

FCC Test Report (DFS Band)

Report No.: RFBAOZ-WTW-P20090314A

FCC ID: WT8DNWAP840E

Test Model: AP840E

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Test Date: Sep. 22 to Nov. 03, 2020

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**FCC Registration /
Designation Number:** 723255 / TW2022



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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 (DFS Band).....	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.....	15
3.4.1 Configuration of System under Test.....	16
3.5 General Description of Applied Standards and References.....	18
4 Test Types and Results	19
4.1 Radiated Emission and Bandedge Measurement.....	19
4.1.1 Limits of Radiated Emission and Bandedge Measurement.....	19
4.1.2 Test Instruments.....	20
4.1.3 Test Procedure.....	23
4.1.4 Deviation from Test Standard.....	23
4.1.5 Test Setup.....	24
4.1.6 EUT Operating Condition.....	25
4.1.7 Test Results (Mode 1).....	26
4.1.8 Test Results (Mode 2).....	51
4.2 Conducted Emission Measurement.....	76
4.2.1 Limits of Conducted Emission Measurement.....	76
4.2.2 Test Instruments.....	76
4.2.3 Test Procedure.....	77
4.2.4 Deviation from Test Standard.....	77
4.2.5 Test Setup.....	77
4.2.6 EUT Operating Condition.....	77
4.2.7 Test Results (Mode 1).....	78
4.2.8 Test Results (Mode 2).....	80
4.3 Transmit Power Measurement.....	82
4.3.1 Limits of Transmit Power Measurement.....	82
4.3.2 Test Setup.....	82
4.3.3 Test Instruments.....	82
4.3.4 Test Procedure.....	83
4.3.5 Deviation from Test Standard.....	83
4.3.6 EUT Operating Condition.....	83
4.3.7 Test Results (Mode 1).....	84
4.3.8 Test Results (Mode 2).....	112
4.4 Occupied Bandwidth Measurement.....	140
4.4.1 Test Setup.....	140
4.4.2 Test Instruments.....	140
4.4.3 Test Procedure.....	140
4.4.4 Test Results (Mode 1).....	141
4.4.5 Test Results (Mode 2).....	146
4.5 Peak Power Spectral Density Measurement.....	151
4.5.1 Limits of Peak Power Spectral Density Measurement.....	151
4.5.2 Test Setup.....	151
4.5.3 Test Instruments.....	151
4.5.4 Test Procedure.....	152
4.5.5 Deviation from Test Standard.....	152

4.5.6 EUT Operating Condition	152
4.5.7 Test Results (Mode 1).....	153
4.5.8 Test Results (Mode 2).....	158
4.6 Frequency Stability Measurement	163
4.6.1 Limits of Frequency Stability Measurement	163
4.6.2 Test Setup.....	163
4.6.3 Test Instruments	163
4.6.4 Test Procedure	163
4.6.5 Deviation from Test Standard	163
4.6.6 EUT Operating Condition	163
4.6.7 Test Results	164
4.7 6dB Bandwidth Measurement.....	165
4.7.1 Limits of 6dB Bandwidth Measurement.....	165
4.7.2 Test Setup.....	165
4.7.3 Test Instruments	165
4.7.4 Test Procedure	165
4.7.5 Deviation from Test Standard	165
4.7.6 EUT Operating Condition	165
4.7.7 Test Results (Mode 1).....	166
4.7.8 Test Results (Mode 2).....	168
5 Pictures of Test Arrangements.....	170
Annex A.1 - Band-Edge Measurement (For U-NII-2A, U-NII-2C band) (Mode 1)	171
Annex A.2 - Band-Edge Measurement (For U-NII-2A, U-NII-2C band) (Mode 2)	178
Appendix – Information of the Testing Laboratories	185



Release Control Record

Issue No.	Description	Date Issued
RFBAOZ-WTW-P20090314A	Original release.	Aug. 11, 2021

1 Certificate of Conformity

Product: WiFi6 outdoor-indoor (IP55) Access Point

Brand: datto

Test Model: AP840E

Sample Status: Engineering sample

Applicant: Datto, Inc.

Test Date: Sep. 22 to Nov. 03, 2020

Standard: 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 EMC characteristics under the conditions specified in this report.

Prepared by : Vivian Huang , **Date:** Aug. 11, 2021
Vivian Hunag / Specialist

Approved by : Clark Lin , **Date:** Aug. 11, 2021
Clark Lin / Technical Manager

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -7.47 dB at 0.35703 MHz.
15.407(b) (1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement*	Pass	Meet the requirement of limit. Minimum passing margin is -0.1 dB at 5725.00 MHz, 5730.00 MHz, 5351.90 MHz, 5732.00 MHz and 5361.60 MHz.
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 R-SMA not a standard connector.

Note:

- For 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.
- Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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	1.9 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.1 dB
	30MHz ~ 1GHz	5.5 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	5.1 dB
	18GHz ~ 40GHz	5.3 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT (DFS Band)

Product	WiFi6 outdoor-indoor (IP55) Access Point
Brand	datto
Test Model	AP840E
Status of EUT	Engineering sample
Power Supply Rating	48-57 Vdc / 0.5 A from POE
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode 1024QAM for OFDMA in 11ax HE mode
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: up to 54 Mbps 802.11n: up to 600 Mbps 802.11ac: up to 1733.3 Mbps 802.11ax: up to 2401.9 Mbps
Operating Frequency	5.26 ~ 5.32 GHz, 5.5 ~ 5.58 GHz & 5.66 ~ 5.72 GHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 13 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 6 802.11ac (VHT80), 802.11ax (HE80): 3
Output Power	Mode 1: Dipole Antenna (Outdoor/Indoor) CDD Mode: 5.26 ~ 5.32 GHz: 203.898 mW 5.5 ~ 5.58 GHz & 5.66 ~ 5.72 GHz: 200.847 mW Beamforming Mode: 5.26 ~ 5.32 GHz: 55.271 mW 5.5 ~ 5.58 GHz & 5.66 ~ 5.72 GHz: 55.34 mW Mode 2: Patch Antenna (Outdoor/Indoor) CDD Mode: 5.26 ~ 5.32 GHz: 130.705 mW 5.5 ~ 5.58 GHz & 5.66 ~ 5.72 GHz: 150.543 mW Beamforming Mode: 5.26 ~ 5.32 GHz: 61.793 mW 5.5 ~ 5.58 GHz & 5.66 ~ 5.72 GHz: 61.599 mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
Data Cable Supplied	NA

Note:

1. This report is prepared for FCC class II change. The difference compared with the Report No.: RFBAOZ-WTW-P20090314-1 as the following:

◆ Add DFS band <5.26GHz ~ 5.32GHz, 5.5 ~ 5.58 GHz & 5.66 ~ 5.72 GHz > by software.

2. According to above conditions, for DFS band all of test items need to be performed and all data was verified to meet the requirements.

3. The EUT has below radios as following table:

Radio 1	Radio 2	Radio 3	Radio 4
WLAN 2.4GHz	WLAN 5GHz	Bluetooth	2.4G/5G Background Scanning (Rx only)

4. Simultaneously transmission condition.

Condition	Technology		
1	WLAN (2.4GHz)	WLAN (5GHz)	Bluetooth

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

5. The antennas provided to the EUT, please refer to the following table:

Ant. Set No.	RF Chain No.	Brand	Model No.	Ant. Net Gain (dBi)	Freq. Range (GHz)	Ant. Type	Connector Type	Cable Length
1	Chain 0 Chain 1 Chain 2 Chain 3	Nienyi	NYS4436	3.5 6.5	2.4~2.4835 5.15~5.85	Dipole	R-SMA	200 mm
2	Chain 0 Chain 1 Chain 2 Chain 3	TerraWave	M6060060M P1D43620	6 6	2.4~2.4835 5.15~5.85	Patch	R-SMA	914.4 mm (36" w/ connector)
3 (Background Ant)	-	Hong Lin	290-20458	6.45 4.5	2.4~2.4835 5.15~5.85	PIFA	i-pex(MHF)	140 mm
4 (BT Ant)	-	Hong Lin	290-20458	3.79	2.4~2.4835	PIFA	i-pex(MHF)	130 mm

6. The EUT incorporates a MIMO function:

2.4GHz Band		
MODULATION MODE	TX & RX CONFIGURATION	
802.11b	4TX	4RX
802.11g	4TX	4RX
802.11n (HT20)	4TX	4RX
802.11n (HT40)	4TX	4RX
VHT20	4TX	4RX
VHT40	4TX	4RX
802.11ax (HE20)	4TX	4RX
802.11ax (HE40)	4TX	4RX
5GHz Band		
MODULATION MODE	TX & RX CONFIGURATION	
802.11a	4TX	4RX
802.11n (HT20)	4TX	4RX
802.11n (HT40)	4TX	4RX
802.11ac (VHT20)	4TX	4RX
802.11ac (VHT40)	4TX	4RX
802.11ac (VHT80)	4TX	4RX
802.11ax (HE20)	4TX	4RX
802.11ax (HE40)	4TX	4RX
802.11ax (HE80)	4TX	4RX

Note:

1. All of modulation mode support beamforming function except 802.11a/b/g modulation mode.
 2. The EUT support Beamforming and CDD mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.
 3. The modulation and bandwidth are similar for 802.11n mode for 20MHz (40MHz), 802.11ac mode for 20MHz (40MHz, 80MHz) and 802.11ax mode for 20MHz (40MHz, 80MHz), therefore the manufacturer will control the power for 802.11n/ac mode is the same as the 802.11ax mode or more lower than it and investigated worst case to representative mode in test report. (Final test mode refer to section 3.2.1)
7. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.
8. 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.

3.2 Description of Test Modes

FOR 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	5290 MHz

FOR 5500 ~ 5580MHz & 5660 ~ 5720MHz

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

Channel	Frequency	Channel	Frequency
100	5500 MHz	132	5660 MHz
104	5520 MHz	136	5680 MHz
108	5540 MHz	140	5700 MHz
112	5560 MHz	144	5720 MHz
116	5580 MHz		

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

Channel	Frequency	Channel	Frequency
102	5510 MHz	134	5670 MHz
110	5550 MHz	142	5710 MHz

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

Channel	Frequency	Channel	Frequency
106	5530 MHz	138	5690 MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable To				Description
	RE \geq 1G	RE<1G	PLC	APCM	
1	√	√	√	√	With Dipole antenna
2	√	√	√	√	With Patch antenna

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

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.

CDD Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11a	5250-5320	52 to 64	52, 60, 64	OFDM	BPSK	6Mb/s
802.11ax (HE20)		52 to 64	52, 60, 64	OFDMA	BPSK	MCS0
802.11ax (HE40)		54 to 62	54, 62	OFDMA	BPSK	MCS0
802.11ax (HE80)		58	58	OFDMA	BPSK	MCS0
802.11a	5500-5580 & 5660-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6Mb/s
802.11ax (HE20)		100 to 144	100, 116, 140, 144	OFDMA	BPSK	MCS0
802.11ax (HE40)		102 to 142	102, 110, 134, 142	OFDMA	BPSK	MCS0
802.11ax (HE80)		106 to 138	106, 138	OFDMA	BPSK	MCS0

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.

CDD Mode						
Dipole antenna						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11ax (HE80)	5250-5320 5500-5580 & 5660-5720	58, 106 to 138	58	OFDMA	BPSK	MCS0
Patch antenna						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11ax (HE80)	5250-5320 5500-5580 & 5660-5720	58, 106 to 138	138	OFDMA	BPSK	MCS0

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.

CDD Mode						
Dipole antenna						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11ax (HE80)	5250-5320 5500-5580 & 5660-5720	58, 106 to 138	58	OFDMA	BPSK	MCS0
Patch antenna						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11ax (HE80)	5250-5320 5500-5580 & 5660-5720	58, 106 to 138	138	OFDMA	BPSK	MCS0

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.

CDD Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11a	5250-5320	52 to 64	52, 60, 64	OFDM	BPSK	6Mb/s
802.11ac (VHT20) (output power only)		52 to 64	52, 60, 64	OFDM	BPSK	MCS0
802.11ac (VHT40) (output power only)		54 to 62	54, 62	OFDM	BPSK	MCS0
802.11ac (VHT80) (output power only)		58	58	OFDM	BPSK	MCS0
802.11ax (HE20)		52 to 64	52, 60, 64	OFDMA	BPSK	MCS0
802.11ax (HE40)		54 to 62	54, 62	OFDMA	BPSK	MCS0
802.11ax (HE80)		58	58	OFDMA	BPSK	MCS0
802.11a		5500-5580 & 5660-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK
802.11ac (VHT20) (output power only)	100 to 144		100, 116, 140, 144	OFDM	BPSK	MCS0
802.11ac (VHT40) (output power only)	102 to 142		102, 110, 134, 142	OFDM	BPSK	MCS0
802.11ac (VHT80) (output power only)	106 to 138		106, 138	OFDM	BPSK	MCS0
802.11ax (HE20)	100 to 144		100, 116, 140, 144	OFDMA	BPSK	MCS0
802.11ax (HE40)	102 to 142		102, 110, 134, 142	OFDMA	BPSK	MCS0
802.11ax (HE80)	106 to 138		106, 138	OFDMA	BPSK	MCS0

Beamforming Mode (output power only)

Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11ac (VHT20)	5250-5320	52 to 64	52, 60, 64	OFDM	BPSK	MCS0
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	MCS0
802.11ac (VHT80)		58	58	OFDM	BPSK	MCS0
802.11ax (HE20)		52 to 64	52, 60, 64	OFDMA	BPSK	MCS0
802.11ax (HE40)		54 to 62	54, 62	OFDMA	BPSK	MCS0
802.11ax (HE80)		58	58	OFDMA	BPSK	MCS0
802.11ac (VHT20)	5500-5580 & 5660-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	MCS0
802.11ac (VHT40)		102 to 142	102, 110, 134, 142	OFDM	BPSK	MCS0
802.11ac (VHT80)		106 to 138	106, 138	OFDM	BPSK	MCS0
802.11ax (HE20)		100 to 144	100, 116, 140, 144	OFDMA	BPSK	MCS0
802.11ax (HE40)		102 to 142	102, 110, 134, 142	OFDMA	BPSK	MCS0
802.11ax (HE80)		106 to 138	106, 138	OFDMA	BPSK	MCS0

Test Condition:

Applicable To	Environmental Conditions	Input Power (System)	Tested By
RE \geq 1G	25deg. C, 75%RH	120Vac, 60Hz	Eric Peng
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Carter Lin
PLC	25deg. C, 64%RH	120Vac, 60Hz	Sampson Chen
APCM	25deg. C, 60%RH	120Vac, 60Hz	Jyunchun Lin

3.3 Duty Cycle of Test Signal

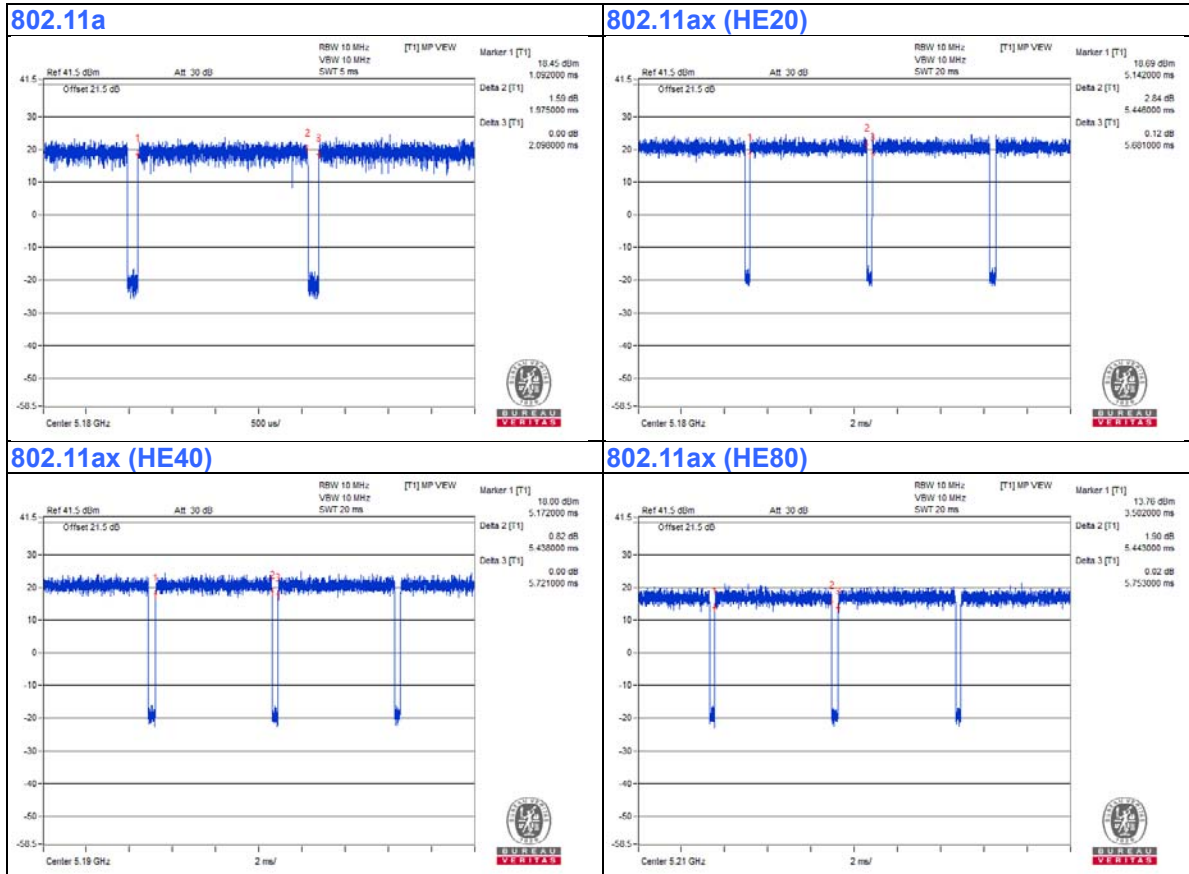
Duty cycle of test signal is < 98 %, duty factor shall be considered.

802.11a: Duty cycle = 1.975 ms / 2.098 ms = 0.941, Duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.26 \text{ dB}$

802.11ax (HE20): Duty cycle = 5.446 ms / 5.681 ms = 0.959, Duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.18 \text{ dB}$

802.11ax (HE40): Duty cycle = 5.438 ms / 5.721 ms = 0.951, Duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.22 \text{ dB}$

802.11ax (HE80): Duty cycle = 5.443 ms / 5.753 ms = 0.946, Duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.24 \text{ dB}$



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.	POE	PHIHONG	POE29U-560	NA	NA	Supplied by client
B.	Laptop	DELL	E5430	GM1SKV1	FCC DoC	Provided by Lab

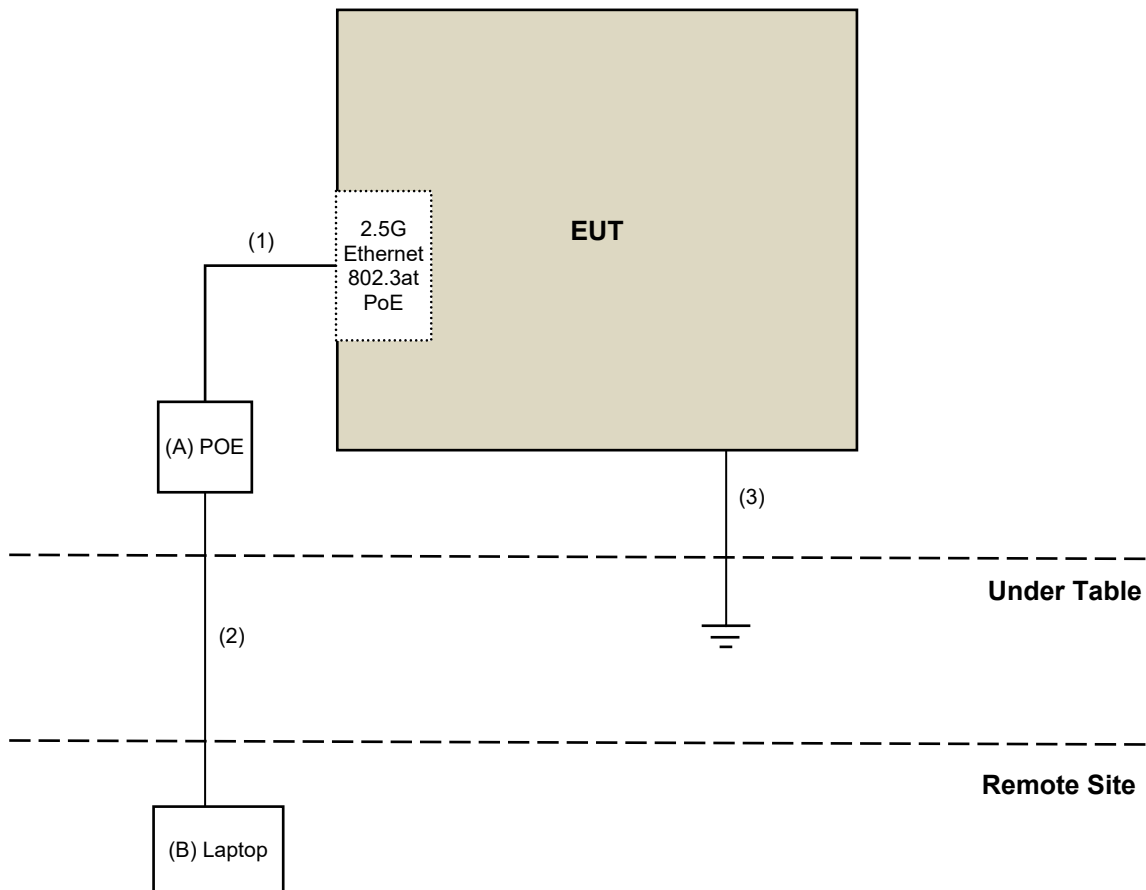
Note:

1. All power cords of the above support units are non-shielded (1.8m).

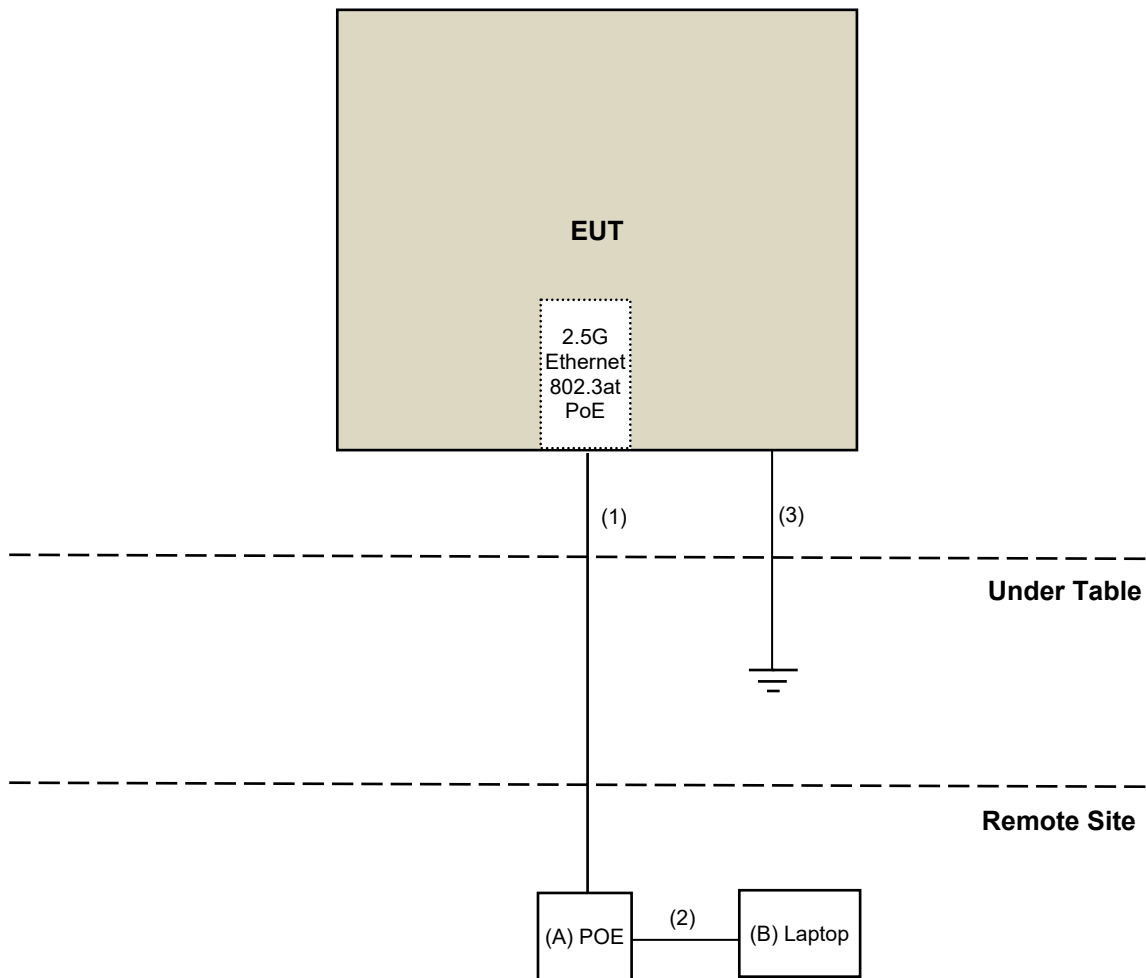
ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ-45 Cable	1	10	No	0	Provided by Lab
2.	RJ-45 Cable	1	1	No	0	Provided by Lab
3.	Ground Cable	1	3	No	0	Provided by Lab

3.4.1 Configuration of System under Test

AC Power Conducted Emissions test



Radiated Emissions test:



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.

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:

- The lower limit shall apply at the transition frequencies.
- Emission level (dBuV/m) = 20 log Emission level (uV/m).
- 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 (dBuV/m)	AV:54 (dBuV/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	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}
5725~5850 MHz	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}
^{*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:

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

4.1.2 Test Instruments

For Radiated emission (Above 1GHz), Bandedge & OOB test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY51210202	Dec. 13, 2019	Dec. 12, 2020
Horn_Antenna SCHWARZBECK	BBHA 9120D	9120D-783	Nov. 24, 2019	Nov. 23, 2020
Pre-Amplifier EMCI	EMC 12630 SE	980638	Apr. 08, 2020	Apr. 07, 2021
RF Cable	EMC104-SM-SM-1200	160923	Jan. 15, 2020	Jan. 14, 2021
RF Cable	EMC104-SM-SM-2000	180502	Apr. 29, 2020	Apr. 28, 2021
RF Cable	EMC104-SM-SM-6000	180418	Apr. 29, 2020	Apr. 28, 2021
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 15, 2020	Jan. 14, 2021
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170519	Nov. 24, 2019	Nov. 23, 2020
RF Cable	EMC102-KM-KM-1200	160924	Jan. 15, 2020	Jan. 14, 2021
RF Cable	EMC-KM-KM-4000	200214	Mar. 11, 2020	Mar. 10, 2021
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	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 966 Chamber No. 4.
3. Tested Date: Sep. 22 to Oct. 20, 2020

For Radiated emission (Below 1GHz) test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY51210202	Dec. 13, 2019	Dec. 12, 2020
Pre-Amplifier EMCI	EMC001340	980142	May 25, 2020	May 24, 2021
Loop Antenna Electro-Metrics	EM-6879	264	Feb. 18, 2020	Feb. 17, 2021
RF Cable	NA	LOOPCAB-001	Jan. 08, 2020	Jan. 07, 2021
RF Cable	NA	LOOPCAB-002	Jan. 08, 2020	Jan. 07, 2021
Pre-Amplifier Mini-Circuits	ZFL-1000VH2B	AMP-ZFL-01	Oct. 23, 2019	Oct. 22, 2020
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-406	Nov. 11, 2019	Nov. 10, 2020
RF Cable	8D	966-4-1	Mar. 18, 2020	Mar. 17, 2021
RF Cable	8D	966-4-2	Mar. 18, 2020	Mar. 17, 2021
RF Cable	8D	966-4-3	Mar. 18, 2020	Mar. 17, 2021
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-4-01	Sep. 24, 2020	Sep. 23, 2021
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	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 966 Chamber No. 4.
3. Tested Date: Oct. 15, 2020

For other test items:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer R&S	FSV40	100964	May 29, 2020	May 28, 2021
Power meter Anritsu	ML2495A	1529002	July 22, 2020	July 21, 2021
Power sensor Anritsu	MA2411B	1339443	July 22, 2020	July 21, 2021
Fixed Attenuator Mini-Circuits	MDCS18N-10	MDCS18N-10-01	Apr. 14, 2020	Apr. 13, 2021
DC Power Supply Topward	6603D	795558	NA	NA
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	Jan. 16, 2020	Jan. 15, 2021
True RMS Clamp Meter FLUKE	325	31130711WS	June 06, 2020	June 05, 2021
Software	ADT_RF Test Software V6.6.5.4	NA	NA	NA

- NOTE:**
1. The test was performed in Oven room 2.
 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 3. Tested Date: Oct. 29 to Nov. 03, 2020

4.1.3 Test Procedure

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 detects 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:

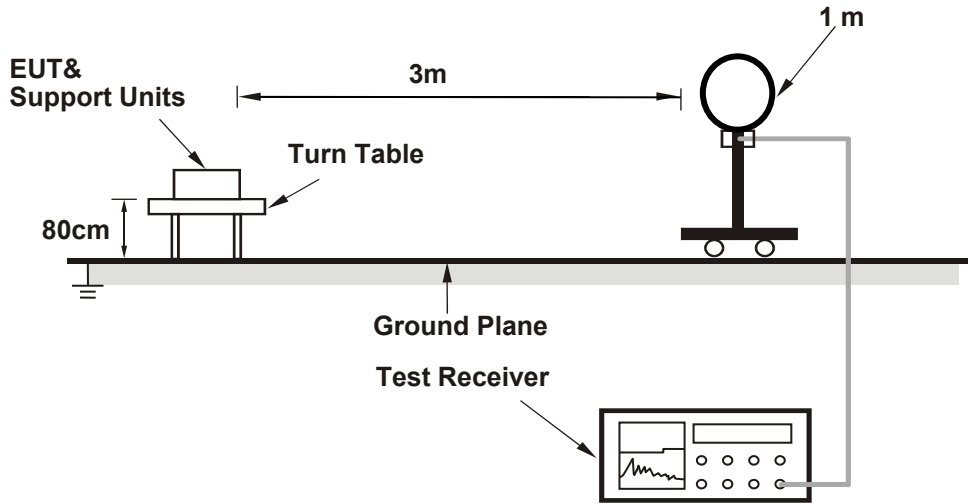
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
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.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

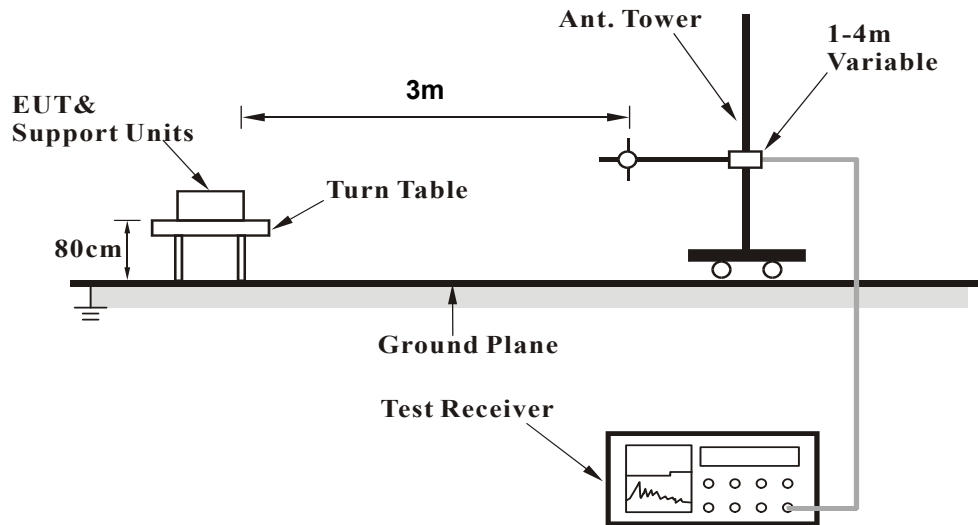
No deviation.

4.1.5 Test Setup

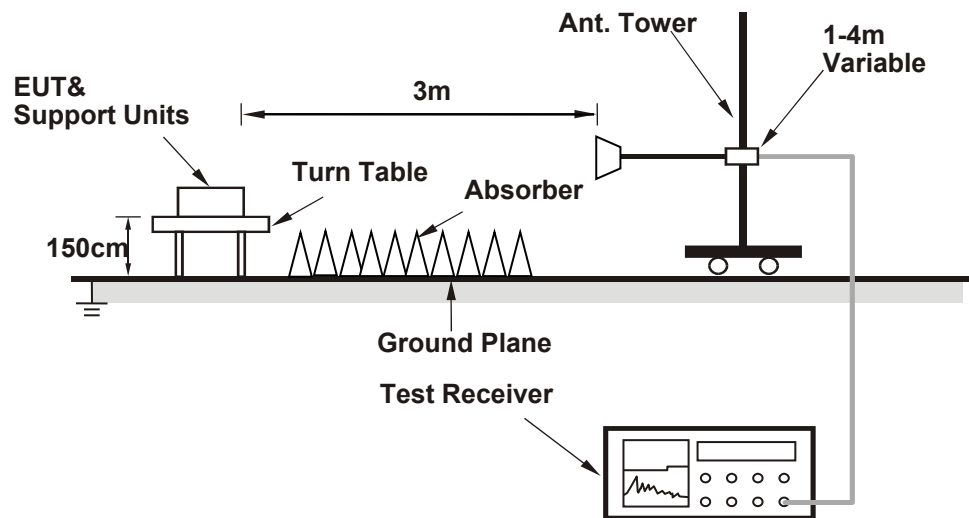
For Radiated emission below 30MHz



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 Condition

- a. Connected the EUT with the Laptop which is placed on remote site.
- b. Controlling software (QRCT_V 4.0.00156.0) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

4.1.7 Test Results (Mode 1)

Above 1GHz Data:

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	5052.50	48.5 PK	74.0	-25.5	1.22 H	342	47.4	1.1
2	5052.50	37.2 AV	54.0	-16.8	1.22 H	342	36.1	1.1
3	*5260.00	111.8 PK			1.22 H	342	111.3	0.5
4	*5260.00	102.2 AV			1.22 H	342	101.7	0.5
5	#10520.00	45.5 PK	68.2	-22.7	1.00 H	343	34.9	10.6
6	15780.00	44.5 PK	74.0	-29.5	1.00 H	355	33.3	11.2
7	15780.00	34.1 AV	54.0	-19.9	1.00 H	355	22.9	11.2

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	5075.60	52.5 PK	74.0	-21.5	1.05 V	98	51.5	1.0
2	5075.60	43.4 AV	54.0	-10.6	1.05 V	98	42.4	1.0
3	*5260.00	121.7 PK			1.05 V	98	121.2	0.5
4	*5260.00	112.5 AV			1.05 V	98	112.0	0.5
5	5357.90	54.6 PK	74.0	-19.4	1.05 V	98	53.9	0.7
6	5357.90	45.0 AV	54.0	-9.0	1.05 V	98	44.3	0.7
7	#10520.00	45.4 PK	68.2	-22.8	1.00 V	149	34.8	10.6
8	15780.00	44.1 PK	74.0	-29.9	1.00 V	158	32.9	11.2
9	15780.00	33.6 AV	54.0	-20.4	1.00 V	158	22.4	11.2

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.
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	112.3 PK			1.20 H	349	111.8	0.5
2	*5300.00	103.1 AV			1.20 H	349	102.6	0.5
3	10600.00	45.1 PK	74.0	-28.9	1.00 H	335	34.8	10.3
4	10600.00	34.8 AV	54.0	-19.2	1.00 H	335	24.5	10.3
5	15900.00	44.2 PK	74.0	-29.8	1.01 H	353	32.6	11.6
6	15900.00	33.6 AV	54.0	-20.4	1.01 H	353	22.0	11.6

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	*5300.00	122.8 PK			3.84 V	263	122.3	0.5
2	*5300.00	113.6 AV			3.84 V	263	113.1	0.5
3	10600.00	44.9 PK	74.0	-29.1	1.03 V	137	34.6	10.3
4	10600.00	34.4 AV	54.0	-19.6	1.03 V	137	24.1	10.3
5	15900.00	43.8 PK	74.0	-30.2	1.03 V	155	32.2	11.6
6	15900.00	33.3 AV	54.0	-20.7	1.03 V	155	21.7	11.6

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 802.11a	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	110.3 PK			1.18 H	353	109.8	0.5
2	*5320.00	102.7 AV			1.18 H	353	102.2	0.5
3	5351.20	63.5 PK	74.0	-10.5	1.18 H	353	62.9	0.6
4	5351.20	47.2 AV	54.0	-6.8	1.18 H	353	46.6	0.6
5	10640.00	44.6 PK	74.0	-29.4	1.00 H	337	34.3	10.3
6	10640.00	34.4 AV	54.0	-19.6	1.00 H	337	24.1	10.3
7	15960.00	43.7 PK	74.0	-30.3	1.00 H	350	31.7	12.0
8	15960.00	33.1 AV	54.0	-20.9	1.00 H	350	21.1	12.0

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	*5320.00	121.3 PK			3.81 V	264	120.8	0.5
2	*5320.00	114.8 AV			3.81 V	264	114.3	0.5
3	5350.00	64.7 PK	74.0	-9.3	3.81 V	264	64.1	0.6
4	5350.00	53.6 AV	54.0	-0.4	3.81 V	264	53.0	0.6
5	10640.00	44.2 PK	74.0	-29.8	1.03 V	141	33.9	10.3
6	10640.00	34.0 AV	54.0	-20.0	1.03 V	141	23.7	10.3
7	15960.00	43.5 PK	74.0	-30.5	1.00 V	156	31.5	12.0
8	15960.00	33.0 AV	54.0	-21.0	1.00 V	156	21.0	12.0

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.

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	5458.00	56.1 PK	74.0	-17.9	2.23 H	173	55.2	0.9
2	5458.00	42.2 AV	54.0	-11.8	2.23 H	173	41.3	0.9
3	#5468.70	62.2 PK	68.2	-6.0	2.23 H	173	61.3	0.9
4	*5500.00	116.2 PK			2.23 H	173	115.3	0.9
5	*5500.00	106.4 AV			2.23 H	173	105.5	0.9
6	11000.00	55.6 PK	74.0	-18.4	2.38 H	280	44.3	11.3
7	11000.00	44.1 AV	54.0	-9.9	2.38 H	280	32.8	11.3
8	#16500.00	47.5 PK	68.2	-20.7	1.03 H	206	33.5	14.0

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	5456.20	59.1 PK	74.0	-14.9	3.91 V	259	58.2	0.9
2	5456.20	47.0 AV	54.0	-7.0	3.91 V	259	46.1	0.9
3	#5468.70	65.8 PK	68.2	-2.4	3.91 V	259	64.9	0.9
4	*5500.00	121.2 PK			3.91 V	259	120.3	0.9
5	*5500.00	114.1 AV			3.91 V	259	113.2	0.9
6	11000.00	51.9 PK	74.0	-22.1	4.00 V	17	40.6	11.3
7	11000.00	40.4 AV	54.0	-13.6	4.00 V	17	29.1	11.3
8	#16500.00	45.5 PK	68.2	-22.7	1.08 V	227	31.5	14.0

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 802.11a	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	116.8 PK			1.52 H	162	115.8	1.0
2	*5580.00	106.8 AV			1.52 H	162	105.8	1.0
3	11160.00	55.8 PK	74.0	-18.2	2.39 H	289	44.9	10.9
4	11160.00	44.2 AV	54.0	-9.8	2.39 H	289	33.3	10.9
5	#16740.00	46.9 PK	68.2	-21.3	1.01 H	206	31.8	15.1

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	120.0 PK			3.86 V	270	119.0	1.0
2	*5580.00	113.7 AV			3.86 V	270	112.7	1.0
3	11160.00	52.0 PK	74.0	-22.0	3.97 V	18	41.1	10.9
4	11160.00	40.2 AV	54.0	-13.8	3.97 V	18	29.3	10.9
5	#16740.00	45.8 PK	68.2	-22.4	1.03 V	235	30.7	15.1

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 802.11a	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	108.7 PK			1.49 H	177	107.3	1.4
2	*5700.00	99.9 AV			1.49 H	177	98.5	1.4
3	#5725.00	60.5 PK	68.2	-7.7	1.49 H	177	59.1	1.4
4	11400.00	52.1 PK	74.0	-21.9	2.42 H	280	40.5	11.6
5	11400.00	40.7 AV	54.0	-13.3	2.42 H	280	29.1	11.6
6	#17100.00	44.1 PK	68.2	-24.1	1.00 H	214	27.2	16.9

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	*5700.00	120.7 PK			1.27 V	97	119.3	1.4
2	*5700.00	112.3 AV			1.27 V	97	110.9	1.4
3	#5725.00	68.1 PK	68.2	-0.1	1.27 V	97	66.7	1.4
4	11400.00	48.6 PK	74.0	-25.4	3.95 V	34	37.0	11.6
5	11400.00	36.9 AV	54.0	-17.1	3.95 V	34	25.3	11.6
6	#17100.00	44.3 PK	68.2	-23.9	1.04 V	222	27.4	16.9

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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 144 : 5720 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	50.4 PK	74.0	-23.6	1.54 H	168	49.5	0.9
2	5460.00	39.9 AV	54.0	-14.1	1.54 H	168	39.0	0.9
3	#5470.00	50.2 PK	68.2	-18.0	1.54 H	168	49.3	0.9
4	*5720.00	116.5 PK			1.54 H	168	115.1	1.4
5	*5720.00	106.7 AV			1.54 H	168	105.3	1.4
6	#5850.00	50.5 PK	68.2	-17.7	1.54 H	168	48.7	1.8
7	11440.00	56.2 PK	74.0	-17.8	2.43 H	289	44.5	11.7
8	11440.00	44.7 AV	54.0	-9.3	2.43 H	289	33.0	11.7
9	#17160.00	47.1 PK	68.2	-21.1	1.00 H	220	31.0	16.1

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	53.4 PK	74.0	-20.6	1.04 V	97	52.5	0.9
2	5460.00	42.7 AV	54.0	-11.3	1.04 V	97	41.8	0.9
3	#5470.00	53.1 PK	68.2	-15.1	1.04 V	97	52.2	0.9
4	*5720.00	122.7 PK			1.04 V	97	121.3	1.4
5	*5720.00	115.0 AV			1.04 V	97	113.6	1.4
6	#5909.10	53.4 PK	68.2	-14.8	1.04 V	97	51.9	1.5
7	11440.00	52.1 PK	74.0	-21.9	4.00 V	10	40.4	11.7
8	11440.00	40.0 AV	54.0	-14.0	4.00 V	10	28.3	11.7
9	#17160.00	45.3 PK	68.2	-22.9	1.00 V	232	29.2	16.1

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 (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	5070.00	49.0 PK	74.0	-25.0	2.01 H	3	48.0	1.0
2	5070.00	37.1 AV	54.0	-16.9	2.01 H	3	36.1	1.0
3	*5260.00	114.1 PK			2.01 H	3	113.6	0.5
4	*5260.00	102.1 AV			2.01 H	3	101.6	0.5
5	#10520.00	45.0 PK	68.2	-23.2	1.02 H	333	34.4	10.6
6	15780.00	45.0 PK	74.0	-29.0	1.03 H	360	33.8	11.2
7	15780.00	34.3 AV	54.0	-19.7	1.03 H	360	23.1	11.2

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	5071.40	52.8 PK	74.0	-21.2	1.16 V	94	51.8	1.0
2	5071.40	44.5 AV	54.0	-9.5	1.16 V	94	43.5	1.0
3	*5260.00	124.5 PK			1.16 V	94	124.0	0.5
4	*5260.00	113.4 AV			1.16 V	94	112.9	0.5
5	5355.30	54.3 PK	74.0	-19.7	1.16 V	94	53.7	0.6
6	5355.30	44.8 AV	54.0	-9.2	1.16 V	94	44.2	0.6
7	#10520.00	45.4 PK	68.2	-22.8	1.00 V	145	34.8	10.6
8	15780.00	44.2 PK	74.0	-29.8	1.00 V	162	33.0	11.2
9	15780.00	33.9 AV	54.0	-20.1	1.00 V	162	22.7	11.2

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.
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	114.8 PK			2.02 H	16	114.3	0.5
2	*5300.00	103.4 AV			2.02 H	16	102.9	0.5
3	10600.00	45.2 PK	74.0	-28.8	1.00 H	336	34.9	10.3
4	10600.00	34.9 AV	54.0	-19.1	1.00 H	336	24.6	10.3
5	15900.00	45.0 PK	74.0	-29.0	1.03 H	343	33.4	11.6
6	15900.00	34.6 AV	54.0	-19.4	1.03 H	343	23.0	11.6

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	*5300.00	123.9 PK			1.00 V	92	123.4	0.5
2	*5300.00	114.0 AV			1.00 V	92	113.5	0.5
3	10600.00	45.1 PK	74.0	-28.9	1.04 V	152	34.8	10.3
4	10600.00	34.6 AV	54.0	-19.4	1.04 V	152	24.3	10.3
5	15900.00	44.1 PK	74.0	-29.9	1.01 V	158	32.5	11.6
6	15900.00	33.5 AV	54.0	-20.5	1.01 V	158	21.9	11.6

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 802.11ax (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	113.2 PK			1.19 H	354	112.7	0.5
2	*5320.00	101.2 AV			1.19 H	354	100.7	0.5
3	5350.00	59.0 PK	74.0	-15.0	1.19 H	354	58.4	0.6
4	5350.00	48.6 AV	54.0	-5.4	1.19 H	354	48.0	0.6
5	10640.00	45.7 PK	74.0	-28.3	1.00 H	334	35.4	10.3
6	10640.00	35.2 AV	54.0	-18.8	1.00 H	334	24.9	10.3
7	15960.00	44.8 PK	74.0	-29.2	1.00 H	360	32.8	12.0
8	15960.00	34.5 AV	54.0	-19.5	1.00 H	360	22.5	12.0

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	*5320.00	122.4 PK			3.80 V	269	121.9	0.5
2	*5320.00	110.5 AV			3.80 V	269	110.0	0.5
3	5350.00	67.5 PK	74.0	-6.5	3.80 V	269	66.9	0.6
4	5350.00	53.4 AV	54.0	-0.6	3.80 V	269	52.8	0.6
5	10640.00	45.1 PK	74.0	-28.9	1.00 V	145	34.8	10.3
6	10640.00	34.6 AV	54.0	-19.4	1.00 V	145	24.3	10.3
7	15960.00	44.0 PK	74.0	-30.0	1.00 V	158	32.0	12.0
8	15960.00	33.2 AV	54.0	-20.8	1.00 V	158	21.2	12.0

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.

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	5406.00	49.8 PK	74.0	-24.2	2.46 H	111	49.0	0.8
2	5406.00	37.8 AV	54.0	-16.2	2.46 H	111	37.0	0.8
3	#5469.30	54.5 PK	68.2	-13.7	2.46 H	111	53.6	0.9
4	*5500.00	111.9 PK			2.46 H	111	111.0	0.9
5	*5500.00	99.5 AV			2.46 H	111	98.6	0.9
6	11000.00	45.9 PK	74.0	-28.1	1.00 H	327	34.6	11.3
7	11000.00	35.5 AV	54.0	-18.5	1.00 H	327	24.2	11.3
8	#16500.00	44.5 PK	68.2	-23.7	1.02 H	343	30.5	14.0

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	5408.90	58.8 PK	74.0	-15.2	3.38 V	274	58.0	0.8
2	5408.90	48.1 AV	54.0	-5.9	3.38 V	274	47.3	0.8
3	#5467.60	67.7 PK	68.2	-0.5	3.38 V	274	66.8	0.9
4	*5500.00	123.8 PK			3.38 V	274	122.9	0.9
5	*5500.00	110.9 AV			3.38 V	274	110.0	0.9
6	11000.00	45.2 PK	74.0	-28.8	1.00 V	147	33.9	11.3
7	11000.00	34.4 AV	54.0	-19.6	1.00 V	147	23.1	11.3
8	#16500.00	44.5 PK	68.2	-23.7	1.00 V	168	30.5	14.0

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 802.11ax (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	114.9 PK			2.47 H	116	113.9	1.0
2	*5580.00	103.7 AV			2.47 H	116	102.7	1.0
3	11160.00	45.4 PK	74.0	-28.6	1.00 H	356	34.5	10.9
4	11160.00	34.9 AV	54.0	-19.1	1.00 H	356	24.0	10.9
5	#16740.00	44.2 PK	68.2	-24.0	1.03 H	356	29.1	15.1

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	123.9 PK			1.12 V	102	122.9	1.0
2	*5580.00	113.4 AV			1.12 V	102	112.4	1.0
3	11160.00	45.4 PK	74.0	-28.6	1.01 V	158	34.5	10.9
4	11160.00	34.5 AV	54.0	-19.5	1.01 V	158	23.6	10.9
5	#16740.00	44.8 PK	68.2	-23.4	1.05 V	165	29.7	15.1

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 (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	111.4 PK			2.44 H	125	110.0	1.4
2	*5700.00	98.8 AV			2.44 H	125	97.4	1.4
3	#5725.00	61.5 PK	68.2	-6.7	2.44 H	125	60.1	1.4
4	11400.00	45.4 PK	74.0	-28.6	1.00 H	333	33.8	11.6
5	11400.00	35.2 AV	54.0	-18.8	1.00 H	333	23.6	11.6
6	#17100.00	43.9 PK	68.2	-24.3	1.00 H	351	27.0	16.9

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	*5700.00	122.9 PK			1.16 V	95	121.5	1.4
2	*5700.00	110.5 AV			1.16 V	95	109.1	1.4
3	#5725.00	67.9 PK	68.2	-0.3	1.16 V	95	66.5	1.4
4	11400.00	45.8 PK	74.0	-28.2	1.00 V	145	34.2	11.6
5	11400.00	35.0 AV	54.0	-19.0	1.00 V	145	23.4	11.6
6	#17100.00	44.5 PK	68.2	-23.7	1.00 V	142	27.6	16.9

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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE20)	Channel	CH 144 : 5720 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	50.6 PK	74.0	-23.4	2.47 H	108	49.7	0.9
2	5460.00	39.7 AV	54.0	-14.3	2.47 H	108	38.8	0.9
3	#5470.00	50.3 PK	68.2	-17.9	2.47 H	108	49.4	0.9
4	*5720.00	115.2 PK			2.47 H	108	113.8	1.4
5	*5720.00	103.7 AV			2.47 H	108	102.3	1.4
6	#5850.00	51.0 PK	68.2	-17.2	2.47 H	108	49.2	1.8
7	11440.00	45.8 PK	74.0	-28.2	1.00 H	358	34.1	11.7
8	11440.00	35.2 AV	54.0	-18.8	1.00 H	358	23.5	11.7
9	#17160.00	44.5 PK	68.2	-23.7	1.01 H	340	28.4	16.1

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	5426.70	53.6 PK	74.0	-20.4	1.09 V	98	52.7	0.9
2	5426.70	41.4 AV	54.0	-12.6	1.09 V	98	40.5	0.9
3	#5470.00	54.5 PK	68.2	-13.7	1.09 V	98	53.6	0.9
4	*5720.00	125.0 PK			1.09 V	98	123.6	1.4
5	*5720.00	113.3 AV			1.09 V	98	111.9	1.4
6	#5905.90	54.8 PK	68.2	-13.4	1.09 V	98	53.3	1.5
7	11440.00	45.1 PK	74.0	-28.9	1.01 V	135	33.4	11.7
8	11440.00	34.7 AV	54.0	-19.3	1.01 V	135	23.0	11.7
9	#17160.00	44.0 PK	68.2	-24.2	1.00 V	173	27.9	16.1

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 (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	5143.00	49.3 PK	74.0	-24.7	1.49 H	292	48.6	0.7
2	5143.00	37.5 AV	54.0	-16.5	1.49 H	292	36.8	0.7
3	*5270.00	111.9 PK			1.49 H	292	111.4	0.5
4	*5270.00	99.4 AV			1.49 H	292	98.9	0.5
5	#10540.00	46.0 PK	68.2	-22.2	1.00 H	345	35.6	10.4
6	15810.00	44.4 PK	74.0	-29.6	1.04 H	343	33.2	11.2
7	15810.00	34.1 AV	54.0	-19.9	1.04 H	343	22.9	11.2

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	55.2 PK	74.0	-18.8	1.14 V	93	54.5	0.7
2	5150.00	44.6 AV	54.0	-9.4	1.14 V	93	43.9	0.7
3	*5270.00	121.4 PK			1.14 V	93	120.9	0.5
4	*5270.00	110.0 AV			1.14 V	93	109.5	0.5
5	5354.14	67.4 PK	74.0	-6.6	1.14 V	93	66.8	0.6
6	5354.14	53.5 AV	54.0	-0.5	1.14 V	93	52.9	0.6
7	#10540.00	45.1 PK	68.2	-23.1	1.00 V	158	34.7	10.4
8	15810.00	44.1 PK	74.0	-29.9	1.04 V	148	32.9	11.2
9	15810.00	33.8 AV	54.0	-20.2	1.04 V	148	22.6	11.2

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.
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	107.2 PK			1.50 H	292	106.7	0.5
2	*5310.00	94.4 AV			1.50 H	292	93.9	0.5
3	5350.00	50.5 PK	74.0	-23.5	1.50 H	292	49.9	0.6
4	5350.00	40.0 AV	54.0	-14.0	1.50 H	292	39.4	0.6
5	10620.00	45.9 PK	74.0	-28.1	1.03 H	335	35.6	10.3
6	10620.00	35.6 AV	54.0	-18.4	1.03 H	335	25.3	10.3
7	15930.00	44.7 PK	74.0	-29.3	1.01 H	360	32.8	11.9
8	15930.00	34.0 AV	54.0	-20.0	1.01 H	360	22.1	11.9

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	115.5 PK			3.78 V	262	115.0	0.5
2	*5310.00	105.0 AV			3.78 V	262	104.5	0.5
3	5350.00	63.6 PK	74.0	-10.4	3.78 V	262	63.0	0.6
4	5350.00	53.7 AV	54.0	-0.3	3.78 V	262	53.1	0.6
5	10620.00	45.3 PK	74.0	-28.7	1.04 V	151	35.0	10.3
6	10620.00	34.9 AV	54.0	-19.1	1.04 V	151	24.6	10.3
7	15930.00	43.6 PK	74.0	-30.4	1.04 V	169	31.7	11.9
8	15930.00	33.3 AV	54.0	-20.7	1.04 V	169	21.4	11.9

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 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	49.2 PK	74.0	-24.8	2.37 H	23	48.3	0.9
2	5460.00	37.8 AV	54.0	-16.2	2.37 H	23	36.9	0.9
3	#5467.20	55.7 PK	68.2	-12.5	2.37 H	23	54.8	0.9
4	*5510.00	106.7 PK			2.37 H	23	105.8	0.9
5	*5510.00	92.9 AV			2.37 H	23	92.0	0.9
6	11020.00	45.0 PK	74.0	-29.0	1.00 H	332	33.8	11.2
7	11020.00	34.8 AV	54.0	-19.2	1.00 H	332	23.6	11.2
8	#16530.00	44.6 PK	68.2	-23.6	1.04 H	344	30.2	14.4

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	5457.60	59.8 PK	74.0	-14.2	3.91 V	261	58.9	0.9
2	5457.60	46.0 AV	54.0	-8.0	3.91 V	261	45.1	0.9
3	#5470.00	67.8 PK	68.2	-0.4	3.91 V	261	66.9	0.9
4	*5510.00	118.7 PK			3.91 V	261	117.8	0.9
5	*5510.00	108.3 AV			3.91 V	261	107.4	0.9
6	11020.00	45.8 PK	74.0	-28.2	1.01 V	138	34.6	11.2
7	11020.00	35.1 AV	54.0	-18.9	1.01 V	138	23.9	11.2
8	#16530.00	44.1 PK	68.2	-24.1	1.00 V	147	29.7	14.4

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 (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	112.5 PK			2.39 H	25	111.5	1.0
2	*5550.00	99.7 AV			2.39 H	25	98.7	1.0
3	11100.00	45.2 PK	74.0	-28.8	1.04 H	356	34.4	10.8
4	11100.00	35.0 AV	54.0	-19.0	1.04 H	356	24.2	10.8
5	#16650.00	44.4 PK	68.2	-23.8	1.05 H	344	29.0	15.4

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	*5550.00	122.3 PK			1.06 V	100	121.3	1.0
2	*5550.00	110.9 AV			1.06 V	100	109.9	1.0
3	11100.00	45.6 PK	74.0	-28.4	1.00 V	151	34.8	10.8
4	11100.00	34.8 AV	54.0	-19.2	1.00 V	151	24.0	10.8
5	#16650.00	44.0 PK	68.2	-24.2	1.01 V	146	28.6	15.4

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 (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	109.6 PK			2.41 H	22	108.4	1.2
2	*5670.00	96.7 AV			2.41 H	22	95.5	1.2
3	#5725.00	61.9 PK	68.2	-6.3	2.41 H	22	60.5	1.4
4	11340.00	45.3 PK	74.0	-28.7	1.00 H	339	34.0	11.3
5	11340.00	34.9 AV	54.0	-19.1	1.00 H	339	23.6	11.3
6	#17010.00	44.4 PK	68.2	-23.8	1.03 H	351	27.3	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	*5670.00	120.3 PK			1.21 V	102	119.1	1.2
2	*5670.00	108.3 AV			1.21 V	102	107.1	1.2
3	#5731.20	67.7 PK	68.2	-0.5	1.21 V	102	66.3	1.4
4	11340.00	45.7 PK	74.0	-28.3	1.04 V	154	34.4	11.3
5	11340.00	34.9 AV	54.0	-19.1	1.04 V	154	23.6	11.3
6	#17010.00	44.3 PK	68.2	-23.9	1.00 V	145	27.2	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.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE40)	Channel	CH 142 : 5710 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	51.6 PK	74.0	-22.4	2.39 H	29	50.7	0.9
2	5460.00	40.5 AV	54.0	-13.5	2.39 H	29	39.6	0.9
3	#5470.00	51.3 PK	68.2	-16.9	2.39 H	29	50.4	0.9
4	*5710.00	112.9 PK			2.39 H	29	111.5	1.4
5	*5710.00	100.2 AV			2.39 H	29	98.8	1.4
6	#5850.00	52.6 PK	68.2	-15.6	2.39 H	29	50.8	1.8
7	11420.00	45.5 PK	74.0	-28.5	1.04 H	332	33.9	11.6
8	11420.00	35.1 AV	54.0	-18.9	1.04 H	332	23.5	11.6
9	#17130.00	44.1 PK	68.2	-24.1	1.02 H	360	27.6	16.5

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	5460.00	55.3 PK	74.0	-18.7	1.10 V	98	54.4	0.9
2	5460.00	41.6 AV	54.0	-12.4	1.10 V	98	40.7	0.9
3	#5470.00	54.0 PK	68.2	-14.2	1.10 V	98	53.1	0.9
4	*5710.00	122.8 PK			1.10 V	98	121.4	1.4
5	*5710.00	111.3 AV			1.10 V	98	109.9	1.4
6	#5860.80	60.3 PK	68.2	-7.9	1.10 V	98	58.5	1.8
7	11420.00	45.2 PK	74.0	-28.8	1.00 V	158	33.6	11.6
8	11420.00	34.8 AV	54.0	-19.2	1.00 V	158	23.2	11.6
9	#17130.00	43.7 PK	68.2	-24.5	1.01 V	162	27.2	16.5

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 (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	48.3 PK	74.0	-25.7	1.59 H	292	47.6	0.7
2	5150.00	37.3 AV	54.0	-16.7	1.59 H	292	36.6	0.7
3	*5290.00	104.9 PK			1.59 H	292	104.3	0.6
4	*5290.00	92.0 AV			1.59 H	292	91.4	0.6
5	5350.00	53.7 PK	74.0	-20.3	1.59 H	292	53.1	0.6
6	5350.00	44.3 AV	54.0	-9.7	1.59 H	292	43.7	0.6
7	#10580.00	45.0 PK	68.2	-23.2	1.00 H	355	34.7	10.3
8	15870.00	45.2 PK	74.0	-28.8	1.00 H	355	33.7	11.5
9	15870.00	34.5 AV	54.0	-19.5	1.00 H	355	23.0	11.5

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	5146.30	56.4 PK	74.0	-17.6	3.82 V	264	55.7	0.7
2	5146.30	45.2 AV	54.0	-8.8	3.82 V	264	44.5	0.7
3	*5290.00	114.6 PK			3.82 V	264	114.0	0.6
4	*5290.00	102.4 AV			3.82 V	264	101.8	0.6
5	5361.60	67.3 PK	74.0	-6.7	3.82 V	264	66.6	0.7
6	5361.60	53.9 AV	54.0	-0.1	3.82 V	264	53.2	0.7
7	#10580.00	45.5 PK	68.2	-22.7	1.00 V	152	35.2	10.3
8	15870.00	44.5 PK	74.0	-29.5	1.00 V	164	33.0	11.5
9	15870.00	33.7 AV	54.0	-20.3	1.00 V	164	22.2	11.5

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 (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	5459.00	58.6 PK	74.0	-15.4	1.24 H	30	57.7	0.9
2	5459.00	46.6 AV	54.0	-7.4	1.24 H	30	45.7	0.9
3	#5460.10	59.2 PK	68.2	-9.0	1.24 H	30	58.3	0.9
4	*5530.00	102.6 PK			1.24 H	30	101.6	1.0
5	*5530.00	90.8 AV			1.24 H	30	89.8	1.0
6	#5785.18	50.0 PK	68.2	-18.2	1.24 H	30	48.5	1.5
7	11060.00	45.2 PK	74.0	-28.8	1.04 H	353	34.1	11.1
8	11060.00	35.0 AV	54.0	-19.0	1.04 H	353	23.9	11.1
9	#16590.00	44.3 PK	68.2	-23.9	1.03 H	346	29.0	15.3

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	5445.80	65.6 PK	74.0	-8.4	3.87 V	261	64.7	0.9
2	5445.80	53.2 AV	54.0	-0.8	3.87 V	261	52.3	0.9
3	#5466.20	67.7 PK	68.2	-0.5	3.87 V	261	66.8	0.9
4	*5530.00	113.8 PK			3.87 V	261	112.8	1.0
5	*5530.00	102.0 AV			3.87 V	261	101.0	1.0
6	#5727.50	51.8 PK	68.2	-16.4	3.87 V	261	50.4	1.4
7	11060.00	45.5 PK	74.0	-28.5	1.00 V	151	34.4	11.1
8	11060.00	35.2 AV	54.0	-18.8	1.00 V	151	24.1	11.1
9	#16590.00	44.3 PK	68.2	-23.9	1.00 V	158	29.0	15.3

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 138 : 5690 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	48.9 PK	74.0	-25.1	1.29 H	17	48.0	0.9
2	5460.00	37.8 AV	54.0	-16.2	1.29 H	17	36.9	0.9
3	#5470.00	49.4 PK	68.2	-18.8	1.29 H	17	48.5	0.9
4	*5690.00	107.4 PK			1.29 H	17	106.0	1.4
5	*5690.00	95.7 AV			1.29 H	17	94.3	1.4
6	#5850.00	60.2 PK	68.2	-8.0	1.27 H	34	58.4	1.8
7	11380.00	45.6 PK	74.0	-28.4	1.06 H	358	34.2	11.4
8	11380.00	35.5 AV	54.0	-18.5	1.06 H	358	24.1	11.4
9	#17070.00	44.6 PK	68.2	-23.6	1.00 H	340	27.7	16.9

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	5445.80	55.6 PK	74.0	-18.4	1.16 V	98	54.7	0.9
2	5445.80	44.9 AV	54.0	-9.1	1.16 V	98	44.0	0.9
3	#5467.00	57.1 PK	68.2	-11.1	1.16 V	98	56.2	0.9
4	*5690.00	119.3 PK			1.16 V	98	117.9	1.4
5	*5690.00	108.6 AV			1.16 V	98	107.2	1.4
6	#5850.00	67.8 PK	68.2	-0.4	1.16 V	98	66.0	1.8
7	11380.00	45.4 PK	74.0	-28.6	1.00 V	142	34.0	11.4
8	11380.00	35.1 AV	54.0	-18.9	1.00 V	142	23.7	11.4
9	#17070.00	43.7 PK	68.2	-24.5	1.00 V	146	26.8	16.9

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.
6. " # ": The radiated frequency is out of the restricted band.

Below 1GHz Data:

802.11ax (HE80)

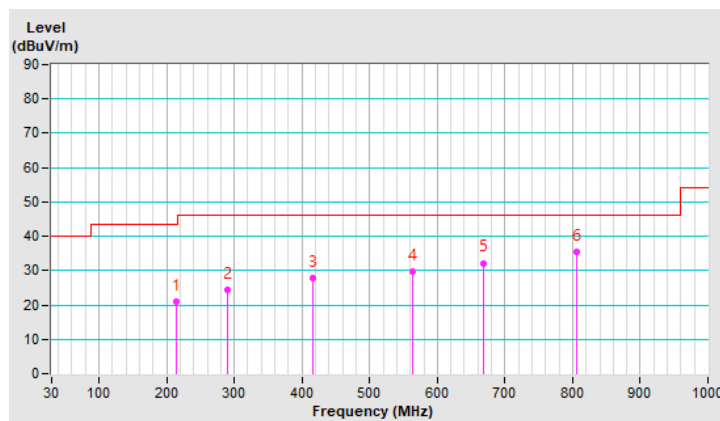
RF Mode	TX 802.11ax (HE80)	Channel	CH 58 : 5290 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	214.03	20.8 QP	43.5	-22.7	3.00 H	94	31.6	-10.8
2	290.64	24.2 QP	46.0	-21.8	3.00 H	44	31.0	-6.8
3	416.59	27.8 QP	46.0	-18.2	1.00 H	360	31.2	-3.4
4	563.50	29.6 QP	46.0	-16.4	3.00 H	267	29.5	0.1
5	669.18	32.2 QP	46.0	-13.8	2.00 H	259	29.8	2.4
6	806.95	35.6 QP	46.0	-10.4	4.00 H	351	30.3	5.3

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 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.



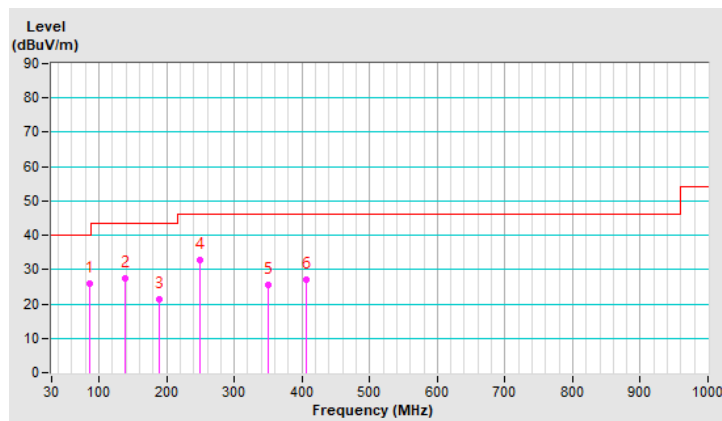
RF Mode	TX 802.11ax (HE80)	Channel	CH 58 : 5290 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	85.92	25.8 QP	40.0	-14.2	2.00 V	26	39.4	-13.6
2	139.37	27.6 QP	43.5	-15.9	2.00 V	295	35.6	-8.0
3	189.32	21.4 QP	43.5	-22.1	2.00 V	360	31.8	-10.4
4	250.02	32.7 QP	46.0	-13.3	1.00 V	279	41.2	-8.5
5	349.59	25.6 QP	46.0	-20.4	4.00 V	121	30.9	-5.3
6	406.99	27.1 QP	46.0	-18.9	3.00 V	295	30.8	-3.7

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 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.



4.1.8 Test Results (Mode 2)

Above 1GHz Data:

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	5072.80	50.4 PK	74.0	-23.6	1.26 H	165	49.4	1.0
2	5072.80	41.4 AV	54.0	-12.6	1.26 H	165	40.4	1.0
3	*5260.00	119.8 PK			1.26 H	165	119.3	0.5
4	*5260.00	111.3 AV			1.26 H	165	110.8	0.5
5	#10520.00	46.0 PK	68.2	-22.2	2.05 H	351	35.4	10.6
6	15780.00	45.5 PK	74.0	-28.5	2.02 H	321	34.3	11.2
7	15780.00	35.0 AV	54.0	-19.0	2.02 H	321	23.8	11.2

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	5073.60	52.8 PK	74.0	-21.2	1.48 V	186	51.8	1.0
2	5073.60	45.2 AV	54.0	-8.8	1.48 V	186	44.2	1.0
3	*5260.00	124.5 PK			1.48 V	186	124.0	0.5
4	*5260.00	115.9 AV			1.48 V	186	115.4	0.5
5	5457.00	56.0 PK	74.0	-18.0	1.48 V	186	55.1	0.9
6	5457.00	46.1 AV	54.0	-7.9	1.48 V	186	45.2	0.9
7	#10520.00	45.7 PK	68.2	-22.5	1.78 V	5	35.1	10.6
8	15780.00	46.7 PK	74.0	-27.3	1.70 V	360	35.5	11.2
9	15780.00	34.6 AV	54.0	-19.4	1.70 V	360	23.4	11.2

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.
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	5105.51	50.3 PK	74.0	-23.7	1.53 H	168	49.4	0.9
2	5105.51	42.6 AV	54.0	-11.4	1.53 H	168	41.7	0.9
3	*5300.00	121.6 PK			1.53 H	168	121.1	0.5
4	*5300.00	112.0 AV			1.53 H	168	111.5	0.5
5	5357.37	55.6 PK	74.0	-18.4	1.53 H	168	54.9	0.7
6	5357.37	42.5 AV	54.0	-11.5	1.53 H	168	41.8	0.7
7	10600.00	45.8 PK	74.0	-28.2	2.07 H	353	35.5	10.3
8	10600.00	35.5 AV	54.0	-18.5	2.07 H	353	25.2	10.3
9	15900.00	44.9 PK	74.0	-29.1	2.07 H	324	33.3	11.6
10	15900.00	34.6 AV	54.0	-19.4	2.07 H	324	23.0	11.6

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	5105.51	53.8 PK	74.0	-20.2	1.35 V	180	52.9	0.9
2	5105.51	44.9 AV	54.0	-9.1	1.35 V	180	44.0	0.9
3	*5300.00	124.7 PK			1.35 V	180	124.2	0.5
4	*5300.00	116.2 AV			1.35 V	180	115.7	0.5
5	5357.37	62.3 PK	74.0	-11.7	1.35 V	180	61.6	0.7
6	5357.37	47.0 AV	54.0	-7.0	1.35 V	180	46.3	0.7
7	10600.00	46.0 PK	74.0	-28.0	1.84 V	9	35.7	10.3
8	10600.00	36.8 AV	54.0	-17.2	1.84 V	9	26.5	10.3
9	15900.00	46.6 PK	74.0	-27.4	1.74 V	352	35.0	11.6
10	15900.00	34.8 AV	54.0	-19.2	1.74 V	352	23.2	11.6

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 802.11a	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	119.7 PK			1.49 H	146	119.2	0.5
2	*5320.00	110.8 AV			1.49 H	146	110.3	0.5
3	5352.30	63.8 PK	74.0	-10.2	1.49 H	146	63.2	0.6
4	5352.30	50.3 AV	54.0	-3.7	1.49 H	146	49.7	0.6
5	10640.00	45.5 PK	74.0	-28.5	2.07 H	339	35.2	10.3
6	10640.00	35.1 AV	54.0	-18.9	2.07 H	339	24.8	10.3
7	15960.00	44.8 PK	74.0	-29.2	2.02 H	331	32.8	12.0
8	15960.00	34.6 AV	54.0	-19.4	2.02 H	331	22.6	12.0

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	*5320.00	123.2 PK			1.52 V	176	122.7	0.5
2	*5320.00	114.7 AV			1.52 V	176	114.2	0.5
3	5350.00	66.7 PK	74.0	-7.3	1.52 V	176	66.1	0.6
4	5350.00	53.4 AV	54.0	-0.6	1.52 V	176	52.8	0.6
5	10640.00	45.4 PK	74.0	-28.6	1.80 V	16	35.1	10.3
6	10640.00	35.7 AV	54.0	-18.3	1.80 V	16	25.4	10.3
7	15960.00	46.3 PK	74.0	-27.7	1.75 V	355	34.3	12.0
8	15960.00	34.2 AV	54.0	-19.8	1.75 V	355	22.2	12.0

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.

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	5396.90	55.2 PK	74.0	-18.8	1.47 H	148	54.4	0.8
2	5396.90	45.3 AV	54.0	-8.7	1.47 H	148	44.5	0.8
3	#5469.50	61.8 PK	68.2	-6.4	1.47 H	148	60.9	0.9
4	*5500.00	118.6 PK			1.47 H	148	117.7	0.9
5	*5500.00	110.3 AV			1.47 H	148	109.4	0.9
6	11000.00	49.3 PK	74.0	-24.7	2.07 H	341	38.0	11.3
7	11000.00	39.7 AV	54.0	-14.3	2.07 H	341	28.4	11.3
8	#16500.00	43.5 PK	68.2	-24.7	2.12 H	339	29.5	14.0
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	5411.00	58.5 PK	74.0	-15.5	1.36 V	183	57.7	0.8
2	5411.00	49.0 AV	54.0	-5.0	1.36 V	183	48.2	0.8
3	#5469.50	67.7 PK	68.2	-0.5	1.36 V	183	66.8	0.9
4	*5500.00	121.0 PK			1.36 V	183	120.1	0.9
5	*5500.00	112.4 AV			1.36 V	183	111.5	0.9
6	11000.00	55.9 PK	74.0	-18.1	1.83 V	14	44.6	11.3
7	11000.00	44.1 AV	54.0	-9.9	1.83 V	14	32.8	11.3
8	#16500.00	46.2 PK	68.2	-22.0	1.71 V	356	32.2	14.0

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 802.11a	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	120.8 PK			1.43 H	162	119.8	1.0
2	*5580.00	112.7 AV			1.43 H	162	111.7	1.0
3	11160.00	51.5 PK	74.0	-22.5	2.06 H	353	40.6	10.9
4	11160.00	41.7 AV	54.0	-12.3	2.06 H	353	30.8	10.9
5	#16740.00	46.4 PK	68.2	-21.8	2.06 H	340	31.3	15.1

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	122.9 PK			1.56 V	191	121.9	1.0
2	*5580.00	114.3 AV			1.56 V	191	113.3	1.0
3	11160.00	58.3 PK	74.0	-15.7	2.62 V	290	47.4	10.9
4	11160.00	46.3 AV	54.0	-7.7	2.62 V	290	35.4	10.9
5	#16740.00	47.9 PK	68.2	-20.3	2.82 V	303	32.8	15.1

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 802.11a	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	120.2 PK			1.48 H	148	118.8	1.4
2	*5700.00	111.9 AV			1.48 H	148	110.5	1.4
3	#5725.00	61.9 PK	68.2	-6.3	1.48 H	148	60.5	1.4
4	11400.00	50.0 PK	74.0	-24.0	2.04 H	359	38.4	11.6
5	11400.00	40.2 AV	54.0	-13.8	2.04 H	359	28.6	11.6
6	#17100.00	43.9 PK	68.2	-24.3	2.02 H	354	27.0	16.9

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	*5700.00	122.4 PK			1.44 V	172	121.0	1.4
2	*5700.00	113.9 AV			1.44 V	172	112.5	1.4
3	#5725.00	67.8 PK	68.2	-0.4	1.44 V	172	66.4	1.4
4	11400.00	56.3 PK	74.0	-17.7	2.59 V	285	44.7	11.6
5	11400.00	44.6 AV	54.0	-9.4	2.59 V	285	33.0	11.6
6	#17100.00	46.7 PK	68.2	-21.5	2.77 V	300	29.8	16.9

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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 144 : 5720 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	53.5 PK	74.0	-20.5	1.45 H	158	52.6	0.9
2	5460.00	40.1 AV	54.0	-13.9	1.45 H	158	39.2	0.9
3	#5470.00	53.6 PK	68.2	-14.6	1.45 H	158	52.7	0.9
4	*5720.00	120.7 PK			1.45 H	158	119.3	1.4
5	*5720.00	112.4 AV			1.45 H	158	111.0	1.4
6	#5866.40	50.1 PK	68.2	-18.1	1.45 H	158	48.3	1.8
7	11440.00	51.1 PK	74.0	-22.9	2.01 H	360	39.4	11.7
8	11440.00	41.2 AV	54.0	-12.8	2.01 H	360	29.5	11.7
9	#17160.00	44.8 PK	68.2	-23.4	2.06 H	343	28.7	16.1

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	55.7 PK	74.0	-18.3	2.14 V	178	54.8	0.9
2	5460.00	43.5 AV	54.0	-10.5	2.14 V	178	42.6	0.9
3	#5470.00	55.9 PK	68.2	-12.3	2.14 V	178	55.0	0.9
4	*5720.00	123.3 PK			2.14 V	178	121.9	1.4
5	*5720.00	114.5 AV			2.14 V	178	113.1	1.4
6	#5866.40	53.2 PK	68.2	-15.0	2.14 V	178	51.4	1.8
7	11440.00	57.4 PK	74.0	-16.6	2.56 V	298	45.7	11.7
8	11440.00	45.8 AV	54.0	-8.2	2.56 V	298	34.1	11.7
9	#17160.00	47.5 PK	68.2	-20.7	2.85 V	309	31.4	16.1

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 (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	5070.70	50.8 PK	74.0	-23.2	1.42 H	139	49.8	1.0
2	5070.70	40.3 AV	54.0	-13.7	1.42 H	139	39.3	1.0
3	*5260.00	122.6 PK			1.42 H	139	122.1	0.5
4	*5260.00	111.5 AV			1.42 H	139	111.0	0.5
5	5447.50	53.3 PK	74.0	-20.7	1.42 H	139	52.4	0.9
6	5447.50	42.8 AV	54.0	-11.2	1.42 H	139	41.9	0.9
7	#10520.00	45.4 PK	68.2	-22.8	2.07 H	325	34.8	10.6
8	15780.00	45.5 PK	74.0	-28.5	2.03 H	319	34.3	11.2
9	15780.00	35.1 AV	54.0	-18.9	2.03 H	319	23.9	11.2

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	5069.80	52.7 PK	74.0	-21.3	1.39 V	171	51.7	1.0
2	5069.80	43.6 AV	54.0	-10.4	1.39 V	171	42.6	1.0
3	*5260.00	125.2 PK			1.39 V	171	124.7	0.5
4	*5260.00	114.6 AV			1.39 V	171	114.1	0.5
5	5454.50	55.0 PK	74.0	-19.0	1.39 V	171	54.1	0.9
6	5454.50	45.3 AV	54.0	-8.7	1.39 V	171	44.4	0.9
7	#10520.00	46.3 PK	68.2	-21.9	1.73 V	15	35.7	10.6
8	15780.00	48.0 PK	74.0	-26.0	1.60 V	351	36.8	11.2
9	15780.00	34.0 AV	54.0	-20.0	1.60 V	351	22.8	11.2

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.
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	123.3 PK			1.43 H	127	122.8	0.5
2	*5300.00	112.1 AV			1.43 H	127	111.6	0.5
3	10600.00	45.8 PK	74.0	-28.2	2.05 H	347	35.5	10.3
4	10600.00	35.3 AV	54.0	-18.7	2.05 H	347	25.0	10.3
5	15900.00	44.8 PK	74.0	-29.2	2.03 H	339	33.2	11.6
6	15900.00	34.5 AV	54.0	-19.5	2.03 H	339	22.9	11.6

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	*5300.00	126.2 PK			1.39 V	185	125.7	0.5
2	*5300.00	115.2 AV			1.39 V	185	114.7	0.5
3	10600.00	46.4 PK	74.0	-27.6	1.73 V	9	36.1	10.3
4	10600.00	37.0 AV	54.0	-17.0	1.73 V	9	26.7	10.3
5	15900.00	48.6 PK	74.0	-25.4	1.63 V	348	37.0	11.6
6	15900.00	34.4 AV	54.0	-19.6	1.63 V	348	22.8	11.6

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 802.11ax (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	120.6 PK			1.32 H	165	120.1	0.5
2	*5320.00	108.7 AV			1.32 H	165	108.2	0.5
3	5361.60	57.2 PK	74.0	-16.8	1.32 H	165	56.5	0.7
4	5361.60	44.2 AV	54.0	-9.8	1.32 H	165	43.5	0.7
5	10640.00	45.5 PK	74.0	-28.5	2.12 H	331	35.2	10.3
6	10640.00	35.4 AV	54.0	-18.6	2.12 H	331	25.1	10.3
7	15960.00	44.9 PK	74.0	-29.1	1.99 H	318	32.9	12.0
8	15960.00	34.7 AV	54.0	-19.3	1.99 H	318	22.7	12.0

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	*5320.00	124.8 PK			1.51 V	177	124.3	0.5
2	*5320.00	114.0 AV			1.51 V	177	113.5	0.5
3	5354.10	67.5 PK	74.0	-6.5	1.51 V	177	66.9	0.6
4	5354.10	53.5 AV	54.0	-0.5	1.51 V	177	52.9	0.6
5	10640.00	46.9 PK	74.0	-27.1	1.77 V	9	36.6	10.3
6	10640.00	37.4 AV	54.0	-16.6	1.77 V	9	27.1	10.3
7	15960.00	48.0 PK	74.0	-26.0	1.68 V	350	36.0	12.0
8	15960.00	34.0 AV	54.0	-20.0	1.68 V	350	22.0	12.0

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.

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	5459.10	60.1 PK	74.0	-13.9	1.61 H	152	59.2	0.9
2	5459.10	47.5 AV	54.0	-6.5	1.61 H	152	46.6	0.9
3	#5466.80	65.3 PK	68.2	-2.9	1.61 H	152	64.4	0.9
4	*5500.00	122.3 PK			1.61 H	152	121.4	0.9
5	*5500.00	110.2 AV			1.61 H	152	109.3	0.9
6	11000.00	45.8 PK	74.0	-28.2	1.99 H	360	34.5	11.3
7	11000.00	35.7 AV	54.0	-18.3	1.99 H	360	24.4	11.3
8	#16500.00	44.4 PK	68.2	-23.8	2.03 H	336	30.4	14.0
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	5460.00	63.1 PK	74.0	-10.9	2.25 V	176	62.2	0.9
2	5460.00	52.0 AV	54.0	-2.0	2.25 V	176	51.1	0.9
3	#5461.50	67.7 PK	68.2	-0.5	2.25 V	176	66.8	0.9
4	*5500.00	125.6 PK			2.25 V	176	124.7	0.9
5	*5500.00	114.1 AV			2.25 V	176	113.2	0.9
6	11000.00	46.8 PK	74.0	-27.2	1.70 V	17	35.5	11.3
7	11000.00	37.4 AV	54.0	-16.6	1.70 V	17	26.1	11.3
8	#16500.00	48.3 PK	68.2	-19.9	1.67 V	345	34.3	14.0

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 802.11ax (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	123.1 PK			1.58 H	163	122.1	1.0
2	*5580.00	111.7 AV			1.58 H	163	110.7	1.0
3	11160.00	45.6 PK	74.0	-28.4	1.95 H	360	34.7	10.9
4	11160.00	35.3 AV	54.0	-18.7	1.95 H	360	24.4	10.9
5	#16740.00	44.8 PK	68.2	-23.4	2.05 H	340	29.7	15.1

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	124.8 PK			1.00 V	175	123.8	1.0
2	*5580.00	114.0 AV			1.00 V	175	113.0	1.0
3	11160.00	49.3 PK	74.0	-24.7	2.76 V	213	38.4	10.9
4	11160.00	39.6 AV	54.0	-14.4	2.76 V	213	28.7	10.9
5	#16740.00	50.3 PK	68.2	-17.9	1.54 V	39	35.2	15.1

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 (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	119.8 PK			1.62 H	151	118.4	1.4
2	*5700.00	108.3 AV			1.62 H	151	106.9	1.4
3	#5725.00	66.3 PK	68.2	-1.9	1.62 H	151	64.9	1.4
4	11400.00	46.2 PK	74.0	-27.8	2.05 H	348	34.6	11.6
5	11400.00	35.9 AV	54.0	-18.1	2.05 H	348	24.3	11.6
6	#17100.00	45.1 PK	68.2	-23.1	2.03 H	326	28.2	16.9

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	*5700.00	124.7 PK			1.74 V	179	123.3	1.4
2	*5700.00	112.5 AV			1.74 V	179	111.1	1.4
3	#5725.00	68.0 PK	68.2	-0.2	1.74 V	179	66.6	1.4
4	11400.00	49.7 PK	74.0	-24.3	2.76 V	208	38.1	11.6
5	11400.00	40.1 AV	54.0	-13.9	2.76 V	208	28.5	11.6
6	#17100.00	49.9 PK	68.2	-18.3	1.51 V	54	33.0	16.9

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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE20)	Channel	CH 144 : 5720 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	50.8 PK	74.0	-23.2	1.62 H	153	49.9	0.9
2	5460.00	40.1 AV	54.0	-13.9	1.62 H	153	39.2	0.9
3	#5470.00	50.5 PK	68.2	-17.7	1.62 H	153	49.6	0.9
4	*5720.00	123.4 PK			1.62 H	153	122.0	1.4
5	*5720.00	111.7 AV			1.62 H	153	110.3	1.4
6	#5907.30	50.6 PK	68.2	-17.6	1.62 H	153	49.1	1.5
7	11440.00	45.5 PK	74.0	-28.5	2.04 H	349	33.8	11.7
8	11440.00	35.2 AV	54.0	-18.8	2.04 H	349	23.5	11.7
9	#17160.00	44.6 PK	68.2	-23.6	2.09 H	337	28.5	16.1

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	54.3 PK	74.0	-19.7	1.00 V	171	53.4	0.9
2	5460.00	42.0 AV	54.0	-12.0	1.00 V	171	41.1	0.9
3	#5470.00	54.1 PK	68.2	-14.1	1.00 V	171	53.2	0.9
4	*5720.00	125.7 PK			1.00 V	171	124.3	1.4
5	*5720.00	114.6 AV			1.00 V	171	113.2	1.4
6	#5907.30	55.7 PK	68.2	-12.5	1.00 V	171	54.2	1.5
7	11440.00	48.9 PK	74.0	-25.1	2.75 V	221	37.2	11.7
8	11440.00	39.2 AV	54.0	-14.8	2.75 V	221	27.5	11.7
9	#17160.00	50.4 PK	68.2	-17.8	1.52 V	51	34.3	16.1

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 (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	5149.10	51.3 PK	74.0	-22.7	1.39 H	139	50.6	0.7
2	5149.10	41.4 AV	54.0	-12.6	1.39 H	139	40.7	0.7
3	*5270.00	119.7 PK			1.39 H	139	119.2	0.5
4	*5270.00	108.5 AV			1.39 H	139	108.0	0.5
5	5355.02	59.4 PK	74.0	-14.6	1.39 H	139	58.8	0.6
6	5355.02	49.3 AV	54.0	-4.7	1.39 H	139	48.7	0.6
7	#10540.00	45.6 PK	68.2	-22.6	2.09 H	328	35.2	10.4
8	15810.00	44.3 PK	74.0	-29.7	2.05 H	342	33.1	11.2
9	15810.00	34.1 AV	54.0	-19.9	2.05 H	342	22.9	11.2

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	5126.00	54.3 PK	74.0	-19.7	1.55 V	169	53.5	0.8
2	5126.00	44.4 AV	54.0	-9.6	1.55 V	169	43.6	0.8
3	*5270.00	122.0 PK			1.55 V	169	121.5	0.5
4	*5270.00	111.5 AV			1.55 V	169	111.0	0.5
5	5351.90	67.0 PK	74.0	-7.0	1.55 V	169	66.4	0.6
6	5351.90	53.9 AV	54.0	-0.1	1.55 V	169	53.3	0.6
7	#10540.00	47.2 PK	68.2	-21.0	1.73 V	21	36.8	10.4
8	15810.00	47.9 PK	74.0	-26.1	1.65 V	353	36.7	11.2
9	15810.00	33.6 AV	54.0	-20.4	1.65 V	353	22.4	11.2

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.
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	114.1 PK			1.45 H	139	113.6	0.5
2	*5310.00	102.6 AV			1.45 H	139	102.1	0.5
3	5353.90	60.1 PK	74.0	-13.9	1.45 H	139	59.5	0.6
4	5353.90	49.4 AV	54.0	-4.6	1.45 H	139	48.8	0.6
5	10620.00	45.7 PK	74.0	-28.3	2.09 H	323	35.4	10.3
6	10620.00	35.3 AV	54.0	-18.7	2.09 H	323	25.0	10.3
7	15930.00	44.5 PK	74.0	-29.5	2.04 H	338	32.6	11.9
8	15930.00	34.1 AV	54.0	-19.9	2.04 H	338	22.2	11.9

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	118.5 PK			1.56 V	178	118.0	0.5
2	*5310.00	107.5 AV			1.56 V	178	107.0	0.5
3	5354.20	69.6 PK	74.0	-4.4	1.56 V	178	69.0	0.6
4	5354.20	53.8 AV	54.0	-0.2	1.56 V	178	53.2	0.6
5	10620.00	47.0 PK	74.0	-27.0	1.77 V	7	36.7	10.3
6	10620.00	37.4 AV	54.0	-16.6	1.77 V	7	27.1	10.3
7	15930.00	47.8 PK	74.0	-26.2	1.63 V	349	35.9	11.9
8	15930.00	33.9 AV	54.0	-20.1	1.63 V	349	22.0	11.9

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 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	5457.10	55.1 PK	74.0	-18.9	1.28 H	154	54.2	0.9
2	5457.10	42.0 AV	54.0	-12.0	1.28 H	154	41.1	0.9
3	#5465.00	64.2 PK	68.2	-4.0	1.28 H	154	63.3	0.9
4	*5510.00	113.2 PK			1.28 H	154	112.3	0.9
5	*5510.00	101.1 AV			1.28 H	154	100.2	0.9
6	11020.00	46.0 PK	74.0	-28.0	2.03 H	360	34.8	11.2
7	11020.00	35.8 AV	54.0	-18.2	2.03 H	360	24.6	11.2
8	#16530.00	44.3 PK	68.2	-23.9	2.03 H	346	29.9	14.4

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	5458.80	60.5 PK	74.0	-13.5	1.48 V	175	59.6	0.9
2	5458.80	47.0 AV	54.0	-7.0	1.48 V	175	46.1	0.9
3	#5470.00	67.8 PK	68.2	-0.4	1.48 V	175	66.9	0.9
4	*5510.00	116.6 PK			1.48 V	175	115.7	0.9
5	*5510.00	106.1 AV			1.48 V	175	105.2	0.9
6	11020.00	47.3 PK	74.0	-26.7	2.71 V	225	36.1	11.2
7	11020.00	37.8 AV	54.0	-16.2	2.71 V	225	26.6	11.2
8	#16530.00	48.1 PK	68.2	-20.1	1.53 V	26	33.7	14.4

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 (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	120.8 PK			1.25 H	168	119.8	1.0
2	*5550.00	104.6 AV			1.25 H	168	103.6	1.0
3	11100.00	45.5 PK	74.0	-28.5	2.06 H	360	34.7	10.8
4	11100.00	35.3 AV	54.0	-18.7	2.06 H	360	24.5	10.8
5	#16650.00	44.9 PK	68.2	-23.3	2.11 H	350	29.5	15.4

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	*5550.00	123.3 PK			1.47 V	176	122.3	1.0
2	*5550.00	112.2 AV			1.47 V	176	111.2	1.0
3	11100.00	46.8 PK	74.0	-27.2	2.76 V	198	36.0	10.8
4	11100.00	37.3 AV	54.0	-16.7	2.76 V	198	26.5	10.8
5	#16650.00	47.6 PK	68.2	-20.6	1.51 V	47	32.2	15.4

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 (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	119.4 PK			1.19 H	171	118.2	1.2
2	*5670.00	103.5 AV			1.19 H	171	102.3	1.2
3	#5725.00	64.9 PK	68.2	-3.3	1.19 H	171	63.5	1.4
4	11340.00	45.6 PK	74.0	-28.4	2.07 H	359	34.3	11.3
5	11340.00	35.4 AV	54.0	-18.6	2.07 H	359	24.1	11.3
6	#17010.00	44.8 PK	68.2	-23.4	2.08 H	358	27.7	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	*5670.00	121.7 PK			1.40 V	179	120.5	1.2
2	*5670.00	111.1 AV			1.40 V	179	109.9	1.2
3	#5725.00	67.7 PK	68.2	-0.5	1.40 V	179	66.3	1.4
4	11340.00	47.5 PK	74.0	-26.5	2.72 V	217	36.2	11.3
5	11340.00	37.8 AV	54.0	-16.2	2.72 V	217	26.5	11.3
6	#17010.00	47.5 PK	68.2	-20.7	1.50 V	35	30.4	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.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE40)	Channel	CH 142 : 5710 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	52.2 PK	74.0	-21.8	1.19 H	166	51.3	0.9
2	5460.00	42.0 AV	54.0	-12.0	1.19 H	166	41.1	0.9
3	#5470.00	53.1 PK	68.2	-15.1	1.19 H	166	52.2	0.9
4	*5710.00	120.5 PK			1.19 H	166	119.1	1.4
5	*5710.00	103.9 AV			1.19 H	166	102.5	1.4
6	#5850.00	56.0 PK	68.2	-12.2	1.19 H	166	54.2	1.8
7	11420.00	45.8 PK	74.0	-28.2	2.04 H	360	34.2	11.6
8	11420.00	35.3 AV	54.0	-18.7	2.04 H	360	23.7	11.6
9	#17130.00	44.8 PK	68.2	-23.4	2.15 H	334	28.3	16.5

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	5460.00	55.1 PK	74.0	-18.9	1.50 V	177	54.2	0.9
2	5460.00	43.2 AV	54.0	-10.8	1.50 V	177	42.3	0.9
3	#5470.00	56.4 PK	68.2	-11.8	1.50 V	177	55.5	0.9
4	*5710.00	123.8 PK			1.50 V	177	122.4	1.4
5	*5710.00	113.0 AV			1.50 V	177	111.6	1.4
6	#5850.00	59.2 PK	68.2	-9.0	1.50 V	177	57.4	1.8
7	11420.00	46.8 PK	74.0	-27.2	2.78 V	202	35.2	11.6
8	11420.00	37.5 AV	54.0	-16.5	2.78 V	202	25.9	11.6
9	#17130.00	47.3 PK	68.2	-20.9	1.60 V	38	30.8	16.5

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 (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	5146.00	48.1 PK	74.0	-25.9	1.64 H	146	47.4	0.7
2	5146.00	38.1 AV	54.0	-15.9	1.64 H	146	37.4	0.7
3	*5290.00	106.8 PK			1.64 H	146	106.2	0.6
4	*5290.00	96.3 AV			1.64 H	146	95.7	0.6
5	5359.30	56.6 PK	74.0	-17.4	1.64 H	146	55.9	0.7
6	5359.30	45.8 AV	54.0	-8.2	1.64 H	146	45.1	0.7
7	#10580.00	45.5 PK	68.2	-22.7	2.05 H	332	35.2	10.3
8	15870.00	44.7 PK	74.0	-29.3	2.08 H	340	33.2	11.5
9	15870.00	34.4 AV	54.0	-19.6	2.08 H	340	22.9	11.5

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	5146.10	49.5 PK	74.0	-24.5	1.60 V	172	48.8	0.7
2	5146.10	39.0 AV	54.0	-15.0	1.60 V	172	38.3	0.7
3	*5290.00	111.8 PK			1.60 V	172	111.2	0.6
4	*5290.00	100.9 AV			1.60 V	172	100.3	0.6
5	5353.00	64.8 PK	74.0	-9.2	1.60 V	172	64.2	0.6
6	5353.00	53.5 AV	54.0	-0.5	1.60 V	172	52.9	0.6
7	#10580.00	46.6 PK	68.2	-21.6	1.77 V	3	36.3	10.3
8	15870.00	47.3 PK	74.0	-26.7	1.68 V	360	35.8	11.5
9	15870.00	33.7 AV	54.0	-20.3	1.68 V	360	22.2	11.5

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 (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	5456.60	58.5 PK	74.0	-15.5	1.00 H	154	57.6	0.9
2	5456.60	47.6 AV	54.0	-6.4	1.00 H	154	46.7	0.9
3	#5464.10	61.2 PK	68.2	-7.0	1.00 H	154	60.3	0.9
4	*5530.00	107.9 PK			1.00 H	154	106.9	1.0
5	*5530.00	97.1 AV			1.00 H	154	96.1	1.0
6	11060.00	46.4 PK	74.0	-27.6	2.07 H	360	35.3	11.1
7	11060.00	35.8 AV	54.0	-18.2	2.07 H	360	24.7	11.1
8	#16590.00	44.6 PK	68.2	-23.6	2.15 H	335	29.3	15.3

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	5450.20	63.8 PK	74.0	-10.2	1.00 V	174	62.9	0.9
2	5450.20	52.2 AV	54.0	-1.8	1.00 V	174	51.3	0.9
3	#5469.00	67.8 PK	68.2	-0.4	1.00 V	174	66.9	0.9
4	*5530.00	113.0 PK			1.00 V	174	112.0	1.0
5	*5530.00	101.6 AV			1.00 V	174	100.6	1.0
6	#5732.80	51.8 PK	68.2	-16.4	1.00 V	174	50.4	1.4
7	11060.00	47.1 PK	74.0	-26.9	2.72 V	200	36.0	11.1
8	11060.00	37.9 AV	54.0	-16.1	2.72 V	200	26.8	11.1
9	#16590.00	47.5 PK	68.2	-20.7	1.50 V	44	32.2	15.3

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 138 : 5690 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	50.7 PK	74.0	-23.3	1.01 H	162	49.8	0.9
2	5460.00	40.1 AV	54.0	-13.9	1.01 H	162	39.2	0.9
3	#5470.00	52.4 PK	68.2	-15.8	1.01 H	162	51.5	0.9
4	*5690.00	115.8 PK			1.01 H	162	114.4	1.4
5	*5690.00	105.7 AV			1.01 H	162	104.3	1.4
6	#5850.00	60.1 PK	68.2	-8.1	1.01 H	162	58.3	1.8
7	11380.00	46.0 PK	74.0	-28.0	2.01 H	360	34.6	11.4
8	11380.00	35.7 AV	54.0	-18.3	2.01 H	360	24.3	11.4
9	#17070.00	44.7 PK	68.2	-23.5	2.13 H	342	27.8	16.9

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	5455.10	57.8 PK	74.0	-16.2	1.00 V	175	56.9	0.9
2	5455.10	45.8 AV	54.0	-8.2	1.00 V	175	44.9	0.9
3	#5470.00	59.7 PK	68.2	-8.5	1.00 V	175	58.8	0.9
4	*5690.00	118.1 PK			1.00 V	175	116.7	1.4
5	*5690.00	107.8 AV			1.00 V	175	106.4	1.4
6	#5866.40	67.8 PK	68.2	-0.4	1.00 V	175	66.0	1.8
7	11380.00	46.9 PK	74.0	-27.1	2.73 V	202	35.5	11.4
8	11380.00	37.8 AV	54.0	-16.2	2.73 V	202	26.4	11.4
9	#17070.00	47.7 PK	68.2	-20.5	1.60 V	35	30.8	16.9

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.
6. " # ": The radiated frequency is out of the restricted band.

Below 1GHz Data:

802.11ax (HE80)

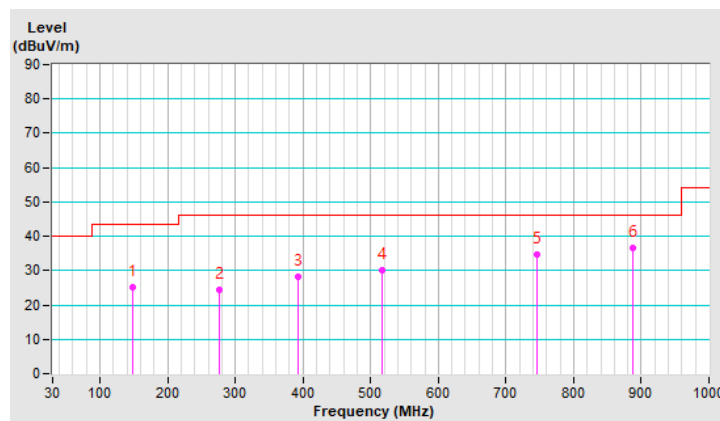
RF Mode	TX 802.11ax (HE80)	Channel	CH 138 : 5690 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	149.16	25.2 QP	43.5	-18.3	4.00 H	316	32.8	-7.6
2	275.43	24.3 QP	46.0	-21.7	3.00 H	360	31.6	-7.3
3	392.63	28.2 QP	46.0	-17.8	4.00 H	198	32.2	-4.0
4	516.16	29.9 QP	46.0	-16.1	2.00 H	238	30.7	-0.8
5	744.96	34.8 QP	46.0	-11.2	2.00 H	2	30.8	4.0
6	886.66	36.6 QP	46.0	-9.4	3.00 H	336	30.4	6.2

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.



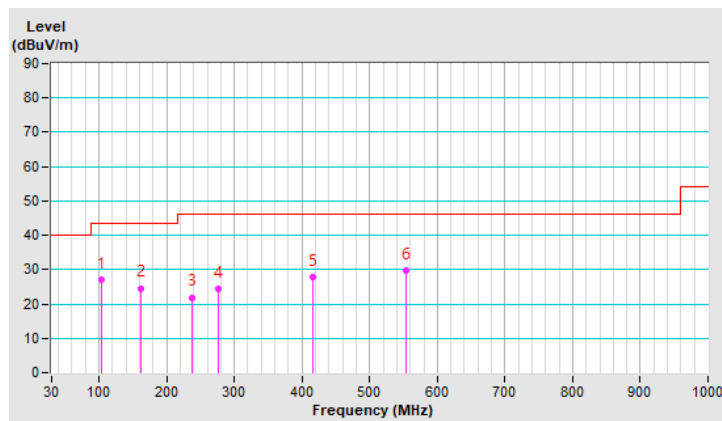
RF Mode	TX 802.11ax (HE80)	Channel	CH 138 : 5690 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	103.74	26.9 QP	43.5	-16.6	3.00 V	264	38.2	-11.3
2	161.24	24.6 QP	43.5	-18.9	4.00 V	88	32.2	-7.6
3	237.94	21.9 QP	46.0	-24.1	2.00 V	253	31.0	-9.1
4	275.43	24.3 QP	46.0	-21.7	3.00 V	360	31.6	-7.3
5	416.59	27.8 QP	46.0	-18.2	1.00 V	360	31.2	-3.4
6	554.75	29.6 QP	46.0	-16.4	1.00 V	251	29.7	-0.1

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.



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

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver R&S	ESCS 30	847124/029	Oct. 20, 2020	Oct. 19, 2021
Line-Impedance Stabilization Network (for EUT) R&S	ESH3-Z5	848773/004	Oct. 27, 2020	Oct. 26, 2021
Line-Impedance Stabilization Network (for Peripheral) R&S	ESH3-Z5	835239/001	Mar. 19, 2020	Mar. 18, 2021
50 ohms Terminator	50	3	Oct. 26, 2020	Oct. 25, 2021
RF Cable	5D-FB	COCCAB-001	Sep. 26, 2020	Sep. 25, 2021
Fixed attenuator EMCI	STI02-2200-10	005	Aug. 29, 2020	Aug. 28, 2021
Software BVADT	BVADT_Cond_ V7.3.7.4	NA	NA	NA

Note:

1. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in Conduction 1.
- 3 Tested Date: Oct. 12, 2020

4.2.3 Test Procedure

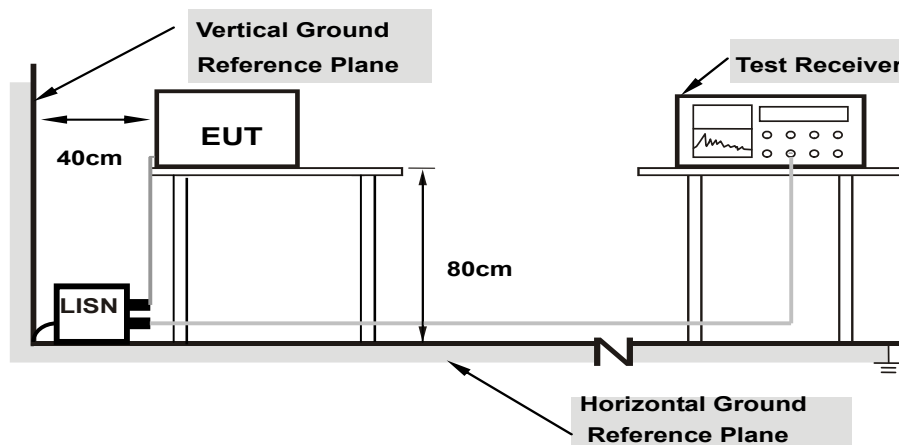
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance 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: All modes of operation were investigated and the worst-case emissions are reported.

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 Condition

Same as 4.1.6.

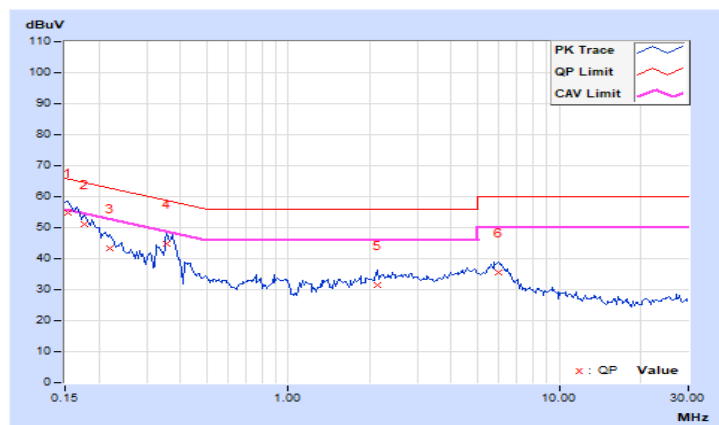
4.2.7 Test Results (Mode 1)

RF Mode	TX 802.11ax (HE80)	Channel	CH 58 : 5290 MHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.91	45.07	28.93	54.98	38.84	65.79	55.79	-10.81	-16.95
2	0.17734	9.92	41.16	25.08	51.08	35.00	64.61	54.61	-13.53	-19.61
3	0.22031	9.93	33.45	20.65	43.38	30.58	62.81	52.81	-19.43	-22.23
4	0.35703	9.95	34.96	31.38	44.91	41.33	58.80	48.80	-13.89	-7.47
5	2.14844	10.04	21.48	16.73	31.52	26.77	56.00	46.00	-24.48	-19.23
6	5.96875	10.22	25.30	20.81	35.52	31.03	60.00	50.00	-24.48	-18.97

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

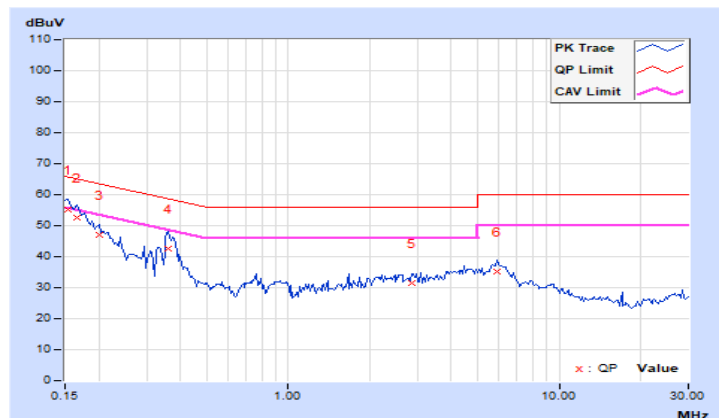


RF Mode	TX 802.11ax (HE80)	Channel	CH 58 : 5290 MHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.91	45.13	28.87	55.04	38.78	65.79	55.79	-10.75	-17.01
2	0.16562	9.92	42.83	26.01	52.75	35.93	65.18	55.18	-12.43	-19.25
3	0.20078	9.93	36.99	21.65	46.92	31.58	63.58	53.58	-16.66	-22.00
4	0.36094	9.95	32.55	24.32	42.50	34.27	58.71	48.71	-16.21	-14.44
5	2.84375	10.05	21.39	16.40	31.44	26.45	56.00	46.00	-24.56	-19.55
6	5.88281	10.18	24.86	20.34	35.04	30.52	60.00	50.00	-24.96	-19.48

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



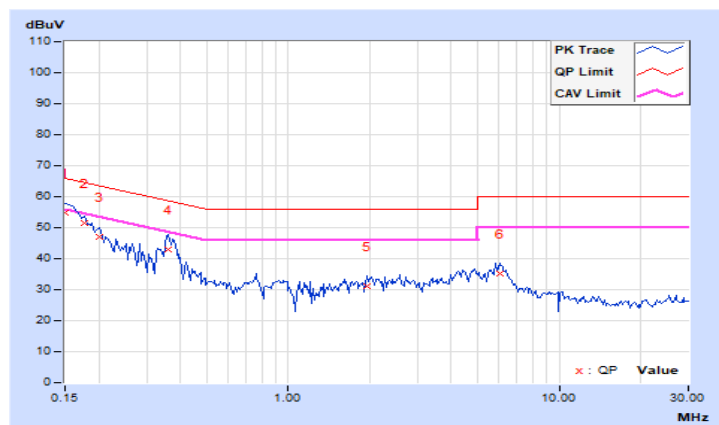
4.2.8 Test Results (Mode 2)

RF Mode	TX 802.11ax (HE80)	Channel	CH 138 : 5690 MHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.91	44.90	31.01	54.81	40.92	66.00	56.00	-11.19	-15.08
2	0.17734	9.92	41.43	25.80	51.35	35.72	64.61	54.61	-13.26	-18.89
3	0.20078	9.93	36.99	22.26	46.92	32.19	63.58	53.58	-16.66	-21.39
4	0.36094	9.95	33.16	24.89	43.11	34.84	58.71	48.71	-15.60	-13.87
5	1.94141	10.03	21.19	15.90	31.22	25.93	56.00	46.00	-24.78	-20.07
6	6.03516	10.23	25.14	20.88	35.37	31.11	60.00	50.00	-24.63	-18.89

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

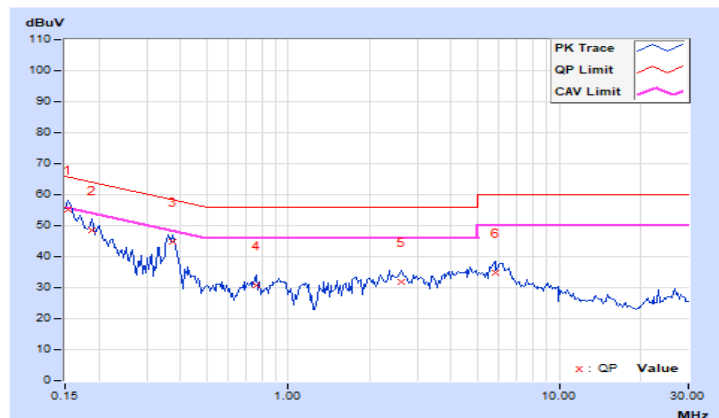


RF Mode	TX 802.11ax (HE80)	Channel	CH 138 : 5690 MHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.91	45.16	28.97	55.07	38.88	65.79	55.79	-10.72	-16.91
2	0.18906	9.93	38.50	22.36	48.43	32.29	64.08	54.08	-15.65	-21.79
3	0.37266	9.95	34.74	30.92	44.69	40.87	58.44	48.44	-13.75	-7.57
4	0.76328	9.97	20.72	10.58	30.69	20.55	56.00	46.00	-25.31	-25.45
5	2.61328	10.04	21.70	16.81	31.74	26.85	56.00	46.00	-24.26	-19.15
6	5.80078	10.18	24.54	20.19	34.72	30.37	60.00	50.00	-25.28	-19.63

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)
		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} ;

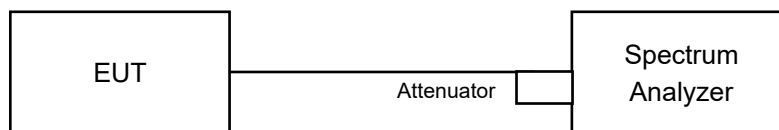
Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

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

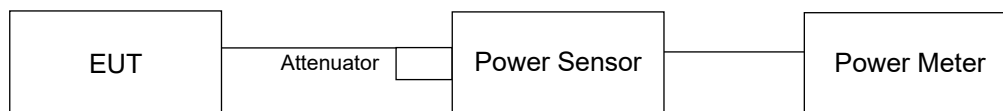
4.3.2 Test Setup

FOR POWER OUTPUT MEASUREMENT

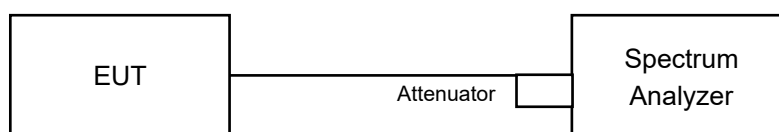
For channel straddling 5725MHz:



For other channels:



FOR 26dB OCCUPIED BANDWIDTH



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

FOR POWER OUTPUT MEASUREMENT

For channel straddling 5725MHz:

Follow FCC KDB 789033 UNII test procedure:

Method SA-2

1. Set span to encompass the emission bandwidth (EBW) of the signal.
2. Set RBW =1MHz.
3. Set the VBW $\geq 3 \times$ RBW.
4. Number of points in sweep ≥ 2 Span / RBW.
5. Sweep time = auto.
6. Detector = RMS.
7. Trace average at least 100 traces in power averaging mode
8. Compute power by integrating the spectrum across the 26 dB EBW of the signal.
9. Duty factor need added to measured value (duty cycle < 98 percent).

For other channels:

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 OCCUPIED BANDWIDTH

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. 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 Condition

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 Results (Mode 1)

CDD Mode

POWER OUTPUT

802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	10.98	10.92	10.65	11.53	50.729	17.05	23.50	PASS
60	5300	11.05	10.96	10.52	11.74	51.409	17.11	23.44	PASS
64	5320	11.08	10.98	10.56	11.68	51.454	17.11	23.46	PASS
100	5500	11.06	11.03	11.00	11.42	51.898	17.15	23.49	PASS
116	5580	11.17	11.36	11.32	11.50	54.446	17.36	23.44	PASS
140	5700	11.10	11.13	11.53	11.04	52.783	17.22	23.50	PASS
*144 (U-NII-2C Band)	5720	7.01	8.10	8.24	7.18	24.828	13.95	22.21	PASS
*144 (U-NII-3 Band)	5720	1.17	0.90	2.90	2.57	6.689	8.25	29.50	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The Max. gain = 6.5 dBi, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(6.5-6)".
2. For U-NII-2C: The Max. gain = 6.5 dBi, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(6.5-6)".
3. For U-NII-3: The Max. gain = 6.5dBi, so the power limit shall be reduced to $30-(6.5-6) = 29.50\text{dBm}$.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	19.98	24 = 24
60	5300	19.68	23.94 < 24
64	5320	19.8	23.96 < 24
100	5500	19.92	23.99 < 24
116	5580	19.7	23.94 < 24
140	5700	19.96	24 = 24
144 (U-NII-2C Band)	5720	14.83	22.71 < 24

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	11.02	11.48	11.02	11.88	54.772	17.39	23.50	PASS
60	5300	11.55	11.34	10.98	11.45	54.398	17.36	23.50	PASS
64	5320	11.53	11.19	11.28	11.32	54.355	17.35	23.50	PASS
100	5500	11.02	10.97	11.61	11.50	53.763	17.30	23.50	PASS
116	5580	11.10	11.29	11.08	11.33	52.748	17.22	23.50	PASS
140	5700	11.13	11.07	11.53	10.75	51.874	17.15	23.50	PASS
*144 (U-NII-2C Band)	5720	8.18	8.15	8.51	7.48	26.915	14.30	22.42	PASS
*144 (U-NII-3 Band)	5720	2.92	2.47	2.88	1.08	7.248	8.60	29.50	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The Max. gain = 6.5 dBi, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(6.5-6)".
2. For U-NII-2C: The Max. gain = 6.5 dBi, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(6.5-6)".
3. For U-NII-3: The Max. gain = 6.5dBi, so the power limit shall be reduced to $30-(6.5-6) = 29.50\text{dBm}$.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	21.31	24.28 > 24
60	5300	21.35	24.29 > 24
64	5320	21.24	24.27 > 24
100	5500	21.41	24.3 > 24
116	5580	21.43	24.31 > 24
140	5700	21.51	24.32 > 24
144 (U-NII-2C Band)	5720	15.57	22.92 < 24

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	14.29	14.46	13.97	14.66	108.966	20.37	23.50	PASS
62	5310	14.18	14.35	13.74	14.85	107.617	20.32	23.50	PASS
102	5510	14.19	14.07	13.69	14.28	101.949	20.08	23.50	PASS
110	5550	14.54	14.32	13.99	14.68	109.922	20.41	23.50	PASS
134	5670	14.52	14.22	14.55	14.46	111.174	20.46	23.50	PASS
*142 (U-NII-2C Band)	5710	12.03	11.79	11.81	12.36	66.751	18.24	23.50	PASS
*142 (U-NII-3 Band)	5710	1.50	1.52	2.88	2.01	6.692	8.26	29.50	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The Max. gain = 6.5 dBi, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(6.5-6)".
2. For U-NII-2C: The Max. gain = 6.5 dBi, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(6.5-6)".
3. For U-NII-3: The Max. gain = 6.5dBi, so the power limit shall be reduced to 30-(6.5-6) = 29.50dBm.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	42.26	27.25 > 24
62	5310	42.23	27.25 > 24
102	5510	41.75	27.2 > 24
110	5550	42.11	27.24 > 24
134	5670	42.04	27.23 > 24
142 (U-NII-2C Band)	5710	35.84	26.54 > 24

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	16.98	16.76	16.54	17.18	194.634	22.89	23.50	PASS
106	5530	16.99	16.82	16.48	16.97	192.324	22.84	23.50	PASS
*138 (U-NII-2C Band)	5690	14.36	14.17	15.25	15.13	126.297	21.01	23.50	PASS
*138 (U-NII-3 Band)	5690	-0.27	0.43	0.66	0.86	4.679	6.70	29.50	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The Max. gain = 6.5 dBi, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(6.5-6)".
2. For U-NII-2C: The Max. gain = 6.5 dBi, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(6.5-6)".
3. For U-NII-3: The Max. gain = 6.5dBi, so the power limit shall be reduced to $30-(6.5-6) = 29.50\text{dBm}$.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	82.71	30.17 > 24
106	5530	82.78	30.17 > 24
138 (U-NII-2C Band)	5690	76.26	29.82 > 24

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	11.32	11.86	11.39	12.35	59.849	17.77	23.50	PASS
60	5300	11.75	11.41	10.99	12.19	57.916	17.63	23.50	PASS
64	5320	11.59	11.48	11.18	12.15	58.01	17.64	23.50	PASS
100	5500	11.11	11.05	11.81	11.52	55.008	17.40	23.50	PASS
116	5580	11.25	11.48	11.37	11.40	54.908	17.40	23.50	PASS
140	5700	11.24	11.22	11.68	10.98	53.802	17.31	23.50	PASS
*144 (U-NII-2C Band)	5720	8.51	8.23	8.81	7.71	28.43	14.54	22.42	PASS
*144 (U-NII-3 Band)	5720	3.02	2.87	3.00	1.19	7.564	8.79	29.50	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The Max. gain = 6.5 dBi, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(6.5-6)".
2. For U-NII-2C: The Max. gain = 6.5 dBi, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(6.5-6)".
3. For U-NII-3: The Max. gain = 6.5dBi, so the power limit shall be reduced to $30-(6.5-6) = 29.50\text{dBm}$.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	21.31	24.28 > 24
60	5300	21.35	24.29 > 24
64	5320	21.24	24.27 > 24
100	5500	21.41	24.3 > 24
116	5580	21.43	24.31 > 24
140	5700	21.51	24.32 > 24
144 (U-NII-2C Band)	5720	15.57	22.92 < 24

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	14.39	14.61	14.08	14.66	111.213	20.46	23.50	PASS
62	5310	14.29	14.43	13.84	14.93	109.914	20.41	23.50	PASS
102	5510	14.29	14.23	13.98	14.56	106.918	20.29	23.50	PASS
110	5550	14.63	14.49	14.24	14.78	113.766	20.56	23.50	PASS
134	5670	14.62	14.47	14.61	14.73	115.587	20.63	23.50	PASS
*142 (U-NII-2C Band)	5710	12.42	12.03	12.13	12.58	71.392	18.54	23.50	PASS
*142 (U-NII-3 Band)	5710	1.78	1.76	3.20	2.39	7.185	8.56	29.50	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The Max. gain = 6.5 dBi, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(6.5-6)".
2. For U-NII-2C: The Max. gain = 6.5 dBi, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(6.5-6)".
3. For U-NII-3: The Max. gain = 6.5dBi, so the power limit shall be reduced to 30-(6.5-6) = 29.50dBm.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	42.26	27.25 > 24
62	5310	42.23	27.25 > 24
102	5510	41.75	27.2 > 24
110	5550	42.11	27.24 > 24
134	5670	42.04	27.23 > 24
142 (U-NII-2C Band)	5710	35.84	26.54 > 24

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	17.12	17.00	16.69	17.45	203.898	23.09	23.50	PASS
106	5530	17.03	17.02	16.67	17.29	200.847	23.03	23.50	PASS
*138 (U-NII-2C Band)	5690	14.56	14.42	15.51	15.23	132.279	21.21	23.50	PASS
*138 (U-NII-3 Band)	5690	0.27	1.10	1.11	1.32	5.284	7.23	29.50	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The Max. gain = 6.5 dBi, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(6.5-6)".
2. For U-NII-2C: The Max. gain = 6.5 dBi, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(6.5-6)".
3. For U-NII-3: The Max. gain = 6.5dBi, so the power limit shall be reduced to $30-(6.5-6) = 29.50\text{dBm}$.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	82.71	30.17 > 24
106	5530	82.78	30.17 > 24
138 (U-NII-2C Band)	5690	76.26	29.82 > 24

Beamforming Mode

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	10.68	11.03	10.71	11.59	50.569	17.04	17.48	PASS
60	5300	11.03	10.86	10.39	11.51	49.964	16.99	17.48	PASS
64	5320	10.82	10.73	10.54	11.57	49.587	16.95	17.48	PASS
100	5500	11.02	10.97	11.61	11.50	53.763	17.30	17.48	PASS
116	5580	11.10	11.29	11.08	11.33	52.748	17.22	17.48	PASS
140	5700	11.13	11.07	11.53	10.75	51.874	17.15	17.48	PASS
*144 (U-NII-2C Band)	5720	8.18	8.15	8.51	7.48	26.915	14.30	16.40	PASS
*144 (U-NII-3 Band)	5720	2.92	2.47	2.88	1.08	7.248	8.60	23.48	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Mett SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.52-6)".
2. For U-NII-2C: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.52-6)".
3. For U-NII-3: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.52-6) = 23.48\text{dBm}$.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	21.31	24.28 > 24
60	5300	21.35	24.29 > 24
64	5320	21.24	24.27 > 24
100	5500	21.41	24.3 > 24
116	5580	21.43	24.31 > 24
140	5700	21.51	24.32 > 24
144 (U-NII-2C Band)	5720	15.57	22.92 < 24

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	11.03	11.04	10.83	11.71	52.313	17.19	17.48	PASS
62	5310	10.89	10.81	10.63	11.68	50.609	17.04	17.48	PASS
102	5510	10.98	11.03	10.76	11.22	50.364	17.02	17.48	PASS
110	5550	11.19	11.16	10.93	11.29	52.061	17.17	17.48	PASS
134	5670	11.24	11.01	10.96	11.23	51.671	17.13	17.48	PASS
*142 (U-NII-2C Band)	5710	9.01	8.69	8.73	9.00	32.366	15.10	17.48	PASS
*142 (U-NII-3 Band)	5710	-1.97	-1.40	-0.44	-1.30	3.1611	5.00	23.48	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Mett SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.52-6)".
2. For U-NII-2C: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.52-6)".
3. For U-NII-3: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.52-6) = 23.48\text{dBm}$.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log\text{B} < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	42.26	27.25 > 24
62	5310	42.23	27.25 > 24
102	5510	41.75	27.2 > 24
110	5550	42.11	27.24 > 24
134	5670	42.04	27.23 > 24
142 (U-NII-2C Band)	5710	35.84	26.54 > 24

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	11.09	11.11	10.79	11.52	51.951	17.16	17.48	PASS
106	5530	10.86	10.80	10.76	11.02	48.772	16.88	17.48	PASS
*138 (U-NII-2C Band)	5690	8.07	8.24	9.17	8.84	30.648	14.86	17.48	PASS
*138 (U-NII-3 Band)	5690	-6.43	-5.71	-5.55	-4.99	1.1538	0.62	23.48	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Mett SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.52-6)".
2. For U-NII-2C: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.52-6)".
3. For U-NII-3: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.52-6) = 23.48\text{dBm}$.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	82.71	30.17 > 24
106	5530	82.78	30.17 > 24
138 (U-NII-2C Band)	5690	76.26	29.82 > 24

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	10.86	11.31	10.95	11.82	53.361	17.27	17.48	PASS
60	5300	11.29	11.09	10.62	11.73	52.74	17.22	17.48	PASS
64	5320	11.06	10.97	10.78	11.82	52.44	17.20	17.48	PASS
100	5500	11.11	11.05	11.81	11.52	55.008	17.40	17.48	PASS
116	5580	11.25	11.48	11.37	11.40	54.908	17.40	17.48	PASS
140	5700	11.24	11.22	11.68	10.98	53.802	17.31	17.48	PASS
*144 (U-NII-2C Band)	5720	8.51	8.23	8.81	7.71	28.43	14.54	16.40	PASS
*144 (U-NII-3 Band)	5720	3.02	2.87	3.00	1.19	7.564	8.79	23.48	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Mett SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.52-6)".
2. For U-NII-2C: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.52-6)".
3. For U-NII-3: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.52-6) = 23.48\text{dBm}$.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	21.31	24.28 > 24
60	5300	21.35	24.29 > 24
64	5320	21.24	24.27 > 24
100	5500	21.41	24.3 > 24
116	5580	21.43	24.31 > 24
140	5700	21.51	24.32 > 24
144 (U-NII-2C Band)	5720	15.57	22.92 < 24

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	11.27	11.31	11.07	11.92	55.271	17.42	17.48	PASS
62	5310	11.19	11.12	10.86	11.92	53.844	17.31	17.48	PASS
102	5510	11.25	11.29	11.02	11.48	53.502	17.28	17.48	PASS
110	5550	11.46	11.42	11.18	11.57	55.34	17.43	17.48	PASS
134	5670	11.47	11.27	11.21	11.49	54.731	17.38	17.48	PASS
*142 (U-NII-2C Band)	5710	9.36	8.94	8.82	9.19	34.069	15.32	17.48	PASS
*142 (U-NII-3 Band)	5710	-1.43	-1.28	-0.08	-0.94	3.4205	5.34	23.48	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Mett SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.52-6)".
2. For U-NII-2C: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.52-6)".
3. For U-NII-3: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.52-6) = 23.48\text{dBm}$.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	42.26	27.25 > 24
62	5310	42.23	27.25 > 24
102	5510	41.75	27.2 > 24
110	5550	42.11	27.24 > 24
134	5670	42.04	27.23 > 24
142 (U-NII-2C Band)	5710	35.84	26.54 > 24

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	11.36	11.41	11.03	11.76	55.186	17.42	17.48	PASS
106	5530	11.12	11.12	11.11	11.25	52.131	17.17	17.48	PASS
*138 (U-NII-2C Band)	5690	8.26	8.43	9.37	9.06	32.098	15.06	17.48	PASS
*138 (U-NII-3 Band)	5690	-6.27	-5.60	-5.29	-4.72	1.2097	0.83	23.48	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Mett SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.52-6)".
2. For U-NII-2C: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.52-6)".
3. For U-NII-3: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.52-6) = 23.48\text{dBm}$.

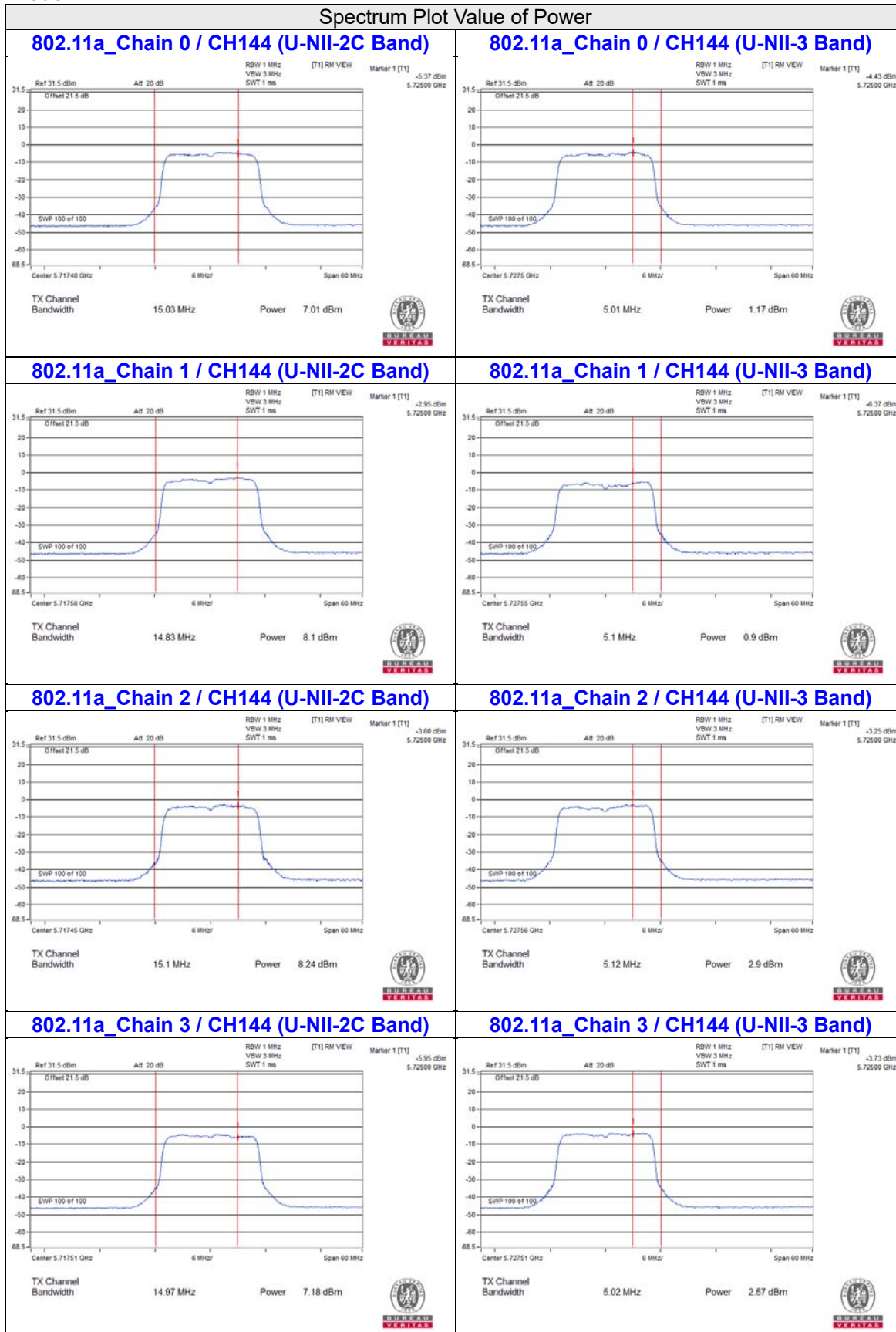
Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	82.71	30.17 > 24
106	5530	82.78	30.17 > 24
138 (U-NII-2C Band)	5690	76.26	29.82 > 24

For channel straddling 5725MHz of Power

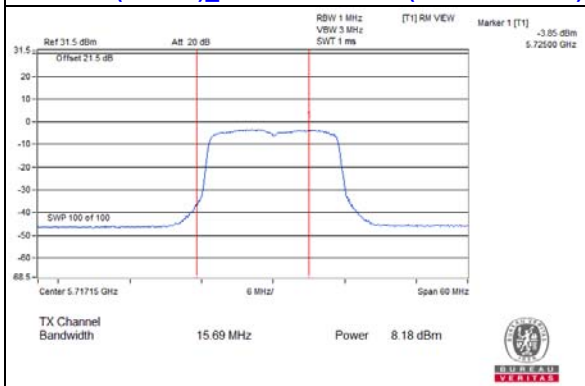
CDD Mode

Spectrum Plot Value of Power

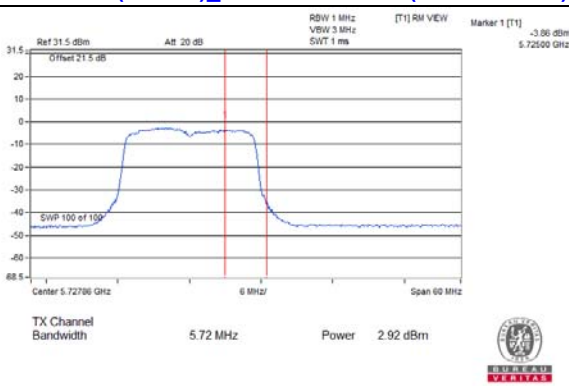


Spectrum Plot Value of Power

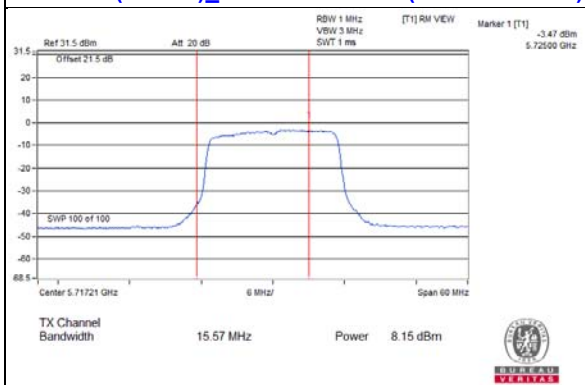
802.11ac (VHT20)_Chain 0 / CH144 (U-NII-2C Band)



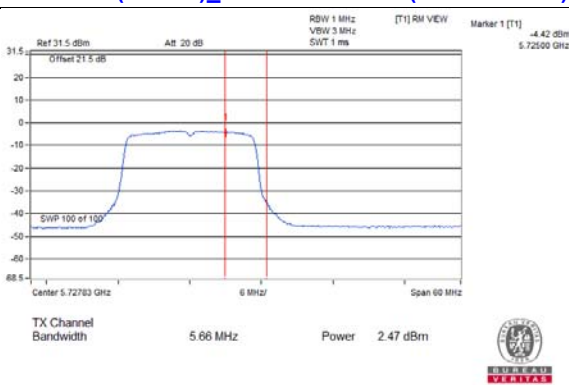
802.11ac (VHT20)_Chain 0 / CH144 (U-NII-3 Band)



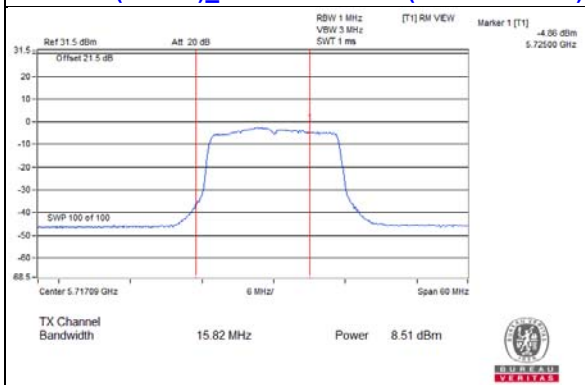
802.11ac (VHT20)_Chain 1 / CH144 (U-NII-2C Band)



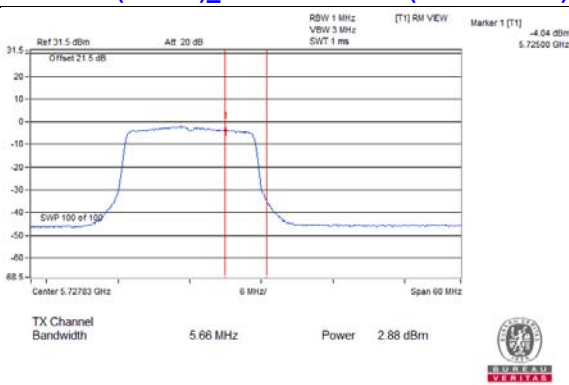
802.11ac (VHT20)_Chain 1 / CH144 (U-NII-3 Band)



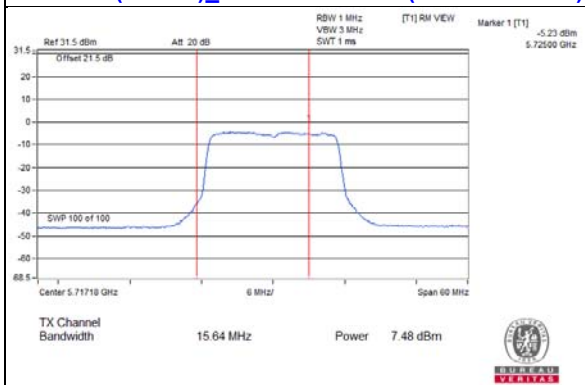
802.11ac (VHT20)_Chain 2 / CH144 (U-NII-2C Band)



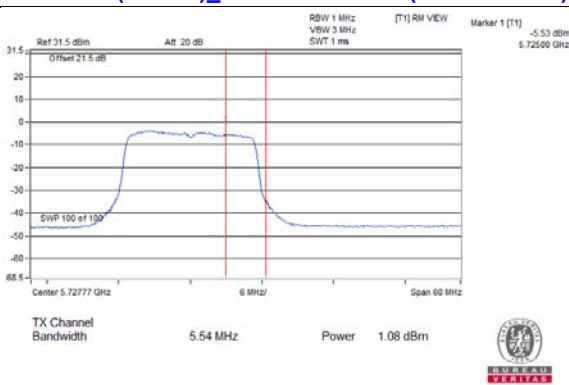
802.11ac (VHT20)_Chain 2 / CH144 (U-NII-3 Band)



802.11ac (VHT20)_Chain 3 / CH144 (U-NII-2C Band)

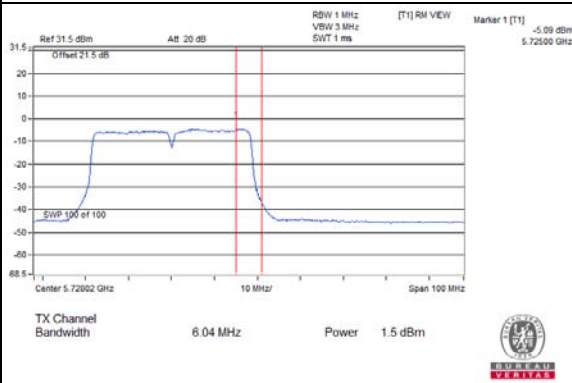
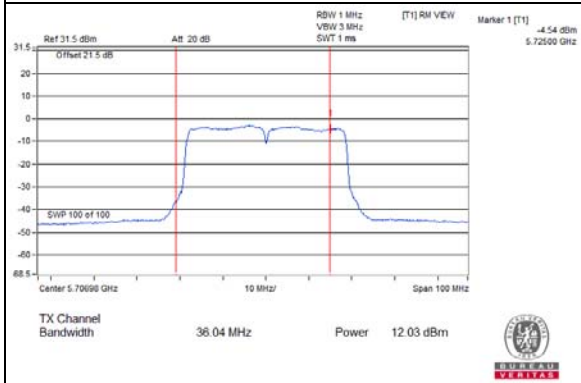


802.11ac (VHT20)_Chain 3 / CH144 (U-NII-3 Band)

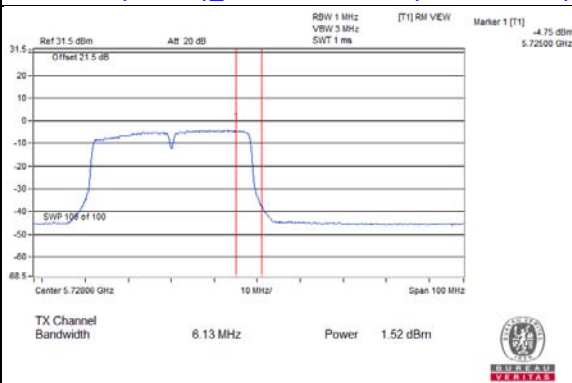
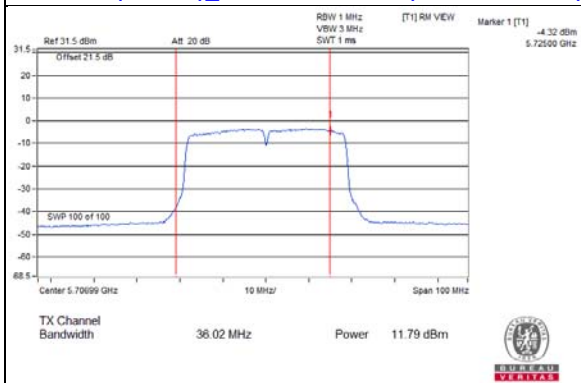


Spectrum Plot Value of Power

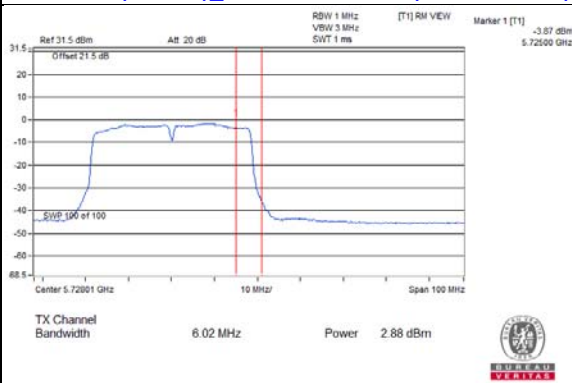
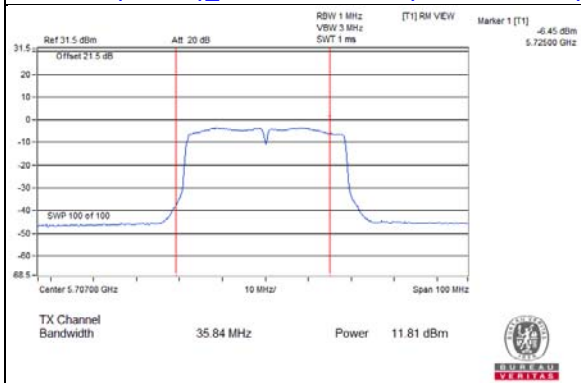
802.11ac (VHT40)_Chain 0 / CH142 (U-NII-2C Band) 802.11ac (VHT40)_Chain 0 / CH142 (U-NII-3 Band)



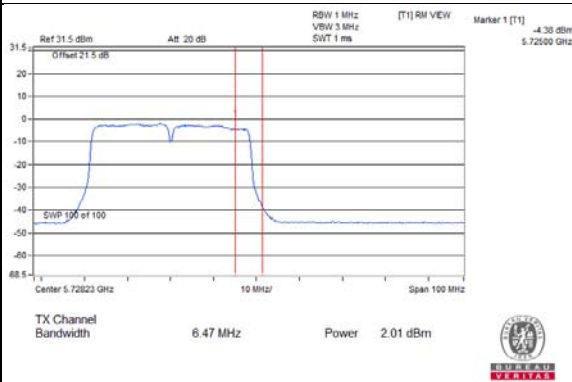
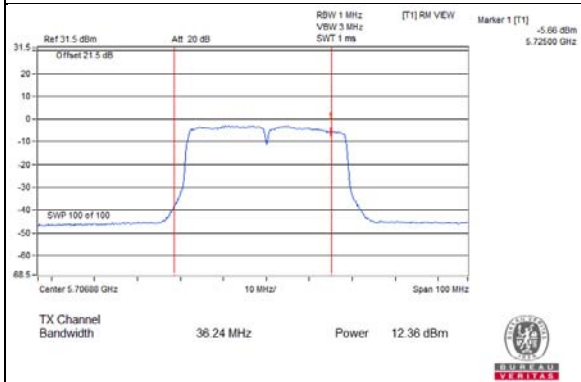
802.11ac (VHT40)_Chain 1 / CH142 (U-NII-2C Band) 802.11ac (VHT40)_Chain 1 / CH142 (U-NII-3 Band)



802.11ac (VHT40)_Chain 2 / CH142 (U-NII-2C Band) 802.11ac (VHT40)_Chain 2 / CH142 (U-NII-3 Band)

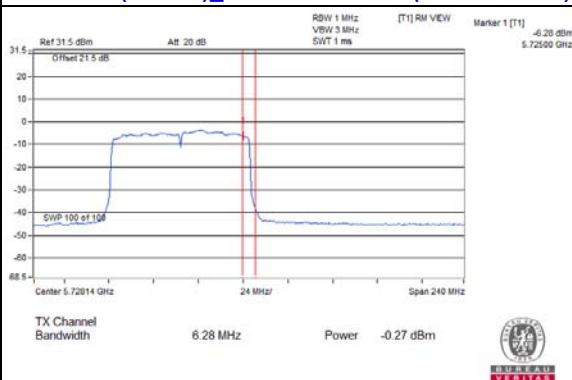
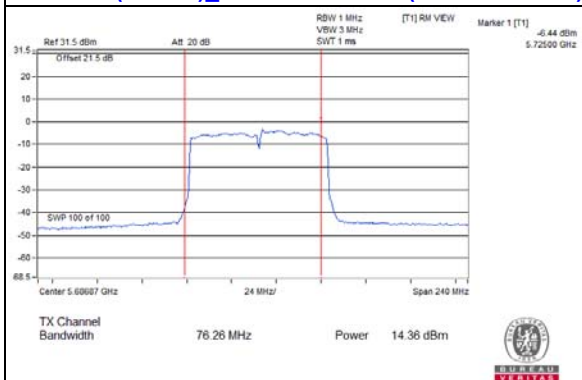


802.11ac (VHT40)_Chain 3 / CH142 (U-NII-2C Band) 802.11ac (VHT40)_Chain 3 / CH142 (U-NII-3 Band)

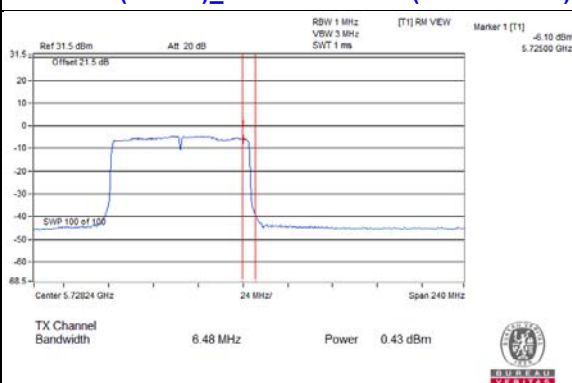
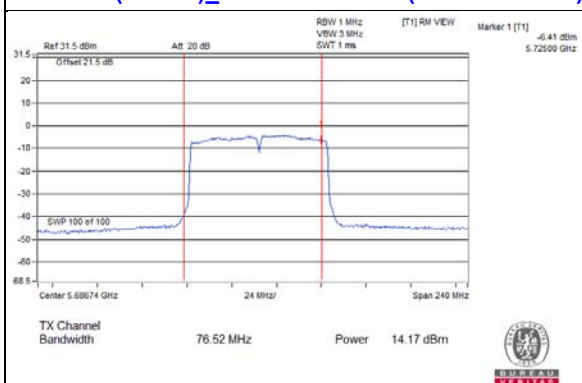


Spectrum Plot Value of Power

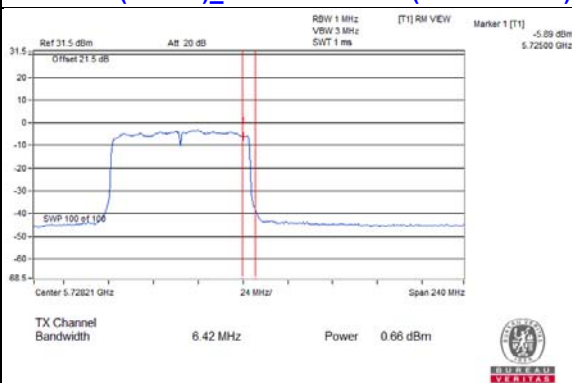
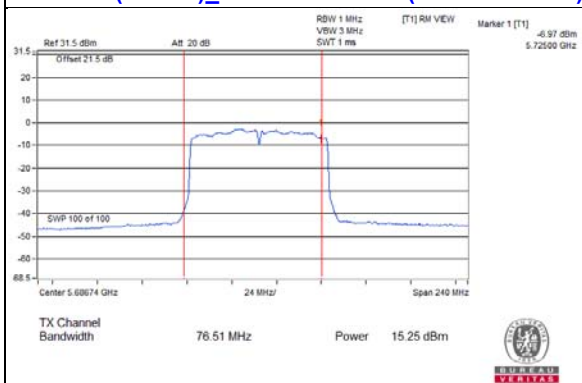
802.11ac (VHT80)_Chain 0 / CH138 (U-NII-2C Band) 802.11ac (VHT80)_Chain 0 / CH138 (U-NII-3 Band)



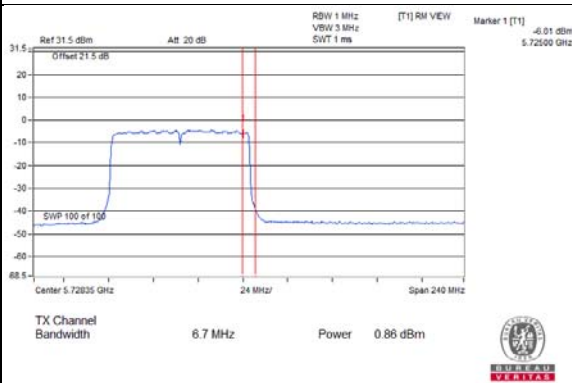
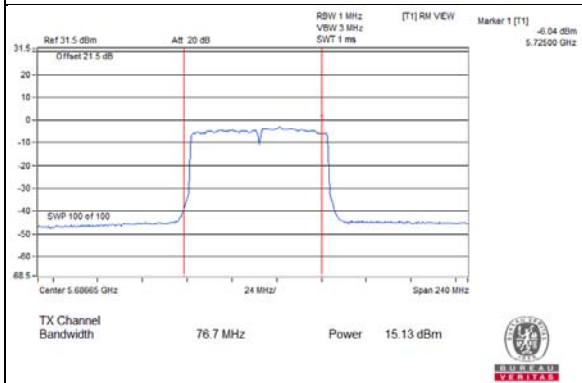
802.11ac (VHT80)_Chain 1 / CH138 (U-NII-2C Band) 802.11ac (VHT80)_Chain 1 / CH138 (U-NII-3 Band)



802.11ac (VHT80)_Chain 2 / CH138 (U-NII-2C Band) 802.11ac (VHT80)_Chain 2 / CH138 (U-NII-3 Band)



802.11ac (VHT80)_Chain 3 / CH138 (U-NII-2C Band) 802.11ac (VHT80)_Chain 3 / CH138 (U-NII-3 Band)



Spectrum Plot Value of Power



Spectrum Plot Value of Power



Spectrum Plot Value of Power

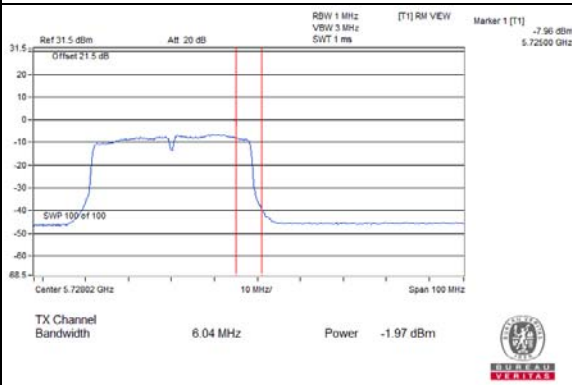
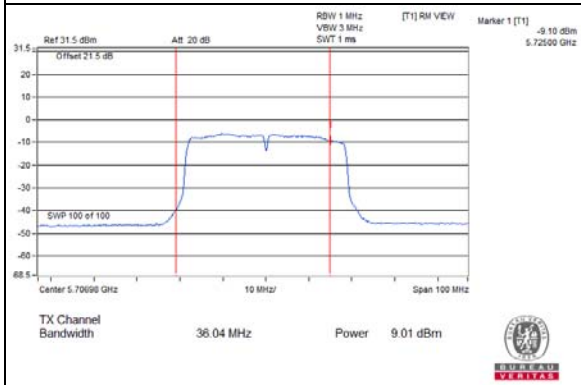


Beamforming Mode

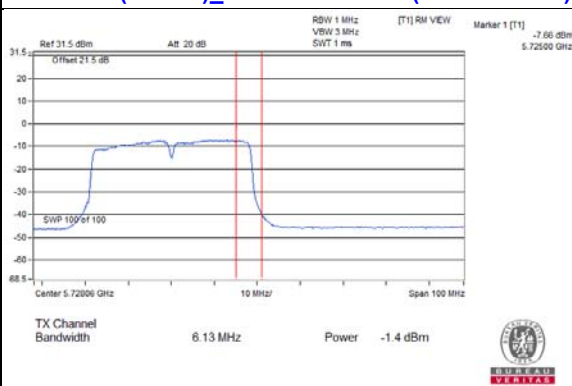
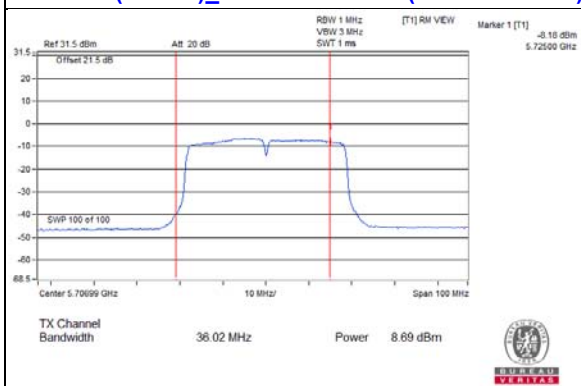


Spectrum Plot Value of Power

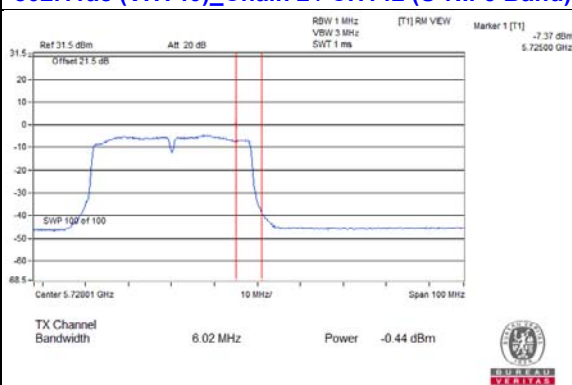
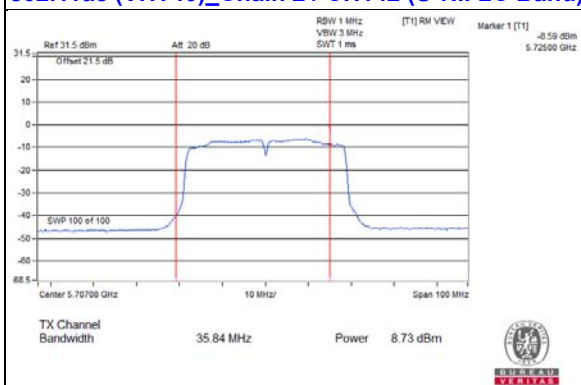
802.11ac (VHT40)_Chain 0 / CH142 (U-NII-2C Band) 802.11ac (VHT40)_Chain 0 / CH142 (U-NII-3 Band)



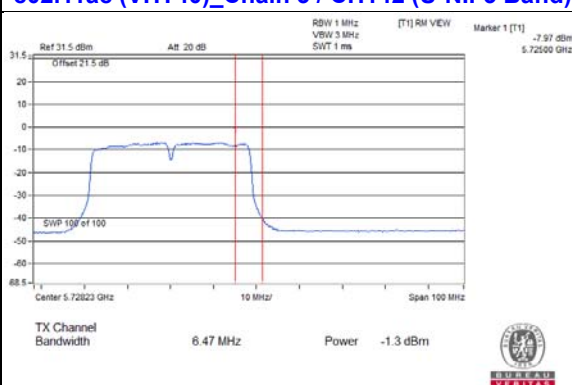
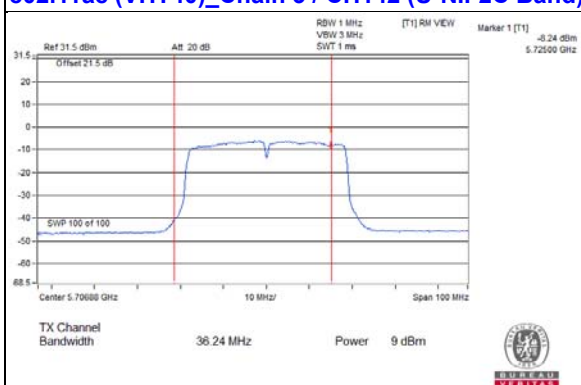
802.11ac (VHT40)_Chain 1 / CH142 (U-NII-2C Band) 802.11ac (VHT40)_Chain 1 / CH142 (U-NII-3 Band)



802.11ac (VHT40)_Chain 2 / CH142 (U-NII-2C Band) 802.11ac (VHT40)_Chain 2 / CH142 (U-NII-3 Band)

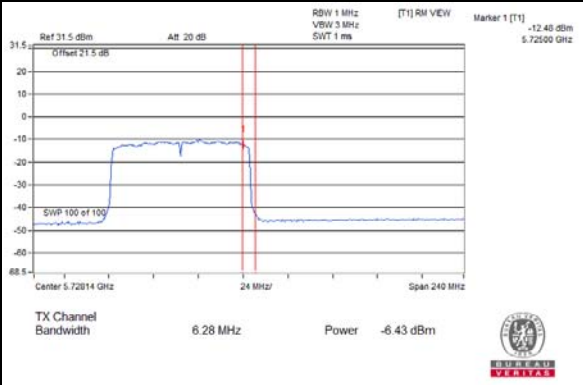
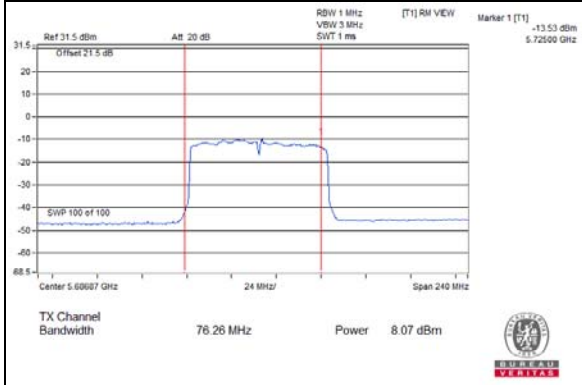


802.11ac (VHT40)_Chain 3 / CH142 (U-NII-2C Band) 802.11ac (VHT40)_Chain 3 / CH142 (U-NII-3 Band)

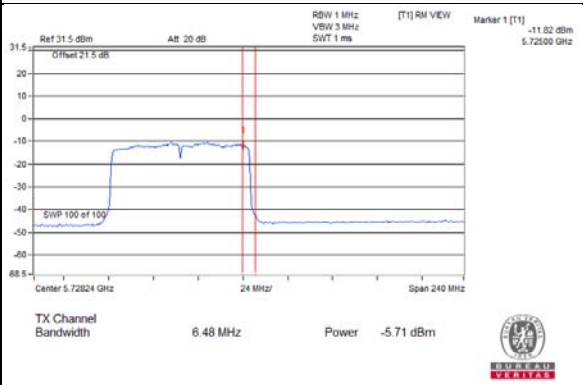
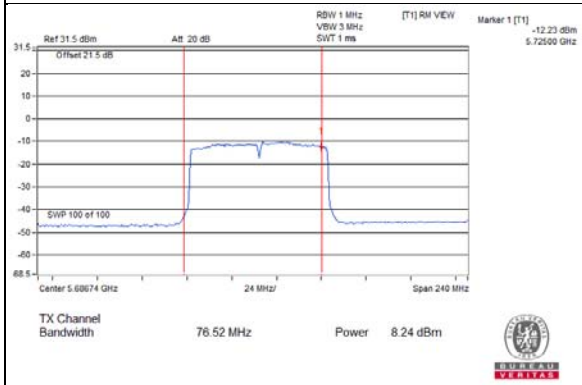


Spectrum Plot Value of Power

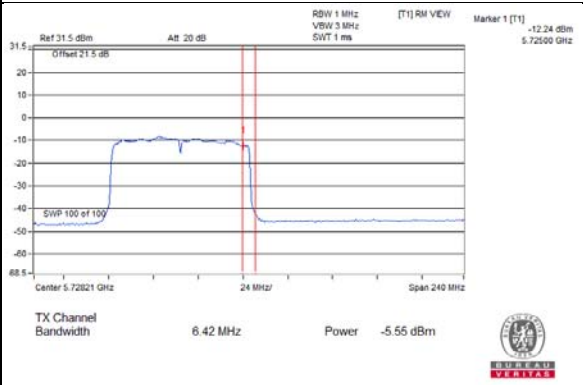
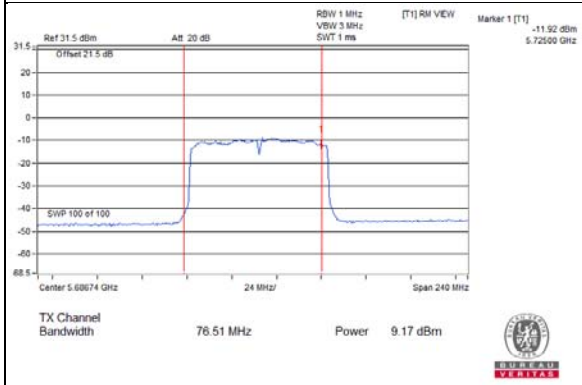
802.11ac (VHT80)_Chain 0 / CH138 (U-NII-2C Band) 802.11ac (VHT80)_Chain 0 / CH138 (U-NII-3 Band)



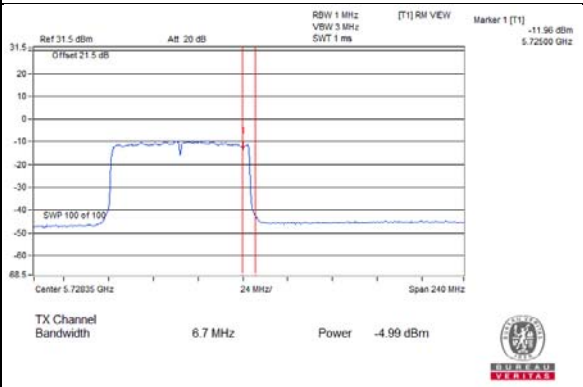
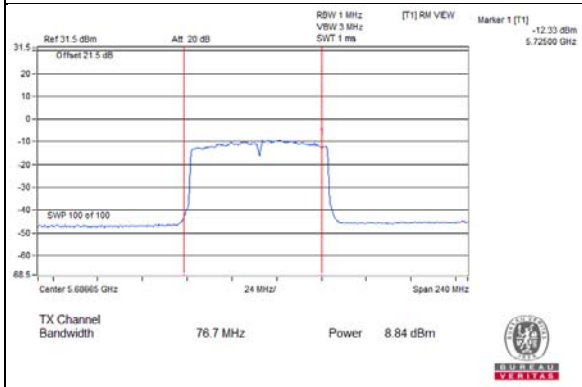
802.11ac (VHT80)_Chain 1 / CH138 (U-NII-2C Band) 802.11ac (VHT80)_Chain 1 / CH138 (U-NII-3 Band)



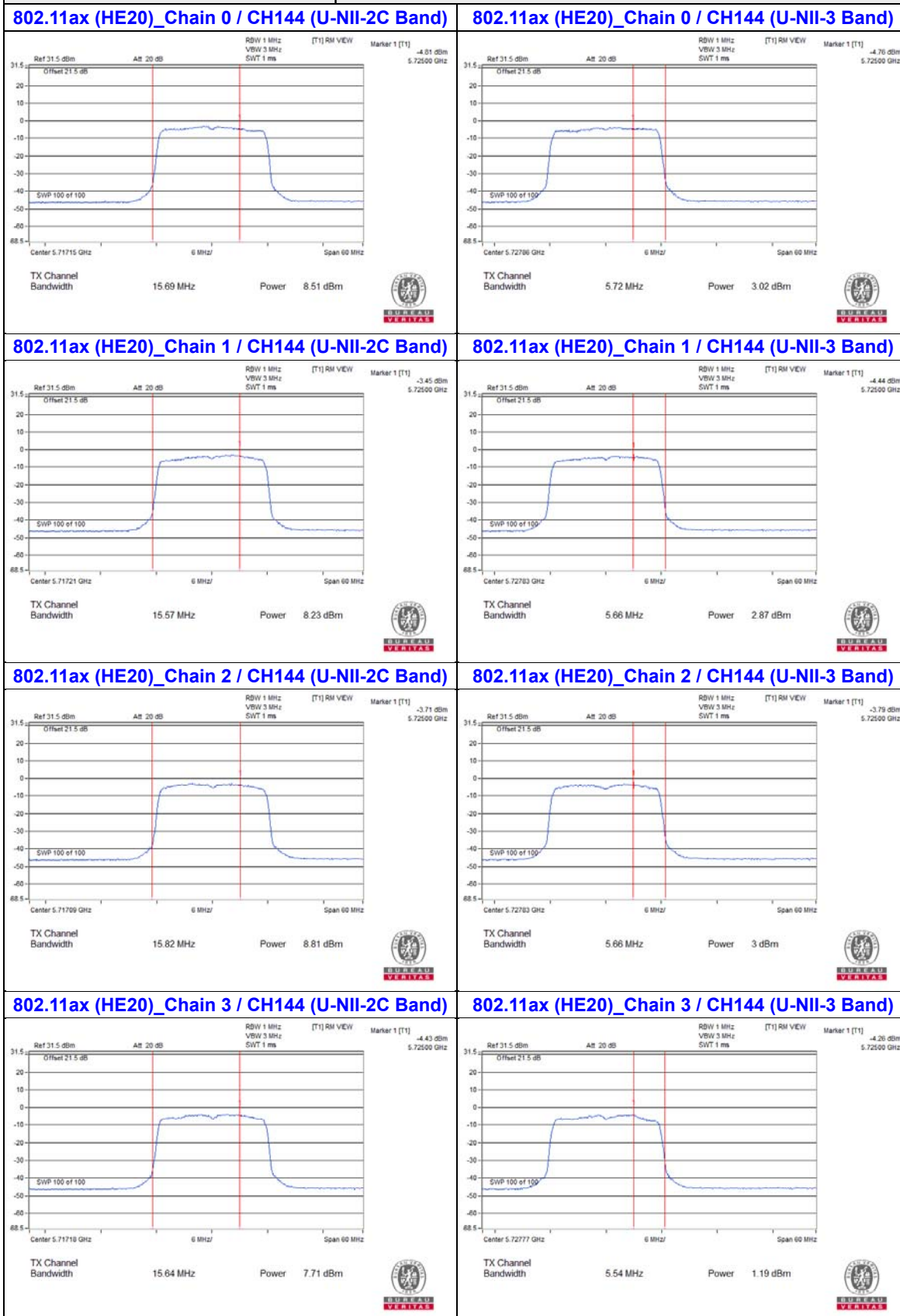
802.11ac (VHT80)_Chain 2 / CH138 (U-NII-2C Band) 802.11ac (VHT80)_Chain 2 / CH138 (U-NII-3 Band)



802.11ac (VHT80)_Chain 3 / CH138 (U-NII-2C Band) 802.11ac (VHT80)_Chain 3 / CH138 (U-NII-3 Band)



Spectrum Plot Value of Power



Spectrum Plot Value of Power



Spectrum Plot Value of Power



CDD Mode
26dB OCCUPIED BANDWIDTH
802.11a

Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		Chain0	Chain1	Chain2	Chain3
52	5260	20.45	20.31	20.15	19.98
60	5300	19.89	19.9	20.25	19.68
64	5320	19.94	19.8	20.11	19.92
100	5500	20.03	19.92	20.17	20.06
116	5580	20.13	20.06	19.86	19.7
140	5700	20.26	19.96	20.15	19.96
144 (U-NII-2C Band)	5720	15.03	14.83	15.1	14.97

802.11ax (HE20)

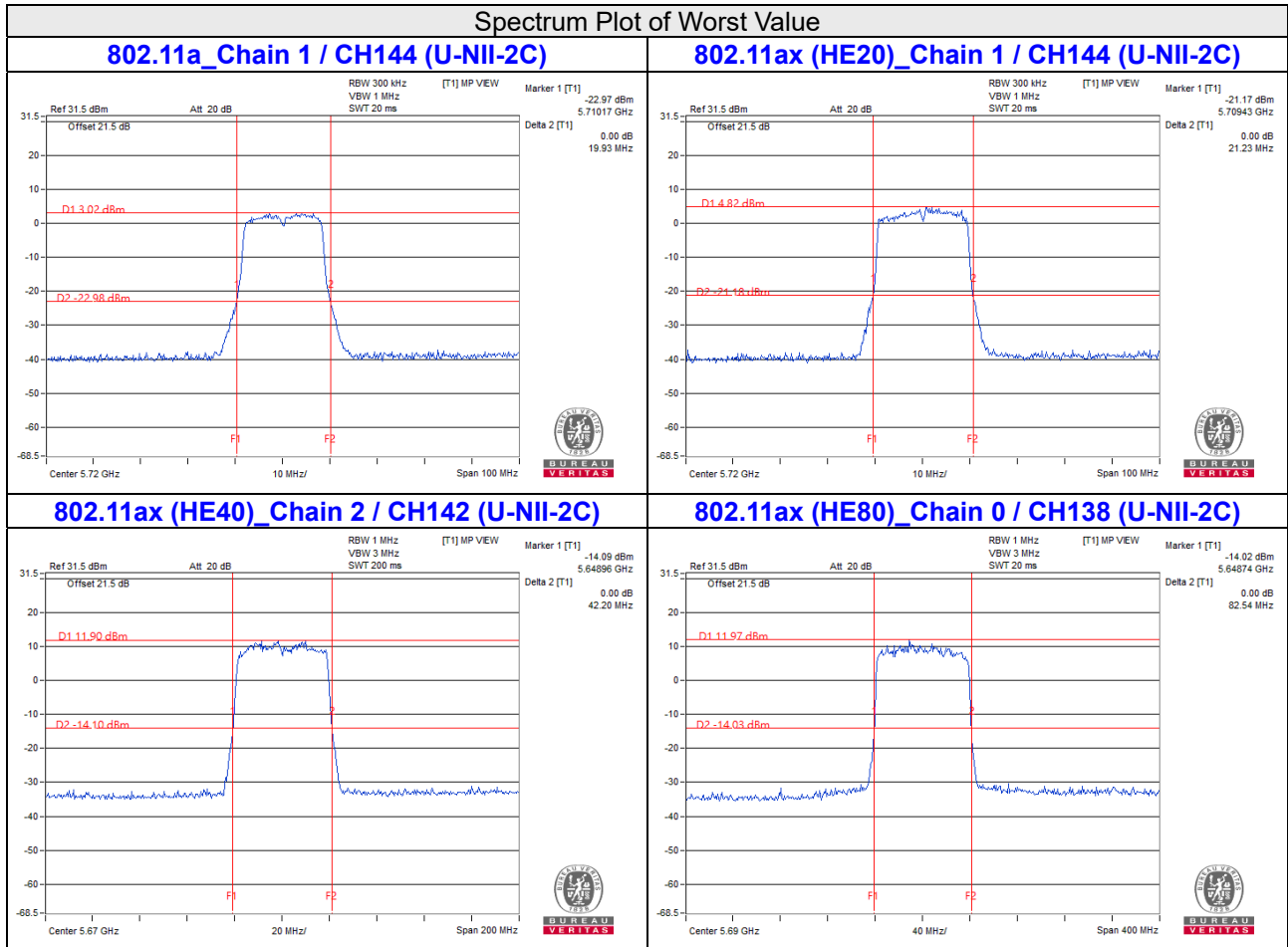
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		Chain0	Chain1	Chain2	Chain3
52	5260	21.61	21.38	21.52	21.31
60	5300	21.58	21.35	21.46	21.41
64	5320	21.47	21.58	21.24	21.43
100	5500	21.84	21.69	21.41	21.47
116	5580	21.73	21.6	21.43	21.44
140	5700	21.59	21.61	21.71	21.51
144 (U-NII-2C Band)	5720	15.69	15.57	15.82	15.64

802.11ax (HE40)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		Chain0	Chain1	Chain2	Chain3
54	5270	42.65	42.26	42.35	42.37
62	5310	42.4	42.38	42.26	42.23
102	5510	42.16	42.3	41.75	42.26
110	5550	42.41	42.65	42.11	42.43
134	5670	42.06	42.11	42.2	42.04
142 (U-NII-2C Band)	5710	36.04	36.02	35.84	36.24

802.11ax (HE80)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		Chain0	Chain1	Chain2	Chain3
58	5290	83.18	83.29	83.05	82.71
106	5530	83.44	83.1	82.78	83.38
138 (U-NII-2C Band)	5690	76.26	76.52	76.51	76.7



Note:

- For CH144 (U-NII-2C) = 5725MHz - Marker 1
- For CH142 (U-NII-2C) = 5725MHz - Marker 1
- For CH138 (U-NII-2C) = 5725MHz - Marker 1

4.3.8 Test Results (Mode 2)

CDD Mode

POWER OUTPUT

802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	11.32	11.43	11.19	12.08	56.747	17.54	23.97	PASS
60	5300	11.45	11.39	11.09	12.11	56.844	17.55	23.93	PASS
64	5320	11.41	11.33	11.21	12.01	56.517	17.52	23.99	PASS
100	5500	11.46	11.54	11.30	11.80	56.877	17.55	23.92	PASS
116	5580	11.77	11.82	11.76	11.82	60.439	17.81	23.97	PASS
140	5700	11.43	11.54	11.92	11.47	57.743	17.61	23.96	PASS
*144 (U-NII-2C Band)	5720	7.15	8.56	8.67	7.48	26.903	14.30	22.68	PASS
*144 (U-NII-3 Band)	5720	1.57	1.28	3.56	3.00	7.482	8.74	30.00	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.
 1. The max. gain = 6 dBi, so the power limit shall not be reduced.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	19.83	23.97 < 24
60	5300	19.67	23.93 < 24
64	5320	19.92	23.99 < 24
100	5500	19.59	23.92 < 24
116	5580	19.82	23.97 < 24
140	5700	19.77	23.96 < 24
144 (U-NII-2C Band)	5720	14.74	22.68 < 24

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	11.53	11.02	11.62	12.73	60.142	17.79	24.00	PASS
60	5300	11.81	11.62	11.34	12.43	60.805	17.84	24.00	PASS
64	5320	11.72	11.68	11.39	12.39	60.693	17.83	24.00	PASS
100	5500	11.43	11.38	12.03	11.88	59.016	17.71	24.00	PASS
116	5580	11.58	11.79	11.62	11.69	58.767	17.69	24.00	PASS
140	5700	11.53	11.49	12.01	11.38	57.942	17.63	24.00	PASS
*144 (U-NII-2C Band)	5720	8.80	8.46	9.15	7.95	30.314	14.82	22.91	PASS
*144 (U-NII-3 Band)	5720	3.16	3.01	3.27	1.73	8.014	9.04	30.00	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. The max. gain = 6 dBi, so the power limit shall not be reduced.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	21.41	24.3 > 24
60	5300	21.5	24.32 > 24
64	5320	21.36	24.29 > 24
100	5500	21.19	24.26 > 24
116	5580	21.2	24.26 > 24
140	5700	21.24	24.27 > 24
144 (U-NII-2C Band)	5720	15.55	22.91 < 24

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	14.14	14.26	15.21	15.68	122.783	20.89	24.00	PASS
62	5310	14.06	14.16	14.50	15.66	116.527	20.66	24.00	PASS
102	5510	13.96	13.85	15.21	15.56	118.319	20.73	24.00	PASS
110	5550	14.30	14.29	15.23	15.71	124.351	20.95	24.00	PASS
134	5670	14.49	14.50	15.41	14.98	122.534	20.88	24.00	PASS
*142 (U-NII-2C Band)	5710	12.60	12.54	12.83	12.83	78.396	18.94	24.00	PASS
*142 (U-NII-3 Band)	5710	1.92	1.99	3.67	2.57	7.651	8.84	30.00	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.
 1. The max. gain = 6 dBi, so the power limit shall not be reduced.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	42.19	27.25 > 24
62	5310	42.04	27.23 > 24
102	5510	42.23	27.25 > 24
110	5550	42.02	27.23 > 24
134	5670	42.22	27.25 > 24
142 (U-NII-2C Band)	5710	35.86	26.54 > 24

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	12.15	12.07	12.64	13.73	74.483	18.72	24.00	PASS
106	5530	13.72	13.87	14.74	15.28	111.442	20.47	24.00	PASS
*138 (U-NII-2C Band)	5690	14.74	15.17	15.74	15.66	144.782	21.61	24.00	PASS
*138 (U-NII-3 Band)	5690	0.61	1.49	1.57	1.59	5.747	7.59	30.00	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. The max. gain = 6 dBi, so the power limit shall not be reduced.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	83.03	30.19 > 24
106	5530	83.05	30.19 > 24
138 (U-NII-2C Band)	5690	76.23	29.82 > 24

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	11.78	11.25	11.83	12.96	63.412	18.02	24.00	PASS
60	5300	12.13	11.86	11.57	12.67	64.524	18.10	24.00	PASS
64	5320	11.97	11.91	11.63	12.66	64.268	18.08	24.00	PASS
100	5500	11.64	11.63	12.29	12.14	62.454	17.96	24.00	PASS
116	5580	11.81	12.03	11.87	11.96	62.214	17.94	24.00	PASS
140	5700	11.79	11.72	12.21	11.56	60.916	17.85	24.00	PASS
*144 (U-NII-2C Band)	5720	8.85	8.69	9.32	8.22	31.563	14.99	22.91	PASS
*144 (U-NII-3 Band)	5720	3.32	3.38	3.59	1.77	8.464	9.28	30.00	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.
 1. The max. gain = 6 dBi, so the power limit shall not be reduced.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	21.41	24.3 > 24
60	5300	21.5	24.32 > 24
64	5320	21.36	24.29 > 24
100	5500	21.19	24.26 > 24
116	5580	21.2	24.26 > 24
140	5700	21.24	24.27 > 24
144 (U-NII-2C Band)	5720	15.55	22.91 < 24

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	14.43	14.55	15.42	15.98	130.705	21.16	24.00	PASS
62	5310	14.33	14.36	14.70	15.96	123.35	20.91	24.00	PASS
102	5510	14.17	14.13	15.41	15.85	125.217	20.98	24.00	PASS
110	5550	14.50	14.59	15.52	16.00	132.414	21.22	24.00	PASS
134	5670	14.78	14.70	15.70	15.27	130.378	21.15	24.00	PASS
*142 (U-NII-2C Band)	5710	12.67	12.65	12.88	13.09	80.67	19.07	24.00	PASS
*142 (U-NII-3 Band)	5710	2.20	2.26	3.74	2.80	8.01	9.04	30.00	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.
 1. The max. gain = 6 dBi, so the power limit shall not be reduced.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	42.19	27.25 > 24
62	5310	42.04	27.23 > 24
102	5510	42.23	27.25 > 24
110	5550	42.02	27.23 > 24
134	5670	42.22	27.25 > 24
142 (U-NII-2C Band)	5710	35.86	26.54 > 24

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	12.35	12.37	12.94	13.94	78.891	18.97	24.00	PASS
106	5530	13.93	14.07	15.04	15.57	118.217	20.73	24.00	PASS
*138 (U-NII-2C Band)	5690	14.92	15.19	15.92	15.94	150.543	21.78	24.00	PASS
*138 (U-NII-3 Band)	5690	0.80	1.64	1.67	1.74	5.943	7.74	30.00	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.
 1. The max. gain = 6 dBi, so the power limit shall not be reduced.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	83.03	30.19 > 24
106	5530	83.05	30.19 > 24
138 (U-NII-2C Band)	5690	76.23	29.82 > 24

Beamforming Mode

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	11.02	11.48	11.02	11.88	54.772	17.39	17.98	PASS
60	5300	11.55	11.34	10.98	11.45	54.398	17.36	17.98	PASS
64	5320	11.53	11.19	11.28	11.32	54.355	17.35	17.98	PASS
100	5500	11.02	10.97	11.61	11.50	53.763	17.30	17.98	PASS
116	5580	11.10	11.29	11.08	11.33	52.748	17.22	17.98	PASS
140	5700	11.13	11.07	11.53	10.75	51.874	17.15	17.98	PASS
*144 (U-NII-2C Band)	5720	8.80	8.46	9.15	7.95	30.314	14.82	16.89	PASS
*144 (U-NII-3 Band)	5720	3.16	3.01	3.27	1.73	8.014	9.04	23.98	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.02-6)".
2. For U-NII-2C: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.02-6)".
3. For U-NII-3: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (12.02 - 6) = 23.98\text{dBm}$.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	21.41	24.3 > 24
60	5300	21.5	24.32 > 24
64	5320	21.36	24.29 > 24
100	5500	21.19	24.26 > 24
116	5580	21.2	24.26 > 24
140	5700	21.24	24.27 > 24
144 (U-NII-2C Band)	5720	15.55	22.91 < 24

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	11.69	11.67	11.21	11.19	55.812	17.47	17.98	PASS
62	5310	11.48	11.39	11.08	12.11	56.911	17.55	17.98	PASS
102	5510	11.51	11.53	11.22	11.68	56.348	17.51	17.98	PASS
110	5550	11.72	11.68	11.38	11.80	58.459	17.67	17.98	PASS
134	5670	11.75	11.49	11.42	11.71	57.748	17.62	17.98	PASS
*142 (U-NII-2C Band)	5710	9.68	9.16	9.38	9.47	36.876	15.67	17.98	PASS
*142 (U-NII-3 Band)	5710	-0.78	-0.89	0.18	-0.64	3.7406	5.73	23.98	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.02-6)".
2. For U-NII-2C: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.02-6)".
3. For U-NII-3: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (12.02 - 6) = 23.98\text{dBm}$.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	42.19	27.25 > 24
62	5310	42.04	27.23 > 24
102	5510	42.23	27.25 > 24
110	5550	42.02	27.23 > 24
134	5670	42.22	27.25 > 24
142 (U-NII-2C Band)	5710	35.86	26.54 > 24

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	11.66	11.58	11.15	12.11	58.331	17.66	17.98	PASS
106	5530	11.53	11.35	11.42	11.48	55.797	17.47	17.98	PASS
*138 (U-NII-2C Band)	5690	9.00	8.95	9.98	9.70	37.08	15.69	17.98	PASS
*138 (U-NII-3 Band)	5690	-5.66	-4.74	-4.55	-4.45	1.3921	1.44	23.98	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.02-6)".
2. For U-NII-2C: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.02-6)".
3. For U-NII-3: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (12.02 - 6) = 23.98\text{dBm}$.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	83.03	30.19 > 24
106	5530	83.05	30.19 > 24
138 (U-NII-2C Band)	5690	76.23	29.82 > 24

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	11.32	11.86	11.39	12.35	59.849	17.77	17.98	PASS
60	5300	11.75	11.41	10.99	12.19	57.916	17.63	17.98	PASS
64	5320	11.59	11.48	11.18	12.15	58.01	17.64	17.98	PASS
100	5500	11.11	11.05	11.81	11.52	55.008	17.40	17.98	PASS
116	5580	11.25	11.48	11.37	11.40	54.908	17.40	17.98	PASS
140	5700	11.24	11.22	11.68	10.98	53.802	17.31	17.98	PASS
*144 (U-NII-2C Band)	5720	8.38	8.18	8.93	8.05	28.856	14.60	16.89	PASS
*144 (U-NII-3 Band)	5720	3.13	2.89	3.13	1.25	7.71	8.87	23.98	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.02-6)".
2. For U-NII-2C: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.02-6)".
3. For U-NII-3: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (12.02 - 6) = 23.98\text{dBm}$.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	21.41	24.3 > 24
60	5300	21.5	24.32 > 24
64	5320	21.36	24.29 > 24
100	5500	21.19	24.26 > 24
116	5580	21.2	24.26 > 24
140	5700	21.24	24.27 > 24
144 (U-NII-2C Band)	5720	15.55	22.91 < 24

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	11.85	11.95	11.48	11.45	59.003	17.71	17.98	PASS
62	5310	11.73	11.61	11.32	12.36	60.152	17.79	17.98	PASS
102	5510	11.73	11.78	11.46	11.93	59.551	17.75	17.98	PASS
110	5550	11.97	11.89	11.62	12.01	61.599	17.90	17.98	PASS
134	5670	11.99	11.73	11.66	11.94	60.993	17.85	17.98	PASS
*142 (U-NII-2C Band)	5710	10.05	9.57	9.72	9.60	39.629	15.98	17.98	PASS
*142 (U-NII-3 Band)	5710	-0.30	-0.52	0.43	-0.26	4.0676	6.09	23.98	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

1. For U-NII-2A: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.02-6)".
2. For U-NII-2C: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.02-6)".
3. For U-NII-3: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.02-6) = 23.98\text{dBm}$.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	42.19	27.25 > 24
62	5310	42.04	27.23 > 24
102	5510	42.23	27.25 > 24
110	5550	42.02	27.23 > 24
134	5670	42.22	27.25 > 24
142 (U-NII-2C Band)	5710	35.86	26.54 > 24

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	11.93	11.74	11.44	12.39	61.793	17.91	17.98	PASS
106	5530	11.76	11.62	11.67	11.76	59.204	17.72	17.98	PASS
*138 (U-NII-2C Band)	5690	9.15	9.28	10.02	10.02	38.882	15.90	17.98	PASS
*138 (U-NII-3 Band)	5690	-5.31	-4.43	-4.26	-4.08	1.5018	1.77	23.98	PASS

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test. The duty factor was included in the total power.

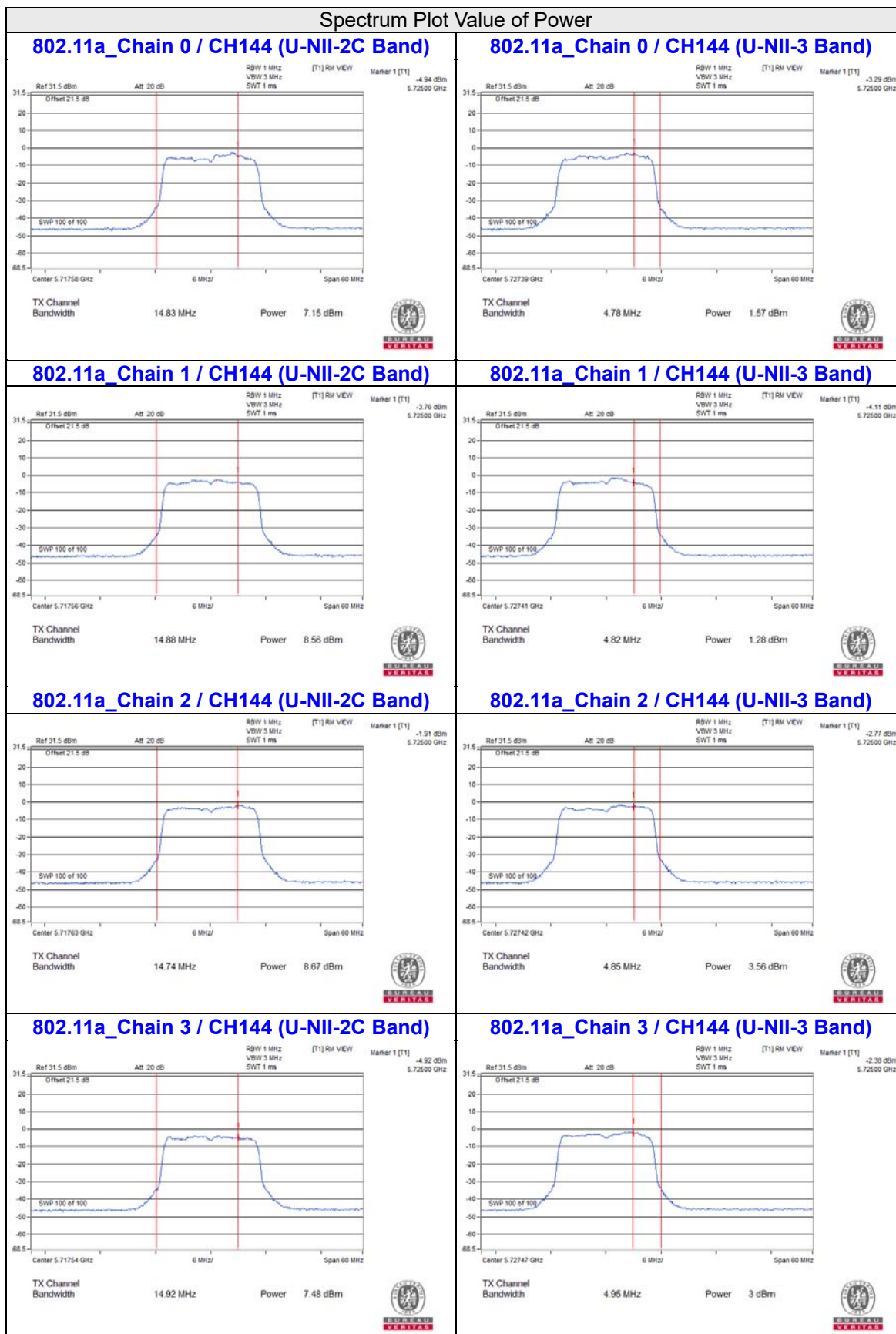
1. For U-NII-2A: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.02-6)".
2. For U-NII-2C: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{ dBi} > 6\text{ dBi}$, therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(12.02-6)".
3. For U-NII-3: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (12.02 - 6) = 23.98\text{dBm}$.

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Power Limit = $11\text{dBm} + 10\log B < \text{U-NII-2A, U-NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	83.03	30.19 > 24
106	5530	83.05	30.19 > 24
138 (U-NII-2C Band)	5690	76.23	29.82 > 24

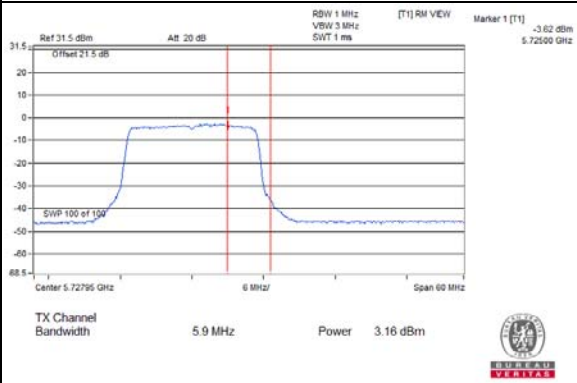
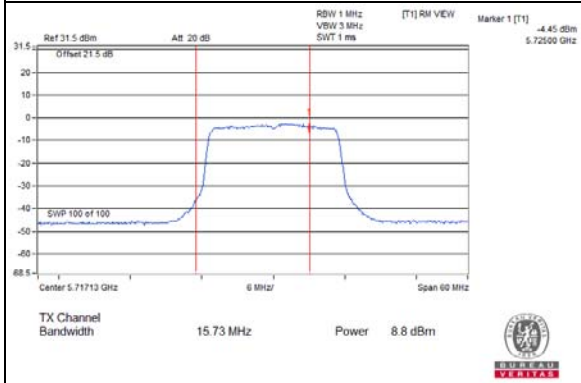
For channel straddling 5725MHz of Power

CDD Mode

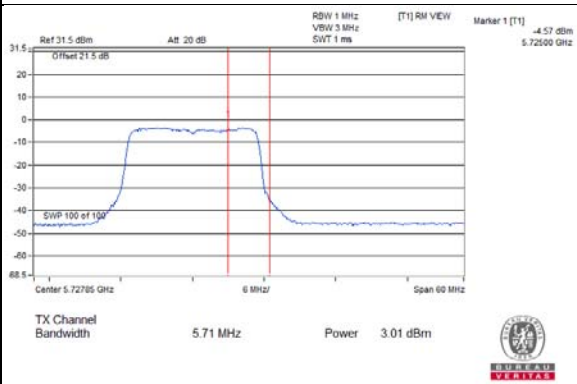
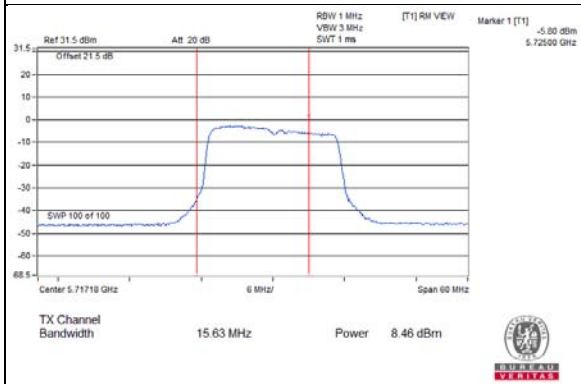


Spectrum Plot Value of Power

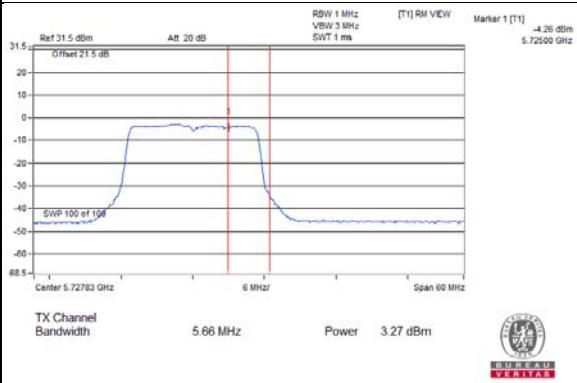
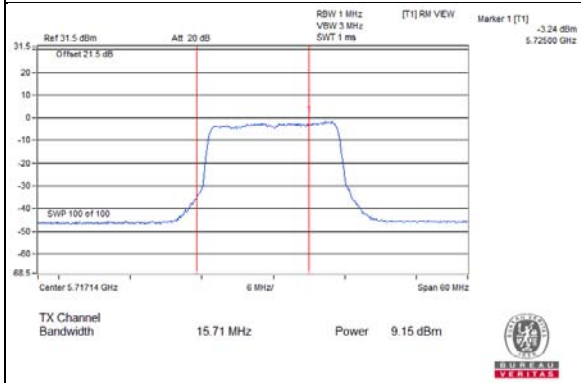
802.11ac (VHT20)_Chain 0 / CH144 (U-NII-2C Band) 802.11ac (VHT20)_Chain 0 / CH144 (U-NII-3 Band)



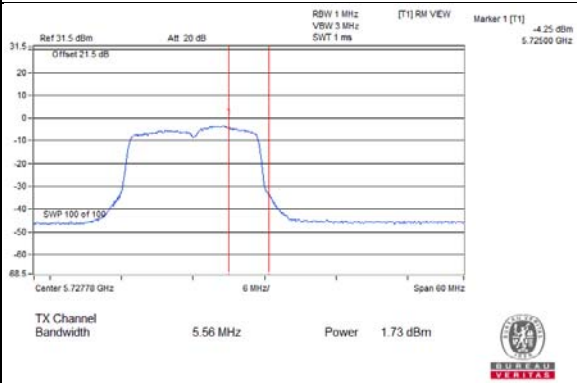
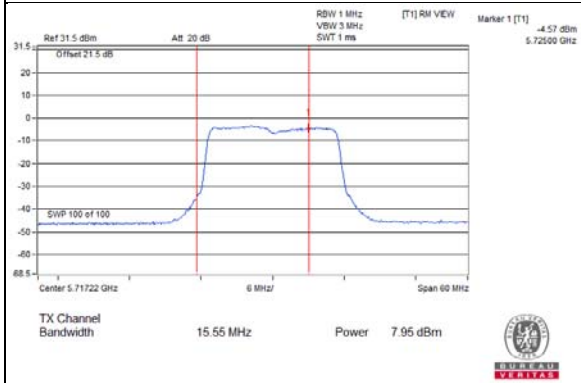
802.11ac (VHT20)_Chain 1 / CH144 (U-NII-2C Band) 802.11ac (VHT20)_Chain 1 / CH144 (U-NII-3 Band)



802.11ac (VHT20)_Chain 2 / CH144 (U-NII-2C Band) 802.11ac (VHT20)_Chain 2 / CH144 (U-NII-3 Band)

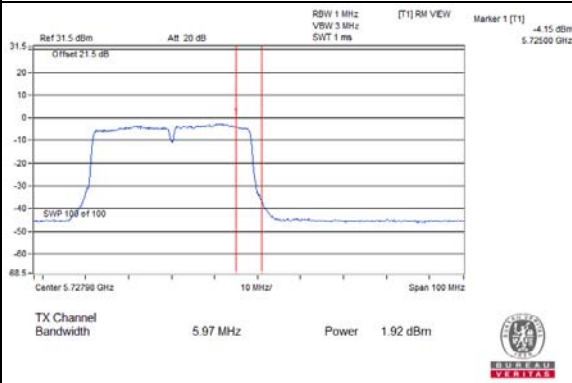
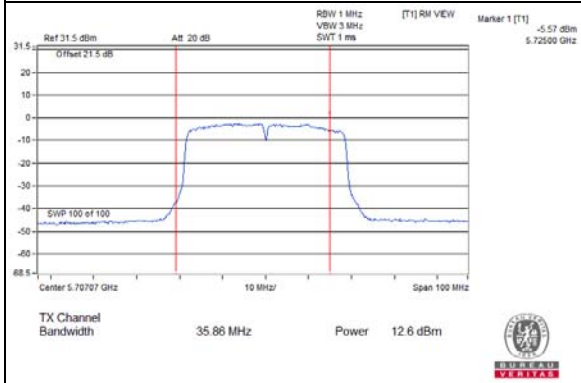


802.11ac (VHT20)_Chain 3 / CH144 (U-NII-2C Band) 802.11ac (VHT20)_Chain 3 / CH144 (U-NII-3 Band)

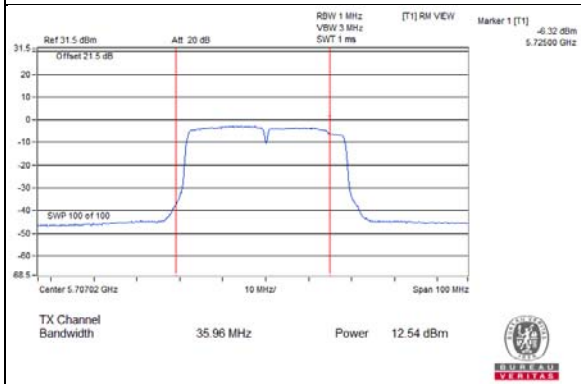


Spectrum Plot Value of Power

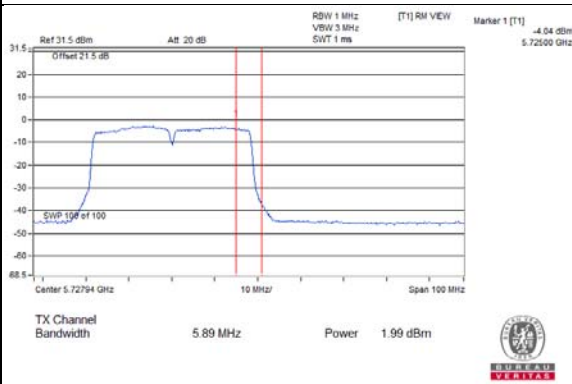
802.11ac (VHT40)_Chain 0 / CH142 (U-NII-2C Band) 802.11ac (VHT40)_Chain 0 / CH142 (U-NII-3 Band)



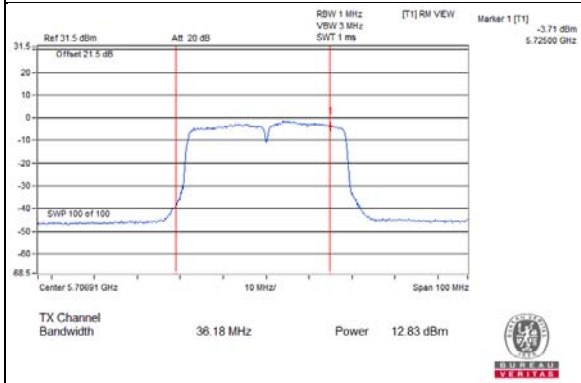
802.11ac (VHT40)_Chain 1 / CH142 (U-NII-2C Band)



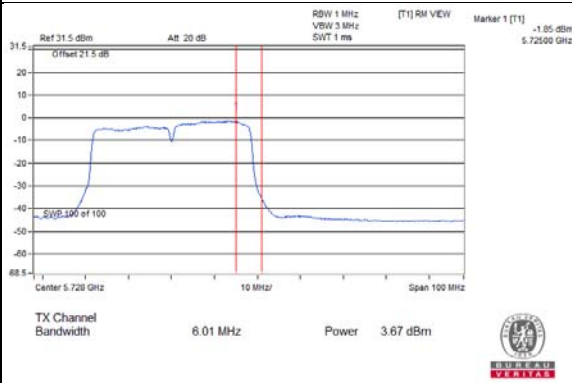
802.11ac (VHT40)_Chain 1 / CH142 (U-NII-3 Band)



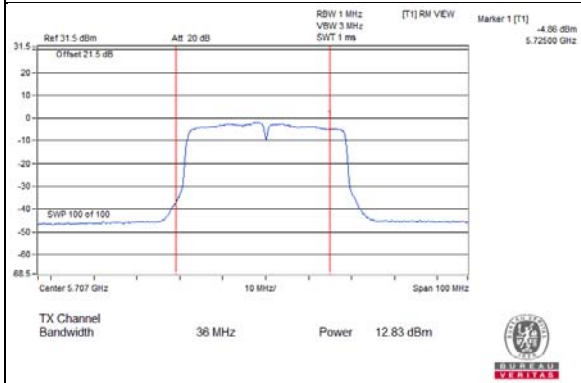
802.11ac (VHT40)_Chain 2 / CH142 (U-NII-2C Band)



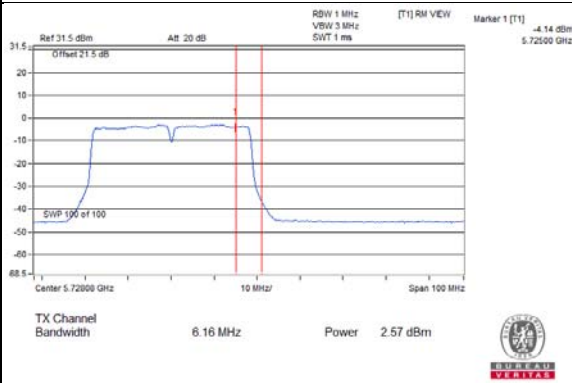
802.11ac (VHT40)_Chain 2 / CH142 (U-NII-3 Band)



802.11ac (VHT40)_Chain 3 / CH142 (U-NII-2C Band)

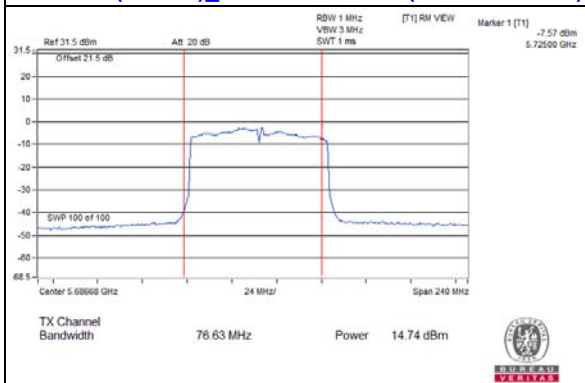


802.11ac (VHT40)_Chain 3 / CH142 (U-NII-3 Band)

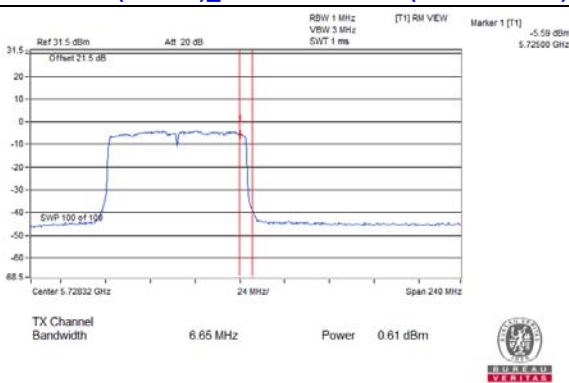


Spectrum Plot Value of Power

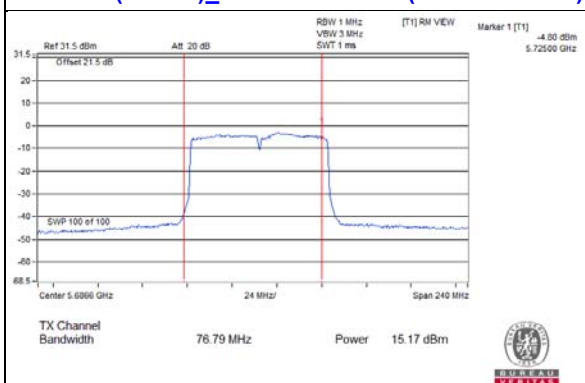
802.11ac (VHT80)_Chain 0 / CH138 (U-NII-2C Band)



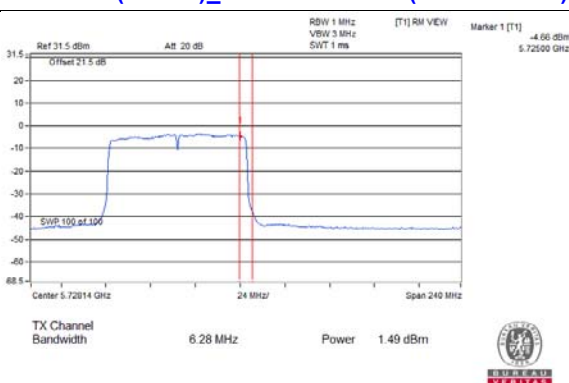
802.11ac (VHT80)_Chain 0 / CH138 (U-NII-3 Band)



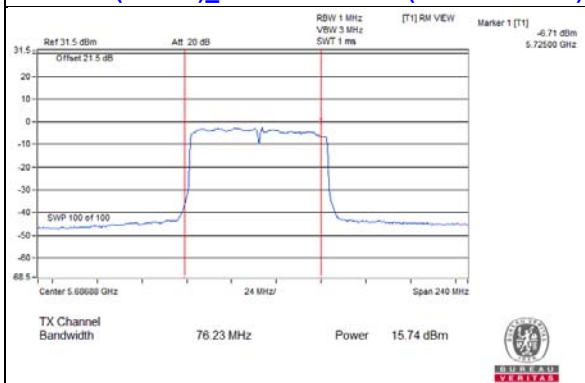
802.11ac (VHT80)_Chain 1 / CH138 (U-NII-2C Band)



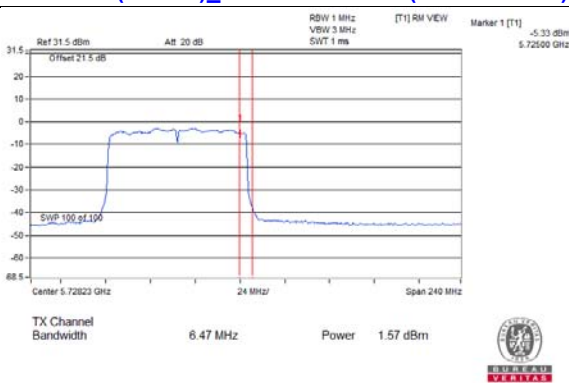
802.11ac (VHT80)_Chain 1 / CH138 (U-NII-3 Band)



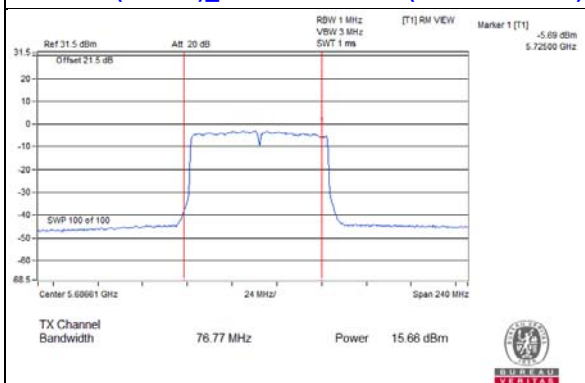
802.11ac (VHT80)_Chain 2 / CH138 (U-NII-2C Band)



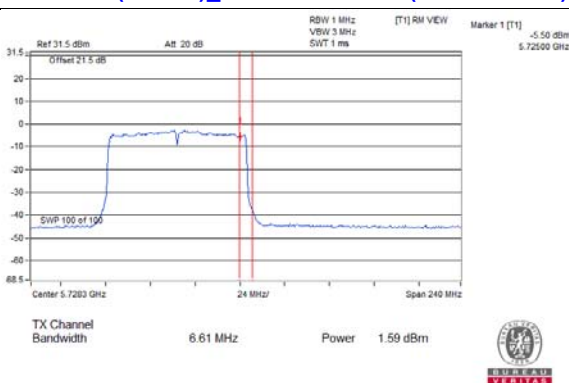
802.11ac (VHT80)_Chain 2 / CH138 (U-NII-3 Band)

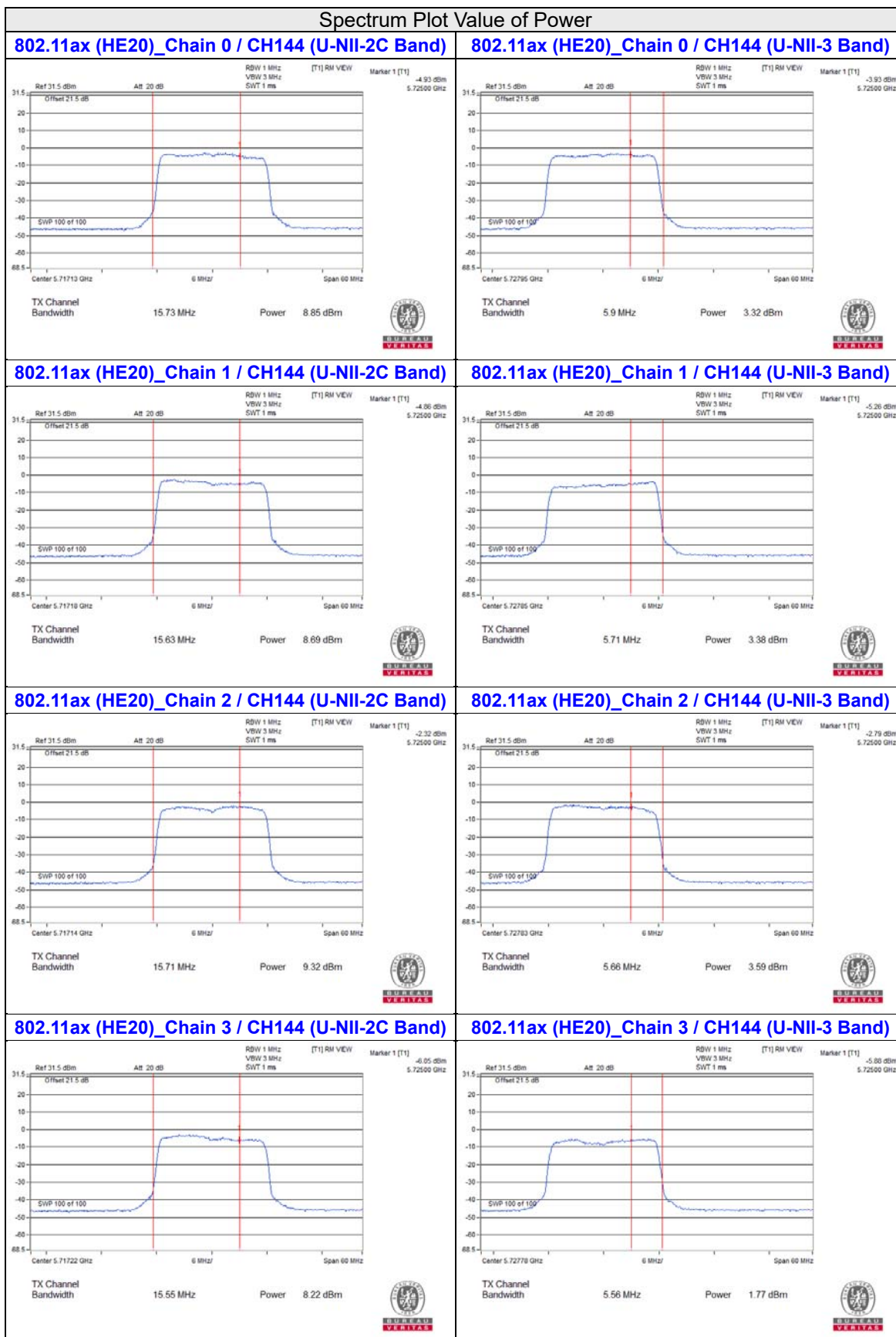


802.11ac (VHT80)_Chain 3 / CH138 (U-NII-2C Band)



802.11ac (VHT80)_Chain 3 / CH138 (U-NII-3 Band)





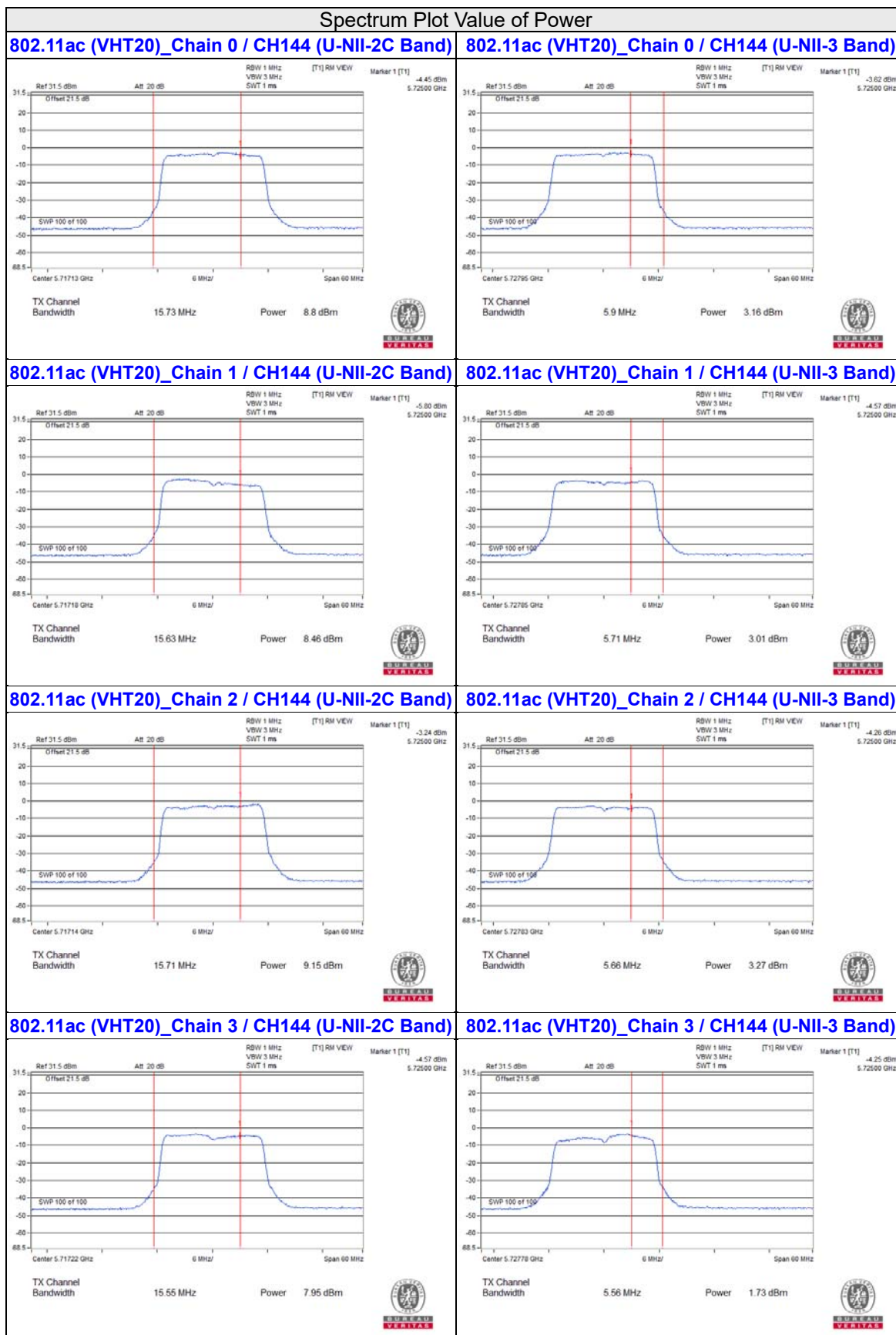
Spectrum Plot Value of Power



Spectrum Plot Value of Power

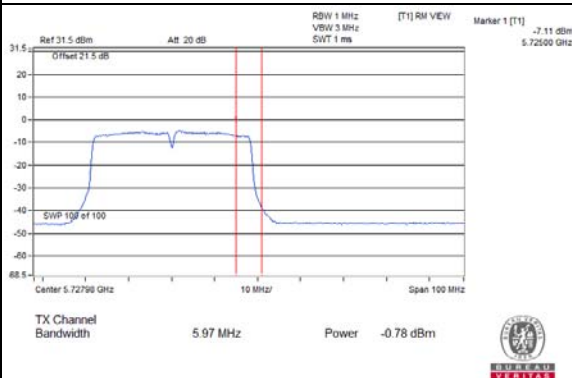
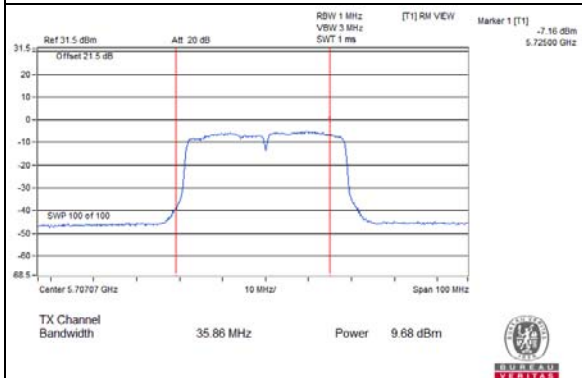


Beamforming Mode

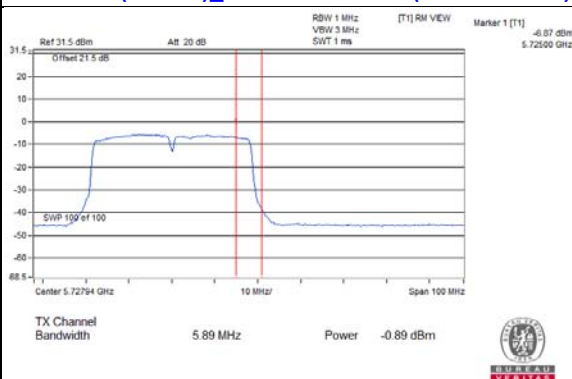
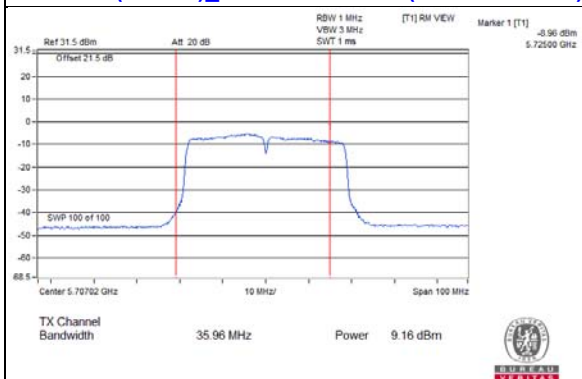


Spectrum Plot Value of Power

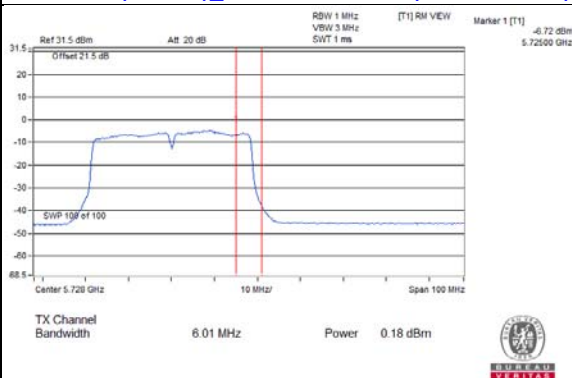
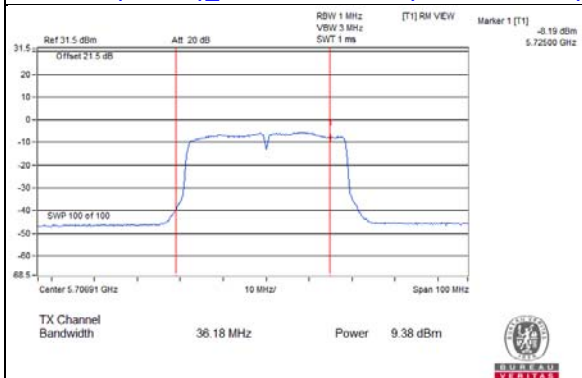
802.11ac (VHT40)_Chain 0 / CH142 (U-NII-2C Band) 802.11ac (VHT40)_Chain 0 / CH142 (U-NII-3 Band)



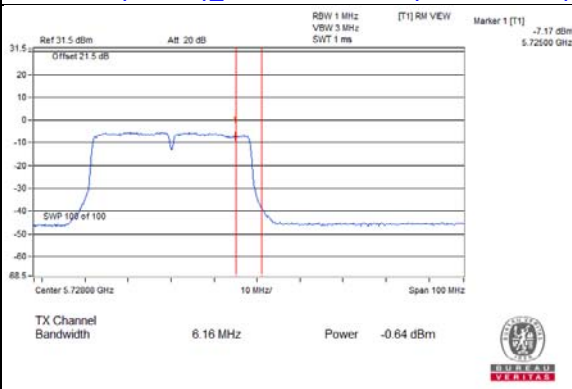
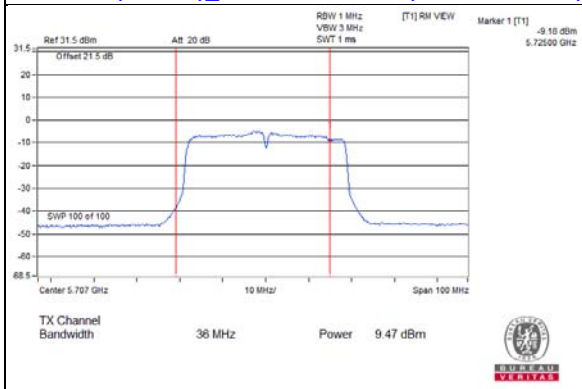
802.11ac (VHT40)_Chain 1 / CH142 (U-NII-2C Band) 802.11ac (VHT40)_Chain 1 / CH142 (U-NII-3 Band)



802.11ac (VHT40)_Chain 2 / CH142 (U-NII-2C Band) 802.11ac (VHT40)_Chain 2 / CH142 (U-NII-3 Band)

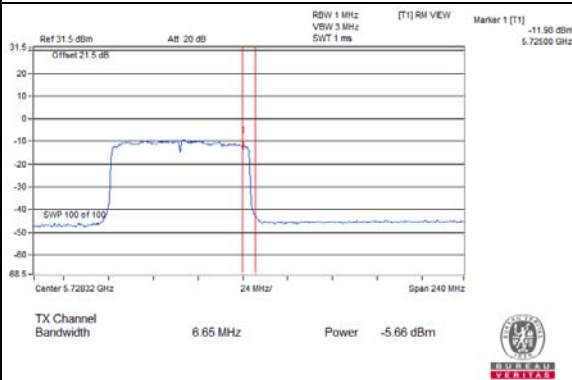
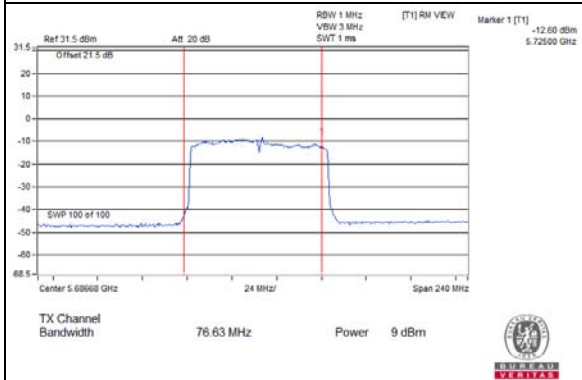


802.11ac (VHT40)_Chain 3 / CH142 (U-NII-2C Band) 802.11ac (VHT40)_Chain 3 / CH142 (U-NII-3 Band)

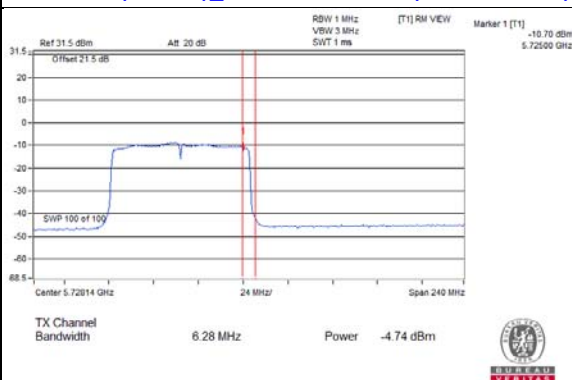
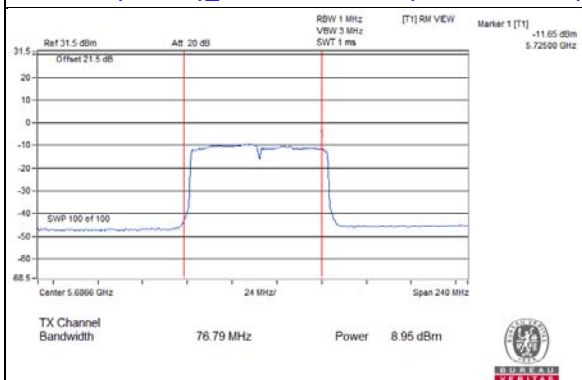


Spectrum Plot Value of Power

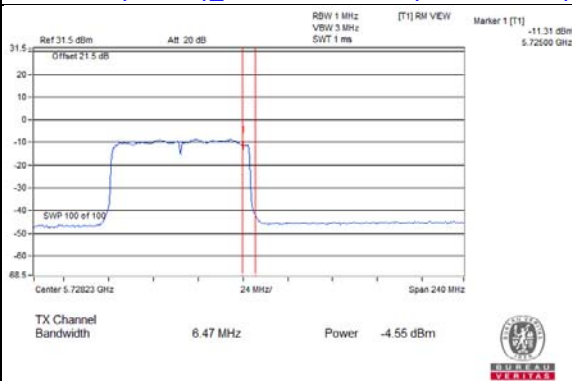
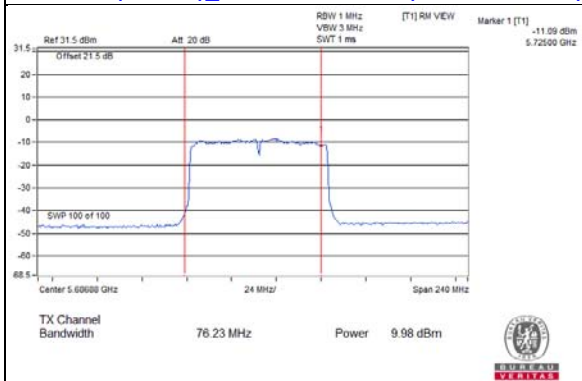
802.11ac (VHT80)_Chain 0 / CH138 (U-NII-2C Band) 802.11ac (VHT80)_Chain 0 / CH138 (U-NII-3 Band)



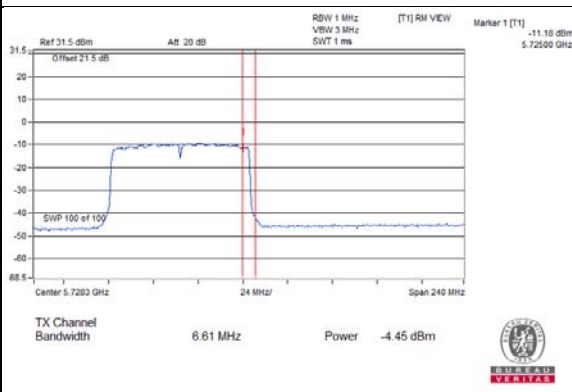
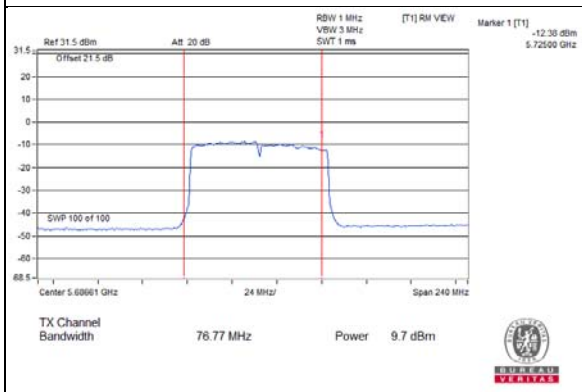
802.11ac (VHT80)_Chain 1 / CH138 (U-NII-2C Band) 802.11ac (VHT80)_Chain 1 / CH138 (U-NII-3 Band)



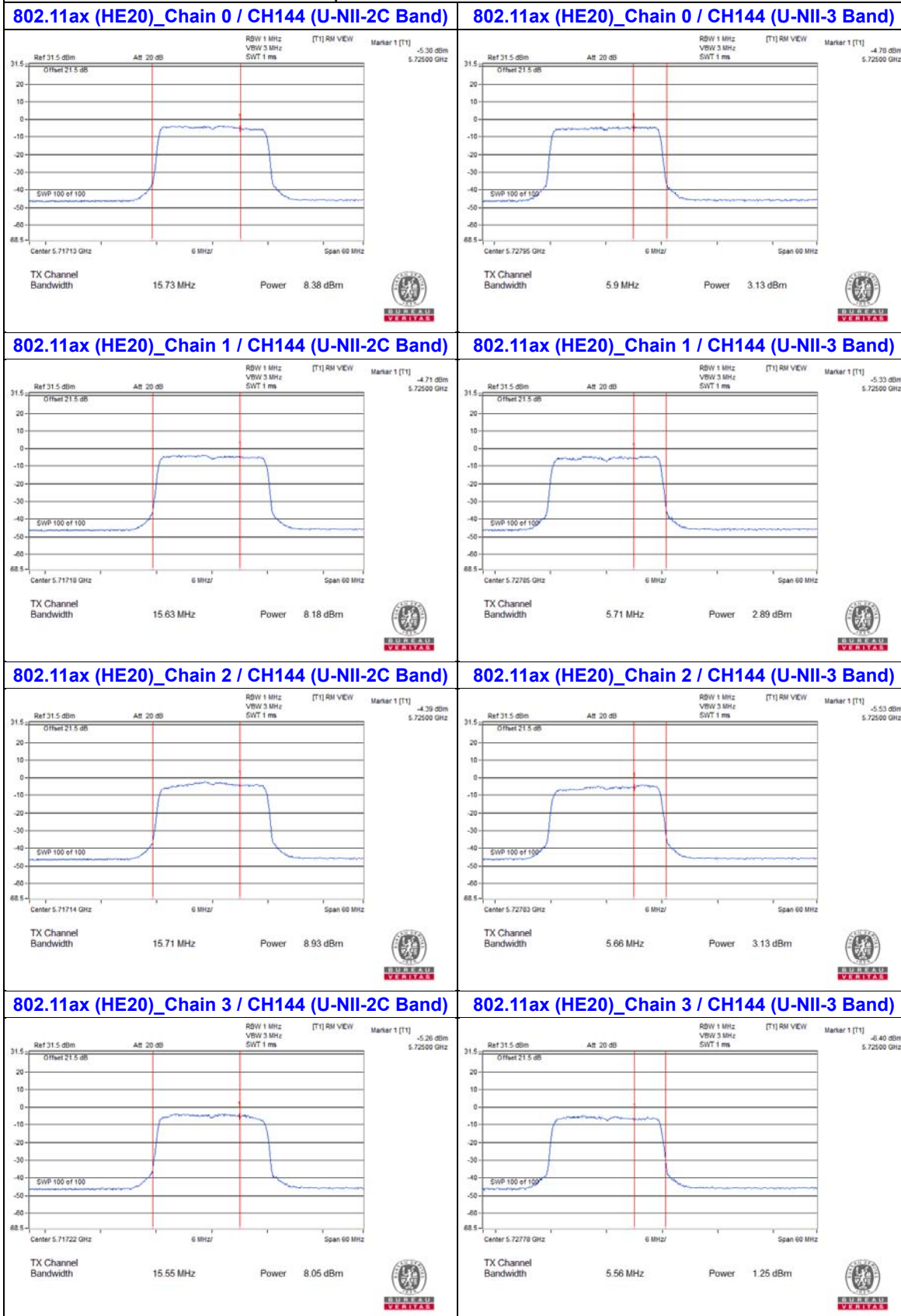
802.11ac (VHT80)_Chain 2 / CH138 (U-NII-2C Band) 802.11ac (VHT80)_Chain 2 / CH138 (U-NII-3 Band)



802.11ac (VHT80)_Chain 3 / CH138 (U-NII-2C Band) 802.11ac (VHT80)_Chain 3 / CH138 (U-NII-3 Band)



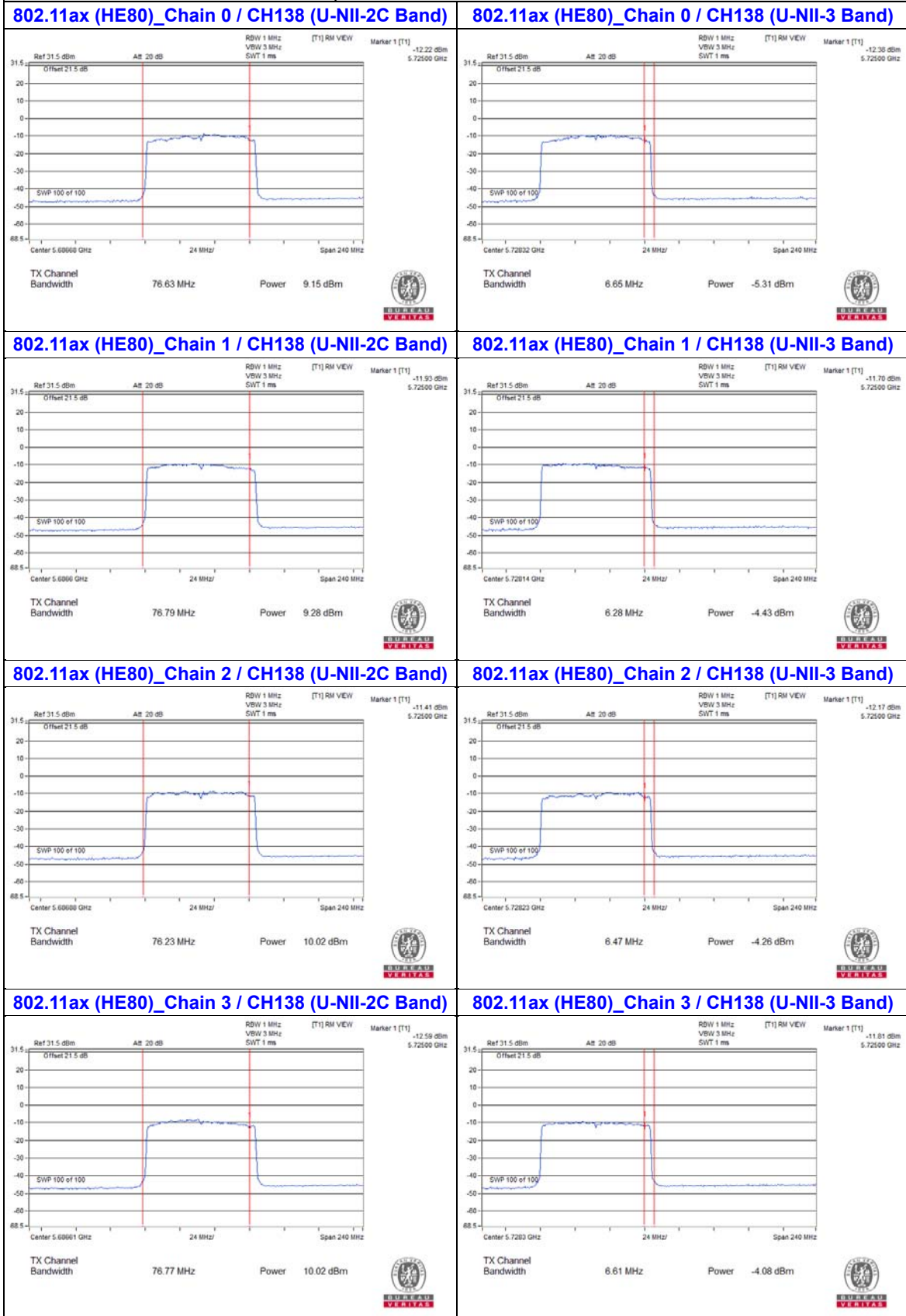
Spectrum Plot Value of Power



Spectrum Plot Value of Power



Spectrum Plot Value of Power



CDD Mode
26dB OCCUPIED BANDWIDTH
802.11a

Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		Chain0	Chain1	Chain2	Chain3
52	5260	19.96	19.85	19.83	19.91
60	5300	19.97	19.75	19.8	19.67
64	5320	20.07	20	20.13	19.92
100	5500	19.59	19.72	19.65	20.14
116	5580	19.82	20.2	20.4	19.84
140	5700	20.05	19.77	20.27	19.88
144 (U-NII-2C Band)	5720	14.83	14.88	14.74	14.92

802.11ax (HE20)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		Chain0	Chain1	Chain2	Chain3
52	5260	21.85	21.54	21.54	21.41
60	5300	21.53	21.54	21.5	21.58
64	5320	21.38	21.36	21.83	21.76
100	5500	21.46	21.57	21.19	21.41
116	5580	21.48	21.2	21.45	21.46
140	5700	21.61	21.24	21.41	21.31
144 (U-NII-2C Band)	5720	15.73	15.63	15.71	15.55

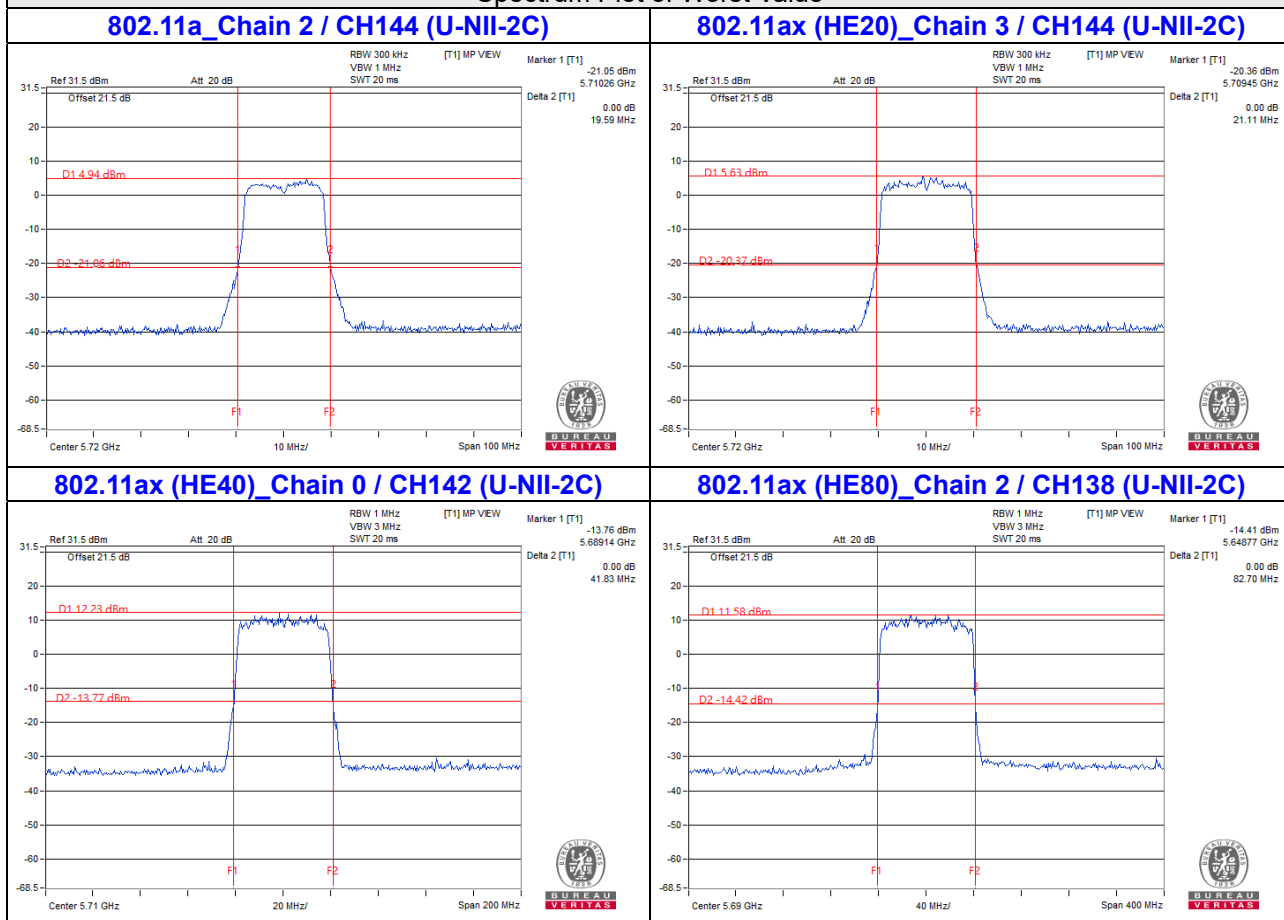
802.11ax (HE40)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		Chain0	Chain1	Chain2	Chain3
54	5270	42.19	42.41	42.41	42.44
62	5310	42.25	42.41	42.04	42.41
102	5510	42.31	42.34	42.4	42.23
110	5550	42.44	42.42	42.02	42.48
134	5670	42.38	42.28	42.22	42.59
142 (U-NII-2C Band)	5710	35.86	35.96	36.18	36

802.11ax (HE80)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		Chain0	Chain1	Chain2	Chain3
58	5290	83.59	83.52	83.39	83.03
106	5530	83.05	83.34	83.14	83.23
138 (U-NII-2C Band)	5690	76.63	76.79	76.23	76.77

Spectrum Plot of Worst Value

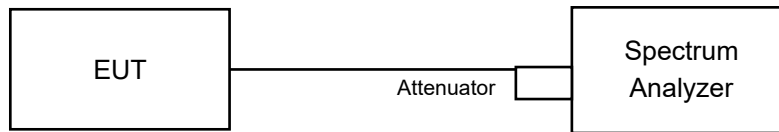


Note:

- For CH144 (U-NII-2C) = 5725MHz - Marker 1
- For CH142 (U-NII-2C) = 5725MHz - Marker 1
- For CH138 (U-NII-2C) = 5725MHz - Marker 1

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 SAMPLE. 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 Results (Mode 1)

CDD Mode

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	16.44	16.56	16.44	16.44
60	5300	16.32	16.56	16.32	16.44
64	5320	16.32	16.44	16.44	16.44
100	5500	16.44	16.32	16.56	16.44
116	5580	16.44	16.44	16.44	16.44
140	5700	16.56	16.44	16.44	16.44
144 (U-NII-2C Band)	5720	13.16	13.16	13.16	13.16
144 (U-NII-3 Band)	5720	3.28	3.28	3.28	3.28

802.11ax (HE20)

Channel	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	18.84
64	5320	18.96	18.96	18.96	18.96
100	5500	18.96	18.96	19.08	18.96
116	5580	18.96	18.96	18.84	18.96
140	5700	18.96	18.96	18.96	18.96
144 (U-NII-2C Band)	5720	14.48	14.48	14.48	14.48
144 (U-NII-3 Band)	5720	4.48	4.48	4.48	4.48

802.11ax (HE40)

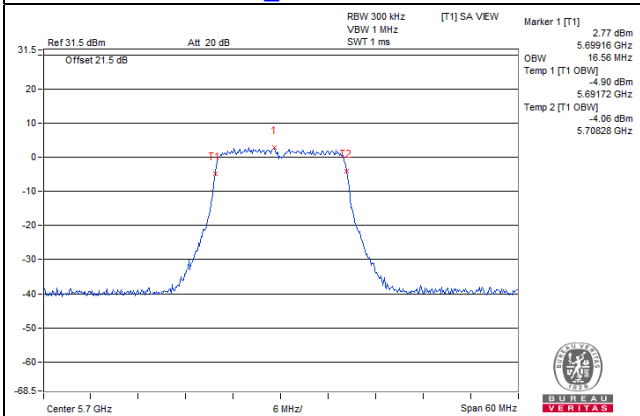
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	37.92	38.16	37.92	38.64
62	5310	37.92	37.92	37.92	37.92
102	5510	38.16	38.16	37.92	37.92
110	5550	37.92	37.92	37.92	38.16
134	5670	37.92	37.92	37.92	37.92
142 (U-NII-2C Band)	5710	34.2	33.96	33.96	33.96
142 (U-NII-3 Band)	5710	3.96	3.96	3.96	3.96

802.11ax (HE80)

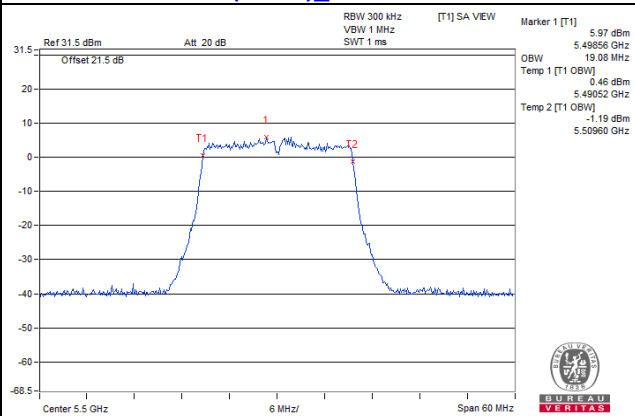
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	76.8	77.28	77.28	77.28
106	5530	76.8	77.76	77.28	77.76
138 (U-NII-2C Band)	5690	73.4	73.88	73.88	73.88
138 (U-NII-3 Band)	5690	3.4	3.4	3.4	3.4

Spectrum Plot of Max. Value

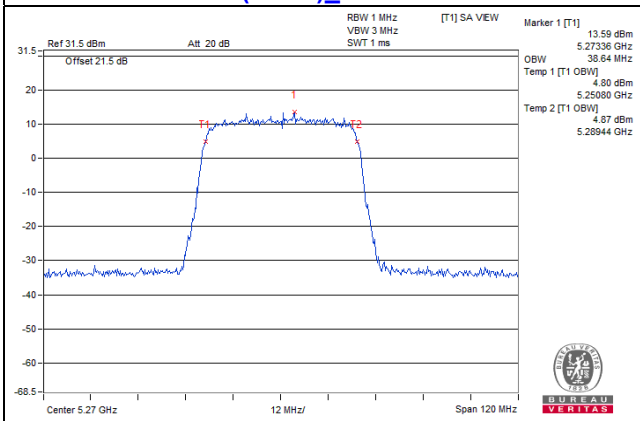
802.11a_Chain 0 / CH140



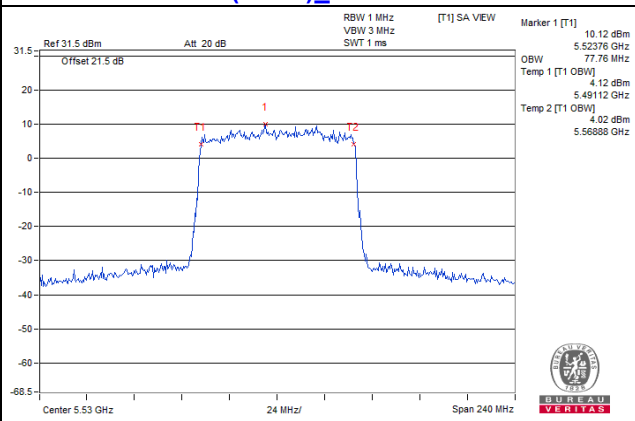
802.11ax (HE20)_Chain 2 / CH100



802.11ax (HE40)_Chain 3 / CH54

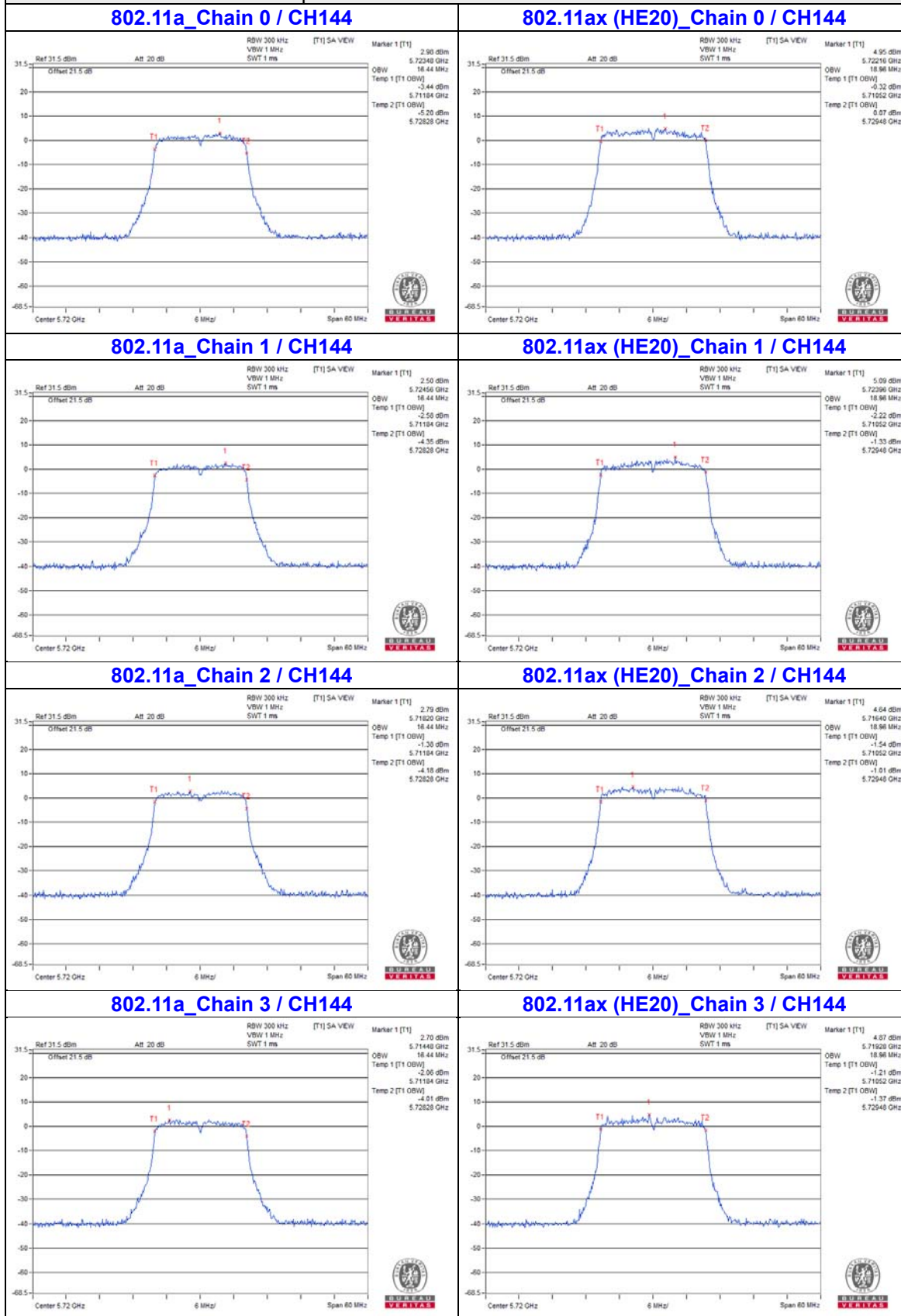


802.11ax (HE80)_Chain 1 / CH106



For channel straddling 5725MHz of OCP99 BW

Spectrum Plot Value of OCP99% BW

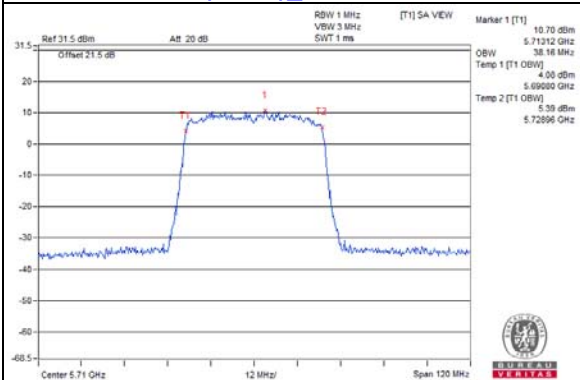


Note:

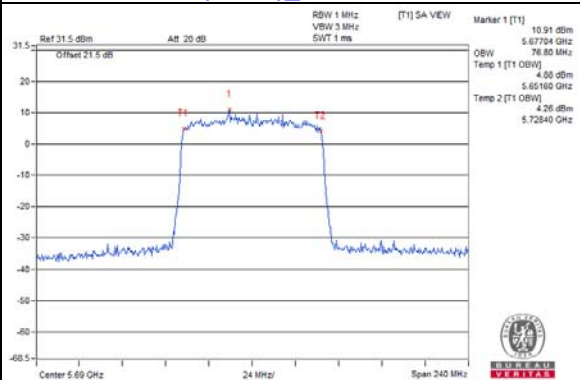
For CH144 (U-NII-2C) = 5725MHz - Temp 1
 For CH144 (U-NII-3) = Temp 2 - 5725MHz

Spectrum Plot Value of OCP99% BW

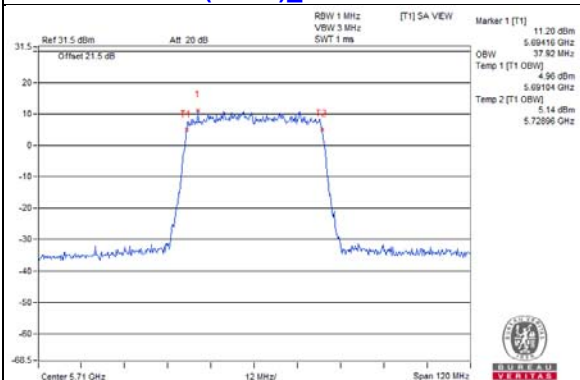
802.11ax (HE40)_Chain 0 / CH142



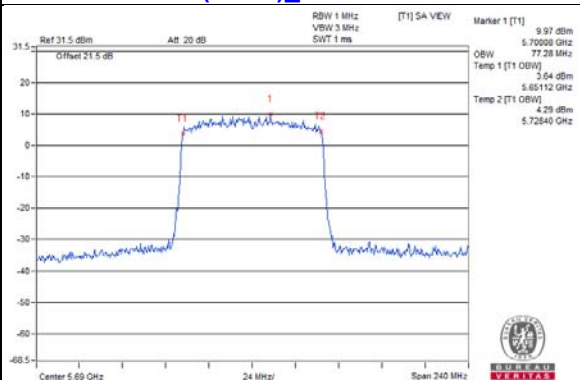
802.11ax (HE80)_Chain 0 / CH138



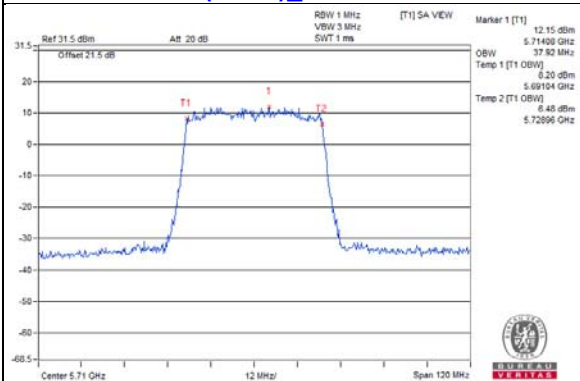
802.11ax (HE40)_Chain 1 / CH142



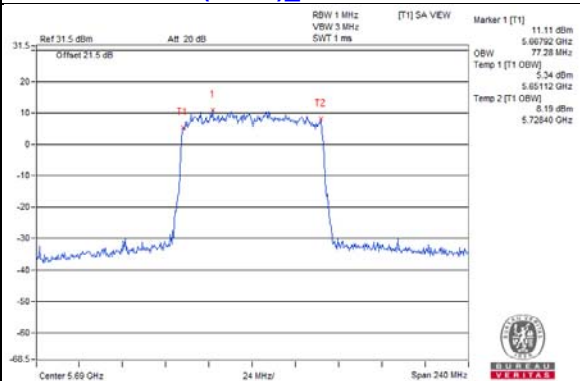
802.11ax (HE80)_Chain 1 / CH138



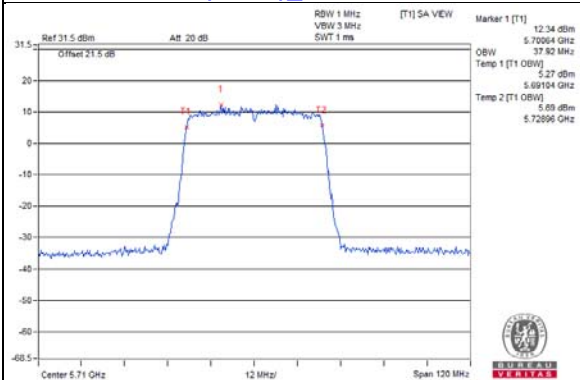
802.11ax (HE40)_Chain 2 / CH142



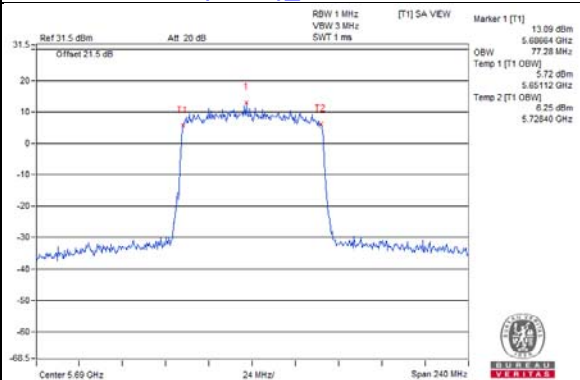
802.11ax (HE80)_Chain 2 / CH138



802.11ax (HE40)_Chain 3 / CH142



802.11ax (HE80)_Chain 3 / CH138



Note:

- For CH142 (U-NII-2C) = 5725MHz - Temp 1
- For CH138 (U-NII-2C) = 5725MHz - Temp 1
- For CH142 (U-NII-3) = Temp 2 - 5725MHz
- For CH138 (U-NII-3) = Temp 2 - 5725MHz

4.4.5 Test Results (Mode 2)

CDD Mode

802.11a

Channel	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	16.56	16.44	16.44	16.44
64	5320	16.56	16.32	16.44	16.44
100	5500	16.44	16.44	16.32	16.44
116	5580	16.56	16.56	16.56	16.44
140	5700	16.56	16.44	16.44	16.32
144 (U-NII-2C Band)	5720	13.16	13.16	13.28	13.16
144 (U-NII-3 Band)	5720	3.16	3.16	3.28	3.16

802.11ax (HE20)

Channel	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	19.08	18.96
100	5500	18.96	18.96	18.84	18.96
116	5580	18.96	18.96	18.96	18.96
140	5700	18.84	18.96	18.96	18.96
144 (U-NII-2C Band)	5720	14.48	14.48	14.48	14.48
144 (U-NII-3 Band)	5720	4.48	4.48	4.48	4.48

802.11ax (HE40)

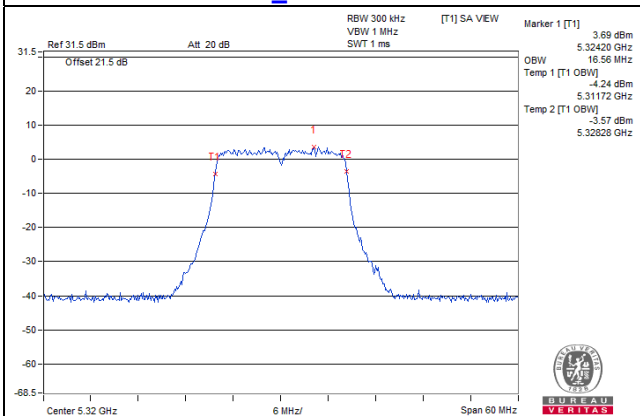
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	37.92	37.92	37.92	37.92
62	5310	37.92	37.92	37.92	37.92
102	5510	37.92	37.92	38.16	37.92
110	5550	37.92	37.92	37.92	37.92
134	5670	37.92	37.92	37.92	37.92
142 (U-NII-2C Band)	5710	33.96	33.96	33.96	33.96
142 (U-NII-3 Band)	5710	3.96	3.96	3.96	3.96

802.11ax (HE80)

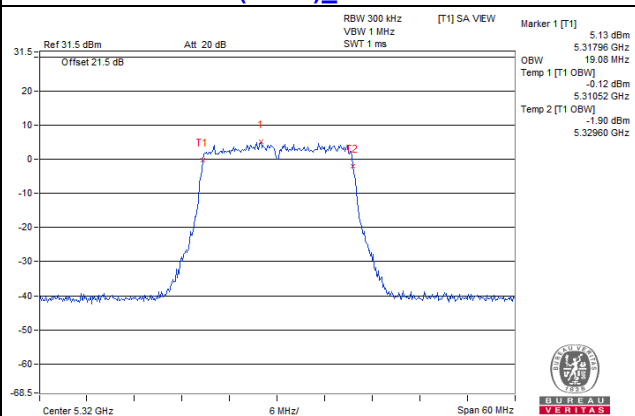
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	77.28	77.76	77.28	77.28
106	5530	77.76	77.76	76.8	76.8
138 (U-NII-2C Band)	5690	73.88	73.88	73.4	73.88
138 (U-NII-3 Band)	5690	3.4	3.4	3.4	3.88

Spectrum Plot of Max. Value

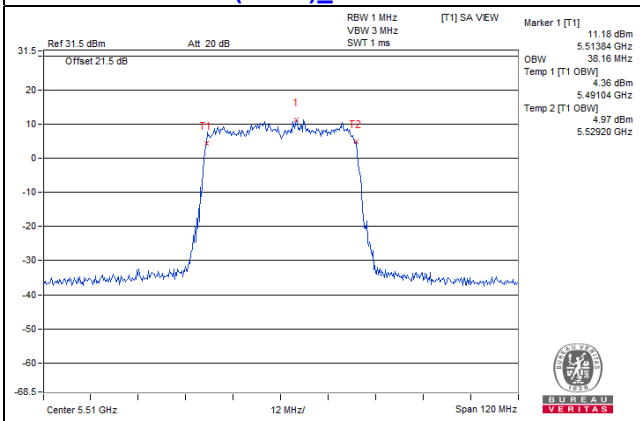
802.11a_Chain 0 / CH64



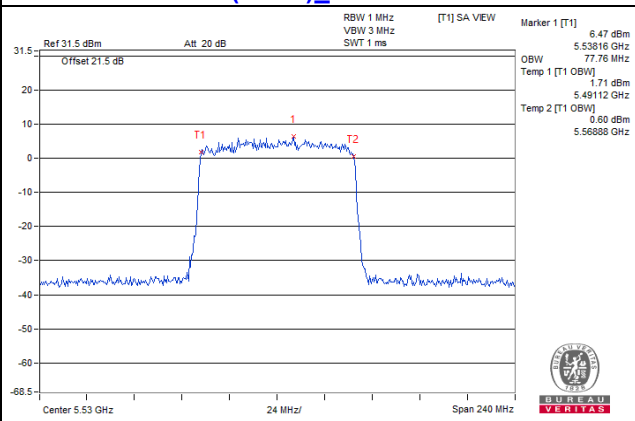
802.11ax (HE20)_Chain 2 / CH64



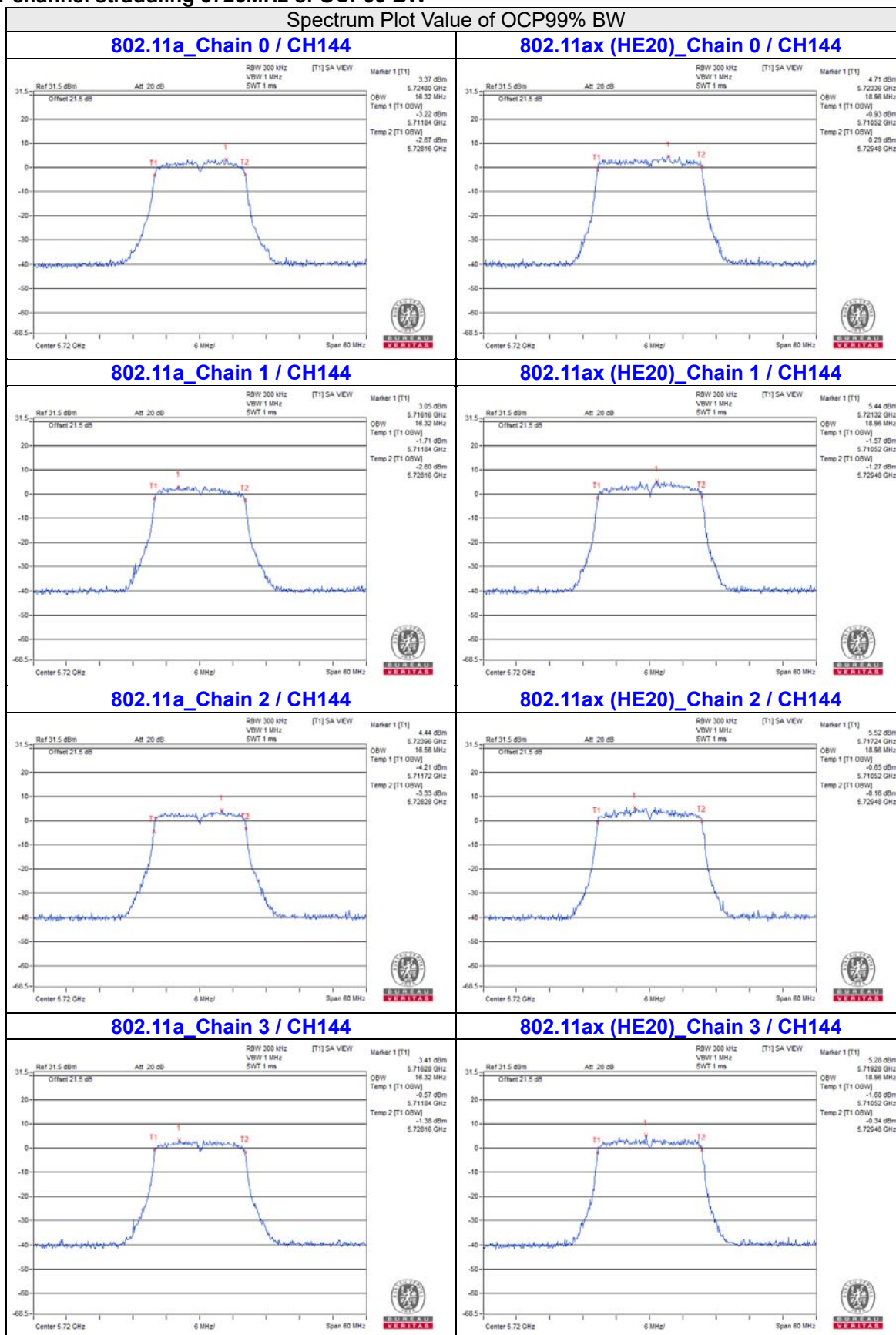
802.11ax (HE40)_Chain 2 / CH102



802.11ax (HE80)_Chain 0 / CH106



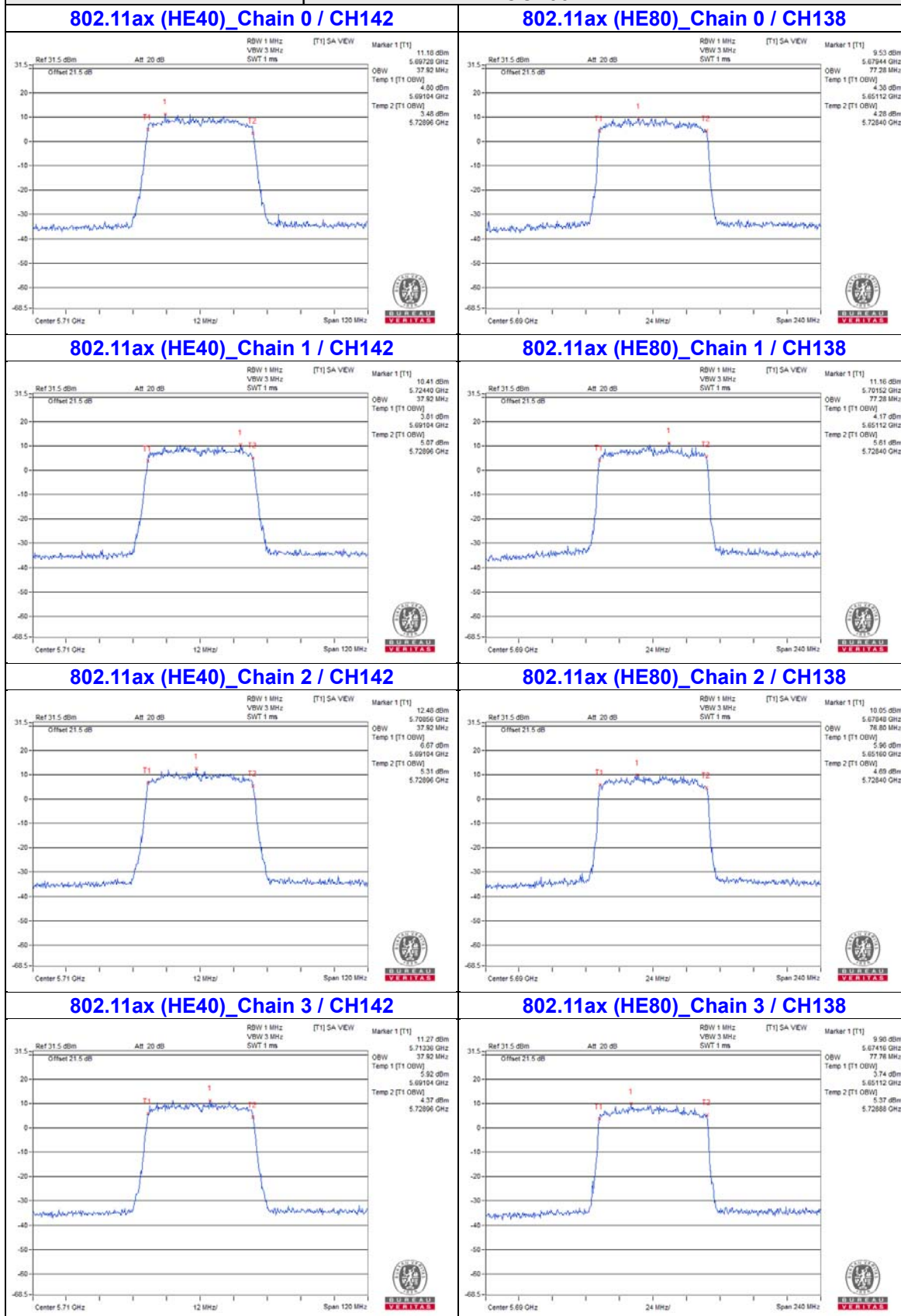
For channel straddling 5725MHz of OCP99 BW



Note:

For CH144 (U-NII-2C) = 5725MHz - Temp 1
 For CH144 (U-NII-3) = Temp 2 - 5725MHz

Spectrum Plot Value of OCP99% BW



Note:

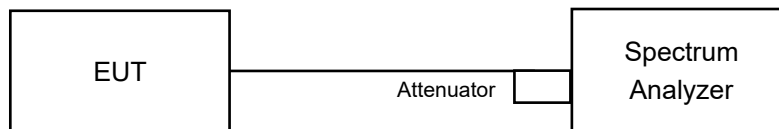
For CH142 (U-NII-2C) = 5725MHz - Temp 1
 For CH138 (U-NII-2C) = 5725MHz - Temp 1
 For CH142 (U-NII-3) = Temp 2 - 5725MHz
 For CH138 (U-NII-3) = Temp 2 - 5725MHz

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	
		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 Procedure

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

Using method SA-2

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

For U-NII-3:

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 300 kHz, Set VBW \geq 1 MHz, Detector = RMS
3. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
4. Scale the observed power level to an equivalent value in 500 kHz by adjusting (increasing) the measured power by a bandwidth correction factor (BWCF) where $BWCF = 10\log(500 \text{ kHz}/300\text{kHz})$
5. Sweep time = auto, trigger set to "free run".
6. Trace average at least 100 traces in power averaging mode.
7. Record the max value and add 10 log (1/duty cycle)

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Condition

Same as Item 4.3.6.

4.5.7 Test Results (Mode 1)

CDD Mode

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

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	-2.39	-2.73	-3.28	-2.03	0.26	3.70	4.48	PASS
60	5300	-1.85	-2.68	-3.16	-2.74	0.26	3.70	4.48	PASS
64	5320	-1.42	-2.85	-4.13	-1.79	0.26	3.86	4.48	PASS
100	5500	-1.92	-3.87	-3.48	-1.80	0.26	3.61	4.48	PASS
116	5580	-2.62	-3.02	-1.09	-3.64	0.26	3.80	4.48	PASS
140	5700	-3.50	-3.47	-2.78	-1.97	0.26	3.40	4.48	PASS
144 (U-NII-2C Band)	5720	-3.52	-2.04	-2.13	-3.73	0.26	3.50	4.48	PASS

- Note: 1. Method 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.
2. For U-NII-2A: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $11 - (12.52 - 6) = 4.48\text{dBm/MHz}$.
3. For U-NII-2C: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $11 - (12.52 - 6) = 4.48\text{dBm/MHz}$.
4. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	-3.94	-1.11	-3.30	-2.80	0.18	3.55	4.48	PASS
60	5300	-3.55	-1.75	-2.93	-2.97	0.18	3.45	4.48	PASS
64	5320	-2.80	-2.56	-2.66	-3.45	0.18	3.35	4.48	PASS
100	5500	-2.52	-4.40	-1.91	-2.68	0.18	3.42	4.48	PASS
116	5580	-4.63	-2.66	-2.92	-2.90	0.18	2.99	4.48	PASS
140	5700	-2.72	-3.10	-3.82	-3.44	0.18	2.95	4.48	PASS
144 (U-NII-2C Band)	5720	-2.79	-2.55	-3.63	-3.76	0.18	3.05	4.48	PASS

- Note: 1. Method 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.
2. For U-NII-2A: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $11 - (12.52 - 6) = 4.48\text{dBm/MHz}$.
3. For U-NII-2C: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $11 - (12.52 - 6) = 4.48\text{dBm/MHz}$.
4. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	-2.56	-4.64	-4.87	-2.46	0.22	2.75	4.48	PASS
62	5310	-3.43	-5.82	-4.65	-1.77	0.22	2.59	4.48	PASS
102	5510	-2.29	-3.54	-2.21	-4.50	0.22	3.21	4.48	PASS
110	5550	-2.63	-1.90	-1.35	-2.46	0.22	4.19	4.48	PASS
134	5670	-2.25	-2.82	-4.54	-2.14	0.22	3.40	4.48	PASS
142 (U-NII-2C Band)	5710	-3.90	-4.51	-1.37	-1.55	0.22	3.63	4.48	PASS

- Note: 1. Method 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.
2. For U-NII-2A: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $11-(12.52-6) = 4.48\text{dBm/MHz}$.
3. For U-NII-2C: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $11-(12.52-6) = 4.48\text{dBm/MHz}$.
4. Refer to section 3.3 for duty cycle spectrum plot.

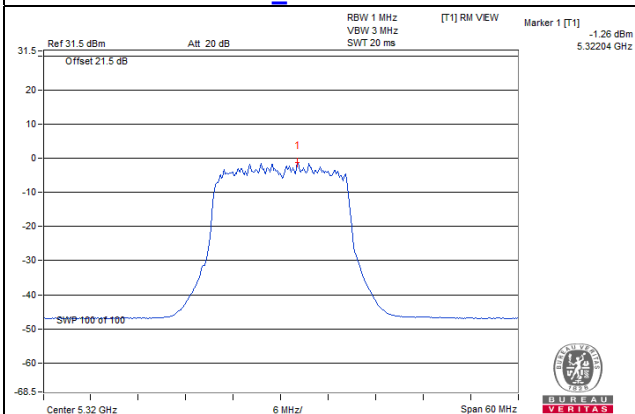
802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	-2.94	-3.02	-5.42	-3.89	0.24	2.55	4.48	PASS
106	5530	-3.29	-2.48	-2.55	-2.63	0.24	3.54	4.48	PASS
138 (U-NII-2C Band)	5690	-2.17	-2.79	-1.75	-2.84	0.24	3.90	4.48	PASS

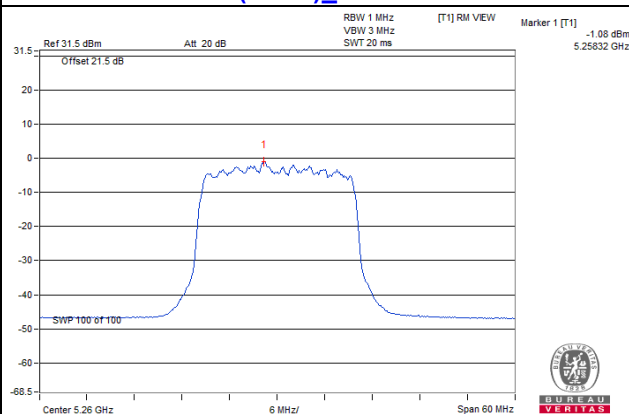
- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For U-NII-2A: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $11-(12.52-6) = 4.48\text{dBm/MHz}$.
3. For U-NII-2C: The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $11-(12.52-6) = 4.48\text{dBm/MHz}$.
4. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

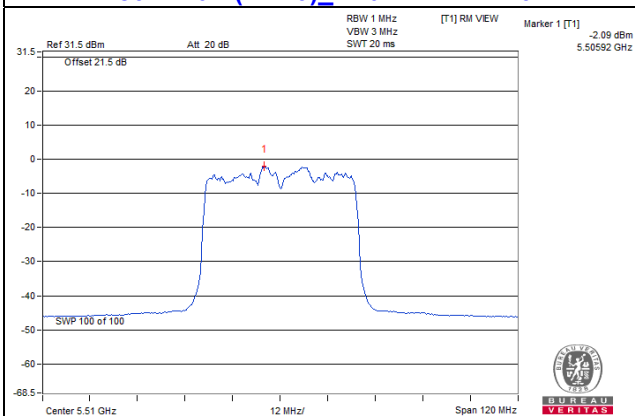
802.11a_Chain 0 / CH64



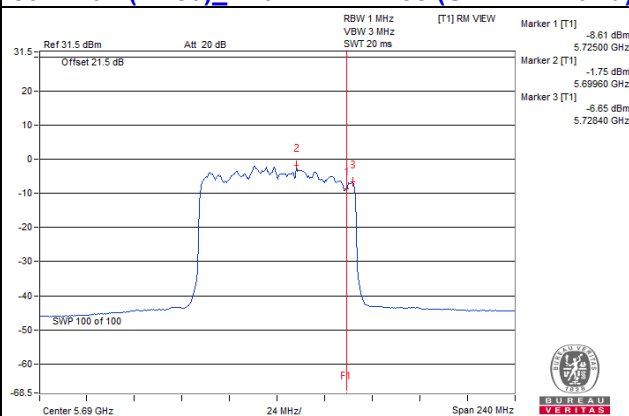
802.11ax (HE20)_Chain 1 / CH52



802.11ax (HE40)_Chain 2 / CH110



802.11ax (HE80)_Chain 2 / CH138 (U-NII-2C Band)



For U-NII-3:
802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Duty Factor (dB)	Total PSD (mW/300kHz)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3						
144 (U-NII-3 Band)	5720	-11.82	-10.32	-10.16	-12.15	0.26	0.33568	-4.74	-2.52	23.48	PASS

- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. The directional gain = The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.52-6) = 23.48\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Duty Factor (dB)	Total PSD (mW/300kHz)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3						
144 (U-NII-3 Band)	5720	-13.26	-12.17	-12.53	-12.37	0.18	0.23124	-6.36	-4.14	23.48	PASS

- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. The directional gain = The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.52-6) = 23.48\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Duty Factor (dB)	Total PSD (mW/300kHz)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3						
142 (U-NII-3 Band)	5710	-14.07	-13.22	-12.76	-12.91	0.22	0.20089	-6.97	-4.75	23.48	PASS

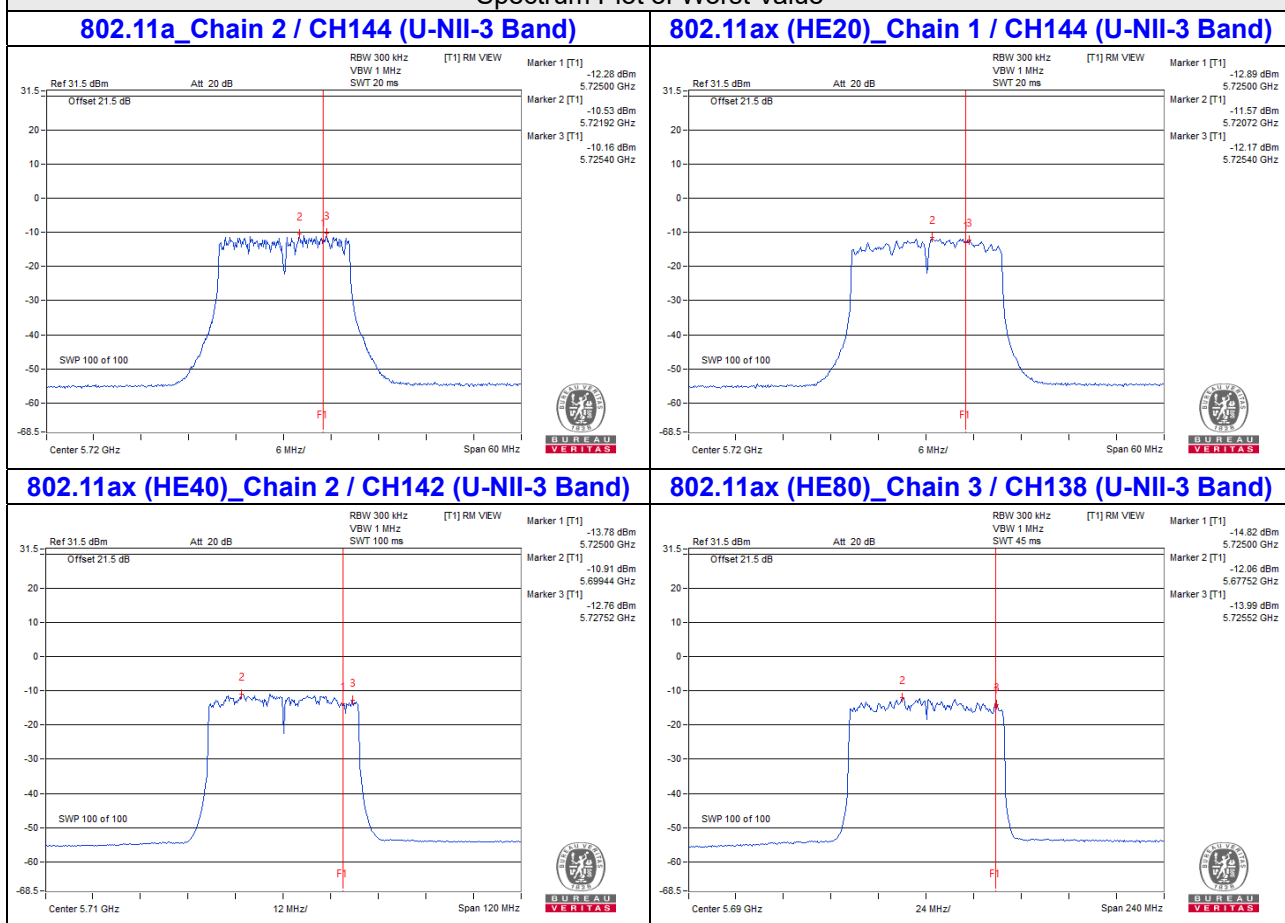
- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. The directional gain = The directional gain = $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.52-6) = 23.48\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Duty Factor (dB)	Total PSD (mW/300kHz)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3						
138 (U-NII-3 Band)	5690	-15.30	-15.32	-15.19	-13.99	0.24	0.13641	-8.65	-6.43	23.48	PASS

- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
 2. The directional gain = The directional gain = 6.5dBi + 10log(4) = 12.52dBi > 6dBi , so the power limit shall be reduced to 30-(12.52-6) = 23.48dBm.
 3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value



4.5.8 Test Results (Mode 2)

CDD Mode

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

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	-1.41	-1.75	-3.73	-2.19	0.26	4.10	4.98	PASS
60	5300	-3.14	-1.95	-1.22	-1.37	0.26	4.43	4.98	PASS
64	5320	-2.04	-1.94	-1.89	-1.34	0.26	4.49	4.98	PASS
100	5500	-1.73	-2.80	-3.11	-1.29	0.26	4.11	4.98	PASS
116	5580	-1.84	-3.03	-2.09	-1.61	0.26	4.17	4.98	PASS
140	5700	-3.38	-2.01	-1.98	-2.26	0.26	3.91	4.98	PASS
144 (U-NII-2C Band)	5720	-2.22	-3.77	-2.11	-2.43	0.26	3.70	4.98	PASS

- Note: 1. Method 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.
2. For U-NII-2A: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $11 - (12.02 - 6) = 4.98\text{dBm/MHz}$.
3. For U-NII-2C: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $11 - (12.02 - 6) = 4.98\text{dBm/MHz}$.
4. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	-2.40	-3.36	-0.92	-2.46	0.18	4.01	4.98	PASS
60	5300	-2.18	-4.31	-2.48	-1.35	0.18	3.75	4.98	PASS
64	5320	-2.63	-2.45	-2.10	-2.06	0.18	3.90	4.98	PASS
100	5500	-2.76	-3.21	-1.55	-2.53	0.18	3.74	4.98	PASS
116	5580	-2.92	-2.61	-1.95	-3.25	0.18	3.55	4.98	PASS
140	5700	-2.79	-2.76	-1.68	-3.00	0.18	3.68	4.98	PASS
144 (U-NII-2C Band)	5720	-2.38	-2.76	-3.17	-2.94	0.18	3.40	4.98	PASS

- Note: 1. Method 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.
2. For U-NII-2A: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $11 - (12.02 - 6) = 4.98\text{dBm/MHz}$.
3. For U-NII-2C: The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $11 - (12.02 - 6) = 4.98\text{dBm/MHz}$.
4. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	-2.19	-5.57	-2.06	-3.08	0.22	3.22	4.98	PASS
62	5310	-3.08	-5.28	-3.29	-2.13	0.22	2.94	4.98	PASS
102	5510	-4.05	-3.29	-2.33	-2.05	0.22	3.38	4.98	PASS
110	5550	-2.20	-1.89	-0.73	-1.04	0.22	4.82	4.98	PASS
134	5670	-4.43	-2.44	-1.82	-4.35	0.22	3.13	4.98	PASS
142 (U-NII-2C Band)	5710	-1.74	-2.19	-1.39	-2.66	0.22	4.27	4.98	PASS

- Note: 1. Method 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.
2. For U-NII-2A: The directional gain = 6dBi + 10log(4) = 12.02dBi > 6dBi , so the power limit shall be reduced to 11-(12.02-6) = 4.98dBm/MHz.
3. For U-NII-2C: The directional gain = 6dBi + 10log(4) = 12.02dBi > 6dBi , so the power limit shall be reduced to 11-(12.02-6) = 4.98dBm/MHz.
4. Refer to section 3.3 for duty cycle spectrum plot.

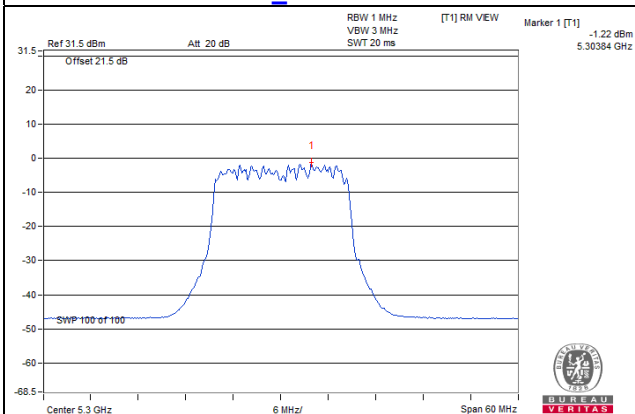
802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	-6.89	-8.50	-7.19	-7.79	0.24	-1.29	4.98	PASS
106	5530	-6.05	-5.79	-4.54	-4.39	0.24	1.13	4.98	PASS
138 (U-NII-2C Band)	5690	-1.81	-2.38	-1.62	-2.55	0.24	4.19	4.98	PASS

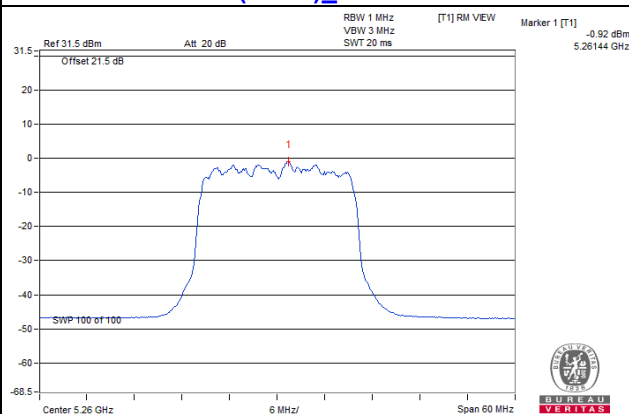
- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For U-NII-2A: The directional gain = 6dBi + 10log(4) = 12.02dBi > 6dBi , so the power limit shall be reduced to 11-(12.02-6) = 4.98dBm/MHz.
3. For U-NII-2C: The directional gain = 6dBi + 10log(4) = 12.02dBi > 6dBi , so the power limit shall be reduced to 11-(12.02-6) = 4.98dBm/MHz.
4. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

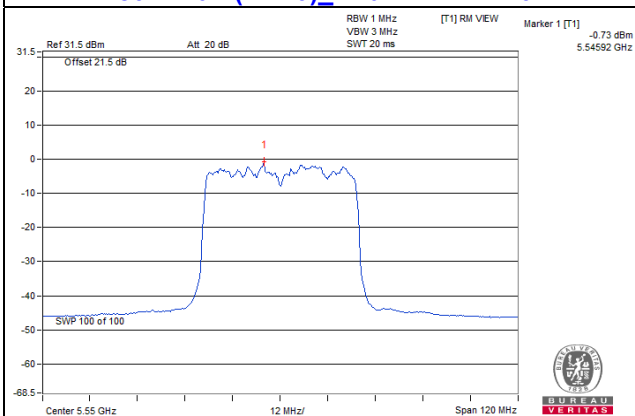
802.11a_Chain 2 / CH60



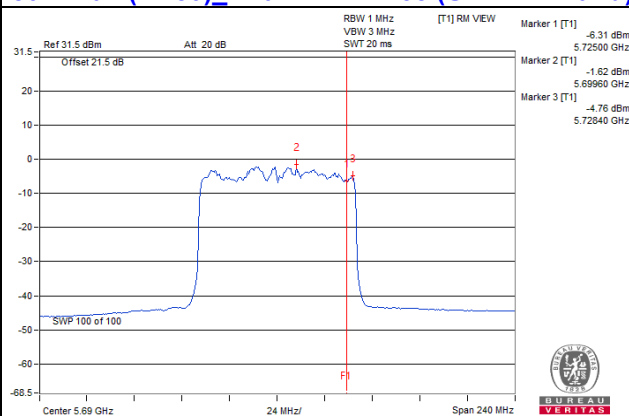
802.11ax (HE20)_Chain 2 / CH52



802.11ax (HE40)_Chain 2 / CH110



802.11ax (HE80)_Chain 2 / CH138 (U-NII-2C Band)



For U-NII-3:
802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Duty Factor (dB)	Total PSD (mW/300kHz)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3						
144 (U-NII-3 Band)	5720	-11.78	-12.12	-10.21	-11.32	0.26	0.31531	-5.01	-2.79	23.98	PASS

- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. The directional gain = The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.02-6) = 23.98\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Duty Factor (dB)	Total PSD (mW/300kHz)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3						
144 (U-NII-3 Band)	5720	-12.07	-11.83	-12.24	-12.29	0.18	0.25706	-5.90	-3.68	23.98	PASS

- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. The directional gain = The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.02-6) = 23.98\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Duty Factor (dB)	Total PSD (mW/300kHz)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3						
142 (U-NII-3 Band)	5710	-13.25	-13.11	-11.29	-12.79	0.22	0.23469	-6.30	-4.08	23.98	PASS

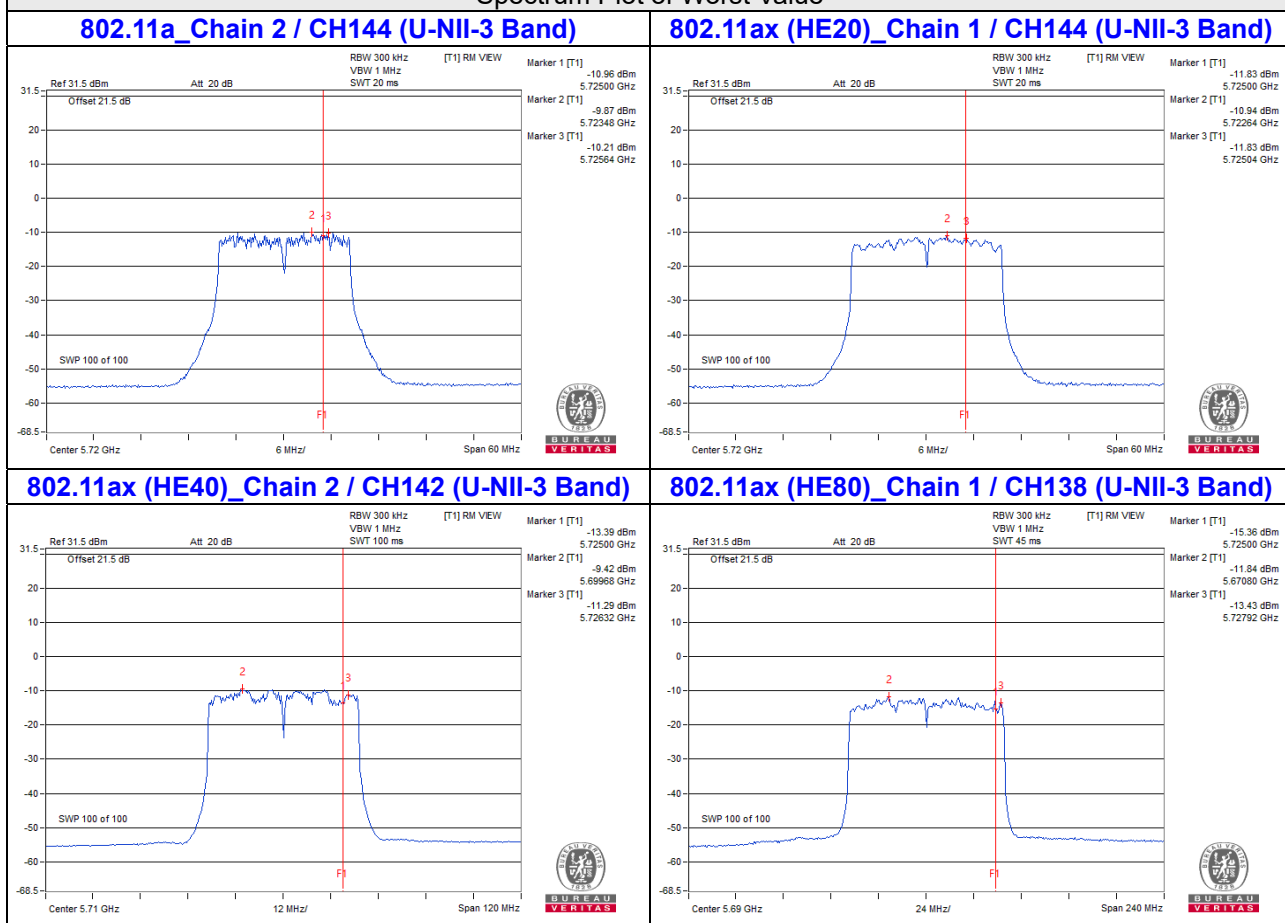
- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. The directional gain = The directional gain = $6\text{dBi} + 10\log(4) = 12.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.02-6) = 23.98\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)				Duty Factor (dB)	Total PSD (mW/300kHz)	Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3						
138 (U-NII-3 Band)	5690	-14.98	-13.43	-14.56	-14.03	0.24	0.16033	-7.95	-5.73	23.98	PASS

- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
 2. The directional gain = The directional gain = 6dBi + 10log(4) = 12.02dBi > 6dBi , so the power limit shall be reduced to 30-(12.02-6) = 23.98dBm.
 3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

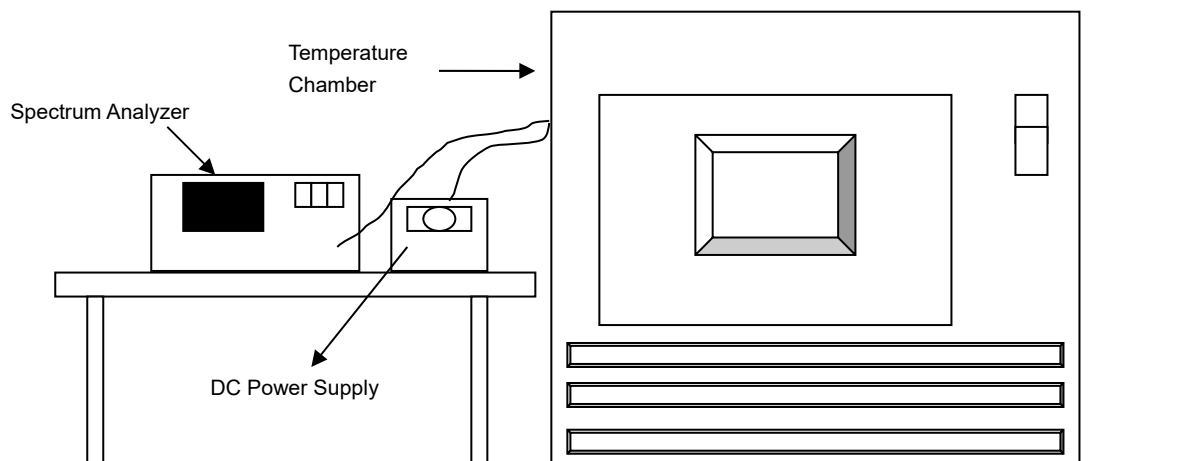


4.6 Frequency Stability Measurement

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

Refer to section 4.1.2 to get information of above instrument.

4.6.4 Test Procedure

- The EUT was placed inside the environmental test chamber and powered by nominal DC 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

Frequency Stability Versus Temp.									
Operating Frequency: 5260 MHz									
TEMP. (°C)	Power Supply (Vdc)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
40	56	5260.0141	PASS	5260.0148	PASS	5260.0136	PASS	5260.013	PASS
30	56	5260.0188	PASS	5260.0204	PASS	5260.0227	PASS	5260.0202	PASS
20	56	5259.9954	PASS	5259.9952	PASS	5259.9911	PASS	5259.9926	PASS
10	56	5259.9831	PASS	5259.9813	PASS	5259.9815	PASS	5259.983	PASS
0	56	5259.9824	PASS	5259.9802	PASS	5259.98	PASS	5259.9783	PASS

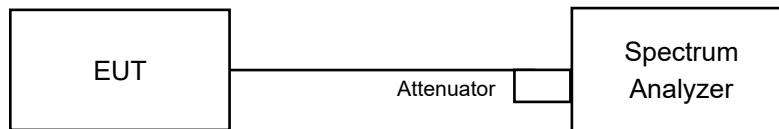
Frequency Stability Versus Voltage									
Operating Frequency: 5260 MHz									
TEMP. (°C)	Power Supply (Vdc)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
20	64.4	5259.9949	PASS	5259.9944	PASS	5259.9902	PASS	5259.9927	PASS
	56	5259.9954	PASS	5259.9952	PASS	5259.9911	PASS	5259.9926	PASS
	47.6	5259.9964	PASS	5259.9951	PASS	5259.9908	PASS	5259.9932	PASS

4.7 6dB Bandwidth Measurement

4.7.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

4.7.2 Test Setup



4.7.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.7.4 Test Procedure

MEASUREMENT PROCEDURE REF

- Set resolution bandwidth (RBW) = 100kHz
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

4.7.5 Deviation from Test Standard

No deviation.

4.7.6 EUT Operating Condition

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequency.

4.7.7 Test Results (Mode 1)

CDD Mode

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain0	Chain1	Chain2	Chain3		
144 (U-NII-3 Band)	5720	2.86	3.22	3.2	3.22	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain0	Chain1	Chain2	Chain3		
144 (U-NII-3 Band)	5720	4.39	4.36	4.27	4.42	0.5	Pass

802.11ax (HE40)

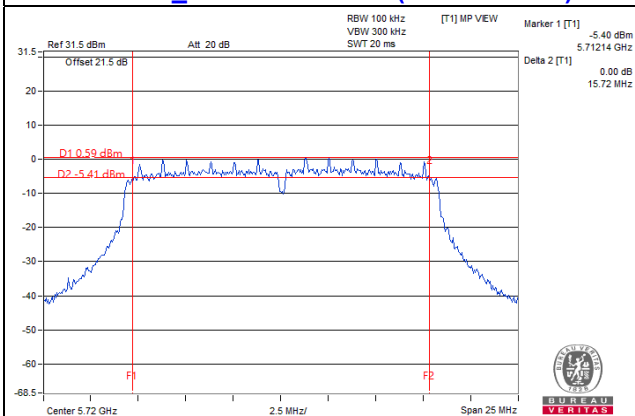
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain0	Chain1	Chain2	Chain3		
142 (U-NII-3 Band)	5710	3.55	4	4.04	3.86	0.5	Pass

802.11ax (HE80)

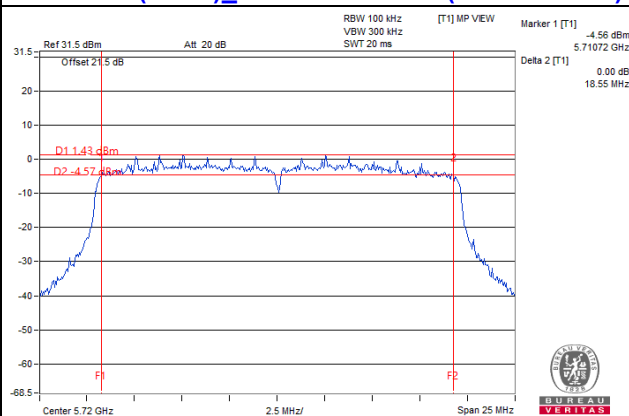
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain0	Chain1	Chain2	Chain3		
138 (U-NII-3 Band)	5690	0.43	2.75	3.83	2.69	0.5	Pass

Spectrum Plot of Worst Value

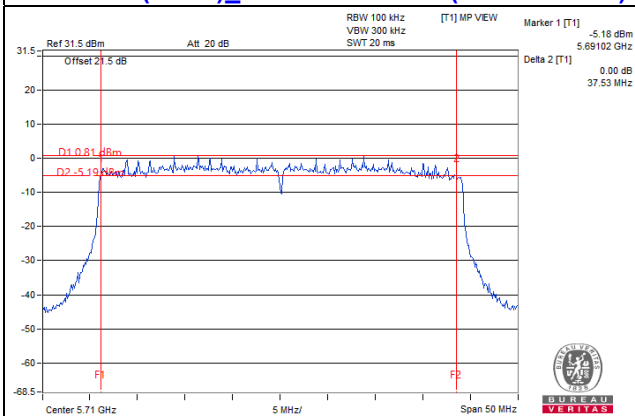
802.11a_Chain 0 / CH144 (U-NII-3 Band)



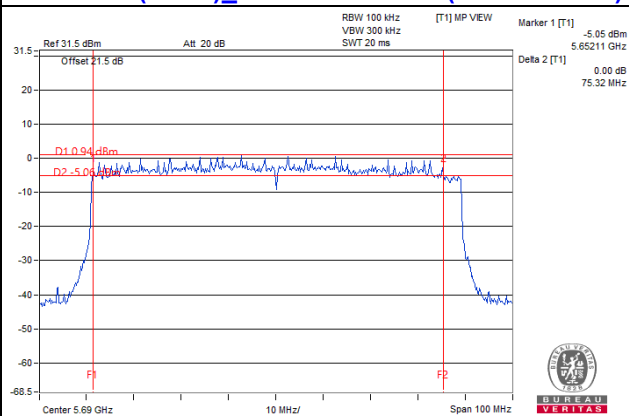
802.11ax (HE20)_Chain 2 / CH144 (U-NII-3 Band)



802.11ax (HE40)_Chain 0 / CH142 (U-NII-3 Band)



802.11ax (HE80)_Chain 0 / CH138 (U-NII-3 Band)



Note: The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

4.7.8 Test Results (Mode 2)

CDD Mode

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain0	Chain1	Chain2	Chain3		
144 (U-NII-3 Band)	5720	2.8	2.81	3.2	3.2	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain0	Chain1	Chain2	Chain3		
144 (U-NII-3 Band)	5720	4.47	4.36	4.33	4.46	0.5	Pass

802.11ax (HE40)

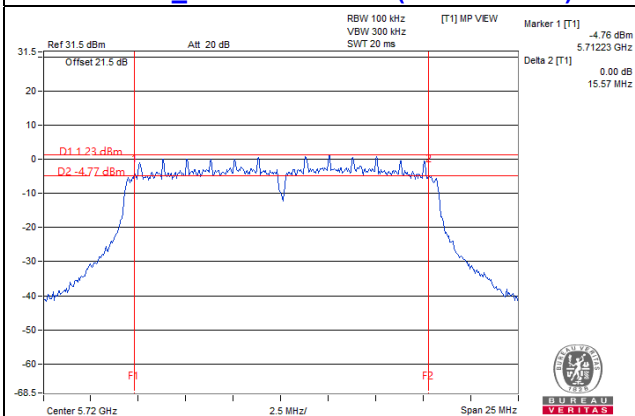
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain0	Chain1	Chain2	Chain3		
142 (U-NII-3 Band)	5710	2.96	3.92	4.01	3.61	0.5	Pass

802.11ax (HE80)

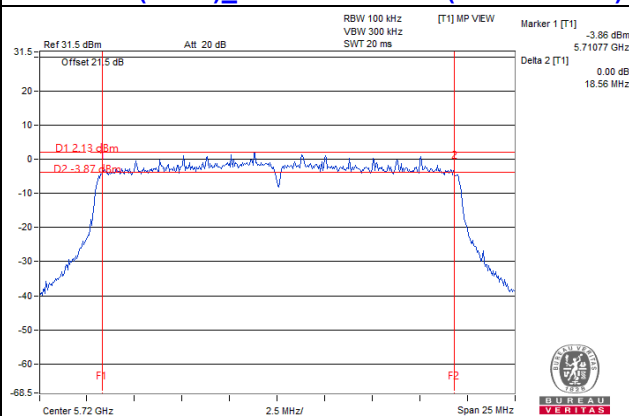
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain0	Chain1	Chain2	Chain3		
138 (U-NII-3 Band)	5690	2.71	2.5	2.75	3.36	0.5	Pass

Spectrum Plot of Worst Value

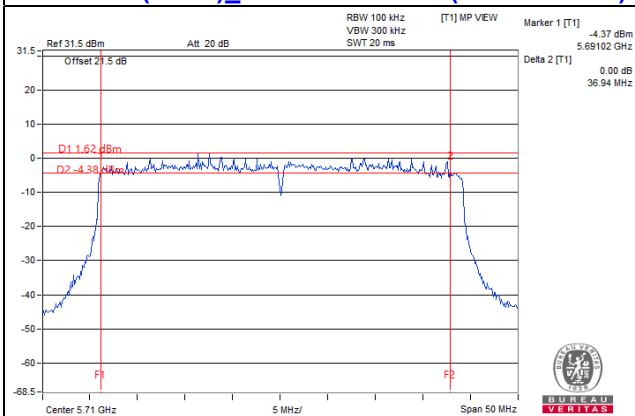
802.11a_Chain 0 / CH144 (U-NII-3 Band)



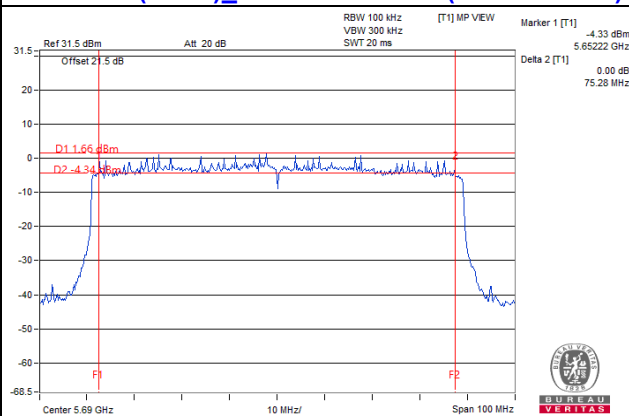
802.11ax (HE20)_Chain 2 / CH144 (U-NII-3 Band)



802.11ax (HE40)_Chain 0 / CH142 (U-NII-3 Band)



802.11ax (HE80)_Chain 1 / CH138 (U-NII-3 Band)

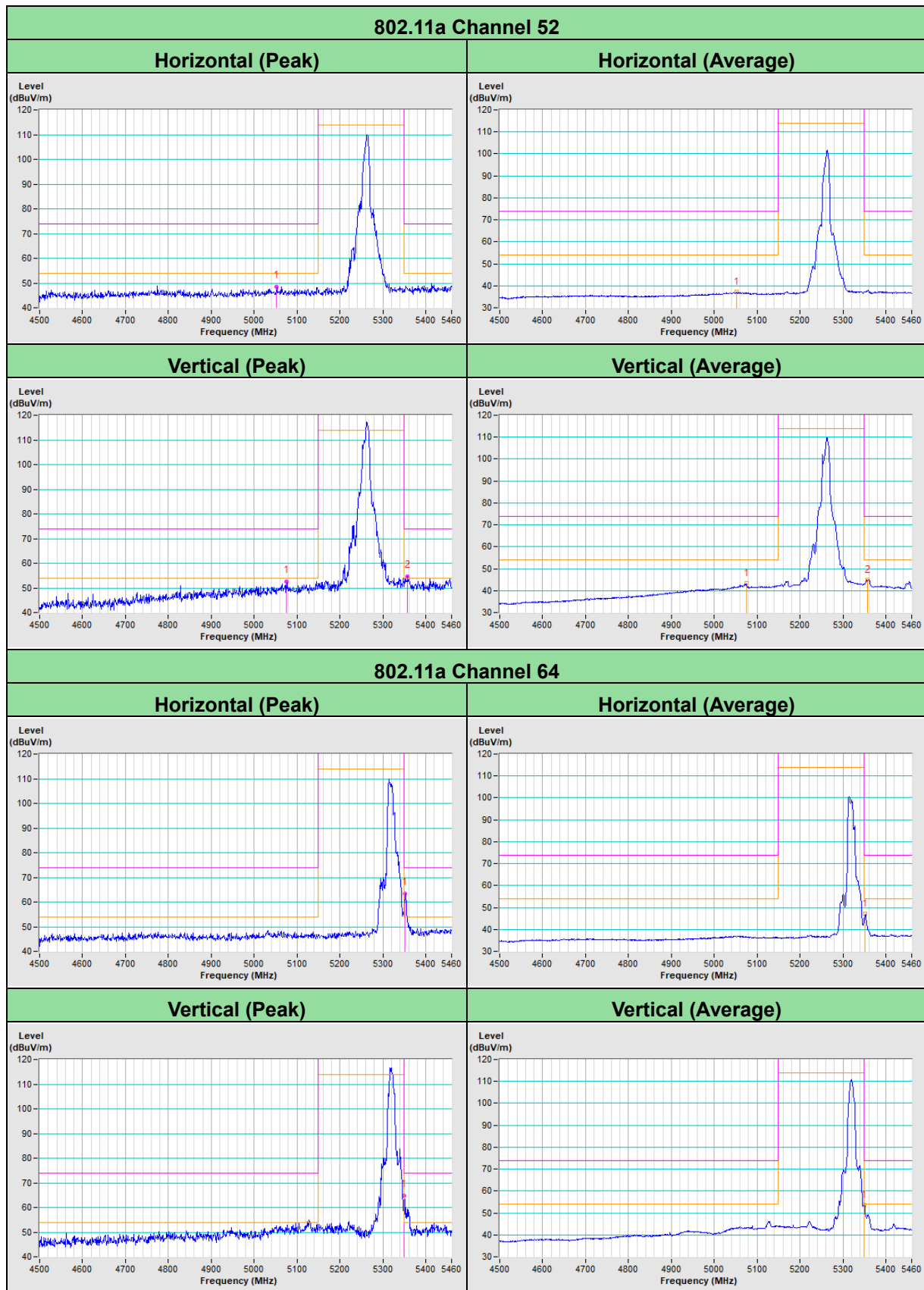


Note: The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

5 Pictures of Test Arrangements

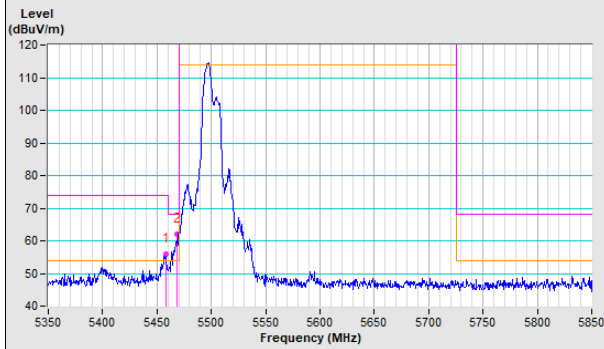
Please refer to the attached file (Test Setup Photo).

Annex A.1 - Band-Edge Measurement (For U-NII-2A, U-NII-2C band) (Mode 1)

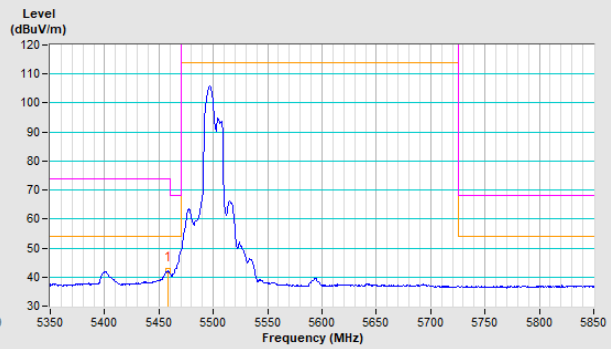


802.11a Channel 100

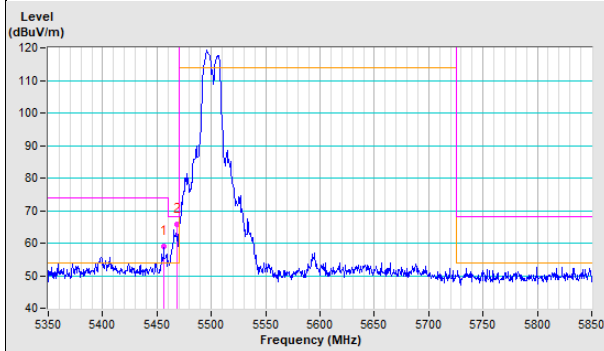
Horizontal (Peak)



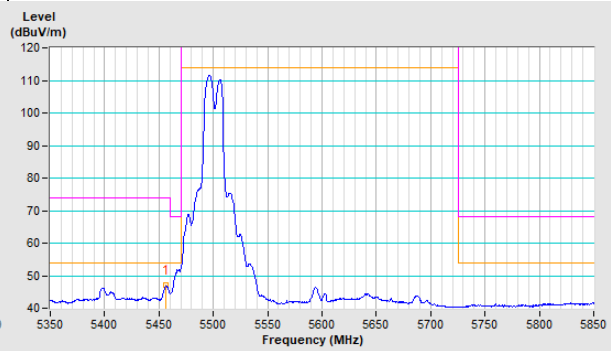
Horizontal (Average)



Vertical (Peak)

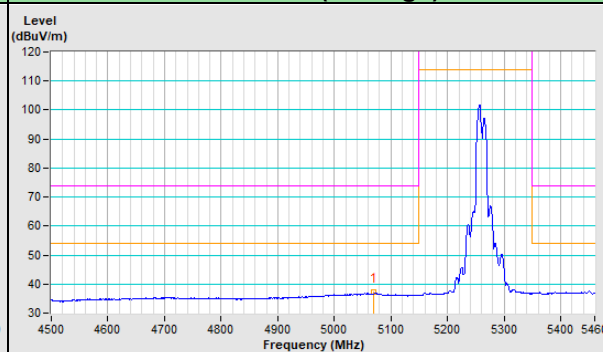
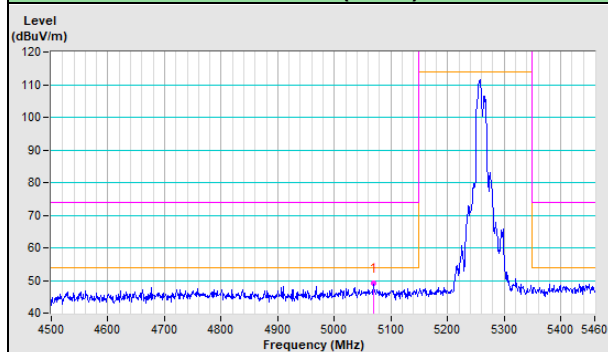


Vertical (Average)

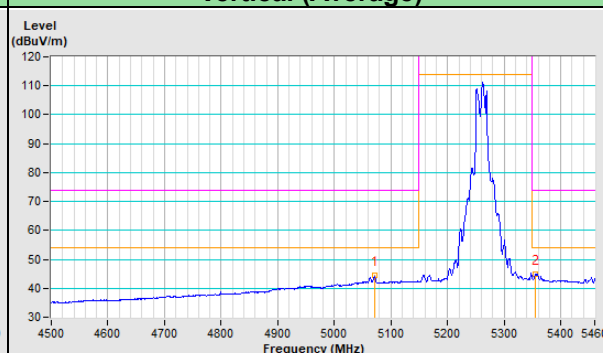
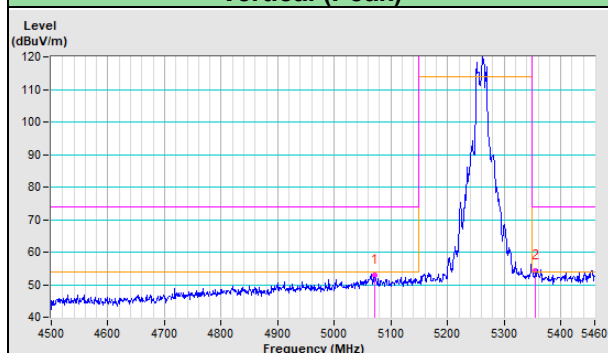


802.11ax (HE20) Channel 52

Horizontal (Peak)	Horizontal (Average)
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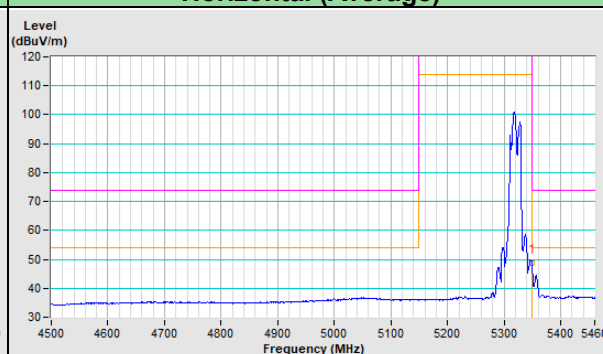
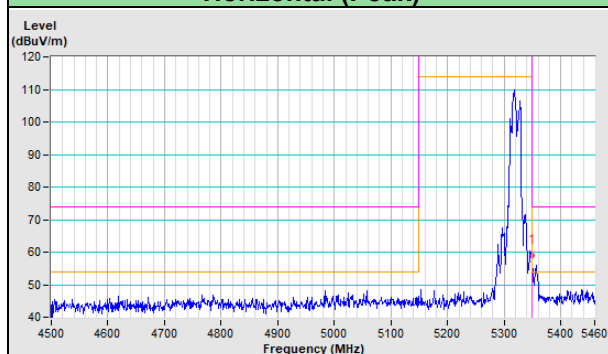


Vertical (Peak)	Vertical (Average)
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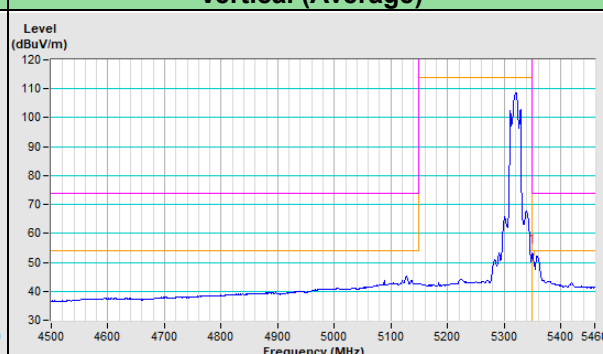
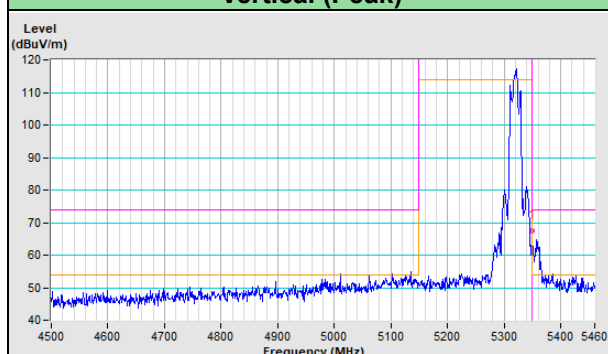


802.11ax (HE20) Channel 64

Horizontal (Peak)	Horizontal (Average)
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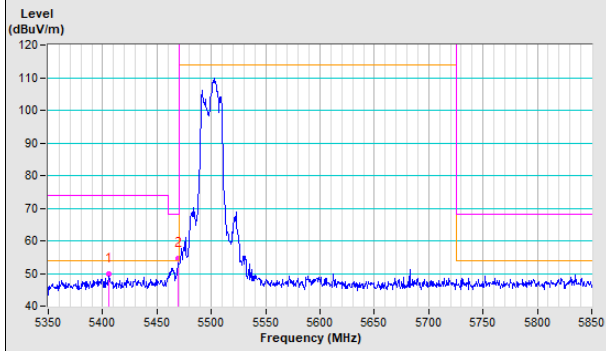


Vertical (Peak)	Vertical (Average)
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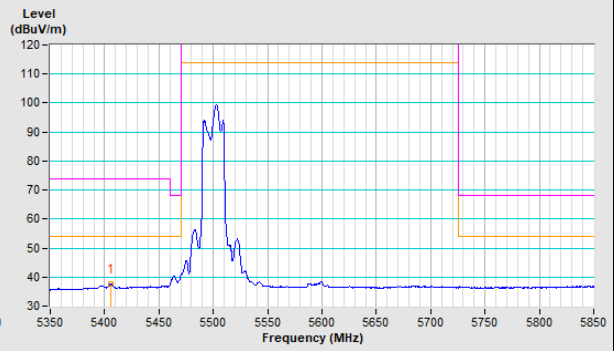


802.11ax (HE20) Channel 100

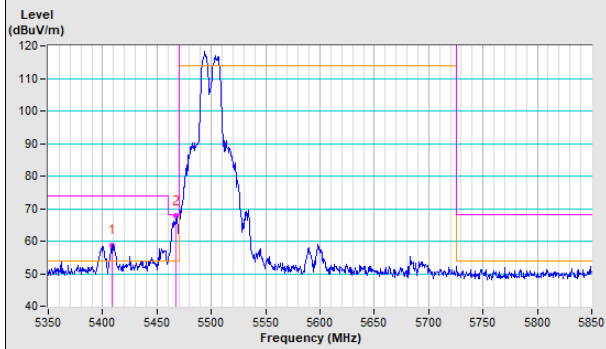
Horizontal (Peak)



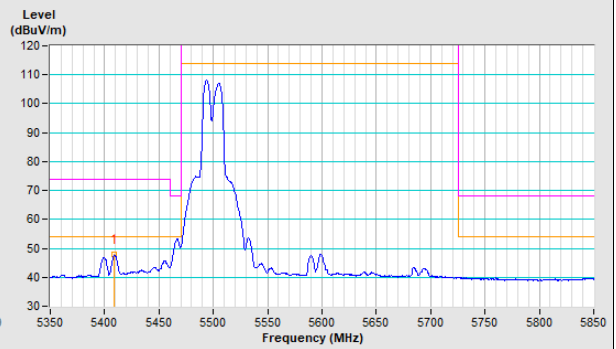
Horizontal (Average)



Vertical (Peak)

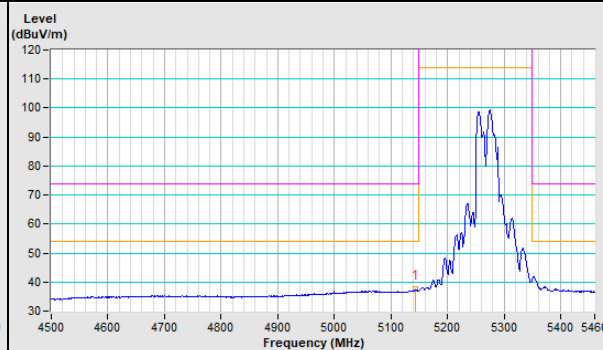
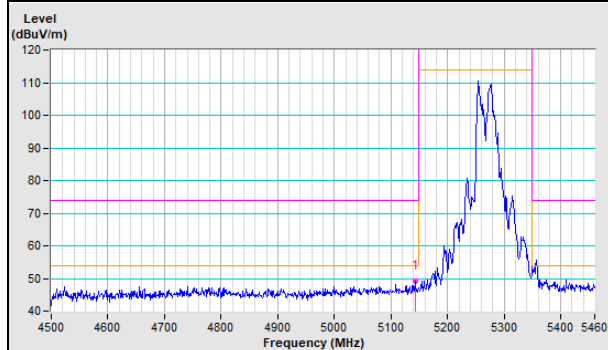


Vertical (Average)

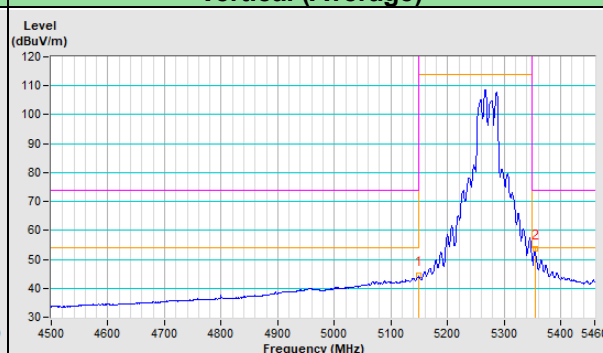
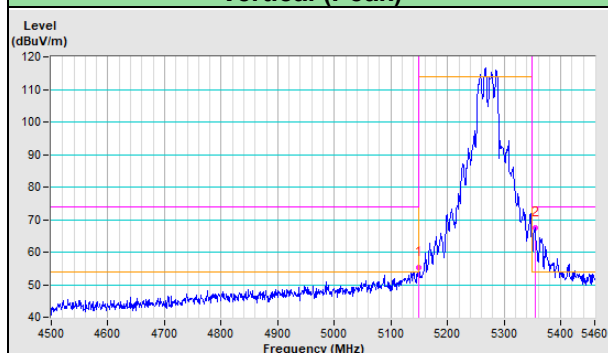


802.11ax (HE40) Channel 54

Horizontal (Peak)	Horizontal (Average)
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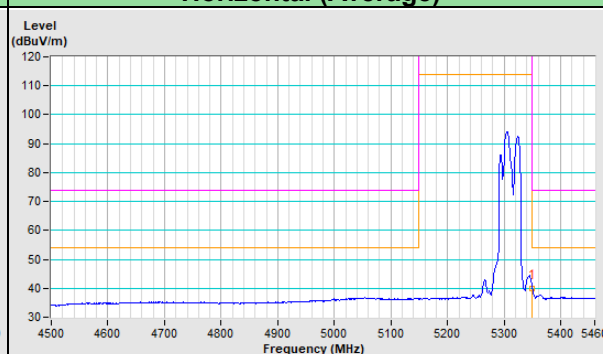
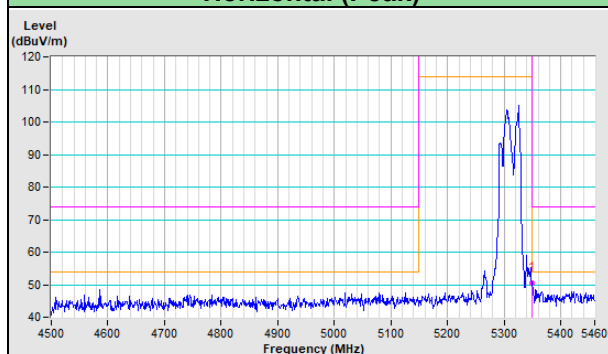


Vertical (Peak)	Vertical (Average)
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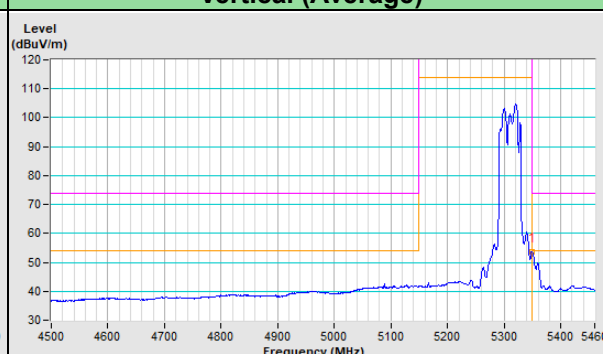
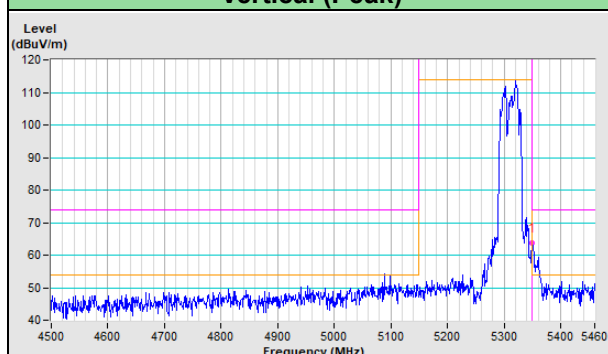


802.11ax (HE40) Channel 62

Horizontal (Peak)	Horizontal (Average)
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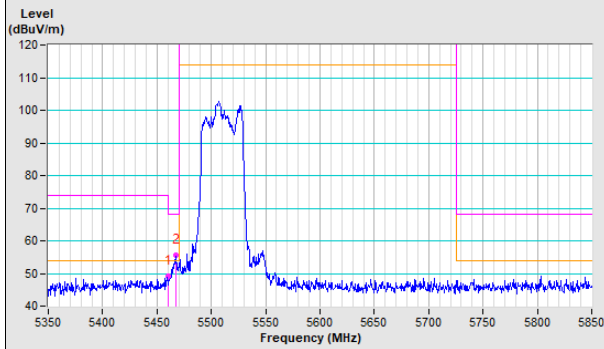


Vertical (Peak)	Vertical (Average)
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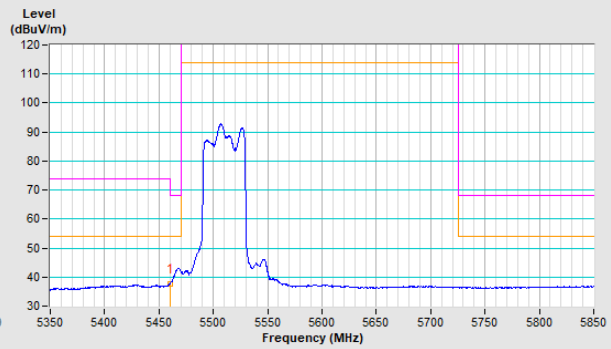


802.11ax (HE40) Channel 102

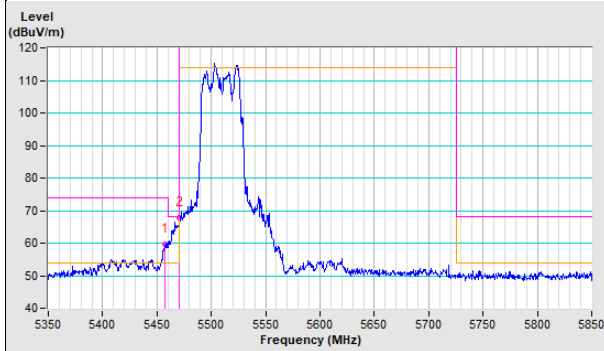
Horizontal (Peak)



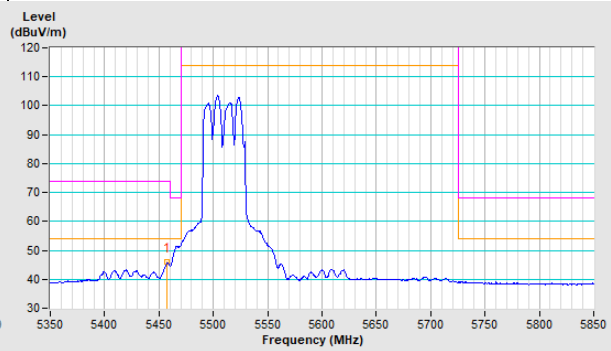
Horizontal (Average)



Vertical (Peak)

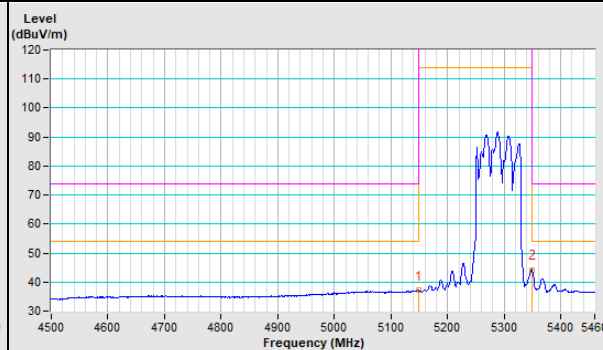
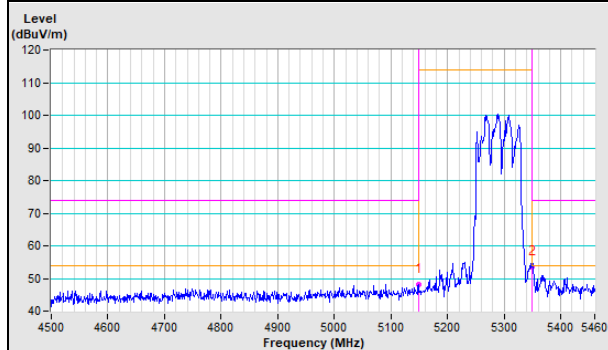


Vertical (Average)

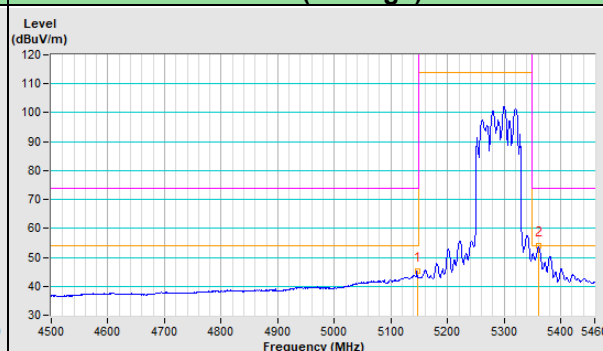
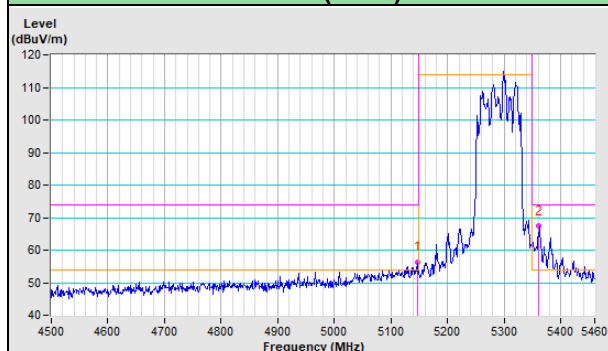


802.11ax (HE80) Channel 58

Horizontal (Peak)	Horizontal (Average)
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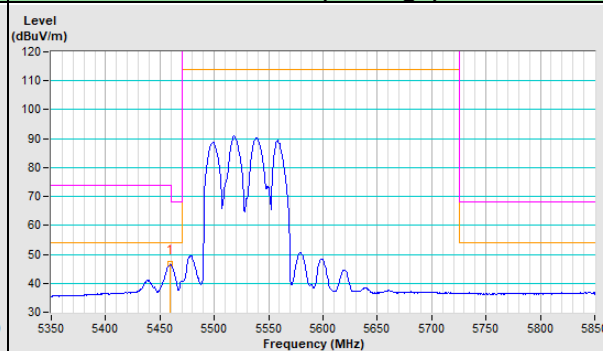
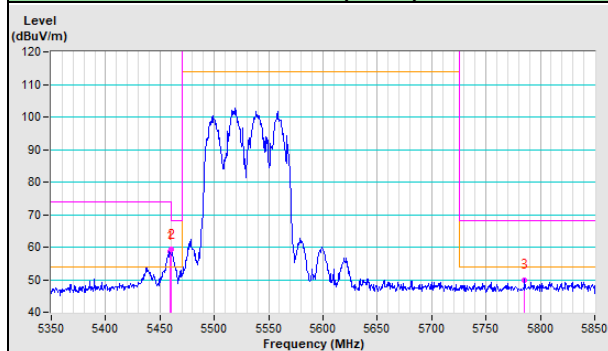


Vertical (Peak)	Vertical (Average)
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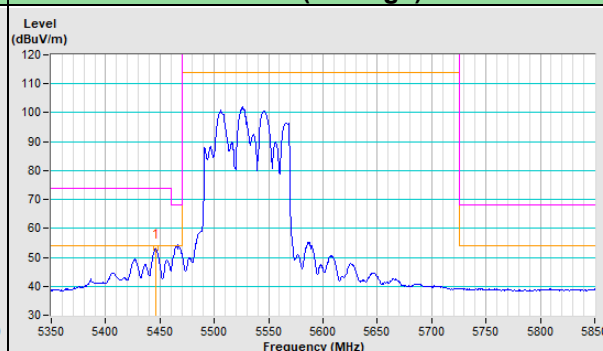
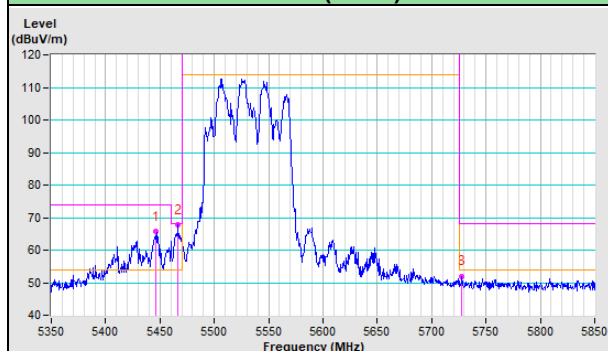


802.11ax (HE80) Channel 106

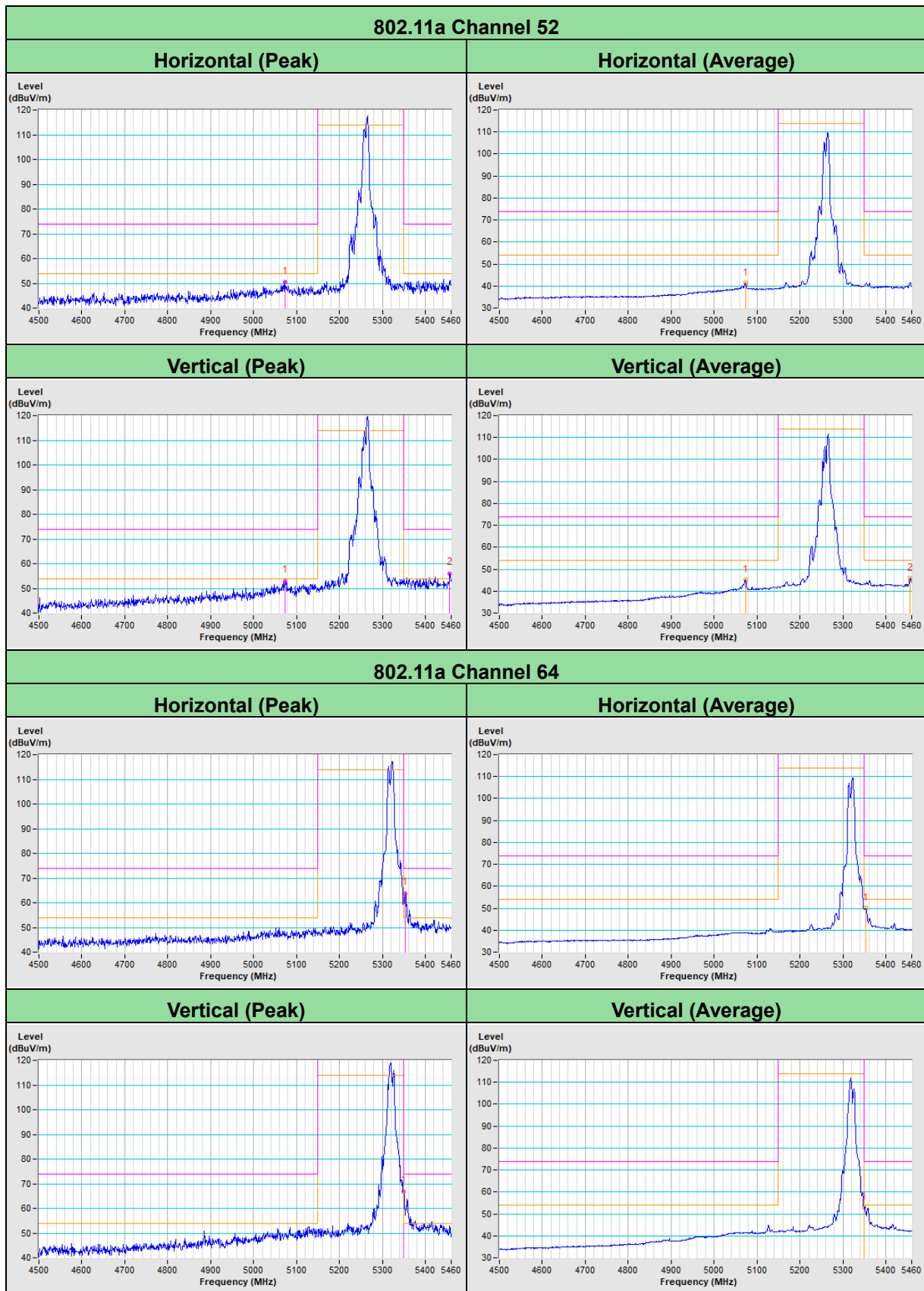
Horizontal (Peak)	Horizontal (Average)
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Vertical (Peak)	Vertical (Average)
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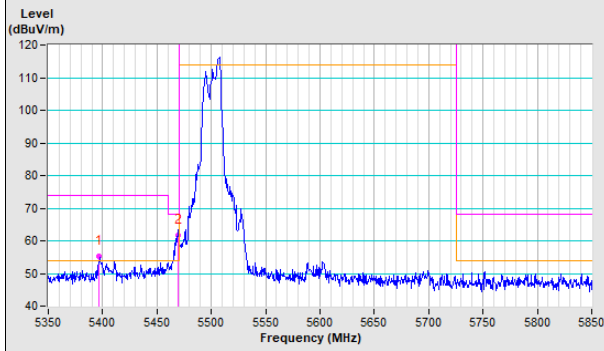


Annex A.2 - Band-Edge Measurement (For U-NII-2A, U-NII-2C band) (Mode 2)

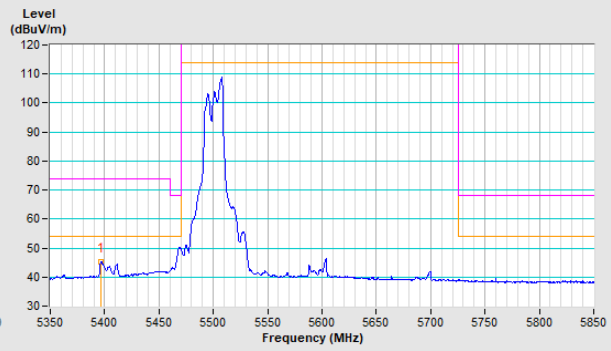


802.11a Channel 100

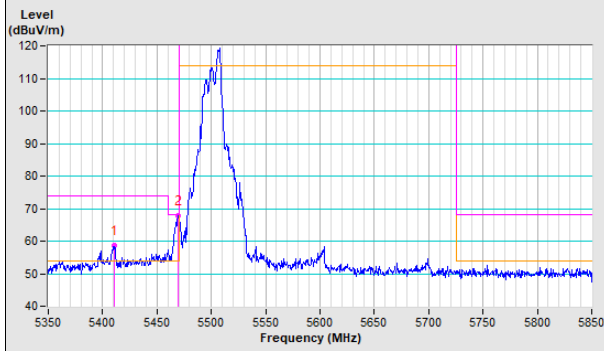
Horizontal (Peak)



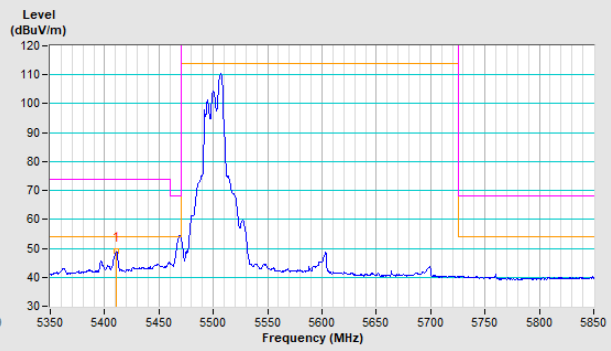
Horizontal (Average)



Vertical (Peak)

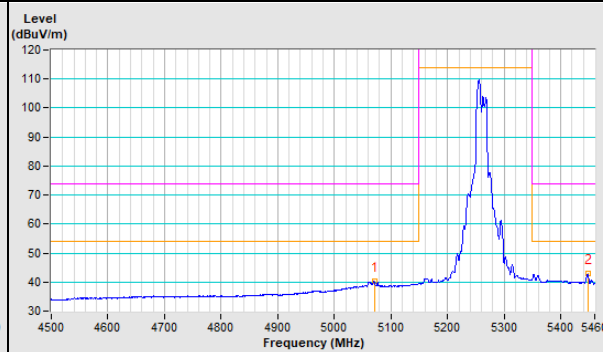
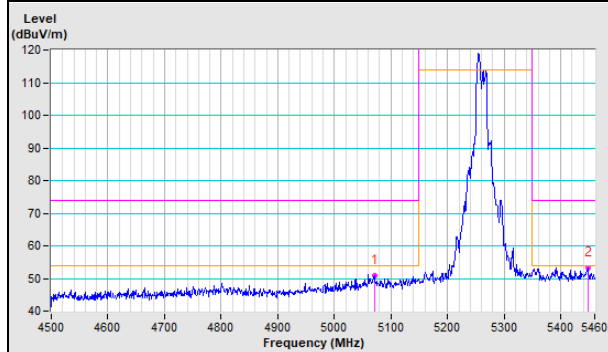


Vertical (Average)

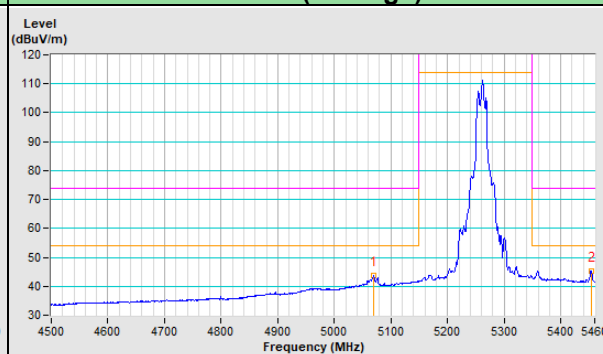
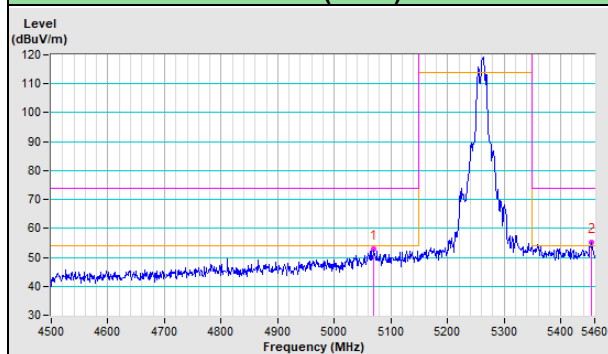


802.11ax (HE20) Channel 52

Horizontal (Peak)	Horizontal (Average)
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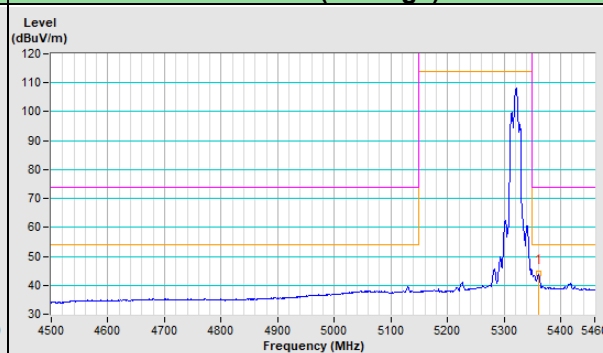
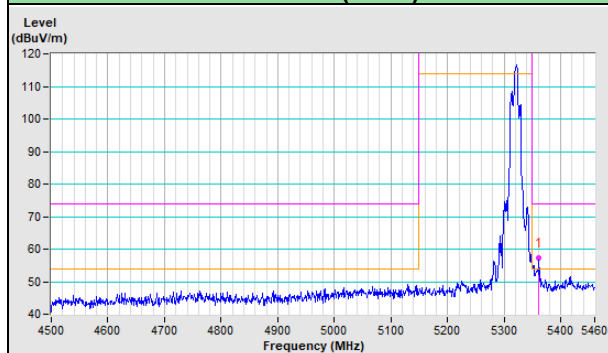


Vertical (Peak)	Vertical (Average)
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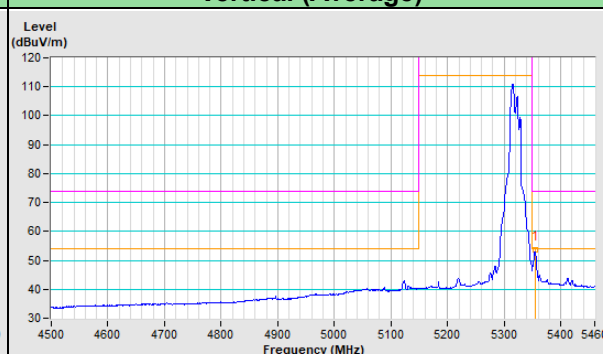
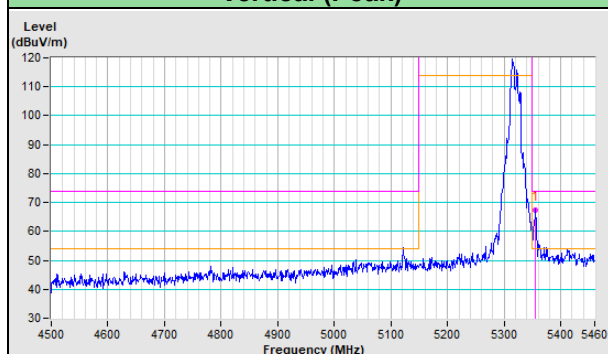


802.11ax (HE20) Channel 64

Horizontal (Peak)	Horizontal (Average)
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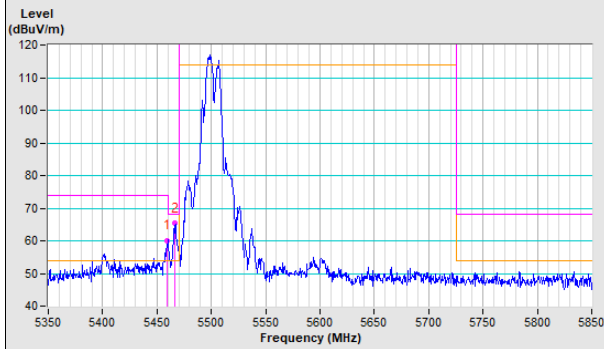


Vertical (Peak)	Vertical (Average)
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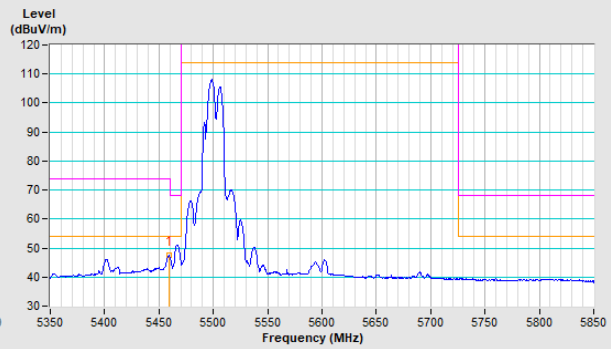


802.11ax (HE20) Channel 100

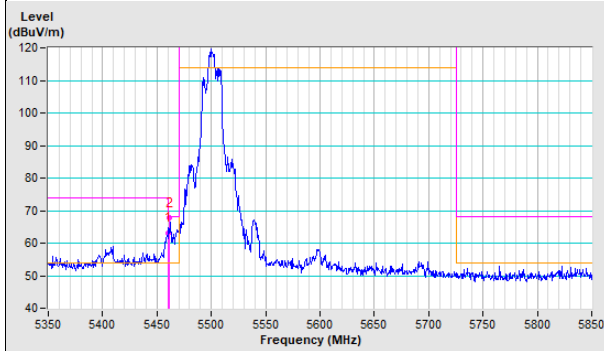
Horizontal (Peak)



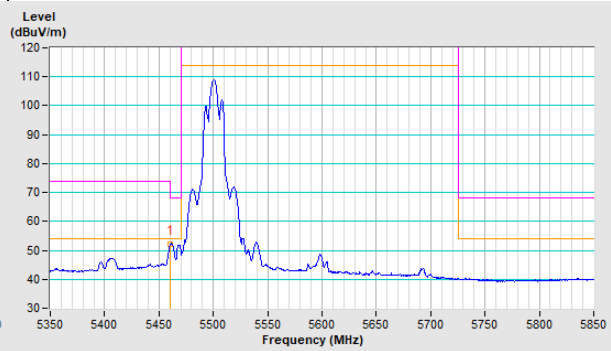
Horizontal (Average)



Vertical (Peak)

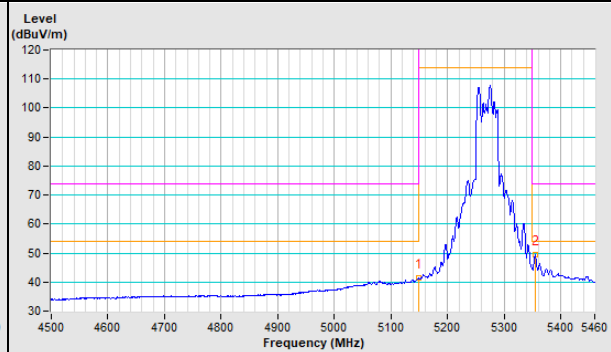
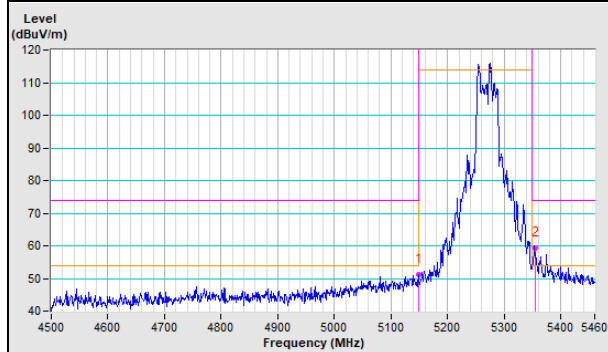


Vertical (Average)

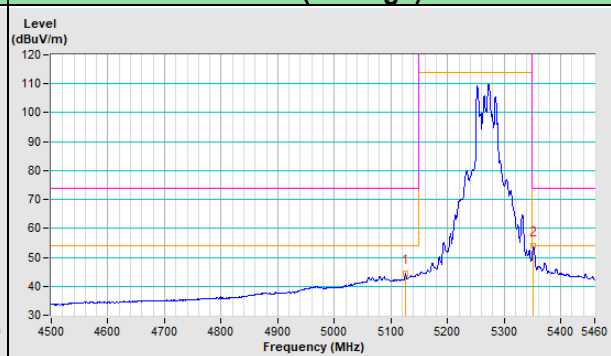
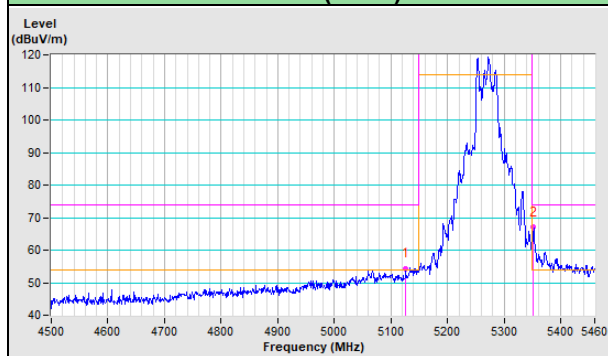


802.11ax (HE40) Channel 54

Horizontal (Peak)	Horizontal (Average)
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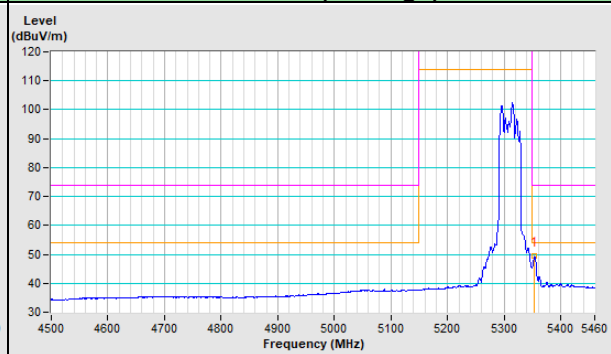
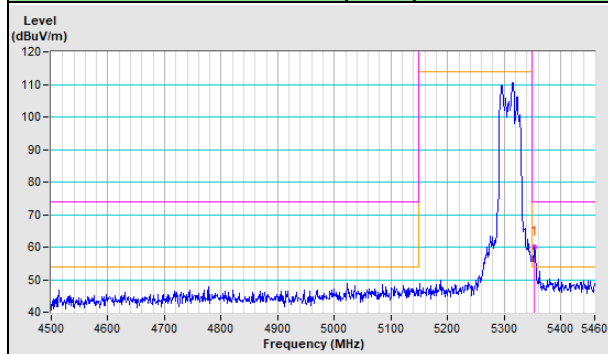


Vertical (Peak)	Vertical (Average)
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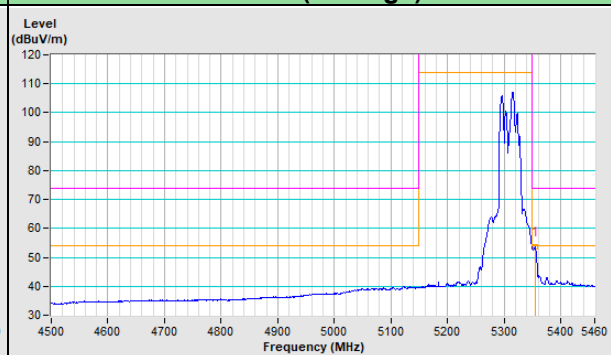
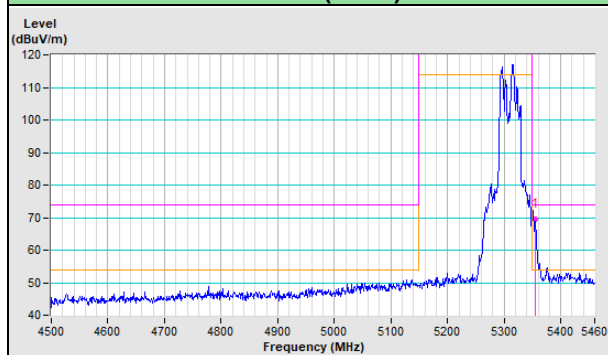


802.11ax (HE40) Channel 62

Horizontal (Peak)	Horizontal (Average)
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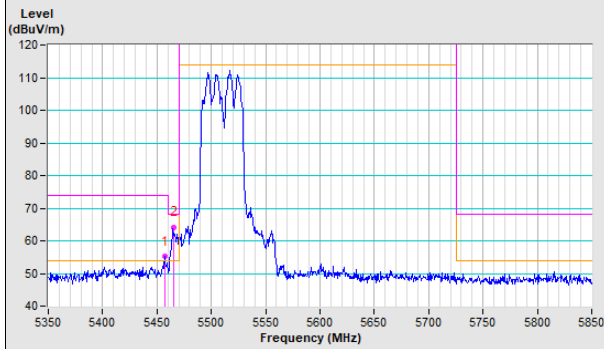


Vertical (Peak)	Vertical (Average)
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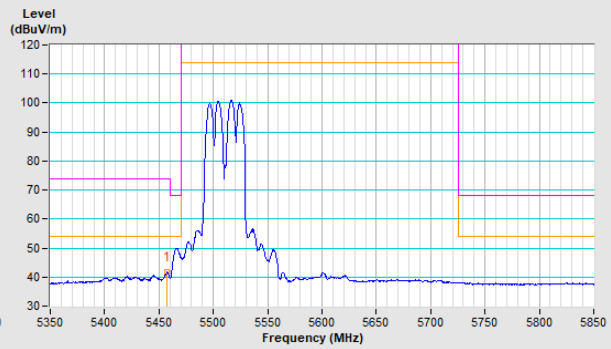


802.11ax (HE40) Channel 102

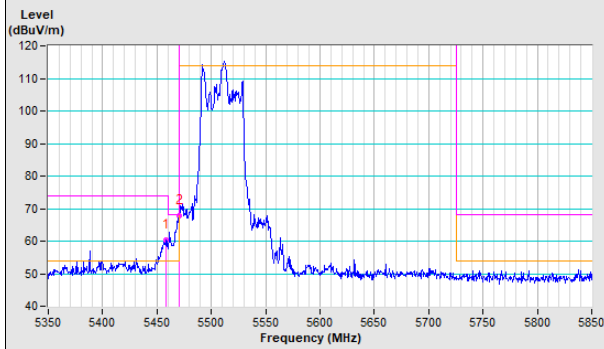
Horizontal (Peak)



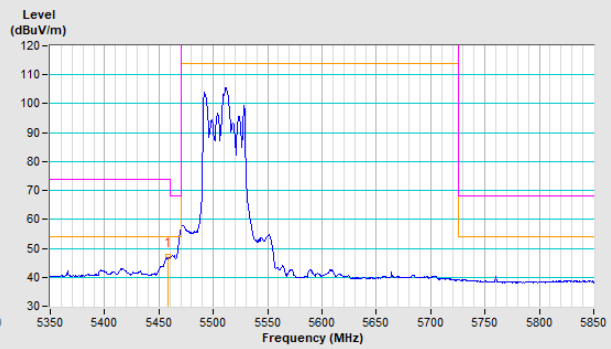
Horizontal (Average)



Vertical (Peak)

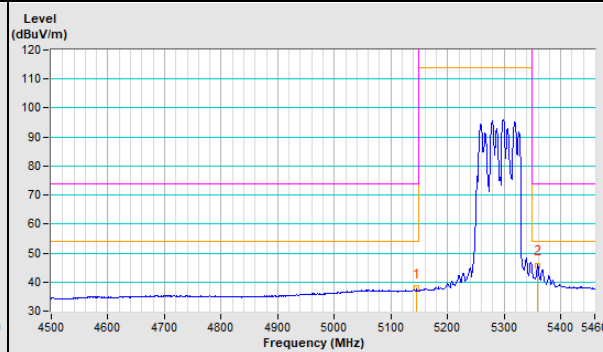
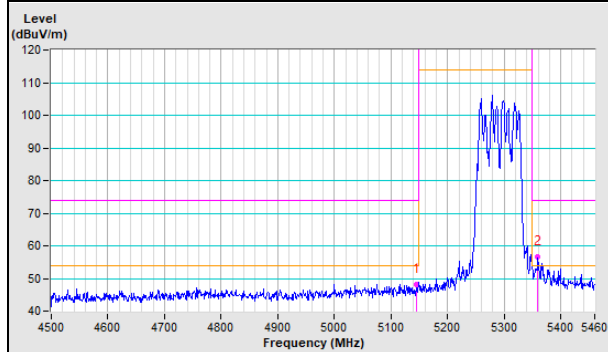


Vertical (Average)

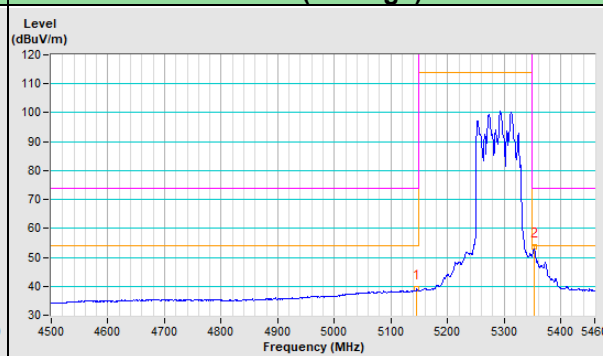
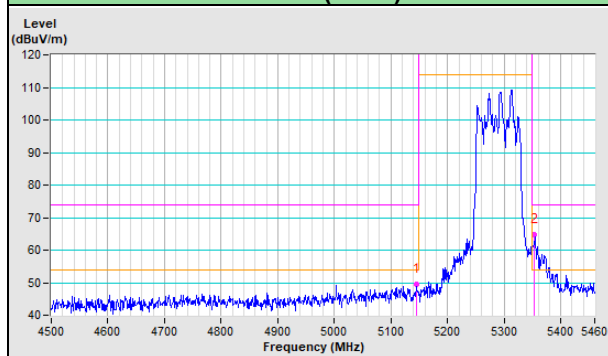


802.11ax (HE80) Channel 58

Horizontal (Peak)	Horizontal (Average)
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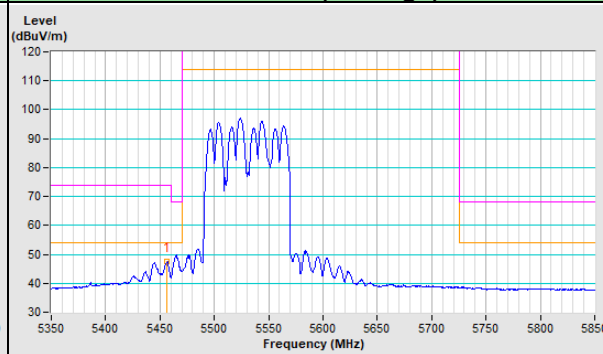
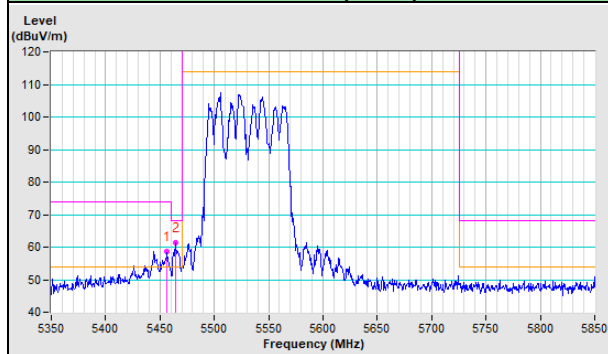


Vertical (Peak)	Vertical (Average)
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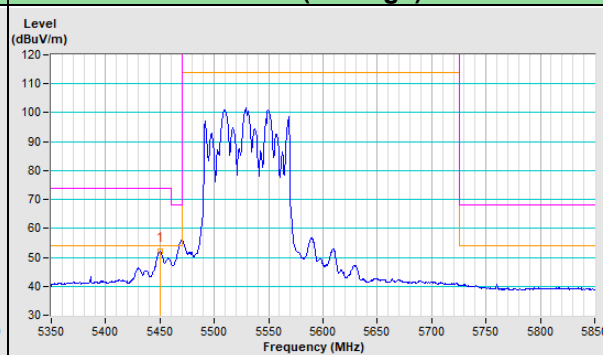
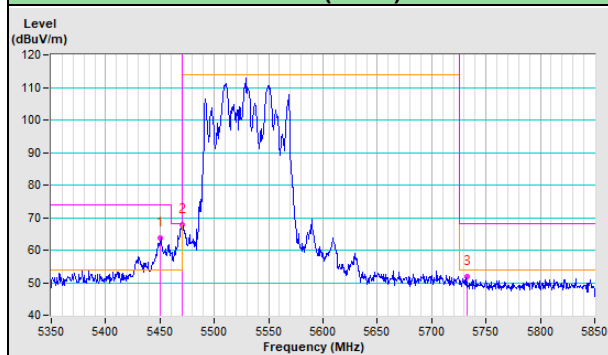


802.11ax (HE80) Channel 106

Horizontal (Peak)	Horizontal (Average)
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Vertical (Peak)	Vertical (Average)
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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 according to ISO/IEC 17025.

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

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Web Site: www.bureauveritas-adt.com

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

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