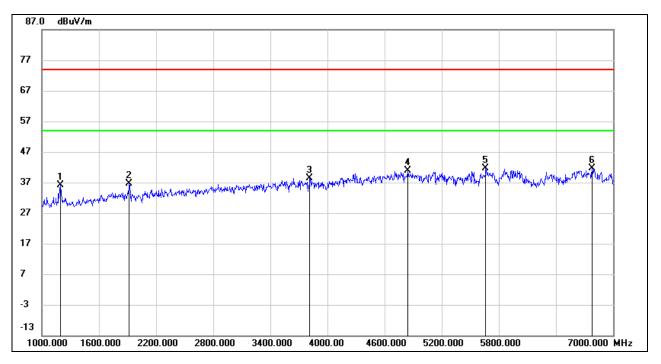
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject 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	1192.000	49.09	-13.03	36.06	74.00	-37.94	peak
2	1918.000	46.79	-10.13	36.66	74.00	-37.34	peak
3	3814.000	41.55	-3.28	38.27	74.00	-35.73	peak
4	4846.000	40.18	0.66	40.84	74.00	-33.16	peak
5	5662.000	39.16	2.47	41.63	74.00	-32.37	peak
6	6778.000	36.16	5.56	41.72	74.00	-32.28	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

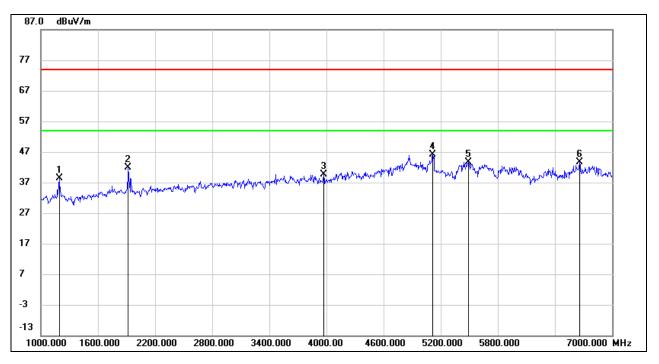
5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	1192.000	51.52	-13.03	38.49	74.00	-35.51	peak
2	1918.000	52.10	-10.13	41.97	74.00	-32.03	peak
3	3970.000	43.20	-3.56	39.64	74.00	-34.36	peak
4	5116.000	44.48	1.60	46.08	74.00	-27.92	peak
5	5494.000	41.48	2.14	43.62	74.00	-30.38	peak
6	6658.000	38.02	5.51	43.53	74.00	-30.47	peak

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

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

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

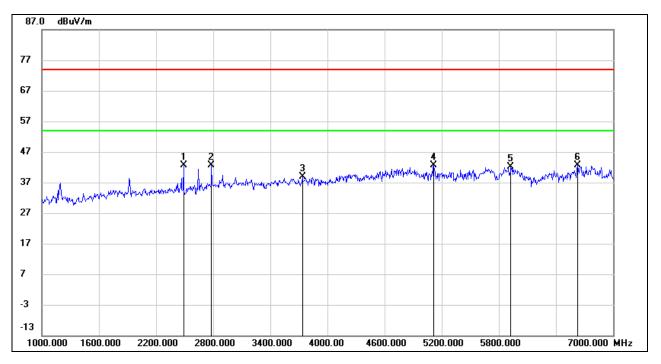
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject 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	2488.000	50.90	-8.24	42.66	74.00	-31.34	peak
2	2782.000	49.21	-6.67	42.54	74.00	-31.46	peak
3	3736.000	42.36	-3.56	38.80	74.00	-35.20	peak
4	5116.000	41.07	1.60	42.67	74.00	-31.33	peak
5	5926.000	39.14	3.01	42.15	74.00	-31.85	peak
6	6628.000	37.01	5.50	42.51	74.00	-31.49	peak

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

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

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

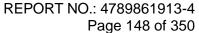
5. For the transmitting duration, please refer to clause 7.1.

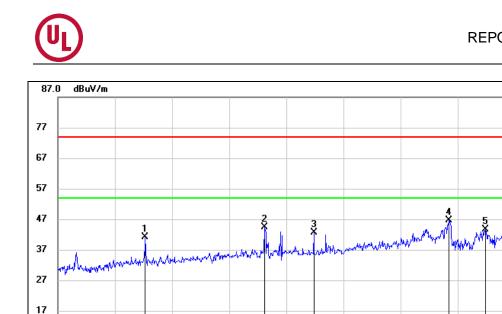
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

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

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)





-13							
1000.000	1600.000 2200	0.000 2800.000	3400.000	4000.00 4600	.000 5200.000	5800.000	7000.000 MHz
F				•			
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	51.31	-10.13	41.18	74.00	-32.82	peak
2	3172.000	49.68	-5.30	44.38	74.00	-29.62	peak
3	3688.000	46.31	-3.78	42.53	74.00	-31.47	peak
4	5110.000	45.06	1.55	46.61	74.00	-27.39	peak
5	5488.000	41.61	2.13	43.74	74.00	-30.26	peak
6	6784.000	36.35	5.56	41.91	74.00	-32.09	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.

7

-3

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

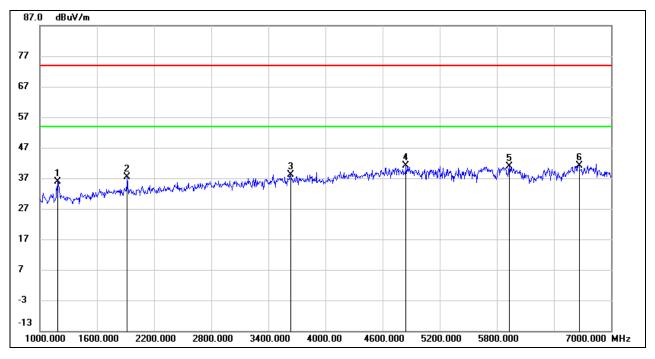
5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	1186.000	48.91	-13.07	35.84	74.00	-38.16	peak
2	1918.000	47.40	-10.13	37.27	74.00	-36.73	peak
3	3634.000	42.12	-4.03	38.09	74.00	-35.91	peak
4	4846.000	40.36	0.66	41.02	74.00	-32.98	peak
5	5932.000	37.91	3.03	40.94	74.00	-33.06	peak
6	6664.000	35.71	5.53	41.24	74.00	-32.76	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

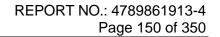
5. For the transmitting duration, please refer to clause 7.1.

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

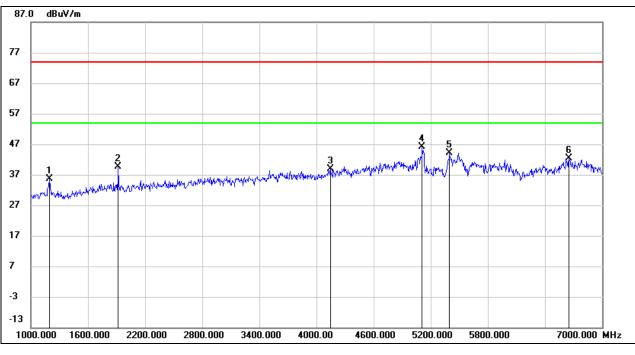
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)







No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1198.000	48.66	-13.00	35.66	74.00	-38.34	peak
2	1918.000	49.71	-10.13	39.58	74.00	-34.42	peak
3	4144.000	41.11	-2.21	38.90	74.00	-35.10	peak
4	5110.000	44.51	1.55	46.06	74.00	-27.94	peak
5	5398.000	42.34	1.88	44.22	74.00	-29.78	peak
6	6652.000	36.84	5.52	42.36	74.00	-31.64	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.

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

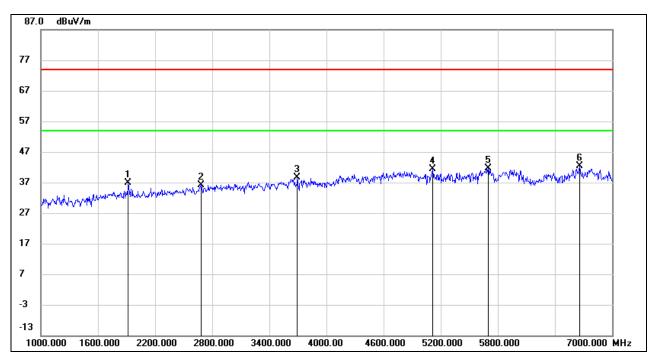
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject 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	1918.000	46.94	-10.13	36.81	74.00	-37.19	peak
2	2680.000	43.44	-7.34	36.10	74.00	-37.90	peak
3	3694.000	42.36	-3.75	38.61	74.00	-35.39	peak
4	5116.000	39.70	1.60	41.30	74.00	-32.70	peak
5	5698.000	39.21	2.49	41.70	74.00	-32.30	peak
6	6658.000	36.93	5.51	42.44	74.00	-31.56	peak

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

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

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

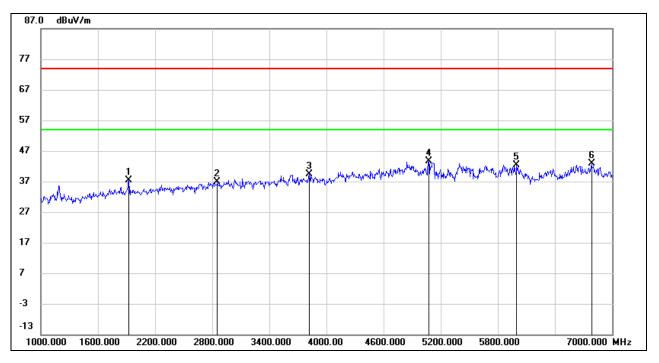
5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	1924.000	47.39	-10.13	37.26	74.00	-36.74	peak
2	2854.000	43.16	-6.30	36.86	74.00	-37.14	peak
3	3820.000	42.68	-3.29	39.39	74.00	-34.61	peak
4	5074.000	42.17	1.34	43.51	74.00	-30.49	peak
5	5998.000	39.19	3.30	42.49	74.00	-31.51	peak
6	6784.000	37.30	5.56	42.86	74.00	-31.14	peak

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

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

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

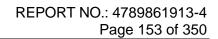
5. For the transmitting duration, please refer to clause 7.1.

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

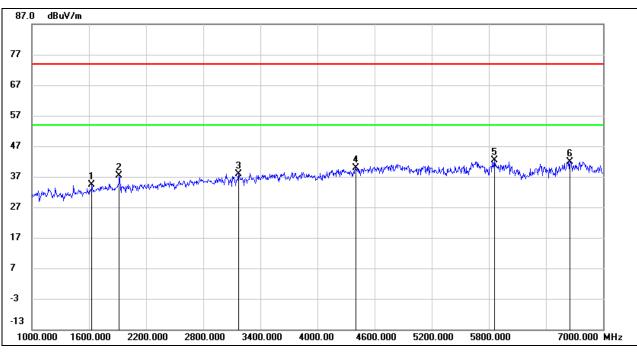
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)







No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1630.000	45.63	-11.33	34.30	74.00	-39.70	peak
2	1918.000	47.44	-10.13	37.31	74.00	-36.69	peak
3	3172.000	43.21	-5.30	37.91	74.00	-36.09	peak
4	4402.000	41.78	-1.85	39.93	74.00	-34.07	peak
5	5860.000	39.55	2.75	42.30	74.00	-31.70	peak
6	6652.000	36.48	5.52	42.00	74.00	-32.00	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

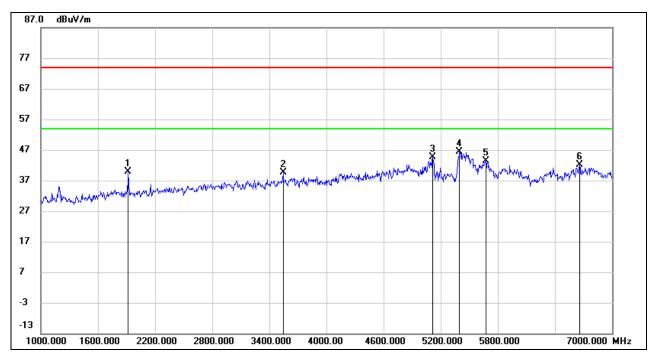
5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	49.92	-10.13	39.79	74.00	-34.21	peak
2	3544.000	44.07	-4.48	39.59	74.00	-34.41	peak
3	5116.000	43.08	1.60	44.68	74.00	-29.32	peak
4	5398.000	44.54	1.88	46.42	74.00	-27.58	peak
5	5674.000	40.92	2.48	43.40	74.00	-30.60	peak
6	6658.000	36.67	5.51	42.18	74.00	-31.82	peak

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

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

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

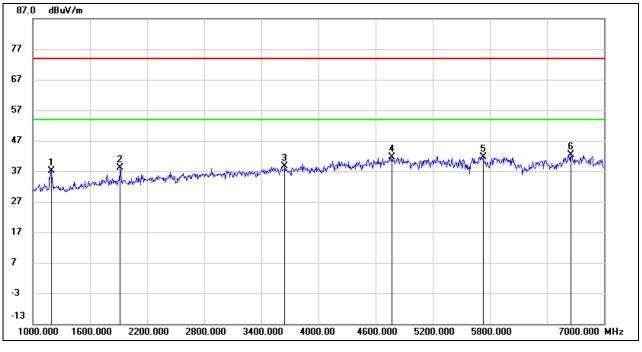
5. For the transmitting duration, please refer to clause 7.1.

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

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1192.000	50.08	-13.03	37.05	74.00	-36.95	peak
2	1918.000	48.24	-10.13	38.11	74.00	-35.89	peak
3	3646.000	42.72	-3.98	38.74	74.00	-35.26	peak
4	4774.000	41.11	0.43	41.54	74.00	-32.46	peak
5	5728.000	39.19	2.49	41.68	74.00	-32.32	peak
6	6652.000	36.89	5.52	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

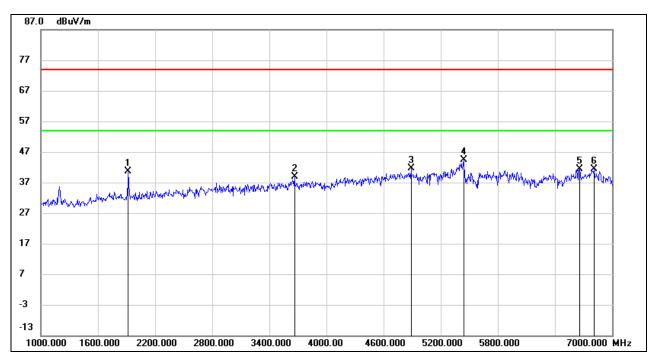
5. For the transmitting duration, please refer to clause 7.1.

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

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	50.76	-10.13	40.63	74.00	-33.37	peak
2	3664.000	42.88	-3.89	38.99	74.00	-35.01	peak
3	4888.000	40.82	0.72	41.54	74.00	-32.46	peak
4	5440.000	42.50	2.00	44.50	74.00	-29.50	peak
5	6658.000	35.77	5.51	41.28	74.00	-32.72	peak
6	6814.000	35.68	5.62	41.30	74.00	-32.70	peak

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

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

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

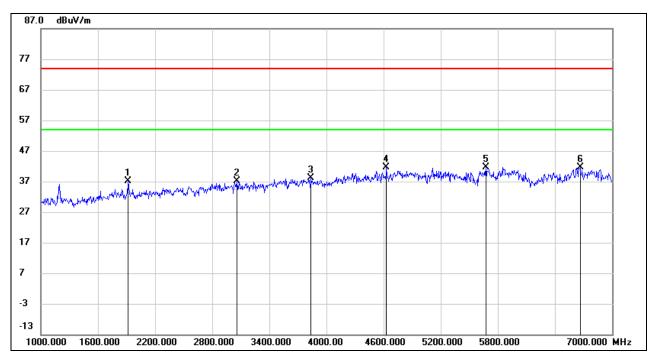
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject 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	1918.000	47.30	-10.13	37.17	74.00	-36.83	peak
2	3058.000	42.59	-5.48	37.11	74.00	-36.89	peak
3	3838.000	41.35	-3.32	38.03	74.00	-35.97	peak
4	4630.000	42.10	-0.38	41.72	74.00	-32.28	peak
5	5674.000	39.22	2.48	41.70	74.00	-32.30	peak
6	6664.000	36.21	5.53	41.74	74.00	-32.26	peak

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

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

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

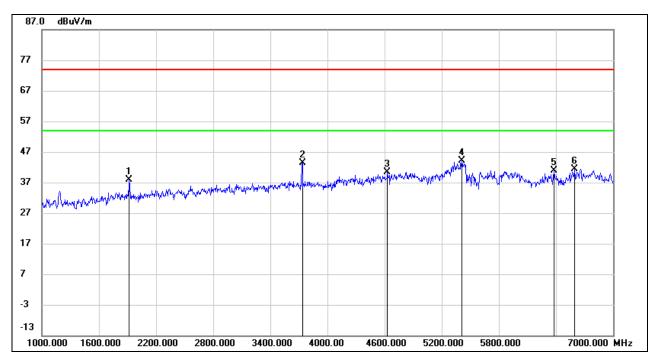
5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	48.02	-10.13	37.89	74.00	-36.11	peak
2	3736.000	47.04	-3.56	43.48	74.00	-30.52	peak
3	4630.000	40.66	-0.38	40.28	74.00	-33.72	peak
4	5410.000	42.24	1.90	44.14	74.00	-29.86	peak
5	6382.000	36.52	4.27	40.79	74.00	-33.21	peak
6	6598.000	35.94	5.49	41.43	74.00	-32.57	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

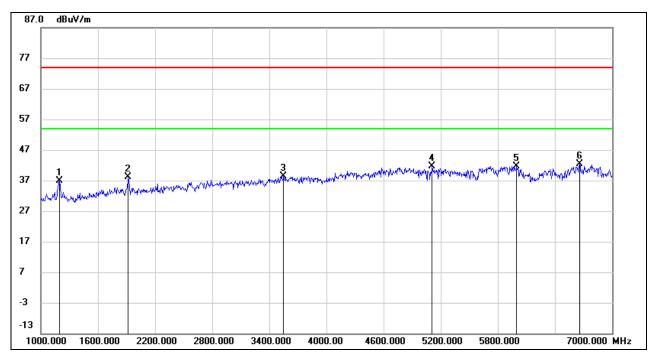
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject 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	1192.000	49.99	-13.03	36.96	74.00	-37.04	peak
2	1918.000	48.27	-10.13	38.14	74.00	-35.86	peak
3	3550.000	42.77	-4.45	38.32	74.00	-35.68	peak
4	5110.000	40.02	1.55	41.57	74.00	-32.43	peak
5	5998.000	38.36	3.30	41.66	74.00	-32.34	peak
6	6658.000	36.98	5.51	42.49	74.00	-31.51	peak

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

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

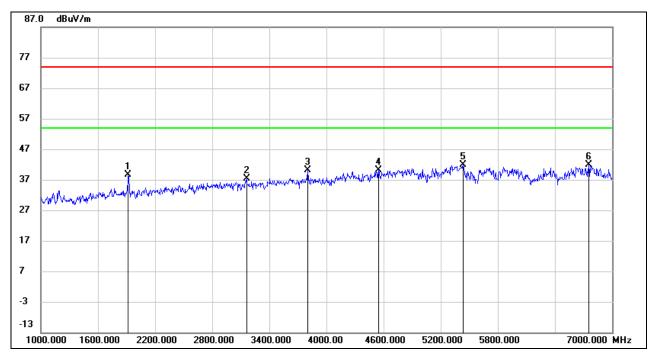
4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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

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

7. 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	48.67	-10.13	38.54	74.00	-35.46	peak
2	3160.000	42.77	-5.32	37.45	74.00	-36.55	peak
3	3802.000	43.38	-3.27	40.11	74.00	-33.89	peak
4	4546.000	41.02	-0.93	40.09	74.00	-33.91	peak
5	5434.000	39.99	1.97	41.96	74.00	-32.04	peak
6	6754.000	36.38	5.56	41.94	74.00	-32.06	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

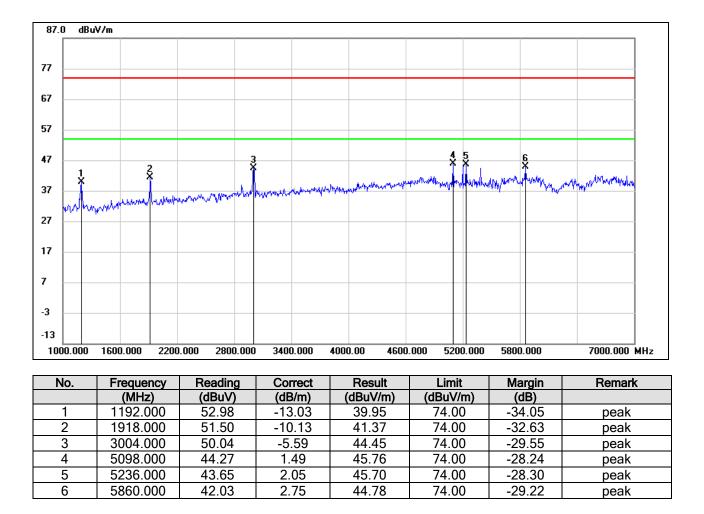
5. For the transmitting duration, please refer to clause 7.1.

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

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.

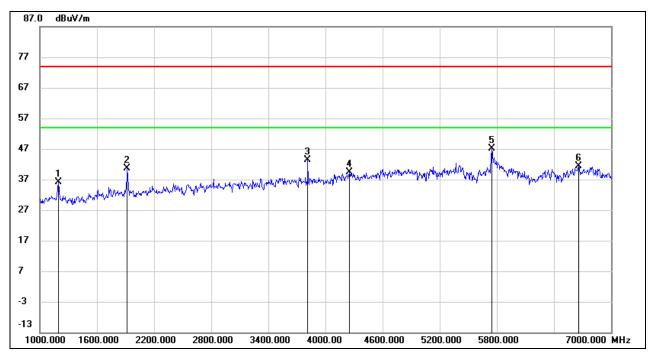
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	1192.000	49.27	-13.03	36.24	74.00	-37.76	peak
2	1918.000	50.67	-10.13	40.54	74.00	-33.46	peak
3	3814.000	46.63	-3.28	43.35	74.00	-30.65	peak
4	4252.000	41.08	-1.73	39.35	74.00	-34.65	peak
5	5746.000	44.57	2.50	47.07	74.00	-26.93	peak
6	6658.000	35.83	5.51	41.34	74.00	-32.66	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.

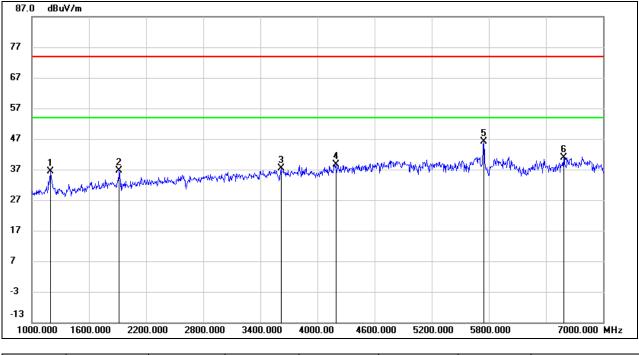
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

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



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	1192.000	49.44	-13.03	36.41	74.00	-37.59	peak
2	1918.000	46.64	-10.13	36.51	74.00	-37.49	peak
3	3616.000	41.48	-4.12	37.36	74.00	-36.64	peak
4	4192.000	40.35	-1.74	38.61	74.00	-35.39	peak
5	5745.000	43.70	2.49	46.19	74.00	-27.81	peak
6	6586.000	35.56	5.41	40.97	74.00	-33.03	peak

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

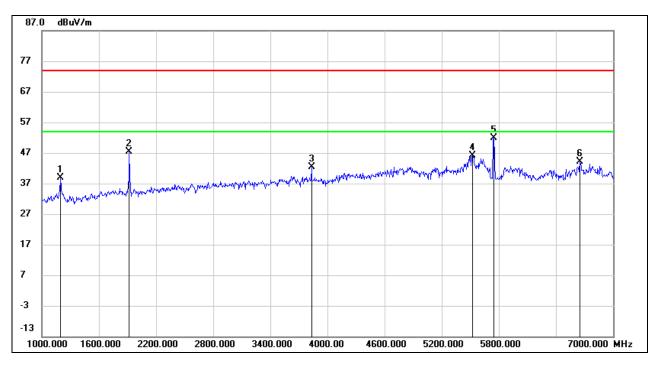
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.

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

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



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	1198.000	51.83	-13.00	38.83	74.00	-35.17	peak
2	1918.000	57.42	-10.13	47.29	74.00	-26.71	peak
3	3832.000	45.62	-3.32	42.30	74.00	-31.70	peak
4	5524.000	43.91	2.23	46.14	74.00	-27.86	peak
5	5745.000	49.51	2.49	52.00	74.00	-22.00	peak
6	6652.000	38.50	5.52	44.02	74.00	-29.98	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

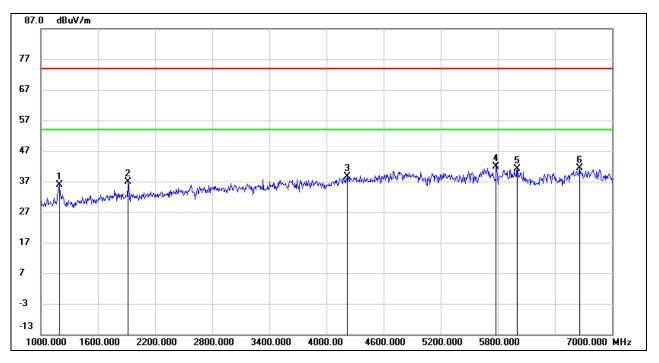
5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject 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	1192.000	48.97	-13.03	35.94	74.00	-38.06	peak
2	1918.000	47.09	-10.13	36.96	74.00	-37.04	peak
3	4216.000	40.32	-1.69	38.63	74.00	-35.37	peak
4	5785.000	39.38	2.50	41.88	74.00	-32.12	peak
5	6004.000	37.95	3.30	41.25	74.00	-32.75	peak
6	6658.000	35.94	5.51	41.45	74.00	-32.55	peak

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

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

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

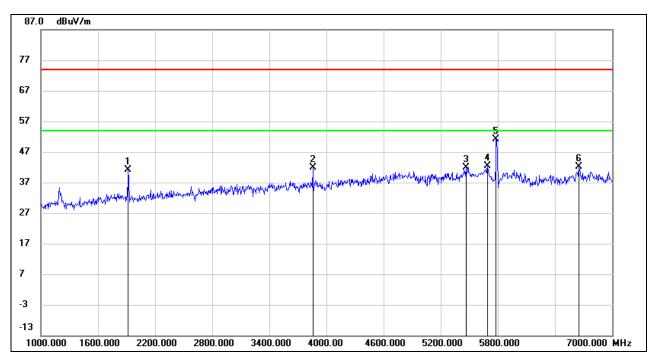
5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	51.32	-10.13	41.19	74.00	-32.81	peak
2	3856.000	45.19	-3.36	41.83	74.00	-32.17	peak
3	5464.000	39.89	2.06	41.95	74.00	-32.05	peak
4	5692.000	39.88	2.47	42.35	74.00	-31.65	peak
5	5785.000	48.75	2.50	51.25	74.00	-22.75	peak
6	6652.000	36.57	5.52	42.09	74.00	-31.91	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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

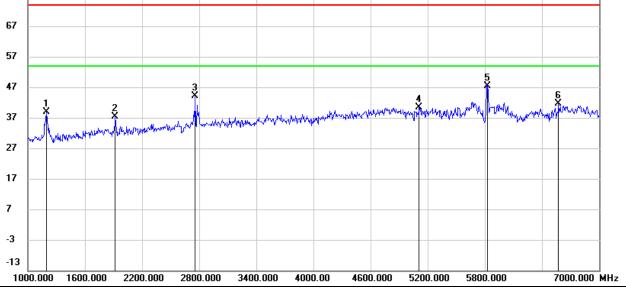
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

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

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1192.000	51.93	-13.03	38.90	74.00	-35.10	peak
2	1918.000	47.40	-10.13	37.27	74.00	-36.73	peak
3	2758.000	51.03	-6.82	44.21	74.00	-29.79	peak
4	5110.000	38.75	1.55	40.30	74.00	-33.70	peak
5	5825.000	44.87	2.61	47.48	74.00	-26.52	peak
6	6574.000	36.31	5.34	41.65	74.00	-32.35	peak

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

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

3. Peak: Peak detector.

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

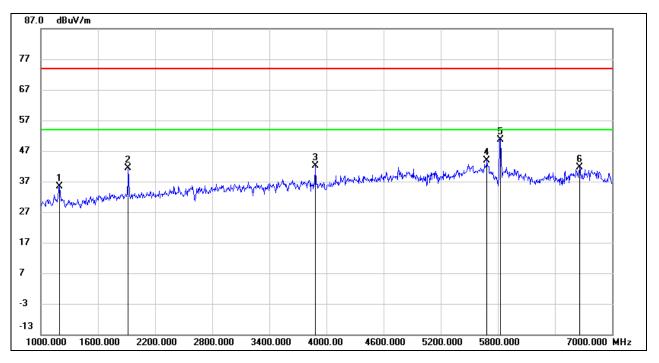
5. For the transmitting duration, please refer to clause 7.1.

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

7. 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	1198.000	48.33	-13.00	35.33	74.00	-38.67	peak
2	1918.000	51.63	-10.13	41.50	74.00	-32.50	peak
3	3886.000	45.59	-3.41	42.18	74.00	-31.82	peak
4	5686.000	41.50	2.47	43.97	74.00	-30.03	peak
5	5825.000	48.06	2.61	50.67	74.00	-23.33	peak
6	6658.000	36.16	5.51	41.67	74.00	-32.33	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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

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

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

8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

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



8.3. SPURIOUS EMISSIONS (7 GHz ~ 18 GHz)

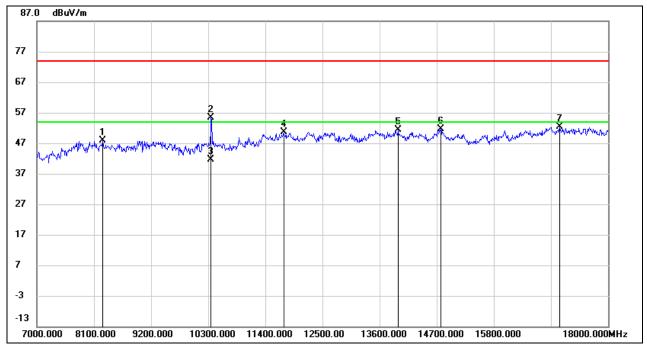
KTC ANTENNA:

8.3.1. 802.11a SISO MODE

ANTENNA 1 TEST RESULTS (WORST CASE)

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	8265.000	38.03	9.73	47.76	74.00	-26.24	peak
2	10355.000	43.45	12.04	55.49	74.00	-18.51	peak
3	10355.000	29.67	12.04	41.71	54.00	-12.29	AVG
4	11752.000	35.28	15.29	50.57	74.00	-23.43	peak
5	13952.000	33.70	17.60	51.30	74.00	-22.70	peak
6	14777.000	33.76	17.96	51.72	74.00	-22.28	peak
7	17065.000	30.77	21.67	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

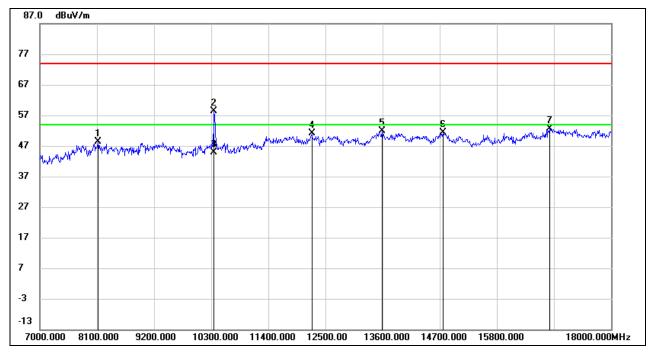
5. For the transmitting duration, please refer to clause 7.1.

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

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8122.000	38.31	10.10	48.41	74.00	-25.59	peak
2	10355.000	46.37	12.04	58.41	74.00	-15.59	peak
3	10355.000	32.78	12.04	44.82	54.00	-9.18	AVG
4	12236.000	35.15	16.01	51.16	74.00	-22.84	peak
5	13589.000	34.73	17.11	51.84	74.00	-22.16	peak
6	14766.000	33.53	17.92	51.45	74.00	-22.55	peak
7	16812.000	31.80	20.81	52.61	74.00	-21.39	peak

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

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

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

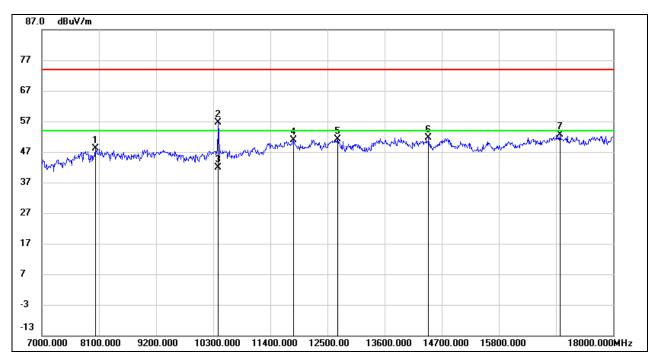
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	8034.000	39.05	9.15	48.20	74.00	-25.80	peak
2	10399.000	44.42	12.23	56.65	74.00	-17.35	peak
3	10399.000	29.73	12.23	41.96	54.00	-12.04	AVG
4	11840.000	35.42	15.35	50.77	74.00	-23.23	peak
5	12698.000	35.57	15.62	51.19	74.00	-22.81	peak
6	14447.000	34.28	17.31	51.59	74.00	-22.41	peak
7	16977.000	31.21	21.31	52.52	74.00	-21.48	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

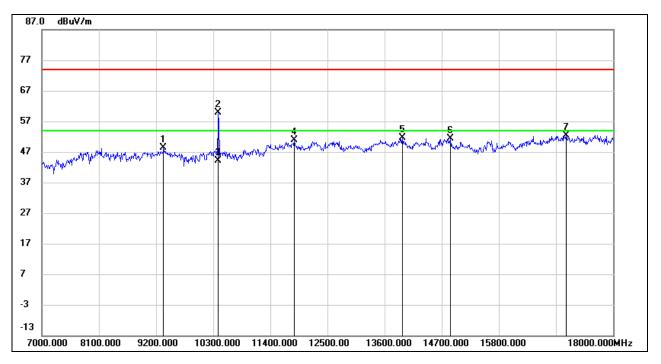
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	9343.000	37.64	10.64	48.28	74.00	-25.72	peak
2	10399.000	47.74	12.23	59.97	74.00	-14.03	peak
3	10399.000	32.02	12.23	44.25	54.00	-9.75	AVG
4	11862.000	35.53	15.41	50.94	74.00	-23.06	peak
5	13941.000	34.03	17.58	51.61	74.00	-22.39	peak
6	14865.000	33.86	17.61	51.47	74.00	-22.53	peak
7	17098.000	30.48	21.89	52.37	74.00	-21.63	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

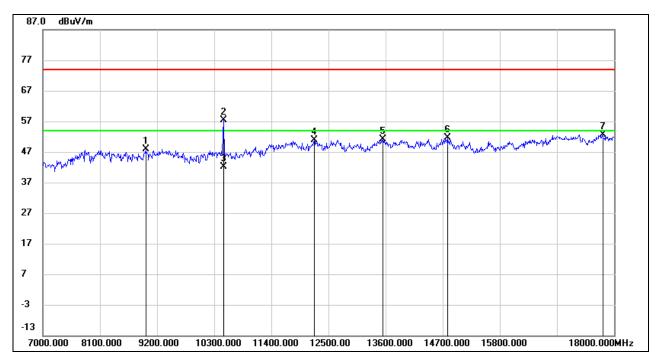
5. For the transmitting duration, please refer to clause 7.1.

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

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8980.000	37.01	10.89	47.90	74.00	-26.10	peak
2	10476.000	45.07	12.33	57.40	74.00	-16.60	peak
3	10476.000	29.92	12.33	42.25	54.00	-11.75	AVG
4	12225.000	34.91	15.99	50.90	74.00	-23.10	peak
5	13545.000	33.93	17.16	51.09	74.00	-22.91	peak
6	14799.000	33.67	18.04	51.71	74.00	-22.29	peak
7	17780.000	28.64	23.94	52.58	74.00	-21.42	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

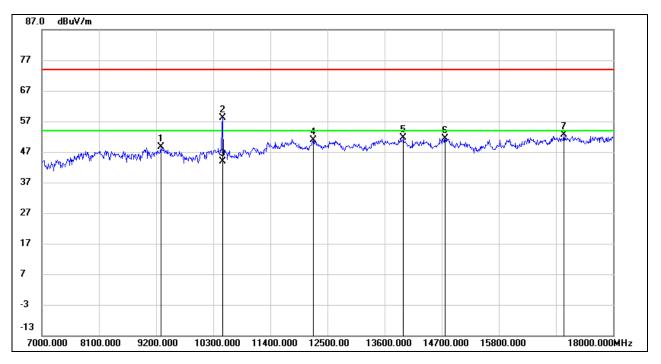
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	9288.000	38.26	10.34	48.60	74.00	-25.40	peak
2	10476.000	45.87	12.33	58.20	74.00	-15.80	peak
3	10476.000	31.55	12.33	43.88	54.00	-10.12	AVG
4	12225.000	34.89	15.99	50.88	74.00	-23.12	peak
5	13963.000	33.92	17.61	51.53	74.00	-22.47	peak
6	14766.000	33.44	17.92	51.36	74.00	-22.64	peak
7	17054.000	31.14	21.59	52.73	74.00	-21.27	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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

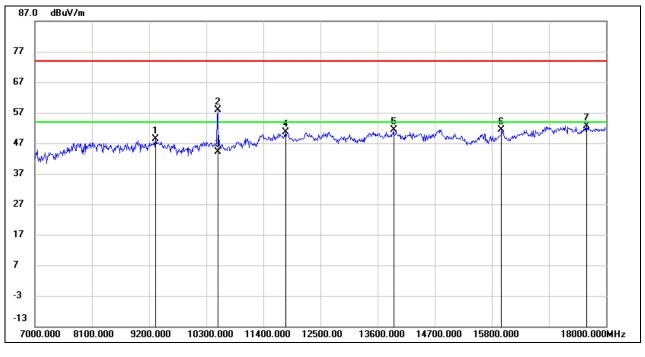
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

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



UNII-2A BAND





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9321.000	37.88	10.52	48.40	74.00	-25.60	peak
2	10520.000	45.50	12.43	57.93	74.00	-16.07	peak
3	10520.000	31.65	12.43	44.08	54.00	-9.92	AVG
4	11829.000	35.31	15.32	50.63	74.00	-23.37	peak
5	13908.000	33.75	17.54	51.29	74.00	-22.71	peak
6	15987.000	33.09	18.37	51.46	74.00	-22.54	peak
7	17626.000	29.77	22.92	52.69	74.00	-21.31	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

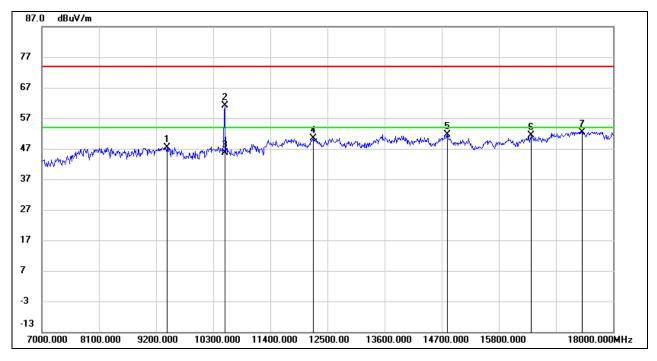
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	9409.000	36.56	10.94	47.50	74.00	-26.50	peak
2	10520.000	48.77	12.43	61.20	74.00	-12.80	peak
3	10520.000	33.22	12.43	45.65	54.00	-8.35	AVG
4	12225.000	34.46	15.99	50.45	74.00	-23.55	peak
5	14810.000	33.70	17.97	51.67	74.00	-22.33	peak
6	16427.000	31.67	19.68	51.35	74.00	-22.65	peak
7	17406.000	30.59	21.88	52.47	74.00	-21.53	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

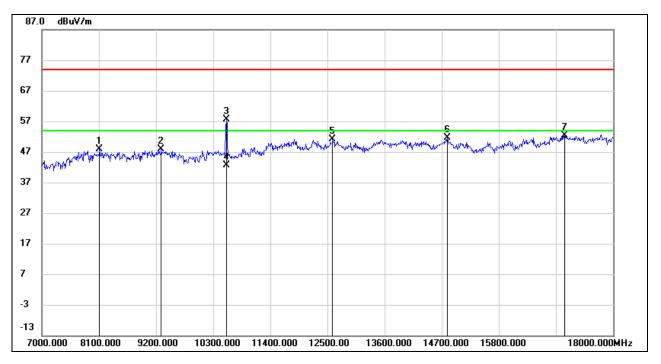
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	37.68	10.14	47.82	74.00	-26.18	peak
2	9299.000	37.49	10.40	47.89	74.00	-26.11	peak
3	10553.000	45.08	12.53	57.61	74.00	-16.39	peak
4	10553.000	30.15	12.53	42.68	54.00	-11.32	AVG
5	12599.000	35.31	15.78	51.09	74.00	-22.91	peak
6	14810.000	33.75	17.97	51.72	74.00	-22.28	peak
7	17065.000	30.65	21.67	52.32	74.00	-21.68	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

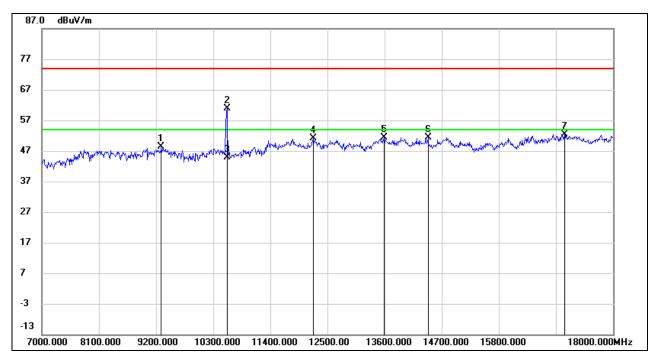
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	9299.000	37.97	10.40	48.37	74.00	-25.63	peak
2	10564.000	48.39	12.57	60.96	74.00	-13.04	peak
3	10564.000	32.27	12.57	44.84	54.00	-9.16	AVG
4	12225.000	35.02	15.99	51.01	74.00	-22.99	peak
5	13589.000	34.19	17.11	51.30	74.00	-22.70	peak
6	14436.000	34.14	17.33	51.47	74.00	-22.53	peak
7	17065.000	30.78	21.67	52.45	74.00	-21.55	peak

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

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

3. Peak: Peak detector.

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

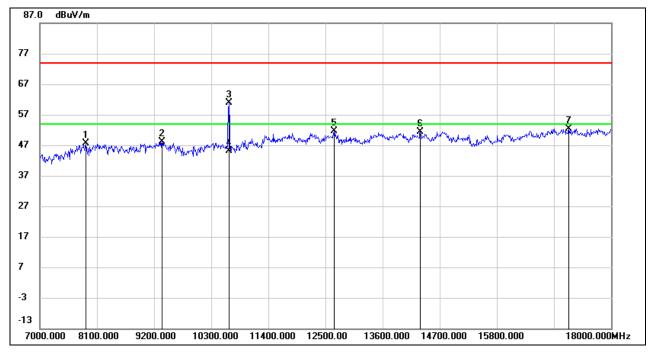
5. For the transmitting duration, please refer to clause 7.1.

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

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	38.62	8.95	47.57	74.00	-26.43	peak
2	9354.000	37.49	10.70	48.19	74.00	-25.81	peak
3	10641.000	48.00	12.77	60.77	74.00	-13.23	peak
4	10641.000	32.34	12.77	45.11	54.00	-8.89	AVG
5	12665.000	35.93	15.68	51.61	74.00	-22.39	peak
6	14326.000	33.46	17.93	51.39	74.00	-22.61	peak
7	17186.000	30.37	21.98	52.35	74.00	-21.65	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

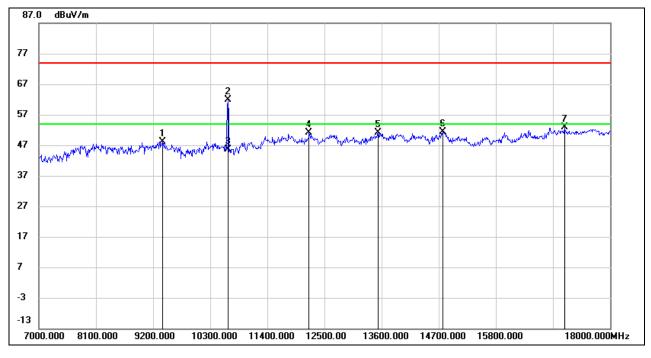
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	9376.000	37.38	10.84	48.22	74.00	-25.78	peak
2	10641.000	49.11	12.77	61.88	68.2	-6.32	peak
3	10641.000	32.78	12.77	/	/	/	AVG
4	12203.000	35.24	15.95	51.19	74.00	-22.81	peak
5	13534.000	34.07	17.18	51.25	74.00	-22.75	peak
6	14777.000	33.40	17.96	51.36	74.00	-22.64	peak
7	17120.000	30.88	21.92	52.80	74.00	-21.20	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.

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

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

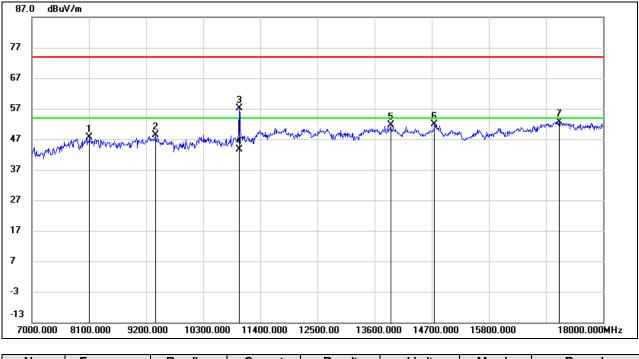
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

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



UNII-2C BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	37.39	10.14	47.53	74.00	-26.47	peak
2	9387.000	37.55	10.89	48.44	74.00	-25.56	peak
3	10993.000	43.80	13.31	57.11	68.2	-11.09	peak
4	10993.000	30.28	13.31	43.59	/	/	AVG
5	13908.000	34.11	17.54	51.65	74.00	-22.35	peak
6	14755.000	34.01	17.88	51.89	74.00	-22.11	peak
7	17153.000	30.66	21.95	52.61	74.00	-21.39	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

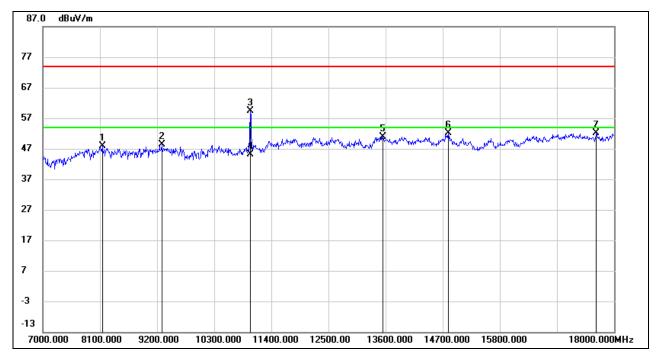
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	8144.000	37.95	10.02	47.97	74.00	-26.03	peak
2	9288.000	37.97	10.34	48.31	74.00	-25.69	peak
3	10993.000	46.10	13.31	59.41	68.2	-8.79	peak
4	10993.000	31.72	13.31	45.03	/	/	AVG
5	13545.000	33.65	17.16	50.81	74.00	-23.19	peak
6	14810.000	34.09	17.97	52.06	74.00	-21.94	peak
7	17659.000	28.87	23.17	52.04	74.00	-21.96	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

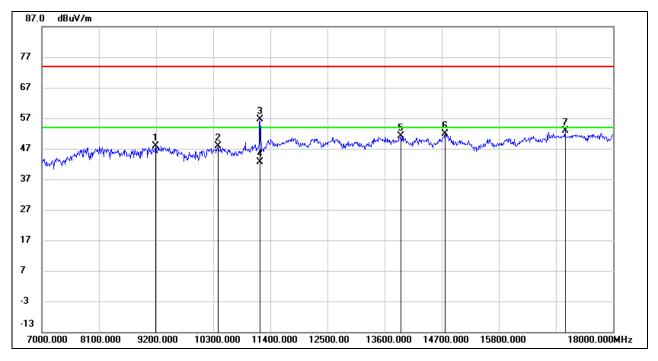
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	9189.000	37.89	9.93	47.82	74.00	-26.18	peak
2	10388.000	35.74	12.18	47.92	74.00	-26.08	peak
3	11202.000	42.74	13.79	56.53	68.2	-11.67	peak
4	11202.000	28.88	13.79	42.67	/	/	AVG
5	13919.000	33.51	17.55	51.06	74.00	-22.94	peak
6	14766.000	34.03	17.92	51.95	74.00	-22.05	peak
7	17076.000	31.04	21.74	52.78	74.00	-21.22	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

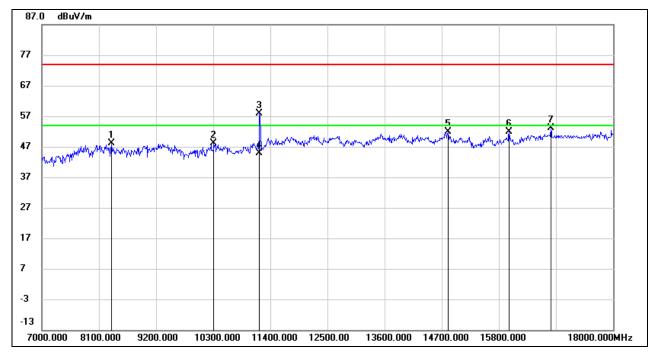
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	8342.000	38.57	9.54	48.11	74.00	-25.89	peak
2	10311.000	36.17	11.86	48.03	74.00	-25.97	peak
3	11191.000	44.22	13.78	58.00	68.2	-10.2	peak
4	11191.000	31.20	13.78	44.98	/	/	AVG
5	14821.000	33.92	17.90	51.82	74.00	-22.18	peak
6	15998.000	33.50	18.42	51.92	74.00	-22.08	peak
7	16801.000	32.31	20.72	53.03	74.00	-20.97	peak

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

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

3. Peak: Peak detector.

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

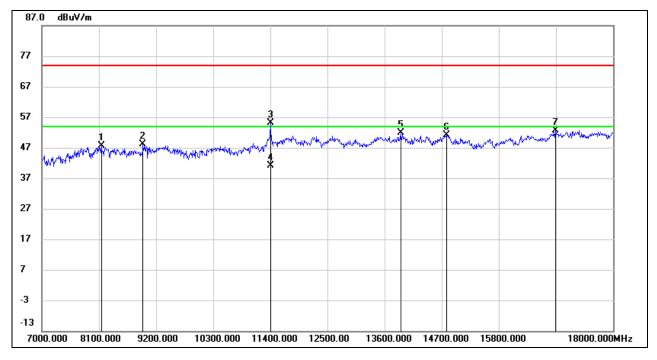
5. For the transmitting duration, please refer to clause 7.1.

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

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8144.000	37.70	10.02	47.72	74.00	-26.28	peak
2	8947.000	37.84	10.27	48.11	74.00	-25.89	peak
3	11400.000	40.30	14.76	55.06	68.2	-13.14	peak
4	11400.000	26.40	14.76	41.16	/	/	AVG
5	13908.000	34.26	17.54	51.80	74.00	-22.20	peak
6	14799.000	33.20	18.04	51.24	74.00	-22.76	peak
7	16889.000	31.24	21.47	52.71	74.00	-21.29	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

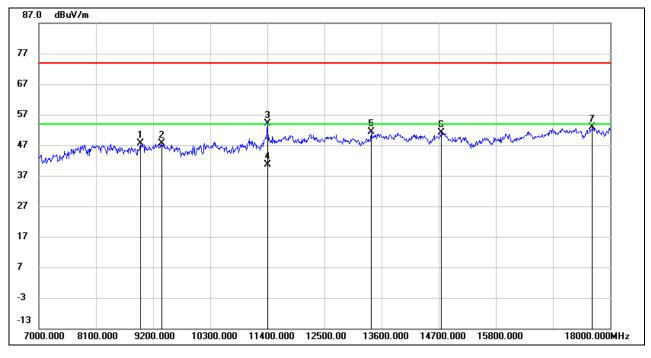
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	8958.000	37.03	10.48	47.51	74.00	-26.49	peak
2	9365.000	36.97	10.77	47.74	74.00	-26.26	peak
3	11400.000	39.47	14.76	54.23	68.2	-13.97	peak
4	11400.000	25.87	14.76	40.63	/	/	AVG
5	13402.000	34.29	17.02	51.31	74.00	-22.69	peak
6	14744.000	33.33	17.84	51.17	74.00	-22.83	peak
7	17659.000	29.59	23.17	52.76	74.00	-21.24	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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

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

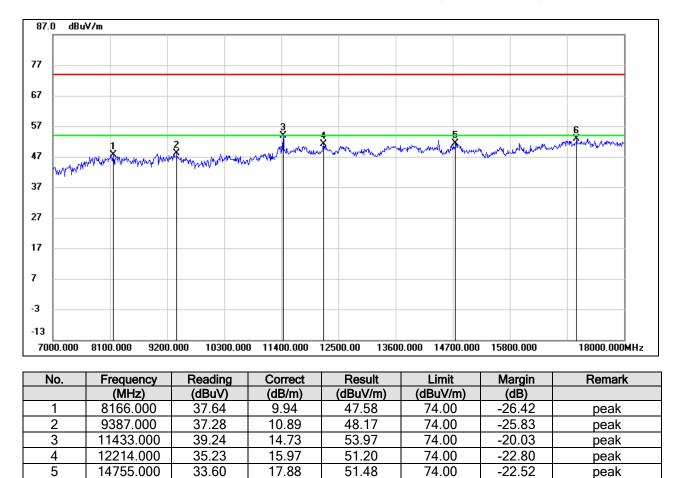
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



5

6

STRADDLE CHANNEL 144



HARMONICS AND SPURIOUS EMISSIONS (HORIZONTAL)

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

33.60

31.15

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

52.96

74.00

74.00

-22.52

-21.04

peak

peak

3. Peak: Peak detector.

14755.000

17087.000

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

17.88

21.81

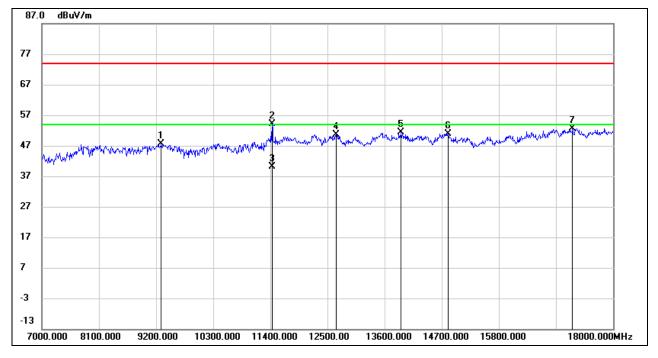
5. For the transmitting duration, please refer to clause 7.1.

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

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



HARMONICS AND SPURIOUS EMISSIONS (VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9299.000	37.13	10.40	47.53	74.00	-26.47	peak
2	11433.000	39.36	14.73	54.09	68.2	-14.11	peak
3	11433.000	25.36	14.73	40.09	/	/	AVG
4	12665.000	35.06	15.68	50.74	74.00	-23.26	peak
5	13919.000	33.81	17.55	51.36	74.00	-22.64	peak
6	14821.000	33.10	17.90	51.00	74.00	-23.00	peak
7	17219.000	30.63	22.11	52.74	74.00	-21.26	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.

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

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

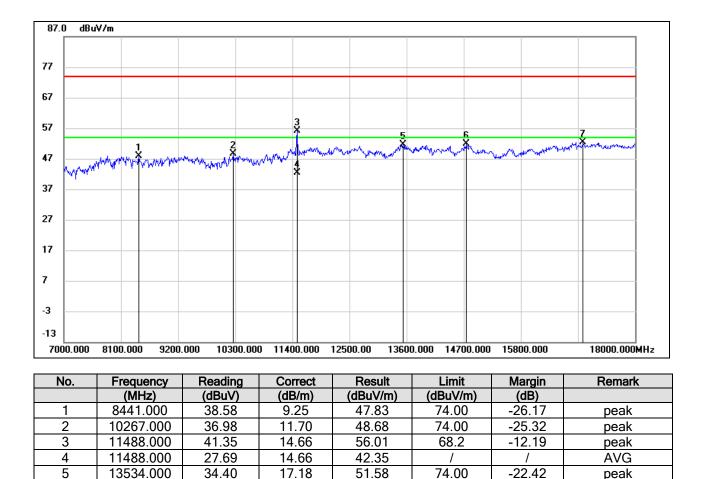
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

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



UNII-3 BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



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

34.00

31.23

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

51.88

52.48

74.00

74.00

-22.12

-21.52

peak

peak

3. Peak: Peak detector.

14755.000

16999.000

6

7

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

17.88

21.25

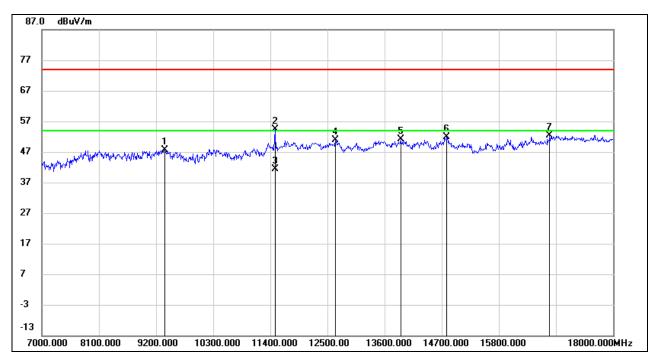
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	9365.000	36.85	10.77	47.62	74.00	-26.38	peak
2	11488.000	39.63	14.66	54.29	68.2	-13.91	peak
3	11488.000	26.71	14.66	41.37	/	/	AVG
4	12654.000	35.12	15.69	50.81	74.00	-23.19	peak
5	13908.000	33.63	17.54	51.17	74.00	-22.83	peak
6	14799.000	33.72	18.04	51.76	74.00	-22.24	peak
7	16779.000	31.93	20.55	52.48	74.00	-21.52	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

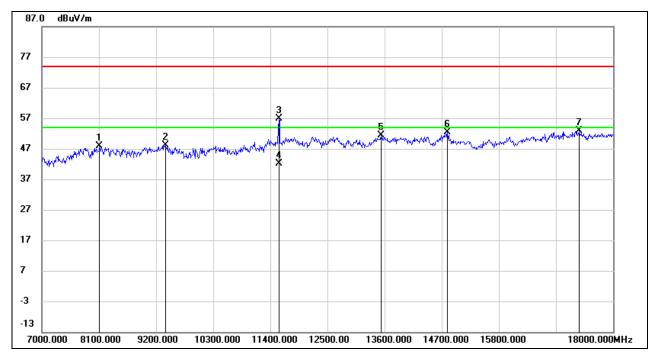
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	37.66	10.14	47.80	74.00	-26.20	peak
2	9387.000	37.19	10.89	48.08	74.00	-25.92	peak
3	11565.000	42.18	14.69	56.87	68.2	-11.33	peak
4	11565.000	27.56	14.69	42.25	/	/	AVG
5	13534.000	34.19	17.18	51.37	74.00	-22.63	peak
6	14810.000	34.39	17.97	52.36	74.00	-21.64	peak
7	17351.000	30.60	22.23	52.83	74.00	-21.17	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

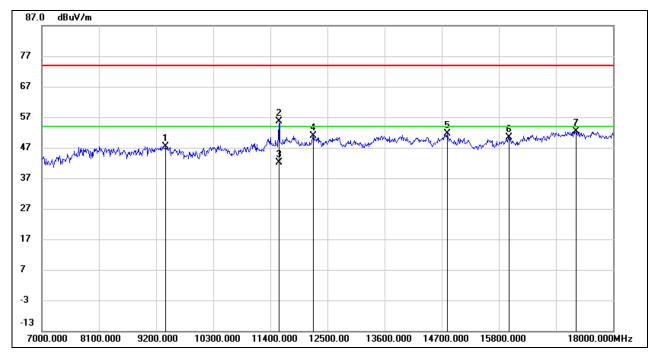
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	9376.000	36.54	10.84	47.38	74.00	-26.62	peak
2	11565.000	40.85	14.69	55.54	68.2	-12.66	peak
3	11565.000	27.53	14.69	42.22	/	/	AVG
4	12225.000	35.01	15.99	51.00	74.00	-23.00	peak
5	14810.000	33.56	17.97	51.53	74.00	-22.47	peak
6	15998.000	31.92	18.42	50.34	74.00	-23.66	peak
7	17285.000	29.75	22.52	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.

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

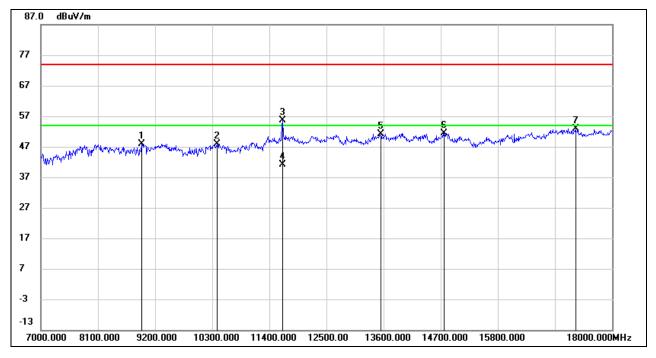
5. For the transmitting duration, please refer to clause 7.1.

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

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8936.000	37.70	10.06	47.76	74.00	-26.24	peak
2	10388.000	35.79	12.18	47.97	74.00	-26.03	peak
3	11653.000	40.55	15.05	55.60	68.2	-12.60	peak
4	11653.000	26.02	15.05	41.07	/	/	AVG
5	13545.000	34.05	17.16	51.21	74.00	-22.79	peak
6	14766.000	33.49	17.92	51.41	74.00	-22.59	peak
7	17296.000	30.28	22.59	52.87	74.00	-21.13	peak

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

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

3. Peak: Peak detector.

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

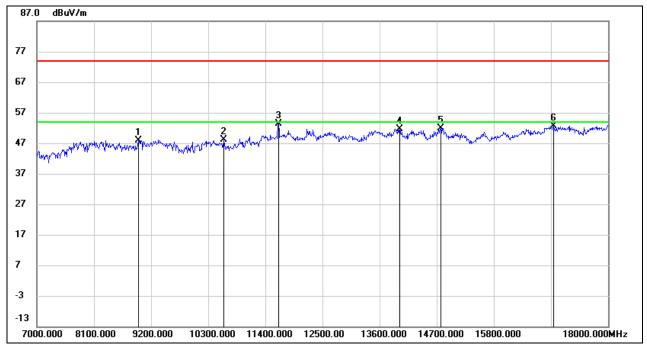
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	8958.000	37.46	10.48	47.94	74.00	-26.06	peak
2	10597.000	35.38	12.68	48.06	74.00	-25.94	peak
3	11653.000	38.43	15.05	53.48	74.00	-20.52	peak
4	13985.000	34.09	17.65	51.74	74.00	-22.26	peak
5	14777.000	33.96	17.96	51.92	74.00	-22.08	peak
6	16955.000	31.34	21.39	52.73	74.00	-21.27	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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

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

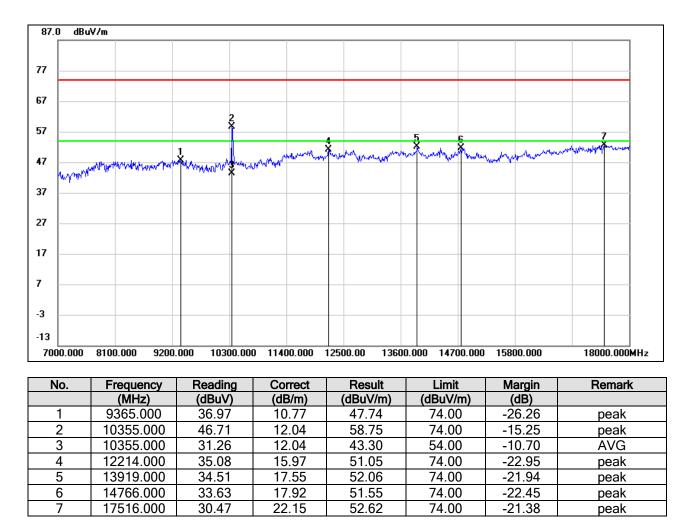
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.



8.3.2. 802.11ac VHT20 MIMO MODE

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

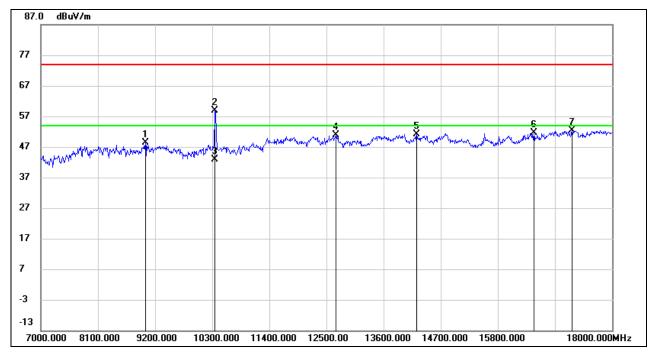
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	9013.000	37.35	11.12	48.47	74.00	-25.53	peak
2	10355.000	46.86	12.04	58.90	74.00	-15.10	peak
3	10355.000	30.91	12.04	42.95	54.00	-11.05	AVG
4	12687.000	35.24	15.64	50.88	74.00	-23.12	peak
5	14238.000	33.15	17.92	51.07	74.00	-22.93	peak
6	16493.000	31.85	19.69	51.54	74.00	-22.46	peak
7	17230.000	30.33	22.17	52.50	74.00	-21.50	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

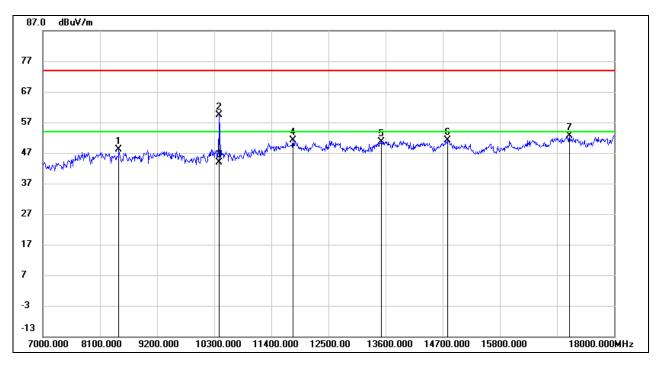
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	8463.000	38.88	9.20	48.08	74.00	-25.92	peak
2	10399.000	47.18	12.23	59.41	74.00	-14.59	peak
3	10399.000	31.53	12.23	43.76	54.00	-10.24	AVG
4	11818.000	35.79	15.29	51.08	74.00	-22.92	peak
5	13523.000	33.49	17.19	50.68	74.00	-23.32	peak
6	14799.000	33.10	18.04	51.14	74.00	-22.86	peak
7	17142.000	30.63	21.93	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

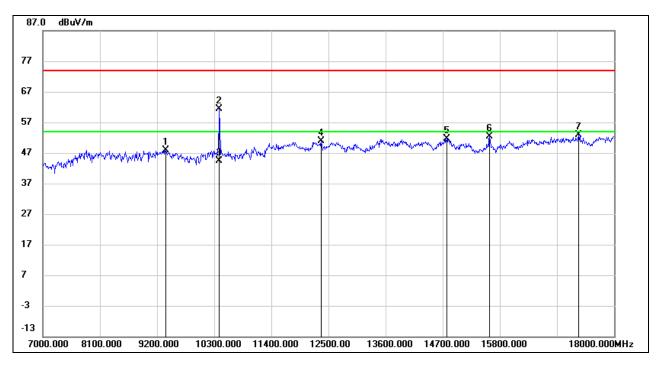
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	9365.000	37.15	10.77	47.92	74.00	-26.08	peak
2	10399.000	49.19	12.23	61.42	74.00	-12.58	peak
3	10399.000	32.27	12.23	44.50	54.00	-9.50	AVG
4	12357.000	34.83	16.01	50.84	74.00	-23.16	peak
5	14777.000	33.74	17.96	51.70	74.00	-22.30	peak
6	15602.000	34.56	17.70	52.26	74.00	-21.74	peak
7	17318.000	30.40	22.47	52.87	74.00	-21.13	peak

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

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

3. Peak: Peak detector.

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

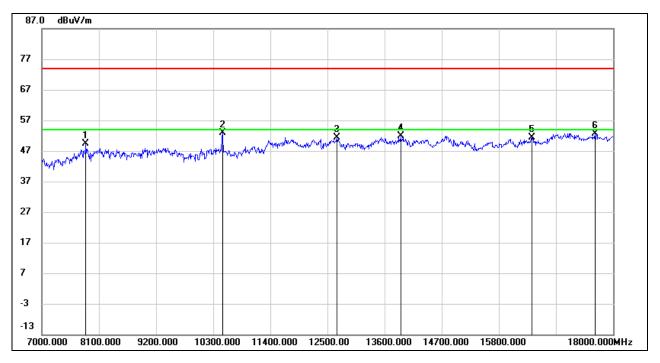
5. For the transmitting duration, please refer to clause 7.1.

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

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7847.000	40.16	9.12	49.28	74.00	-24.72	peak
2	10476.000	40.44	12.33	52.77	74.00	-21.23	peak
3	12687.000	35.76	15.64	51.40	74.00	-22.60	peak
4	13908.000	34.43	17.54	51.97	74.00	-22.03	peak
5	16438.000	31.82	19.68	51.50	74.00	-22.50	peak
6	17648.000	29.64	23.08	52.72	74.00	-21.28	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

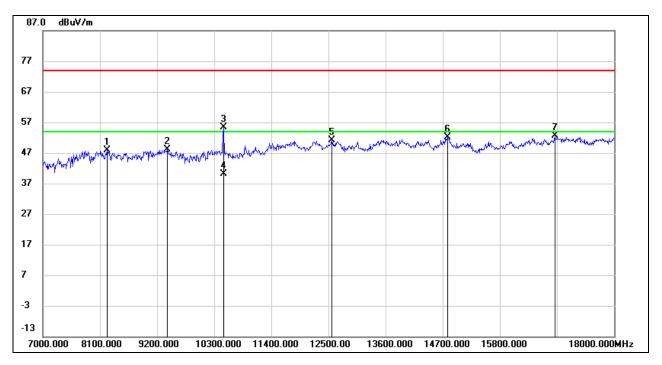
5. For the transmitting duration, please refer to clause 7.1.

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

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



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	8232.000	38.12	9.77	47.89	74.00	-26.11	peak
2	9398.000	37.18	10.96	48.14	74.00	-25.86	peak
3	10476.000	42.97	12.33	55.30	74.00	-18.70	peak
4	10476.000	27.88	12.33	40.21	54.00	-13.79	AVG
5	12566.000	35.38	15.74	51.12	74.00	-22.88	peak
6	14799.000	34.12	18.04	52.16	74.00	-21.84	peak
7	16856.000	31.33	21.19	52.52	74.00	-21.48	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. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

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

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

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