

FCC Test Report

Report No.: RFBHJS-WTW-P20090518

FCC ID: PD5-NWA1000

Test Model: NWA1000

Received Date: Sep. 23, 2020

Test Date: Sep. 29, 2020 ~ Jun. 18, 2021

Issued Date: Jun. 21, 2021

Applicant: Delta Electronics, Inc.

Address: 31-1 Shien Pan Rd., Kuei San Industrial Zone, Taoyuan City, 333 Taiwan

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lin Kou Laboratories

Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

Test Location: No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City
33383, Taiwan

**FCC Registration /
Designation Number:** 788550 / TW0003



This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specifically mentioned, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification.

Table of Contents

Release Control Record	4
1 Certificate of Conformity	5
2 Summary of Test Results	6
2.1 Measurement Uncertainty.....	6
2.2 Modification Record.....	6
3 General Information	7
3.1 General Description of EUT.....	7
3.2 Description of Test Modes.....	10
3.2.1 Test Mode Applicability and Tested Channel Detail.....	11
3.3 Duty Cycle of Test Signal.....	14
3.4 Description of Support Units.....	16
3.4.1 Configuration of System under Test.....	16
3.5 General Description of Applied Standards and References.....	17
4 Test Types and Results	18
4.1 Radiated Emission and Bandedge Measurement.....	18
4.1.1 Limits of Radiated Emission and Bandedge Measurement.....	18
4.1.2 Test Instruments.....	19
4.1.3 Test Procedures.....	20
4.1.4 Deviation from Test Standard.....	21
4.1.5 Test Setup.....	21
4.1.6 EUT Operating Conditions.....	22
4.1.7 Test Results.....	23
4.2 Conducted Emission Measurement.....	71
4.2.1 Limits of Conducted Emission Measurement.....	71
4.2.2 Test Instruments.....	71
4.2.3 Test Procedures.....	72
4.2.4 Deviation from Test Standard.....	72
4.2.5 Test Setup.....	72
4.2.6 EUT Operating Conditions.....	72
4.2.7 Test Results.....	73
4.3 Transmit Power Measurement.....	81
4.3.1 Limits of Transmit Power Measurement.....	81
4.3.2 Test Setup.....	81
4.3.3 Test Instruments.....	82
4.3.4 Test Procedure.....	82
4.3.5 Deviation from Test Standard.....	82
4.3.6 EUT Operating Conditions.....	82
4.3.7 Test Result.....	83
4.4 Occupied Bandwidth Measurement.....	111
4.4.1 Test Setup.....	111
4.4.2 Test Instruments.....	111
4.4.3 Test Procedure.....	111
4.4.4 Test Result.....	112
4.5 Peak Power Spectral Density Measurement.....	117
4.5.1 Limits of Peak Power Spectral Density Measurement.....	117
4.5.2 Test Setup.....	117
4.5.3 Test Instruments.....	117
4.5.4 Test Procedures.....	117
4.5.5 Deviation from Test Standard.....	117
4.5.6 EUT Operating Conditions.....	117
4.5.7 Test Results.....	118
4.6 Frequency Stability.....	123
4.6.1 Limits of Frequency Stability Measurement.....	123

4.6.2 Test Setup.....	123
4.6.3 Test Instruments	123
4.6.4 Test Procedure	123
4.6.5 Deviation from Test Standard	124
4.6.6 EUT Operating Condition	124
4.6.7 Test Results	124
5 Pictures of Test Arrangements.....	126
Annex A- Band Edge Measurement.....	127
Appendix – Information of the Testing Laboratories	143

Release Control Record

Issue No.	Description	Date Issued
RFBHJS-WTW-P20090518	Original release.	Jun. 21, 2021

1 Certificate of Conformity

Product: Wireless Access Point

Brand: Nile Global

Test Model: NWA1000

Sample Status: Engineering sample

Applicant: Delta Electronics, Inc.

Test Date: Sep. 29, 2020 ~ Jun. 18, 2021

Standards: 47 CFR FCC Part 15, Subpart E (Section 15.407)
ANSI C63.10:2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by : *Polly Chien* , **Date:** Jun. 21, 2021
Polly Chien / Specialist

Approved by : *Bruce Chen* , **Date:** Jun. 21, 2021
Bruce Chen / Senior Engineer

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(8)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -8.72dB at 18.98447MHz.
15.407(b)(1/2/3/4(i/ii)/8)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -0.3dB at 5740.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
---	Occupied Bandwidth Measurement	-	Reference only.
15.407(a)(1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	Antenna connector is IPEX not a standard connector.

Note:

- Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
- For U-NII-1, U-NII-2A and U-NII-2C band compliance with rule 15.407(b) of the band-edge items, the test plots were recorded in Annex A. Test Procedures refer to report 4.1.3.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) (\pm)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.79 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.04 dB
	30MHz ~ 200MHz	3.86 dB
	200MHz ~ 1000MHz	3.87 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Wireless Access Point
Brand	Nile Global
Test Model	NWA1000
Sample Status	Engineering sample
Power Supply Rating	12Vdc from Adapter 55Vdc from PoE
Modulation Type	802.11a: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6Mbps 802.11n (HT20/40): 6.5 to 600Mbps (MCS0 to MCS31) 802.11ac (VHT20/40): 6.5 to 1733Mbps (MCS0 to MCS9, NSS=1 to 4) 802.11ax: 18 to 2400Mbps (MCS0 to MCS11, NSS=1 to 4)
Operating Frequency	5260 ~ 5320MHz, 5500 ~ 5700MHz
Number of Channel	For QCN-5154 Module: 5260 ~ 5320MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 4 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 2 802.11ac (VHT80), 802.11ax (HE80): 1 5500 ~ 5700MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 11 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 5 802.11ac (VHT80), 802.11ax (HE80): 2 For QCA-9889 Module: 5260 ~ 5320MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 4 802.11n (HT40), 802.11ac (VHT40): 2 802.11ac (VHT80): 1 5500 ~ 5700MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 11 802.11n (HT40), 802.11ac (VHT40): 5 802.11ac (VHT80): 2

Output Power	For QCN-5154 Module: CDD Mode: 5260~5320MHz: 228.485mW 5500~5700MHz: 243.079mW Beamforming Mode: 5260~5320MHz: 101.249mW 5500~5700MHz: 98.310mW For QCA-9889 Module: CDD Mode: 5260~5320MHz: 50.582mW 5500~5700MHz: 49.204mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	Refer to Note
Cable Supplied	NA

Note:

1. This report is prepared for FCC class III permissive change. The difference compared with the original report (BV CPS report no.: RFBHJS-WTW-P20080536-1) is adding 5.26GHz to 5.32GHz, 5.50GHz to 5.70GHz mode by software.
2. The EUT incorporates a MIMO function. Physically, the EUT provides 4 completed transmitters and 4 receivers.

Radio	Modulation Mode	Beamforming Mode	TX Function
QCN-5154 Module	802.11a	Not Support	4TX
	802.11n (HT20)	Support	4TX
	802.11n (HT40)	Support	4TX
	802.11ac (VHT20)	Support	4TX
	802.11ac (VHT40)	Support	4TX
	802.11ac (VHT80)	Support	4TX
	802.11ax (HE20)	Support	4TX
	802.11ax (HE40)	Support	4TX
QCA-9889 Module	802.11a	Not Support	1TX
	802.11n (HT20)	Not Support	1TX
	802.11n (HT40)	Not Support	1TX
	802.11ac (VHT20)	Not Support	1TX
	802.11ac (VHT40)	Not Support	1TX
	802.11ac (VHT80)	Not Support	1TX

* The bandwidth and modulation are similar for HT20/HT40 on 802.11n mode and VHT20/VHT40/VHT80 on 802.11n mode and HE20/HE40/HE80 on 802.11ax mode. Therefore the investigated worst case is the representative mode in test report. (Final test mode refer section 3.2.1)

* For 802.11n/ax, CDD mode and Beamforming mode are presented in power output test item. For other test items, CDD mode is the worst case for final tests after pretesting.

3. There are four modules for the EUT.

Module	Function
QCN-5124	WLAN 2.4G (TX/RX)
QCN-5154	WLAN 5G (TX/RX)
QCA-9889	WLAN 2.4G & 5G (TX/RX)
CSR8811	BT LE

4. The EUT uses following adapter & PoE Injector.

Adapter	
Brand	I.T.E
Model	MU42B1120350-A1
Input Power	100-240Vac~50/60Hz 1.5A
Output Power	12Vdc, 3.5A
Power Cable	1.5m non-shielded power cable without core

PoE Injector (Support unit)	
Brand	YAMAHA
Model	YPS-PoE-AT
Input Power	100-240Vac
Output Power	55Vdc

5. The EUT uses following antennas.

Ant. No.	1	2	3	4	5	6	7	8	9	10 (BLE)
Ant. Type	PIFA		PCB		PIFA		PCB		PIFA	PIFA
Frequency (MHz)	2412-2484				5150-5825				2400-2500/ 5150-5825	2400-2500
Gain (dBi)	4.6	4.2	3.4	3.7	5	5	3	2.3	4.6/5	4.4
Connector	IPEX								IPEX	IPEX

*The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

6. WLAN 2.4GHz and WLAN 5GHz technologies can transmit simultaneously except BT.

3.2 Description of Test Modes

5260~5320MHz:

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

Channel	Frequency	Channel	Frequency
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80), 802.11ax (HE80):

Channel	Frequency
58	5290MHz

5500~5700MHz:

11 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

Channel	Frequency	Channel	Frequency
100	5500 MHz	124	5620 MHz
104	5520 MHz	128	5640 MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz		

5 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
102	5510 MHz	126	5630 MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz		

2 channels are provided for 802.11ac (VHT80), 802.11ax (HE80):

Channel	Frequency	Channel	Frequency
106	5530 MHz	122	5610 MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable to				Description	
	RE \geq 1G	RE<1G	PLC	APCM	Module	
A	√	√	√	√	QCN-5124	Power from adapter
B	-	√	√	-		Power from PoE
C	√	√	√	√	QCA-9889	Power from adapter
D	-	√	√	-		Power from PoE

Where RE \geq 1G: Radiated Emission above 1GHz & Bandedge Measurement
 RE<1G: Radiated Emission below 1GHz
 PLC: Power Line Conducted Emission
 APCM: Antenna Port Conducted Measurement

Note:

1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**.
2. Radiated emission test (below 1GHz) and power line conducted emission test items chosen the worst maximum power.
3. "-" means no effect.

Radiated Emission Test (Above 1GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)	Remark
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0	QCN-5154
	802.11ax (HE20)		52 to 64	52, 60, 64	OFDMA	MCS0	
	802.11ax (HE40)		54 to 62	54, 62	OFDMA	MCS0	
	802.11ax (HE80)		58	58	OFDMA	MCS0	
	802.11a	5500-5700	100 to 140	100, 116, 140	OFDMA	6.0	
	802.11ax (HE20)		100 to 140	100, 116, 140	OFDMA	MCS0	
	802.11ax (HE40)		102 to 134	102, 110, 134	OFDMA	MCS0	
	802.11ax (HE80)		106 to 122	106, 122	OFDMA	MCS0	
C	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0	QCA-9889
	802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	6.5	
	802.11ac (VHT40)		54 to 62	54, 62	OFDM	13.5	
	802.11ac (VHT80)		58	58	OFDM	29.3	
	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	6.0	
	802.11ac (VHT20)		100 to 140	100, 116, 140	OFDM	6.5	
	802.11ac (VHT40)		102 to 134	102, 110, 134	OFDM	13.5	
	802.11ac (VHT80)		106 to 122	106, 122	OFDM	29.3	

Radiated Emission Test (Below 1GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)	Remark
A, B	802.11ax (HE20)	5500-5700	100 to 140	100	OFDMA	MCS0	QCN-5154
C, D	802.11ac (VHT20)	5260-5320	52 to 64	52	OFDM	6.5	QCA-9889

Power Line Conducted Emission Test:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)	Remark
A, B	802.11ax (HE20)	5500-5700	100 to 140	100	OFDMA	MCS0	QCN-5154
C, D	802.11ac (VHT20)	5260-5320	52 to 64	52	OFDM	6.5	QCA-9889

Antenna Port Conducted Measurement:

- This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)	Remark
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0	QCN-5154
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	6.5	
	802.11n (HT40)		54 to 62	54, 62	OFDM	13.5	
	802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	6.5	
	802.11ac (VHT40)		54 to 62	54, 62	OFDM	13.5	
	802.11ac (VHT80)		58	58	OFDM	29.3	
	802.11ax (HE20)		58	58	OFDM	MCS0	
	802.11ax (HE40)		54 to 62	54, 62	OFDMA	MCS0	
	802.11ax (HE80)		58	58	OFDMA	MCS0	
A	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	6.0	QCN-5154
	802.11n (HT20)		100 to 140	100, 116, 140	OFDM	6.5	
	802.11n (HT40)		102 to 134	102, 110, 134	OFDM	13.5	
	802.11ac (VHT20)		100 to 140	100, 116, 140	OFDM	6.5	
	802.11ac (VHT40)		102 to 134	102, 110, 134	OFDM	13.5	
	802.11ac (VHT80)		106 to 122	106, 122	OFDM	29.3	
	802.11ax (HE20)		100 to 140	100, 116, 140	OFDMA	MCS0	
	802.11ax (HE40)		102 to 134	102, 110, 134	OFDMA	MCS0	
	802.11ax (HE80)		106 to 122	106, 122	OFDMA	MCS0	

*802.11n (HT20)/802.11n (VHT20), 802.11n (HT40)/802.11n (VHT40), 802.11n (VHT80) are for Conducted Output Power Measurement only.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)	Remark
C	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0	QCA-9889
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	6.5	
	802.11n (HT40)		54 to 62	54, 62	OFDM	13.5	
	802.11ac (VHT80)		58	58	OFDM	65.0	
C	802.11a	5500-5700	100 to 144	100, 116, 140, 144	OFDM	6.0	QCA-9889
	802.11n (HT20)		100 to 144	100, 116, 140, 144	OFDM	6.5	
	802.11n (HT40)		102 to 142	102, 110, 134, 142	OFDM	13.5	
	802.11ac (VHT80)		106 to 122	106, 122	OFDM	65.0	

Test Conition:

Applicable to	Environmental Conditions	Input Power	Tested by
RE \geq 1G	23 deg. C, 67% RH 23 deg. C, 66% RH 25 deg. C, 70% RH	120Vac, 60Hz	Adair Peng, Titan Hsu, Rex Wang
RE<1G	25 deg. C, 70% RH 23 deg. C, 66% RH	120Vac, 60Hz	Adair Peng, Titan Hsu, Hans Wu
PLC	23 deg. C, 66% RH 24 deg. C, 66% RH 25 deg. C, 75% RH	120Vac, 60Hz	Titan Hsu, Edison Lee, Hans Wu
APCM	25 deg. C, 76% RH 25 deg. C, 60% RH	120Vac, 60Hz	Jisyong Wang, Ivan Tseng

3.3 Duty Cycle of Test Signal

Duty cycle of test signal is < 98%, duty factor shall be considered.

Mode A

802.11a: Duty cycle = $1.958/2.103 = 0.931$, Duty factor = $10 * \log(1/0.931) = 0.31$

802.11ax (HE20): Duty cycle = $5.400/5.863 = 0.921$, Duty factor = $10 * \log(1/0.921) = 0.36$

802.11ax (HE40): Duty cycle = $5.375/5.763 = 0.933$, Duty factor = $10 * \log(1/0.933) = 0.30$

802.11ax (HE80): Duty cycle = $5.338/5.800 = 0.920$, Duty factor = $10 * \log(1/0.920) = 0.36$



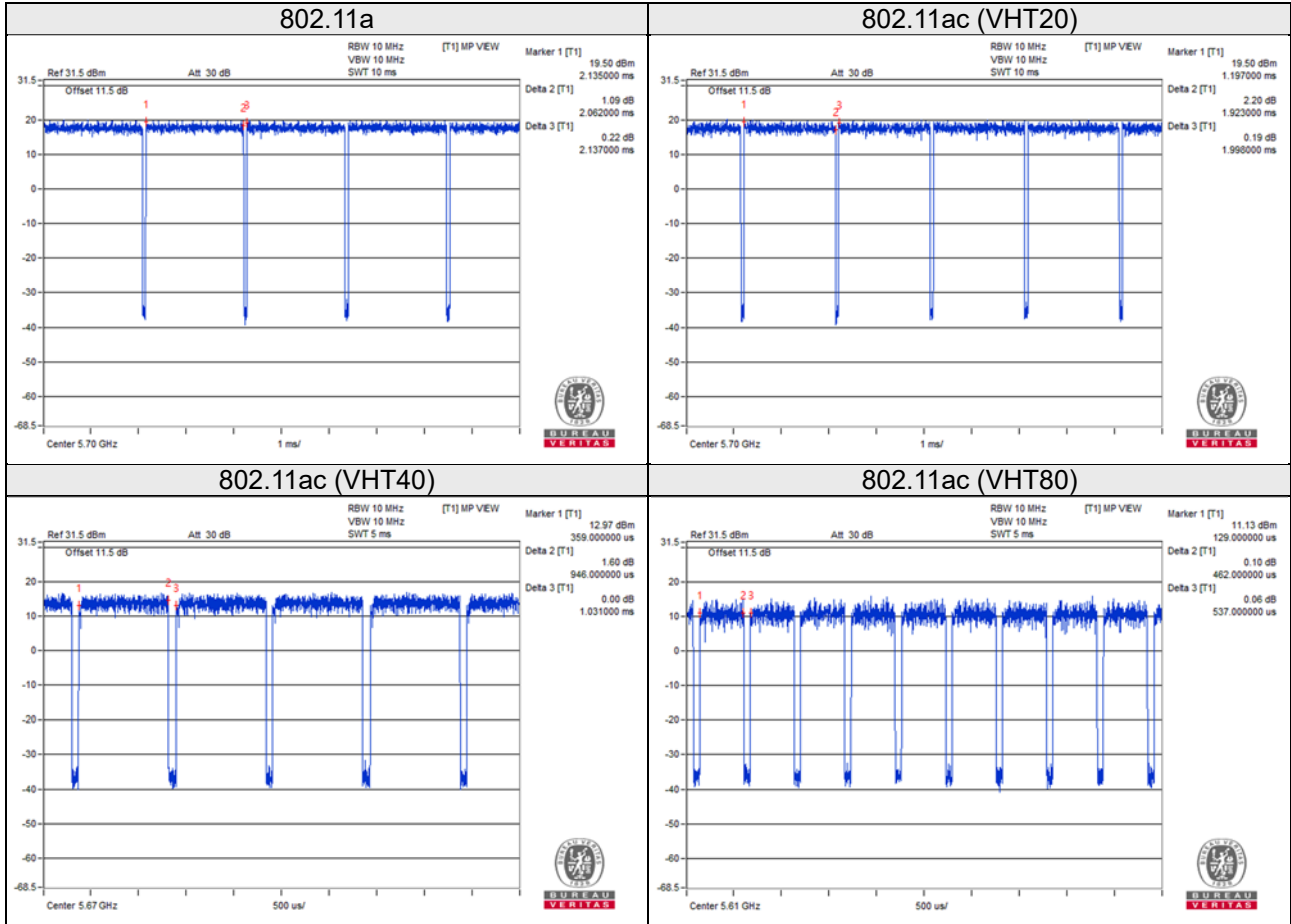
Mode C

802.11a: Duty cycle = $2.062/2.137 = 0.965$, Duty factor = $10 * \log(1/0.965) = 0.16$

802.11ac (VHT20): Duty cycle = $1.923/1.998 = 0.962$, Duty factor = $10 * \log(1/0.962) = 0.17$

802.11ac (VHT40): Duty cycle = $0.946/1.031 = 0.918$, Duty factor = $10 * \log(1/0.918) = 0.37$

802.11ac (VHT80): Duty cycle = $0.462/0.537 = 0.860$, Duty factor = $10 * \log(1/0.860) = 0.65$



3.4 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	DELL	E5410	1HC2XM1	FCC DoC Approved	-
B.	PoE Injector	YAMAHA	YPS-PoE-AT	NA	NA	Provided by client

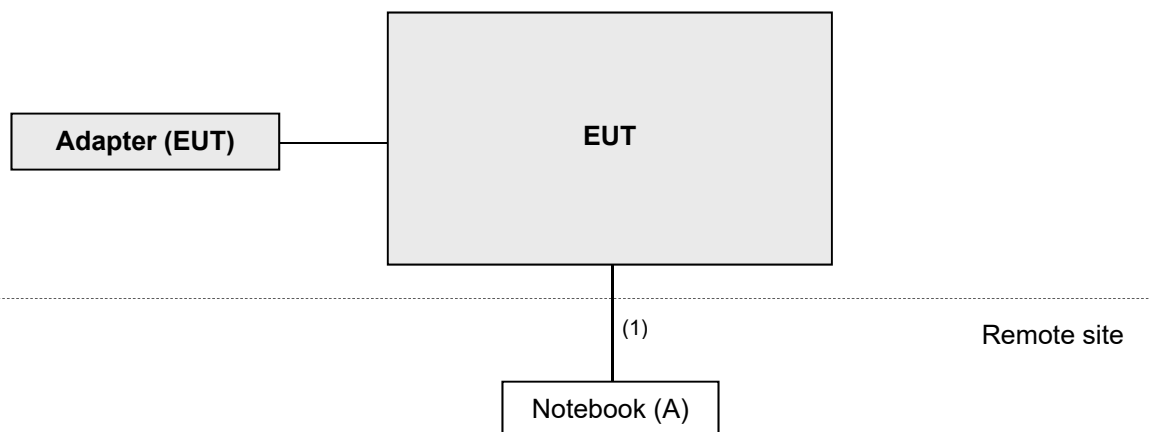
Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item A acted as a communication partners to transfer data.

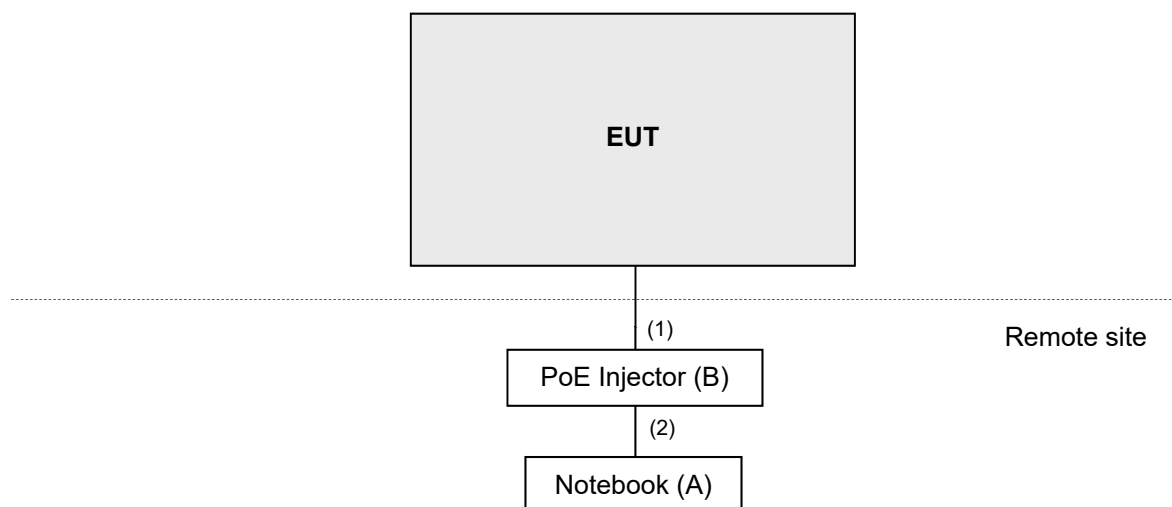
ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	LAN	1	7	N	0	RJ45, Cat5e
2.	LAN	1	1.5	N	0	RJ45, Cat5e

3.4.1 Configuration of System under Test

Mode A



Mode B



3.5 General Description of Applied Standards and References

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards and references:

Test standard:

FCC Part 15, Subpart E (15.407)

ANSI C63.10:2013

All test items have been performed and recorded as per the above standards.

KDB References Test Guidance:

KDB 789033 D02 General UNII Test Procedure New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

All test items have been performed as a reference to the above KDB test guidance.

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

Frequencies (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
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Note:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

Applicable To		Limit	
789033 D02 General UNII Test Procedure New Rules v02r01		Field Strength at 3m	
		PK: 74 (dBµV/m)	AV: 54 (dBµV/m)
Frequency Band	Applicable To	EIRP Limit	Equivalent Field Strength at 3m
5150~5250 MHz	15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2(dBµV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	<input checked="" type="checkbox"/> 15.407(b)(4)(i)	PK: -27 (dBm/MHz) ^{*1} PK: 10 (dBm/MHz) ^{*2} PK: 15.6 (dBm/MHz) ^{*3} PK: 27 (dBm/MHz) ^{*4}	PK: 68.2(dBµV/m) ^{*1} PK: 105.2 (dBµV/m) ^{*2} PK: 110.8(dBµV/m) ^{*3} PK: 122.2 (dBµV/m) ^{*4}
	<input type="checkbox"/> 15.407(b)(4)(ii)	Emission limits in section 15.247(d)	
^{*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.	

Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000 \sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts).}$$

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver ROHDE & SCHWARZ	ESR3	102579	Jul. 07, 2020	Jul. 06, 2021
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Sep. 16, 2020	Sep. 15, 2021
BILOG Antenna SCHWARZBECK	VULB9168	9168-171	Nov. 11, 2019	Nov. 10, 2020
			Nov. 04, 2020	Nov. 03, 2021
HORN Antenna SCHWARZBECK	9120D	209	Nov. 24, 2019	Nov. 23, 2020
			Nov. 22, 2020	Nov. 21, 2021
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 24, 2019	Nov. 23, 2020
			Nov. 22, 2020	Nov. 21, 2021
Loop Antenna TESEQ	HLA 6121	45745	Jul. 06, 2020	Jul. 05, 2021
Preamplifier Agilent (Below 1GHz)	8447D	2944A10738	Aug. 16, 2020	Aug. 15, 2021
Preamplifier Agilent (Above 1GHz)	8449B	3008A02465	Mar. 23, 2020	Mar. 22, 2021
			Mar. 22, 2021	Mar. 21, 2022
RF Coaxial Cable WOKEN With 5dB PAD	8D-FB	Cable-CH3-01	Aug. 16, 2020	Aug. 15, 2021
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH3-03 (223653/4)	Aug. 16, 2020	Aug. 15, 2021
RF signal cable HUBER+SUHNER& EMCI	SUCOFLEX 104&EMC104-SM- SM-8000	Cable-CH3-03 (309224+170907)	Aug. 16, 2020	Aug. 15, 2021
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021702	NA	NA
Turn Table BV ADT	TT100	TT93021702	NA	NA
Turn Table Controller BV ADT	SC100	SC93021702	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Pre-amplifier (18GHz- 40GHz) EMC	EMC184045B	980175	Sep. 04, 2020	Sep. 03, 2021
Peak Power Analyzer KEYSIGHT	8990B	MY51000485	Jan. 14, 2020	Jan. 13, 2021
			Jan. 19, 2021	Jan. 18, 2022
Wideband Power Sensor KEYSIGHT	N1923A	MY58020002	Jan. 13, 2020	Jan. 12, 2021
			Jan. 11, 2021	Jan. 10, 2022

- Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Chamber 3.
 3. Tested date: Sep. 29 ~ Oct. 15, 2020 and May 28 ~ Jun. 18, 2021

4.1.3 Test Procedures

For Radiated emission below 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

For Radiated emission above 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.

Mode A:

(802.11a: RBW = 1MHz, VBW = 1kHz; 802.11ax (HE20): RBW = 1MHz, VBW = 1kHz; 802.11ax (HE40): RBW = 1MHz, VBW = 1kHz; 802.11ax (HE80): RBW = 1MHz, VBW = 1kHz)

Mode C:

(802.11a: RBW = 1MHz, VBW = 1kHz; 802.11ac (VHT20): RBW = 1MHz, VBW = 1kHz; 802.11ac (VHT40): RBW = 1MHz, VBW = 3kHz; 802.11ac (VHT80): RBW = 1MHz, VBW = 3kHz)

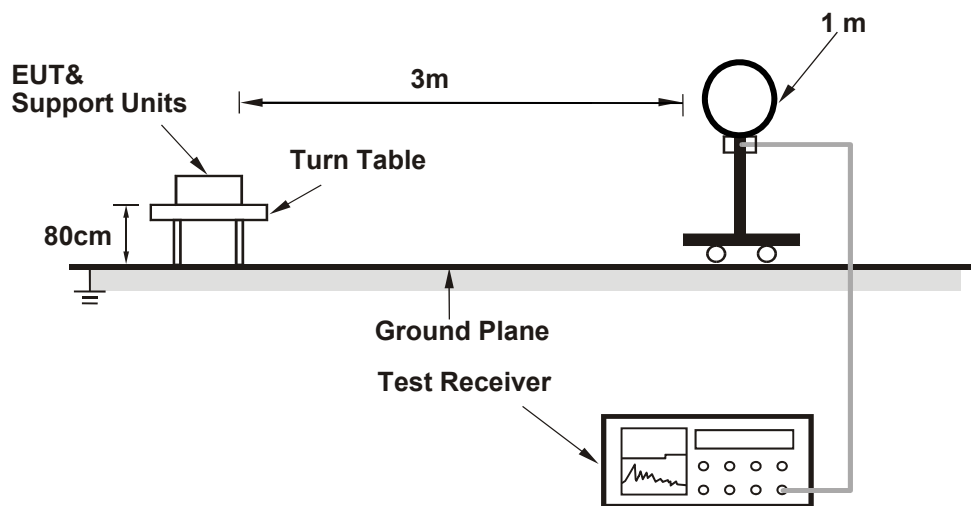
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

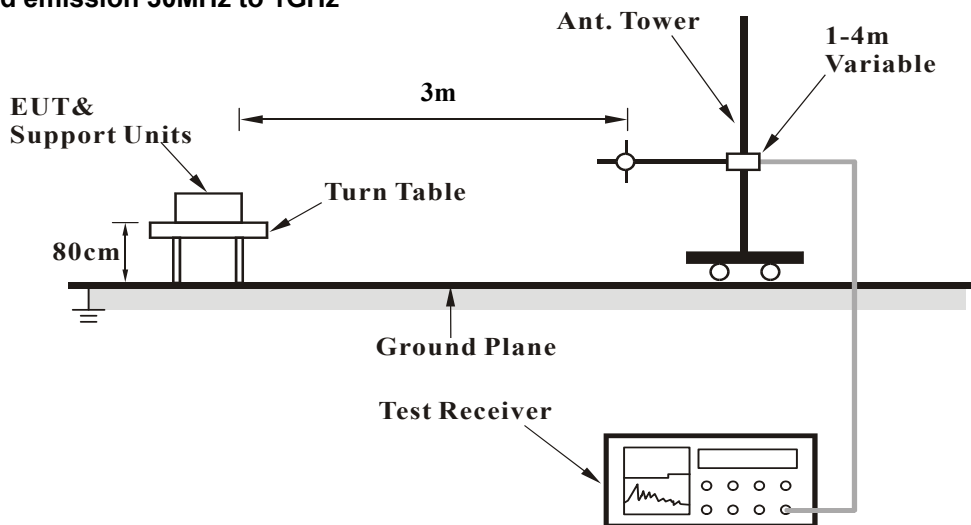
No deviation.

4.1.5 Test Setup

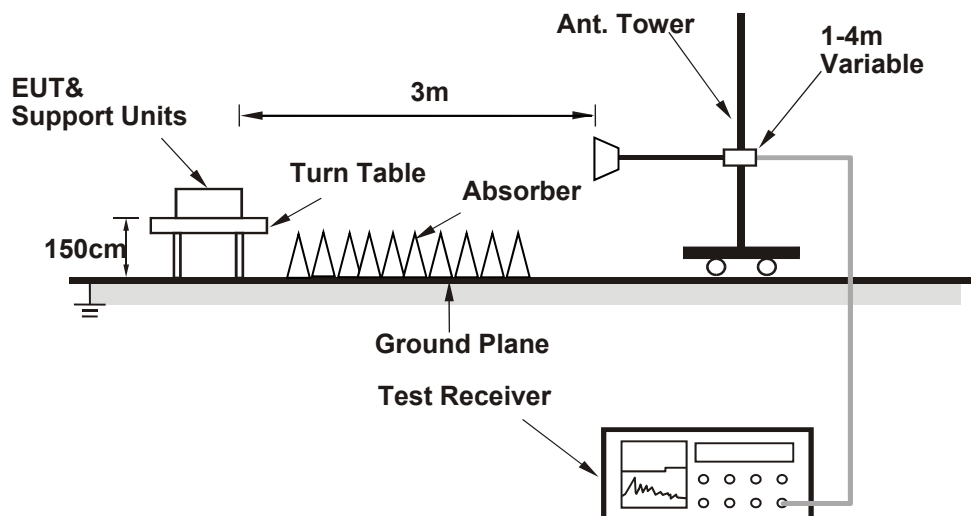
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT Operating Conditions

- a. Placed the EUT on the testing table.
- b. Prepared a notebook to act as a communication partner and placed it outside of testing area.
- c. The communication partner connected with EUT via a RJ45 cable and ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
- d. The communication partner sent data to EUT by command "PING".

4.1.7 Test Results

Above 1GHz data:

Mode A

RF Mode	TX 802.11a	Channel	CH 52 : 5260 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.9 PK	74.0	-16.1	2.34 H	181	51.4	6.5
2	5150.00	44.8 AV	54.0	-9.2	2.34 H	181	38.3	6.5
3	*5260.00	117.7 PK			2.34 H	181	75.9	41.8
4	*5260.00	108.3 AV			2.34 H	181	66.5	41.8
5	#10520.00	59.5 PK	68.2	-8.7	1.57 H	200	42.1	17.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.3 PK	74.0	-16.7	2.14 V	343	50.8	6.5
2	5150.00	44.8 AV	54.0	-9.2	2.14 V	343	38.3	6.5
3	*5260.00	116.1 PK			2.14 V	343	74.3	41.8
4	*5260.00	106.7 AV			2.14 V	343	64.9	41.8
5	#10520.00	59.9 PK	68.2	-8.3	1.49 V	215	42.5	17.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 60 : 5300 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	118.2 PK			2.26 H	189	76.3	41.9
2	*5300.00	108.2 AV			2.26 H	189	66.3	41.9
3	10600.00	59.0 PK	74.0	-15.0	1.61 H	178	41.9	17.1
4	10600.00	45.6 AV	54.0	-8.4	1.61 H	178	28.5	17.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	116.6 PK			2.27 V	336	74.7	41.9
2	*5300.00	107.5 AV			2.27 V	336	65.6	41.9
3	10600.00	58.8 PK	74.0	-15.2	1.52 V	63	41.7	17.1
4	10600.00	45.5 AV	54.0	-8.5	1.52 V	63	28.4	17.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11a	Channel	CH 64 : 5320 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	117.6 PK			2.34 H	355	75.7	41.9
2	*5320.00	108.1 AV			2.34 H	355	66.2	41.9
3	5350.00	58.1 PK	74.0	-15.9	2.34 H	355	51.8	6.3
4	5350.00	44.7 AV	54.0	-9.3	2.34 H	355	38.4	6.3
5	10640.00	58.7 PK	74.0	-15.3	1.66 H	238	41.4	17.3
6	10640.00	45.6 AV	54.0	-8.4	1.66 H	238	28.3	17.3

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	116.8 PK			1.60 V	347	74.9	41.9
2	*5320.00	107.5 AV			1.60 V	347	65.6	41.9
3	5350.00	58.2 PK	74.0	-15.8	1.60 V	347	51.9	6.3
4	5350.00	45.3 AV	54.0	-8.7	1.60 V	347	39.0	6.3
5	10640.00	59.1 PK	74.0	-14.9	1.59 V	264	41.8	17.3
6	10640.00	45.8 AV	54.0	-8.2	1.59 V	264	28.5	17.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11a	Channel	CH 100 : 5500 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	59.2 PK	74.0	-14.8	2.88 H	323	53.0	6.2
2	5460.00	44.7 AV	54.0	-9.3	2.88 H	323	38.5	6.2
3	#5470.00	57.8 PK	68.2	-10.4	2.88 H	323	51.6	6.2
4	*5500.00	118.3 PK			2.88 H	323	76.4	41.9
5	*5500.00	108.7 AV			2.88 H	323	66.8	41.9
6	11000.00	60.1 PK	74.0	-13.9	1.77 H	247	41.7	18.4
7	11000.00	47.4 AV	54.0	-6.6	1.77 H	247	29.0	18.4

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	58.6 PK	74.0	-15.4	2.28 V	242	52.4	6.2
2	5460.00	45.3 AV	54.0	-8.7	2.28 V	242	39.1	6.2
3	#5470.00	58.3 PK	68.2	-9.9	2.28 V	242	52.1	6.2
4	*5500.00	117.5 PK			2.28 V	242	75.6	41.9
5	*5500.00	107.7 AV			2.28 V	242	65.8	41.9
6	11000.00	60.5 PK	74.0	-13.5	1.47 V	205	42.1	18.4
7	11000.00	47.5 AV	54.0	-6.5	1.47 V	205	29.1	18.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 116 : 5580 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	119.7 PK			2.46 H	204	77.7	42.0
2	*5580.00	110.0 AV			2.46 H	204	68.0	42.0
3	11160.00	59.1 PK	74.0	-14.9	1.80 H	265	41.0	18.1
4	11160.00	46.5 AV	54.0	-7.5	1.80 H	265	28.4	18.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	118.6 PK			2.43 V	241	76.6	42.0
2	*5580.00	108.7 AV			2.43 V	241	66.7	42.0
3	11160.00	60.2 PK	74.0	-13.8	1.52 V	221	42.1	18.1
4	11160.00	47.1 AV	54.0	-6.9	1.52 V	221	29.0	18.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.

RF Mode	TX 802.11a	Channel	CH 140 : 5700 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	117.4 PK			2.02 H	190	75.3	42.1
2	*5700.00	107.8 AV			2.02 H	190	65.7	42.1
3	#5725.00	57.4 PK	68.2	-10.8	2.02 H	190	51.1	6.3
4	11400.00	59.0 PK	74.0	-15.0	1.99 H	261	41.4	17.6
5	11400.00	45.9 AV	54.0	-8.1	1.99 H	261	28.3	17.6

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	118.3 PK			2.64 V	319	76.2	42.1
2	*5700.00	108.6 AV			2.64 V	319	66.5	42.1
3	#5725.00	59.7 PK	68.2	-8.5	2.64 V	319	53.4	6.3
4	11400.00	59.8 PK	74.0	-14.2	1.55 V	214	42.2	17.6
5	11400.00	46.7 AV	54.0	-7.3	1.55 V	214	29.1	17.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE20)	Channel	CH 52 : 5260 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	58.9 PK	74.0	-15.1	2.20 H	171	52.4	6.5
2	5150.00	44.6 AV	54.0	-9.4	2.20 H	171	38.1	6.5
3	*5260.00	121.4 PK			2.20 H	171	79.6	41.8
4	*5260.00	108.1 AV			2.20 H	171	66.3	41.8
5	#10520.00	59.6 PK	68.2	-8.6	1.58 H	255	42.2	17.4

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	58.5 PK	74.0	-15.5	2.09 V	346	52.0	6.5
2	5150.00	44.6 AV	54.0	-9.4	2.09 V	346	38.1	6.5
3	*5260.00	120.5 PK			2.09 V	346	78.7	41.8
4	*5260.00	106.3 AV			2.09 V	346	64.5	41.8
5	#10520.00	58.8 PK	68.2	-9.4	1.48 V	61	41.4	17.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE20)	Channel	CH 60 : 5300 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	122.1 PK			2.34 H	191	80.2	41.9
2	*5300.00	108.3 AV			2.34 H	191	66.4	41.9
3	10600.00	58.8 PK	74.0	-15.2	1.88 H	275	41.7	17.1
4	10600.00	45.8 AV	54.0	-8.2	1.88 H	275	28.7	17.1

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	120.1 PK			1.85 V	349	78.2	41.9
2	*5300.00	106.0 AV			1.85 V	349	64.1	41.9
3	10600.00	58.1 PK	74.0	-15.9	1.69 V	270	41.0	17.1
4	10600.00	45.3 AV	54.0	-8.7	1.69 V	270	28.2	17.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11ax (HE20)	Channel	CH 64 : 5320 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	121.9 PK			2.31 H	231	80.0	41.9
2	*5320.00	108.6 AV			2.31 H	231	66.7	41.9
3	5350.00	58.4 PK	74.0	-15.6	2.31 H	231	52.1	6.3
4	5350.00	45.0 AV	54.0	-9.0	2.31 H	231	38.7	6.3
5	10640.00	59.5 PK	74.0	-14.5	1.76 H	251	42.2	17.3
6	10640.00	46.0 AV	54.0	-8.0	1.76 H	251	28.7	17.3

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	120.4 PK			2.06 V	342	78.5	41.9
2	*5320.00	107.2 AV			2.06 V	342	65.3	41.9
3	5350.00	58.2 PK	74.0	-15.8	2.06 V	342	51.9	6.3
4	5350.00	45.0 AV	54.0	-9.0	2.06 V	342	38.7	6.3
5	10640.00	59.1 PK	74.0	-14.9	1.44 V	73	41.8	17.3
6	10640.00	45.7 AV	54.0	-8.3	1.44 V	73	28.4	17.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11ax (HE20)	Channel	CH 100 : 5500 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	57.4 PK	74.0	-16.6	2.41 H	355	51.2	6.2
2	5460.00	45.1 AV	54.0	-8.9	2.41 H	355	38.9	6.2
3	#5470.00	61.0 PK	68.2	-7.2	2.41 H	355	54.8	6.2
4	*5500.00	122.2 PK			2.41 H	355	80.3	41.9
5	*5500.00	108.9 AV			2.41 H	355	67.0	41.9
6	11000.00	60.5 PK	74.0	-13.5	1.82 H	251	42.1	18.4
7	11000.00	47.2 AV	54.0	-6.8	1.82 H	251	28.8	18.4

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	57.4 PK	74.0	-16.6	2.36 V	244	51.2	6.2
2	5460.00	45.1 AV	54.0	-8.9	2.36 V	244	38.9	6.2
3	#5470.00	59.1 PK	68.2	-9.1	2.36 V	244	52.9	6.2
4	*5500.00	121.2 PK			2.36 V	244	79.3	41.9
5	*5500.00	107.1 AV			2.36 V	244	65.2	41.9
6	11000.00	60.5 PK	74.0	-13.5	1.48 V	215	42.1	18.4
7	11000.00	47.5 AV	54.0	-6.5	1.48 V	215	29.1	18.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE20)	Channel	CH 116 : 5580 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	121.6 PK			2.40 H	249	79.6	42.0
2	*5580.00	108.3 AV			2.40 H	249	66.3	42.0
3	11160.00	60.1 PK	74.0	-13.9	1.88 H	256	42.0	18.1
4	11160.00	47.0 AV	54.0	-7.0	1.88 H	256	28.9	18.1

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	120.6 PK			2.56 V	11	78.6	42.0
2	*5580.00	106.1 AV			2.56 V	11	64.1	42.0
3	11160.00	60.2 PK	74.0	-13.8	1.44 V	223	42.1	18.1
4	11160.00	47.1 AV	54.0	-6.9	1.44 V	223	29.0	18.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11ax (HE20)	Channel	CH 140 : 5700 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	122.1 PK			2.46 H	300	80.0	42.1
2	*5700.00	108.6 AV			2.46 H	300	66.5	42.1
3	#5725.00	61.7 PK	68.2	-6.5	2.46 H	300	55.4	6.3
4	11400.00	59.7 PK	74.0	-14.3	1.92 H	255	42.1	17.6
5	11400.00	46.4 AV	54.0	-7.6	1.92 H	255	28.8	17.6

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	121.9 PK			2.78 V	315	79.8	42.1
2	*5700.00	108.4 AV			2.78 V	315	66.3	42.1
3	#5725.00	60.9 PK	68.2	-7.3	2.78 V	315	54.6	6.3
4	11400.00	59.8 PK	74.0	-14.2	1.52 V	218	42.2	17.6
5	11400.00	46.7 AV	54.0	-7.3	1.52 V	218	29.1	17.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE40)	Channel	CH 54 : 5270 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.7 PK	74.0	-16.3	2.30 H	234	51.2	6.5
2	5150.00	44.9 AV	54.0	-9.1	2.30 H	234	38.4	6.5
3	*5270.00	118.5 PK			2.30 H	234	76.6	41.9
4	*5270.00	105.6 AV			2.30 H	234	63.7	41.9
5	#10540.00	59.7 PK	68.2	-8.5	2.12 H	268	42.2	17.5

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.6 PK	74.0	-14.4	2.10 V	347	53.1	6.5
2	5150.00	44.5 AV	54.0	-9.5	2.10 V	347	38.0	6.5
3	*5270.00	117.2 PK			2.10 V	347	75.3	41.9
4	*5270.00	104.6 AV			2.10 V	347	62.7	41.9
5	#10540.00	58.9 PK	68.2	-9.3	1.58 V	208	41.4	17.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE40)	Channel	CH 62 : 5310 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	118.2 PK			2.43 H	191	76.3	41.9
2	*5310.00	105.6 AV			2.43 H	191	63.7	41.9
3	5350.00	65.3 PK	74.0	-8.7	2.43 H	191	59.0	6.3
4	5350.00	51.3 AV	54.0	-2.7	2.43 H	191	45.0	6.3
5	10620.00	58.5 PK	74.0	-15.5	1.65 H	222	41.2	17.3
6	10620.00	45.9 AV	54.0	-8.1	1.65 H	222	28.6	17.3

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	116.7 PK			1.95 V	337	74.8	41.9
2	*5310.00	103.9 AV			1.95 V	337	62.0	41.9
3	5350.00	65.0 PK	74.0	-9.0	1.95 V	337	58.7	6.3
4	5350.00	50.0 AV	54.0	-4.0	1.95 V	337	43.7	6.3
5	10620.00	59.3 PK	74.0	-14.7	1.53 V	208	42.0	17.3
6	10620.00	45.9 AV	54.0	-8.1	1.53 V	208	28.6	17.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11ax (HE40)	Channel	CH 102 : 5510 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	58.2 PK	74.0	-15.8	2.54 H	298	52.0	6.2
2	5460.00	45.1 AV	54.0	-8.9	2.54 H	298	38.9	6.2
3	#5470.00	64.9 PK	68.2	-3.3	2.54 H	298	58.7	6.2
4	*5510.00	118.5 PK			2.54 H	298	76.6	41.9
5	*5510.00	105.8 AV			2.54 H	298	63.9	41.9
6	11020.00	60.5 PK	74.0	-13.5	1.82 H	241	42.2	18.3
7	11020.00	47.2 AV	54.0	-6.8	1.82 H	241	28.9	18.3

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	60.3 PK	74.0	-13.7	2.51 V	243	54.1	6.2
2	5460.00	46.9 AV	54.0	-7.1	2.51 V	243	40.7	6.2
3	#5470.00	61.6 PK	68.2	-6.6	2.51 V	243	55.4	6.2
4	*5510.00	116.7 PK			2.51 V	243	74.8	41.9
5	*5510.00	104.2 AV			2.51 V	243	62.3	41.9
6	11020.00	60.4 PK	74.0	-13.6	1.58 V	208	42.1	18.3
7	11020.00	47.2 AV	54.0	-6.8	1.58 V	208	28.9	18.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE40)	Channel	CH 110 : 5550 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	118.2 PK			2.92 H	14	76.2	42.0
2	*5550.00	105.5 AV			2.92 H	14	63.5	42.0
3	11100.00	59.9 PK	74.0	-14.1	1.92 H	251	42.0	17.9
4	11100.00	46.9 AV	54.0	-7.1	1.92 H	251	29.0	17.9

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	117.0 PK			2.34 V	10	75.0	42.0
2	*5550.00	104.6 AV			2.34 V	10	62.6	42.0
3	11100.00	60.0 PK	74.0	-14.0	1.53 V	217	42.1	17.9
4	11100.00	46.8 AV	54.0	-7.2	1.53 V	217	28.9	17.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11ax (HE40)	Channel	CH 134 : 5670 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	118.2 PK			2.91 H	143	76.1	42.1
2	*5670.00	104.7 AV			2.91 H	143	62.6	42.1
3	#5725.00	58.3 PK	68.2	-9.9	2.91 H	143	52.0	6.3
4	11340.00	59.9 PK	74.0	-14.1	1.69 H	239	42.1	17.8
5	11340.00	46.8 AV	54.0	-7.2	1.69 H	239	29.0	17.8

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	117.2 PK			2.31 V	313	75.1	42.1
2	*5670.00	104.7 AV			2.31 V	313	62.6	42.1
3	#5725.00	57.5 PK	68.2	-10.7	2.31 V	313	51.2	6.3
4	11340.00	59.7 PK	74.0	-14.3	1.44 V	215	41.9	17.8
5	11340.00	46.6 AV	54.0	-7.4	1.44 V	215	28.8	17.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE80)	Channel	CH 58 : 5290 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	58.6 PK	74.0	-15.4	2.23 H	241	52.1	6.5
2	5150.00	45.0 AV	54.0	-9.0	2.23 H	241	38.5	6.5
3	*5290.00	116.7 PK			2.23 H	241	74.8	41.9
4	*5290.00	103.2 AV			2.23 H	241	61.3	41.9
5	5350.00	65.4 PK	74.0	-8.6	2.23 H	241	59.1	6.3
6	5350.00	51.7 AV	54.0	-2.3	2.23 H	241	45.4	6.3
7	#10580.00	58.7 PK	68.2	-9.5	2.37 H	274	41.4	17.3

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.4 PK	74.0	-16.6	2.14 V	336	50.9	6.5
2	5150.00	44.6 AV	54.0	-9.4	2.14 V	336	38.1	6.5
3	*5290.00	115.1 PK			2.14 V	336	73.2	41.9
4	*5290.00	101.6 AV			2.14 V	336	59.7	41.9
5	5350.00	64.2 PK	74.0	-9.8	2.14 V	336	57.9	6.3
6	5350.00	51.3 AV	54.0	-2.7	2.14 V	336	45.0	6.3
7	#10580.00	58.7 PK	68.2	-9.5	1.48 V	203	41.4	17.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE80)	Channel	CH 106 : 5530 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	63.6 PK	74.0	-10.4	2.73 H	327	57.4	6.2
2	5460.00	51.4 AV	54.0	-2.6	2.73 H	327	45.2	6.2
3	#5470.00	66.9 PK	68.2	-1.3	2.73 H	327	60.7	6.2
4	*5530.00	115.2 PK			2.73 H	327	73.2	42.0
5	*5530.00	102.5 AV			2.73 H	327	60.5	42.0
6	#5725.00	58.0 PK	68.2	-10.2	2.73 H	327	51.7	6.3
7	11060.00	60.3 PK	74.0	-13.7	1.95 H	261	42.2	18.1
8	11060.00	47.2 AV	54.0	-6.8	1.95 H	261	29.1	18.1

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	62.8 PK	74.0	-11.2	2.26 V	243	56.6	6.2
2	5460.00	49.1 AV	54.0	-4.9	2.26 V	243	42.9	6.2
3	#5470.00	65.1 PK	68.2	-3.1	2.26 V	243	58.9	6.2
4	*5530.00	114.5 PK			2.26 V	243	72.5	42.0
5	*5530.00	101.2 AV			2.26 V	243	59.2	42.0
6	#5725.00	57.9 PK	68.2	-10.3	2.26 V	243	51.6	6.3
7	11060.00	60.1 PK	74.0	-13.9	1.51 V	211	42.0	18.1
8	11060.00	46.9 AV	54.0	-7.1	1.51 V	211	28.8	18.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE80)	Channel	CH 122 : 5610 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	57.6 PK	74.0	-16.4	2.66 H	315	51.4	6.2
2	5460.00	44.7 AV	54.0	-9.3	2.66 H	315	38.5	6.2
3	#5470.00	57.8 PK	68.2	-10.4	2.66 H	315	51.6	6.2
4	*5610.00	116.7 PK			2.66 H	315	74.7	42.0
5	*5610.00	102.9 AV			2.66 H	315	60.9	42.0
6	#5725.00	61.4 PK	68.2	-6.8	2.66 H	315	55.1	6.3
7	11220.00	60.2 PK	74.0	-13.8	1.82 H	257	42.1	18.1
8	11220.00	47.1 AV	54.0	-6.9	1.82 H	257	29.0	18.1

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	57.4 PK	74.0	-16.6	1.96 V	352	51.2	6.2
2	5460.00	44.5 AV	54.0	-9.5	1.96 V	352	38.3	6.2
3	#5470.00	57.8 PK	68.2	-10.4	1.96 V	352	51.6	6.2
4	*5610.00	115.1 PK			1.96 V	352	73.1	42.0
5	*5610.00	102.4 AV			1.96 V	352	60.4	42.0
6	#5725.00	57.4 PK	68.2	-10.8	1.96 V	352	51.1	6.3
7	11220.00	60.1 PK	74.0	-13.9	1.46 V	205	42.0	18.1
8	11220.00	47.0 AV	54.0	-7.0	1.46 V	205	28.9	18.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

Mode C

RF Mode	TX 802.11a	Channel	CH 52 : 5260 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.2 PK	74.0	-13.8	2.68 H	271	46.8	13.4
2	5150.00	48.2 AV	54.0	-5.8	2.68 H	271	34.8	13.4
3	*5260.00	105.5 PK			2.68 H	271	63.0	42.5
4	*5260.00	96.7 AV			2.68 H	271	54.2	42.5
5	#10520.00	60.6 PK	68.2	-7.6	1.77 H	205	37.8	22.8

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.4 PK	74.0	-14.6	2.25 V	259	46.0	13.4
2	5150.00	48.0 AV	54.0	-6.0	2.25 V	259	34.6	13.4
3	*5260.00	110.9 PK			2.25 V	259	68.4	42.5
4	*5260.00	101.8 AV			2.25 V	259	59.3	42.5
5	#10520.00	61.0 PK	68.2	-7.2	1.55 V	44	38.2	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 60 : 5300 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	105.7 PK			2.66 H	272	63.1	42.6
2	*5300.00	96.9 AV			2.66 H	272	54.3	42.6
3	10600.00	61.7 PK	74.0	-12.3	1.75 H	199	37.9	23.8
4	10600.00	50.4 AV	54.0	-3.6	1.75 H	199	26.6	23.8

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	110.7 PK			2.75 V	249	68.1	42.6
2	*5300.00	101.2 AV			2.75 V	249	58.6	42.6
3	10600.00	61.9 PK	74.0	-12.1	1.53 V	46	38.1	23.8
4	10600.00	50.5 AV	54.0	-3.5	1.53 V	46	26.7	23.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.

RF Mode	TX 802.11a	Channel	CH 64 : 5320 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	106.0 PK			2.68 H	268	63.3	42.7
2	*5320.00	97.0 AV			2.68 H	268	54.3	42.7
3	5350.00	60.0 PK	74.0	-14.0	2.68 H	268	46.8	13.2
4	5350.00	50.1 AV	54.0	-3.9	2.68 H	268	36.9	13.2
5	10640.00	61.7 PK	74.0	-12.3	1.79 H	200	37.8	23.9
6	10640.00	50.4 AV	54.0	-3.6	1.79 H	200	26.5	23.9

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	110.9 PK			2.67 V	247	68.2	42.7
2	*5320.00	101.7 AV			2.67 V	247	59.0	42.7
3	5350.00	63.3 PK	74.0	-10.7	2.67 V	247	50.1	13.2
4	5350.00	52.4 AV	54.0	-1.6	2.67 V	247	39.2	13.2
5	10640.00	62.2 PK	74.0	-11.8	1.58 V	55	38.3	23.9
6	10640.00	50.8 AV	54.0	-3.2	1.58 V	55	26.9	23.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11a	Channel	CH 100 : 5500 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	59.2 PK	74.0	-14.8	2.53 H	271	45.6	13.6
2	5460.00	48.3 AV	54.0	-5.7	2.53 H	271	34.7	13.6
3	#5470.00	60.4 PK	68.2	-7.8	2.53 H	271	46.8	13.6
4	*5500.00	104.2 PK			2.53 H	271	61.0	43.2
5	*5500.00	95.5 AV			2.53 H	271	52.3	43.2
6	11000.00	63.0 PK	74.0	-11.0	1.76 H	201	38.3	24.7
7	11000.00	51.5 AV	54.0	-2.5	1.76 H	201	26.8	24.7

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	59.0 PK	74.0	-15.0	2.35 V	253	45.4	13.6
2	5460.00	48.2 AV	54.0	-5.8	2.35 V	253	34.6	13.6
3	#5470.00	61.1 PK	68.2	-7.1	2.35 V	253	47.5	13.6
4	*5500.00	110.1 PK			2.35 V	253	66.9	43.2
5	*5500.00	101.4 AV			2.35 V	253	58.2	43.2
6	11000.00	62.5 PK	74.0	-11.5	1.57 V	54	37.8	24.7
7	11000.00	51.3 AV	54.0	-2.7	1.57 V	54	26.6	24.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 116 : 5580 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	104.1 PK			2.67 H	270	61.0	43.1
2	*5580.00	94.8 AV			2.67 H	270	51.7	43.1
3	11160.00	61.7 PK	74.0	-12.3	1.73 H	194	37.0	24.7
4	11160.00	51.6 AV	54.0	-2.4	1.73 H	194	26.9	24.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	110.1 PK			2.24 V	247	67.0	43.1
2	*5580.00	100.9 AV			2.24 V	247	57.8	43.1
3	11160.00	61.8 PK	74.0	-12.2	1.59 V	57	37.1	24.7
4	11160.00	51.7 AV	54.0	-2.3	1.59 V	57	27.0	24.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.

RF Mode	TX 802.11a	Channel	CH 140 : 5700 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	105.9 PK			2.77 H	281	62.5	43.4
2	*5700.00	96.6 AV			2.77 H	281	53.2	43.4
3	#5725.00	61.5 PK	68.2	-6.7	2.77 H	281	47.7	13.8
4	11400.00	63.1 PK	74.0	-10.9	1.68 H	206	37.8	25.3
5	11400.00	52.0 AV	54.0	-2.0	1.68 H	206	26.7	25.3

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	110.9 PK			2.59 V	244	67.5	43.4
2	*5700.00	101.4 AV			2.59 V	244	58.0	43.4
3	#5725.00	55.7 PK	68.2	-12.5	2.59 V	244	41.9	13.8
4	11400.00	62.9 PK	74.0	-11.1	1.50 V	42	37.6	25.3
5	11400.00	51.9 AV	54.0	-2.1	1.50 V	42	26.6	25.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ac (VHT20)	Channel	CH 52 : 5260 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.3 PK	74.0	-14.7	2.55 H	270	45.9	13.4
2	5150.00	48.1 AV	54.0	-5.9	2.55 H	270	34.7	13.4
3	*5260.00	105.2 PK			2.55 H	270	62.7	42.5
4	*5260.00	96.2 AV			2.55 H	270	53.7	42.5
5	#10520.00	60.6 PK	68.2	-7.6	1.72 H	209	37.8	22.8

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.6 PK	74.0	-14.4	2.72 V	250	46.2	13.4
2	5150.00	48.3 AV	54.0	-5.7	2.72 V	250	34.9	13.4
3	*5260.00	110.3 PK			2.72 V	250	67.8	42.5
4	*5260.00	100.9 AV			2.72 V	250	58.4	42.5
5	#10520.00	60.5 PK	68.2	-7.7	1.50 V	51	37.7	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ac (VHT20)	Channel	CH 60 : 5300 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	105.9 PK			2.66 H	274	63.3	42.6
2	*5300.00	96.4 AV			2.66 H	274	53.8	42.6
3	10600.00	61.7 PK	74.0	-12.3	1.78 H	203	37.9	23.8
4	10600.00	50.7 AV	54.0	-3.3	1.78 H	203	26.9	23.8

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	109.9 PK			2.42 V	243	67.3	42.6
2	*5300.00	101.1 AV			2.42 V	243	58.5	42.6
3	10600.00	62.1 PK	74.0	-11.9	1.61 V	44	38.3	23.8
4	10600.00	50.6 AV	54.0	-3.4	1.61 V	44	26.8	23.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11ac (VHT20)	Channel	CH 64 : 5320 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	106.1 PK			2.68 H	267	63.4	42.7
2	*5320.00	96.9 AV			2.68 H	267	54.2	42.7
3	5350.00	60.3 PK	74.0	-13.7	2.68 H	267	47.1	13.2
4	5350.00	50.6 AV	54.0	-3.4	2.68 H	267	37.4	13.2
5	10640.00	61.8 PK	74.0	-12.2	1.73 H	196	37.9	23.9
6	10640.00	50.8 AV	54.0	-3.2	1.73 H	196	26.9	23.9

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	111.2 PK			2.37 V	247	68.5	42.7
2	*5320.00	101.6 AV			2.37 V	247	58.9	42.7
3	5350.00	63.4 PK	74.0	-10.6	2.37 V	247	50.2	13.2
4	5350.00	53.0 AV	54.0	-1.0	2.37 V	247	39.8	13.2
5	10640.00	61.7 PK	74.0	-12.3	1.43 V	49	37.8	23.9
6	10640.00	50.7 AV	54.0	-3.3	1.43 V	49	26.8	23.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11ac (VHT20)	Channel	CH 100 : 5500 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	59.4 PK	74.0	-14.6	2.62 H	273	45.8	13.6
2	5460.00	48.3 AV	54.0	-5.7	2.62 H	273	34.7	13.6
3	#5470.00	60.9 PK	68.2	-7.3	2.62 H	273	47.3	13.6
4	*5500.00	103.8 PK			2.62 H	273	60.6	43.2
5	*5500.00	94.9 AV			2.62 H	273	51.7	43.2
6	11000.00	62.4 PK	74.0	-11.6	1.76 H	191	37.7	24.7
7	11000.00	51.6 AV	54.0	-2.4	1.76 H	191	26.9	24.7

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	59.0 PK	74.0	-15.0	2.35 V	253	45.4	13.6
2	5460.00	48.2 AV	54.0	-5.8	2.35 V	253	34.6	13.6
3	#5470.00	61.1 PK	68.2	-7.1	2.35 V	253	47.5	13.6
4	*5500.00	110.1 PK			2.35 V	253	66.9	43.2
5	*5500.00	101.4 AV			2.35 V	253	58.2	43.2
6	11000.00	62.5 PK	74.0	-11.5	1.57 V	54	37.8	24.7
7	11000.00	51.3 AV	54.0	-2.7	1.57 V	54	26.6	24.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ac (VHT20)	Channel	CH 116 : 5580 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	104.5 PK			2.64 H	274	61.4	43.1
2	*5580.00	94.7 AV			2.64 H	274	51.6	43.1
3	11160.00	61.5 PK	74.0	-12.5	1.78 H	197	36.8	24.7
4	11160.00	51.6 AV	54.0	-2.4	1.78 H	197	26.9	24.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	109.8 PK			2.29 V	250	66.7	43.1
2	*5580.00	100.8 AV			2.29 V	250	57.7	43.1
3	11160.00	61.3 PK	74.0	-12.7	1.55 V	44	36.6	24.7
4	11160.00	51.4 AV	54.0	-2.6	1.55 V	44	26.7	24.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11ac (VHT20)	Channel	CH 140 : 5700 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	103.9 PK			2.62 H	281	60.5	43.4
2	*5700.00	95.1 AV			2.62 H	281	51.7	43.4
3	#5725.00	61.1 PK	68.2	-7.1	2.62 H	281	47.3	13.8
4	11400.00	62.9 PK	74.0	-11.1	1.74 H	204	37.6	25.3
5	11400.00	52.1 AV	54.0	-1.9	1.74 H	204	26.8	25.3

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	108.6 PK			2.19 V	246	65.2	43.4
2	*5700.00	99.9 AV			2.19 V	246	56.5	43.4
3	#5725.00	67.5 PK	68.2	-0.7	2.19 V	246	53.7	13.8
4	11400.00	63.0 PK	74.0	-11.0	1.51 V	53	37.7	25.3
5	11400.00	52.3 AV	54.0	-1.7	1.51 V	53	27.0	25.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ac (VHT40)	Channel	CH 54 : 5270 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.7 PK	74.0	-13.3	2.63 H	275	47.3	13.4
2	5150.00	48.3 AV	54.0	-5.7	2.63 H	275	34.9	13.4
3	*5270.00	100.7 PK			2.63 H	275	58.2	42.5
4	*5270.00	92.6 AV			2.63 H	275	50.1	42.5
5	#10540.00	60.5 PK	68.2	-7.7	1.79 H	207	37.5	23.0

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.3 PK	74.0	-14.7	2.34 V	248	45.9	13.4
2	5150.00	48.4 AV	54.0	-5.6	2.34 V	248	35.0	13.4
3	*5270.00	107.5 PK			2.34 V	248	65.0	42.5
4	*5270.00	98.3 AV			2.34 V	248	55.8	42.5
5	#10540.00	60.8 PK	68.2	-7.4	1.56 V	48	37.8	23.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ac (VHT40)	Channel	CH 62 : 5310 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	97.5 PK			2.64 H	265	54.9	42.6
2	*5310.00	88.4 AV			2.64 H	265	45.8	42.6
3	5350.00	59.1 PK	74.0	-14.9	2.64 H	265	45.9	13.2
4	5350.00	49.4 AV	54.0	-4.6	2.64 H	265	36.2	13.2
5	10620.00	61.5 PK	74.0	-12.5	1.76 H	201	37.6	23.9
6	10620.00	50.5 AV	54.0	-3.5	1.76 H	201	26.6	23.9

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	102.5 PK			2.30 V	248	59.9	42.6
2	*5310.00	93.2 AV			2.30 V	248	50.6	42.6
3	5350.00	63.1 PK	74.0	-10.9	2.30 V	248	49.9	13.2
4	5350.00	53.4 AV	54.0	-0.6	2.30 V	248	40.2	13.2
5	10620.00	61.4 PK	74.0	-12.6	1.53 V	49	37.5	23.9
6	10620.00	50.6 AV	54.0	-3.4	1.53 V	49	26.7	23.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.

RF Mode	TX 802.11ac (VHT40)	Channel	CH 102 : 5510 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	59.4 PK	74.0	-14.6	2.51 H	303	45.8	13.6
2	5460.00	49.2 AV	54.0	-4.8	2.51 H	303	35.6	13.6
3	#5470.00	61.4 PK	68.2	-6.8	2.51 H	303	47.8	13.6
4	*5510.00	97.9 PK			2.51 H	303	54.7	43.2
5	*5510.00	89.4 AV			2.51 H	303	46.2	43.2
6	11020.00	61.8 PK	74.0	-12.2	1.84 H	195	37.1	24.7
7	11020.00	51.6 AV	54.0	-2.4	1.84 H	195	26.9	24.7

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.2 PK	74.0	-12.8	2.42 V	253	47.6	13.6
2	5460.00	50.9 AV	54.0	-3.1	2.42 V	253	37.3	13.6
3	#5470.00	67.8 PK	68.2	-0.4	2.42 V	253	54.2	13.6
4	*5510.00	104.7 PK			2.42 V	253	61.5	43.2
5	*5510.00	95.4 AV			2.42 V	253	52.2	43.2
6	11020.00	62.3 PK	74.0	-11.7	1.85 V	214	37.6	24.7
7	11020.00	52.1 AV	54.0	-1.9	1.85 V	214	27.4	24.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ac (VHT40)	Channel	CH 110 : 5550 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	101.1 PK			2.53 H	306	58.0	43.1
2	*5550.00	91.9 AV			2.53 H	306	48.8	43.1
3	11100.00	63.0 PK	74.0	-11.0	1.72 H	228	38.4	24.6
4	11100.00	52.5 AV	54.0	-1.5	1.72 H	228	27.9	24.6

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	106.6 PK			2.42 V	257	63.5	43.1
2	*5550.00	97.5 AV			2.42 V	257	54.4	43.1
3	11100.00	63.0 PK	74.0	-11.0	1.63 V	200	38.4	24.6
4	11100.00	52.8 AV	54.0	-1.2	1.63 V	200	28.2	24.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.

RF Mode	TX 802.11ac (VHT40)	Channel	CH 134 : 5670 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	100.8 PK			3.14 H	251	57.5	43.3
2	*5670.00	91.8 AV			3.14 H	251	48.5	43.3
3	#5725.00	60.4 PK	68.2	-7.8	2.51 H	314	46.6	13.8
4	11340.00	63.2 PK	74.0	-10.8	1.60 H	223	38.2	25.0
5	11340.00	52.7 AV	54.0	-1.3	1.60 H	223	27.7	25.0

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	106.6 PK			2.44 V	245	63.3	43.3
2	*5670.00	97.5 AV			2.44 V	245	54.2	43.3
3	#5725.00	61.8 PK	68.2	-6.4	2.44 V	245	48.0	13.8
4	11340.00	63.2 PK	74.0	-10.8	1.55 V	197	38.2	25.0
5	11340.00	52.6 AV	54.0	-1.4	1.55 V	197	27.6	25.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ac (VHT80)	Channel	CH 58 : 5290 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	91.5 PK			2.68 H	267	48.9	42.6
2	*5290.00	82.8 AV			2.68 H	267	40.2	42.6
3	5350.00	59.9 PK	74.0	-14.1	2.68 H	267	46.7	13.2
4	5350.00	51.5 AV	54.0	-2.5	2.68 H	267	38.3	13.2
5	#10580.00	61.0 PK	68.2	-7.2	1.71 H	212	37.4	23.6

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	96.2 PK			2.27 V	248	53.6	42.6
2	*5290.00	87.1 AV			2.27 V	248	44.5	42.6
3	5350.00	62.9 PK	74.0	-11.1	2.27 V	248	49.7	13.2
4	5350.00	53.6 AV	54.0	-0.4	2.27 V	248	40.4	13.2
5	#10580.00	61.7 PK	68.2	-6.5	1.63 V	46	38.1	23.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ac (VHT80)	Channel	CH 106 : 5530 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	60.4 PK	74.0	-13.6	2.48 H	304	46.8	13.6
2	5460.00	49.5 AV	54.0	-4.5	2.48 H	304	35.9	13.6
3	#5470.00	63.3 PK	68.2	-4.9	2.48 H	304	49.7	13.6
4	*5530.00	93.3 PK			2.48 H	304	50.2	43.1
5	*5530.00	84.5 AV			2.48 H	304	41.4	43.1
6	11060.00	62.2 PK	74.0	-11.8	1.59 H	237	37.6	24.6
7	11060.00	51.8 AV	54.0	-2.2	1.59 H	237	27.2	24.6

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	59.7 PK	74.0	-14.3	2.44 V	256	46.1	13.6
2	5460.00	49.1 AV	54.0	-4.9	2.44 V	256	35.5	13.6
3	#5470.00	67.9 PK	68.2	-0.3	2.44 V	256	54.3	13.6
4	*5530.00	99.7 PK			2.44 V	256	56.6	43.1
5	*5530.00	90.2 AV			2.44 V	256	47.1	43.1
6	11060.00	62.0 PK	74.0	-12.0	1.56 V	219	37.4	24.6
7	11060.00	51.7 AV	54.0	-2.3	1.56 V	219	27.1	24.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ac (VHT80)	Channel	CH 122 : 5610 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5610.00	100.4 PK			2.45 H	312	57.2	43.2
2	*5610.00	91.0 AV			2.45 H	312	47.8	43.2
3	#5725.00	60.1 PK	68.2	-8.1	2.45 H	312	46.3	13.8
4	11220.00	63.0 PK	74.0	-11.0	1.68 H	210	38.4	24.6
5	11220.00	52.4 AV	54.0	-1.6	1.68 H	210	27.8	24.6

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5610.00	106.1 PK			2.49 V	245	62.9	43.2
2	*5610.00	96.5 AV			2.49 V	245	53.3	43.2
3	#5725.00	63.4 PK	68.2	-4.8	2.49 V	245	49.6	13.8
4	11220.00	63.0 PK	74.0	-11.0	1.43 V	182	38.4	24.6
5	11220.00	52.4 AV	54.0	-1.6	1.43 V	182	27.8	24.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

Below 1GHz Worst-Case

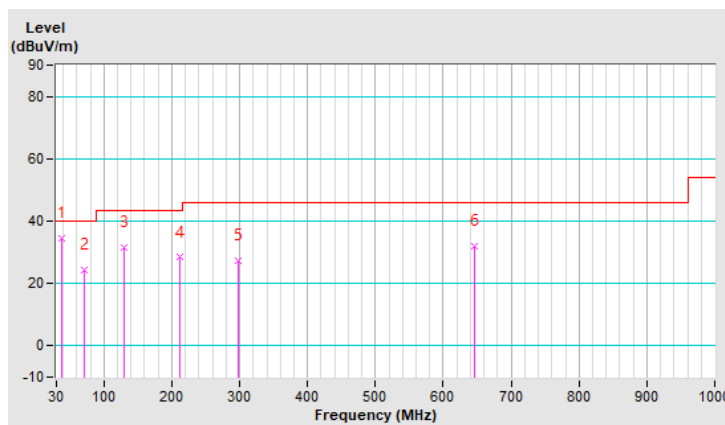
802.11ax (HE20)

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	A

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	38.43	34.3 QP	40.0	-5.7	1.51 H	215	44.1	-9.8
2	70.77	24.2 QP	40.0	-15.8	1.00 H	273	35.2	-11.0
3	129.81	31.7 QP	43.5	-11.8	2.00 H	250	41.6	-9.9
4	211.35	28.3 QP	43.5	-15.2	1.00 H	225	39.2	-10.9
5	297.10	27.4 QP	46.0	-18.6	1.00 H	163	34.2	-6.8
6	645.74	31.9 QP	46.0	-14.1	2.00 H	178	30.9	1.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

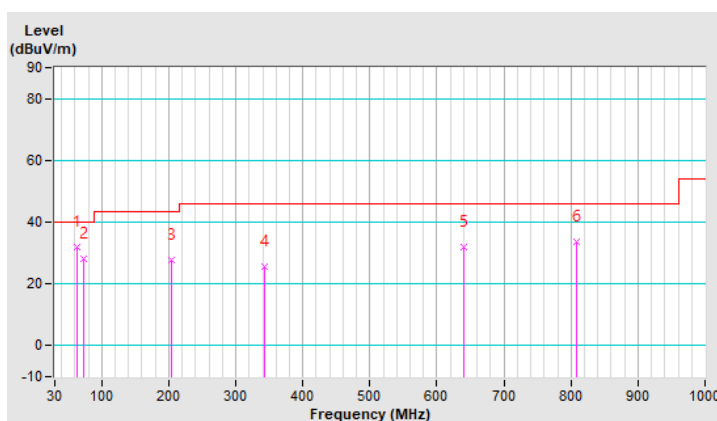


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	A

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	62.33	31.9 QP	40.0	-8.1	1.00 V	7	41.5	-9.6
2	72.17	28.0 QP	40.0	-12.0	1.49 V	347	39.4	-11.4
3	204.32	27.6 QP	43.5	-15.9	1.49 V	15	38.8	-11.2
4	342.09	25.7 QP	46.0	-20.3	1.49 V	235	31.5	-5.8
5	640.12	32.0 QP	46.0	-14.0	2.00 V	6	31.1	0.9
6	808.81	33.6 QP	46.0	-12.4	1.49 V	171	29.5	4.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

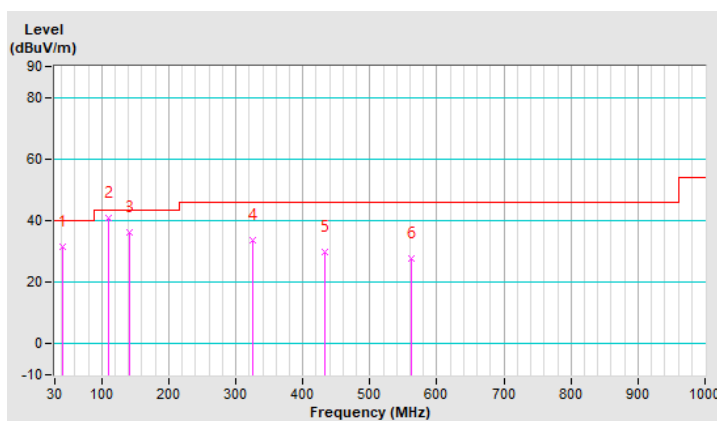


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	B

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	41.25	31.4 QP	40.0	-8.6	2.00 H	63	40.7	-9.3
2	110.13	41.0 QP	43.5	-2.5	1.50 H	250	53.0	-12.0
3	141.06	36.1 QP	43.5	-7.4	1.00 H	21	45.1	-9.0
4	325.22	33.8 QP	46.0	-12.2	2.00 H	71	39.7	-5.9
5	433.46	29.8 QP	46.0	-16.2	1.00 H	349	33.3	-3.5
6	561.39	27.6 QP	46.0	-18.4	1.00 H	277	28.6	-1.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

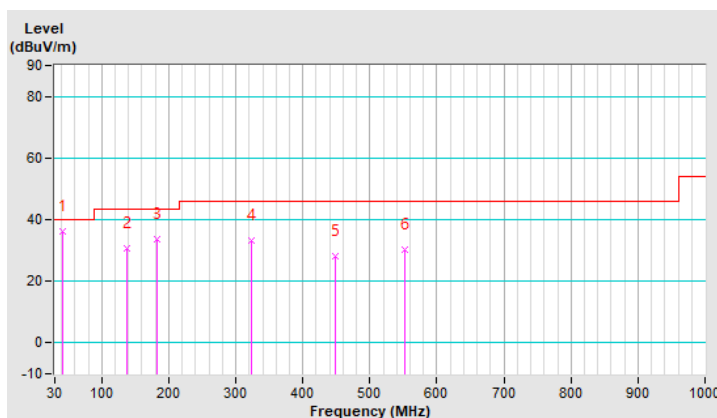


CHANNEL	TX Channel 100	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	B

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	41.25	36.0 QP	40.0	-4.0	1.50 V	14	45.3	-9.3
2	138.25	30.6 QP	43.5	-12.9	1.00 V	14	39.7	-9.1
3	183.23	33.7 QP	43.5	-9.8	1.50 V	38	43.9	-10.2
4	323.81	33.2 QP	46.0	-12.8	1.00 V	14	39.2	-6.0
5	448.93	28.3 QP	46.0	-17.7	1.50 V	297	31.7	-3.4
6	552.96	30.1 QP	46.0	-15.9	2.00 V	105	31.3	-1.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



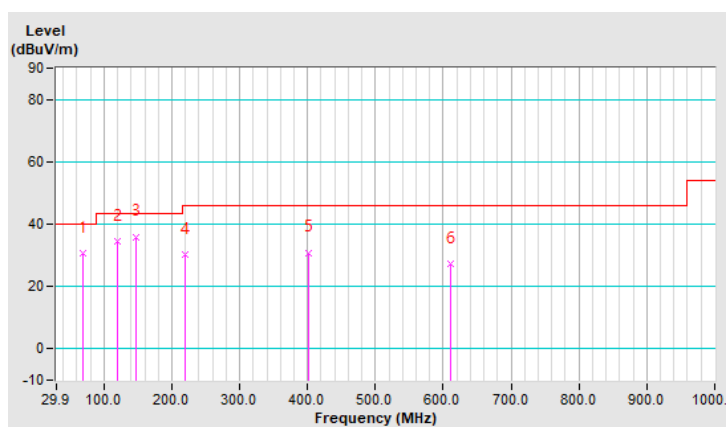
802.11ac (VHT20)

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	C

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	68.71	30.5 QP	40.0	-9.5	1.01 H	132	41.3	-10.8
2	120.13	34.4 QP	43.5	-9.1	2.00 H	292	45.4	-11.0
3	146.32	36.0 QP	43.5	-7.5	1.50 H	33	44.8	-8.8
4	220.06	30.4 QP	46.0	-15.6	1.01 H	259	41.8	-11.4
5	401.49	30.9 QP	46.0	-15.1	2.00 H	201	36.2	-5.3
6	610.08	27.1 QP	46.0	-18.9	2.00 H	14	27.9	-0.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

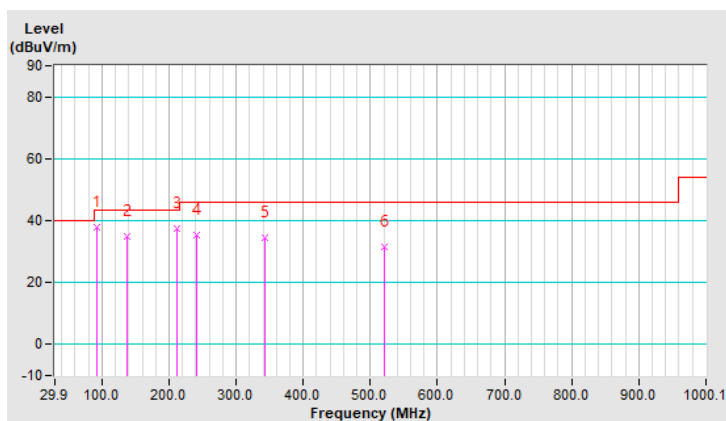


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	C

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	92.96	38.0 QP	43.5	-5.5	1.00 V	312	52.1	-14.1
2	137.59	34.9 QP	43.5	-8.6	1.00 V	9	44.2	-9.3
3	211.33	37.3 QP	43.5	-6.2	1.00 V	313	48.7	-11.4
4	241.40	35.5 QP	46.0	-10.5	1.00 V	313	45.3	-9.8
5	342.30	34.4 QP	46.0	-11.6	1.00 V	9	40.7	-6.3
6	521.79	31.6 QP	46.0	-14.4	1.00 V	9	34.6	-3.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

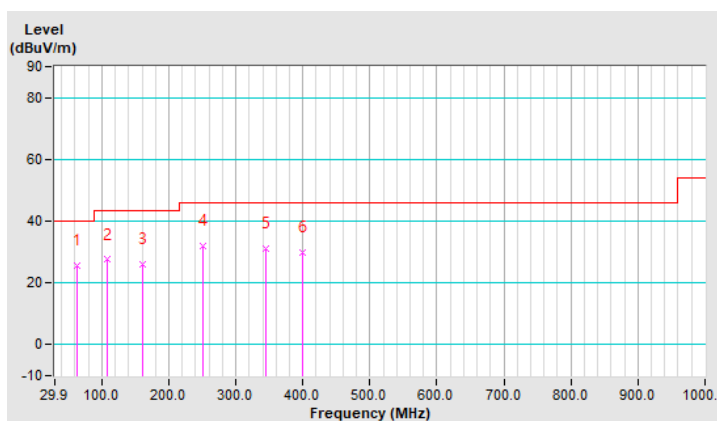


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	D

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	62.89	25.5 QP	40.0	-14.5	1.99 H	140	35.0	-9.5
2	107.52	27.5 QP	43.5	-16.0	1.50 H	346	39.7	-12.2
3	161.85	26.0 QP	43.5	-17.5	1.50 H	246	34.6	-8.6
4	250.14	32.0 QP	46.0	-14.0	1.50 H	301	41.3	-9.3
5	344.24	31.1 QP	46.0	-14.9	1.99 H	190	37.4	-6.3
6	399.55	29.8 QP	46.0	-16.2	1.99 H	19	35.2	-5.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

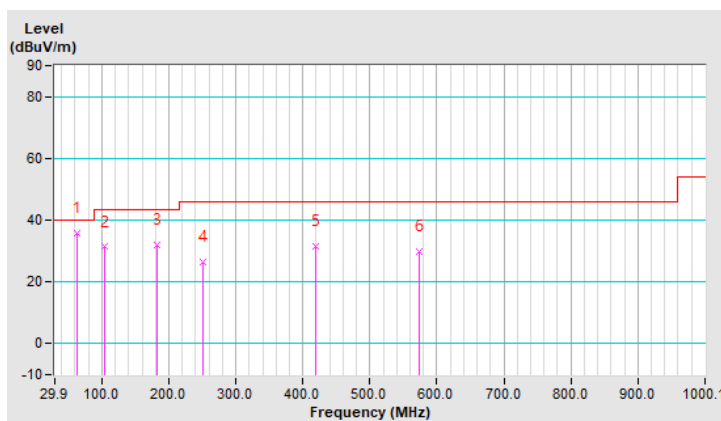


CHANNEL	TX Channel 52	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	D

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	62.89	35.7 QP	40.0	-4.3	1.01 V	217	45.2	-9.5
2	104.61	31.3 QP	43.5	-12.2	1.01 V	286	43.9	-12.6
3	183.19	31.9 QP	43.5	-11.6	1.01 V	274	42.4	-10.5
4	250.14	26.5 QP	46.0	-19.5	2.00 V	166	35.8	-9.3
5	419.92	31.7 QP	46.0	-14.3	1.01 V	183	36.6	-4.9
6	574.18	29.8 QP	46.0	-16.2	1.01 V	305	31.8	-2.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Note: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2.2 Test Instruments

Tested date: Aug. 31, 2020~ Jun. 06, 2021

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Dec. 31, 2019	Dec. 30, 2020
		100613	Dec. 04, 2020	Dec. 03, 2021
RF signal cable Woken	5D-FB	Cable-cond1-01	Sep. 04, 2020	Sep. 03, 2021
LISN/AMN ROHDE & SCHWARZ (EUT)	ENV216	101826	Feb. 20, 2020	Feb. 19, 2021
			Feb. 25, 2021	Feb. 24, 2022
LISN/AMN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Aug. 28, 2020	Aug. 27, 2021
Software ADT	BV ADT_Cond_ V7.3.7.4	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in HwaYa Shielded Room 1 (Conduction 1).

3. The VCCI Site Registration No. is C-12040.

4.2.3 Test Procedures

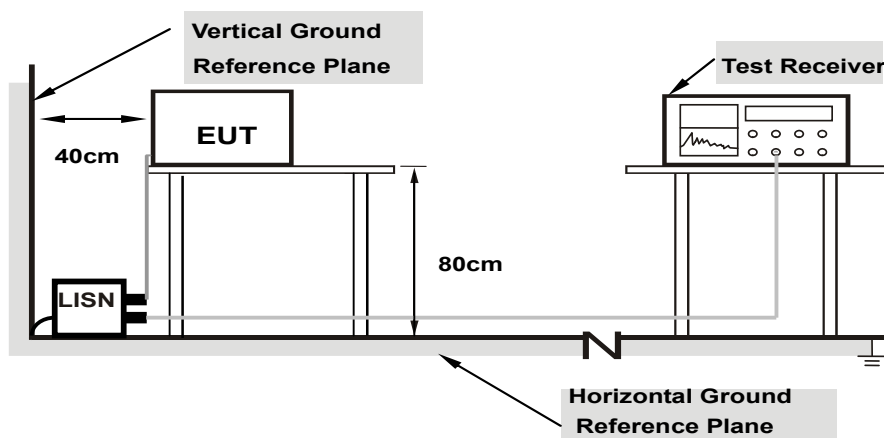
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

Note: The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.2.6 EUT Operating Conditions

Same as 4.1.6.

4.2.7 Test Results

Worst-case data:

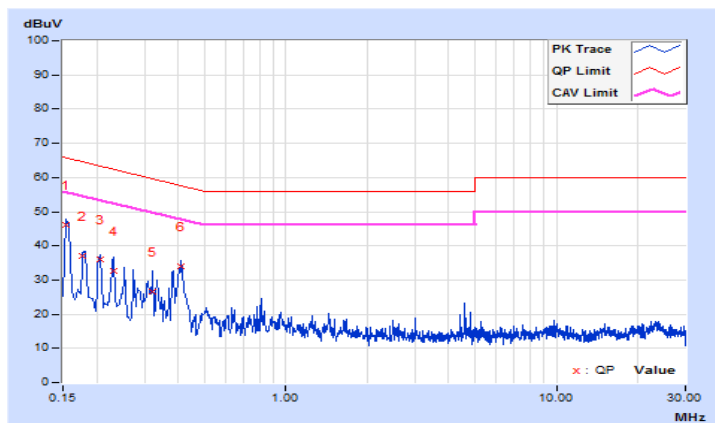
802.11ax (HE20)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	9.82	36.47	21.18	46.29	31.00	65.78	55.78	-19.49	-24.78
2	0.17801	9.84	27.25	17.04	37.09	26.88	64.58	54.58	-27.49	-27.70
3	0.20600	9.85	26.04	12.94	35.89	22.79	63.37	53.37	-27.48	-30.58
4	0.22985	9.85	22.88	11.00	32.73	20.85	62.46	52.46	-29.73	-31.61
5	0.32200	9.86	16.77	9.25	26.63	19.11	59.66	49.66	-33.03	-30.55
6	0.41000	9.87	24.02	19.20	33.89	29.07	57.65	47.65	-23.76	-18.58

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

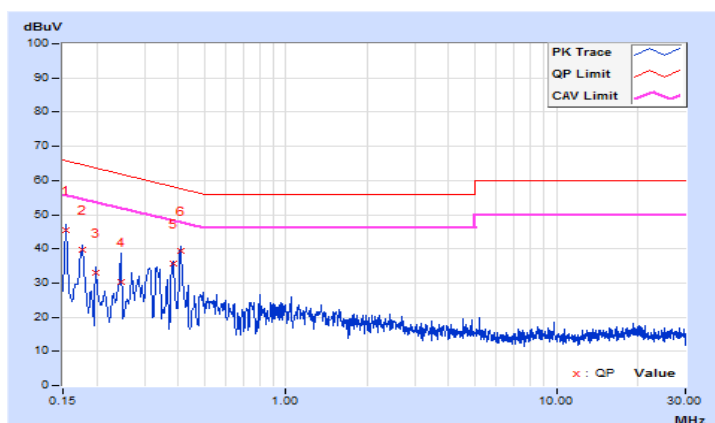


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	9.84	35.47	20.22	45.31	30.06	65.78	55.78	-20.47	-25.72
2	0.17800	9.85	29.97	16.62	39.82	26.47	64.58	54.58	-24.76	-28.11
3	0.19800	9.85	23.16	12.82	33.01	22.67	63.69	53.69	-30.68	-31.02
4	0.24600	9.86	20.47	4.03	30.33	13.89	61.89	51.89	-31.56	-38.00
5	0.38600	9.90	25.64	23.78	35.54	33.68	58.15	48.15	-22.61	-14.47
6	0.41000	9.90	29.35	25.27	39.25	35.17	57.65	47.65	-18.40	-12.48

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

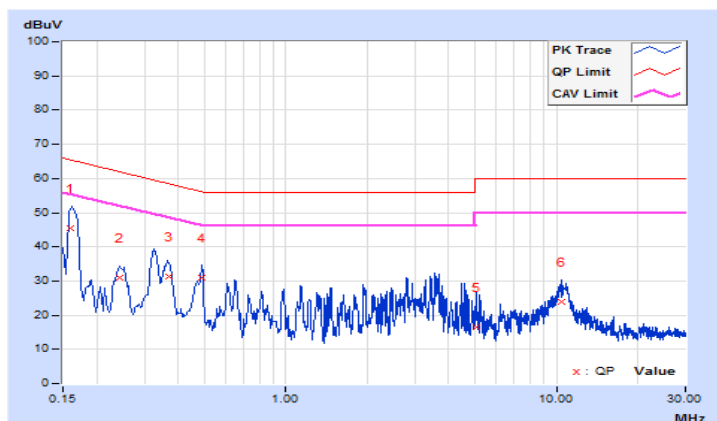


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15895	9.65	35.82	14.38	45.47	24.03	65.52
2	0.24164	9.66	21.38	7.86	31.04	17.52	62.04	52.04	-31.00	-34.52
3	0.37000	9.66	21.64	8.36	31.30	18.02	58.50	48.50	-27.20	-30.48
4	0.48700	9.66	21.16	9.60	30.82	19.26	56.22	46.22	-25.40	-26.96
5	5.03400	9.75	6.90	1.55	16.65	11.30	60.00	50.00	-43.35	-38.70
6	10.39800	9.79	14.00	2.99	23.79	12.78	60.00	50.00	-36.21	-37.22

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

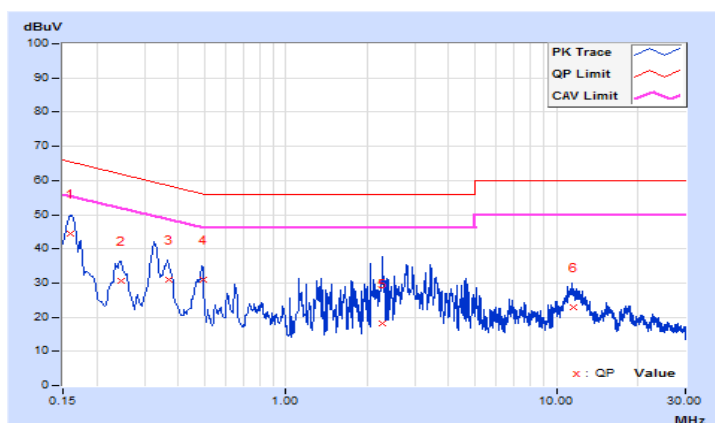


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15895	9.68	34.74	16.15	44.42	25.83	65.52
2	0.24485	9.68	20.96	8.51	30.64	18.19	61.93	51.93	-31.29	-33.74
3	0.37000	9.68	21.34	7.96	31.02	17.64	58.50	48.50	-27.48	-30.86
4	0.49400	9.68	21.22	9.52	30.90	19.20	56.10	46.10	-25.20	-26.90
5	2.26847	9.74	8.51	1.59	18.25	11.33	56.00	46.00	-37.75	-34.67
6	11.52600	9.86	13.13	2.37	22.99	12.23	60.00	50.00	-37.01	-37.77

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



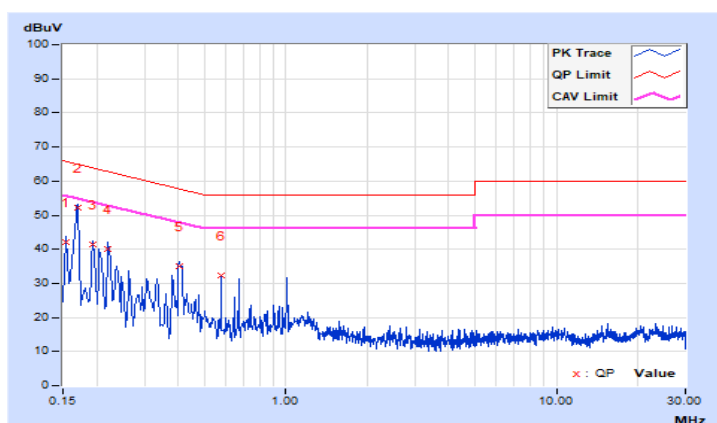
802.11ac (VHT20)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	C		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.76	32.24	16.88	42.00	26.64	65.79	55.79	-23.79	-29.15
2	0.16955	9.76	42.55	21.59	52.31	31.35	64.98	54.98	-12.67	-23.63
3	0.19301	9.77	31.75	15.39	41.52	25.16	63.91	53.91	-22.39	-28.75
4	0.22038	9.78	30.16	9.55	39.94	19.33	62.80	52.80	-22.86	-33.47
5	0.40415	9.83	25.31	20.82	35.14	30.65	57.77	47.77	-22.63	-17.12
6	0.57619	9.85	22.32	11.21	32.17	21.06	56.00	46.00	-23.83	-24.94

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

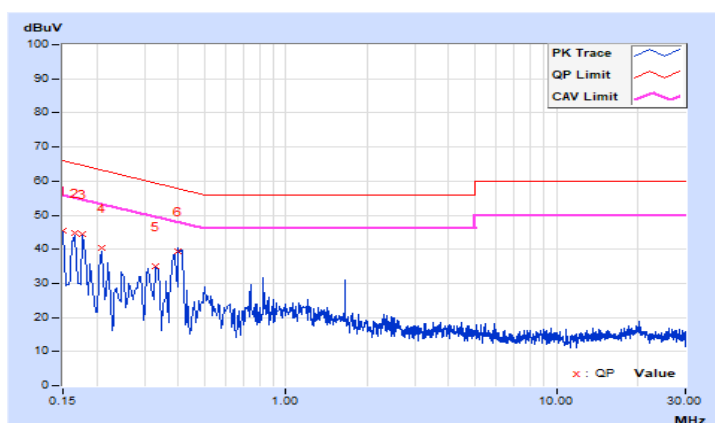


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	C		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15000	9.80	35.78	22.37	45.58	32.17	66.00
2	0.16564	9.81	34.82	20.20	44.63	30.01	65.18	55.18	-20.55	-25.17
3	0.17737	9.82	34.54	19.14	44.36	28.96	64.61	54.61	-20.25	-25.65
4	0.20865	9.83	30.66	14.79	40.49	24.62	63.26	53.26	-22.77	-28.64
5	0.32986	9.88	25.15	16.50	35.03	26.38	59.45	49.45	-24.42	-23.07
6	0.40024	9.90	29.49	20.51	39.39	30.41	57.85	47.85	-18.46	-17.44

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

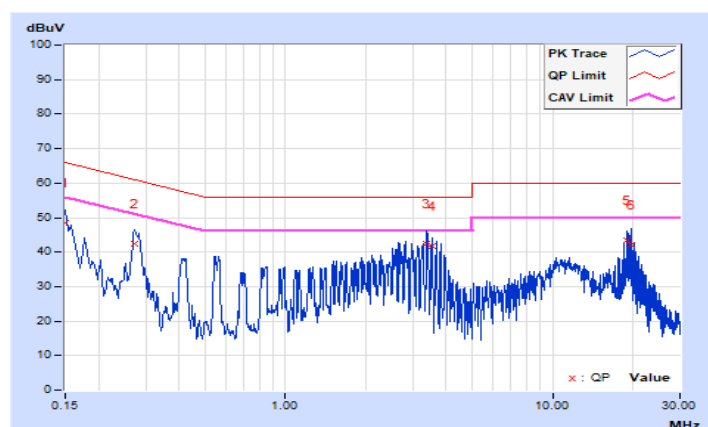


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	D		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15000	9.67	38.74	17.48	48.41	27.15	66.00
2	0.27120	9.68	32.64	16.80	42.32	26.48	61.08	51.08	-18.76	-24.60
3	3.39139	9.74	32.52	22.35	42.26	32.09	56.00	46.00	-13.74	-13.91
4	3.53071	9.75	32.15	16.62	41.90	26.37	56.00	46.00	-14.10	-19.63
5	18.98447	9.76	33.81	31.52	43.57	41.28	60.00	50.00	-16.43	-8.72
6	19.77429	9.76	32.33	30.40	42.09	40.16	60.00	50.00	-17.91	-9.84

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

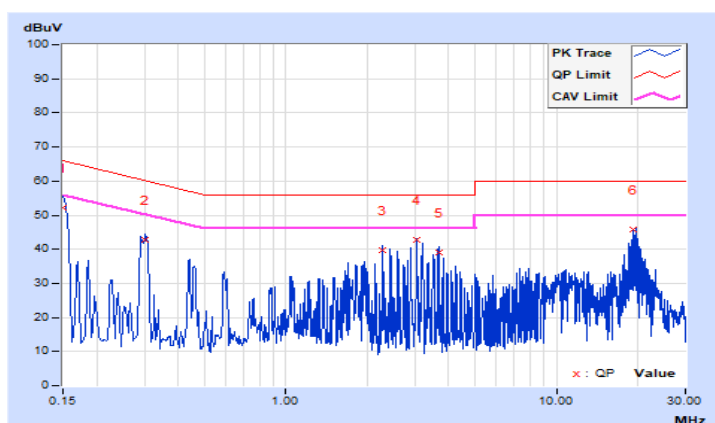


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	D		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15000	9.75	42.40	31.84	52.15	41.59	66.00
2	0.30249	9.75	32.89	12.79	42.64	22.54	60.17	50.17	-17.53	-27.63
3	2.28095	9.80	30.02	17.47	39.82	27.27	56.00	46.00	-16.18	-18.73
4	3.04731	9.81	32.98	15.85	42.79	25.66	56.00	46.00	-13.21	-20.34
5	3.66900	9.82	29.26	17.10	39.08	26.92	56.00	46.00	-16.92	-19.08
6	19.18388	9.93	35.82	23.07	45.75	33.00	60.00	50.00	-14.25	-17.00

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



4.3 Transmit Power Measurement

4.3.1 Limits of Transmit Power Measurement

Operation Band	EUT Category	Limit
U-NII-1	Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p \leq 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
	Fixed point-to-point Access Point	1 Watt (30 dBm)
	Indoor Access Point	1 Watt (30 dBm)
	Mobile and Portable client device	250mW (24 dBm)
U-NII-2A	√	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	√	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3		1 Watt (30 dBm)

*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

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

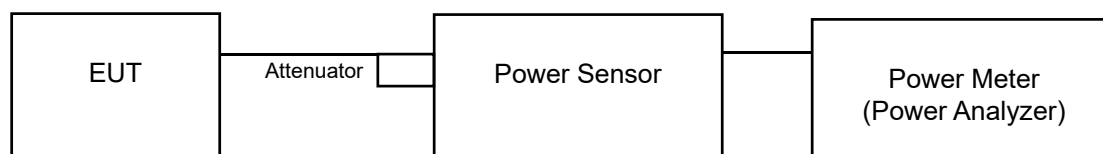
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

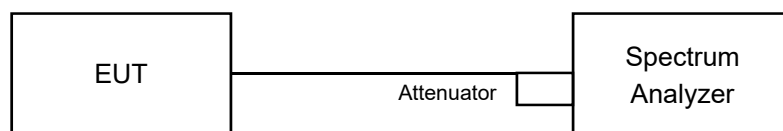
For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

4.3.2 Test Setup

For Power Output



For 26dB Bandwidth



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

For Average Power Measurement

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

For 26dB Bandwidth

- a. Set RBW = approximately 1% of the emission bandwidth.
- b. Set the VBW > RBW.
- c. Detector = Peak.
- d. Trace mode = max hold.
- e. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 Test Result

Power Output:

Mode A

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	13.52	13.50	13.72	13.48	90.713	19.58	23.89	Pass
60	5300	13.49	13.35	13.52	13.42	88.432	19.47	23.89	Pass
64	5320	13.51	13.48	13.43	13.37	88.479	19.47	23.86	Pass
100	5500	14.10	13.43	14.01	14.02	98.145	19.92	23.88	Pass
116	5580	13.52	13.56	14.00	14.03	95.601	19.80	23.88	Pass
140	5700	13.41	13.32	13.48	13.62	88.705	19.48	23.86	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(19.49) = 23.89 < 24\text{dBm}$
2. $11\text{dBm} + 10\log(19.46) = 23.89 < 24\text{dBm}$
3. $11\text{dBm} + 10\log(19.56) = 23.91 < 24\text{dBm}$
4. $11\text{dBm} + 10\log(19.71) = 23.94 < 24\text{dBm}$
5. $11\text{dBm} + 10\log(19.52) = 23.90 < 24\text{dBm}$
6. $11\text{dBm} + 10\log(19.48) = 23.89 < 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(19.48) = 23.89 < 24\text{dBm}$
2. $11\text{dBm} + 10\log(19.54) = 23.90 < 24\text{dBm}$
3. $11\text{dBm} + 10\log(19.50) = 23.90 < 24\text{dBm}$
4. $11\text{dBm} + 10\log(19.94) = 23.99 < 24\text{dBm}$
5. $11\text{dBm} + 10\log(19.45) = 23.88 < 24\text{dBm}$
6. $11\text{dBm} + 10\log(19.34) = 23.86 < 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(19.46) = 23.89 < 24\text{dBm}$
2. $11\text{dBm} + 10\log(19.59) = 23.92 < 24\text{dBm}$
3. $11\text{dBm} + 10\log(19.58) = 23.91 < 24\text{dBm}$
4. $11\text{dBm} + 10\log(19.45) = 23.88 < 24\text{dBm}$
5. $11\text{dBm} + 10\log(19.48) = 23.89 < 24\text{dBm}$
6. $11\text{dBm} + 10\log(19.67) = 23.93 < 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(19.61) = 23.92 < 24\text{dBm}$
2. $11\text{dBm} + 10\log(19.67) = 23.93 < 24\text{dBm}$
3. $11\text{dBm} + 10\log(19.35) = 23.86 < 24\text{dBm}$
4. $11\text{dBm} + 10\log(19.53) = 23.90 < 24\text{dBm}$
5. $11\text{dBm} + 10\log(19.63) = 23.92 < 24\text{dBm}$
6. $11\text{dBm} + 10\log(19.51) = 23.90 < 24\text{dBm}$

802.11n (HT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	13.95	13.92	14.03	13.94	99.559	19.98	24.00	Pass
60	5300	13.91	13.78	14.02	13.91	98.320	19.93	24.00	Pass
64	5320	14.03	14.01	13.89	13.95	99.792	19.99	24.00	Pass
100	5500	14.52	14.11	14.48	14.36	109.421	20.39	24.00	Pass
116	5580	14.61	14.18	14.70	14.58	113.309	20.54	24.00	Pass
140	5700	14.16	14.36	14.48	14.06	106.874	20.29	24.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(21.27) = 24.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.38) = 24.30 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.47) = 24.31 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.33) = 24.28 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.51) = 24.32 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.33) = 24.28 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(21.26) = 24.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.52) = 24.32 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.29) = 24.28 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.35) = 24.29 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.46) = 24.31 > 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.65) = 24.35 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.42) = 24.30 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.11) = 24.24 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.36) = 24.29 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.24) = 24.27 > 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(21.39) = 24.30 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.24) = 24.27 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.71) = 24.36 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.42) = 24.30 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.56) = 24.33 > 24\text{dBm}$

802.11n (HT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	16.73	16.62	16.86	16.68	188.105	22.74	24.00	Pass
62	5310	16.42	16.56	16.68	16.41	179.454	22.54	24.00	Pass
102	5510	17.34	16.88	17.34	17.03	207.619	23.17	24.00	Pass
110	5550	16.85	16.63	17.00	17.06	195.378	22.91	24.00	Pass
134	5670	17.20	17.06	17.26	17.05	207.207	23.16	24.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(42.14) = 27.24 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.35) = 27.26 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.28) = 27.26 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.23) = 27.25 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.35) = 27.26 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(42.03) = 27.23 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.03) = 27.23 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(41.97) = 27.22 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.38) = 27.27 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.09) = 27.24 > 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(42.11) = 27.24 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.23) = 27.25 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.45) = 27.27 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(41.90) = 27.22 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.25) = 27.25 > 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(42.44) = 27.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.46) = 27.27 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.65) = 27.29 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.28) = 27.26 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.40) = 27.27 > 24\text{dBm}$

802.11ac (VHT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	14.02	13.96	14.16	14.02	101.420	20.06	24.00	Pass
60	5300	13.98	13.85	14.08	13.96	99.744	19.99	24.00	Pass
64	5320	14.08	14.09	13.95	14.03	101.355	20.06	24.00	Pass
100	5500	14.53	14.13	14.50	14.38	109.861	20.41	24.00	Pass
116	5580	14.63	14.20	14.71	14.61	113.830	20.56	24.00	Pass
140	5700	14.18	14.38	14.50	14.08	107.367	20.31	24.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(21.27) = 24.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.38) = 24.30 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.47) = 24.31 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.33) = 24.28 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.51) = 24.32 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.33) = 24.28 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(21.26) = 24.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.52) = 24.32 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.29) = 24.28 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.35) = 24.29 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.46) = 24.31 > 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.65) = 24.35 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.42) = 24.30 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.11) = 24.24 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.36) = 24.29 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.24) = 24.27 > 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(21.39) = 24.30 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.24) = 24.27 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.71) = 24.36 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.42) = 24.30 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.56) = 24.33 > 24\text{dBm}$

802.11ac (VHT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	16.78	16.68	16.94	16.71	190.514	22.80	24.00	Pass
62	5310	16.48	16.62	16.72	16.45	181.529	22.59	24.00	Pass
102	5510	17.35	16.89	17.36	17.06	208.456	23.19	24.00	Pass
110	5550	16.88	16.66	17.01	17.08	196.382	22.93	24.00	Pass
134	5670	17.21	17.08	17.28	17.08	208.159	23.18	24.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(42.14) = 27.24 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.35) = 27.26 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.28) = 27.26 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.23) = 27.25 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.35) = 27.26 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(42.03) = 27.23 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.03) = 27.23 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(41.97) = 27.22 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.38) = 27.27 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.09) = 27.24 > 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(42.11) = 27.24 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.23) = 27.25 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.45) = 27.27 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(41.90) = 27.22 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.25) = 27.25 > 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(42.44) = 27.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.46) = 27.27 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.65) = 27.29 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.28) = 27.26 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.40) = 27.27 > 24\text{dBm}$

802.11ac (VHT80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	17.56	17.45	14.56	14.48	169.237	22.28	24.00	Pass
106	5530	17.69	17.51	17.77	17.35	229.279	23.60	24.00	Pass
122	5610	17.75	17.25	17.94	18.00	237.980	23.77	24.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(82.60) = 30.16 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(82.83) = 30.18 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.55) = 30.16 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(82.50) = 30.16 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(83.19) = 30.20 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.96) = 30.18 > 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(82.86) = 30.18 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(82.27) = 30.15 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.53) = 30.16 > 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(82.73) = 30.17 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(82.55) = 30.16 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.73) = 30.17 > 24\text{dBm}$

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	14.11	14.01	14.23	14.07	102.952	20.13	24.00	Pass
60	5300	14.01	13.93	14.16	14.03	101.249	20.05	24.00	Pass
64	5320	14.12	14.15	14.01	14.13	102.883	20.12	24.00	Pass
100	5500	14.56	14.16	14.52	14.40	110.494	20.43	24.00	Pass
116	5580	14.65	14.21	14.73	14.63	114.294	20.58	24.00	Pass
140	5700	14.21	14.40	14.52	14.10	107.923	20.33	24.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(21.27) = 24.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.38) = 24.30 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.47) = 24.31 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.33) = 24.28 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.51) = 24.32 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.33) = 24.28 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(21.26) = 24.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.52) = 24.32 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.29) = 24.28 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.35) = 24.29 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.46) = 24.31 > 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.65) = 24.35 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.42) = 24.30 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.11) = 24.24 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.36) = 24.29 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.24) = 24.27 > 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(21.39) = 24.30 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.24) = 24.27 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.71) = 24.36 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.42) = 24.30 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.56) = 24.33 > 24\text{dBm}$

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	16.82	16.74	17.00	16.78	193.052	22.86	24.00	Pass
62	5310	16.52	16.73	16.78	16.51	184.387	22.66	24.00	Pass
102	5510	17.37	16.91	17.38	17.09	209.536	23.21	24.00	Pass
110	5550	16.90	16.68	17.03	17.10	197.289	22.95	24.00	Pass
134	5670	17.23	17.10	17.30	17.11	209.238	23.21	24.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(42.14) = 27.24 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.35) = 27.26 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.28) = 27.26 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.23) = 27.25 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.35) = 27.26 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(42.03) = 27.23 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.03) = 27.23 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(41.97) = 27.22 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.38) = 27.27 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.09) = 27.24 > 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(42.11) = 27.24 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.23) = 27.25 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.45) = 27.27 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(41.90) = 27.22 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.25) = 27.25 > 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(42.44) = 27.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.46) = 27.27 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.65) = 27.29 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.28) = 27.26 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.40) = 27.27 > 24\text{dBm}$

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	17.62	17.49	17.64	17.52	228.485	23.59	24.00	Pass
106	5530	17.82	17.64	17.92	17.42	235.762	23.72	24.00	Pass
122	5610	17.83	17.36	18.01	18.11	243.079	23.86	24.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(82.60) = 30.16 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(82.83) = 30.18 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.55) = 30.16 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(82.50) = 30.16 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(83.19) = 30.20 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.96) = 30.18 > 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(82.86) = 30.18 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(82.27) = 30.15 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.53) = 30.16 > 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(82.73) = 30.17 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(82.55) = 30.16 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.73) = 30.17 > 24\text{dBm}$

Beamforming Mode

802.11n (HT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	13.58	13.52	13.78	13.56	91.871	19.63	20.07	Pass
60	5300	13.98	13.90	14.11	14.00	100.433	20.02	20.07	Pass
64	5320	13.62	13.67	13.56	13.52	91.485	19.61	20.07	Pass
100	5500	13.39	12.96	13.35	13.31	84.653	19.28	20.07	Pass
116	5580	13.53	13.12	13.45	13.48	87.469	19.42	20.07	Pass
140	5700	13.13	13.25	13.39	12.96	83.291	19.21	20.07	Pass

*For U-NII-2A/ For U-NII-2C: Directional Gain = $10 \log\left[\frac{10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20}}{4}\right] = 9.93\text{dBi} > 6\text{dBi}$, so the limit shall be reduced to $24 - (9.93 - 6) = 20.07\text{dBm}$.

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(21.27) = 24.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.38) = 24.30 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.47) = 24.31 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.33) = 24.28 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.51) = 24.32 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.33) = 24.28 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(21.26) = 24.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.52) = 24.32 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.29) = 24.28 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.35) = 24.29 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.46) = 24.31 > 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.65) = 24.35 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.42) = 24.30 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.11) = 24.24 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.36) = 24.29 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.24) = 24.27 > 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(21.39) = 24.30 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.24) = 24.27 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.71) = 24.36 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.42) = 24.30 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.56) = 24.33 > 24\text{dBm}$

802.11n (HT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	13.82	13.76	13.96	13.82	96.855	19.86	20.07	Pass
62	5310	13.54	13.71	13.72	13.49	91.977	19.64	20.07	Pass
102	5510	13.74	13.31	13.76	13.52	91.347	19.61	20.07	Pass
110	5550	13.76	13.53	13.89	13.92	95.462	19.80	20.07	Pass
134	5670	13.68	13.51	13.72	13.48	91.608	19.62	20.07	Pass

*For U-NII-2A/ For U-NII-2C: Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 9.93\text{dBi} > 6\text{dBi}$, so the limit shall be reduced to $24 - (9.93 - 6) = 20.07\text{dBm}$.

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(42.14) = 27.24 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.35) = 27.26 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.28) = 27.26 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.23) = 27.25 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.35) = 27.26 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(42.03) = 27.23 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.03) = 27.23 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(41.97) = 27.22 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.38) = 27.27 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.09) = 27.24 > 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(42.11) = 27.24 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.23) = 27.25 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.45) = 27.27 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(41.90) = 27.22 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.25) = 27.25 > 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(42.44) = 27.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.46) = 27.27 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.65) = 27.29 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.28) = 27.26 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.40) = 27.27 > 24\text{dBm}$

802.11ac (VHT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	13.62	13.59	13.82	13.63	93.037	19.69	20.07	Pass
60	5300	14.00	13.91	14.13	14.01	100.781	20.03	20.07	Pass
64	5320	13.68	13.71	13.61	13.58	92.596	19.67	20.07	Pass
100	5500	13.45	13.04	13.42	13.36	85.924	19.34	20.07	Pass
116	5580	13.62	13.18	13.52	13.56	89.001	19.49	20.07	Pass
140	5700	13.18	13.32	13.44	13.03	84.446	19.27	20.07	Pass

*For U-NII-2A/ For U-NII-2C: Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 9.93\text{dBi} > 6\text{dBi}$, so the limit shall be reduced to $24 - (9.93 - 6) = 20.07\text{dBm}$.

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(21.27) = 24.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.38) = 24.30 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.47) = 24.31 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.33) = 24.28 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.51) = 24.32 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.33) = 24.28 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(21.26) = 24.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.52) = 24.32 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.29) = 24.28 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.35) = 24.29 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.46) = 24.31 > 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.65) = 24.35 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.42) = 24.30 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.11) = 24.24 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.36) = 24.29 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.24) = 24.27 > 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(21.39) = 24.30 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.24) = 24.27 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.71) = 24.36 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.42) = 24.30 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.56) = 24.33 > 24\text{dBm}$

802.11ac (VHT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	13.89	13.81	14.03	13.86	98.149	19.92	20.07	Pass
62	5310	13.61	13.75	13.79	13.56	93.307	19.70	20.07	Pass
102	5510	13.81	13.35	13.86	13.57	92.744	19.67	20.07	Pass
110	5550	13.81	13.61	13.95	13.98	96.840	19.86	20.07	Pass
134	5670	13.74	13.55	13.79	13.52	92.729	19.67	20.07	Pass

*For U-NII-2A/ For U-NII-2C: Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 9.93\text{dBi} > 6\text{dBi}$, so the limit shall be reduced to $24 - (9.93 - 6) = 20.07\text{dBm}$.

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(42.14) = 27.24 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.35) = 27.26 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.28) = 27.26 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.23) = 27.25 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.35) = 27.26 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(42.03) = 27.23 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.03) = 27.23 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(41.97) = 27.22 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.38) = 27.27 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.09) = 27.24 > 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(42.11) = 27.24 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.23) = 27.25 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.45) = 27.27 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(41.90) = 27.22 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.25) = 27.25 > 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(42.44) = 27.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.46) = 27.27 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.65) = 27.29 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.28) = 27.26 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.40) = 27.27 > 24\text{dBm}$

802.11ac (VHT80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	13.71	13.56	13.72	13.62	92.76	19.67	20.07	Pass
106	5530	13.75	13.54	13.91	13.46	93.094	19.69	20.07	Pass
122	5610	13.76	13.35	13.91	14.01	95.176	19.79	20.07	Pass

*For U-NII-2A/ For U-NII-2C: Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 9.93\text{dBi} > 6\text{dBi}$, so the limit shall be reduced to $24 - (9.93 - 6) = 20.07\text{dBm}$.

For U-NII-3: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 9.93\text{dBi} > 6\text{dBi}$, so the limit shall be reduced to $30 - (9.93 - 6) = 26.07\text{dBm}$.

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(82.60) = 30.16 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(82.83) = 30.18 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.55) = 30.16 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(82.50) = 30.16 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(83.19) = 30.20 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.96) = 30.18 > 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(82.86) = 30.18 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(82.27) = 30.15 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.53) = 30.16 > 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(82.73) = 30.17 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(82.55) = 30.16 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.73) = 30.17 > 24\text{dBm}$

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	13.69	13.65	13.89	13.67	94.334	19.75	20.07	Pass
60	5300	14.01	13.93	14.16	14.03	101.249	20.05	20.07	Pass
64	5320	13.72	13.75	13.63	13.66	93.559	19.71	20.07	Pass
100	5500	13.52	13.12	13.53	13.43	87.574	19.42	20.07	Pass
116	5580	13.63	13.21	13.62	13.65	90.197	19.55	20.07	Pass
140	5700	13.22	13.39	13.53	13.12	85.871	19.34	20.07	Pass

*For U-NII-2A/ For U-NII-2C: Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 9.93\text{dBi} > 6\text{dBi}$, so the limit shall be reduced to $24 - (9.93 - 6) = 20.07\text{dBm}$.

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(21.27) = 24.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.38) = 24.30 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.47) = 24.31 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.33) = 24.28 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.51) = 24.32 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.33) = 24.28 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(21.26) = 24.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.52) = 24.32 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.29) = 24.28 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.35) = 24.29 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.46) = 24.31 > 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.65) = 24.35 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.42) = 24.30 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.11) = 24.24 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.36) = 24.29 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.24) = 24.27 > 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(21.39) = 24.30 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.24) = 24.27 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.71) = 24.36 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.42) = 24.30 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.56) = 24.33 > 24\text{dBm}$

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	13.93	13.85	14.09	13.88	99.062	19.96	20.07	Pass
62	5310	13.67	13.85	13.82	13.65	94.820	19.77	20.07	Pass
102	5510	13.87	13.42	13.96	13.63	94.313	19.75	20.07	Pass
110	5550	13.89	13.65	14.01	14.06	98.310	19.93	20.07	Pass
134	5670	13.82	13.65	13.86	13.65	94.769	19.77	20.07	Pass

*For U-NII-2A/ For U-NII-2C: Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 9.93\text{dBi} > 6\text{dBi}$, so the limit shall be reduced to $24 - (9.93 - 6) = 20.07\text{dBm}$.

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(42.14) = 27.24 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.35) = 27.26 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.28) = 27.26 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.23) = 27.25 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.35) = 27.26 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(42.03) = 27.23 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.03) = 27.23 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(41.97) = 27.22 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.38) = 27.27 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.09) = 27.24 > 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(42.11) = 27.24 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.23) = 27.25 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.45) = 27.27 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(41.90) = 27.22 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.25) = 27.25 > 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(42.44) = 27.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.46) = 27.27 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.65) = 27.29 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(42.28) = 27.26 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.40) = 27.27 > 24\text{dBm}$

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	13.76	13.62	13.75	13.68	93.831	19.72	20.07	Pass
106	5530	13.81	13.66	13.98	13.52	94.765	19.77	20.07	Pass
122	5610	13.85	13.42	13.97	14.06	96.659	19.85	20.07	Pass

*For U-NII-2A/ For U-NII-2C: Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 9.93\text{dBi} > 6\text{dBi}$, so the limit shall be reduced to $24 - (9.93 - 6) = 20.07\text{dBm}$.

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(82.60) = 30.16 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(82.83) = 30.18 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.55) = 30.16 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(82.50) = 30.16 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(83.19) = 30.20 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.96) = 30.18 > 24\text{dBm}$

Chain 2

1. $11\text{dBm} + 10\log(82.86) = 30.18 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(82.27) = 30.15 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.53) = 30.16 > 24\text{dBm}$

Chain 3

1. $11\text{dBm} + 10\log(82.73) = 30.17 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(82.55) = 30.16 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.73) = 30.17 > 24\text{dBm}$

Mode C

CDD Mode

802.11a

Chan.	Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Pass / Fail
52	5260	48.195	16.83	24.00	Pass
60	5300	47.973	16.81	24.00	Pass
64	5320	45.920	16.62	24.00	Pass
100	5500	43.152	16.35	24.00	Pass
116	5580	47.753	16.79	24.00	Pass
140	5700	47.973	16.81	24.00	Pass

* For U-NII-2A/ For U-NII-2C: Max. gain = 5dBi < 6dBi, so the power limit no need to reduced.

Note:

For U-NII-2A, U-NII-2C Band:

1. 11dBm + 10log (33.17) = 26.20 > 24dBm
2. 11dBm + 10log (33.97) = 26.31 > 24dBm
3. 11dBm + 10log (34.04) = 26.31 > 24dBm
4. 11dBm + 10log (29.37) = 25.67 > 24dBm
5. 11dBm + 10log (29.33) = 25.67 > 24dBm
6. 11dBm + 10log (29.42) = 25.68 > 24dBm

802.11ac (VHT20)

Chan.	Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Pass / Fail
52	5260	50.582	17.04	24.00	Pass
60	5300	50.003	16.99	24.00	Pass
64	5320	48.417	16.85	24.00	Pass
100	5500	44.668	16.50	24.00	Pass
116	5580	49.204	16.92	24.00	Pass
140	5700	40.926	16.12	24.00	Pass

* For U-NII-2A/ For U-NII-2C: Max. gain = 5dBi < 6dBi, so the power limit no need to reduced.

Note:

For U-NII-2A, U-NII-2C Band:

1. 11dBm + 10log (36.96) = 26.67 > 24dBm
2. 11dBm + 10log (36.30) = 26.59 > 24dBm
3. 11dBm + 10log (40.70) = 27.09 > 24dBm
4. 11dBm + 10log (32.56) = 26.12 > 24dBm
5. 11dBm + 10log (36.26) = 26.59 > 24dBm
6. 11dBm + 10log (33.51) = 26.25 > 24dBm

802.11ac (VHT40)

Chan.	Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Pass / Fail
54	5270	45.082	16.54	24.00	Pass
62	5310	13.428	11.28	24.00	Pass
102	5510	23.281	13.67	24.00	Pass
110	5550	40.551	16.08	24.00	Pass
134	5670	45.186	16.55	24.00	Pass

* For U-NII-2A/ For U-NII-2C: Max. gain = 5dBi < 6dBi, so the power limit no need to reduced.

Note:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(67.16) = 29.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(54.19) = 28.33 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(51.70) = 28.13 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(58.49) = 28.67 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(61.27) = 28.87 > 24\text{dBm}$

802.11ac (VHT80)

Chan.	Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Pass / Fail
58	5290	6.950	8.42	24.00	Pass
106	5530	11.350	10.55	24.00	Pass
122	5610	44.566	16.49	24.00	Pass

* For U-NII-2A/ For U-NII-2C: Max. gain = 5dBi < 6dBi, so the power limit no need to reduced.

Note:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(102.18) = 31.09 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(102.66) = 31.11 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(133.64) = 32.25 > 24\text{dBm}$

26dB Bandwidth:

Mode A

802.11a

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	19.49	19.48	19.46	19.61
60	5300	19.46	19.54	19.59	19.67
64	5320	19.56	19.50	19.58	19.35
100	5500	19.71	19.94	19.45	19.53
116	5580	19.52	19.45	19.48	19.63
140	5700	19.48	19.34	19.67	19.51

802.11ax (HE20)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.27	21.26	21.37	21.39
60	5300	21.38	21.52	21.65	21.37
64	5320	21.47	21.37	21.42	21.24
100	5500	21.33	21.29	21.11	21.71
116	5580	21.51	21.35	21.36	21.42
140	5700	21.33	21.46	21.24	21.56

802.11ax (HE40)

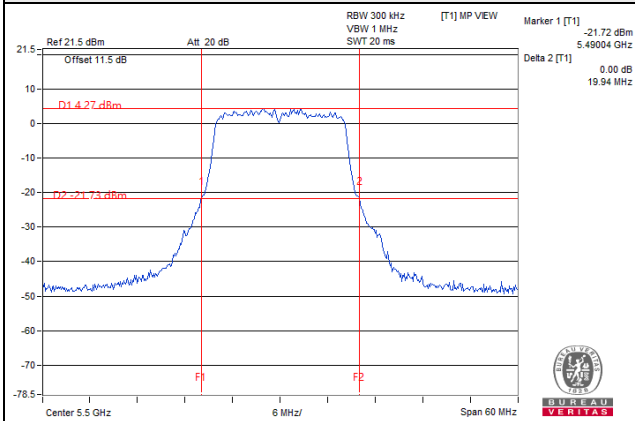
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	42.14	42.03	42.11	42.44
62	5310	42.35	42.03	42.23	42.46
102	5510	42.28	41.97	42.45	42.65
110	5550	42.23	42.38	41.9	42.28
134	5670	42.35	42.09	42.25	42.40

802.11ax (HE80)

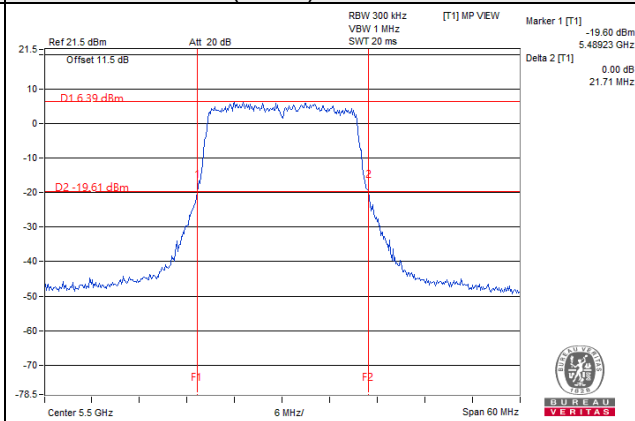
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	82.60	82.50	82.86	82.73
106	5530	82.83	83.19	82.27	82.55
122	5610	82.55	82.96	82.53	82.73

Spectrum Plot of Worst Value

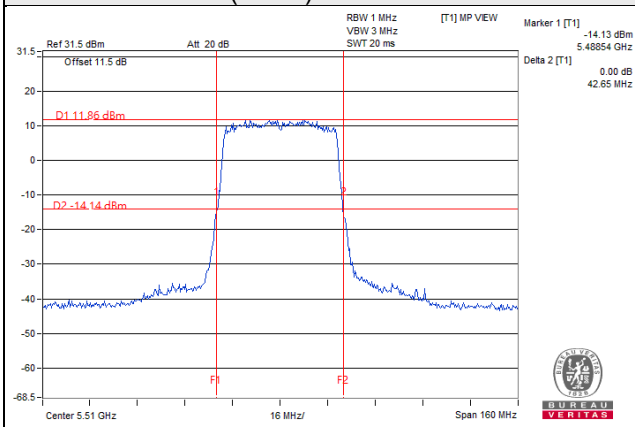
802.11a / Chain 1 / Ch 100



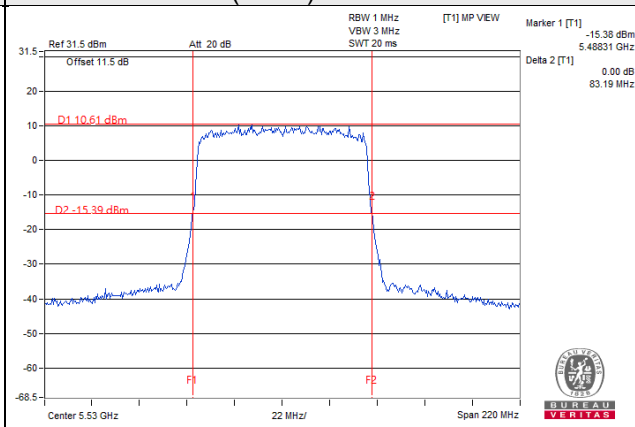
802.11ax (HE20) / Chain 3 / Ch 100



802.11ax (HE40) / Chain 3 / Ch 102



802.11ax (HE80) / Chain 1 / Ch 106



Mode C

802.11a

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
52	5260	33.17
60	5300	33.97
64	5320	34.04
100	5500	29.37
116	5580	29.33
140	5700	29.42

802.11ac (VHT20)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
52	5260	36.96
60	5300	36.30
64	5320	40.70
100	5500	32.56
116	5580	36.26
140	5700	33.51

802.11ac (VHT40)

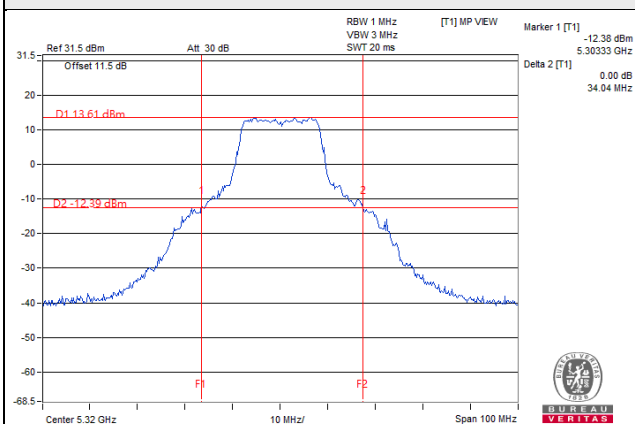
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
54	5270	67.16
62	5310	54.19
102	5510	51.70
110	5550	58.49
134	5670	61.27

802.11ac (VHT80)

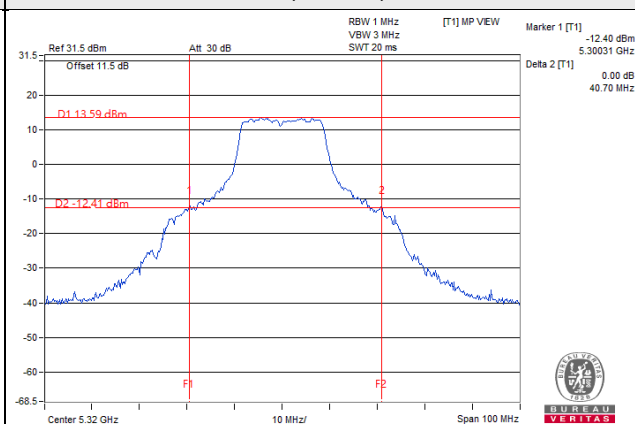
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
58	5290	102.18
106	5530	102.66
122	5610	133.64

Spectrum Plot of Worst Value

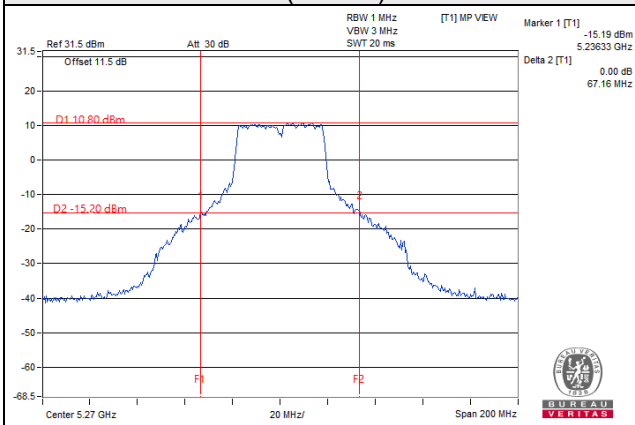
802.11a / Ch 64



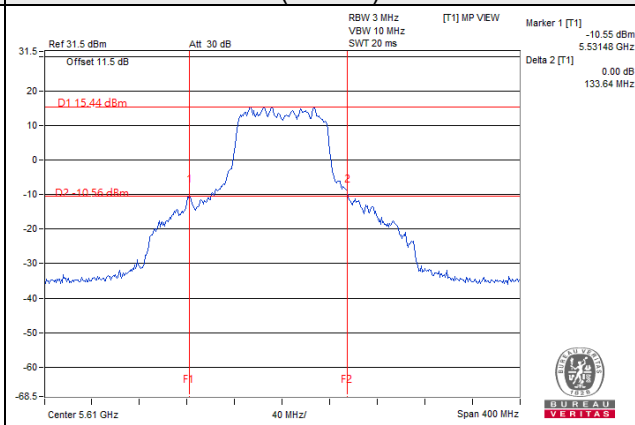
802.11ac (VHT20) / Ch 64



802.11ac (VHT40) / Ch 54



802.11ac (VHT80) / Ch 122



EUT Maximum Conducted Power

Mode A

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	90.713	19.58
5470~5725	98.145	19.92

802.11n (HT20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	99.792	19.99
5470~5725	113.309	20.54

802.11n (HT40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	188.105	22.74
5470~5725	207.619	23.17

802.11ac (VHT20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	101.420	20.06
5470~5725	113.830	20.56

802.11ac (VHT40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	190.514	22.80
5470~5725	208.456	23.19

802.11ac (VHT80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	169.237	22.28
5470~5725	237.980	23.77

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	102.952	20.13
5470~5725	114.294	20.58

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	193.052	22.86
5470~5725	209.536	23.21

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	228.485	23.59
5470~5725	243.079	23.86

Beamforming Mode

802.11n (HT20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	100.433	20.02
5470~5725	87.469	19.42

802.11n (HT40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	96.855	19.86
5470~5725	95.462	19.80

802.11ac (VHT20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	100.781	20.03
5470~5725	89.001	19.49

802.11ac (VHT40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	98.149	19.92
5470~5725	96.840	19.86

802.11ac (VHT80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	92.76	19.67
5470~5725	95.176	19.79

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	101.249	20.05
5470~5725	90.197	19.55

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	99.062	19.96
5470~5725	98.310	19.93

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	93.831	19.72
5470~5725	96.659	19.85

Mode C

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	48.195	16.83
5470~5725	47.973	16.81

802.11ac (VHT20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	50.582	17.04
5470~5725	49.204	16.92

802.11ac (VHT40)

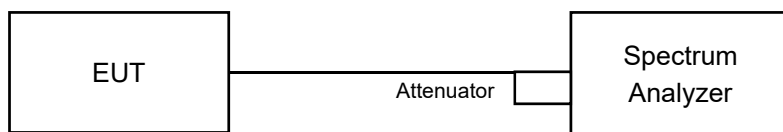
Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	45.082	16.54
5470~5725	45.186	16.55

802.11ac (VHT80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	6.950	8.42
5470~5725	44.566	16.49

4.4 Occupied Bandwidth Measurement

4.4.1 Test Setup



4.4.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.3 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to sampling. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

4.4.4 Test Result

Mode A

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	16.44	16.44	16.44	16.44
60	5300	16.44	16.44	16.44	16.44
64	5320	16.44	16.44	16.44	16.44
100	5500	16.44	16.44	16.44	16.44
116	5580	16.44	16.44	16.44	16.44
140	5700	16.44	16.44	16.44	16.44

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	18.96	18.96	18.96	18.96
60	5300	18.96	18.96	18.96	18.96
64	5320	18.96	18.96	18.96	18.96
100	5500	18.96	18.96	18.96	18.96
116	5580	18.96	18.96	18.96	18.96
140	5700	18.96	18.96	18.96	19.08

802.11ax (HE40)

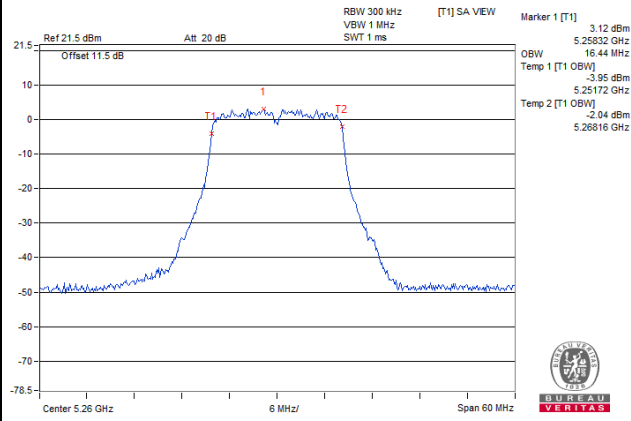
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	38.04	38.04	38.04	38.16
62	5310	38.16	38.04	38.04	38.04
102	5510	38.04	38.04	38.16	38.04
110	5550	38.04	38.04	38.16	38.04
134	5670	38.04	38.04	38.04	38.16

802.11ax (HE80)

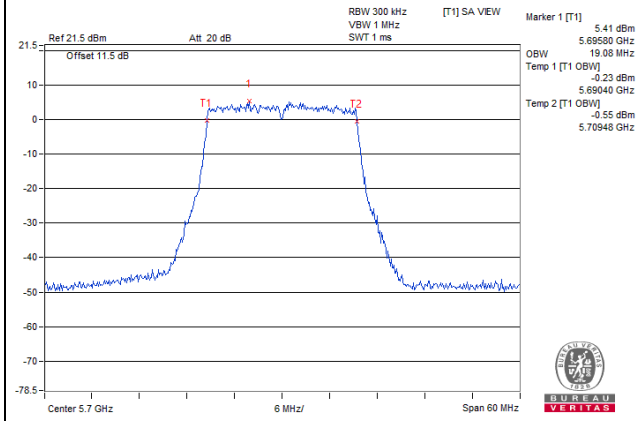
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	77.28	77.28	77.28	77.28
106	5530	77.28	77.28	77.04	77.28
122	5610	77.28	77.28	77.04	77.52

Spectrum Plot of Worst Value

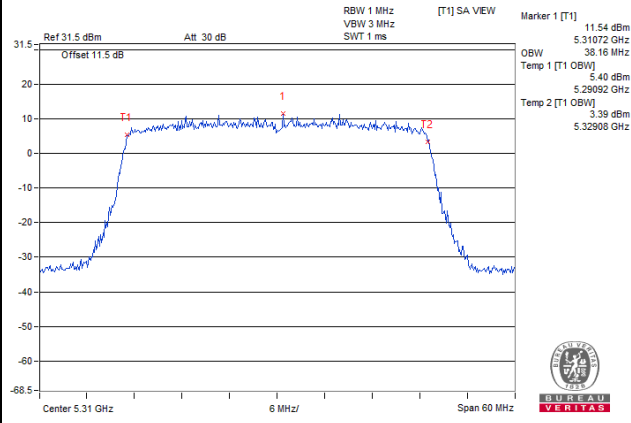
802.11a



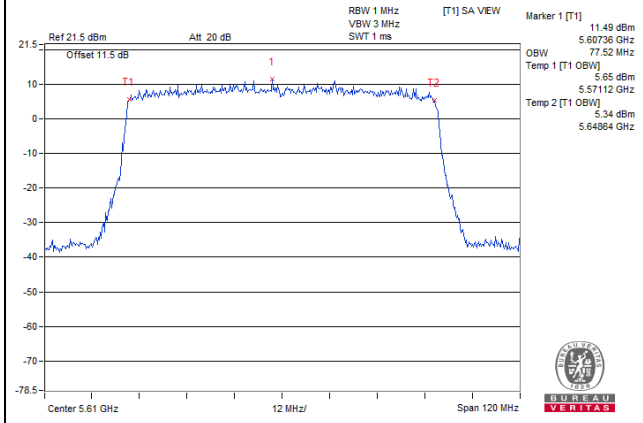
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)



Mode C

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
52	5260	19.32
60	5300	19.20
64	5320	19.32
100	5500	17.88
116	5580	17.76
140	5700	18.00

802.11ac (VHT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
52	5260	19.56
60	5300	19.80
64	5320	20.16
100	5500	18.60
116	5580	18.96
140	5700	18.96

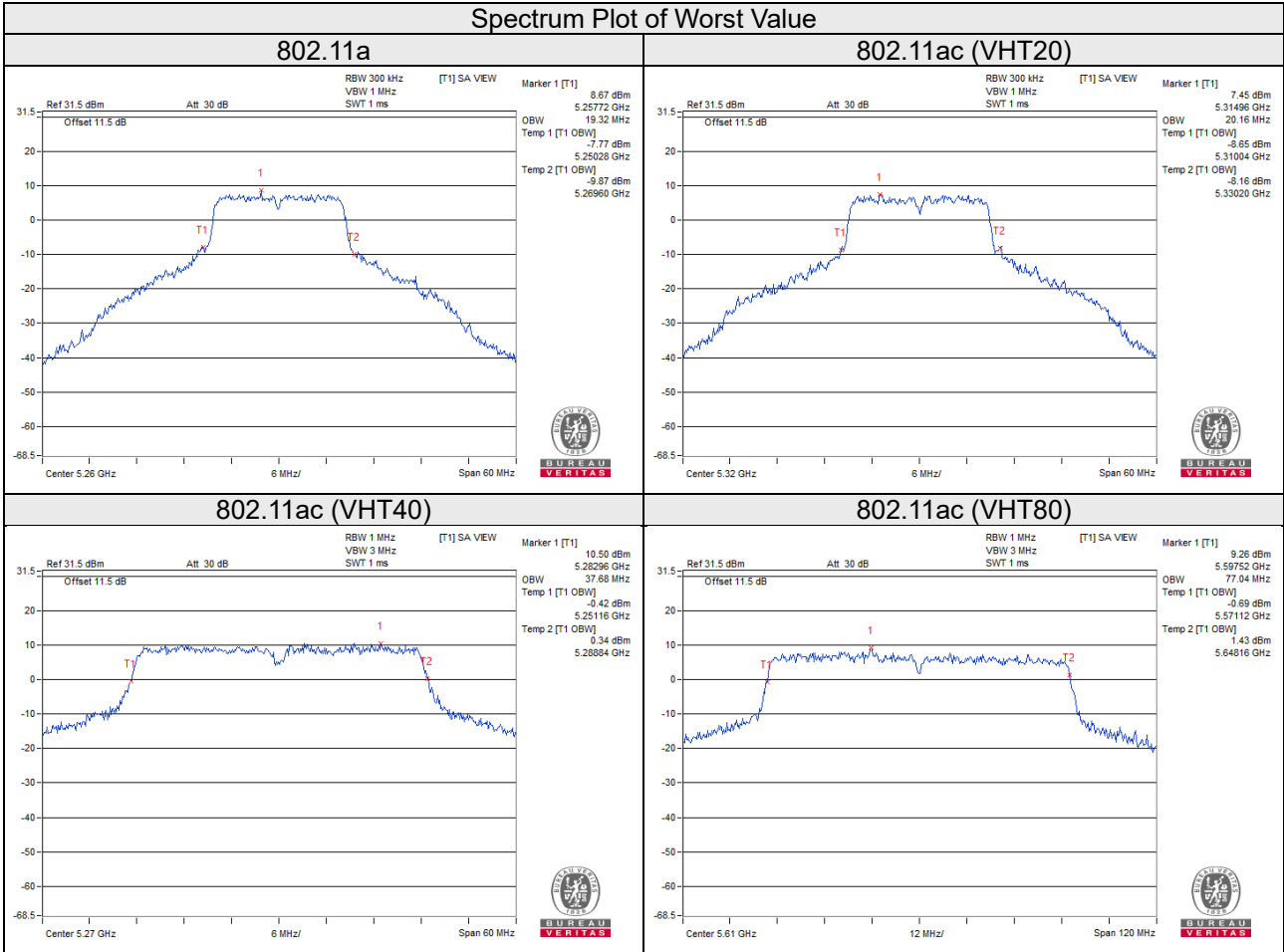
802.11ac (VHT40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
54	5270	37.68
62	5310	37.44
102	5510	37.32
110	5550	37.56
134	5670	37.68

802.11ac (VHT80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
58	5290	76.56
106	5530	76.56
122	5610	77.04

Spectrum Plot of Worst Value

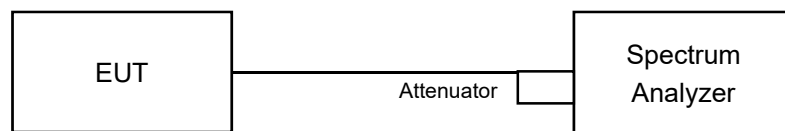


4.5 Peak Power Spectral Density Measurement

4.5.1 Limits of Peak Power Spectral Density Measurement

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
		Mobile and Portable client device	11dBm/ MHz
U-NII-2A	√		11dBm/ MHz
U-NII-2C	√		11dBm/ MHz
U-NII-3			30dBm/ 500kHz

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.5.4 Test Procedures

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

Duty cycle of test signal is < 98%

Using method SA-2

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 1MHz, Set VBW ≥ 3 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to "free run".
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Record the max value and add $10 \log (1/\text{duty cycle})$

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Conditions

Same as 4.3.6.

4.5.7 Test Results

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

Mode A

802.11a

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	-0.93	0.73	0.82	0.90	0.31	6.77	7.07	Pass
60	5300	-0.63	0.90	0.93	0.94	0.31	6.91	7.07	Pass
64	5320	-0.95	0.83	0.87	0.75	0.31	6.77	7.07	Pass
100	5500	-0.19	0.76	0.86	0.76	0.31	6.90	7.07	Pass
116	5580	0.64	0.62	0.66	0.54	0.31	6.95	7.07	Pass
140	5700	0.74	0.58	0.70	0.67	0.31	7.00	7.07	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 9.93\text{dBi} > 6\text{dBi}$, so the limit shall be reduced to $11 - (9.93 - 6) = 7.07\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	0.48	0.24	-0.33	-0.39	0.36	6.40	7.07	Pass
60	5300	-0.11	0.25	-0.39	0.95	0.36	6.59	7.07	Pass
64	5320	-0.36	0.76	0.96	-0.47	0.36	6.65	7.07	Pass
100	5500	-0.46	0.58	-0.13	0.28	0.36	6.47	7.07	Pass
116	5580	0.00	-0.11	0.03	0.15	0.36	6.40	7.07	Pass
140	5700	-0.27	0.53	0.04	0.23	0.36	6.52	7.07	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 9.93\text{dBi} > 6\text{dBi}$, so the limit shall be reduced to $11 - (9.93 - 6) = 7.07\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	0.48	-0.11	-0.10	0.22	0.30	6.45	7.07	Pass
62	5310	1.47	-1.58	0.47	0.46	0.30	6.66	7.07	Pass
102	5510	1.83	-0.16	-0.05	-0.16	0.30	6.77	7.07	Pass
110	5550	-0.24	-0.60	0.90	0.93	0.30	6.62	7.07	Pass
134	5670	-0.12	-0.16	0.67	-0.84	0.30	6.24	7.07	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 9.93\text{dBi} > 6\text{dBi}$, so the limit shall be reduced to $11 - (9.93 - 6) = 7.07\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

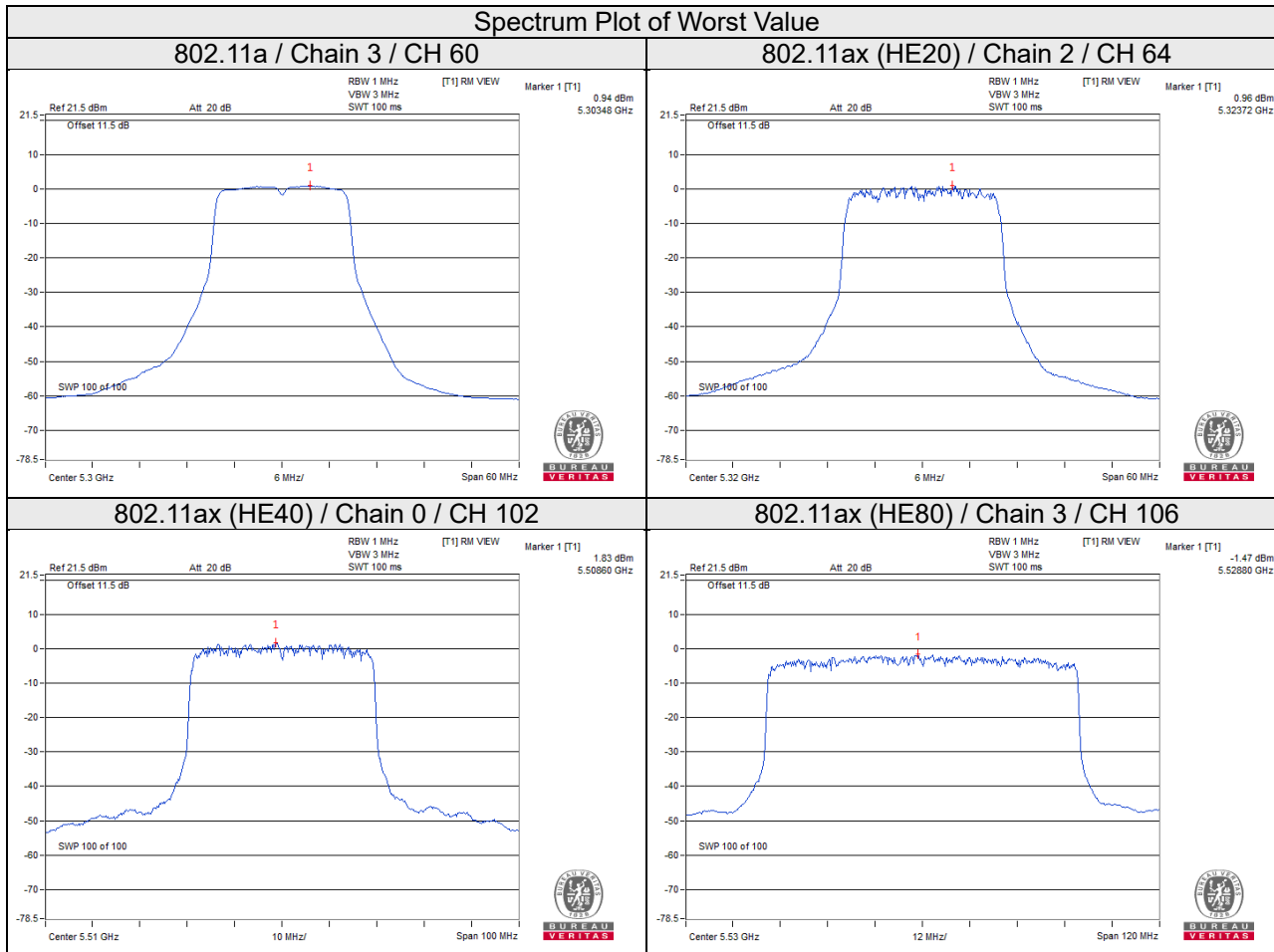
802.11ax (HE80)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	-2.95	-2.85	-2.48	-2.54	0.36	3.68	7.07	Pass
106	5530	-2.62	-3.12	-3.17	-1.76	0.36	3.75	7.07	Pass
122	5610	-2.03	-1.94	-3.44	-2.47	0.36	3.95	7.07	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 9.93\text{dBi} > 6\text{dBi}$, so the limit shall be reduced to $11 - (9.93 - 6) = 7.07\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value



Mode C

802.11a

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
52	5260	3.79	0.16	3.94	11.00	Pass
60	5300	3.77	0.16	3.93	11.00	Pass
64	5320	3.66	0.16	3.81	11.00	Pass
100	5500	3.64	0.16	3.79	11.00	Pass
116	5580	3.91	0.16	4.07	11.00	Pass
140	5700	3.79	0.16	3.94	11.00	Pass

Note:

1. Max. Antenna Gain 5 dBi < 6dBi, so the power density limit no need to reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT20)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
52	5260	3.81	0.17	3.98	11.00	Pass
60	5300	3.80	0.17	3.97	11.00	Pass
64	5320	3.60	0.17	3.77	11.00	Pass
100	5500	3.71	0.17	3.88	11.00	Pass
116	5580	3.92	0.17	4.09	11.00	Pass
140	5700	3.36	0.17	3.53	11.00	Pass

Note:

1. Max. Antenna Gain 5 dBi < 6dBi, so the power density limit no need to reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT40)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
54	5270	0.38	0.37	0.76	11.00	Pass
62	5310	-4.99	0.37	-4.62	11.00	Pass
102	5510	-2.56	0.37	-2.19	11.00	Pass
110	5550	-0.20	0.37	0.17	11.00	Pass
134	5670	0.63	0.37	1.00	11.00	Pass

Note:

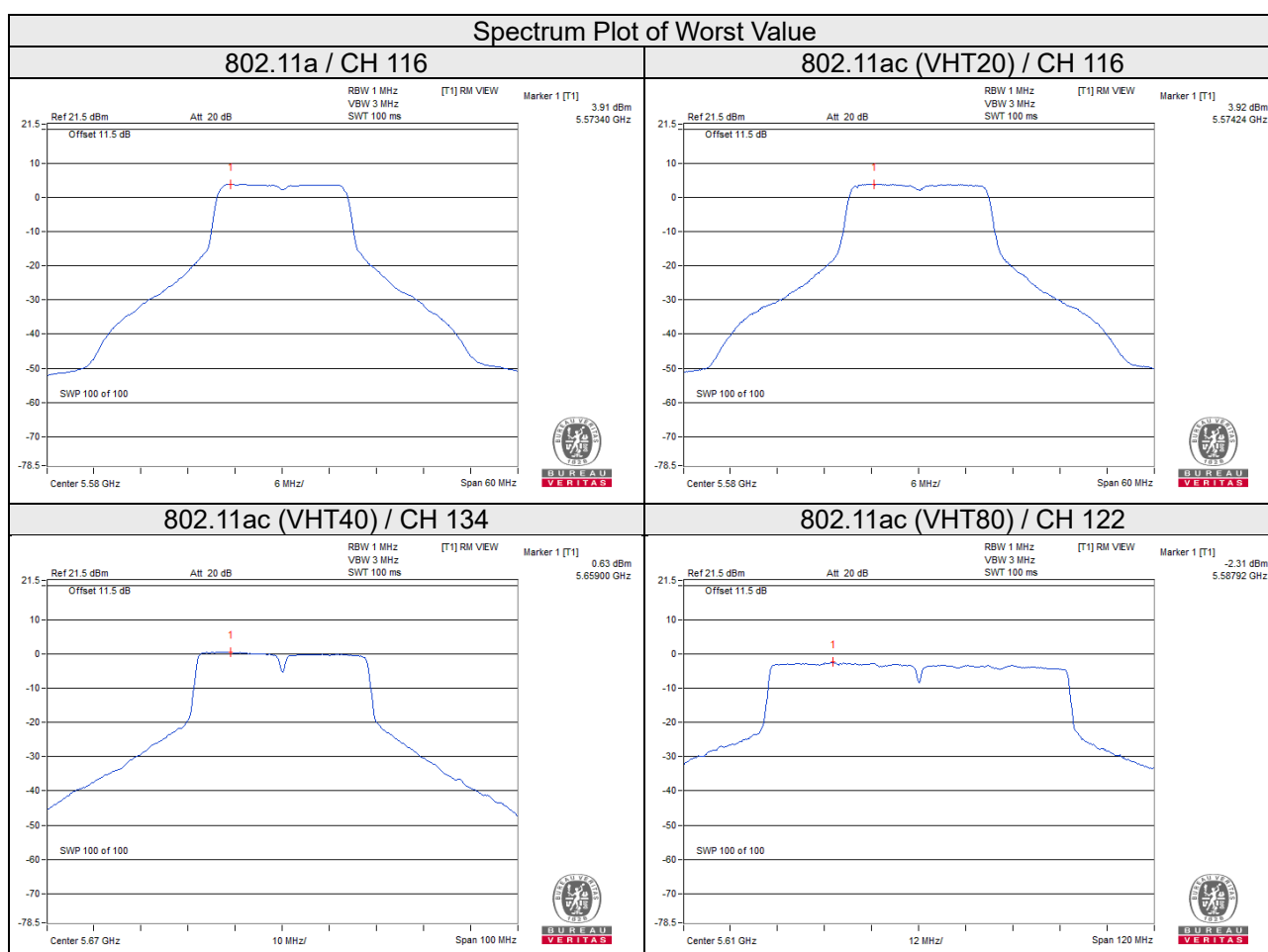
1. Max. Antenna Gain 5 dBi < 6dBi, so the power density limit no need to reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
58	5290	-10.89	0.65	-10.24	11.00	Pass
106	5530	-8.69	0.65	-8.04	11.00	Pass
122	5610	-2.31	0.65	-1.66	11.00	Pass

Note:

1. Max. Antenna Gain 5 dBi < 6dBi, so the power density limit no need to reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

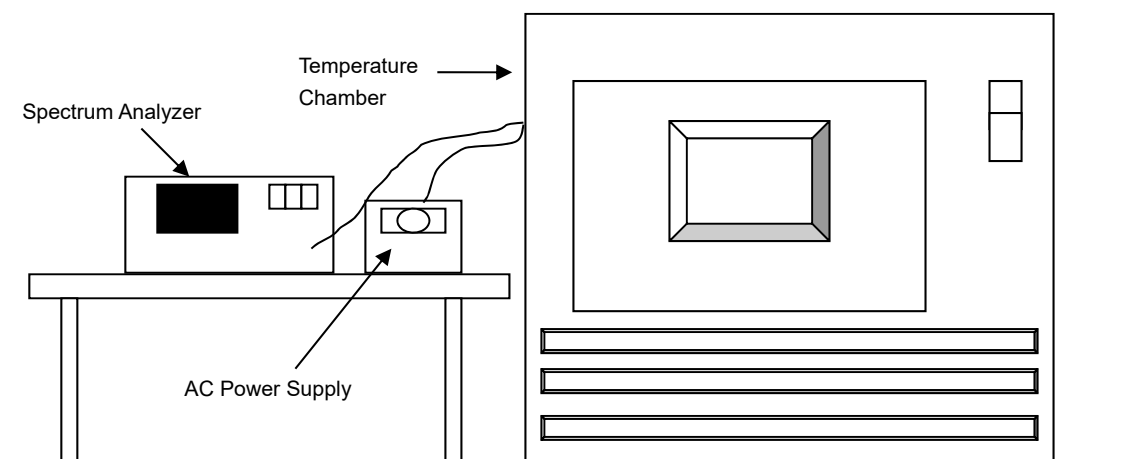


4.6 Frequency Stability

4.6.1 Limits of Frequency Stability Measurement

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

4.6.2 Test Setup



4.6.3 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Jun. 12, 2020	Jun. 11, 2021
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 01, 2020	May 31, 2021
Digital Multimeter Fluke	87-III	70360742	Jun. 23, 2020	Jun. 22, 2021
AC Power Supply Exttech	CFW-105	E000603	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. Tested date: Oct. 08, 2020

4.6.4 Test Procedure

- The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
- Turn the EUT on and couple its output to a spectrum analyzer.
- Turn the EUT off and set the chamber to the highest temperature specified.
- Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
- Repeat step (d) with the temperature chamber set to the next desired temperature until measurements down to the lowest specified temperature have been completed.
- The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

Set the EUT transmit at un-modulation mode to test frequency stability.

4.6.7 Test Results

Mode A

Frequency Stability Versus Temp.									
Operating Frequency: 5260MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
50	120	5260.0125	PASS	5260.0151	PASS	5260.0155	PASS	5260.0147	PASS
40	120	5260.0159	PASS	5260.0159	PASS	5260.0171	PASS	5260.0146	PASS
30	120	5259.9831	PASS	5259.9852	PASS	5259.9813	PASS	5259.9815	PASS
20	120	5259.9848	PASS	5259.9833	PASS	5259.9821	PASS	5259.9846	PASS
10	120	5260.0144	PASS	5260.0191	PASS	5260.0161	PASS	5260.0169	PASS
0	120	5260.0078	PASS	5260.0109	PASS	5260.0101	PASS	5260.0075	PASS
-10	120	5260.0170	PASS	5260.0176	PASS	5260.0151	PASS	5260.0150	PASS
-20	120	5259.9823	PASS	5259.9785	PASS	5259.9824	PASS	5259.9801	PASS
-30	120	5259.9891	PASS	5259.9870	PASS	5259.9883	PASS	5259.9873	PASS

Frequency Stability Versus Voltage									
Operating Frequency: 5260MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5259.9850	PASS	5259.9835	PASS	5259.9829	PASS	5259.9855	PASS
	120	5259.9848	PASS	5259.9833	PASS	5259.9821	PASS	5259.9846	PASS
	102	5259.9854	PASS	5259.9836	PASS	5259.9813	PASS	5259.9849	PASS

Mode C

Frequency Stability Versus Temp.									
Operating Frequency: 5260MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
50	120	5260.0113	PASS	5260.0113	PASS	5260.016	PASS	5260.0123	PASS
40	120	5259.9958	PASS	5259.9949	PASS	5259.993	PASS	5259.9915	PASS
30	120	5259.9875	PASS	5259.9905	PASS	5259.9912	PASS	5259.9876	PASS
20	120	5260.0117	PASS	5260.0128	PASS	5260.0083	PASS	5260.0119	PASS
10	120	5260.0276	PASS	5260.0274	PASS	5260.025	PASS	5260.0235	PASS
0	120	5260.0183	PASS	5260.0199	PASS	5260.0177	PASS	5260.0161	PASS
-10	120	5260.0143	PASS	5260.0161	PASS	5260.0173	PASS	5260.0159	PASS
-20	120	5259.9994	PASS	5259.9992	PASS	5259.9969	PASS	5259.9992	PASS
-30	120	5260.0131	PASS	5260.0163	PASS	5260.0142	PASS	5260.0173	PASS

Frequency Stability Versus Voltage									
Operating Frequency: 5260MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5260.0126	PASS	5260.0134	PASS	5260.0075	PASS	5260.0115	PASS
	120	5260.0117	PASS	5260.0128	PASS	5260.0083	PASS	5260.0119	PASS
	102	5260.0125	PASS	5260.0128	PASS	5260.0073	PASS	5260.0117	PASS

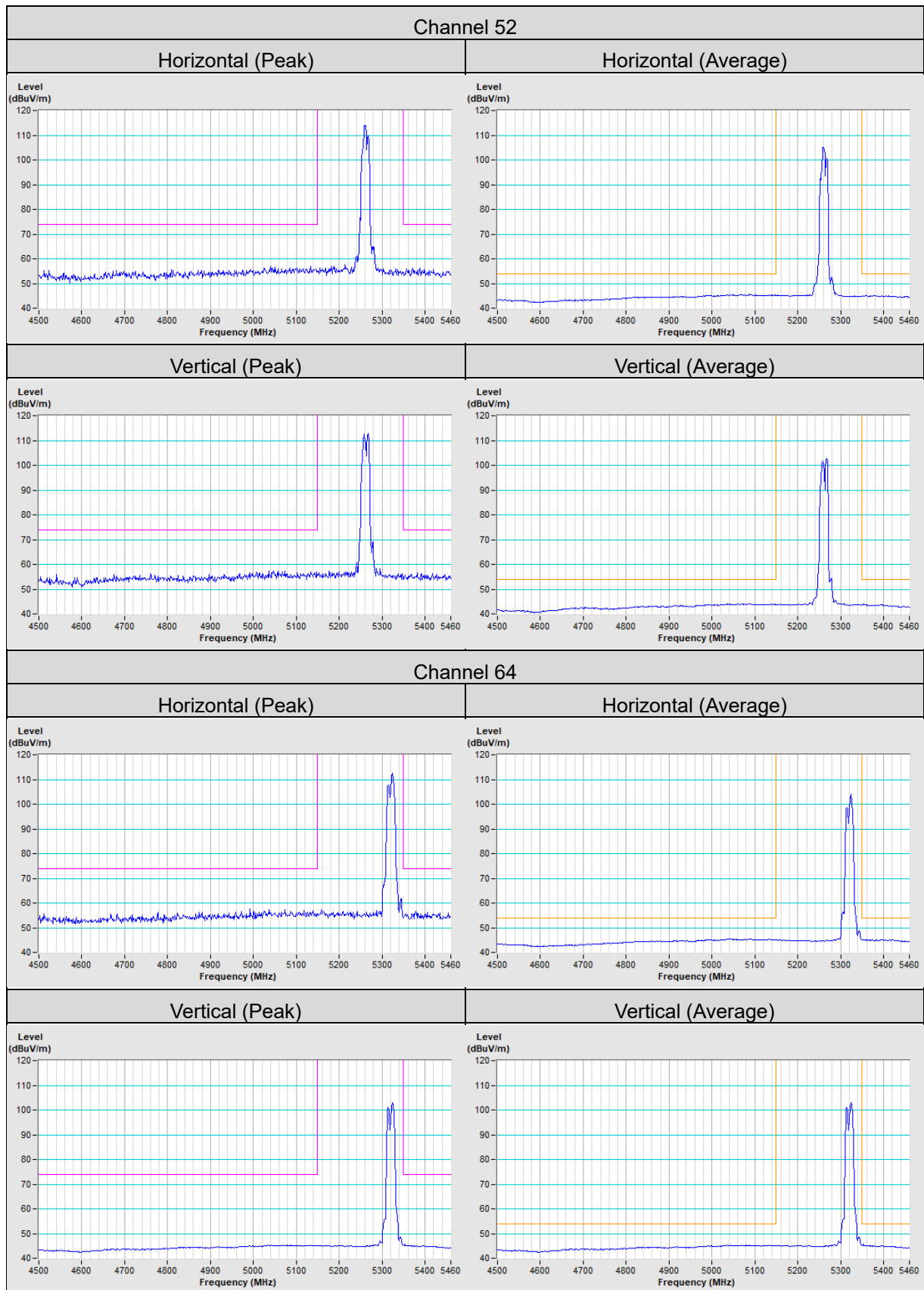
5 Pictures of Test Arrangements

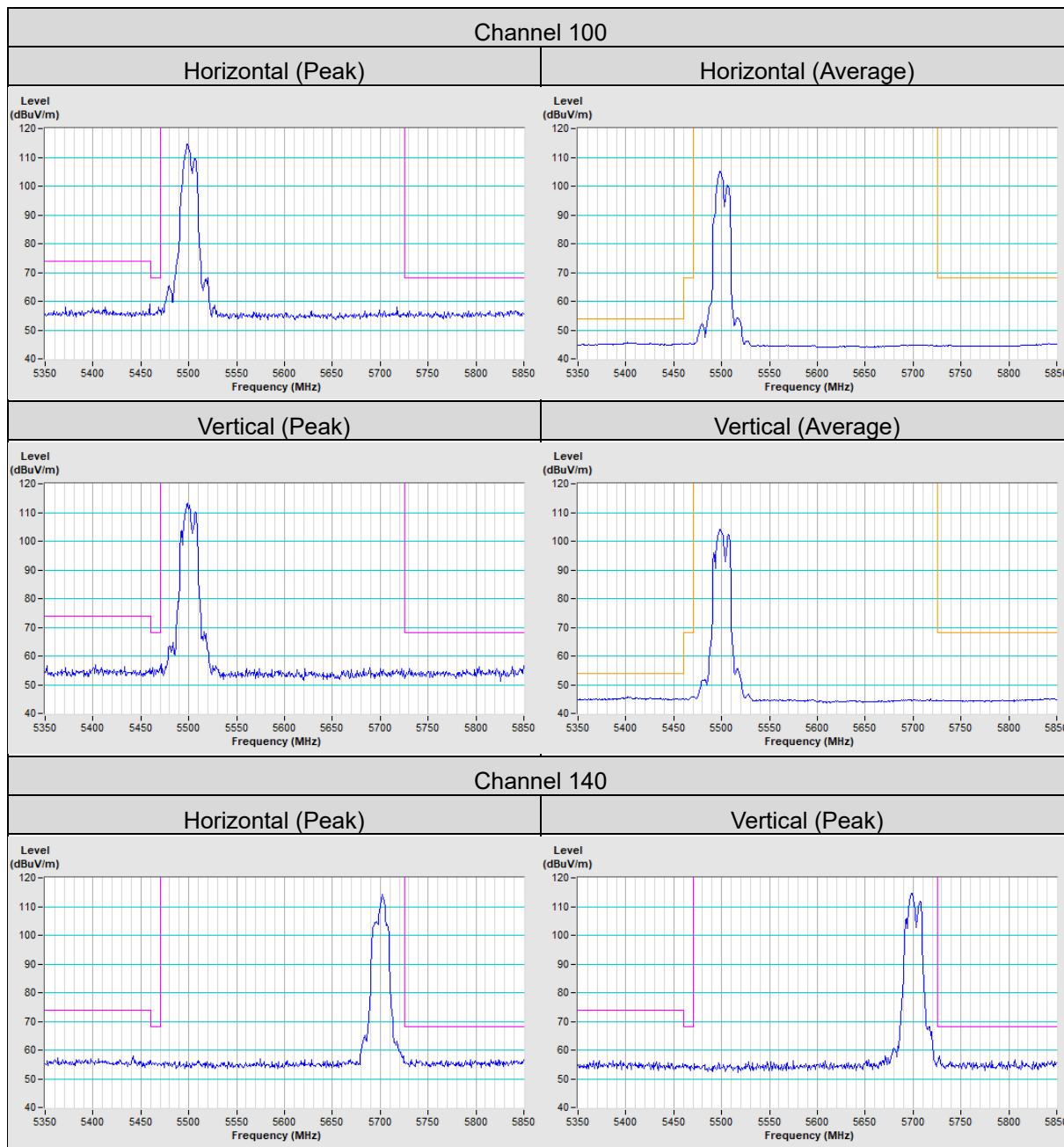
Please refer to the attached file (Test Setup Photo).

Annex A- Band Edge Measurement

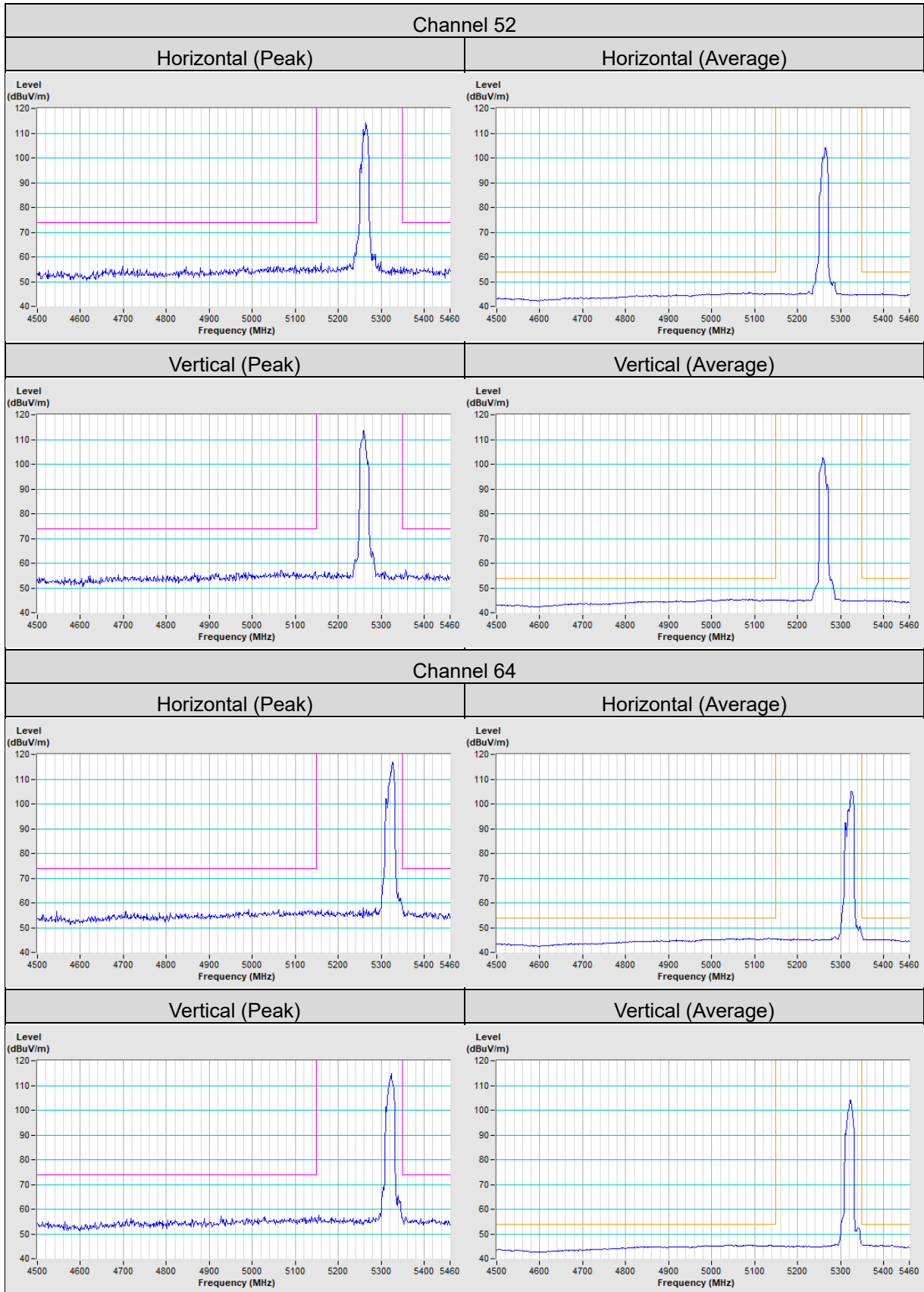
Mode A

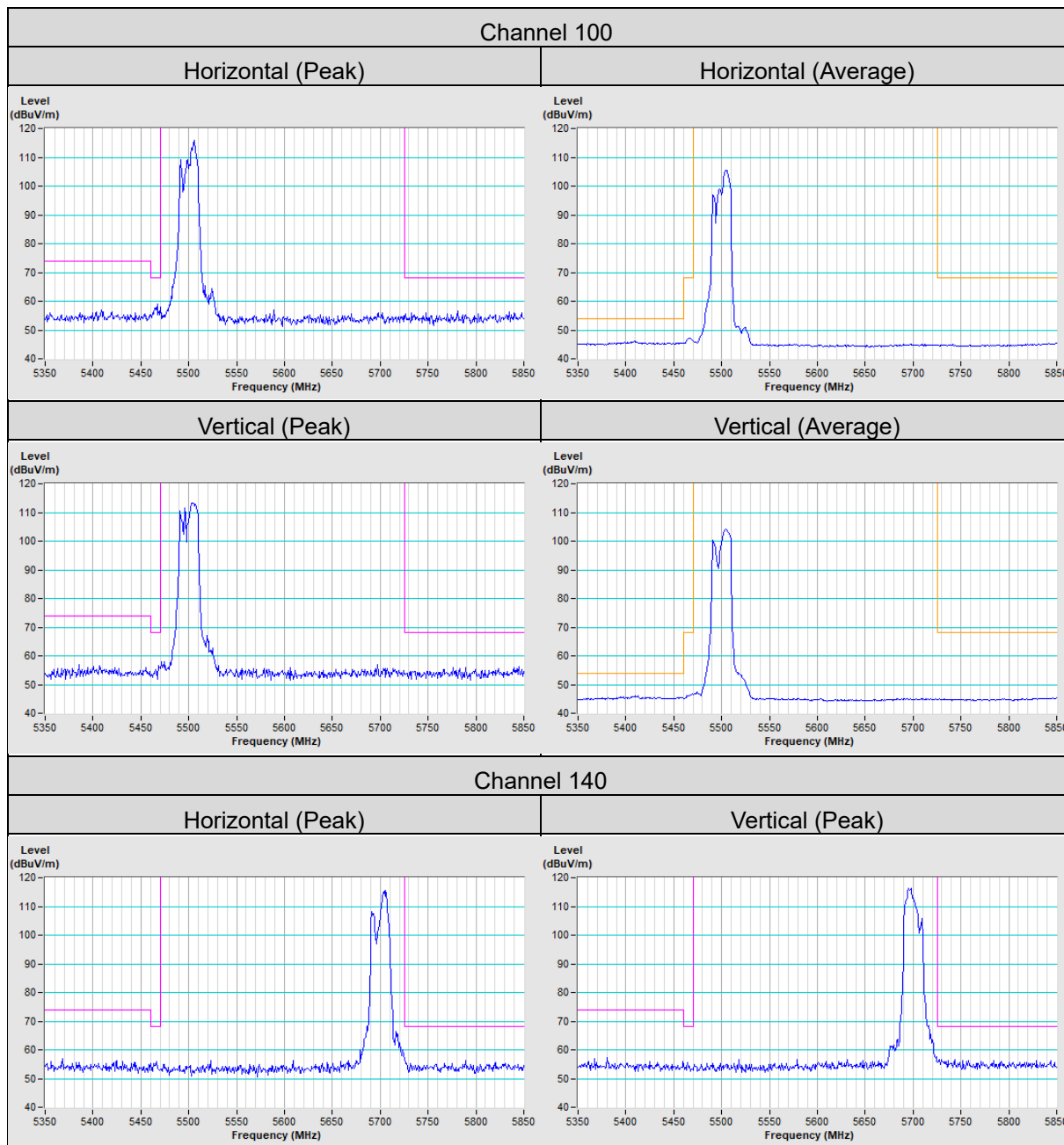
802.11a



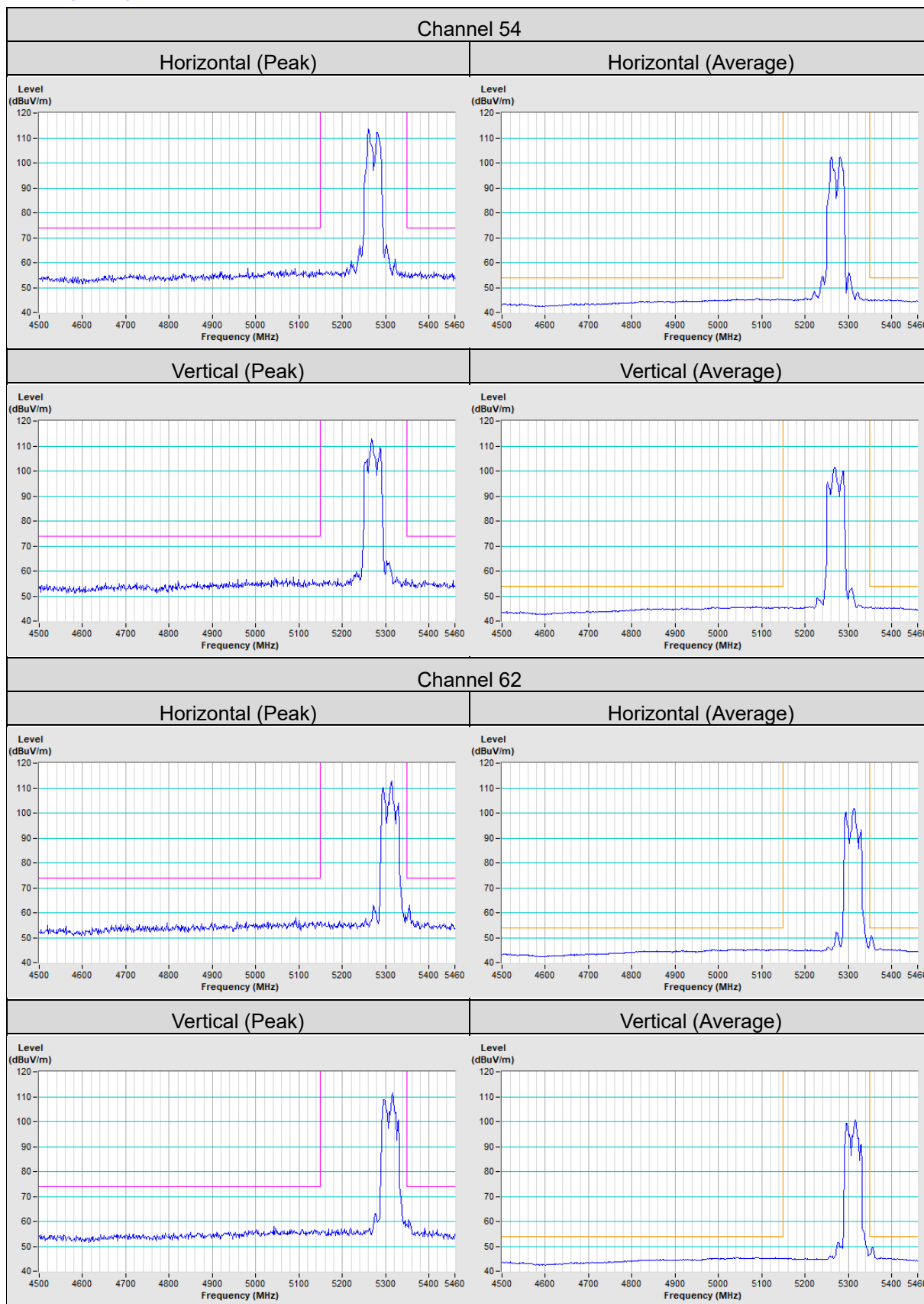


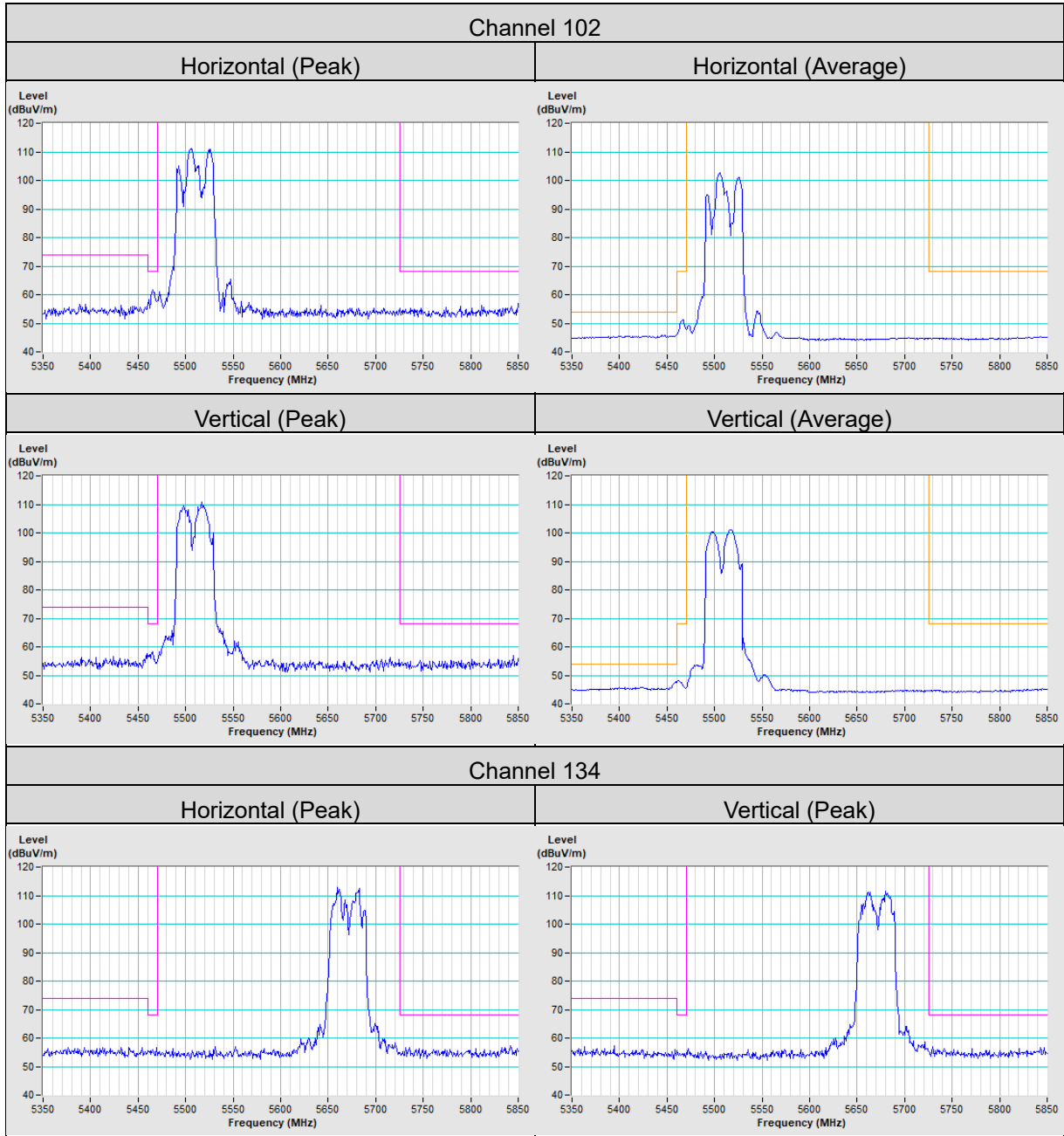
802.11ax (HE20)



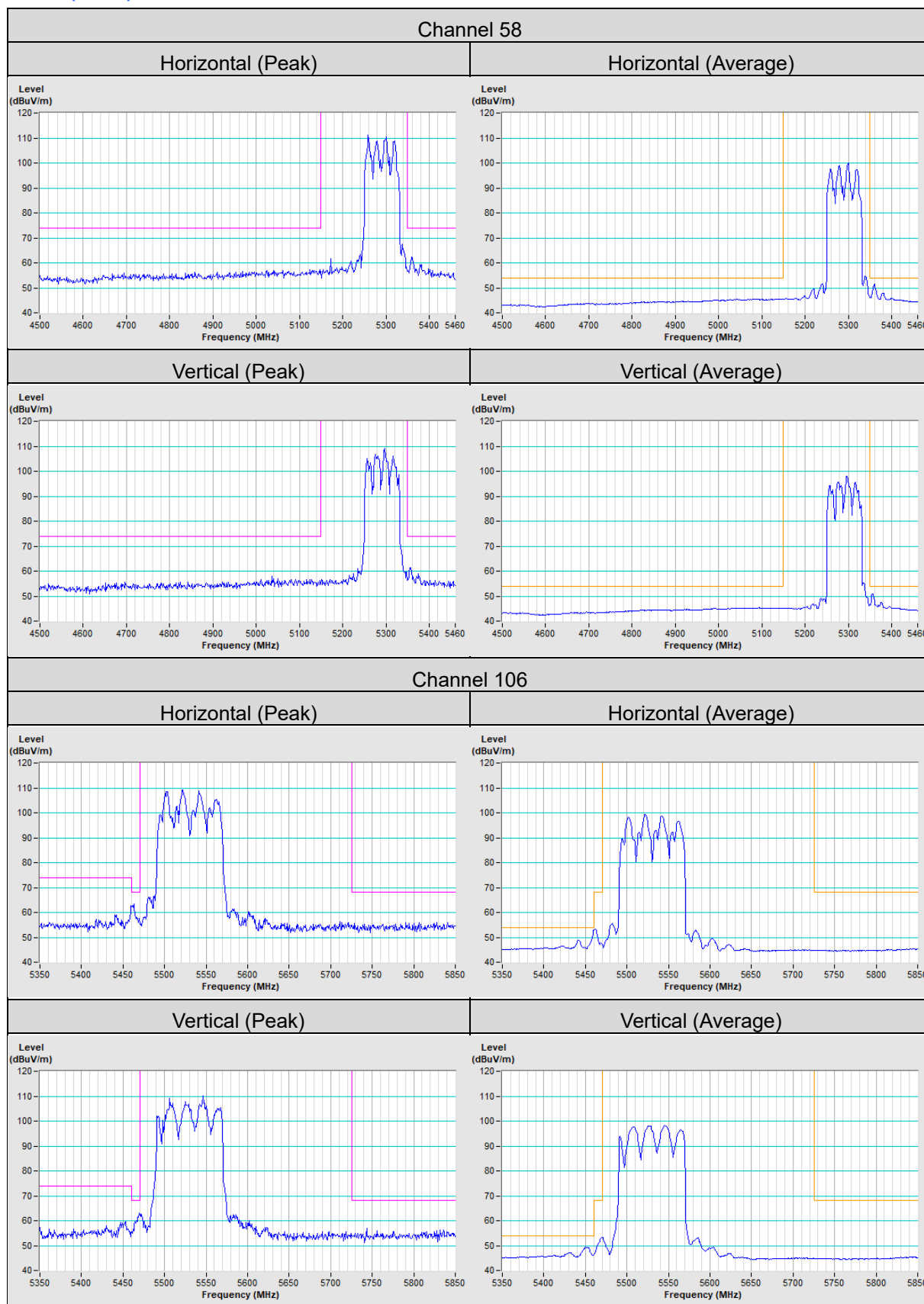


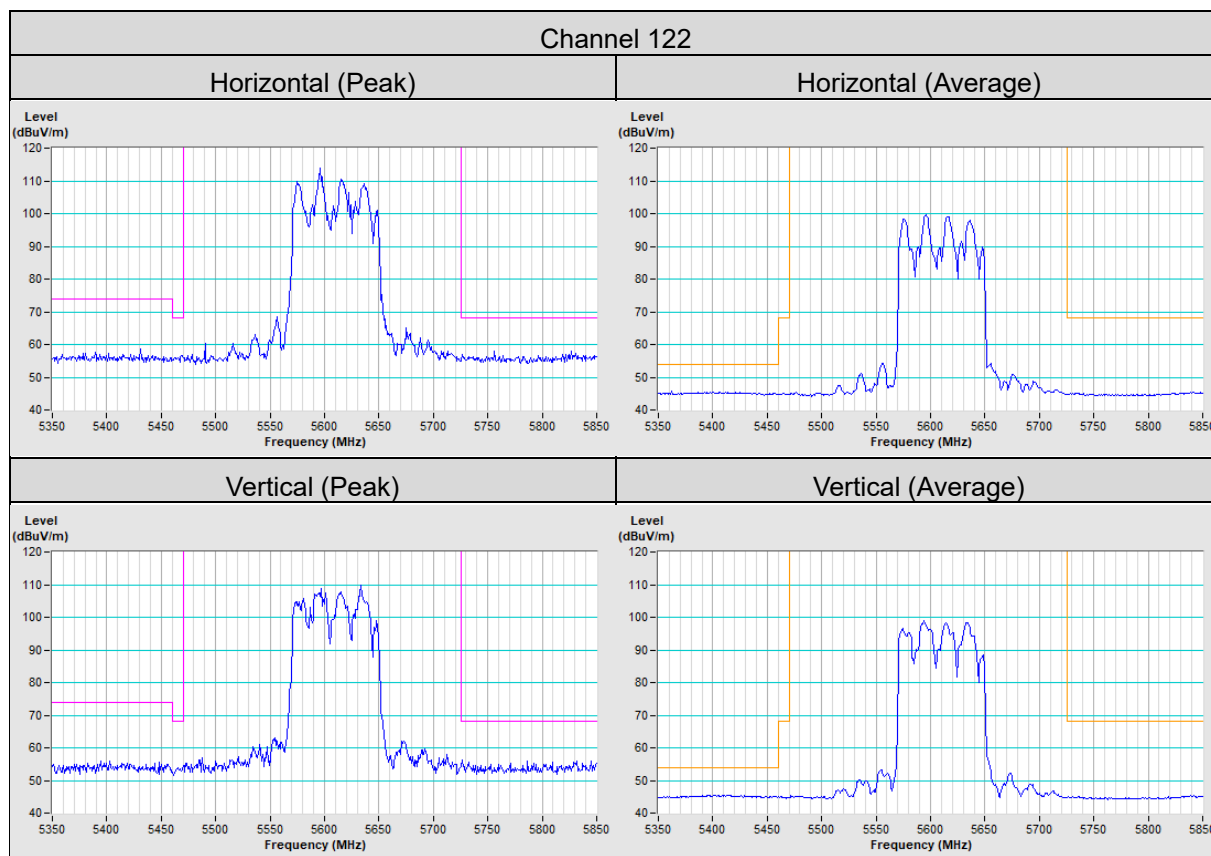
802.11ax (HE40)





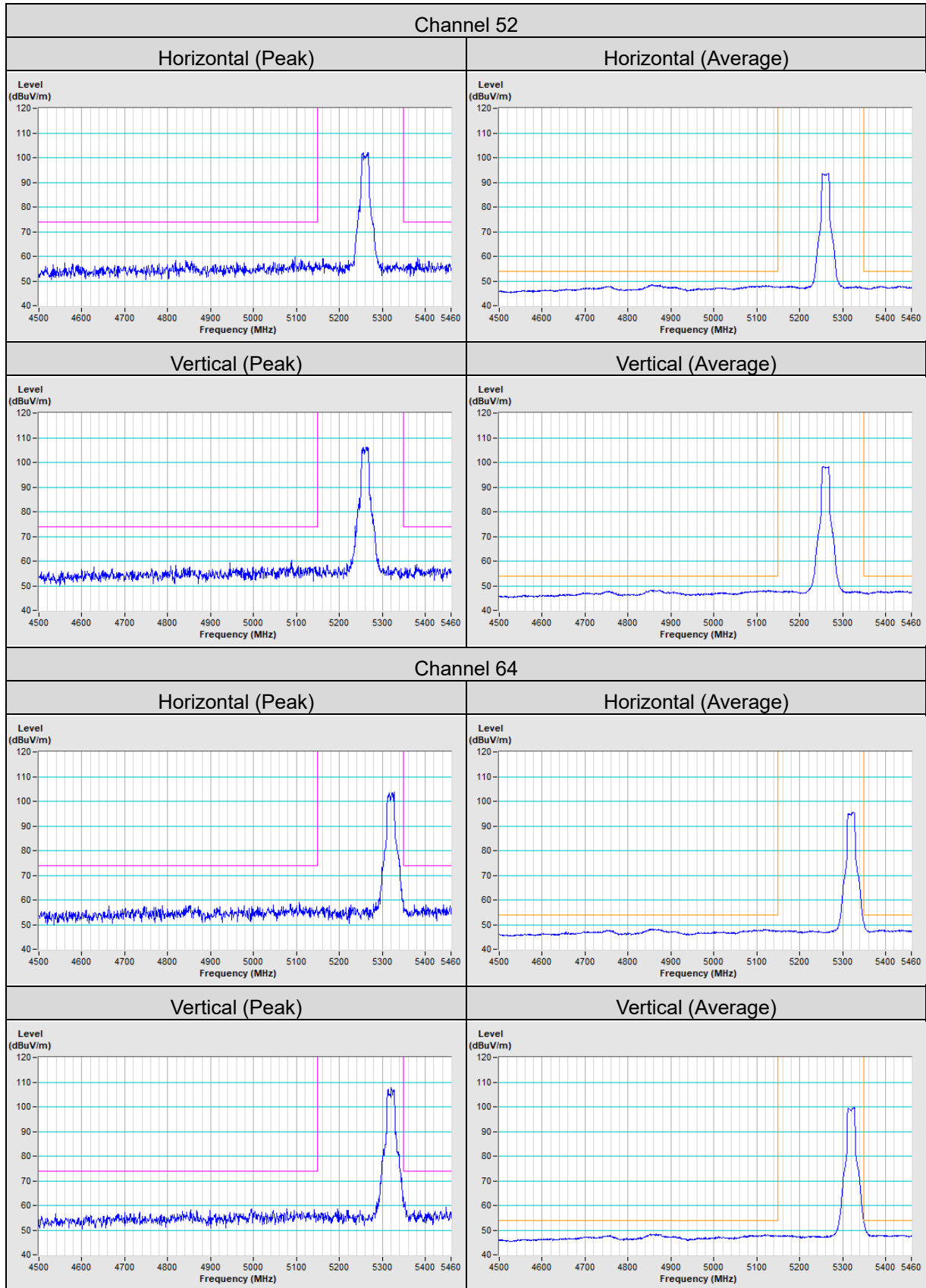
802.11ax (HE80)

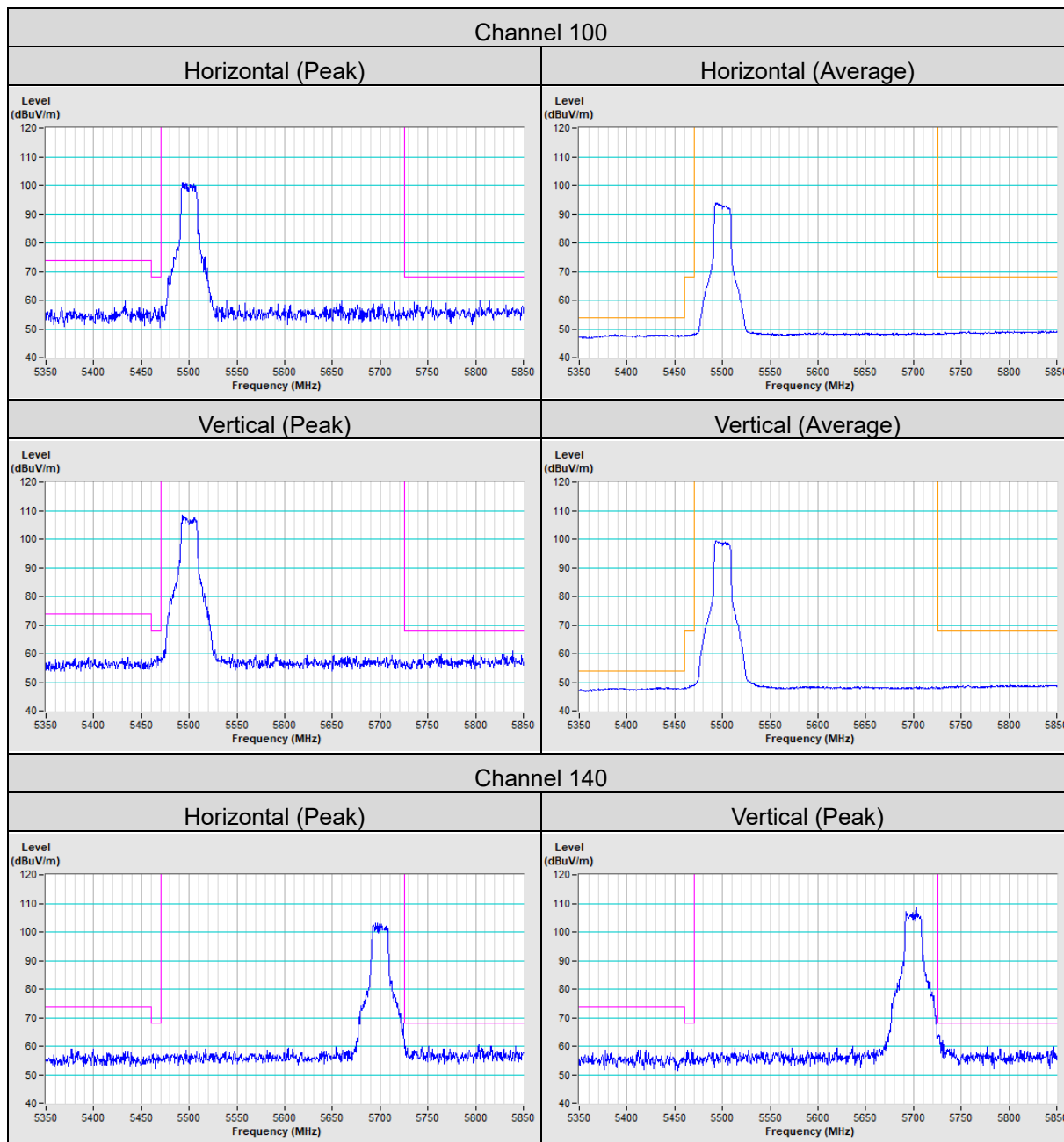




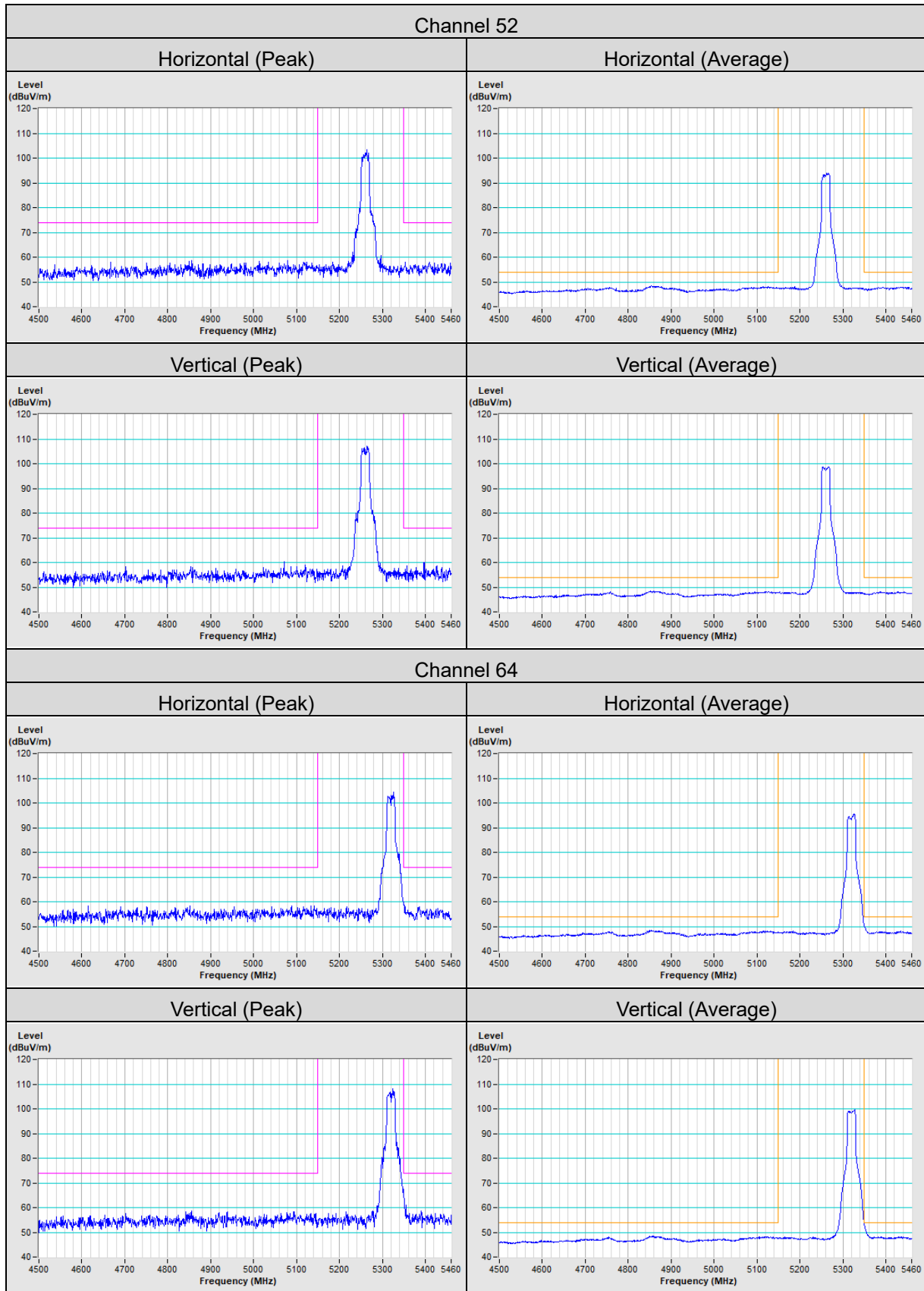
Mode C

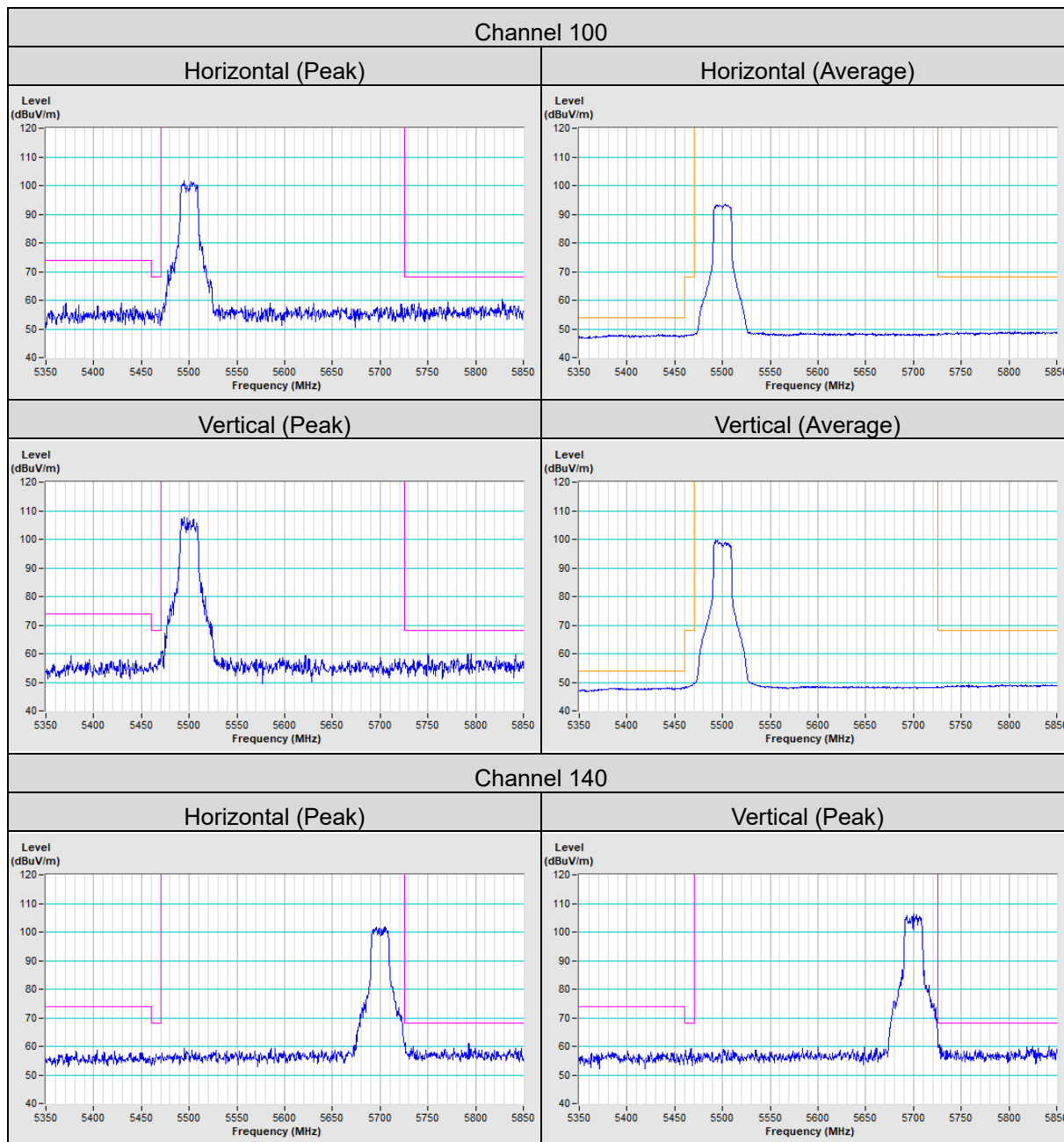
802.11a



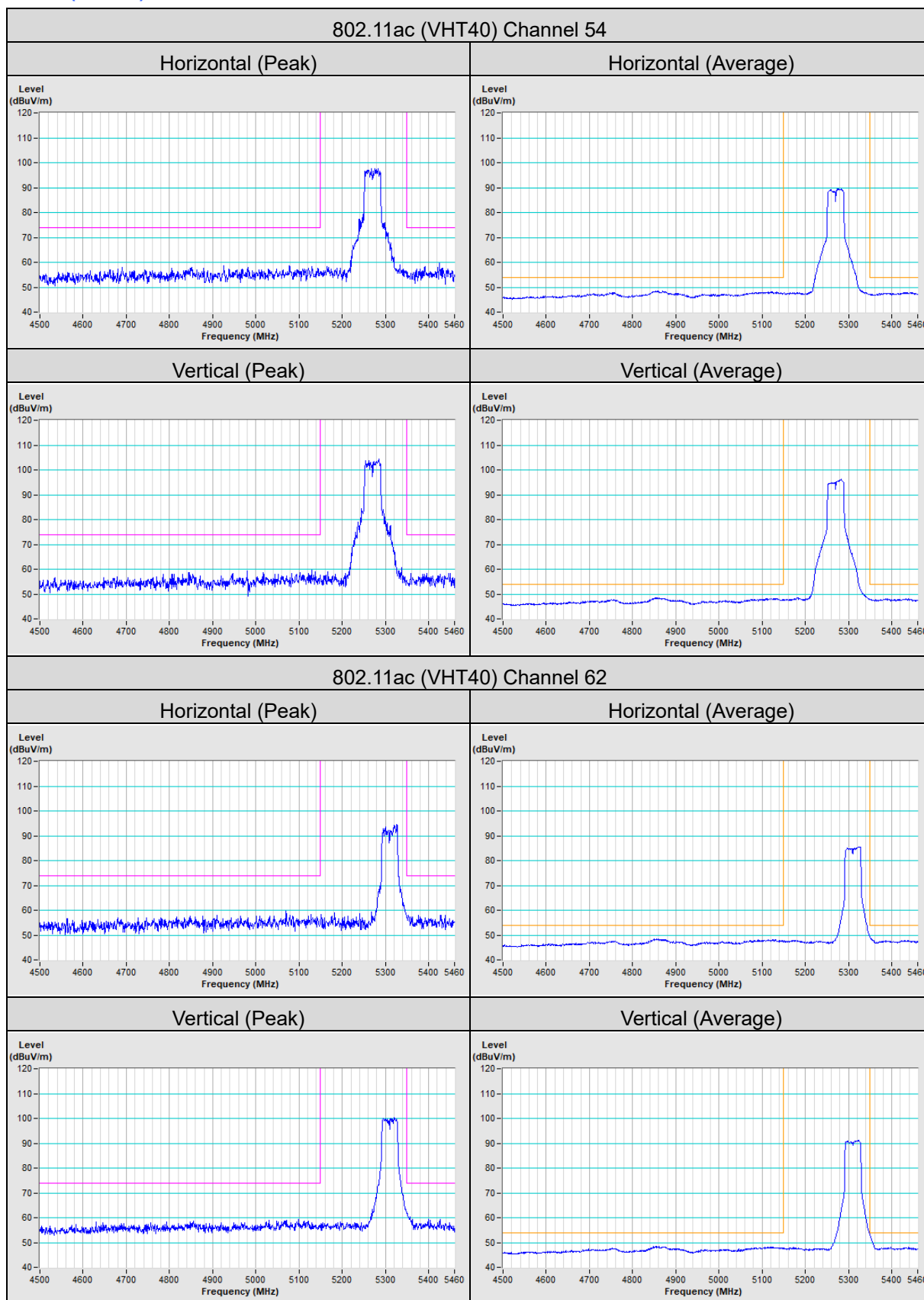


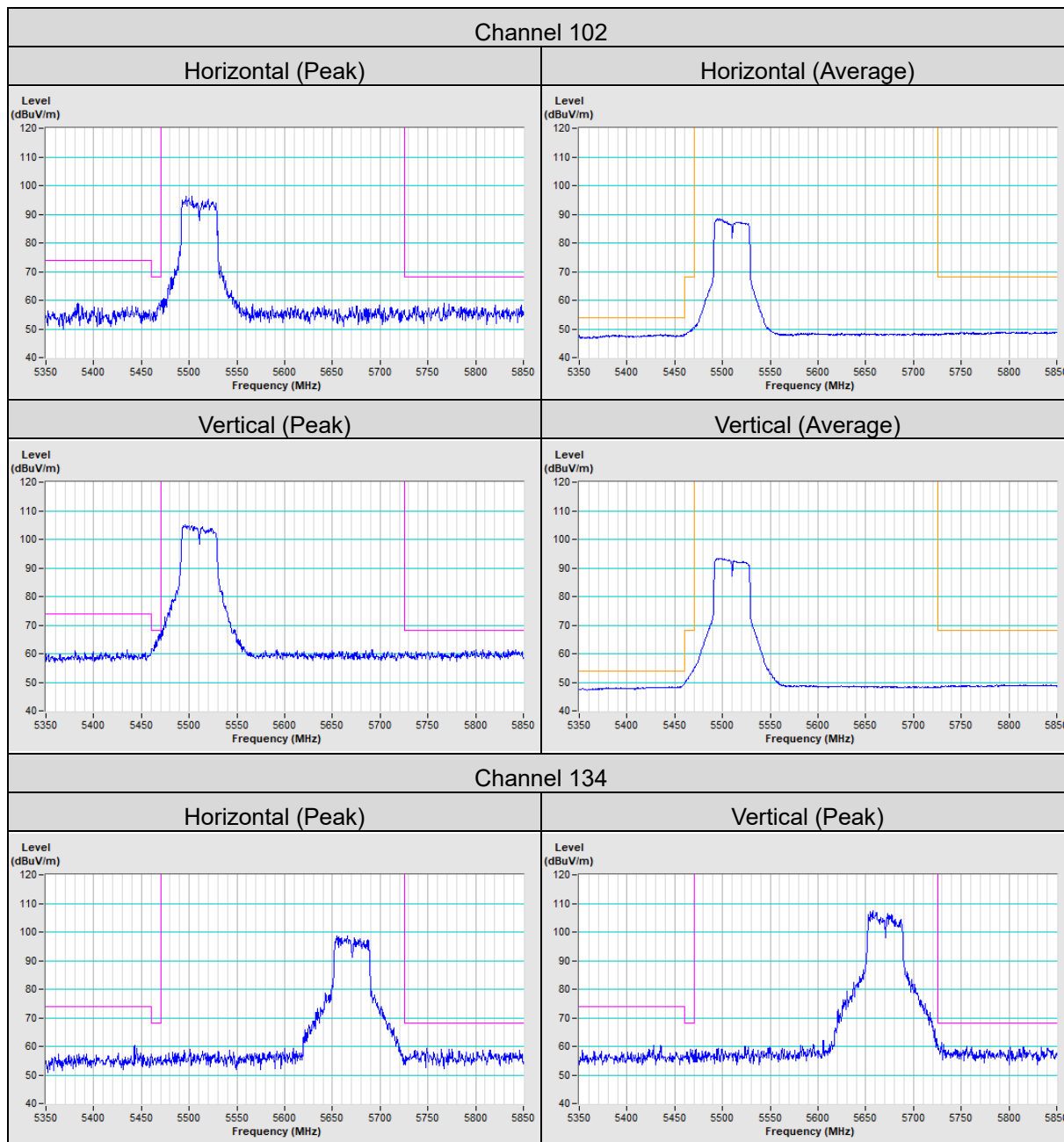
802.11ac (VHT20)



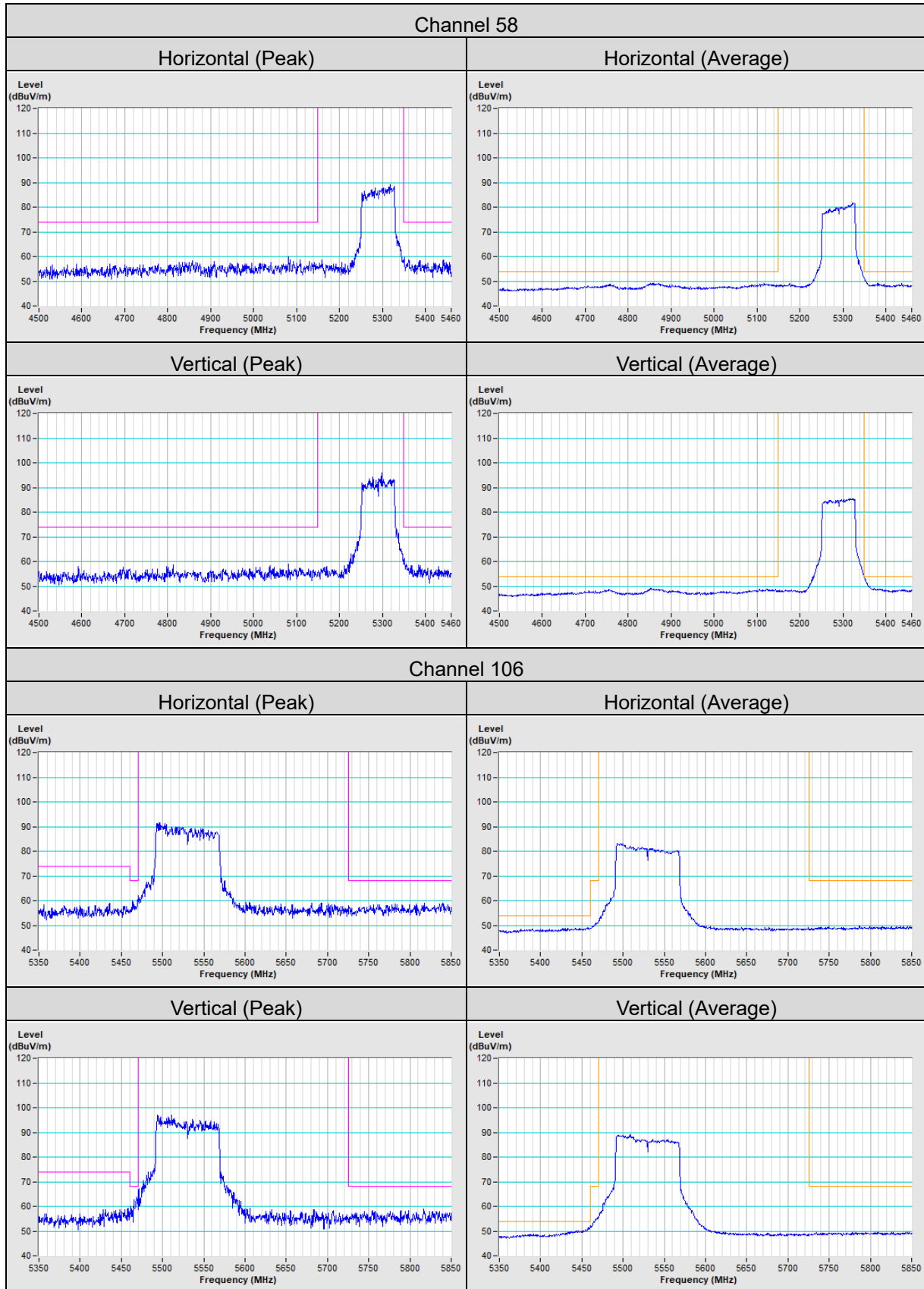


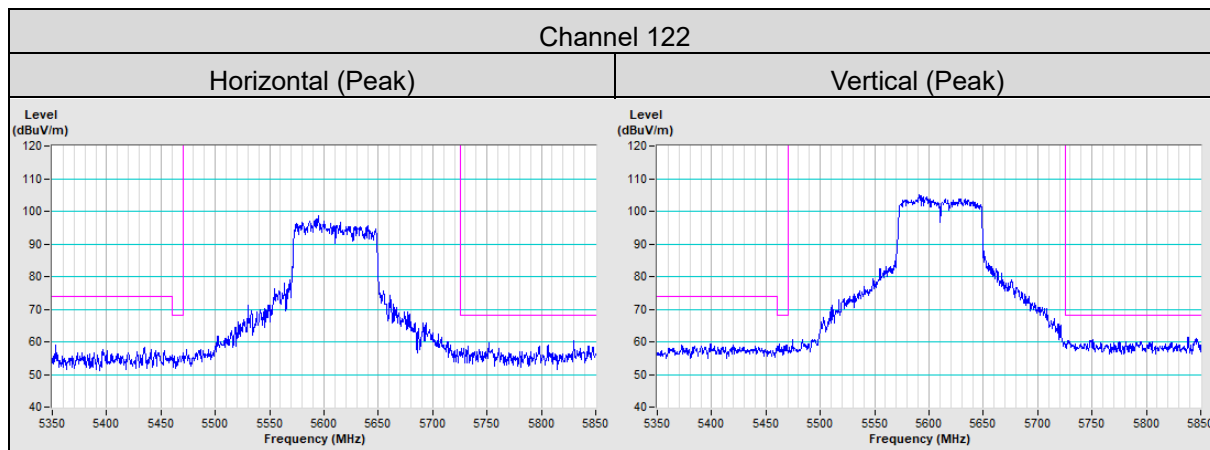
802.11ac (VHT40)





802.11ac (VHT80)





Appendix – Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Lin Kou EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab

Tel: 886-3-6668565

Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab

Tel: 886-3-3183232

Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

--- END ---