



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

CERTIFICATION TEST REPORT

For

X2D 100C

MODEL NUMBER: X2D 100C

FCC ID: 2AEFA-X2D100C2106 IC: 20193-X2D100C2106

REPORT NUMBER: 4790183964.4-6

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Prepared for

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Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	01/25/2022	Initial Issue	





	Summary of Test Results					
Clause	se 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.



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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: VICTOR HASSELBLAD AB

Address: Utvecklingsgatan 2 SE-417 56 Gothenburg Sweden

Manufacturer Information

Company Name: VICTOR HASSELBLAD AB

Address: Utvecklingsgatan 2 SE-417 56 Gothenburg Sweden

EUT Information

EUT Name: X2D 100C Model: X2D 100C Brand: **HASSELBLAD** Sample Received Date: November 18, 2021

Sample Status: Normal Sample ID: 4401571

Date of Tested: November 18, 2021, ~ January 21, 2022

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

Prepared By:	Checked By:		
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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 Assessment			
	Body Identifier (CABID) is CN0046.			
	VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)			
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.			
	has been assessed and proved to be in compliance with VCCI, the			
	Membership No. is 3793.			
	Facility Name:			
	Chamber D, the VCCI registration No. is G-20019 and R-20004			
	Shielding Room B, the VCCI registration No. is C-20012 and T-20011			

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

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

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

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4. CALIBRATION AND UNCERTAINTY

MEASURING INSTRUMENT CALIBRATION 4.1.

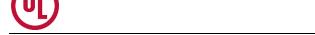
The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognize national standards.

MEASUREMENT UNCERTAINTY 4.2.

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

Test Item	Uncertainty	
Conduction emission	3.62 dB	
Radiated Emission (Included Fundamental Emission) (9 kHz ~ 30 MHz)	2.2 dB	
Radiated Emission (Included Fundamental Emission) (30 MHz ~ 1 GHz)	4.00 dB	
Radiated Emission	5.78 dB (1 GHz ~ 18 GHz)	
(Included Fundamental Emission) (1 GHz to 26 GHz)	5.23 dB (18 GHz ~ 26 GHz)	
Duty Cycle	±0.028%	
Emission Bandwidth and 99% Occupied Bandwidth	±0.0196%	
Maximum Conducted Output Power	±0.766 dB	
Maximum Power Spectral Density Level	±1.22 dB	
Frequency Stability	±2.76%	
Conducted Band-edge Compliance	±1.328 dB	
Conducted Unwanted Emissions In Non-restricted	±0.746 dB (9 kHz ~ 1 GHz)	
Frequency Bands	±1.328dB (1 GHz ~ 26 GHz)	

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



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5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name	X2D 100C
Model	X2D 100C
Radio Technology	IEEE802.11a 20 IEEE802.11n HT20/n HT40 IEEE802.11ac VHT20/VHT40/VHT80 IEEE802.11ax HE20/HE40/HE80
Operation frequency	UNII-1/UNII-3
Modulation	IEEE 802.11a/n HT20/n HT40/ac VHT20/VHT40/VHT80: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM only in ac mode) IEEE 802.11ax HE20/HE40/HE80: OFDMA (BPSK, QPSK,16QAM, 64QAM, 256QAM, 1024QAM)
Ratings	DC 5V: charging via non-standard adapter or personal computer DC 15V: charging via standard adapter
Note	Both input voltages are considered, only the worst voltage data (DC 5V) is recorded in this report.
Battery	Max charge voltage: 8.4V Nominal capacity: 7.27Vdc Rated capacity: 3400mAh, 24.7Wh

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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)
a20		17.12	14.12
n HT20		18.11	15.11
n HT40		19.62	16.62
ac VHT20		Covered by 802.11n H	T20
ac VHT40	5150 ~ 5250	Covered by 802.11n H	T40
ac VHT80		19.41	16.41
ax HE20		19.24	16.24
ax HE40		19.43	16.43
ax HE80		19.36	16.36

UNII-3 BAND(FCC&ISED)

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
a20		16.75
n HT20	5725 ~ 5850	19.43
n HT40		19.38
ac VHT20		Covered by 802.11n HT20
ac VHT40		Covered by 802.11n HT40
ac VHT80		19.47
ax HE20		19.43
ax HE40		19.44
ax HE80		19.43



5.3. CHANNEL LIST

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

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

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5.4. TEST CHANNEL CONFIGURATION

	UNII-1 Test Channel Configuration							
IEEE Std.	Test Channel Number	Frequency						
802.11a	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						
802.11ax HE20	CH 36(Low Channel), CH 40(MID Channel), CH 48(High Channel)	5180 MHz, 5200 MHz, 5240 MHz						
802.11ax HE40	CH 38(Low Channel), CH 46(High Channel)	5190 MHz, 5230 MHz						
802.11ax HE80	CH 42(Low Channel)	5210 MHz						

	UNII-3 Test Channel Configuration						
IEEE Std.	Test Channel Number	Frequency					
802.11a	CH 149(Low Channel), CH 157(MID Channel), CH 165(High Channel)	5745 MHz, 5785 MHz, 5825 MHz					
802.11n HT20	CH 149(Low Channel), CH 157(MID Channel), CH 165(High Channel)	5745 MHz, 5785 MHz, 5825 MHz					
802.11n HT40	CH 151(Low Channel), CH 159(High Channel)	5755MHz, 5795MHz					
802.11ac VHT20	CH 149(Low Channel), CH 157(MID Channel), CH 165(High Channel)	5745 MHz, 5785 MHz, 5825 MHz					
802.11ac VHT40	CH 151(Low Channel), CH 159(High Channel)	5755 MHz, 5795 MHz					
802.11ac VHT80	CH 155(Low Channel)	5775 MHz					
802.11ax HE20	CH 36(Low Channel), CH 40(MID Channel), CH 48(High Channel)	5180 MHz, 5200 MHz, 5240 MHz					
802.11ax HE40	CH 38(Low Channel), CH 46(High Channel)	5190 MHz, 5230 MHz					
802.11ax HE80	CH 42(Low Channel)	5210 MHz					



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5.5. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna No.	Frequency Band	Antenna Type	Max Antenna Gain (dBi)
1	5150-5250	PIFA	-3
1	5725-5850	PIFA	1
2	5150-5250	PIFA	-3
2	5725-5850	PIFA	0

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 clause F)2)f)(i).

For output power measurements:

Directional gain= Gant + Array Gain = 1 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 = 4 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
802.11a20	⊠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.
802.11ax HE20	⊠2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11ax HE40	⊠2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11ax HE80	⊠2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.

Note:

1.BLE&WLAN 2.4G, BLE & WLAN 5G, WLAN 2.4G & WLAN 5G can't transmit simultaneously. (Declared by client)

2. 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	WiFi Certify

UNII-1

IEE Std. 802.11	Rate	Channel	Soft se	et value
1EE 3td. 802.11	Nale	Charine	ANT 1	ANT 2
		36	16	16
a 20	6M	40	16	16
		48	16	16
		36	14	14
n HT20	MCS0	40	14	14
		48	14	14
n HT40	MCS0	38	16	16
11 11 140	IVICSU	46	16	16
ac HT 80	MCS0	42	16	16
		36	15	15
ax HE20	MCS0	40	15	15
		48	15	15
ax HE40	MCS0	38	16	16
ax 11E40	IVICOU	46	16	16
ax HE80	MCS0	42	16	16

UNII-3

IEE 044 000 44	Dete	Channal	Soft set value		
IEE Std. 802.11	Rate	Channel	ANT 1	ANT 2	
		149	16	16	
a 20	6M	157	16	16	
		165	16	16	
		149	16	16	
n HT20	MCS0	157	16	16	
		165	16	16	
n HT40	MCS0	151	16	16	
11 11 40	IVICSU	159	16	16	
ac VHT80	MCS0	155	16	16	
		149	16	16	
ax HE20	MCS0	157	16	16	
		165	16	16	
ov HE40	MCS0	151	16	16	
ax HE40	IVICSU	159	16	16	
ax HE80	MCS0	155	16	16	

Note: 802.11ac VHT20&VHT40 power cover by 802.11 n HT20&HT40.

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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 802.11ax HE20 mode: MCS0 802.11ax HE40 mode: MCS0 802.11ax HE40 mode: MCS0 802.11ax HE80 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.

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.

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5.8. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	Remarks
1	Laptop	Lenovo	XIAOXIN 5000	/
2	CF Card	SanDisk	/	32GB

I/O CABLES

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
/	/	/	/	/	/

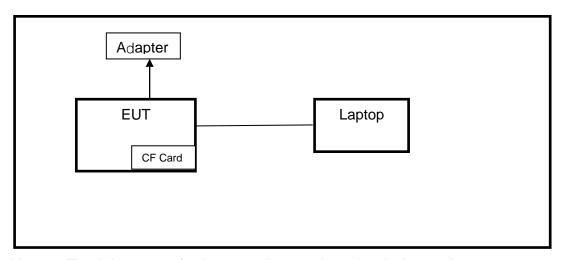
ACCESSORIES

Item	Accessory	Brand Name	Model Name	Description
1	Type-C Cable	HASSELBLAD	N/A	Length: 1.0 m No Ferrite Core shield
2	Battery	Battery HASSELBLAD VHBI- 3400mAh- 7.27V	3400mAh-	Max charge voltage: 8.4V Nominal capacity: 7.27Vdc Rated capacity: 3400mAh, 24.7Wh
3	Adapter	apter HASSELBLAD P		Input: 100-240V~, 50/60Hz 0.8A Max Output: 3.3-11Vdc, 2.27A, 29.92W or 5Vdc 3A, 15W or 9Vdc 3A, 27W or 12Vdc 2.5A, 30W or 15Vdc 2A, 30W

TEST SETUP

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

SETUP DIAGRAM FOR TESTS



Note: 1. The Adapter use for Ac power line conducted emission testing.

2. The Laptop use for Radiated emission testing.



6. MEASURING INSTRUMENT AND SOFTWARE USED

R&S TS 8997 Test System									
Equipment		Manufacturer		Model	Model No. Se		Last Cal.		Due. Date
Power sensor, Power M	leter	R&S	3	OSP1	20	100921	Mar.23,2	2021	Mar.22,2022
Vector Signal Genera	tor	R&S	3	SMBV1	00A	261637	Oct.30, 2	2021	Oct.29, 2022
Signal Generator		R&S	3	SMB10	00A	178553	Oct.30, 2	2021	Oct.29, 2022
Signal Analyzer		R&S	3	FSV4	10	101118	Oct.30, 2	2021	Oct.29, 2022
	•			Softwar	е				
Description		N	/lanut	facturer		Nam	ie		Version
For R&S TS 8997 Test	Syste	m Rol	hde 8	Schwa	rz	EMC	32		10.60.10
		Tor	nsend	d RF Tes	st Sy	/stem			
Equipment	Manu	ufacturer	Mod	del No.	Serial No.		Last Cal.		Due. Date
Wideband Radio Communication Tester	F	R&S	CM	IW500	155523		Oct.30, 2021		Oct.29, 2022
Wireless Connectivity Tester	F	R&S	CM	IW270	V270 1201.0002N75		Sep.29,	2021	Sep.28, 2022
PXA Signal Analyzer	Ke	ysight	N9	9030A	MY	′55410512	Oct.30,	2021	Oct.29, 2022
MXG Vector Signal Generator	Ke	ysight	N5	5182B	MY	′56200284	Oct.30,	2021	Oct.29, 2022
MXG Vector Signal Generator	Ke	ysight	N5	5172B	MY	′56200301	Oct.30,	2021	Oct.29, 2022
DC power supply	Ke	ysight	E3	8642A	MY	′55159130	Oct.30, 2021		Oct.29, 2022
Temperature & SAN Humidity Chamber		IMOOD	SG-8	30-CC-2		2088	Nov.20,2020		Nov.19,2022
				Softwar	е				
Description		Manufacturer			Name		Version		Version
Tonsend SRD Test Syst	tem	Tonser	nd	d JS1120-3 RF Tes			System 2.6.77.0518		.6.77.0518



Radiated Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Oct.30, 2021	Oct.29, 2022
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130959	Aug.02, 2021	Aug.01, 2024
Preamplifier	HP	8447D	2944A09099	Oct.30, 2021	Oct.29, 2022
EMI Measurement Receiver	R&S	ESR26	101377	Oct.30, 2021	Oct.29, 2022
Horn Antenna	TDK	HRN-0118	130940	July 20, 2021	July 19, 2024
Preamplifier	TDK	PA-02-0118	TRS-305- 00067	Oct.30, 2021	Oct.29, 2022
Horn Antenna	Schwarzbeck	BBHA9170	697	July 20, 2021	July 19, 2024
Preamplifier	TDK	PA-02-2	TRS-307- 00003	Oct.31, 2021	Oct.30, 2022
Preamplifier	TDK	PA-02-3	TRS-308- 00002	Oct.31, 2021	Oct.30, 2022
Loop antenna	Schwarzbeck	1519B	80000	Dec.14, 2021	Dec.13, 2024
Preamplifier	TDK	PA-02-001- 3000	TRS-302- 00050	Oct.31, 2021	Oct.30, 2022
Preamplifier	Mini-Circuits	ZX60-83LN- S+	SUP01201941	Oct.31, 2021	Oct.30, 2022
Highpass Filter	Wainwright	WHKX10- 5850-6500- 1800-40SS	4	Oct.31, 2021	Oct.30, 2022
Band Reject Filter	Wainwright	WRCJV12- 5695-5725- 5850-5880- 40SS	4	Oct.31, 2021	Oct.30, 2022
Band Reject Filter	Wainwright	WRCJV20- 5120-5150- 5350-5380- 60SS	2	Oct.31, 2021	Oct.30, 2022
Band Reject Filter	Wainwright	WRCJV20- 5440-5470- 5725-5755- 60SS	1	Oct.31, 2021	Oct.30, 2022
Software					
Description Manufacturer Name Version					
Test Software for Radiated Emissions			Farad	EZ-EMC	Ver. UL-3A1

Last Calibration time

		Radiated	Emissions		
Equipment Manufacturer Model No. Serial No. Last Cal. Due Date					
Loop antenna Schwarzbeck 1519B 00008 Jan.17, 2019 Jan.16,2022					



7. ANTENNA PORT TEST RESULTS
7.1. ON TIME AND DUTY CYCLE

LIMITS

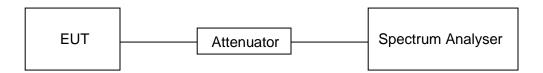
None; for reporting purposes only.

PROCEDURE

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

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

TEST SETUP



TEST ENVIRONMENT

Temperature	23.2 °C	Relative Humidity	42.8 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5V

RESULTS

Please refer to appendix E.

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

LIMITS

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

TEST PROCEDURE

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

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

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

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

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

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

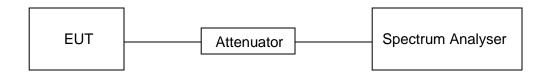
For Example: Fundamental frequency: 5720 MHz

6 dB BW: 15.36 MHz Mark 1: 5712.2 MHz

FL: 5725 MHz (Turning Frequency)
FH: Mark 1+6 dB BW = 5727.56 MHz

6 dB Bandwidth of UNII-3 band Portion = 5727.56 – 5725=2.56 MHz

TEST SETUP



TEST ENVIRONMENT

Temperature	23.2 °C	Relative Humidity	42.8 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5V

RESULTS

Please refer to Appendix A1&A2&A3.

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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.

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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 ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ 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 %).

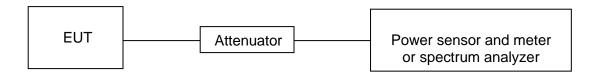
Method PM-G (Measurement using a gated RF average power meter):

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	23.2 °C	Relative Humidity	42.8 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5V

RESULTS

Please refer to Appendix B.



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7.4. POWER SPECTRAL DENSITY

LIMITS

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

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

Note:

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

TEST PROCEDURE

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

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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	23.2 °C	Relative Humidity	42.8 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

RESULTS

Please refer to Appendix C.



8. RADIATED TEST RESULTS

LIMITS

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

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

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

Emissions radiated outside of the specified frequency bands above 30 MHz			
Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Stren (dBuV/m)	
		Quasi-Peak	
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	
Ab 2002 4000	500	Peak	Average
Above 1000		74	54

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

ISED General field strength limits at frequencies below 30 MHz

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

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

ISED Restricted bands refer to ISED RSS-GEN Clause 8.10



MHz	MHz	GHz
0.090 - 0.110	149.9 - 150.05	9.0 - 9.2
0.495 - 0.505	156.52475 - 156.52525	9.3 - 9.5
2.1735 - 2.1905	156.7 - 156.9	10.6 - 12.7
3.020 - 3.028	182.0125 - 187.17	13.25 - 13.4
4.125 - 4.128	187.72 - 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
8.215 - 6.218	608 - 614	23.6 - 24.0
8.28775 - 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
8.362 - 8.366	1660 - 1710	
8.37625 - 8.38675	1718.8 - 1722.2	
8.41425 - 8.41475	2200 - 2300	
12.29 - 12.293	2310 - 2390	
12.51975 - 12.52025	2483.5 - 2500	
12.57675 - 12.57725	2655 - 2900	
13.36 - 13.41	3260 – 3267	
16.42 - 16.423	3332 - 3339	
16.69475 - 16.69525	3345.8 - 3358	
16.80425 - 16.80475	3500 - 4400	
25.5 - 25.67	4500 - 5150	
37.5 - 38.25	5350 - 5460	
73 - 74.6	7250 - 7750	
74.8 - 75.2	8025 – 8500	
108 – 138		

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

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(²)
13.36-13.41			

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

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



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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			
5250~5350 MHz	PK: -27 (dBm/MHz)	PK:68.2(dBµV/m)	
5470~5725 MHz			
	PK: -27 (dBm/MHz) *1	PK: 68.2(dBµV/m) *1	
5725~5850 MHz	PK: 10 (dBm/MHz) *2 PK: 105.2 (dBμV/i		
	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.

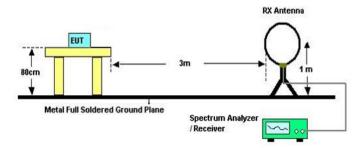
^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

^{*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



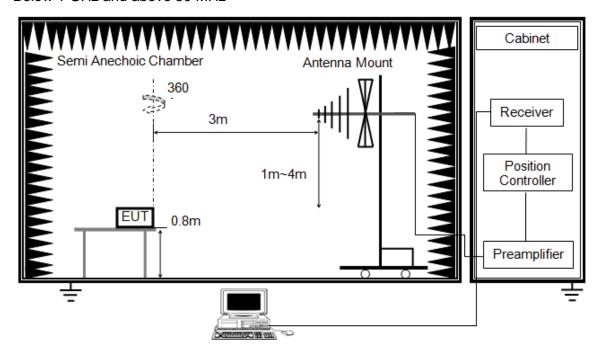
The setting of the spectrum analyser

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

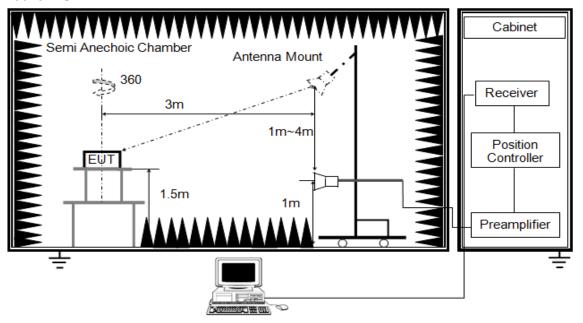


The setting of the spectrum analyser

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



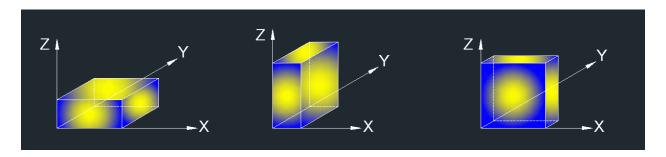
The setting of the spectrum analyser

RBW	1 MHz
IVBW	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	22.5 °C	Relative Humidity	48 %
Atmosphere Pressure	101 kPa	Test Voltage	AC 120 V, 60 Hz

RESULTS

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8.1. RESTRICTED BANDEDGE

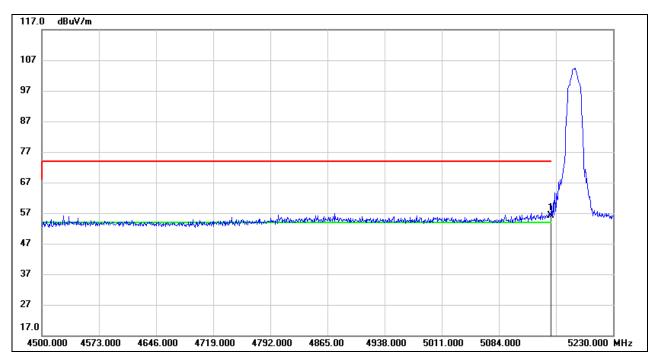
8.1.1. 802.11a20 SISO MODE

UNII-1 BAND

ANTENNA 1 TEST RESULTS (WORST CASE)

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

PEAK



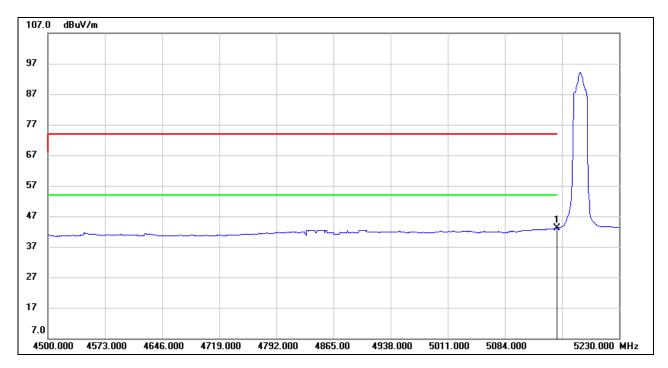
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150,000	16.28	39.91	56.19	74.00	-17.81	peak

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

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



AVG



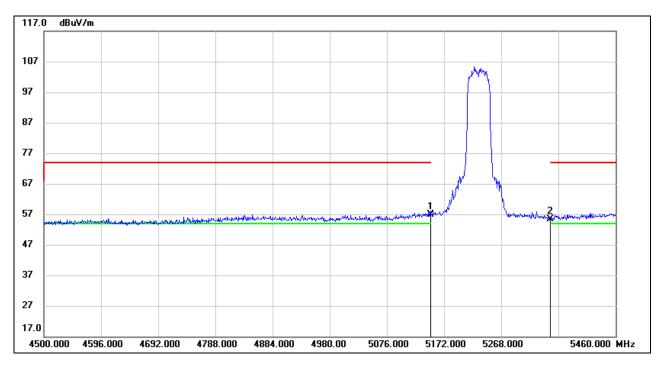
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	3.27	39.91	43.18	54.00	-10.82	AVG

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.



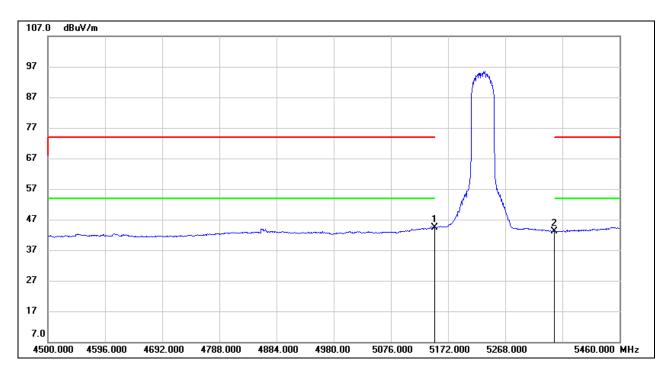
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	16.95	39.91	56.86	74.00	-17.14	peak
2	5350.000	15.41	40.08	55.49	74.00	-18.51	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	4.44	39.91	44.35	54.00	-9.65	AVG
2	5350.000	3.13	40.08	43.21	54.00	-10.79	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.
- 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.

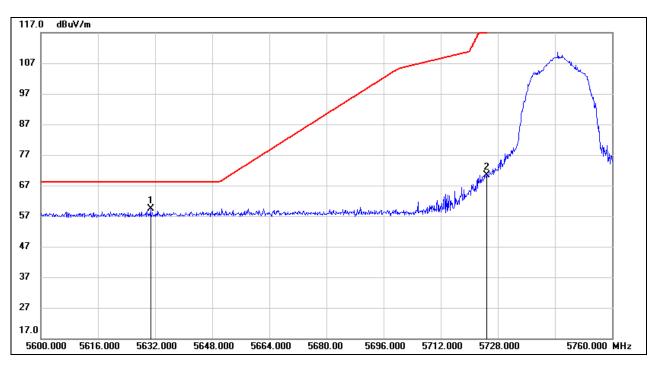


UNII-3 BAND

ANTENNA 1 TEST RESULTS (WORST CASE)

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

PEAK

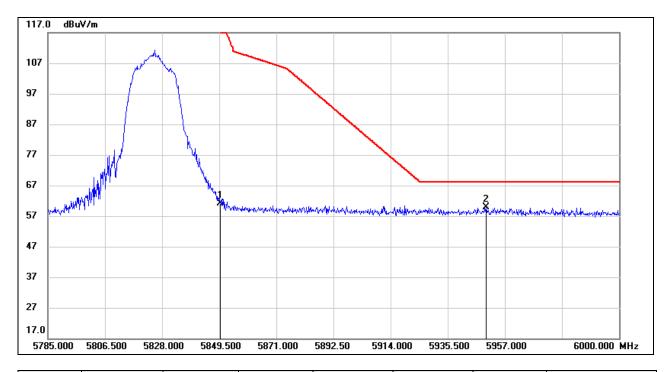


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5630.720	18.78	40.65	59.43	68.20	-8.77	peak
2	5725.000	29.76	40.63	70.39	122.20	-51.81	peak

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



PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.000	19.74	41.45	61.19	122.20	-61.01	peak
2	5949.905	18.16	41.71	59.87	68.20	-8.33	peak

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

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

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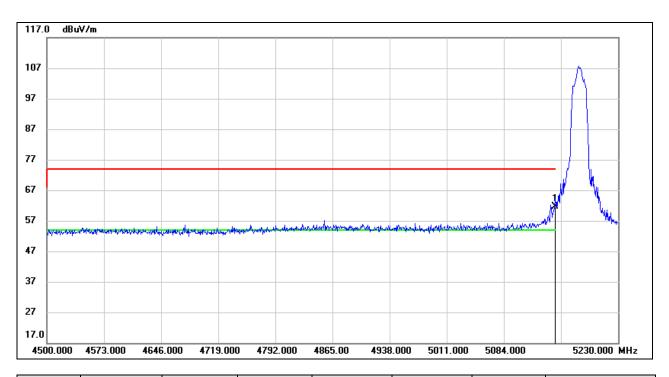


8.1.2. **802.11n HT20 MIMO MODE**

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

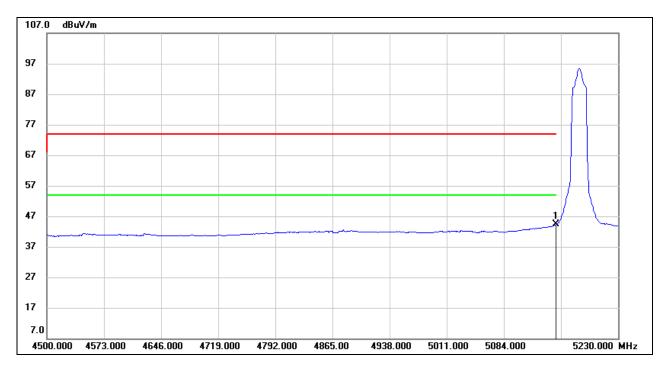
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	21.84	39.91	61.75	74.00	-12.25	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.



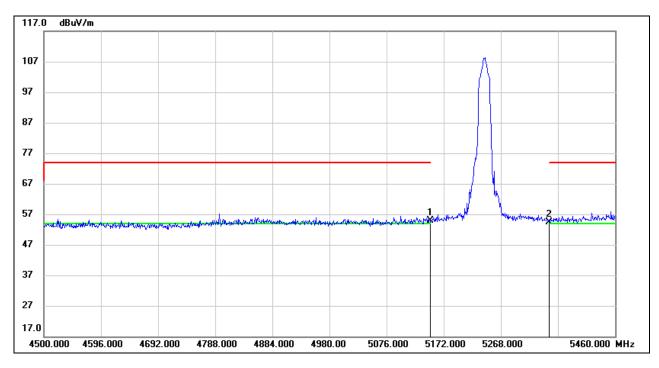


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	4.43	39.91	44.34	54.00	-9.66	AVG

- 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

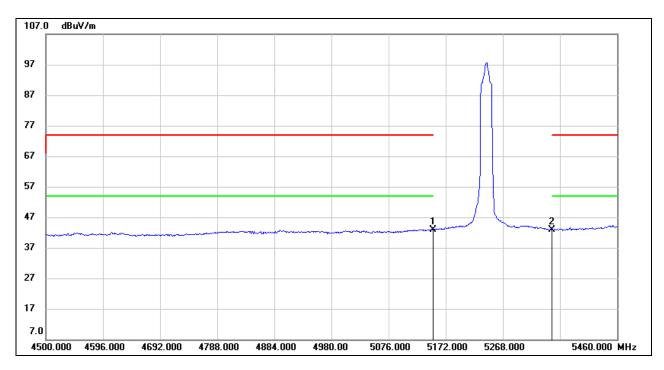


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	14.88	39.91	54.79	74.00	-19.21	peak
2	5350.000	14.31	40.08	54.39	74.00	-19.61	peak

- 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	5150.000	2.97	39.91	42.88	54.00	-11.12	AVG
2	5350.000	2.82	40.08	42.90	54.00	-11.10	AVG

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

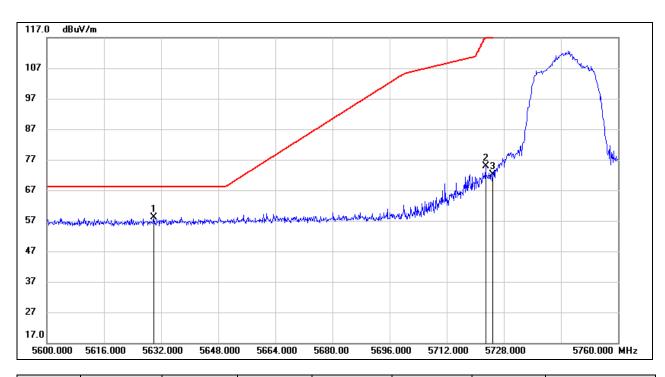
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions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

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

PEAK

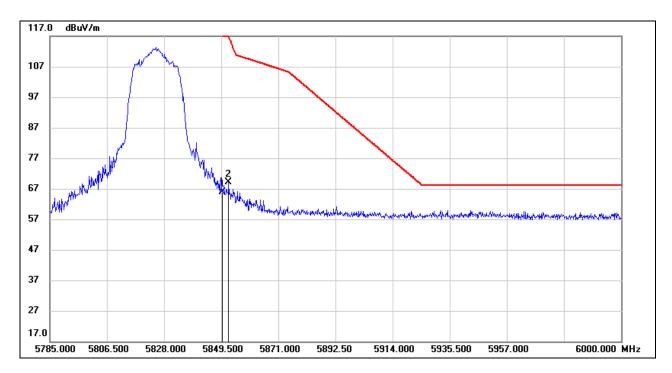


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5629.920	17.56	40.65	58.21	68.20	-9.99	peak
2	5722.880	34.38	40.61	74.99	117.37	-42.38	peak
3	5725.000	31.42	40.63	72.05	122.20	-50.15	peak

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



PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.000	24.47	41.45	65.92	122.20	-56.28	peak
2	5852.295	27.73	41.48	69.21	116.97	-47.76	peak

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

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

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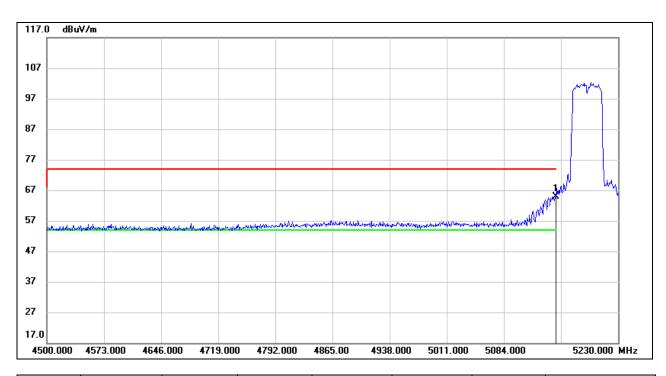
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UNII-1 BAND

8.1.3.

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

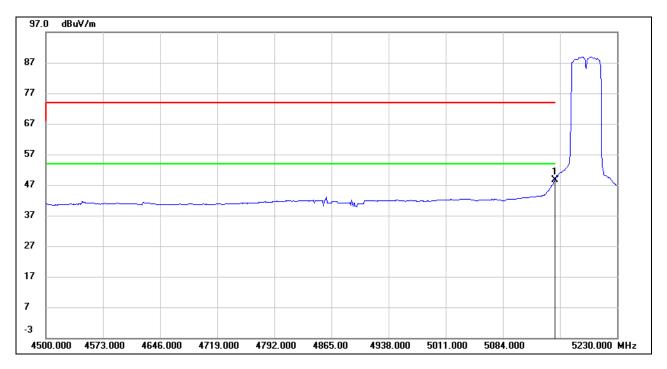
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	24.97	39.91	64.88	74.00	-9.12	peak

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



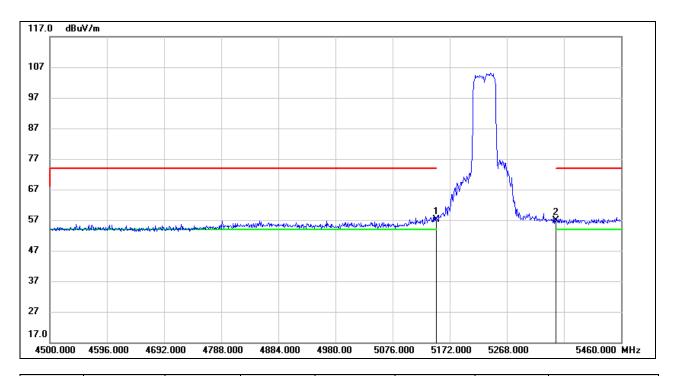


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	8.80	39.91	48.71	54.00	-5.29	AVG

- 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.



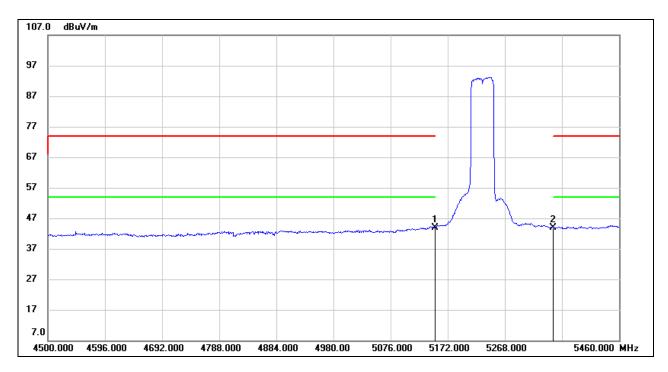
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	17.18	39.91	57.09	74.00	-16.91	peak
2	5350.000	16.80	40.08	56.88	74.00	-17.12	peak

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





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	4.09	39.91	44.00	54.00	-10.00	AVG
2	5350.000	3.89	40.08	43.97	54.00	-10.03	AVG

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

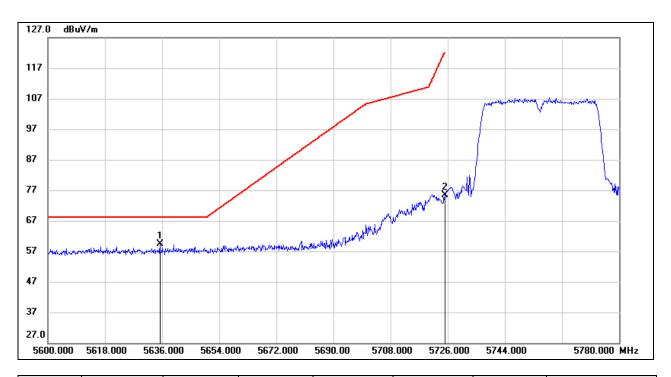
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions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



JNII-3 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

PEAK

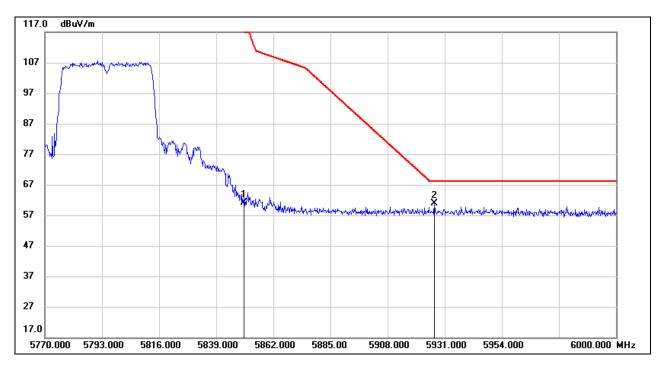


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5635.280	18.72	40.64	59.36	68.20	-8.84	peak
2	5725.000	34.74	40.63	75.37	122.20	-46.83	peak

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



PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.000	19.61	41.45	61.06	122.20	-61.14	peak
2	5926.860	19.05	41.82	60.87	68.20	-7.33	peak

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

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

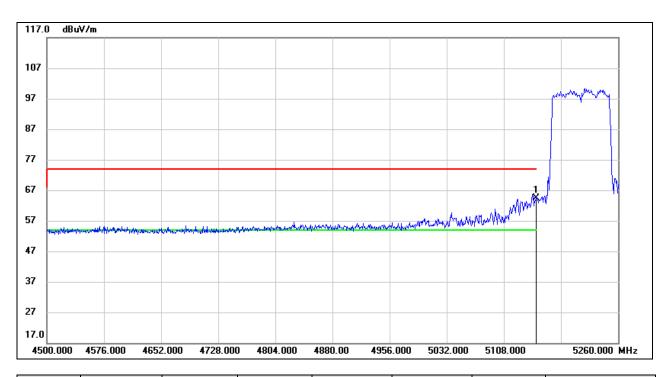


8.1.4. 802.11ac VHT80 MIMO MODE

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

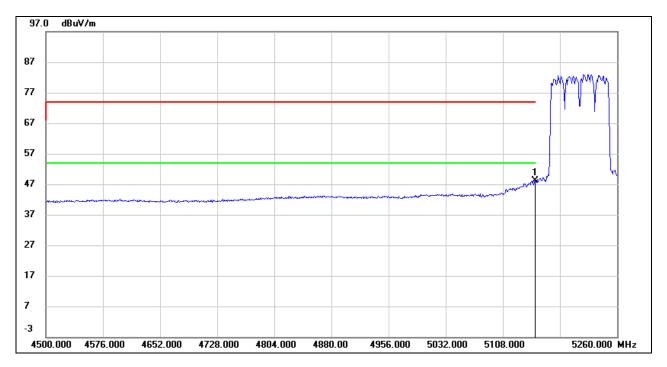
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	24.46	39.91	64.37	74.00	-9.63	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	8.11	39.91	48.02	54.00	-5.98	AVG

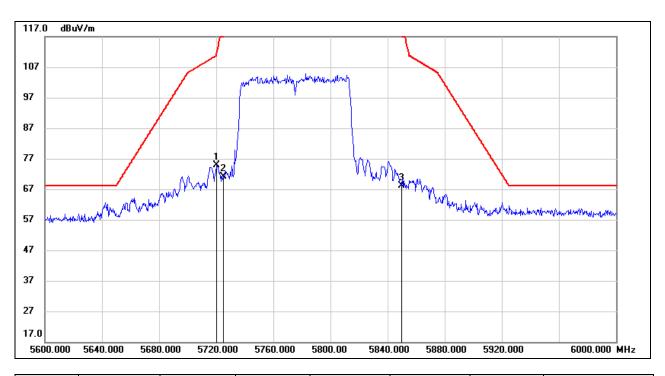
Note: 1. Measurement = Reading Level + Correct Factor.

- 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-3 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5720.400	34.39	40.60	74.99	111.71	-36.72	peak
2	5725.000	30.53	40.63	71.16	122.20	-51.04	peak
3	5850.000	26.76	41.45	68.21	122.20	-53.99	peak

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

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

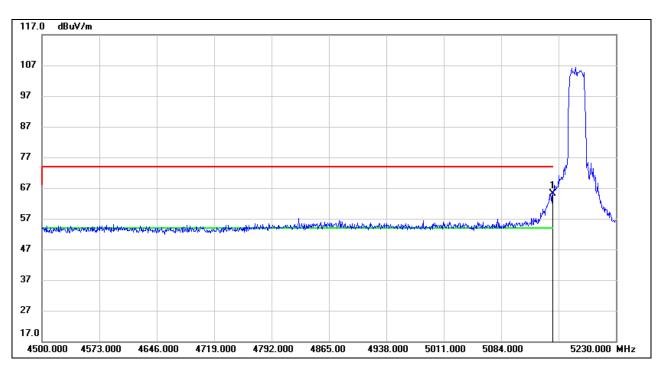


8.1.5. 802.11ax HE20 MIMO MODE

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

PEAK

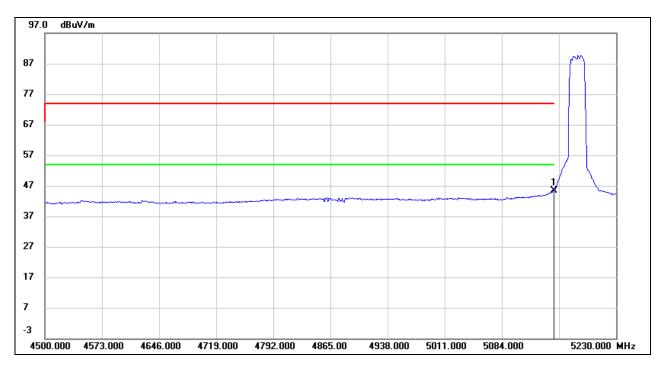


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	25.10	39.91	65.01	74.00	-8.99	peak

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



<u>AVG</u>

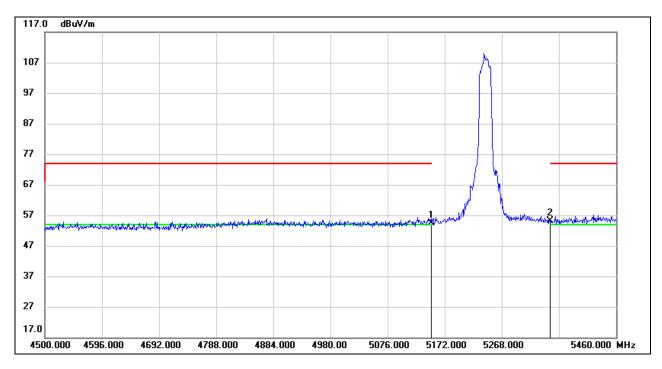


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	5.47	39.91	45.38	54.00	-8.62	AVG

- 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.



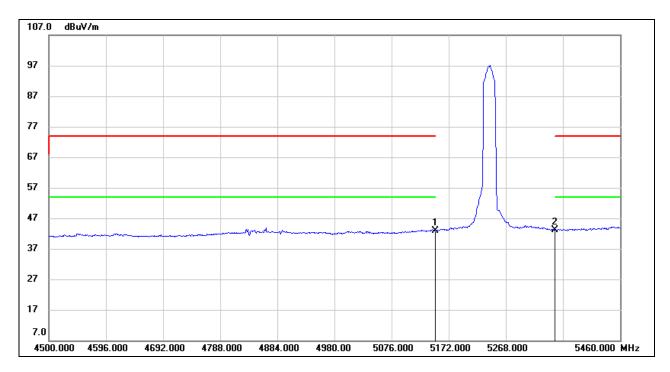
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	14.57	39.91	54.48	74.00	-19.52	peak
2	5350.000	14.94	40.08	55.02	74.00	-18.98	peak

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





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	2.99	39.91	42.90	54.00	-11.10	AVG
2	5350.000	3.17	40.08	43.25	54.00	-10.75	AVG

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

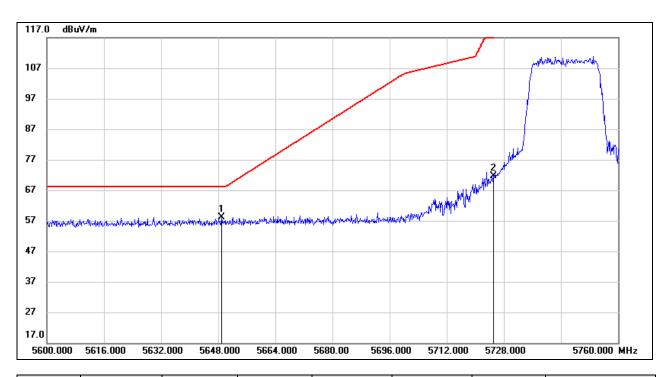
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions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

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

PEAK

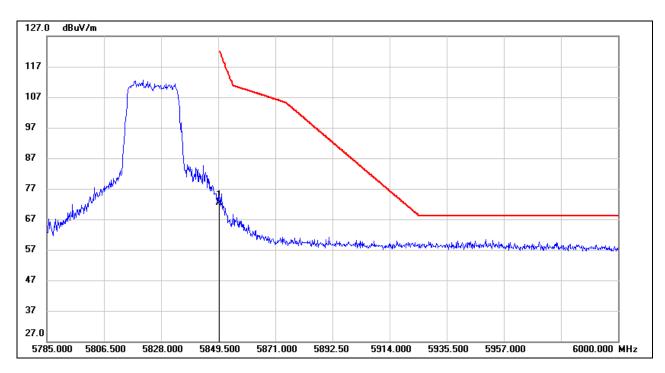


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5648.960	17.53	40.61	58.14	68.20	-10.06	peak
2	5725.000	31.07	40.63	71.70	122.20	-50.50	peak

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



PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.000	30.91	41.45	72.36	122.20	-49.84	peak

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

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

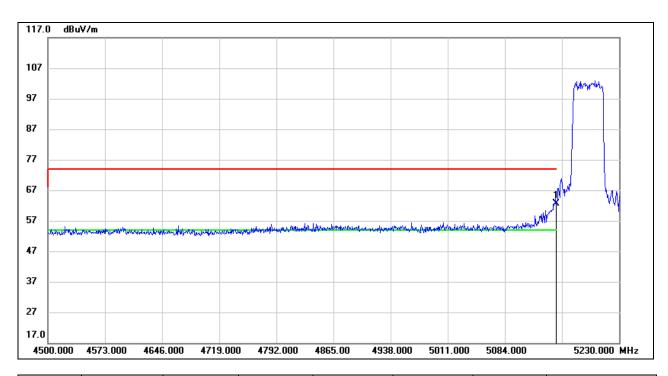
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8.1.6. 802.11ax HE40 MIMO MODE

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

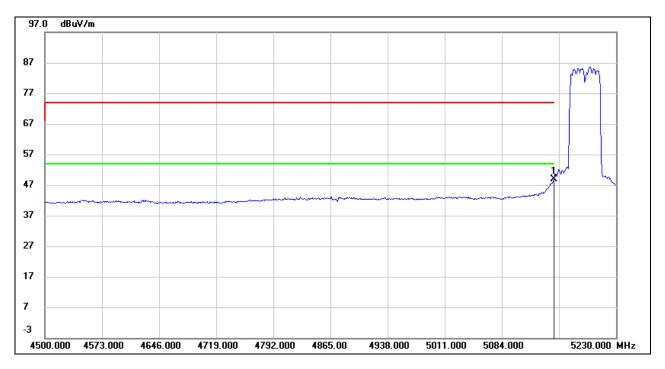
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	22.69	39.91	62.60	74.00	-11.40	peak

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



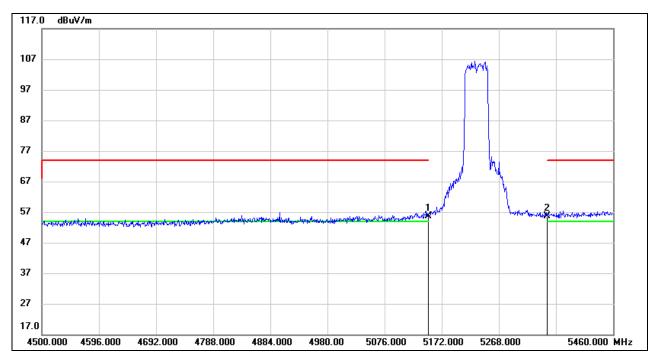


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	8.96	39.91	48.87	54.00	-5.13	AVG

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



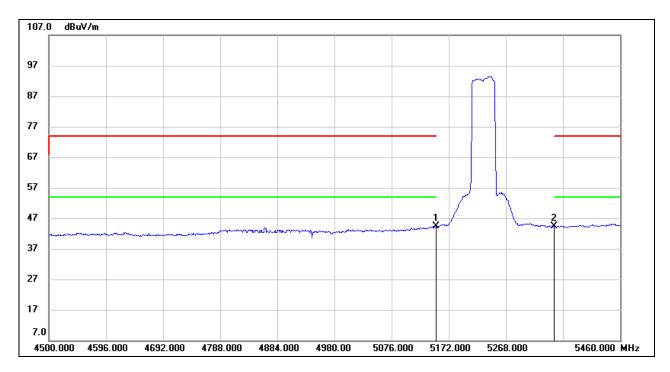
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	15.72	39.91	55.63	74.00	-18.37	peak
2	5350.000	15.59	40.08	55.67	74.00	-18.33	peak

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





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	4.37	39.91	44.28	54.00	-9.72	AVG
2	5350.000	4.26	40.08	44.34	54.00	-9.66	AVG

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

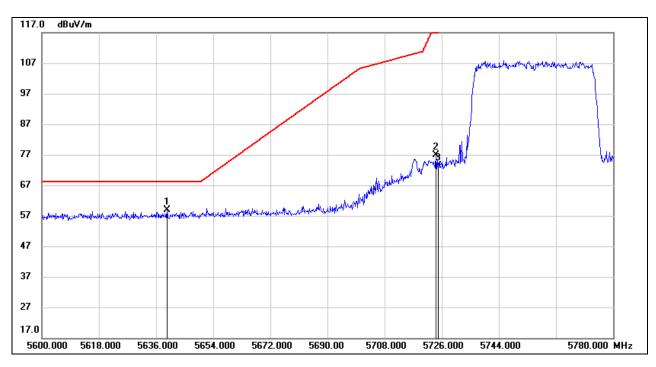
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 4. For the transmitting duration, please refer to clause 7.1.
- 5. Only the worst data was recorded, if it complies with the limit, the other emissions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

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

PEAK

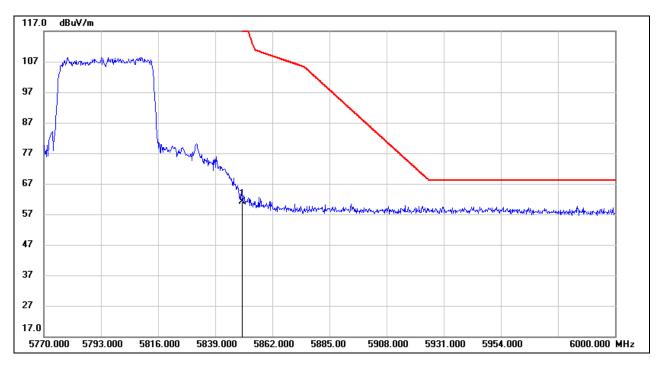


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5639.420	18.25	40.63	58.88	68.20	-9.32	peak
2	5724.200	36.32	40.61	76.93	120.38	-43.45	peak
3	5725.000	32.76	40.63	73.39	122.20	-48.81	peak

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



PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5850.000	19.74	41.45	61.19	122.20	-61.01	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.

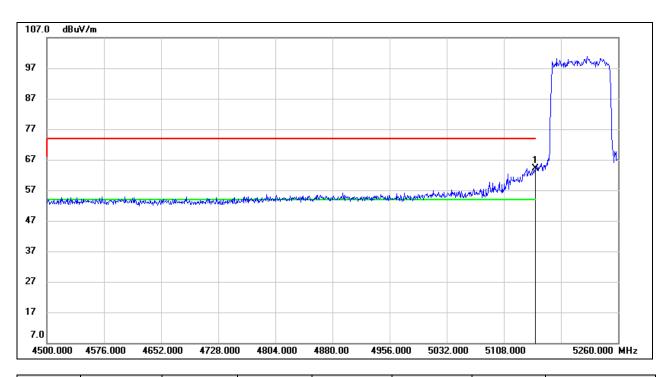


8.1.7. 802.11ax HE80 MIMO MODE

UNII-1 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

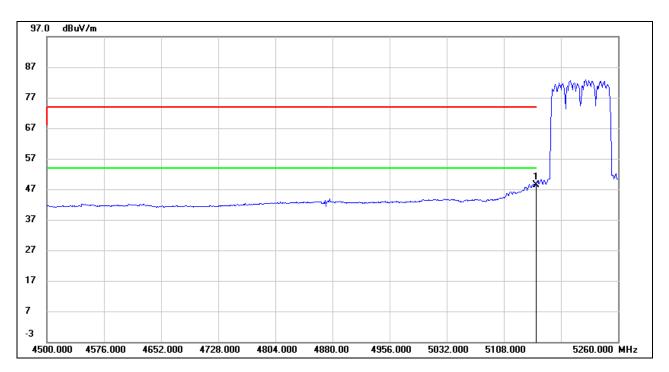
PEAK



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	24.25	39.91	64.16	74.00	-9.84	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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5150.000	8.55	39.91	48.46	54.00	-5.54	AVG

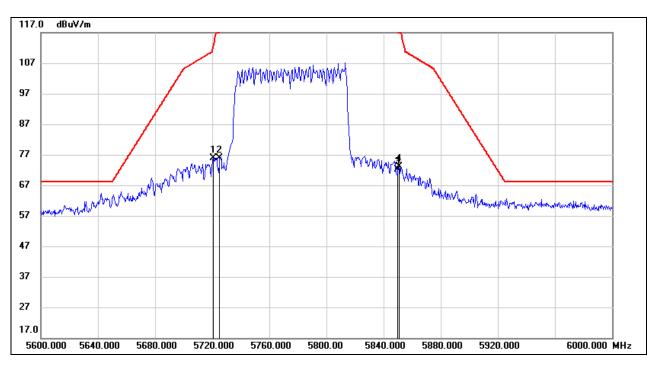
Note: 1. Measurement = Reading Level + Correct Factor.

- 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-3 BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5720.800	35.37	40.60	75.97	112.62	-36.65	peak
2	5725.000	35.25	40.63	75.88	122.20	-46.32	peak
3	5850.000	30.71	41.45	72.16	122.20	-50.04	peak
4	5850.800	31.55	41.46	73.01	120.38	-47.37	peak

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

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



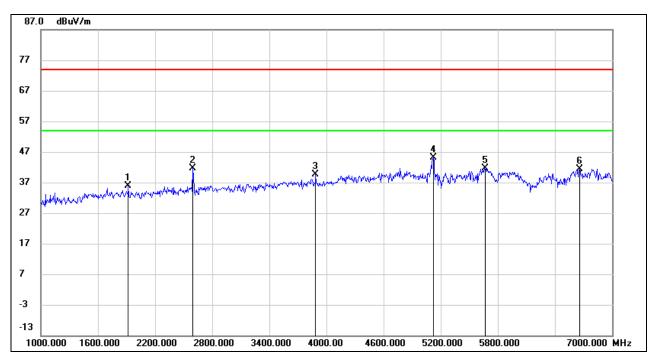
8.2. SPURIOUS EMISSIONS (1 GHz ~ 7 GHz)

8.2.1. 802.11n HT20 MIMO MODE

UNII-1 BAND

MIMO MODE TEST RESULTS (WORST CASE)

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

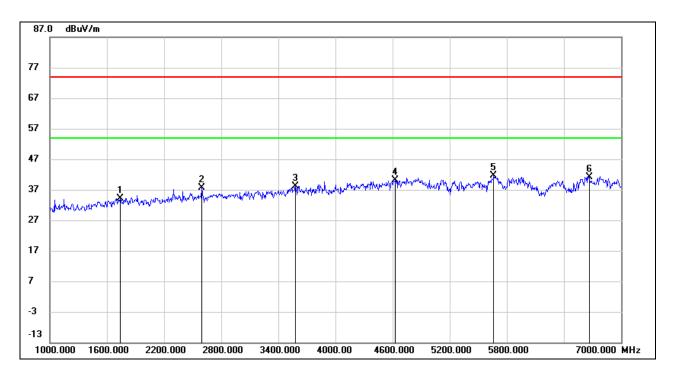


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	46.84	-11.02	35.82	74.00	-38.18	peak
2	2596.000	50.17	-8.66	41.51	74.00	-32.49	peak
3	3886.000	44.09	-4.51	39.58	74.00	-34.42	peak
4	5122.000	44.82	0.33	45.15	74.00	-28.85	peak
5	5668.000	40.31	1.44	41.75	74.00	-32.25	peak
6	6658.000	36.94	4.51	41.45	74.00	-32.55	peak

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

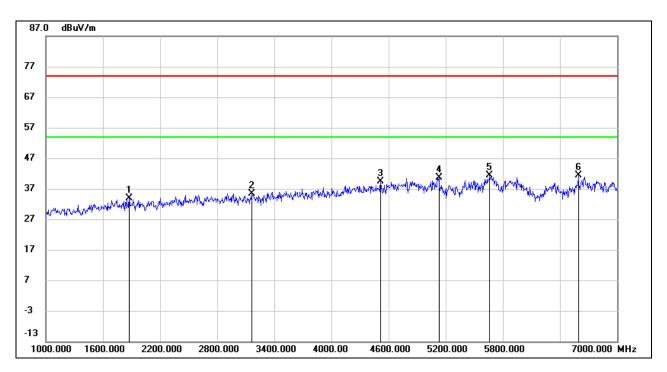


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1738.000	45.32	-11.14	34.18	74.00	-39.82	peak
2	2596.000	46.23	-8.66	37.57	74.00	-36.43	peak
3	3580.000	43.43	-5.40	38.03	74.00	-35.97	peak
4	4630.000	41.70	-1.49	40.21	74.00	-33.79	peak
5	5662.000	40.15	1.44	41.59	74.00	-32.41	peak
6	6664.000	36.69	4.53	41.22	74.00	-32.78	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

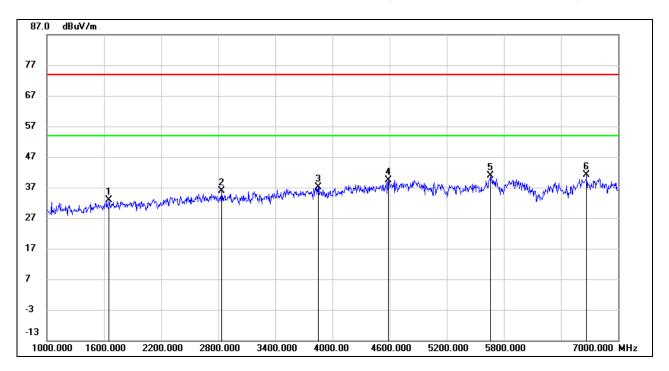


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1876.000	44.70	-10.93	33.77	74.00	-40.23	peak
2	3166.000	42.17	-6.67	35.50	74.00	-38.50	peak
3	4516.000	41.51	-2.14	39.37	74.00	-34.63	peak
4	5128.000	40.14	0.38	40.52	74.00	-33.48	peak
5	5662.000	39.94	1.44	41.38	74.00	-32.62	peak
6	6592.000	36.83	4.45	41.28	74.00	-32.72	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)

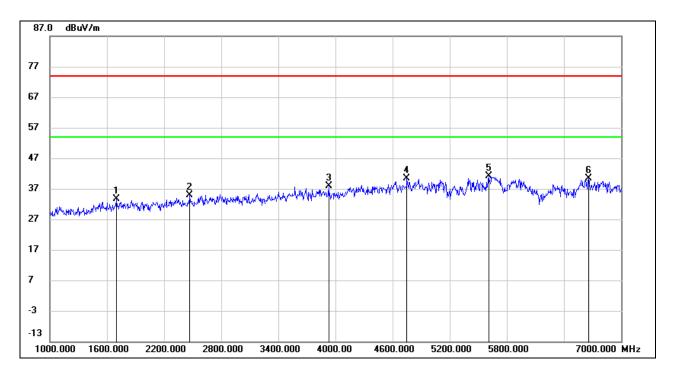


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1654.000	44.61	-11.67	32.94	74.00	-41.06	peak
2	2836.000	43.52	-7.59	35.93	74.00	-38.07	peak
3	3850.000	41.65	-4.45	37.20	74.00	-36.80	peak
4	4588.000	41.17	-1.72	39.45	74.00	-34.55	peak
5	5662.000	39.54	1.44	40.98	74.00	-33.02	peak
6	6670.000	36.65	4.53	41.18	74.00	-32.82	peak

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

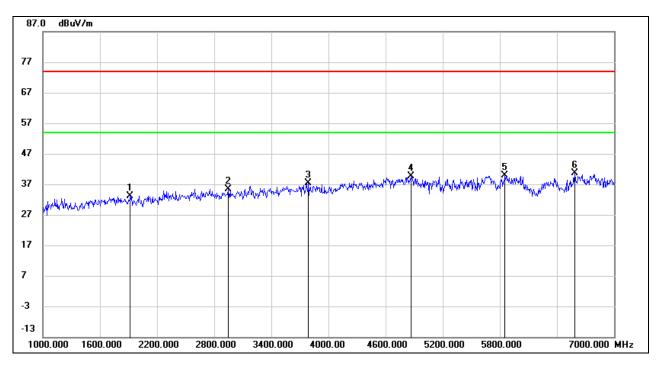


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1696.000	45.05	-11.41	33.64	74.00	-40.36	peak
2	2470.000	43.90	-8.90	35.00	74.00	-39.00	peak
3	3928.000	42.57	-4.57	38.00	74.00	-36.00	peak
4	4750.000	41.16	-0.90	40.26	74.00	-33.74	peak
5	5608.000	39.57	1.44	41.01	74.00	-32.99	peak
6	6658.000	35.87	4.51	40.38	74.00	-33.62	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1918.000	44.27	-11.02	33.25	74.00	-40.75	peak
2	2944.000	42.73	-7.25	35.48	74.00	-38.52	peak
3	3790.000	41.72	-4.41	37.31	74.00	-36.69	peak
4	4864.000	40.11	-0.60	39.51	74.00	-34.49	peak
5	5854.000	38.35	1.64	39.99	74.00	-34.01	peak
6	6586.000	36.11	4.41	40.52	74.00	-33.48	peak

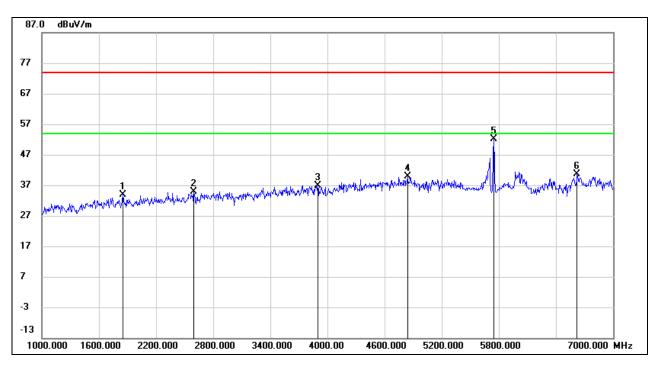
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
 - 5. Proper operation of the transmitter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

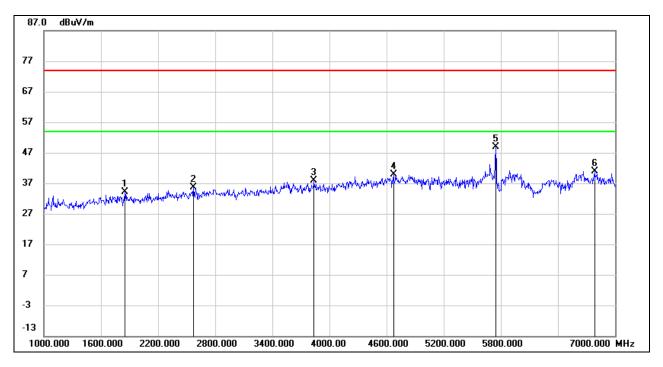


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1852.000	44.82	-10.88	33.94	74.00	-40.06	peak
2	2596.000	43.48	-8.66	34.82	74.00	-39.18	peak
3	3898.000	41.43	-4.52	36.91	74.00	-37.09	peak
4	4840.000	40.56	-0.62	39.94	74.00	-34.06	peak
5	5746.000	50.75	1.45	52.20	74.00	-21.80	peak
6	6622.000	36.05	4.51	40.56	74.00	-33.44	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)

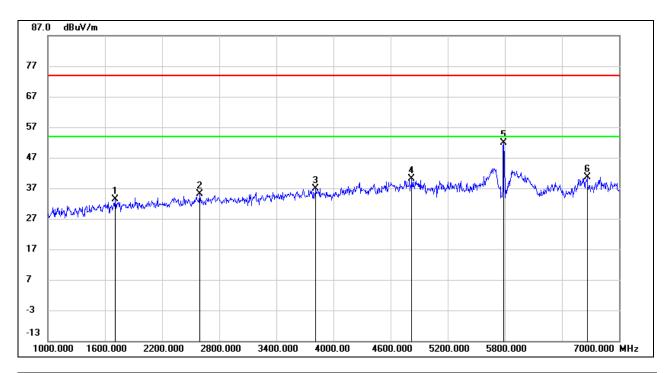


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1852.000	44.96	-10.88	34.08	74.00	-39.92	peak
2	2572.000	44.28	-8.69	35.59	74.00	-38.41	peak
3	3838.000	42.33	-4.42	37.91	74.00	-36.09	peak
4	4672.000	41.05	-1.29	39.76	74.00	-34.24	peak
5	5746.000	47.53	1.45	48.98	74.00	-25.02	peak
6	6784.000	36.29	4.56	40.85	74.00	-33.15	peak

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

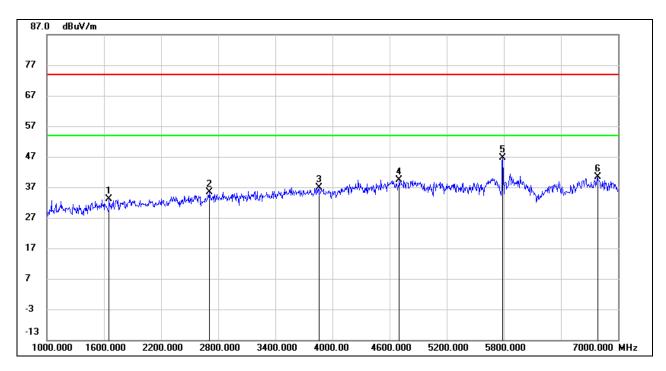


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1708.000	44.66	-11.33	33.33	74.00	-40.67	peak
2	2596.000	43.83	-8.66	35.17	74.00	-38.83	peak
3	3814.000	41.36	-4.38	36.98	74.00	-37.02	peak
4	4822.000	40.71	-0.63	40.08	74.00	-33.92	peak
5	5788.000	50.37	1.44	51.81	74.00	-22.19	peak
6	6664.000	36.21	4.53	40.74	74.00	-33.26	peak

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

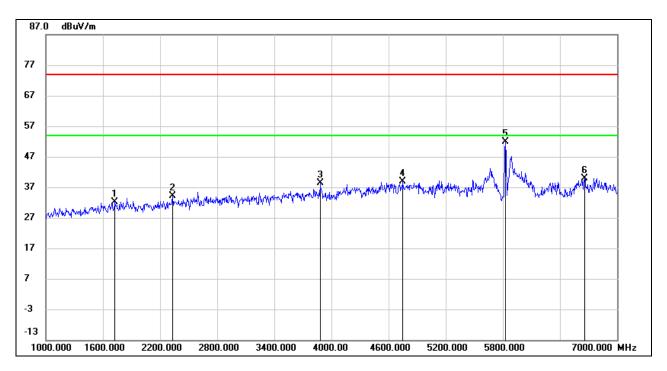


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1654.000	44.71	-11.67	33.04	74.00	-40.96	peak
2	2704.000	43.46	-8.14	35.32	74.00	-38.68	peak
3	3856.000	41.27	-4.46	36.81	74.00	-37.19	peak
4	4702.000	40.49	-1.15	39.34	74.00	-34.66	peak
5	5788.000	45.16	1.44	46.60	74.00	-27.40	peak
6	6784.000	35.85	4.56	40.41	74.00	-33.59	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)

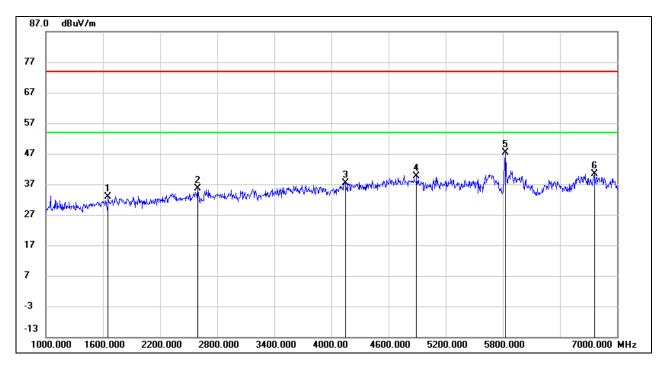


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1726.000	43.35	-11.22	32.13	74.00	-41.87	peak
2	2332.000	43.44	-9.35	34.09	74.00	-39.91	peak
3	3880.000	42.98	-4.50	38.48	74.00	-35.52	peak
4	4750.000	39.80	-0.90	38.90	74.00	-35.10	peak
5	5830.000	50.41	1.56	51.97	74.00	-22.03	peak
6	6658.000	35.49	4.51	40.00	74.00	-34.00	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 (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1654.000	44.50	-11.67	32.83	74.00	-41.17	peak
2	2596.000	44.29	-8.66	35.63	74.00	-38.37	peak
3	4150.000	40.60	-3.23	37.37	74.00	-36.63	peak
4	4894.000	40.18	-0.58	39.60	74.00	-34.40	peak
5	5830.000	45.74	1.56	47.30	74.00	-26.70	peak
6	6760.000	35.88	4.56	40.44	74.00	-33.56	peak

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

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



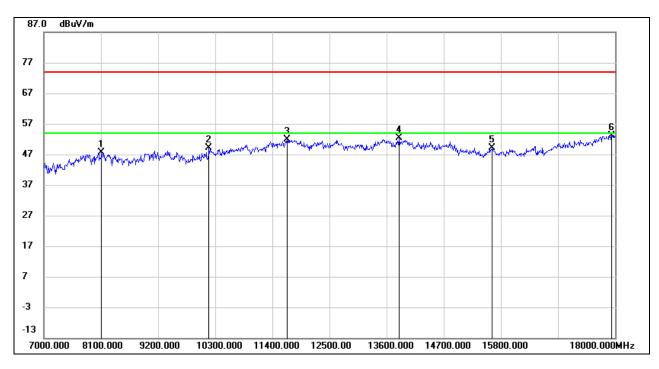
8.3. SPURIOUS EMISSIONS (7 GHz ~ 18 GHz)

8.3.1. 802.11a SISO MODE

UNII-1 BAND

ANTENNA 1 TEST RESULTS (WORST CASE)

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

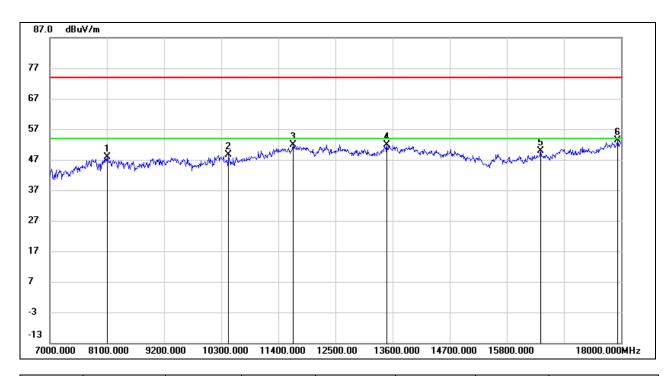


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	38.11	9.52	47.63	74.00	-26.37	peak
2	10179.000	37.15	11.97	49.12	74.00	-24.88	peak
3	11686.000	34.81	17.03	51.84	74.00	-22.16	peak
4	13842.000	33.06	19.37	52.43	74.00	-21.57	peak
5	15635.000	33.59	15.63	49.22	74.00	-24.78	peak
6	17934.000	28.58	24.53	53.11	74.00	-20.89	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 (LOW CHANNEL, VERTICAL)

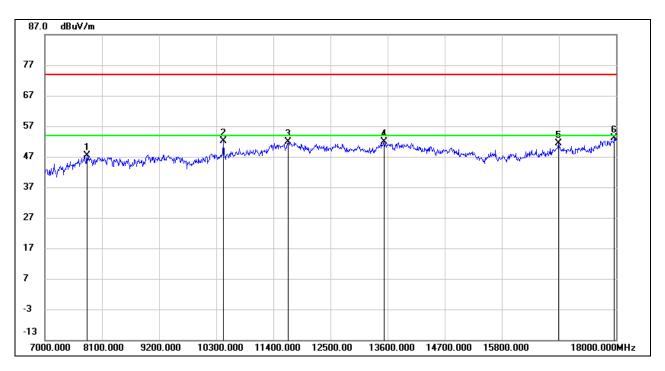


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	38.26	9.52	47.78	74.00	-26.22	peak
2	10443.000	35.84	12.80	48.64	74.00	-25.36	peak
3	11686.000	34.82	17.03	51.85	74.00	-22.15	peak
4	13490.000	32.62	19.19	51.81	74.00	-22.19	peak
5	16449.000	32.63	17.26	49.89	74.00	-24.11	peak
6	17934.000	28.76	24.53	53.29	74.00	-20.71	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 (MID CHANNEL, HORIZONTAL)

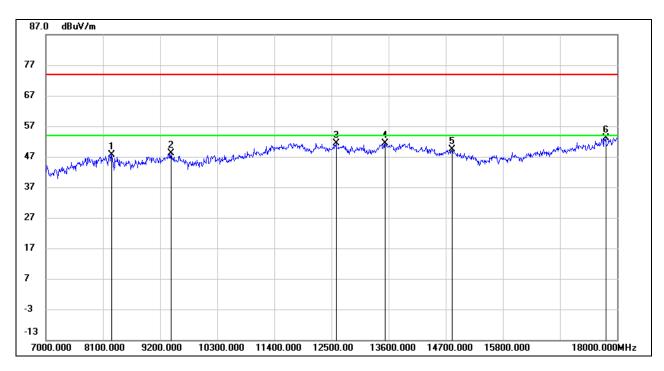


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7814.000	38.65	8.64	47.29	74.00	-26.71	peak
2	10432.000	39.24	12.78	52.02	74.00	-21.98	peak
3	11686.000	34.96	17.03	51.99	74.00	-22.01	peak
4	13534.000	32.82	19.16	51.98	74.00	-22.02	peak
5	16889.000	31.73	19.62	51.35	74.00	-22.65	peak
6	17967.000	28.28	24.75	53.03	74.00	-20.97	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.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

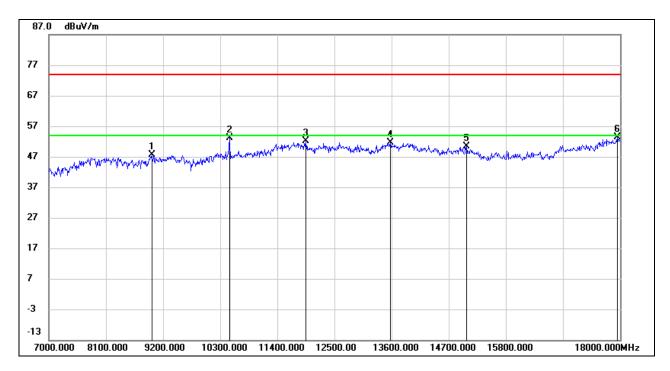


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8265.000	38.57	9.07	47.64	74.00	-26.36	peak
2	9409.000	37.31	10.76	48.07	74.00	-25.93	peak
3	12588.000	34.30	17.10	51.40	74.00	-22.60	peak
4	13534.000	32.16	19.16	51.32	74.00	-22.68	peak
5	14821.000	32.14	17.36	49.50	74.00	-24.50	peak
6	17780.000	29.22	24.02	53.24	74.00	-20.76	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 (HIGH CHANNEL, HORIZONTAL)

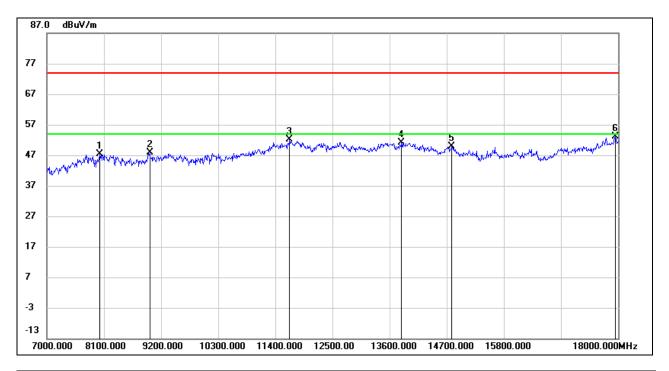


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8980.000	37.17	10.39	47.56	74.00	-26.44	peak
2	10476.000	40.23	12.84	53.07	74.00	-20.93	peak
3	11950.000	34.87	17.26	52.13	74.00	-21.87	peak
4	13578.000	32.49	19.08	51.57	74.00	-22.43	peak
5	15041.000	33.91	16.47	50.38	74.00	-23.62	peak
6	17945.000	28.68	24.61	53.29	74.00	-20.71	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 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	8023.000	38.90	8.38	47.28	74.00	-26.72	peak
2	8980.000	37.45	10.39	47.84	74.00	-26.16	peak
3	11675.000	35.16	16.95	52.11	74.00	-21.89	peak
4	13831.000	31.78	19.39	51.17	74.00	-22.83	peak
5	14799.000	32.24	17.56	49.80	74.00	-24.20	peak
6	17945.000	28.56	24.61	53.17	74.00	-20.83	peak

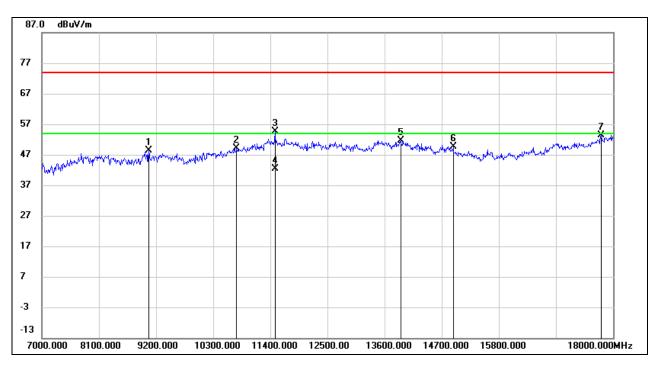
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency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



UNII-3 BAND

ANTENNA 1 TEST RESULTS (WORST CASE)

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

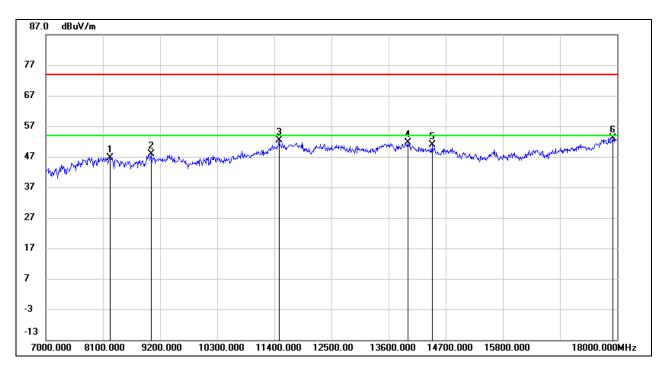


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9057.000	38.09	10.18	48.27	74.00	-25.73	peak
2	10751.000	35.42	13.65	49.07	74.00	-24.93	peak
3	11488.000	38.10	16.44	54.54	74.00	-19.46	peak
4	11488.000	25.95	16.44	42.39	54.00	-11.61	AVG
5	13908.000	32.33	19.30	51.63	74.00	-22.37	peak
6	14920.000	32.99	16.65	49.64	74.00	-24.36	peak
7	17769.000	29.50	23.92	53.42	74.00	-20.58	peak

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

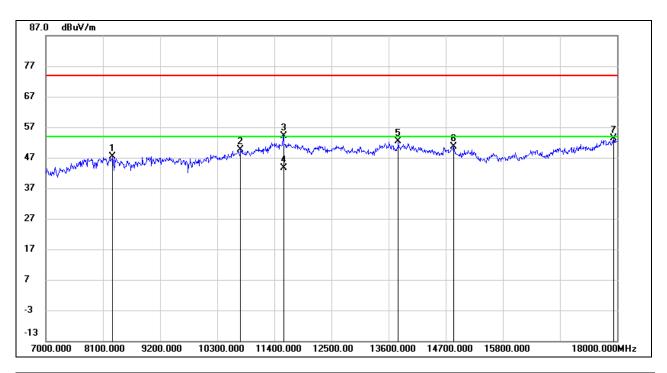


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8232.000	37.57	9.13	46.70	74.00	-27.30	peak
2	9024.000	37.41	10.53	47.94	74.00	-26.06	peak
3	11488.000	36.04	16.44	52.48	74.00	-21.52	peak
4	13974.000	32.39	19.34	51.73	74.00	-22.27	peak
5	14436.000	33.09	17.81	50.90	74.00	-23.10	peak
6	17923.000	28.70	24.46	53.16	74.00	-20.84	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. 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)

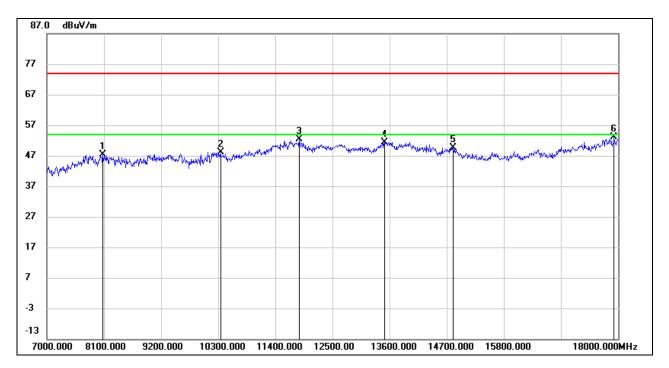


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8287.000	38.42	9.05	47.47	74.00	-26.53	peak
2	10751.000	36.10	13.65	49.75	74.00	-24.25	peak
3	11576.000	37.56	16.49	54.05	74.00	-19.95	peak
4	11576.000	27.19	16.49	43.68	54.00	-10.32	AVG
5	13787.000	32.84	19.44	52.28	74.00	-21.72	peak
6	14854.000	33.44	17.07	50.51	74.00	-23.49	peak
7	17934.000	28.74	24.53	53.27	74.00	-20.73	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)

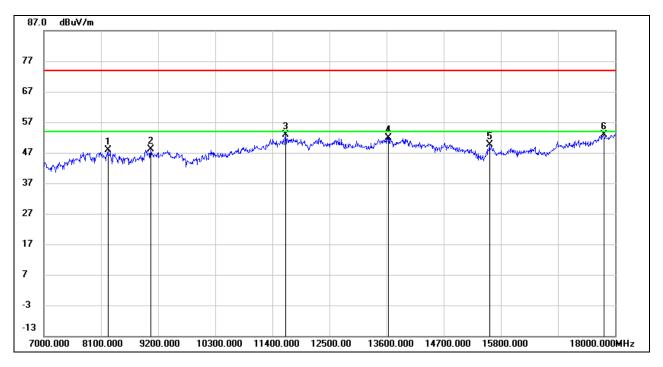


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8078.000	38.06	9.22	47.28	74.00	-26.72	peak
2	10344.000	35.58	12.52	48.10	74.00	-25.90	peak
3	11862.000	35.17	17.14	52.31	74.00	-21.69	peak
4	13501.000	32.26	19.22	51.48	74.00	-22.52	peak
5	14821.000	32.24	17.36	49.60	74.00	-24.40	peak
6	17923.000	28.74	24.46	53.20	74.00	-20.80	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

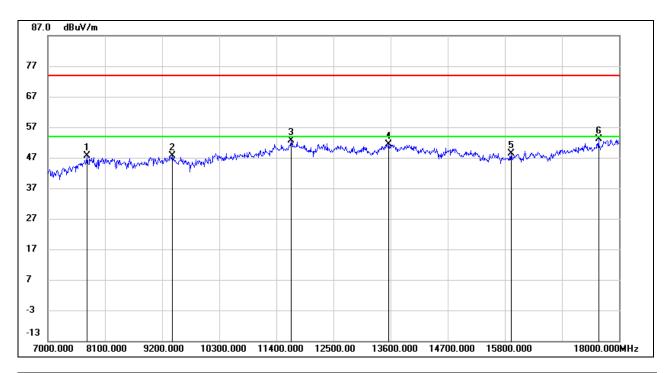


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8232.000	38.80	9.13	47.93	74.00	-26.07	peak
2	9057.000	37.84	10.18	48.02	74.00	-25.98	peak
3	11653.000	36.07	16.82	52.89	74.00	-21.11	peak
4	13633.000	32.64	19.19	51.83	74.00	-22.17	peak
5	15580.000	34.11	15.54	49.65	74.00	-24.35	peak
6	17780.000	28.98	24.02	53.00	74.00	-21.00	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 (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7759.000	39.19	8.34	47.53	74.00	-26.47	peak
2	9398.000	36.90	10.78	47.68	74.00	-26.32	peak
3	11686.000	35.53	17.03	52.56	74.00	-21.44	peak
4	13567.000	32.20	19.10	51.30	74.00	-22.70	peak
5	15921.000	32.92	15.57	48.49	74.00	-25.51	peak
6	17604.000	30.70	22.35	53.05	74.00	-20.95	peak

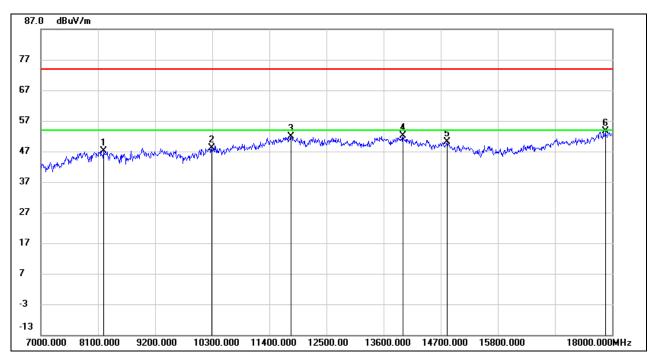
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency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



8.3.2. 802.11n HT20 MIMO MODE

UNII-1 BAND

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

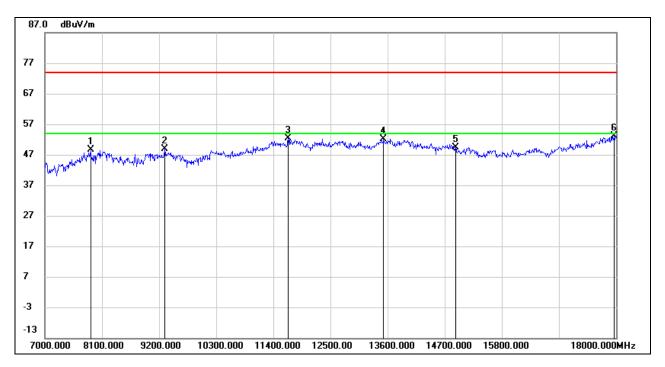


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8210.000	37.93	9.16	47.09	74.00	-26.91	peak
2	10289.000	35.93	12.30	48.23	74.00	-25.77	peak
3	11818.000	34.86	17.02	51.88	74.00	-22.12	peak
4	13974.000	32.78	19.34	52.12	74.00	-21.88	peak
5	14821.000	32.71	17.36	50.07	74.00	-23.93	peak
6	17868.000	29.25	24.27	53.52	74.00	-20.48	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)

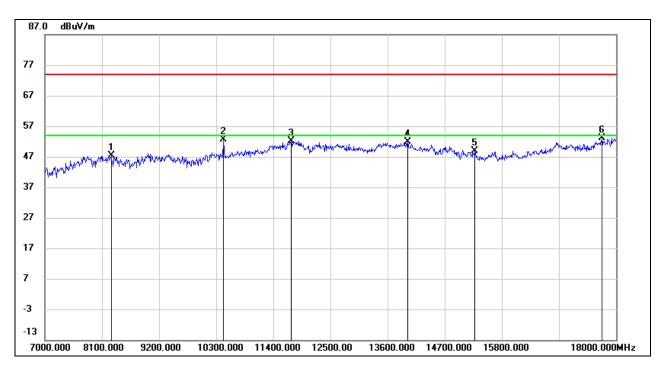


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	40.27	8.33	48.60	74.00	-25.40	peak
2	9310.000	38.60	10.21	48.81	74.00	-25.19	peak
3	11686.000	35.42	17.03	52.45	74.00	-21.55	peak
4	13523.000	32.85	19.18	52.03	74.00	-21.97	peak
5	14909.000	32.77	16.65	49.42	74.00	-24.58	peak
6	17956,000	28.49	24.68	53.17	74.00	-20.83	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

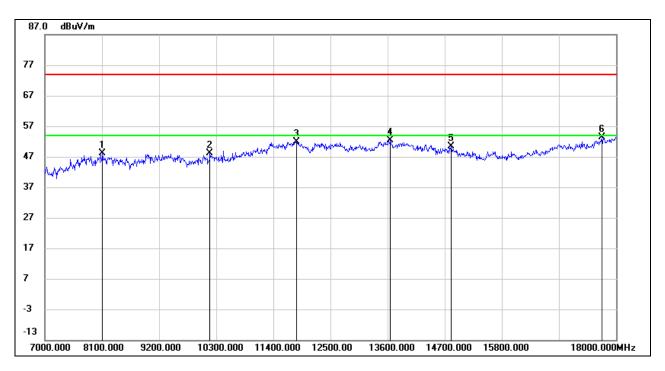


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8276.000	38.21	9.06	47.27	74.00	-26.73	peak
2	10443.000	39.85	12.80	52.65	74.00	-21.35	peak
3	11741.000	35.15	17.05	52.20	74.00	-21.80	peak
4	13985.000	32.40	19.36	51.76	74.00	-22.24	peak
5	15283.000	33.36	15.52	48.88	74.00	-25.12	peak
6	17725.000	29.53	23.54	53.07	74.00	-20.93	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

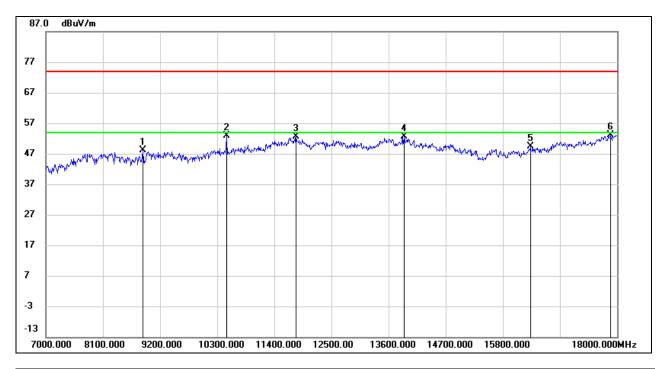


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	38.49	9.52	48.01	74.00	-25.99	peak
2	10179.000	36.24	11.97	48.21	74.00	-25.79	peak
3	11840.000	34.81	17.08	51.89	74.00	-22.11	peak
4	13655.000	33.13	19.29	52.42	74.00	-21.58	peak
5	14821.000	32.96	17.36	50.32	74.00	-23.68	peak
6	17725.000	29.74	23.54	53.28	74.00	-20.72	peak

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



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

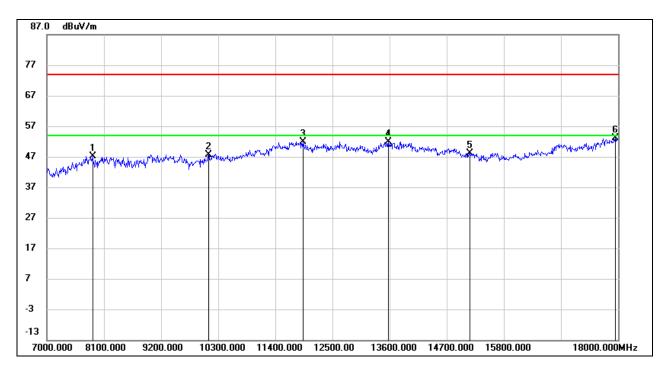


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8870.000	39.31	8.78	48.09	74.00	-25.91	peak
2	10476.000	39.96	12.84	52.80	74.00	-21.20	peak
3	11818.000	35.49	17.02	52.51	74.00	-21.49	peak
4	13897.000	33.38	19.28	52.66	74.00	-21.34	peak
5	16328.000	32.14	17.13	49.27	74.00	-24.73	peak
6	17868.000	28.91	24.27	53.18	74.00	-20.82	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.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



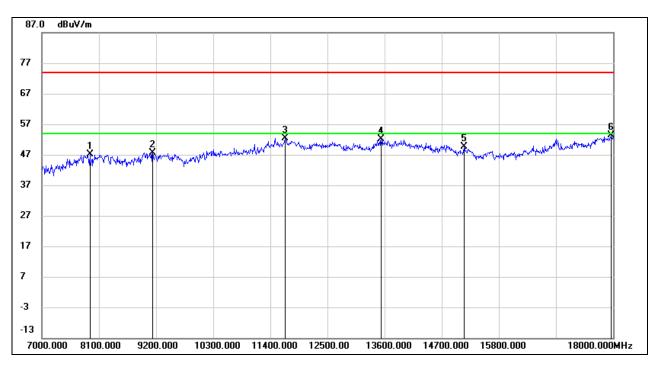
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	38.82	8.33	47.15	74.00	-26.85	peak
2	10113.000	35.93	11.73	47.66	74.00	-26.34	peak
3	11928.000	34.60	17.24	51.84	74.00	-22.16	peak
4	13578.000	32.82	19.08	51.90	74.00	-22.10	peak
5	15151.000	32.41	15.83	48.24	74.00	-25.76	peak
6	17945.000	28.47	24.61	53.08	74.00	-20.92	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. 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)

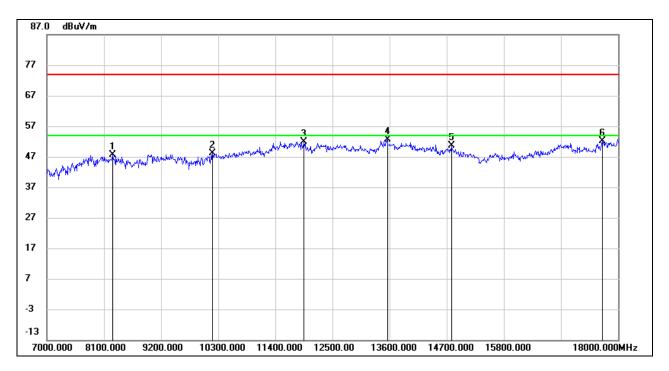


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7924.000	39.05	8.19	47.24	74.00	-26.76	peak
2	9134.000	38.03	9.66	47.69	74.00	-26.31	peak
3	11686.000	35.40	17.03	52.43	74.00	-21.57	peak
4	13534.000	32.85	19.16	52.01	74.00	-21.99	peak
5	15129.000	33.69	15.98	49.67	74.00	-24.33	peak
6	17967.000	28.58	24.75	53.33	74.00	-20.67	peak

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



HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

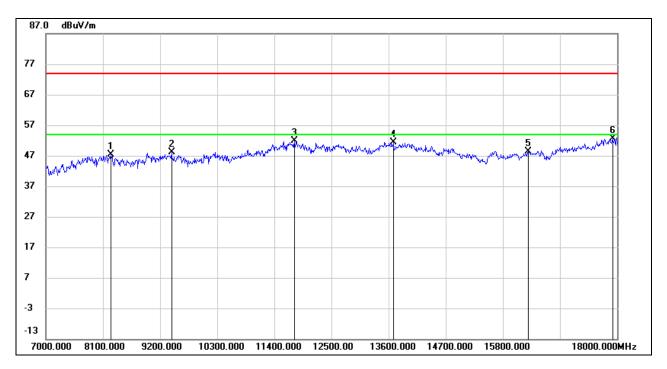


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8265.000	38.48	9.07	47.55	74.00	-26.45	peak
2	10190.000	36.04	12.02	48.06	74.00	-25.94	peak
3	11950.000	34.66	17.26	51.92	74.00	-22.08	peak
4	13556.000	33.43	19.11	52.54	74.00	-21.46	peak
5	14788.000	33.01	17.55	50.56	74.00	-23.44	peak
6	17692.000	28.88	23.25	52.13	74.00	-21.87	peak

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



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

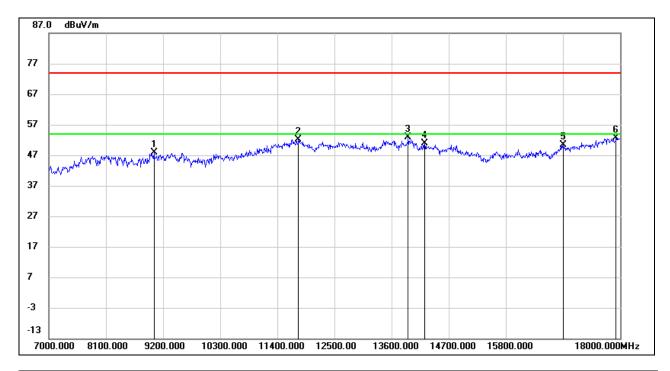


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8254.000	38.27	9.10	47.37	74.00	-26.63	peak
2	9420.000	37.33	10.71	48.04	74.00	-25.96	peak
3	11785.000	34.82	17.00	51.82	74.00	-22.18	peak
4	13688.000	31.93	19.43	51.36	74.00	-22.64	peak
5	16284.000	31.46	16.94	48.40	74.00	-25.60	peak
6	17912.000	28.30	24.39	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. 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)

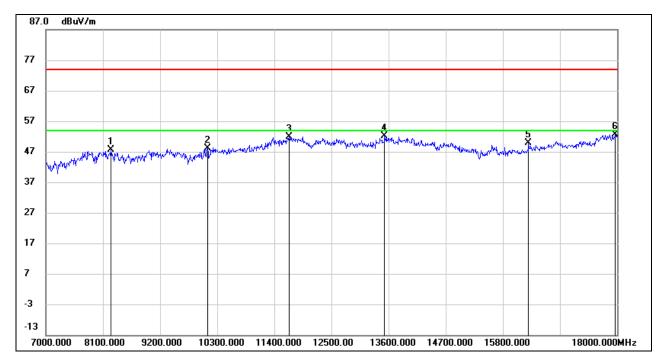


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9024.000	37.23	10.53	47.76	74.00	-26.24	peak
2	11807.000	35.09	17.01	52.10	74.00	-21.90	peak
3	13919.000	33.54	19.30	52.84	74.00	-21.16	peak
4	14238.000	31.97	18.95	50.92	74.00	-23.08	peak
5	16911.000	30.71	19.71	50.42	74.00	-23.58	peak
6	17923.000	28.28	24.46	52.74	74.00	-21.26	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)

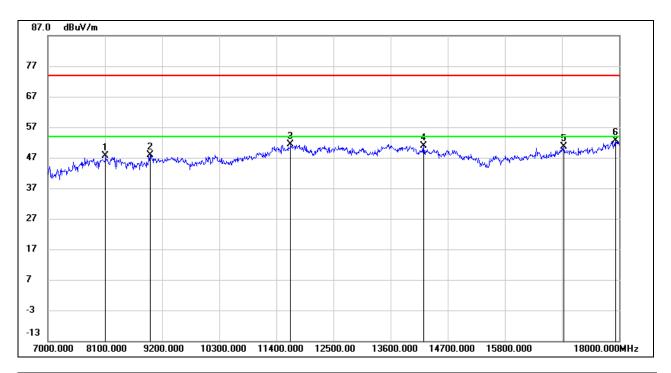


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8254.000	38.42	9.10	47.52	74.00	-26.48	peak
2	10113.000	36.48	11.73	48.21	74.00	-25.79	peak
3	11686.000	34.87	17.03	51.90	74.00	-22.10	peak
4	13523.000	32.90	19.18	52.08	74.00	-21.92	peak
5	16295.000	32.81	17.05	49.86	74.00	-24.14	peak
6	17967.000	27.83	24.75	52.58	74.00	-21.42	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	8111.000	38.14	9.52	47.66	74.00	-26.34	peak
2	8969.000	37.80	10.17	47.97	74.00	-26.03	peak
3	11675.000	34.46	16.95	51.41	74.00	-22.59	peak
4	14238.000	32.04	18.95	50.99	74.00	-23.01	peak
5	16933.000	30.87	19.67	50.54	74.00	-23.46	peak
6	17934.000	28.19	24.53	52.72	74.00	-21.28	peak

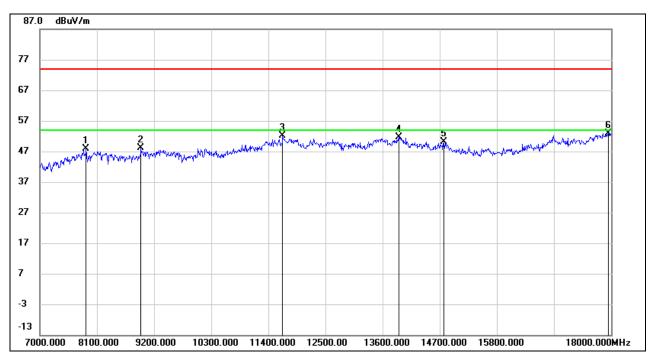
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency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

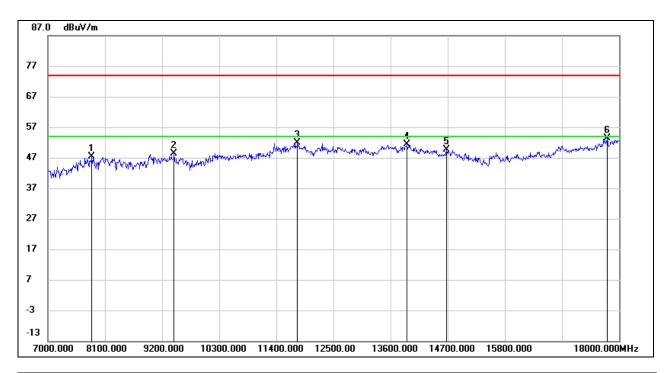


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7891.000	39.70	8.27	47.97	74.00	-26.03	peak
2	8947.000	38.41	9.75	48.16	74.00	-25.84	peak
3	11675.000	35.17	16.95	52.12	74.00	-21.88	peak
4	13908.000	32.43	19.30	51.73	74.00	-22.27	peak
5	14777.000	32.68	17.54	50.22	74.00	-23.78	peak
6	17945.000	28.34	24.61	52.95	74.00	-21.05	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)

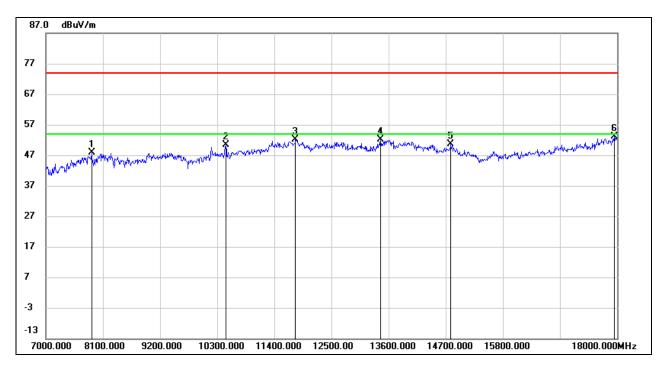


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7847.000	38.97	8.49	47.46	74.00	-26.54	peak
2	9431.000	37.66	10.68	48.34	74.00	-25.66	peak
3	11807.000	34.84	17.01	51.85	74.00	-22.15	peak
4	13919.000	32.12	19.30	51.42	74.00	-22.58	peak
5	14678.000	32.09	17.46	49.55	74.00	-24.45	peak
6	17769.000	29.54	23.92	53.46	74.00	-20.54	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.



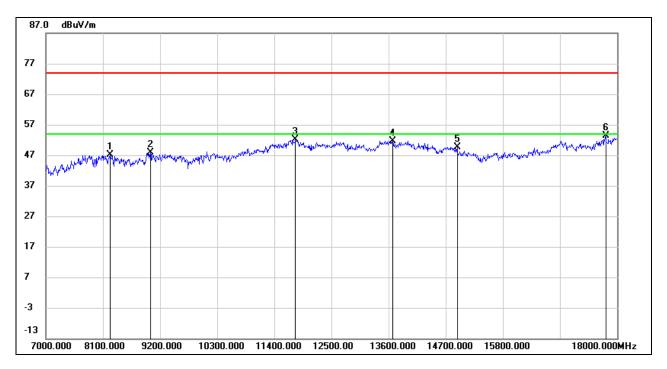
HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	39.48	8.33	47.81	74.00	-26.19	peak
2	10465.000	37.50	12.83	50.33	74.00	-23.67	peak
3	11807.000	35.19	17.01	52.20	74.00	-21.80	peak
4	13446.000	33.02	19.06	52.08	74.00	-21.92	peak
5	14799.000	33.04	17.56	50.60	74.00	-23.40	peak
6	17945.000	28.52	24.61	53.13	74.00	-20.87	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. 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.





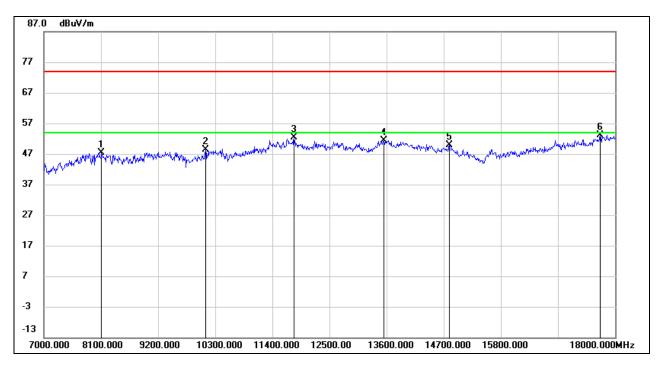
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8243.000	37.95	9.11	47.06	74.00	-26.94	peak
2	9013.000	37.20	10.63	47.83	74.00	-26.17	peak
3	11807.000	35.18	17.01	52.19	74.00	-21.81	peak
4	13677.000	32.30	19.39	51.69	74.00	-22.31	peak
5	14920.000	32.87	16.65	49.52	74.00	-24.48	peak
6	17780.000	29.28	24.02	53.30	74.00	-20.70	peak

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



UNII-3 BAND

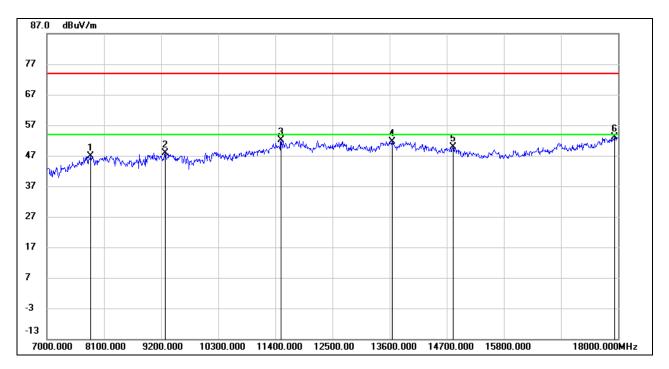
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	37.81	9.52	47.33	74.00	-26.67	peak
2	10113.000	36.53	11.73	48.26	74.00	-25.74	peak
3	11818.000	35.31	17.02	52.33	74.00	-21.67	peak
4	13545.000	32.34	19.13	51.47	74.00	-22.53	peak
5	14810.000	32.36	17.46	49.82	74.00	-24.18	peak
6	17714.000	29.68	23.45	53.13	74.00	-20.87	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. 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.



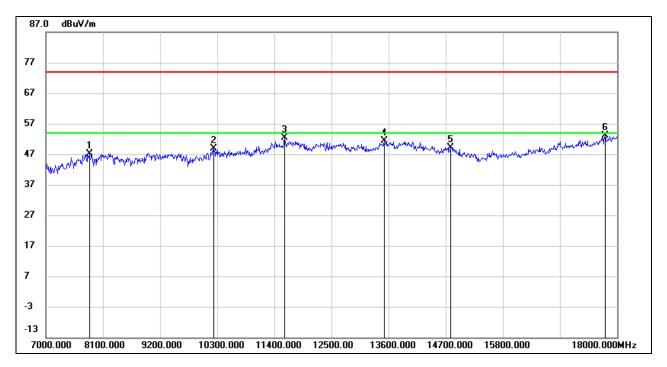


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7847.000	38.48	8.49	46.97	74.00	-27.03	peak
2	9277.000	37.79	10.00	47.79	74.00	-26.21	peak
3	11510.000	35.59	16.46	52.05	74.00	-21.95	peak
4	13655.000	32.40	19.29	51.69	74.00	-22.31	peak
5	14821.000	32.64	17.36	50.00	74.00	-24.00	peak
6	17934.000	28.70	24.53	53.23	74.00	-20.77	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.



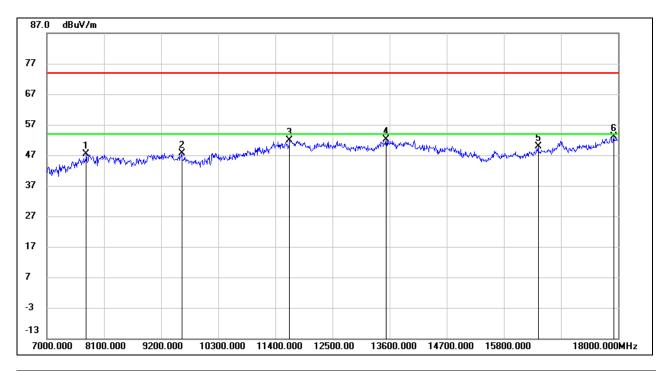
HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7836.000	38.70	8.54	47.24	74.00	-26.76	peak
2	10234.000	36.62	12.16	48.78	74.00	-25.22	peak
3	11598.000	35.89	16.50	52.39	74.00	-21.61	peak
4	13512.000	32.24	19.20	51.44	74.00	-22.56	peak
5	14799.000	31.59	17.56	49.15	74.00	-24.85	peak
6	17769.000	29.09	23.92	53.01	74.00	-20.99	peak

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





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7759.000	38.99	8.34	47.33	74.00	-26.67	peak
2	9596.000	36.62	11.05	47.67	74.00	-26.33	peak
3	11675.000	35.04	16.95	51.99	74.00	-22.01	peak
4	13534.000	32.99	19.16	52.15	74.00	-21.85	peak
5	16460.000	32.54	17.26	49.80	74.00	-24.20	peak
6	17912.000	28.68	24.39	53.07	74.00	-20.93	peak

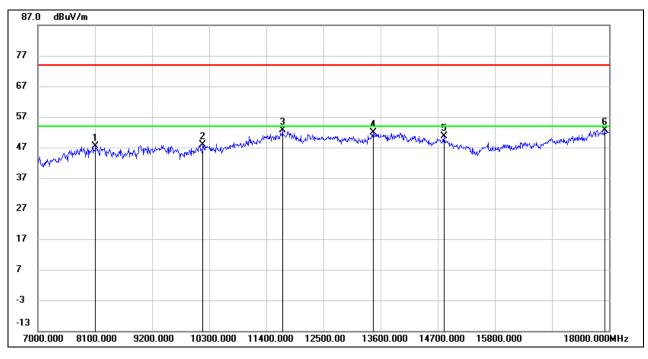
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency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



8.3.4. 802.11ac VHT80 MIMO MODE

UNII-1 BAND

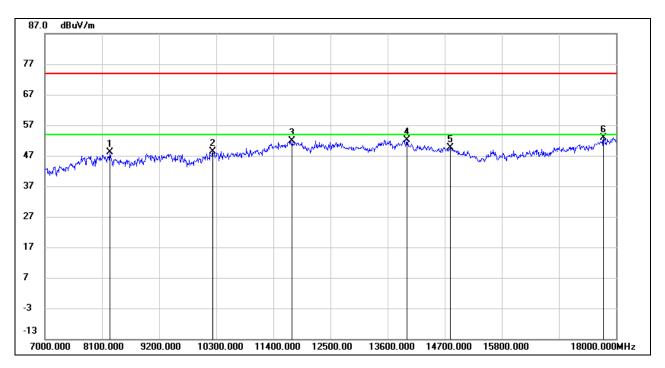
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	37.92	9.52	47.44	74.00	-26.56	peak
2	10179.000	35.83	11.97	47.80	74.00	-26.20	peak
3	11708.000	35.63	17.10	52.73	74.00	-21.27	peak
4	13457.000	32.75	19.10	51.85	74.00	-22.15	peak
5	14821.000	33.22	17.36	50.58	74.00	-23.42	peak
6	17912.000	28.28	24.39	52.67	74.00	-21.33	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. 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.





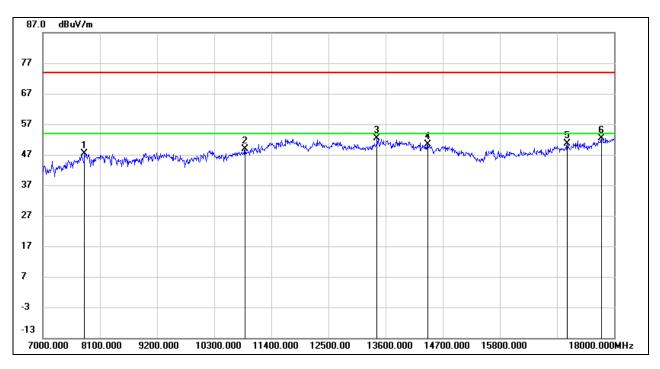
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8254.000	38.91	9.10	48.01	74.00	-25.99	peak
2	10234.000	36.10	12.16	48.26	74.00	-25.74	peak
3	11763.000	34.83	17.03	51.86	74.00	-22.14	peak
4	13974.000	32.86	19.34	52.20	74.00	-21.80	peak
5	14810.000	32.20	17.46	49.66	74.00	-24.34	peak
6	17758.000	29.13	23.83	52.96	74.00	-21.04	peak

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



UNII-3 BAND

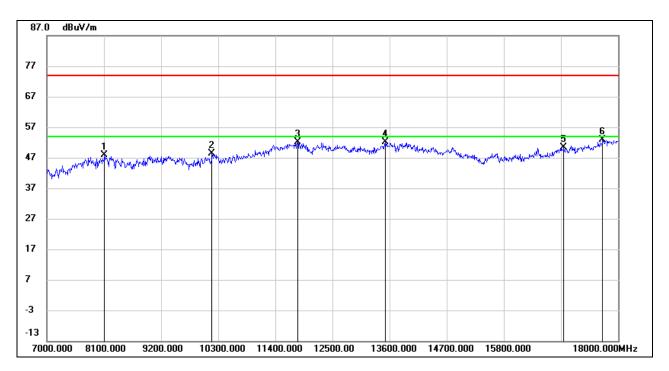
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7803.000	38.66	8.69	47.35	74.00	-26.65	peak
2	10894.000	34.68	14.15	48.83	74.00	-25.17	peak
3	13435.000	33.42	19.03	52.45	74.00	-21.55	peak
4	14414.000	32.37	17.90	50.27	74.00	-23.73	peak
5	17098.000	30.24	20.38	50.62	74.00	-23.38	peak
6	17758.000	28.52	23.83	52.35	74.00	-21.65	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. 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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	38.48	9.52	48.00	74.00	-26.00	peak
2	10179.000	36.31	11.97	48.28	74.00	-25.72	peak
3	11829.000	35.18	17.05	52.23	74.00	-21.77	peak
4	13523.000	32.85	19.18	52.03	74.00	-21.97	peak
5	16955.000	30.72	19.63	50.35	74.00	-23.65	peak
6	17703.000	29.53	23.36	52.89	74.00	-21.11	peak

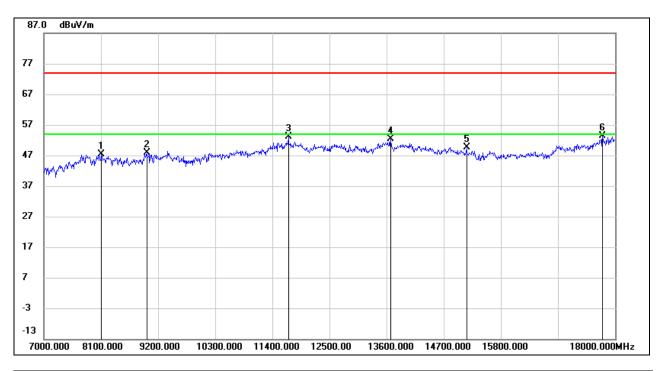
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency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



8.3.5. 802.11ax HE20 MIMO MODE

UNII-1 BAND

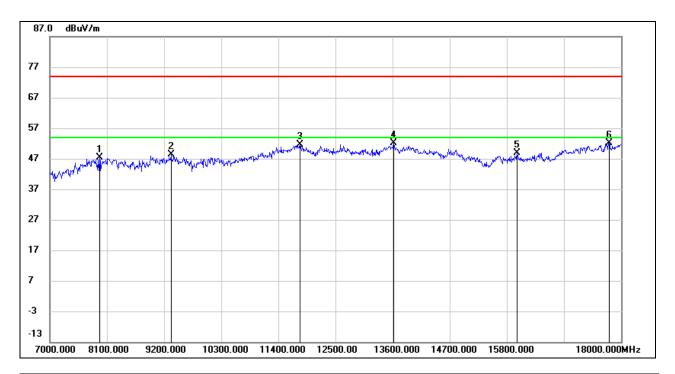
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	37.93	9.52	47.45	74.00	-26.55	peak
2	8980.000	37.53	10.39	47.92	74.00	-26.08	peak
3	11708.000	35.95	17.10	53.05	74.00	-20.95	peak
4	13677.000	32.87	19.39	52.26	74.00	-21.74	peak
5	15140.000	33.84	15.90	49.74	74.00	-24.26	peak
6	17758.000	29.43	23.83	53.26	74.00	-20.74	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.



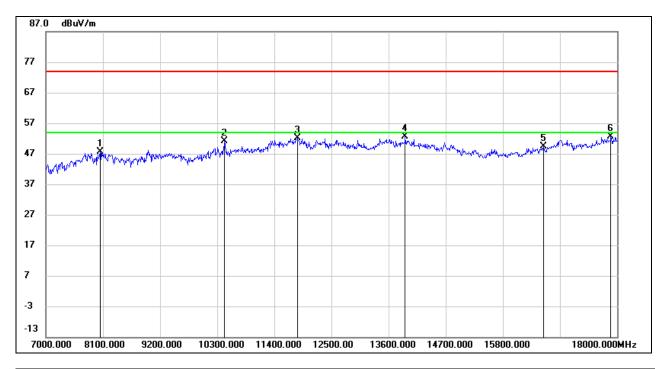


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7957.000	39.17	8.12	47.29	74.00	-26.71	peak
2	9332.000	37.91	10.35	48.26	74.00	-25.74	peak
3	11818.000	34.50	17.02	51.52	74.00	-22.48	peak
4	13622.000	33.01	19.13	52.14	74.00	-21.86	peak
5	15998.000	33.23	15.72	48.95	74.00	-25.05	peak
6	17769.000	28.29	23.92	52.21	74.00	-21.79	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. 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.



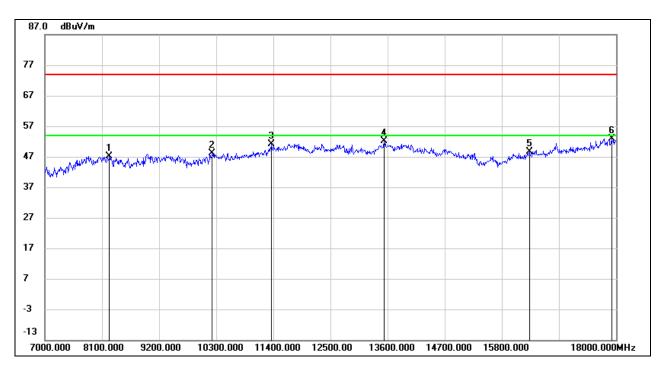
HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8045.000	38.92	8.72	47.64	74.00	-26.36	peak
2	10443.000	38.27	12.80	51.07	74.00	-22.93	peak
3	11840.000	34.96	17.08	52.04	74.00	-21.96	peak
4	13919.000	33.44	19.30	52.74	74.00	-21.26	peak
5	16581.000	31.76	17.66	49.42	74.00	-24.58	peak
6	17879.000	28.29	24.28	52.57	74.00	-21.43	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.



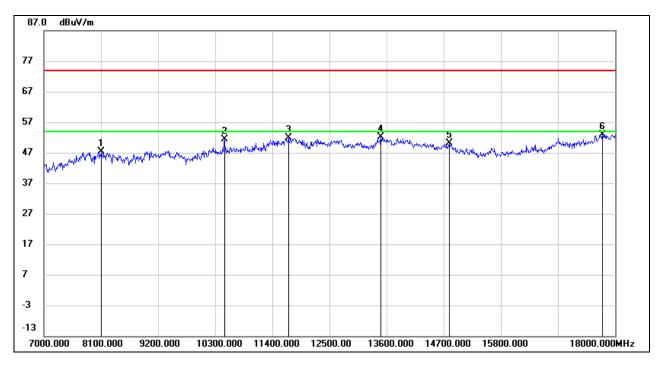


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8243.000	37.97	9.11	47.08	74.00	-26.92	peak
2	10223.000	36.07	12.11	48.18	74.00	-25.82	peak
3	11367.000	35.16	16.01	51.17	74.00	-22.83	peak
4	13534.000	33.09	19.16	52.25	74.00	-21.75	peak
5	16328.000	31.47	17.13	48.60	74.00	-25.40	peak
6	17912.000	28.46	24.39	52.85	74.00	-21.15	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.



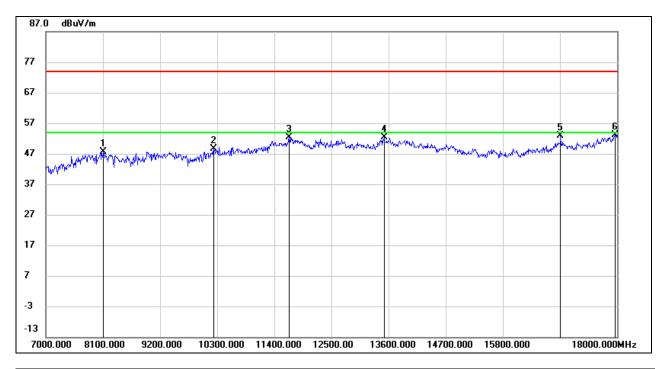
HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	37.83	9.52	47.35	74.00	-26.65	peak
2	10476.000	38.61	12.84	51.45	74.00	-22.55	peak
3	11708.000	34.68	17.10	51.78	74.00	-22.22	peak
4	13490.000	33.00	19.19	52.19	74.00	-21.81	peak
5	14810.000	32.55	17.46	50.01	74.00	-23.99	peak
6	17758.000	29.09	23.83	52.92	74.00	-21.08	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.





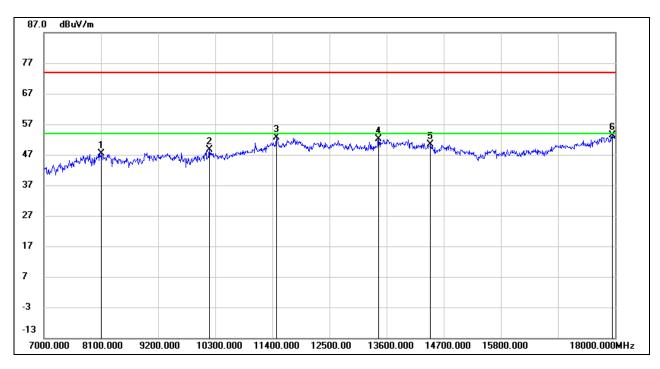
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	38.07	9.52	47.59	74.00	-26.41	peak
2	10234.000	36.35	12.16	48.51	74.00	-25.49	peak
3	11686.000	35.43	17.03	52.46	74.00	-21.54	peak
4	13512.000	33.08	19.20	52.28	74.00	-21.72	peak
5	16911.000	33.06	19.71	52.77	74.00	-21.23	peak
6	17956.000	28.43	24.68	53.11	74.00	-20.89	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.



UNII-3 BAND

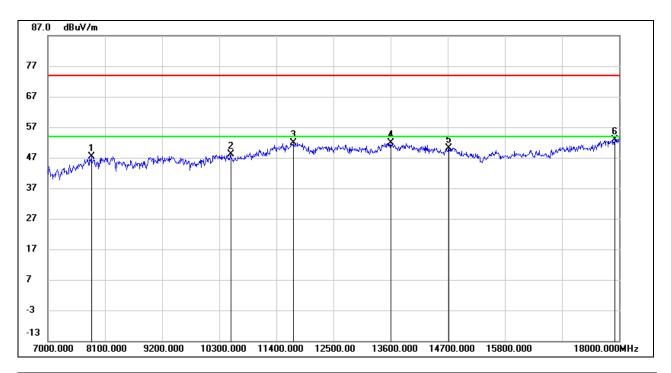
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	37.79	9.52	47.31	74.00	-26.69	peak
2	10190.000	36.50	12.02	48.52	74.00	-25.48	peak
3	11477.000	36.20	16.44	52.64	74.00	-21.36	peak
4	13446.000	33.03	19.06	52.09	74.00	-21.91	peak
5	14447.000	32.63	17.76	50.39	74.00	-23.61	peak
6	17945.000	28.70	24.61	53.31	74.00	-20.69	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.



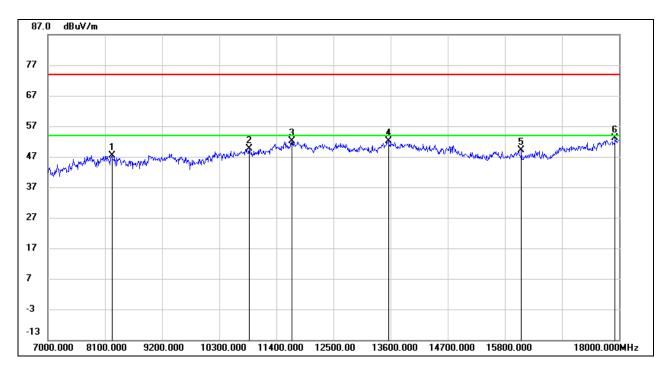


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7836.000	38.77	8.54	47.31	74.00	-26.69	peak
2	10520.000	35.27	12.95	48.22	74.00	-25.78	peak
3	11730.000	34.72	17.07	51.79	74.00	-22.21	peak
4	13600.000	32.80	19.04	51.84	74.00	-22.16	peak
5	14722.000	32.68	17.49	50.17	74.00	-23.83	peak
6	17912.000	28.54	24.39	52.93	74.00	-21.07	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. 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.



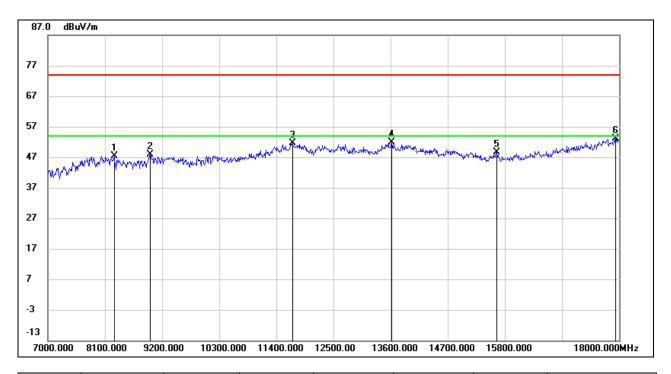
HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8232.000	38.31	9.13	47.44	74.00	-26.56	peak
2	10872.000	35.49	14.05	49.54	74.00	-24.46	peak
3	11697.000	34.93	17.10	52.03	74.00	-21.97	peak
4	13556.000	32.90	19.11	52.01	74.00	-21.99	peak
5	16119.000	33.31	15.81	49.12	74.00	-24.88	peak
6	17923.000	28.64	24.46	53.10	74.00	-20.90	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. 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.



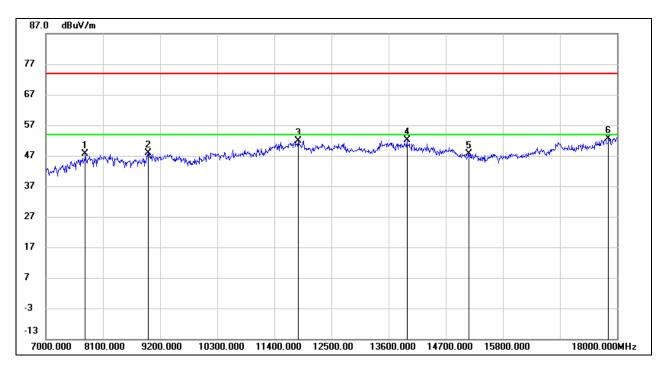


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8276.000	38.33	9.06	47.39	74.00	-26.61	peak
2	8969.000	37.71	10.17	47.88	74.00	-26.12	peak
3	11708.000	34.57	17.10	51.67	74.00	-22.33	peak
4	13622.000	32.71	19.13	51.84	74.00	-22.16	peak
5	15646.000	33.06	15.63	48.69	74.00	-25.31	peak
6	17934.000	28.70	24.53	53.23	74.00	-20.77	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.



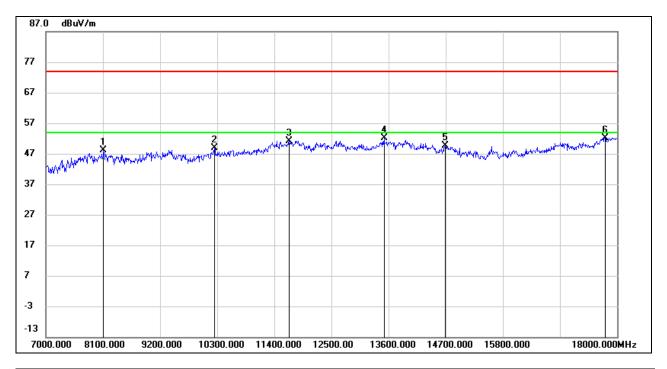
HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7759.000	39.24	8.34	47.58	74.00	-26.42	peak
2	8969.000	37.63	10.17	47.80	74.00	-26.20	peak
3	11862.000	34.82	17.14	51.96	74.00	-22.04	peak
4	13952.000	32.90	19.33	52.23	74.00	-21.77	peak
5	15140.000	31.85	15.90	47.75	74.00	-26.25	peak
6	17835.000	28.36	24.23	52.59	74.00	-21.41	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.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	38.58	9.52	48.10	74.00	-25.90	peak
2	10245.000	36.68	12.18	48.86	74.00	-25.14	peak
3	11686.000	34.13	17.03	51.16	74.00	-22.84	peak
4	13512.000	32.85	19.20	52.05	74.00	-21.95	peak
5	14689.000	32.11	17.46	49.57	74.00	-24.43	peak
6	17769.000	28.25	23.92	52.17	74.00	-21.83	peak

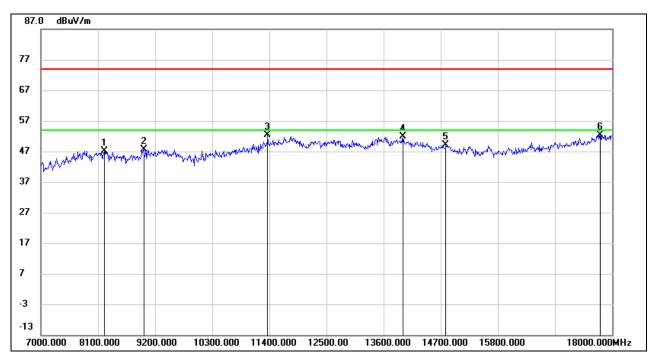
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency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



8.3.6. 802.11ax HE40 MIMO MODE

UNII-1 BAND

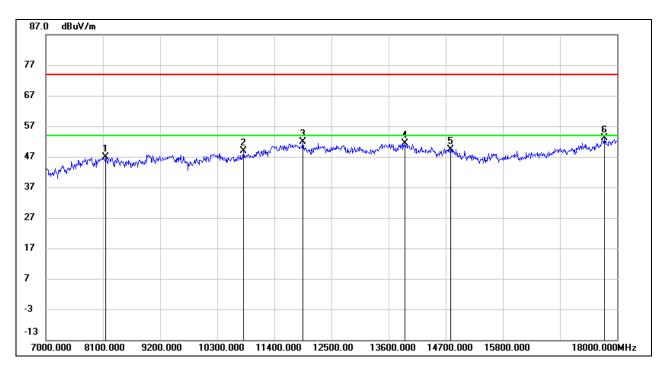
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8221.000	38.05	9.14	47.19	74.00	-26.81	peak
2	8980.000	37.23	10.39	47.62	74.00	-26.38	peak
3	11367.000	36.31	16.01	52.32	74.00	-21.68	peak
4	13974.000	32.63	19.34	51.97	74.00	-22.03	peak
5	14799.000	31.67	17.56	49.23	74.00	-24.77	peak
6	17769.000	28.46	23.92	52.38	74.00	-21.62	peak

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



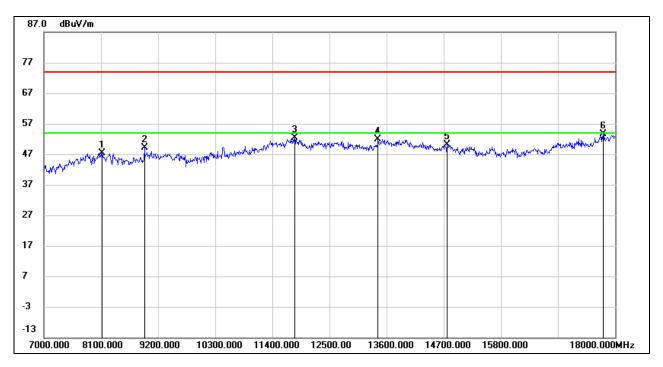


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8155.000	37.58	9.35	46.93	74.00	-27.07	peak
2	10806.000	35.09	13.76	48.85	74.00	-25.15	peak
3	11950.000	34.65	17.26	51.91	74.00	-22.09	peak
4	13908.000	32.16	19.30	51.46	74.00	-22.54	peak
5	14799.000	31.94	17.56	49.50	74.00	-24.50	peak
6	17758.000	29.31	23.83	53.14	74.00	-20.86	peak

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



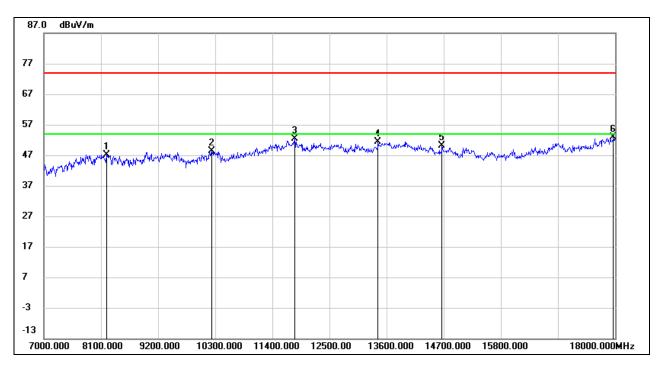
HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8122.000	37.81	9.47	47.28	74.00	-26.72	peak
2	8936.000	39.60	9.53	49.13	74.00	-24.87	peak
3	11829.000	35.27	17.05	52.32	74.00	-21.68	peak
4	13435.000	32.95	19.03	51.98	74.00	-22.02	peak
5	14766.000	32.63	17.53	50.16	74.00	-23.84	peak
6	17769.000	29.65	23.92	53.57	74.00	-20.43	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 -27dBm/MHz (68.2dBuV/m) limit.





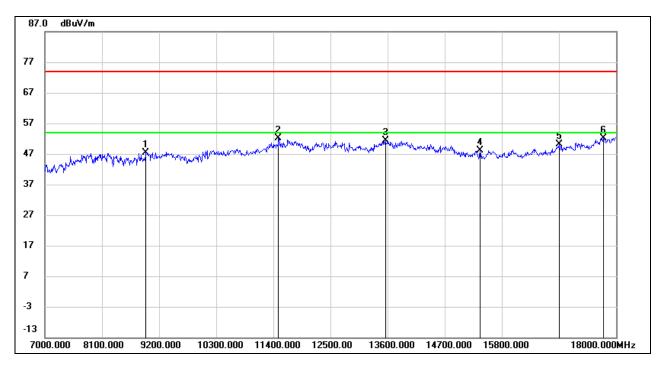
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8210.000	38.05	9.16	47.21	74.00	-26.79	peak
2	10234.000	36.34	12.16	48.50	74.00	-25.50	peak
3	11829.000	35.27	17.05	52.32	74.00	-21.68	peak
4	13435.000	32.32	19.03	51.35	74.00	-22.65	peak
5	14667.000	32.57	17.45	50.02	74.00	-23.98	peak
6	17967.000	28.03	24.75	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.



UNII-3 BAND

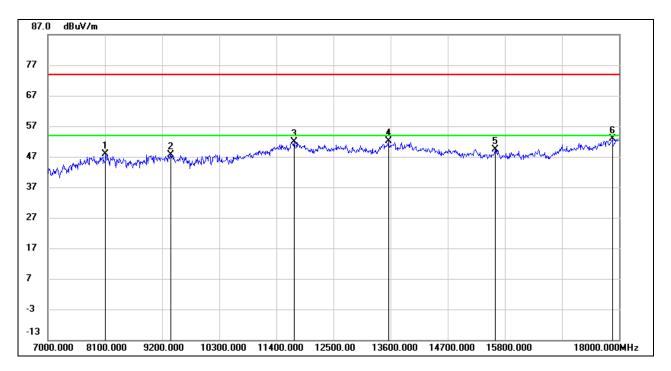
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8947.000	37.68	9.75	47.43	74.00	-26.57	peak
2	11499.000	35.67	16.45	52.12	74.00	-21.88	peak
3	13556.000	32.30	19.11	51.41	74.00	-22.59	peak
4	15382.000	32.50	15.58	48.08	74.00	-25.92	peak
5	16900.000	30.41	19.73	50.14	74.00	-23.86	peak
6	17758.000	28.42	23.83	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.



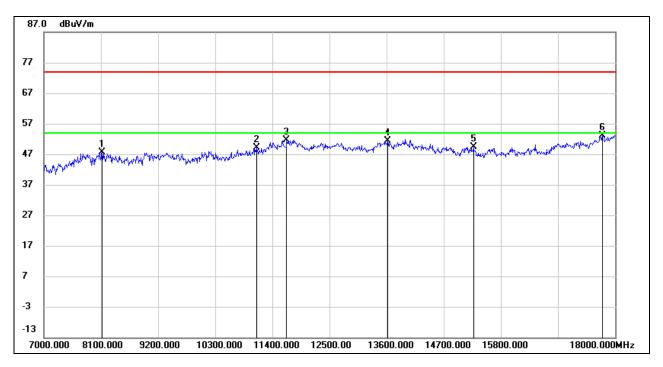


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	38.46	9.52	47.98	74.00	-26.02	peak
2	9365.000	36.98	10.56	47.54	74.00	-26.46	peak
3	11741.000	34.73	17.05	51.78	74.00	-22.22	peak
4	13556.000	33.01	19.11	52.12	74.00	-21.88	peak
5	15613.000	33.76	15.64	49.40	74.00	-24.60	peak
6	17868.000	28.64	24.27	52.91	74.00	-21.09	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 -27dBm/MHz (68.2dBuV/m) limit.



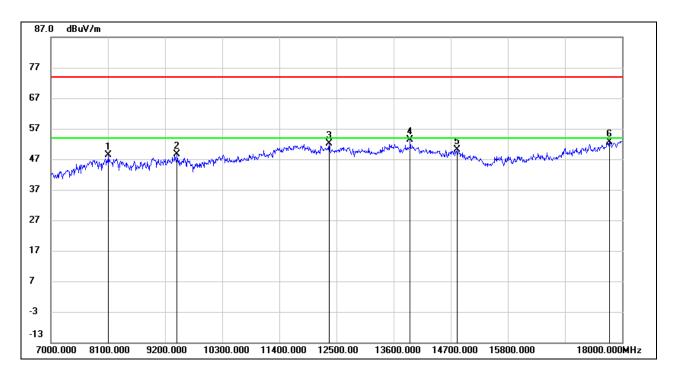
HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8122.000	38.19	9.47	47.66	74.00	-26.34	peak
2	11092.000	34.24	14.82	49.06	74.00	-24.94	peak
3	11675.000	34.63	16.95	51.58	74.00	-22.42	peak
4	13622.000	32.33	19.13	51.46	74.00	-22.54	peak
5	15272.000	33.86	15.52	49.38	74.00	-24.62	peak
6	17758.000	29.26	23.83	53.09	74.00	-20.91	peak

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





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	38.75	9.52	48.27	74.00	-25.73	peak
2	9431.000	38.05	10.68	48.73	74.00	-25.27	peak
3	12357.000	34.76	17.43	52.19	74.00	-21.81	peak
4	13919.000	34.05	19.30	53.35	74.00	-20.65	peak
5	14821.000	32.69	17.36	50.05	74.00	-23.95	peak
6	17758.000	28.74	23.83	52.57	74.00	-21.43	peak

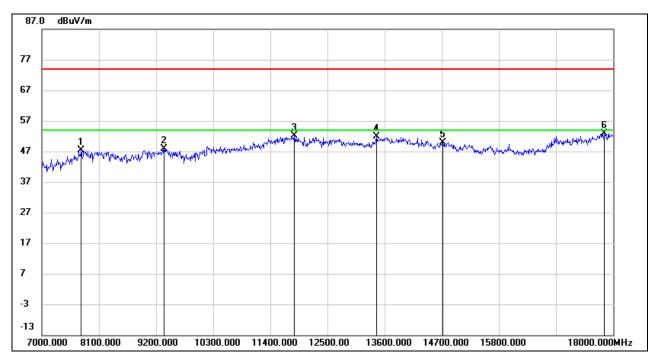
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency 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 -27dBm/MHz (68.2dBuV/m) limit.



8.3.7. 802.11ax HE80 MIMO MODE

UNII-1 BAND

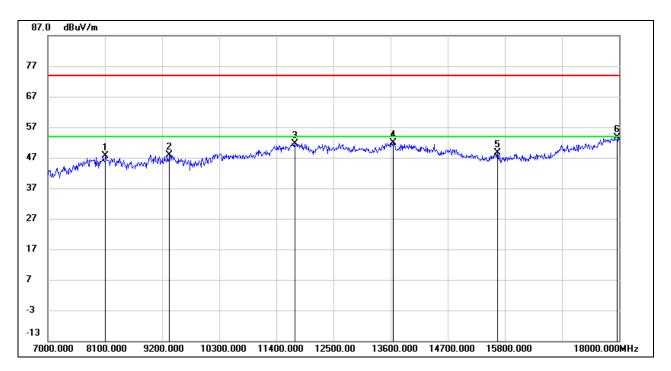
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7759.000	39.03	8.34	47.37	74.00	-26.63	peak
2	9354.000	37.44	10.49	47.93	74.00	-26.07	peak
3	11862.000	35.04	17.14	52.18	74.00	-21.82	peak
4	13446.000	32.91	19.06	51.97	74.00	-22.03	peak
5	14722.000	32.44	17.49	49.93	74.00	-24.07	peak
6	17824.000	28.75	24.21	52.96	74.00	-21.04	peak

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





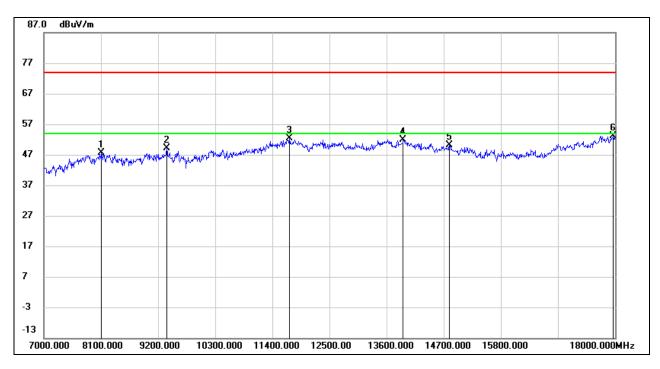
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	38.09	9.52	47.61	74.00	-26.39	peak
2	9343.000	37.56	10.42	47.98	74.00	-26.02	peak
3	11752.000	34.66	17.04	51.70	74.00	-22.30	peak
4	13655.000	32.61	19.29	51.90	74.00	-22.10	peak
5	15657.000	33.04	15.62	48.66	74.00	-25.34	peak
6	17967.000	28.97	24.75	53.72	74.00	-20.28	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

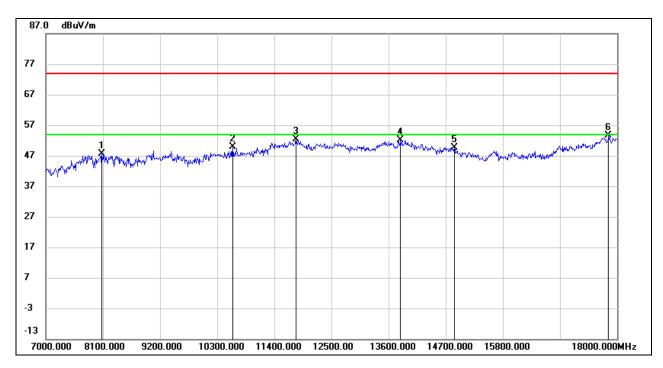
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	38.17	9.52	47.69	74.00	-26.31	peak
2	9365.000	38.62	10.56	49.18	74.00	-24.82	peak
3	11730.000	35.21	17.07	52.28	74.00	-21.72	peak
4	13919.000	32.59	19.30	51.89	74.00	-22.11	peak
5	14810.000	32.60	17.46	50.06	74.00	-23.94	peak
6	17967.000	28.49	24.75	53.24	74.00	-20.76	peak

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





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8078.000	38.48	9.22	47.70	74.00	-26.30	peak
2	10597.000	36.60	13.26	49.86	74.00	-24.14	peak
3	11818.000	35.44	17.02	52.46	74.00	-21.54	peak
4	13831.000	32.78	19.39	52.17	74.00	-21.83	peak
5	14865.000	32.73	16.97	49.70	74.00	-24.30	peak
6	17835.000	29.44	24.23	53.67	74.00	-20.33	peak

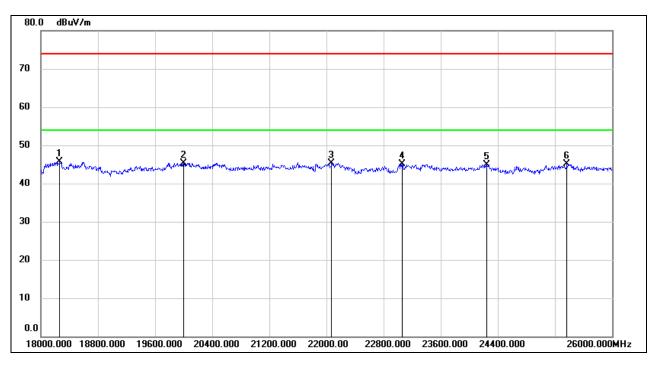
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency 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. 802.11ax HE40 MODE

SPURIOUS EMISSIONS (UNII-1 BAND HIGH CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	18264.000	51.15	-5.53	45.62	74.00	-28.38	peak
2	20000.000	50.81	-5.45	45.36	74.00	-28.64	peak
3	22072.000	49.77	-4.41	45.36	74.00	-28.64	peak
4	23064.000	48.49	-3.42	45.07	74.00	-28.93	peak
5	24248.000	47.82	-2.83	44.99	74.00	-29.01	peak
6	25368.000	46.73	-1.72	45.01	74.00	-28.99	peak

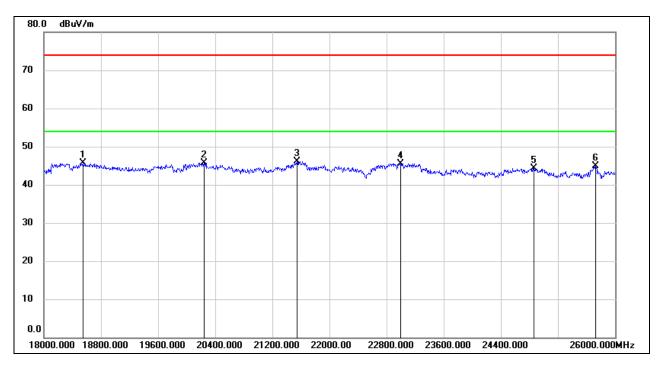
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



SPURIOUS EMISSIONS (UNII-1 BAND HIGH CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	18552.000	51.04	-5.28	45.76	74.00	-28.24	peak
2	20240.000	51.32	-5.61	45.71	74.00	-28.29	peak
3	21544.000	50.76	-4.63	46.13	74.00	-27.87	peak
4	22992.000	49.05	-3.45	45.60	74.00	-28.40	peak
5	24864.000	46.53	-2.23	44.30	74.00	-29.70	peak
6	25728.000	45.61	-0.72	44.89	74.00	-29.11	peak

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

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

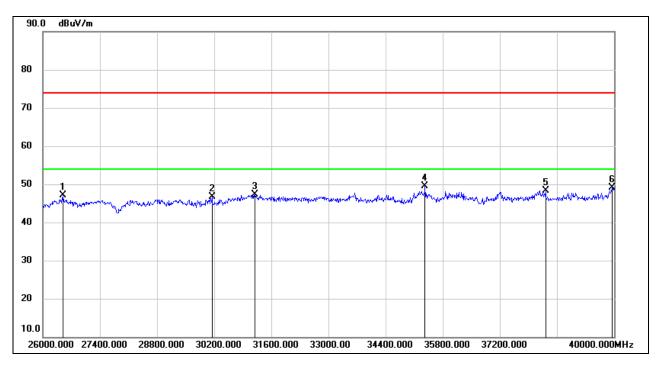
Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.



8.5. SPURIOUS EMISSIONS (26 GHz ~ 40 GHz)

8.5.1. 802.11ax HE40 MODE

SPURIOUS EMISSIONS (UNII-1 BAND HIGH CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	26490.000	51.79	-4.74	47.05	74.00	-26.95	peak
2	30144.000	47.96	-1.30	46.66	74.00	-27.34	peak
3	31194.000	48.04	-0.80	47.24	74.00	-26.76	peak
4	35366.000	46.90	2.59	49.49	74.00	-24.51	peak
5	38320.000	44.56	3.77	48.33	74.00	-25.67	peak
6	39958.000	44.08	5.12	49.20	74.00	-24.80	peak

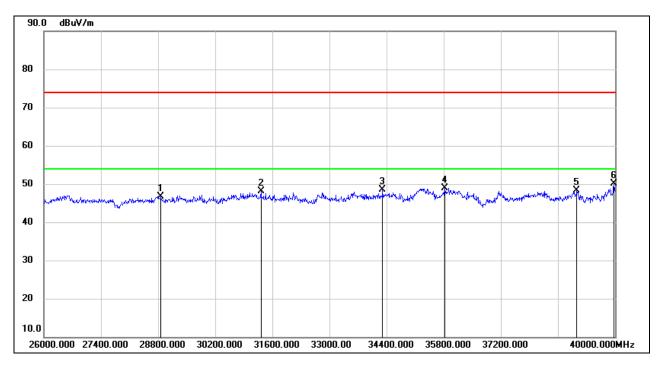
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

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SPURIOUS EMISSIONS (UNII-1 BAND HIGH CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	28870.000	47.60	-0.95	46.65	74.00	-27.35	peak
2	31320.000	49.11	-0.93	48.18	74.00	-25.82	peak
3	34302.000	47.45	1.10	48.55	74.00	-25.45	peak
4	35828.000	45.25	3.67	48.92	74.00	-25.08	peak
5	39062.000	43.98	4.30	48.28	74.00	-25.72	peak
6	39972.000	44.95	5.13	50.08	74.00	-23.92	peak

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

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

3. Peak: Peak detector.

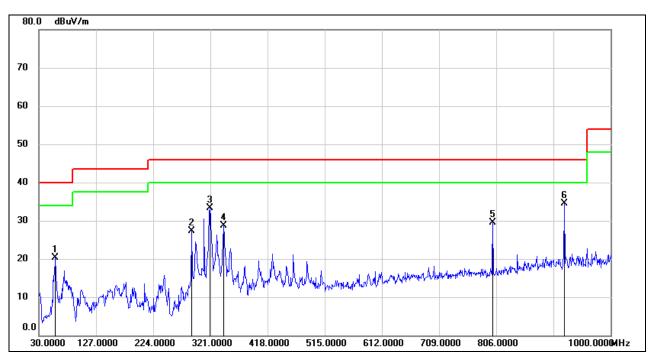
Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.



8.6. SPURIOUS EMISSIONS (30 MHz ~ 1 GHz)

8.6.1. 802.11ax HE40 MODE

SPURIOUS EMISSIONS (UNII-1 BAND HIGH CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)



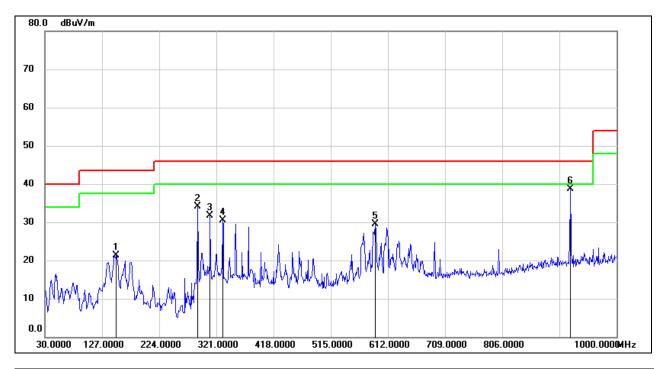
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	58.1300	40.82	-20.55	20.27	40.00	-19.73	QP
2	288.9900	43.32	-15.98	27.34	46.00	-18.66	QP
3	320.0300	48.04	-14.78	33.26	46.00	-12.74	QP
4	343.3100	43.18	-14.40	28.78	46.00	-17.22	QP
5	800.1800	36.83	-7.33	29.50	46.00	-16.50	QP
6	921.4300	39.18	-4.76	34.42	46.00	-11.58	QP

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-1 BAND HIGH CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	150.2800	39.60	-18.25	21.35	43.50	-22.15	QP
2	288.9900	50.17	-15.98	34.19	46.00	-11.81	QP
3	310.3299	46.79	-15.07	31.72	46.00	-14.28	QP
4	331.6700	45.17	-14.64	30.53	46.00	-15.47	QP
5	590.6599	39.36	-9.80	29.56	46.00	-16.44	QP
6	921.4300	43.37	-4.76	38.61	46.00	-7.39	QP

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.

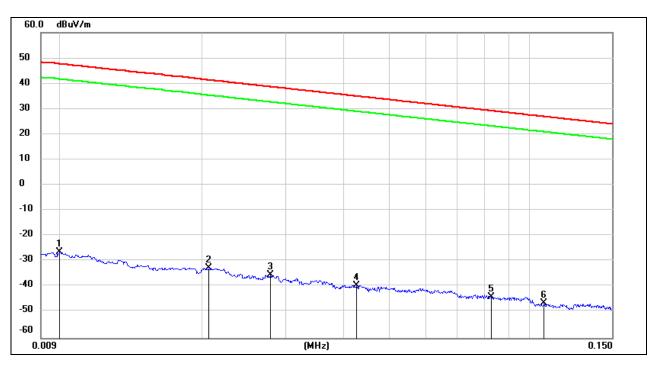


8.7. SPURIOUS EMISSIONS BELOW 30 MHz

8.7.1. 802.11ax HE40 MODE

<u>SPURIOUS EMISSIONS (UNII-1 BAND HIGH CHANNEL, LOOP ANTENNA FACE ON TO THE EUT, WORST-CASE CONFIGURATION)</u>

9 kHz~ 150 kHz



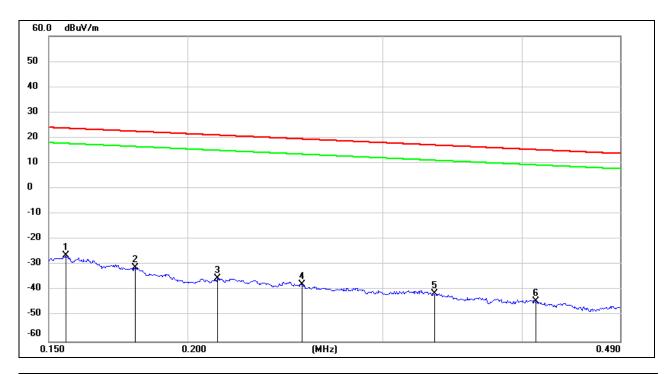
No.	Frequency	Reading	Correct	FCC	FCC	ISED	ISED	Margin	Remark
				Result	Limit	Result	Limit		
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.0100	75.22	-101.40	-26.18	47.6	-77.68	-3.90	-73.78	peak
2	0.0206	68.92	-101.35	-32.43	41.32	-83.93	-10.18	-73.75	peak
3	0.0279	66.17	-101.38	-35.21	38.69	-86.71	-12.81	-73.90	peak
4	0.0427	62.14	-101.45	-39.31	34.99	-90.81	-16.51	-74.30	peak
5	0.0830	57.68	-101.65	-43.97	29.22	-95.47	-22.28	-73.19	peak
6	0.1073	55.30	-101.77	-46.47	26.99	-97.97	-24.51	-73.46	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. $dBuA/m = dBuV/m 20log10(120\pi) = dBuV/m -51.5$.



150 kHz ~ 490 kHz



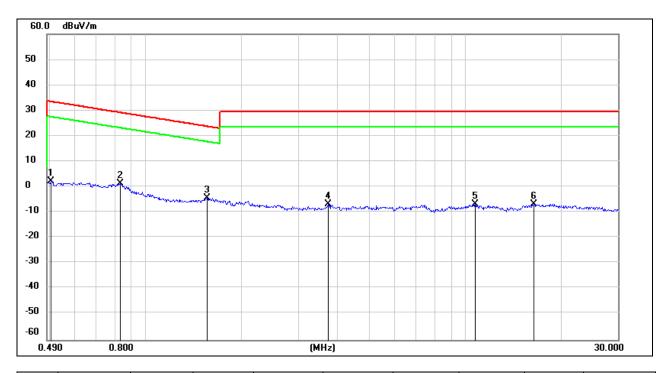
No.	Frequency	Reading	Correct	FCC	FCC	ISED	ISED	Margin	Remark
				Result	Limit	Result	Limit		
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.1554	75.27	-101.65	-26.38	23.77	-77.88	-27.73	-50.15	peak
2	0.1794	70.77	-101.68	-30.91	22.53	-82.41	-28.97	-53.44	peak
3	0.2127	66.45	-101.74	-35.29	21.04	-86.79	-30.46	-56.33	peak
4	0.2534	64.14	-101.80	-37.66	19.52	-89.16	-31.98	-57.18	peak
5	0.3336	60.52	-101.89	-41.37	17.14	-92.87	-34.36	-58.51	peak
6	0.4121	57.63	-101.98	-44.35	15.3	-95.85	-36.20	-59.65	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. $dBuA/m = dBuV/m 20log10(120\pi) = dBuV/m -51.5$.



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	0.5039	64.44	-62.07	2.37	33.56	-49.13	-17.94	-31.19	peak
2	0.8296	63.44	-62.17	1.27	29.23	-50.23	-22.27	-27.96	peak
3	1.5564	57.68	-62.02	-4.34	23.76	-55.84	-27.74	-28.10	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.



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9. AC POWER LINE CONDUCTED EMISSIONS

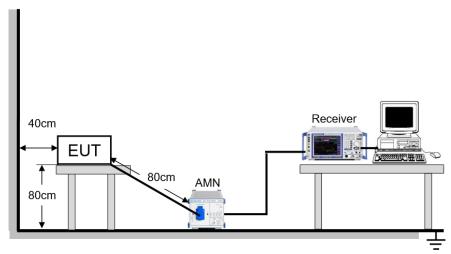
LIMITS

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.

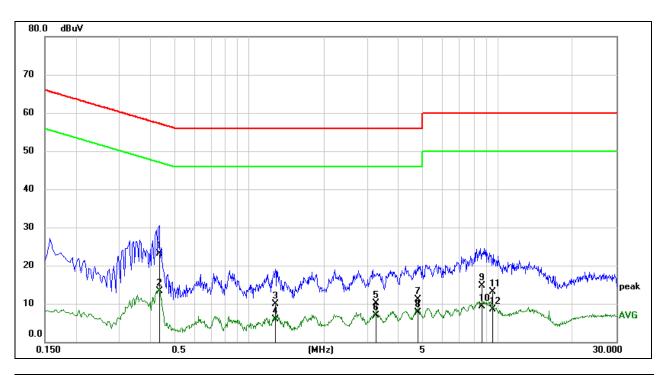
The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

TEST ENVIRONMENT

Temperature	27.6 °C	Relative Humidity	64.8 %
Atmosphere Pressure	101 kPa	Test Voltage	AC 120 V, 60 Hz



9.1.1. 802.11n HT40 MODE <u>LINE L RESULTS (UNII-1 BAND HIGH CHANNEL, WORST-CASE CONFIGURATION)</u>



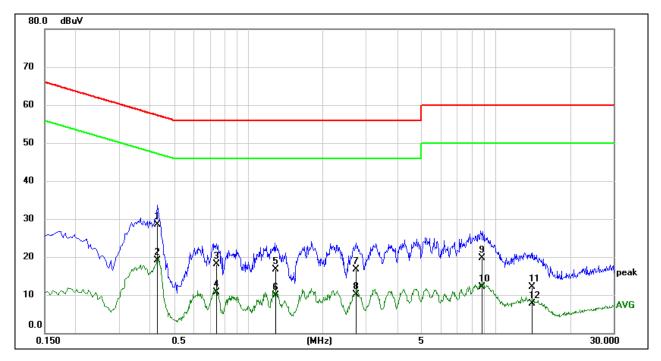
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.4331	13.56	9.52	23.08	57.19	-34.11	QP
2	0.4331	3.80	9.52	13.32	47.19	-33.87	AVG
3	1.2686	0.39	9.54	9.93	56.00	-46.07	QP
4	1.2686	-3.54	9.54	6.00	46.00	-40.00	AVG
5	3.2163	0.51	9.61	10.12	56.00	-45.88	QP
6	3.2163	-2.62	9.61	6.99	46.00	-39.01	AVG
7	4.7768	1.64	9.45	11.09	56.00	-44.91	QP
8	4.7768	-1.73	9.45	7.72	46.00	-38.28	AVG
9	8.6010	5.31	9.33	14.64	60.00	-45.36	QP
10	8.6010	-0.08	9.33	9.25	50.00	-40.75	AVG
11	9.5064	3.68	9.52	13.20	60.00	-46.80	QP
12	9.5064	-0.95	9.52	8.57	50.00	-41.43	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-1 BAND HIGH CHANNEL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.4297	18.92	9.52	28.44	57.26	-28.82	QP
2	0.4297	9.65	9.52	19.17	47.26	-28.09	AVG
3	0.7492	8.54	9.50	18.04	56.00	-37.96	QP
4	0.7492	1.13	9.50	10.63	46.00	-35.37	AVG
5	1.2886	7.26	9.54	16.80	56.00	-39.20	QP
6	1.2886	0.37	9.54	9.91	46.00	-36.09	AVG
7	2.7324	7.09	9.62	16.71	56.00	-39.29	QP
8	2.7324	0.50	9.62	10.12	46.00	-35.88	AVG
9	8.7946	10.36	9.37	19.73	60.00	-40.27	QP
10	8.7946	2.66	9.37	12.03	50.00	-37.97	AVG
11	14.1677	2.49	9.66	12.15	60.00	-47.85	QP
12	14.1677	-1.89	9.66	7.77	50.00	-42.23	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

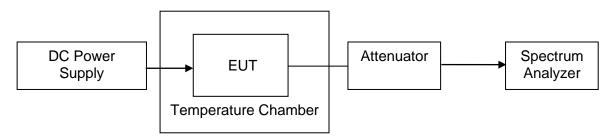
- 1. The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between 0 °C ~ 40 °C (declared by customer).
- 2. The temperature was incremented by 10 °C intervals and the unit allowed to stabilize at each temperature before each measurement. The center frequency 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





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TEST ENVIRONMENT

	Normal Test Conditions	Extreme Test Conditions		
Relative Humidity	20 % - 75 %	/		
Atmospheric Pressure	100 kPa ~102 kPa	/		
Temperature	T_N (Normal Temperature): 25.1 °C	T _L (Low Temperature): 0 °C		
		T _H (High Temperature): 40 °C		
Supply Voltage	V _N (Normal Voltage): AC 120 V, 60 Hz	V _L (Low Voltage): AC 108 V		
		V _H (High Voltage): AC 132 V		

RESULTS

Please refer to Appendix D.

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11. 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. APPDEX

12.1. Appendix A1: Emission Bandwidth 12.1.1. Test Result

Test Mode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
	Ant1	5180	20.880	5169.440	5190.320		
	Ant2	5180	19.360	5170.200	5189.560		
	Ant1	5200	19.960	5190.080	5210.040		
	Ant2	5200	20.720	5189.480	5210.200		
	Ant1	5240	19.720	5230.120	5249.840		
111	Ant2	5240	21.000	5229.720	5250.720		
11A	Ant1	5745	20.440	5734.840	5755.280		
	Ant2	5745	20.480	5735.160	5755.640		
	Ant1	5785	19.880	5775.080	5794.960		
	Ant2	5785	20.360	5774.960	5795.320		
	Ant1	5825	20.560	5814.680	5835.240		
	Ant2	5825	20.040	5815.040	5835.080		
	Ant1	5180	20.360	5169.960	5190.320		
	Ant2	5180	20.240	5169.960	5190.200		
	Ant1	5200	20.320	5190.000	5210.320		
	Ant2	5200	20.440	5189.760	5210.200		
	Ant1	5240	20.200	5230.120	5250.320		
441100141140	Ant2	5240	20.560	5229.960	5250.520		
11N20MIMO	Ant1	5745	20.600	5734.840	5755.440		
	Ant2	5745	20.920	5734.400	5755.320		
	Ant1	5785	20.240	5775.080	5795.320		
	Ant2	5785	19.960	5775.120	5795.080		
	Ant1	5825	20.160	5814.920	5835.080		
	Ant2	5825	20.440	5814.880	5835.320		
	Ant1	5190	39.360	5170.320	5209.680		
	Ant2	5190	38.640	5170.720	5209.360		
448440841840	Ant1	5230	40.800	5209.040	5249.840		
	Ant2	5230	39.200	5210.560	5249.760		
11N40MIMO	Ant1	5755	39.520	5735.480	5775.000		
	Ant2	5755	39.680	5735.480	5775.160		
	Ant1	5795	39.680	5775.560	5815.240		
	Ant2	5795	39.120	5775.560	5814.680		
	Ant1	5210	80.960	5169.680	5250.640		
	Ant2	5210	80.480	5170.160	5250.640		
11AC80MIMO	Ant1	5775	81.600	5734.360	5815.960		
	Ant2	5775	80.480	5734.840	5815.320		
	Ant1	5180	20.720	5169.640	5190.360		
	Ant2	5180	21.360	5169.400	5190.760		
	Ant1	5200	20.520	5189.800	5210.320		
	Ant2	5200	20.960	5189.440	5210.400		
	Ant1	5240	20.760	5229.440	5250.200		
11AX20MIMO	Ant2	5240	21.000	5229.480	5250.480		
	Ant1	5745	20.760	5734.800	5755.560		
	Ant2	5745	21.120	5734.400	5755.520		
	Ant1	5785	20.800	5774.600	5795.400		
	Ant2	5785	20.440	5774.880	5795.320		
	Ant1	5825	20.360	5814.720	5835.080		
	Ant2	5825	20.720	5814.680	5835.400		
11AX40MIMO	Ant1	5190	39.120	5170.480	5209.600		
	Ant2	5190	39.440	5170.320	5209.760		
	Ant1	5230	39.440	5210.320	5249.760		
	Ant2	5230	39.600	5210.320	5249.920		



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	Ant1	5755	39.600	5735.320	5774.920	
	Ant2	5755	39.360	5735.480	5774.840	
	Ant1	5795	45.920	5775.640	5821.560	
	Ant2	5795	39.280	5775.480	5814.760	
11AX80MIMO	Ant1	5210	80.960	5170.000	5250.960	
	Ant2	5210	79.840	5170.160	5250.000	 -
	Ant1	5775	82.080	5733.720	5815.800	 -
	Ant2	5775	80.160	5735.160	5815.320	



12.1.2. Test Graphs

