



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

CERTIFICATION TEST REPORT

For

WIFI+BT Module

MODEL NUMBER: DCT2KM2501

FCC ID: 2AC23-DCT2K

IC: 12290A-DCT2K

REPORT NUMBER: 4790160679.2-10

ISSUE DATE: December 7, 2021

Prepared for

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



REPORT NO.: 4790160679.2-10 Page 2 of 334

Revision History

Rev.	Issue Date	Revisions	Revised By
V0	12/07/2021	Initial Issue	_



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

Note:

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

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



TABLE OF CONTENTS

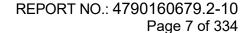
	. ^	ATTESTATION OF TEST RESULTS 7			
2.	Т	TEST METHODOLOGY	8		
3.	F	FACILITIES AND ACCREDITATION	8		
4.	C	CALIBRATION AND UNCERTAINTY	9		
	4.1	1. MEASURING INSTRUMENT CALIBRATION	9		
	4.2	2. MEASUREMENT UNCERTAINTY	9		
5.	E	EQUIPMENT UNDER TEST	10		
	5.1	1. DESCRIPTION OF EUT	10		
	5.2	2. MAXIMUM OUTPUT POWER	11		
	5.3	3. CHANNEL LIST	12		
	5.4	4. TEST CHANNEL CONFIGURATION	13		
	5.5	5. DESCRIPTION OF AVAILABLE ANTENNAS	15		
	5.6	6. THE WORSE CASE POWER SETTING PARAMETER	16		
	5.7	7. THE WORSE CASE CONFIGURATIONS	18		
	5.8	8. DESCRIPTION OF TEST SETUP	19		
6.		MEASURING INSTRUMENT AND SOFTWARE USED	20		
7.	_	ANTENNA PORT TEST RESULTS	22		
•			22		
	7.1				
•	7.1 7.2	1. ON TIME AND DUTY CYCLE	22		
•		1. ON TIME AND DUTY CYCLE 2. 6/26 dB EMISSION BANDWIDTH AND 99 % OCCUPIED BANDWIDTH	22 23		
•	7.2	1. ON TIME AND DUTY CYCLE 2. 6/26 dB EMISSION BANDWIDTH AND 99 % OCCUPIED BANDWIDTH 3. CONDUCTED OUTPUT POWER	22 23 25		
8.	7.2 7.3 7.4	1. ON TIME AND DUTY CYCLE 2. 6/26 dB EMISSION BANDWIDTH AND 99 % OCCUPIED BANDWIDTH 3. CONDUCTED OUTPUT POWER	22 23 25 28		
	7.2 7.3 7.4 F 8.1	1. ON TIME AND DUTY CYCLE	22 23 25 28 30		
	7.2 7.3 7.4 F 8.1	1. ON TIME AND DUTY CYCLE	22 25 28 30 37		
	7.2 7.3 7.4 F 8.1	1. ON TIME AND DUTY CYCLE	22 25 28 30 37 37		
	7.2 7.3 7.4 F 8.1 8 U	1. ON TIME AND DUTY CYCLE	22 25 28 37 37 37 37		
	7.2 7.3 7.4 F 8.1 8.1	1. ON TIME AND DUTY CYCLE	22 25 30 37 37 37 41 45		
	7.2 7.3 7.4 F 8.1 8 U	1. ON TIME AND DUTY CYCLE 2. 6/26 dB EMISSION BANDWIDTH AND 99 % OCCUPIED BANDWIDTH	22 25 30 37 37 37 41 45 50		
	7.2 7.3 7.4 F 8.1 8 U U U U	1. ON TIME AND DUTY CYCLE 2. 6/26 dB EMISSION BANDWIDTH AND 99 % OCCUPIED BANDWIDTH	22 25 30 37 37 37 41 45 50		
	7.2 7.3 7.4 F 8.1 U U U U	1. ON TIME AND DUTY CYCLE 2. 6/26 dB EMISSION BANDWIDTH AND 99 % OCCUPIED BANDWIDTH	22 25 30 37 37 37 41 45 50 50		
	7.2 7.3 7.4 F 8.1 8 U U U U U U U U U U U U U U U U U U	1. ON TIME AND DUTY CYCLE	22 25 30 37 37 41 45 50 50 54 50		
	7.2 7.3 7.4 F 8.1 8 U U U U U U U U U U U U U U U U U U	1. ON TIME AND DUTY CYCLE 2. 6/26 dB EMISSION BANDWIDTH AND 99 % OCCUPIED BANDWIDTH	22 25 30 37 37 41 50 50 50 54 50		



UNII-2C BAND	71
UNII-3 BAND	
8.1.4. 802.11ac VHT80 MIMO MODE	76
UNII-1 BAND	76
UNII-2A BAND	
UNII-2C BAND	
UNII-3 BAND	83
8.2. SPURIOUS EMISSIONS (1 GHz ~ 7 GHz)	84
8.2.1. 802.11n HT20 MIMO MODE	
UNII-1 BAND	
UNII-2A BAND	
UNII-2C BAND	
STRADDLE CHANNEL 144	
UNII-3 BAND	104
8.3. SPURIOUS EMISSIONS (7 GHz ~ 18 GHz)	110
8.3.1. 802.11a 20 SISO MODE	
UNII-1 BAND	
UNII-2A BAND	
UNII-2C BAND	
STRADDLE CHANNEL 144	
UNII-3 BAND	
8.3.2. 802.11n HT20 MIMO MODE	
UNII-1 BAND	
UNII-2A BAND	
UNII-2C BAND	
STRADDLE CHANNEL 144	154
UNII-3 BAND	156
8.3.3. 802.11n HT40 MIMO MODE	
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-2A BANDUNII-2C BAND	
STRADDLE CHANNEL 138	100
UNII-3 BAND	
8.4. SPURIOUS EMISSIONS (18 GHz ~ 26 GHz)	
8.4.1. 802.11n HT20 MODE	194
8.5. SPURIOUS EMISSIONS (26 GHz ~ 40 GHz)	196
8.5.1. 802.11n HT20 MODE	
8.6. SPURIOUS EMISSIONS (30 MHz ~ 1 GHz)	198 100
8.7. SPURIOUS EMISSIONS BELOW 30 MHz	
8.7.1. 802.11n HT20 MODE	200
A O DOMED LINE CONDUCTED ENGOSONS	
. AC POWER LINE CONDUCTED EMISSIONS	203



9.1.1. 802.11n HT20 MODE	204
10. FREQUENCY STABILITY	206
11. DYNAMIC FREQUENCY SELECTION	208
12. ANTENNA REQUIREMENTS	212
12.1. Appendix A1: Emission Bandwidth	213
12.1.1. Test Result	
12.1.2. Test Graphs	215
12.2. Appendix A2: Occupied channel bandwidth	243
12.2.1. Test Result	
12.2.2. Test Graphs	245
12.3. Appendix A3: Min emission bandwidth	273
12.3.1. Test Result	
12.3.2. Test Graphs	
12.4. Appendix B: Maximum conducted output power	283
12.4.1. Test Result	
12.4.2. Test Graphs	
12.5. Appendix C: Maximum power spectral density	202
12.5.1. Test Result	
12.5.2. Test Graphs	
12.6. Appendix D: Duty Cycle	
12.6.1. Test Result	
12.6.2. Test Graphs	
12.7. Appendix E: Channel Move Time and Channel Closing Transn 12.7.1. Test Result	
12.7.2. Test Result	
12.8. Appendix F: Non-Occupancy Period	
12.8.1. Test Graphs	
12.9. Appendix G: Frequency Stability	
12.9.1. Test Result	333





1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Hui Zhou Gaoshengda Technology Co.,LTD

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

Avenue, Huizhou City, Guangdong, China

Manufacturer Information

Company Name: Hui Zhou Gaoshengda Technology Co.,LTD

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

Avenue, Huizhou City, Guangdong, China

EUT Information

EUT Name: WIFI+BT Module Model: DCT2KM2501

Brand: GSD

Sample Received Date: October 28, 2021

Sample Status: Normal Sample ID: 4347117

Date of Tested: October 28 ,2021 ~ November 10, 2021

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

Prepared By:	Checked By:	
kelo. zhang.	Shemales	
Kebo Zhang Project Engineer	Shawn Wen Laboratory Leader	

Approved By:

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 v01r01, KDB 662911 D01 Multiple Transmitter Output v02r01, KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02, KDB 905462 D03 UNII clients without radar detection New Rules v01r02, KDB 905462 D04 Operational Modes for DFS Testing New Rules v01 and KDB 905462 D06 802 11 Channel Plans New Rules v02.

3. FACILITIES AND ACCREDITATION

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

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

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

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



4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. MEASUREMENT UNCERTAINTY

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

Test Item	Uncertainty
Conduction emission	3.62 dB
Radiated Emission (Included Fundamental Emission) (9 kHz ~ 30 MHz)	2.2 dB
Radiated Emission (Included Fundamental Emission) (30 MHz ~ 1 GHz)	4.00 dB
D # 4 15 1 1	5.78 dB (1 GHz-18 GHz)
Radiated Emission (Included Fundamental Emission) (1 GHz to 40 GHz)	5.23dB (18 GHz-26 GHz)
(5.64 dB (26 GHz-40 GHz)

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



5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name	WIFI+BT Module
Model	DCT2KM2501
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	IEEE 802.11a 20: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac VHT20: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac VHT40: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac VHT80: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
Power Supply	DC 3.3 V



5.2. MAXIMUM OUTPUT POWER

UNII-1 BAND(FCC&ISED)

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)	Max Average EIRP (dBm)
a 20	5180 ~ 5240	14.33	18.33
n HT20	5180 ~ 5240	13.00	17.00
n HT40	5190 ~ 5230	15.80	19.80
ac VHT20	5180 ~ 5240	Covered by 802.11n H	T20
ac VHT40	5190 ~ 5230	Covered by 802.11n H	T40
ac VHT80	5210	15.80	19.80

UNII-2A BAND(FCC&ISED)

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
a 20	5260 ~ 5320	14.24
n HT20	5260 ~ 5320	17.10
n HT40	5270 ~ 5310	16.90
ac VHT20	5260 ~ 5320	Covered by 802.11n HT20
ac VHT40	5270 ~ 5310	Covered by 802.11n HT40
ac VHT80	5290	14.90

UNII-2C BAND(FCC&ISED)

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
a 20	5500 ~ 5720	14.63
n HT20	5500 ~ 5720	17.10
n HT40	5510 ~ 5710	16.90
ac VHT20	5500 ~ 5720	Covered by 802.11n HT20
ac VHT40	5510 ~ 5710	Covered by 802.11n HT40
ac VHT80	5530 ~ 5690	15.80

UNII-3 BAND(FCC&ISED)

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
a 20	5745 ~ 5825	15.21
n HT20	5745 ~ 5825	17.30
n HT40	5755 ~ 5795	16.90
ac VHT20	5745 ~ 5825	Covered by 802.11n HT20
ac VHT40	5755 ~ 5795	Covered by 802.11n HT40
ac VHT80	5775	15.80



5.3. CHANNEL LIST

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

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

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

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



5.4. TEST CHANNEL CONFIGURATION

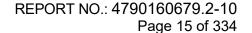
UNII-1 Test Channel Configuration			
IEEE Std.	Test Channel Number	Frequency	
802.11a	CH 36(Low Channel), CH 40(MID Channel), CH 48(High Channel)	5180 MHz, 5200 MHz, 5240 MHz	
802.11n HT20	CH 36(Low Channel), CH 40(MID Channel), CH 48(High Channel)	5180 MHz, 5200 MHz, 5240 MHz	
802.11n HT40	CH 38(Low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

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

UNII-2C Test Channel Configuration				
IEEE Std.	Test Channel Number	Frequency		
802.11a	CH 100(Low Channel), CH 120(MID Channel), CH 140(High Channel)	5500 MHz, 5600 MHz, 5700 MHz		
802.11n HT20	CH 100(Low Channel), CH 120(MID Channel), CH 140(High Channel)	5500 MHz, 5600 MHz, 5700 MHz		
802.11n HT40	CH 102(Low Channel), CH 118(MID Channel), CH 134(High Channel)	5510 MHz, 5590 MHz, 5670 MHz		
802.11ac VHT20	CH 100(Low Channel), CH 120(MID Channel), CH 140(High Channel)	5500MHz, 5600 MHz, 5700MHz		
802.11ac VHT40	CH 102(Low Channel), CH 118(MID Channel), CH 134(High Channel)	5510 MHz, 5590 MHz, 5670 MHz		
802.11ac VHT80	CH 102(Low Channel), CH 122(High Channel)	5530 MHz, 5610 MHz		



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





5.5. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna No.	Frequency Band	Antenna Type	Max Antenna Gain (dBi)
1	5180~5825	PCB	4
2	5180~5825	PCB	4

The EUT support Cyclic Shift Diversity(CDD) mode.

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

For output power measurements:

Directional gain= GANT + Array Gain = 4 dBi

G_{ANT}: equal to the gain of the antenna having the highest gain

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \le 4$

For power spectral density (PSD) measurements:

Directional gain= Gant + Array Gain = 7 dBi

Array Gain = 10 log(Nant/Nss) dB. Nant : number of transmit antennas

Nss: number of spatial streams, The worst case directional gain will occur when Nss = 1

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

Note:

- 1. BT&WLAN 2.4G & WLAN 5G can't transmit simultaneously. (declared by client)
- 2. Only 802.11a mode does not support MIMO mode.
- 3. The value of the antenna gain was declared by customer.



5.6. THE WORSE CASE POWER SETTING PARAMETER

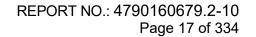
The Worse Case Power Setting Parameter		
Test Software	QA tool	

UNII-1

Mode	Pate	Rate Channel Soft set value ANT 1 ANT 2		et value
Wiode	Nate			ANT 2
		36	20	1E
11a 20	6M	40	20	1E
		48	20	1E
		36	17	16
11ac VHT20	MCS0	40	17	16
		48	17	16
11aa \ / UT 10	MCCO	38	1D	1D
11ac VHT40	MCS0	46	1B	1B
11ac VHT80	MCS0	42	20	20

UNII-2A

Mode	Data	Channel	Soft set value		
Mode	Rate	Channel	ANT 1	ANT 2	
		52	1E	1E	
11a 20	6M	56	1E	1E	
		64	1E	1E	
		52	1E	1E	
11ac VHT20	MCS0	56	1E	1E	
		64	1E	1E	
11ac VHT40	MCS0	54	1E	1E	
TIAC VITTAU		62	1E	1E	
11ac VHT80	MCS0	58	1E	1E	





UNII-2C

Mode	Rate	Channel	Soft se	et value
iviode	Nate	Charmer	ANT 1	ANT 2
		100	20	1E
11a 20	6M	116	20	1E
1 1a 20	Olvi	140	20	1E
		144	20	1E
		100	1E	1E
11ac VHT20	MCS0	116	1E	1E
Trac VIII20		140	1E	1E
		144	1E	1E
		102	1E	1E
11ac VHT40	MCS0	118	1E	1E
Trac VIII40		134	1E	1E
		142	1E	1E
11ac VHT80		106	20	20
	MCS0	122	20	20
		138	20	20

UNII-3

Mode	Data	Channal	Soft set value		
Mode	Rate	Rate Channel		ANT 2	
		149	21	1F	
11a 20	6M	157	21	1F	
		165	21	1F	
		149	1F	1F	
11ac VHT20	MCS0	157	1F	1F	
		165	1F	1F	
11ac VHT40	MCS0	151	1F	1F	
TIAC VITTAU		159	1F	1F	
11ac VHT80	MCS0	155	21	21	



5.7. THE WORSE CASE CONFIGURATIONS

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

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

Test channels referring to section 5.4.

Maximum power setting referring to section 5.6.

Worst case Data Rates declared by the customer:

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

802.11ac VHT20 and VHT40 mode are different from 802.11nHT20 and HT40 only in control messages, so for these 4 modes, only 802.11n HT20 and 802.11n HT40 worst case power modes radiated emission test data are recorded in the report.

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

802.11a mode does not support MIMO mode.

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

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

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

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

The EUT support Cyclic Shift Diversity(CDD), Space Time Coding(STBC), Spartial Division Multiplexing(SDM) modes. They use the same conducted power per chain in any given mode, CDD mode have the maximum power setting, so we only chose the worst case mode CDD for final testing.



5.8. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	Remarks
1	Laptop	Lenovo	XIAOXIN 5000	1
2	UART	1	1	1
3	AC Adapter	Lenovo	ADLX65YCC3D	Input: 100-240 Vac, 50/60 Hz Output: 20 Vdc, 3.25A

I/O CABLES

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

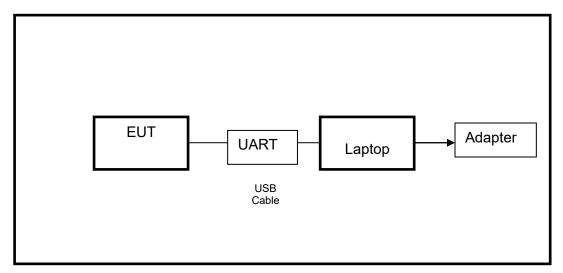
ACCESSORIES

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

TEST SETUP

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

SETUP DIAGRAM FOR TESTS



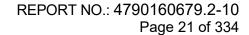
Note: AC adapter only use for AC POWER LINE CONDUCTED EMISSIONS testing.



6. MEASURING INSTRUMENT AND SOFTWARE USED

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

	Radiated Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date	
MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Nov. 12, 2020	Nov. 11, 2021	
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130959	April 24, 2020	April 23, 2023	
Preamplifier	HP	8447D	2944A09099	Nov. 12, 2020	Nov. 11, 2021	
EMI Measurement Receiver	R&S	ESR26	101377	Nov. 12, 2020	Nov. 11, 2021	
Horn Antenna	TDK	HRN-0118	130940	Jul. 20, 2021	Jul. 19, 2024	
Preamplifier	TDK	PA-02-0118	TRS-305- 00067	Nov. 20, 2020	Nov. 19, 2021	
Horn Antenna	Schwarzbeck	BBHA9170	#697	July 20, 2021	July 19, 2024	
Preamplifier	TDK	PA-02-2	TRS-307- 00003	Nov. 12, 2020	Nov. 11, 2021	
Preamplifier	TDK	PA-02-3	TRS-308- 00002	Nov. 12, 2020	Nov. 11, 2021	
Loop antenna	Schwarzbeck	1519B	80000	Jan.17, 2019	Jan.17,2022	
Preamplifier	TDK	PA-02-001- 3000	TRS-302- 00050	Nov. 12, 2020	Nov. 11, 2021	
Preamplifier	Mini-Circuits	ZX60-83LN- S+	SUP01201941	Nov. 20, 2020	Nov. 19, 2021	
Highpass Filter	Wainwright	WHKX10- 5850-6500- 1800-40SS	4	Nov. 12, 2020	Nov. 11, 2021	
Band Reject Filter	Wainwright	WRCJV12- 5695-5725- 5850-5880- 40SS	4	Nov. 12, 2020	Nov. 11, 2021	
Band Reject Filter	Wainwright	WRCJV20- 5120-5150- 5350-5380-	2	Nov. 12, 2020	Nov. 11, 2021	





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

R&S TS 8997 Test System						
Equipment	Manufacturer	Model No.	Serial No.	Last	Cal.	Due. Date
Power sensor, Power Meter	R&S	OSP120	100921	Mar.2	3,2021	Mar.24,2022
Vector Signal Generator	R&S	SMBV100A	261637	Nov.2	0,2020	Nov.19,2021
Signal Generator	R&S	SMB100A	178553	Nov.2	0,2020	Nov.19,2021
Signal Analyzer	R&S	FSV40	101118	Nov.2	0,2020	Nov.19,2021
Software						
Description	Manufacturer		Name '		\	/ersion
For R&S TS 8997 Test Syste	em Rohde &	Schwarz	EMC 3	32	1	0.60.10



7. ANTENNA PORT TEST RESULTS

7.1. ON TIME AND DUTY CYCLE

LIMITS

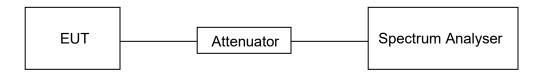
None; for reporting purposes only.

PROCEDURE

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

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

TEST SETUP



TEST ENVIRONMENT

Temperature	27.4 °C	Relative Humidity	54.1 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

RESULTS

Please refer to appendix D.



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

LIMITS

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

TEST PROCEDURE

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

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

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

a) Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.

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

For Example: Fundamental Frequency: 5720 MHz

99 % OBW: 21.00 MHz

b) Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6/26 dB relative to the maximum level measured in the fundamental emission.



Turning Frequency: 5725 MHz

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

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

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

For Example: Fundamental frequency: 5720 MHz

26 dB BW: 20.00 MHz

FL: 5710.16 MHz FH: 5730.16 MHz

Turning Frequency: 5725 MHz

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

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

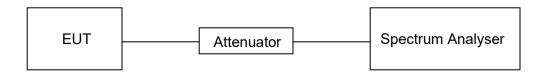
For Example: Fundamental frequency: 5720 MHz

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

Turning Frequency: 5725 MHz

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

TEST SETUP



TEST ENVIRONMENT

Temperature	27.4 °C	Relative Humidity	54.1 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

RESULTS

Please refer to Appendix A1&A2&A3.



7.3. CONDUCTED OUTPUT POWER

LIMITS

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

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

Note:

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



TEST PROCEDURE

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

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

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

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

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

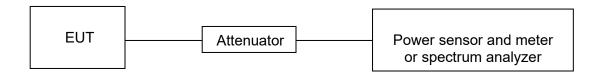
Method PM-G (Measurement using a gated RF average power meter):

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	27.4 °C	Relative Humidity	54.1 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

RESULTS

Please refer to Appendix B.



7.4. POWER SPECTRAL DENSITY

LIMITS

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

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

Note:

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

TEST PROCEDURE

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



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

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

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

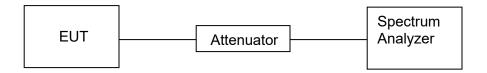
For U-NII-3:

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

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

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

TEST SETUP



TEST ENVIRONMENT

Temperature	27.4 °C	Relative Humidity	54.1 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

RESULTS

Please refer to Appendix C.



8. RADIATED TEST RESULTS

LIMITS

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

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

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

Emissions radiated outside of the specified frequency bands above 30 MHz			
Frequency Range	Field Strength Limit	Field Stren	gth Limit
(MHz)	(uV/m) at 3 m	(dBuV/m)	at 3 m
		Quasi-l	Peak
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	
Above 1000	500	Peak	Average
Above 1000	Above 1000 500	74	54

FCC Emissions radiated outside of the specified frequency bands below 30 MHz			
Frequency (MHz)	uency (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 - 3.028	162.0125 - 167.17	13.25 - 13.4
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5
4.17725 - 4.17775	240 – 285	15.35 - 16.2
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4
5.677 - 5.683	399.9 - 410	22.01 - 23.12
6.215 - 6.218	608 - 614	23.6 - 24.0
6.26775 - 6.26825	960 - 1427	31.2 - 31.8
8.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5
8.291 - 8.294	1645.5 - 1646.5	Above 38.6
8.382 - 8.388	1680 - 1710	
8.37625 - 8.38675	1718.8 - 1722.2	
8.41425 - 8.41475	2200 - 2300	
12.29 - 12.293	2310 - 2390	
12.51975 - 12.52025	2483.5 - 2500	
12.57675 - 12.57725	2655 - 2900	
13.36 - 13.41	3280 - 3287	
16.42 - 16.423	3332 - 3339	
16.69475 - 16.69525	3345.8 - 3358	
16.80425 - 16.80475	3500 - 4400	
25.5 - 25.67	4500 - 5150	
37.5 - 38.25	5350 - 5480	
73 - 74.6	7250 - 7750	
74.8 - 75.2	8025 - 8500	
108 – 138		

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

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
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



REPORT NO.: 4790160679.2-10 Page 32 of 334

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)	EIRP LIIIIIL	(dBuV/m) at 3 m	
5150~5250 MHz		PK:68.2(dBµV/m)	
5250~5350 MHz	PK: -27 (dBm/MHz)		
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	
3723°3630 WI IZ	PK: 15.6 (dBm/MHz) *3	PK: 110.8(dBµV/m) *3	
	PK: 27 (dBm/MHz) *4 PK: 122.2 (dBµV/m) *4		

Note:

^{*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.

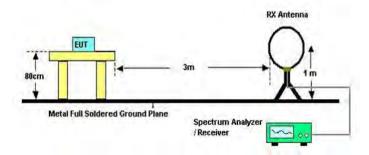
^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

^{*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



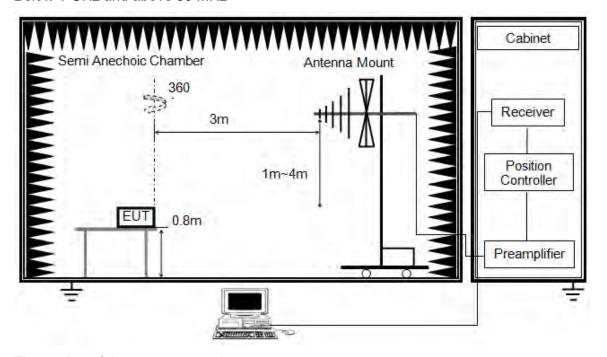
The setting of the spectrum analyser

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

- 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.



Below 1 GHz and above 30 MHz



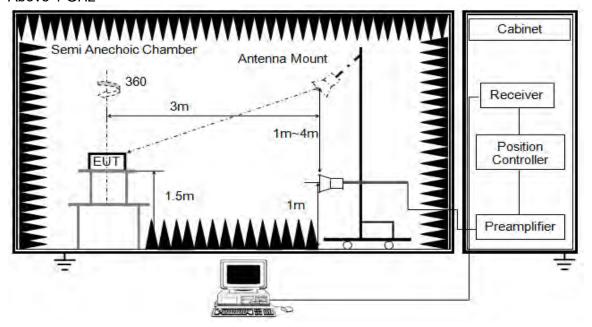
The setting of the spectrum analyser

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



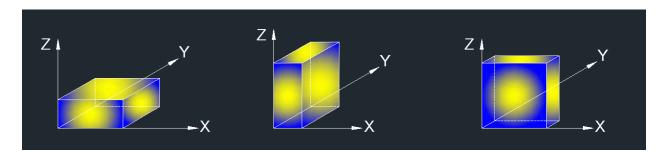
The setting of the spectrum analyser

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

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



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.

TEST ENVIRONMENT

Temperature	24.3 °C	Relative Humidity	61 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

RESULTS



8.1. RESTRICTED BANDEDGE

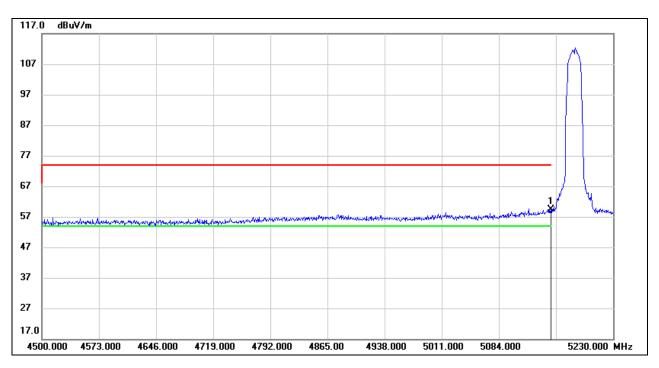
8.1.1. 802.11a 20 SISO MODE

UNII-1 BAND

ANTENNA 2 TEST RESULTS (WORST CASE)

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

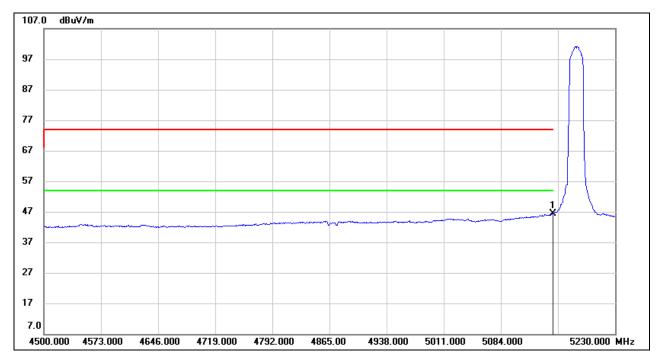
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	18.31	41.19	59.50	74.00	-14.50	peak

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



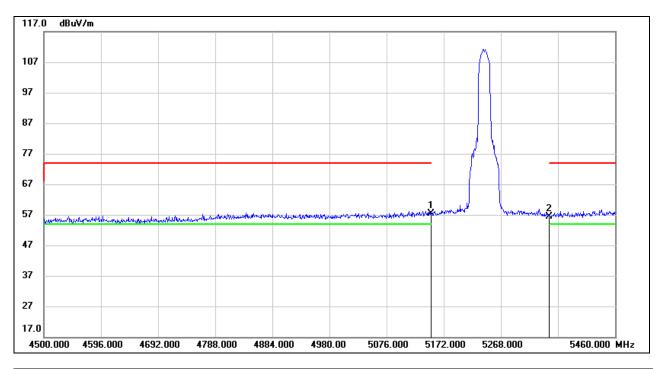


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	5.28	41.19	46.47	54.00	-7.53	AVG

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



PEAK

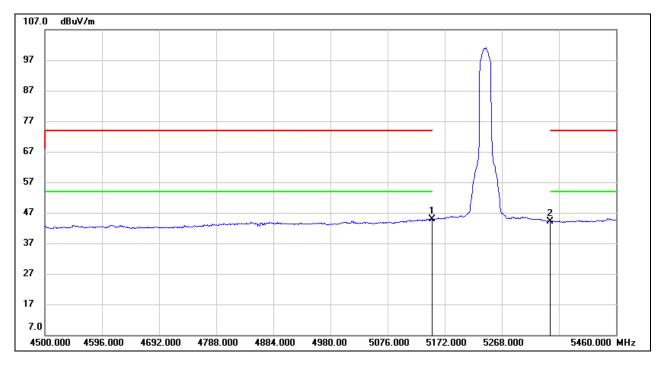


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	16.22	41.19	57.41	74.00	-16.59	peak
2	5350.000	15.30	41.20	56.50	74.00	-17.50	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
- 5. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	3.67	41.19	44.86	54.00	-9.14	AVG
2	5350.000	2.98	41.20	44.18	54.00	-9.82	AVG

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

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
- 6. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.

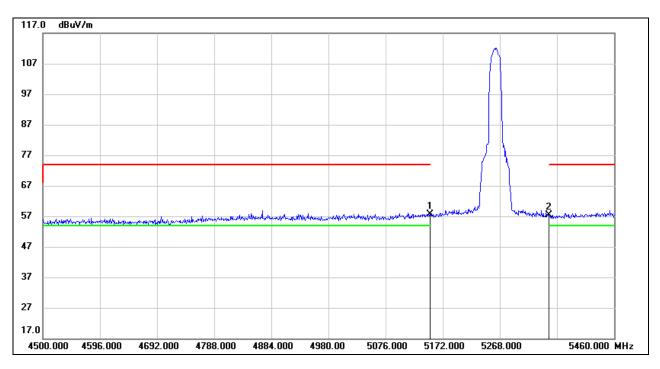


UNII-2A BAND

ANTENNA 2 TEST RESULTS (WORST CASE)

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

PEAK

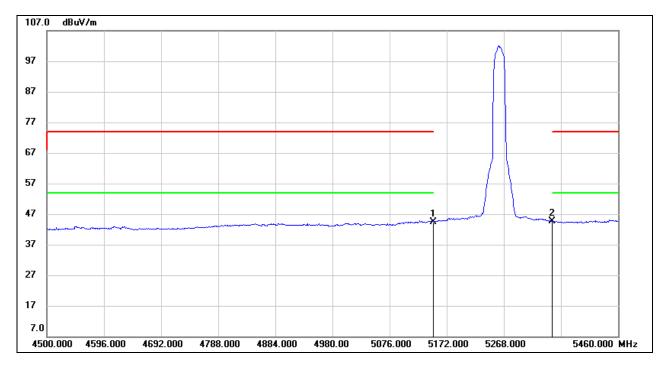


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	16.50	41.19	57.69	74.00	-16.31	peak
2	5350.000	16.26	41.20	57.46	74.00	-16.54	peak

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



AVG

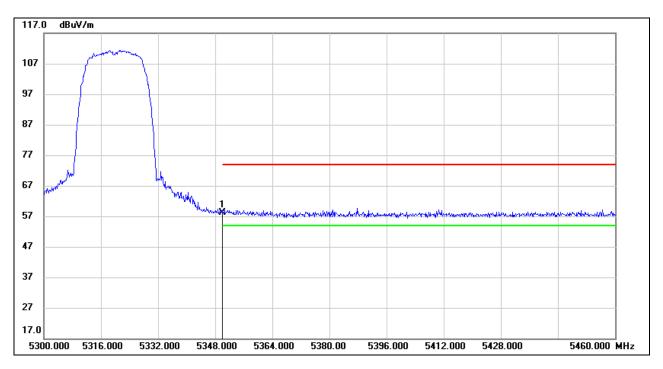


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	3.24	41.19	44.43	54.00	-9.57	AVG
2	5350.000	3.38	41.20	44.58	54.00	-9.42	AVG

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



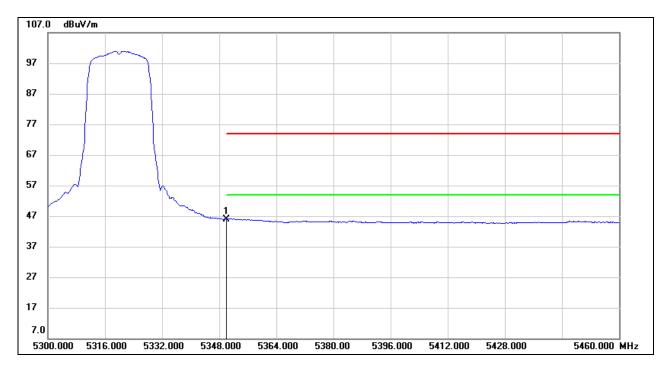
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	16.89	41.20	58.09	74.00	-15.91	peak

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





N	No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
	1	5350.000	4.69	41.20	45.89	54.00	-8.11	AVG

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

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

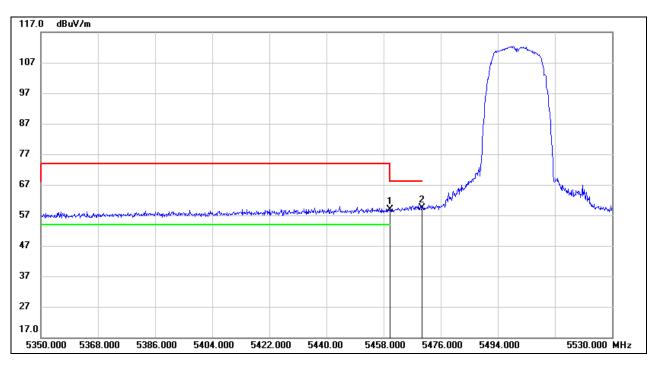


UNII-2C BAND

ANTENNA 2 TEST RESULTS (WORST CASE)

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

PEAK

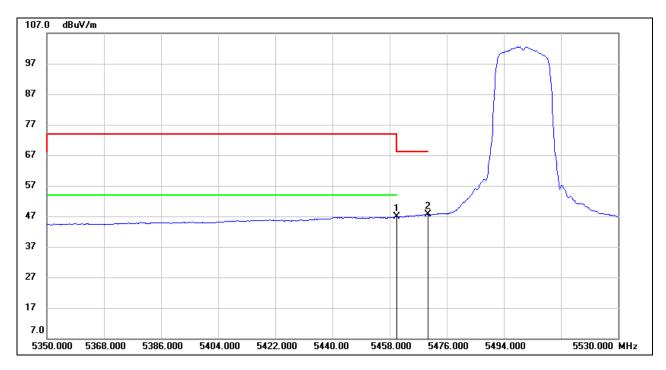


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	16.95	41.82	58.77	68.20	-9.43	peak
2	5470.000	17.49	41.87	59.36	68.20	-8.84	peak

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



AVG

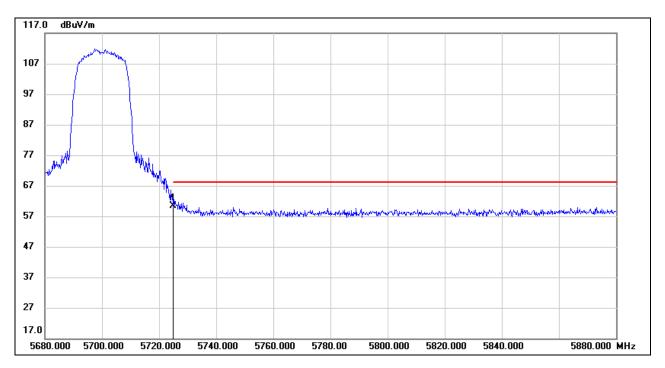


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	5.07	41.82	46.89	54.00	-7.11	AVG
2	5470.000	5.75	41.87	47.62	1	/	AVG

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



PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	18.66	41.67	60.33	68.20	-7.87	peak

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

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

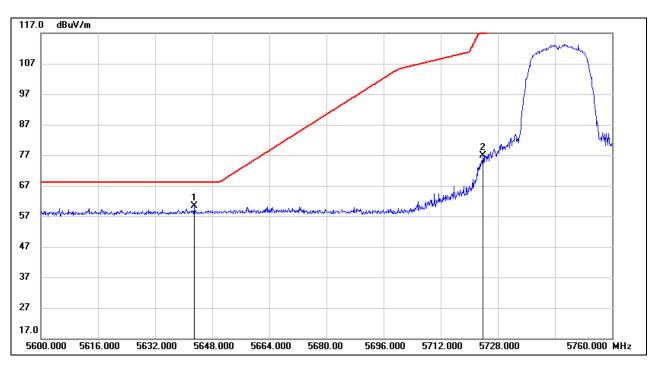


UNII-3 BAND

ANTENNA 2 TEST RESULTS (WORST CASE)

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

PEAK

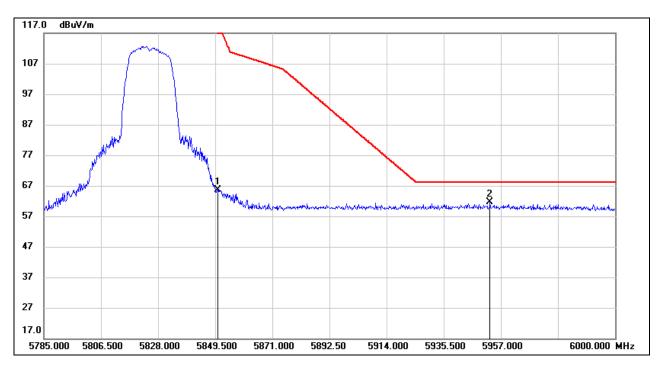


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5643.040	18.72	41.65	60.37	68.20	-7.83	peak
2	5723.840	35.18	41.66	76.84	119.56	-42.72	peak

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



PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.360	23.04	42.53	65.57	121.38	-55.81	peak
2	5952.915	18.88	42.78	61.66	68.20	-6.54	peak

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

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

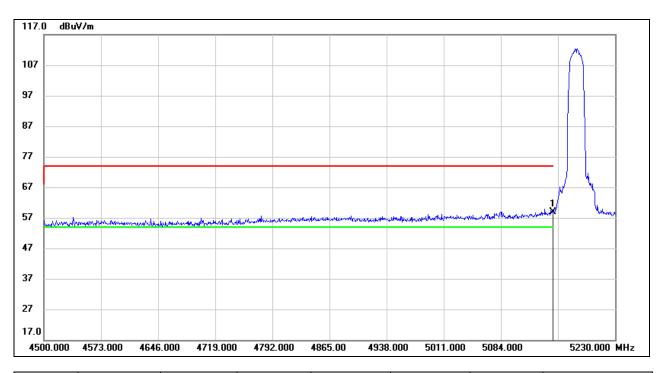


8.1.2. 802.11n HT20 MIMO MODE

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

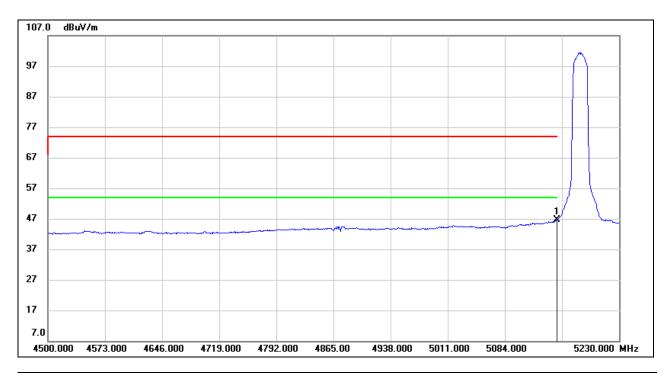
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	17.80	41.19	58.99	74.00	-15.01	peak

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



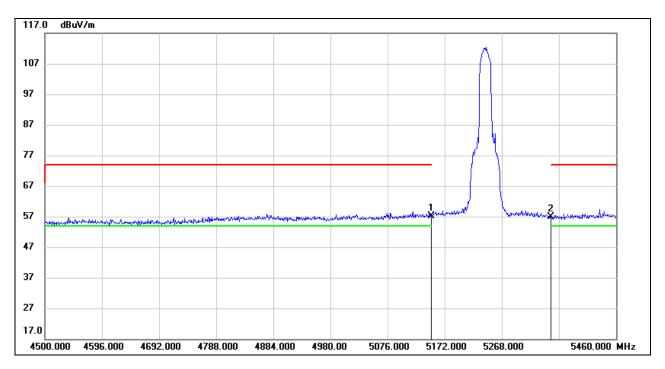


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	5.38	41.19	46.57	54.00	-7.43	AVG

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



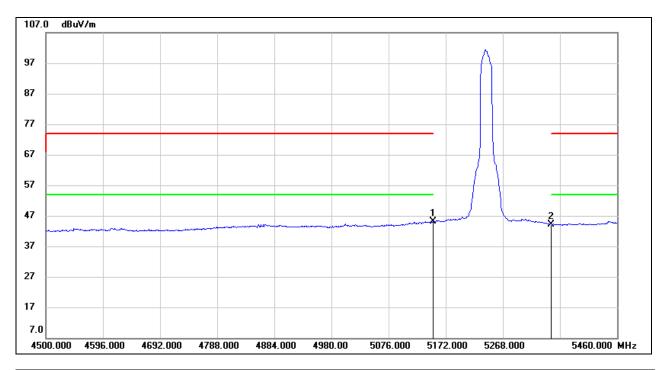
<u>PEAK</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	15.94	41.19	57.13	74.00	-16.87	peak
2	5350.000	15.74	41.20	56.94	74.00	-17.06	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
- 5. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	3.84	41.19	45.03	54.00	-8.97	AVG
2	5350.000	3.00	41.20	44.20	54.00	-9.80	AVG

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

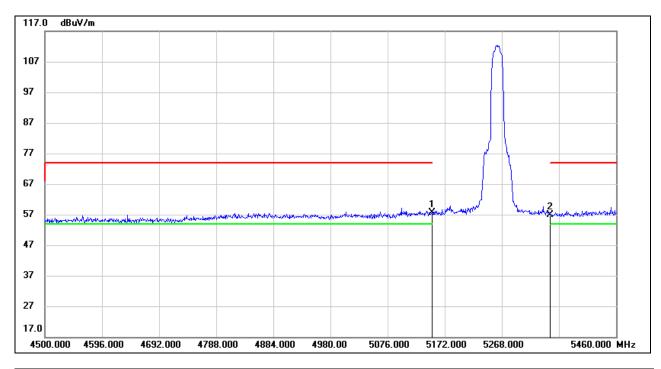
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
- 6. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.



UNII-2A BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

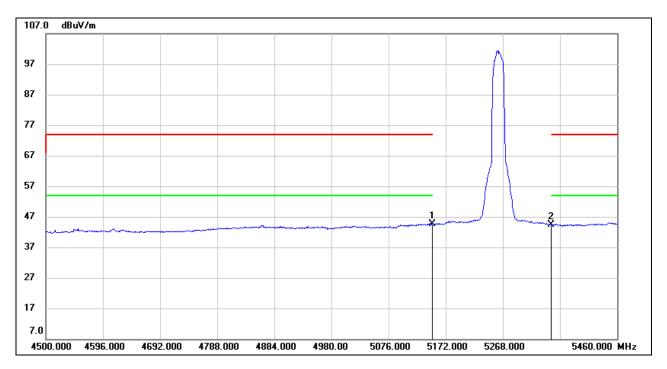
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	16.53	41.19	57.72	74.00	-16.28	peak
2	5350.000	15.76	41.20	56.96	74.00	-17.04	peak

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



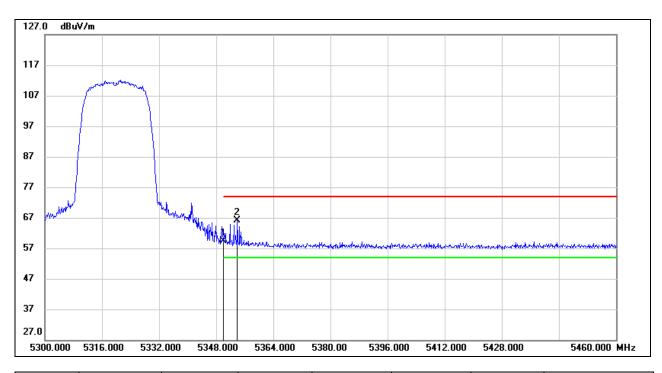


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	3.36	41.19	44.55	54.00	-9.45	AVG
2	5350.000	3.17	41.20	44.37	54.00	-9.63	AVG

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



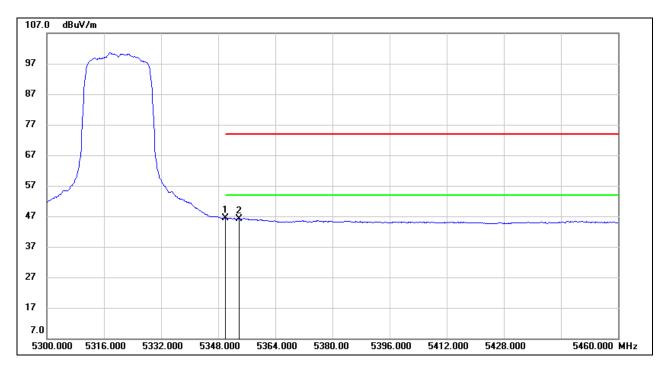
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	18.27	41.20	59.47	74.00	-14.53	peak
2	5353.920	24.85	41.22	66.07	74.00	-7.93	peak

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





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	5.27	41.20	46.47	54.00	-7.53	AVG
2	5353.920	4.89	41.22	46.11	54.00	-7.89	AVG

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

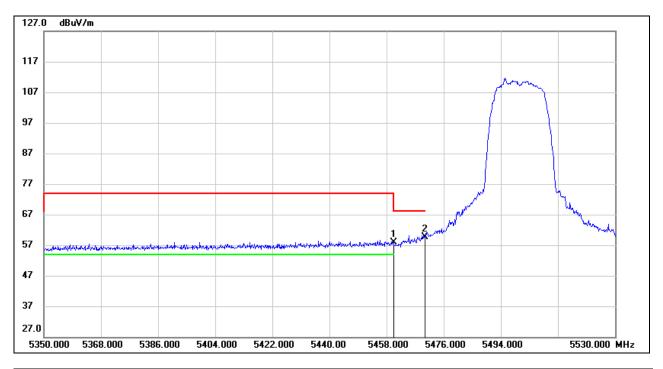
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions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



UNII-2C BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

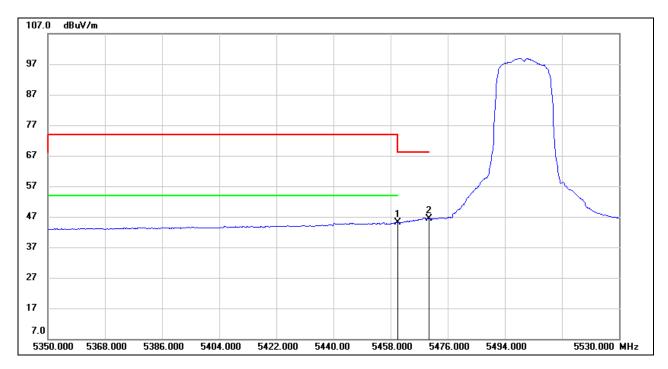
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	17.18	40.79	57.97	68.20	-10.23	peak
2	5470.000	18.82	40.85	59.67	68.20	-8.53	peak

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



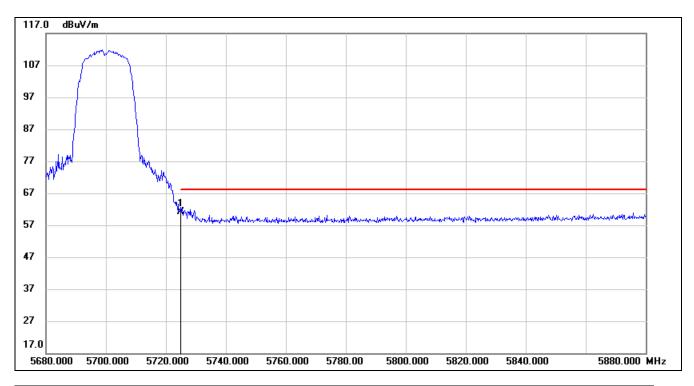


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	4.42	40.79	45.21	54.00	-8.79	AVG
2	5470.000	5.61	40.85	46.46	1	/	AVG

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



PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	19.45	41.67	61.12	68.20	-7.08	peak

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

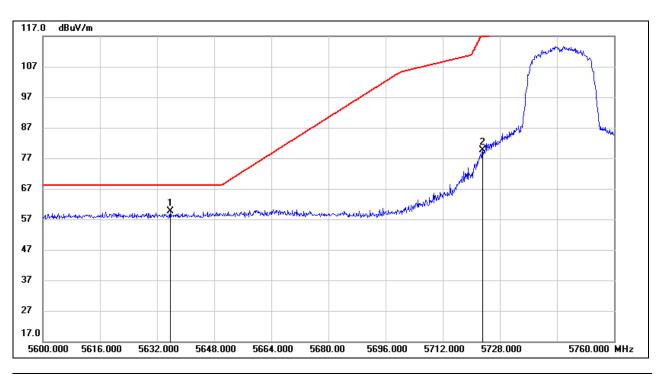
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



UNII-3 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

PEAK

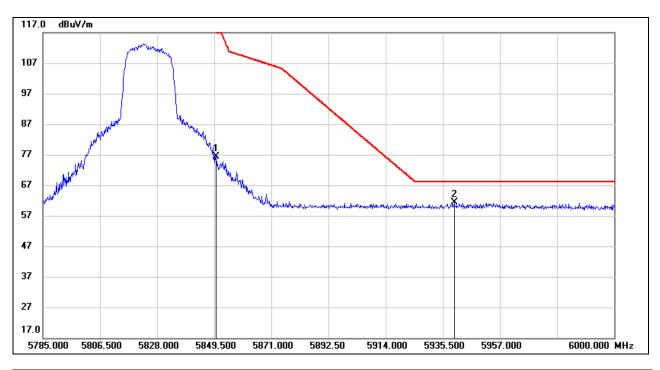


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5635.680	18.04	41.66	59.70	68.20	-8.50	peak
2	5723.200	37.99	41.66	79.65	118.10	-38.45	peak

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



PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.145	33.82	42.53	76.35	121.87	-45.52	peak
2	5939.800	18.44	42.85	61.29	68.20	-6.91	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. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

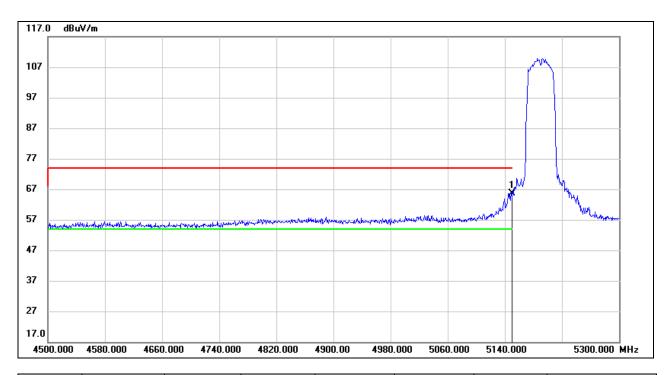


8.1.3. 802.11n HT40 MIMO MODE

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

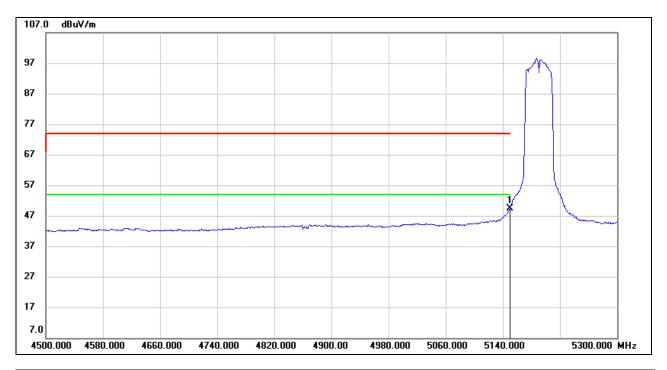
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	24.45	41.19	65.64	74.00	-8.36	peak

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



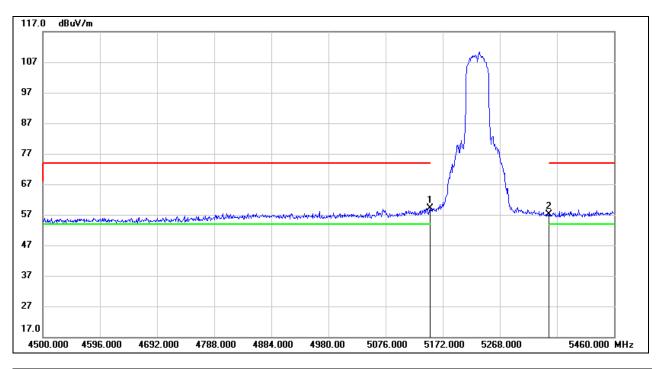


	No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
Ī	1	5150.000	8.23	41.19	49.42	54.00	-4.58	AVG

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



PEAK

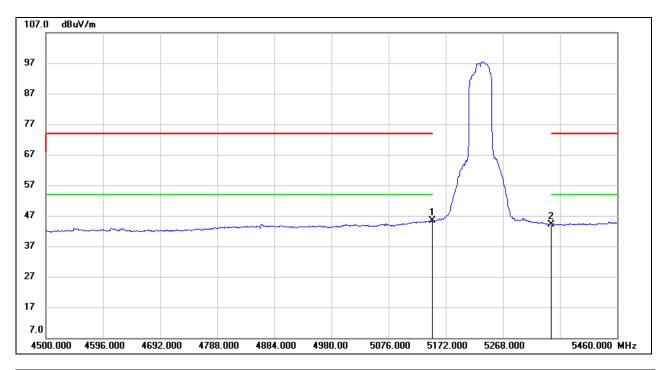


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	17.88	41.19	59.07	74.00	-14.93	peak
2	5350.000	15.89	41.20	57.09	74.00	-16.91	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
- 5. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	4.08	41.19	45.27	54.00	-8.73	AVG
2	5350.000	2.97	41.20	44.17	54.00	-9.83	AVG

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

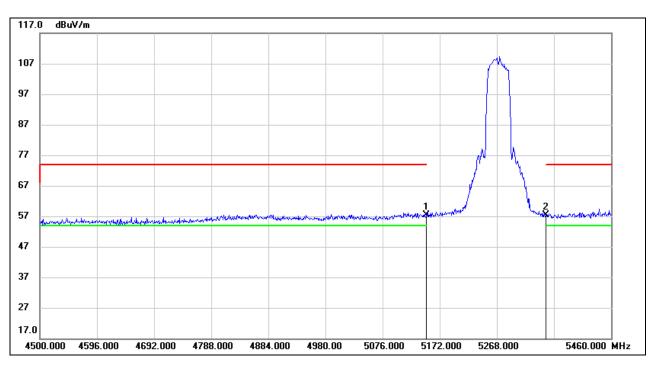
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
- 6. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.



UNII-2A BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

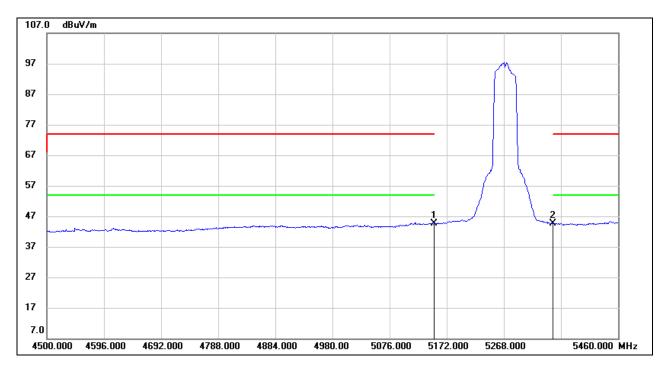
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	16.08	41.19	57.27	74.00	-16.73	peak
2	5350.000	16.12	41.20	57.32	74.00	-16.68	peak

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



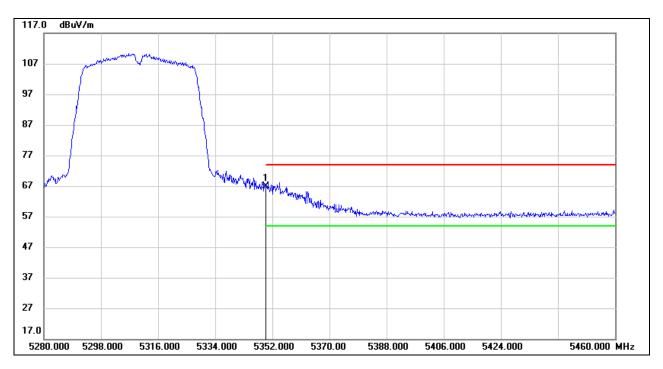


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	3.34	41.19	44.53	54.00	-9.47	AVG
2	5350.000	3.39	41.20	44.59	54.00	-9.41	AVG

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



PEAK

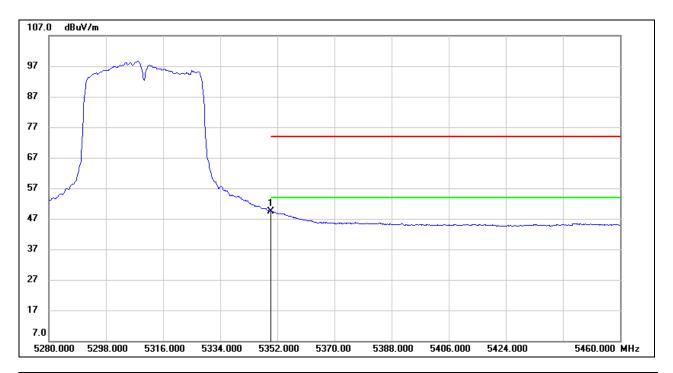


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	25.64	41.20	66.84	74.00	-7.16	peak

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



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	8.12	41.20	49.32	54.00	-4.68	AVG

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

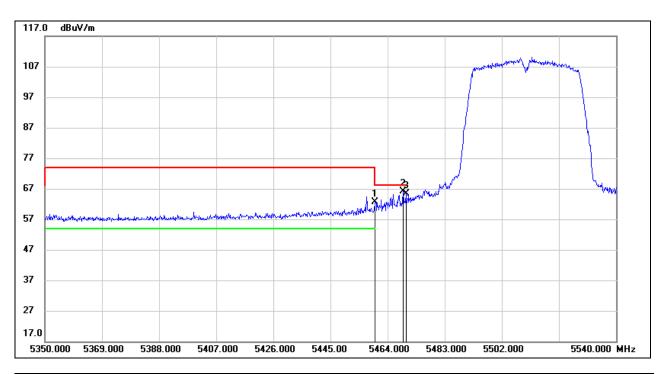
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions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



UNII-2C BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

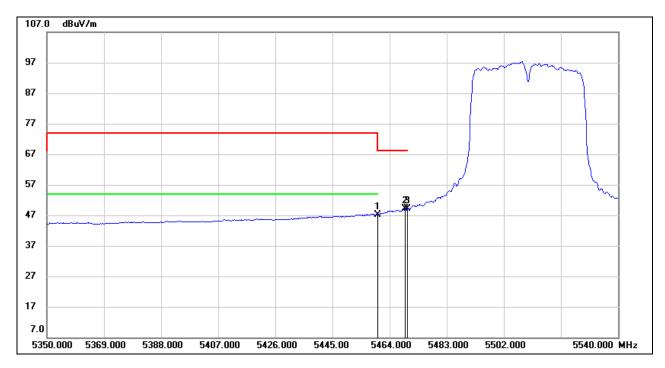
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	20.72	41.82	62.54	68.20	-5.66	peak
2	5469.130	24.38	41.87	66.25	68.20	-1.95	peak
3	5470.000	23.47	41.87	65.34	68.20	-2.86	peak

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





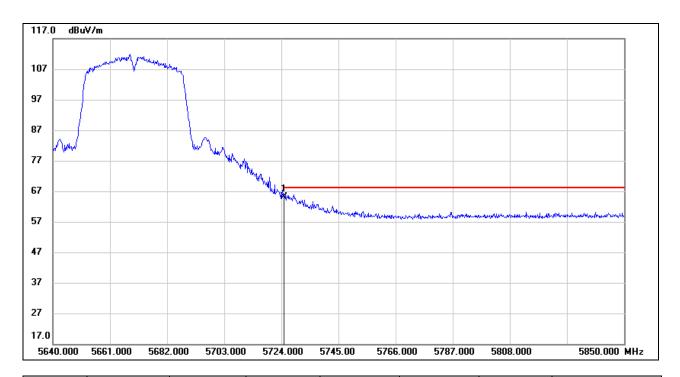
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	5.43	41.82	47.25	54.00	-6.75	AVG
2	5469.130	7.18	41.87	49.05	/	/	AVG
3	5470.000	7.26	41.87	49.13	1	/	AVG

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



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	23.52	41.67	65.19	68.20	-3.01	peak

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

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

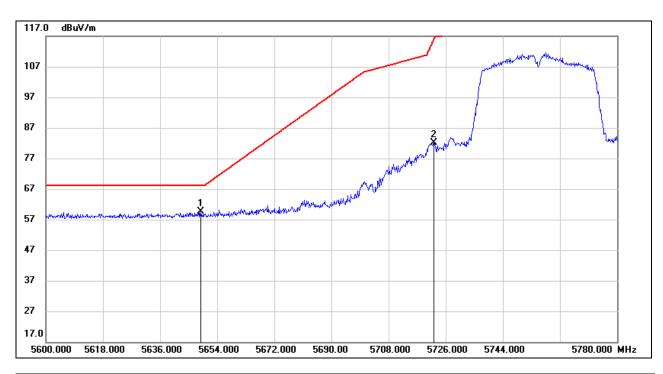
Note: All the polarities (Vertical & Horizontal) and Antennas had been tested, only the worst data was recorded in the report.



UNII-3 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

PEAK



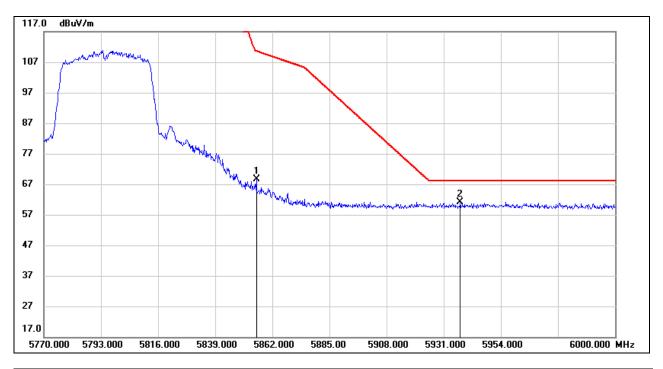
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5648.780	17.95	41.64	59.59	68.20	-8.61	peak
2	5722.220	40.36	41.66	82.02	115.86	-33.84	peak

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



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5855.560	25.94	42.58	68.52	110.64	-42.12	peak
2	5937.670	18.31	42.86	61.17	68.20	-7.03	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. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

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

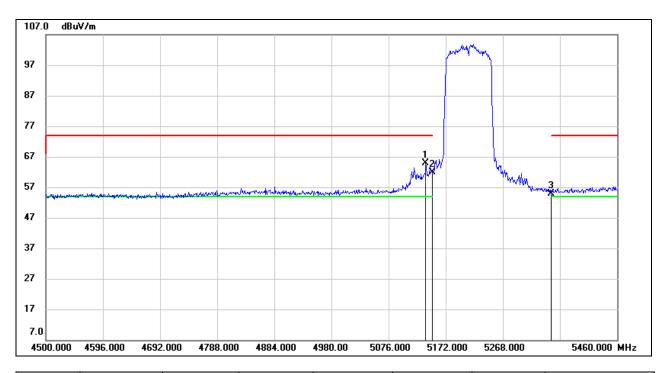


8.1.4. 802.11ac VHT80 MIMO MODE

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

PEAK

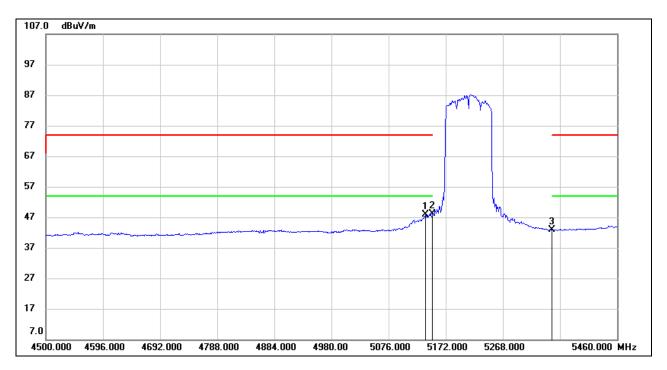


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5138.400	24.98	39.80	64.78	74.00	-9.22	peak
2	5150.000	21.97	39.91	61.88	74.00	-12.12	peak
3	5350.000	14.87	40.08	54.95	74.00	-19.05	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
- 5. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5138.400	8.15	39.80	47.95	54.00	-6.05	AVG
2	5150.000	8.18	39.91	48.09	54.00	-5.91	AVG
3	5350.000	2.86	40.08	42.94	54.00	-11.06	AVG

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

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
- 6. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.

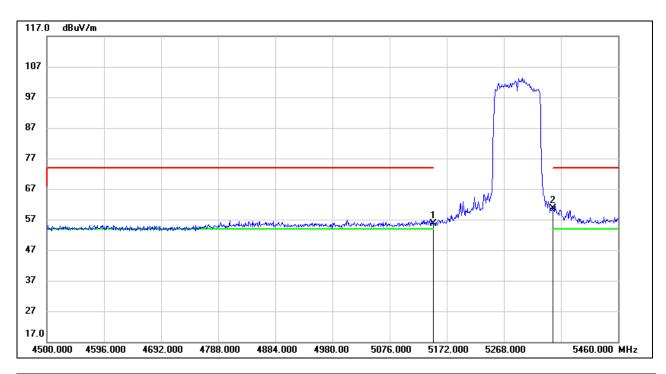
Note: All the polarities (Vertical & Horizontal) and Antennas had been tested, only the worst data was recorded in the report.



UNII-2A BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

PEAK

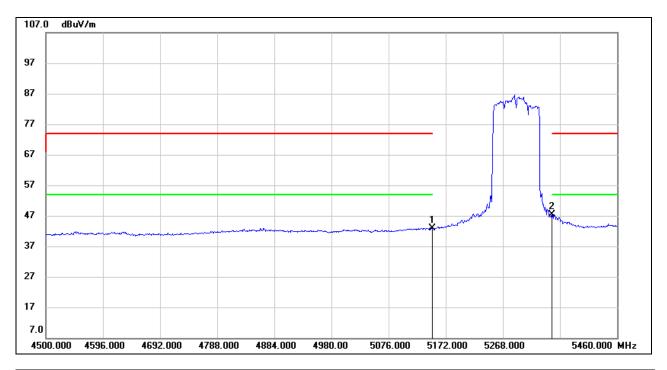


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	15.68	39.91	55.59	74.00	-18.41	peak
2	5350.000	20.67	40.08	60.75	74.00	-13.25	peak

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



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	3.00	39.91	42.91	54.00	-11.09	AVG
2	5350.000	7.31	40.08	47.39	54.00	-6.61	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.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
- 6. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. The worst setting has been used for investigation during the measurement.

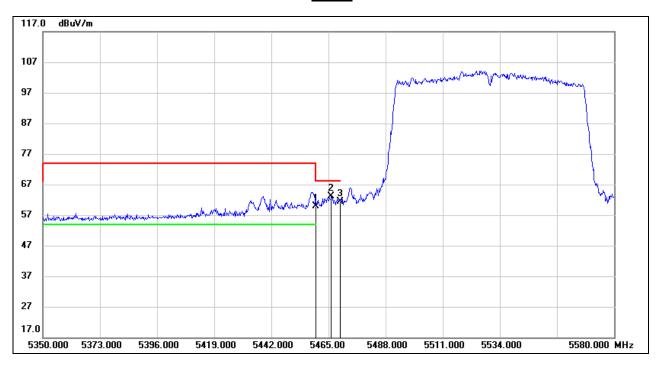
Note: All the polarities (Vertical & Horizontal) and Antennas had been tested, only the worst data was recorded in the report.



UNII-2C BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

PEAK

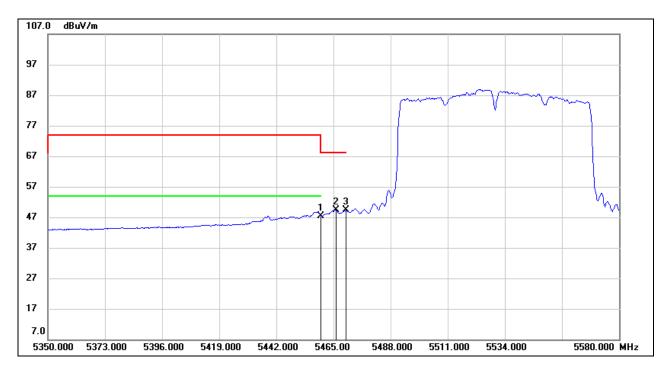


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	19.02	40.79	59.81	68.20	-8.39	peak
2	5466.150	22.20	40.83	63.03	68.20	-5.17	peak
3	5470.000	20.53	40.85	61.38	68.20	-6.82	peak

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



AVG



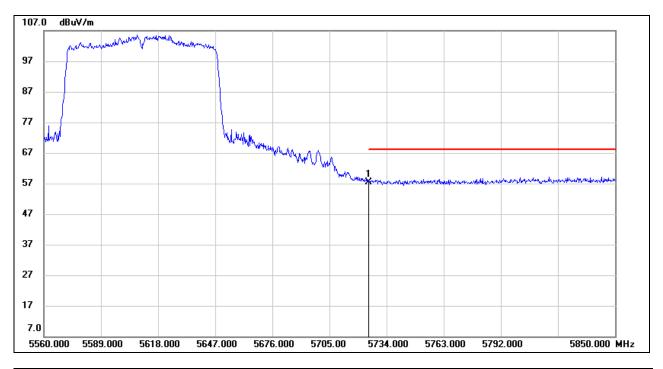
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	6.53	40.79	47.32	54.00	-6.68	AVG
2	5466.150	8.59	40.83	49.42	/	/	AVG
3	5470.000	8.49	40.85	49.34	/	/	AVG

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



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5725.000	16.79	40.63	57.42	68.20	-10.78	peak

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

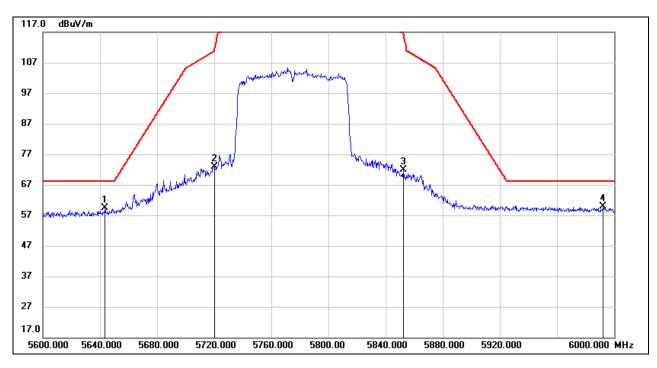
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

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



UNII-3 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5643.600	18.73	40.62	59.35	68.20	-8.85	peak
2	5720.000	32.38	40.60	72.98	110.80	-37.82	peak
3	5852.400	30.30	41.48	71.78	116.73	-44.95	peak
4	5992.400	18.33	41.49	59.82	68.20	-8.38	peak

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

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

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



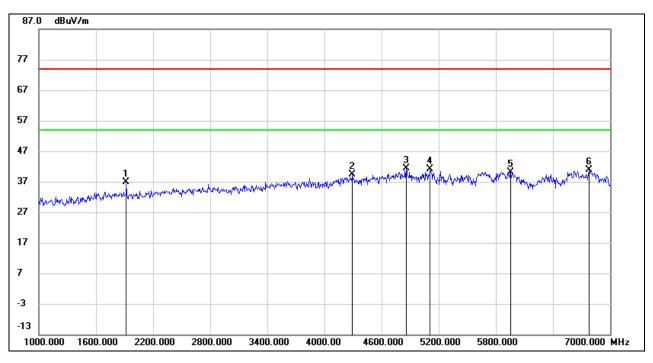
8.2. SPURIOUS EMISSIONS (1 GHz ~ 7 GHz)

8.2.1. 802.11n HT20 MIMO MODE

UNII-1 BAND

MIMO MODE TEST RESULTS (WORST CASE)

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

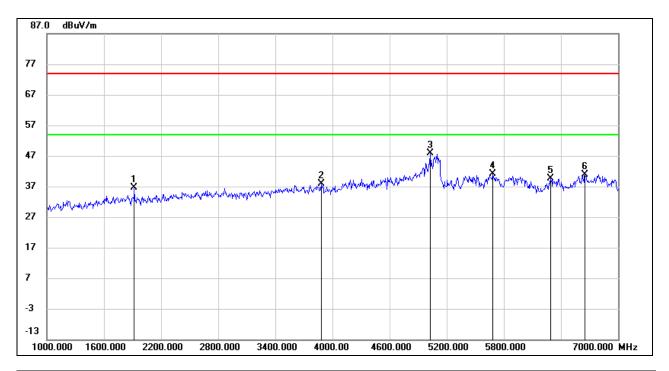


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	47.87	-11.02	36.85	74.00	-37.15	peak
2	4294.000	42.16	-2.80	39.36	74.00	-34.64	peak
3	4861.000	41.92	-0.60	41.32	74.00	-32.68	peak
4	5113.000	40.91	0.28	41.19	74.00	-32.81	peak
5	5956.000	38.18	2.04	40.22	74.00	-33.78	peak
6	6778.000	36.37	4.56	40.93	74.00	-33.07	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

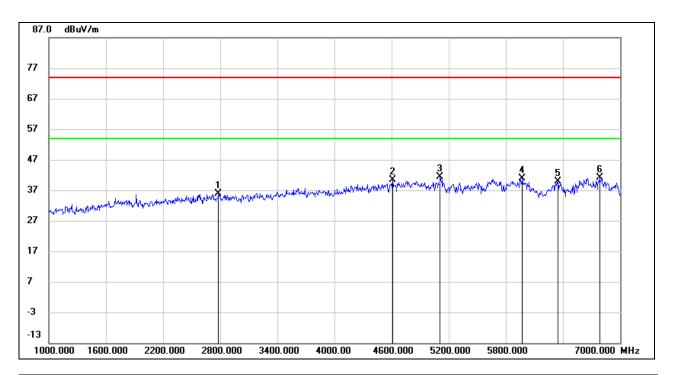


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	47.60	-11.02	36.58	74.00	-37.42	peak
2	3883.000	42.46	-4.50	37.96	74.00	-36.04	peak
3	5026.000	48.20	-0.32	47.88	74.00	-26.12	peak
4	5683.000	39.77	1.44	41.21	74.00	-32.79	peak
5	6292.000	36.85	2.73	39.58	74.00	-34.42	peak
6	6655.000	36.24	4.52	40.76	74.00	-33.24	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

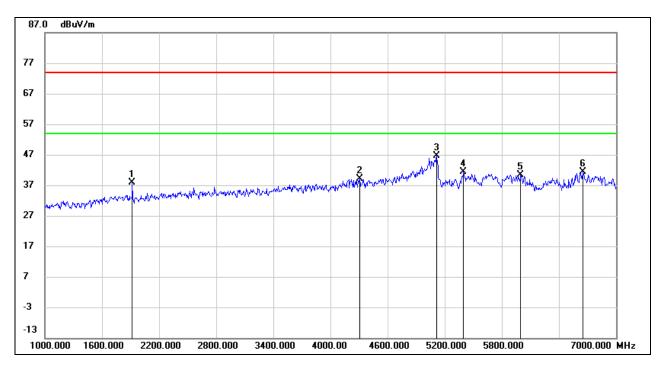


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2782.000	43.64	-7.78	35.86	74.00	-38.14	peak
2	4612.000	42.03	-1.58	40.45	74.00	-33.55	peak
3	5113.000	41.15	0.28	41.43	74.00	-32.57	peak
4	5974.000	38.77	2.10	40.87	74.00	-33.13	peak
5	6346.000	36.88	3.04	39.92	74.00	-34.08	peak
6	6787.000	36.55	4.58	41.13	74.00	-32.87	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

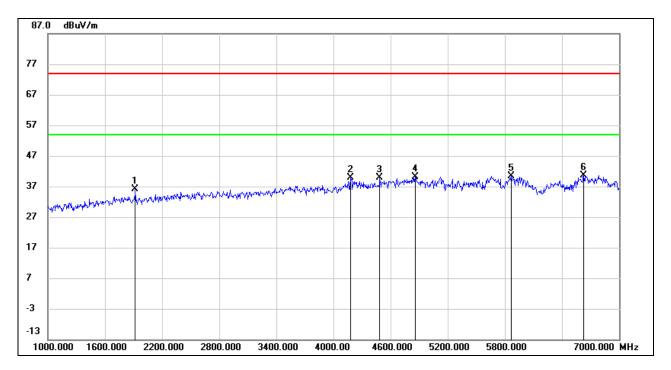


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	49.01	-11.02	37.99	74.00	-36.01	peak
2	4309.000	41.83	-2.81	39.02	74.00	-34.98	peak
3	5116.000	46.29	0.29	46.58	74.00	-27.42	peak
4	5401.000	40.51	0.79	41.30	74.00	-32.70	peak
5	6001.000	38.27	2.20	40.47	74.00	-33.53	peak
6	6652.000	36.79	4.52	41.31	74.00	-32.69	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

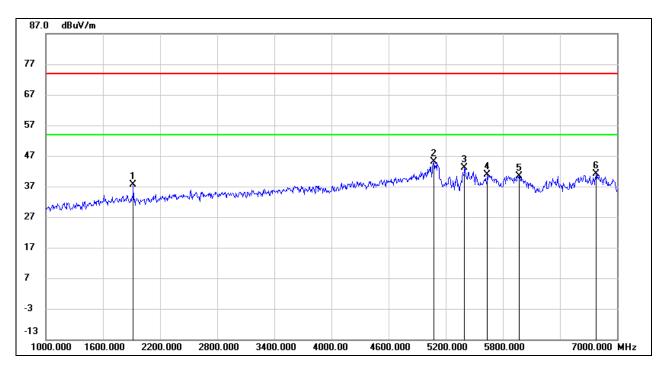


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	47.22	-11.02	36.20	74.00	-37.80	peak
2	4183.000	42.76	-2.89	39.87	74.00	-34.13	peak
3	4489.000	42.24	-2.30	39.94	74.00	-34.06	peak
4	4858.000	40.80	-0.61	40.19	74.00	-33.81	peak
5	5866.000	38.75	1.70	40.45	74.00	-33.55	peak
6	6628.000	36.03	4.50	40.53	74.00	-33.47	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.58	-11.02	37.56	74.00	-36.44	peak
2	5077.000	45.10	0.02	45.12	74.00	-28.88	peak
3	5398.000	42.34	0.80	43.14	74.00	-30.86	peak
4	5638.000	39.51	1.44	40.95	74.00	-33.05	peak
5	5971.000	38.32	2.09	40.41	74.00	-33.59	peak
6	6781.000	36.51	4.57	41.08	74.00	-32.92	peak

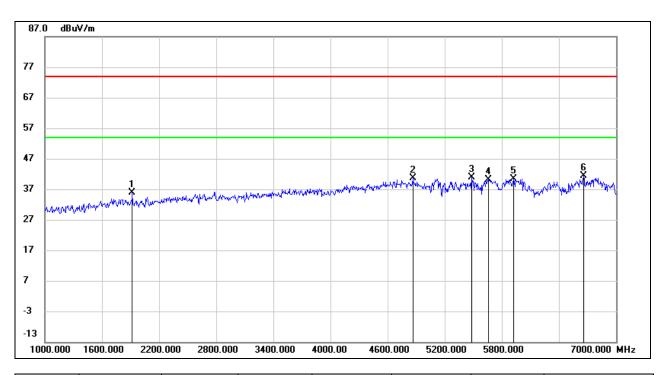
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
 - 5. Proper operation of the transmitter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



UNII-2A BAND

MIMO MODE TEST RESULTS (WORST CASE)

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

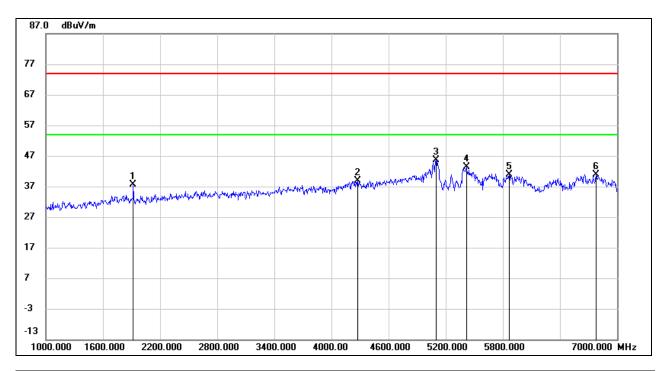


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	46.98	-11.02	35.96	74.00	-38.04	peak
2	4864.000	41.35	-0.60	40.75	74.00	-33.25	peak
3	5482.000	39.69	1.09	40.78	74.00	-33.22	peak
4	5659.000	38.70	1.44	40.14	74.00	-33.86	peak
5	5929.000	38.41	1.94	40.35	74.00	-33.65	peak
6	6661.000	36.82	4.52	41.34	74.00	-32.66	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

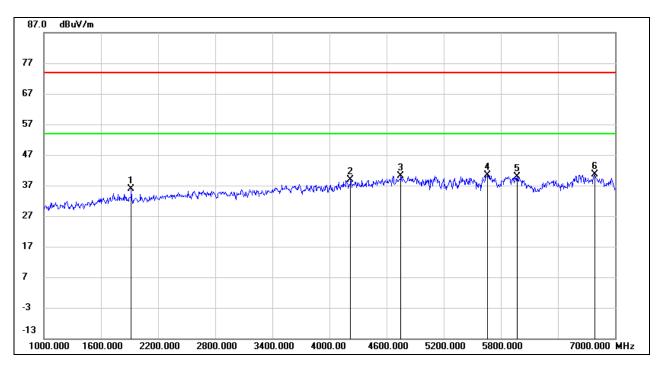


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.75	-11.02	37.73	74.00	-36.27	peak
2	4279.000	41.58	-2.79	38.79	74.00	-35.21	peak
3	5101.000	45.43	0.18	45.61	74.00	-28.39	peak
4	5419.000	42.52	0.87	43.39	74.00	-30.61	peak
5	5866.000	39.29	1.70	40.99	74.00	-33.01	peak
6	6781.000	36.43	4.57	41.00	74.00	-33.00	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

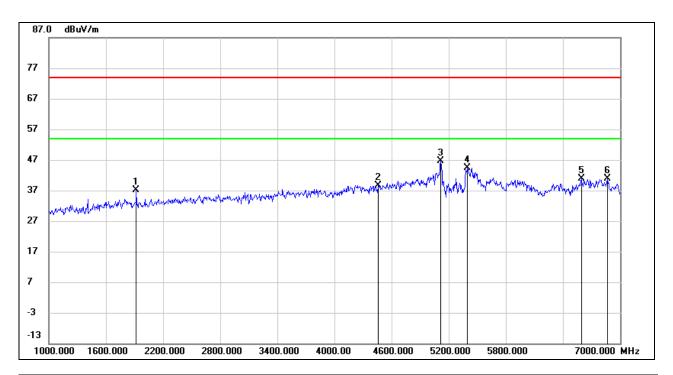


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	46.85	-11.02	35.83	74.00	-38.17	peak
2	4225.000	41.53	-2.74	38.79	74.00	-35.21	peak
3	4750.000	40.96	-0.90	40.06	74.00	-33.94	peak
4	5659.000	38.86	1.44	40.30	74.00	-33.70	peak
5	5971.000	37.91	2.09	40.00	74.00	-34.00	peak
6	6784.000	36.05	4.56	40.61	74.00	-33.39	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

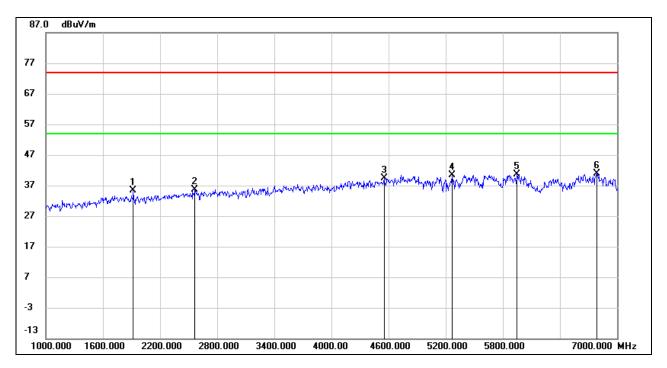


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.17	-11.02	37.15	74.00	-36.85	peak
2	4459.000	41.22	-2.50	38.72	74.00	-35.28	peak
3	5116.000	46.31	0.29	46.60	74.00	-27.40	peak
4	5401.000	43.52	0.79	44.31	74.00	-29.69	peak
5	6592.000	36.36	4.45	40.81	74.00	-33.19	peak
6	6868.000	36.20	4.76	40.96	74.00	-33.04	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

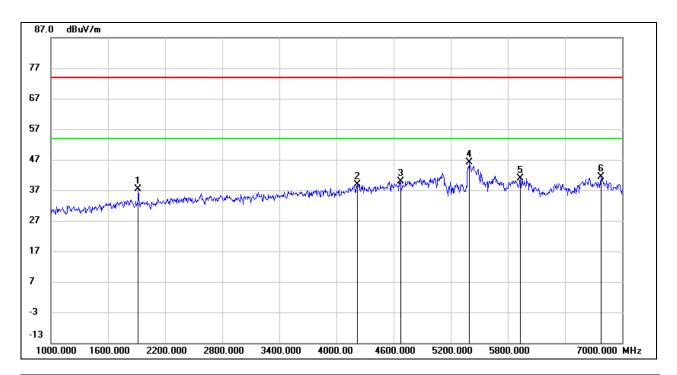


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	46.50	-11.02	35.48	74.00	-38.52	peak
2	2569.000	44.27	-8.70	35.57	74.00	-38.43	peak
3	4555.000	41.34	-1.91	39.43	74.00	-34.57	peak
4	5266.000	39.65	0.84	40.49	74.00	-33.51	peak
5	5950.000	38.64	2.01	40.65	74.00	-33.35	peak
6	6787.000	36.40	4.58	40.98	74.00	-33.02	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.33	-11.02	37.31	74.00	-36.69	peak
2	4222.000	41.59	-2.75	38.84	74.00	-35.16	peak
3	4675.000	41.24	-1.27	39.97	74.00	-34.03	peak
4	5401.000	45.44	0.79	46.23	74.00	-27.77	peak
5	5932.000	38.93	1.94	40.87	74.00	-33.13	peak
6	6781.000	36.77	4.57	41.34	74.00	-32.66	peak

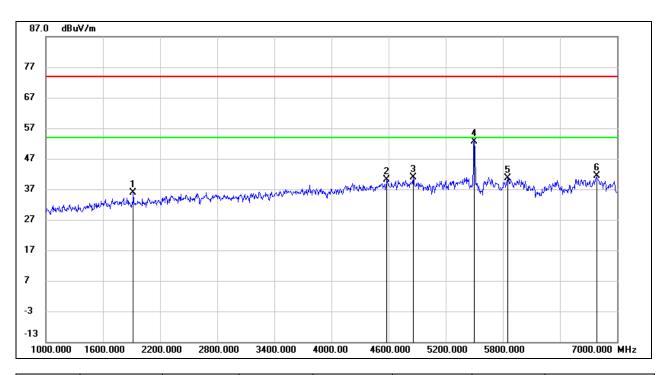
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
 - 5. Proper operation of the transmitter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



UNII-2C BAND

MIMO MODE TEST RESULTS (WORST CASE)

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

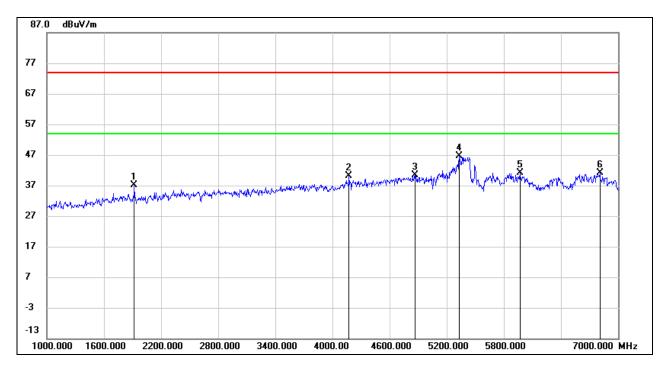


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	46.88	-11.02	35.86	74.00	-38.14	peak
2	4585.000	41.84	-1.73	40.11	74.00	-33.89	peak
3	4861.000	41.37	-0.60	40.77	74.00	-33.23	peak
4	5500.000	51.54	1.17	52.71	74.00	-21.29	peak
5	5857.000	39.00	1.67	40.67	74.00	-33.33	peak
6	6784.000	36.71	4.56	41.27	74.00	-32.73	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

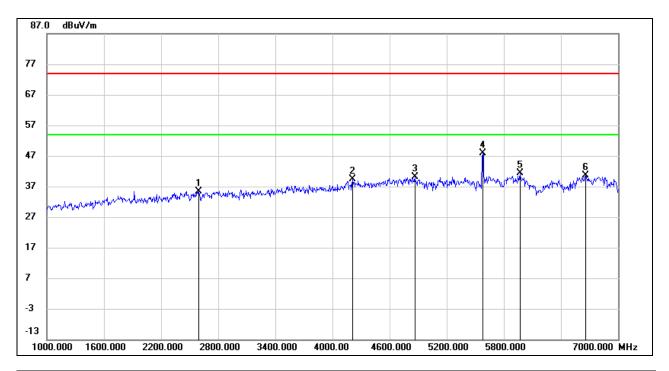


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.27	-11.02	37.25	74.00	-36.75	peak
2	4174.000	43.07	-2.98	40.09	74.00	-33.91	peak
3	4864.000	40.99	-0.60	40.39	74.00	-33.61	peak
4	5335.000	45.89	0.81	46.70	74.00	-27.30	peak
5	5971.000	38.96	2.09	41.05	74.00	-32.95	peak
6	6808.000	36.44	4.59	41.03	74.00	-32.97	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

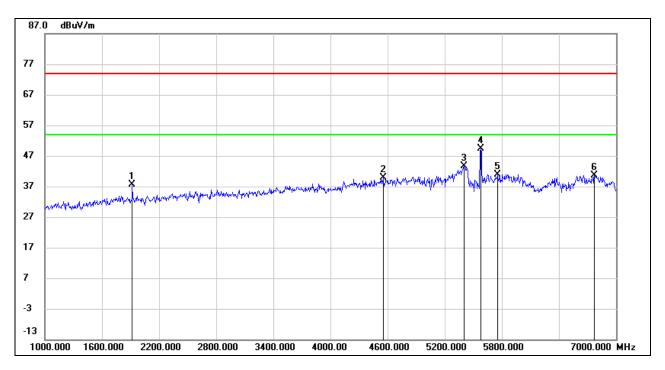


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2599.000	44.11	-8.64	35.47	74.00	-38.53	peak
2	4210.000	42.11	-2.73	39.38	74.00	-34.62	peak
3	4864.000	40.79	-0.60	40.19	74.00	-33.81	peak
4	5581.000	46.52	1.38	47.90	74.00	-26.10	peak
5	5971.000	39.31	2.09	41.40	74.00	-32.60	peak
6	6661.000	36.09	4.52	40.61	74.00	-33.39	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

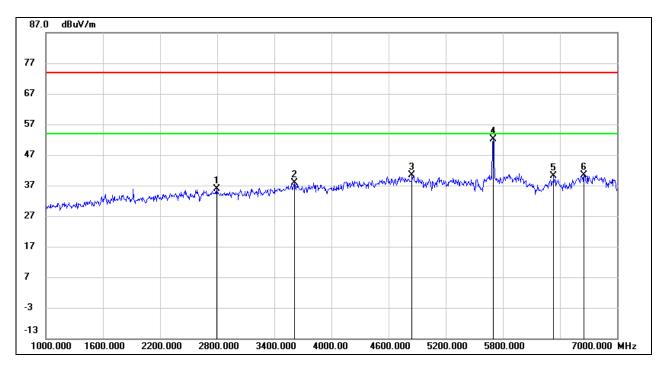


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.58	-11.02	37.56	74.00	-36.44	peak
2	4555.000	41.84	-1.91	39.93	74.00	-34.07	peak
3	5407.000	42.80	0.82	43.62	74.00	-30.38	peak
4	5581.000	48.04	1.38	49.42	74.00	-24.58	peak
5	5755.000	39.40	1.45	40.85	74.00	-33.15	peak
6	6772.000	36.02	4.57	40.59	74.00	-33.41	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

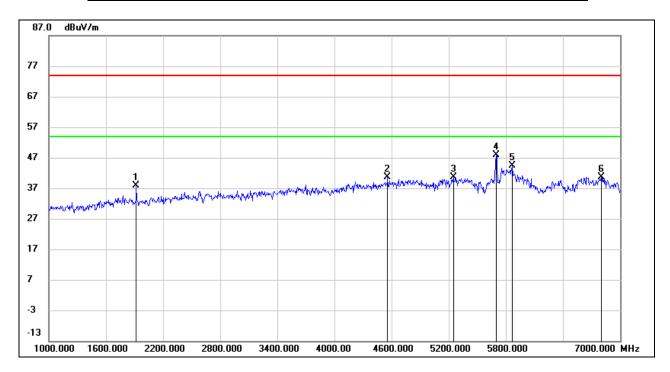


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2794.000	43.64	-7.72	35.92	74.00	-38.08	peak
2	3613.000	43.06	-5.22	37.84	74.00	-36.16	peak
3	4849.000	40.94	-0.62	40.32	74.00	-33.68	peak
4	5698.000	50.59	1.45	52.04	74.00	-21.96	peak
5	6337.000	37.02	3.00	40.02	74.00	-33.98	peak
6	6655.000	35.83	4.52	40.35	74.00	-33.65	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.86	-11.02	37.84	74.00	-36.16	peak
2	4561.000	42.40	-1.87	40.53	74.00	-33.47	peak
3	5251.000	39.75	0.84	40.59	74.00	-33.41	peak
4	5700.000	46.47	1.44	47.91	74.00	-26.09	peak
5	5866.000	42.65	1.70	44.35	74.00	-29.65	peak
6	6805.000	36.11	4.59	40.70	74.00	-33.30	peak

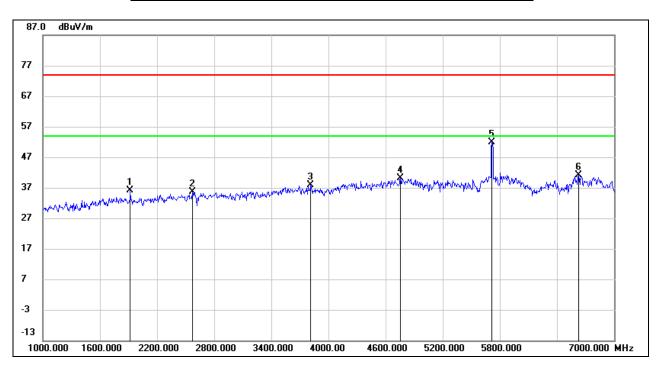
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
 - 5. Proper operation of the transmitter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



STRADDLE CHANNEL 144

MIMO MODE TEST RESULTS (WORST CASE)

HARMONICS AND SPURIOUS EMISSIONS (HORIZONTAL)

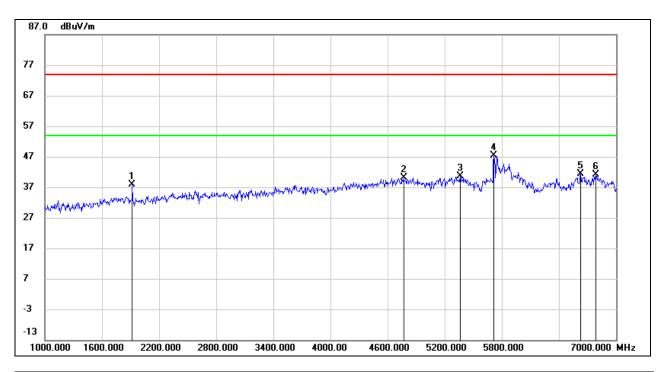


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	47.14	-11.02	36.12	74.00	-37.88	peak
2	2575.000	44.21	-8.69	35.52	74.00	-38.48	peak
3	3817.000	42.17	-4.39	37.78	74.00	-36.22	peak
4	4759.000	40.96	-0.86	40.10	74.00	-33.90	peak
5	5720.000	50.52	1.44	51.96	74.00	-22.04	peak
6	6628.000	36.56	4.50	41.06	74.00	-32.94	peak

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



HARMONICS AND SPURIOUS EMISSIONS (VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.91	-11.02	37.89	74.00	-36.11	peak
2	4771.000	40.83	-0.79	40.04	74.00	-33.96	peak
3	5362.000	39.83	0.80	40.63	74.00	-33.37	peak
4	5719.000	45.93	1.44	47.37	74.00	-26.63	peak
5	6631.000	36.75	4.52	41.27	74.00	-32.73	peak
6	6784.000	36.61	4.56	41.17	74.00	-32.83	peak

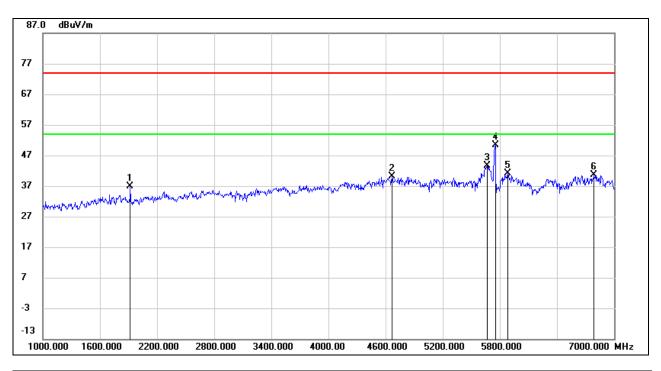
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
 - 5. Proper operation of the transmitter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



UNII-3 BAND

MIMO MODE TEST RESULTS (WORST CASE)

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

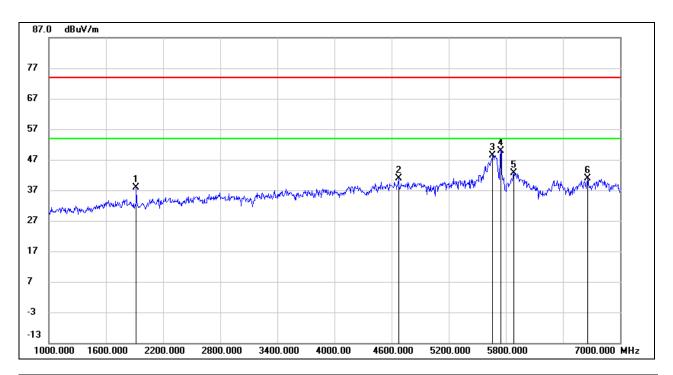


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	47.98	-11.02	36.96	74.00	-37.04	peak
2	4666.000	41.33	-1.31	40.02	74.00	-33.98	peak
3	5668.000	42.31	1.44	43.75	74.00	-30.25	peak
4	5752.000	48.89	1.44	50.33	74.00	-23.67	peak
5	5884.000	39.25	1.76	41.01	74.00	-32.99	peak
6	6790.000	36.03	4.57	40.60	74.00	-33.40	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

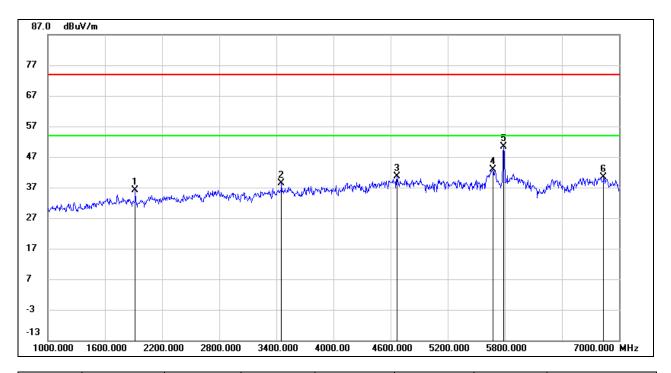


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.93	-11.02	37.91	74.00	-36.09	peak
2	4672.000	42.05	-1.29	40.76	74.00	-33.24	peak
3	5662.000	47.03	1.44	48.47	74.00	-25.53	peak
4	5745.000	48.45	1.45	49.90	74.00	-24.10	peak
5	5884.000	40.98	1.76	42.74	74.00	-31.26	peak
6	6658.000	36.31	4.51	40.82	74.00	-33.18	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

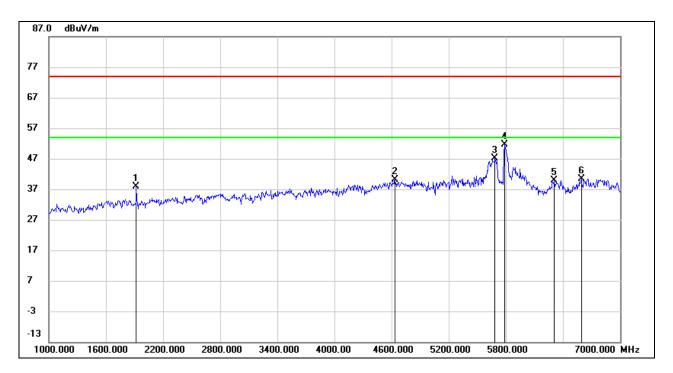


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	47.03	-11.02	36.01	74.00	-37.99	peak
2	3454.000	44.50	-6.02	38.48	74.00	-35.52	peak
3	4666.000	41.82	-1.31	40.51	74.00	-33.49	peak
4	5674.000	41.42	1.44	42.86	74.00	-31.14	peak
5	5788.000	49.03	1.44	50.47	74.00	-23.53	peak
6	6838.000	35.61	4.69	40.30	74.00	-33.70	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

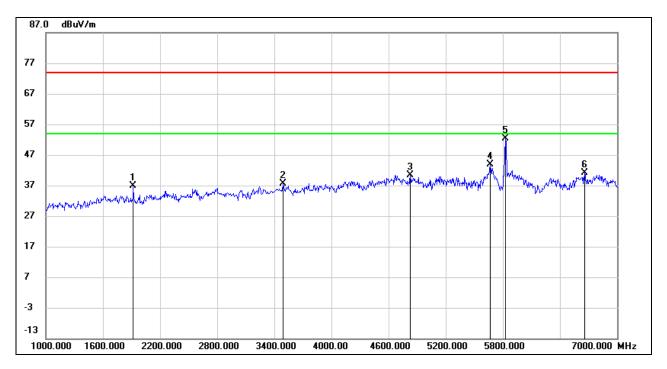


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.94	-11.02	37.92	74.00	-36.08	peak
2	4636.000	41.57	-1.46	40.11	74.00	-33.89	peak
3	5686.000	45.68	1.44	47.12	74.00	-26.88	peak
4	5785.000	50.08	1.44	51.52	74.00	-22.48	peak
5	6310.000	37.14	2.83	39.97	74.00	-34.03	peak
6	6592.000	35.84	4.45	40.29	74.00	-33.71	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

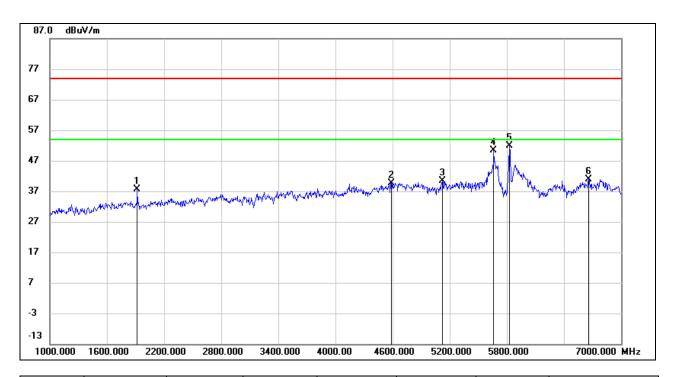


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	47.84	-11.02	36.82	74.00	-37.18	peak
2	3490.000	43.52	-5.86	37.66	74.00	-36.34	peak
3	4828.000	41.04	-0.63	40.41	74.00	-33.59	peak
4	5668.000	42.40	1.44	43.84	74.00	-30.16	peak
5	5830.000	50.71	1.56	52.27	74.00	-21.73	peak
6	6658.000	36.57	4.51	41.08	74.00	-32.92	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	48.58	-11.02	37.56	74.00	-36.44	peak
2	4588.000	41.45	-1.72	39.73	74.00	-34.27	peak
3	5122.000	39.96	0.33	40.29	74.00	-33.71	peak
4	5662.000	49.04	1.44	50.48	74.00	-23.52	peak
5	5825.000	50.45	1.55	52.00	74.00	-22.00	peak
6	6658.000	36.49	4.51	41.00	74.00	-33.00	peak

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

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

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



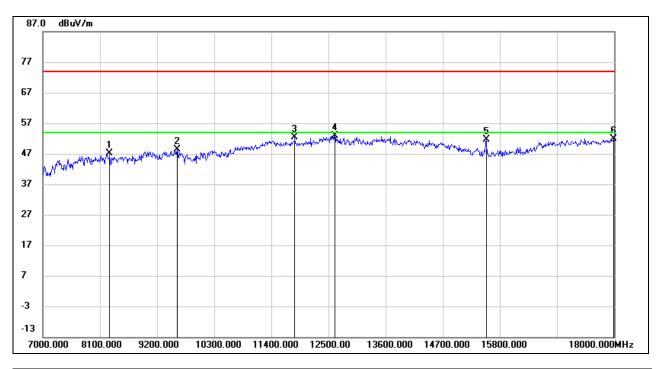
8.3. SPURIOUS EMISSIONS (7 GHz ~ 18 GHz)

8.3.1. 802.11a 20 SISO MODE

UNII-1 BAND

ANTENNA 2 TEST RESULTS (WORST CASE)

<u>HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)</u>

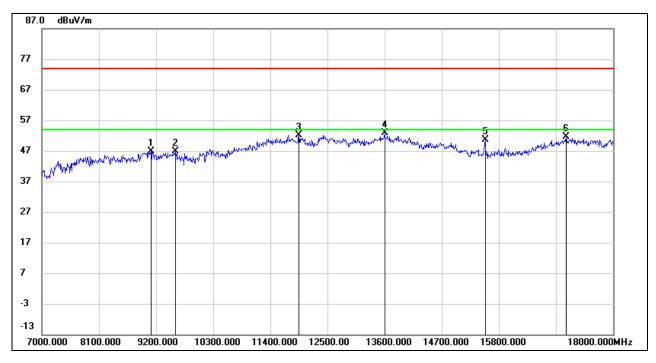


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8287.000	37.63	9.56	47.19	74.00	-26.81	peak
2	9594.625	36.43	11.96	48.39	74.00	-25.61	peak
3	11859.250	33.93	18.37	52.30	74.00	-21.70	peak
4	12621.000	34.67	18.18	52.85	74.00	-21.15	peak
5	15540.125	35.92	15.78	51.70	74.00	-22.30	peak
6	17997.250	27.10	24.71	51.81	74.00	-22.19	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

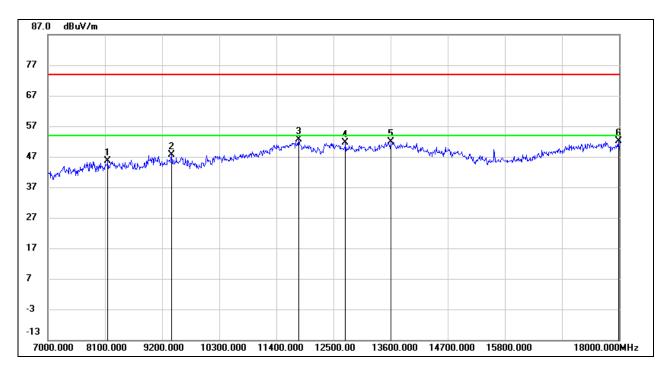


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9102.375	37.25	9.52	46.77	74.00	-27.23	peak
2	9580.875	36.49	10.48	46.97	74.00	-27.03	peak
3	11954.125	35.01	17.09	52.10	74.00	-21.90	peak
4	13606.875	34.38	18.39	52.77	74.00	-21.23	peak
5	15541.500	35.99	14.59	50.58	74.00	-23.42	peak
6	17102.125	32.36	19.15	51.51	74.00	-22.49	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

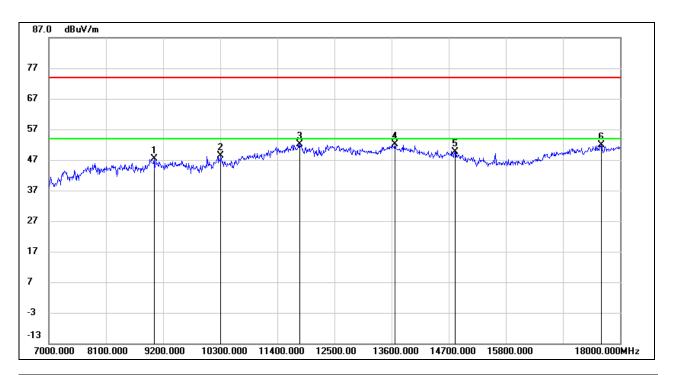


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8161.875	37.15	8.41	45.56	74.00	-28.44	peak
2	9391.125	37.64	10.09	47.73	74.00	-26.27	peak
3	11835.875	35.32	17.30	52.62	74.00	-21.38	peak
4	12733.750	34.61	16.93	51.54	74.00	-22.46	peak
5	13609.625	33.37	18.39	51.76	74.00	-22.24	peak
6	17998.625	28.72	23.36	52.08	74.00	-21.92	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

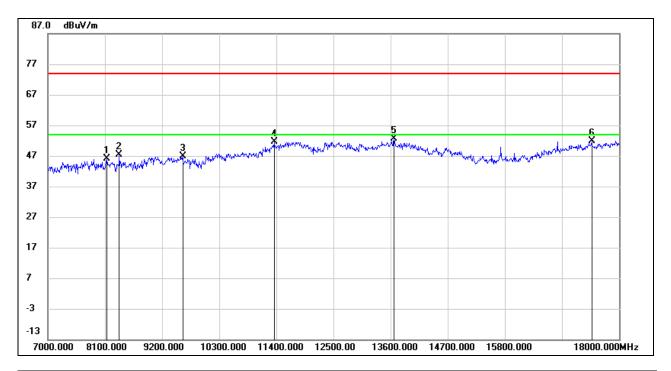


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9025.375	37.32	9.98	47.30	74.00	-26.70	peak
2	10312.375	36.61	11.68	48.29	74.00	-25.71	peak
3	11830.375	34.86	17.30	52.16	74.00	-21.84	peak
4	13671.500	33.68	18.51	52.19	74.00	-21.81	peak
5	14827.875	33.31	16.26	49.57	74.00	-24.43	peak
6	17641.125	30.65	21.18	51.83	74.00	-22.17	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

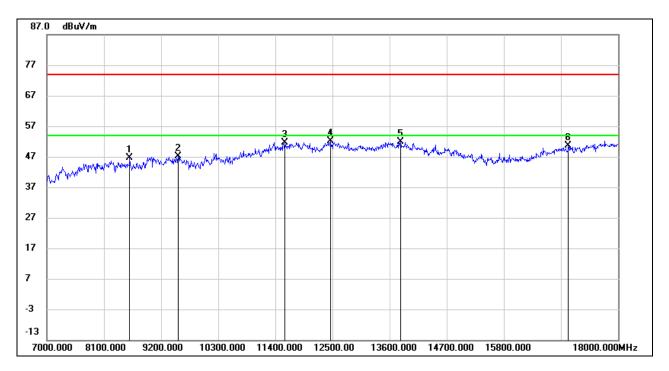


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8141.250	37.81	8.23	46.04	74.00	-27.96	peak
2	8383.250	39.41	7.98	47.39	74.00	-26.61	peak
3	9600.125	36.35	10.51	46.86	74.00	-27.14	peak
4	11357.375	35.91	15.64	51.55	74.00	-22.45	peak
5	13674.250	34.07	18.52	52.59	74.00	-21.41	peak
6	17472.000	31.80	20.04	51.84	74.00	-22.16	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8599.125	38.68	7.90	46.58	74.00	-27.42	peak
2	9536.875	36.84	10.41	47.25	74.00	-26.75	peak
3	11578.750	35.46	16.26	51.72	74.00	-22.28	peak
4	12460.125	35.26	16.75	52.01	74.00	-21.99	peak
5	13810.375	33.06	18.77	51.83	74.00	-22.17	peak
6	17045.750	31.79	18.81	50.60	74.00	-23.40	peak

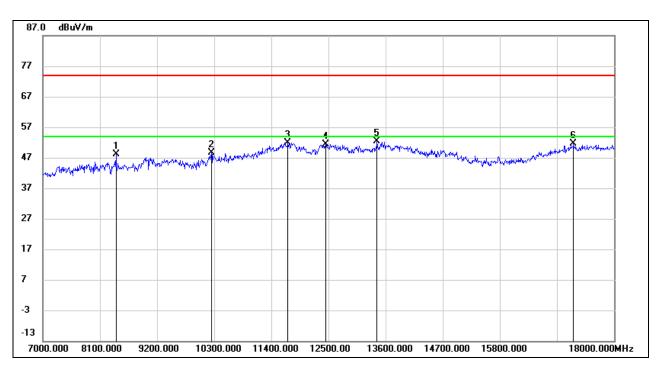
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency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



UNII-2A BAND

ANTENNA 1 TEST RESULTS (WORST CASE)

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

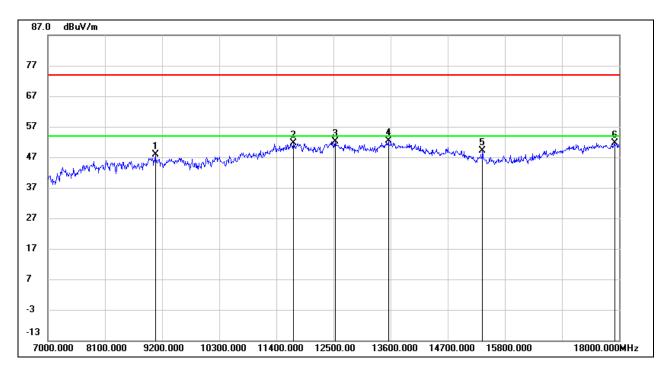


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8416.250	40.24	7.89	48.13	74.00	-25.87	peak
2	10250.500	37.21	11.47	48.68	74.00	-25.32	peak
3	11724.500	35.00	16.95	51.95	74.00	-22.05	peak
4	12447.750	34.59	16.78	51.37	74.00	-22.63	peak
5	13441.875	33.99	18.29	52.28	74.00	-21.72	peak
6	17225.875	31.80	19.75	51.55	74.00	-22.45	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

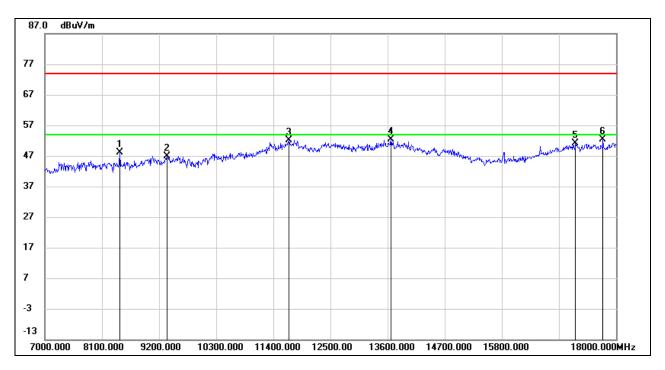


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9068.000	38.14	9.73	47.87	74.00	-26.13	peak
2	11739.625	34.61	17.03	51.64	74.00	-22.36	peak
3	12539.875	35.54	16.66	52.20	74.00	-21.80	peak
4	13561.500	33.88	18.39	52.27	74.00	-21.73	peak
5	15371.000	34.33	14.72	49.05	74.00	-24.95	peak
6	17916.125	28.54	23.16	51.70	74.00	-22.30	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

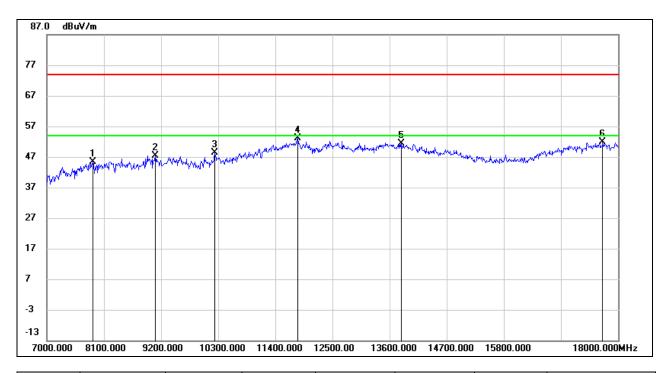


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8447.875	40.27	7.87	48.14	74.00	-25.86	peak
2	9355.375	37.00	9.86	46.86	74.00	-27.14	peak
3	11701.125	35.27	16.83	52.10	74.00	-21.90	peak
4	13668.750	33.85	18.50	52.35	74.00	-21.65	peak
5	17219.000	31.43	19.74	51.17	74.00	-22.83	peak
6	17749.750	30.10	22.33	52.43	74.00	-21.57	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

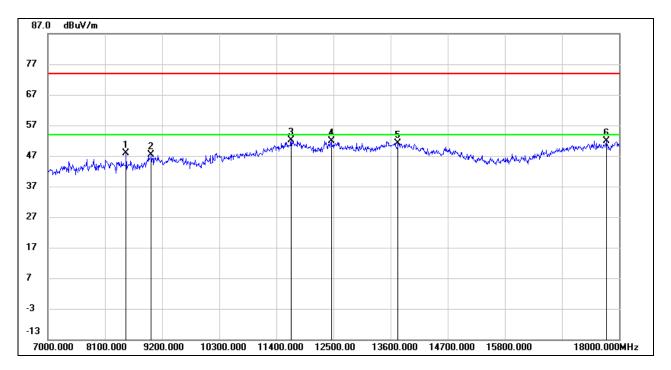


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7895.125	38.10	7.36	45.46	74.00	-28.54	peak
2	9090.000	37.78	9.60	47.38	74.00	-26.62	peak
3	10240.875	36.98	11.44	48.42	74.00	-25.58	peak
4	11831.750	35.90	17.30	53.20	74.00	-20.80	peak
5	13839.250	32.59	18.73	51.32	74.00	-22.68	peak
6	17704.375	29.99	21.85	51.84	74.00	-22.16	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

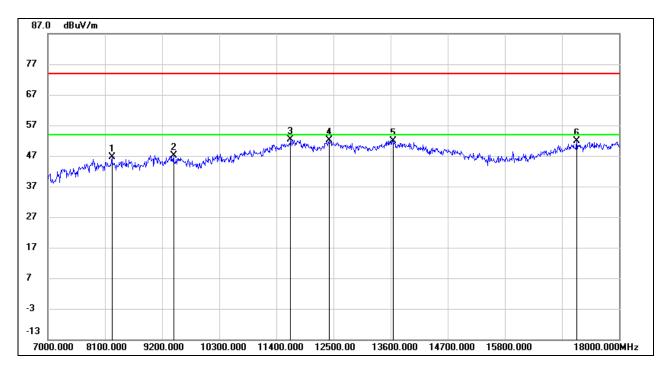


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8511.125	40.03	7.83	47.86	74.00	-26.14	peak
2	8991.000	37.28	10.03	47.31	74.00	-26.69	peak
3	11694.250	35.43	16.79	52.22	74.00	-21.78	peak
4	12458.750	35.22	16.75	51.97	74.00	-22.03	peak
5	13751.250	32.47	18.68	51.15	74.00	-22.85	peak
6	17758.000	29.42	22.42	51.84	74.00	-22.16	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8237.500	38.18	8.56	46.74	74.00	-27.26	peak
2	9425.500	37.04	10.19	47.23	74.00	-26.77	peak
3	11677.750	35.68	16.70	52.38	74.00	-21.62	peak
4	12412.000	35.31	16.87	52.18	74.00	-21.82	peak
5	13644.000	33.50	18.46	51.96	74.00	-22.04	peak
6	17187.375	32.15	19.66	51.81	74.00	-22.19	peak

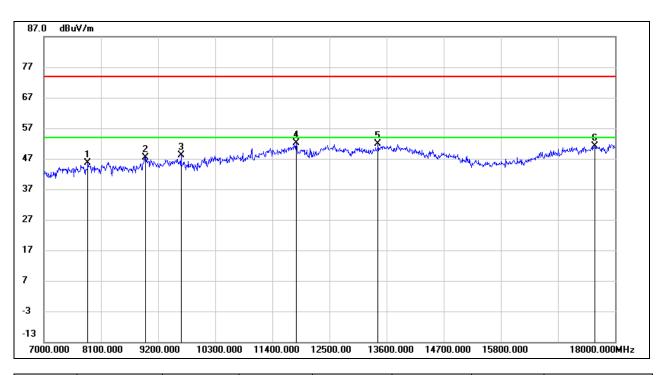
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency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



UNII-2C BAND

ANTENNA 1 TEST RESULTS (WORST CASE)

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

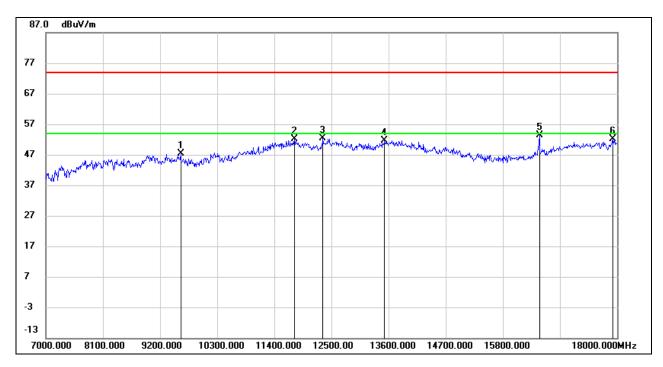


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7851.125	38.26	7.47	45.73	74.00	-28.27	peak
2	8967.625	37.66	9.77	47.43	74.00	-26.57	peak
3	9640.000	37.59	10.46	48.05	74.00	-25.95	peak
4	11866.125	34.84	17.23	52.07	74.00	-21.93	peak
5	13444.625	33.52	18.30	51.82	74.00	-22.18	peak
6	17624.625	30.17	21.01	51.18	74.00	-22.82	peak

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



<u>HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)</u>

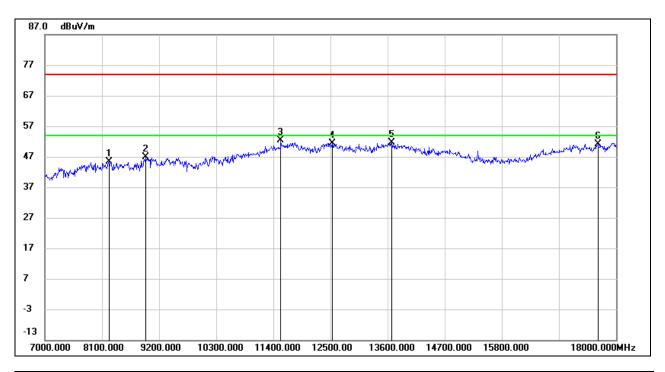


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9601.500	36.90	10.51	47.41	74.00	-26.59	peak
2	11786.375	34.82	17.28	52.10	74.00	-21.90	peak
3	12341.875	35.47	16.82	52.29	74.00	-21.71	peak
4	13527.125	33.29	18.41	51.70	74.00	-22.30	peak
5	16505.375	36.68	16.75	53.43	74.00	-20.57	peak
6	17916.125	28.95	23.16	52.11	74.00	-21.89	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

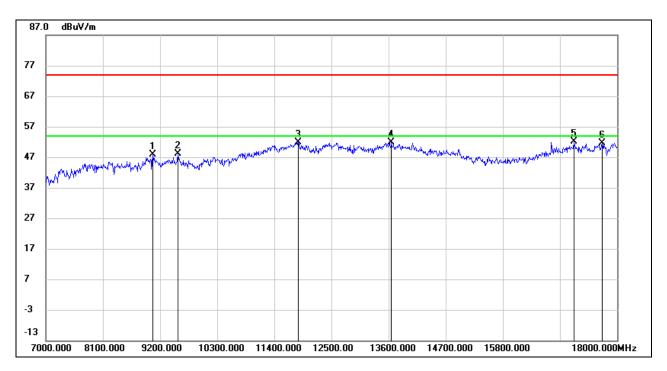


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8234.750	36.82	8.58	45.40	74.00	-28.60	peak
2	8953.875	37.22	9.62	46.84	74.00	-27.16	peak
3	11552.625	36.12	16.22	52.34	74.00	-21.66	peak
4	12535.750	34.81	16.65	51.46	74.00	-22.54	peak
5	13681.125	33.01	18.54	51.55	74.00	-22.45	peak
6	17653.500	29.85	21.31	51.16	74.00	-22.84	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

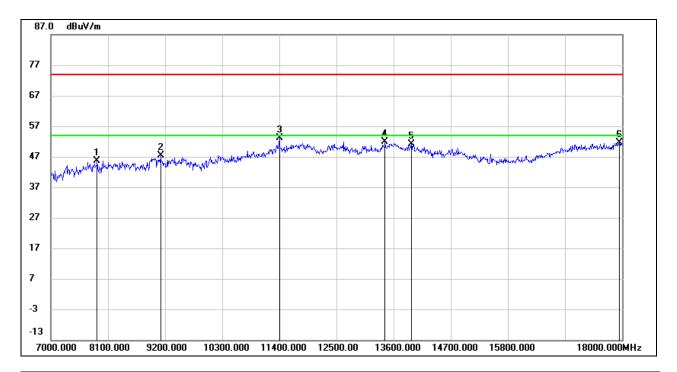


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9063.875	38.16	9.75	47.91	74.00	-26.09	peak
2	9550.625	37.73	10.43	48.16	74.00	-25.84	peak
3	11870.250	34.54	17.24	51.78	74.00	-22.22	peak
4	13657.750	33.39	18.49	51.88	74.00	-22.12	peak
5	17165.375	32.70	19.53	52.23	74.00	-21.77	peak
6	17715.375	29.65	21.96	51.61	74.00	-22.39	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

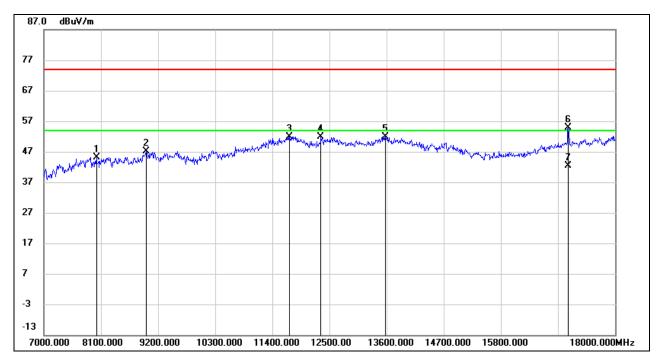


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7893.750	38.25	7.36	45.61	74.00	-28.39	peak
2	9117.500	37.87	9.43	47.30	74.00	-26.70	peak
3	11404.125	37.40	15.85	53.25	74.00	-20.75	peak
4	13444.625	33.49	18.30	51.79	74.00	-22.21	peak
5	13941.000	32.62	18.61	51.23	74.00	-22.77	peak
6	17951.875	28.38	23.25	51.63	74.00	-22.37	peak

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



<u>HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8021.625	37.91	7.24	45.15	74.00	-28.85	peak
2	8978.625	37.17	9.89	47.06	74.00	-26.94	peak
3	11738.250	34.85	17.02	51.87	74.00	-22.13	peak
4	12336.375	35.07	16.81	51.88	74.00	-22.12	peak
5	13583.500	33.51	18.38	51.89	74.00	-22.11	peak
6	17100.750	35.76	19.14	54.90	74.00	-19.10	peak
7	17100.750	23.12	19.14	42.26	54.00	-11.74	AVG

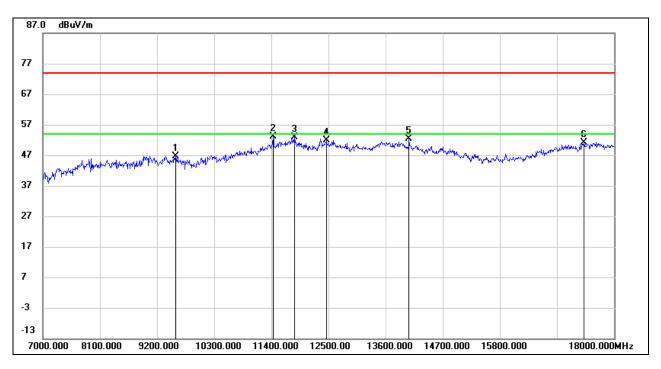
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency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



STRADDLE CHANNEL 144

ANTENNA 2 TEST RESULTS (WORST CASE)

HARMONICS AND SPURIOUS EMISSIONS (HORIZONTAL)

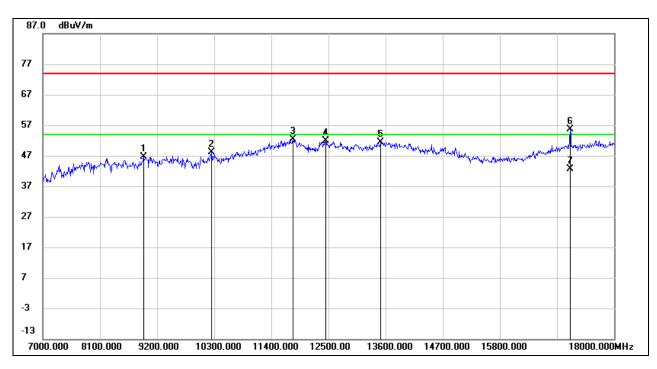


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9567.125	36.27	10.46	46.73	74.00	-27.27	peak
2	11437.125	37.17	15.96	53.13	74.00	-20.87	peak
3	11852.375	35.55	17.27	52.82	74.00	-21.18	peak
4	12462.875	35.05	16.75	51.80	74.00	-22.20	peak
5	14056.500	33.98	18.35	52.33	74.00	-21.67	peak
6	17423.875	31.15	19.90	51.05	74.00	-22.95	peak

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



HARMONICS AND SPURIOUS EMISSIONS (VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8938.750	37.29	9.46	46.75	74.00	-27.25	peak
2	10249.125	36.63	11.46	48.09	74.00	-25.91	peak
3	11819.375	35.10	17.32	52.42	74.00	-21.58	peak
4	12449.125	35.05	16.78	51.83	74.00	-22.17	peak
5	13509.250	33.09	18.41	51.50	74.00	-22.50	peak
6	17162.625	36.20	19.52	55.72	74.00	-18.28	peak
7	17162.625	23.01	19.52	42.53	54.00	-11.47	AVG

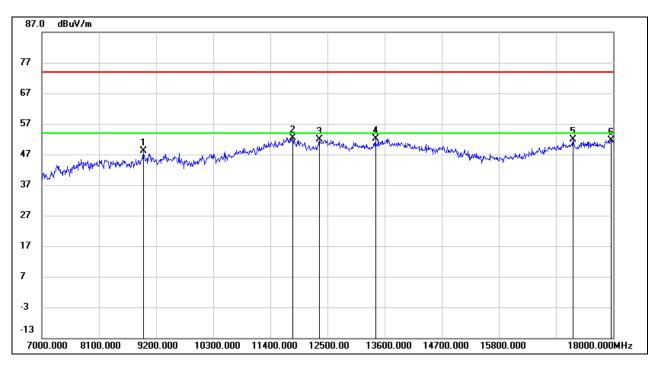
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
 - 5. Proper operation of the transmitter prior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



UNII-3 BAND

ANTENNA 1 TEST RESULTS (WORST CASE)

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

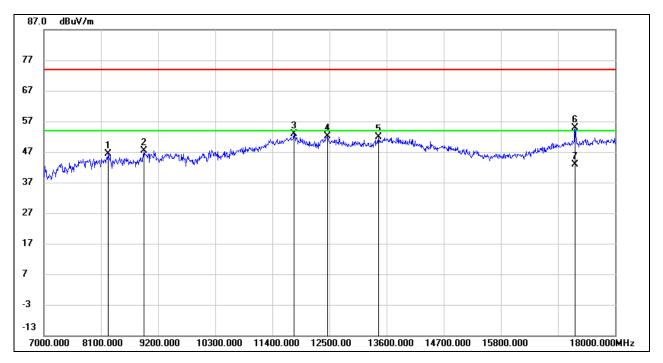


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8967.625	38.29	9.77	48.06	74.00	-25.94	peak
2	11830.375	35.00	17.30	52.30	74.00	-21.70	peak
3	12346.000	35.03	16.83	51.86	74.00	-22.14	peak
4	13425.375	33.99	18.26	52.25	74.00	-21.75	peak
5	17235.500	32.14	19.75	51.89	74.00	-22.11	peak
6	17964.250	28.31	23.28	51.59	74.00	-22.41	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

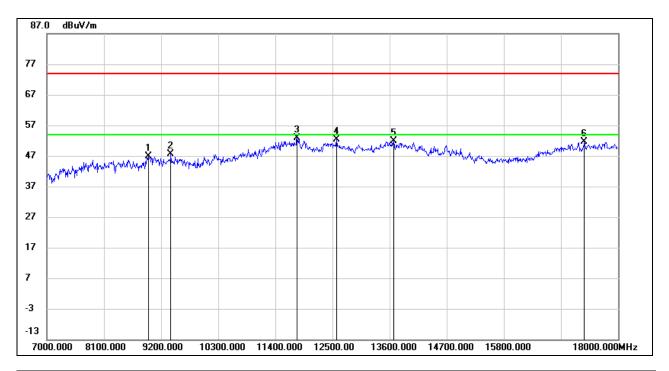


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8240.250	37.82	8.55	46.37	74.00	-27.63	peak
2	8934.625	38.02	9.41	47.43	74.00	-26.57	peak
3	11824.875	35.48	17.31	52.79	74.00	-21.21	peak
4	12456.000	35.39	16.78	52.17	74.00	-21.83	peak
5	13446.000	33.48	18.30	51.78	74.00	-22.22	peak
6	17236.875	35.05	19.75	54.80	74.00	-19.20	peak
7	17236.875	23.10	19.75	42.85	54.00	-11.15	AVG

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

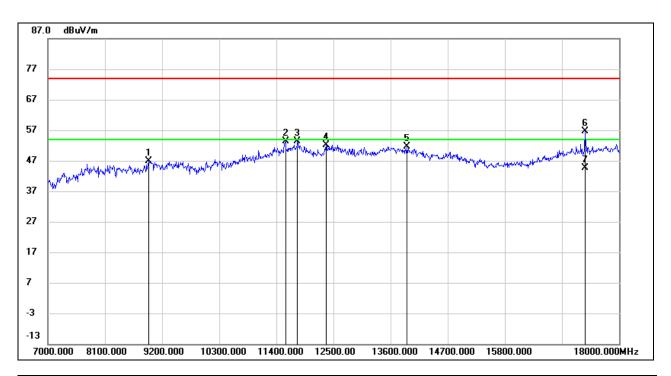


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8964.875	37.16	9.75	46.91	74.00	-27.09	peak
2	9395.250	37.64	10.10	47.74	74.00	-26.26	peak
3	11822.125	35.45	17.32	52.77	74.00	-21.23	peak
4	12578.375	35.79	16.63	52.42	74.00	-21.58	peak
5	13677.000	33.28	18.53	51.81	74.00	-22.19	peak
6	17356.500	31.77	19.81	51.58	74.00	-22.42	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

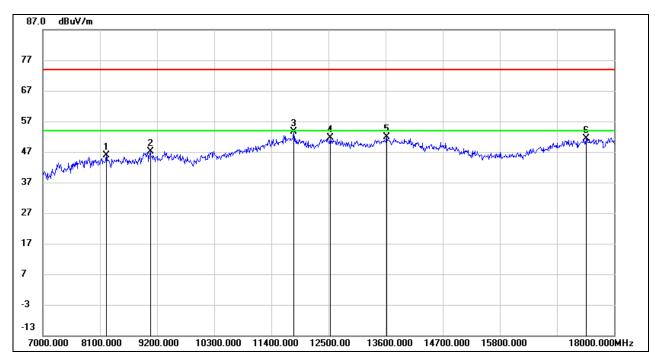


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8948.375	37.26	9.57	46.83	74.00	-27.17	peak
2	11577.375	37.17	16.26	53.43	74.00	-20.57	peak
3	11811.125	36.08	17.34	53.42	74.00	-20.58	peak
4	12363.875	35.37	16.85	52.22	74.00	-21.78	peak
5	13921.750	33.01	18.64	51.65	74.00	-22.35	peak
6	17349.625	36.83	19.81	56.64	74.00	-17.36	peak
7	17349.625	24.71	19.81	44.52	54.00	-9.48	AVG

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

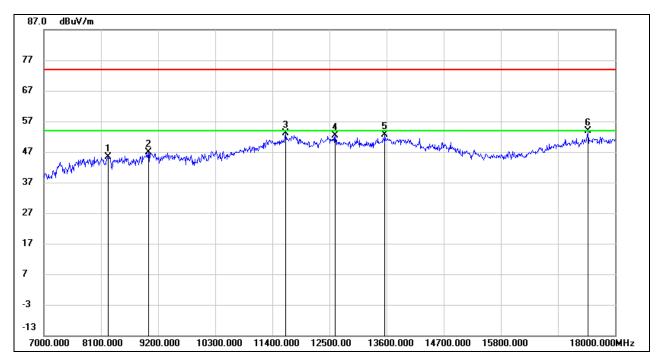


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8229.250	37.35	8.60	45.95	74.00	-28.05	peak
2	9070.750	37.33	9.70	47.03	74.00	-26.97	peak
3	11830.375	36.23	17.30	53.53	74.00	-20.47	peak
4	12539.875	35.07	16.66	51.73	74.00	-22.27	peak
5	13626.125	33.49	18.42	51.91	74.00	-22.09	peak
6	17465.125	31.40	20.02	51.42	74.00	-22.58	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8233.375	36.73	8.59	45.32	74.00	-28.68	peak
2	9018.500	36.90	10.02	46.92	74.00	-27.08	peak
3	11653.000	36.51	16.57	53.08	74.00	-20.92	peak
4	12618.250	35.66	16.67	52.33	74.00	-21.67	peak
5	13575.250	34.27	18.38	52.65	74.00	-21.35	peak
6	17489.875	33.82	20.10	53.92	74.00	-20.08	peak

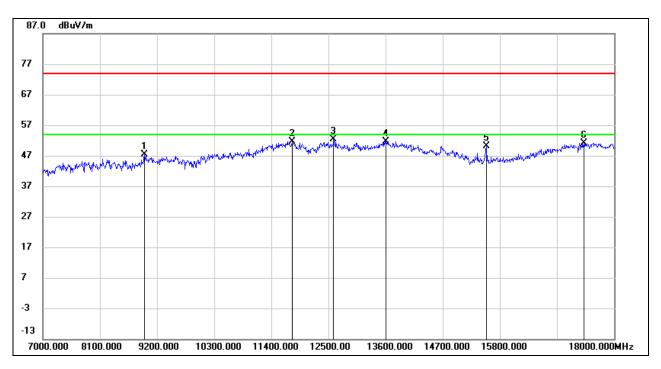
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency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



8.3.2. 802.11n HT20 MIMO MODE

UNII-1 BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

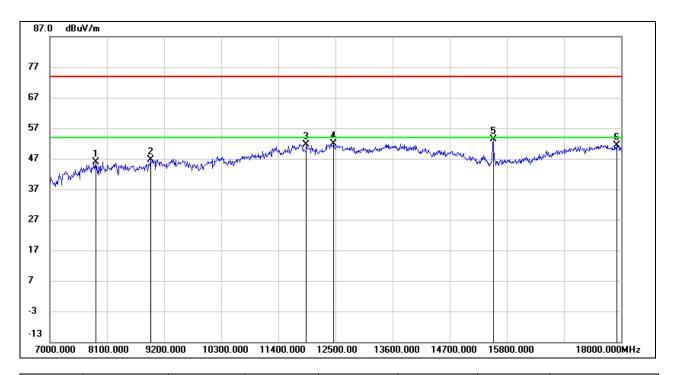


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8960.750	37.70	9.70	47.40	74.00	-26.60	peak
2	11796.000	34.41	17.33	51.74	74.00	-22.26	peak
3	12603.125	35.66	16.63	52.29	74.00	-21.71	peak
4	13619.250	33.33	18.40	51.73	74.00	-22.27	peak
5	15541.500	35.53	14.59	50.12	74.00	-23.88	peak
6	17425.250	31.16	19.91	51.07	74.00	-22.93	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

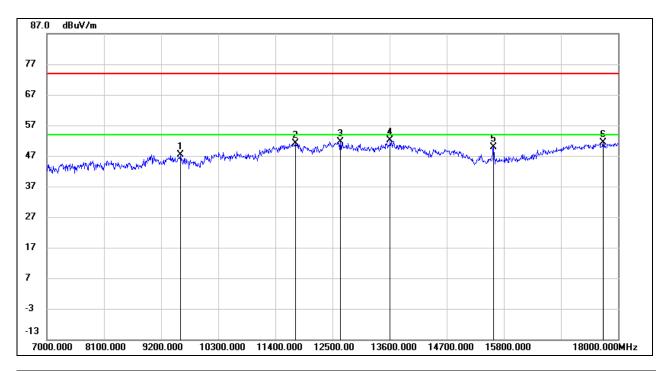


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7884.125	38.47	7.38	45.85	74.00	-28.15	peak
2	8945.625	37.19	9.53	46.72	74.00	-27.28	peak
3	11947.250	34.54	17.11	51.65	74.00	-22.35	peak
4	12468.375	35.12	16.74	51.86	74.00	-22.14	peak
5	15541.500	38.84	14.59	53.43	74.00	-20.57	peak
6	17914.750	28.31	23.15	51.46	74.00	-22.54	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

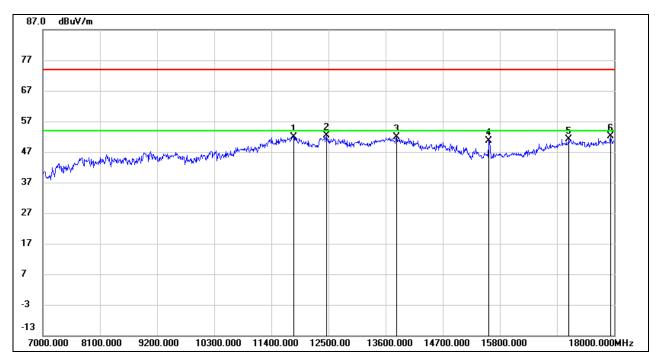


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9583.625	36.97	10.48	47.45	74.00	-26.55	peak
2	11790.500	33.73	17.30	51.03	74.00	-22.97	peak
3	12655.375	35.00	16.75	51.75	74.00	-22.25	peak
4	13620.625	33.81	18.41	52.22	74.00	-21.78	peak
5	15603.375	35.16	14.64	49.80	74.00	-24.20	peak
6	17715.375	29.31	21.96	51.27	74.00	-22.73	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

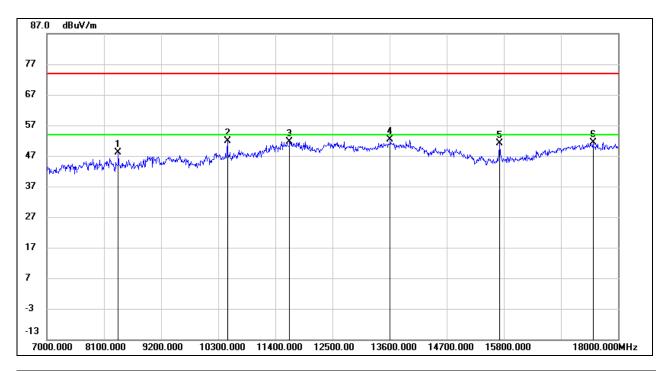


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	11829.000	34.70	17.30	52.00	74.00	-22.00	peak
2	12468.375	35.76	16.74	52.50	74.00	-21.50	peak
3	13809.000	33.13	18.77	51.90	74.00	-22.10	peak
4	15593.750	36.02	14.63	50.65	74.00	-23.35	peak
5	17132.375	31.71	19.33	51.04	74.00	-22.96	peak
6	17938.125	28.80	23.21	52.01	74.00	-21.99	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

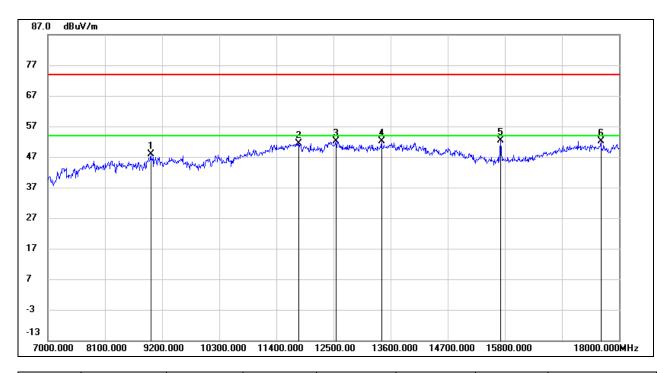


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8383.250	40.26	7.98	48.24	74.00	-25.76	peak
2	10481.500	39.50	12.37	51.87	74.00	-22.13	peak
3	11679.125	34.91	16.70	51.61	74.00	-22.39	peak
4	13617.875	33.99	18.40	52.39	74.00	-21.61	peak
5	15728.500	36.63	14.51	51.14	74.00	-22.86	peak
6	17525.625	31.14	20.29	51.43	74.00	-22.57	peak

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



<u>HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)</u>



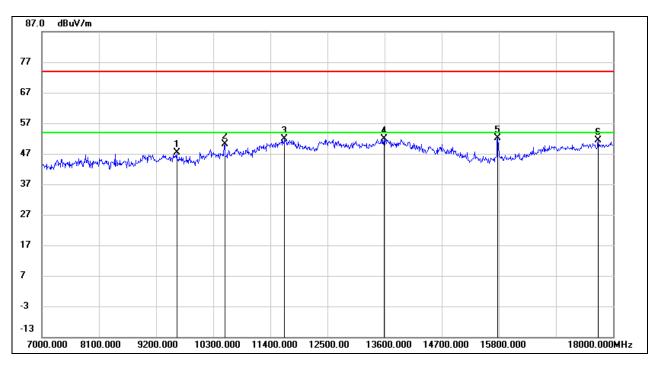
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8981.375	37.85	9.93	47.78	74.00	-26.22	peak
2	11829.000	34.20	17.30	51.50	74.00	-22.50	peak
3	12549.500	35.50	16.65	52.15	74.00	-21.85	peak
4	13425.375	33.77	18.26	52.03	74.00	-21.97	peak
5	15718.875	37.85	14.52	52.37	74.00	-21.63	peak
6	17652.125	30.74	21.29	52.03	74.00	-21.97	peak

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



UNII-2A BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

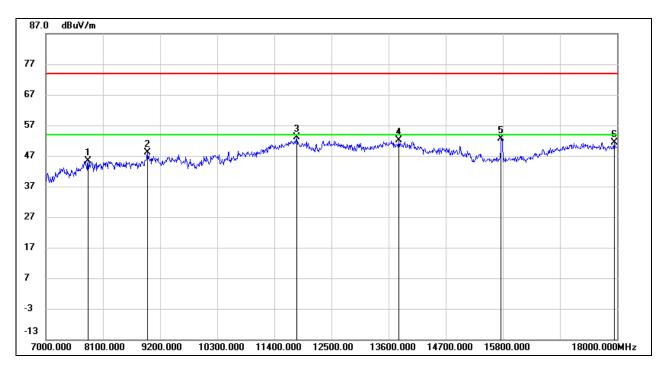


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9601.500	36.95	10.51	47.46	74.00	-26.54	peak
2	10521.375	37.47	12.56	50.03	74.00	-23.97	peak
3	11676.375	35.22	16.69	51.91	74.00	-22.09	peak
4	13597.250	33.45	18.37	51.82	74.00	-22.18	peak
5	15780.750	37.77	14.47	52.24	74.00	-21.76	peak
6	17715.375	29.43	21.96	51.39	74.00	-22.61	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

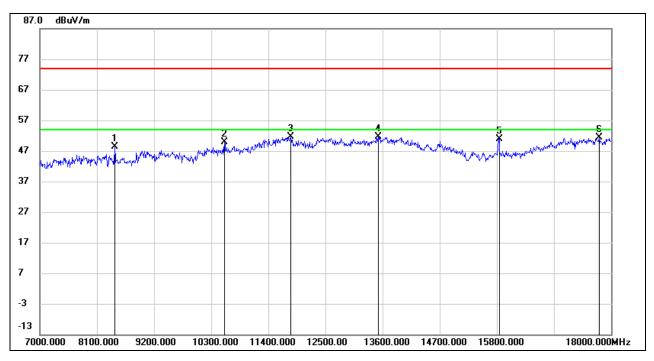


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7823.625	37.87	7.54	45.41	74.00	-28.59	peak
2	8963.500	38.35	9.73	48.08	74.00	-25.92	peak
3	11829.000	35.83	17.30	53.13	74.00	-20.87	peak
4	13807.625	33.43	18.77	52.20	74.00	-21.80	peak
5	15775.250	38.11	14.47	52.58	74.00	-21.42	peak
6	17951.875	28.12	23.25	51.37	74.00	-22.63	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

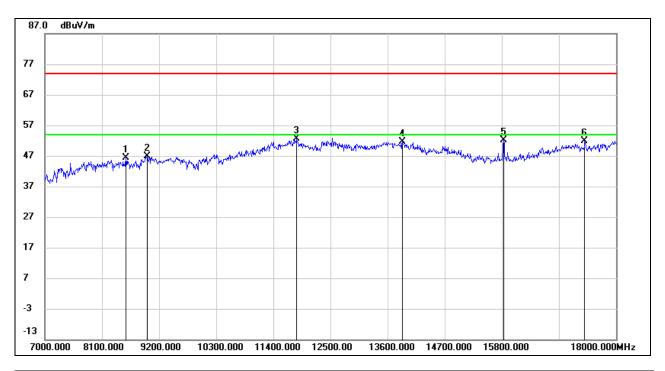


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8447.875	40.53	7.87	48.40	74.00	-25.60	peak
2	10555.750	37.15	12.72	49.87	74.00	-24.13	peak
3	11831.750	34.39	17.30	51.69	74.00	-22.31	peak
4	13521.625	33.29	18.41	51.70	74.00	-22.30	peak
5	15844.000	36.47	14.47	50.94	74.00	-23.06	peak
6	17771.750	28.93	22.56	51.49	74.00	-22.51	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

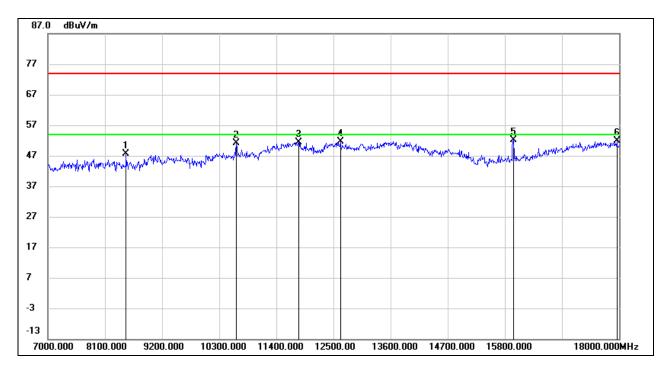


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8564.750	38.48	7.87	46.35	74.00	-27.65	peak
2	8974.500	36.95	9.85	46.80	74.00	-27.20	peak
3	11857.875	35.30	17.26	52.56	74.00	-21.44	peak
4	13891.500	32.88	18.67	51.55	74.00	-22.45	peak
5	15842.625	37.78	14.47	52.25	74.00	-21.75	peak
6	17403.250	32.06	19.84	51.90	74.00	-22.10	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

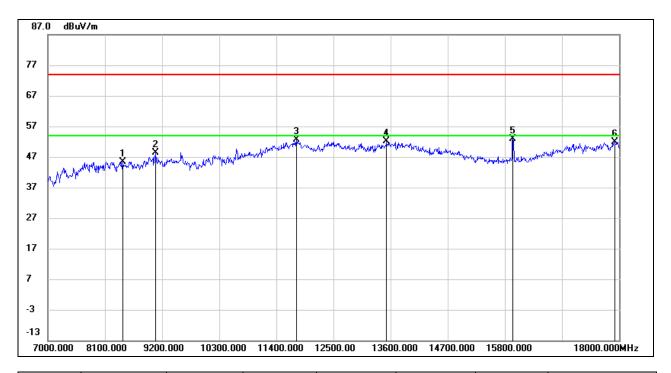


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8511.125	39.71	7.83	47.54	74.00	-26.46	peak
2	10636.875	38.04	13.03	51.07	74.00	-22.93	peak
3	11830.375	34.08	17.30	51.38	74.00	-22.62	peak
4	12633.375	34.92	16.70	51.62	74.00	-22.38	peak
5	15969.125	37.58	14.52	52.10	74.00	-21.90	peak
6	17964.250	28.56	23.28	51.84	74.00	-22.16	peak

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



<u>HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)</u>



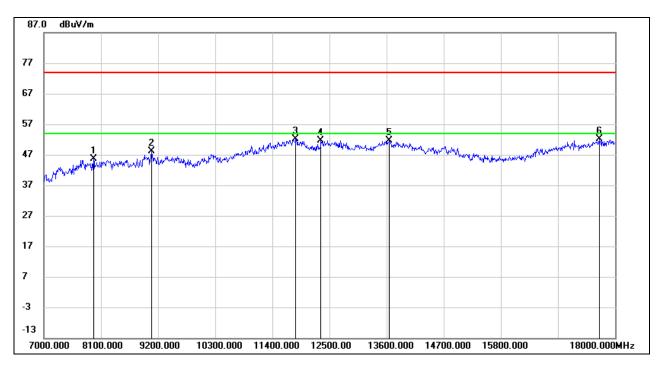
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8447.875	37.61	7.87	45.48	74.00	-28.52	peak
2	9083.125	38.79	9.63	48.42	74.00	-25.58	peak
3	11785.000	35.29	17.27	52.56	74.00	-21.44	peak
4	13525.750	33.74	18.41	52.15	74.00	-21.85	peak
5	15960.875	38.34	14.52	52.86	74.00	-21.14	peak
6	17916.125	28.81	23.16	51.97	74.00	-22.03	peak

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



UNII-2C BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

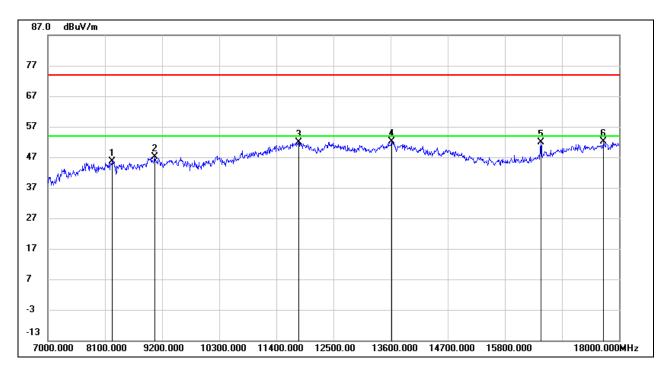


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7963.875	38.56	7.16	45.72	74.00	-28.28	peak
2	9072.125	38.31	9.71	48.02	74.00	-25.98	peak
3	11855.125	34.95	17.26	52.21	74.00	-21.79	peak
4	12343.250	34.92	16.82	51.74	74.00	-22.26	peak
5	13656.375	33.16	18.48	51.64	74.00	-22.36	peak
6	17700.250	30.34	21.80	52.14	74.00	-21.86	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

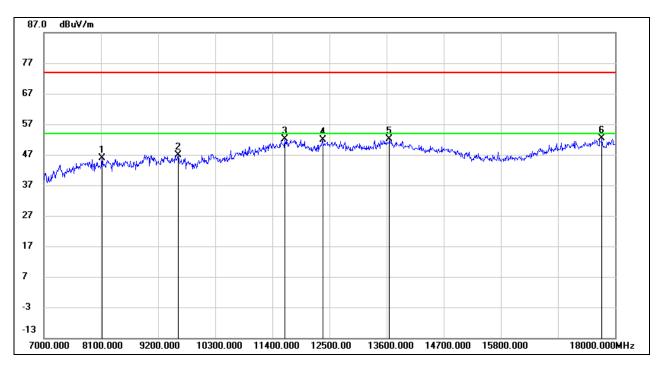


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8243.000	37.07	8.54	45.61	74.00	-28.39	peak
2	9063.875	37.30	9.75	47.05	74.00	-26.95	peak
3	11831.750	34.47	17.30	51.77	74.00	-22.23	peak
4	13626.125	33.64	18.42	52.06	74.00	-21.94	peak
5	16499.875	35.04	16.72	51.76	74.00	-22.24	peak
6	17709.875	30.34	21.90	52.24	74.00	-21.76	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

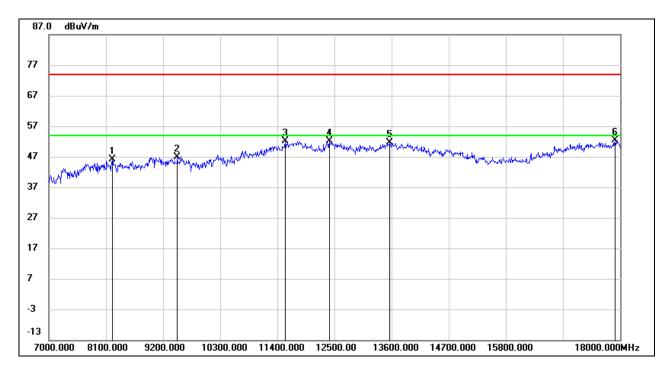


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8126.125	37.69	8.11	45.80	74.00	-28.20	peak
2	9585.000	36.50	10.49	46.99	74.00	-27.01	peak
3	11644.750	35.57	16.53	52.10	74.00	-21.90	peak
4	12373.500	34.97	16.86	51.83	74.00	-22.17	peak
5	13663.250	33.54	18.49	52.03	74.00	-21.97	peak
6	17753.875	29.97	22.37	52.34	74.00	-21.66	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

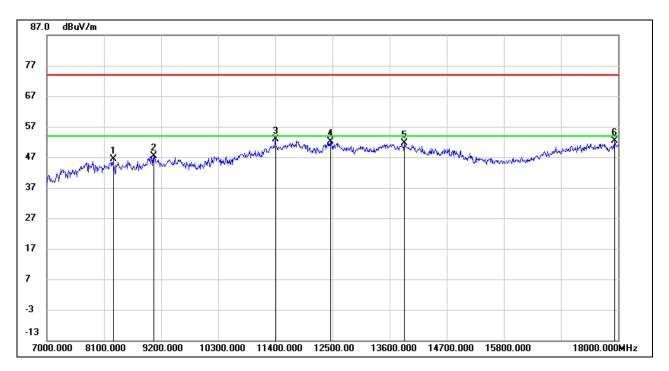


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8230.625	37.48	8.60	46.08	74.00	-27.92	peak
2	9475.000	36.61	10.30	46.91	74.00	-27.09	peak
3	11554.000	35.95	16.22	52.17	74.00	-21.83	peak
4	12410.625	35.16	16.87	52.03	74.00	-21.97	peak
5	13564.250	33.13	18.38	51.51	74.00	-22.49	peak
6	17901.000	29.31	23.12	52.43	74.00	-21.57	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

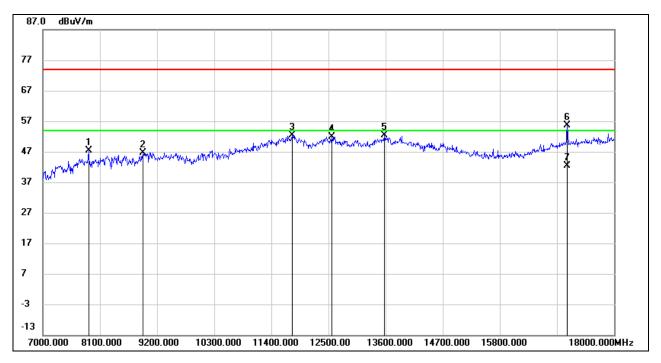


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8280.125	38.10	8.40	46.50	74.00	-27.50	peak
2	9065.250	37.63	9.74	47.37	74.00	-26.63	peak
3	11401.375	37.08	15.84	52.92	74.00	-21.08	peak
4	12464.250	35.44	16.75	52.19	74.00	-21.81	peak
5	13888.750	32.88	18.67	51.55	74.00	-22.45	peak
6	17940.875	29.17	23.22	52.39	74.00	-21.61	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



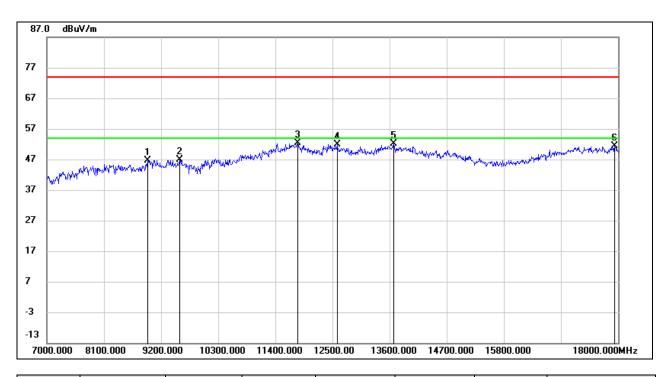
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7885.500	39.98	7.38	47.36	74.00	-26.64	peak
2	8933.250	37.34	9.40	46.74	74.00	-27.26	peak
3	11815.250	35.18	17.32	52.50	74.00	-21.50	peak
4	12567.375	35.36	16.64	52.00	74.00	-22.00	peak
5	13586.250	34.11	18.37	52.48	74.00	-21.52	peak
6	17099.375	36.43	19.13	55.56	74.00	-18.44	peak
7	17099.375	23.15	19.13	42.28	54.00	-11.72	AVG

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



STRADDLE CHANNEL 144

HARMONICS AND SPURIOUS EMISSIONS (HORIZONTAL)

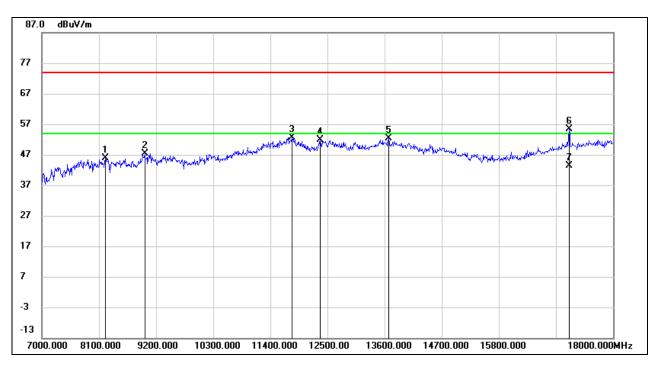


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8940.125	37.27	9.48	46.75	74.00	-27.25	peak
2	9568.500	36.43	10.46	46.89	74.00	-27.11	peak
3	11833.125	34.98	17.30	52.28	74.00	-21.72	peak
4	12594.875	35.23	16.63	51.86	74.00	-22.14	peak
5	13677.000	33.63	18.53	52.16	74.00	-21.84	peak
6	17940.875	28.25	23.22	51.47	74.00	-22.53	peak

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



HARMONICS AND SPURIOUS EMISSIONS (VERTICAL)



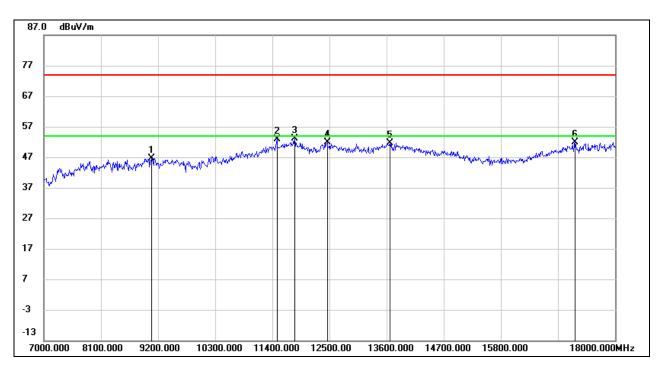
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8230.625	37.29	8.60	45.89	74.00	-28.11	peak
2	8986.875	37.33	9.98	47.31	74.00	-26.69	peak
3	11823.500	35.23	17.32	52.55	74.00	-21.45	peak
4	12363.875	35.11	16.85	51.96	74.00	-22.04	peak
5	13686.625	33.95	18.55	52.50	74.00	-21.50	peak
6	17161.250	35.80	19.50	55.30	74.00	-18.70	peak
7	17161.250	23.99	19.50	43.49	54.00	-10.51	AVG

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



UNII-3 BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

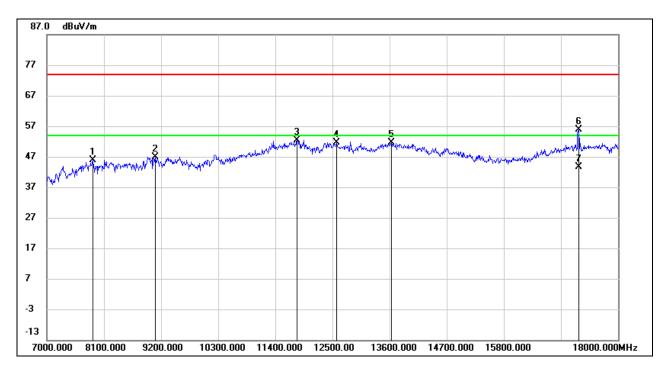


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9069.375	37.03	9.71	46.74	74.00	-27.26	peak
2	11492.125	36.64	16.14	52.78	74.00	-21.22	peak
3	11838.625	35.79	17.29	53.08	74.00	-20.92	peak
4	12458.750	35.13	16.75	51.88	74.00	-22.12	peak
5	13671.500	33.06	18.51	51.57	74.00	-22.43	peak
6	17238.250	32.24	19.76	52.00	74.00	-22.00	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

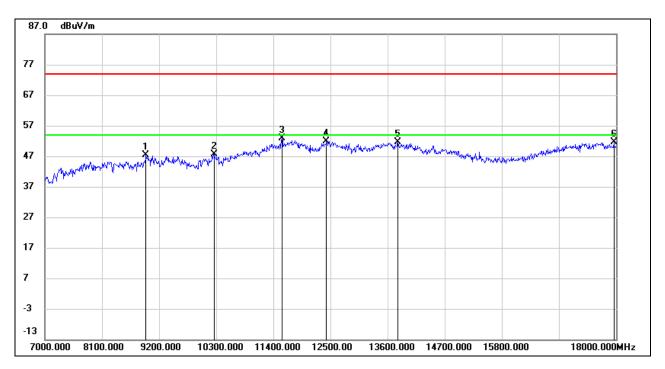


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	38.45	7.39	45.84	74.00	-28.16	peak
2	9091.375	37.33	9.60	46.93	74.00	-27.07	peak
3	11819.375	35.11	17.32	52.43	74.00	-21.57	peak
4	12579.750	34.98	16.64	51.62	74.00	-22.38	peak
5	13641.250	33.13	18.45	51.58	74.00	-22.42	peak
6	17242.375	36.15	19.76	55.91	74.00	-18.09	peak
7	17242.375	23.89	19.76	43.65	54.00	-10.35	AVG

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

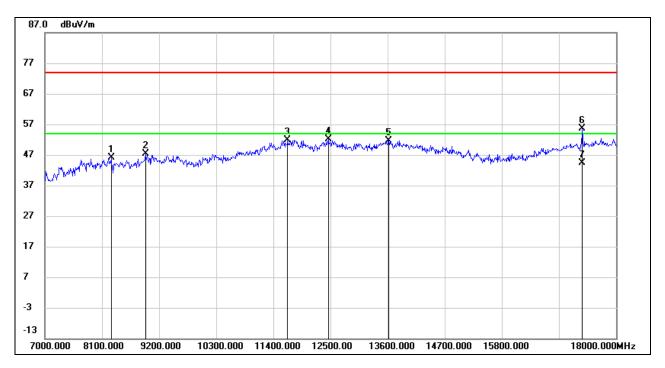


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8948.375	37.91	9.57	47.48	74.00	-26.52	peak
2	10256.000	36.12	11.49	47.61	74.00	-26.39	peak
3	11570.500	36.63	16.26	52.89	74.00	-21.11	peak
4	12432.625	35.12	16.82	51.94	74.00	-22.06	peak
5	13804.875	32.87	18.78	51.65	74.00	-22.35	peak
6	17962.875	28.29	23.28	51.57	74.00	-22.43	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

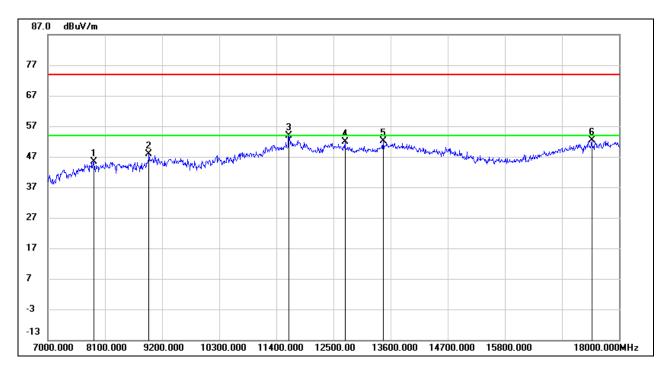


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8277.375	37.75	8.41	46.16	74.00	-27.84	peak
2	8945.625	37.91	9.53	47.44	74.00	-26.56	peak
3	11680.500	35.25	16.72	51.97	74.00	-22.03	peak
4	12464.250	35.40	16.75	52.15	74.00	-21.85	peak
5	13626.125	33.31	18.42	51.73	74.00	-22.27	peak
6	17356.500	35.79	19.81	55.60	74.00	-18.40	peak
7	17356.500	24.57	19.81	44.38	54.00	-9.62	AVG

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

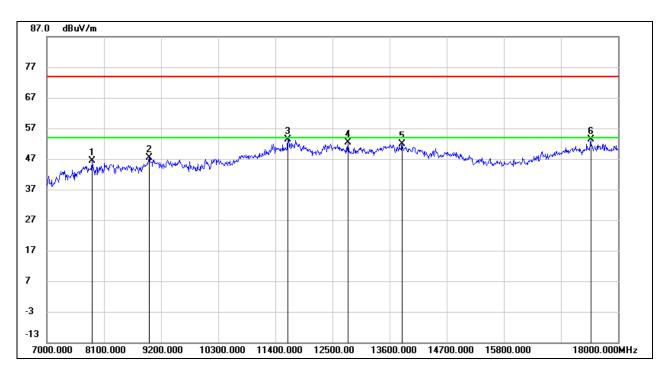


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7882.750	38.11	7.39	45.50	74.00	-28.50	peak
2	8947.000	38.44	9.55	47.99	74.00	-26.01	peak
3	11643.375	37.24	16.52	53.76	74.00	-20.24	peak
4	12726.875	34.94	16.91	51.85	74.00	-22.15	peak
5	13463.875	33.72	18.34	52.06	74.00	-21.94	peak
6	17476.125	32.34	20.06	52.40	74.00	-21.60	peak

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



<u>HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7878.625	39.01	7.39	46.40	74.00	-27.60	peak
2	8973.125	37.45	9.84	47.29	74.00	-26.71	peak
3	11648.875	36.91	16.56	53.47	74.00	-20.53	peak
4	12801.125	35.28	17.07	52.35	74.00	-21.65	peak
5	13844.750	33.24	18.73	51.97	74.00	-22.03	peak
6	17481.625	33.32	20.08	53.40	74.00	-20.60	peak

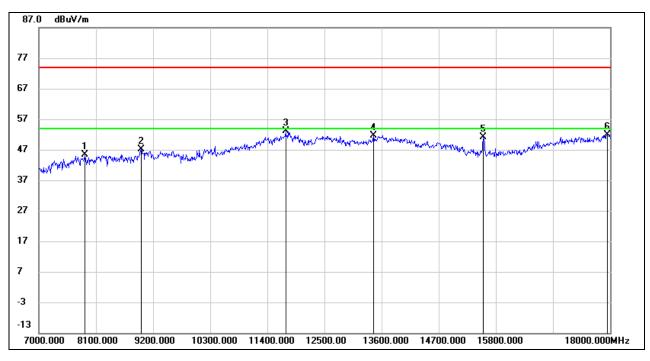
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency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



8.3.3. 802.11n HT40 MIMO MODE

UNII-1 BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

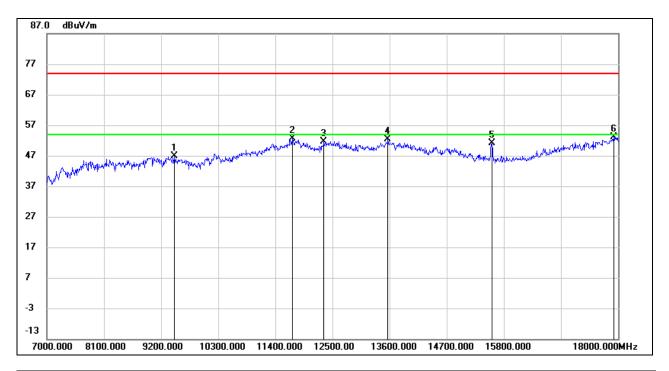


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7895.125	38.04	7.36	45.40	74.00	-28.60	peak
2	8973.125	37.24	9.84	47.08	74.00	-26.92	peak
3	11752.000	35.91	17.10	53.01	74.00	-20.99	peak
4	13450.125	33.30	18.31	51.61	74.00	-22.39	peak
5	15560.750	36.49	14.61	51.10	74.00	-22.90	peak
6	17950.500	28.71	23.24	51.95	74.00	-22.05	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

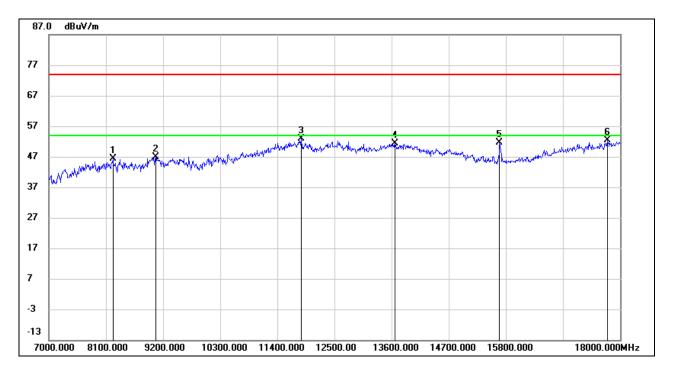


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9462.625	36.57	10.27	46.84	74.00	-27.16	peak
2	11736.875	35.52	17.02	52.54	74.00	-21.46	peak
3	12344.625	34.89	16.82	51.71	74.00	-22.29	peak
4	13573.875	34.01	18.38	52.39	74.00	-21.61	peak
5	15574.500	36.40	14.62	51.02	74.00	-22.98	peak
6	17912.000	30.01	23.14	53.15	74.00	-20.85	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

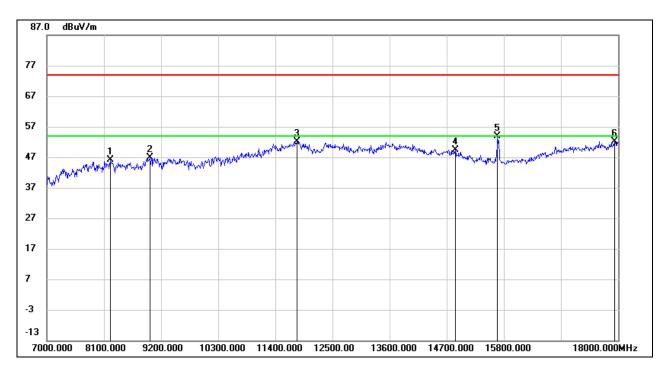


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8232.000	37.90	8.59	46.49	74.00	-27.51	peak
2	9063.875	37.20	9.75	46.95	74.00	-27.05	peak
3	11871.625	35.52	17.24	52.76	74.00	-21.24	peak
4	13668.750	32.93	18.50	51.43	74.00	-22.57	peak
5	15688.625	37.00	14.55	51.55	74.00	-22.45	peak
6	17764.875	29.83	22.49	52.32	74.00	-21.68	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



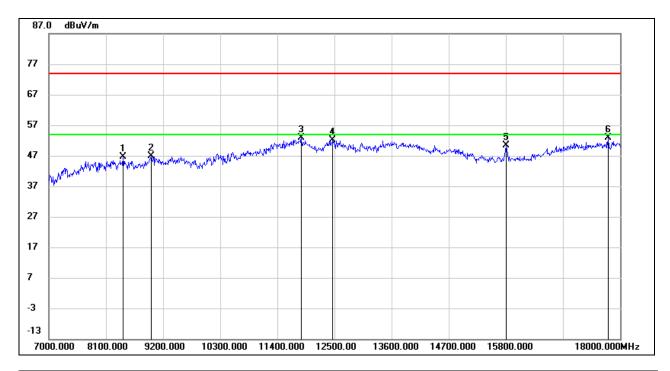
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8226.500	37.41	8.61	46.02	74.00	-27.98	peak
2	8984.125	36.80	9.96	46.76	74.00	-27.24	peak
3	11823.500	34.84	17.32	52.16	74.00	-21.84	peak
4	14866.375	33.27	16.18	49.45	74.00	-24.55	peak
5	15681.750	39.25	14.55	53.80	74.00	-20.20	peak
6	17943.625	28.88	23.22	52.10	74.00	-21.90	peak

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



UNII-2A BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

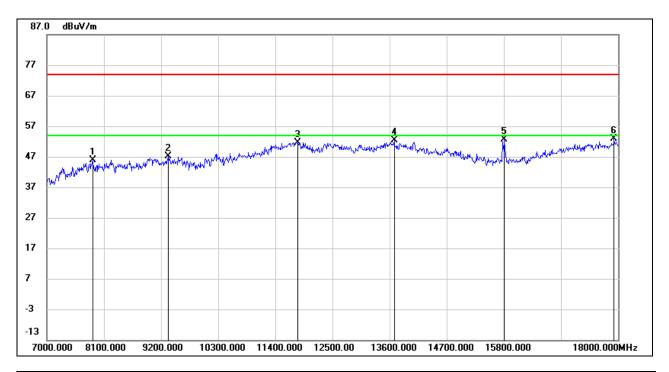


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8431.375	38.69	7.89	46.58	74.00	-27.42	peak
2	8975.875	36.96	9.86	46.82	74.00	-27.18	peak
3	11863.375	35.70	17.24	52.94	74.00	-21.06	peak
4	12467.000	35.37	16.74	52.11	74.00	-21.89	peak
5	15820.625	35.96	14.46	50.42	74.00	-23.58	peak
6	17774.500	30.27	22.60	52.87	74.00	-21.13	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

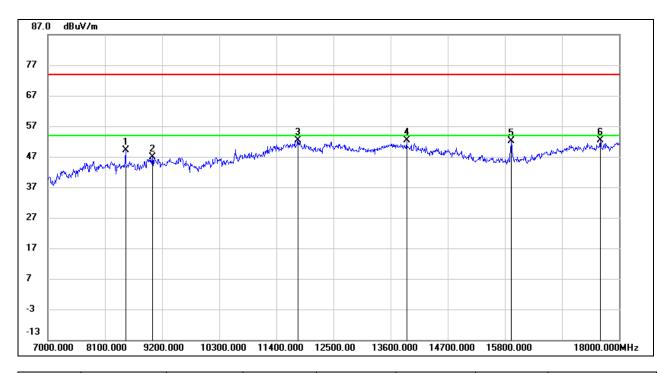


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7881.375	38.49	7.39	45.88	74.00	-28.12	peak
2	9347.125	37.35	9.82	47.17	74.00	-26.83	peak
3	11834.500	34.43	17.29	51.72	74.00	-22.28	peak
4	13689.375	33.82	18.55	52.37	74.00	-21.63	peak
5	15820.625	38.25	14.46	52.71	74.00	-21.29	peak
6	17925.750	29.60	23.18	52.78	74.00	-21.22	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

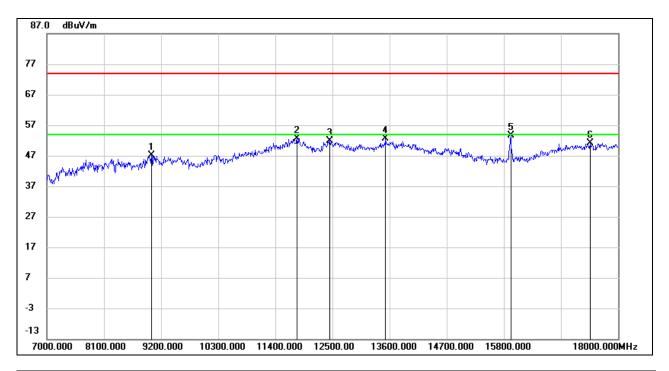


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8496.000	41.22	7.83	49.05	74.00	-24.95	peak
2	9014.375	36.81	10.04	46.85	74.00	-27.15	peak
3	11826.250	35.16	17.31	52.47	74.00	-21.53	peak
4	13913.500	33.71	18.65	52.36	74.00	-21.64	peak
5	15923.750	37.72	14.50	52.22	74.00	-21.78	peak
6	17645.250	31.10	21.22	52.32	74.00	-21.68	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



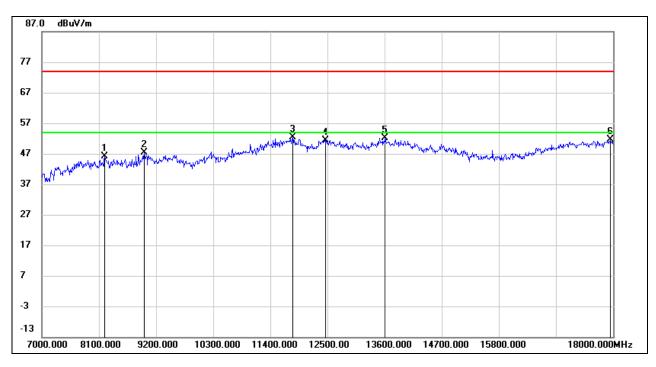
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9022.625	37.15	10.00	47.15	74.00	-26.85	peak
2	11820.750	35.29	17.33	52.62	74.00	-21.38	peak
3	12451.875	35.19	16.78	51.97	74.00	-22.03	peak
4	13527.125	34.33	18.41	52.74	74.00	-21.26	peak
5	15936.125	39.23	14.50	53.73	74.00	-20.27	peak
6	17465.125	31.19	20.02	51.21	74.00	-22.79	peak

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



UNII-2C BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

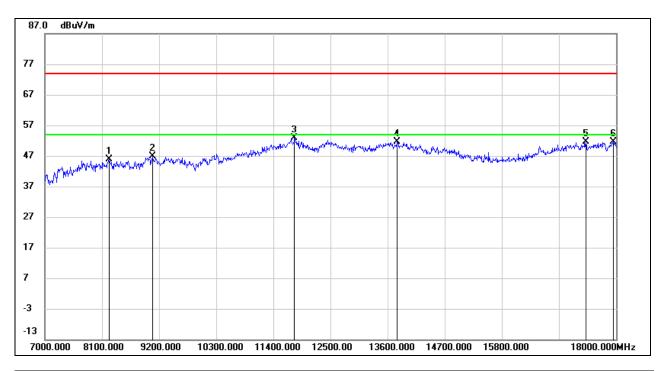


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8218.250	37.55	8.64	46.19	74.00	-27.81	peak
2	8971.750	37.68	9.82	47.50	74.00	-26.50	peak
3	11830.375	35.00	17.30	52.30	74.00	-21.70	peak
4	12468.375	34.74	16.74	51.48	74.00	-22.52	peak
5	13611.000	33.82	18.39	52.21	74.00	-21.79	peak
6	17953.250	28.26	23.25	51.51	74.00	-22.49	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

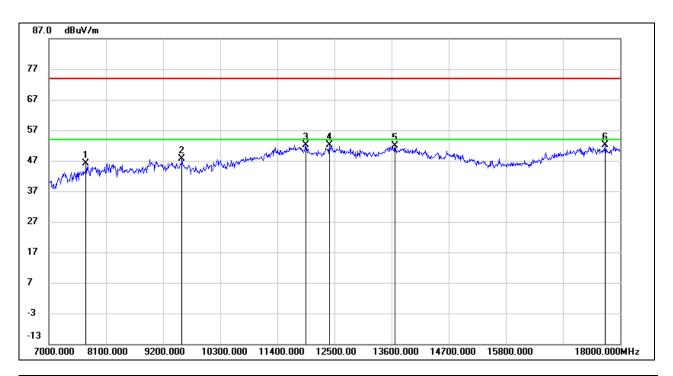


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8234.750	37.32	8.58	45.90	74.00	-28.10	peak
2	9083.125	37.29	9.63	46.92	74.00	-27.08	peak
3	11816.625	35.47	17.32	52.79	74.00	-21.21	peak
4	13796.625	32.90	18.77	51.67	74.00	-22.33	peak
5	17422.500	31.62	19.89	51.51	74.00	-22.49	peak
6	17947.750	28.36	23.24	51.60	74.00	-22.40	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

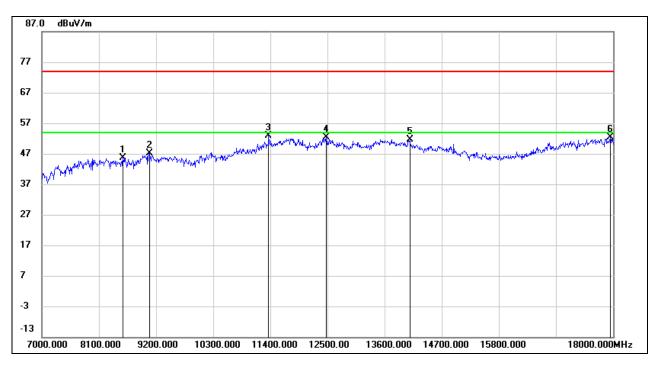


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7717.750	38.82	7.27	46.09	74.00	-27.91	peak
2	9571.250	37.07	10.46	47.53	74.00	-26.47	peak
3	11954.125	35.05	17.09	52.14	74.00	-21.86	peak
4	12406.500	35.19	16.88	52.07	74.00	-21.93	peak
5	13668.750	33.41	18.50	51.91	74.00	-22.09	peak
6	17715.375	30.13	21.96	52.09	74.00	-21.91	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

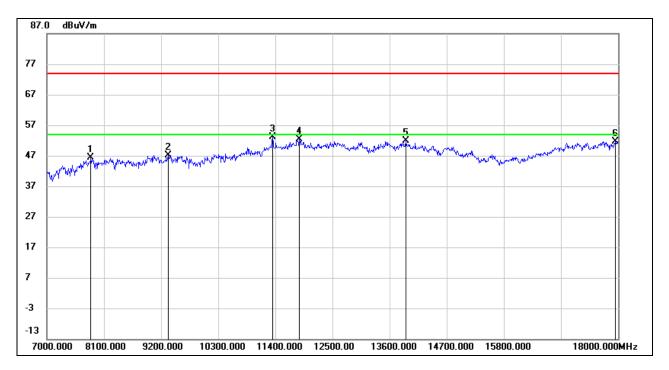


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8566.125	37.84	7.87	45.71	74.00	-28.29	peak
2	9068.000	37.46	9.73	47.19	74.00	-26.81	peak
3	11369.750	37.10	15.70	52.80	74.00	-21.20	peak
4	12482.125	35.63	16.71	52.34	74.00	-21.66	peak
5	14085.375	33.47	18.25	51.72	74.00	-22.28	peak
6	17954.625	29.12	23.26	52.38	74.00	-21.62	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

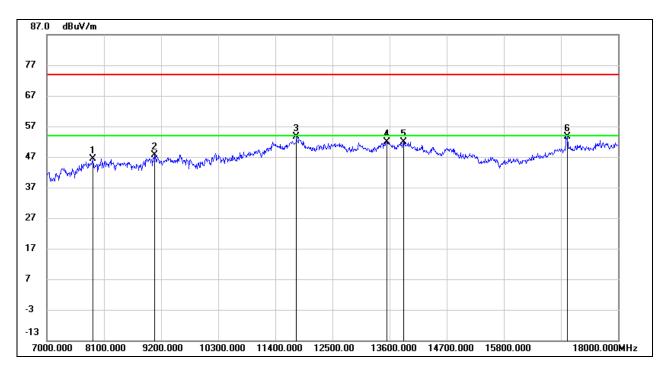


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7847.000	38.93	7.48	46.41	74.00	-27.59	peak
2	9343.000	37.33	9.80	47.13	74.00	-26.87	peak
3	11345.000	37.56	15.58	53.14	74.00	-20.86	peak
4	11862.000	35.23	17.25	52.48	74.00	-21.52	peak
5	13913.500	33.26	18.65	51.91	74.00	-22.09	peak
6	17950.500	28.46	23.24	51.70	74.00	-22.30	peak

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



<u>HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)</u>



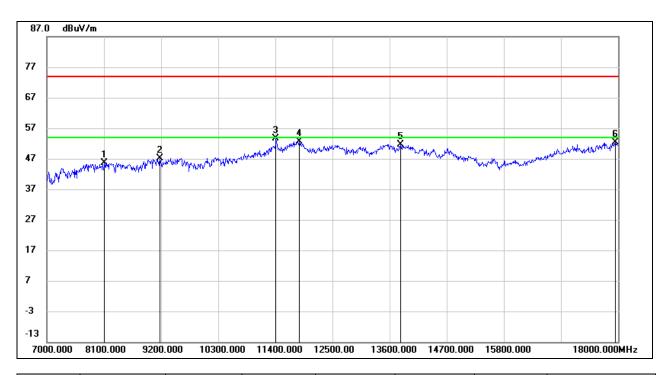
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7885.500	39.07	7.38	46.45	74.00	-27.55	peak
2	9079.000	37.95	9.67	47.62	74.00	-26.38	peak
3	11812.500	36.21	17.33	53.54	74.00	-20.46	peak
4	13545.000	33.45	18.39	51.84	74.00	-22.16	peak
5	13880.500	33.22	18.69	51.91	74.00	-22.09	peak
6	17021.000	34.96	18.66	53.62	74.00	-20.38	peak

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



STRADDLE CHANNEL 142

HARMONICS AND SPURIOUS EMISSIONS (HORIZONTAL)

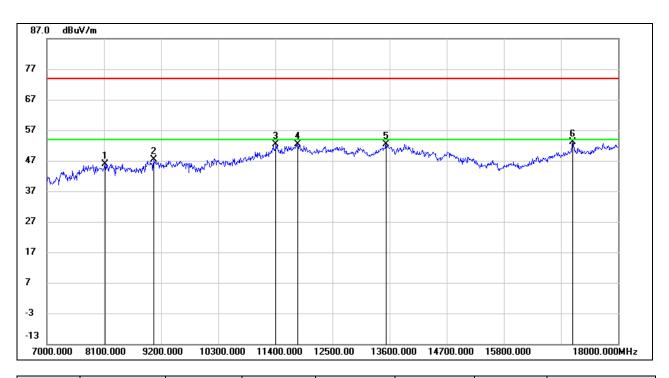


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	37.59	7.99	45.58	74.00	-28.42	peak
2	9178.000	38.04	9.07	47.11	74.00	-26.89	peak
3	11416.500	37.64	15.89	53.53	74.00	-20.47	peak
4	11867.500	35.27	17.24	52.51	74.00	-21.49	peak
5	13809.000	32.84	18.77	51.61	74.00	-22.39	peak
6	17950.500	29.05	23.24	52.29	74.00	-21.71	peak

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



HARMONICS AND SPURIOUS EMISSIONS (VERTICAL)



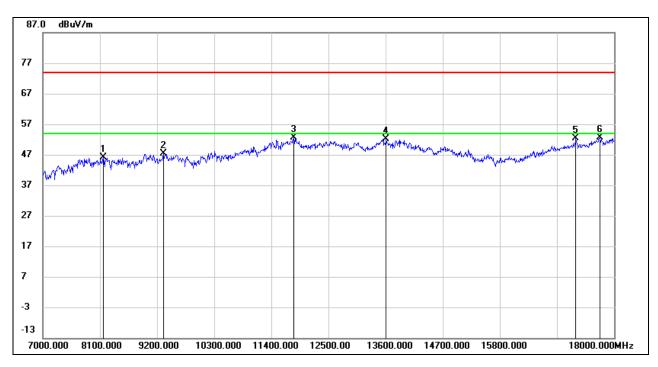
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8122.000	37.89	8.07	45.96	74.00	-28.04	peak
2	9062.500	37.71	9.76	47.47	74.00	-26.53	peak
3	11411.000	36.52	15.87	52.39	74.00	-21.61	peak
4	11829.000	35.08	17.30	52.38	74.00	-21.62	peak
5	13539.500	34.03	18.39	52.42	74.00	-21.58	peak
6	17136.500	33.84	19.35	53.19	74.00	-20.81	peak

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



UNII-3 BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

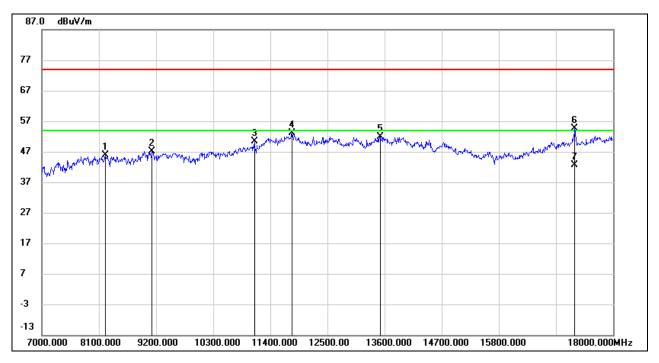


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8166.000	37.70	8.43	46.13	74.00	-27.87	peak
2	9326.500	37.64	9.70	47.34	74.00	-26.66	peak
3	11834.500	35.41	17.29	52.70	74.00	-21.30	peak
4	13616.500	33.73	18.40	52.13	74.00	-21.87	peak
5	17268.500	32.56	19.78	52.34	74.00	-21.66	peak
6	17725.000	30.48	22.06	52.54	74.00	-21.46	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

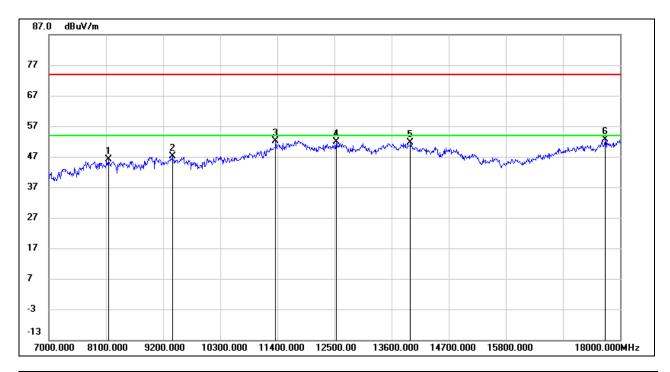


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8221.000	37.34	8.63	45.97	74.00	-28.03	peak
2	9128.500	37.75	9.37	47.12	74.00	-26.88	peak
3	11097.500	35.77	14.51	50.28	74.00	-23.72	peak
4	11818.000	35.72	17.31	53.03	74.00	-20.97	peak
5	13528.500	33.37	18.40	51.77	74.00	-22.23	peak
6	17268.500	34.73	19.78	54.51	74.00	-19.49	peak
7	17268.500	22.74	19.78	42.52	54.00	-11.48	AVG

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

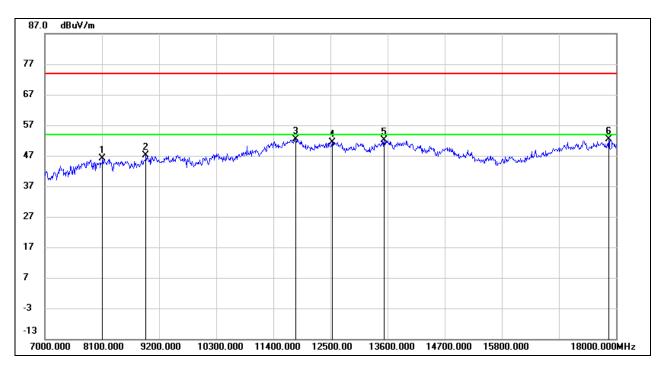


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8144.000	37.80	8.25	46.05	74.00	-27.95	peak
2	9376.000	37.05	9.99	47.04	74.00	-26.96	peak
3	11367.000	36.58	15.67	52.25	74.00	-21.75	peak
4	12533.000	35.22	16.66	51.88	74.00	-22.12	peak
5	13963.000	33.04	18.59	51.63	74.00	-22.37	peak
6	17714.000	30.75	21.94	52.69	74.00	-21.31	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	38.26	7.99	46.25	74.00	-27.75	peak
2	8952.500	37.50	9.61	47.11	74.00	-26.89	peak
3	11834.500	35.16	17.29	52.45	74.00	-21.55	peak
4	12538.500	34.83	16.66	51.49	74.00	-22.51	peak
5	13539.500	33.76	18.39	52.15	74.00	-21.85	peak
6	17862.500	29.31	23.01	52.32	74.00	-21.68	peak

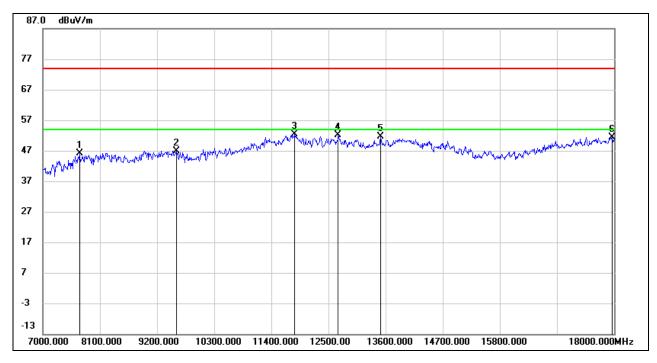
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency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



8.3.4. 802.11ac VHT80 MIMO MODE

UNII-1 BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

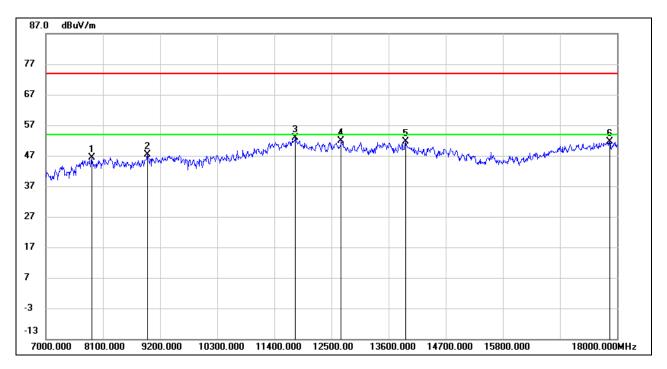


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7709.500	38.95	7.25	46.20	74.00	-27.80	peak
2	9574.000	36.46	10.46	46.92	74.00	-27.08	peak
3	11851.000	35.14	17.26	52.40	74.00	-21.60	peak
4	12687.000	35.36	16.82	52.18	74.00	-21.82	peak
5	13501.000	33.10	18.41	51.51	74.00	-22.49	peak
6	17972.500	28.01	23.30	51.31	74.00	-22.69	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



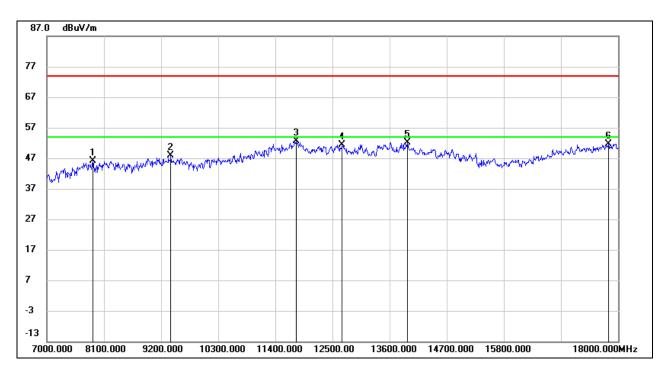
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	38.95	7.39	46.34	74.00	-27.66	peak
2	8963.500	37.53	9.73	47.26	74.00	-26.74	peak
3	11807.000	35.61	17.35	52.96	74.00	-21.04	peak
4	12692.500	35.14	16.83	51.97	74.00	-22.03	peak
5	13930.000	32.99	18.63	51.62	74.00	-22.38	peak
6	17857.000	28.70	23.00	51.70	74.00	-22.30	peak

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



UNII-2A BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

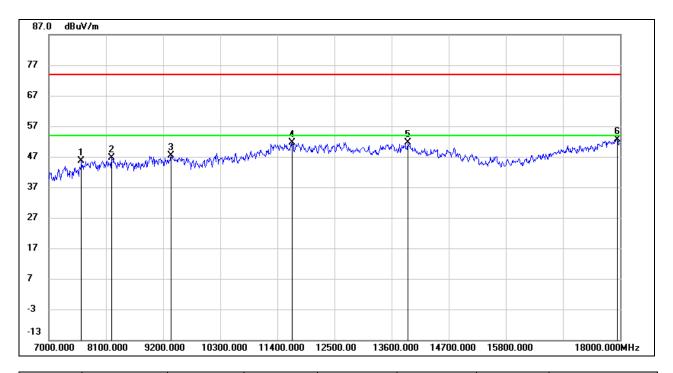


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	38.82	7.39	46.21	74.00	-27.79	peak
2	9387.000	37.74	10.05	47.79	74.00	-26.21	peak
3	11796.000	35.22	17.33	52.55	74.00	-21.45	peak
4	12692.500	34.50	16.83	51.33	74.00	-22.67	peak
5	13946.500	33.50	18.61	52.11	74.00	-21.89	peak
6	17813.000	28.77	22.90	51.67	74.00	-22.33	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



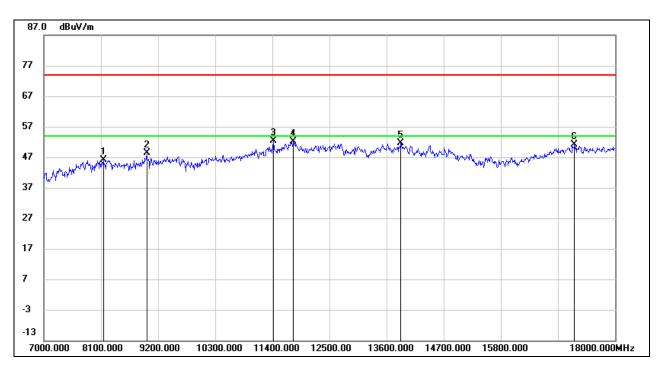
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7632.500	38.76	6.93	45.69	74.00	-28.31	peak
2	8215.500	38.07	8.65	46.72	74.00	-27.28	peak
3	9354.000	37.54	9.86	47.40	74.00	-26.60	peak
4	11686.000	34.94	16.75	51.69	74.00	-22.31	peak
5	13913.500	33.00	18.65	51.65	74.00	-22.35	peak
6	17945.000	29.47	23.23	52.70	74.00	-21.30	peak

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



UNII-2C BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

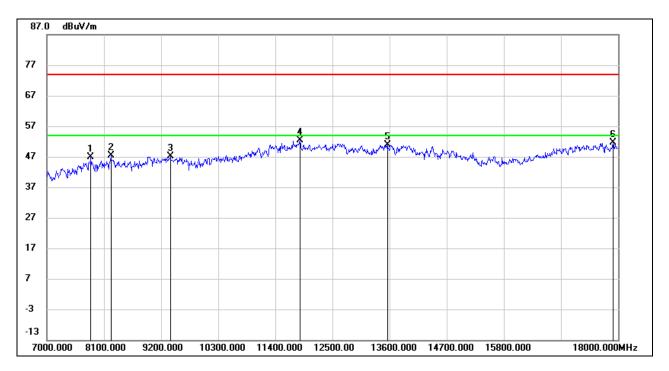


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8149.500	37.83	8.30	46.13	74.00	-27.87	peak
2	8980.000	38.46	9.91	48.37	74.00	-25.63	peak
3	11422.000	36.36	15.91	52.27	74.00	-21.73	peak
4	11807.000	34.75	17.35	52.10	74.00	-21.90	peak
5	13875.000	32.82	18.69	51.51	74.00	-22.49	peak
6	17219.000	31.41	19.74	51.15	74.00	-22.85	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

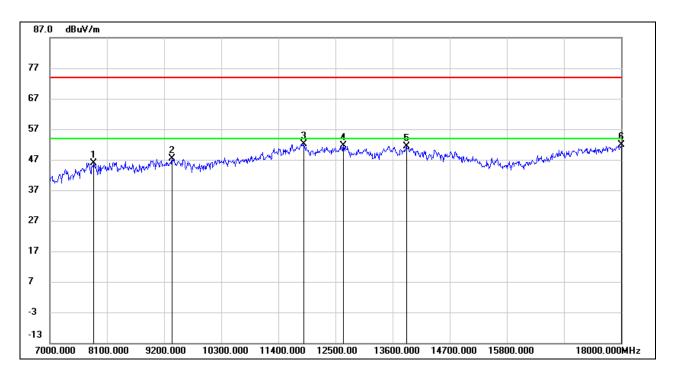


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7847.000	39.28	7.48	46.76	74.00	-27.24	peak
2	8232.000	38.70	8.59	47.29	74.00	-26.71	peak
3	9381.500	37.01	10.02	47.03	74.00	-26.97	peak
4	11878.500	35.12	17.22	52.34	74.00	-21.66	peak
5	13556.000	32.37	18.39	50.76	74.00	-23.24	peak
6	17901.000	28.51	23.12	51.63	74.00	-22.37	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

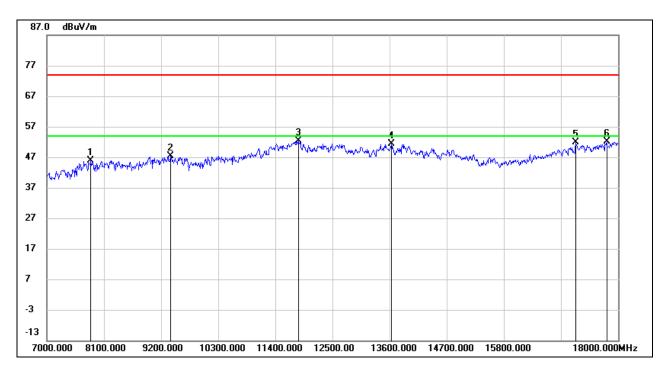


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7852.500	38.44	7.46	45.90	74.00	-28.10	peak
2	9354.000	37.45	9.86	47.31	74.00	-26.69	peak
3	11884.000	34.89	17.22	52.11	74.00	-21.89	peak
4	12659.500	34.79	16.76	51.55	74.00	-22.45	peak
5	13864.000	32.78	18.70	51.48	74.00	-22.52	peak
6	18000.000	28.58	23.37	51.95	74.00	-22.05	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



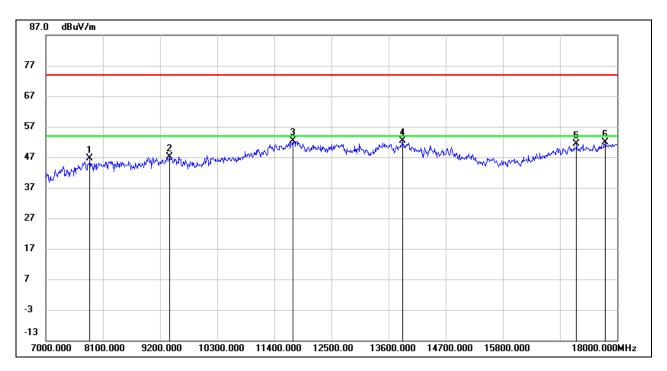
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7847.000	38.50	7.48	45.98	74.00	-28.02	peak
2	9381.500	37.30	10.02	47.32	74.00	-26.68	peak
3	11845.500	35.15	17.28	52.43	74.00	-21.57	peak
4	13633.000	32.93	18.43	51.36	74.00	-22.64	peak
5	17186.000	32.29	19.65	51.94	74.00	-22.06	peak
6	17780.000	29.60	22.65	52.25	74.00	-21.75	peak

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



STRADDLE CHANNEL 138

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

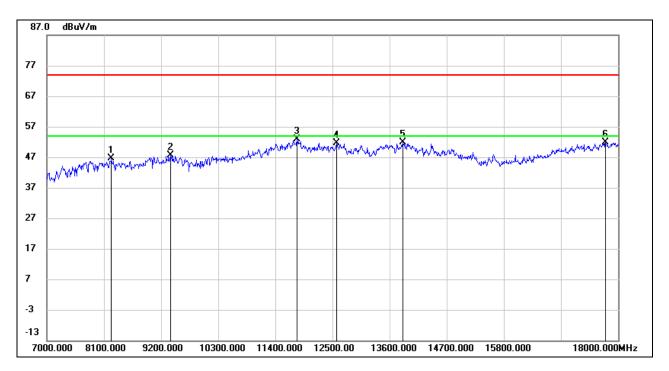


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7847.000	39.12	7.48	46.60	74.00	-27.40	peak
2	9381.500	37.11	10.02	47.13	74.00	-26.87	peak
3	11752.000	35.35	17.10	52.45	74.00	-21.55	peak
4	13869.500	33.68	18.70	52.38	74.00	-21.62	peak
5	17219.000	31.61	19.74	51.35	74.00	-22.65	peak
6	17774.500	29.30	22.60	51.90	74.00	-22.10	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



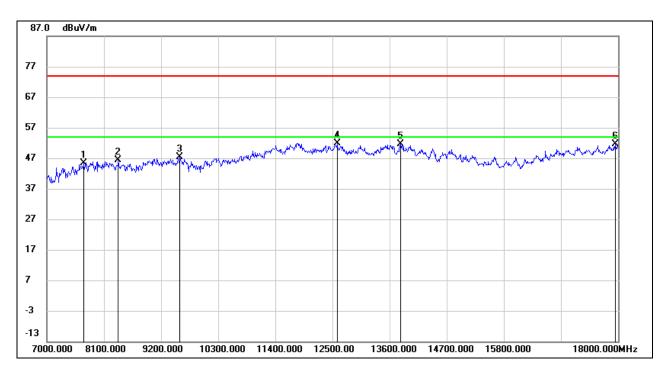
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8243.000	38.07	8.54	46.61	74.00	-27.39	peak
2	9376.000	37.61	9.99	47.60	74.00	-26.40	peak
3	11823.500	35.58	17.32	52.90	74.00	-21.10	peak
4	12577.000	34.92	16.64	51.56	74.00	-22.44	peak
5	13858.500	33.07	18.71	51.78	74.00	-22.22	peak
6	17763.500	29.43	22.48	51.91	74.00	-22.09	peak

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



UNII-3 BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

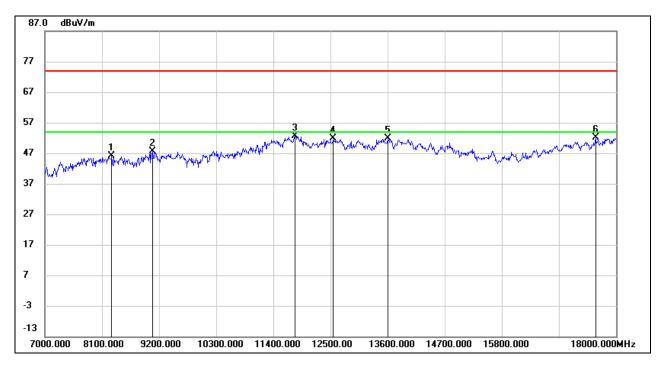


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7715.000	38.11	7.26	45.37	74.00	-28.63	peak
2	8375.000	38.30	8.01	46.31	74.00	-27.69	peak
3	9563.000	36.83	10.44	47.27	74.00	-26.73	peak
4	12588.000	35.35	16.63	51.98	74.00	-22.02	peak
5	13809.000	32.78	18.77	51.55	74.00	-22.45	peak
6	17945.000	28.47	23.23	51.70	74.00	-22.30	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8287.000	37.64	8.37	46.01	74.00	-27.99	peak
2	9079.000	38.01	9.67	47.68	74.00	-26.32	peak
3	11818.000	35.27	17.31	52.58	74.00	-21.42	peak
4	12555.000	35.21	16.65	51.86	74.00	-22.14	peak
5	13611.000	33.42	18.39	51.81	74.00	-22.19	peak
6	17604.000	31.32	20.79	52.11	74.00	-21.89	peak

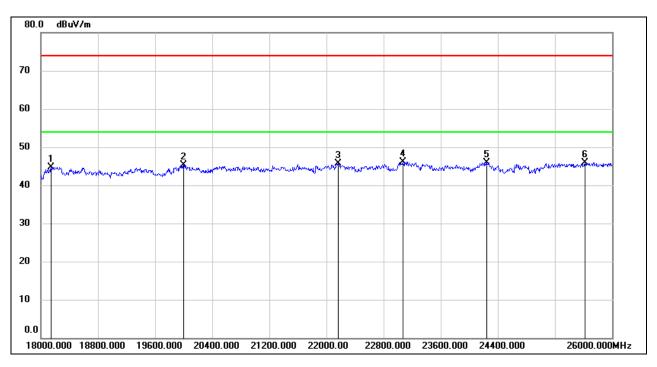
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency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



8.4. SPURIOUS EMISSIONS (18 GHz ~ 26 GHz)

8.4.1. 802.11n HT20 MODE

SPURIOUS EMISSIONS (UNII-3 BAND LOW CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	18144.000	50.27	-5.48	44.79	74.00	-29.21	peak
2	20000.000	50.81	-5.45	45.36	74.00	-28.64	peak
3	22160.000	50.08	-4.31	45.77	74.00	-28.23	peak
4	23072.000	49.52	-3.42	46.10	74.00	-27.90	peak
5	24248.000	48.82	-2.83	45.99	74.00	-28.01	peak
6	25616.000	47.18	-1.24	45.94	74.00	-28.06	peak

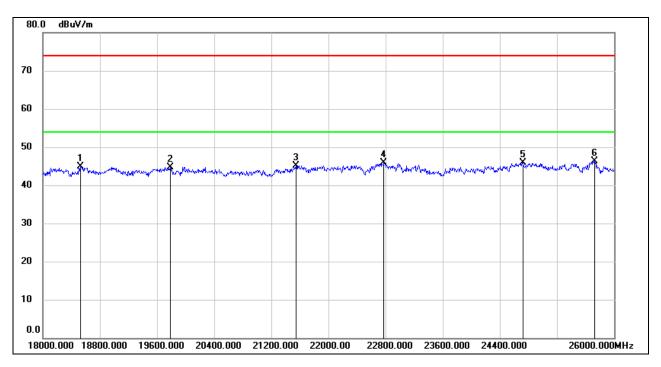
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



SPURIOUS EMISSIONS (UNII-3 BAND LOW CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	18528.000	50.11	-5.26	44.85	74.00	-29.15	peak
2	19784.000	50.07	-5.28	44.79	74.00	-29.21	peak
3	21544.000	49.76	-4.63	45.13	74.00	-28.87	peak
4	22776.000	49.61	-3.66	45.95	74.00	-28.05	peak
5	24720.000	48.22	-2.33	45.89	74.00	-28.11	peak
6	25728.000	47.11	-0.72	46.39	74.00	-27.61	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.

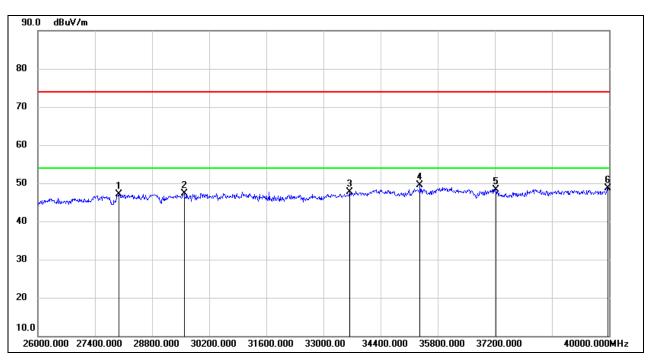
Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.



8.5. SPURIOUS EMISSIONS (26 GHz ~ 40 GHz)

8.5.1. 802.11n HT20 MODE

SPURIOUS EMISSIONS (UNII-3 BAND LOW CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	27988.000	51.08	-4.04	47.04	74.00	-26.96	peak
2	29584.000	48.41	-1.03	47.38	74.00	-26.62	peak
3	33644.000	47.31	0.42	47.73	74.00	-26.27	peak
4	35366.000	46.90	2.59	49.49	74.00	-24.51	peak
5	37228.000	45.23	3.14	48.37	74.00	-25.63	peak
6	39972.000	43.58	5.13	48.71	74.00	-25.29	peak

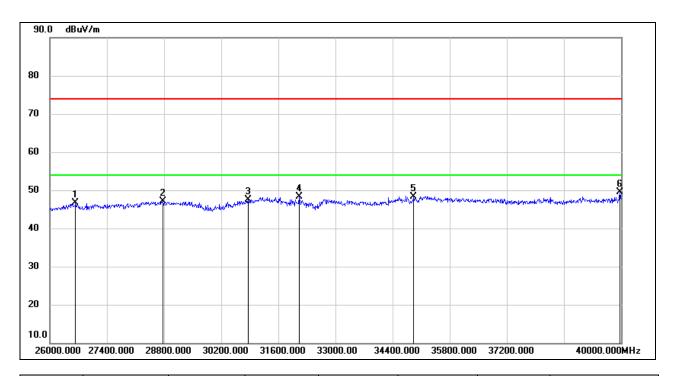
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



SPURIOUS EMISSIONS (UNII-3 BAND LOW CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	26630.000	51.47	-4.84	46.63	74.00	-27.37	peak
2	28772.000	47.66	-0.59	47.07	74.00	-26.93	peak
3	30858.000	48.38	-0.97	47.41	74.00	-26.59	peak
4	32104.000	49.99	-1.75	48.24	74.00	-25.76	peak
5	34918.000	46.98	1.40	48.38	74.00	-25.62	peak
6	39972.000	44.45	5.13	49.58	74.00	-24.42	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.

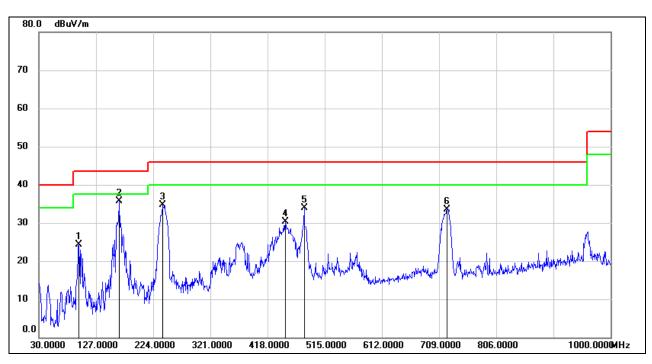
Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.



8.6. SPURIOUS EMISSIONS (30 MHz ~ 1 GHz)

8.6.1. 802.11n HT20 MODE

SPURIOUS EMISSIONS (UNII-3 BAND LOW CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)



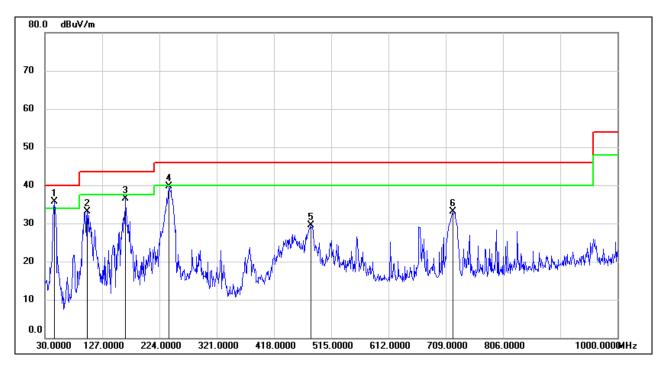
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	97.9000	45.55	-21.30	24.25	43.50	-19.25	peak
2	165.8000	53.21	-17.51	35.70	43.50	-7.80	peak
3	239.5200	53.82	-19.16	34.66	46.00	-11.34	peak
4	448.0700	42.71	-12.50	30.21	46.00	-15.79	peak
5	480.0800	45.61	-11.79	33.82	46.00	-12.18	peak
6	722.5800	41.59	-8.08	33.51	46.00	-12.49	peak

Note: 1. Result Level = Read Level + Correct Factor.

- 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
- 3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.



SPURIOUS EMISSIONS (UNII-3 BAND LOW CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	46.4900	56.16	-20.46	35.70	40.00	-4.30	peak
2	101.7800	54.19	-21.00	33.19	43.50	-10.31	peak
3	165.8000	54.09	-17.51	36.58	43.50	-6.92	peak
4	239.5200	58.87	-19.16	39.71	46.00	-6.29	peak
5	480.0800	41.34	-11.79	29.55	46.00	-16.45	peak
6	720.6400	41.15	-8.09	33.06	46.00	-12.94	peak

Note: 1. Result Level = Read Level + Correct Factor.

- 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
- 3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto

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

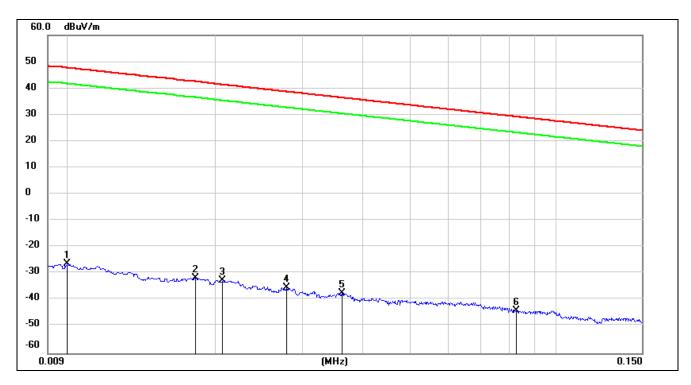


8.7. SPURIOUS EMISSIONS BELOW 30 MHz

8.7.1. 802.11n HT20 MODE

SPURIOUS EMISSIONS (UNII-3 BAND LOW CHANNEL, LOOP ANTENNA FACE ON TO THE EUT, WORST-CASE CONFIGURATION)

9 kHz~ 150 kHz

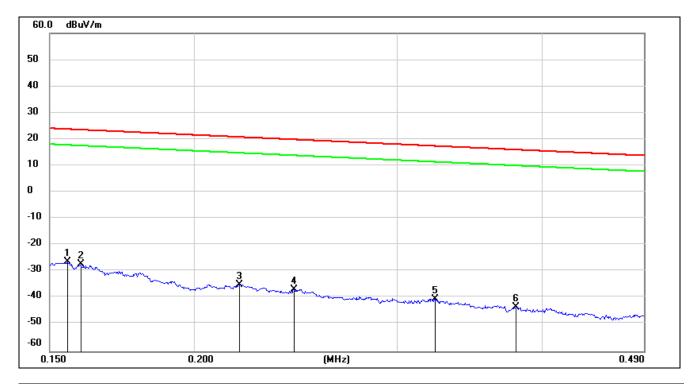


No.	Frequency	Reading	Correct	FCC	FCC	ISED	ISED	Margin	Remark
				Result	Limit	Result	Limit		
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.0100	75.22	-101.40	-26.18	47.6	-77.68	-3.90	-73.78	peak
2	0.0181	69.85	-101.36	-31.51	42.45	-83.01	-9.05	-73.96	peak
3	0.0206	68.92	-101.35	-32.43	41.32	-83.93	-10.18	-73.75	peak
4	0.0279	66.17	-101.38	-35.21	38.69	-86.71	-12.81	-73.90	peak
5	0.0362	64.01	-101.42	-37.41	36.43	-88.91	-15.07	-73.84	peak
6	0.0830	57.68	-101.65	-43.97	29.22	-95.47	-22.28	-73.19	peak

- 2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
- 3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.
 - 4. $dBuA/m = dBuV/m 20log10(120\pi) = dBuV/m -51.5$.



150 kHz ~ 490 kHz

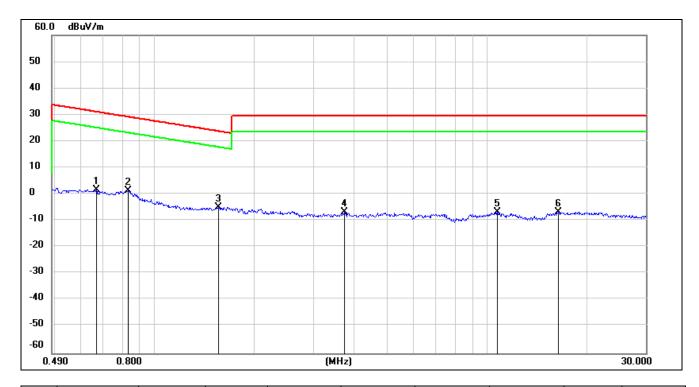


No.	Frequency	Reading	Correct	FCC	FCC	ISED	ISED	Margin	Remark
				Result	Limit	Result	Limit		
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.1554	75.27	-101.65	-26.38	23.77	-77.88	-27.73	-50.15	peak
2	0.1595	74.36	-101.65	-27.29	23.55	-78.79	-27.95	-50.84	peak
3	0.2190	66.77	-101.75	-34.98	20.79	-86.48	-30.71	-55.77	peak
4	0.2442	65.03	-101.79	-36.76	19.85	-88.26	-31.65	-56.61	peak
5	0.3234	61.48	-101.88	-40.4	17.41	-91.90	-34.09	-57.81	peak
6	0.3800	58.52	-101.94	-43.42	16.01	-94.92	-35.49	-59.43	peak

- 2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
- 3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.
 - 4. $dBuA/m = dBuV/m 20log10(120\pi) = dBuV/m 51.5$.



490 kHz ~ 30 MHz



No.	Frequency	Reading	Correct	FCC	FCC	ISED	ISED	Margin	Remark
				Result	Limit	Result	Limit		
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.6671	63.75	-62.10	1.65	31.12	-49.85	-20.38	-29.47	peak
2	0.8296	63.44	-62.17	1.27	29.23	-50.23	-22.27	-27.96	peak
3	1.5564	57.18	-62.02	-4.84	23.76	-56.34	-27.74	-28.60	peak
4	3.7100	54.70	-61.41	-6.71	29.54	-58.21	-21.96	-36.25	peak
5	10.7299	53.98	-60.83	-6.85	29.54	-58.35	-21.96	-36.39	peak
6	16.3959	54.17	-60.96	-6.79	29.54	-58.29	-21.96	-36.33	peak

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

- 2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
- 3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.
 - 4. $dBuA/m = dBuV/m 20log10(120\pi) = dBuV/m -51.5$.

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



9. AC POWER LINE CONDUCTED EMISSIONS

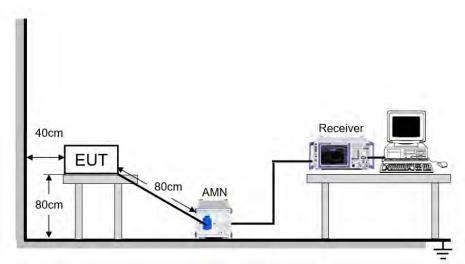
LIMITS

Please refer to CFR 47 FCC §15.207 (a) and ISED RSS-Gen Clause 8.8

FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

TEST SETUP AND PROCEDURE

Refer to ANSI C63.10-2013 clause 6.2.



The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

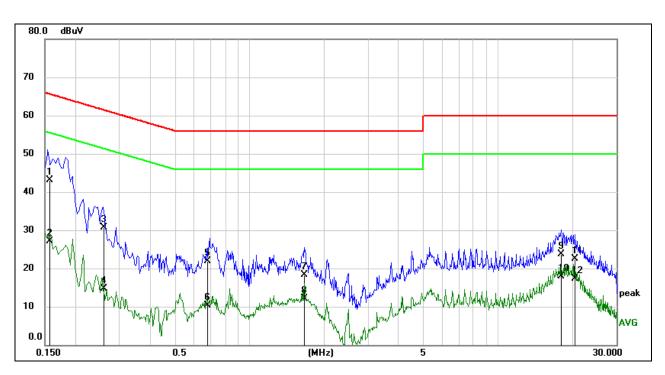
TEST ENVIRONMENT

Temperature	22.7 °C	Relative Humidity	54.6 %
Atmosphere Pressure	101 kPa	Test Voltage	AC 120 V, 60 Hz



RESULTS

9.1.1. 802.11n HT20 MODE LINE L RESULTS (UNII-3 BAND LOW CHANNEL, WORST-CASE CONFIGURATION)



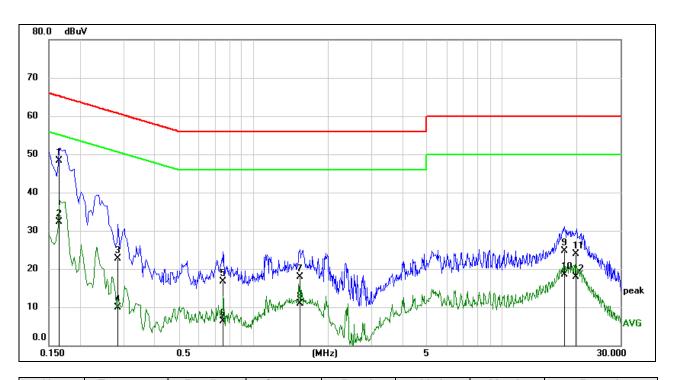
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1567	43.51	-0.50	43.01	65.64	-22.63	QP
2	0.1567	27.66	-0.50	27.16	55.64	-28.48	AVG
3	0.2590	31.28	-0.50	30.78	61.46	-30.68	QP
4	0.2590	15.27	-0.50	14.77	51.46	-36.69	AVG
5	0.6789	22.46	-0.46	22.00	56.00	-34.00	QP
6	0.6789	10.83	-0.46	10.37	46.00	-35.63	AVG
7	1.6678	18.67	-0.40	18.27	56.00	-37.73	QP
8	1.6678	12.53	-0.40	12.13	46.00	-33.87	AVG
9	18.0329	24.63	-0.92	23.71	60.00	-36.29	QP
10	18.0329	18.74	-0.92	17.82	50.00	-32.18	AVG
11	20.4510	23.60	-1.01	22.59	60.00	-37.41	QP
12	20.4510	18.31	-1.01	17.30	50.00	-32.70	AVG

Note: 1. Result = Reading + Correct Factor.

- 2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
- 4. Step size: 80 Hz (0.009 MHz \sim 0.15 MHz), 4 kHz (0.15 MHz \sim 30 MHz), Scan time: auto.



LINE N RESULTS (UNII-3 BAND LOW CHANNEL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1645	48.71	-0.50	48.21	65.23	-17.02	QP
2	0.1645	32.78	-0.50	32.28	55.23	-22.95	AVG
3	0.2838	23.11	-0.50	22.61	60.70	-38.09	QP
4	0.2838	10.34	-0.50	9.84	50.70	-40.86	AVG
5	0.7601	17.16	-0.42	16.74	56.00	-39.26	QP
6	0.7601	6.74	-0.42	6.32	46.00	-39.68	AVG
7	1.5330	18.27	-0.40	17.87	56.00	-38.13	QP
8	1.5330	11.31	-0.40	10.91	46.00	-35.09	AVG
9	17.9237	25.67	-0.92	24.75	60.00	-35.25	QP
10	17.9237	19.34	-0.92	18.42	50.00	-31.58	AVG
11	19.9047	24.92	-1.00	23.92	60.00	-36.08	QP
12	19.9047	18.97	-1.00	17.97	50.00	-32.03	AVG

Note: 1. Result = Reading + Correct Factor.

- 2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
- 4. Step size: 80 Hz (0.009 MHz \sim 0.15 MHz), 4 kHz (0.15 MHz \sim 30 MHz), Scan time: auto.

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



10. FREQUENCY STABILITY

LIMITS

The frequency of the carrier signal shall be maintained within band of operation.

TEST PROCEDURE

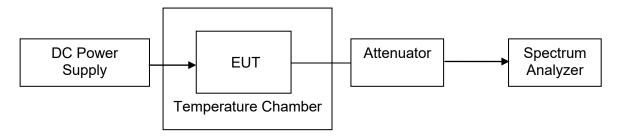
- 1. The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between 0 $^{\circ}$ C \sim 70 $^{\circ}$ C (declared by customer).
- 2. The temperature was incremented by 10 °C intervals and the unit allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.
- 3. The primary supply voltage is varied from 85 % to 115 % of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

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

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	10 kHz
VBW	≥3 × RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

- 4. While maintaining a constant temperature inside the environmental chamber, turn the EUT on and record the operating frequency at startup, and at 2 minutes, 5minutes, and 10 minutes after the EUT is energized.
- 5. Allow the trace to stabilize, find the peak value of the power envelope and record the frequency, then calculated the frequency drift.

TEST SETUP





REPORT NO.: 4790160679.2-10 Page 207 of 334

TEST ENVIRONMENT

	Normal Test Conditions	Extreme Test Conditions
Relative Humidity	20 % - 75 %	/
Atmospheric Pressure	100 kPa ∼102 kPa	1
Tomporaturo	T _N (Normal Temperature):	T _L (Low Temperature): -10 °C
Temperature	25.1 °C	T _H (High Temperature): 70 °C
Supply Voltage	V _N (Normal Voltage): DC 3.3 V	V _L (Low Voltage): DC 2.97 V
Supply Voltage	VN (Normal Voltage). DC 3.3 V	V _H (High Voltage): DC 3.63 V

RESULTS

Please refer to Appendix G.

REPORT NO.: 4790160679.2-10 Page 208 of 334

11. DYNAMIC FREQUENCY SELECTION

APPLICABILITY OF DFS REQUIREMENTS

A U-NII network will employ a DFS function to detect signals from radar systems and to avoid co-channel operation with these systems. This applies to the 5250-5350 MHz and/or 5470-5725 MHz bands.

Within the context of the operation of the DFS function, a U-NII device will operate in either Master Mode or Client Mode. U-NII devices operating in Client Mode can only operate in a network controlled by a U-NII device operating in Master Mode.

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Table 117 (ppiloability of 21 of todalite the todal to coo of a officialitie)					
	Operational Mode				
Requirement	Mostor		☐ Client With Radar		
	☐ Master	Radar Detection	Detection		
Non-Occupancy Period	Yes	Not required	Yes		
DFS Detection Threshold	Yes	Not required	Yes		
Channel Availability Check Time	Yes	Not required	Not required		
U-NII Detection Bandwidth	Yes	Not required	Yes		

Table 2: Applicability of DFS requirements during normal operation

	Operational Mode			
Requirement	☐ Master Device or Client with Radar Detection	⊠ Client Without Radar Detection		
DFS Detection Threshold	Yes	Not required		
Channel Closing Transmission Time	Yes	Yes		
Channel Move Time	Yes	Yes		
U-NII Detection Bandwidth	Yes	Not required		

Additional requirements for devices with multiple bandwidth modes	☐ Master Device or Client with Radar Detection	⊠ Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required

Note: Frequencies selected for statistical performance check should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.



LIMITS

(1) DFS Detection Thresholds

Table 3: DFS Detection Thresholds for Master Devices and Client Devices With Radar Detection

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP ≥ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and	-62 dBm
power spectral density < 10 dBm/MHz	-02 ubiii
EIRP < 200 milliwatt that do not meet the	
power	-64 dBm
spectral density requirement	

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.

Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

(2) DFS Response Requirements

Table 4: DFS Response Requirement Values

Parameter	Value		
Non-occupancy period	Minimum 30 minutes		
Channel Availability Check Time	60 seconds		
Channel Move Time	10 seconds		
Charmer wove Time	See Note 1.		
	200 milliseconds + an aggregate of 60		
Channel Closing Transmission Time	milliseconds over		
Charmer Closing Transmission Time	remaining 10 second period.		
	See Notes 1 and 2.		
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission		
U-INIT Detection bandwidth	power bandwidth. See Note 3.		
l	. <u>.</u>		

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required facilitating a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.



PARAMETERS OF RADAR TEST WAVEFORMS

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
		Test A			
1	1	Test B	Roundup $\left\{ \begin{array}{c} 360 \\ \hline 19 \cdot 10^{\prime\prime} \\ \hline PRI_{page} \end{array} \right\}$	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (F	Radar Types 1-4)		80%	120

Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.

Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a.

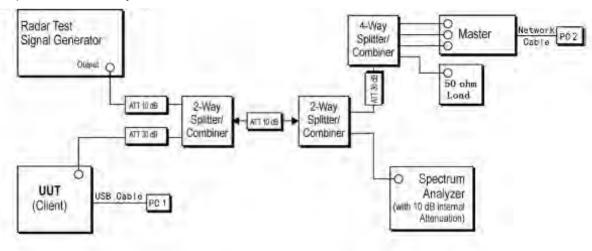
Test B: 15 unique PRI values randomly selected within the range of 518-3066 µsec, with a minimum increment of 1 µsec, excluding PRI values selected in Test A

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B. Test aggregate is average of the percentage of successful detections of short pulse radar types 1-4.



TEST SETUP

Setup for Client with injection at the Master



TEST ENVIRONMENT

Temperature	26.2 °C	Relative Humidity	55.8 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

RESULTS

Please refer to Appendix E & F.



12. ANTENNA REQUIREMENTS

APPLICABLE REQUIREMENTS

Please refer to FCC §15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC §15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

RESULTS

Complies



12.1. Appendix A1: Emission Bandwidth 12.1.1. Test Result

Test Mode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Verdict
	Ant1	5180	19.880	5169.960	5189.840	PASS
	Ant2	5180	20.080	5169.880	5189.960	PASS
	Ant1	5200	20.000	5190.040	5210.040	PASS
	Ant2	5200	20.080	5189.960	5210.040	PASS
	Ant1	5240	19.920	5230.040	5249.960	PASS
	Ant2	5240	19.960	5230.040	5250.000	PASS
	Ant1	5260	19.960	5250.000	5269.960	PASS
	Ant2	5260	20.400	5249.800	5270.200	PASS
	Ant1	5280	19.960	5270.000	5289.960	PASS
	Ant2	5280	19.760	5270.200	5289.960	PASS
	Ant1	5320	19.840	5310.160	5330.000	PASS
	Ant2	5320	20.080	5309.880	5329.960	PASS
	Ant1	5500	20.200	5489.960	5510.160	PASS
	Ant2	5500	20.400	5489.840	5510.240	PASS
444	Ant1	5580	20.040	5570.040	5590.080	PASS
11A	Ant2	5580	19.800	5570.040	5589.840	PASS
	Ant1	5700	20.080	5689.880	5709.960	PASS
	Ant2	5700	20.120	5689.960	5710.080	PASS
	Ant1	5720	20.200	5709.920	5730.120	PASS
	Ant2	5720	20.280	5709.880	5730.160	PASS
	Ant1	5720 UNII-2C	15.08	5709.920	5725	PASS
	Ant2	5720 UNII-2C	15.12	5709.880	5725	PASS
	Ant1	5720 UNII-3	5.12	5725	5730.120	PASS
	Ant2	5720 UNII-3	5.16	5725	5730.160	PASS
	Ant1	5745	20.440	5734.720	5755.160	PASS
	Ant2	5745	20.440	5734.720	5755.160	PASS
	Ant1	5785	20.320	5774.920	5795.240	PASS
	Ant2	5785	20.280	5774.680	5794.960	PASS
	Ant1	5825	19.680	5815.080	5834.760	PASS
	Ant2	5825	20.160	5814.920	5835.080	PASS
	Ant1	5180	20.200	5169.840	5190.040	PASS
	Ant2	5180	20.120	5169.960	5190.080	PASS
	Ant1	5200	20.360	5189.760	5210.120	PASS
	Ant2	5200	20.200	5189.920	5210.120	PASS
	Ant1	5240	20.280	5229.800	5250.080	PASS
	Ant2	5240	20.360	5229.720	5250.080	PASS
	Ant1	5260	19.920	5250.040	5269.960	PASS
	Ant2	5260	20.200	5249.920	5270.120	PASS
	Ant1	5280	20.080	5269.960	5290.040	PASS
	Ant2	5280	20.400	5269.880	5290.280	PASS
	Ant1	5320	20.000	5309.960	5329.960	PASS
11N20MIMO	Ant2	5320	20.000	5310.040	5330.040	PASS
	Ant1	5500	20.360	5489.840	5510.200	PASS
	Ant2	5500	20.240	5489.880	5510.120	PASS
	Ant1	5580	20.400	5569.920	5590.320	PASS
	Ant2	5580	20.280	5569.840	5590.120	PASS
	Ant1	5700	19.960	5690.000	5709.960	PASS
	Ant2	5700	20.120	5690.040	5710.160	PASS
	Ant1	5720	20.320	5709.880	5730.200	PASS
	Ant2	5720	20.600	5709.880	5730.200	PASS
	Ant1	5720 UNII-2C	15.12	5709.880	5730.460	PASS
	Ant2	5720_UNII-2C	15.12	5709.880	5725	PASS
	MIILZ	JIZU_UINII-ZU	10.12	3703.000	3123	FASS



	Ant1	5720 UNII-3	5.2	5725	5730.200	PASS
	Ant2	5720 UNII-3	5.48	5725	5730.480	PASS
	Ant1	5745	20.480	5734.680	5755.160	PASS
	Ant2	5745	20.520	5734.680	5755.200	PASS
	Ant1	5785	20.320	5774.920	5795.240	PASS
	Ant2	5785	20.680	5774.560	5795.240	PASS
	Ant1	5825	19.920	5814.880	5834.800	PASS
	Ant2	5825	20.240	5814.920	5835.160	PASS
	Ant1	5190	41.280	5169.440	5210.720	PASS
11N40MIMO	Ant2	5190	40.720	5169.680	5210.400	PASS
	Ant1	5230	41.120	5209.360	5250.480	PASS
	Ant2	5230	40.480	5209.840	5250.320	PASS
	Ant1	5270	41.440	5249.360	5290.800	PASS
	Ant2	5270	41.040		5290.720	PASS
		5310		5249.680		
	Ant1		41.280	5289.520	5330.800	PASS
	Ant2	5310	40.480	5289.760	5330.240	PASS
	Ant1	5510	41.200	5489.440	5530.640	PASS
	Ant2	5510	40.800	5489.680	5530.480	PASS
	Ant1	5550	41.360	5529.360	5570.720	PASS
	Ant2	5550	41.200	5529.360	5570.560	PASS
	Ant1	5670	41.200	5649.440	5690.640	PASS
	Ant2	5670	41.600	5649.280	5690.880	PASS
	Ant1	5710	42.000	5689.280	5731.280	PASS
	Ant2	5710	42.000	5689.200	5731.200	PASS
	Ant1	5710_UNII-2C	35.72	5689.280	5725	PASS
	Ant2	5710_UNII-2C	35.8	5689.200	5725	PASS
	Ant1	5710_UNII-3	6.28	5725	5731.280	PASS
	Ant2	5710_UNII-3	6.2	5725	5731.200	PASS
	Ant1	5755	41.600	5734.040	5775.640	PASS
	Ant2	5755	41.840	5733.960	5775.800	PASS
	Ant1	5795	41.520	5774.360	5815.880	PASS
	Ant2	5795	40.960	5774.600	5815.560	PASS
11AC80MIMO	Ant1	5210	81.760	5169.200	5250.960	PASS
	Ant2	5210	80.800	5169.680	5250.480	PASS
	Ant1	5290	81.280	5249.360	5330.640	PASS
	Ant2	5290	81.280	5249.520	5330.800	PASS
	Ant1	5530	81.760	5489.200	5570.960	PASS
	Ant2	5530	81.280	5489.520	5570.800	PASS
	Ant1	5610	81.440	5569.360	5650.800	PASS
	Ant2	5610	81.120	5569.520	5650.640	PASS
	Ant1	5690	81.760	5649.360	5731.120	PASS
	Ant2	5690	81.760	5649.200	5730.960	PASS
	Ant1	5690 UNII-2C	75.64	5649.360	5725	PASS
	Ant2	5690_UNII-2C	75.8	5649.200	5725	PASS
	Ant1	5690_UNII-2C	6.12	5725	5731.120	PASS
		5690_UNII-3				PASS
	Ant2		5.96	5725	5730.960 5816.280	
	Ant1	5775	84.000	5732.280		PASS
	Ant2	5775	82.080	5734.200	5816.280	PASS



12.1.2. Test Graphs

