

# TEST REPORT

## CERTIFICATE OF CONFORMITY

**Standard:** 47 CFR FCC Part 15, Subpart E (Section 15.407)

**Report No.:** RFBERD-WTW-P24010469-7

**FCC ID:** U4G-SGVWF

**Product:** Mobile Computer/Barcode reader

**Brand:** Datalogic

**Model No.:** SGVWF

**Received Date:** 2023/12/18

**Test Date:** 2023/12/18 ~ 2024/2/26

**Issued Date:** 2024/3/18

**Applicant:** Datalogic S.r.l.

**Address:** Via San Vitalino 13, 40012 Lippo di Calderara di Reno (BO) – Italy

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

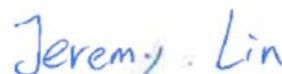
**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

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

**FCC Registration /** 788550 / TW0003

**Designation Number:**

Approved by:



, Date:

2024/3/18

Jeremy Lin / Project Engineer

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Prepared by : Polly Chien / Specialist

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## Release Control Record

Issue No.	Description	Date Issued
RFBERD-WTW-P24010469-7	Original release.	2024/3/18



## 1 Certificate

**Product:** Mobile Computer/Barcode reader

**Brand:** Datalogic

**Test Model:** SGVWF

**Sample Status:** Engineering sample

**Applicant:** Datalogic S.r.l.

**Test Date:** 2023/12/18 ~ 2024/2/26

**Standard:** 47 CFR FCC Part 15, Subpart E (Section 15.407)

**Measurement procedure:** ANSI C63.10-2013

KDB 987594 D02 U-NII 6 GHz EMC Measurement v02r01

KDB 789033 D02 General UNII Test Procedure New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

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

## 2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)

Clause	Test Item	Result	Remark
15.407(a)(8)	Maximum RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(8)	Maximum Power Spectral Density	Pass	Meet the requirement of limit.
15.407(a)(10)	Emission Bandwidth	Pass	Meet the requirement of limit.
-	Occupied Bandwidth	-	Reference only
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -32.81 dB at 0.49800 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -4.4 dB at 52.53 MHz
15.407(b)(6) 15.407(b)(10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -2.1 dB at 7125.00 MHz
15.407(b)(7)	In-Band Emission Mask	Pass	Meet the requirement of limit.
15.407(d)(6)	Contention-based Protocol	Pass	Meet the requirement of limit.
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	No antenna connector is used.

Note: 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	Specification	Expanded Uncertainty (k=2) (±)
Occupied Bandwidth	-	72 Hz
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.88 dB
Unwanted Emissions below 1 GHz	30 MHz ~ 1 GHz	3.6 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	2.29 dB
	18 GHz ~ 40 GHz	2.29 dB

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

### 2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

### 3 General Information

#### 3.1 General Description of EUT

Product	Mobile Computer/Barcode reader
Brand	Datalogic
Test Model	SGVWF
Host Marketing Name (HMN)	MEMOR 30/MEMOR 30X
Status of EUT	Engineering sample
Power Supply Rating	Refer to Note as below
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 1024QAM for OFDMA in 11ax mode
Modulation Technology	OFDM, OFDMA
Transfer Rate	Up to 2401.9 Mbps
Operating Frequency	5.935 GHz ~ 6.415 GHz 6.435 GHz ~ 6.525 GHz 6.535 GHz ~ 6.865 GHz 6.875 GHz ~ 7.115 GHz
Number of Channel	802.11a, 802.11ax (HE20):60 802.11ax (HE40):29 802.11ax (HE80):14 802.11ax (HE160):7
Output Power	Under controlled by Low-Power Indoor AP: 5.935 GHz ~ 6.415 GHz : EIRP: 40.52 mW (16.08 dBm) 6.435 GHz ~ 6.525 GHz : EIRP: 37.961 mW (15.79 dBm) 6.535 GHz ~ 6.865 GHz : EIRP: 39.028 mW (15.91 dBm) 6.875 GHz ~ 7.115 GHz : EIRP: 42.276 mW (16.26 dBm)  Under controlled by Standard Power AP: 5.935 GHz ~ 6.415 GHz: EIRP: 44.433 mW (16.48 dBm) 6.535 GHz ~ 6.865 GHz: EIRP: 39.028 mW (15.91 dBm)
Equipment Class	6CD: 15E 6 GHz Dual client
HW Version	DVT1
SW Version	0.11.000.20240131
P/N	Refer to Note as below
S/N	Refer to Note as below

Note:

- The EUT uses following accessories.

Scanner 1		
Brand		Model
Datalogic		Argon
Scanner 2		
Brand		Model
Datalogic		Xenon
BT/WLAN Module		
Brand		Model
Qualcomm		WCN6856
NFC chipset		
Brand		Model
NXP		PN7161
Battery		
Brand	Model	Specification
Datalogic	SGV-BY-140	Power Rating : 3.86V, 4565mAh, 17.6Wh
USB Cable		
Brand	Model	Specification
Datalogic	A9816360	Signal Line : USB3.0 Type A to Type C, 1.5M

- Sample's information is listed as below.

Sample	Scanner	S/N	P/N	BV Login No.
A	Argon	V24A00605	944850001	WTW240207/006Q22N03
B	Xenon	V24A00440	944850004	WTW240207/006Q22N15
C	Xenon	V24A00476	944850004	WTW240207/006Q22N01

- The EUT support OFDMA and Partial RU mode, therefore partial RU combination were investigated and the worst case scenario was identified.
- The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

### 3.2 Antenna Description of EUT

- The antenna information is listed as below.

Antenna No.		Gain (dBi)				Antenna Type	Connector Type
		5.925~ 6.425GHz	6.425~ 6.525GHz	6.525~ 6.875GHz	6.875~ 7.125GHz		
Ant 8 (Chain 0)	Max.	1.6	1.2	0.4	1.3	Coupling monopole	N/A
	Min.	0.9	0.34	0.34	0.56		
Ant 9 (Chain 1)	Max.	1.2	0.6	0.6	0.3	Loop	IPEX
	Min.	0.45	0.44	0.13	0.08		

\*Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.

- The EUT incorporates a MIMO function:

6 GHz Band		
Modulation Mode		TX & RX Configuration
802.11a		2TX
802.11ax (HE20)		2TX
802.11ax (HE40)		2TX
802.11ax (HE80)		2TX
802.11ax (HE160)		2TX
802.11ax (RU26/52/106/242/484/996/2x996)		2TX

### 3.3 Channel List

#### U-NII-5:

25 channels are provided for 802.11a, 802.11ax (HE20):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
2	5935 MHz	1	5955 MHz	5	5975 MHz	9	5995 MHz
13	6015 MHz	17	6035 MHz	21	6055 MHz	25	6075 MHz
29	6095 MHz	33	6115 MHz	37	6135 MHz	41	6155 MHz
45	6175 MHz	49	6195 MHz	53	6215 MHz	57	6235 MHz
61	6255 MHz	65	6275 MHz	69	6295 MHz	73	6315 MHz
77	6335 MHz	81	6355 MHz	85	6375 MHz	89	6395 MHz
93	6415 MHz						

12 channels are provided for 802.11ax (HE40):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
3	5965 MHz	11	6005 MHz	19	6045 MHz	27	6085 MHz
35	6125 MHz	43	6165 MHz	51	6205 MHz	59	6245 MHz
67	6285 MHz	75	6325 MHz	83	6365 MHz	91	6405 MHz

6 channels are provided for 802.11ax (HE80):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
7	5985 MHz	23	6065 MHz	39	6145 MHz	55	6225 MHz
71	6305 MHz	87	6385 MHz				

3 channels are provided for 802.11ax (HE160):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
15	6025 MHz	47	6185 MHz	79	6345 MHz		

#### U-NII-6:

5 channels are provided for 802.11a, 802.11ax (HE20):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
97	6435 MHz	101	6455 MHz	105	6475 MHz	109	6495 MHz
113	6515 MHz						

3 channels are provided for 802.11ax (HE40):

Channel	Frequency	Channel	Frequency	Channel	Frequency
99	6445 MHz	107	6485 MHz	*115	6525 MHz

1 channel is provided for 802.11ax (HE80):

Channel	Frequency
103	6465 MHz

1 channel is provided for 802.11ax (HE160):

Channel	Frequency
*111	6505 MHz

**U-NII-7:**

17 channels are provided for 802.11a, 802.11ax (HE20):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
117	6535 MHz	121	6555 MHz	125	6575 MHz	129	6595 MHz
133	6615 MHz	137	6635 MHz	141	6655 MHz	145	6675 MHz
149	6695 MHz	153	6715 MHz	157	6735 MHz	161	6755 MHz
165	6775 MHz	169	6795 MHz	173	6815 MHz	177	6835 MHz
181	6855 MHz						

8 channels are provided for 802.11ax (HE40):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
123	6565 MHz	131	6605 MHz	139	6645 MHz	147	6685 MHz
155	6725 MHz	163	6765 MHz	171	6805 MHz	179	6845 MHz

5 channels are provided for 802.11ax (HE80):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
*119	6545 MHz	135	6625 MHz	151	6705 MHz	167	6785 MHz
*183	6865 MHz						

2 channels are provided for 802.11ax (HE160):

Channel	Frequency	Channel	Frequency
143	6665 MHz	175	*6825 MHz

**U-NII-8:**

13 channels are provided for 802.11a, 802.11ax (HE20):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
185	6875 MHz	189	6895 MHz	193	6915 MHz	197	6935 MHz
201	6955 MHz	205	6975 MHz	209	6995 MHz	213	7015 MHz
217	7035 MHz	221	7055 MHz	225	7075 MHz	229	7095 MHz
233	7115 MHz						

6 channels are provided for 802.11ax (HE40):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
187	6885 MHz	195	6925 MHz	203	6965 MHz	211	7005 MHz
219	7045 MHz	227	7085 MHz				

2 channels are provided for 802.11ax (HE80):

Channel	Frequency	Channel	Frequency
199	6945 MHz	215	7025 MHz

1 channel is provided for 802.11ax (HE160):

Channel	Frequency
207	6985 MHz

Note: \* mean these are straddle channels.

### 3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. EUT can be used in the following ways: X-axis/ Y-axis/ Z-axis. Pre-scan these ways and find the worst case as a representative test condition. 2. Pre-scan ac adapter and Notebook mode
Worst Case:	1. X-axis/ Y-axis/ Z-axis Worst Condition: Z-axis 2. Worst Condition: adapter mode

#### Under controlled by Low-Power Indoor AP

Following channel(s) was (were) selected for the final test as listed below:

Test Item	EUT Configure Mode	Mode	Tested Channel	Modulation	Data Rate Parameter
Maximum RF Output Power	C	802.11a	2, 1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	6Mb/s
		802.11ax (HE20) 26-tone RU	2, 1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
		802.11ax (HE20) 52-tone RU	2, 1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
		802.11ax (HE20) 106-tone RU	2, 1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
		802.11ax (HE20) 242-tone RU	2, 1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
		802.11ax (HE20) Full RU	2, 1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
		802.11ax (HE40) 26-tone RU	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
		802.11ax (HE40) 52-tone RU	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
		802.11ax (HE40) 106-tone RU	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
		802.11ax (HE40) 242-tone RU	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
		802.11ax (HE40) 484-tone RU	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
		802.11ax (HE40) Full RU	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
		802.11ax (HE80) 26-tone RU	7, 39, 87, 103, 119, 151, 183, 199, 215	BPSK	MCS0
		802.11ax (HE80) 52-tone RU	7, 39, 87, 103, 119, 151, 183, 199, 215	BPSK	MCS0
		802.11ax (HE80) 106-tone RU	7, 39, 87, 103, 119, 151, 183, 199, 215	BPSK	MCS0
		802.11ax (HE80) 242-tone RU	7, 39, 87, 103, 119, 151, 183, 199, 215	BPSK	MCS0
		802.11ax (HE80) 484-tone RU	7, 39, 87, 103, 119, 151, 183, 199, 215	BPSK	MCS0
		802.11ax (HE80) 996-tone RU	7, 39, 87, 103, 119, 151, 183, 199, 215	BPSK	MCS0
		802.11ax (HE80) Full RU	7, 39, 87, 103, 119, 151, 183, 199, 215	BPSK	MCS0

Test Item	EUT Configure Mode	Mode	Tested Channel	Modulation	Data Rate Parameter
Maximum RF Output Power	C	802.11ax (HE160) 26-tone RU	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
		802.11ax (HE160) 52-tone RU	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
		802.11ax (HE160) 106-tone RU	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
		802.11ax (HE160) 242-tone RU	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
		802.11ax (HE160) 484-tone RU	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
		802.11ax (HE160) 996-tone RU	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
		802.11ax (HE160) 2x996-tone RU	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
		802.11ax (HE160) Full RU	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
Maximum Power Spectral Density / Emission Bandwidth / In-Band Emission Mask / Occupied Bandwidth	C	802.11a	2, 1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	6Mb/s
		802.11ax (HE20) RU26	2, 1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
		802.11ax (HE20) RU52	2, 1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
		802.11ax (HE20) RU106	2, 1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
		802.11ax (HE20) Full RU	2, 1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
		802.11ax (HE40) Full RU	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
		802.11ax (HE80) Full RU	7, 39, 87, 103, 119, 151, 183, 199, 215	BPSK	MCS0
		802.11ax (HE160) Full RU	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
Contention-based Protocol	C	802.11ax (HE20) Full RU	45, 105, 149, 209	BPSK	MCS0
		802.11ax (HE160) Full RU	47, 111, 143, 207	BPSK	MCS0
AC Power Conducted Emissions	A	802.11ax (HE160) Full RU	207	BPSK	MCS0
Unwanted Emissions below 1 GHz	A, B	802.11ax (HE160) Full RU	207	BPSK	MCS0
Unwanted Emissions above 1 GHz	A	802.11a	2, 1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	6Mb/s
		802.11ax (HE20) Full RU	2, 1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
		802.11ax (HE40) Full RU	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
		802.11ax (HE80) Full RU	7, 39, 87, 103, 119, 151, 183, 199, 215	BPSK	MCS0
		802.11ax (HE160) Full RU	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
	B	802.11ax (HE20) Full RU	233	BPSK	MCS0
		802.11ax (HE20) RU26	2, 1, 93, 97, 113, 117, 181, 185, 233	BPSK	MCS0
		802.11ax (HE20) RU52	2, 1, 93, 97, 113, 117, 181, 185, 233	BPSK	MCS0
EUT Configure Mode:	A	802.11ax (HE20) RU106	2, 1, 93, 97, 113, 117, 181, 185, 233	BPSK	MCS0
		Sample A			
		Sample B			
	C	Sample C			

**Under controlled by Standard Power AP**

Following channel(s) was (were) selected for the final test as listed below:

Test Item	EUT Configure Mode	Mode	Tested Channel	Modulation	Data Rate Parameter
Maximum RF Output Power	C	802.11a	2, 1, 45, 93, 117, 149, 181	BPSK	6Mb/s
		802.11ax (HE20) 26-tone RU	2, 1, 45, 93, 117, 149, 181	BPSK	MCS0
		802.11ax (HE20) 52-tone RU	2, 1, 45, 93, 117, 149, 181	BPSK	MCS0
		802.11ax (HE20) 106-tone RU	2, 1, 45, 93, 117, 149, 181	BPSK	MCS0
		802.11ax (HE20) 242-tone RU	2, 1, 45, 93, 117, 149, 181	BPSK	MCS0
		802.11ax (HE20) Full RU	2, 1, 45, 93, 117, 149, 181	BPSK	MCS0
		802.11ax (HE40) 26-tone RU	3, 43, 91, 123, 155, 179	BPSK	MCS0
		802.11ax (HE40) 52-tone RU	3, 43, 91, 123, 155, 179	BPSK	MCS0
		802.11ax (HE40) 106-tone RU	3, 43, 91, 123, 155, 179	BPSK	MCS0
		802.11ax (HE40) 242-tone RU	3, 43, 91, 123, 155, 179	BPSK	MCS0
		802.11ax (HE40) 484-tone RU	3, 43, 91, 123, 155, 179	BPSK	MCS0
		802.11ax (HE40) Full RU	3, 43, 91, 123, 155, 179	BPSK	MCS0
		802.11ax (HE80) 26-tone RU	7, 39, 87, 135, 151, 167	BPSK	MCS0
		802.11ax (HE80) 52-tone RU	7, 39, 87, 135, 151, 167	BPSK	MCS0
		802.11ax (HE80) 106-tone RU	7, 39, 87, 135, 151, 167	BPSK	MCS0
		802.11ax (HE80) 242-tone RU	7, 39, 87, 135, 151, 167	BPSK	MCS0
		802.11ax (HE80) 484-tone RU	7, 39, 87, 135, 151, 167	BPSK	MCS0
		802.11ax (HE80) 996-tone RU	7, 39, 87, 119, 135, 151, 167	BPSK	MCS0
		802.11ax (HE80) Full RU	7, 39, 87, 119, 135, 151, 167	BPSK	MCS0
		802.11ax (HE160) 26-tone RU	15, 47, 79, 143	BPSK	MCS0
		802.11ax (HE160) 52-tone RU	15, 47, 79, 143	BPSK	MCS0
		802.11ax (HE160) 106-tone RU	15, 47, 79, 143	BPSK	MCS0
		802.11ax (HE160) 242-tone RU	15, 47, 79, 143	BPSK	MCS0
		802.11ax (HE160) 484-tone RU	15, 47, 79, 143	BPSK	MCS0
		802.11ax (HE160) 996-tone RU	15, 47, 79, 143	BPSK	MCS0
		802.11ax (HE160) 2x996-tone RU	15, 47, 79, 143	BPSK	MCS0
		802.11ax (HE160) Full RU	15, 47, 79, 143	BPSK	MCS0
Maximum Power Spectral Density / Emission Bandwidth / In-Band Emission Mask / Occupied Bandwidth	C	802.11a	2, 1, 45, 93, 117, 149, 181	BPSK	6Mb/s
		802.11ax (HE20) 26-tone RU	2, 1, 45, 93, 117, 149, 181	BPSK	MCS0
		802.11ax (HE20) 52-tone RU	2, 1, 45, 93, 117, 149, 181	BPSK	MCS0
		802.11ax (HE20) 106-tone RU	2, 1, 45, 93, 117, 149, 181	BPSK	MCS0
		802.11ax (HE20) Full RU	2, 1, 45, 93, 117, 149, 181	BPSK	6Mb/s
		802.11ax (HE40) Full RU	3, 43, 91, 123, 155, 179	BPSK	MCS0
		802.11ax (HE80) Full RU	7, 39, 87, 119, 135, 151, 167	BPSK	MCS0
		802.11ax (HE160) Full RU	15, 47, 79, 143	BPSK	MCS0
Frequency Stability	C	802.11a	2	unmodulated	MCS0



BUREAU  
VERITAS

Test Item	EUT Configure Mode	Mode	Tested Channel	Modulation	Data Rate Parameter
AC Power Conducted Emissions	A	802.11a	1	BPSK	6Mb/s
Unwanted Emissions below 1 GHz	A, B	802.11a	1	BPSK	6Mb/s
Unwanted Emissions above 1 GHz	A	802.11a	2, 1, 45, 93, 117, 149, 181	BPSK	6Mb/s
		802.11ax (HE20) Full RU	2, 1, 45, 93, 117, 149, 181	BPSK	MCS0
		802.11ax (HE40) Full RU	3, 43, 91, 123, 155, 179	BPSK	MCS0
		802.11ax (HE80) Full RU	7, 39, 87, 135, 151, 167	BPSK	MCS0
		802.11ax (HE160) Full RU	15, 47, 79, 143	BPSK	MCS0
	B	802.11ax (HE20) Full RU	2	BPSK	MCS0
	A	802.11ax (HE20) RU26	2, 1, 93, 117, 181	BPSK	MCS0
		802.11ax (HE20) RU52	2, 1, 93, 117, 181	BPSK	MCS0
		802.11ax (HE20) RU106	2, 1, 93, 117, 181	BPSK	MCS0
EUT Configure Mode:	A	Sample A			
	B	Sample B			
	C	Sample C			

### 3.5 Duty Cycle of Test Signal

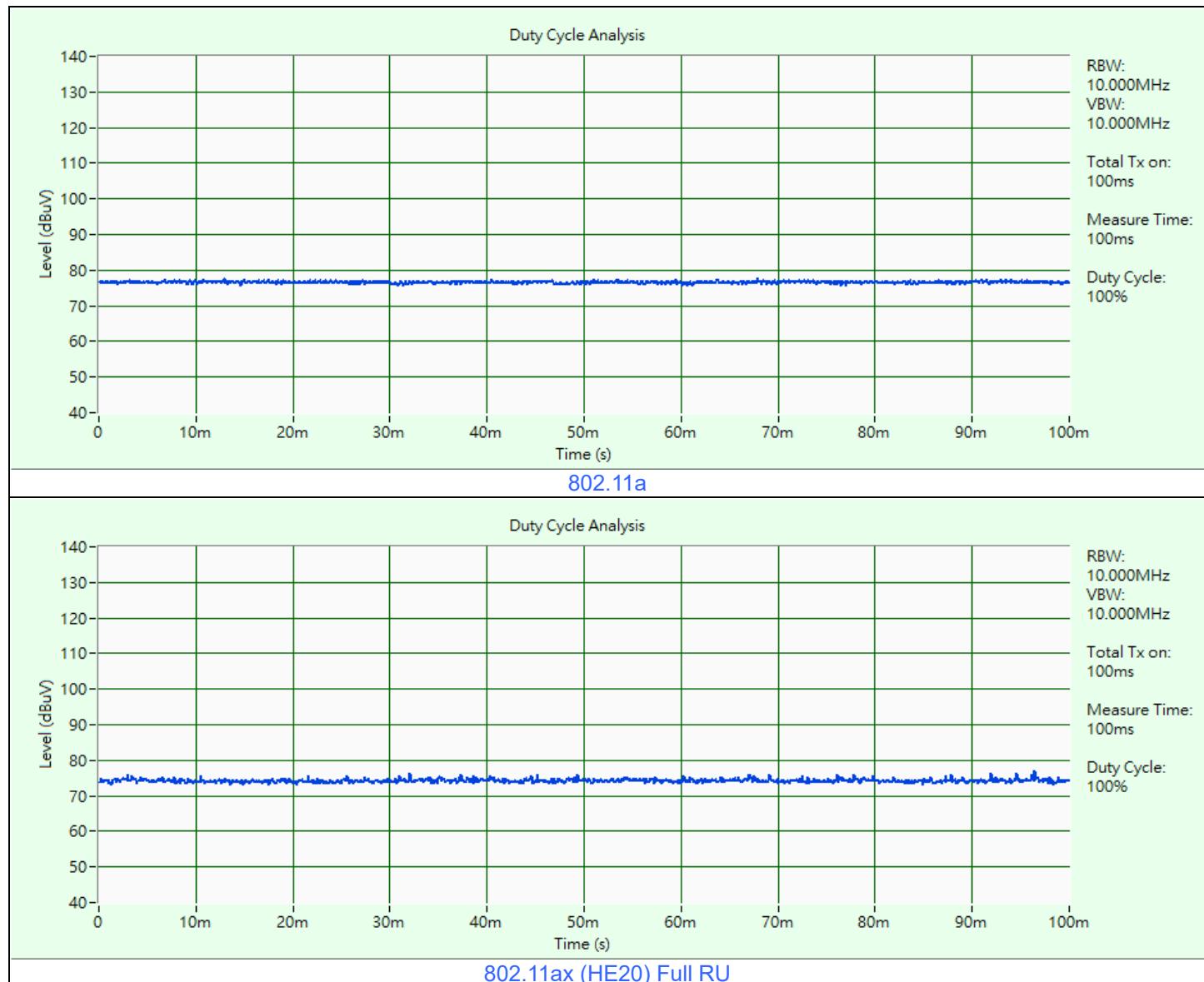
**802.11a:** Duty cycle = 100 ms / 100 ms x 100% = 100.0%

**802.11ax (HE20) Full RU:** Duty cycle = 100 ms / 100 ms x 100% = 100.0%

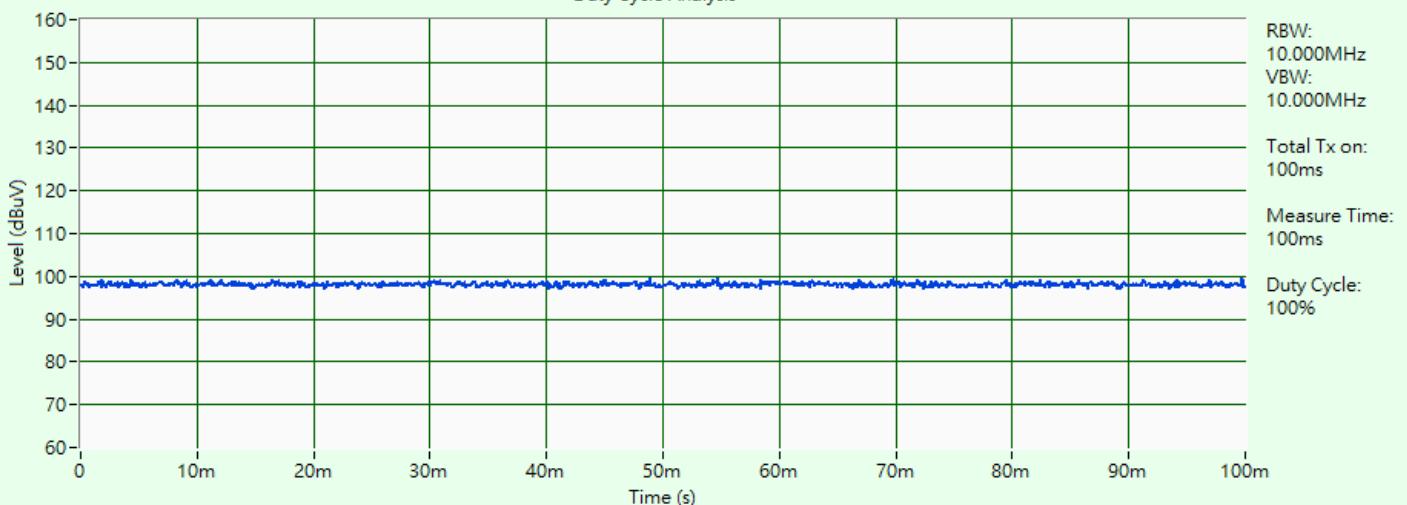
**802.11ax (HE40) Full RU:** Duty cycle = 100 ms / 100 ms x 100% = 100.0%

**802.11ax (HE80) Full RU:** Duty cycle = 2.557 ms / 2.567 ms x 100% = 99.6%

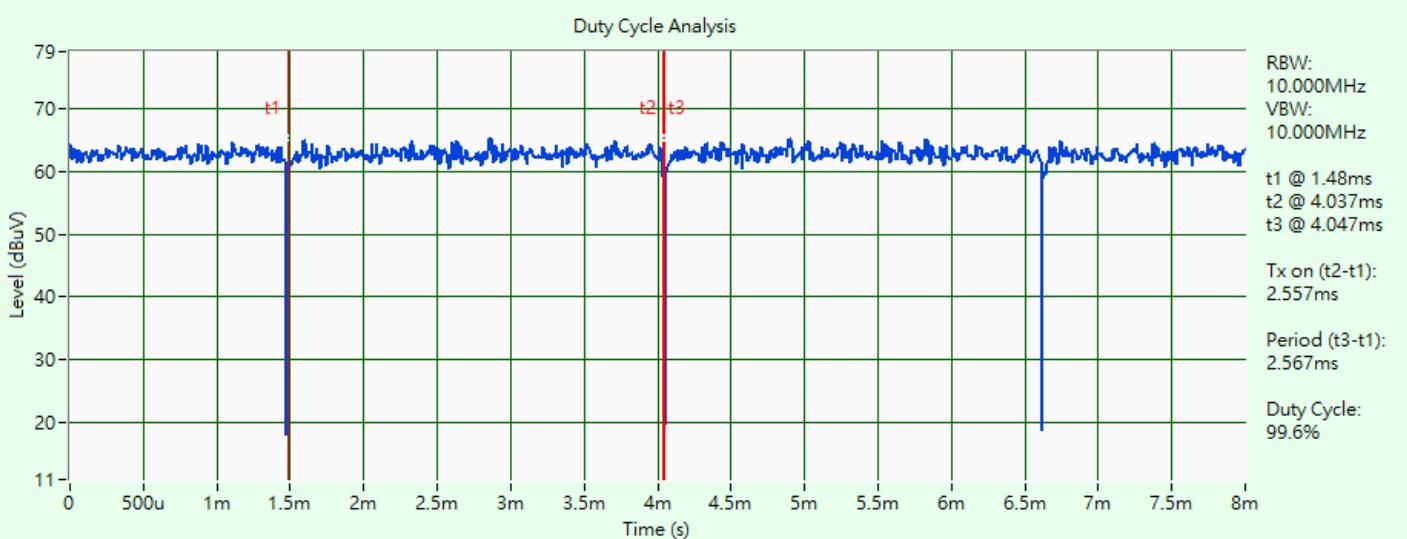
**802.11ax (HE160) Full RU:** Duty cycle = 2.219 ms / 2.222 ms x 100% = 99.9%



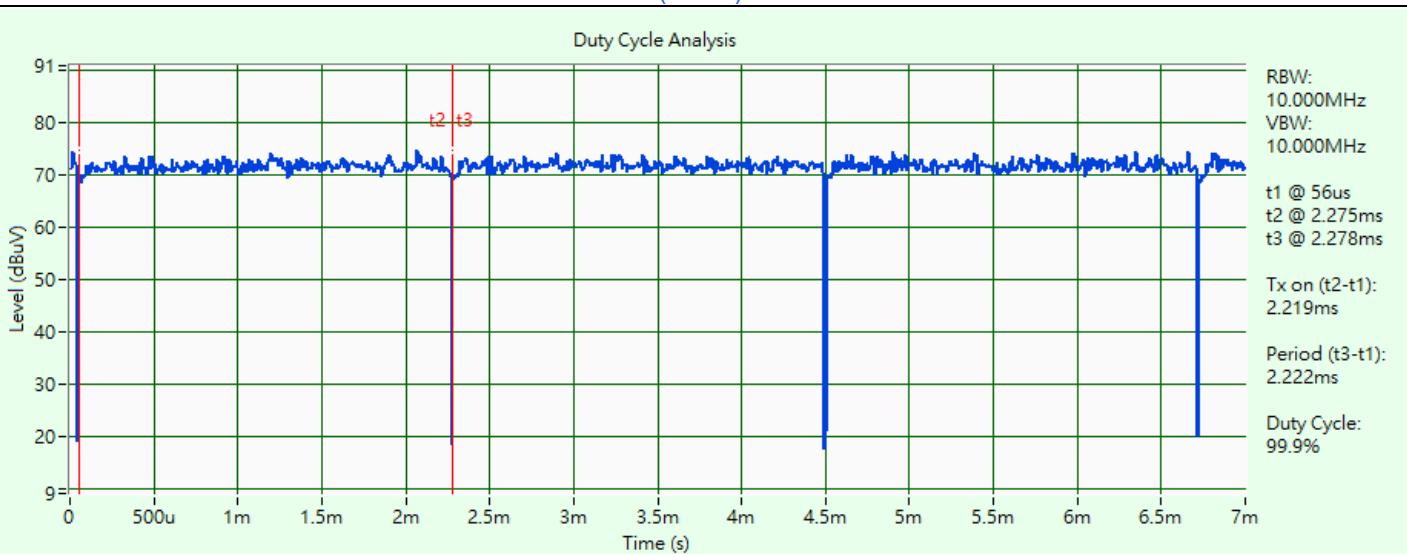
## Duty Cycle Analysis



## 802.11ax (HE40) Full RU



## 802.11ax (HE80) Full RU

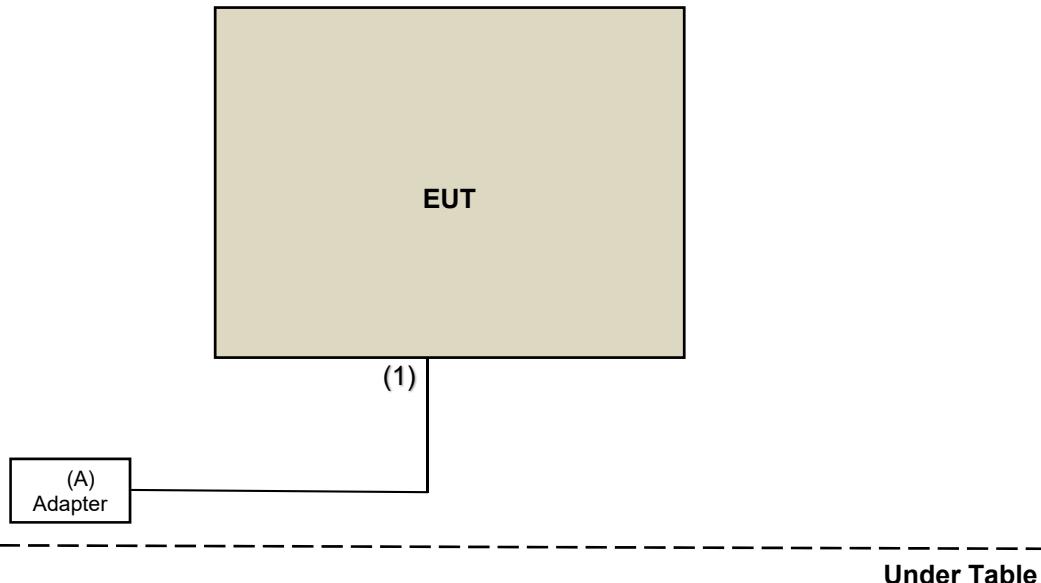


## 802.11ax (HE160) Full RU

### 3.6 Test Program Used and Operation Descriptions

Controlling software QRCT4 Version 4.0.211.0 has been activated to set the EUT under transmission condition continuously at specific channel frequency.

### 3.7 Connection Diagram of EUT and Peripheral Devices



### 3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Adapter	CWT	2ACP0183C	N/A	N/A	Supplied by applicant

No.	Cable Descriptions	Qty.	Length (m)	Shielded (Yes/ No)	Cores (Qty.)	Remark
1.	USB Cable	1	1.5	Yes	0	Supplied by applicant

## 4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

### 4.1 Maximum RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Peak Power Analyzer Keysight	8990B	MY51000485	2024/1/21	2025/1/20
Wideband Power Sensor Keysight	N1923A	MY58020002	2024/1/18	2025/1/17
		MY58140009	2024/1/18	2025/1/17

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/2/18 ~ 2024/2/26

### 4.2 Maximum Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Signal & Spectrum Analyzer R&S	FSV3044	101504	2023/6/5	2024/6/4
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/2/18 ~ 2024/2/26

### 4.3 Emission Bandwidth

Refer to section 4.2 to get information of the instruments.

### 4.4 In-Band Emission Mask

Refer to section 4.2 to get information of the instruments.

### 4.5 Occupied Bandwidth

Refer to section 4.2 to get information of the instruments.

#### 4.6 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
3-channel DC power supply JIN YIH Technology	ODP3033	ODP30332128138	N/A	N/A
Digital Multimeter Fluke	87-III	70360742	2023/7/6	2024/7/5
Signal & Spectrum Analyzer R&S	FSV3044	101504	2023/6/5	2024/6/4
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
Temperature & Humidity Chamber Terchy	HRM-120RF	931022	2023/12/19	2024/12/18

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/2/18 ~ 2024/2/26

#### 4.7 Contention-based Protocol

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
EXA Signal Analyzer Agilent	N9010A	MY52220207	2023/1/3	2024/1/2
			2023/12/28	2024/12/27
MXG Vector Signal Generator Agilent	N5182B	MY53050430	2023/12/4	2024/12/3
MXG Vector Signal Generator Keysight	N5182BU	MY59360189	2023/12/4	2024/12/3
Power Divider Woken	0120A02058001M	DCMD33WIK3	2023/5/5	2024/5/4
		DCMD33WIK7	2023/5/5	2024/5/4

Notes:

1. The test was performed in Adaptivity room.
2. Tested Date: 2023/12/18 ~ 2024/2/23

#### 4.8 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance HUBER+SUHNER	E1-011276	01	2023/2/1	2024/1/31
	E1-011312	10	2023/1/30	2024/1/29
	E1-011591	17	2023/2/1	2024/1/31
DC-LISN Schwarzbeck	NNBM 8126G	8126G-069	2023/11/7	2024/11/6
EMI Test Receiver R&S	ESR3	102783	2023/12/13	2024/12/12
Fixed Attenuator SGH	BNC10W10dB	PAD-COND2-01	2023/9/2	2024/9/1
LISN R&S	ESH2-Z5	100100	2023/3/7	2024/3/6
	ESH3-Z5	100312	2023/9/12	2024/9/11
RF Coaxial Cable Woken	5D-FB	Cable-cond2-01	2023/9/2	2024/9/1
Software BVADT	BVADT_Cond_V7.3.7.4	N/A	N/A	N/A
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2023/8/31	2024/8/30

Notes:

1. The test was performed in HY - Conduction 2.
2. Tested Date: 2024/1/19

#### 4.9 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower & Turn BV ADT	AT100	AT93021705	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-160	2023/10/17	2024/10/16
Loop Antenna Electro-Metrics	EM-6879	269	2023/9/23	2024/9/22
Loop Antenna TESEQ	HLA 6121	45745	2023/8/8	2024/8/7
MXE EMI Receiver Keysight	N9038A	MY55420137	2023/5/3	2024/5/2
Preamplifier Agilent	8447D	2944A10638	2023/5/7	2024/5/6
RF Coaxial Cable Woken	8D-FB	Cable-CH9-01	2023/5/7	2024/5/6
Signal & Spectrum Analyzer R&S	FSW43	101867	2023/12/29	2024/12/28
Software BV ADT	ADT_Radiated_V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 4.
2. Tested Date: 2024/2/1 ~ 2024/2/20

#### 4.10 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower & Turn BV ADT	AT100	AT93021705	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	5	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-1169	2023/11/12	2024/11/11
	BBHA 9170	9170-480	2023/11/12	2024/11/11
		BBHA9170243	2023/11/12	2024/11/11
MXE EMI Receiver Keysight	N9038A	MY55420137	2023/5/3	2024/5/2
Notch Filter Micro-Tronics	BRM50716	060	2023/12/25	2024/12/24
Preamplifier Agilent	8449B	3008A02367	2024/1/6	2025/1/5
Preamplifier EMCI	EMC 184045	980116	2023/9/27	2024/9/26
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2023/7/8	2024/7/7
	EMC102-KM-KM-3000	150929	2023/7/8	2024/7/7
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-(250795/4)	2024/1/6	2025/1/5
RF Coaxial Cable HUBER+SUHNER&EMCI	SUCOFLEX 104& EMC104-SM-SM8000	CABLE-CH9-02 (248780+171006)	2024/1/6	2025/1/5
Signal & Spectrum Analyzer R&S	FSW43	101867	2023/12/29	2024/12/28
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 4.
2. Tested Date: 2024/1/17 ~ 2024/2/25

## 5 Limits of Test Items

### 5.1 Maximum RF Output Power

Operation Band	Equipment Class	Limit
		Maximum Average Power
U-NII-5 U-NII-6 U-NII-7 U-NII-8	6CD: 15E 6 GHz Dual client (under control of a low-power indoor access point)	EIRP 24 dBm
U-NII-5 U-NII-7	6CD: 15E 6 GHz Dual client (under control of a Standard power access point)	EIRP 30 dBm

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  $\geq 40$  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.

### 5.2 Maximum Power Spectral Density

Operation Band	Equipment Class	Limit
		Maximum Power Density
U-NII-5 U-NII-6 U-NII-7 U-NII-8	6CD: 15E 6 GHz Dual client (under control of a low-power indoor access point)	EIRP -1 dBm/MHz
U-NII-5 U-NII-7	6CD: 15E 6 GHz Dual client (under control of a Standard power access point)	EIRP 17 dBm/MHz

### 5.3 Emission Bandwidth

The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 MHz.

## 5.4 In-Band Emission Mask

Test Item	Frequencies (MHz)	(X) dBc <sup>*1</sup>
Emission Mask	At 1 MHz outside of channel edge	20
	At one channel bandwidth from the channel center <sup>*2</sup>	28
	At one- and one-half times the channel bandwidth away from channel center <sup>*3</sup>	40
	More than one- and one-half times the channel bandwidth	40

<sup>\*1</sup> : The power spectral density must be suppressed by "x" dB

<sup>\*2</sup> : At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression,

<sup>\*3</sup> : At frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression.

## 5.5 Occupied Bandwidth

The results are for reference only.

## 5.6 Frequency Stability

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

## 5.7 Contention-based Protocol

Unlicensed indoor low-power devices must detect co-channel radio frequency power that is at least -62 dBm (The threshold is referenced to a 0 dBi antenna gain.) or lower. Additionally, indoor low-power devices must detect co-channel energy with 90% or greater certainty.

## 5.8 AC Power Conducted Emissions

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

Notes:

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 0.50 MHz.

## 5.9 Unwanted Emissions below 1 GHz

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

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

## 5.10 Unwanted Emissions above 1 GHz

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)
Above 960	500	3

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000 MHz, 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 20 dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

Frequencies (MHz)	EIRP Limit	Equivalent Field Strength at 3 m
5925 MHz > F > 7125 MHz	Peak: -7 (dBm/MHz)	88.2 (dBuV/m)
	Average: -27 (dBm/MHz)	68.2 (dBuV/m)

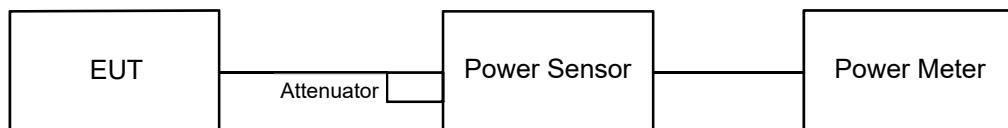
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

## 6 Test Arrangements

### 6.1 Maximum RF Output Power

#### 6.1.1 Test Setup

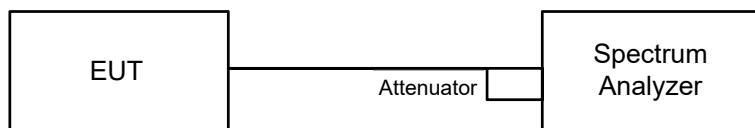


#### 6.1.2 Test Procedure

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 and set the detector to average. Duty factor is not added to measured value.

### 6.2 Maximum Power Spectral Density

#### 6.2.1 Test Setup



#### 6.2.2 Test Procedure

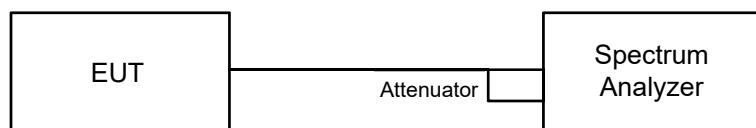
##### For specified measurement bandwidth 1 MHz:

Method SA-1

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz, Set VBW  $\geq$  3 MHz, Detector = RMS
- Sweep points  $\geq [2 \times \text{span} / \text{RBW}]$ . (This gives bin-to-bin spacing  $\leq \text{RBW} / 2$ , so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto, trigger set to “free run”.
- Trace average at least 100 traces in power averaging mode.
- Record the max value

### 6.3 Emission Bandwidth

#### 6.3.1 Test Setup

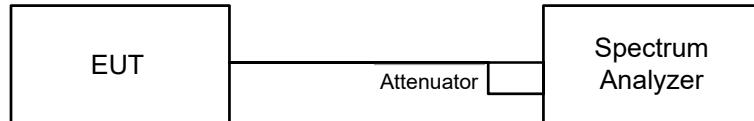


#### 6.3.2 Test Procedure

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW  $>$  RBW.
- Detector = Peak.
- Trace mode = max hold.
- 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%.

## 6.4 In-Band Emission Mask

### 6.4.1 Test Setup

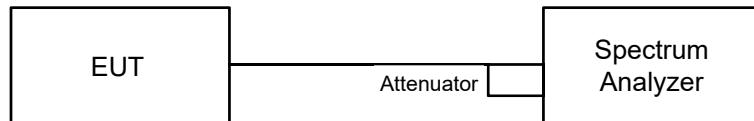


### 6.4.2 Test Procedure

- a. Connect output of the antenna port to a spectrum analyzer and adjust appropriate attenuation.
- b. Measure the 26 dB EBW using the test procedure 12.4.1 of ANSI C63.10-2013. (Determine the channel edge.)
- c. Measure the power spectral density (for emissions mask reference) using the following procedure:
  - a) Set the span to encompass the entire 26 dB EBW of the signal.
  - b) Set RBW = same RBW used for 26 dB EBW measurement.
  - c) Set VBW  $\geq [3 \times \text{RBW}]$ .
  - d) Number of points in sweep  $\geq [2 \times \text{span} / \text{RBW}]$ .
  - e) Sweep time = auto.
  - f) Detector = RMS (i.e., power averaging).
  - g) Trace average at least 100 traces in power averaging (rms) mode.
  - h) Use the peak search function on the instrument to find the peak of the spectrum.
- d. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows:
  - a) Suppressed by 20 dB at 1 MHz outside of the channel edge. (The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)
  - b) Suppressed by 28 dB at one channel bandwidth from the channel center.
  - c) Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
- e. Adjust the span to encompass the entire mask as necessary and clear trace.
- f. Trace average at least 100 traces in power averaging (rms) mode.
- g. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask

## 6.5 Occupied Bandwidth

### 6.5.1 Test Setup

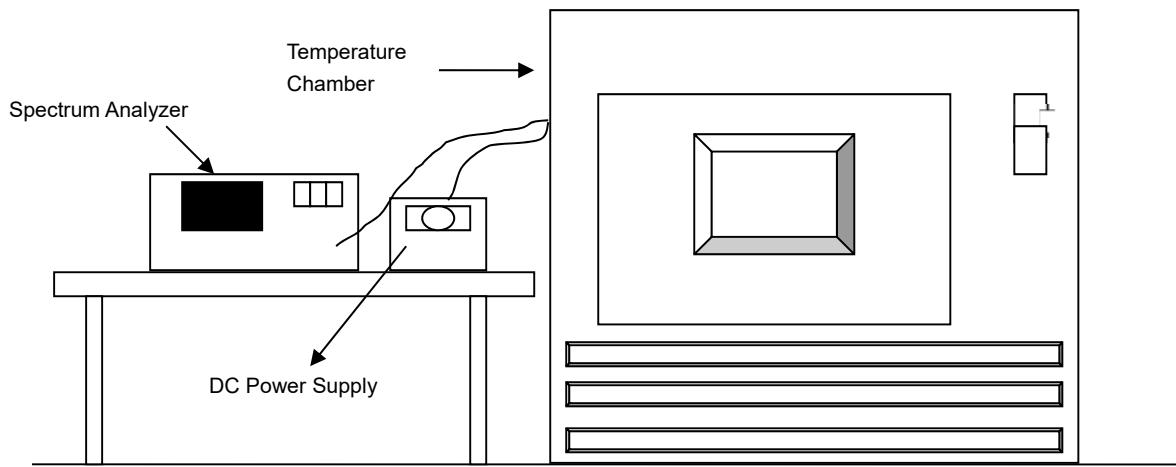


### 6.5.2 Test Procedure

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

## 6.6 Frequency Stability

### 6.6.1 Test Setup

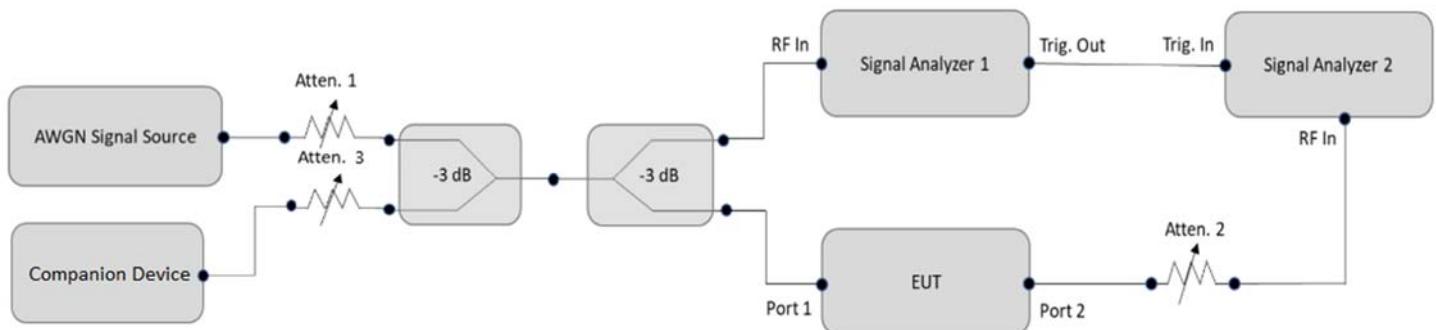


### 6.6.2 Test Procedure

- a. The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
- b. Turn the EUT on and couple its output to a spectrum analyzer.
- c. Turn the EUT off and set the chamber to the highest temperature specified.
- d. 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.
- e. Repeat step (d) with the temperature chamber set to the next desired temperature until measurements down to the lowest specified temperature have been completed.
- f. 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.

## 6.7 Contention-based Protocol

### 6.7.1 Test Setup



### 6.7.2 Test Procedure

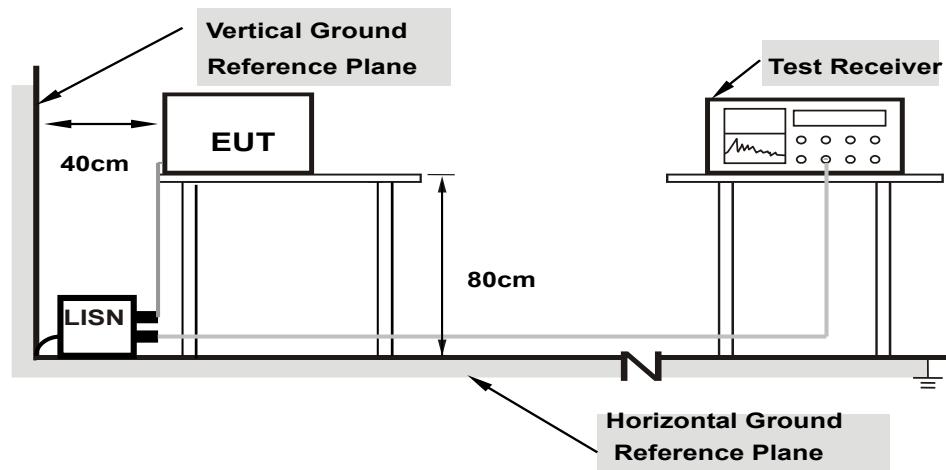
- Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
- Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters (set as following section 4.7.5 EUT operating condition).
- Determine number of times detection threshold test as following table,

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leq BW_{Inc}$	Once	Same as EUT transmission
$BW_{Inc} < BW_{EUT} \leq 2xBW_{Inc}$	Once	Contained within $BW_{EUT}$
$2xBW_{Inc} < BW_{EUT} \leq 4xBW_{Inc}$	Twice. (Incumbent transmission is contained within $BW_{EUT}$ )	Closely to the lower edge and upper edge of the EUT Channel
$BW_{EUT} > 4xBW_{Inc}$	Three times	Closely to the lower edge ,in the middle and upper edge of the EUT Channel

- Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use step c table to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
- Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT.
- Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
- Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
- (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
- Refer to step c table to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step d, choose a different center frequency for the AWGN signal and repeat the process.

## 6.8 AC Power Conducted Emissions

### 6.8.1 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).

### 6.8.2 Test Procedure

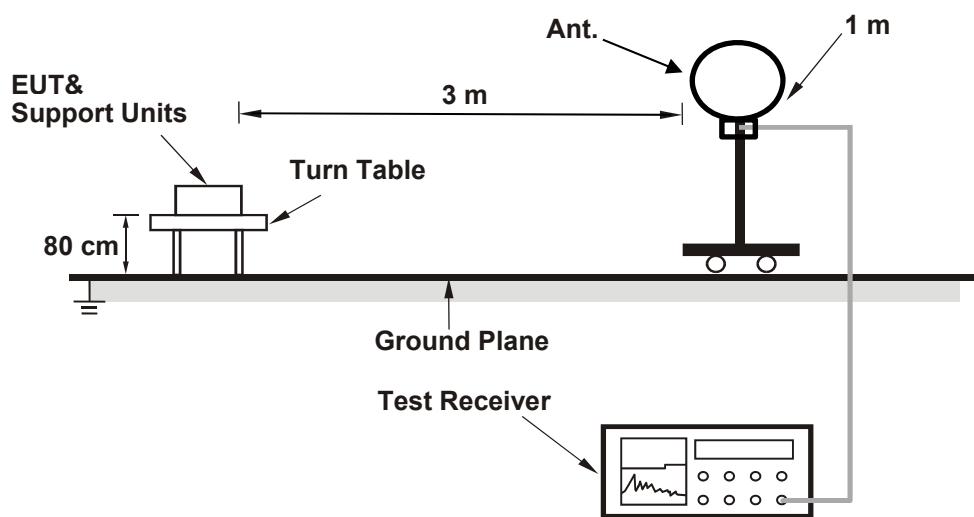
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50 uH 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 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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

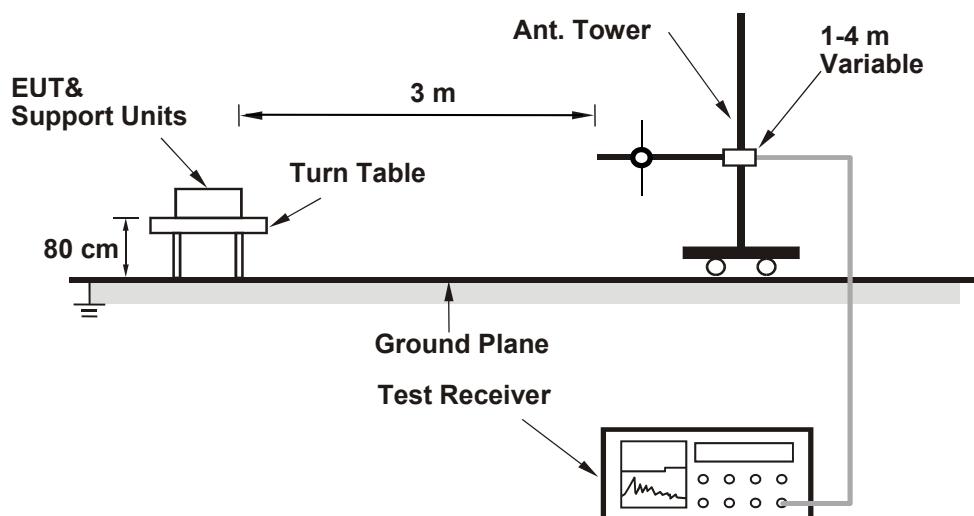
## 6.9 Unwanted Emissions below 1 GHz

### 6.9.1 Test Setup

**For Radiated emission below 30 MHz**



**For Radiated emission above 30 MHz**



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

## 6.9.2 Test Procedure

### For Radiated emission below 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters 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. 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, except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency (150 kHz to 30 MHz).
3. All modes of operation were investigated and the worst-case emissions are reported.

### For Radiated emission above 30 MHz

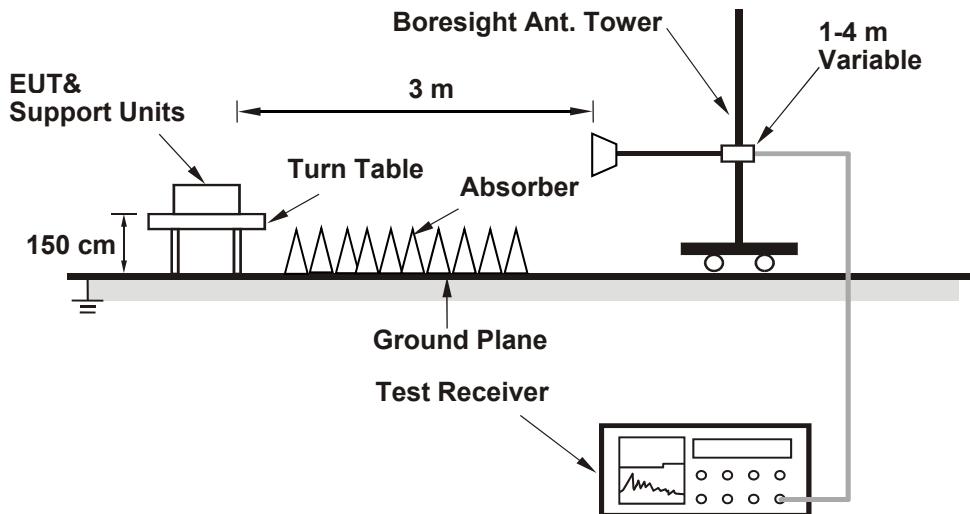
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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.

Notes:

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

## 6.10 Unwanted Emissions above 1 GHz

### 6.10.1 Test Setup



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

### 6.10.2 Test Procedure

- a. The EUT was placed on the top of a rotating table 1.5 meters 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 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.

Notes:

1. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) and Average detection (AV) at frequency above 1 GHz.
2. For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is  $\geq 1/T$  (Duty cycle  $< 98\%$ ) or 10 Hz (Duty cycle  $\geq 98\%$ ) for Average detection (AV) at frequency above 1 GHz.
3. All modes of operation were investigated and the worst-case emissions are reported.

## 7 Test Results of Test Item

### 7.1 Maximum RF Output Power

Input Power:	3.86 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu
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**Under controlled by Low-Power Indoor AP**

**802.11a**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
2	5935	2.05	3.12	3.654	5.63	1.60	5.282	7.23	24	Pass
1	5955	1.86	3.02	3.539	5.49	1.60	5.115	7.09	24	Pass
45	6175	2.82	0.19	2.959	4.71	1.60	4.277	6.31	24	Pass
93	6415	2.23	0.89	2.899	4.62	1.60	4.19	6.22	24	Pass
97	6435	2.83	1.55	3.348	5.25	1.20	4.414	6.45	24	Pass
105	6475	2.91	1.85	3.485	5.42	1.20	4.594	6.62	24	Pass
113	6515	2.89	2.09	3.563	5.52	1.20	4.697	6.72	24	Pass
117	6535	2.99	2.16	3.635	5.61	0.60	4.174	6.21	24	Pass
149	6695	3.54	2.67	4.109	6.14	0.60	4.718	6.74	24	Pass
181	6855	3.68	1.81	3.851	5.86	0.60	4.422	6.46	24	Pass
185	6875	2.65	1.42	3.228	5.09	1.30	4.354	6.39	24	Pass
209	6995	2.91	2.11	3.58	5.54	1.30	4.829	6.84	24	Pass
233	7115	2.87	1.83	3.46	5.39	1.30	4.667	6.69	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

**802.11ax (HE20) 26-tone RU**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
2	5935	-7.55	-6.64	0.3926	-4.06	1.60	0.5675	-2.46	24	Pass
1	5955	-8.25	-4.75	0.4842	-3.15	1.60	0.6999	-1.55	24	Pass
45	6175	-8.23	-5.97	0.4033	-3.94	1.60	0.5829	-2.34	24	Pass
93	6415	-7.85	-6.28	0.3998	-3.98	1.60	0.5779	-2.38	24	Pass
97	6435	-7.20	-6.11	0.4355	-3.61	1.20	0.5741	-2.41	24	Pass
105	6475	-7.77	-6.01	0.4179	-3.79	1.20	0.5509	-2.59	24	Pass
113	6515	-7.92	-6.37	0.3918	-4.07	1.20	0.5165	-2.87	24	Pass
117	6535	-6.98	-5.72	0.4679	-3.30	0.60	0.5372	-2.7	24	Pass
149	6695	-6.14	-6.24	0.4806	-3.18	0.60	0.5518	-2.58	24	Pass
181	6855	-6.90	-6.08	0.4506	-3.46	0.60	0.5174	-2.86	24	Pass
185	6875	-7.56	-6.80	0.3844	-4.15	1.30	0.5185	-2.85	24	Pass
209	6995	-5.76	-5.65	0.538	-2.69	1.30	0.7257	-1.39	24	Pass
233	7115	-8.65	-8.57	0.2754	-5.60	1.30	0.3715	-4.3	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

**802.11ax (HE20) 52-tone RU**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
2	5935	-7.45	-6.59	0.3992	-3.99	1.60	0.577	-2.39	24	Pass
1	5955	-5.24	-1.72	0.972	-0.12	1.60	1.405	1.48	24	Pass
45	6175	-5.16	-2.91	0.8165	-0.88	1.60	1.18	0.72	24	Pass
93	6415	-4.83	-3.24	0.8027	-0.95	1.60	1.16	0.65	24	Pass
97	6435	-4.12	-3.02	0.8855	-0.53	1.20	1.167	0.67	24	Pass
105	6475	-4.71	-2.97	0.8423	-0.75	1.20	1.11	0.45	24	Pass
113	6515	-4.89	-3.28	0.7949	-1.00	1.20	1.048	0.2	24	Pass
117	6535	-3.94	-2.62	0.9502	-0.22	0.60	1.091	0.38	24	Pass
149	6695	-3.06	-3.16	0.9776	-0.10	0.60	1.122	0.5	24	Pass
181	6855	-3.86	-3.01	0.9117	-0.40	0.60	1.047	0.2	24	Pass
185	6875	-4.54	-3.79	0.7698	-1.14	1.30	1.038	0.16	24	Pass
209	6995	-2.71	-2.61	1.0845	0.35	1.30	1.463	1.65	24	Pass
233	7115	-8.56	-8.47	0.2817	-5.50	1.30	0.38	-4.2	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

**802.11ax (HE20) 106-tone RU**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
2	5935	-7.37	-6.51	0.4066	-3.91	1.60	0.5877	-2.31	24	Pass
1	5955	-2.24	1.33	1.9543	2.91	1.60	2.825	4.51	24	Pass
45	6175	-2.12	0.15	1.6479	2.17	1.60	2.382	3.77	24	Pass
93	6415	-1.82	-0.15	1.6246	2.11	1.60	2.348	3.71	24	Pass
97	6435	-1.11	0.00	1.7744	2.49	1.20	2.339	3.69	24	Pass
105	6475	-1.65	0.11	1.7101	2.33	1.20	2.254	3.53	24	Pass
113	6515	-1.83	-0.18	1.6153	2.08	1.20	2.129	3.28	24	Pass
117	6535	-0.94	0.42	1.9075	2.80	0.60	2.19	3.4	24	Pass
149	6695	0.00	-0.13	1.9706	2.95	0.60	2.263	3.55	24	Pass
181	6855	-0.80	0.05	1.8451	2.66	0.60	2.118	3.26	24	Pass
185	6875	-1.50	-0.70	1.5593	1.93	1.30	2.103	3.23	24	Pass
209	6995	0.38	0.45	2.201	3.43	1.30	2.969	4.73	24	Pass
233	7115	-8.53	-8.45	0.2834	-5.48	1.30	0.3823	-4.18	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

**802.11ax (HE20) 242-tone RU**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
2	5935	-7.33	-6.45	0.4114	-3.86	1.60	0.5947	-2.26	24	Pass
1	5955	0.64	4.31	3.857	5.86	1.60	5.575	7.46	24	Pass
45	6175	0.84	2.84	3.136	4.96	1.60	4.533	6.56	24	Pass
93	6415	1.25	2.85	3.262	5.13	1.60	4.715	6.73	24	Pass
97	6435	1.88	2.67	3.391	5.30	1.20	4.47	6.5	24	Pass
105	6475	1.38	3.17	3.448	5.38	1.20	4.545	6.58	24	Pass
113	6515	1.19	2.53	3.106	4.92	1.20	4.095	6.12	24	Pass
117	6535	2.16	3.50	3.881	5.89	0.60	4.456	6.49	24	Pass
149	6695	2.84	2.89	3.868	5.87	0.60	4.441	6.47	24	Pass
181	6855	2.05	2.88	3.544	5.49	0.60	4.069	6.09	24	Pass
185	6875	1.50	2.33	3.123	4.95	1.30	4.213	6.25	24	Pass
209	6995	3.26	3.24	4.227	6.26	1.30	5.702	7.56	24	Pass
233	7115	-8.63	-8.42	0.281	-5.51	1.30	0.3791	-4.21	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

**802.11ax (HE20) Full RU**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
2	5935	-7.24	-6.34	0.4211	-3.76	1.60	0.6087	-2.16	24	Pass
1	5955	2.92	3.02	3.963	5.98	1.60	5.728	7.58	24	Pass
45	6175	3.13	0.51	3.18	5.02	1.60	4.596	6.62	24	Pass
93	6415	2.77	1.49	3.302	5.19	1.60	4.773	6.79	24	Pass
97	6435	3.12	1.86	3.586	5.55	1.20	4.727	6.75	24	Pass
105	6475	2.91	1.91	3.507	5.45	1.20	4.623	6.65	24	Pass
113	6515	2.33	1.65	3.172	5.01	1.20	4.182	6.21	24	Pass
117	6535	3.28	2.52	3.915	5.93	0.60	4.495	6.53	24	Pass
149	6695	3.85	1.74	3.919	5.93	0.60	4.5	6.53	24	Pass
181	6855	3.16	1.86	3.605	5.57	0.60	4.139	6.17	24	Pass
185	6875	2.53	1.31	3.143	4.97	1.30	4.24	6.27	24	Pass
209	6995	3.65	2.96	4.294	6.33	1.30	5.792	7.63	24	Pass
233	7115	-8.31	-8.59	0.2859	-5.44	1.30	0.3857	-4.14	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

**802.11ax (HE40) 26-tone RU**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
3	5965	-8.36	-5.26	0.4437	-3.53	1.60	0.6413	-1.93	24	Pass
43	6165	-8.33	-6.13	0.3907	-4.08	1.60	0.5647	-2.48	24	Pass
91	6405	-7.94	-6.35	0.3924	-4.06	1.60	0.5672	-2.46	24	Pass
99	6445	-7.46	-6.59	0.3988	-3.99	1.20	0.5257	-2.79	24	Pass
107	6485	-7.85	-6.74	0.376	-4.25	1.20	0.4957	-3.05	24	Pass
115	6525	-8.15	-7.17	0.345	-4.62	1.20	0.4548	-3.42	24	Pass
123	6565	-7.05	-5.89	0.4549	-3.42	0.60	0.5223	-2.82	24	Pass
155	6725	-6.79	-6.34	0.4415	-3.55	0.60	0.5069	-2.95	24	Pass
179	6845	-6.99	-6.42	0.428	-3.69	0.60	0.4914	-3.09	24	Pass
187	6885	-7.59	-7.17	0.3658	-4.37	1.30	0.4935	-3.07	24	Pass
211	7005	-5.84	-6.24	0.4984	-3.02	1.30	0.6723	-1.72	24	Pass
227	7085	-8.72	-8.73	0.2682	-5.72	1.30	0.3618	-4.42	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

**802.11ax (HE40) 52-tone RU**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
3	5965	-5.05	-2.24	0.9096	-0.41	1.60	1.315	1.19	24	Pass
43	6165	-5.29	-3.13	0.7822	-1.07	1.60	1.131	0.53	24	Pass
91	6405	-4.92	-4.20	0.702	-1.54	1.60	1.015	0.06	24	Pass
99	6445	-4.41	-3.53	0.8059	-0.94	1.20	1.062	0.26	24	Pass
107	6485	-4.77	-3.74	0.7562	-1.21	1.20	0.9969	-0.01	24	Pass
115	6525	-5.05	-4.11	0.7002	-1.55	1.20	0.923	-0.35	24	Pass
123	6565	-4.51	-2.77	0.8823	-0.54	0.60	1.013	0.06	24	Pass
155	6725	-4.59	-2.84	0.8675	-0.62	0.60	0.996	-0.02	24	Pass
179	6845	-3.91	-3.40	0.8638	-0.64	0.60	0.9918	-0.04	24	Pass
187	6885	-4.57	-4.12	0.7362	-1.33	1.30	0.9931	-0.03	24	Pass
211	7005	-2.79	-3.19	1.0058	0.03	1.30	1.357	1.33	24	Pass
227	7085	-8.69	-8.55	0.2748	-5.61	1.30	0.3707	-4.31	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

**802.11ax (HE40) 106-tone RU**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
3	5965	-2.31	1.02	1.8522	2.68	1.60	2.677	4.28	24	Pass
43	6165	-2.22	0.04	1.609	2.07	1.60	2.326	3.67	24	Pass
91	6405	-1.87	-0.89	1.4654	1.66	1.60	2.118	3.26	24	Pass
99	6445	-1.37	-0.46	1.6297	2.12	1.20	2.148	3.32	24	Pass
107	6485	-1.69	-0.72	1.5252	1.83	1.20	2.011	3.03	24	Pass
115	6525	-2.01	-1.08	1.4104	1.49	1.20	1.859	2.69	24	Pass
123	6565	-0.97	0.35	1.8841	2.75	0.60	2.163	3.35	24	Pass
155	6725	-0.55	-0.16	1.8449	2.66	0.60	2.118	3.26	24	Pass
179	6845	-0.89	-0.38	1.7319	2.39	0.60	1.988	2.99	24	Pass
187	6885	-1.56	-1.02	1.4879	1.73	1.30	2.007	3.03	24	Pass
211	7005	0.32	-0.13	2.0462	3.11	1.30	2.76	4.41	24	Pass
227	7085	-8.62	-8.51	0.2783	-5.55	1.30	0.3754	-4.25	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

**802.11ax (HE40) 242-tone RU**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
3	5965	0.62	4.26	3.82	5.82	1.60	5.522	7.42	24	Pass
43	6165	0.95	2.14	2.881	4.60	1.60	4.164	6.2	24	Pass
91	6405	1.22	1.87	2.864	4.57	1.60	4.14	6.17	24	Pass
99	6445	1.69	2.57	3.282	5.16	1.20	4.327	6.36	24	Pass
107	6485	1.35	2.34	3.078	4.88	1.20	4.058	6.08	24	Pass
115	6525	1.01	1.92	2.82	4.50	1.20	3.717	5.7	24	Pass
123	6565	1.79	3.50	3.748	5.74	0.60	4.303	6.34	24	Pass
155	6725	1.33	2.89	3.305	5.19	0.60	3.795	5.79	24	Pass
179	6845	2.21	2.66	3.51	5.45	0.60	4.03	6.05	24	Pass
187	6885	1.47	2.00	2.987	4.75	1.30	4.029	6.05	24	Pass
211	7005	3.36	2.87	4.104	6.13	1.30	5.536	7.43	24	Pass
227	7085	-8.69	-8.51	0.2761	-5.59	1.30	0.3724	-4.29	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

**802.11ax (HE40) 484-tone RU**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
3	5965	4.73	7.04	8.03	9.05	1.60	11.607	10.65	24	Pass
43	6165	5.33	5.65	7.085	8.50	1.60	10.241	10.1	24	Pass
91	6405	5.31	5.96	7.338	8.66	1.60	10.607	10.26	24	Pass
99	6445	5.71	6.61	8.307	9.19	1.20	10.951	10.39	24	Pass
107	6485	5.33	6.26	7.639	8.83	1.20	10.07	10.03	24	Pass
115	6525	5.29	6.17	7.521	8.76	1.20	9.915	9.96	24	Pass
123	6565	5.33	7.14	8.588	9.34	0.60	9.86	9.94	24	Pass
155	6725	5.41	6.98	8.467	9.28	0.60	9.721	9.88	24	Pass
179	6845	6.36	6.76	9.072	9.58	0.60	10.416	10.18	24	Pass
187	6885	5.89	6.44	8.287	9.18	1.30	11.179	10.48	24	Pass
211	7005	6.55	5.95	8.448	9.27	1.30	11.396	10.57	24	Pass
227	7085	6.52	4.98	7.635	8.83	1.30	10.299	10.13	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

**802.11ax (HE40) Full RU**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
3	5965	6.17	6.23	8.338	9.21	1.60	12.052	10.81	24	Pass
43	6165	6.14	4.87	7.181	8.56	1.60	10.38	10.16	24	Pass
91	6405	5.93	5.44	7.417	8.70	1.60	10.721	10.3	24	Pass
99	6445	6.11	6.35	8.398	9.24	1.20	11.071	10.44	24	Pass
107	6485	6.65	5.12	7.875	8.96	1.20	10.381	10.16	24	Pass
115	6525	6.54	5.06	7.714	8.87	1.20	10.169	10.07	24	Pass
123	6565	6.15	6.74	8.842	9.47	0.60	10.152	10.07	24	Pass
155	6725	5.89	6.61	8.463	9.28	0.60	9.717	9.88	24	Pass
179	6845	6.56	6.62	9.121	9.60	0.60	10.472	10.2	24	Pass
187	6885	6.21	6.29	8.434	9.26	1.30	11.377	10.56	24	Pass
211	7005	6.45	6.13	8.518	9.30	1.30	11.49	10.6	24	Pass
227	7085	6.21	5.55	7.768	8.90	1.30	10.479	10.2	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

**802.11ax (HE80) 26-tone RU**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	-8.46	-5.37	0.433	-3.64	1.60	0.6259	-2.04	24	Pass
39	6145	-8.59	-6.29	0.3733	-4.28	1.60	0.5396	-2.68	24	Pass
87	6385	-8.03	-6.46	0.3833	-4.16	1.60	0.554	-2.56	24	Pass
103	6465	-7.54	-7.59	0.3501	-4.56	1.20	0.4615	-3.36	24	Pass
119	6545	-7.24	-6.53	0.4111	-3.86	0.60	0.472	-3.26	24	Pass
151	6705	-6.98	-6.81	0.4086	-3.89	0.60	0.4691	-3.29	24	Pass
183	6865	-7.09	-7.27	0.3831	-4.17	0.60	0.4399	-3.57	24	Pass
199	6945	-7.64	-7.91	0.3339	-4.76	1.30	0.4504	-3.46	24	Pass
215	7025	-8.84	-8.79	0.2627	-5.81	1.30	0.3544	-4.51	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

### 802.11ax (HE80) 52-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	-5.23	-2.84	0.8199	-0.86	1.60	1.185	0.74	24	Pass
39	6145	-5.55	-3.27	0.7496	-1.25	1.60	1.084	0.35	24	Pass
87	6385	-5.14	-4.52	0.6595	-1.81	1.60	0.9533	-0.21	24	Pass
103	6465	-4.48	-4.58	0.7048	-1.52	1.20	0.9291	-0.32	24	Pass
119	6545	-4.53	-2.94	0.8605	-0.65	0.60	0.988	-0.05	24	Pass
151	6705	-4.87	-3.49	0.7736	-1.11	0.60	0.8882	-0.51	24	Pass
183	6865	-3.99	-4.21	0.7778	-1.09	0.60	0.893	-0.49	24	Pass
199	6945	-4.64	-4.84	0.672	-1.73	1.30	0.9065	-0.43	24	Pass
215	7025	-8.73	-8.64	0.2707	-5.68	1.30	0.3652	-4.38	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

### 802.11ax (HE80) 106-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	-2.67	0.72	1.7211	2.36	1.60	2.488	3.96	24	Pass
39	6145	-2.45	-0.24	1.5144	1.80	1.60	2.189	3.4	24	Pass
87	6385	-2.06	-1.44	1.3406	1.27	1.60	1.938	2.87	24	Pass
103	6465	-1.45	-0.74	1.5598	1.93	1.20	2.056	3.13	24	Pass
119	6545	-1.24	0.03	1.7586	2.45	0.60	2.019	3.05	24	Pass
151	6705	-0.75	-0.69	1.6945	2.29	0.60	1.946	2.89	24	Pass
183	6865	-0.93	-1.12	1.5795	1.99	0.60	1.814	2.59	24	Pass
199	6945	-1.62	-1.74	1.358	1.33	1.30	1.832	2.63	24	Pass
215	7025	-8.69	-8.66	0.2714	-5.66	1.30	0.3661	-4.36	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

### 802.11ax (HE80) 242-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	0.69	3.53	3.426	5.35	1.60	4.952	6.95	24	Pass
39	6145	0.60	1.26	2.485	3.95	1.60	3.592	5.55	24	Pass
87	6385	1.03	1.65	2.729	4.36	1.60	3.945	5.96	24	Pass
103	6465	1.63	1.54	2.882	4.60	1.20	3.799	5.8	24	Pass
119	6545	1.79	2.53	3.301	5.19	0.60	3.79	5.79	24	Pass
151	6705	1.45	1.94	2.96	4.71	0.60	3.399	5.31	24	Pass
183	6865	2.16	1.89	3.19	5.04	0.60	3.663	5.64	24	Pass
199	6945	1.43	1.30	2.74	4.38	1.30	3.696	5.68	24	Pass
215	7025	-8.73	-8.57	0.273	-5.64	1.30	0.3683	-4.34	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

### 802.11ax (HE80) 484-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	4.03	6.73	7.239	8.60	1.60	10.464	10.2	24	Pass
39	6145	4.67	5.28	6.307	8.00	1.60	9.116	9.6	24	Pass
87	6385	5.27	5.65	7.038	8.47	1.60	10.173	10.07	24	Pass
103	6465	5.79	5.64	7.458	8.73	1.20	9.832	9.93	24	Pass
119	6545	5.81	5.92	7.719	8.88	0.60	8.863	9.48	24	Pass
151	6705	5.73	5.99	7.713	8.87	0.60	8.856	9.47	24	Pass
183	6865	6.23	6.45	8.613	9.35	0.60	9.889	9.95	24	Pass
199	6945	5.89	5.90	7.773	8.91	1.30	10.485	10.21	24	Pass
215	7025	6.04	4.88	7.094	8.51	1.30	9.57	9.81	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

### 802.11ax (HE80) 996-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	6.89	9.12	13.052	11.16	1.60	18.866	12.76	24	Pass
39	6145	7.53	8.14	12.179	10.86	1.60	17.604	12.46	24	Pass
87	6385	7.59	8.06	12.139	10.84	1.60	17.546	12.44	24	Pass
103	6465	8.66	8.46	14.36	11.57	1.20	18.93	12.77	24	Pass
119	6545	8.32	8.64	14.103	11.49	0.60	16.192	12.09	24	Pass
151	6705	8.46	8.55	14.176	11.52	0.60	16.276	12.12	24	Pass
183	6865	8.77	8.44	14.518	11.62	0.60	16.669	12.22	24	Pass
199	6945	9.14	8.97	16.105	12.07	1.30	21.725	13.37	24	Pass
215	7025	8.94	8.24	14.502	11.61	1.30	19.563	12.91	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

### 802.11ax (HE80) Full RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	8.41	8.39	13.837	11.41	1.60	20.001	13.01	24	Pass
39	6145	8.23	7.78	12.651	11.02	1.60	18.286	12.62	24	Pass
87	6385	7.88	7.98	12.418	10.94	1.60	17.949	12.54	24	Pass
103	6465	8.56	8.61	14.439	11.60	1.20	19.034	12.8	24	Pass
119	6545	8.64	8.67	14.673	11.67	0.60	16.847	12.27	24	Pass
151	6705	8.41	8.87	14.643	11.66	0.60	16.812	12.26	24	Pass
183	6865	8.60	8.65	14.573	11.64	0.60	16.732	12.24	24	Pass
199	6945	9.13	9.01	16.146	12.08	1.30	21.78	13.38	24	Pass
215	7025	8.89	8.63	15.039	11.77	1.30	20.287	13.07	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

### 802.11ax (HE160) 26-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	-8.53	-5.53	0.4202	-3.77	1.60	0.6074	-2.17	24	Pass
47	6185	-8.73	-6.44	0.361	-4.42	1.60	0.5218	-2.82	24	Pass
79	6345	-8.29	-6.59	0.3675	-4.35	1.60	0.5312	-2.75	24	Pass
111	6505	-7.67	-8.77	0.3037	-5.18	1.20	0.4004	-3.98	24	Pass
143	6665	-7.45	-7.66	0.3513	-4.54	0.60	0.4033	-3.94	24	Pass
175	6825	-7.41	-7.72	0.3506	-4.55	0.60	0.4025	-3.95	24	Pass
207	6985	-8.93	-8.81	0.2595	-5.86	1.30	0.3501	-4.56	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

### 802.11ax (HE160) 52-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	-5.37	-3.14	0.7757	-1.10	1.60	1.121	0.5	24	Pass
47	6185	-5.67	-3.45	0.7229	-1.41	1.60	1.045	0.19	24	Pass
79	6345	-5.19	-5.52	0.5832	-2.34	1.60	0.843	-0.74	24	Pass
111	6505	-4.62	-5.69	0.6148	-2.11	1.20	0.8105	-0.91	24	Pass
143	6665	-4.73	-3.55	0.7781	-1.09	0.60	0.8934	-0.49	24	Pass
175	6825	-4.12	-4.27	0.7612	-1.19	0.60	0.874	-0.59	24	Pass
207	6985	-8.79	-8.77	0.2649	-5.77	1.30	0.3573	-4.47	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

### 802.11ax (HE160) 106-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	-2.79	0.53	1.6558	2.19	1.60	2.393	3.79	24	Pass
47	6185	-2.53	-0.39	1.4726	1.68	1.60	2.129	3.28	24	Pass
79	6345	-2.07	-2.45	1.1891	0.75	1.60	1.719	2.35	24	Pass
111	6505	-1.59	-1.49	1.403	1.47	1.20	1.85	2.67	24	Pass
143	6665	-1.33	-0.29	1.6716	2.23	0.60	1.919	2.83	24	Pass
175	6825	-0.99	-1.23	1.5495	1.90	0.60	1.779	2.5	24	Pass
207	6985	-8.73	-8.69	0.2692	-5.70	1.30	0.3631	-4.4	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

### 802.11ax (HE160) 242-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	0.62	3.47	3.377	5.29	1.60	4.881	6.89	24	Pass
47	6185	0.55	0.22	2.187	3.40	1.60	3.161	5	24	Pass
79	6345	0.93	0.57	2.379	3.76	1.60	3.439	5.36	24	Pass
111	6505	1.48	0.37	2.496	3.97	1.20	3.29	5.17	24	Pass
143	6665	1.64	2.01	3.047	4.84	0.60	3.498	5.44	24	Pass
175	6825	2.05	1.84	3.131	4.96	0.60	3.595	5.56	24	Pass
207	6985	-8.81	-8.62	0.2689	-5.70	1.30	0.3627	-4.4	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

### 802.11ax (HE160) 484-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	3.84	6.43	6.816	8.34	1.60	9.852	9.94	24	Pass
47	6185	4.63	4.27	5.579	7.47	1.60	8.064	9.07	24	Pass
79	6345	4.94	4.84	6.167	7.90	1.60	8.914	9.5	24	Pass
111	6505	5.84	4.73	6.809	8.33	1.20	8.976	9.53	24	Pass
143	6665	5.44	5.24	6.841	8.35	0.60	7.855	8.95	24	Pass
175	6825	5.99	5.89	7.853	8.95	0.60	9.016	9.55	24	Pass
207	6985	5.88	4.79	6.886	8.38	1.30	9.289	9.68	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

### 802.11ax (HE160) 996-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	7.66	7.64	11.642	10.66	1.60	16.828	12.26	24	Pass
47	6185	7.64	7.29	11.165	10.48	1.60	16.138	12.08	24	Pass
79	6345	7.55	7.10	10.82	10.34	1.60	15.64	11.94	24	Pass
111	6505	8.53	7.44	12.68	11.03	1.20	16.715	12.23	24	Pass
143	6665	8.37	8.01	13.186	11.20	0.60	15.14	11.8	24	Pass
175	6825	8.65	8.37	14.199	11.52	0.60	16.303	12.12	24	Pass
207	6985	8.97	7.82	13.952	11.45	1.30	18.821	12.75	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

### 802.11ax (HE160) 2x996-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	11.29	11.33	27.042	14.32	1.60	39.088	15.92	24	Pass
47	6185	11.59	11.06	27.186	14.34	1.60	39.296	15.94	24	Pass
79	6345	11.56	11.15	27.335	14.37	1.60	39.511	15.97	24	Pass
111	6505	12.04	11.00	28.6	14.56	1.20	37.702	15.76	24	Pass
143	6665	12.43	12.09	33.668	15.27	0.60	38.656	15.87	24	Pass
175	6825	12.38	12.03	33.266	15.22	0.60	38.194	15.82	24	Pass
207	6985	11.94	11.73	30.525	14.85	1.30	41.177	16.15	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

### 802.11ax (HE160) Full RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	11.61	11.07	27.282	14.36	1.60	39.434	15.96	24	Pass
47	6185	11.77	11.14	28.033	14.48	1.60	40.52	16.08	24	Pass
79	6345	11.58	11.15	27.42	14.38	1.60	39.634	15.98	24	Pass
111	6505	11.74	11.42	28.796	14.59	1.20	37.961	15.79	24	Pass
143	6665	11.73	12.81	33.992	15.31	0.60	39.028	15.91	24	Pass
175	6825	12.04	12.42	33.454	15.24	0.60	38.41	15.84	24	Pass
207	6985	12.03	11.87	31.34	14.96	1.30	42.276	16.26	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-6, the maximum gain is 1.2 dBi.
4. For U-NII-7, the maximum gain is 0.6 dBi.
5. For U-NII-8, the maximum gain is 1.3 dBi.

### Under controlled by Standard Power AP

#### 802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
2	5935	9.33	9.24	16.965	12.30	1.60	24.522	13.9	30	Pass
1	5955	11.96	11.75	30.666	14.87	1.60	44.326	16.47	30	Pass
45	6175	11.94	11.66	30.287	14.81	1.60	43.778	16.41	30	Pass
93	6415	11.83	11.68	29.964	14.77	1.60	43.311	16.37	30	Pass
117	6535	12.19	12.12	32.851	15.17	0.60	37.718	15.77	30	Pass
149	6695	12.18	12.23	33.231	15.22	0.60	38.154	15.82	30	Pass
181	6855	12.26	12.18	33.346	15.23	0.60	38.286	15.83	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

#### 802.11ax (HE20) 26-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
2	5935	-7.55	-6.64	0.3926	-4.06	1.60	0.5675	-2.46	30	Pass
1	5955	11.53	11.15	27.254	14.35	1.60	39.394	15.95	30	Pass
45	6175	11.58	11.39	28.173	14.50	1.60	40.722	16.1	30	Pass
93	6415	11.41	11.24	27.155	14.34	1.60	39.251	15.94	30	Pass
117	6535	11.82	11.90	30.698	14.87	0.60	35.246	15.47	30	Pass
149	6695	11.80	11.59	29.573	14.71	0.60	33.954	15.31	30	Pass
181	6855	11.88	11.77	30.449	14.84	0.60	34.96	15.44	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE20) 52-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
2	5935	-7.45	-6.59	0.3992	-3.99	1.60	0.577	-2.39	30	Pass
1	5955	11.57	11.34	27.97	14.47	1.60	40.429	16.07	30	Pass
45	6175	11.59	11.49	28.484	14.55	1.60	41.172	16.15	30	Pass
93	6415	11.60	11.39	28.238	14.51	1.60	40.816	16.11	30	Pass
117	6535	11.99	11.95	31.482	14.98	0.60	36.146	15.58	30	Pass
149	6695	11.92	11.78	30.637	14.86	0.60	35.176	15.46	30	Pass
181	6855	11.95	11.96	31.354	14.96	0.60	35.999	15.56	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE20) 106-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
2	5935	-7.37	-6.51	0.4066	-3.91	1.60	0.5877	-2.31	30	Pass
1	5955	11.70	11.50	28.906	14.61	1.60	41.782	16.21	30	Pass
45	6175	11.64	11.50	28.709	14.58	1.60	41.497	16.18	30	Pass
93	6415	11.78	11.46	29.062	14.63	1.60	42.007	16.23	30	Pass
117	6535	12.04	12.02	31.908	15.04	0.60	36.635	15.64	30	Pass
149	6695	12.05	11.92	31.601	15.00	0.60	36.283	15.6	30	Pass
181	6855	12.03	12.01	31.831	15.03	0.60	36.547	15.63	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE20) 242-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
2	5935	-7.33	-6.45	0.4114	-3.86	1.60	0.5947	-2.26	30	Pass
1	5955	11.87	11.61	29.861	14.75	1.60	43.162	16.35	30	Pass
45	6175	11.82	11.65	29.828	14.75	1.60	43.115	16.35	30	Pass
93	6415	11.82	11.61	29.711	14.73	1.60	42.945	16.33	30	Pass
117	6535	12.14	12.08	32.508	15.12	0.60	37.324	15.72	30	Pass
149	6695	12.07	11.99	31.922	15.04	0.60	36.651	15.64	30	Pass
181	6855	12.05	12.04	32.012	15.05	0.60	36.755	15.65	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE20) Full RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
2	5935	-7.24	-6.34	0.4211	-3.76	1.60	0.6087	-2.16	30	Pass
1	5955	11.98	11.65	30.398	14.83	1.60	43.938	16.43	30	Pass
45	6175	11.99	11.74	30.74	14.88	1.60	44.433	16.48	30	Pass
93	6415	12.02	11.68	30.645	14.86	1.60	44.296	16.46	30	Pass
117	6535	12.27	12.12	33.158	15.21	0.60	38.07	15.81	30	Pass
149	6695	12.22	12.16	33.116	15.20	0.60	38.022	15.8	30	Pass
181	6855	12.19	12.22	33.23	15.22	0.60	38.153	15.82	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE40) 26-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
3	5965	11.52	11.00	26.784	14.28	1.60	38.715	15.88	30	Pass
43	6165	11.49	11.31	27.616	14.41	1.60	39.917	16.01	30	Pass
91	6405	11.24	11.13	26.266	14.19	1.60	37.966	15.79	30	Pass
123	6565	11.63	11.79	29.654	14.72	0.60	34.047	15.32	30	Pass
155	6725	11.75	11.49	29.043	14.63	0.60	33.346	15.23	30	Pass
179	6845	11.84	11.75	30.248	14.81	0.60	34.729	15.41	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE40) 52-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
3	5965	11.52	11.26	27.55	14.40	1.60	39.822	16	30	Pass
43	6165	11.41	11.44	27.779	14.44	1.60	40.153	16.04	30	Pass
91	6405	11.59	11.21	27.641	14.42	1.60	39.953	16.02	30	Pass
123	6565	11.94	11.85	30.951	14.91	0.60	35.537	15.51	30	Pass
155	6725	11.90	11.78	30.553	14.85	0.60	35.08	15.45	30	Pass
179	6845	11.89	11.85	30.755	14.88	0.60	35.311	15.48	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE40) 106-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
3	5965	11.59	11.33	28.006	14.47	1.60	40.481	16.07	30	Pass
43	6165	11.58	11.40	28.194	14.50	1.60	40.753	16.1	30	Pass
91	6405	11.69	11.36	28.454	14.54	1.60	41.129	16.14	30	Pass
123	6565	12.04	11.82	31.212	14.94	0.60	35.836	15.54	30	Pass
155	6725	12.03	11.73	30.861	14.89	0.60	35.433	15.49	30	Pass
179	6845	11.95	11.91	31.176	14.94	0.60	35.795	15.54	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE40) 242-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
3	5965	11.67	11.42	28.578	14.56	1.60	41.308	16.16	30	Pass
43	6165	11.74	11.64	29.538	14.70	1.60	42.695	16.3	30	Pass
91	6405	11.74	11.60	29.366	14.68	1.60	42.447	16.28	30	Pass
123	6565	12.01	11.94	31.488	14.98	0.60	36.153	15.58	30	Pass
155	6725	12.03	11.90	31.445	14.98	0.60	36.104	15.58	30	Pass
179	6845	11.98	12.04	31.761	15.02	0.60	36.467	15.62	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE40) 484-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
3	5965	11.77	11.65	29.662	14.72	1.60	42.875	16.32	30	Pass
43	6165	11.82	11.47	29.237	14.66	1.60	42.26	16.26	30	Pass
91	6405	11.80	11.61	29.65	14.72	1.60	42.857	16.32	30	Pass
123	6565	12.08	12.14	32.516	15.12	0.60	37.333	15.72	30	Pass
155	6725	12.18	11.98	32.293	15.09	0.60	37.077	15.69	30	Pass
179	6845	12.08	12.15	32.541	15.12	0.60	37.362	15.72	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE40) Full RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
3	5965	11.92	11.75	30.522	14.85	1.60	44.118	16.45	30	Pass
43	6165	11.93	11.65	30.217	14.80	1.60	43.677	16.4	30	Pass
91	6405	11.96	11.72	30.563	14.85	1.60	44.177	16.45	30	Pass
123	6565	12.23	12.22	33.383	15.24	0.60	38.329	15.84	30	Pass
155	6725	12.25	12.17	33.27	15.22	0.60	38.199	15.82	30	Pass
179	6845	12.13	12.26	33.157	15.21	0.60	38.069	15.81	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE80) 26-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	11.47	10.89	26.294	14.20	1.60	38.006	15.8	30	Pass
39	6145	11.37	11.21	26.92	14.30	1.60	38.911	15.9	30	Pass
87	6385	11.05	11.05	25.485	14.06	1.60	36.837	15.66	30	Pass
119	6545	11.62	11.64	29.121	14.64	0.60	33.435	15.24	30	Pass
135	6625	11.45	11.66	28.632	14.57	0.60	32.874	15.17	30	Pass
151	6705	11.62	11.59	28.949	14.62	0.60	33.238	15.22	30	Pass
167	6785	11.58	11.38	28.123	14.49	0.60	32.29	15.09	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE80) 52-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	11.32	11.17	26.652	14.26	1.60	38.524	15.86	30	Pass
39	6145	11.41	11.40	27.636	14.41	1.60	39.946	16.01	30	Pass
87	6385	11.40	11.05	26.52	14.24	1.60	38.333	15.84	30	Pass
119	6545	11.75	11.81	30.117	14.79	0.60	34.579	15.39	30	Pass
135	6625	11.78	11.82	30.248	14.81	0.60	34.729	15.41	30	Pass
151	6705	11.80	11.77	30.189	14.80	0.60	34.662	15.4	30	Pass
167	6785	11.77	11.69	29.777	14.74	0.60	34.189	15.34	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE80) 106-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	11.40	11.33	27.372	14.37	1.60	39.565	15.97	30	Pass
39	6145	11.56	11.20	27.506	14.39	1.60	39.758	15.99	30	Pass
87	6385	11.66	11.31	28.198	14.50	1.60	40.759	16.1	30	Pass
119	6545	11.95	11.82	30.857	14.89	0.60	35.429	15.49	30	Pass
135	6625	12.03	11.70	30.76	14.88	0.60	35.317	15.48	30	Pass
151	6705	11.89	11.66	30.113	14.79	0.60	34.574	15.39	30	Pass
167	6785	11.75	11.86	30.299	14.81	0.60	34.788	15.41	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE80) 242-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	11.59	11.30	27.891	14.45	1.60	40.315	16.05	30	Pass
39	6145	11.74	11.52	29.121	14.64	1.60	42.093	16.24	30	Pass
87	6385	11.74	11.56	29.247	14.66	1.60	42.275	16.26	30	Pass
119	6545	11.96	11.82	30.911	14.90	0.60	35.491	15.5	30	Pass
135	6625	11.91	11.88	30.931	14.90	0.60	35.514	15.5	30	Pass
151	6705	11.89	11.86	30.785	14.88	0.60	35.346	15.48	30	Pass
167	6785	11.91	12.03	31.483	14.98	0.60	36.147	15.58	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE80) 484-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	11.68	11.63	29.275	14.66	1.60	42.315	16.26	30	Pass
39	6145	11.71	11.45	28.795	14.59	1.60	41.621	16.19	30	Pass
87	6385	11.80	11.59	29.555	14.71	1.60	42.72	16.31	30	Pass
119	6545	11.94	12.10	31.848	15.03	0.60	36.566	15.63	30	Pass
135	6625	11.96	12.08	31.864	15.03	0.60	36.585	15.63	30	Pass
151	6705	12.14	11.79	31.492	14.98	0.60	36.158	15.58	30	Pass
167	6785	12.08	12.08	32.289	15.09	0.60	37.073	15.69	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE80) 996-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	11.90	11.63	30.039	14.78	1.60	43.42	16.38	30	Pass
39	6145	11.91	11.72	30.366	14.82	1.60	43.892	16.42	30	Pass
87	6385	11.81	11.58	29.556	14.71	1.60	42.721	16.31	30	Pass
119	6545	12.13	12.09	32.497	15.12	0.60	37.312	15.72	30	Pass
135	6625	12.03	12.11	32.221	15.08	0.60	36.995	15.68	30	Pass
151	6705	12.16	12.04	32.469	15.11	0.60	37.279	15.71	30	Pass
167	6785	12.05	12.05	32.084	15.06	0.60	36.837	15.66	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE80) Full RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	11.96	11.66	30.359	14.82	1.60	43.882	16.42	30	Pass
39	6145	11.99	11.73	30.706	14.87	1.60	44.384	16.47	30	Pass
87	6385	11.98	11.75	30.738	14.88	1.60	44.430	16.48	30	Pass
119	6545	12.18	12.20	33.115	15.20	0.60	38.021	15.8	30	Pass
135	6625	12.17	12.24	33.231	15.22	0.60	38.154	15.82	30	Pass
151	6705	12.19	12.21	33.192	15.21	0.60	38.11	15.81	30	Pass
167	6785	12.25	12.17	33.27	15.22	0.60	38.199	15.82	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE160) 26-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	11.39	10.83	25.856	14.13	1.60	37.373	15.73	30	Pass
47	6185	11.20	11.11	26.092	14.17	1.60	37.714	15.77	30	Pass
79	6345	10.98	10.95	25	13.98	1.60	36.136	15.58	30	Pass
143	6665	11.36	11.57	28.033	14.48	0.60	32.186	15.08	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE160) 52-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	11.13	11.10	25.863	14.13	1.60	37.383	15.73	30	Pass
47	6185	11.29	11.32	27.004	14.31	1.60	39.033	15.91	30	Pass
79	6345	11.33	10.89	25.856	14.13	1.60	37.373	15.73	30	Pass
143	6665	11.63	11.73	29.434	14.69	0.60	33.795	15.29	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE160) 106-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	11.24	11.15	26.336	14.21	1.60	38.067	15.81	30	Pass
47	6185	11.38	11.01	26.367	14.21	1.60	38.112	15.81	30	Pass
79	6345	11.66	11.28	28.094	14.49	1.60	40.608	16.09	30	Pass
143	6665	11.88	11.77	30.453	14.84	0.60	34.965	15.44	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE160) 242-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	11.54	11.19	27.403	14.38	1.60	39.609	15.98	30	Pass
47	6185	11.57	11.41	28.216	14.50	1.60	40.785	16.1	30	Pass
79	6345	11.71	11.45	28.759	14.59	1.60	41.569	16.19	30	Pass
143	6665	11.94	11.65	30.252	14.81	0.60	34.734	15.41	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE160) 484-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	11.50	11.59	28.541	14.55	1.60	41.254	16.15	30	Pass
47	6185	11.54	11.38	27.977	14.47	1.60	40.439	16.07	30	Pass
79	6345	11.63	11.40	28.372	14.53	1.60	41.01	16.13	30	Pass
143	6665	11.86	12.04	31.358	14.96	0.60	36.004	15.56	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE160) 996-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	11.71	11.57	29.192	14.65	1.60	42.195	16.25	30	Pass
47	6185	11.87	11.66	30.047	14.78	1.60	43.431	16.38	30	Pass
79	6345	11.72	11.49	28.951	14.62	1.60	41.847	16.22	30	Pass
143	6665	11.97	12.06	31.798	15.02	0.60	36.509	15.62	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE160) 2x996-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	11.60	10.91	26.804	14.28	1.60	38.744	15.88	30	Pass
47	6185	11.60	10.99	27.014	14.32	1.60	39.047	15.92	30	Pass
79	6345	11.56	11.15	27.359	14.37	1.60	39.546	15.97	30	Pass
143	6665	11.62	12.69	33.091	15.20	0.60	37.994	15.8	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

### 802.11ax (HE160) Full RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	11.61	11.07	27.282	14.36	1.60	39.434	15.96	30	Pass
47	6185	11.77	11.14	28.033	14.48	1.60	40.52	16.08	30	Pass
79	6345	11.58	11.15	27.42	14.38	1.60	39.634	15.98	30	Pass
143	6665	11.73	12.81	33.992	15.31	0.60	39.028	15.91	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 1.6 dBi.
3. For U-NII-7, the maximum gain is 0.6 dBi.

## 7.2 Maximum Power Spectral Density

Input Power:	3.86 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu
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### Under controlled by Low-Power Indoor AP

#### 802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
2	5935	-10.29	-8.04	-6.01	4.41	-1.6	-1	Pass
1	5955	-10.03	-8.22	-6.02	4.41	-1.61	-1	Pass
45	6175	-9.99	-8.06	-5.91	4.41	-1.5	-1	Pass
93	6415	-9.64	-8.66	-6.11	4.41	-1.7	-1	Pass
97	6435	-9.35	-7.93	-5.57	3.92	-1.65	-1	Pass
105	6475	-9.42	-7.79	-5.52	3.92	-1.6	-1	Pass
113	6515	-8.95	-8.22	-5.56	3.92	-1.64	-1	Pass
117	6535	-8.51	-7.50	-4.97	3.51	-1.46	-1	Pass
149	6695	-7.75	-8.31	-5.01	3.51	-1.5	-1	Pass
181	6855	-8.37	-7.92	-5.13	3.51	-1.62	-1	Pass
185	6875	-8.78	-8.23	-5.49	3.82	-1.67	-1	Pass
209	6995	-8.01	-9.08	-5.50	3.82	-1.68	-1	Pass
233	7115	-7.49	-9.62	-5.42	3.82	-1.6	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 4.41 dBi.
4. For U-NII-6, The directional gain is 3.92 dBi.
5. For U-NII-7, The directional gain is 3.51 dBi.
6. For U-NII-8, The directional gain is 3.82 dBi.

**802.11ax (HE20) 26-tone RU**

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
2	5935	-20.83	-20.88	-17.84	4.41	-13.43	-1	Pass
1	5955	-10.51	-7.78	-5.92	4.41	-1.51	-1	Pass
45	6175	-11.08	-7.60	-5.99	4.41	-1.58	-1	Pass
93	6415	-10.35	-8.52	-6.33	4.41	-1.92	-1	Pass
97	6435	-9.23	-8.07	-5.60	3.92	-1.68	-1	Pass
105	6475	-9.27	-7.84	-5.49	3.92	-1.57	-1	Pass
113	6515	-9.43	-7.64	-5.43	3.92	-1.51	-1	Pass
117	6535	-9.14	-7.46	-5.21	3.51	-1.7	-1	Pass
149	6695	-8.23	-8.48	-5.34	3.51	-1.83	-1	Pass
181	6855	-8.74	-8.07	-5.38	3.51	-1.87	-1	Pass
185	6875	-8.88	-7.95	-5.38	3.82	-1.56	-1	Pass
209	6995	-8.76	-8.54	-5.64	3.82	-1.82	-1	Pass
233	7115	-20.99	-21.91	-18.42	3.82	-14.6	-1	Pass

Notes:

1. Method E 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 4.41 dBi.
4. For U-NII-6, The directional gain is 3.92 dBi.
5. For U-NII-7, The directional gain is 3.51 dBi.
6. For U-NII-8, The directional gain is 3.82 dBi.

**802.11ax (HE20) 52-tone RU**

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
2	5935	-20.51	-21.37	-17.91	4.41	-13.5	-1	Pass
1	5955	-10.49	-7.82	-5.94	4.41	-1.53	-1	Pass
45	6175	-10.89	-7.68	-5.98	4.41	-1.57	-1	Pass
93	6415	-10.55	-8.32	-6.28	4.41	-1.87	-1	Pass
97	6435	-9.14	-8.52	-5.81	3.92	-1.89	-1	Pass
105	6475	-9.31	-8.35	-5.79	3.92	-1.87	-1	Pass
113	6515	-9.23	-8.18	-5.66	3.92	-1.74	-1	Pass
117	6535	-9.01	-7.56	-5.21	3.51	-1.7	-1	Pass
149	6695	-7.77	-8.52	-5.12	3.51	-1.61	-1	Pass
181	6855	-8.41	-7.94	-5.16	3.51	-1.65	-1	Pass
185	6875	-8.35	-8.32	-5.32	3.82	-1.5	-1	Pass
209	6995	-8.05	-8.77	-5.38	3.82	-1.56	-1	Pass
233	7115	-20.94	-21.54	-18.22	3.82	-14.4	-1	Pass

Notes:

1. Method E 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 4.41 dBi.
4. For U-NII-6, The directional gain is 3.92 dBi.
5. For U-NII-7, The directional gain is 3.51 dBi.
6. For U-NII-8, The directional gain is 3.82 dBi.

**802.11ax (HE20) 106-tone RU**

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
2	5935	-21.27	-20.95	-18.10	4.41	-13.69	-1	Pass
1	5955	-10.55	-8.36	-6.31	4.41	-1.9	-1	Pass
45	6175	-11.19	-7.51	-5.96	4.41	-1.55	-1	Pass
93	6415	-9.61	-8.33	-5.91	4.41	-1.5	-1	Pass
97	6435	-8.55	-8.40	-5.46	3.92	-1.54	-1	Pass
105	6475	-9.10	-8.28	-5.66	3.92	-1.74	-1	Pass
113	6515	-8.96	-8.17	-5.54	3.92	-1.62	-1	Pass
117	6535	-8.33	-7.85	-5.07	3.51	-1.56	-1	Pass
149	6695	-7.78	-8.37	-5.05	3.51	-1.54	-1	Pass
181	6855	-8.67	-7.91	-5.26	3.51	-1.75	-1	Pass
185	6875	-8.68	-8.33	-5.49	3.82	-1.67	-1	Pass
209	6995	-8.31	-8.46	-5.37	3.82	-1.55	-1	Pass
233	7115	-20.88	-21.32	-18.08	3.82	-14.26	-1	Pass

Notes:

1. Method E 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 4.41 dBi.
4. For U-NII-6, The directional gain is 3.92 dBi.
5. For U-NII-7, The directional gain is 3.51 dBi.
6. For U-NII-8, The directional gain is 3.82 dBi.

**802.11ax (HE20) Full RU**

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
2	5935	-20.54	-20.80	-17.66	4.41	-13.25	-1	Pass
1	5955	-10.13	-8.14	-6.01	4.41	-1.6	-1	Pass
45	6175	-10.71	-7.66	-5.91	4.41	-1.5	-1	Pass
93	6415	-9.96	-8.42	-6.11	4.41	-1.7	-1	Pass
97	6435	-8.77	-8.16	-5.44	3.92	-1.52	-1	Pass
105	6475	-9.09	-8.03	-5.52	3.92	-1.6	-1	Pass
113	6515	-9.31	-8.04	-5.62	3.92	-1.7	-1	Pass
117	6535	-8.79	-7.37	-5.01	3.51	-1.5	-1	Pass
149	6695	-7.84	-8.35	-5.08	3.51	-1.57	-1	Pass
181	6855	-8.50	-7.96	-5.21	3.51	-1.7	-1	Pass
185	6875	-8.81	-8.09	-5.42	3.82	-1.6	-1	Pass
209	6995	-8.22	-8.65	-5.42	3.82	-1.6	-1	Pass
233	7115	-20.47	-21.75	-18.05	3.82	-14.23	-1	Pass

Notes:

1. Method E 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 4.41 dBi.
4. For U-NII-6, The directional gain is 3.92 dBi.
5. For U-NII-7, The directional gain is 3.51 dBi.
6. For U-NII-8, The directional gain is 3.82 dBi.

**802.11ax (HE40) Full RU**

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
3	5965	-9.78	-8.38	-6.01	4.41	-1.6	-1	Pass
43	6165	-9.31	-9.02	-6.15	4.41	-1.74	-1	Pass
91	6405	-9.12	-8.93	-6.01	4.41	-1.6	-1	Pass
99	6445	-9.15	-8.90	-6.01	3.92	-2.09	-1	Pass
107	6485	-8.70	-8.36	-5.52	3.92	-1.6	-1	Pass
115	6525	-8.64	-8.23	-5.42	3.92	-1.5	-1	Pass
123	6565	-9.29	-7.89	-5.52	3.51	-2.01	-1	Pass
155	6725	-8.48	-7.79	-5.11	3.51	-1.6	-1	Pass
179	6845	-7.71	-8.35	-5.01	3.51	-1.5	-1	Pass
187	6885	-8.02	-8.02	-5.01	3.82	-1.19	-1	Pass
211	7005	-8.09	-9.25	-5.62	3.82	-1.8	-1	Pass
227	7085	-7.56	-10.04	-5.62	3.82	-1.8	-1	Pass

**Notes:**

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 4.41 dBi.
4. For U-NII-6, The directional gain is 3.92 dBi.
5. For U-NII-7, The directional gain is 3.51 dBi.
6. For U-NII-8, The directional gain is 3.82 dBi.

### 802.11ax (HE80) Full RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
7	5985	-9.42	-8.84	-6.11	4.41	-1.7	-1	Pass
39	6145	-9.41	-8.67	-6.01	4.41	-1.6	-1	Pass
87	6385	-8.45	-9.67	-6.01	4.41	-1.6	-1	Pass
103	6465	-8.46	-9.67	-6.01	3.92	-2.09	-1	Pass
119	6545	-8.13	-9.19	-5.62	3.51	-2.11	-1	Pass
151	6705	-7.38	-8.77	-5.01	3.51	-1.5	-1	Pass
183	6865	-7.39	-8.75	-5.01	3.51	-1.5	-1	Pass
199	6945	-7.81	-9.16	-5.42	3.82	-1.6	-1	Pass
215	7025	-7.61	-9.69	-5.52	3.82	-1.7	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 4.41 dBi.
4. For U-NII-6, The directional gain is 3.92 dBi.
5. For U-NII-7, The directional gain is 3.51 dBi.
6. For U-NII-8, The directional gain is 3.82 dBi.

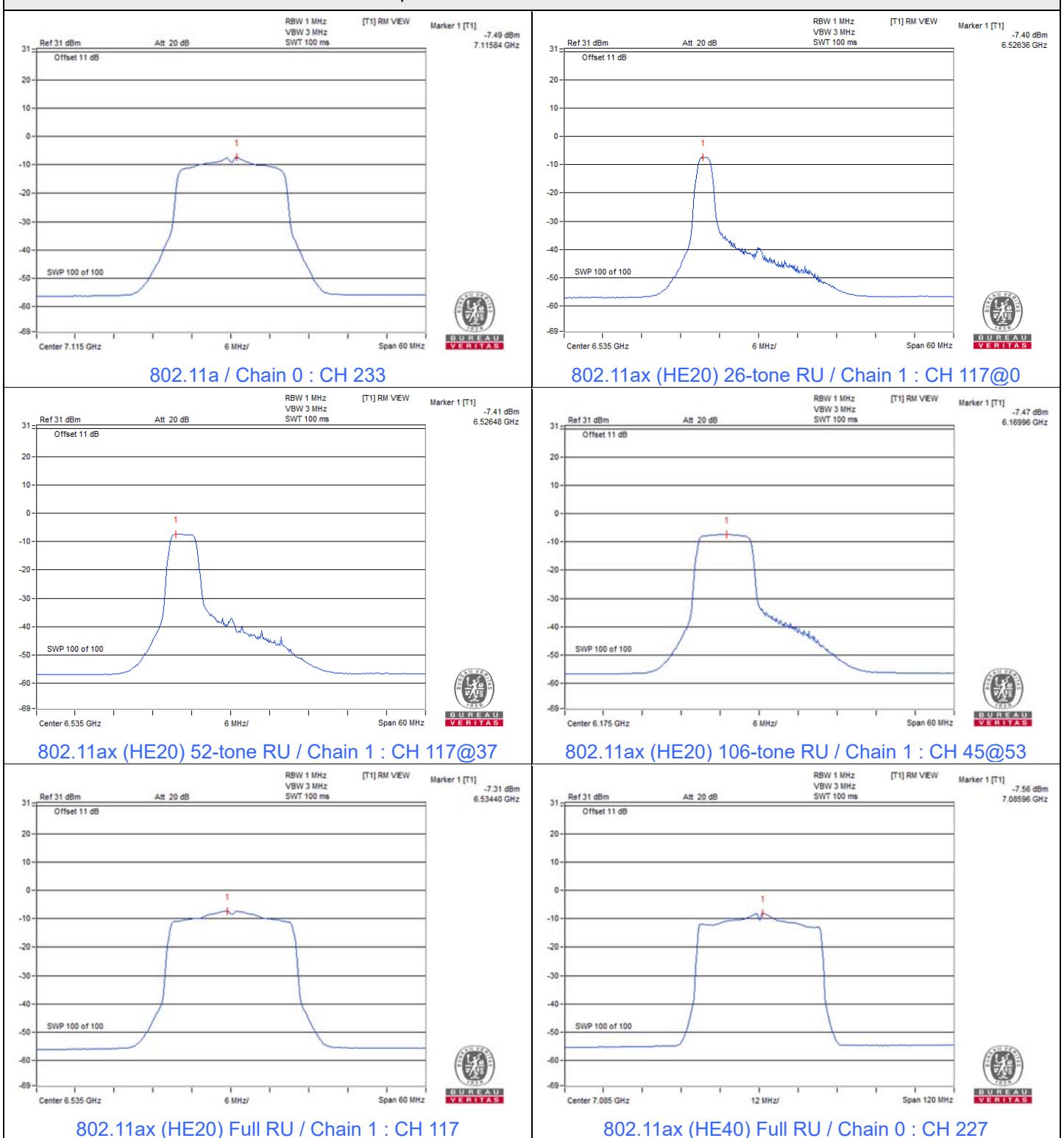
### 802.11ax (HE160) Full RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
15	6025	-8.33	-9.85	-6.01	4.41	-1.6	-1	Pass
47	6185	-9.72	-8.24	-5.91	4.41	-1.5	-1	Pass
79	6345	-8.50	-9.62	-6.01	4.41	-1.6	-1	Pass
111	6505	-8.24	-9.96	-6.01	3.92	-2.09	-1	Pass
143	6665	-8.15	-9.18	-5.62	3.51	-2.11	-1	Pass
175	6825	-7.77	-8.96	-5.31	3.51	-1.8	-1	Pass
207	6985	-7.60	-9.18	-5.31	3.82	-1.49	-1	Pass

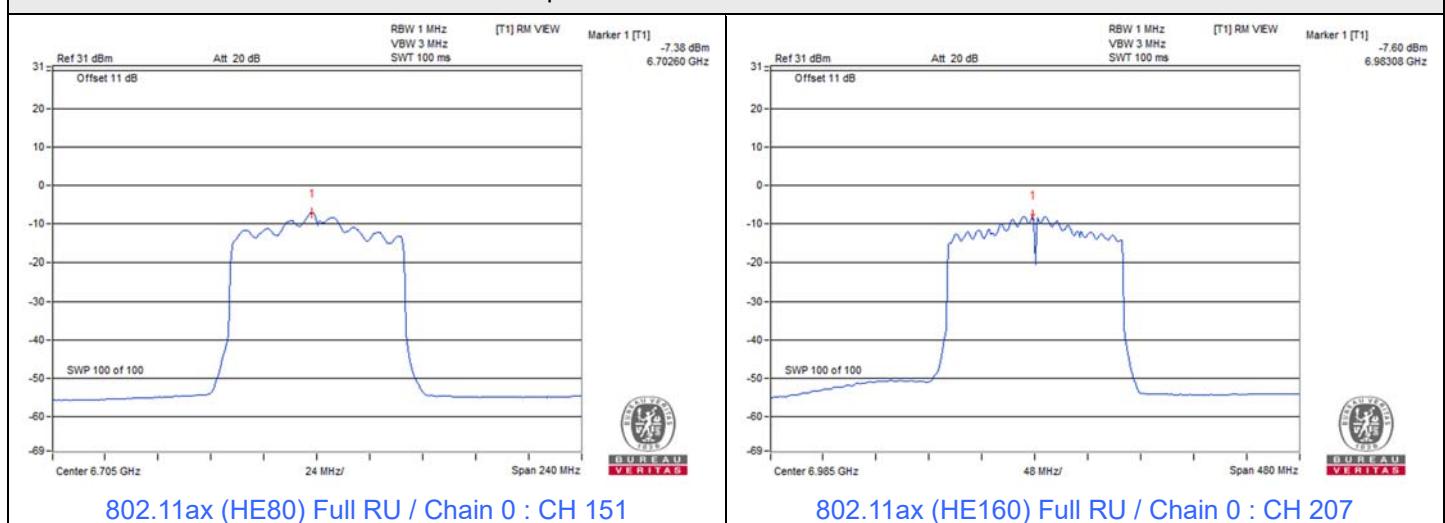
Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 4.41 dBi.
4. For U-NII-6, The directional gain is 3.92 dBi.
5. For U-NII-7, The directional gain is 3.51 dBi.
6. For U-NII-8, The directional gain is 3.82 dBi.

### Spectrum Plot of Maximum Value



### Spectrum Plot of Maximum Value



**Under controlled by Standard Power AP**

**802.11a**

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
2	5935	-4.85	-1.28	0.30	4.41	4.71	17	Pass
1	5955	4.58	5.17	7.90	4.41	12.31	17	Pass
45	6175	4.86	5.11	8.00	4.41	12.41	17	Pass
93	6415	5.03	5.02	8.04	4.41	12.45	17	Pass
117	6535	4.98	5.21	8.11	3.51	11.62	17	Pass
149	6695	5.16	5.42	8.30	3.51	11.81	17	Pass
181	6855	5.12	5.41	8.28	3.51	11.79	17	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 4.41 dBi.
4. For U-NII-7, The directional gain is 3.51 dBi.

**802.11ax (HE20) 26-tone RU**

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
2	5935	-13.57	-10.79	-8.95	4.41	-4.54	17	Pass
1	5955	8.97	9.05	12.02	4.41	16.43	17	Pass
45	6175	9.18	9.43	12.32	4.41	16.73	17	Pass
93	6415	9.40	9.50	12.46	4.41	16.87	17	Pass
117	6535	9.65	10.08	12.88	3.51	16.39	17	Pass
149	6695	9.42	10.92	13.24	3.51	16.75	17	Pass
181	6855	9.62	10.34	13.01	3.51	16.52	17	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 4.41 dBi.
4. For U-NII-7, The directional gain is 3.51 dBi.

### 802.11ax (HE20) 52-tone RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
2	5935	-15.13	-13.85	-11.43	4.41	-7.02	17	Pass
1	5955	8.50	9.22	11.89	4.41	16.3	17	Pass
45	6175	8.47	8.82	11.66	4.41	16.07	17	Pass
93	6415	9.37	9.19	12.29	4.41	16.7	17	Pass
117	6535	8.22	8.93	11.60	3.51	15.11	17	Pass
149	6695	7.87	9.40	11.71	3.51	15.22	17	Pass
181	6855	9.06	8.73	11.91	3.51	15.42	17	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 4.41 dBi.
4. For U-NII-7, The directional gain is 3.51 dBi.

### 802.11ax (HE20) 106-tone RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
2	5935	-18.87	-17.60	-15.18	4.41	-10.77	17	Pass
1	5955	5.57	6.07	8.84	4.41	13.25	17	Pass
45	6175	6.21	6.24	9.24	4.41	13.65	17	Pass
93	6415	5.93	6.24	9.10	4.41	13.51	17	Pass
117	6535	5.34	6.14	8.77	3.51	12.28	17	Pass
149	6695	5.39	6.44	8.96	3.51	12.47	17	Pass
181	6855	5.49	6.15	8.84	3.51	12.35	17	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 4.41 dBi.
4. For U-NII-7, The directional gain is 3.51 dBi.

### 802.11ax (HE20) Full RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
2	5935	-20.94	-20.80	-17.86	4.41	-13.45	17	Pass
1	5955	2.95	2.86	5.92	4.41	10.33	17	Pass
45	6175	2.89	3.06	5.99	4.41	10.4	17	Pass
93	6415	2.94	3.30	6.13	4.41	10.54	17	Pass
117	6535	2.62	3.56	6.13	3.51	9.64	17	Pass
149	6695	2.08	4.03	6.17	3.51	9.68	17	Pass
181	6855	2.78	3.60	6.22	3.51	9.73	17	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 4.41 dBi.
4. For U-NII-7, The directional gain is 3.51 dBi.

### 802.11ax (HE40) Full RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
3	5965	0.87	0.64	3.77	4.41	8.18	17	Pass
43	6165	1.23	0.91	4.08	4.41	8.49	17	Pass
91	6405	0.82	0.80	3.82	4.41	8.23	17	Pass
123	6565	1.36	1.59	4.49	3.51	8	17	Pass
155	6725	1.28	1.09	4.20	3.51	7.71	17	Pass
179	6845	1.34	1.30	4.33	3.51	7.84	17	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 4.41 dBi.
4. For U-NII-7, The directional gain is 3.51 dBi.

### 802.11ax (HE80) Full RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
7	5985	-1.48	-1.76	1.39	4.41	5.8	17	Pass
39	6145	-1.86	-1.25	1.47	4.41	5.88	17	Pass
87	6385	-1.50	-1.64	1.44	4.41	5.85	17	Pass
119	6545	-1.24	-1.53	1.63	3.51	5.14	17	Pass
135	6625	-1.56	-1.55	1.46	3.51	4.97	17	Pass
151	6705	-1.47	-1.26	1.65	3.51	5.16	17	Pass
167	6785	-1.16	-1.01	1.93	3.51	5.44	17	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 4.41 dBi.
4. For U-NII-7, The directional gain is 3.51 dBi.

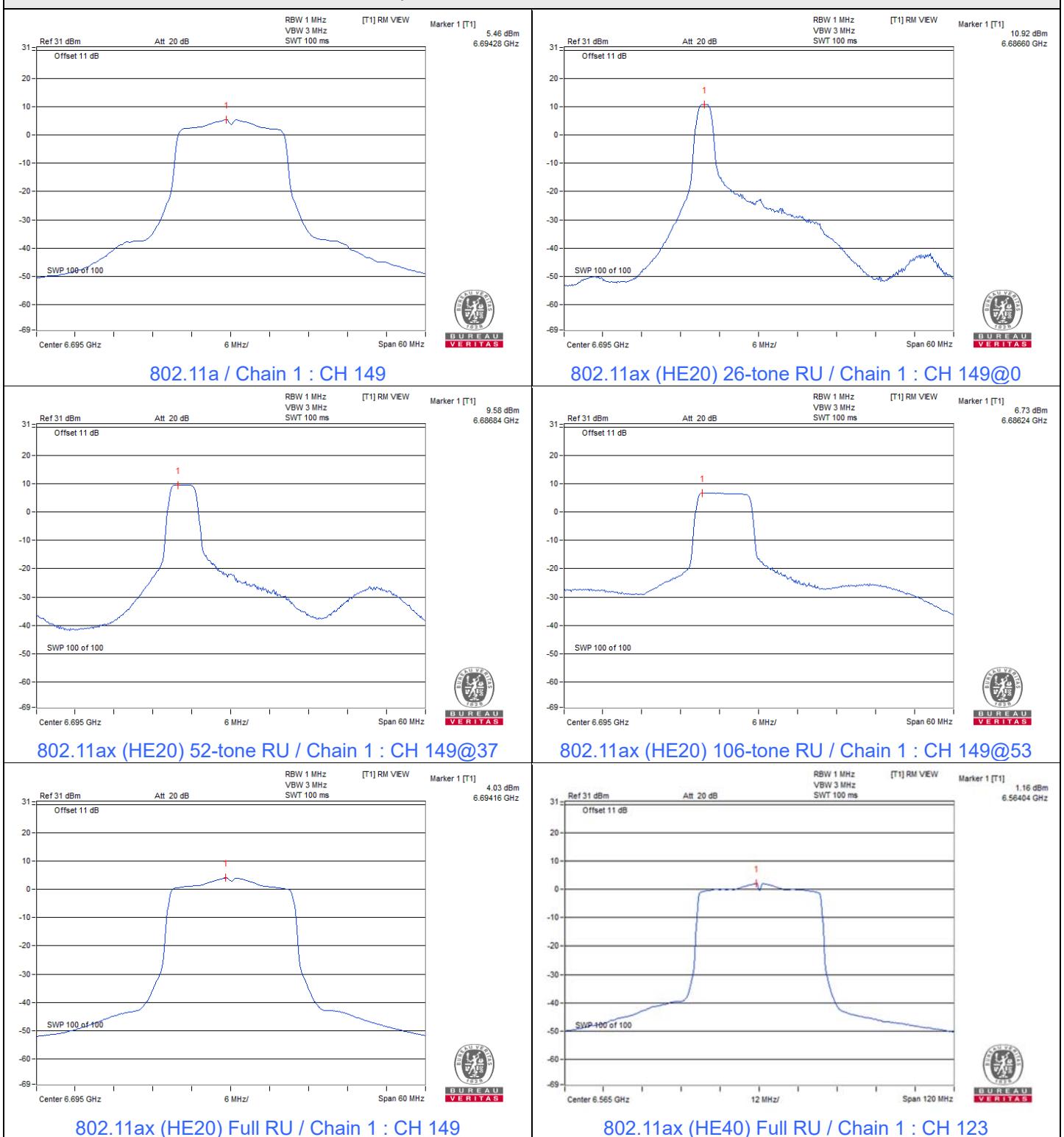
### 802.11ax (HE160) Full RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
15	6025	-3.68	-3.99	-0.82	4.41	3.59	17	Pass
47	6185	-3.55	-3.63	-0.58	4.41	3.83	17	Pass
79	6345	-3.74	-3.82	-0.77	4.41	3.64	17	Pass
143	6665	-3.82	-3.50	-0.65	3.51	2.86	17	Pass

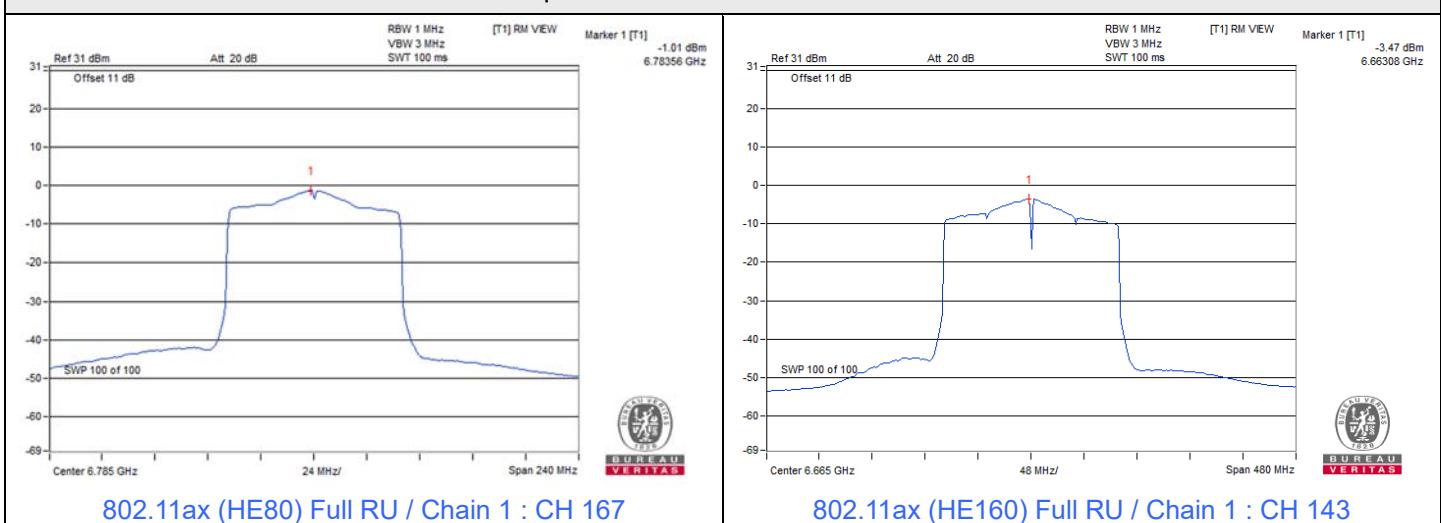
Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 4.41 dBi.
4. For U-NII-7, The directional gain is 3.51 dBi.

### Spectrum Plot of Maximum Value



### Spectrum Plot of Maximum Value



### 7.3 Emission Bandwidth

Input Power:	3.86 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu
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Under controlled by Low-Power Indoor AP

#### 802.11a

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
2	5935	18.59	19.06	320	Pass
1	5955	18.59	19.15	320	Pass
45	6175	18.96	19.25	320	Pass
93	6415	18.88	19.07	320	Pass
97	6435	18.86	19.27	320	Pass
105	6475	18.76	19.22	320	Pass
113	6515	18.69	19.28	320	Pass
117	6535	18.65	19.16	320	Pass
149	6695	18.69	19.25	320	Pass
181	6855	19.80	19.27	320	Pass
185	6875	19.69	19.19	320	Pass
209	6995	18.66	19.16	320	Pass
233	7115	19.17	19.46	320	Pass

#### 802.11ax (HE20) 26-tone RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
2	5935	21.82	21.60	320	Pass
1	5955	20.91	21.46	320	Pass
45	6175	21.21	21.09	320	Pass
93	6415	20.41	20.40	320	Pass
97	6435	21.41	21.44	320	Pass
105	6475	21.46	21.13	320	Pass
113	6515	20.45	20.56	320	Pass
117	6535	21.58	21.40	320	Pass
149	6695	21.55	21.00	320	Pass
181	6855	20.40	20.41	320	Pass
185	6875	21.55	21.29	320	Pass
209	6995	21.38	20.99	320	Pass
233	7115	20.69	20.51	320	Pass



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### 802.11ax (HE20) 52-tone RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
2	5935	21.22	20.91	320	Pass
1	5955	21.08	21.37	320	Pass
45	6175	21.59	21.22	320	Pass
93	6415	20.81	20.64	320	Pass
97	6435	20.80	21.03	320	Pass
105	6475	21.10	21.03	320	Pass
113	6515	20.85	20.57	320	Pass
117	6535	21.21	21.53	320	Pass
149	6695	21.25	21.30	320	Pass
181	6855	21.01	20.54	320	Pass
185	6875	21.37	21.23	320	Pass
209	6995	22.02	21.19	320	Pass
233	7115	21.57	20.77	320	Pass

### 802.11ax (HE20) 106-tone RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
2	5935	21.55	21.36	320	Pass
1	5955	21.88	21.09	320	Pass
45	6175	21.66	21.15	320	Pass
93	6415	21.43	20.57	320	Pass
97	6435	21.49	21.25	320	Pass
105	6475	29.71	21.26	320	Pass
113	6515	21.03	20.92	320	Pass
117	6535	21.07	21.32	320	Pass
149	6695	21.50	21.28	320	Pass
181	6855	20.80	20.80	320	Pass
185	6875	21.82	21.14	320	Pass
209	6995	21.87	21.27	320	Pass
233	7115	21.76	21.06	320	Pass

**802.11ax (HE20) Full RU**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
2	5935	20.72	20.91	320	Pass
1	5955	20.55	20.78	320	Pass
45	6175	20.56	20.91	320	Pass
93	6415	20.59	20.99	320	Pass
97	6435	20.67	20.87	320	Pass
105	6475	20.53	20.82	320	Pass
113	6515	20.68	21.02	320	Pass
117	6535	20.54	20.83	320	Pass
149	6695	20.64	21.02	320	Pass
181	6855	21.24	20.79	320	Pass
185	6875	20.84	20.98	320	Pass
209	6995	20.73	20.78	320	Pass
233	7115	20.75	21.19	320	Pass

**802.11ax (HE40) Full RU**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	5965	40.70	40.70	320	Pass
43	6165	40.54	40.65	320	Pass
91	6405	40.58	41.08	320	Pass
99	6445	40.61	40.79	320	Pass
107	6485	40.66	40.65	320	Pass
115	6525	40.64	40.70	320	Pass
123	6565	40.73	40.93	320	Pass
155	6725	40.63	40.84	320	Pass
179	6845	40.98	40.94	320	Pass
187	6885	40.74	40.73	320	Pass
211	7005	40.82	40.77	320	Pass
227	7085	40.61	40.68	320	Pass

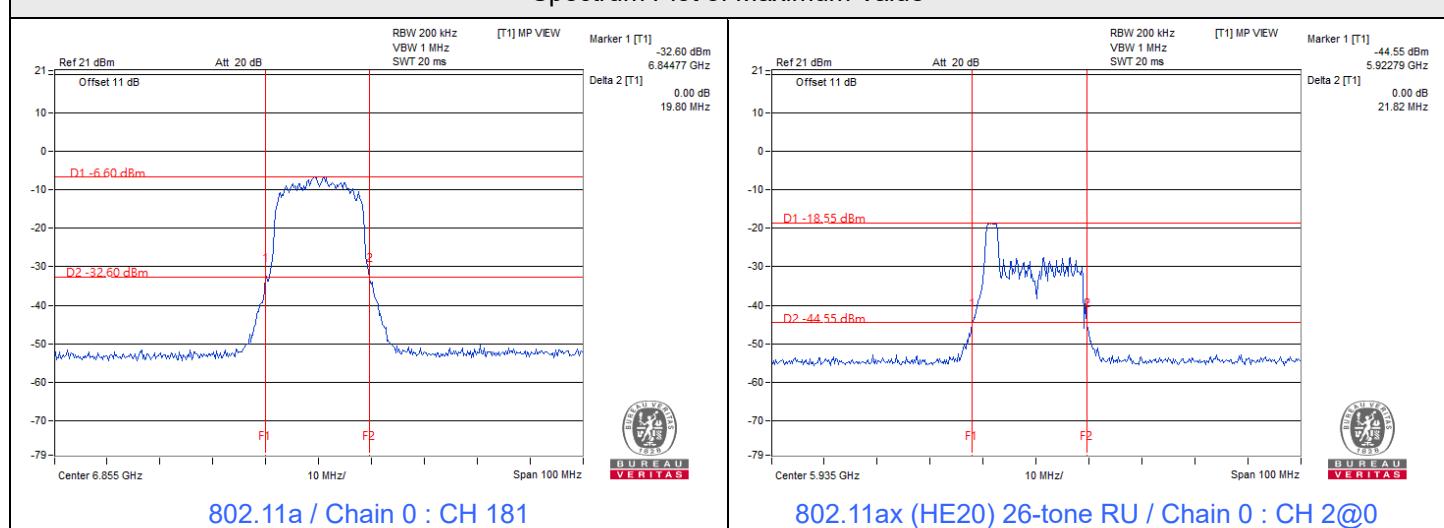
### 802.11ax (HE80) Full RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
7	5985	82.75	82.89	320	Pass
39	6145	82.55	82.53	320	Pass
87	6385	82.46	82.71	320	Pass
103	6465	82.61	82.95	320	Pass
119	6545	82.26	82.95	320	Pass
151	6705	82.31	82.70	320	Pass
183	6865	82.25	82.45	320	Pass
199	6945	82.96	82.64	320	Pass
215	7025	82.83	82.66	320	Pass

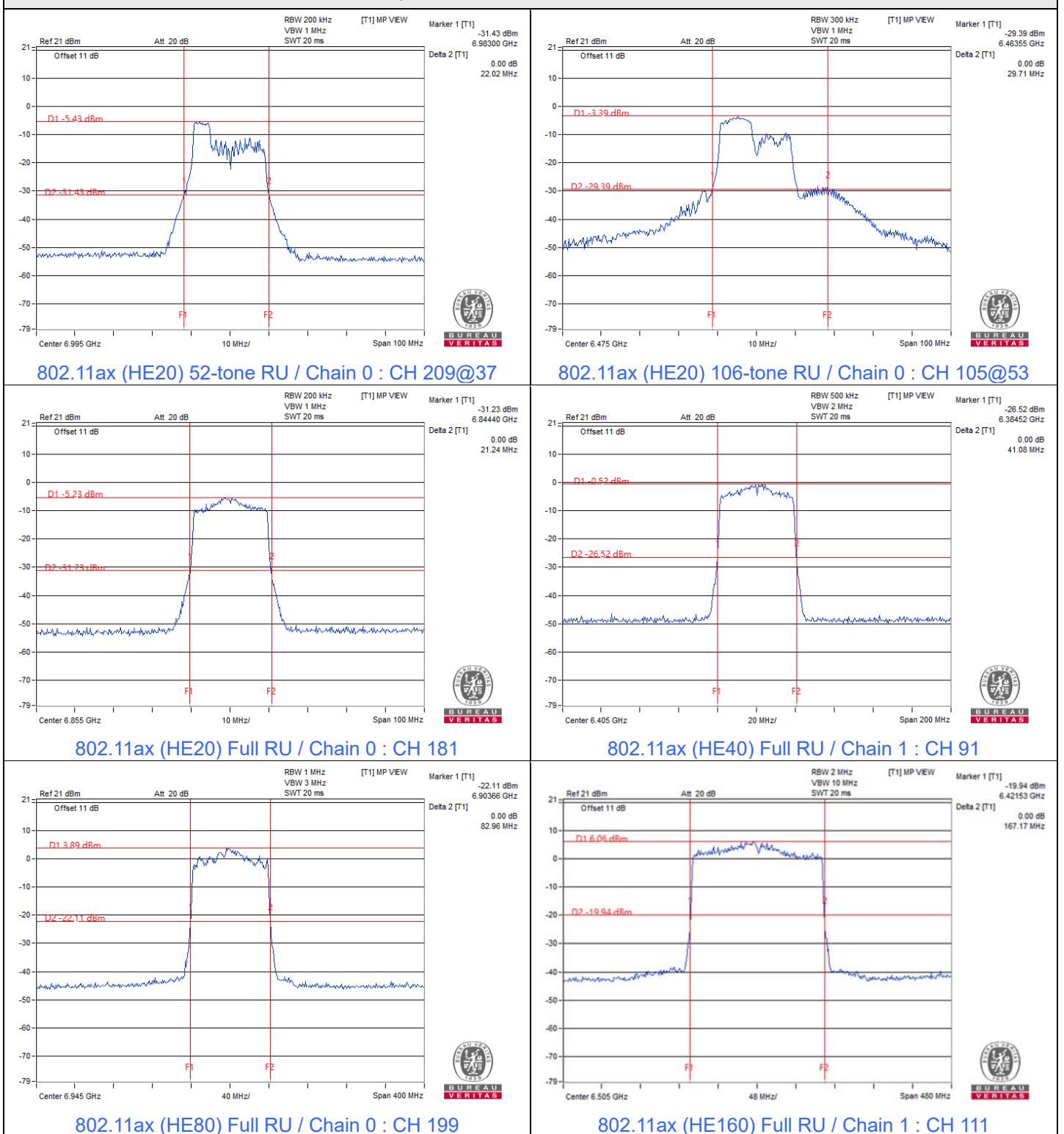
### 802.11ax (HE160) Full RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
15	6025	165.70	167.04	320	Pass
47	6185	165.37	165.97	320	Pass
79	6345	166.60	165.93	320	Pass
111	6505	166.43	167.17	320	Pass
143	6665	165.96	165.19	320	Pass
175	6825	166.90	166.11	320	Pass
207	6985	165.76	165.71	320	Pass

Spectrum Plot of Maximum Value



## Spectrum Plot of Maximum Value



**Under controlled by Standard Power AP**

**802.11a**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
2	5935	21.04	20.90	320	Pass
1	5955	18.72	18.92	320	Pass
45	6175	18.83	19.03	320	Pass
93	6415	19.01	18.99	320	Pass
117	6535	18.73	19.12	320	Pass
149	6695	18.52	18.88	320	Pass
181	6855	19.43	19.38	320	Pass

**802.11ax (HE20) 26-tone RU**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
2	5935	21.51	21.41	320	Pass
1	5955	21.14	21.48	320	Pass
45	6175	21.33	21.41	320	Pass
93	6415	20.51	20.38	320	Pass
117	6535	20.99	20.90	320	Pass
149	6695	21.05	21.09	320	Pass
181	6855	20.31	20.31	320	Pass

**802.11ax (HE20) 52-tone RU**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
2	5935	21.33	21.44	320	Pass
1	5955	21.38	21.38	320	Pass
45	6175	21.03	21.07	320	Pass
93	6415	20.69	20.68	320	Pass
117	6535	21.08	21.09	320	Pass
149	6695	21.08	21.07	320	Pass
181	6855	20.68	20.66	320	Pass

### 802.11ax (HE20) 106-tone RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
2	5935	22.08	21.37	320	Pass
1	5955	21.84	21.42	320	Pass
45	6175	33.05	22.83	320	Pass
93	6415	32.24	23.57	320	Pass
117	6535	30.87	24.46	320	Pass
149	6695	30.61	61.47	320	Pass
181	6855	23.69	57.73	320	Pass

### 802.11ax (HE20) Full RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
2	5935	20.72	20.91	320	Pass
1	5955	20.74	20.86	320	Pass
45	6175	20.75	20.85	320	Pass
93	6415	21.03	20.72	320	Pass
117	6535	20.72	21.10	320	Pass
149	6695	20.94	20.80	320	Pass
181	6855	21.13	20.76	320	Pass

### 802.11ax (HE40) Full RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	5965	40.76	40.65	320	Pass
43	6165	40.79	40.87	320	Pass
91	6405	40.47	40.56	320	Pass
123	6565	40.67	40.76	320	Pass
155	6725	40.66	40.88	320	Pass
179	6845	40.57	40.51	320	Pass

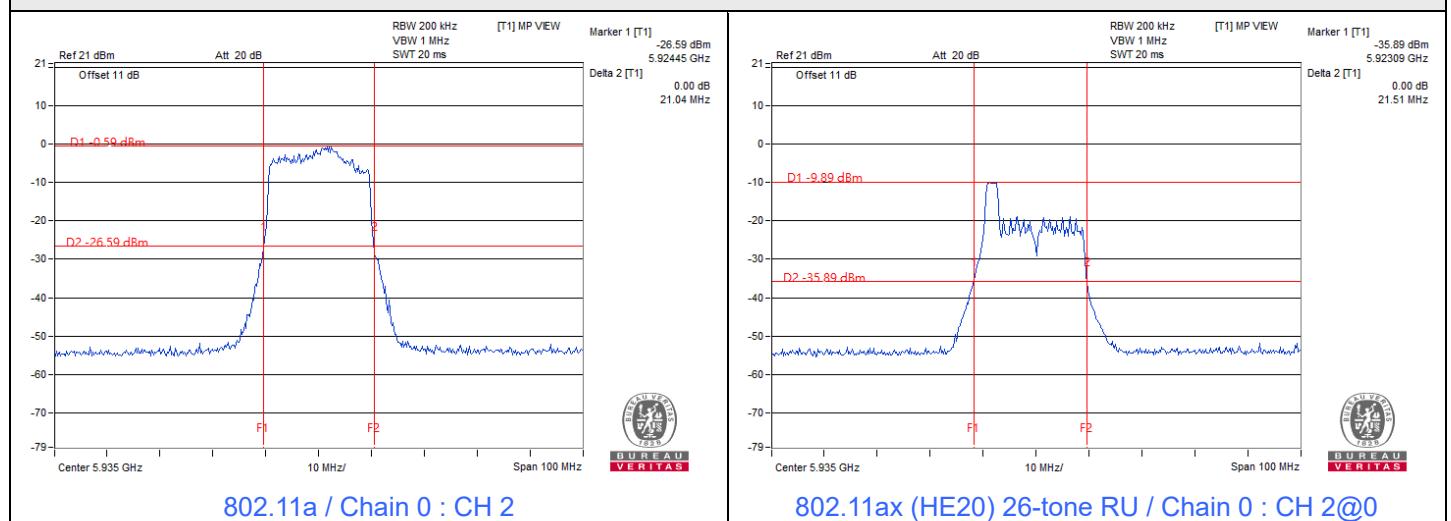
### 802.11ax (HE80) Full RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
7	5985	82.40	82.53	320	Pass
39	6145	82.40	82.28	320	Pass
87	6385	82.40	82.07	320	Pass
119	6545	82.43	82.92	320	Pass
135	6625	82.69	82.66	320	Pass
151	6705	82.41	82.68	320	Pass
167	6785	82.20	82.72	320	Pass

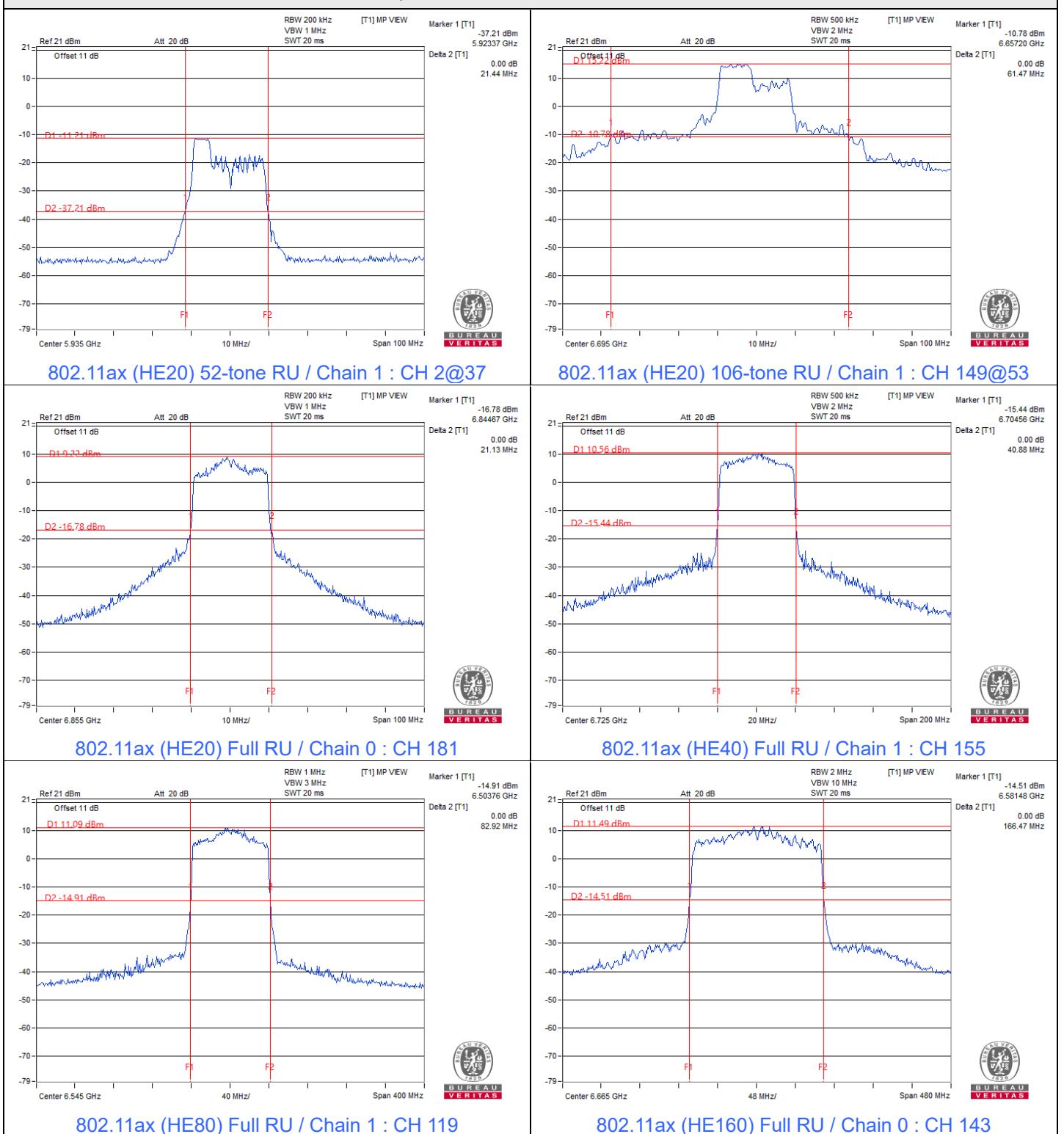
### 802.11ax (HE160) Full RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
15	6025	165.33	165.98	320	Pass
47	6185	166.14	165.49	320	Pass
79	6345	165.00	166.38	320	Pass
143	6665	166.47	165.54	320	Pass

Spectrum Plot of Maximum Value



### Spectrum Plot of Maximum Value

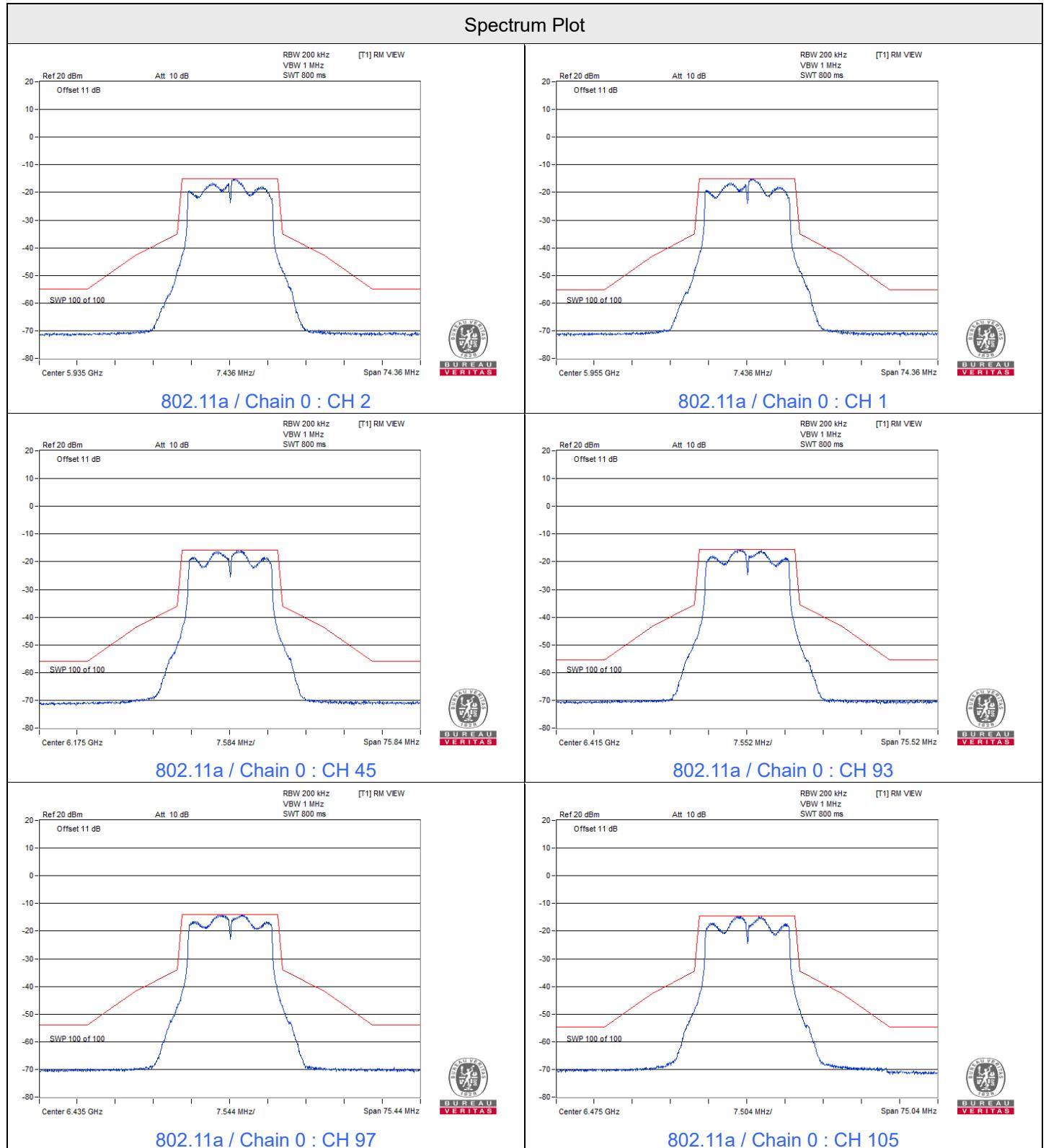


## 7.4 In-Band Emission Mask

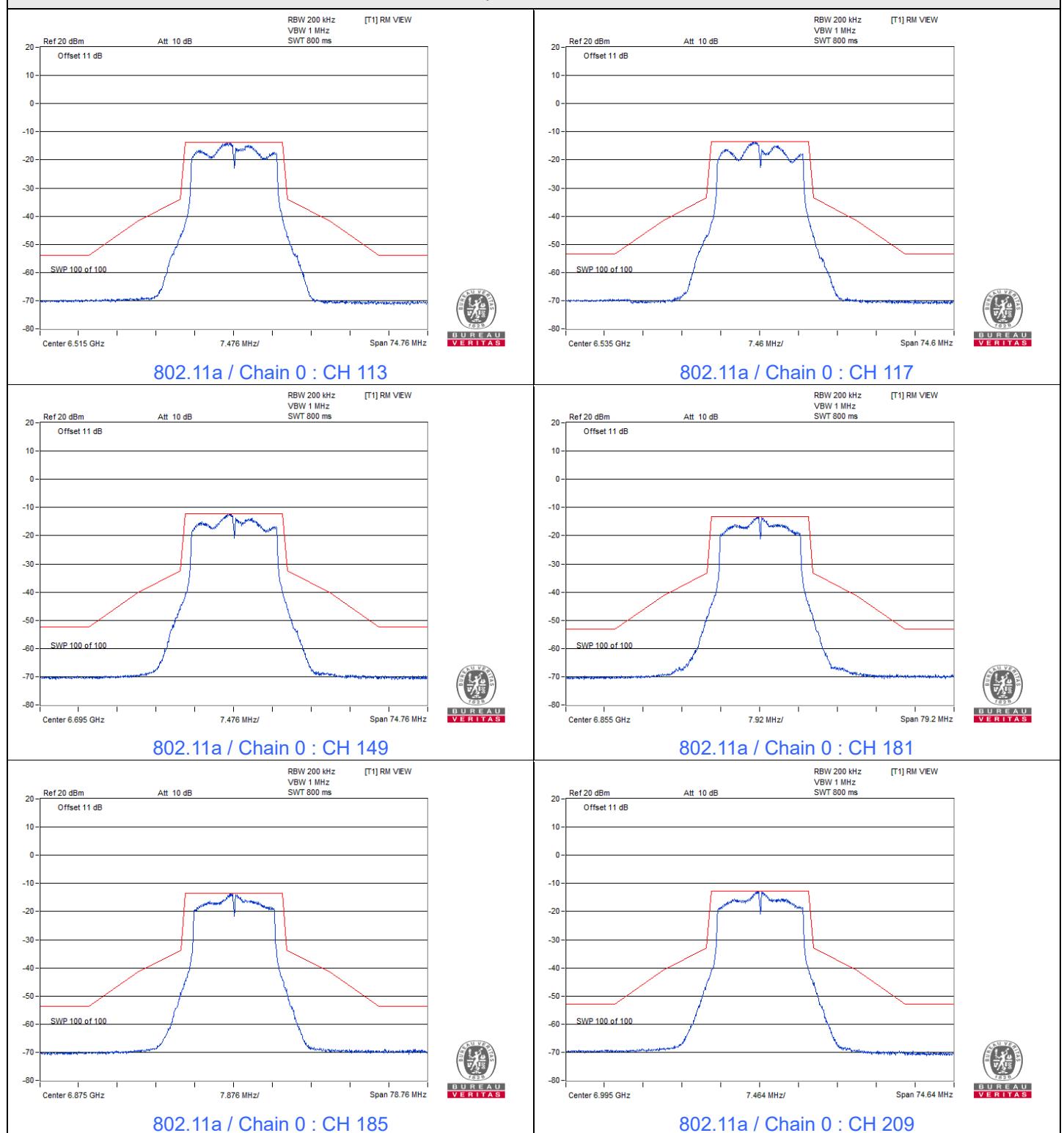
Input Power:	3.86 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu
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Under controlled by Low-Power Indoor AP

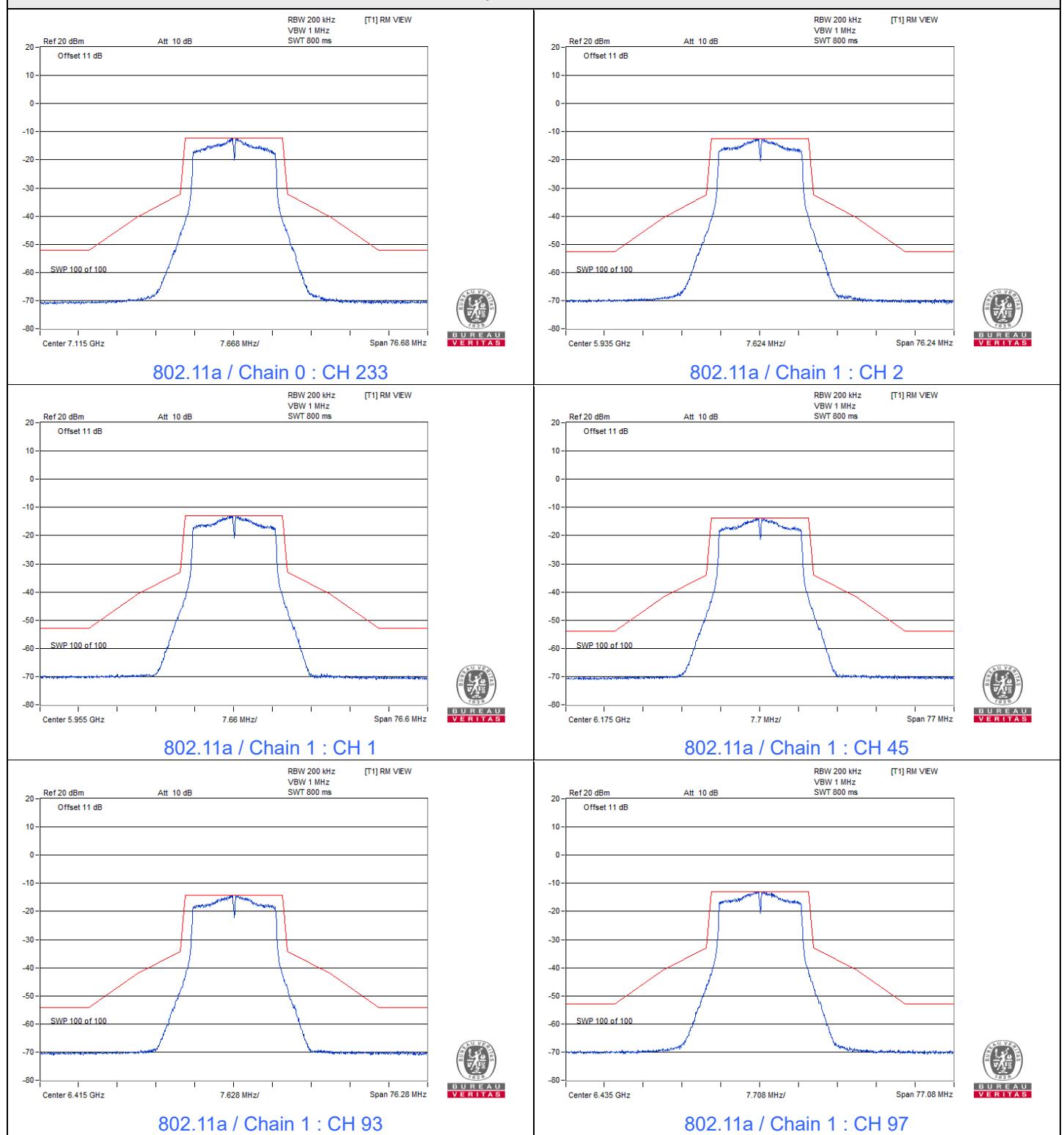
### 802.11a



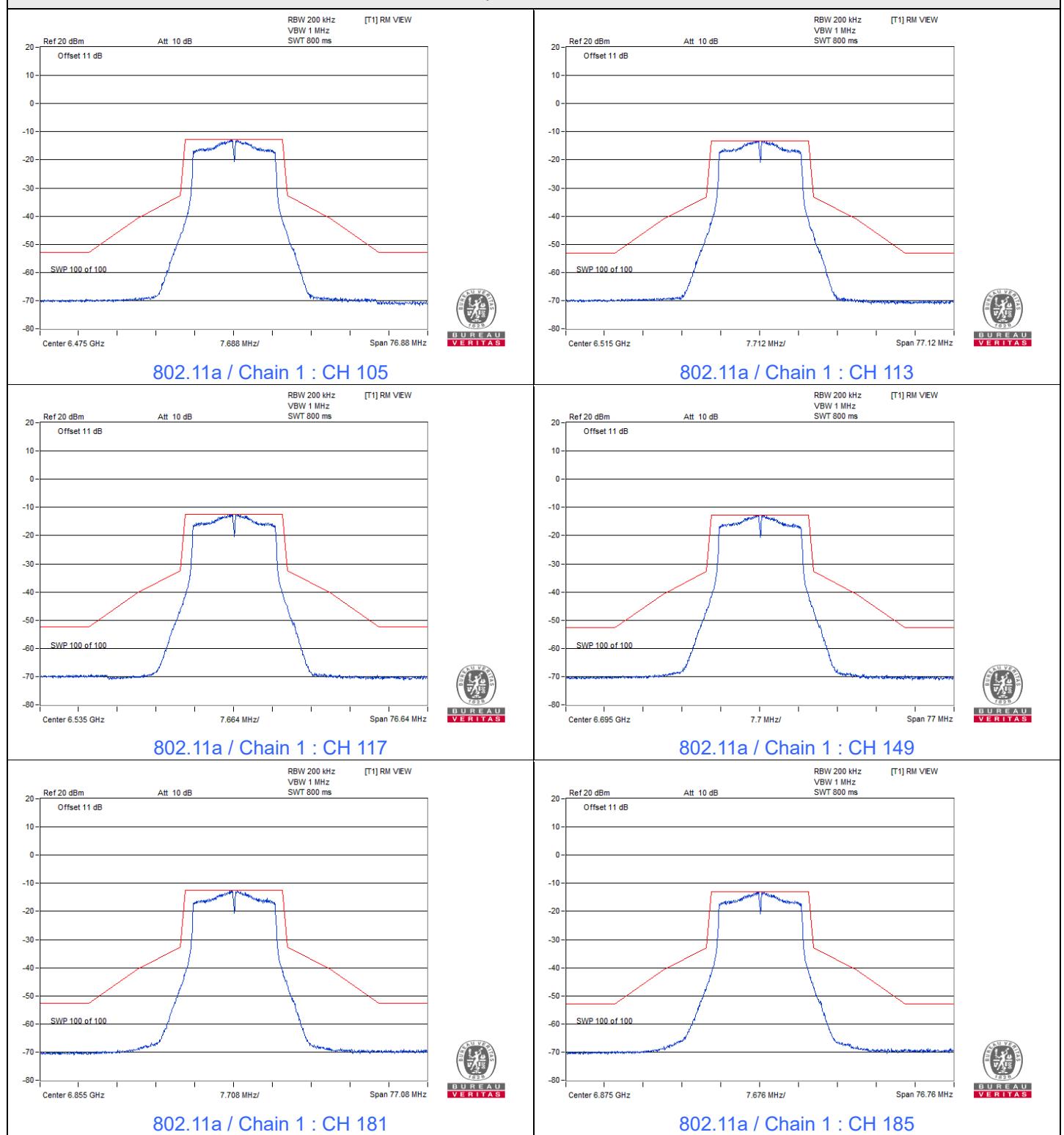
## Spectrum Plot



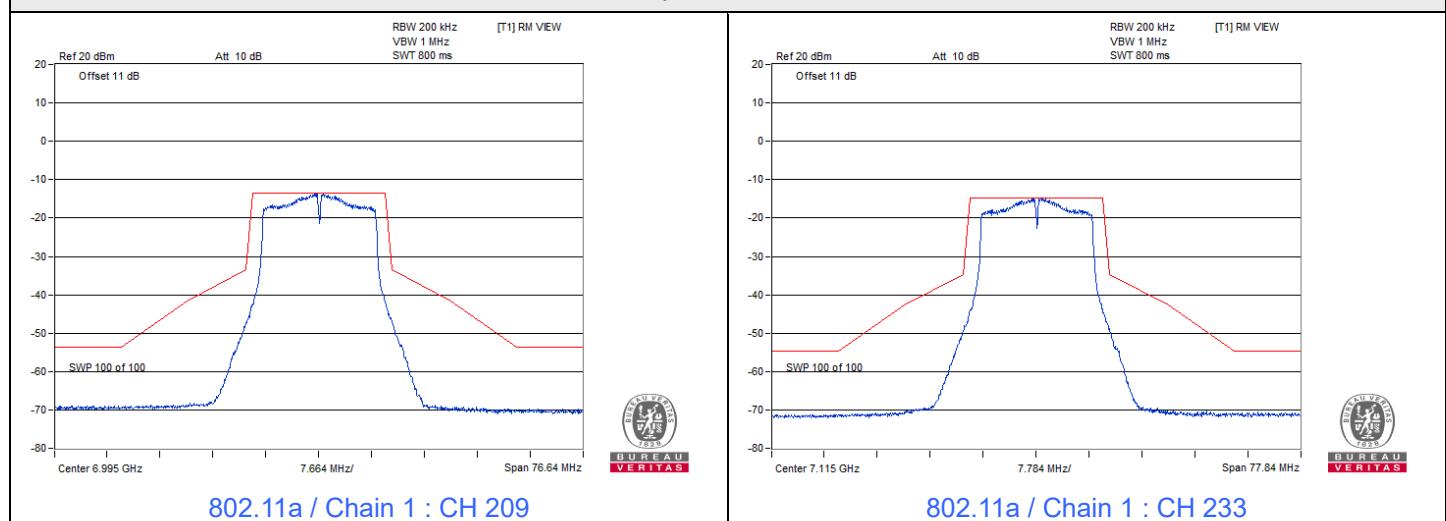
## Spectrum Plot



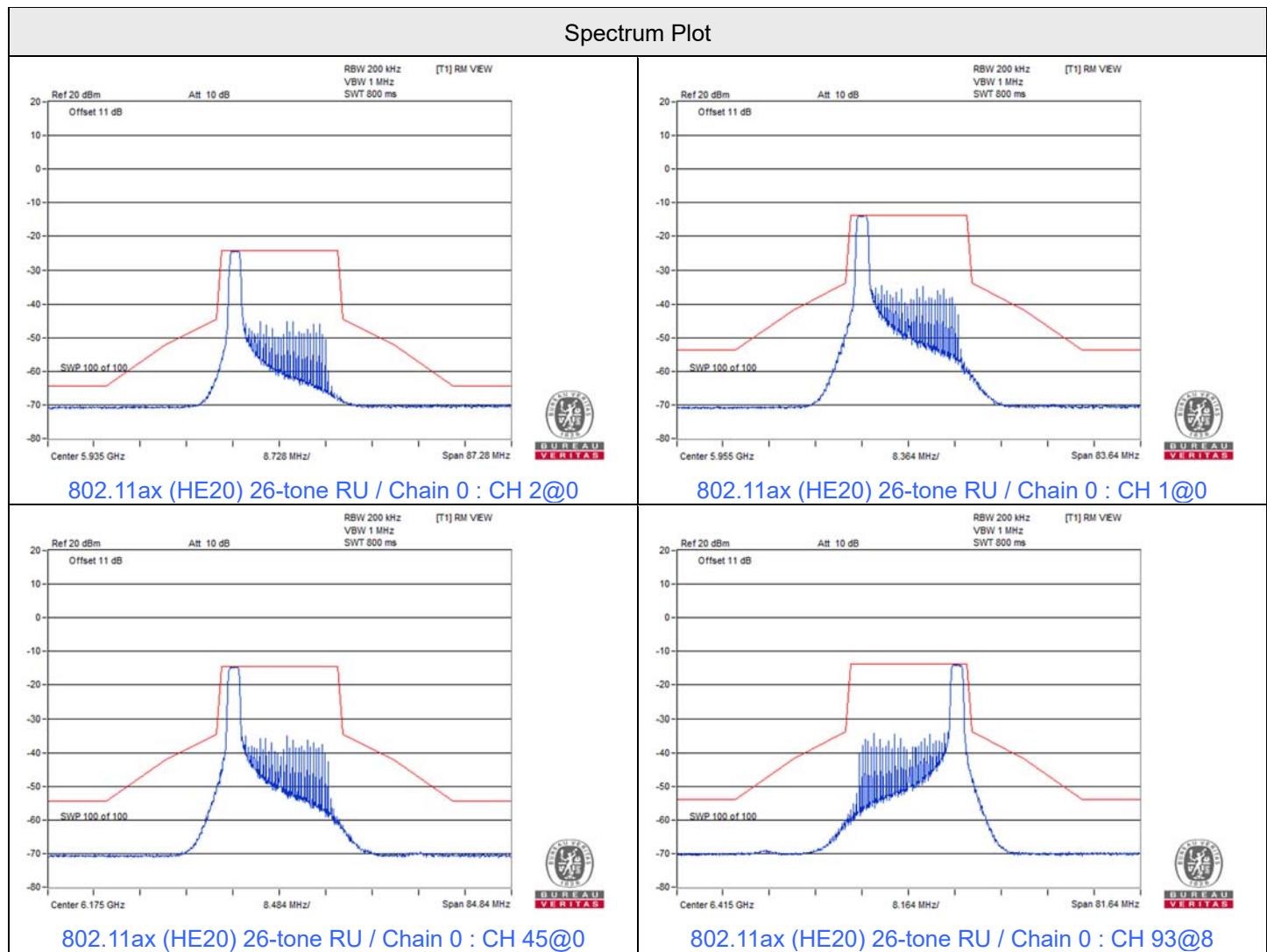
## Spectrum Plot



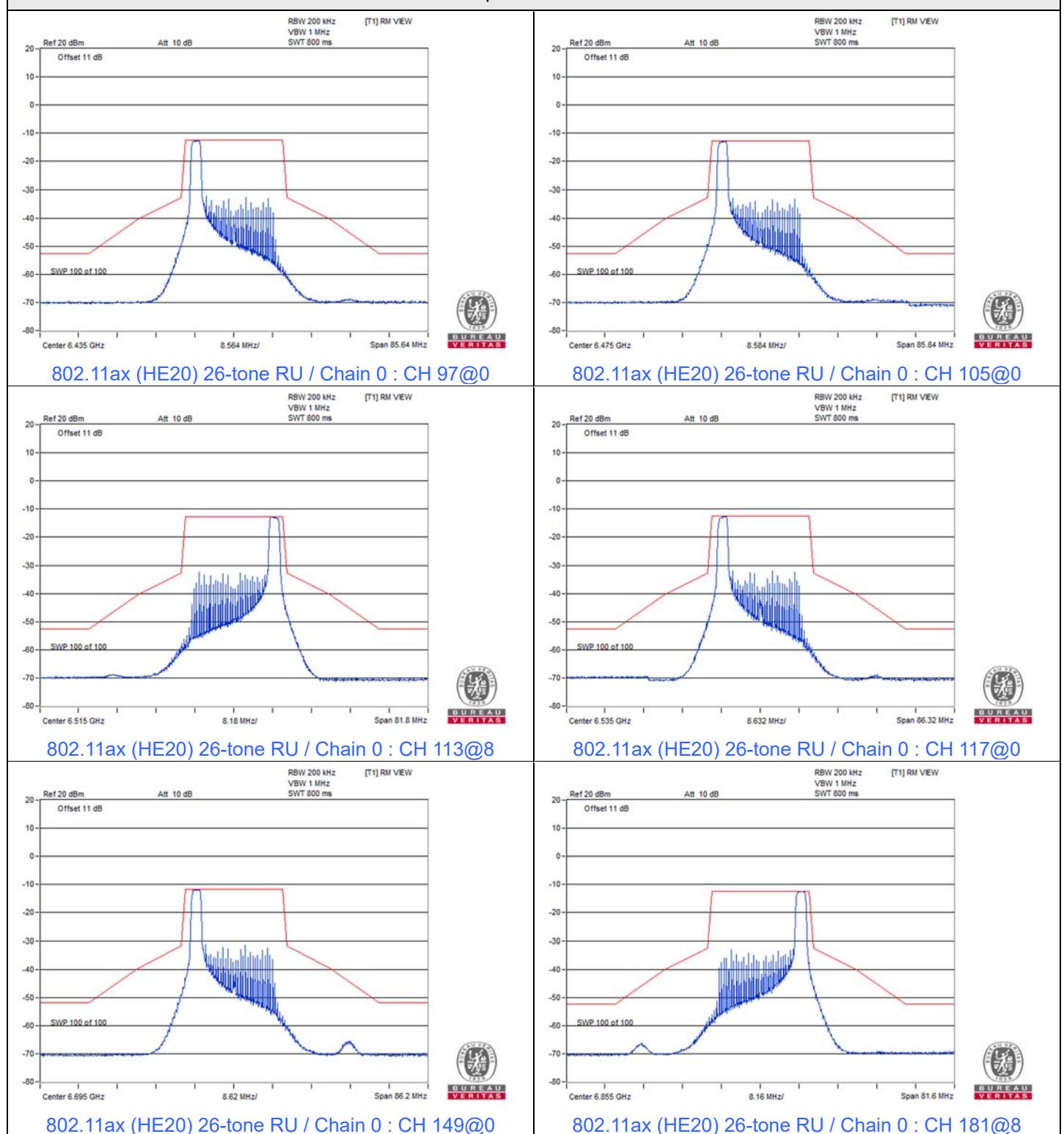
### Spectrum Plot



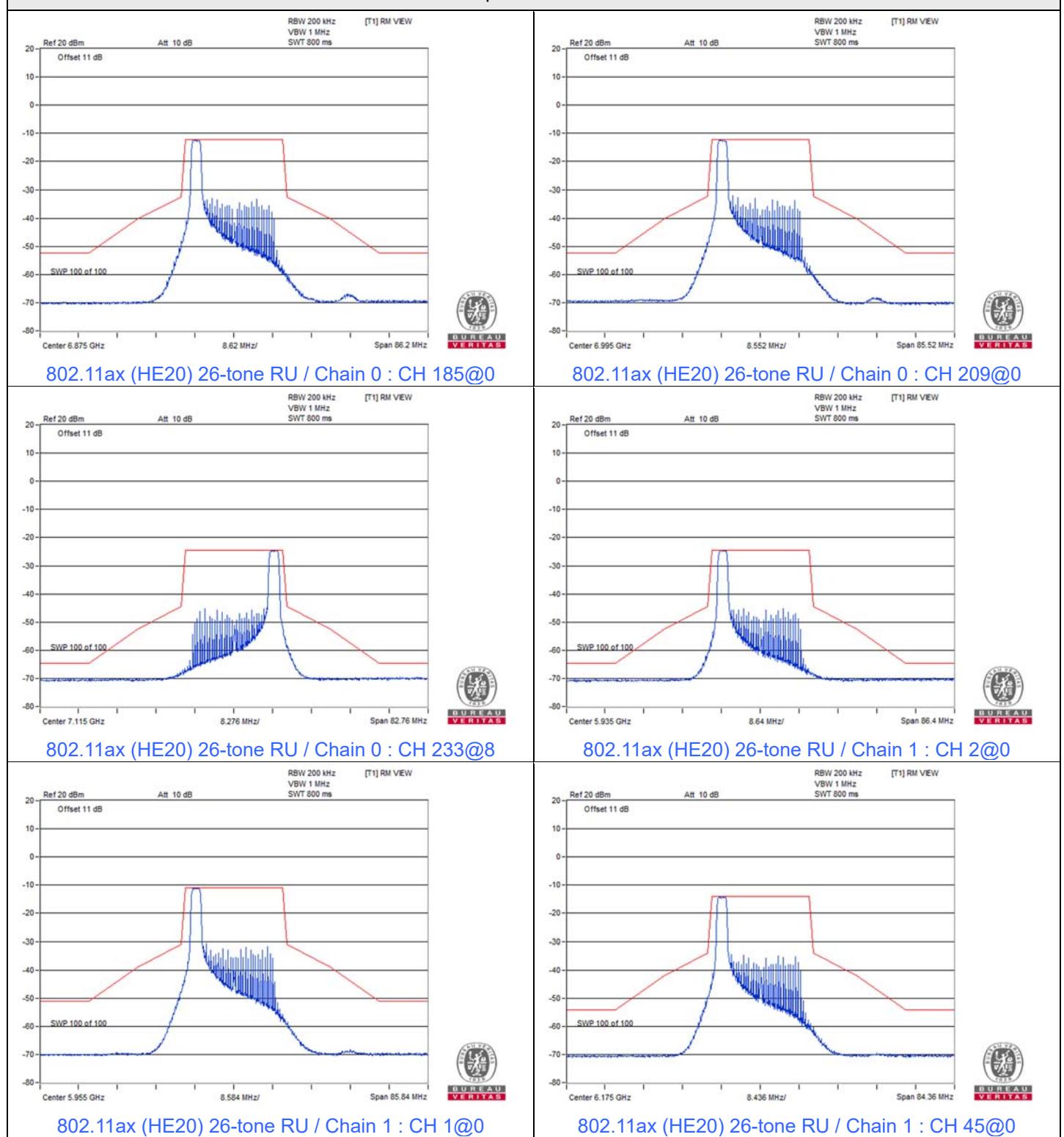
### 802.11ax (HE20) 26-tone RU



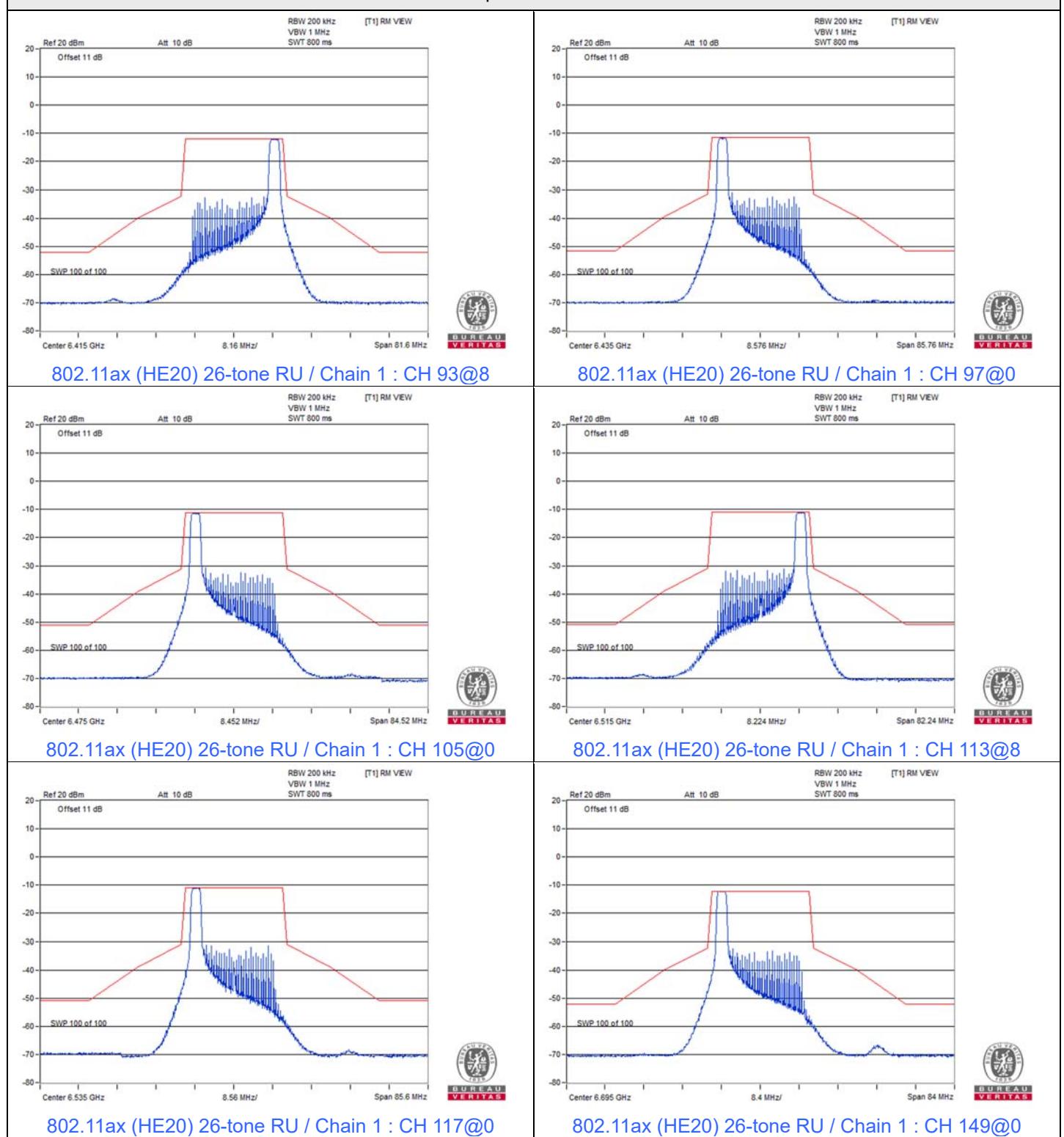
### Spectrum Plot



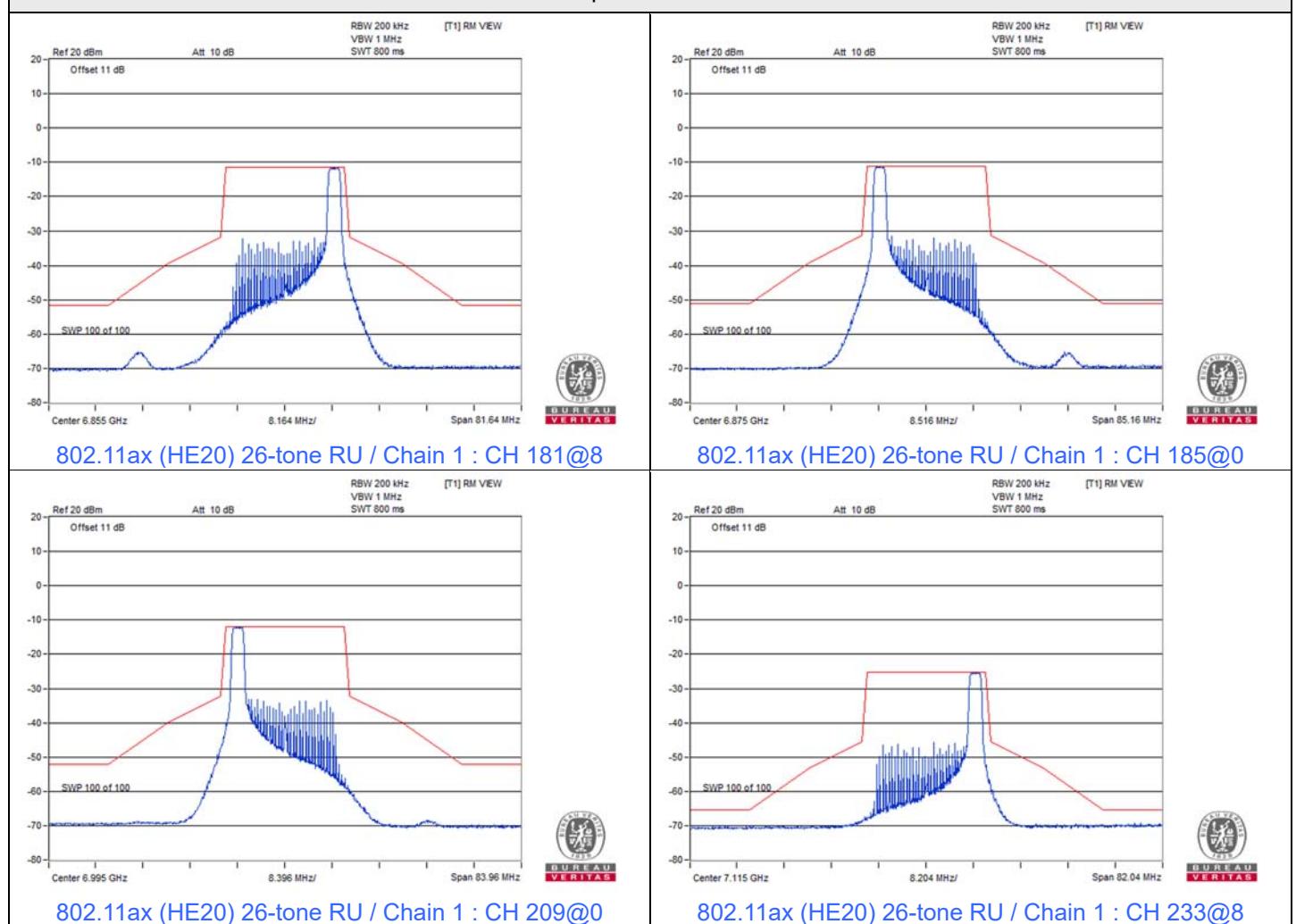
## Spectrum Plot



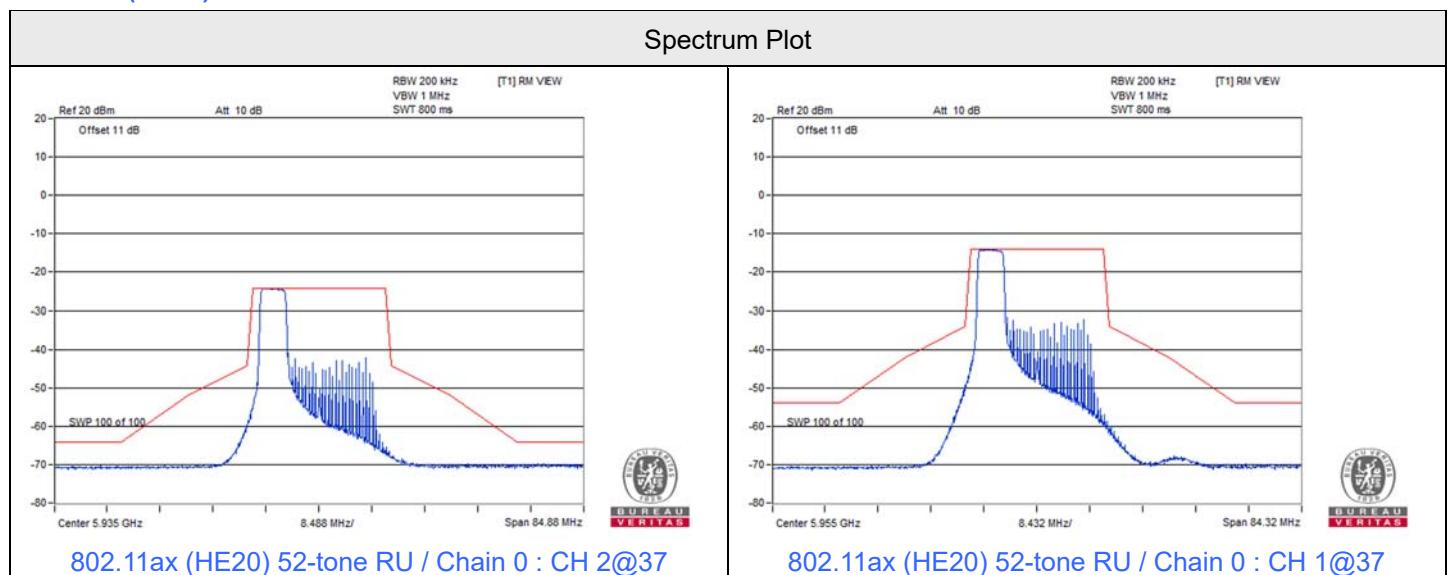
### Spectrum Plot



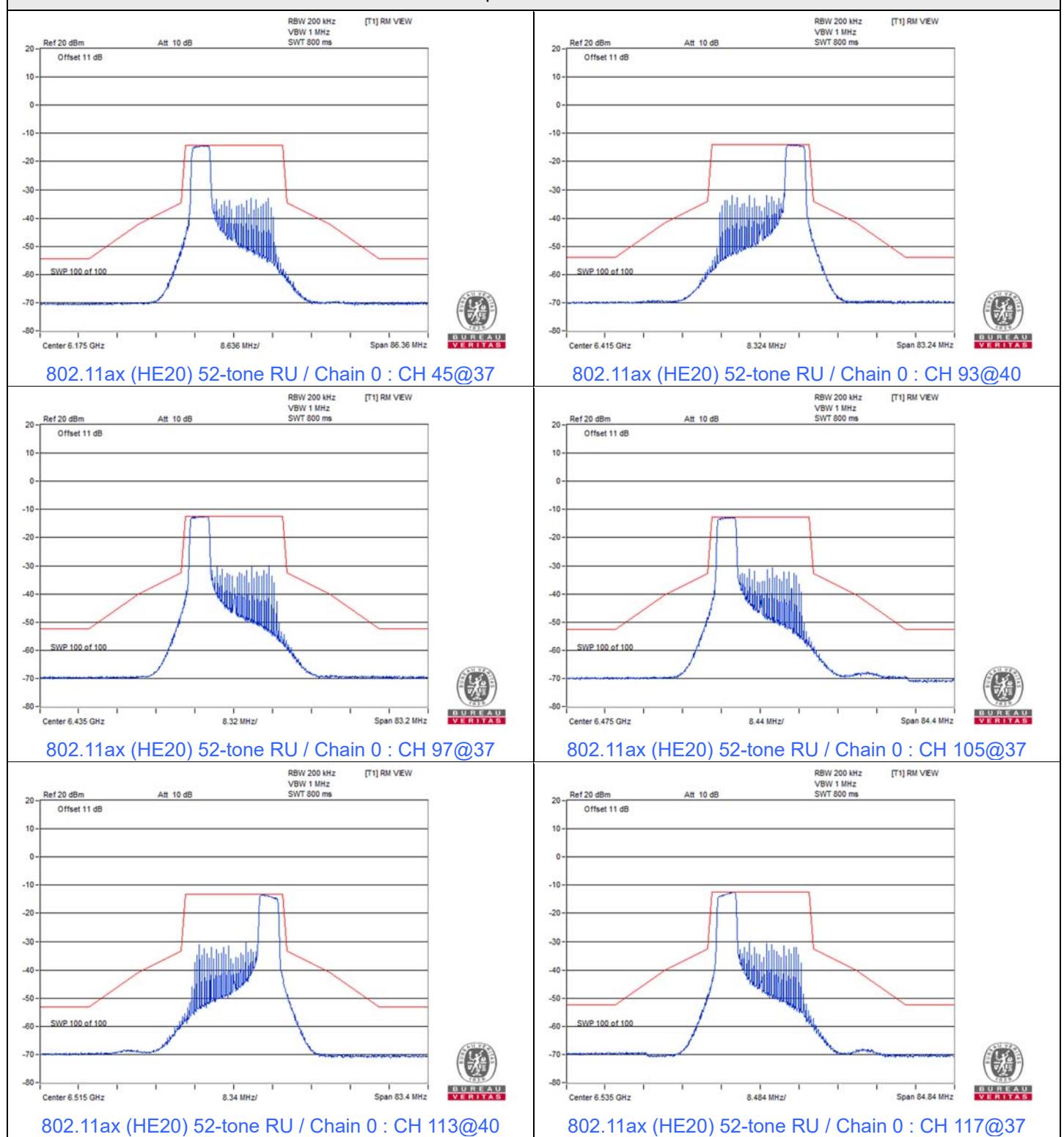
### Spectrum Plot



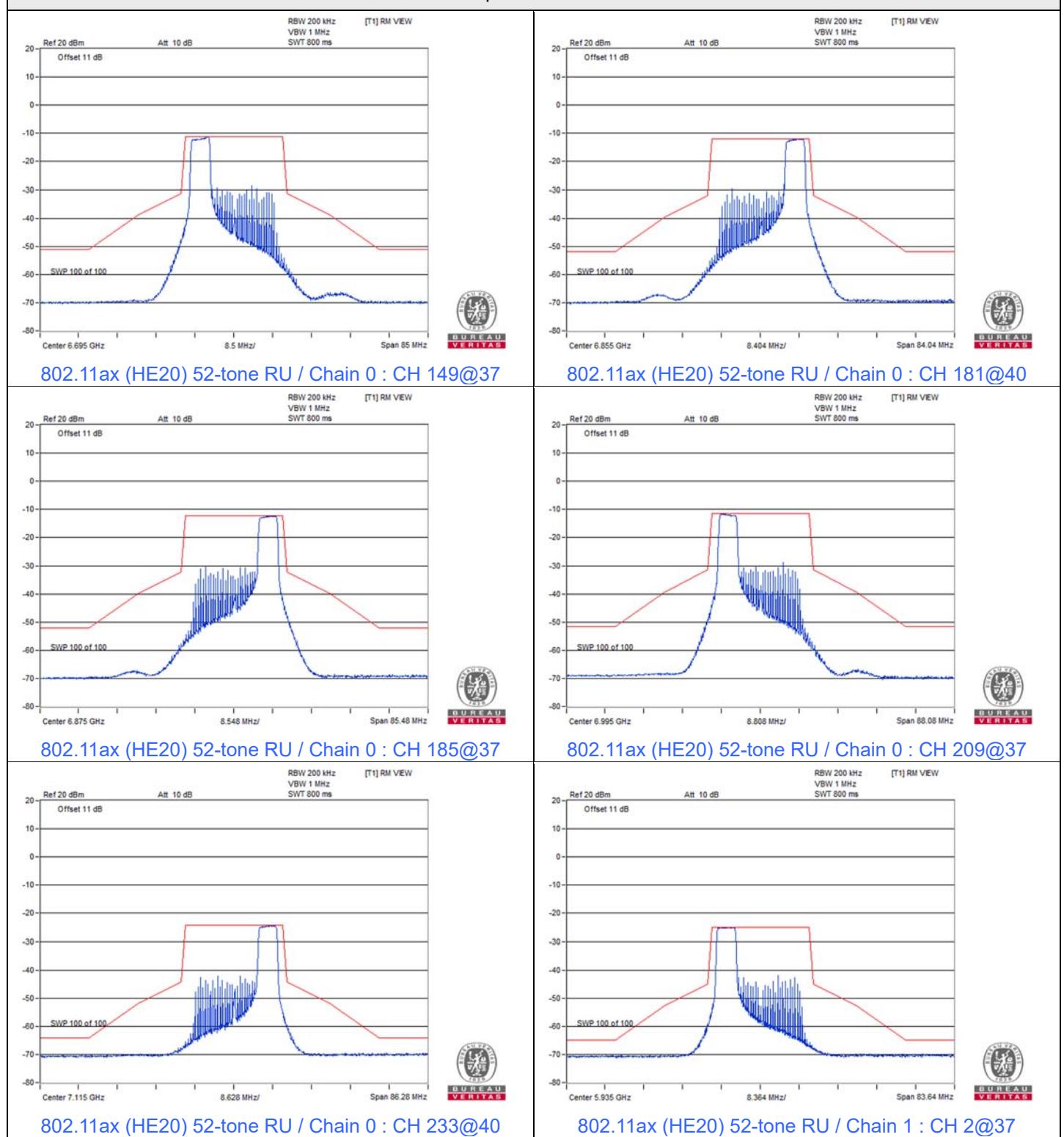
### 802.11ax (HE20) 52-tone RU



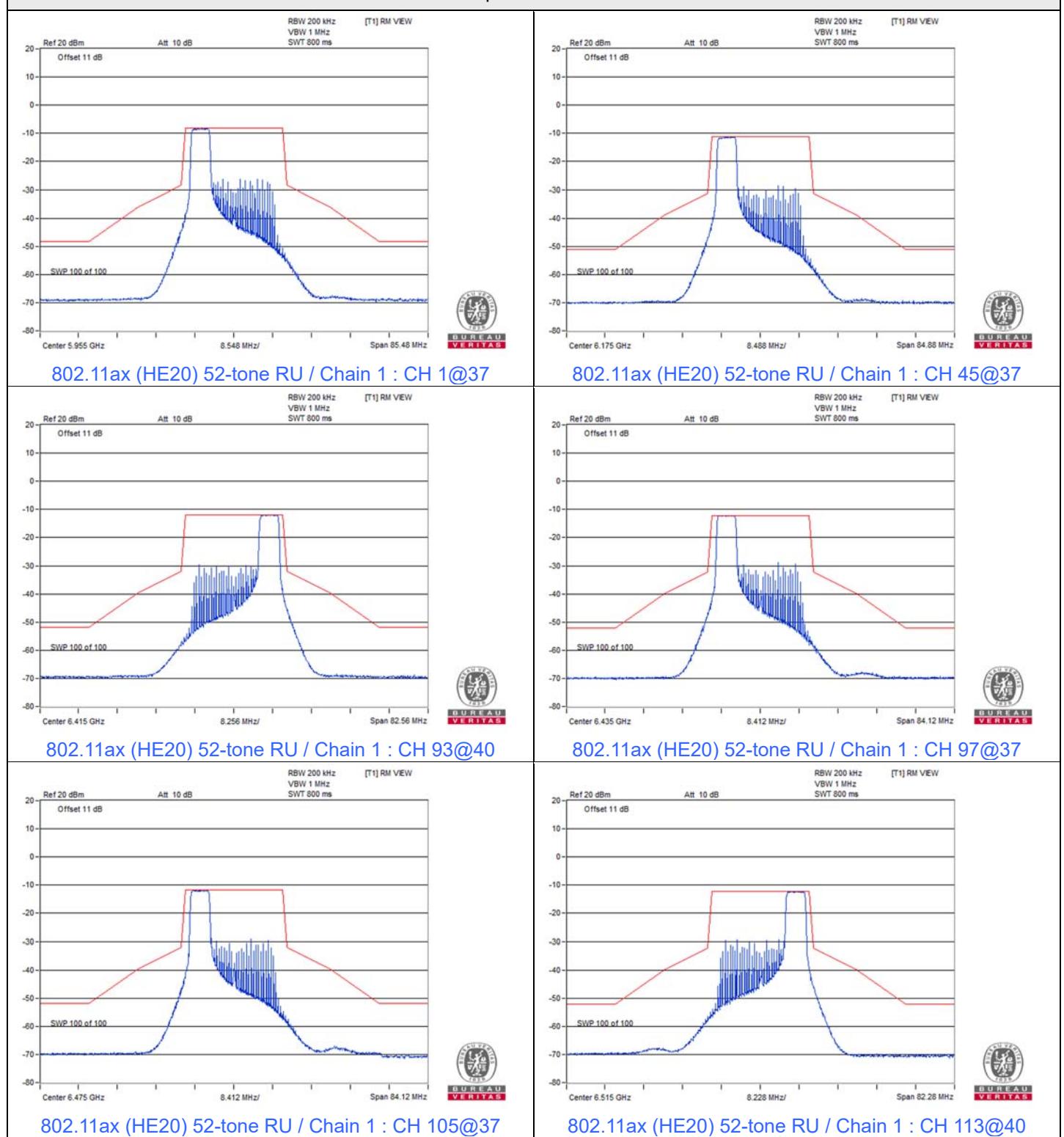
### Spectrum Plot



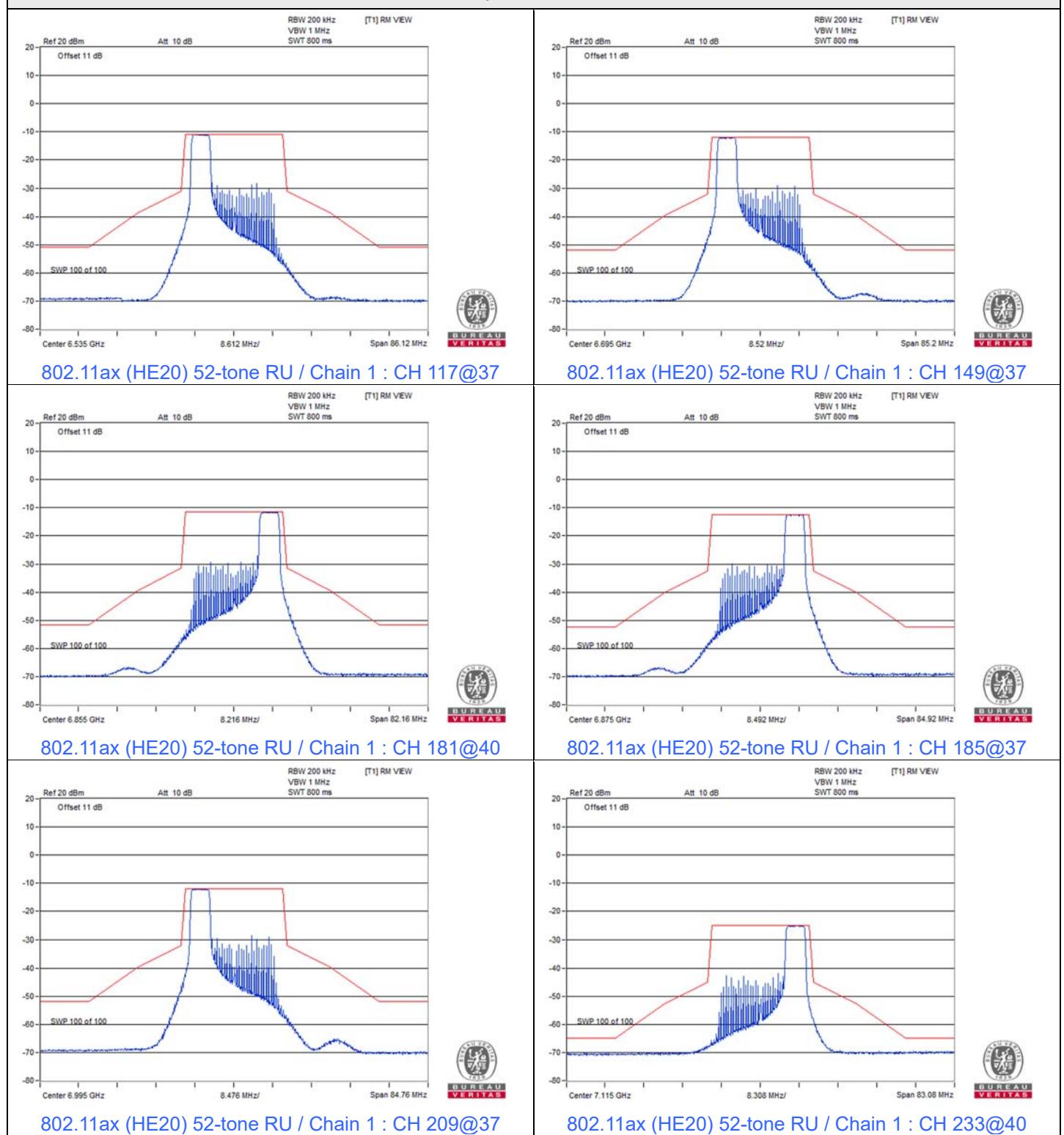
### Spectrum Plot



### Spectrum Plot

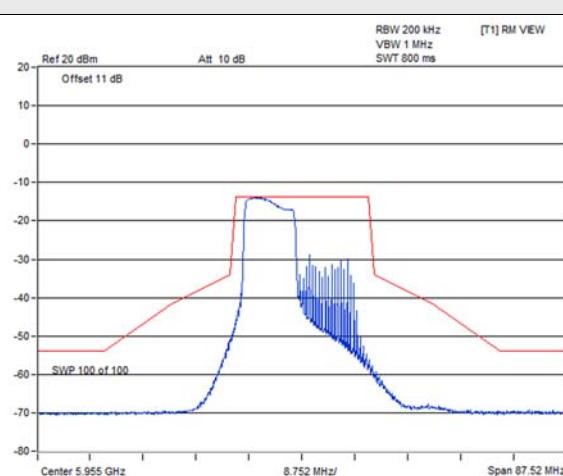
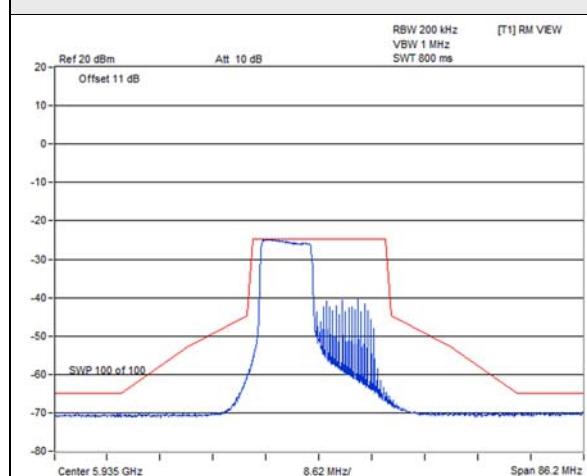


## Spectrum Plot



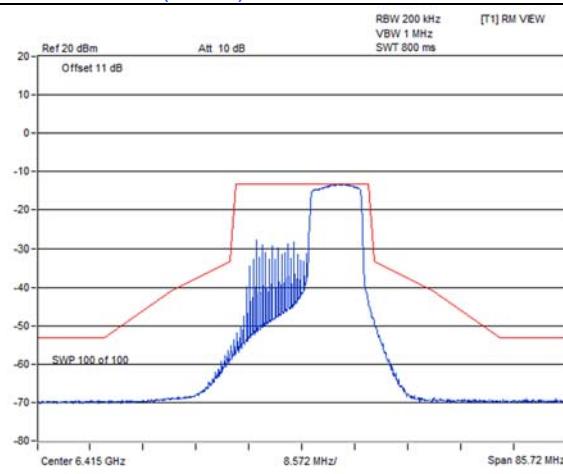
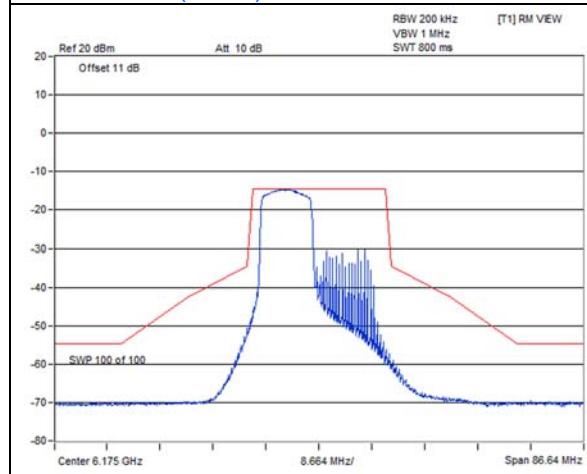
## 802.11ax (HE20) 106-tone RU

Spectrum Plot



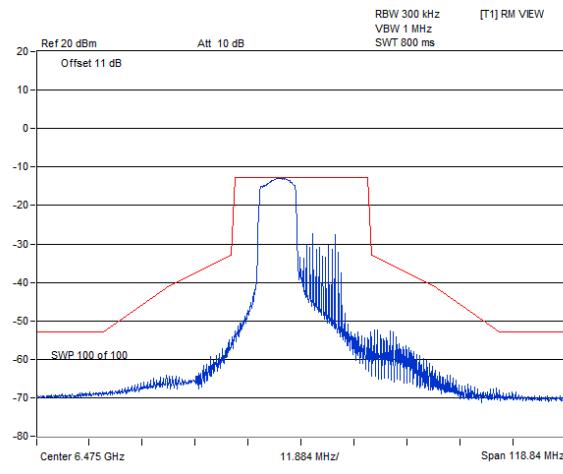
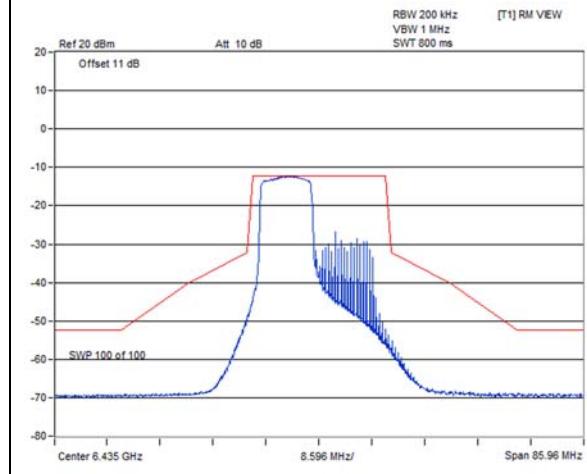
802.11ax (HE20) 106-tone RU / Chain 0 : CH 2@53

802.11ax (HE20) 106-tone RU / Chain 0 : CH 1@53



802.11ax (HE20) 106-tone RU / Chain 0 : CH 45@53

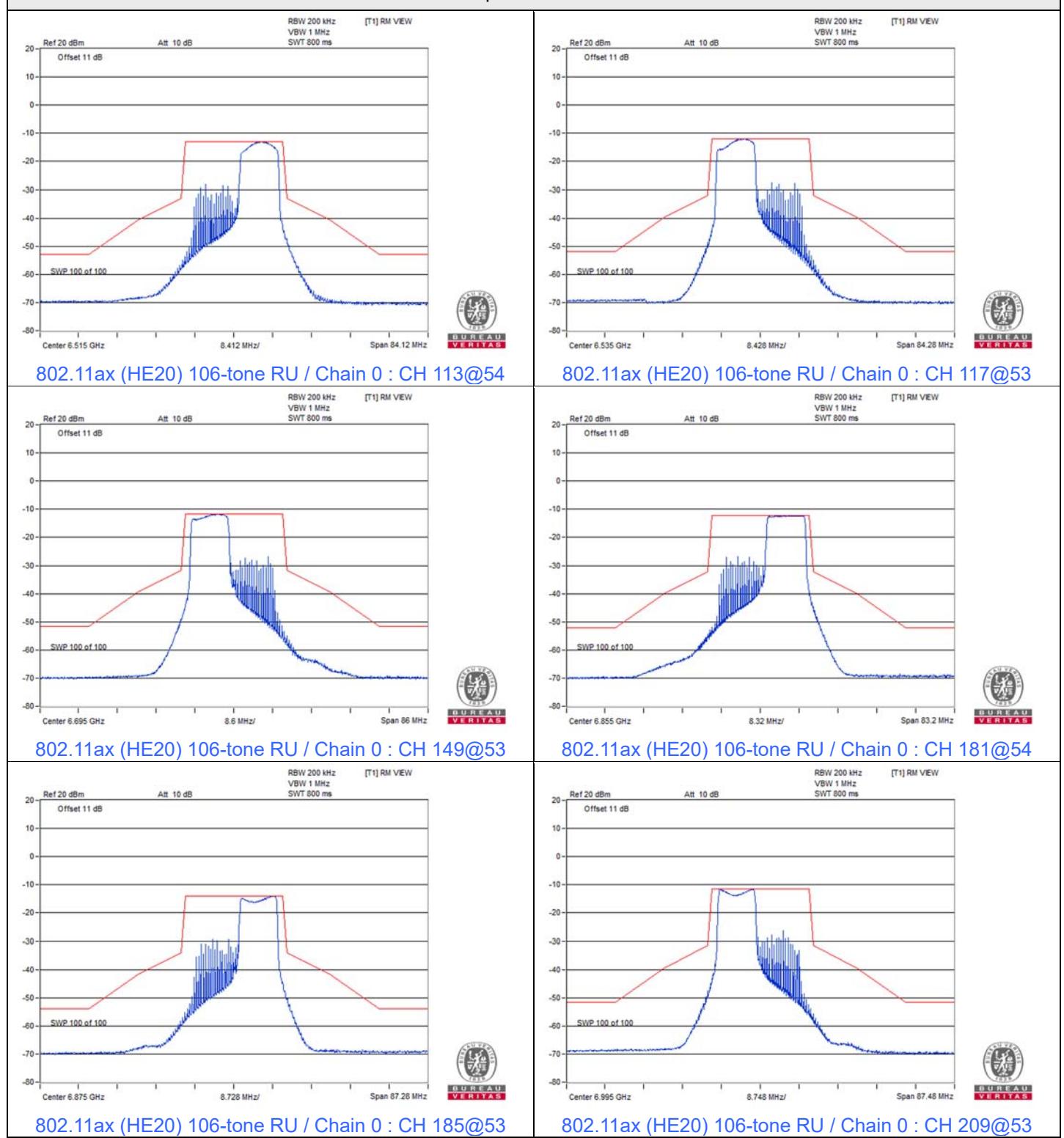
802.11ax (HE20) 106-tone RU / Chain 0 : CH 93@54



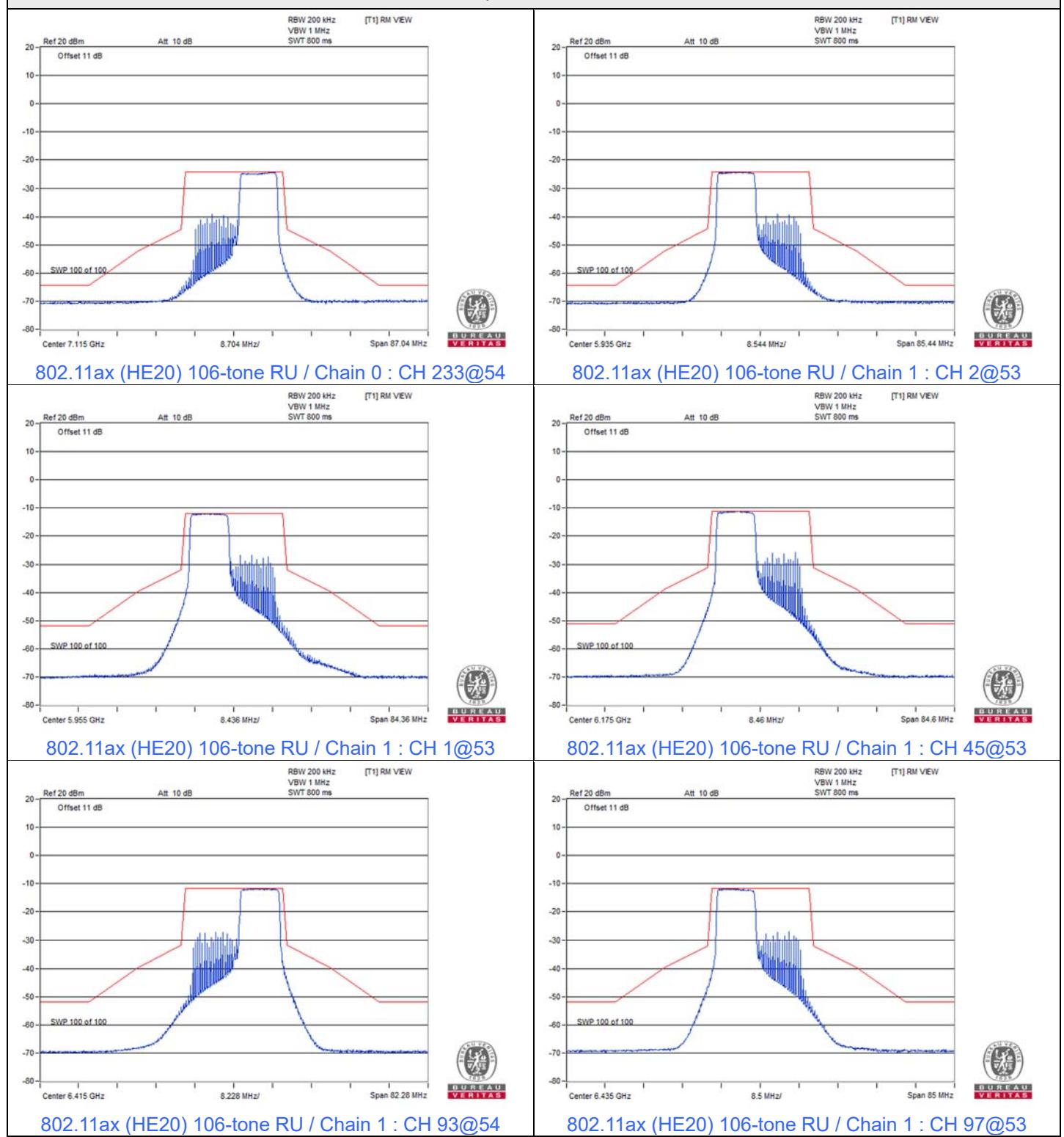
802.11ax (HE20) 106-tone RU / Chain 0 : CH 97@53

802.11ax (HE20) 106-tone RU / Chain 0 : CH 105@53

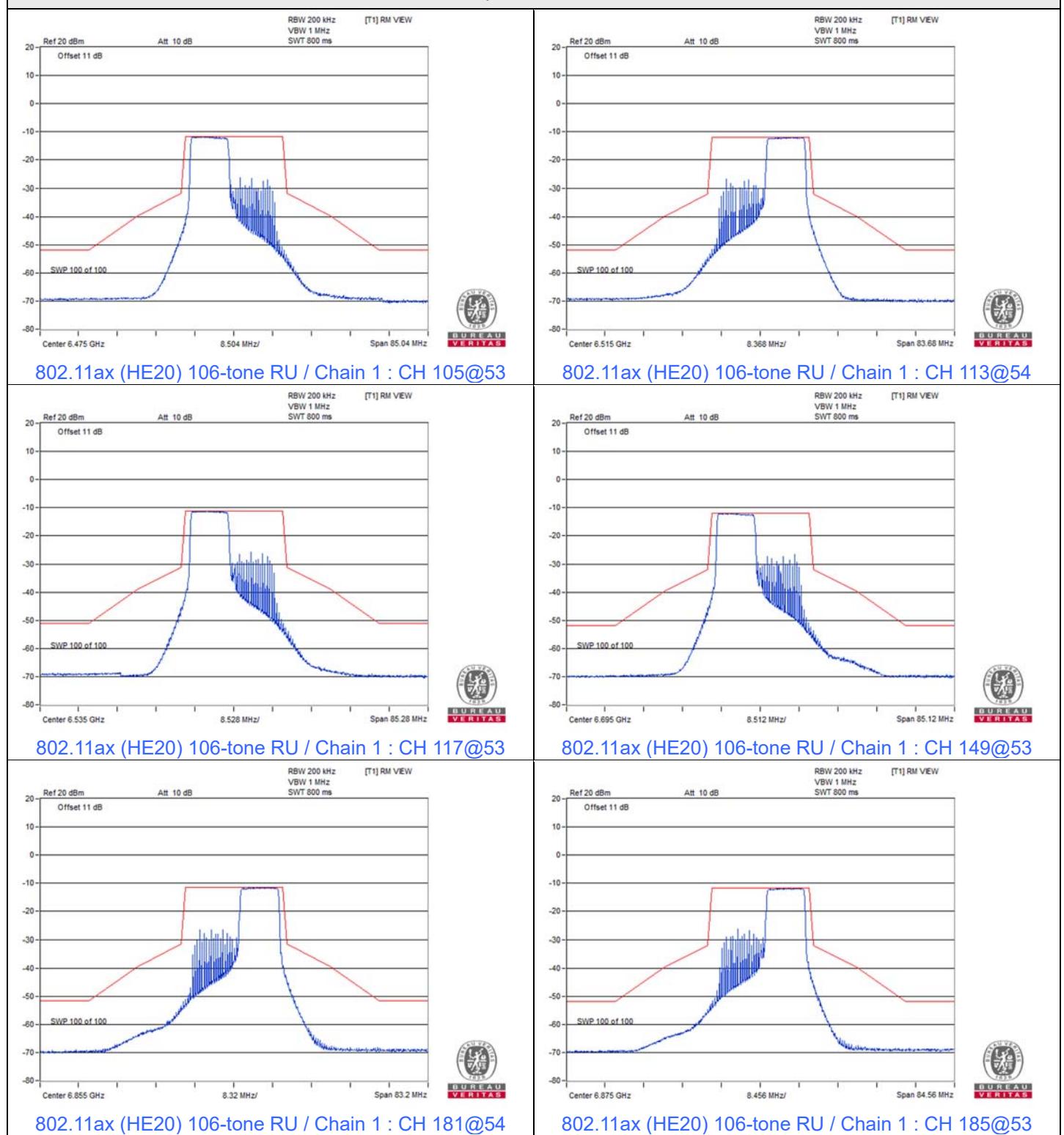
### Spectrum Plot



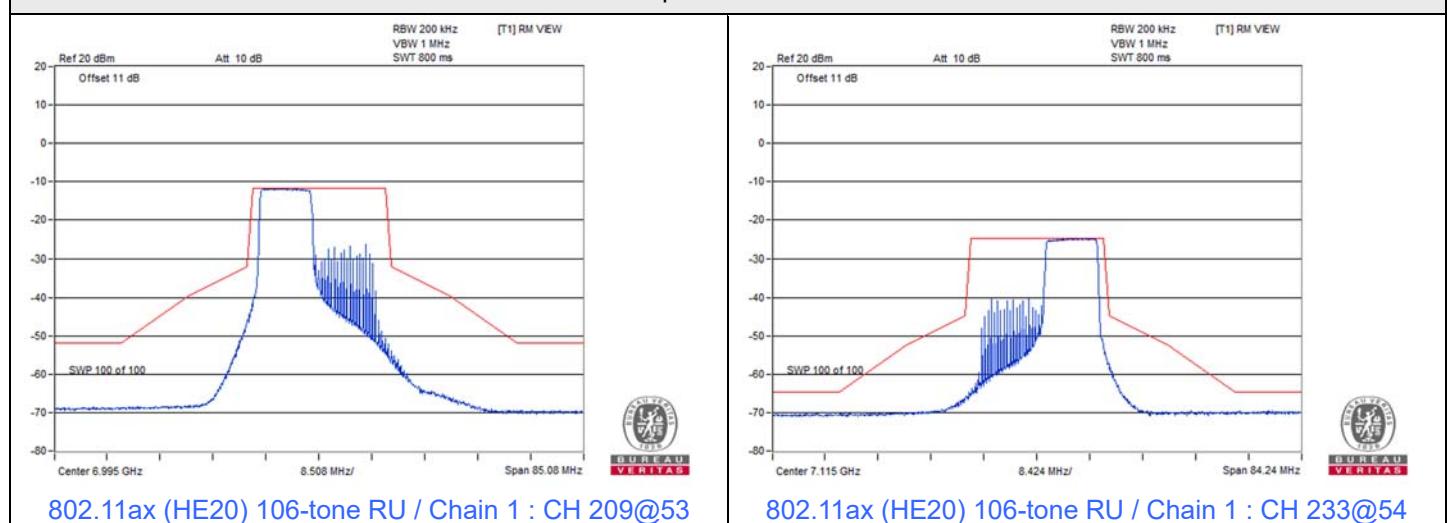
## Spectrum Plot



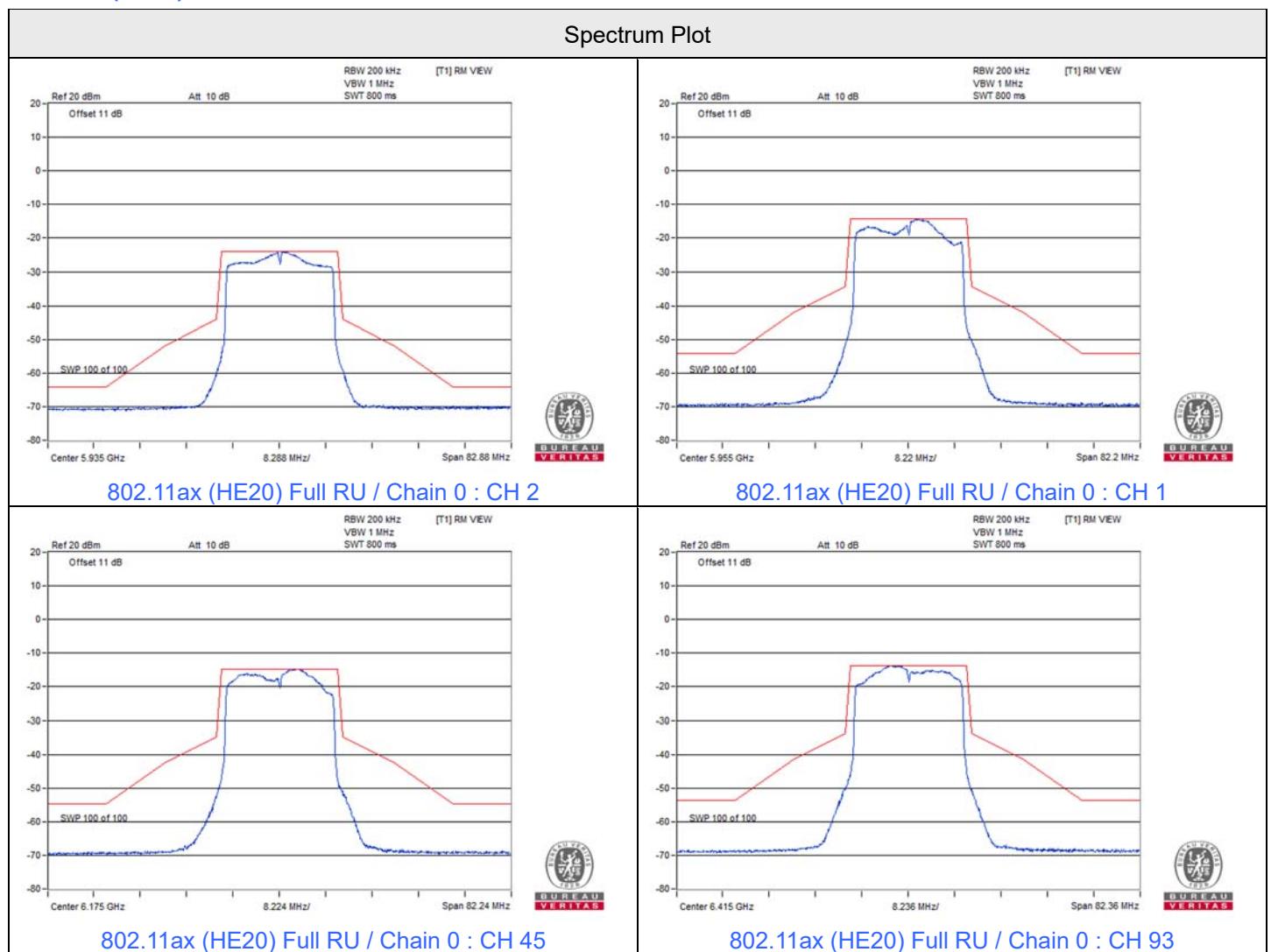
### Spectrum Plot



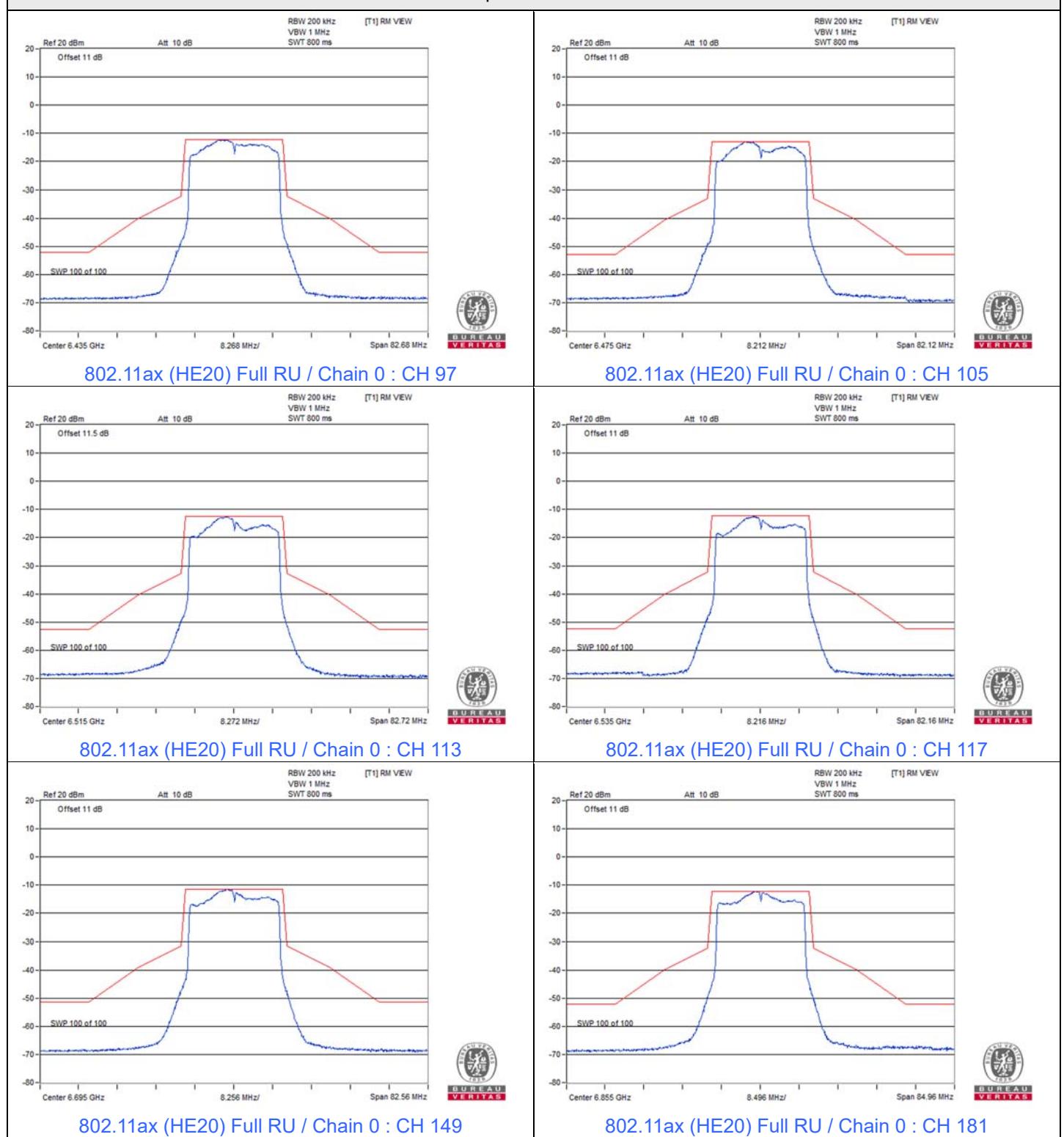
### Spectrum Plot



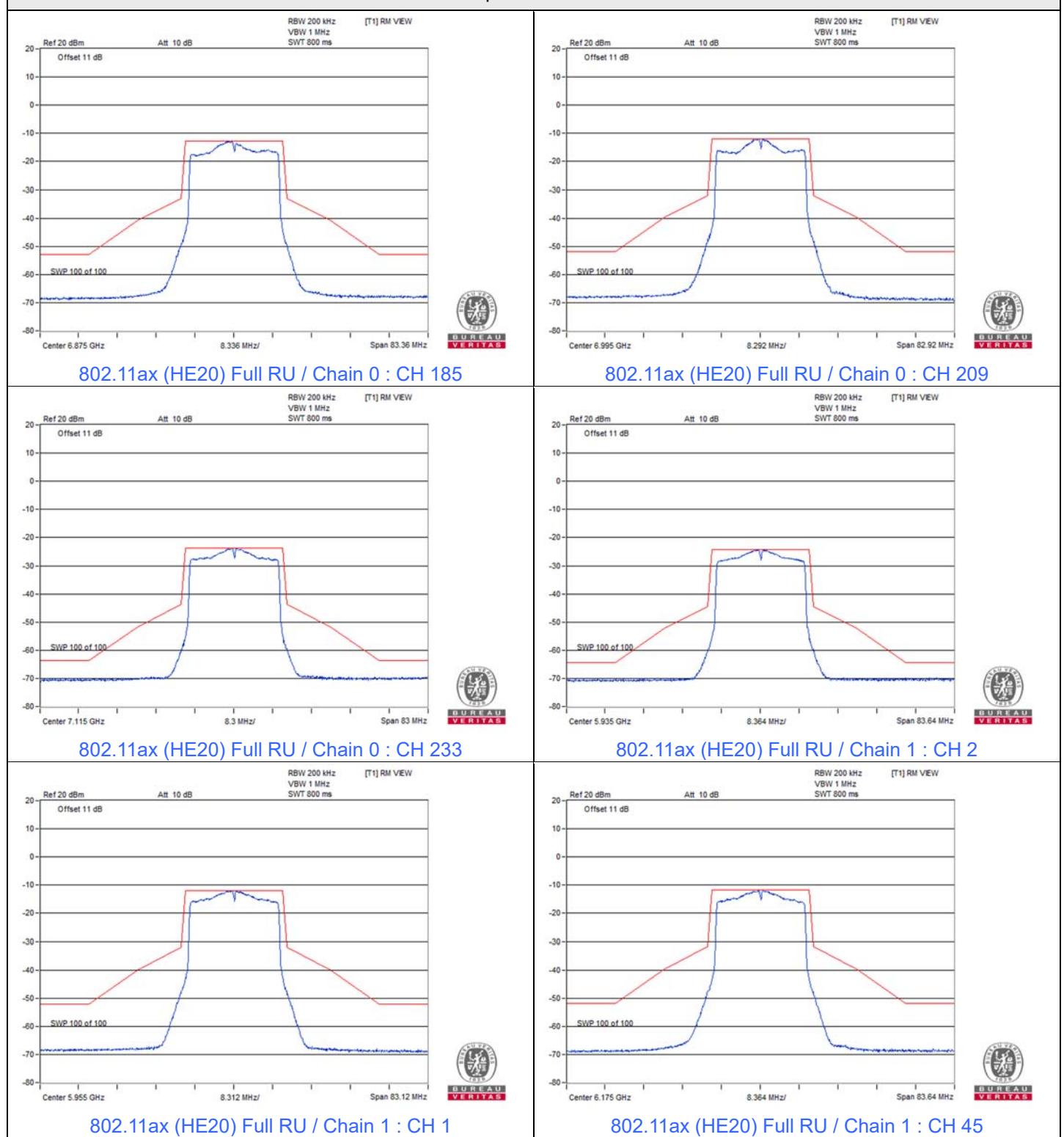
### 802.11ax (HE20) Full RU



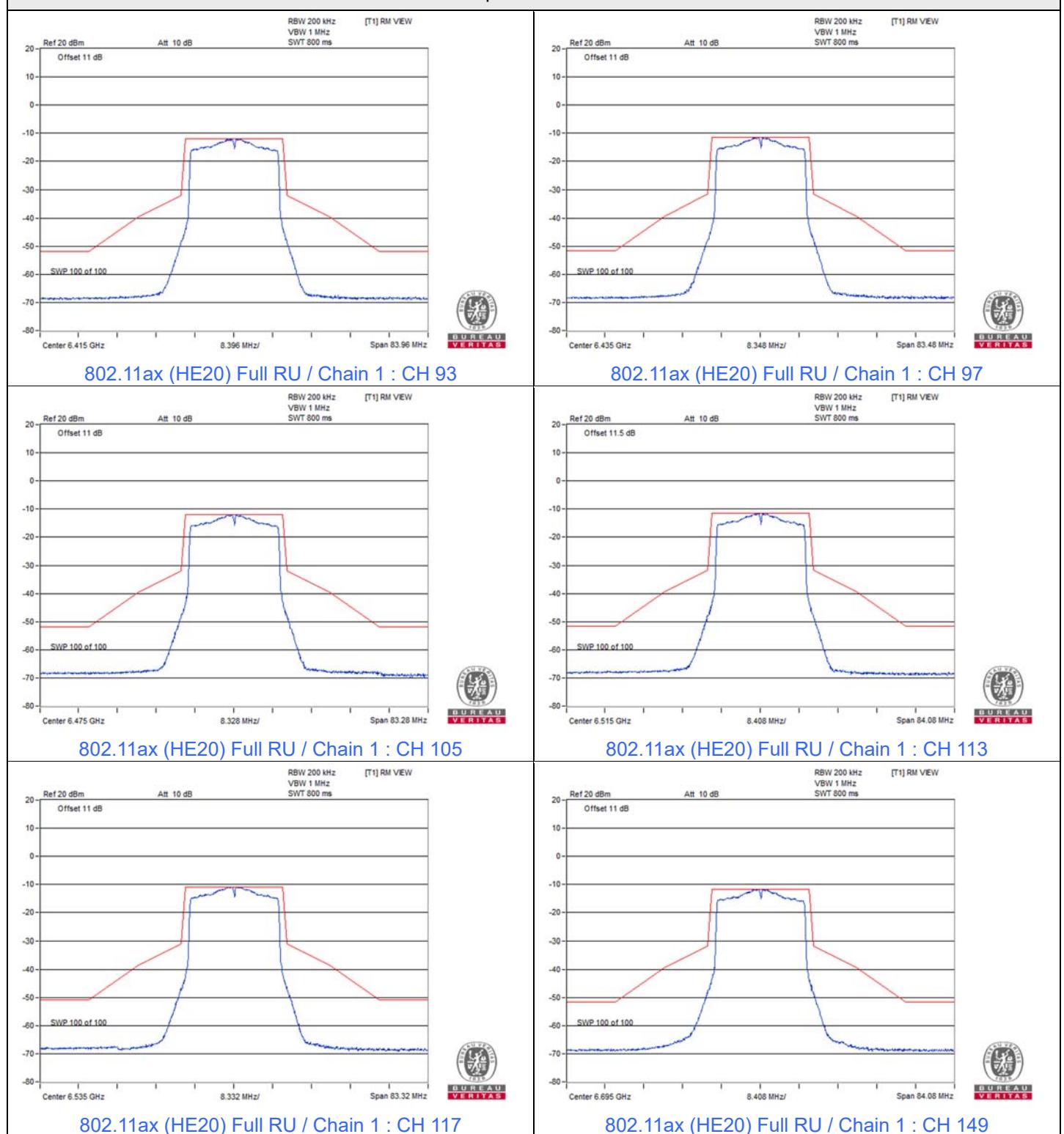
### Spectrum Plot



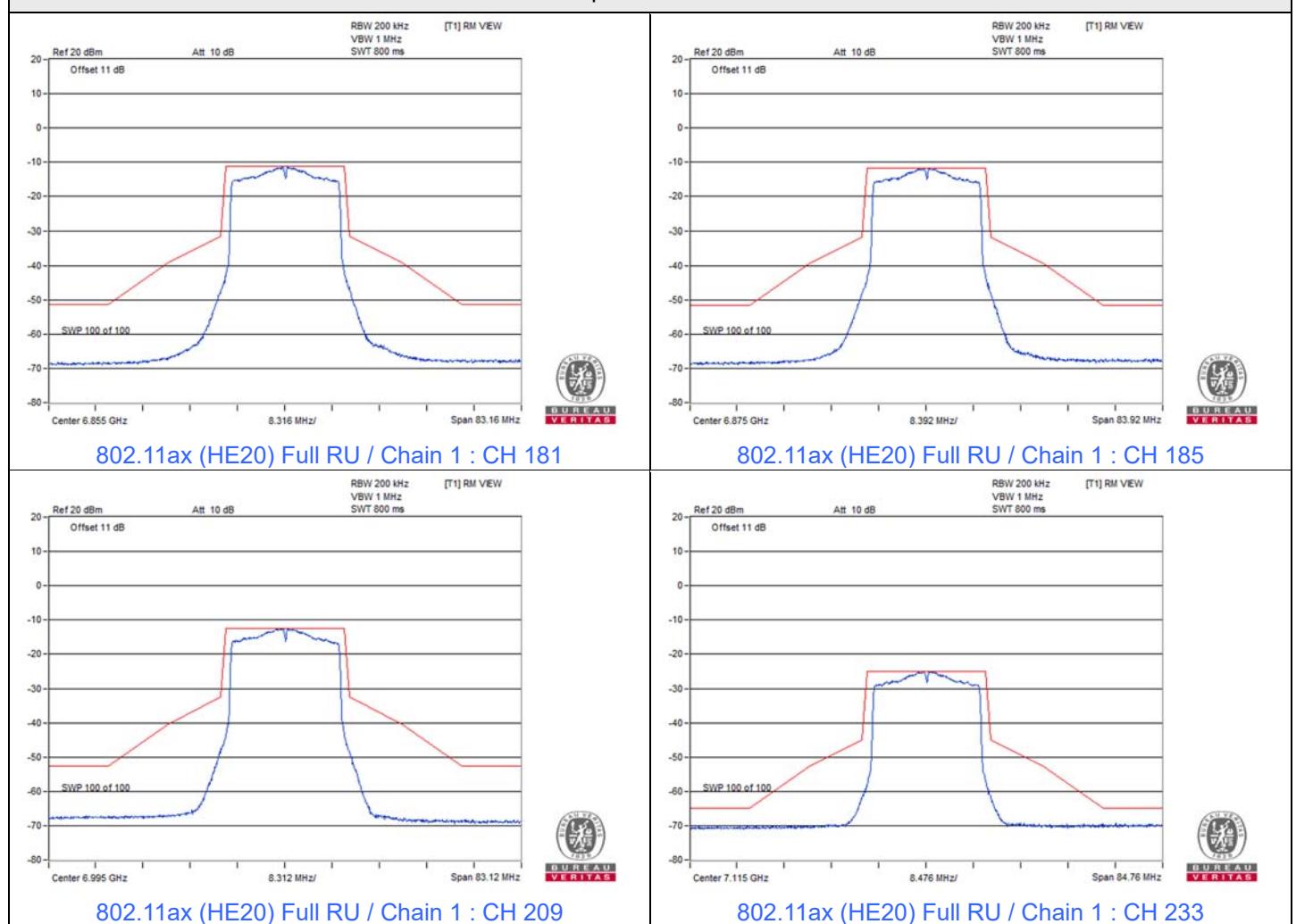
## Spectrum Plot



### Spectrum Plot

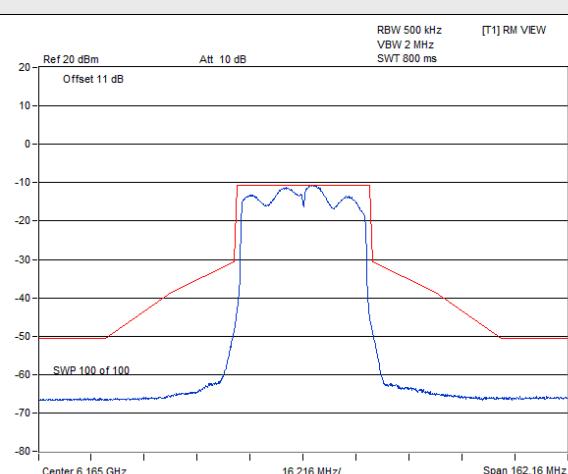
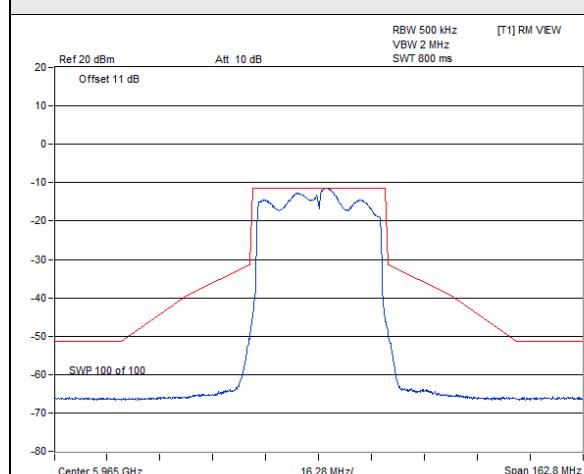


## Spectrum Plot



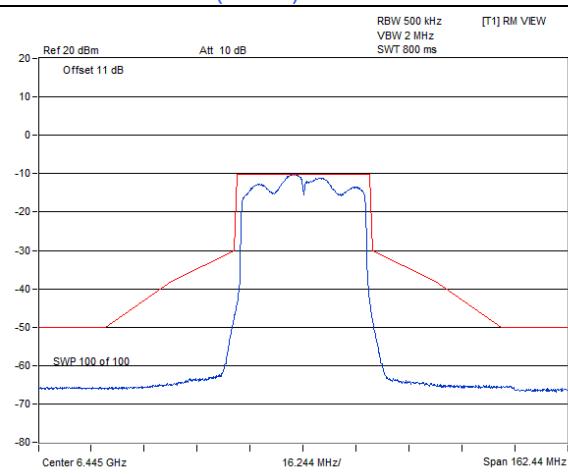
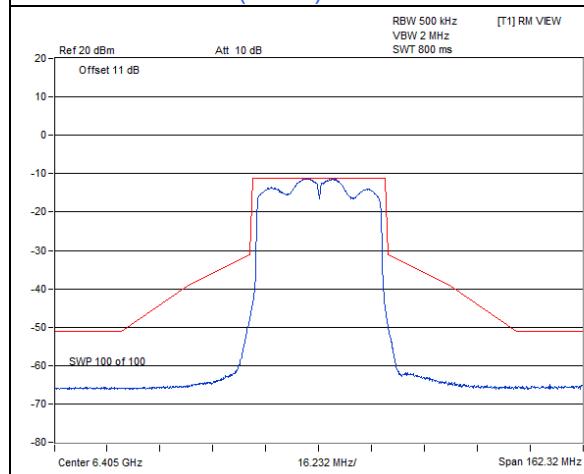
## 802.11ax (HE40) Full RU

Spectrum Plot



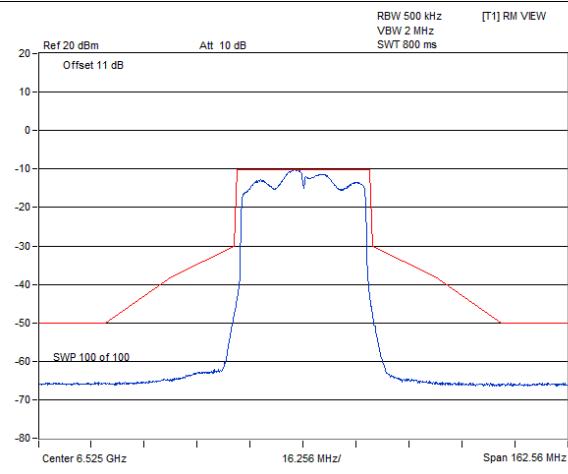
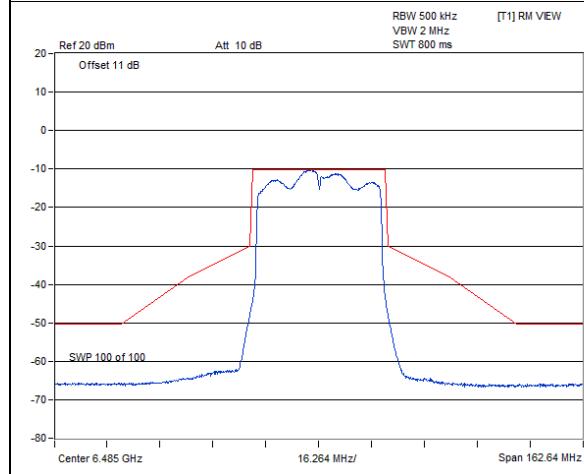
802.11ax (HE40) Full RU / Chain 0 : CH 3

802.11ax (HE40) Full RU / Chain 0 : CH 43



802.11ax (HE40) Full RU / Chain 0 : CH 91

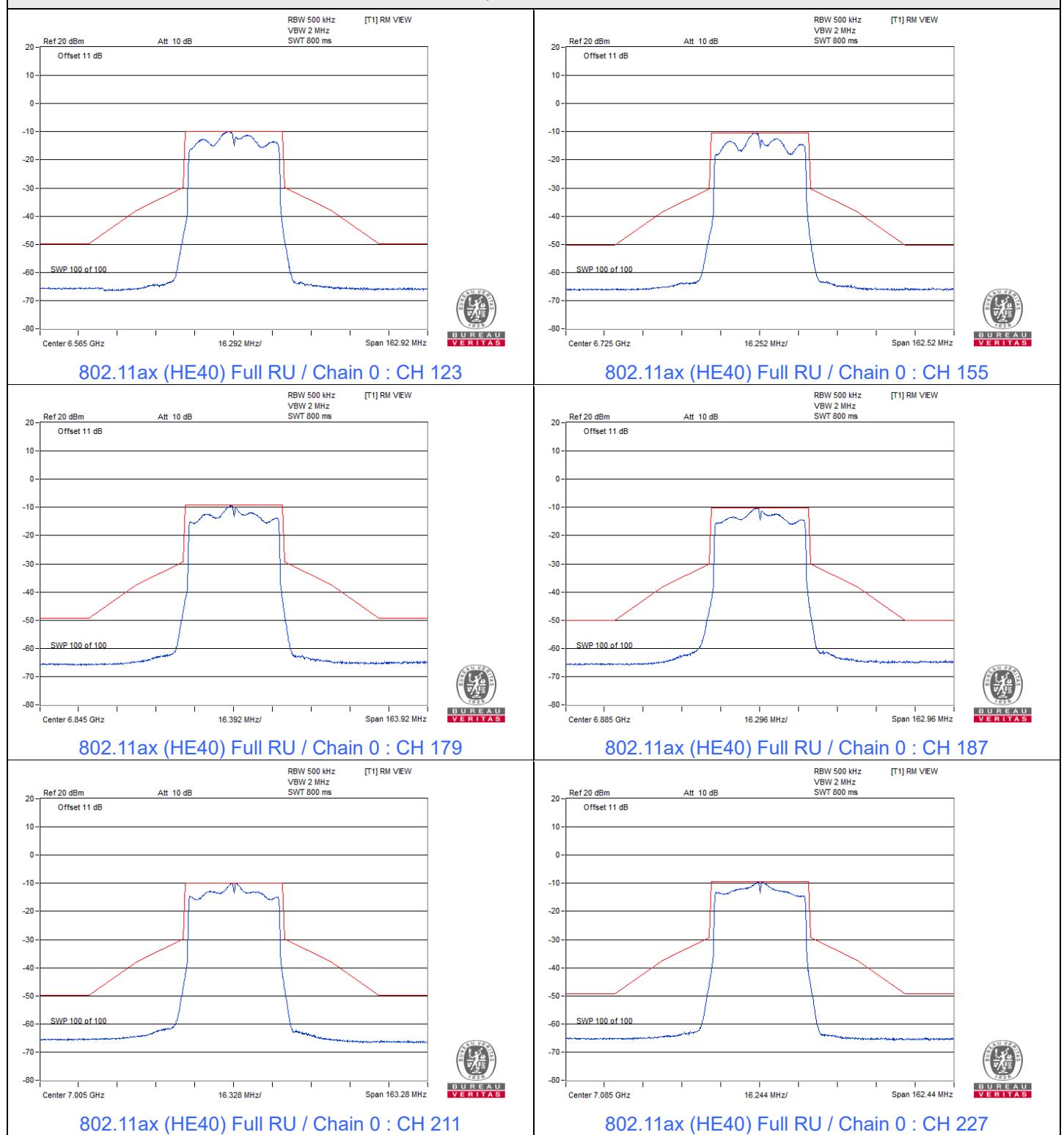
802.11ax (HE40) Full RU / Chain 0 : CH 99



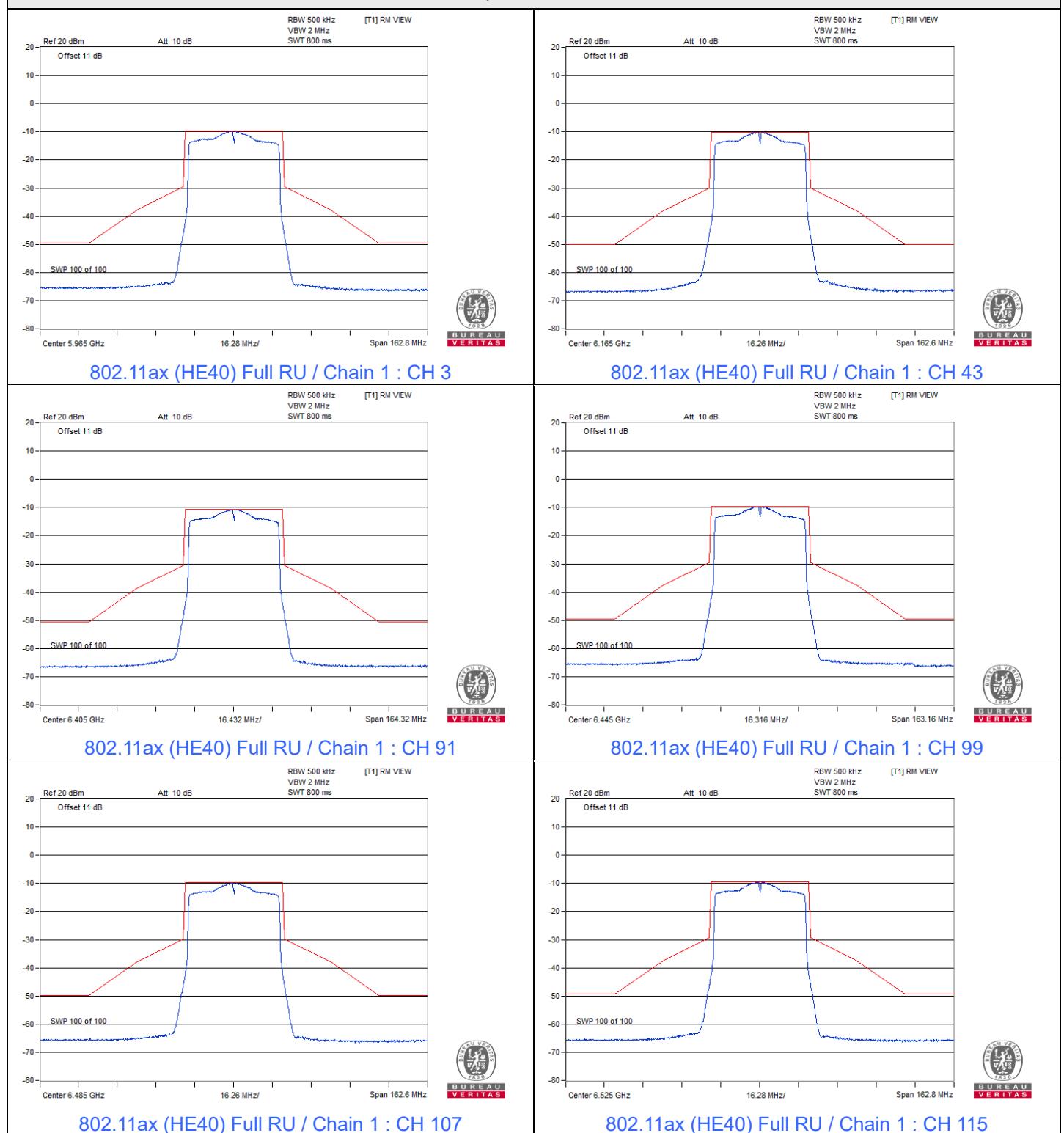
802.11ax (HE40) Full RU / Chain 0 : CH 107

802.11ax (HE40) Full RU / Chain 0 : CH 115

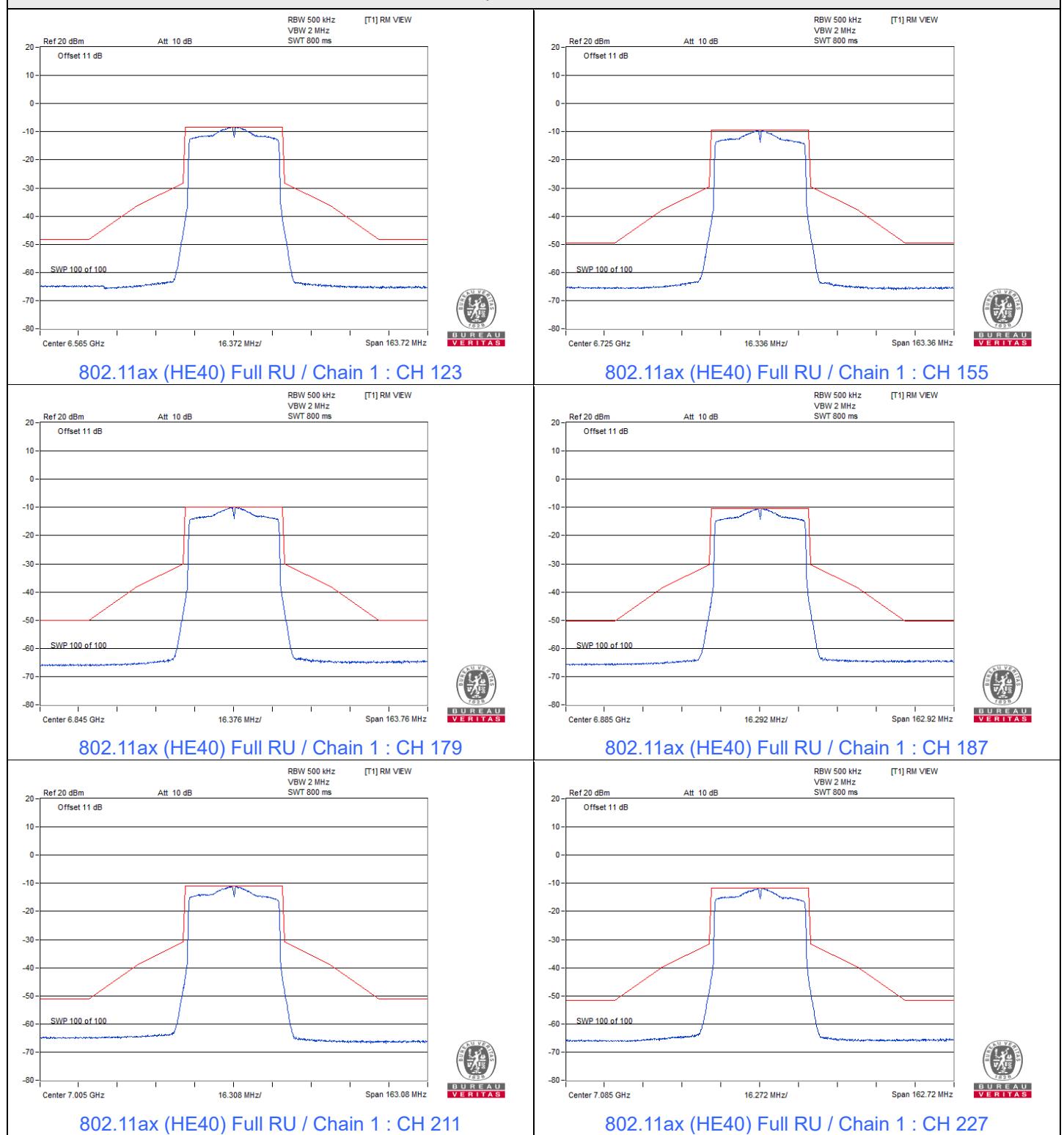
## Spectrum Plot



## Spectrum Plot

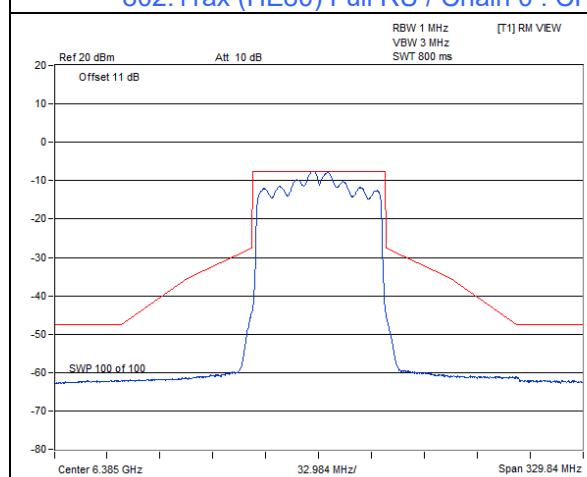
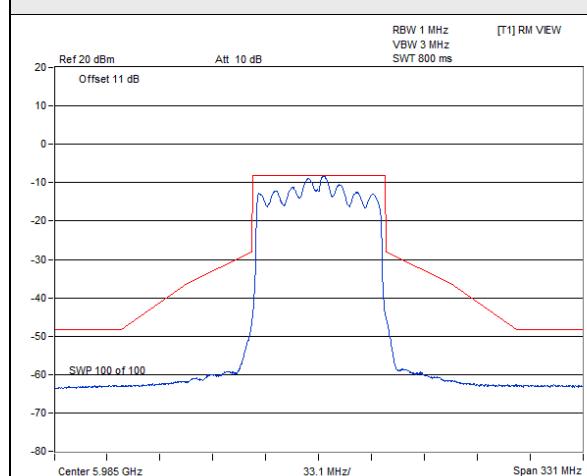


## Spectrum Plot

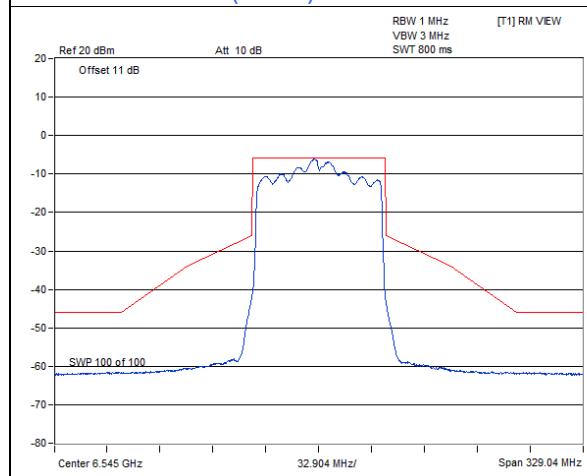


## 802.11ax (HE80) Full RU

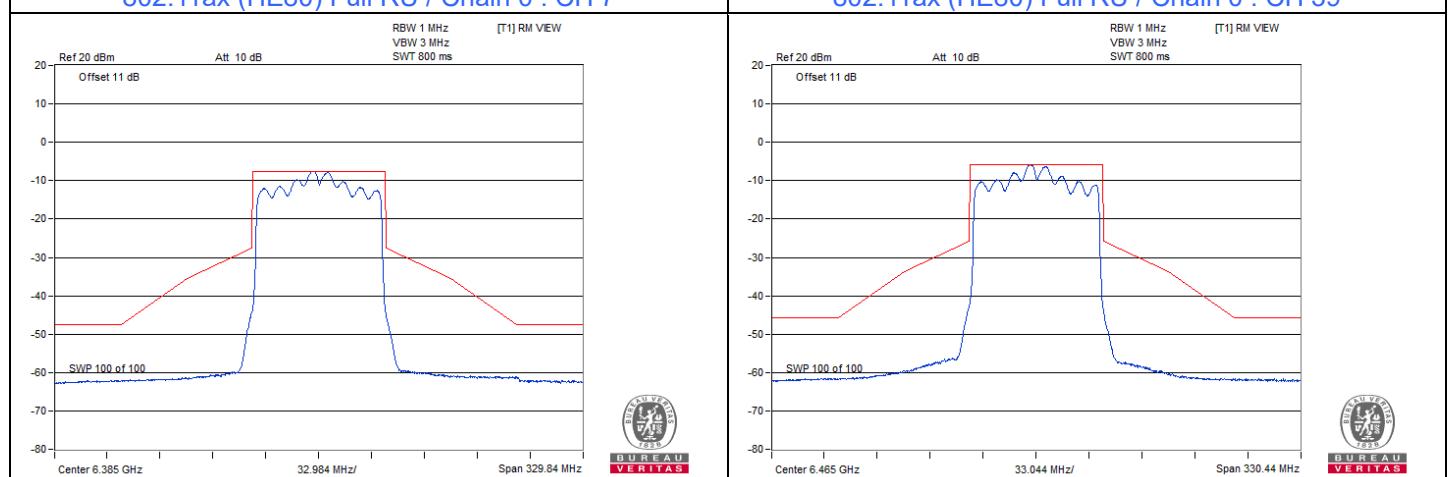
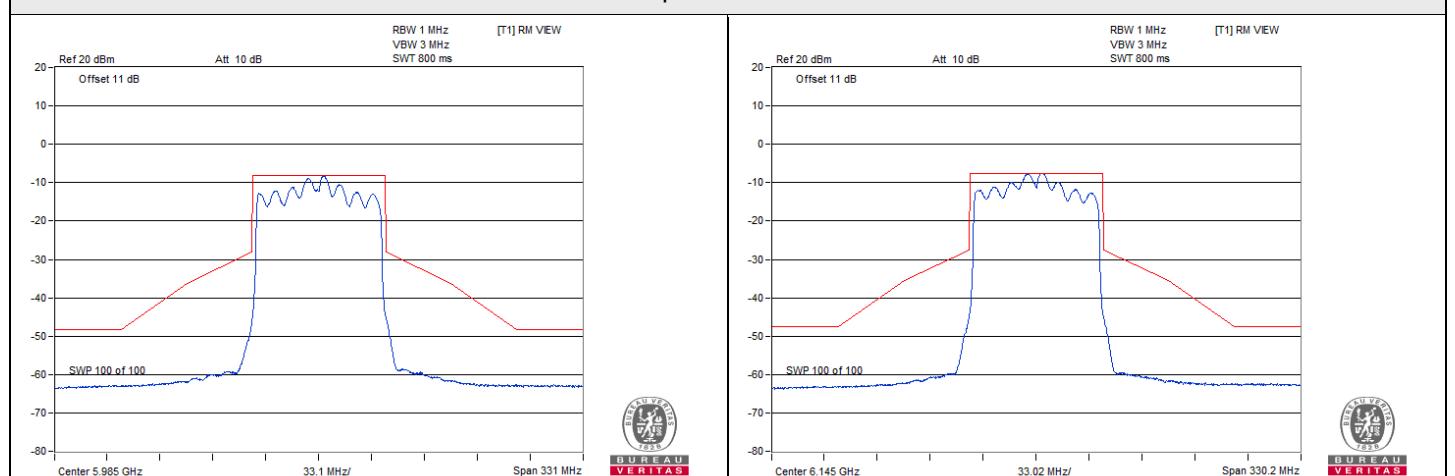
Spectrum Plot



**802.11ax (HE80) Full RU / Chain 0 : CH 87**

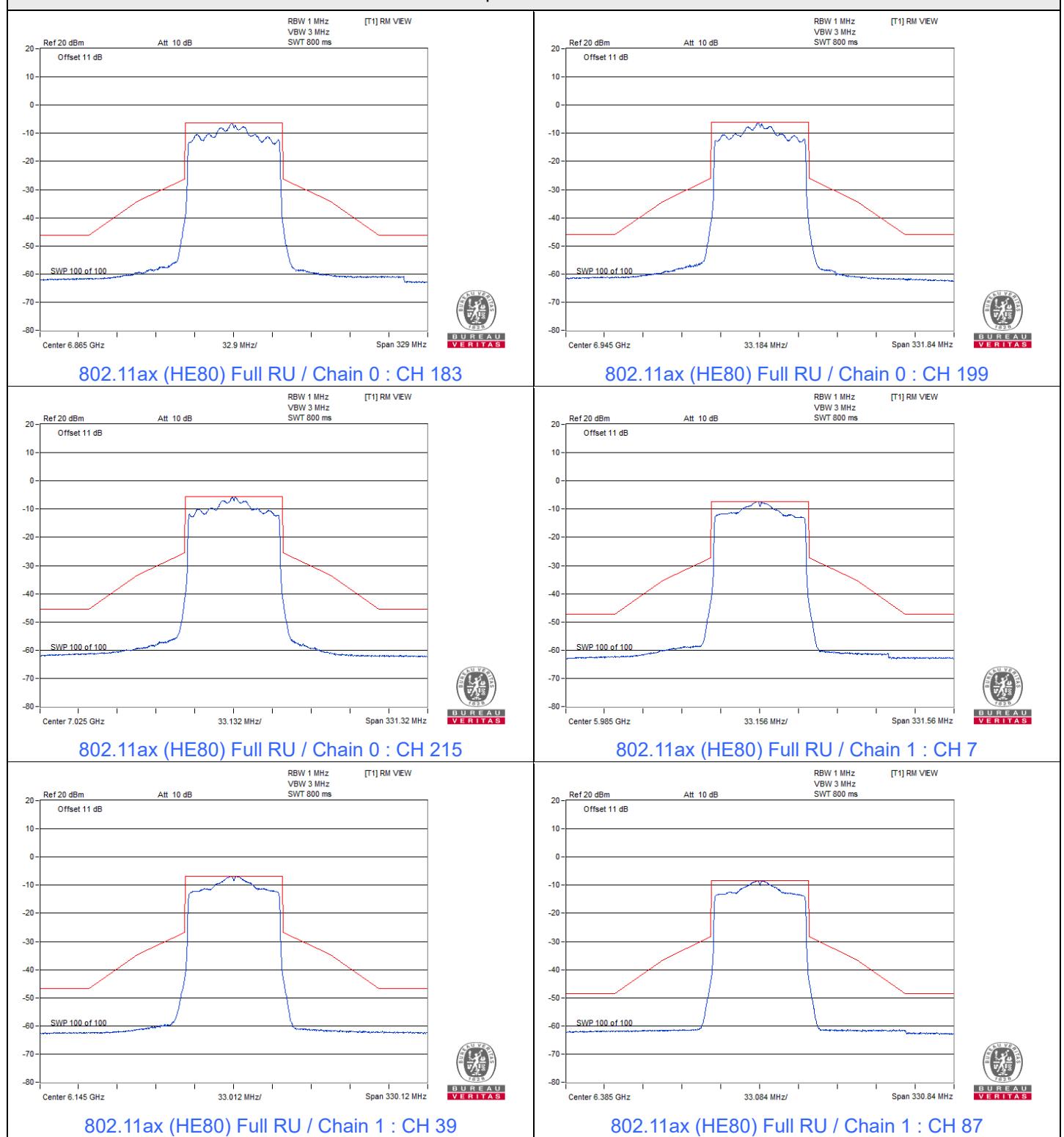


**802.11ax (HE80) Full RU / Chain 0 : CH 119**

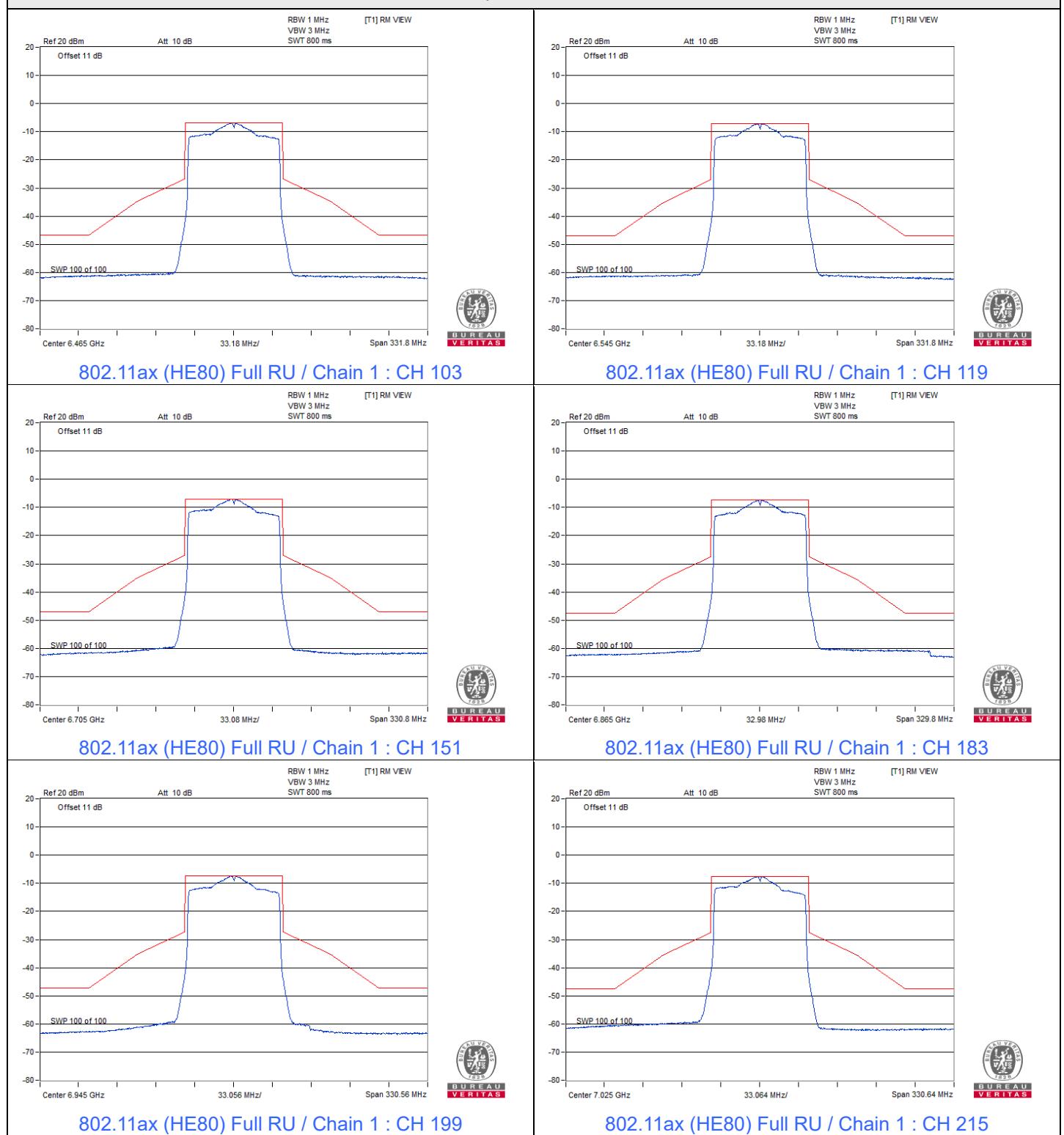


**802.11ax (HE80) Full RU / Chain 0 : CH 151**

## Spectrum Plot

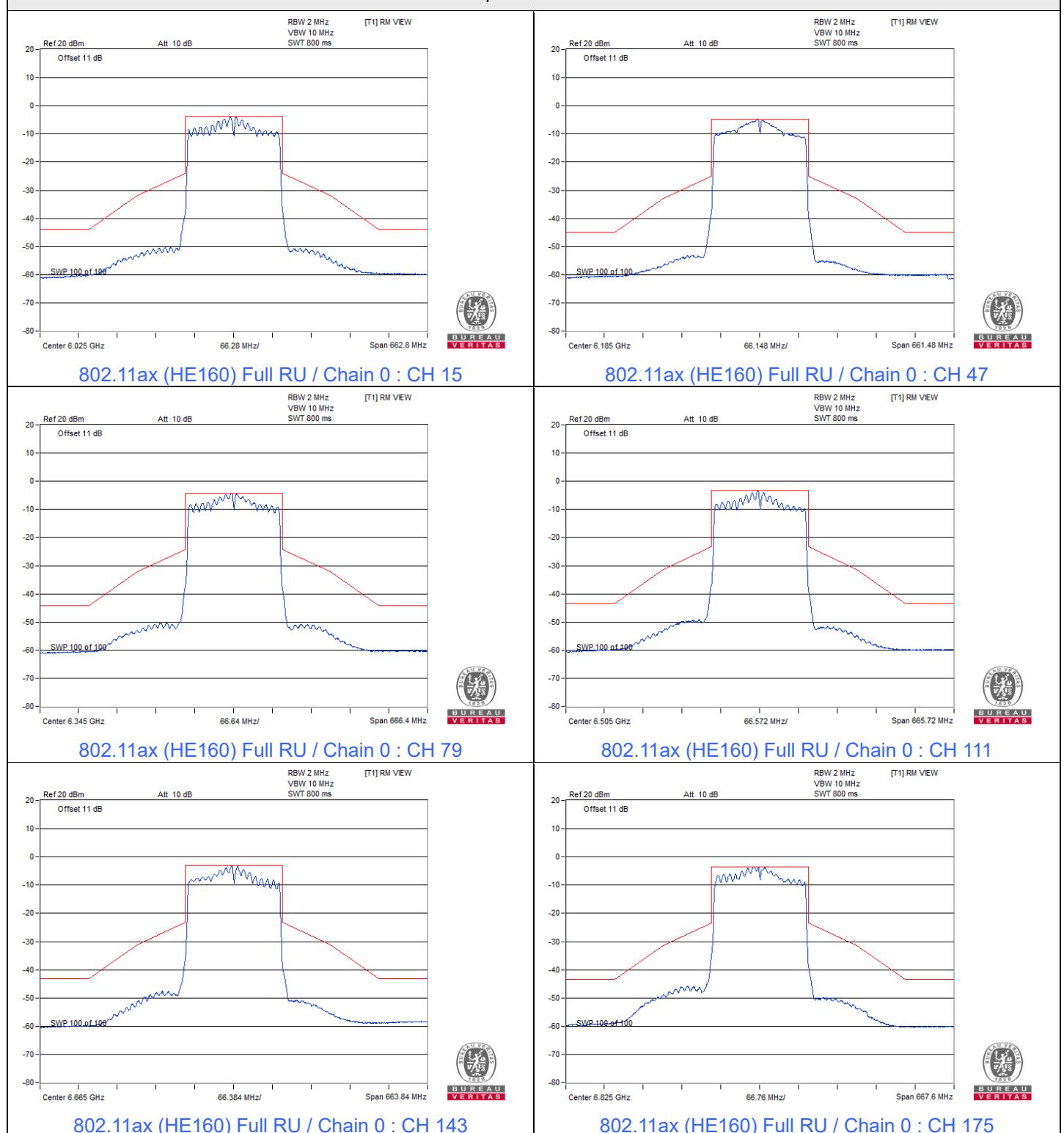


## Spectrum Plot

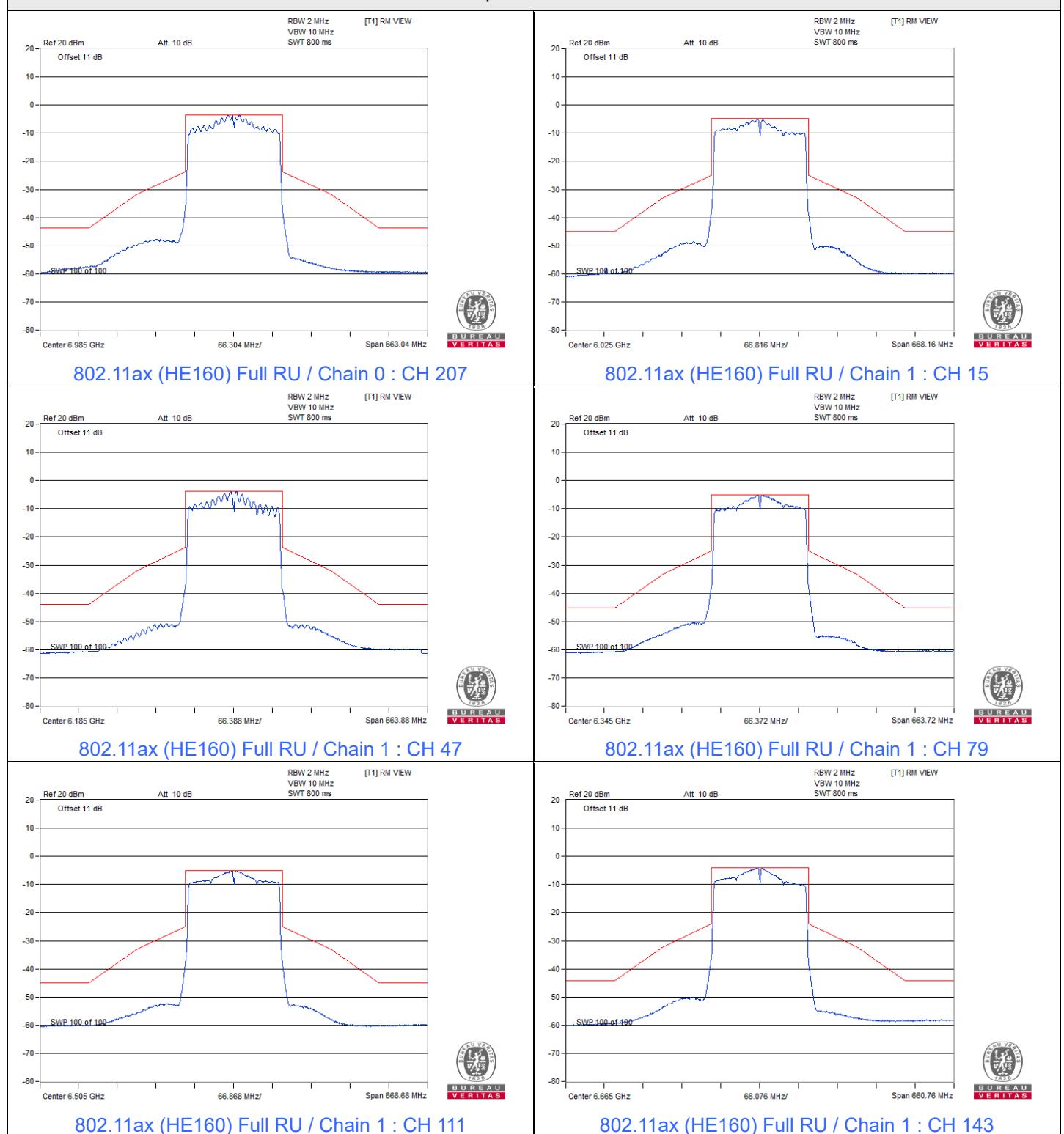


## 802.11ax (HE160) Full RU

Spectrum Plot



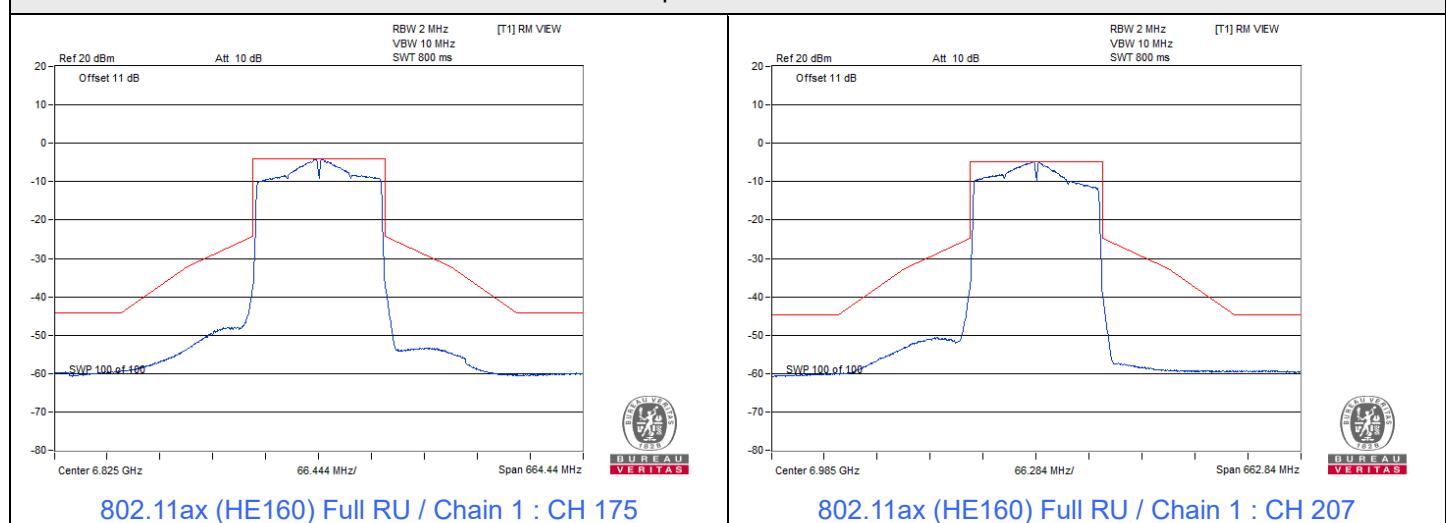
## Spectrum Plot





BUREAU  
VERITAS

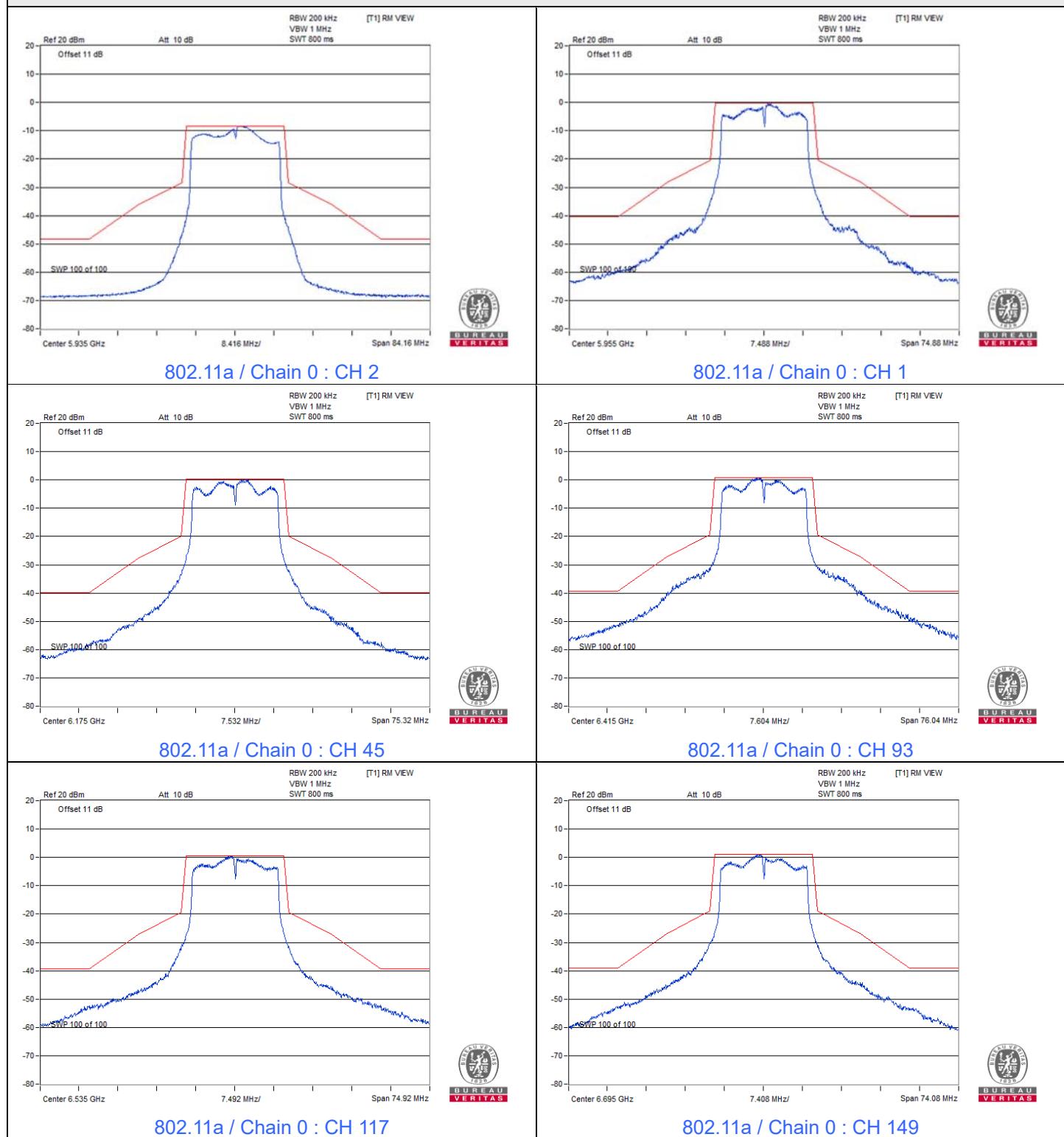
## Spectrum Plot



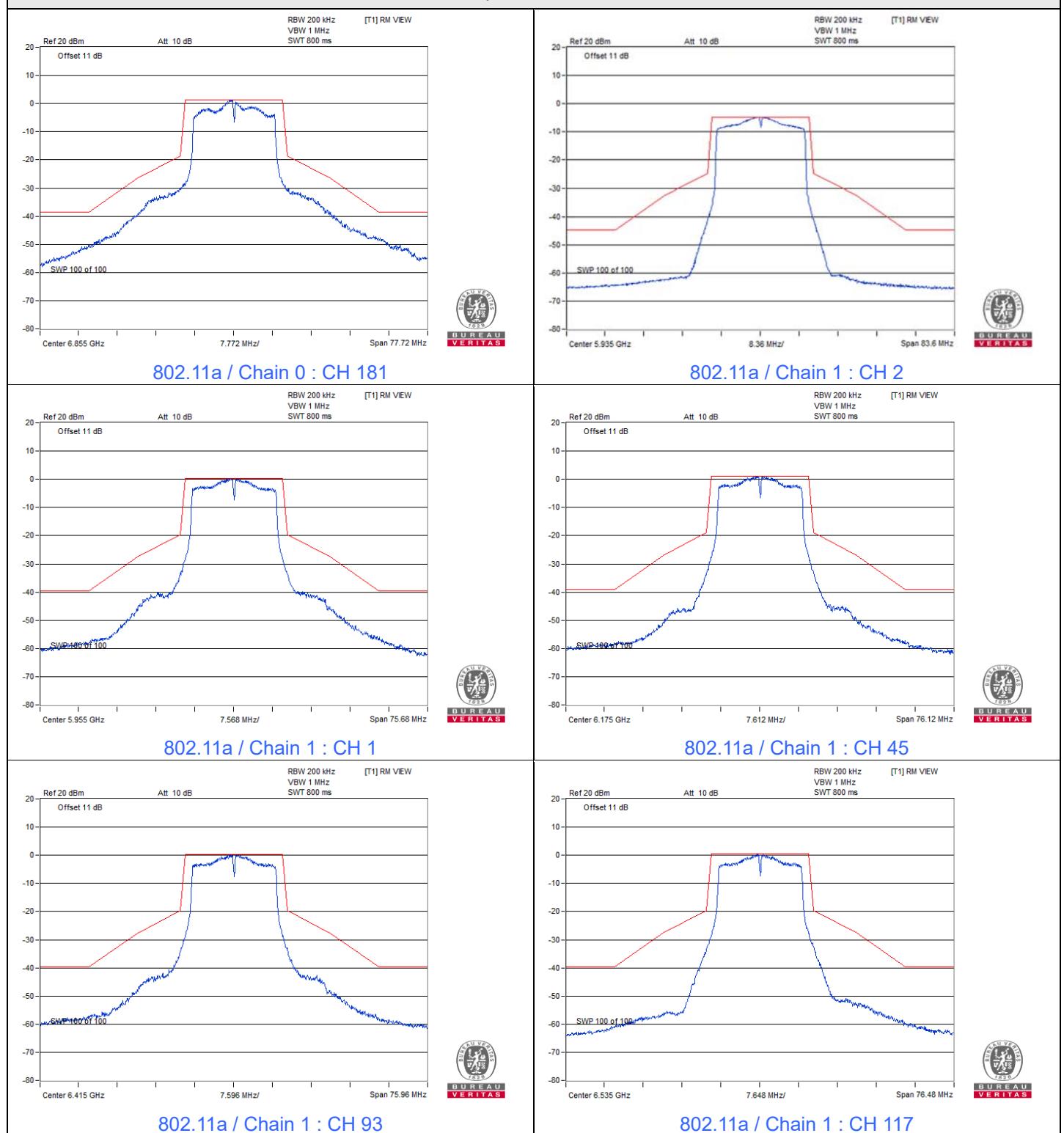
## Under controlled by Standard Power AP

### 802.11a

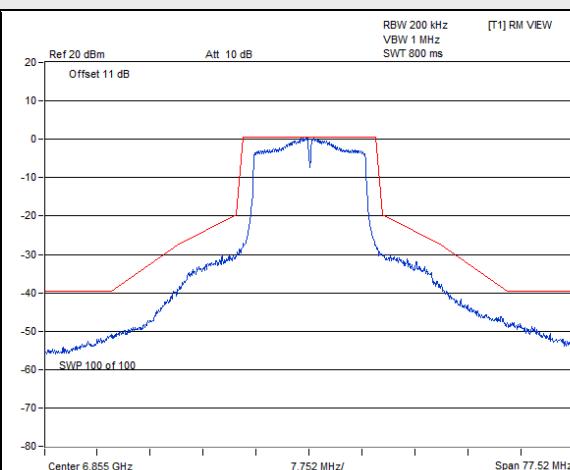
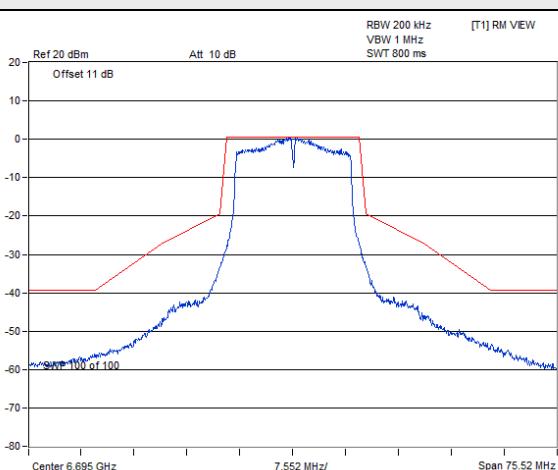
**Spectrum Plot**



## Spectrum Plot

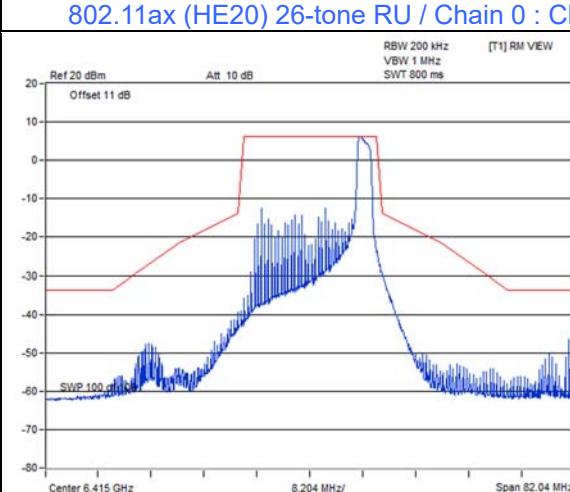
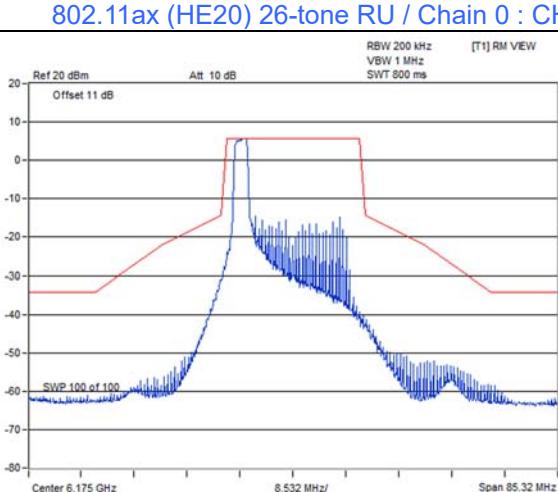
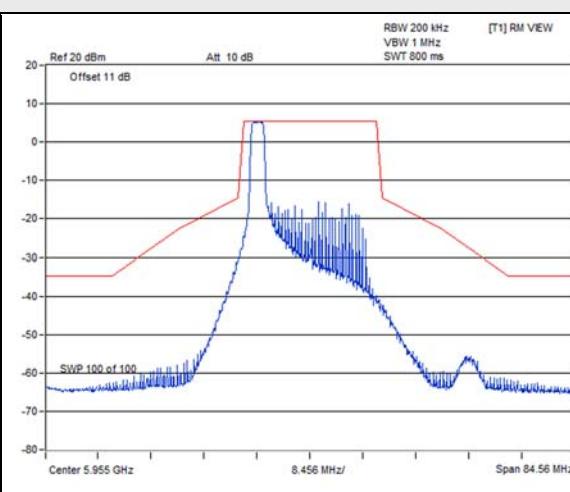
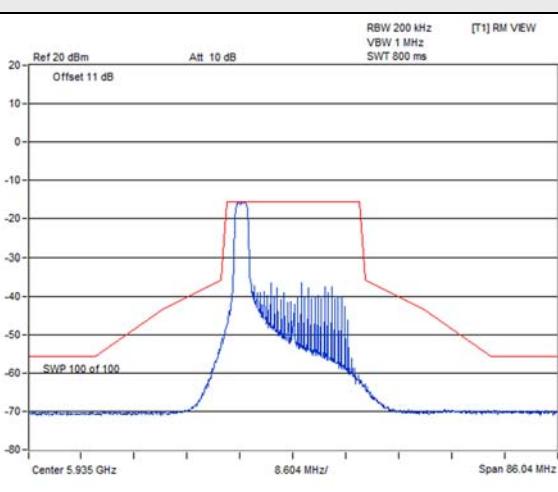


### Spectrum Plot

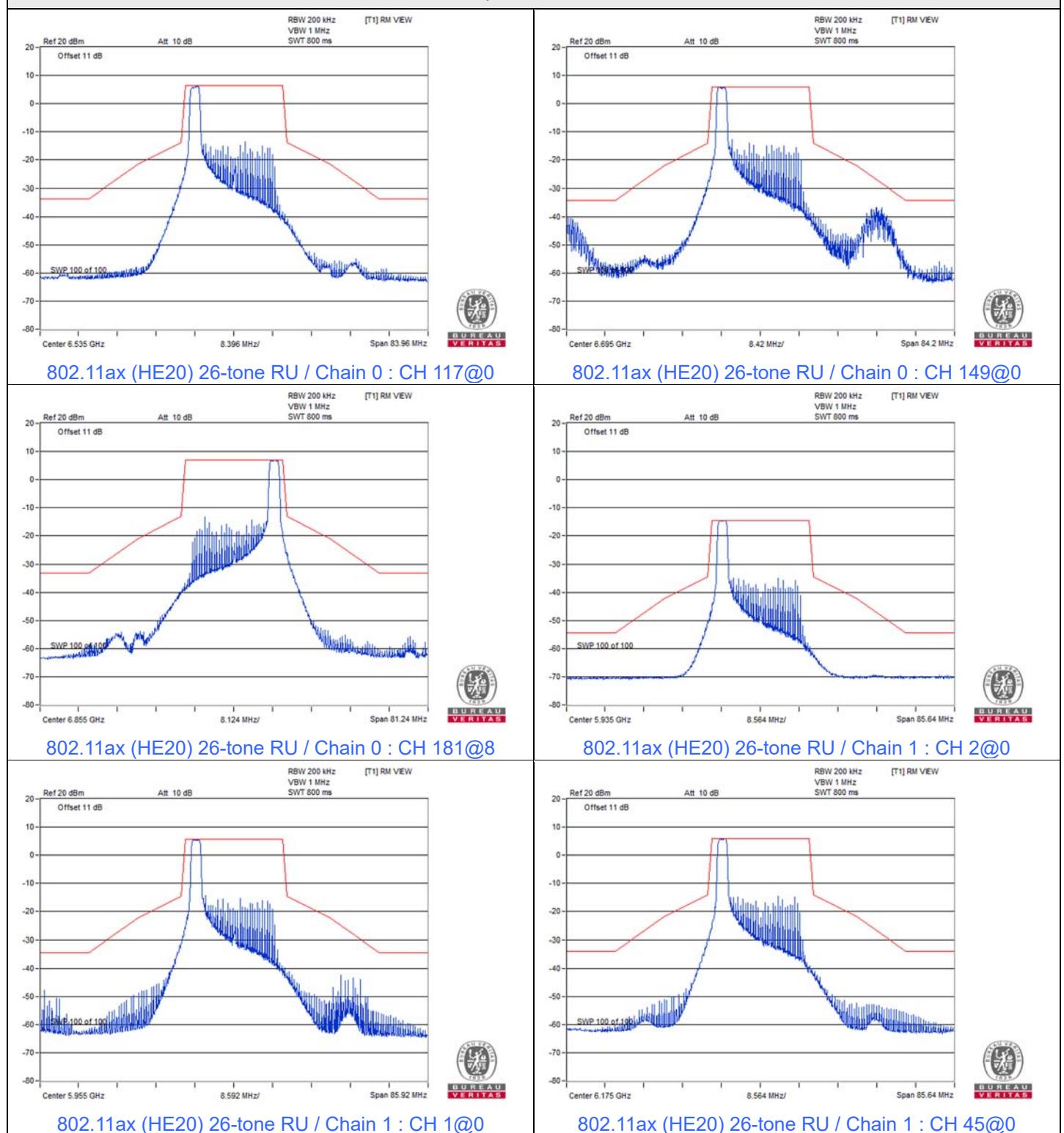


### 802.11ax (HE20) 26-tone RU

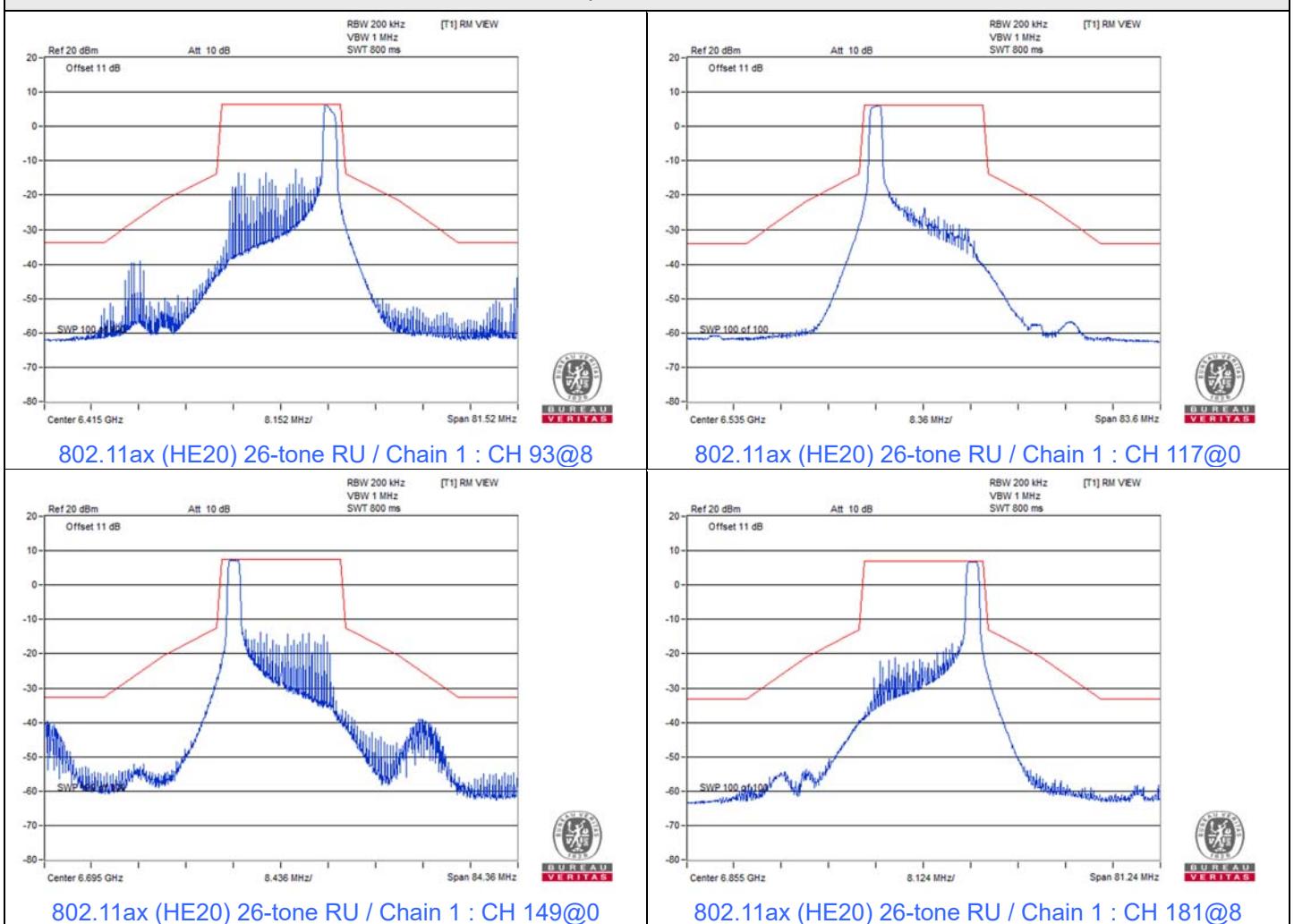
### Spectrum Plot



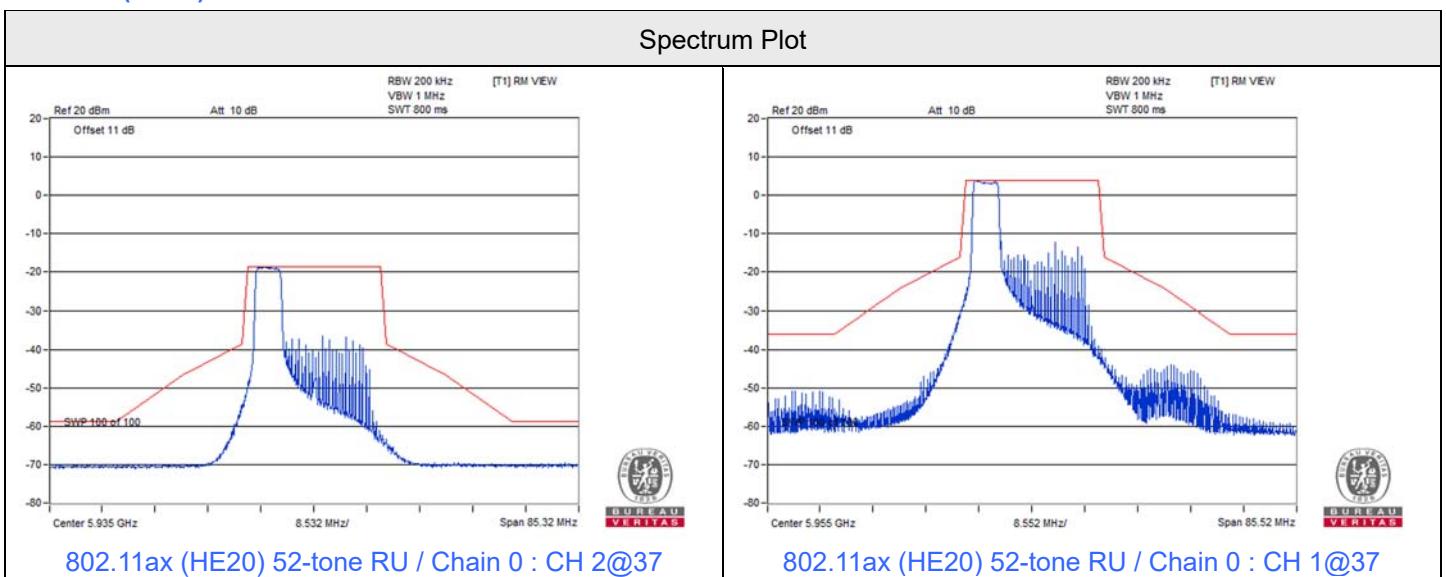
### Spectrum Plot



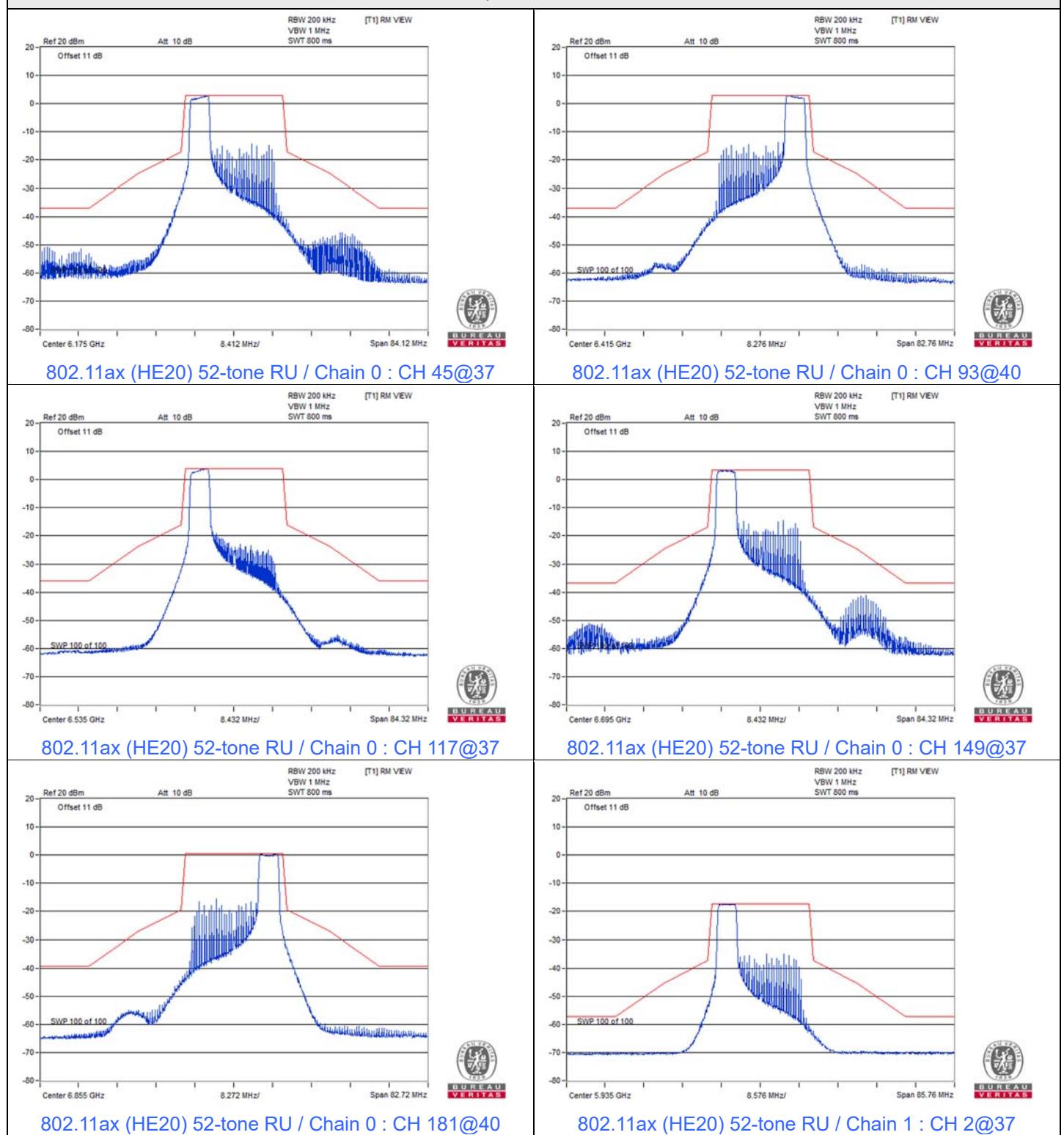
### Spectrum Plot



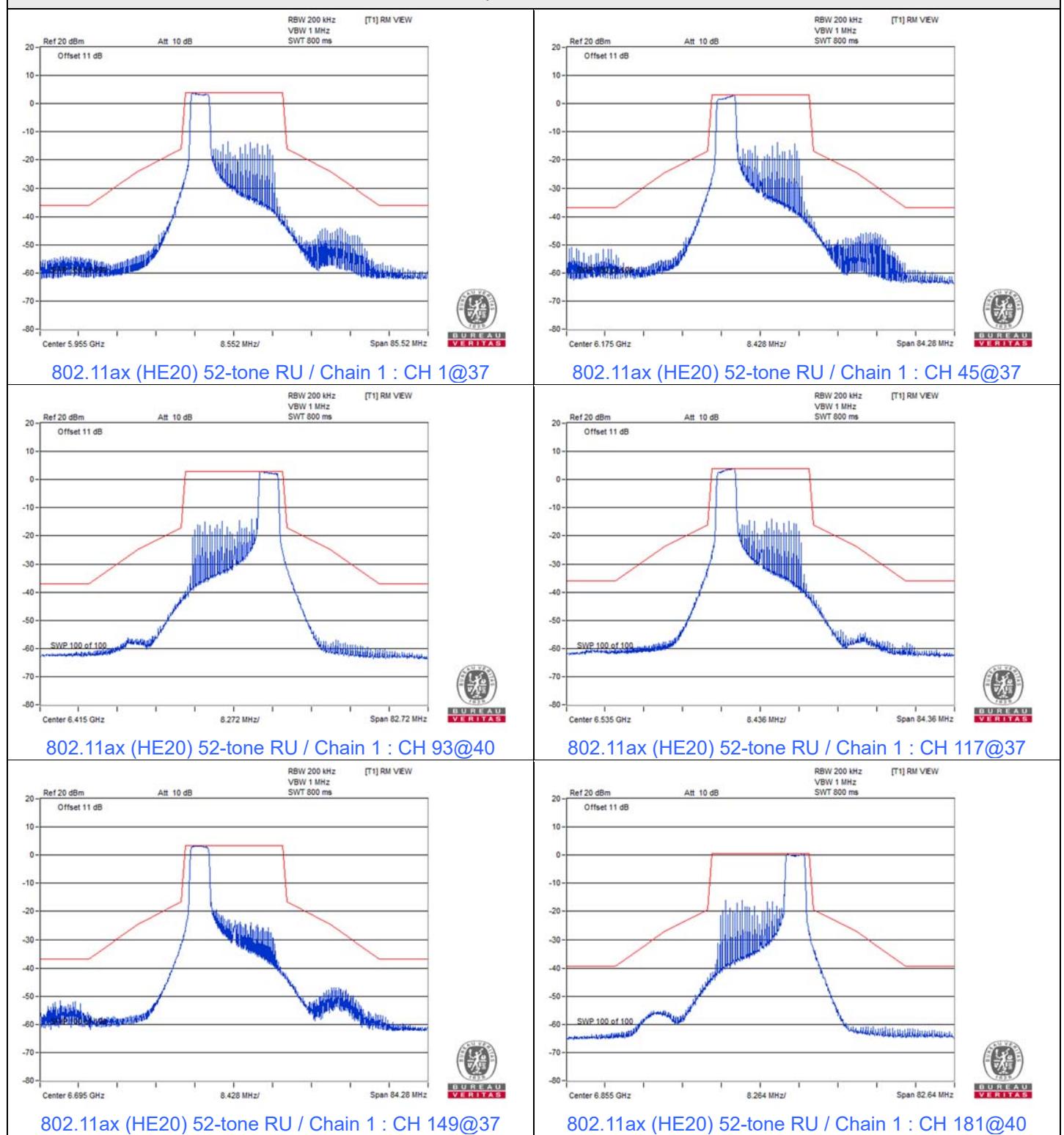
### 802.11ax (HE20) 52-tone RU



### Spectrum Plot



### Spectrum Plot



## 802.11ax (HE20) 106-tone RU

Spectrum Plot

