TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 15, Subpart E (Section 15.407)**
Report No.:	RFBDKG-WTW-P23080624-3
FCC ID:	JNZVR0032
Product:	Micro Four Thirds Wireless Video Production Camera
Brand:	Logitech
Model No.:	VR0032
Received Date:	2023/8/28
Test Date:	2023/10/4 ~ 2023/11/6
Issued Date:	2023/11/30
Applicant:	Logitech Far East Ltd.
Address:	#2 Creation Rd. 4, Science-Based Ind. Park Hsinchu Taiwan, R.O.C.
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
Test Location:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
FCC Registration / Designation Number:	723255 / TW2022

Approved by: _____ , **Date:** 2023/11/30

May Chen / Manager

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Prepared by : Phoenix Huang / Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBDKG-WTW-P23080624-3	Original release.	2023/11/30

1 Certificate

Product:	Micro Four Thirds Wireless Video Production Camera
Brand:	Logitech
Test Model:	VR0032
Sample Status:	Engineering sample
Applicant:	Logitech Far East Ltd.
Test Date:	2023/10/4 ~ 2023/11/6
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.
15.407(a)(10)	Occupied Bandwidth	Pass	Meet the requirement of limit.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -13.55 dB at 12.20313 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -4.0 dB at 500.01 MHz
15.407(b)(6) 15.407(b)(10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -4.0 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	Antenna connector is IPEX MHF I not a standard connector.

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) (±)
Maximum RF Output Power	-	1.1 dB
Maximum Power Spectral Density	-	1.3 dB
Emission Bandwidth	-	1050.00 Hz
Occupied Bandwidth	-	1050.00 Hz
AC Power Conducted Emissions	150 kHz ~ 30 MHz	1.9 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.1 dB
	30 MHz ~ 1 GHz	5.4 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	5.0 dB
	18 GHz ~ 40 GHz	5.3 dB
In-Band Emission Mask	-	2.6 dB
Contention-based Protocol	-	2.7 dB
Frequency Stability	-	0.16 ppm

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	Micro Four Thirds Wireless Video Production Camera
Brand	Logitech
Test Model	VR0032
Status of EUT	Engineering sample
Power Supply Rating	3.6 Vdc from battery or 5-9 Vdc from USB interface
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 1024QAM for OFDMA in 11ax mode
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: up to 54 Mbps 802.11ax: up to 1201.2 Mbps
Operating Frequency	5.955 GHz ~ 6.415 GHz 6.435 GHz ~ 6.525 GHz 6.535 GHz ~ 6.865 GHz 6.875 GHz ~ 7.095 GHz
Number of Channel	802.11a, 802.11ax (HE20): 58 802.11ax (HE40): 29 802.11ax (HE80): 14
Resource Unit (RU)	Single RU: 26-tone, 52-tone, 106-tone, 242-tone, 484-tone, 996-tone
Output Power	**1Tx:** 5.955 GHz ~ 6.415 GHz: EIRP: 47.423 mW (16.76 dBm) 6.435 GHz ~ 6.525 GHz: EIRP: 46.666 mW (16.69 dBm) 6.535 GHz ~ 6.865 GHz: EIRP: 47.317 mW (16.75 dBm) 6.875 GHz ~ 7.095 GHz: EIRP: 45.5 mW (16.58 dBm) **2Tx:** 5.955 GHz ~ 6.415 GHz: EIRP: 21.726 mW (13.37 dBm) 6.435 GHz ~ 6.525 GHz: EIRP: 20.282 mW (13.07 dBm) 6.535 GHz ~ 6.865 GHz: EIRP: 21.66 mW (13.36 dBm) 6.875 GHz ~ 7.095 GHz: EIRP: 21.115 mW (13.25 dBm)
Equipment Class	6XD: 15E 6 GHz Low-power Indoor client

Note:

1. The EUT must be supplied with a battery as the following table:

Brand	Model	Specification
Panasonic	533-000231 533-000230	Power Rating : 3.6 Vdc ; 23.04 Wh ; 6400 mAh

2. The EUT uses following accessories.

Type C Cable		
Brand	Model	Specification
Logi	JEM 1510-0429-0138	Signal Line : Shielded, 2 m

3. There are WLAN (2.4 GHz & 5 GHz & 6 GHz) and Bluetooth technology used for the EUT.

4. Simultaneously transmission condition.

Condition	Technology	
1	WLAN (5 GHz)	Bluetooth
2	WLAN (6 GHz)	Bluetooth
Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.		

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

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna No.	RF Chain No.	Antenna Net Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connector Type
0	0	4.5	2.4~2.4835	Printed F	IPEX MHF I
		6.93	5.15~5.85		
		7.03	5.925~7.125		
1	1	3.41	2.4~2.4835	Printed F	IPEX MHF I
		6.69	5.15~5.85		
		6.81	5.925~7.125		

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

2. The EUT incorporates a MIMO function:

6 GHz Band		
Modulation Mode	**Tx & Rx Configuration**	
802.11a	2Tx/1Tx Diversity	2Rx
802.11ax (HE20)	2Tx/1Tx Diversity	2Rx
802.11ax (HE40)	2Tx/1Tx Diversity	2Rx
802.11ax (HE80)	2Tx/1Tx Diversity	2Rx
802.11ax (RU26/52/106/242/484/996)	2Tx/1Tx Diversity	2Rx

3.3 Channel List

U-NII-5:

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

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
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				

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

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						

U-NII-8:

12 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

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

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. EUT has support 1Tx diversity configuration. Pre-scan these Chain0/ Chain1 and find the worst case as a representative test condition. 3. For Unwanted Emission (below 1GHz) items: Battery/ AC Adapter/ Laptop. Pre-scan these modes and find the worst case as a representative test condition. 4. For AC power conducted emission items: AC Adapter/ Laptop. Only these modes as a representative test condition. 5. The worst-case Partial RU modes across all supported bandwidth modes has been determined via pre-scan. 6. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
Worst Case:	1. X-axis/ Y-axis/ Z-axis Worst Condition: Y-axis 2. For 1Tx diversity Worst Condition: Chain0 3. For Unwanted emission (below 1GHz) item worst condidtion: Laptop 4. For AC power conducted emission items worst condition: Laptop 5. The worst case occurs in 20 MHz bandwidth (RU 26/52/106).

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

Test Item	Mode	Transmitter Configuration	Tested Channel	Modulation	Data Rate Parameter	RU Index
Maximum RF Output Power / Maximum Power Spectral Density	802.11a	1Tx Chain0 / 2Tx	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	6Mb/s	-
	802.11ax (HE20)		1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	MCS0	-
	802.11ax (HE40)		3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0	-
	802.11ax (HE80)		7, 39, 87, 103, 119, 151 183, 199, 215	BPSK	MCS0	-
	802.11ax (HE20) 26-tone RU		1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	MCS0	0, 4, 8 0, 4, 8 0, 4, 8 0, 4, 8
	802.11ax (HE20) 52-tone RU		1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	MCS0	37, 38, 40 37, 38, 40 37, 38, 40 37, 38, 40
	802.11ax (HE20) 106-tone RU		1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	MCS0	53, 53, 54 53, 53, 54 53, 53, 54 53, 53, 54

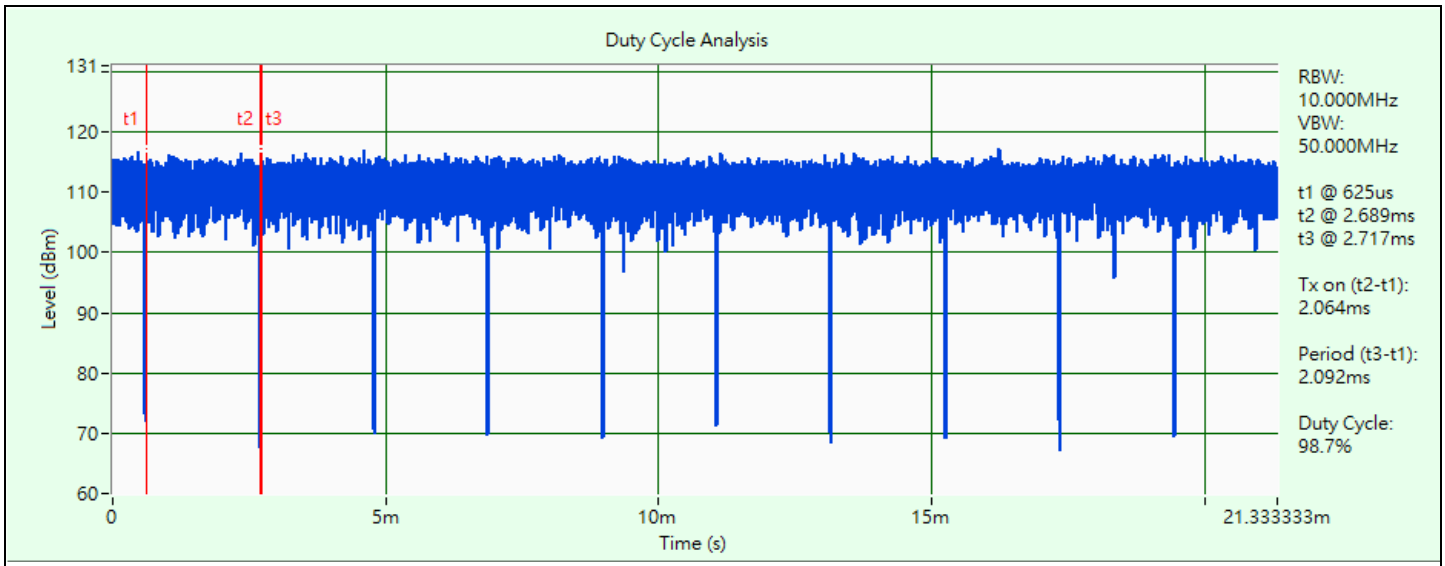
Test Item	Mode	Transmitter Configuration	Tested Channel	Modulation	Data Rate Parameter	RU Index
Emission Bandwidth / Occupied Bandwidth	802.11a	1Tx Chain0 / 2Tx	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	6Mb/s	-
	802.11ax (HE20)		1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	MCS0	-
	802.11ax (HE40)		3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0	-
	802.11ax (HE80)		7, 39, 87, 103, 119, 151 183, 199, 215	BPSK	MCS0	-
	802.11ax (HE20) 26-tone RU		1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	MCS0	0, 4, 8 0, 4, 8 0, 4, 8 0, 4, 8
	802.11ax (HE20) 52-tone RU		1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	MCS0	37, 38, 40 37, 38, 40 37, 38, 40 37, 38, 40
	802.11ax (HE20) 106-tone RU		1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	MCS0	53, 53, 54 53, 53, 54 53, 53, 54 53, 53, 54
In-Band Emission Mask	802.11a	1Tx Chain0 / 2Tx	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	6Mb/s	-
	802.11ax (HE20)		1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	MCS0	-
	802.11ax (HE40)		3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0	-
	802.11ax (HE80)		7, 39, 87, 103, 119, 151 183, 199, 215	BPSK	MCS0	-
	802.11ax (HE20) 26-tone RU		1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	MCS0	0, 4, 8 0, 4, 8 0, 4, 8 0, 4, 8
	802.11ax (HE20) 52-tone RU		1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	MCS0	37, 38, 40 37, 38, 40 37, 38, 40 37, 38, 40
	802.11ax (HE20) 106-tone RU		1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	MCS0	53, 53, 54 53, 53, 54 53, 53, 54 53, 53, 54

Test Item	Mode	Transmitter Configuration	Tested Channel	Modulation	Data Rate Parameter	RU Index
Frequency Stability	802.11a	-	1	unmodulated	-	-
Contention-based Protocol	802.11ax (HE20)	-	37, 101, 149, 213	BPSK	MCS0	-
	802.11ax (HE80)		39, 103, 151, 215	BPSK	MCS0	-
AC Power Conducted Emissions	802.11ax (HE80)	1Tx Chain0 / 2Tx	7	BPSK	MCS0	-
Unwanted Emissions below 1 GHz	802.11ax (HE80)	1Tx Chain0 / 2Tx	7	BPSK	MCS0	-
Unwanted Emissions above 1 GHz	802.11a	1Tx Chain0 / 2Tx	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	6Mb/s	-
	802.11ax (HE20)		1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	MCS0	-
	802.11ax (HE40)		3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0	-
	802.11ax (HE80)		7, 39, 87, 103, 119, 151 183, 199, 215	BPSK	MCS0	-
	802.11ax (HE20) 26-tone RU		1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	MCS0	0, 4, 8 0, 4, 8 0, 4, 8 0, 4, 8
	802.11ax (HE20) 52-tone RU		1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	MCS0	37, 38, 40 37, 38, 40 37, 38, 40 37, 38, 40
	802.11ax (HE20) 106-tone RU		1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 229	BPSK	MCS0	53, 53, 54 53, 53, 54 53, 53, 54 53, 53, 54

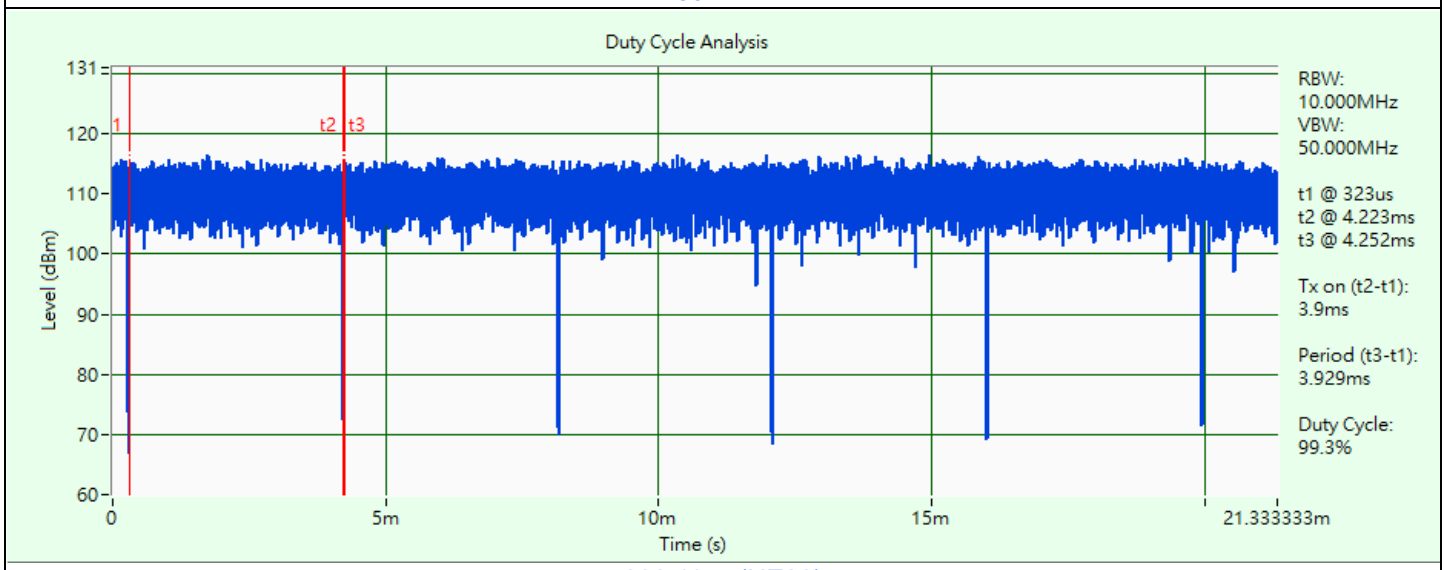
Note:
1. Channel puncturing mechanism is not supported.
2. This battery has two model names (533-000230 & 533-000231), select model (533-000230) for testing.

3.5 Duty Cycle of Test Signal

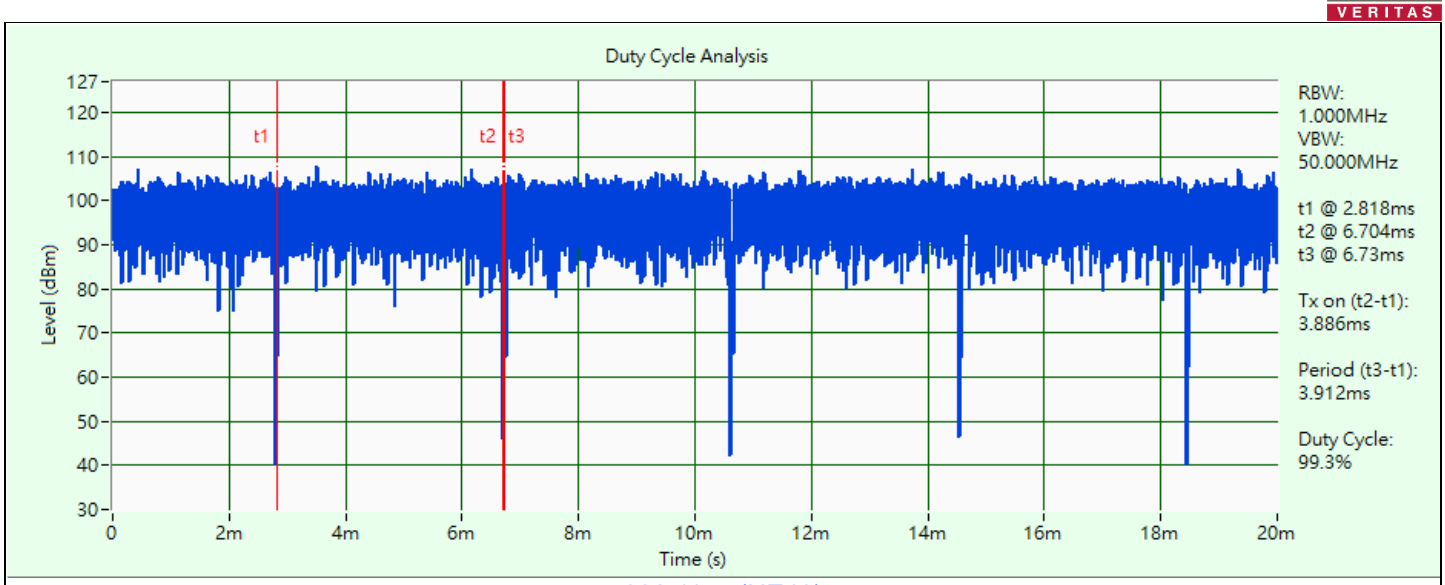
802.11a: Duty cycle = 2.064 ms / 2.092 ms x 100% = 98.7%
802.11ax (HE20): Duty cycle = 3.9 ms / 3.929 ms x 100% = 99.3%
802.11ax (HE40): Duty cycle = 3.886 ms / 3.912 ms x 100% = 99.3%
802.11ax (HE80): Duty cycle = 1.888 ms / 1.917 ms x 100% = 98.5%



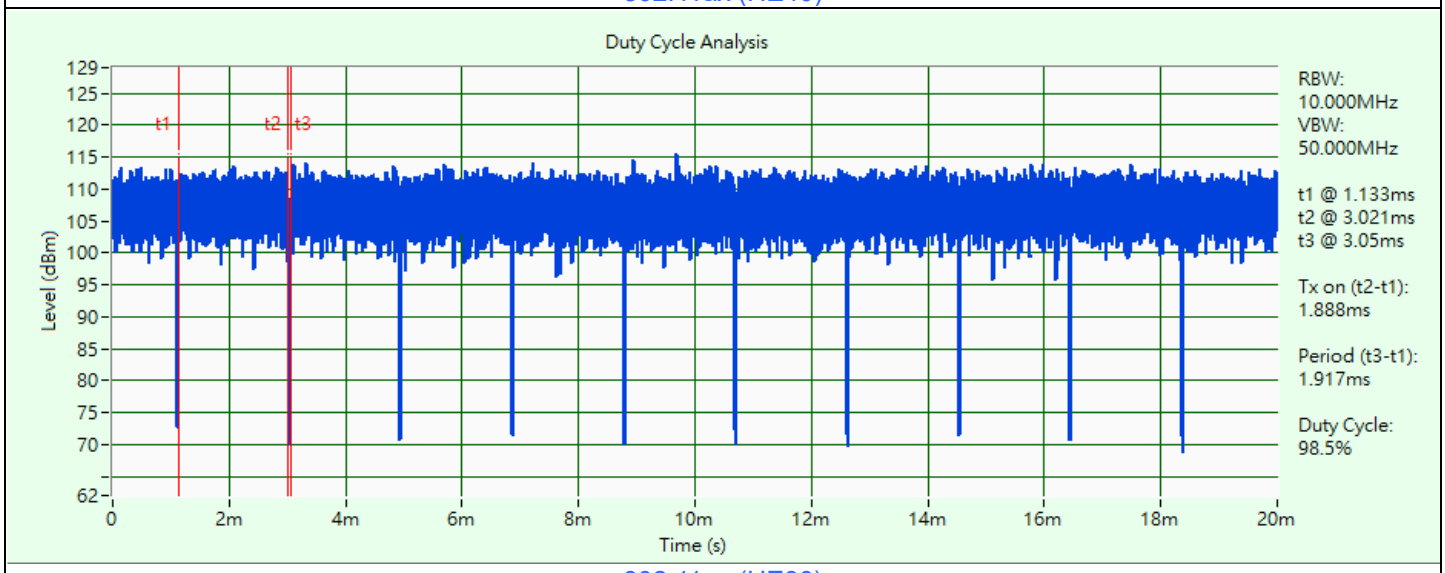
802.11a



802.11ax (HE20)



802.11ax (HE40)



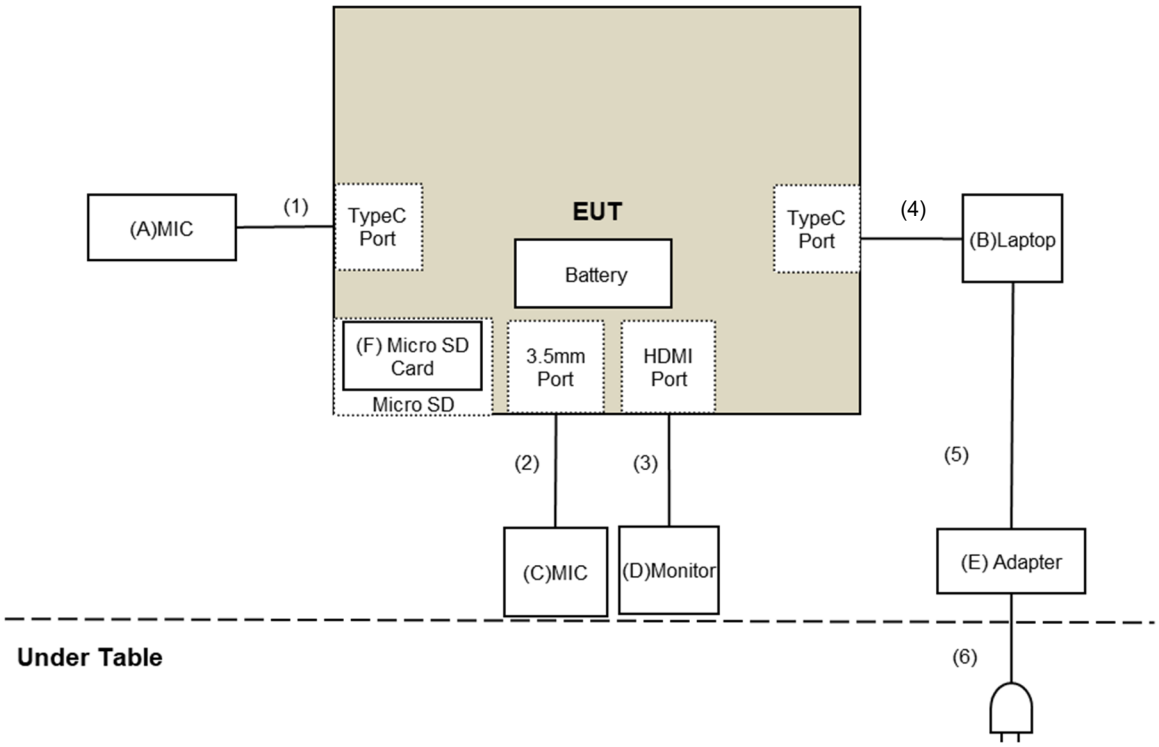
802.11ax (HE80)

3.6 Test Program Used and Operation Descriptions

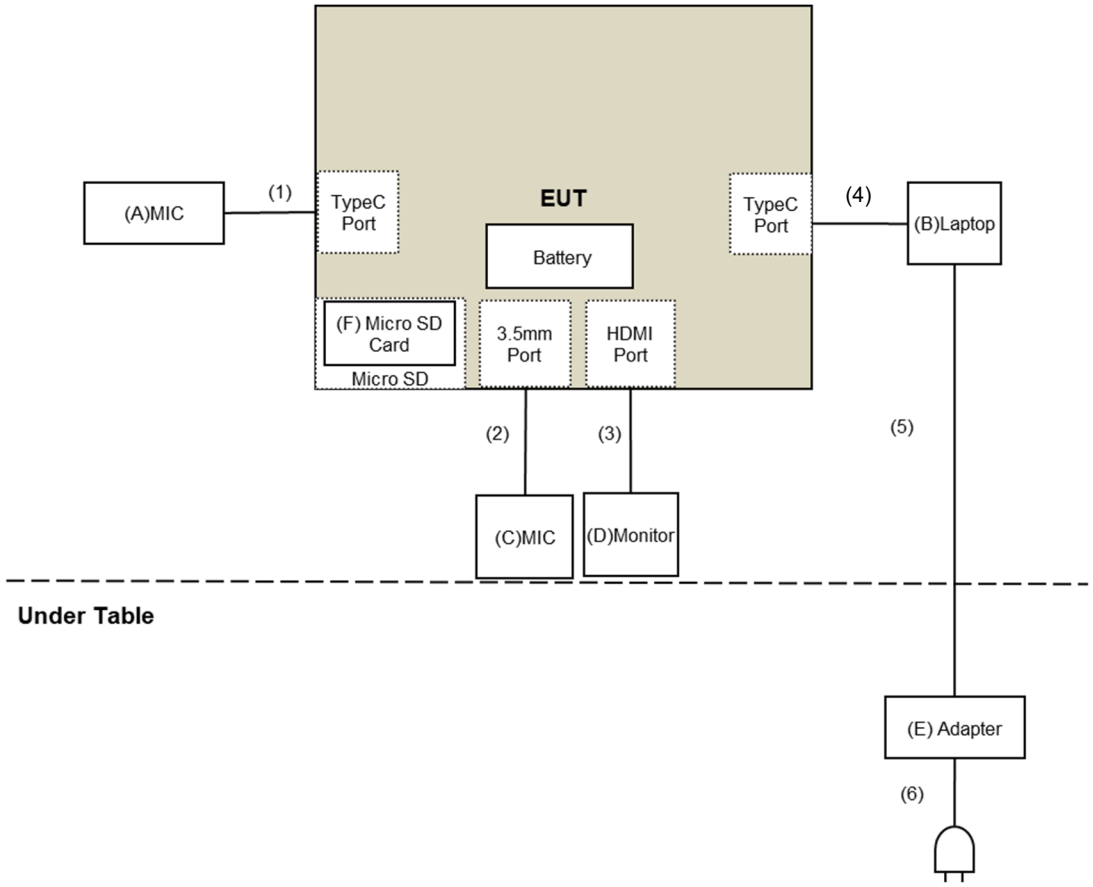
Controlling software (teraterm-4.106 paste VR0032_Wi-Fi TEST SOP.pptx command) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices

For AC Power Conducted Emission test



For Unwanted Emission test



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	MIC	Logitech	2324SG000NN8	N/A	N/A	Supplied by applicant
B	Laptop	Lenovo	20U5S01X00 L14	PF-1ANPYA	N/A	Provided by Lab
C	MIC	E-books	E-EPB130	N/A	N/A	Provided by Lab
D	Monitor	DELL	P2415Q	CN-0J1P7F-QDC00-85L-13GB-A09	DoC	Provided by Lab
E	Adapter	Lenovo	ADLX45YLC3D	N/A	N/A	Provided by Lab
F	Micro SD card	Adata	2E-1746D1	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	Type C Cable	1	2	Yes	0	Supplied by applicant
2	3.5mm Cable	1	1.5	No	0	Provided by Lab
3	HDMI Cable	1	2	Yes	0	Supplied by applicant
4	Type C Cable	1	2	Yes	0	Supplied by applicant
5	DC Cable	1	1.8	No	0	Provided by Lab
6	AC Cable	1	1	No	0	Provided by Lab

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
Power Meter Anritsu	ML2495A	1529002	2023/6/17	2024/6/16
Pulse Power Sensor Anritsu	MA2411B	1726434	2023/6/19	2024/6/18

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/10/11 ~ 2023/11/1

4.2 Maximum Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
MXA Signal Analyzer Keysight	N9020B	MY60112409	2023/2/18	2024/2/17
Software	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/10/11 ~ 2023/11/1

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
DC Power Supply Topward	6603D	795558	N/A	N/A
MXA Signal Analyzer Keysight	N9020B	MY60112409	2023/2/18	2024/2/17
Software	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	2022/12/26	2023/12/25
True RMS Clamp Meter FLUKE	325	31130711WS	2023/6/8	2024/6/7

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/10/11 ~ 2023/11/1

4.7 Contention-based Protocol

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Frequency Extender Keysight	N5182BX07	MY59360198	2023/10/6	2024/10/5
MXG Vector Signal Generator Keysight	N5182B	MY53052647	2023/10/2	2024/10/1
Power Splitter/Combiner Mini-Circuits	ZFRSC-123-S+	F698501347_01	2022/12/28	2023/12/27
		F698501347_02	2022/12/15	2023/12/14
PXA Signal Analyzer Keysight	N9030A	MY55410176	2023/6/13	2024/6/12
Signal Analyzer R&S	FSV40	101516	2023/2/10	2024/2/9

Notes:

1. The test was performed in Adaptivity room.
2. Tested Date: 2023/10/6

4.8 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance	N/A	EMC-04	2023/10/20	2024/10/19
EMI Test Receiver R&S	ESCS 30	100375	2023/5/17	2024/5/16
Fixed Attenuator STI	STI02-2200-10	005	2023/7/1	2024/6/30
LISN R&S	ENV216	100071	2022/10/26 2023/10/25	2023/10/25 2024/10/24
RF Coaxial Cable JYEBAO	5D-FB	COCCAB-001	2023/7/1	2024/6/30
Software BVADT	BVADT_Cond_V7.3.7.4	N/A	N/A	N/A

Notes:

1. The test was performed in Conduction 1
2. Tested Date: 2023/10/24 ~ 2023/10/27

4.9 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-361	2023/10/13	2024/10/12
Fix tool for Boresight antenna tower BV	FBA-01	FBA_SIP01	N/A	N/A
Fixed Attenuator Mini-Circuits	UNAT-5+	PAD-3m-3-01	2023/9/7	2024/9/6
Loop Antenna Electro-Metrics	EM-6879	264	2023/2/21	2024/2/20
MXE EMI Receiver Agilent	N9038A	MY50010156	2023/6/13	2024/6/12
Preamplifier EMCI	EMC330N	980852	2023/2/20	2024/2/19
	EMC001340	980142	2023/5/8	2024/5/7
RF Coaxial Cable JYEBAO	5D-FB	LOOPCAB-001	2022/12/19	2023/12/18
		LOOPCAB-002	2022/12/19	2023/12/18
RF Coaxial Cable PEWC	8D	966-3-2	2023/2/17	2024/2/16
		966-3-3	2023/2/17	2024/2/16
		966-4-1	2023/2/18	2024/2/17
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in 966 Chamber No. 3.
2. Tested Date: 2023/10/23

4.10 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	N/A	N/A
Fix tool for Boresight antenna tower BV	FBA-01	FBA_SIP01	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-406	2022/11/13	2023/11/12
	BBHA 9170	9170-739	2022/11/13	2023/11/12
MXE EMI Receiver Agilent	N9038A	MY50010156	2023/6/13	2024/6/12
Preamplifier EMCI	EMC12630SE	980384	2023/8/9	2024/8/8
	EMC184045SE	980387	2023/8/9	2024/8/8
PXA Signal Analyzer Keysight	N9030B	MY57142938	2023/4/6	2024/4/5
RF Coaxial Cable EMCI	EMC-KM-KM-4000	200214	2023/2/20	2024/2/19
	EMC102-KM-KM-1200	160924	2023/8/9	2024/8/8
	EMC104-SM-SM-1500	180504	2023/3/27	2024/3/26
	EMC104-SM-SM-2000	180601	2023/6/2	2024/6/1
	EMC104-SM-SM-6000	210201	2023/5/8	2024/5/7
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in 966 Chamber No. 3.
2. Tested Date: 2023/10/4 ~ 2023/11/6

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	6XD: 15E 6 GHz Low-power Indoor client	EIRP 24 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 ≥ 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	6XD: 15E 6 GHz Low-power Indoor client	EIRP -1 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*1
Emission Mask	At 1 MHz outside of channel edge	20
	At one channel bandwidth from the channel center*2	28
	At one- and one-half times the channel bandwidth away from channel center*3	40
	More than one- and one-half times the channel bandwidth	40

*1 : The power spectral density must be suppressed by “x” dB

*2 : 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,

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

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:

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

6 Test Arrangements

6.1 Maximum RF Output Power

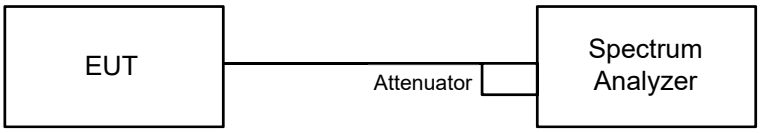
6.1.1 Test Setup

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



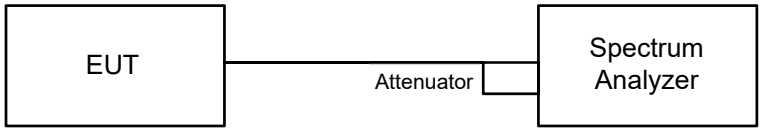
6.2.2 Test Procedure

For specified measurement bandwidth 1 MHz:
Method SA-1

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
c. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
d. Sweep time = auto, trigger set to “free run”.
e. Trace average at least 100 traces in power averaging mode.
f. Record the max value

6.3 Emission Bandwidth

6.3.1 Test Setup

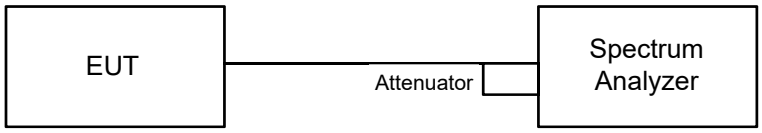


6.3.2 Test Procedure

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

6.4 In-Band Emission Mask

6.4.1 Test Setup

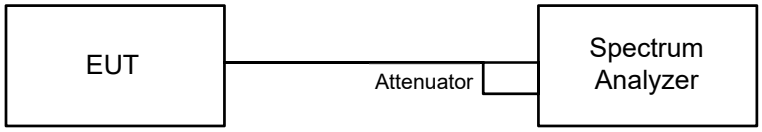


6.4.2 Test Procedure

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 ≥ [3 X RBW].
    d) Number of points in sweep ≥ [2 X span / 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

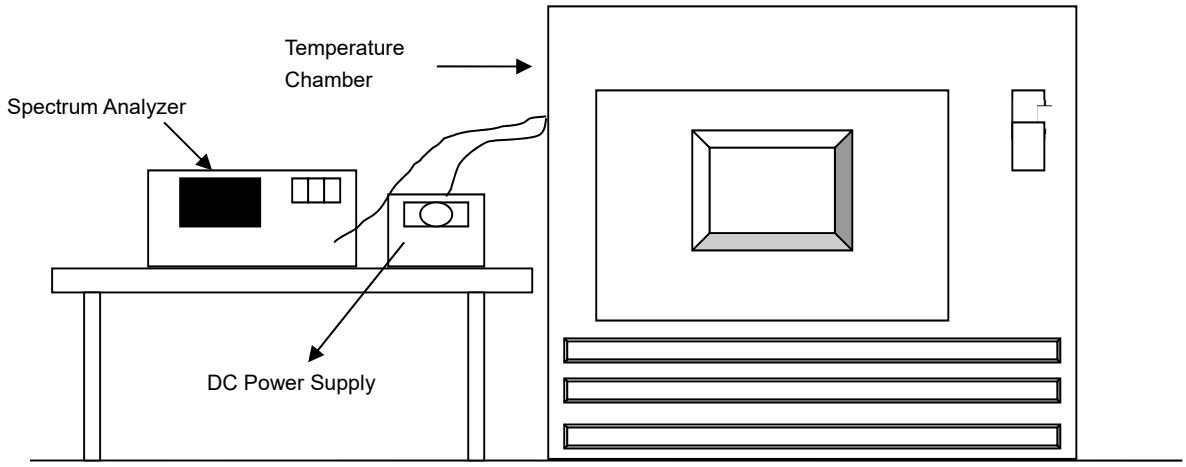


6.5.2 Test Procedure

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

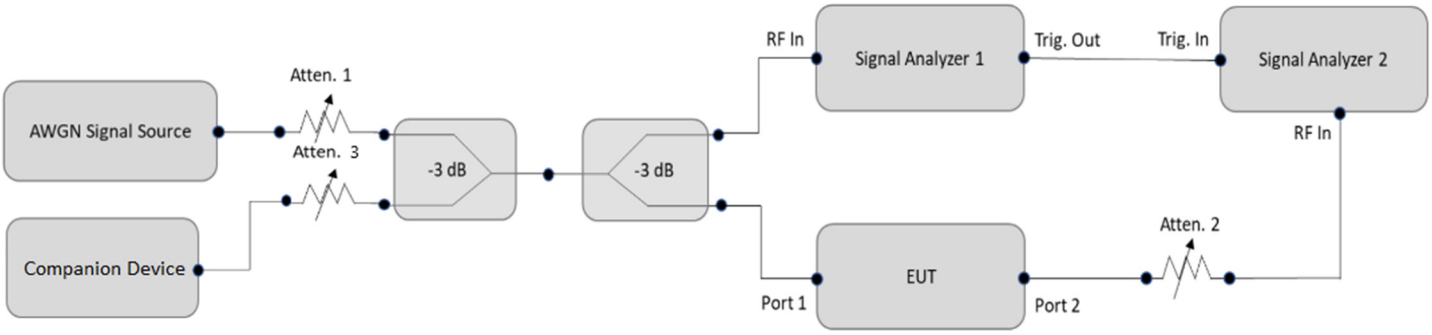


6.6.2 Test Procedure

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

a. 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.

b. 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).

c. Determine number of times detection threshold test as following table,

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leqq BW_{Inc}$	Once	Same as EUT transmission
$BW_{Inc} < BW_{EUT} \leqq 2xBW_{Inc}$	Once	Contained within BW_{EUT}
$2xBW_{Inc} < BW_{EUT} \leqq 4xBW_{Inc}$	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

d. 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.

e. 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.

f. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.

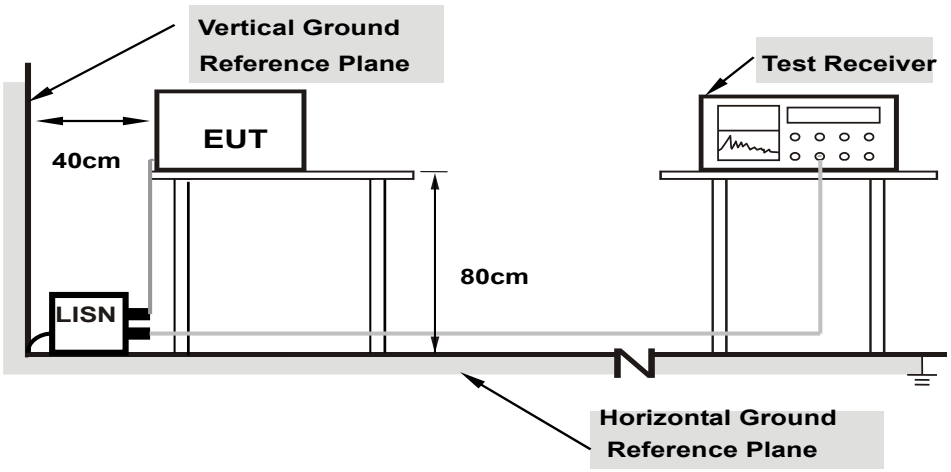
g. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.

h. (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.

i. 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

a. 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.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

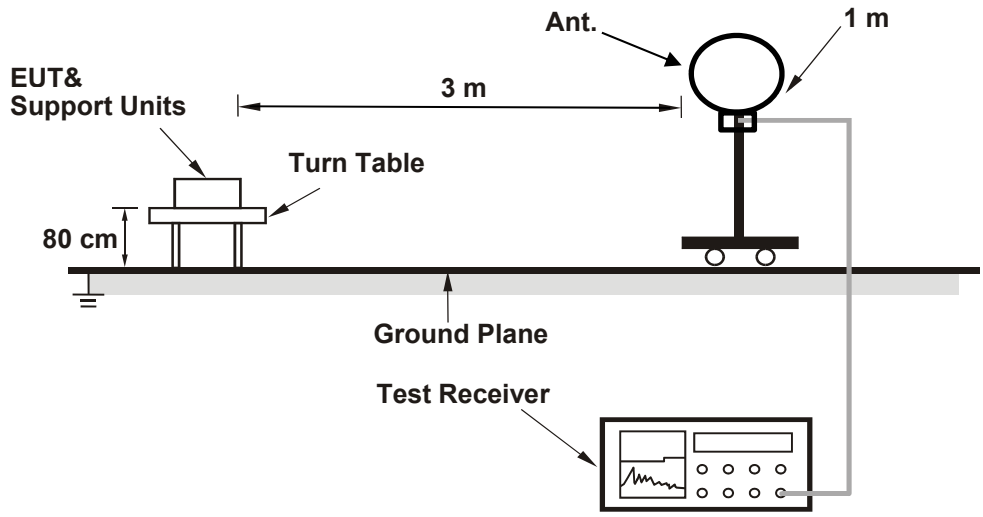
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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.

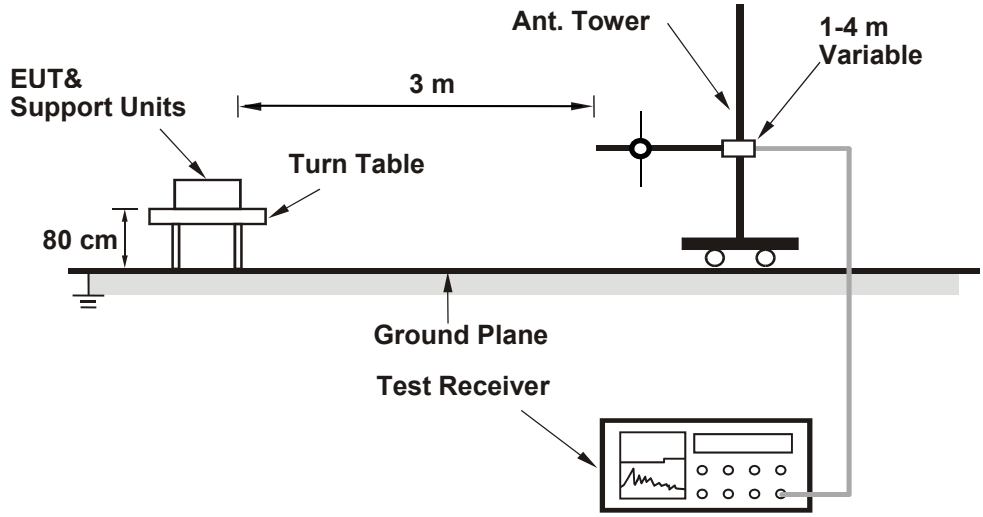
6.9 Unwanted Emissions below 1 GHz

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.

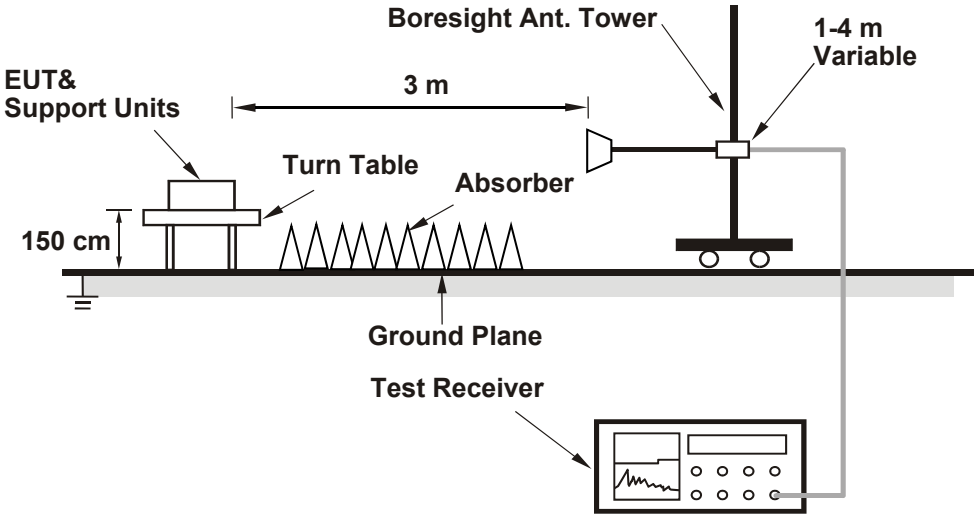
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

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

6.10.1Test Setup



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

6.10.2Test 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 ≥ 1/T (Duty cycle < 98%) or 10 Hz (Duty cycle ≥ 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:	3.6 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng

802.11a 1Tx

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
1	5955	2.183	3.39	7.03	11.017	10.42	24	Pass
45	6175	2.173	3.37	7.03	10.966	10.4	24	Pass
93	6415	2.123	3.27	7.03	10.714	10.3	24	Pass
97	6435	2.042	3.10	7.03	10.305	10.13	24	Pass
105	6475	2.148	3.32	7.03	10.84	10.35	24	Pass
113	6515	2.065	3.15	7.03	10.421	10.18	24	Pass
117	6535	2.056	3.13	7.03	10.376	10.16	24	Pass
149	6695	2	3.01	7.03	10.093	10.04	24	Pass
181	6855	2.198	3.42	7.03	11.092	10.45	24	Pass
185	6875	2.153	3.33	7.03	10.865	10.36	24	Pass
209	6995	2.109	3.24	7.03	10.643	10.27	24	Pass
229	7095	2.188	3.40	7.03	11.042	10.43	24	Pass

Notes:

1. For U-NII-5, the antenna gain is 7.03 dBi.
2. For U-NII-6, the antenna gain is 7.03 dBi.
3. For U-NII-7, the antenna gain is 7.03 dBi.
4. For U-NII-8, the antenna gain is 7.03 dBi.

802.11ax (HE20) 1Tx

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
1	5955	2.213	3.45	7.03	11.168	10.48	24	Pass
45	6175	2.355	3.72	7.03	11.885	10.75	24	Pass
93	6415	2.355	3.72	7.03	11.885	10.75	24	Pass
97	6435	2.27	3.56	7.03	11.456	10.59	24	Pass
105	6475	2.323	3.66	7.03	11.723	10.69	24	Pass
113	6515	2.36	3.73	7.03	11.91	10.76	24	Pass
117	6535	2.27	3.56	7.03	11.456	10.59	24	Pass
149	6695	2.344	3.70	7.03	11.829	10.73	24	Pass
181	6855	2.377	3.76	7.03	11.996	10.79	24	Pass
185	6875	2.234	3.49	7.03	11.274	10.52	24	Pass
209	6995	2.28	3.58	7.03	11.506	10.61	24	Pass
229	7095	2.27	3.56	7.03	11.456	10.59	24	Pass

Notes:

1. For U-NII-5, the antenna gain is 7.03 dBi.
2. For U-NII-6, the antenna gain is 7.03 dBi.
3. For U-NII-7, the antenna gain is 7.03 dBi.
4. For U-NII-8, the antenna gain is 7.03 dBi.

802.11ax (HE40) 1Tx

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
3	5965	4.539	6.57	7.03	22.907	13.6	24	Pass
43	6165	4.487	6.52	7.03	22.644	13.55	24	Pass
91	6405	4.529	6.56	7.03	22.856	13.59	24	Pass
99	6445	4.613	6.64	7.03	23.28	13.67	24	Pass
107	6485	4.603	6.63	7.03	23.23	13.66	24	Pass
115	6525	4.656	6.68	7.03	23.497	13.71	24	Pass
123	6565	4.624	6.65	7.03	23.336	13.68	24	Pass
155	6725	4.55	6.58	7.03	22.962	13.61	24	Pass
179	6845	4.539	6.57	7.03	22.907	13.6	24	Pass
187	6885	4.457	6.49	7.03	22.493	13.52	24	Pass
211	7005	4.519	6.55	7.03	22.806	13.58	24	Pass
227	7085	4.416	6.45	7.03	22.286	13.48	24	Pass

Notes:

1. For U-NII-5, the antenna gain is 7.03 dBi.
2. For U-NII-6, the antenna gain is 7.03 dBi.
3. For U-NII-7, the antenna gain is 7.03 dBi.
4. For U-NII-8, the antenna gain is 7.03 dBi.

802.11ax (HE80) 1Tx

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
7	5985	9.397	9.73	7.03	47.423	16.76	24	Pass
39	6145	8.974	9.53	7.03	45.288	16.56	24	Pass
87	6385	9.078	9.58	7.03	45.813	16.61	24	Pass
103	6465	9.247	9.66	7.03	46.666	16.69	24	Pass
119	6545	9.376	9.72	7.03	47.317	16.75	24	Pass
151	6705	9.268	9.67	7.03	46.772	16.7	24	Pass
183	6865	9.29	9.68	7.03	46.883	16.71	24	Pass
199	6945	8.995	9.54	7.03	45.394	16.57	24	Pass
215	7025	9.016	9.55	7.03	45.5	16.58	24	Pass

Notes:

1. For U-NII-5, the antenna gain is 7.03 dBi.
2. For U-NII-6, the antenna gain is 7.03 dBi.
3. For U-NII-7, the antenna gain is 7.03 dBi.
4. For U-NII-8, the antenna gain is 7.03 dBi.

802.11ax (HE20) 26-tone RU 1Tx

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
1	5955	0.3133	-5.04	7.03	1.581	1.99	24	Pass
45	6175	0.3184	-4.97	7.03	1.607	2.06	24	Pass
93	6415	0.3436	-4.64	7.03	1.734	2.39	24	Pass
97	6435	0.3162	-5.00	7.03	1.596	2.03	24	Pass
105	6475	0.335	-4.75	7.03	1.691	2.28	24	Pass
113	6515	0.3319	-4.79	7.03	1.675	2.24	24	Pass
117	6535	0.3648	-4.38	7.03	1.841	2.65	24	Pass
149	6695	0.3342	-4.76	7.03	1.687	2.27	24	Pass
181	6855	0.3304	-4.81	7.03	1.667	2.22	24	Pass
185	6875	0.3412	-4.67	7.03	1.722	2.36	24	Pass
209	6995	0.3388	-4.70	7.03	1.71	2.33	24	Pass
229	7095	0.3281	-4.84	7.03	1.656	2.19	24	Pass

Notes:

1. For U-NII-5, the antenna gain is 7.03 dBi.
2. For U-NII-6, the antenna gain is 7.03 dBi.
3. For U-NII-7, the antenna gain is 7.03 dBi.
4. For U-NII-8, the antenna gain is 7.03 dBi.

802.11ax (HE20) 52-tone RU 1Tx

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
1	5955	0.5636	-2.49	7.03	2.844	4.54	24	Pass
45	6175	0.5821	-2.35	7.03	2.938	4.68	24	Pass
93	6415	0.6039	-2.19	7.03	3.048	4.84	24	Pass
97	6435	0.6138	-2.12	7.03	3.098	4.91	24	Pass
105	6475	0.6561	-1.83	7.03	3.311	5.2	24	Pass
113	6515	0.6546	-1.84	7.03	3.304	5.19	24	Pass
117	6535	0.6324	-1.99	7.03	3.191	5.04	24	Pass
149	6695	0.5998	-2.22	7.03	3.027	4.81	24	Pass
181	6855	0.6124	-2.13	7.03	3.091	4.9	24	Pass
185	6875	0.5984	-2.23	7.03	3.02	4.8	24	Pass
209	6995	0.6081	-2.16	7.03	3.069	4.87	24	Pass
229	7095	0.5929	-2.27	7.03	2.992	4.76	24	Pass

Notes:

1. For U-NII-5, the antenna gain is 7.03 dBi.
2. For U-NII-6, the antenna gain is 7.03 dBi.
3. For U-NII-7, the antenna gain is 7.03 dBi.
4. For U-NII-8, the antenna gain is 7.03 dBi.

802.11ax (HE20) 106-tone RU 1Tx

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
1	5955	1.245	0.95	7.03	6.283	7.98	24	Pass
45	6175	1.288	1.10	7.03	6.5	8.13	24	Pass
93	6415	1.247	0.96	7.03	6.293	7.99	24	Pass
97	6435	1.225	0.88	7.03	6.182	7.91	24	Pass
105	6475	1.242	0.94	7.03	6.268	7.97	24	Pass
113	6515	1.178	0.71	7.03	5.945	7.74	24	Pass
117	6535	1.276	1.06	7.03	6.439	8.09	24	Pass
149	6695	1.213	0.84	7.03	6.122	7.87	24	Pass
181	6855	1.096	0.40	7.03	5.531	7.43	24	Pass
185	6875	1.122	0.50	7.03	5.662	7.53	24	Pass
209	6995	1.14	0.57	7.03	5.753	7.6	24	Pass
229	7095	1.202	0.80	7.03	6.066	7.83	24	Pass

Notes:

1. For U-NII-5, the antenna gain is 7.03 dBi.
2. For U-NII-6, the antenna gain is 7.03 dBi.
3. For U-NII-7, the antenna gain is 7.03 dBi.
4. For U-NII-8, the antenna gain is 7.03 dBi.

802.11a CDD-2Tx

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							
1	5955	-2.62	-3.34	1.0105	0.05	7.03	5.1	7.08	24	Pass
45	6175	-3.68	-2.63	0.9743	-0.11	7.03	4.917	6.92	24	Pass
93	6415	-2.58	-3.66	0.9826	-0.08	7.03	4.959	6.95	24	Pass
97	6435	-2.81	-3.13	1.01	0.04	7.03	5.097	7.07	24	Pass
105	6475	-2.91	-3.14	0.997	-0.01	7.03	5.031	7.02	24	Pass
113	6515	-3.14	-3.26	0.9574	-0.19	7.03	4.832	6.84	24	Pass
117	6535	-2.28	-3.82	1.0065	0.03	7.03	5.079	7.06	24	Pass
149	6695	-3.05	-2.97	1.0001	0.00	7.03	5.047	7.03	24	Pass
181	6855	-3.39	-2.56	1.0128	0.06	7.03	5.111	7.09	24	Pass
185	6875	-3.39	-2.89	0.9722	-0.12	7.03	4.906	6.91	24	Pass
209	6995	-2.72	-3.17	1.0165	0.07	7.03	5.13	7.1	24	Pass
229	7095	-2.86	-3.04	1.0142	0.06	7.03	5.118	7.09	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 7.03 dBi.
3. For U-NII-6, the maximum gain is 7.03 dBi.
4. For U-NII-7, the maximum gain is 7.03 dBi.
5. For U-NII-8, the maximum gain is 7.03 dBi.

802.11ax (HE20) CDD-2Tx

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							
1	5955	-2.61	-3.73	0.9719	-0.12	7.03	4.905	6.91	24	Pass
45	6175	-2.74	-3.44	0.985	-0.07	7.03	4.971	6.96	24	Pass
93	6415	-2.35	-3.68	1.0107	0.05	7.03	5.101	7.08	24	Pass
97	6435	-2.63	-2.83	1.067	0.28	7.03	5.385	7.31	24	Pass
105	6475	-2.79	-2.80	1.0508	0.22	7.03	5.303	7.25	24	Pass
113	6515	-2.46	-2.85	1.0863	0.36	7.03	5.482	7.39	24	Pass
117	6535	-2.21	-3.73	1.0248	0.11	7.03	5.172	7.14	24	Pass
149	6695	-3.36	-2.80	0.9861	-0.06	7.03	4.976	6.97	24	Pass
181	6855	-3.37	-2.95	0.9672	-0.14	7.03	4.881	6.89	24	Pass
185	6875	-2.80	-2.79	1.0508	0.22	7.03	5.303	7.25	24	Pass
209	6995	-3.01	-2.83	1.0212	0.09	7.03	5.154	7.12	24	Pass
229	7095	-2.96	-2.83	1.027	0.12	7.03	5.183	7.15	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 7.03 dBi.
3. For U-NII-6, the maximum gain is 7.03 dBi.
4. For U-NII-7, the maximum gain is 7.03 dBi.
5. For U-NII-8, the maximum gain is 7.03 dBi.

802.11ax (HE40) CDD-2Tx

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	0.76	-0.19	2.1484	3.32	7.03	10.842	10.35	24	Pass
43	6165	0.81	-0.51	2.0942	3.21	7.03	10.569	10.24	24	Pass
91	6405	1.28	-0.90	2.1556	3.34	7.03	10.878	10.37	24	Pass
99	6445	0.19	0.12	2.073	3.17	7.03	10.462	10.2	24	Pass
107	6485	0.37	0.09	2.11	3.24	7.03	10.648	10.27	24	Pass
115	6525	0.30	0.07	2.088	3.20	7.03	10.537	10.23	24	Pass
123	6565	1.04	-0.91	2.0815	3.18	7.03	10.505	10.21	24	Pass
155	6725	0.45	-0.08	2.0909	3.20	7.03	10.552	10.23	24	Pass
179	6845	0.60	0.04	2.157	3.34	7.03	10.886	10.37	24	Pass
187	6885	0.30	-0.17	2.0331	3.08	7.03	10.26	10.11	24	Pass
211	7005	0.03	0.36	2.093	3.21	7.03	10.563	10.24	24	Pass
227	7085	0.32	0.30	2.148	3.32	7.03	10.84	10.35	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 7.03 dBi.
3. For U-NII-6, the maximum gain is 7.03 dBi.
4. For U-NII-7, the maximum gain is 7.03 dBi.
5. For U-NII-8, the maximum gain is 7.03 dBi.

802.11ax (HE80) CDD-2Tx

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	3.53	3.12	4.305	6.34	7.03	21.726	13.37	24	Pass
39	6145	3.12	2.94	4.019	6.04	7.03	20.282	13.07	24	Pass
87	6385	3.68	2.48	4.104	6.13	7.03	20.711	13.16	24	Pass
103	6465	3.52	2.48	4.019	6.04	7.03	20.282	13.07	24	Pass
119	6545	3.95	2.42	4.229	6.26	7.03	21.342	13.29	24	Pass
151	6705	3.32	2.85	4.075	6.10	7.03	20.565	13.13	24	Pass
183	6865	3.22	3.41	4.292	6.33	7.03	21.66	13.36	24	Pass
199	6945	3.05	1.17	3.328	5.22	7.03	16.795	12.25	24	Pass
215	7025	3.24	3.17	4.184	6.22	7.03	21.115	13.25	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 7.03 dBi.
3. For U-NII-6, the maximum gain is 7.03 dBi.
4. For U-NII-7, the maximum gain is 7.03 dBi.
5. For U-NII-8, the maximum gain is 7.03 dBi.

802.11ax (HE20) 26-tone RU CDD-2Tx

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							
1	5955	-10.27	-10.43	0.18455	-7.34	7.03	0.9314	-0.31	24	Pass
45	6175	-10.95	-10.32	0.17325	-7.61	7.03	0.8743	-0.58	24	Pass
93	6415	-11.89	-9.03	0.18974	-7.22	7.03	0.9575	-0.19	24	Pass
97	6435	-11.53	-10.11	0.16781	-7.75	7.03	0.8469	-0.72	24	Pass
105	6475	-11.33	-9.90	0.17595	-7.55	7.03	0.888	-0.52	24	Pass
113	6515	-10.73	-10.52	0.17324	-7.61	7.03	0.8743	-0.58	24	Pass
117	6535	-11.53	-10.74	0.15464	-8.11	7.03	0.7804	-1.08	24	Pass
149	6695	-11.29	-11.11	0.15175	-8.19	7.03	0.7658	-1.16	24	Pass
181	6855	-11.58	-10.87	0.15135	-8.20	7.03	0.7638	-1.17	24	Pass
185	6875	-12.52	-11.61	0.125	-9.03	7.03	0.6308	-2	24	Pass
209	6995	-12.81	-11.93	0.11648	-9.34	7.03	0.5878	-2.31	24	Pass
229	7095	-9.18	-8.50	0.262	-5.82	7.03	1.322	1.21	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 7.03 dBi.
3. For U-NII-6, the maximum gain is 7.03 dBi.
4. For U-NII-7, the maximum gain is 7.03 dBi.
5. For U-NII-8, the maximum gain is 7.03 dBi.

802.11ax (HE20) 52-tone RU CDD-2Tx

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							
1	5955	-7.70	-7.62	0.3428	-4.65	7.03	1.73	2.38	24	Pass
45	6175	-8.34	-7.94	0.3072	-5.13	7.03	1.55	1.9	24	Pass
93	6415	-9.97	-7.19	0.2917	-5.35	7.03	1.472	1.68	24	Pass
97	6435	-9.12	-7.41	0.304	-5.17	7.03	1.534	1.86	24	Pass
105	6475	-9.07	-7.24	0.3127	-5.05	7.03	1.578	1.98	24	Pass
113	6515	-8.12	-7.82	0.3194	-4.96	7.03	1.612	2.07	24	Pass
117	6535	-9.52	-8.38	0.2569	-5.90	7.03	1.296	1.13	24	Pass
149	6695	-8.68	-7.61	0.3089	-5.10	7.03	1.559	1.93	24	Pass
181	6855	-9.02	-7.94	0.286	-5.44	7.03	1.443	1.59	24	Pass
185	6875	-10.20	-8.61	0.23322	-6.32	7.03	1.177	0.71	24	Pass
209	6995	-10.55	-8.47	0.23034	-6.38	7.03	1.162	0.65	24	Pass
229	7095	-10.60	-8.55	0.22673	-6.44	7.03	1.144	0.58	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 7.03 dBi.
3. For U-NII-6, the maximum gain is 7.03 dBi.
4. For U-NII-7, the maximum gain is 7.03 dBi.
5. For U-NII-8, the maximum gain is 7.03 dBi.

802.11ax (HE20) 106-tone RU CDD-2Tx

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							
1	5955	-5.29	-5.17	0.5999	-2.22	7.03	3.027	4.81	24	Pass
45	6175	-5.12	-4.65	0.6504	-1.87	7.03	3.282	5.16	24	Pass
93	6415	-7.21	-4.29	0.5625	-2.50	7.03	2.839	4.53	24	Pass
97	6435	-6.47	-4.43	0.586	-2.32	7.03	2.957	4.71	24	Pass
105	6475	-5.71	-4.49	0.6242	-2.05	7.03	3.15	4.98	24	Pass
113	6515	-5.02	-4.62	0.6599	-1.81	7.03	3.33	5.22	24	Pass
117	6535	-6.04	-4.90	0.5725	-2.42	7.03	2.889	4.61	24	Pass
149	6695	-6.77	-5.65	0.4826	-3.16	7.03	2.435	3.86	24	Pass
181	6855	-6.64	-5.48	0.4999	-3.01	7.03	2.523	4.02	24	Pass
185	6875	-6.95	-5.74	0.4685	-3.29	7.03	2.364	3.74	24	Pass
209	6995	-7.22	-5.73	0.457	-3.40	7.03	2.306	3.63	24	Pass
229	7095	-5.15	-4.06	0.6981	-1.56	7.03	3.523	5.47	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, the maximum gain is 7.03 dBi.
3. For U-NII-6, the maximum gain is 7.03 dBi.
4. For U-NII-7, the maximum gain is 7.03 dBi.
5. For U-NII-8, the maximum gain is 7.03 dBi.

7.2 Maximum Power Spectral Density

Input Power:	3.6 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng

802.11a 1Tx

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
1	5955	-9.09	7.03	-2.06	-1	Pass
45	6175	-9.23	7.03	-2.2	-1	Pass
93	6415	-9.21	7.03	-2.18	-1	Pass
97	6435	-9.43	7.03	-2.4	-1	Pass
105	6475	-9.17	7.03	-2.14	-1	Pass
113	6515	-9.04	7.03	-2.01	-1	Pass
117	6535	-9.21	7.03	-2.18	-1	Pass
149	6695	-9.08	7.03	-2.05	-1	Pass
181	6855	-9.13	7.03	-2.1	-1	Pass
185	6875	-9.26	7.03	-2.23	-1	Pass
209	6995	-9.37	7.03	-2.34	-1	Pass
229	7095	-9.35	7.03	-2.32	-1	Pass

Notes:

1. For U-NII-5, The antenna gain is 7.03 dBi.
2. For U-NII-6, The antenna gain is 7.03 dBi.
3. For U-NII-7, The antenna gain is 7.03 dBi.
4. For U-NII-8, The antenna gain is 7.03 dBi.

802.11ax (HE20) 1Tx

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
1	5955	-9.43	7.03	-2.4	-1	Pass
45	6175	-9.38	7.03	-2.35	-1	Pass
93	6415	-9.08	7.03	-2.05	-1	Pass
97	6435	-9.16	7.03	-2.13	-1	Pass
105	6475	-9.54	7.03	-2.51	-1	Pass
113	6515	-9.24	7.03	-2.21	-1	Pass
117	6535	-9.07	7.03	-2.04	-1	Pass
149	6695	-9.36	7.03	-2.33	-1	Pass
181	6855	-9.27	7.03	-2.24	-1	Pass
185	6875	-9.19	7.03	-2.16	-1	Pass
209	6995	-9.58	7.03	-2.55	-1	Pass
229	7095	-9.12	7.03	-2.09	-1	Pass

Notes:

1. For U-NII-5, The antenna gain is 7.03 dBi.
2. For U-NII-6, The antenna gain is 7.03 dBi.
3. For U-NII-7, The antenna gain is 7.03 dBi.
4. For U-NII-8, The antenna gain is 7.03 dBi.

802.11ax (HE40) 1Tx

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
3	5965	-9.19	7.03	-2.16	-1	Pass
43	6165	-9.64	7.03	-2.61	-1	Pass
91	6405	-9.67	7.03	-2.64	-1	Pass
99	6445	-9.07	7.03	-2.04	-1	Pass
107	6485	-9.31	7.03	-2.28	-1	Pass
115	6525	-9.34	7.03	-2.31	-1	Pass
123	6565	-9.08	7.03	-2.05	-1	Pass
155	6725	-9.16	7.03	-2.13	-1	Pass
179	6845	-9.22	7.03	-2.19	-1	Pass
187	6885	-9.44	7.03	-2.41	-1	Pass
211	7005	-9.55	7.03	-2.52	-1	Pass
227	7085	-9.34	7.03	-2.31	-1	Pass

Notes:

1. For U-NII-5, The antenna gain is 7.03 dBi.
2. For U-NII-6, The antenna gain is 7.03 dBi.
3. For U-NII-7, The antenna gain is 7.03 dBi.
4. For U-NII-8, The antenna gain is 7.03 dBi.

802.11ax (HE80) 1Tx

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
7	5985	-9.65	7.03	-2.62	-1	Pass
39	6145	-9.54	7.03	-2.51	-1	Pass
87	6385	-9.57	7.03	-2.54	-1	Pass
103	6465	-9.50	7.03	-2.47	-1	Pass
119	6545	-9.21	7.03	-2.18	-1	Pass
151	6705	-9.51	7.03	-2.48	-1	Pass
183	6865	-9.13	7.03	-2.1	-1	Pass
199	6945	-9.45	7.03	-2.42	-1	Pass
215	7025	-9.13	7.03	-2.1	-1	Pass

Notes:

1. For U-NII-5, The antenna gain is 7.03 dBi.
2. For U-NII-6, The antenna gain is 7.03 dBi.
3. For U-NII-7, The antenna gain is 7.03 dBi.
4. For U-NII-8, The antenna gain is 7.03 dBi.

802.11ax (HE20) 26-tone RU 1Tx

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
1	5955	-9.44	7.03	-2.41	-1	Pass
45	6175	-9.28	7.03	-2.25	-1	Pass
93	6415	-9.12	7.03	-2.09	-1	Pass
97	6435	-9.81	7.03	-2.78	-1	Pass
105	6475	-9.35	7.03	-2.32	-1	Pass
113	6515	-9.28	7.03	-2.25	-1	Pass
117	6535	-9.14	7.03	-2.11	-1	Pass
149	6695	-9.47	7.03	-2.44	-1	Pass
181	6855	-9.16	7.03	-2.13	-1	Pass
185	6875	-9.09	7.03	-2.06	-1	Pass
209	6995	-9.15	7.03	-2.12	-1	Pass
229	7095	-9.56	7.03	-2.53	-1	Pass

Notes:

1. For U-NII-5, The antenna gain is 7.03 dBi.
2. For U-NII-6, The antenna gain is 7.03 dBi.
3. For U-NII-7, The antenna gain is 7.03 dBi.
4. For U-NII-8, The antenna gain is 7.03 dBi.

802.11ax (HE20) 52-tone RU 1Tx

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
1	5955	-9.50	7.03	-2.47	-1	Pass
45	6175	-9.44	7.03	-2.41	-1	Pass
93	6415	-9.56	7.03	-2.53	-1	Pass
97	6435	-9.41	7.03	-2.38	-1	Pass
105	6475	-9.45	7.03	-2.42	-1	Pass
113	6515	-9.05	7.03	-2.02	-1	Pass
117	6535	-9.47	7.03	-2.44	-1	Pass
149	6695	-9.35	7.03	-2.32	-1	Pass
181	6855	-9.12	7.03	-2.09	-1	Pass
185	6875	-9.14	7.03	-2.11	-1	Pass
209	6995	-9.58	7.03	-2.55	-1	Pass
229	7095	-9.36	7.03	-2.33	-1	Pass

Notes:

1. For U-NII-5, The antenna gain is 7.03 dBi.
2. For U-NII-6, The antenna gain is 7.03 dBi.
3. For U-NII-7, The antenna gain is 7.03 dBi.
4. For U-NII-8, The antenna gain is 7.03 dBi.

802.11ax (HE20) 106-tone RU 1Tx

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
1	5955	-9.25	7.03	-2.22	-1	Pass
45	6175	-9.11	7.03	-2.08	-1	Pass
93	6415	-9.35	7.03	-2.32	-1	Pass
97	6435	-9.51	7.03	-2.48	-1	Pass
105	6475	-9.33	7.03	-2.3	-1	Pass
113	6515	-9.53	7.03	-2.5	-1	Pass
117	6535	-9.41	7.03	-2.38	-1	Pass
149	6695	-9.41	7.03	-2.38	-1	Pass
181	6855	-9.52	7.03	-2.49	-1	Pass
185	6875	-9.30	7.03	-2.27	-1	Pass
209	6995	-9.57	7.03	-2.54	-1	Pass
229	7095	-9.26	7.03	-2.23	-1	Pass

Notes:

1. For U-NII-5, The antenna gain is 7.03 dBi.
2. For U-NII-6, The antenna gain is 7.03 dBi.
3. For U-NII-7, The antenna gain is 7.03 dBi.
4. For U-NII-8, The antenna gain is 7.03 dBi.

802.11a CDD-2Tx

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					
1	5955	-16.36	-14.71	-12.45	9.93	-2.52	-1	Pass
45	6175	-15.30	-14.86	-12.06	9.93	-2.13	-1	Pass
93	6415	-14.89	-15.18	-12.02	9.93	-2.09	-1	Pass
97	6435	-15.08	-14.95	-12.00	9.93	-2.07	-1	Pass
105	6475	-14.49	-16.00	-12.17	9.93	-2.24	-1	Pass
113	6515	-15.16	-15.29	-12.21	9.93	-2.28	-1	Pass
117	6535	-14.82	-15.06	-11.93	9.93	-2	-1	Pass
149	6695	-15.75	-14.38	-12.00	9.93	-2.07	-1	Pass
181	6855	-15.96	-14.12	-11.93	9.93	-2	-1	Pass
185	6875	-15.96	-14.52	-12.17	9.93	-2.24	-1	Pass
209	6995	-16.33	-14.01	-12.01	9.93	-2.08	-1	Pass
229	7095	-15.97	-14.17	-11.97	9.93	-2.04	-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[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. For U-NII-5, The directional gain is 9.93 dBi.
4. For U-NII-6, The directional gain is 9.93 dBi.
5. For U-NII-7, The directional gain is 9.93 dBi.
6. For U-NII-8, The directional gain is 9.93 dBi.

802.11ax (HE20) CDD-2Tx

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					
1	5955	-15.48	-15.14	-12.30	9.93	-2.37	-1	Pass
45	6175	-16.78	-13.85	-12.06	9.93	-2.13	-1	Pass
93	6415	-17.65	-13.65	-12.19	9.93	-2.26	-1	Pass
97	6435	-17.40	-13.47	-11.99	9.93	-2.06	-1	Pass
105	6475	-17.67	-13.81	-12.31	9.93	-2.38	-1	Pass
113	6515	-17.58	-13.74	-12.24	9.93	-2.31	-1	Pass
117	6535	-16.74	-13.89	-12.07	9.93	-2.14	-1	Pass
149	6695	-16.33	-13.98	-11.99	9.93	-2.06	-1	Pass
181	6855	-15.74	-15.29	-12.50	9.93	-2.57	-1	Pass
185	6875	-16.55	-14.59	-12.45	9.93	-2.52	-1	Pass
209	6995	-16.46	-14.36	-12.27	9.93	-2.34	-1	Pass
229	7095	-16.77	-14.50	-12.48	9.93	-2.55	-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 = $10 \log[(10^{Chain0/20} + 10^{Chain1/20})^2 / 2]$
3. For U-NII-5, The directional gain is 9.93 dBi.
4. For U-NII-6, The directional gain is 9.93 dBi.
5. For U-NII-7, The directional gain is 9.93 dBi.
6. For U-NII-8, The directional gain is 9.93 dBi.

802.11ax (HE40) CDD-2Tx

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	-15.63	-14.53	-12.03	9.93	-2.1	-1	Pass
43	6165	-15.92	-14.57	-12.18	9.93	-2.25	-1	Pass
91	6405	-16.12	-14.11	-11.99	9.93	-2.06	-1	Pass
99	6445	-15.16	-15.15	-12.14	9.93	-2.21	-1	Pass
107	6485	-15.75	-14.90	-12.29	9.93	-2.36	-1	Pass
115	6525	-16.07	-14.56	-12.24	9.93	-2.31	-1	Pass
123	6565	-16.25	-14.28	-12.14	9.93	-2.21	-1	Pass
155	6725	-15.00	-15.06	-12.02	9.93	-2.09	-1	Pass
179	6845	-16.01	-14.66	-12.27	9.93	-2.34	-1	Pass
187	6885	-15.73	-14.46	-12.04	9.93	-2.11	-1	Pass
211	7005	-15.93	-14.39	-12.08	9.93	-2.15	-1	Pass
227	7085	-15.11	-14.81	-11.95	9.93	-2.02	-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 = $10 \log[(10^{Chain0/20} + 10^{Chain1/20})^2 / 2]$
3. For U-NII-5, The directional gain is 9.93 dBi.
4. For U-NII-6, The directional gain is 9.93 dBi.
5. For U-NII-7, The directional gain is 9.93 dBi.
6. For U-NII-8, The directional gain is 9.93 dBi.

802.11ax (HE80) CDD-2Tx

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	-15.95	-14.30	-12.04	9.93	-2.11	-1	Pass
39	6145	-15.85	-14.33	-12.01	9.93	-2.08	-1	Pass
87	6385	-15.86	-14.68	-12.22	9.93	-2.29	-1	Pass
103	6465	-15.57	-14.64	-12.07	9.93	-2.14	-1	Pass
119	6545	-15.86	-14.23	-11.96	9.93	-2.03	-1	Pass
151	6705	-16.24	-14.60	-12.33	9.93	-2.4	-1	Pass
183	6865	-15.19	-15.47	-12.32	9.93	-2.39	-1	Pass
199	6945	-15.91	-14.58	-12.18	9.93	-2.25	-1	Pass
215	7025	-15.87	-14.66	-12.21	9.93	-2.28	-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[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. For U-NII-5, The directional gain is 9.93 dBi.
4. For U-NII-6, The directional gain is 9.93 dBi.
5. For U-NII-7, The directional gain is 9.93 dBi.
6. For U-NII-8, The directional gain is 9.93 dBi.

802.11ax (HE20) 26-tone RU CDD-2Tx

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					
1	5955	-15.05	-15.28	-12.15	9.93	-2.22	-1	Pass
45	6175	-15.35	-15.20	-12.26	9.93	-2.33	-1	Pass
93	6415	-16.66	-13.99	-12.11	9.93	-2.18	-1	Pass
97	6435	-16.10	-14.81	-12.40	9.93	-2.47	-1	Pass
105	6475	-15.88	-14.46	-12.10	9.93	-2.17	-1	Pass
113	6515	-15.29	-15.26	-12.26	9.93	-2.33	-1	Pass
117	6535	-15.35	-14.60	-11.95	9.93	-2.02	-1	Pass
149	6695	-15.27	-15.17	-12.21	9.93	-2.28	-1	Pass
181	6855	-15.32	-15.22	-12.26	9.93	-2.33	-1	Pass
185	6875	-15.46	-14.61	-12.00	9.93	-2.07	-1	Pass
209	6995	-16.06	-14.85	-12.40	9.93	-2.47	-1	Pass
229	7095	-15.93	-14.74	-12.28	9.93	-2.35	-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[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. For U-NII-5, The directional gain is 9.93 dBi.
4. For U-NII-6, The directional gain is 9.93 dBi.
5. For U-NII-7, The directional gain is 9.93 dBi.
6. For U-NII-8, The directional gain is 9.93 dBi.

802.11ax (HE20) 52-tone RU CDD-2Tx

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					
1	5955	-15.14	-15.27	-12.19	9.93	-2.26	-1	Pass
45	6175	-15.87	-15.52	-12.68	9.93	-2.75	-1	Pass
93	6415	-17.17	-14.76	-12.79	9.93	-2.86	-1	Pass
97	6435	-16.38	-14.64	-12.41	9.93	-2.48	-1	Pass
105	6475	-16.24	-14.90	-12.51	9.93	-2.58	-1	Pass
113	6515	-15.44	-15.05	-12.23	9.93	-2.3	-1	Pass
117	6535	-15.93	-14.99	-12.42	9.93	-2.49	-1	Pass
149	6695	-15.17	-14.97	-12.06	9.93	-2.13	-1	Pass
181	6855	-15.31	-15.08	-12.18	9.93	-2.25	-1	Pass
185	6875	-15.86	-14.90	-12.34	9.93	-2.41	-1	Pass
209	6995	-16.21	-15.16	-12.64	9.93	-2.71	-1	Pass
229	7095	-15.47	-14.69	-12.05	9.93	-2.12	-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[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. For U-NII-5, The directional gain is 9.93 dBi.
4. For U-NII-6, The directional gain is 9.93 dBi.
5. For U-NII-7, The directional gain is 9.93 dBi.
6. For U-NII-8, The directional gain is 9.93 dBi.

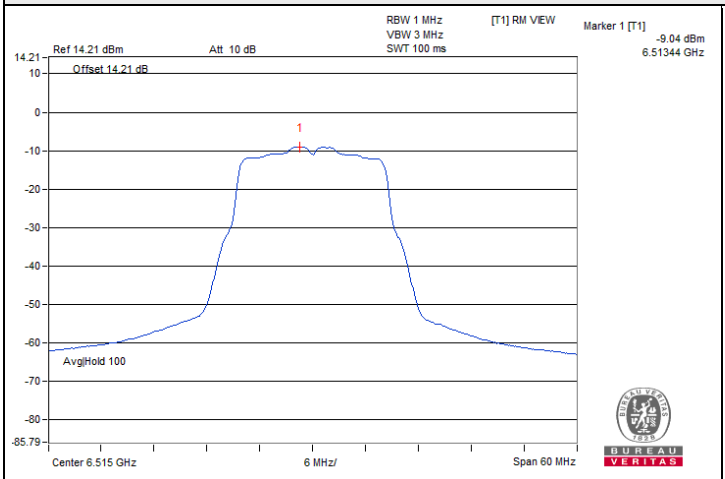
802.11ax (HE20) 106-tone RU CDD-2Tx

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					
1	5955	-15.46	-15.65	-12.54	9.93	-2.61	-1	Pass
45	6175	-15.14	-14.77	-11.94	9.93	-2.01	-1	Pass
93	6415	-16.99	-14.00	-12.23	9.93	-2.3	-1	Pass
97	6435	-16.74	-15.00	-12.77	9.93	-2.84	-1	Pass
105	6475	-16.14	-14.92	-12.48	9.93	-2.55	-1	Pass
113	6515	-15.10	-14.98	-12.03	9.93	-2.1	-1	Pass
117	6535	-15.52	-14.76	-12.11	9.93	-2.18	-1	Pass
149	6695	-15.57	-15.12	-12.33	9.93	-2.4	-1	Pass
181	6855	-15.77	-15.01	-12.36	9.93	-2.43	-1	Pass
185	6875	-15.46	-14.75	-12.08	9.93	-2.15	-1	Pass
209	6995	-15.87	-14.84	-12.31	9.93	-2.38	-1	Pass
229	7095	-15.82	-14.53	-12.12	9.93	-2.19	-1	Pass

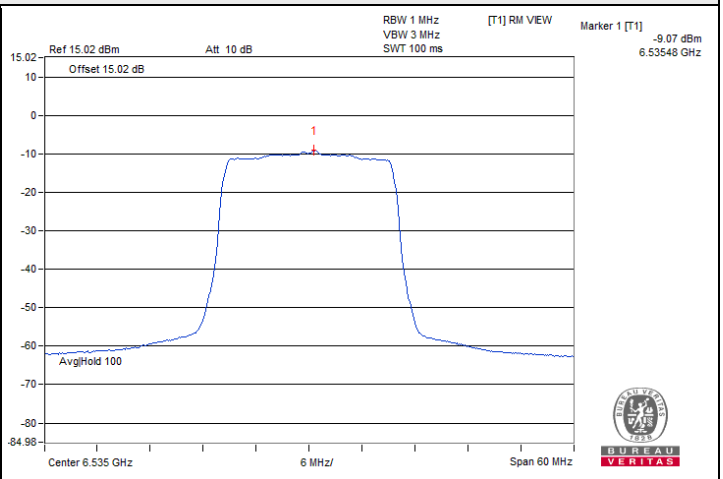
Notes:

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$^{Chain0/20}$ + 10$^{Chain1/20}$)^2 / 2]
3. For U-NII-5, The directional gain is 9.93 dBi.
4. For U-NII-6, The directional gain is 9.93 dBi.
5. For U-NII-7, The directional gain is 9.93 dBi.
6. For U-NII-8, The directional gain is 9.93 dBi.

Spectrum Plot of Maximum Value

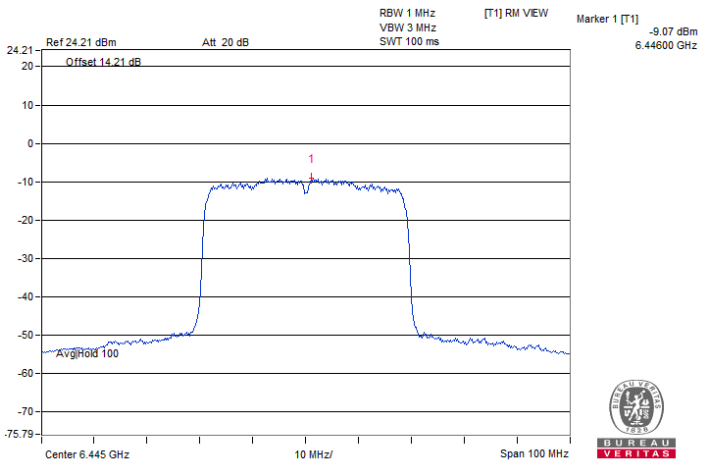


802.11a 1Tx / Chain 0 : CH 113

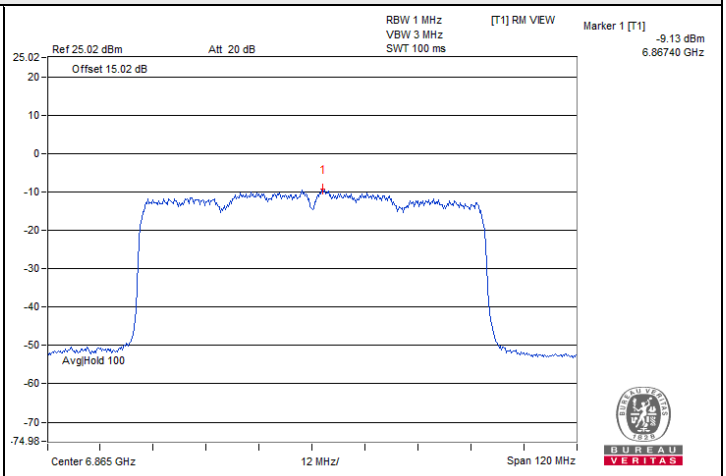


802.11ax (HE20) 1Tx / Chain 0 : CH 117

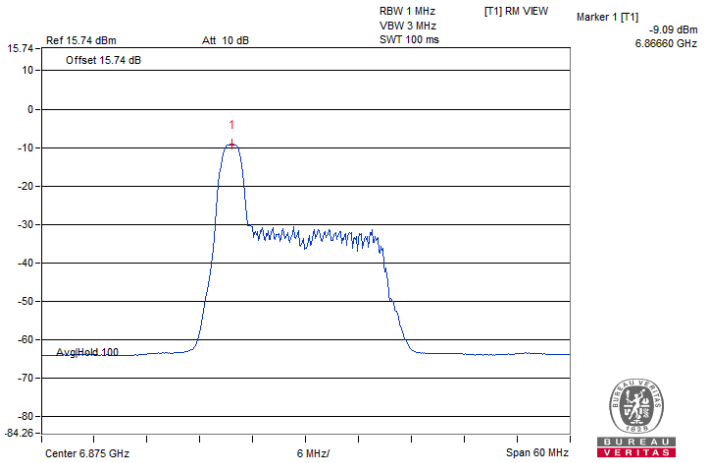
Spectrum Plot of Maximum Value



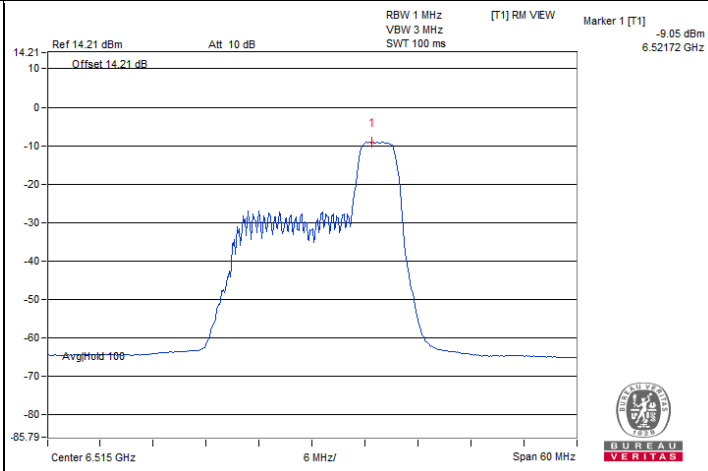
802.11ax (HE40) 1Tx / Chain 0 : CH 99



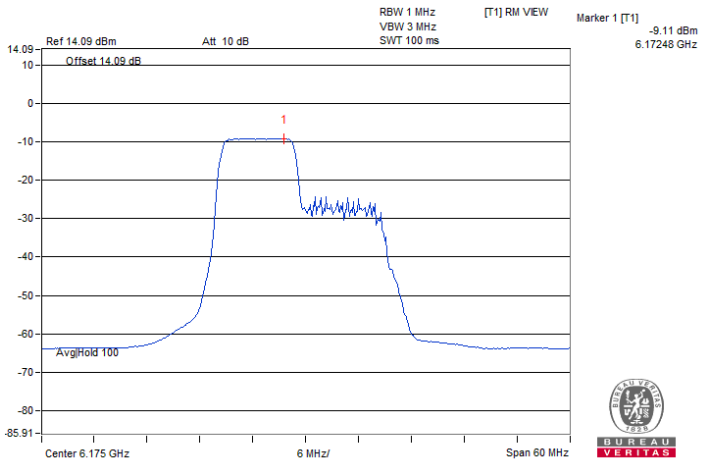
802.11ax (HE80) 1Tx / Chain 0 : CH 183



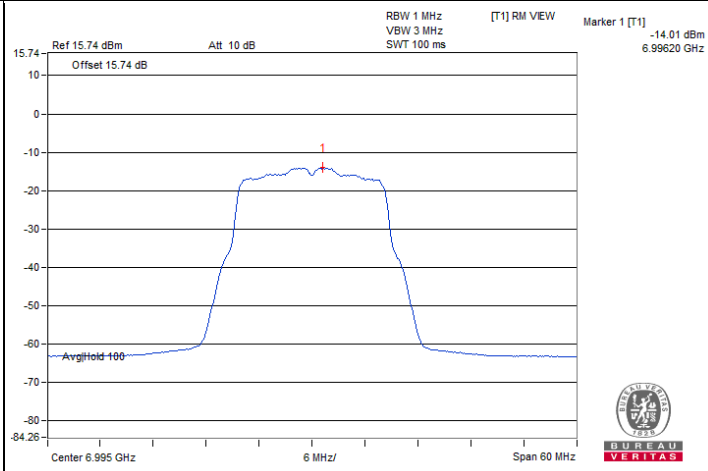
802.11ax (HE20) 26-tone RU 1Tx / Chain 0 : CH 185@0



802.11ax (HE20) 52-tone RU 1Tx / Chain 0 : CH 113@40

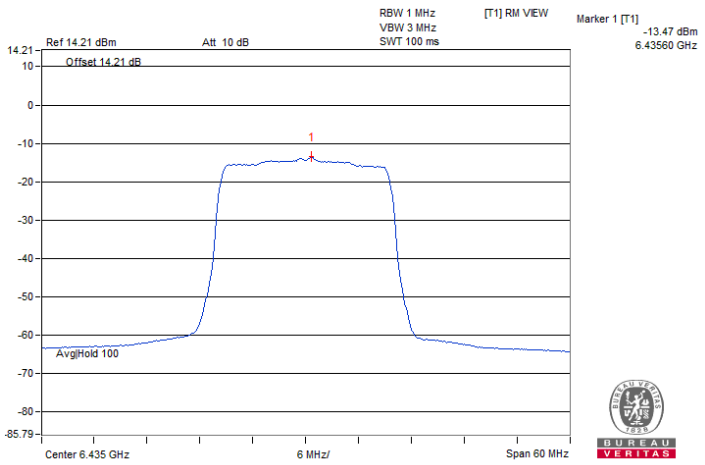


802.11ax (HE20) 106-tone RU 1Tx / Chain 0 : CH 45@53

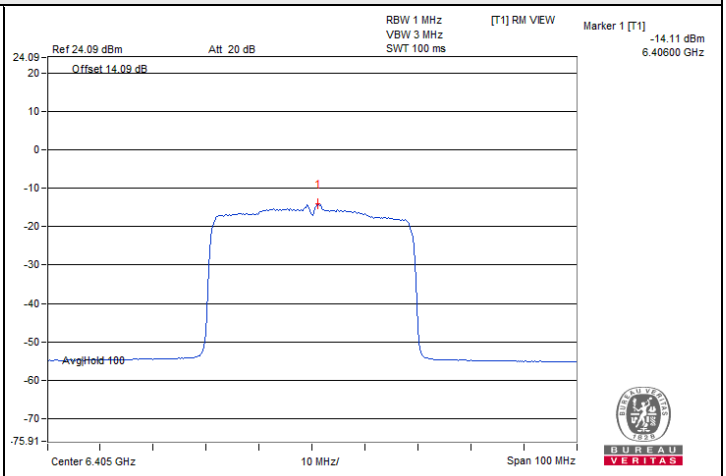


802.11a CDD-2Tx / Chain 1 : CH 209

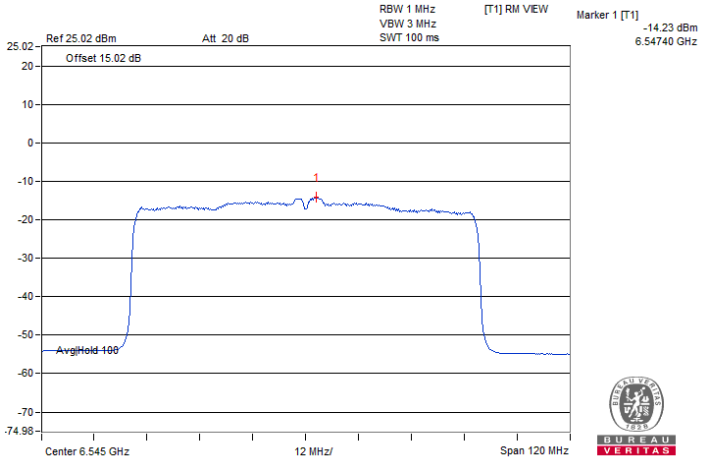
Spectrum Plot of Maximum Value



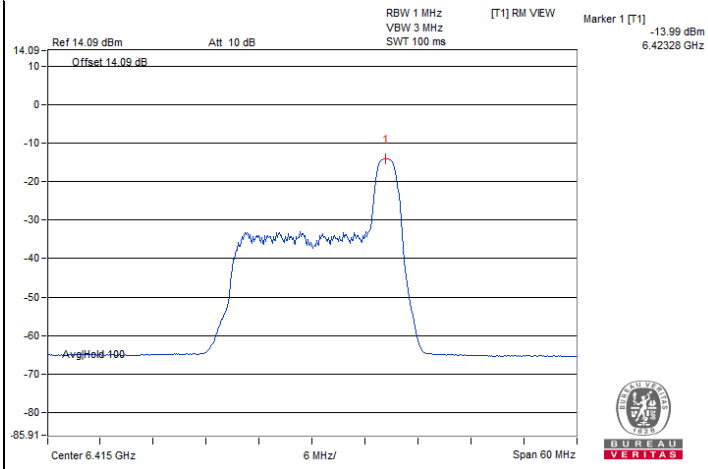
802.11ax (HE20) CDD-2Tx / Chain 1 : CH 97



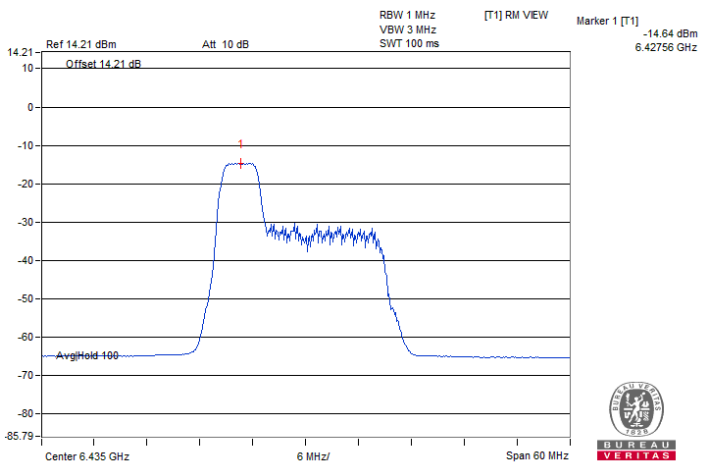
802.11ax (HE40) CDD-2Tx / Chain 1 : CH 91



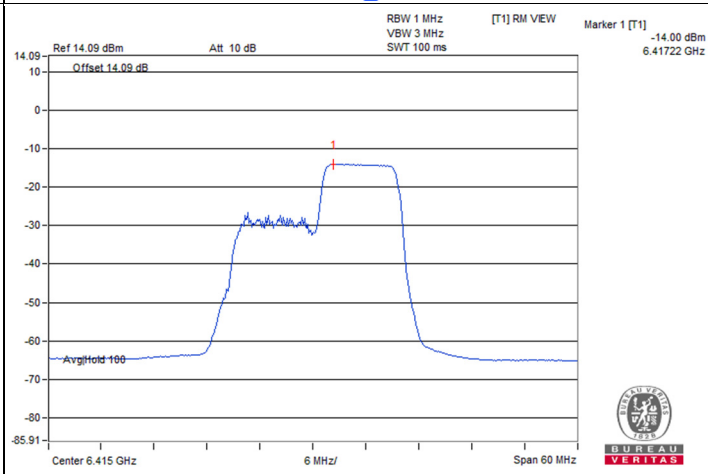
802.11ax (HE80) CDD-2Tx / Chain 1 : CH 119



802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 1 : CH 93@8



802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 1 : CH 97@37



802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 1 : CH 93@54

7.3 Emission Bandwidth

Input Power:	3.6 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng

802.11a 1Tx

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	Maximum Limit (MHz)	Test Result
1	5955	21.11	320	Pass
45	6175	20.97	320	Pass
93	6415	21	320	Pass
97	6435	21.11	320	Pass
105	6475	20.86	320	Pass
113	6515	20.97	320	Pass
117	6535	20.93	320	Pass
149	6695	20.98	320	Pass
181	6855	20.99	320	Pass
185	6875	21.24	320	Pass
209	6995	20.95	320	Pass
229	7095	20.97	320	Pass

802.11ax (HE20) 1Tx

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	Maximum Limit (MHz)	Test Result
1	5955	21.25	320	Pass
45	6175	21.56	320	Pass
93	6415	21.18	320	Pass
97	6435	21.35	320	Pass
105	6475	21.24	320	Pass
113	6515	21.47	320	Pass
117	6535	21.47	320	Pass
149	6695	21.2	320	Pass
181	6855	21.36	320	Pass
185	6875	21.58	320	Pass
209	6995	21.43	320	Pass
229	7095	21.57	320	Pass

802.11ax (HE40) 1Tx

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	Maximum Limit (MHz)	Test Result
3	5965	39.87	320	Pass
43	6165	39.76	320	Pass
91	6405	39.77	320	Pass
99	6445	39.52	320	Pass
107	6485	39.71	320	Pass
115	6525	39.42	320	Pass
123	6565	39.61	320	Pass
155	6725	39.48	320	Pass
179	6845	39.73	320	Pass
187	6885	39.87	320	Pass
211	7005	39.52	320	Pass
227	7085	39.61	320	Pass

802.11ax (HE80) 1Tx

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	Maximum Limit (MHz)	Test Result
7	5985	80.7	320	Pass
39	6145	81.57	320	Pass
87	6385	81.36	320	Pass
103	6465	81.26	320	Pass
119	6545	80.73	320	Pass
151	6705	81.49	320	Pass
183	6865	81.07	320	Pass
199	6945	81.2	320	Pass
215	7025	81.66	320	Pass

802.11ax (HE20) 26-tone RU 1Tx

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	Maximum Limit (MHz)	Test Result
1	5955	19.97	320	Pass
45	6175	18.46	320	Pass
93	6415	19.82	320	Pass
97	6435	20.15	320	Pass
105	6475	18.36	320	Pass
113	6515	19.9	320	Pass
117	6535	19.83	320	Pass
149	6695	18.43	320	Pass
181	6855	19.71	320	Pass
185	6875	19.82	320	Pass
209	6995	18.3	320	Pass
229	7095	19.89	320	Pass

802.11ax (HE20) 52-tone RU 1Tx

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	Maximum Limit (MHz)	Test Result
1	5955	20.63	320	Pass
45	6175	19.15	320	Pass
93	6415	20.52	320	Pass
97	6435	20.55	320	Pass
105	6475	19.2	320	Pass
113	6515	20.58	320	Pass
117	6535	20.69	320	Pass
149	6695	19.07	320	Pass
181	6855	20.44	320	Pass
185	6875	20.58	320	Pass
209	6995	19.33	320	Pass
229	7095	20.65	320	Pass

802.11ax (HE20) 106-tone RU 1Tx

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	Maximum Limit (MHz)	Test Result
1	5955	21	320	Pass
45	6175	20.91	320	Pass
93	6415	20.51	320	Pass
97	6435	20.79	320	Pass
105	6475	20.85	320	Pass
113	6515	20.9	320	Pass
117	6535	20.93	320	Pass
149	6695	21.13	320	Pass
181	6855	20.91	320	Pass
185	6875	20.89	320	Pass
209	6995	20.93	320	Pass
229	7095	20.81	320	Pass

802.11a CDD-2Tx

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	20.96	21.21	320	Pass
45	6175	20.95	21.18	320	Pass
93	6415	20.96	21.33	320	Pass
97	6435	21.01	21.04	320	Pass
105	6475	21.27	21.37	320	Pass
113	6515	21.26	21.16	320	Pass
117	6535	21.13	21.05	320	Pass
149	6695	20.92	21.11	320	Pass
181	6855	21.12	21.14	320	Pass
185	6875	21.08	21.08	320	Pass
209	6995	21.09	21.51	320	Pass
229	7095	21.20	21.15	320	Pass

802.11ax (HE20) CDD-2Tx

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	21.22	21.28	320	Pass
45	6175	21.77	21.35	320	Pass
93	6415	21.27	21.50	320	Pass
97	6435	21.58	21.26	320	Pass
105	6475	21.45	21.39	320	Pass
113	6515	21.48	21.41	320	Pass
117	6535	21.57	21.30	320	Pass
149	6695	21.48	21.45	320	Pass
181	6855	21.58	21.28	320	Pass
185	6875	21.37	21.35	320	Pass
209	6995	21.28	21.48	320	Pass
229	7095	21.38	21.23	320	Pass

802.11ax (HE40) CDD-2Tx

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	5965	39.59	39.58	320	Pass
43	6165	39.43	39.50	320	Pass
91	6405	39.63	39.68	320	Pass
99	6445	39.79	39.61	320	Pass
107	6485	39.71	39.98	320	Pass
115	6525	39.78	39.51	320	Pass
123	6565	39.47	39.60	320	Pass
155	6725	39.67	39.67	320	Pass
179	6845	39.56	39.81	320	Pass
187	6885	39.55	39.94	320	Pass
211	7005	39.74	39.72	320	Pass
227	7085	39.61	39.47	320	Pass

802.11ax (HE80) CDD-2Tx

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
7	5985	80.90	80.84	320	Pass
39	6145	80.86	80.97	320	Pass
87	6385	81.43	80.94	320	Pass
103	6465	81.15	81.04	320	Pass
119	6545	81.43	80.98	320	Pass
151	6705	81.52	81.11	320	Pass
183	6865	81.40	80.77	320	Pass
199	6945	80.96	80.74	320	Pass
215	7025	81.19	81.05	320	Pass

802.11ax (HE20) 26-tone RU CDD-2Tx

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	19.74	19.58	320	Pass
45	6175	18.25	18.06	320	Pass
93	6415	19.77	19.67	320	Pass
97	6435	19.67	19.72	320	Pass
105	6475	18.34	18.01	320	Pass
113	6515	20.13	19.60	320	Pass
117	6535	19.81	19.55	320	Pass
149	6695	18.30	17.99	320	Pass
181	6855	19.87	19.72	320	Pass
185	6875	19.68	19.50	320	Pass
209	6995	18.40	18.02	320	Pass
229	7095	20.17	19.82	320	Pass

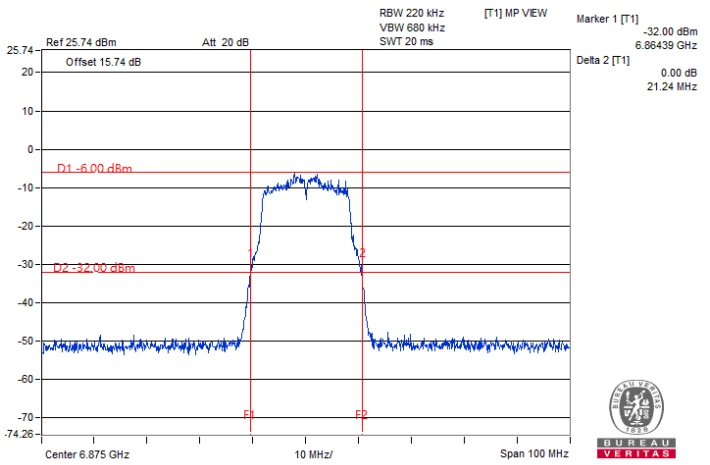
802.11ax (HE20) 52-tone RU CDD-2Tx

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	19.95	19.93	320	Pass
45	6175	18.19	18.27	320	Pass
93	6415	19.70	19.73	320	Pass
97	6435	19.88	19.91	320	Pass
105	6475	18.10	18.33	320	Pass
113	6515	19.75	19.54	320	Pass
117	6535	19.71	19.75	320	Pass
149	6695	18.22	18.38	320	Pass
181	6855	19.60	19.79	320	Pass
185	6875	19.79	19.84	320	Pass
209	6995	18.17	18.24	320	Pass
229	7095	19.76	19.71	320	Pass

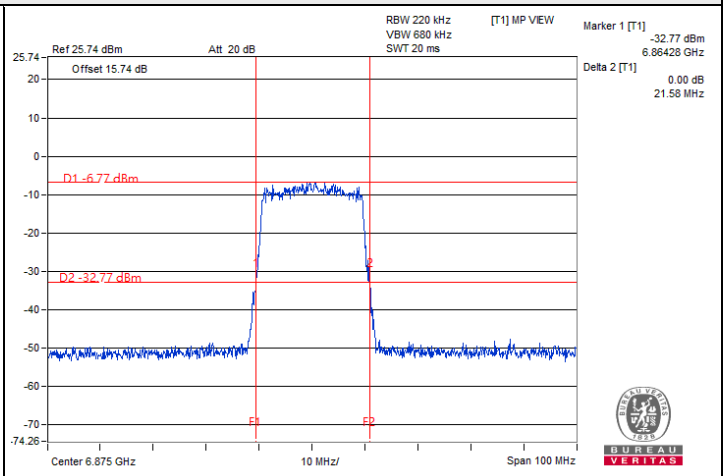
802.11ax (HE20) 106-tone RU CDD-2Tx

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	19.91	20.16	320	Pass
45	6175	19.91	19.97	320	Pass
93	6415	21.21	20.76	320	Pass
97	6435	20.24	19.79	320	Pass
105	6475	20.52	20.34	320	Pass
113	6515	20.96	20.66	320	Pass
117	6535	20.32	19.96	320	Pass
149	6695	19.90	19.92	320	Pass
181	6855	20.97	20.56	320	Pass
185	6875	20.43	19.76	320	Pass
209	6995	19.83	19.95	320	Pass
229	7095	21.20	20.67	320	Pass

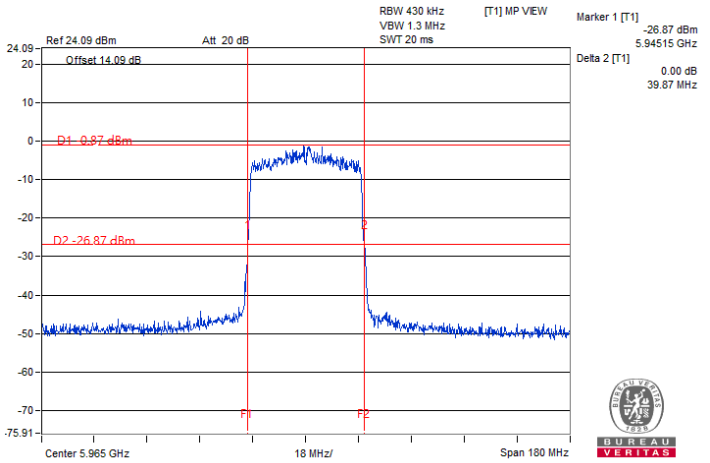
Spectrum Plot of Maximum Value



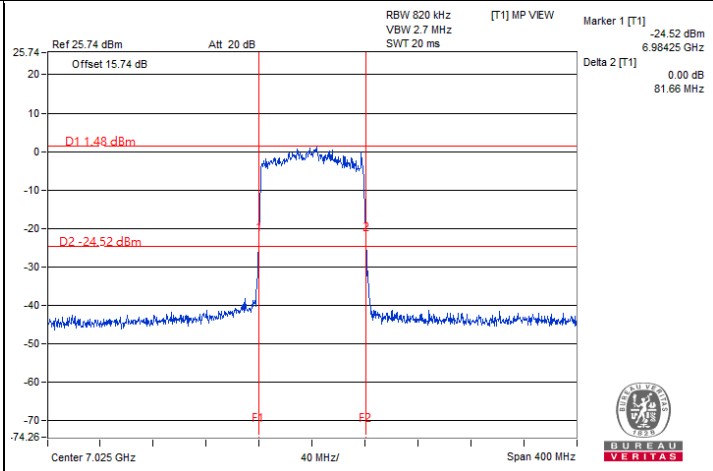
802.11a 1Tx : CH 185



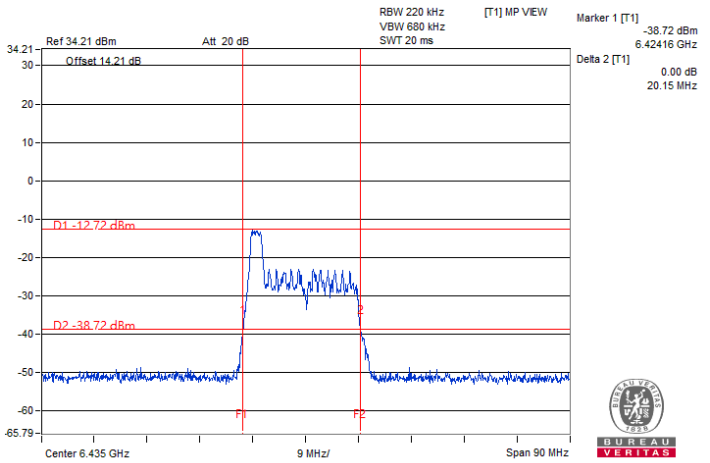
802.11ax (HE20) 1Tx : CH 185



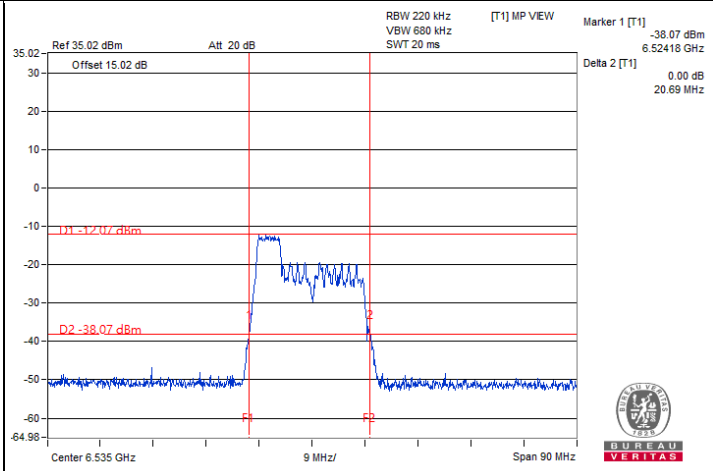
802.11ax (HE40) 1Tx : CH 3



802.11ax (HE80) 1Tx : CH 215

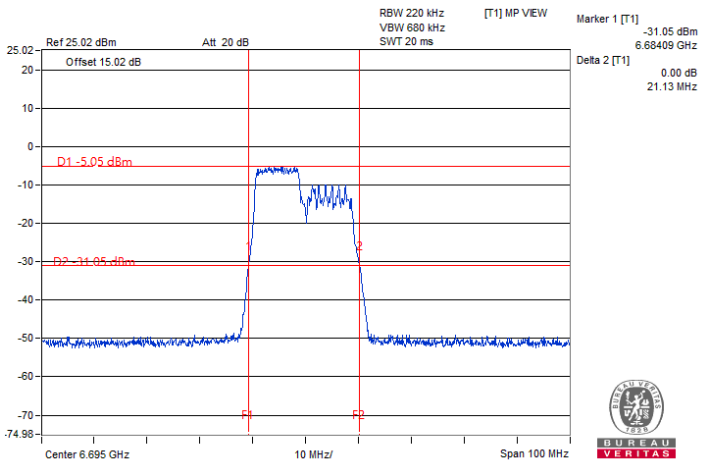


802.11ax (HE20) 26-tone RU 1Tx : CH 97@0

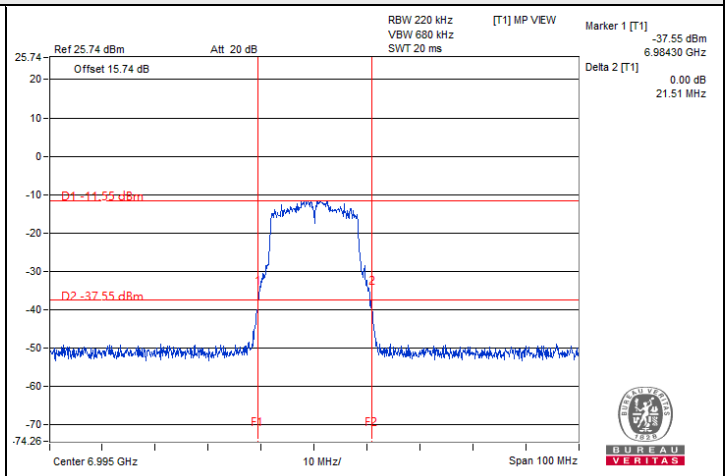


802.11ax (HE20) 52-tone RU 1Tx : CH 117@37

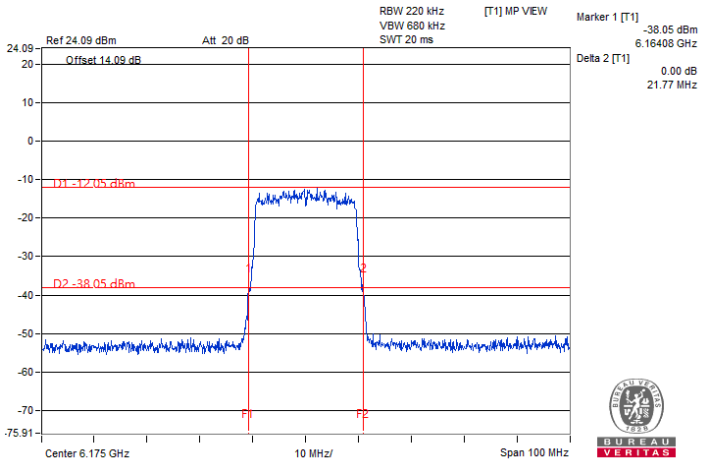
Spectrum Plot of Maximum Value



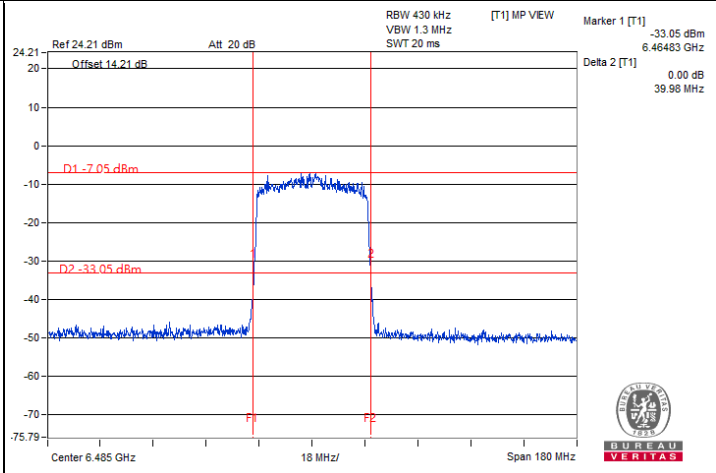
802.11ax (HE20) 106-tone RU 1Tx : CH 149@53



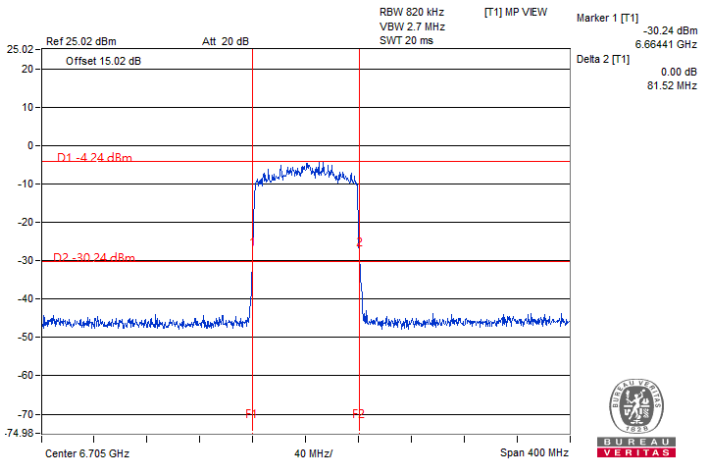
802.11a CDD-2Tx / Chain 1 : CH 209



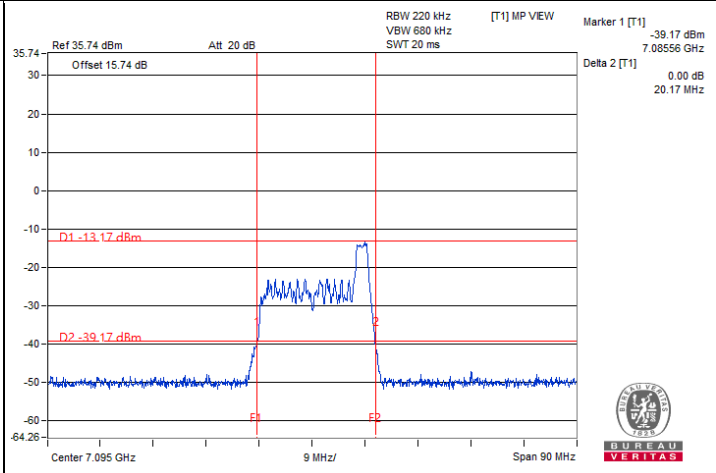
802.11ax (HE20) CDD-2Tx / Chain 0 : CH 45



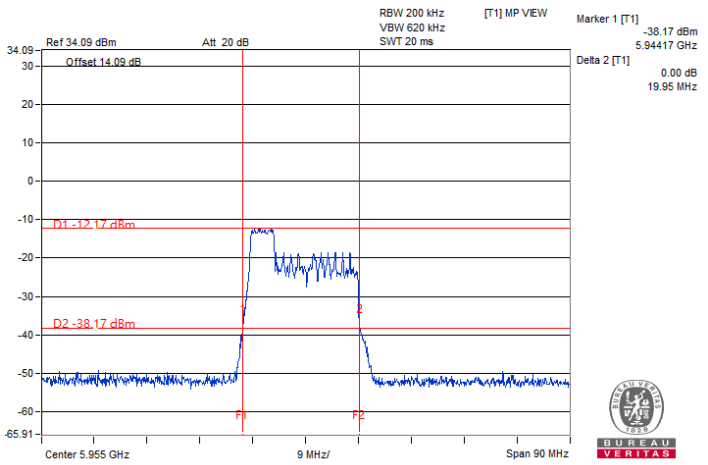
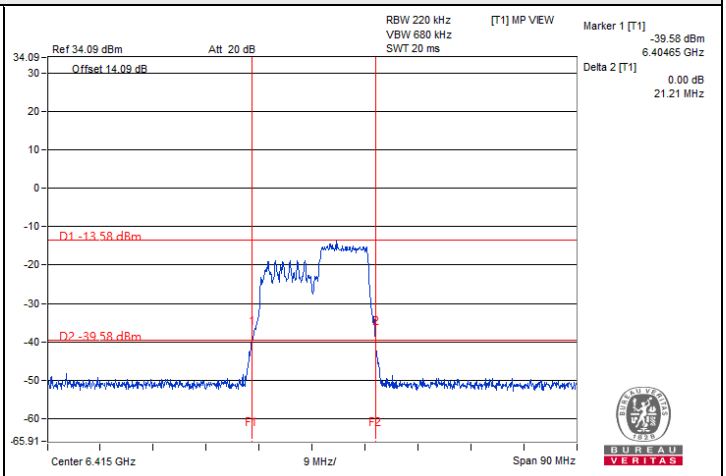
802.11ax (HE40) CDD-2Tx / Chain 1 : CH 107



802.11ax (HE80) CDD-2Tx / Chain 0 : CH 151



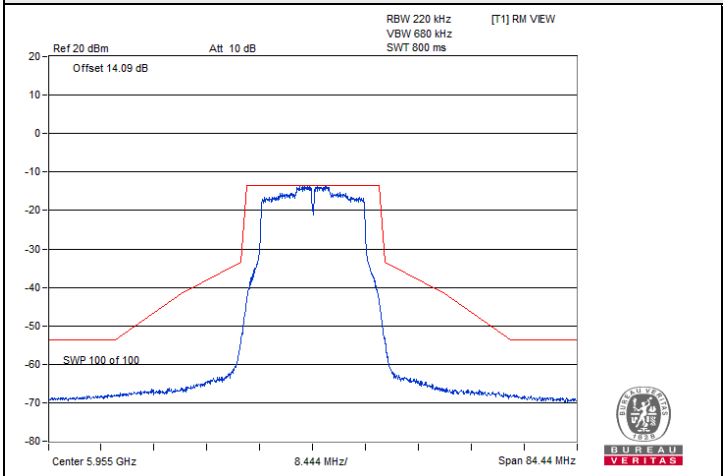
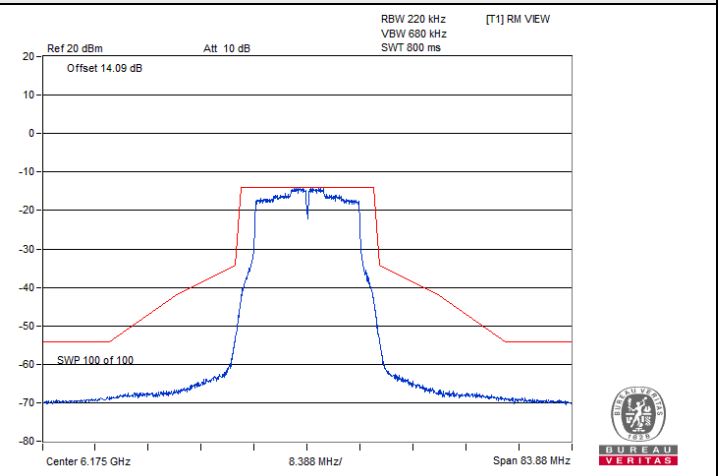
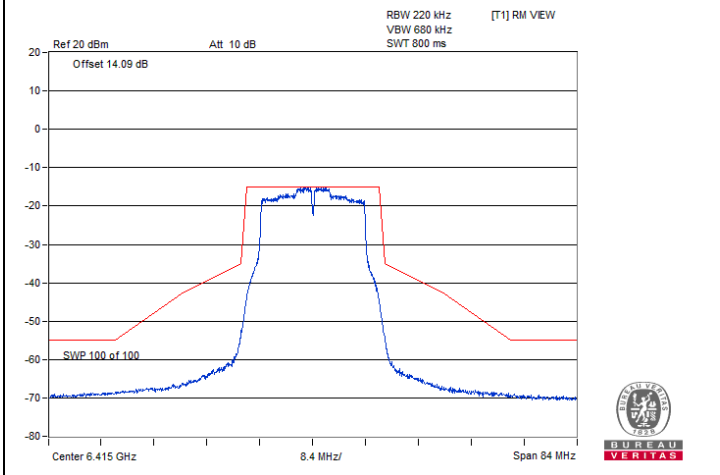
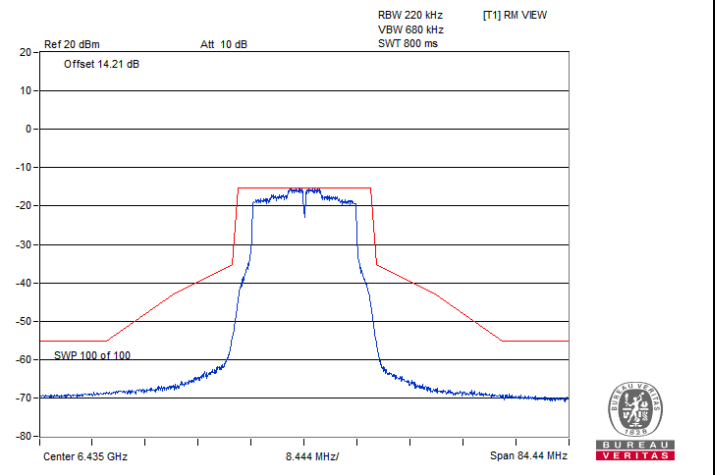
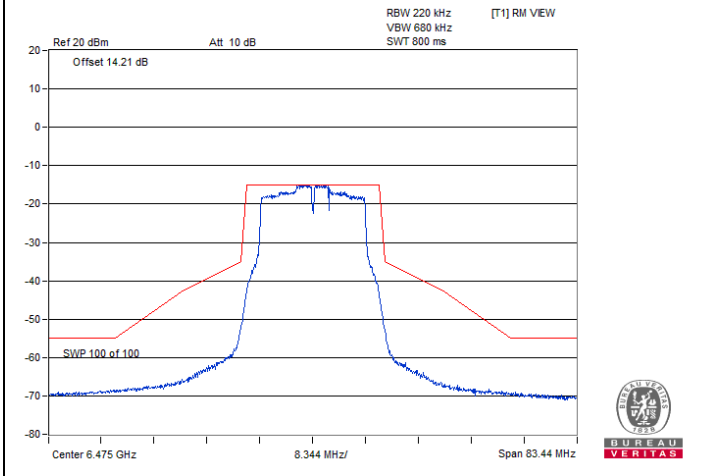
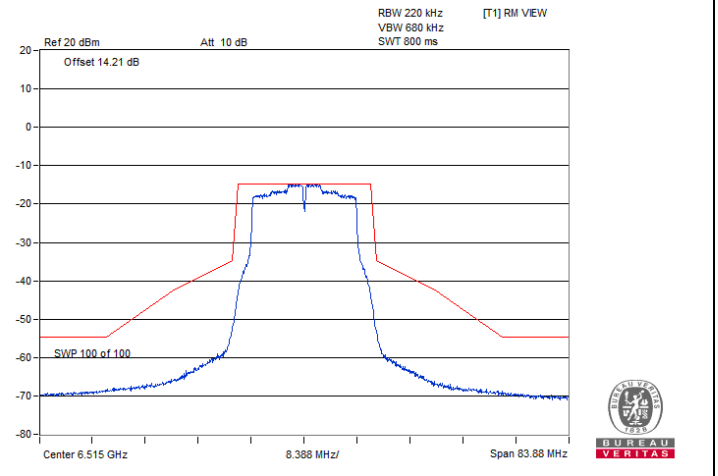
802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 0 : CH 229@8

Spectrum Plot of Maximum Value	
	
802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 0 : CH 1@37	802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 0 : CH 93@54

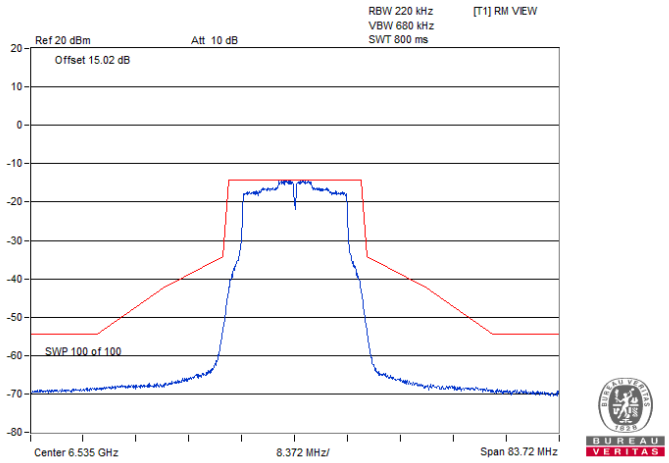
7.4 In-Band Emission Mask

Input Power:	3.6 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng

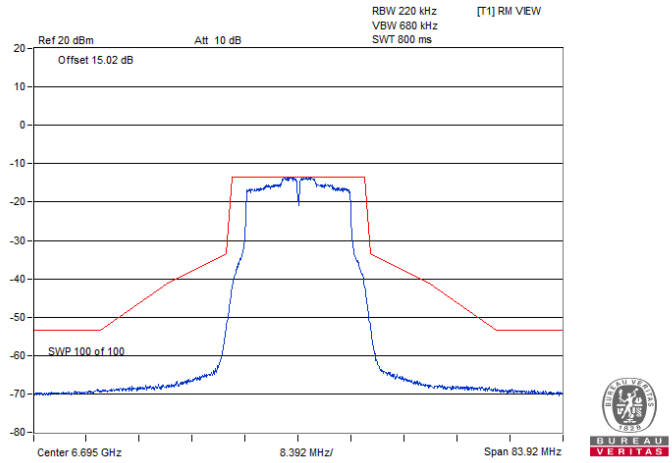
802.11a 1Tx

Spectrum Plot	
	
802.11a 1Tx / Chain 0 : CH 1	802.11a 1Tx / Chain 0 : CH 45
	
802.11a 1Tx / Chain 0 : CH 93	802.11a 1Tx / Chain 0 : CH 97
	
802.11a 1Tx / Chain 0 : CH 105	802.11a 1Tx / Chain 0 : CH 113

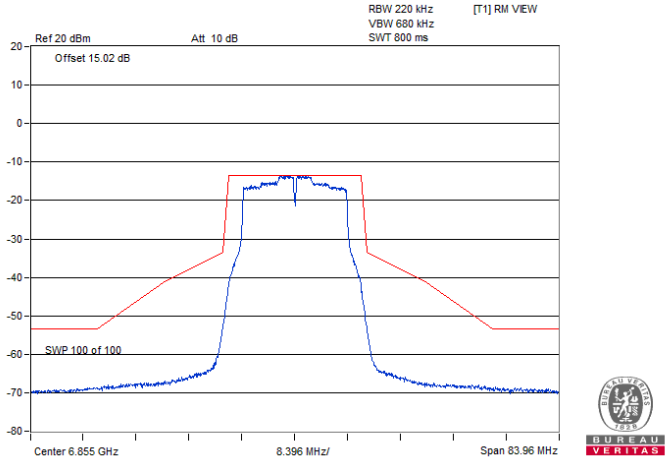
Spectrum Plot



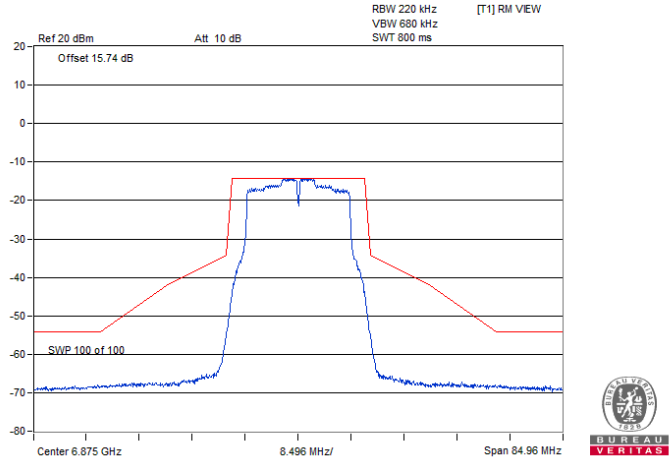
802.11a 1Tx / Chain 0 : CH 117



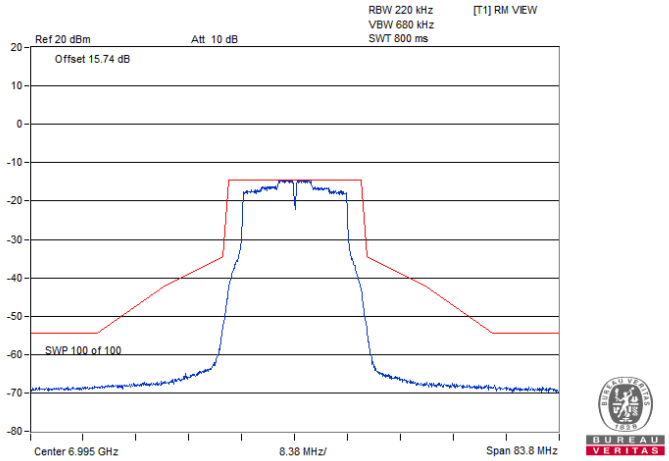
802.11a 1Tx / Chain 0 : CH 149



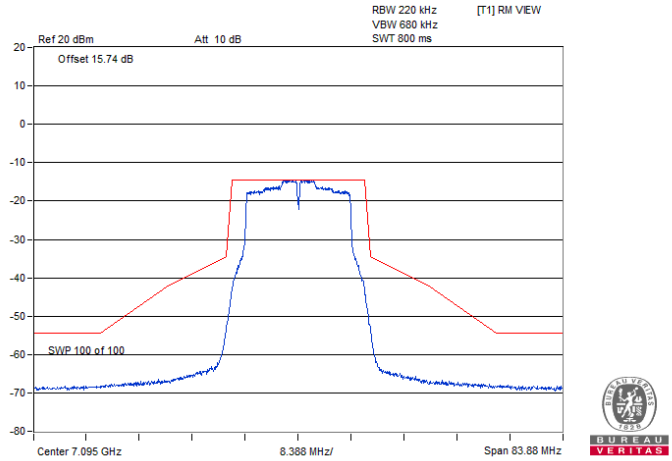
802.11a 1Tx / Chain 0 : CH 181



802.11a 1Tx / Chain 0 : CH 185

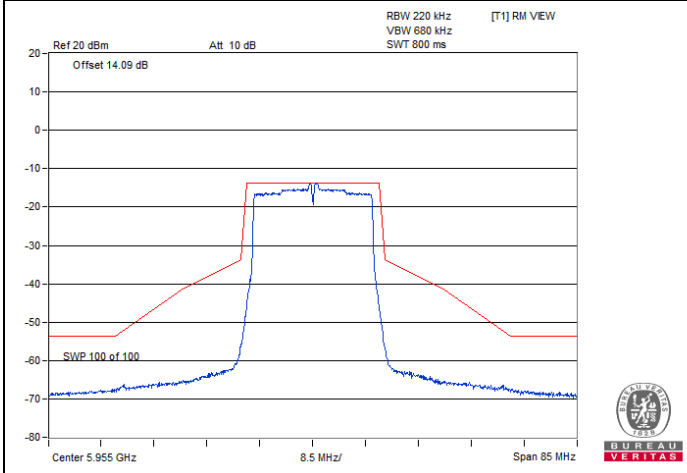
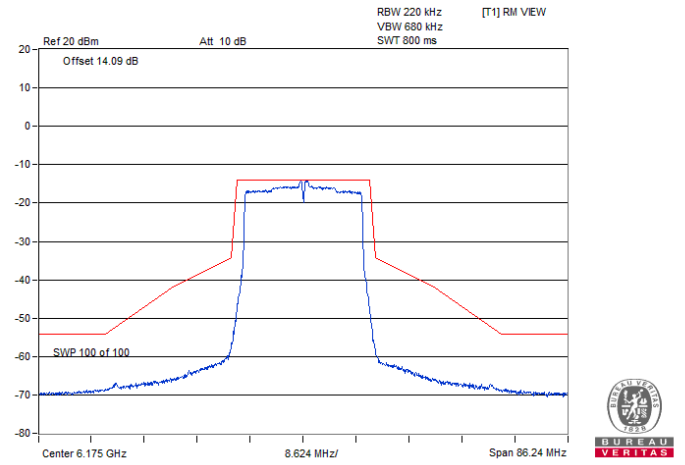
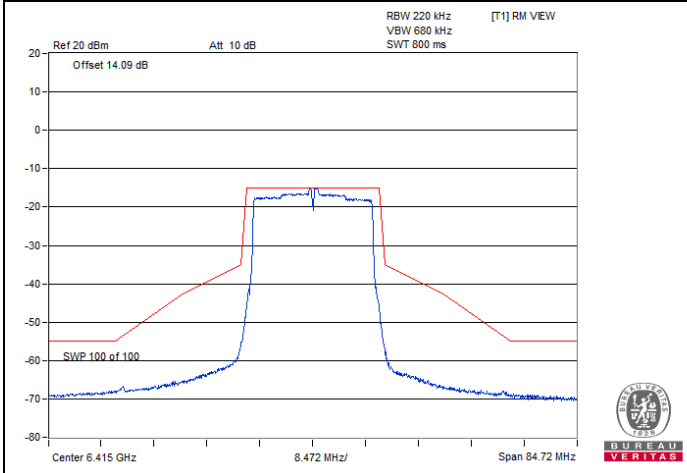
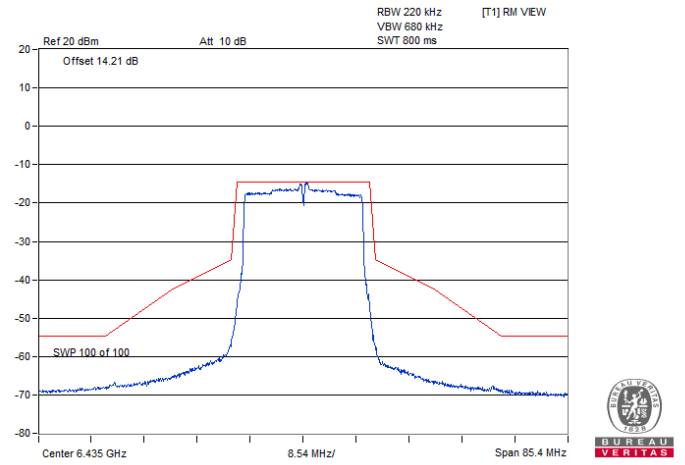
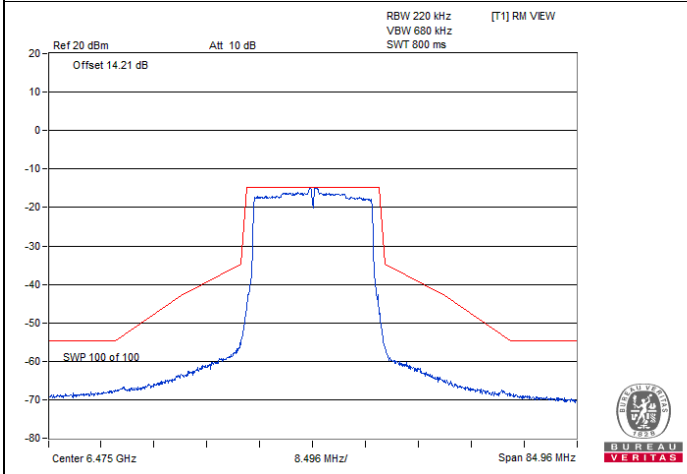
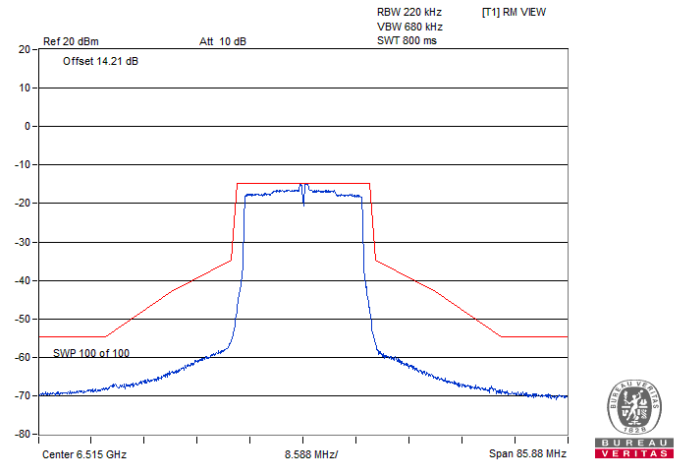


802.11a 1Tx / Chain 0 : CH 209

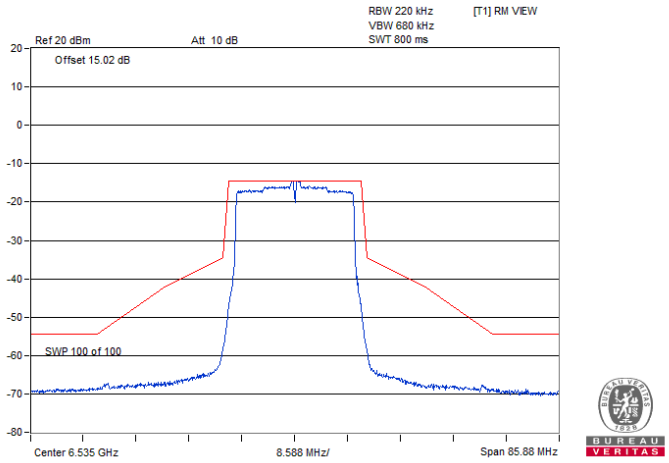


802.11a 1Tx / Chain 0 : CH 229

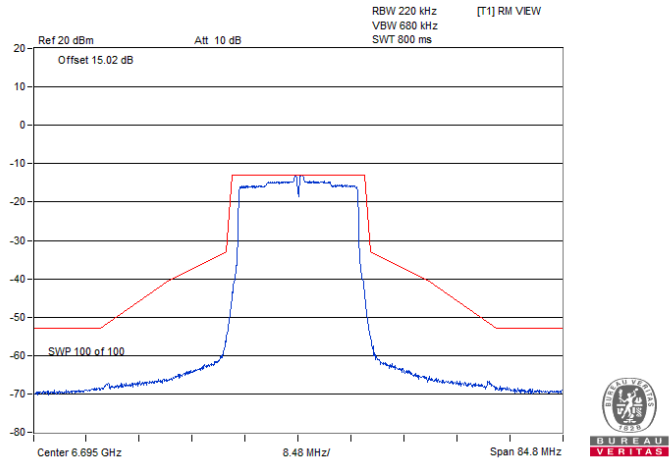
802.11ax (HE20) 1Tx

Spectrum Plot	
	
802.11ax (HE20) 1Tx / Chain 0 : CH 1	802.11ax (HE20) 1Tx / Chain 0 : CH 45
	
802.11ax (HE20) 1Tx / Chain 0 : CH 93	802.11ax (HE20) 1Tx / Chain 0 : CH 97
	
802.11ax (HE20) 1Tx / Chain 0 : CH 105	802.11ax (HE20) 1Tx / Chain 0 : CH 113

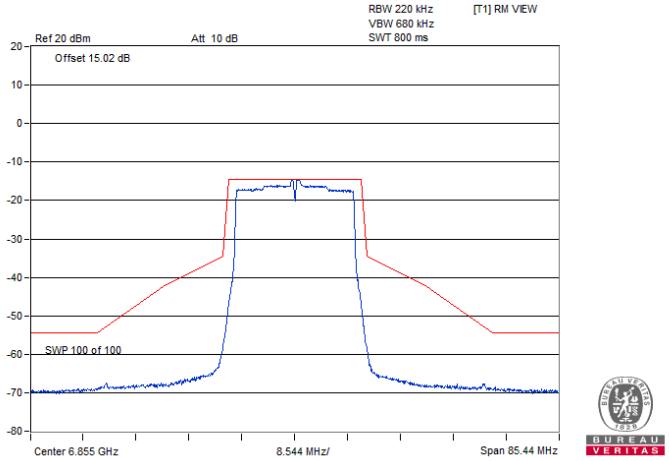
Spectrum Plot



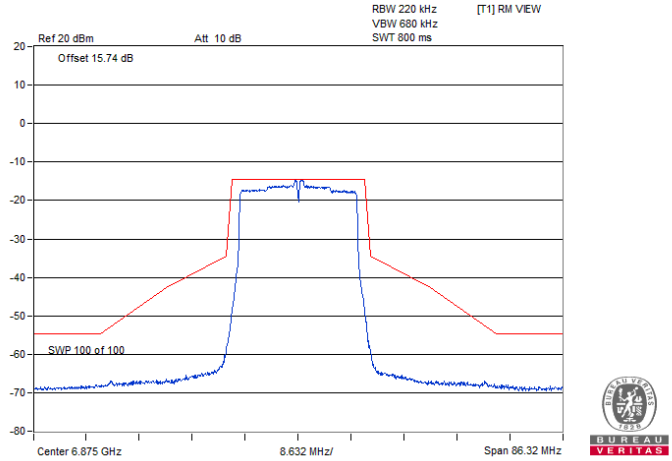
802.11ax (HE20) 1Tx / Chain 0 : CH 117



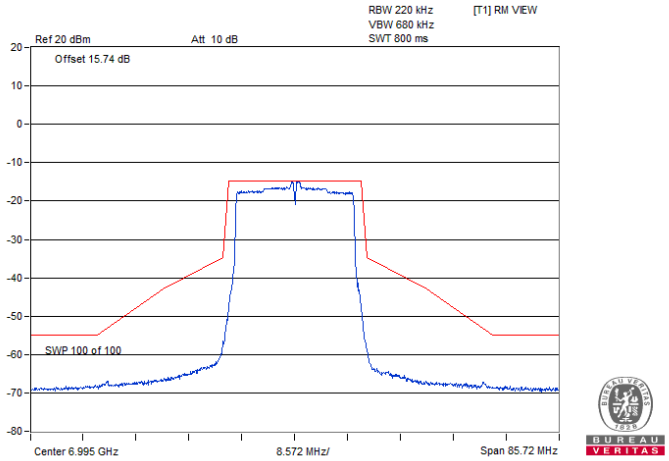
802.11ax (HE20) 1Tx / Chain 0 : CH 149



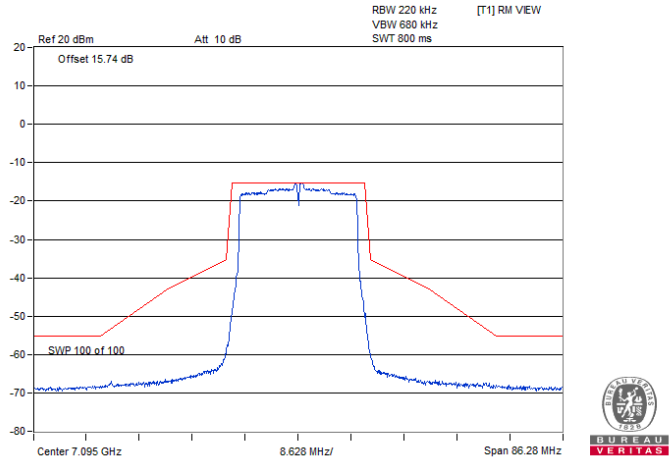
802.11ax (HE20) 1Tx / Chain 0 : CH 181



802.11ax (HE20) 1Tx / Chain 0 : CH 185

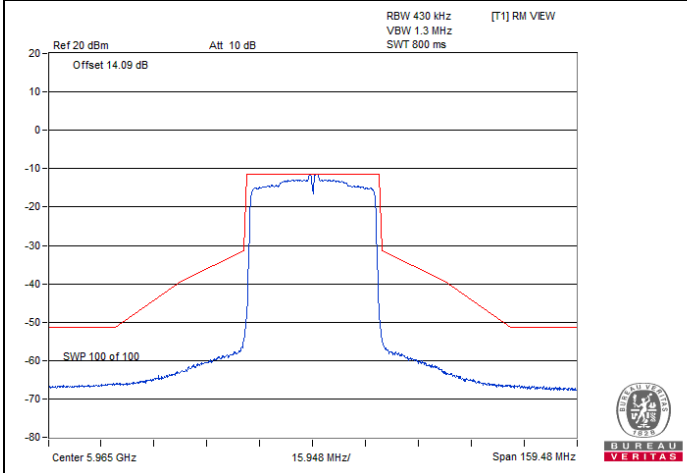
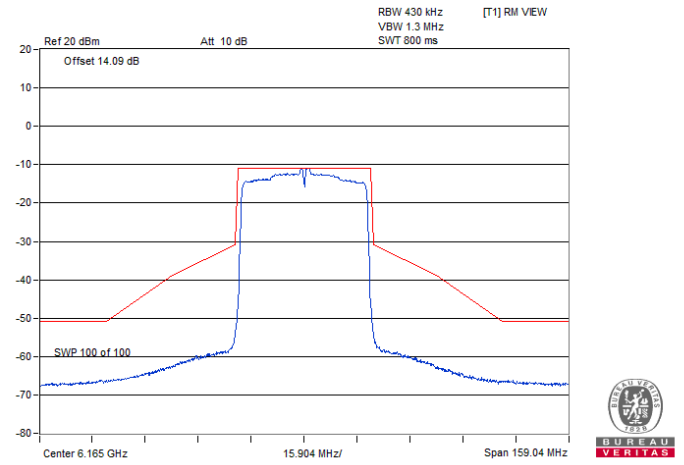
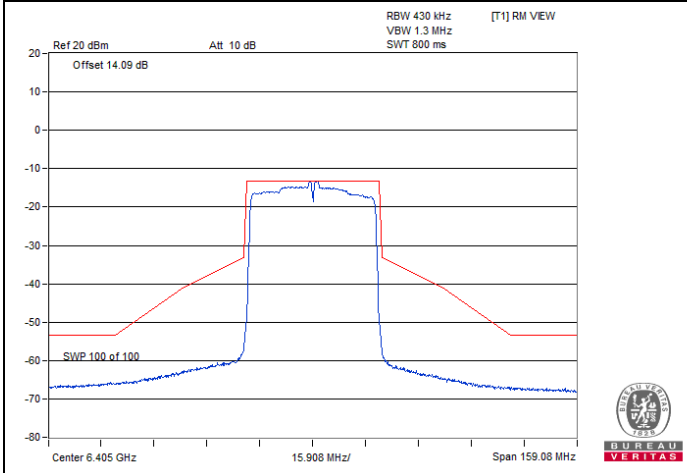
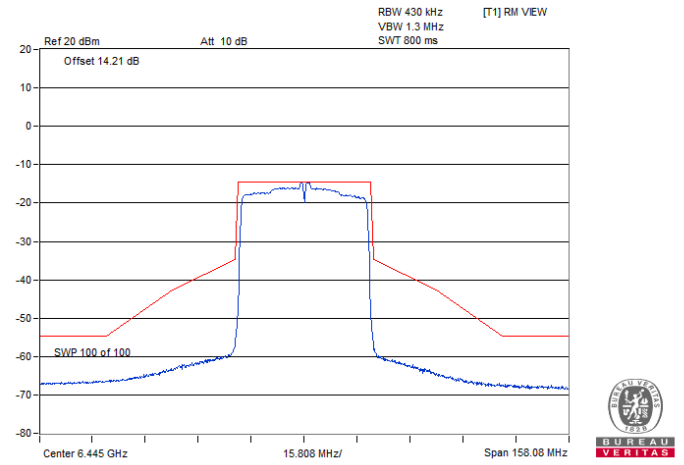
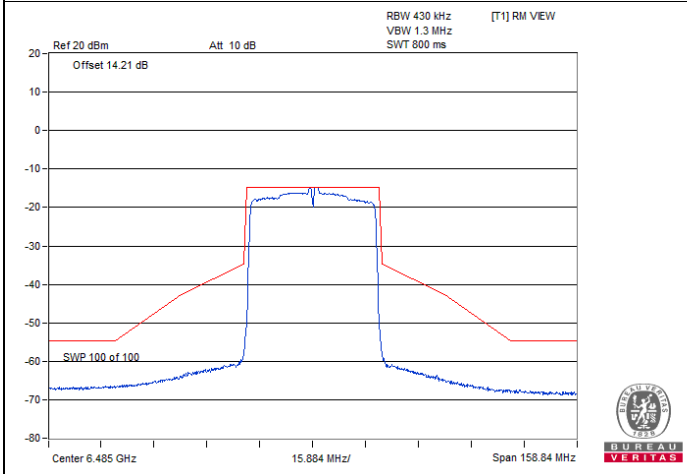
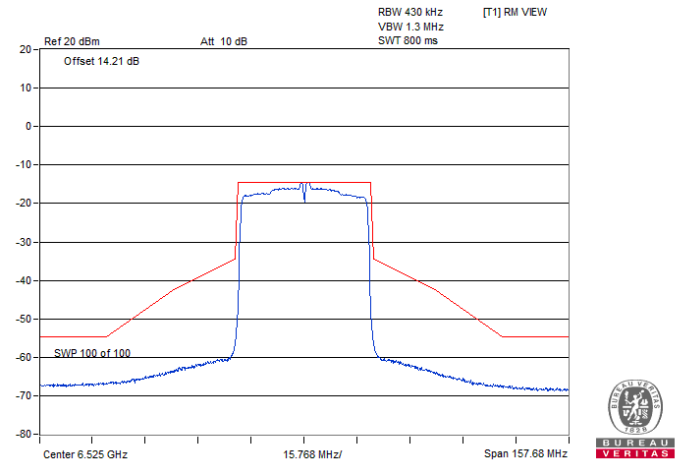


802.11ax (HE20) 1Tx / Chain 0 : CH 209

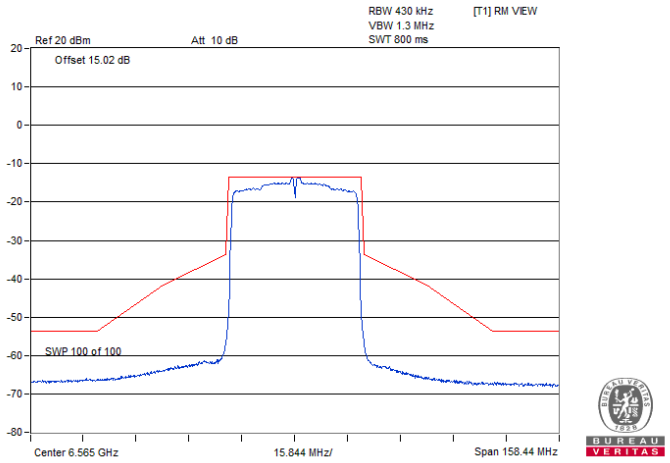


802.11ax (HE20) 1Tx / Chain 0 : CH 229

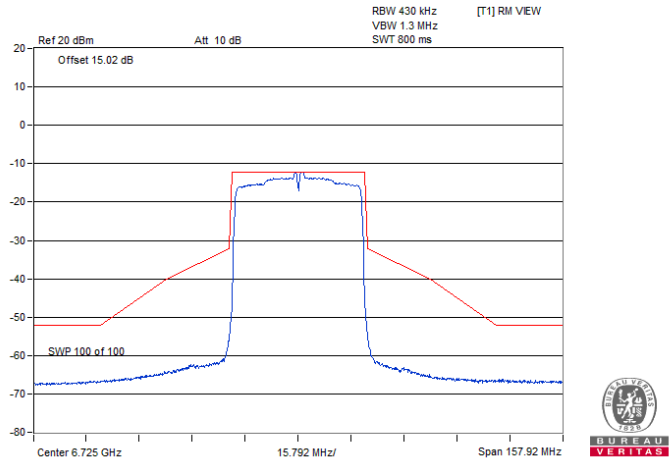
802.11ax (HE40) 1Tx

Spectrum Plot	
	
802.11ax (HE40) 1Tx / Chain 0 : CH 3	802.11ax (HE40) 1Tx / Chain 0 : CH 43
	
802.11ax (HE40) 1Tx / Chain 0 : CH 91	802.11ax (HE40) 1Tx / Chain 0 : CH 99
	
802.11ax (HE40) 1Tx / Chain 0 : CH 107	802.11ax (HE40) 1Tx / Chain 0 : CH 115

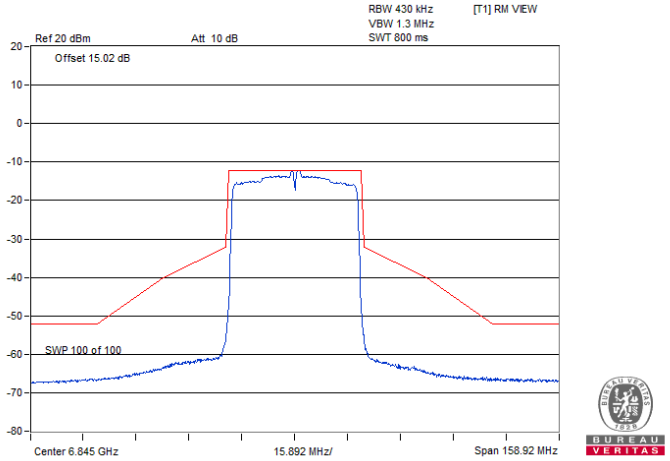
Spectrum Plot



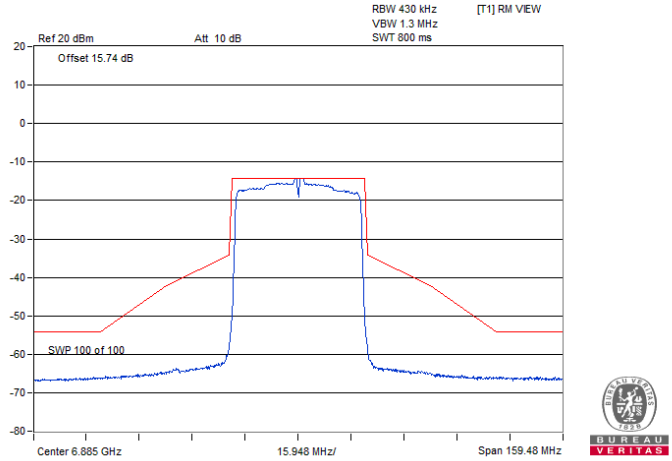
802.11ax (HE40) 1Tx / Chain 0 : CH 123



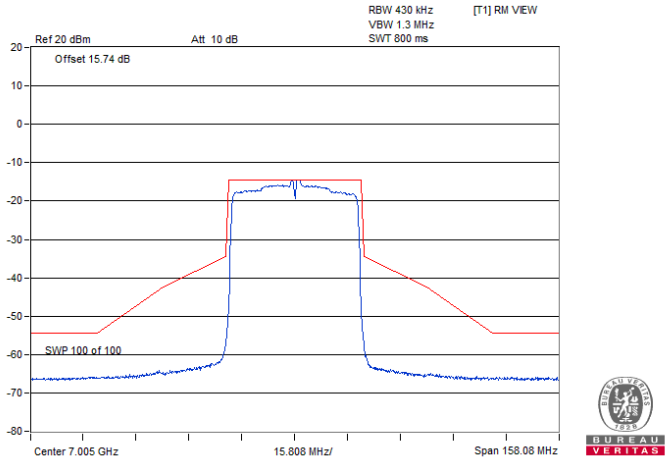
802.11ax (HE40) 1Tx / Chain 0 : CH 155



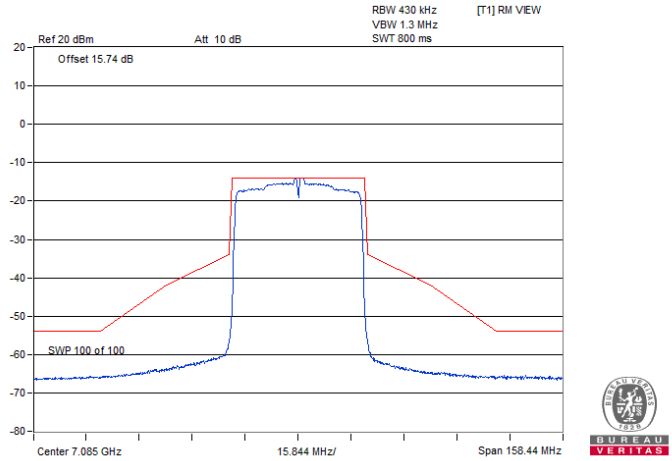
802.11ax (HE40) 1Tx / Chain 0 : CH 179



802.11ax (HE40) 1Tx / Chain 0 : CH 187

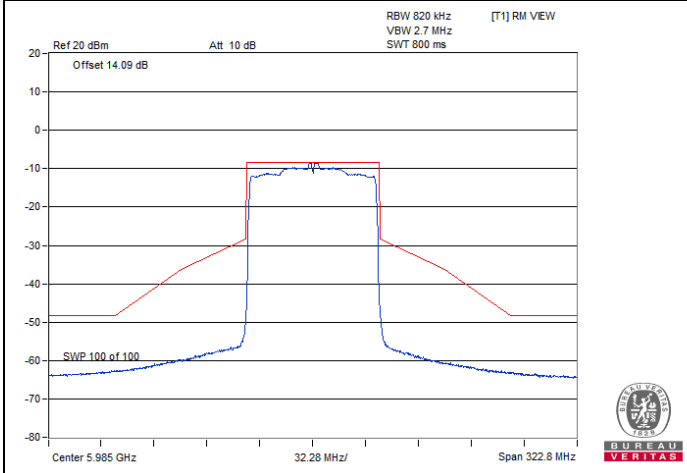
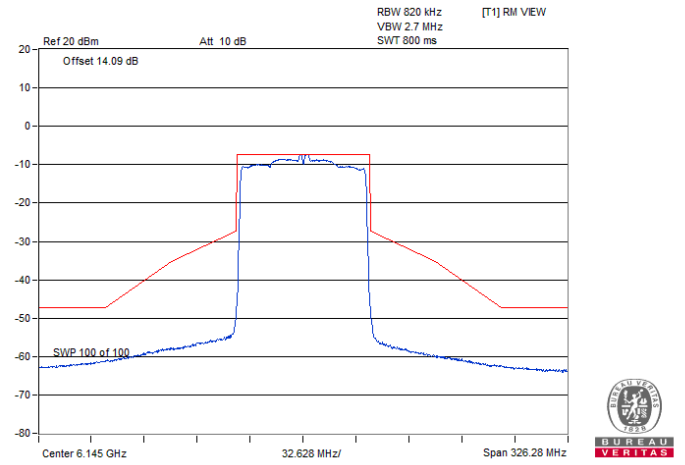
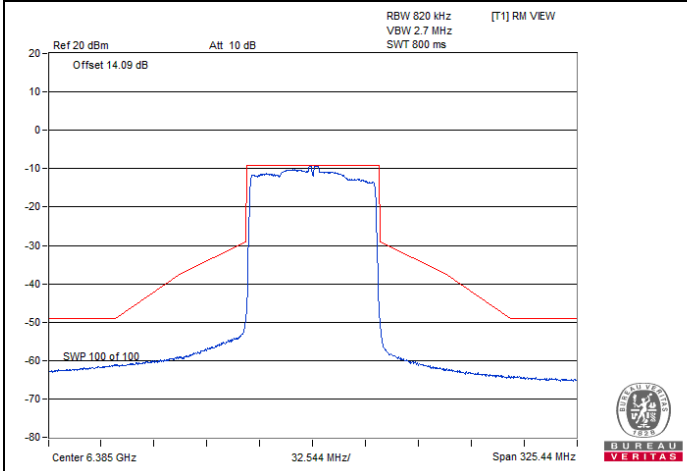
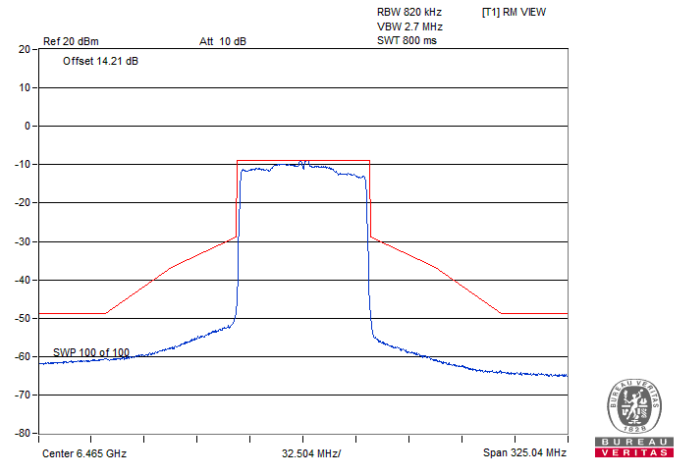
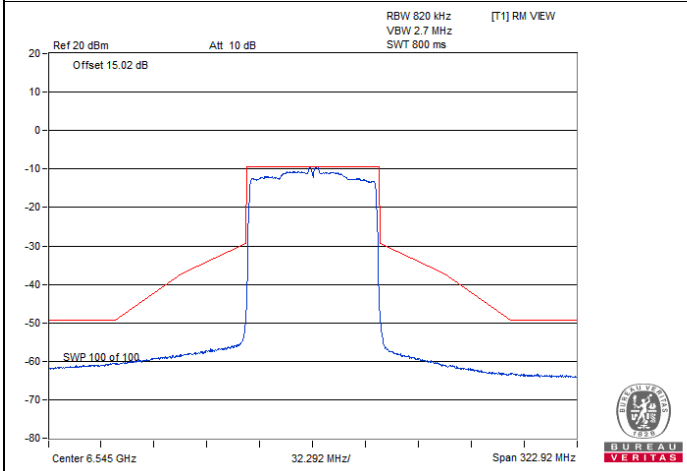
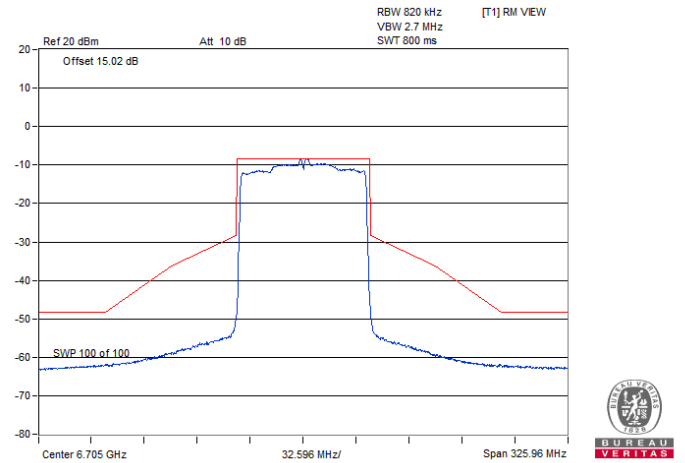


802.11ax (HE40) 1Tx / Chain 0 : CH 211

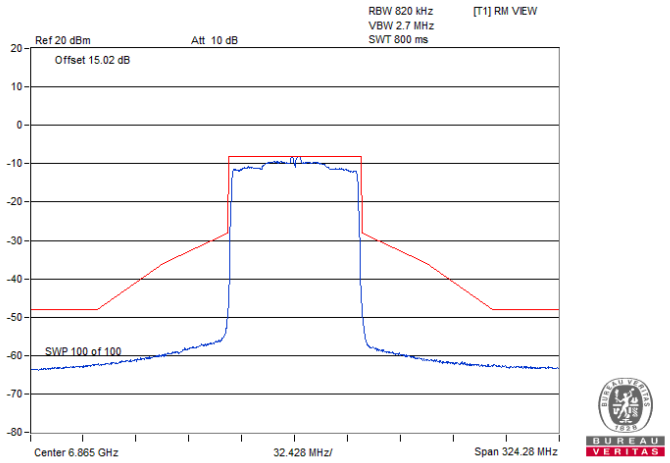


802.11ax (HE40) 1Tx / Chain 0 : CH 227

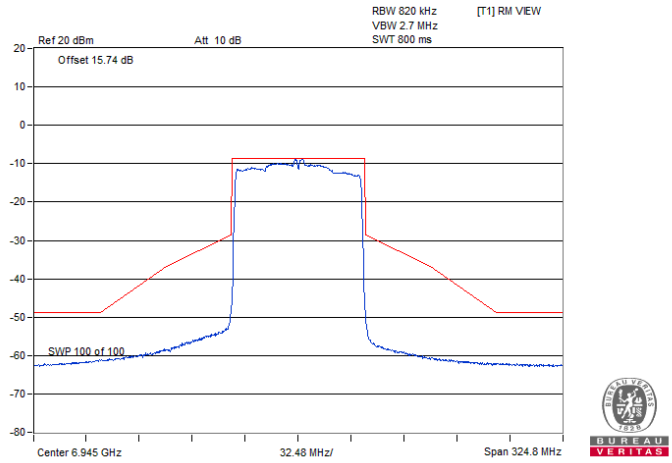
802.11ax (HE80) 1Tx

Spectrum Plot	
	
802.11ax (HE80) 1Tx / Chain 0 : CH 7	802.11ax (HE80) 1Tx / Chain 0 : CH 39
	
802.11ax (HE80) 1Tx / Chain 0 : CH 87	802.11ax (HE80) 1Tx / Chain 0 : CH 103
	
802.11ax (HE80) 1Tx / Chain 0 : CH 119	802.11ax (HE80) 1Tx / Chain 0 : CH 151

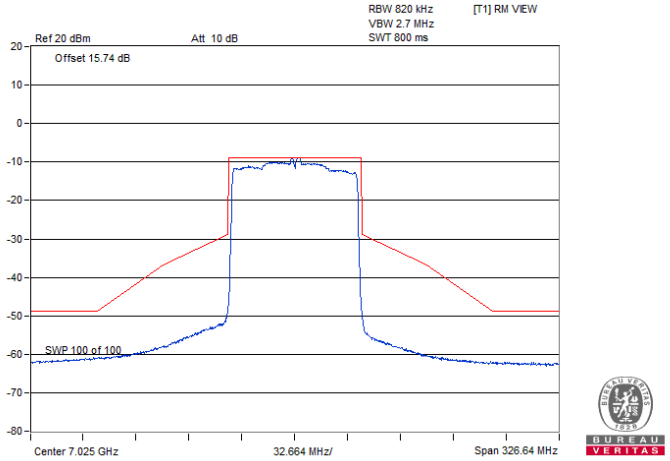
Spectrum Plot



802.11ax (HE80) 1Tx / Chain 0 : CH 183

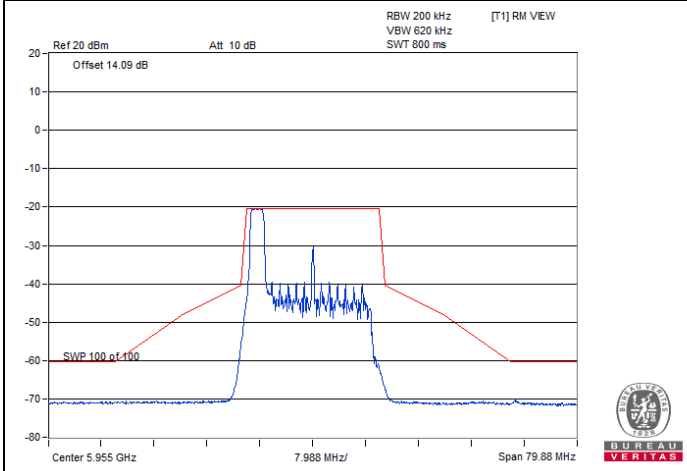
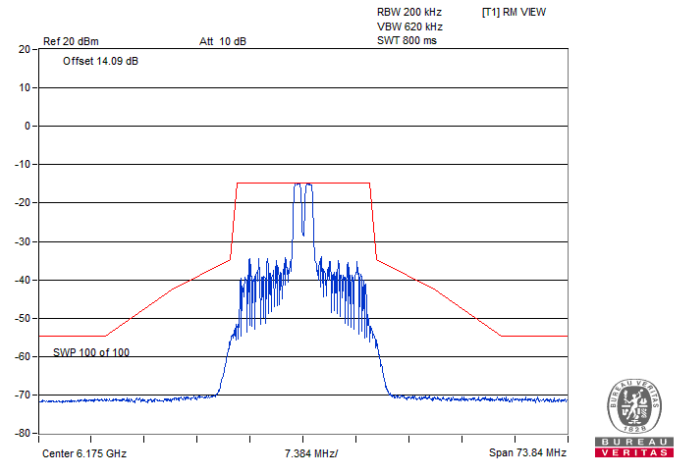
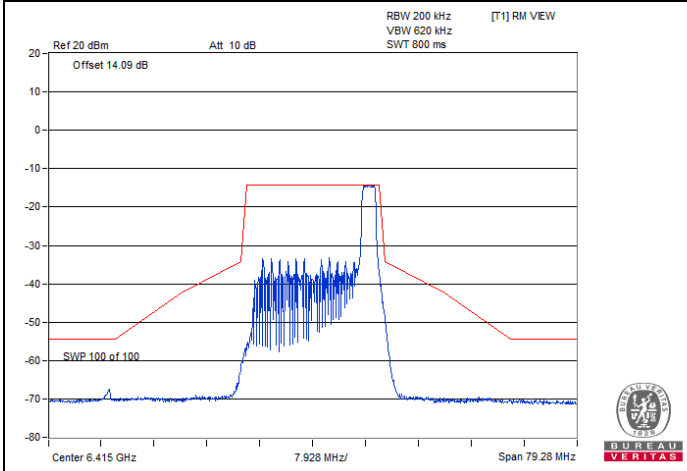
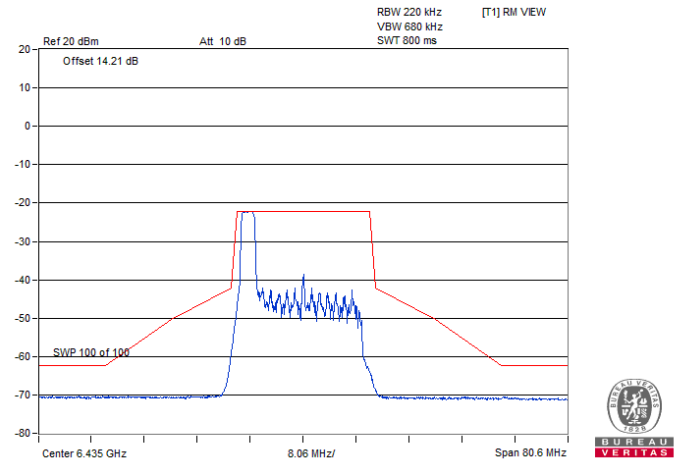
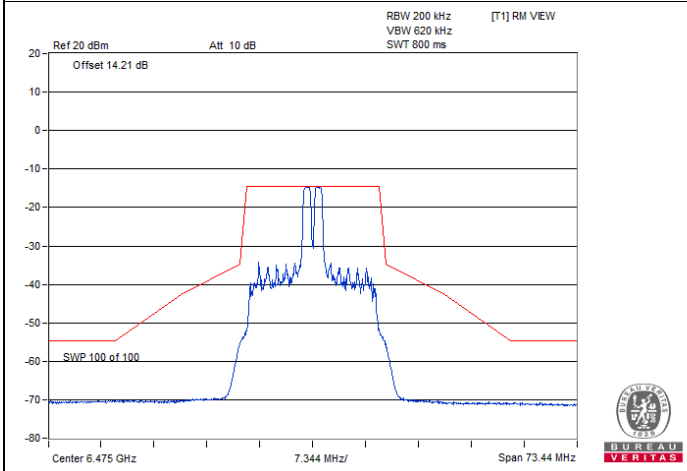
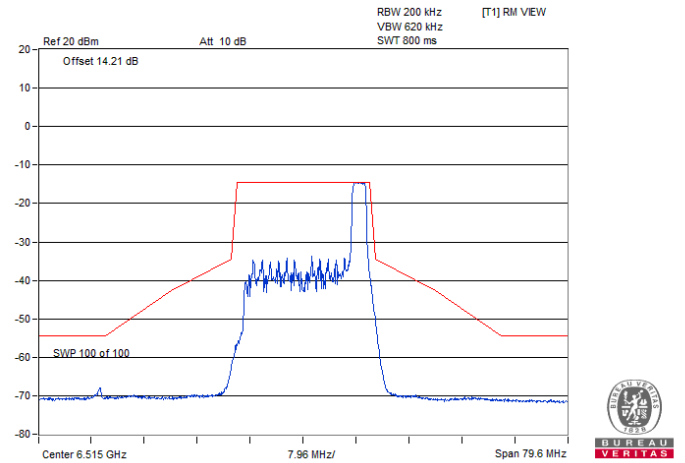


802.11ax (HE80) 1Tx / Chain 0 : CH 199

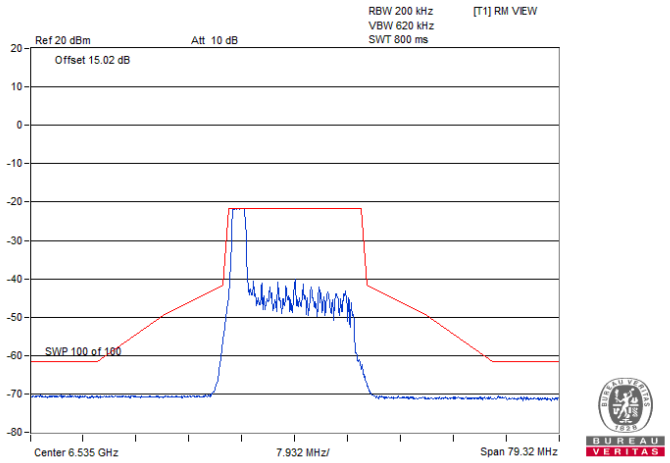


802.11ax (HE80) 1Tx / Chain 0 : CH 215

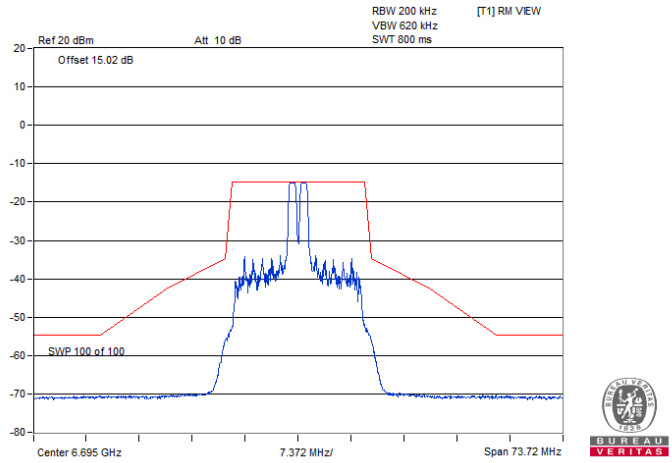
802.11ax (HE20) 26-tone RU 1Tx

Spectrum Plot	
	
802.11ax (HE20) 26-tone RU 1Tx / Chain 0 : CH 1@0	802.11ax (HE20) 26-tone RU 1Tx / Chain 0 : CH 45@4
	
802.11ax (HE20) 26-tone RU 1Tx / Chain 0 : CH 93@8	802.11ax (HE20) 26-tone RU 1Tx / Chain 0 : CH 97@0
	
802.11ax (HE20) 26-tone RU 1Tx / Chain 0 : CH 105@4	802.11ax (HE20) 26-tone RU 1Tx / Chain 0 : CH 113@8

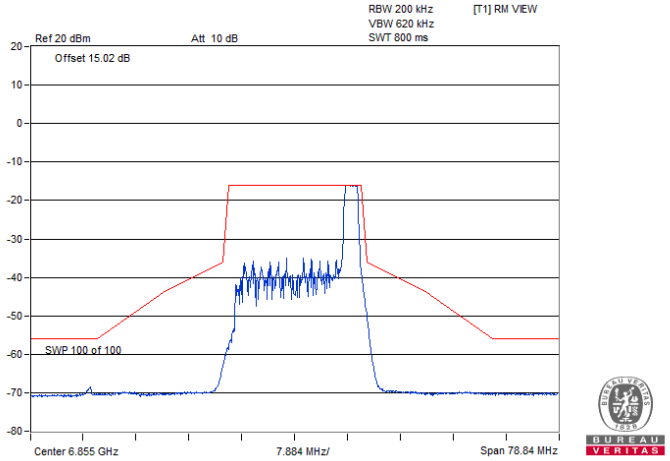
Spectrum Plot



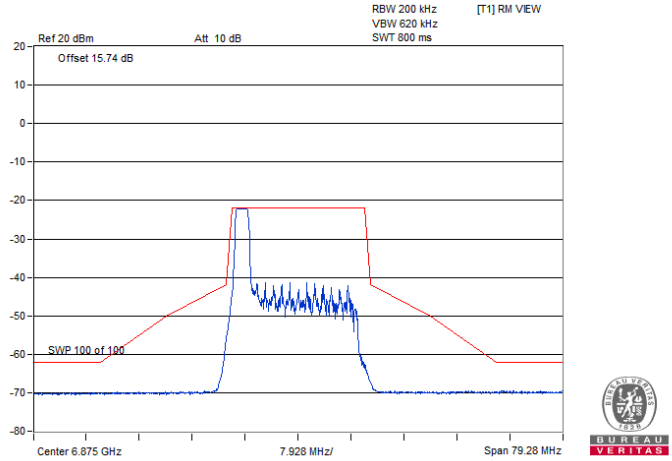
802.11ax (HE20) 26-tone RU 1Tx / Chain 0 : CH 117@0



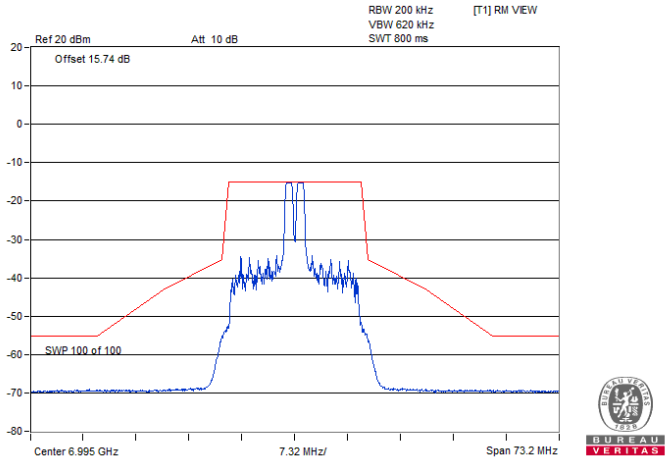
802.11ax (HE20) 26-tone RU 1Tx / Chain 0 : CH 149@4



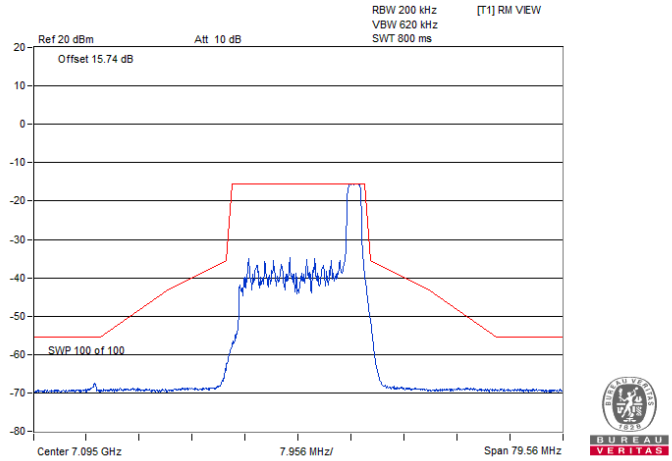
802.11ax (HE20) 26-tone RU 1Tx / Chain 0 : CH 181@8



802.11ax (HE20) 26-tone RU 1Tx / Chain 0 : CH 185@0

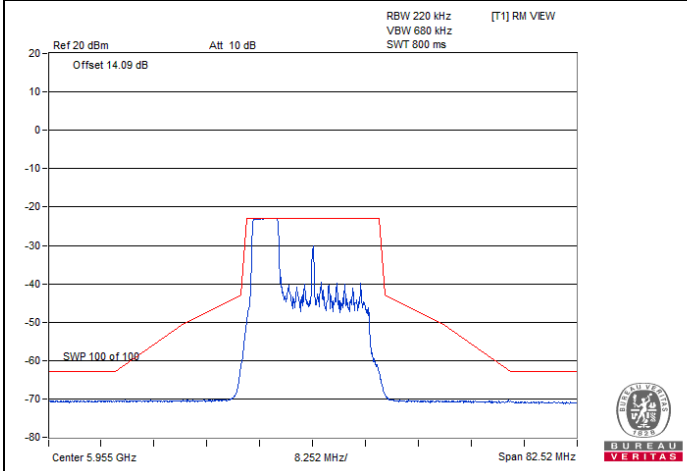
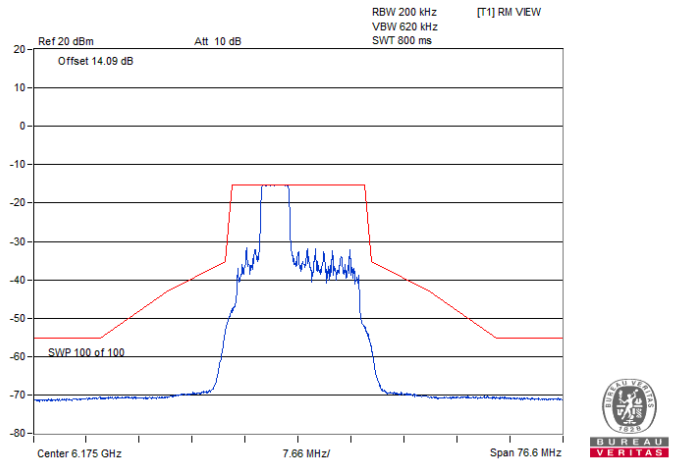
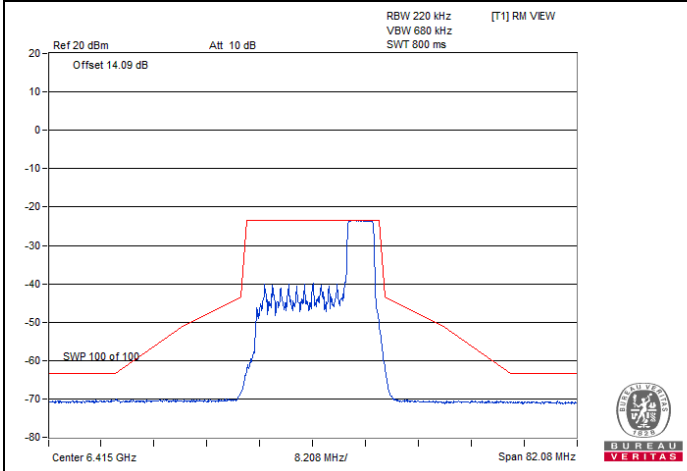
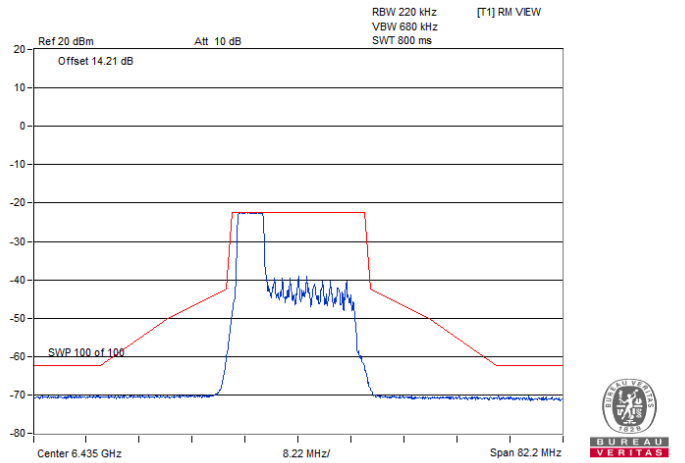
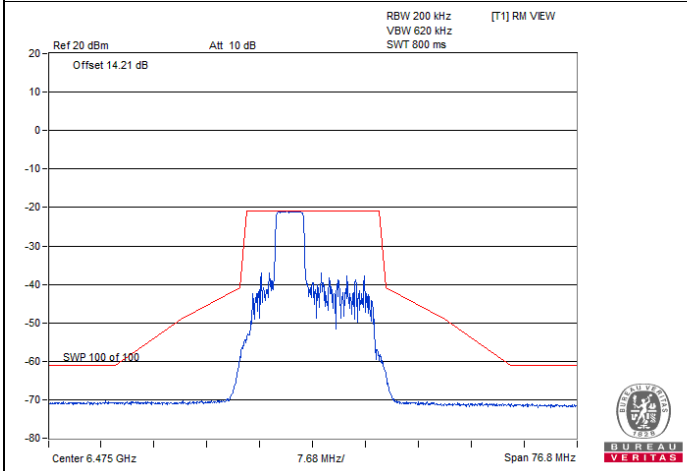
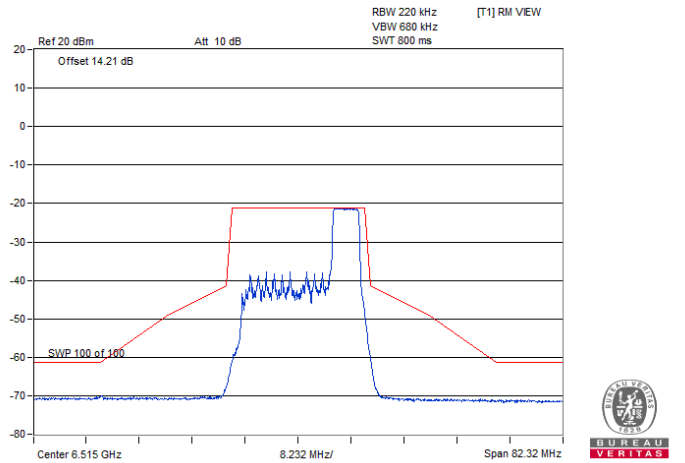


802.11ax (HE20) 26-tone RU 1Tx / Chain 0 : CH 209@4

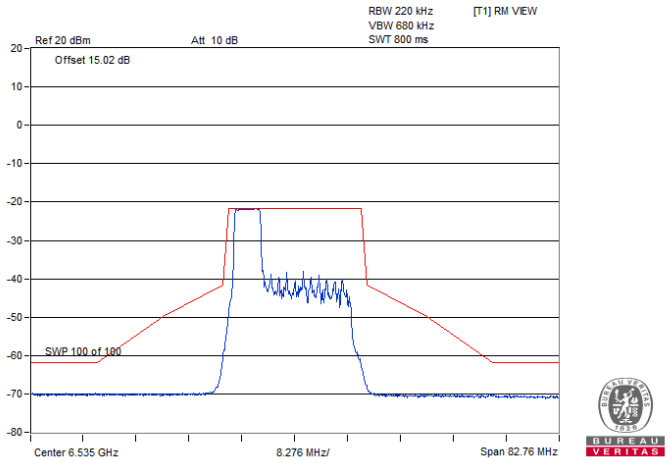


802.11ax (HE20) 26-tone RU 1Tx / Chain 0 : CH 229@8

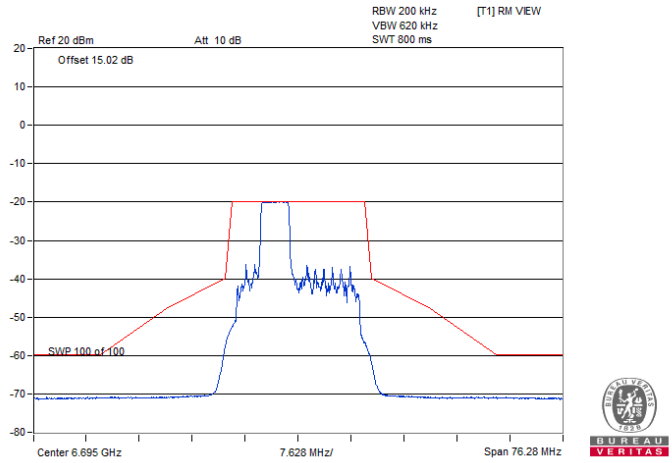
802.11ax (HE20) 52-tone RU 1Tx

Spectrum Plot	
	
802.11ax (HE20) 52-tone RU 1Tx / Chain 0 : CH 1@37	802.11ax (HE20) 52-tone RU 1Tx / Chain 0 : CH 45@38
	
802.11ax (HE20) 52-tone RU 1Tx / Chain 0 : CH 93@40	802.11ax (HE20) 52-tone RU 1Tx / Chain 0 : CH 97@37
	
802.11ax (HE20) 52-tone RU 1Tx / Chain 0 : CH 105@38	802.11ax (HE20) 52-tone RU 1Tx / Chain 0 : CH 113@40

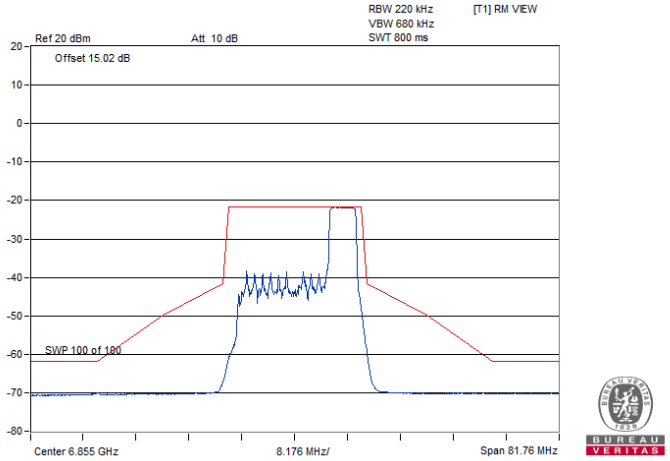
Spectrum Plot



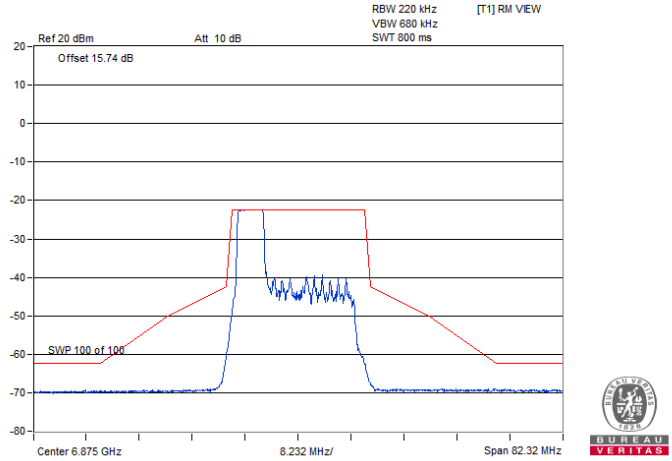
802.11ax (HE20) 52-tone RU 1Tx / Chain 0 : CH 117@37



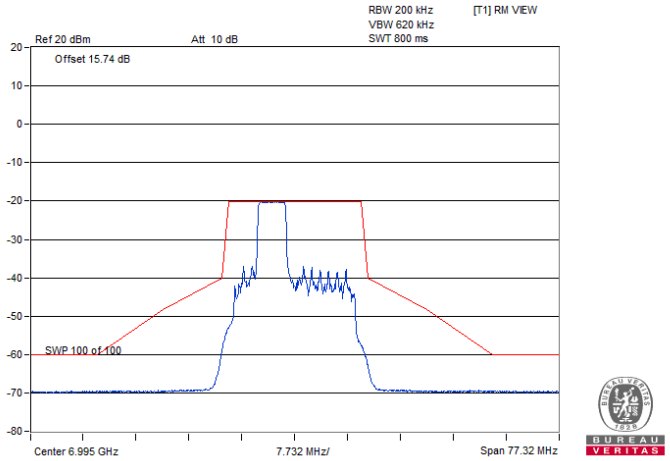
802.11ax (HE20) 52-tone RU 1Tx / Chain 0 : CH 149@38



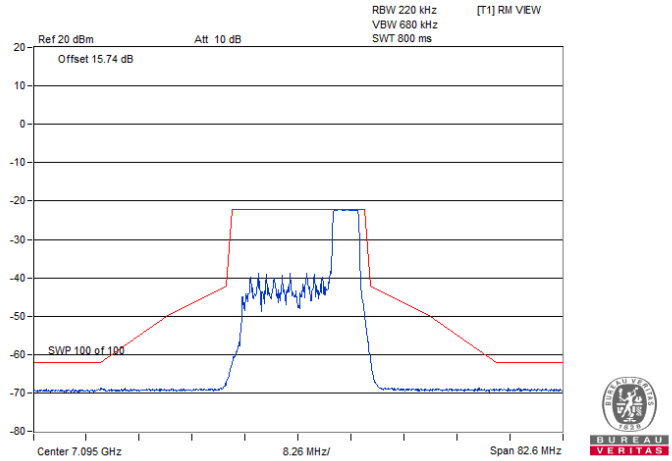
802.11ax (HE20) 52-tone RU 1Tx / Chain 0 : CH 181@40



802.11ax (HE20) 52-tone RU 1Tx / Chain 0 : CH 185@37

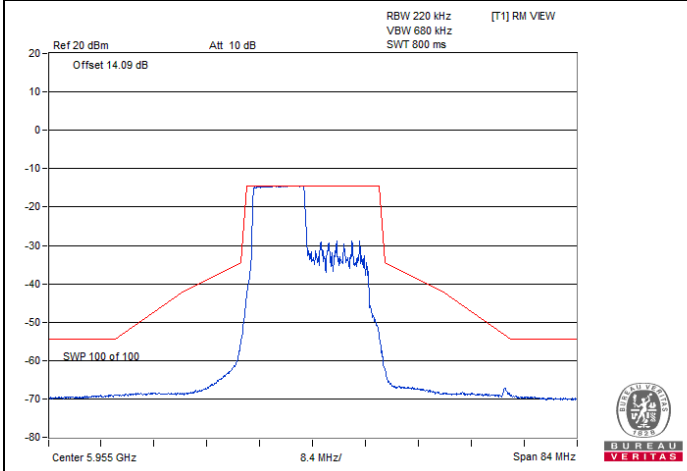
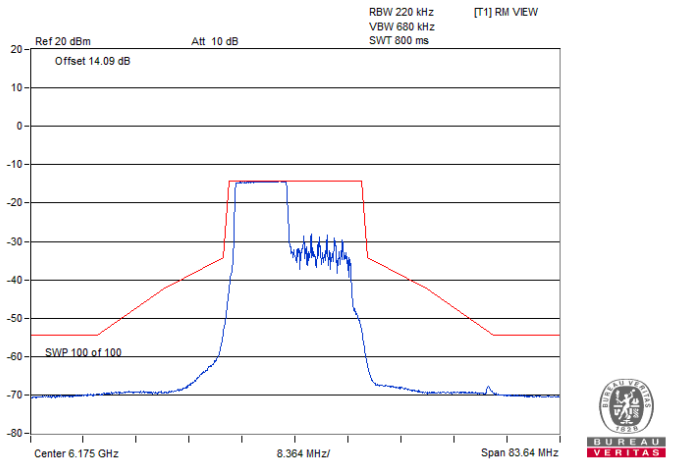
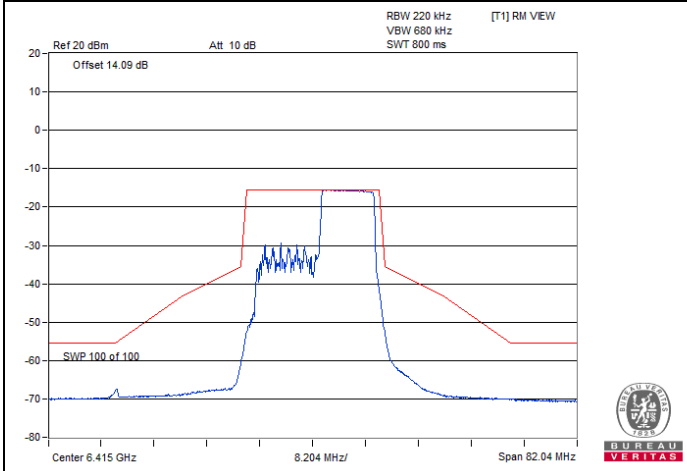
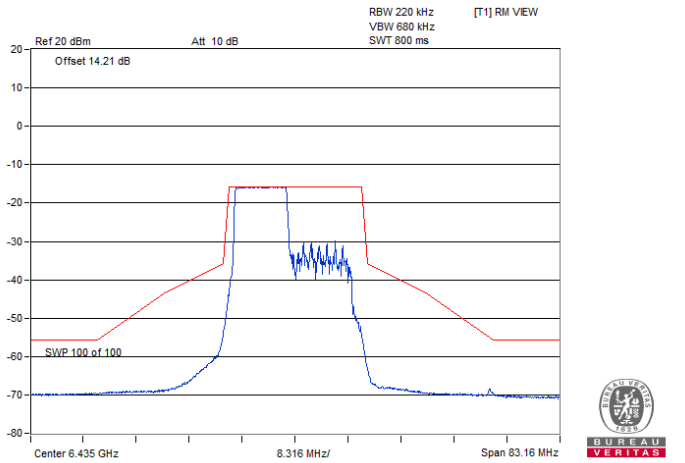
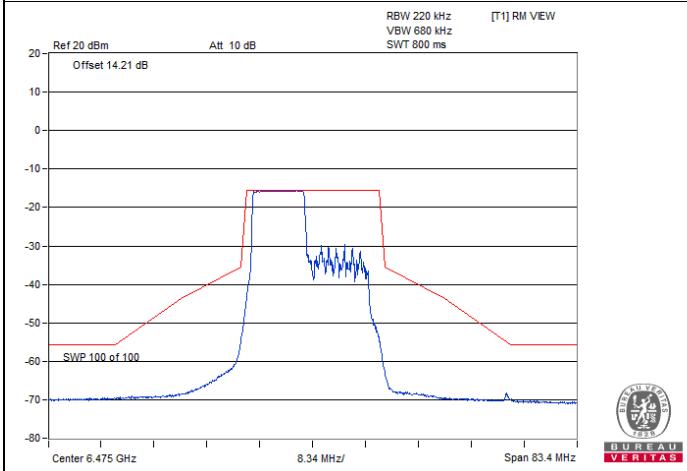
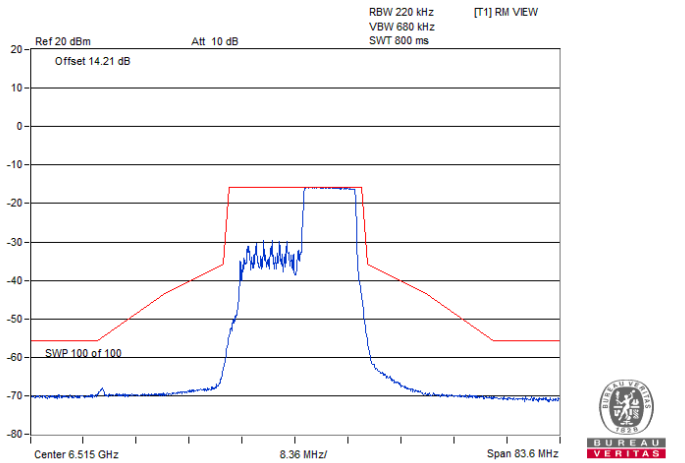


802.11ax (HE20) 52-tone RU 1Tx / Chain 0 : CH 209@38

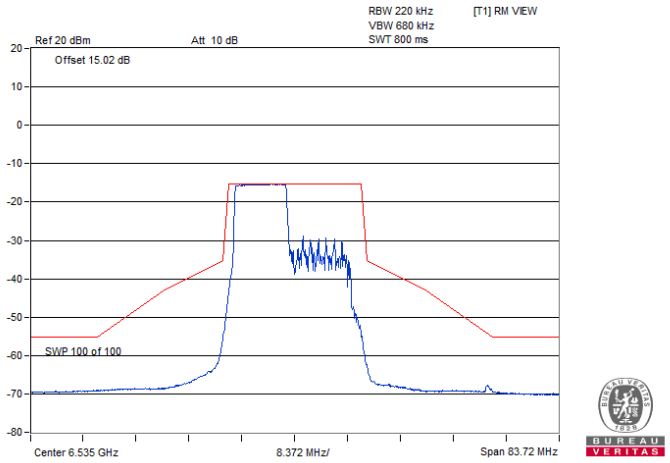


802.11ax (HE20) 52-tone RU 1Tx / Chain 0 : CH 229@40

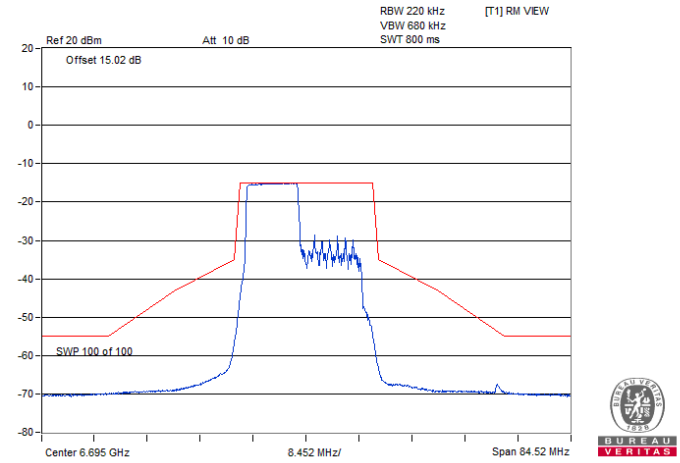
802.11ax (HE20) 106-tone RU 1Tx

Spectrum Plot	
	
802.11ax (HE20) 106-tone RU 1Tx / Chain 0 : CH 1@53	802.11ax (HE20) 106-tone RU 1Tx / Chain 0 : CH 45@53
	
802.11ax (HE20) 106-tone RU 1Tx / Chain 0 : CH 93@54	802.11ax (HE20) 106-tone RU 1Tx / Chain 0 : CH 97@53
	
802.11ax (HE20) 106-tone RU 1Tx / Chain 0 : CH 105@53	802.11ax (HE20) 106-tone RU 1Tx / Chain 0 : CH 113@54

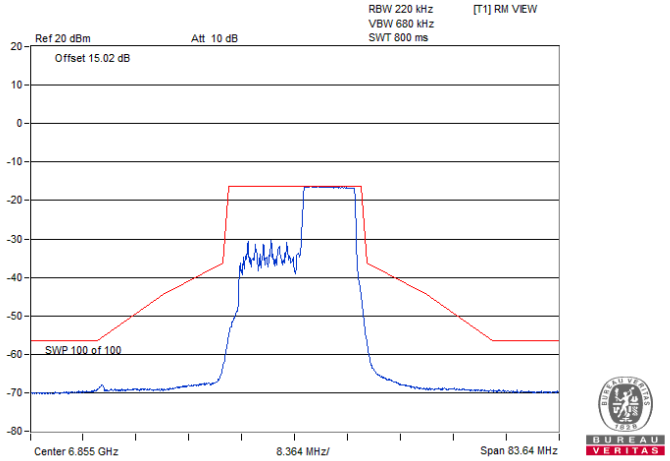
Spectrum Plot



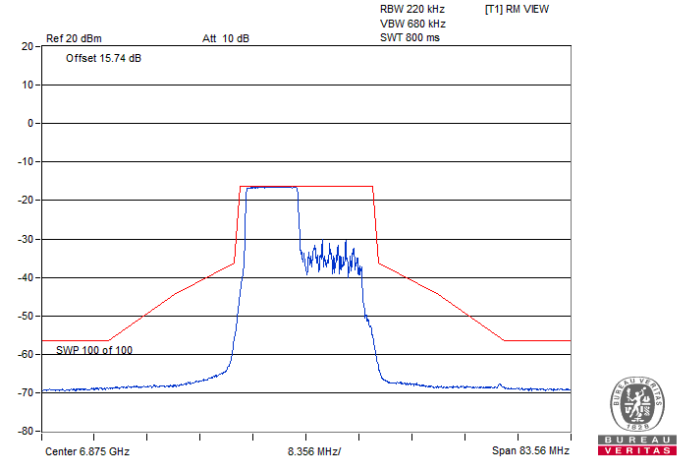
802.11ax (HE20) 106-tone RU 1Tx / Chain 0 : CH 117@53



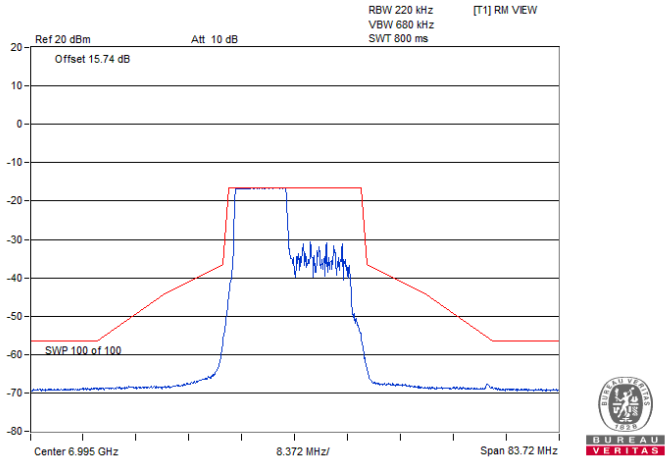
802.11ax (HE20) 106-tone RU 1Tx / Chain 0 : CH 149@53



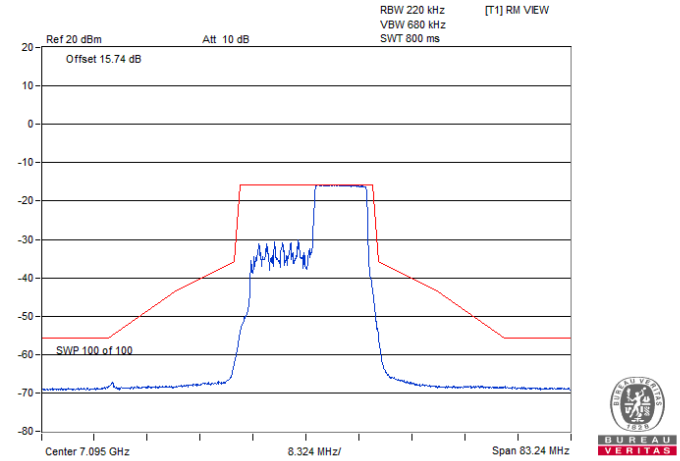
802.11ax (HE20) 106-tone RU 1Tx / Chain 0 : CH 181@54



802.11ax (HE20) 106-tone RU 1Tx / Chain 0 : CH 185@53

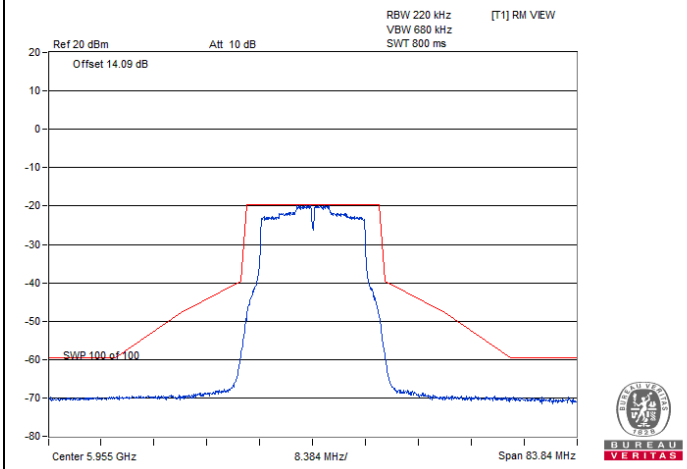
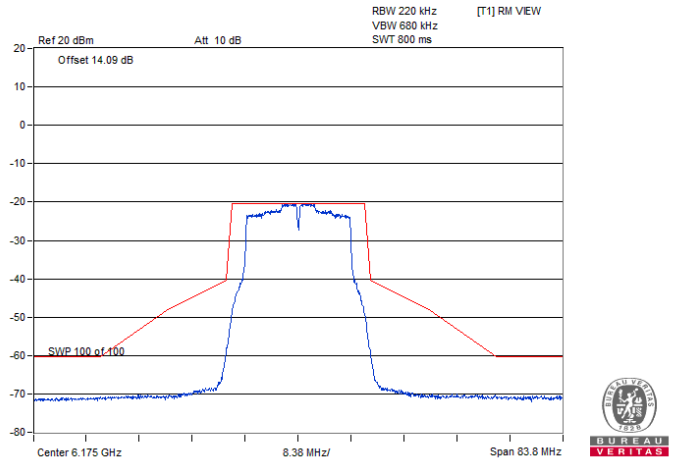
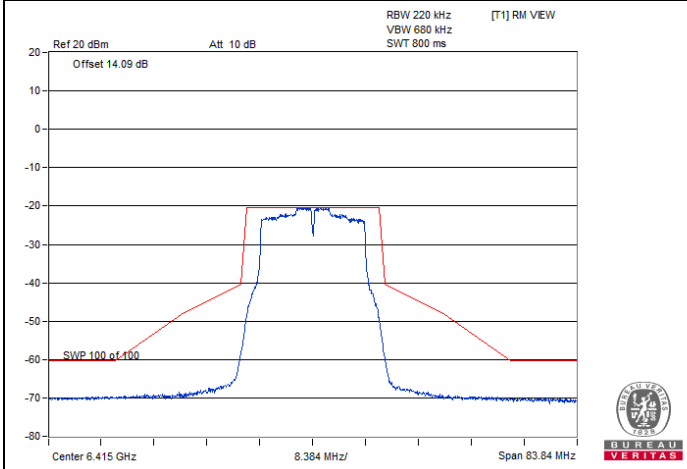
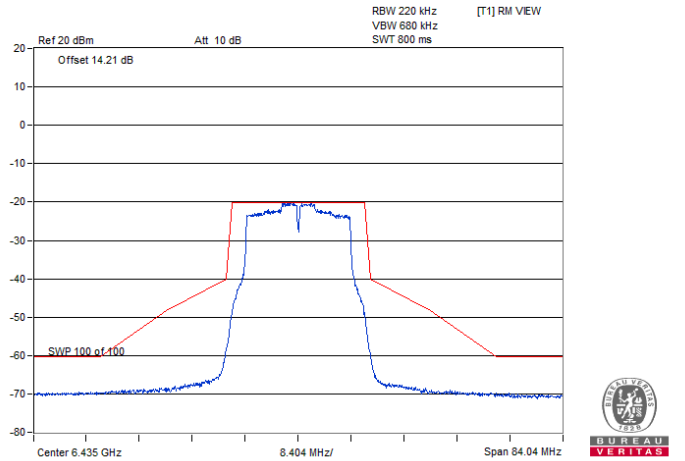
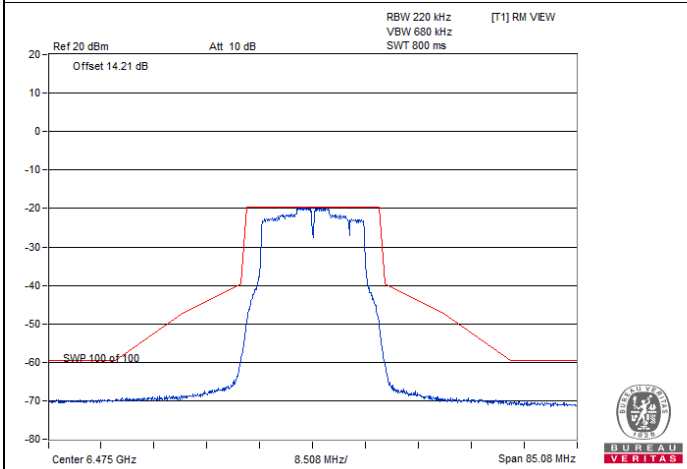
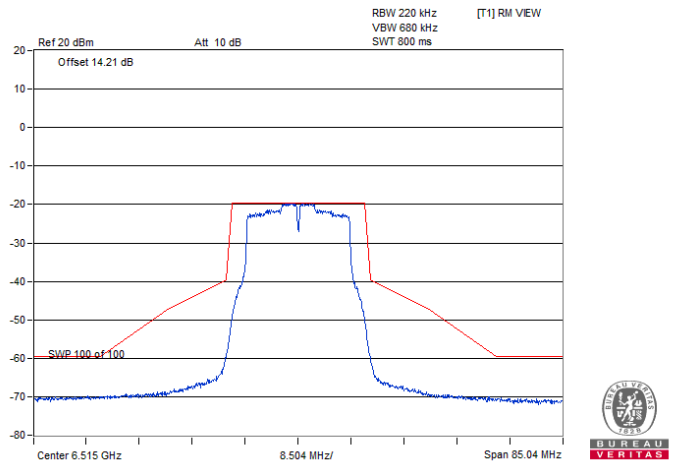


802.11ax (HE20) 106-tone RU 1Tx / Chain 0 : CH 209@53

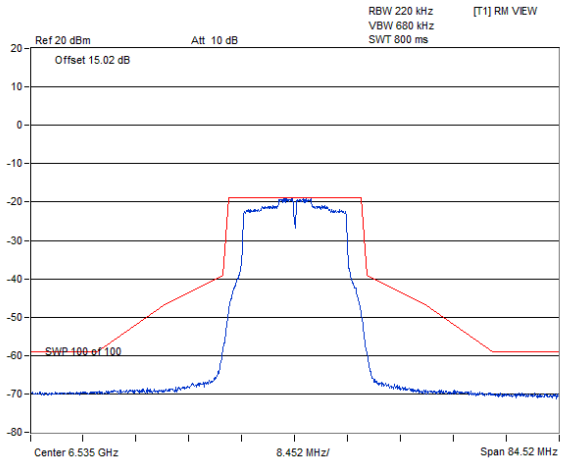


802.11ax (HE20) 106-tone RU 1Tx / Chain 0 : CH 229@54

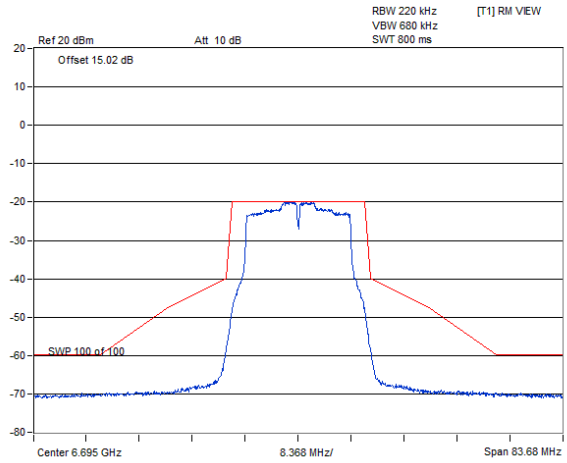
802.11a CDD-2Tx

Spectrum Plot	
	
802.11a CDD-2Tx / Chain 0 : CH 1	802.11a CDD-2Tx / Chain 0 : CH 45
	
802.11a CDD-2Tx / Chain 0 : CH 93	802.11a CDD-2Tx / Chain 0 : CH 97
	
802.11a CDD-2Tx / Chain 0 : CH 105	802.11a CDD-2Tx / Chain 0 : CH 113

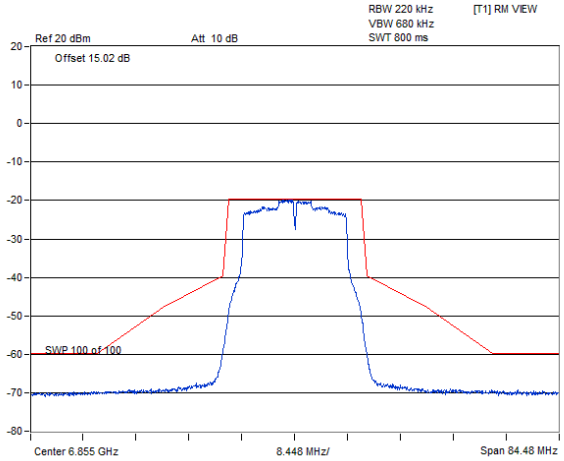
Spectrum Plot



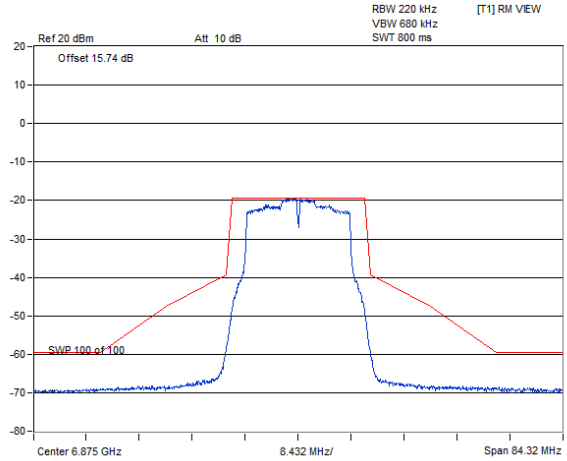
802.11a CDD-2Tx / Chain 0 : CH 117



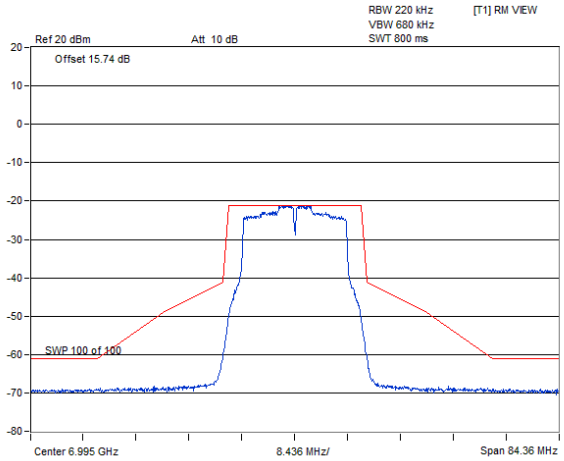
802.11a CDD-2Tx / Chain 0 : CH 149



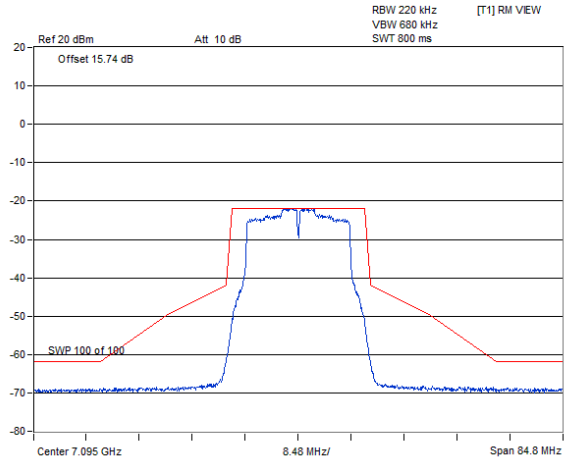
802.11a CDD-2Tx / Chain 0 : CH 181



802.11a CDD-2Tx / Chain 0 : CH 185

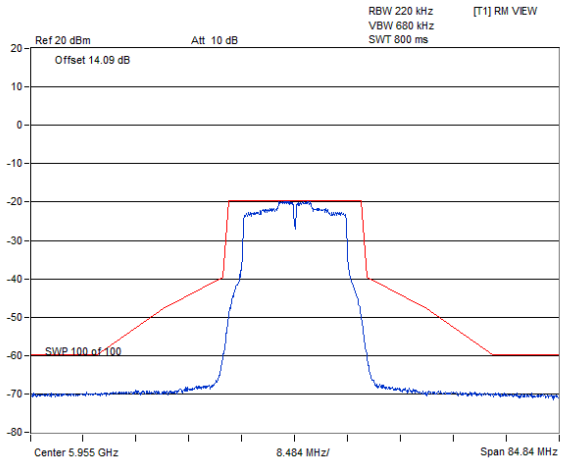


802.11a CDD-2Tx / Chain 0 : CH 209

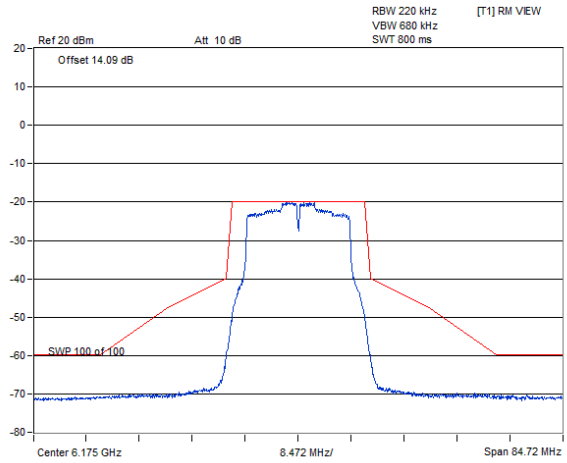


802.11a CDD-2Tx / Chain 0 : CH 229

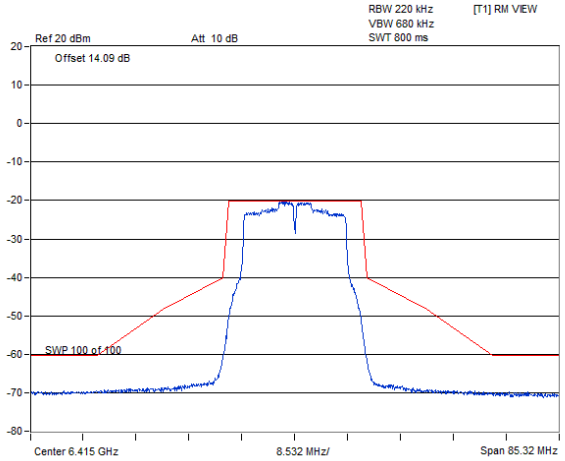
Spectrum Plot



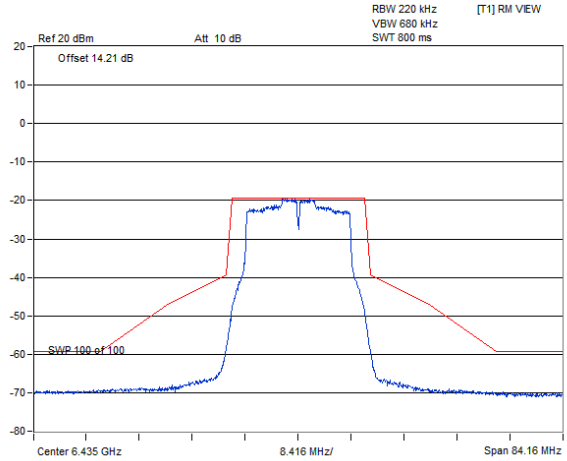
802.11a CDD-2Tx / Chain 1 : CH 1



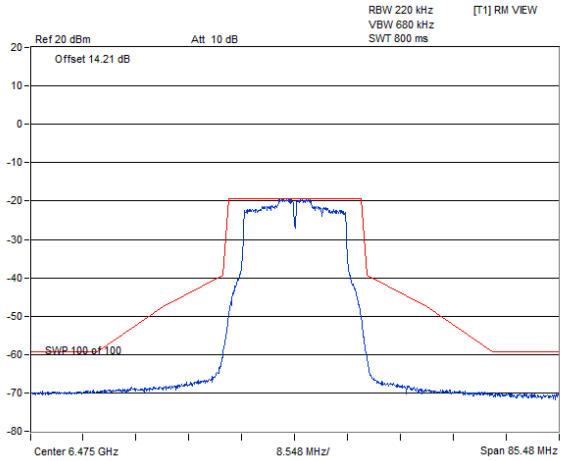
802.11a CDD-2Tx / Chain 1 : CH 45



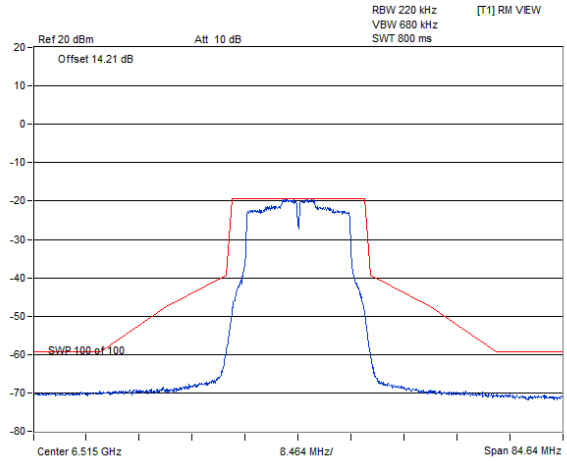
802.11a CDD-2Tx / Chain 1 : CH 93



802.11a CDD-2Tx / Chain 1 : CH 97

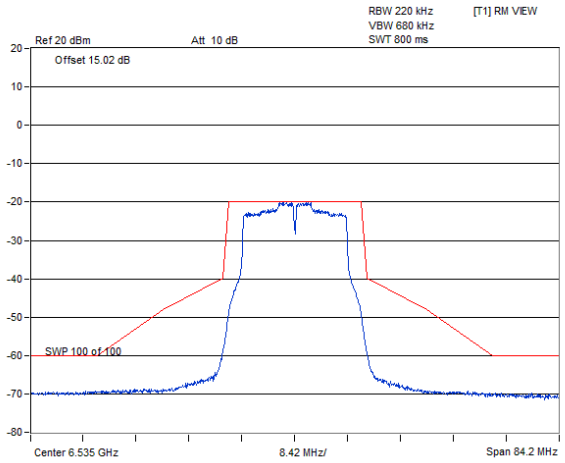


802.11a CDD-2Tx / Chain 1 : CH 105

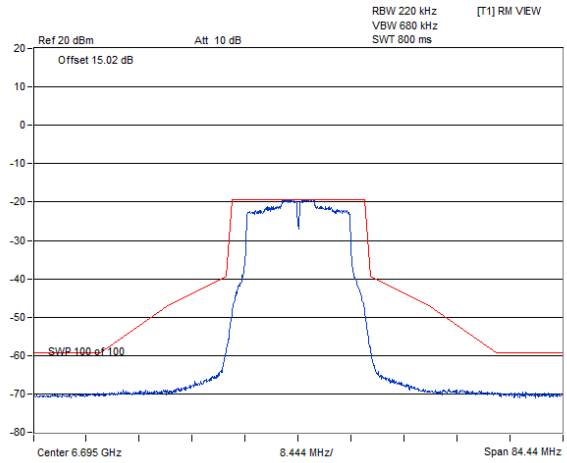


802.11a CDD-2Tx / Chain 1 : CH 113

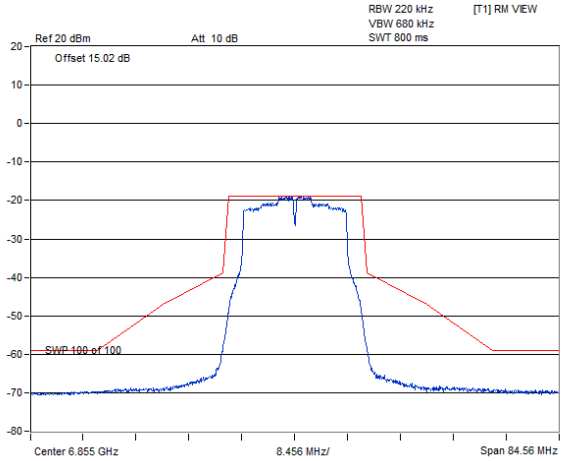
Spectrum Plot



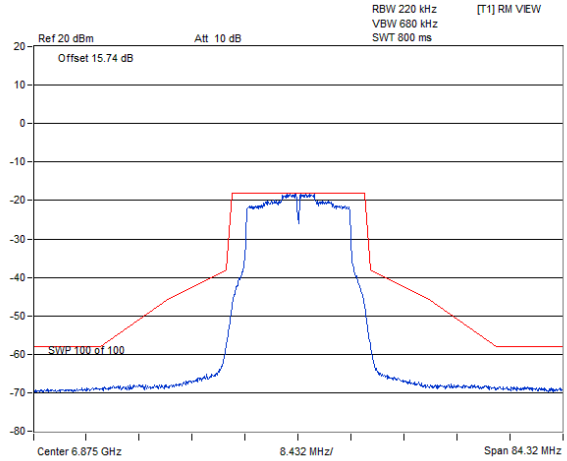
802.11a CDD-2Tx / Chain 1 : CH 117



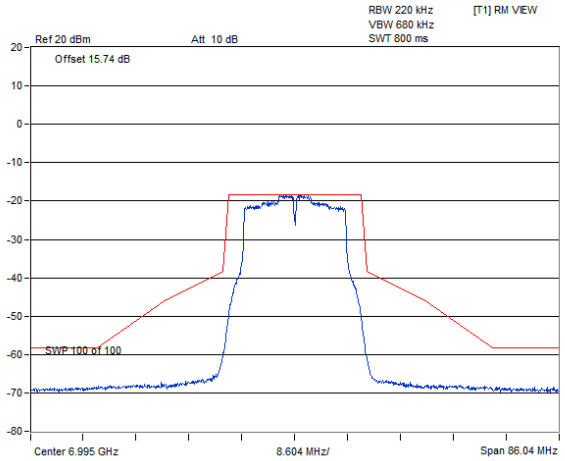
802.11a CDD-2Tx / Chain 1 : CH 149



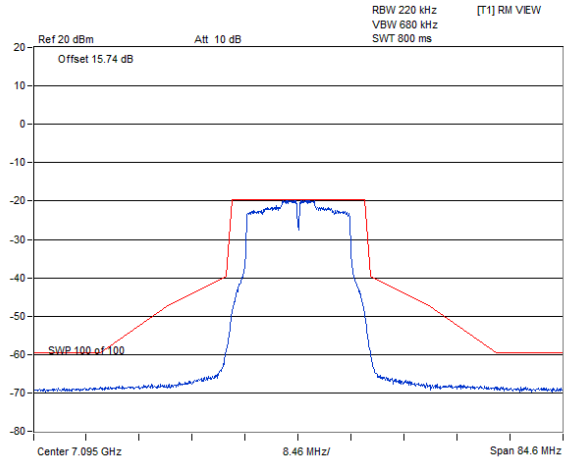
802.11a CDD-2Tx / Chain 1 : CH 181



802.11a CDD-2Tx / Chain 1 : CH 185

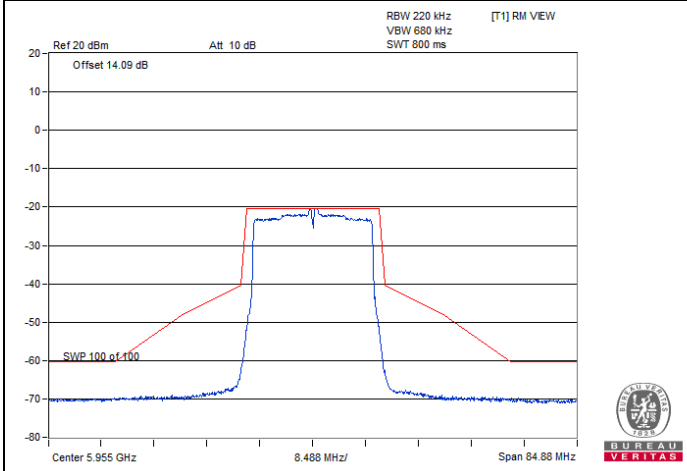
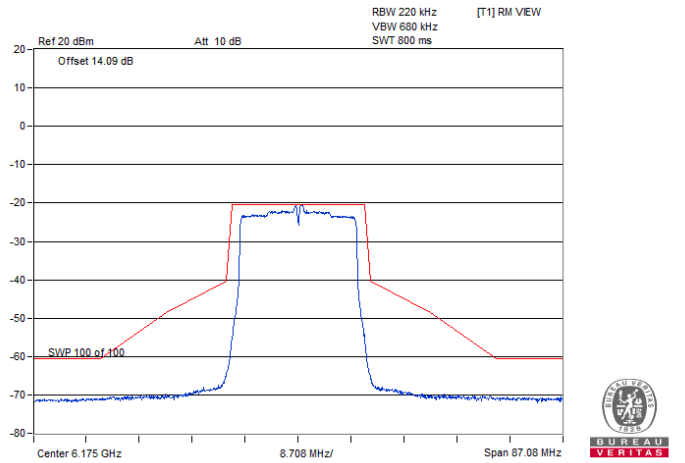
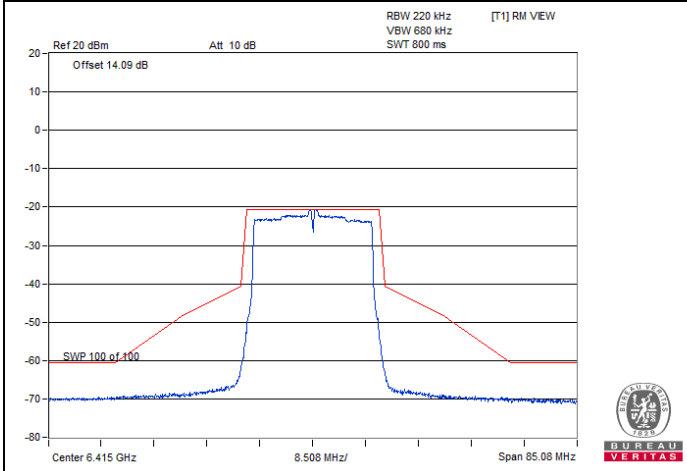
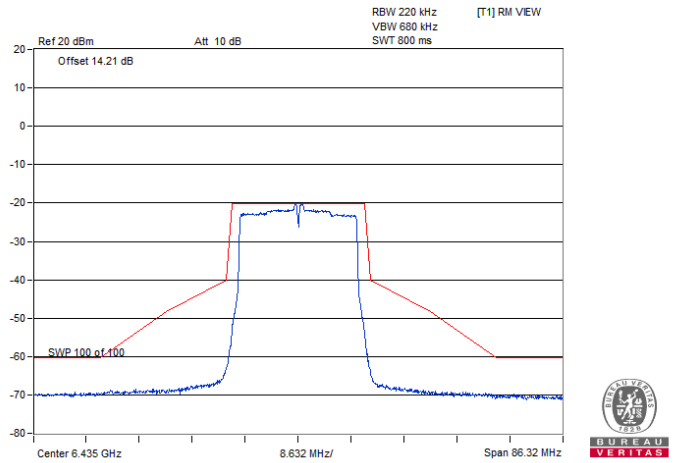
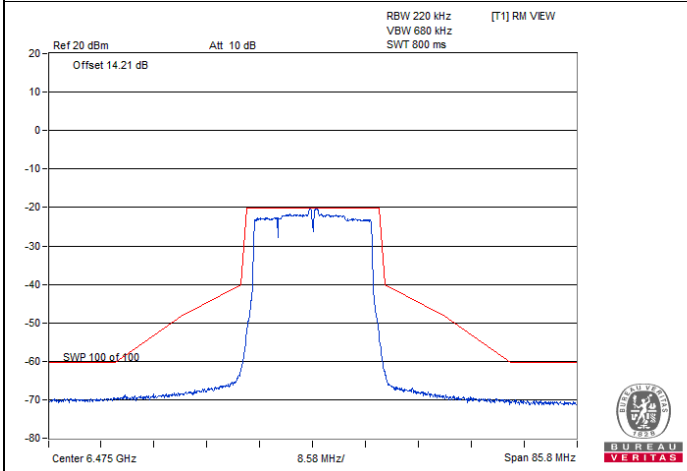
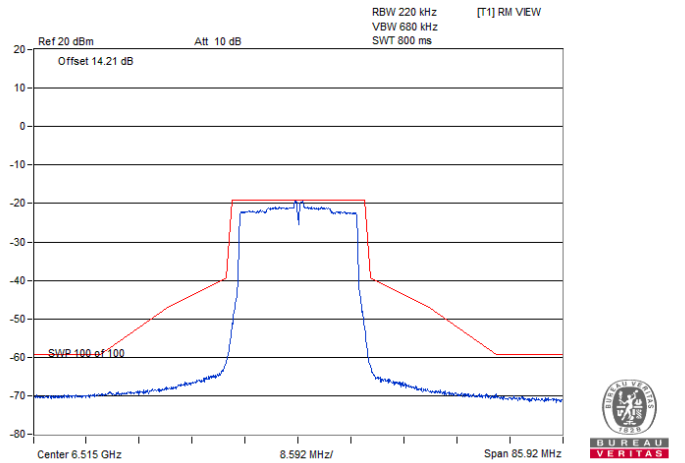


802.11a CDD-2Tx / Chain 1 : CH 209

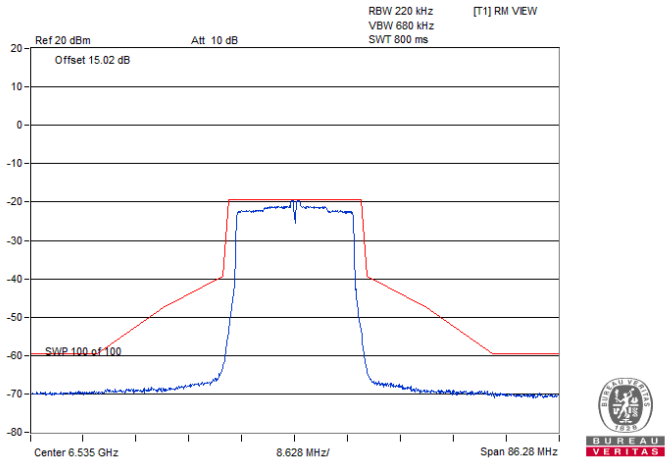


802.11a CDD-2Tx / Chain 1 : CH 229

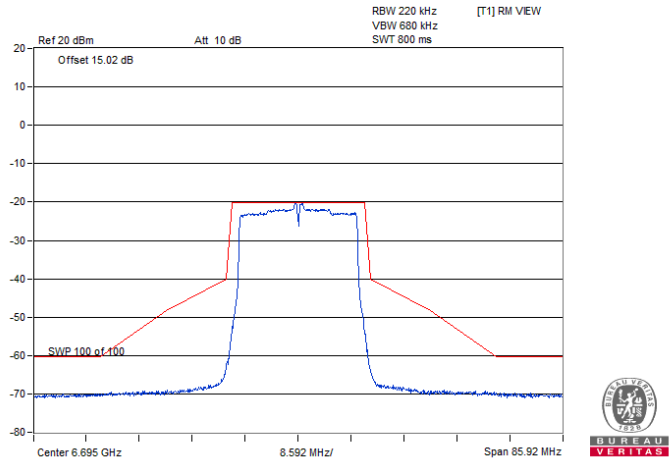
802.11ax (HE20) CDD-2Tx

Spectrum Plot	
	
802.11ax (HE20) CDD-2Tx / Chain 0 : CH 1	802.11ax (HE20) CDD-2Tx / Chain 0 : CH 45
	
802.11ax (HE20) CDD-2Tx / Chain 0 : CH 93	802.11ax (HE20) CDD-2Tx / Chain 0 : CH 97
	
802.11ax (HE20) CDD-2Tx / Chain 0 : CH 105	802.11ax (HE20) CDD-2Tx / Chain 0 : CH 113

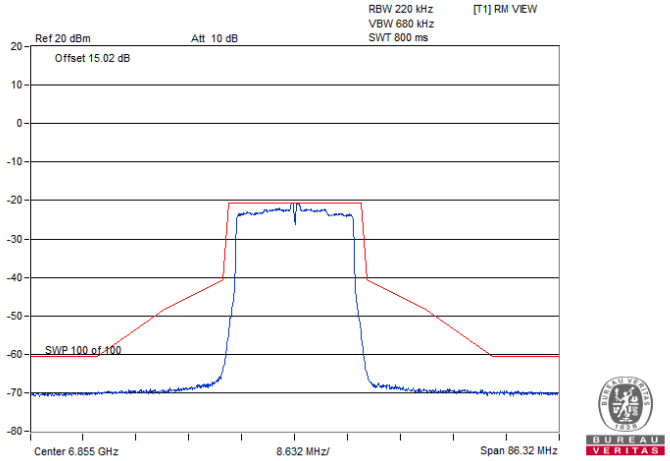
Spectrum Plot



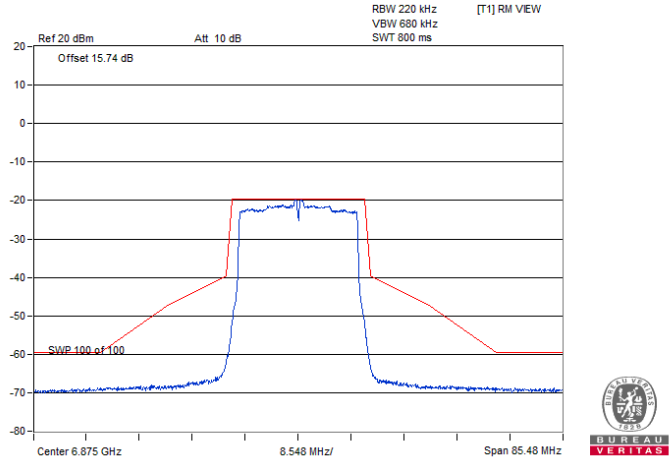
802.11ax (HE20) CDD-2Tx / Chain 0 : CH 117



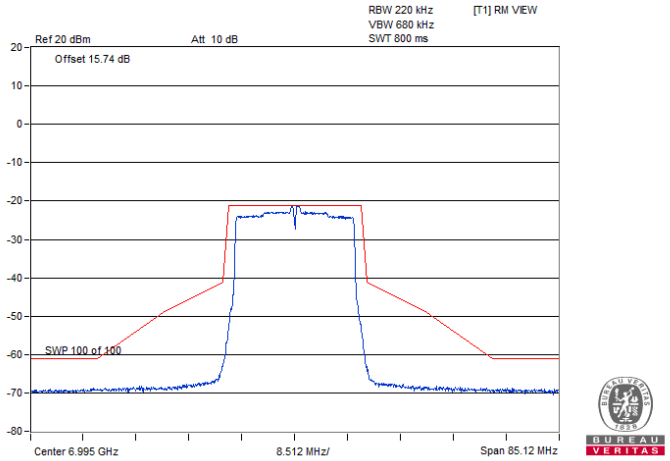
802.11ax (HE20) CDD-2Tx / Chain 0 : CH 149



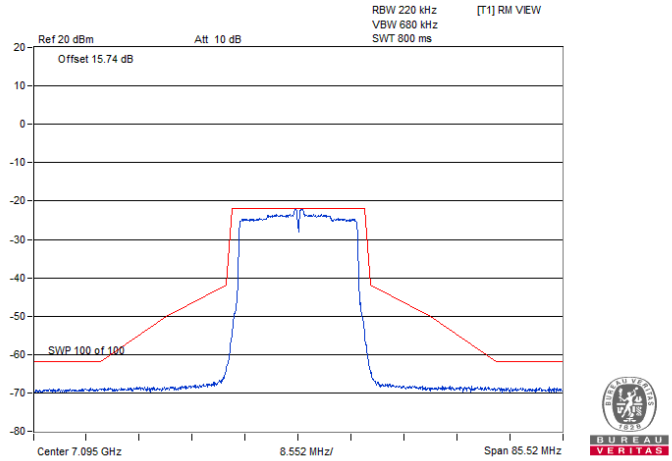
802.11ax (HE20) CDD-2Tx / Chain 0 : CH 181



802.11ax (HE20) CDD-2Tx / Chain 0 : CH 185

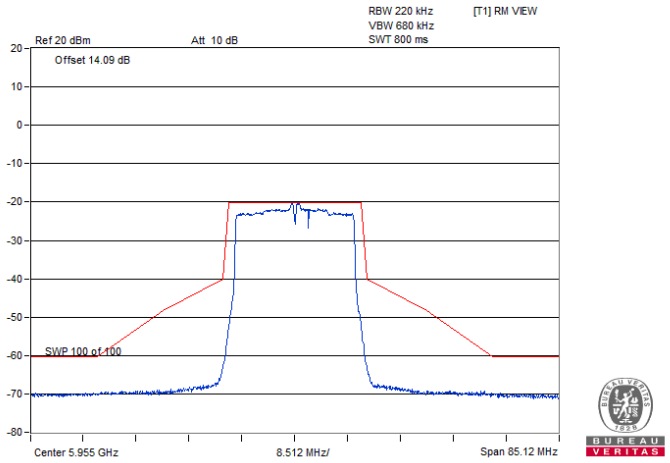


802.11ax (HE20) CDD-2Tx / Chain 0 : CH 209

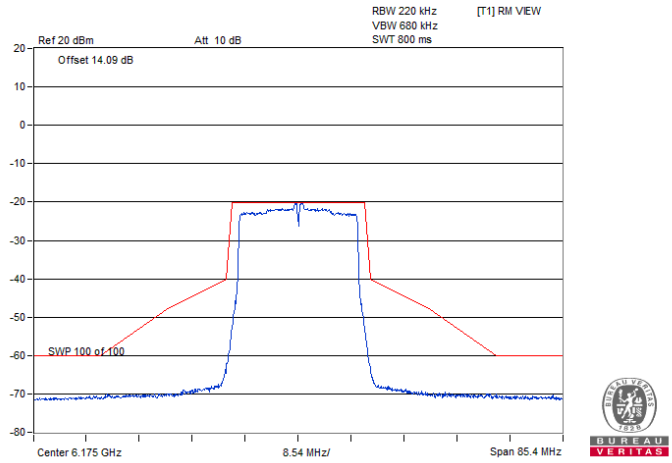


802.11ax (HE20) CDD-2Tx / Chain 0 : CH 229

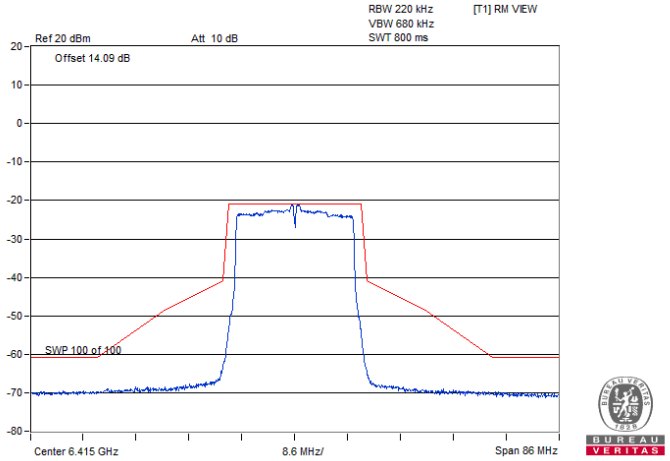
Spectrum Plot



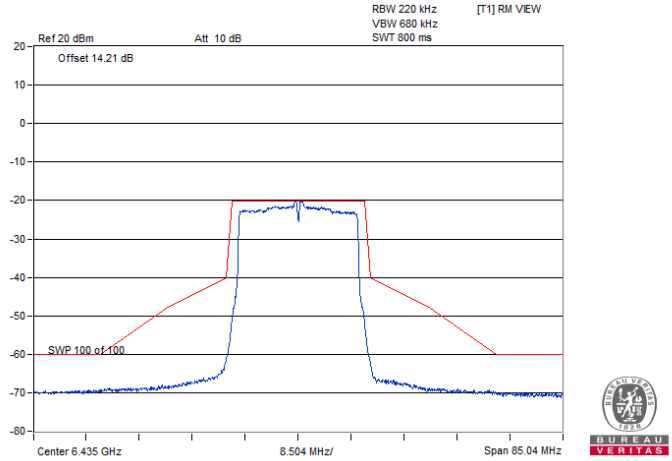
802.11ax (HE20) CDD-2Tx / Chain 1 : CH 1



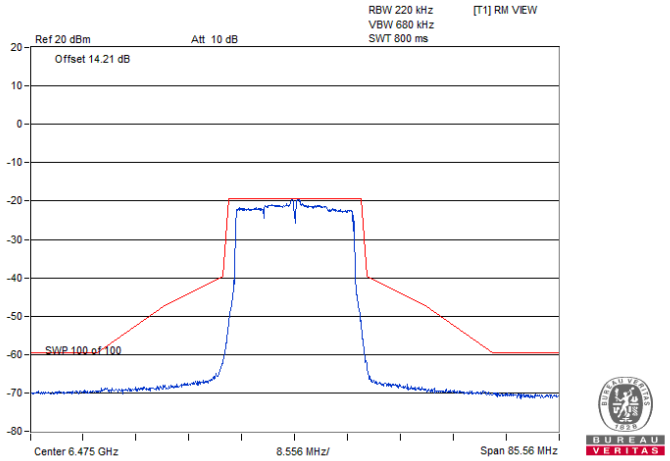
802.11ax (HE20) CDD-2Tx / Chain 1 : CH 45



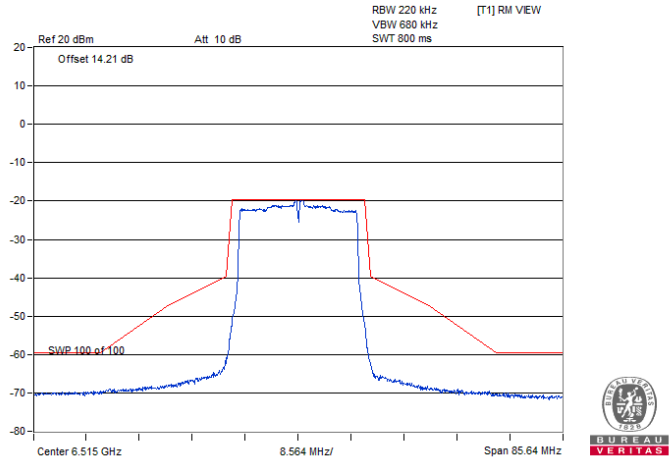
802.11ax (HE20) CDD-2Tx / Chain 1 : CH 93



802.11ax (HE20) CDD-2Tx / Chain 1 : CH 97

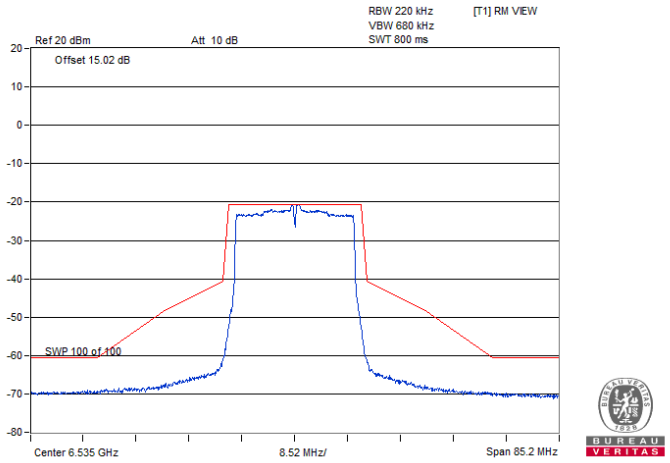


802.11ax (HE20) CDD-2Tx / Chain 1 : CH 105

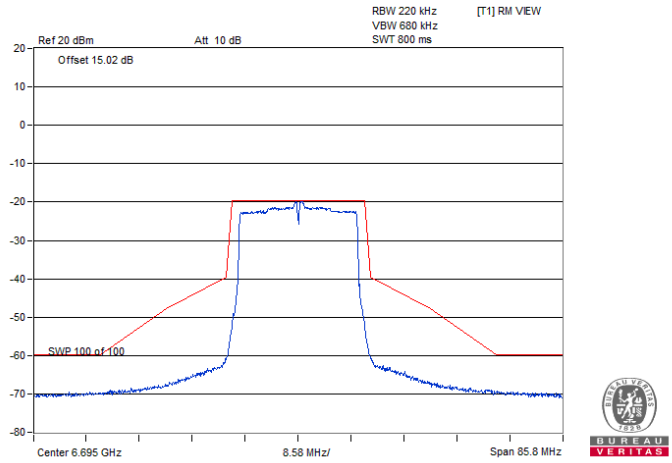


802.11ax (HE20) CDD-2Tx / Chain 1 : CH 113

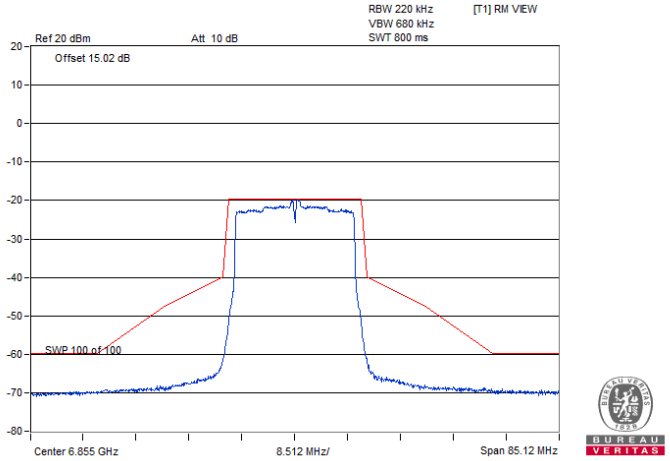
Spectrum Plot



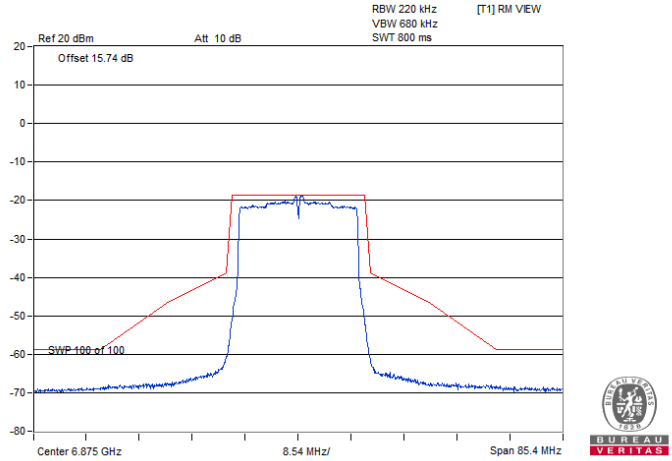
802.11ax (HE20) CDD-2Tx / Chain 1 : CH 117



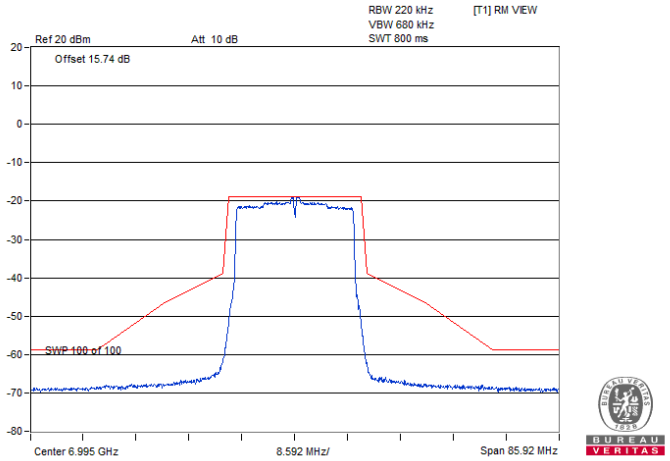
802.11ax (HE20) CDD-2Tx / Chain 1 : CH 149



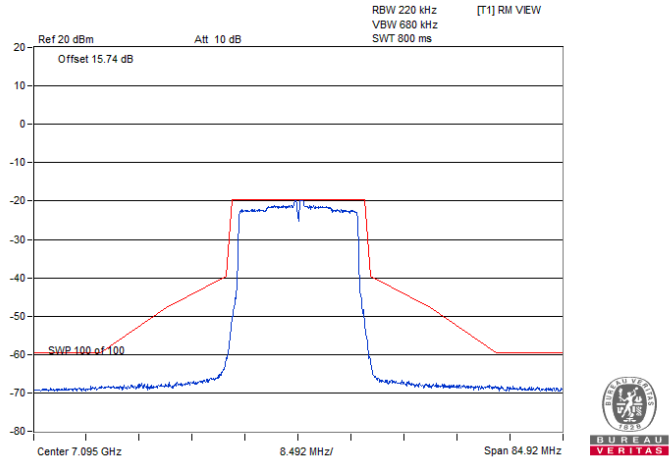
802.11ax (HE20) CDD-2Tx / Chain 1 : CH 181



802.11ax (HE20) CDD-2Tx / Chain 1 : CH 185

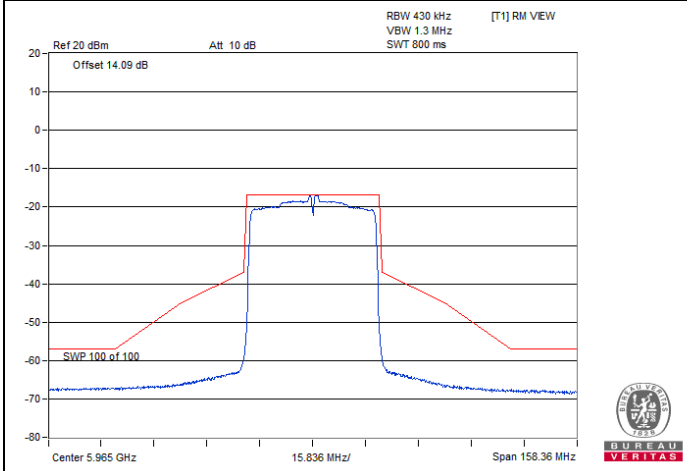
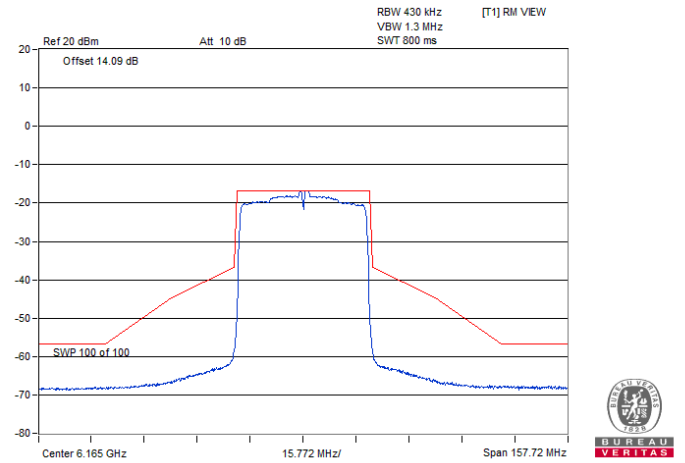
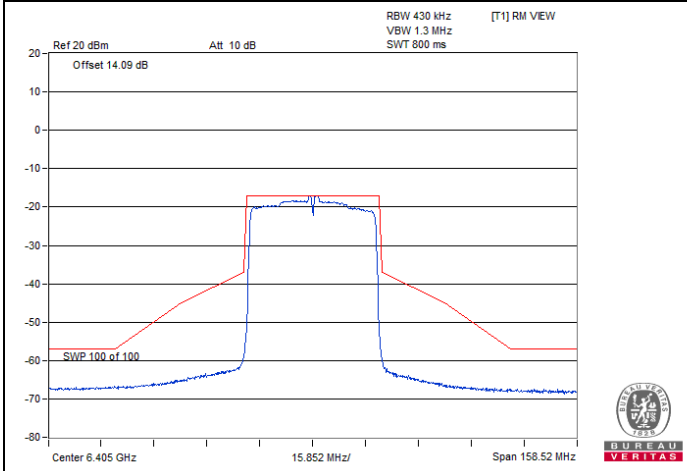
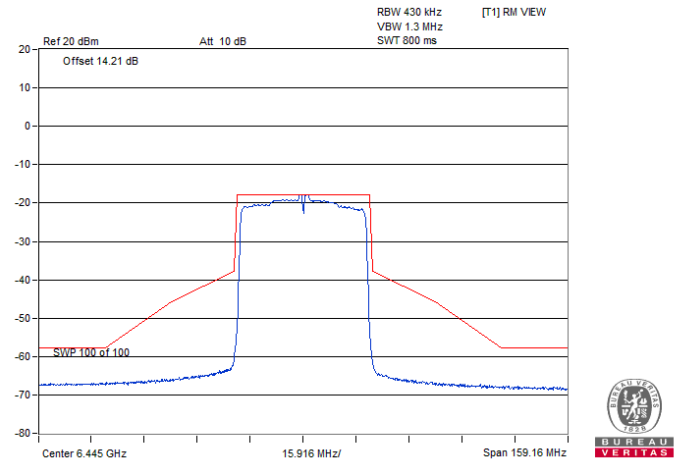
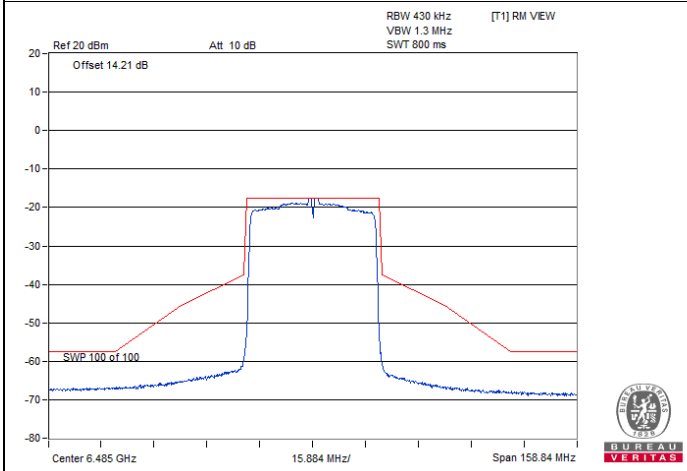
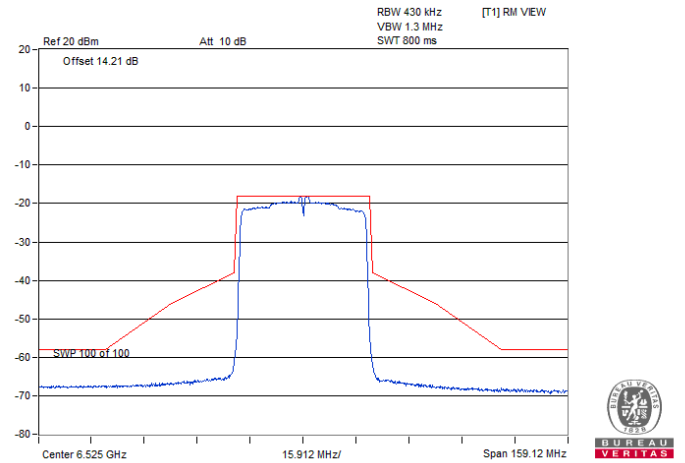


802.11ax (HE20) CDD-2Tx / Chain 1 : CH 209

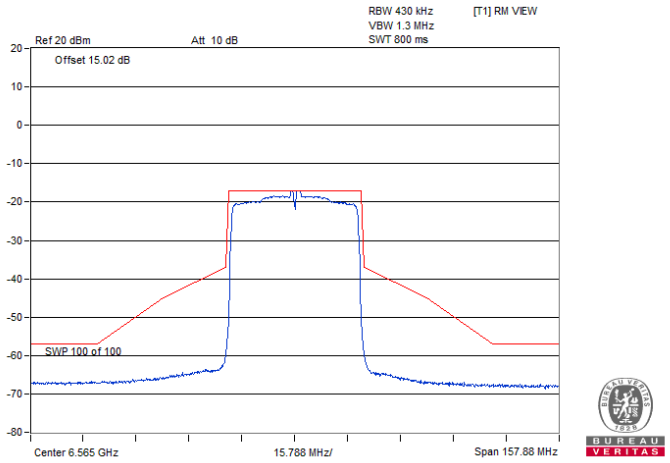


802.11ax (HE20) CDD-2Tx / Chain 1 : CH 229

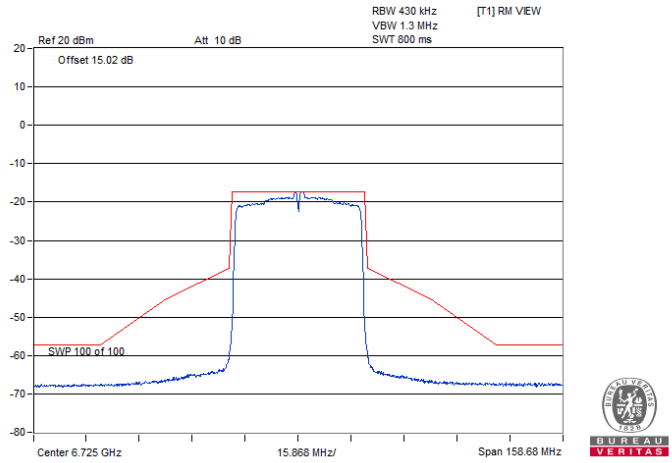
802.11ax (HE40) CDD-2Tx

Spectrum Plot	
	
802.11ax (HE40) CDD-2Tx / Chain 0 : CH 3	802.11ax (HE40) CDD-2Tx / Chain 0 : CH 43
	
802.11ax (HE40) CDD-2Tx / Chain 0 : CH 91	802.11ax (HE40) CDD-2Tx / Chain 0 : CH 99
	
802.11ax (HE40) CDD-2Tx / Chain 0 : CH 107	802.11ax (HE40) CDD-2Tx / Chain 0 : CH 115

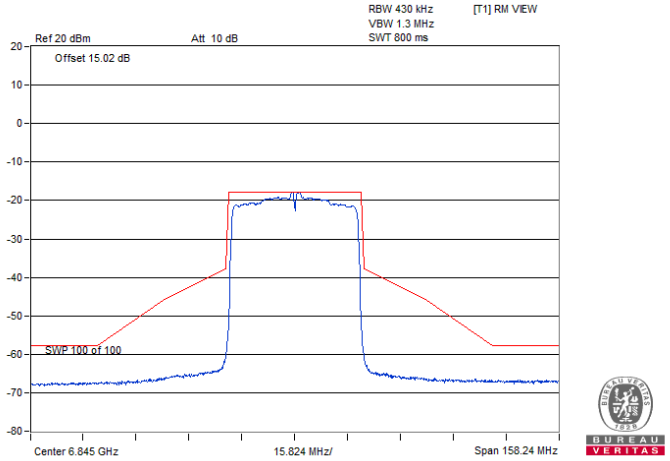
Spectrum Plot



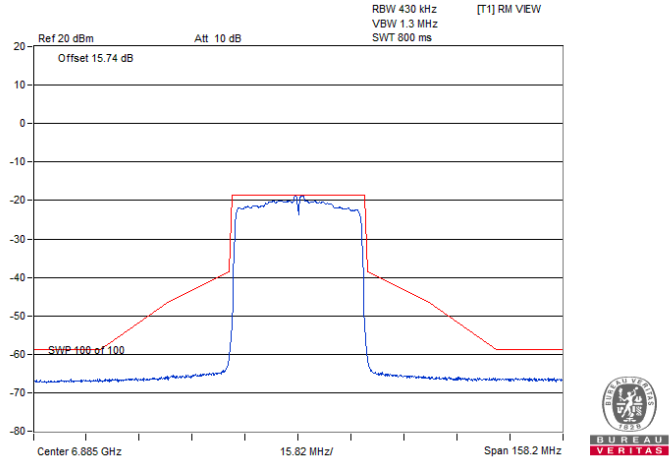
802.11ax (HE40) CDD-2Tx / Chain 0 : CH 123



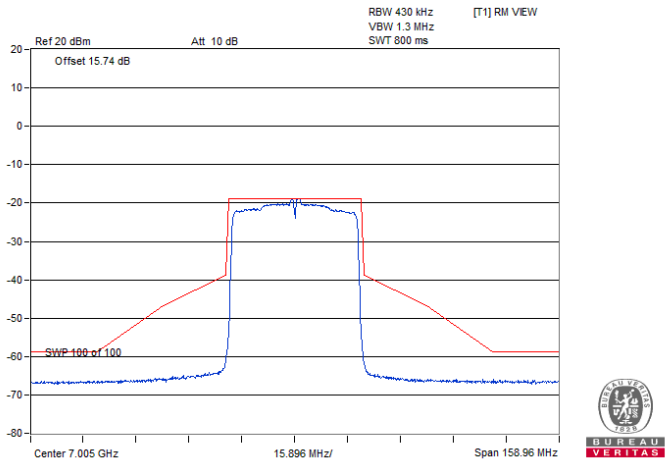
802.11ax (HE40) CDD-2Tx / Chain 0 : CH 155



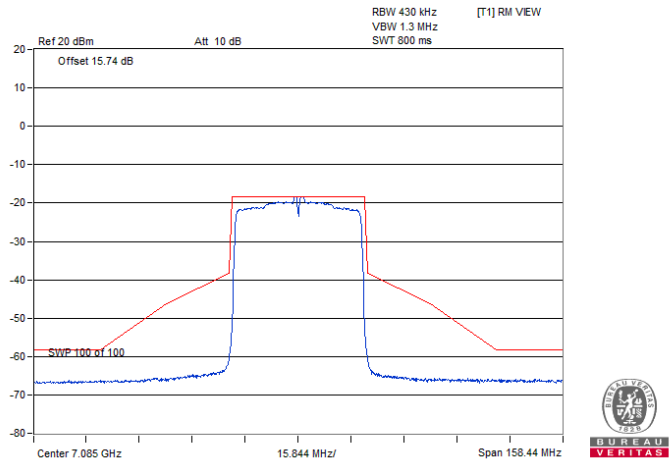
802.11ax (HE40) CDD-2Tx / Chain 0 : CH 179



802.11ax (HE40) CDD-2Tx / Chain 0 : CH 187

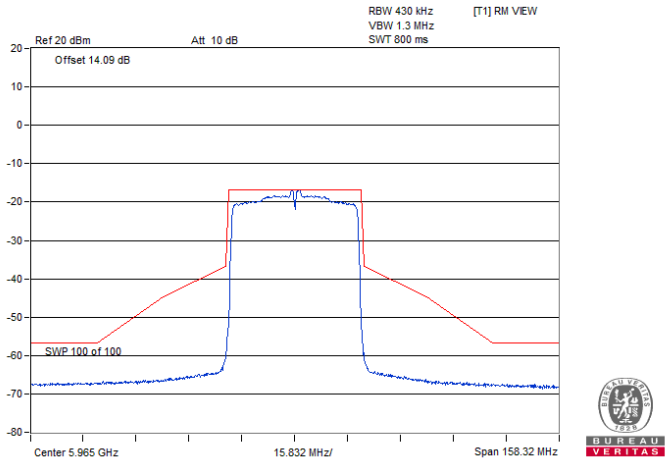


802.11ax (HE40) CDD-2Tx / Chain 0 : CH 211

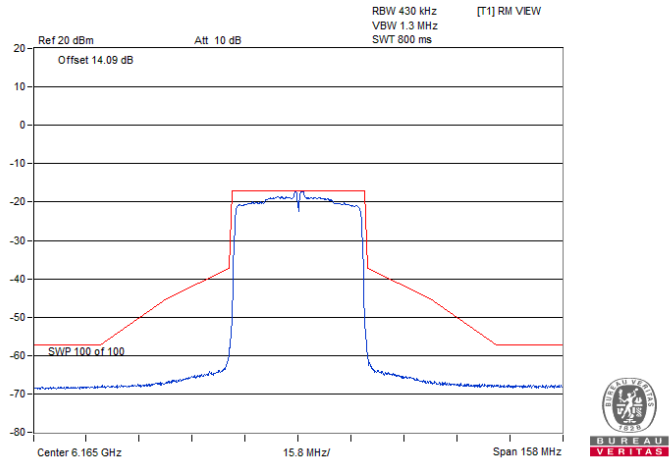


802.11ax (HE40) CDD-2Tx / Chain 0 : CH 227

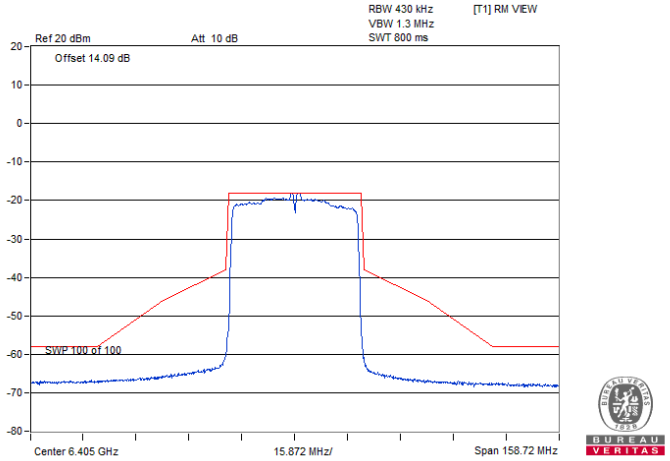
Spectrum Plot



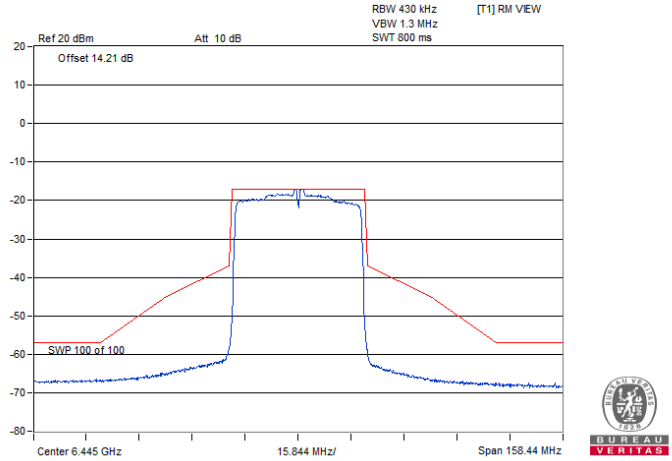
802.11ax (HE40) CDD-2Tx / Chain 1 : CH 3



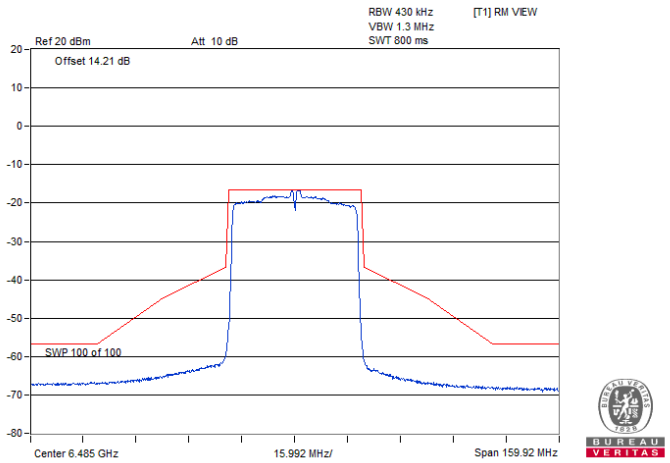
802.11ax (HE40) CDD-2Tx / Chain 1 : CH 43



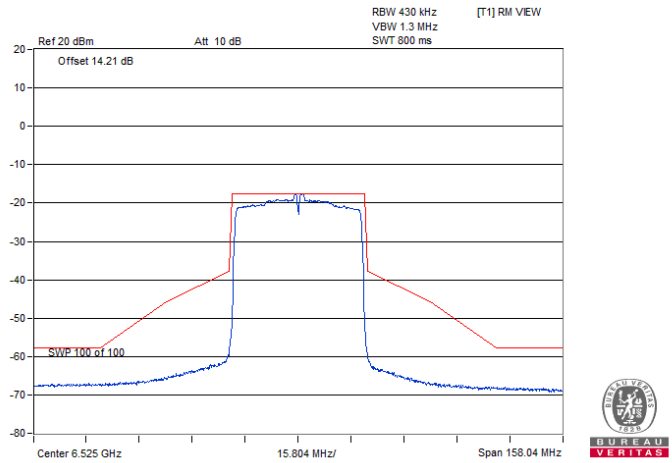
802.11ax (HE40) CDD-2Tx / Chain 1 : CH 91



802.11ax (HE40) CDD-2Tx / Chain 1 : CH 99

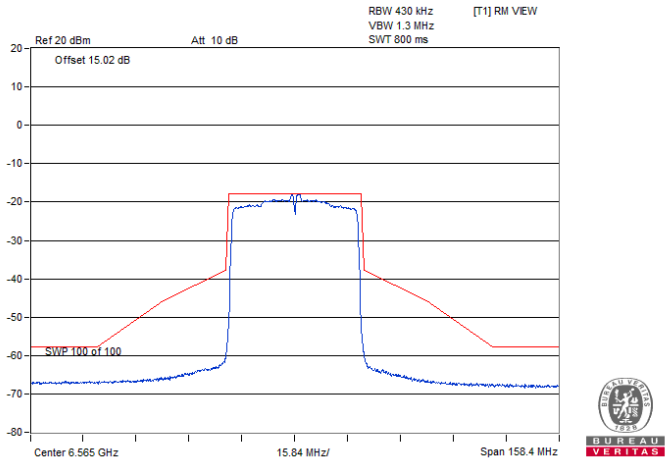


802.11ax (HE40) CDD-2Tx / Chain 1 : CH 107

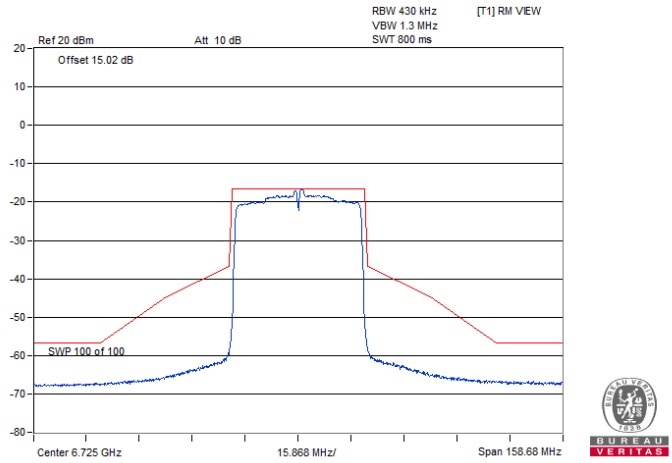


802.11ax (HE40) CDD-2Tx / Chain 1 : CH 115

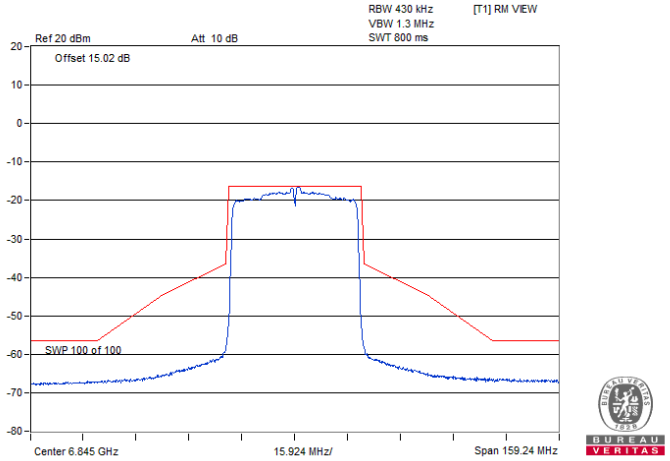
Spectrum Plot



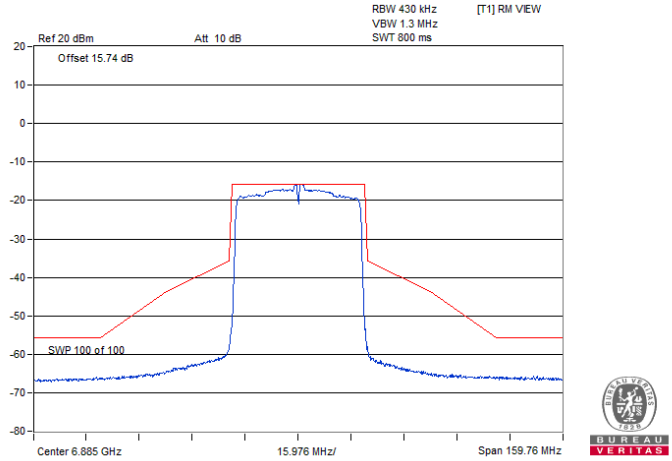
802.11ax (HE40) CDD-2Tx / Chain 1 : CH 123



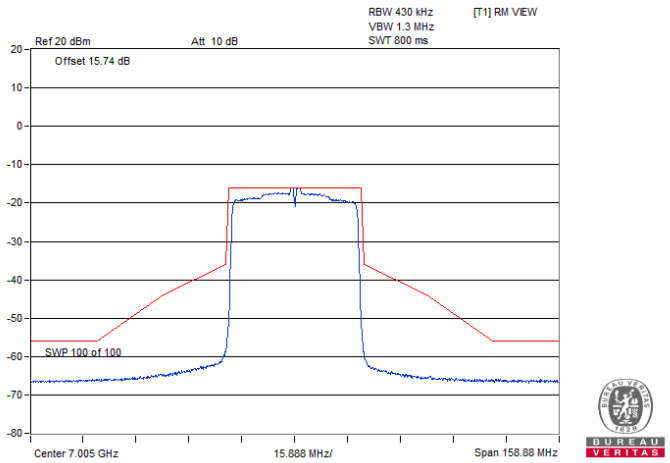
802.11ax (HE40) CDD-2Tx / Chain 1 : CH 155



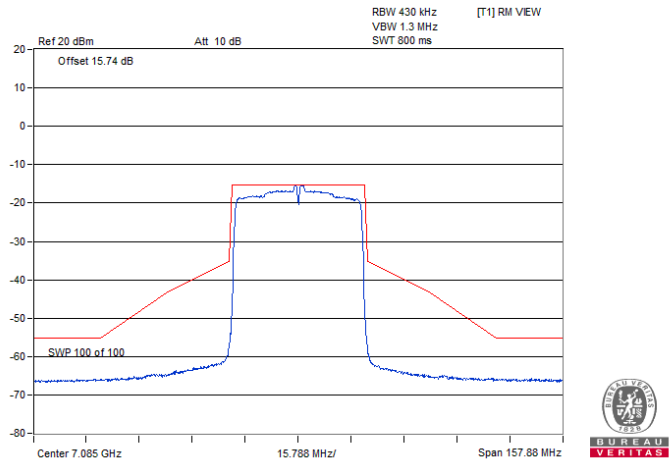
802.11ax (HE40) CDD-2Tx / Chain 1 : CH 179



802.11ax (HE40) CDD-2Tx / Chain 1 : CH 187

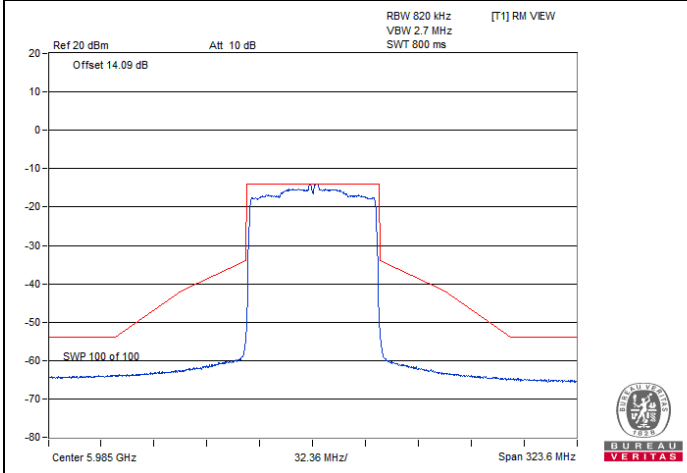
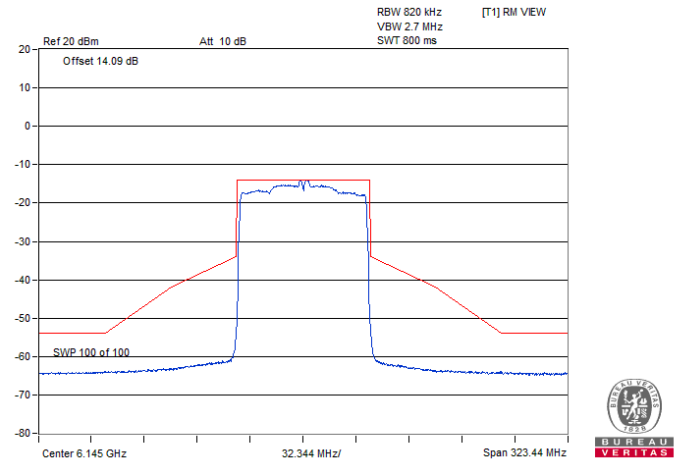
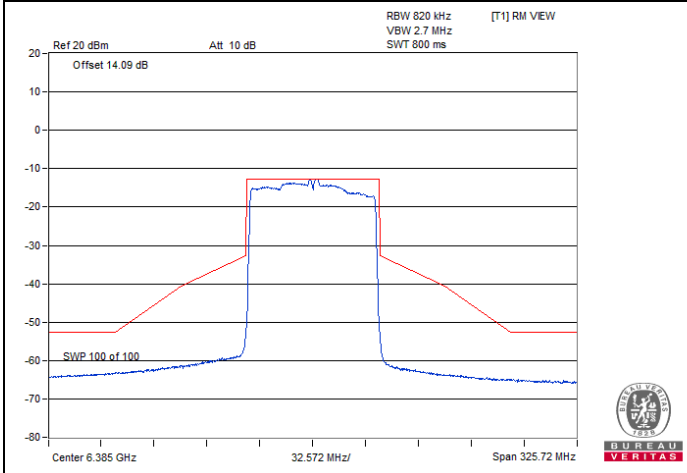
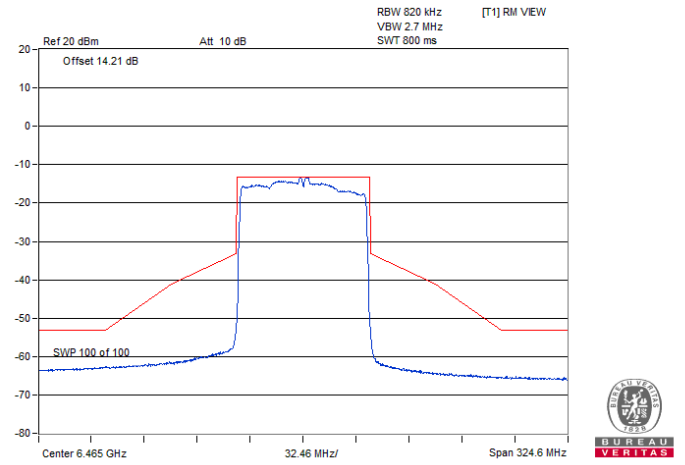
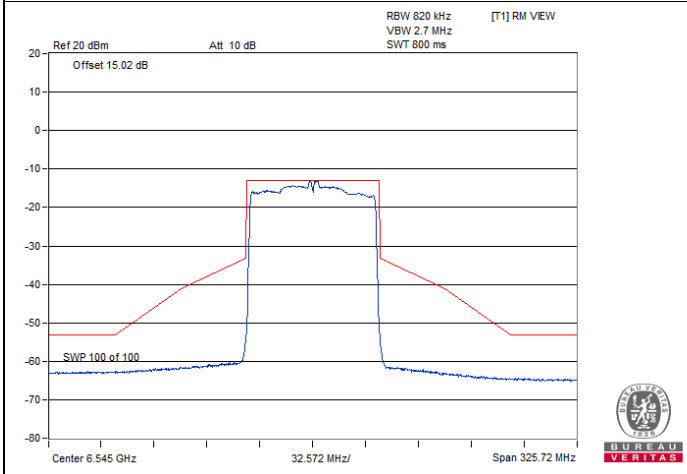
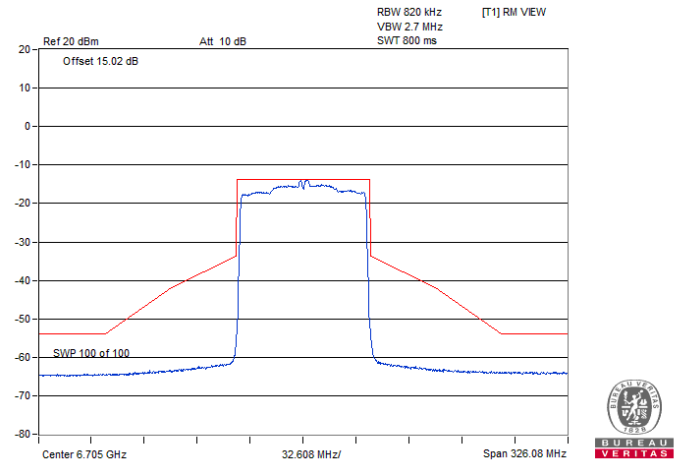


802.11ax (HE40) CDD-2Tx / Chain 1 : CH 211

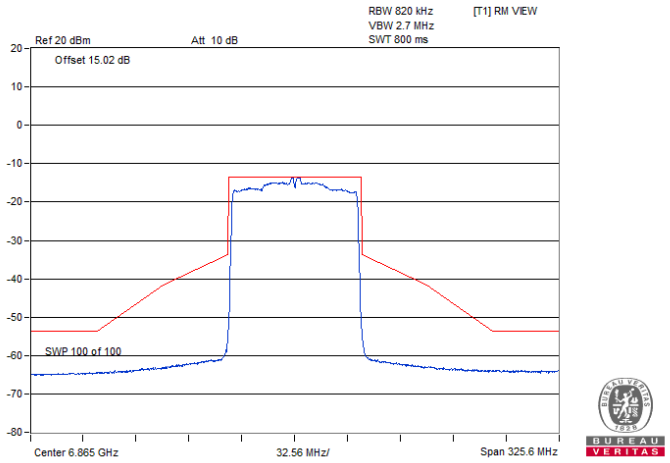


802.11ax (HE40) CDD-2Tx / Chain 1 : CH 227

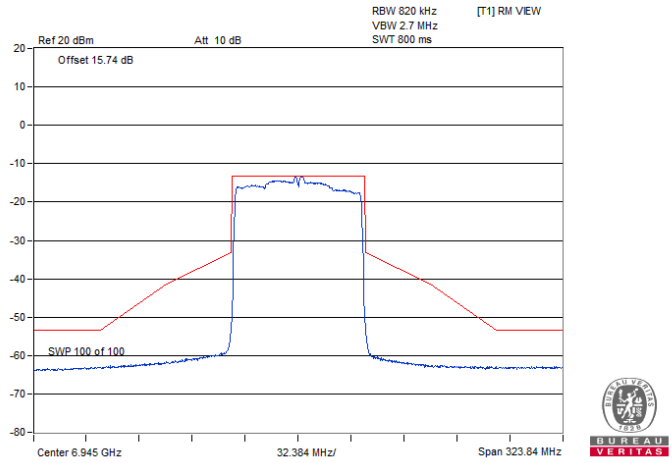
802.11ax (HE80) CDD-2Tx

Spectrum Plot	
	
802.11ax (HE80) CDD-2Tx / Chain 0 : CH 7	802.11ax (HE80) CDD-2Tx / Chain 0 : CH 39
	
802.11ax (HE80) CDD-2Tx / Chain 0 : CH 87	802.11ax (HE80) CDD-2Tx / Chain 0 : CH 103
	
802.11ax (HE80) CDD-2Tx / Chain 0 : CH 119	802.11ax (HE80) CDD-2Tx / Chain 0 : CH 151

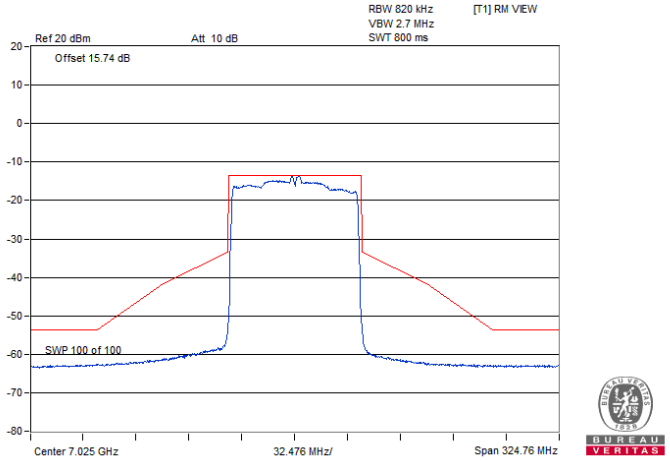
Spectrum Plot



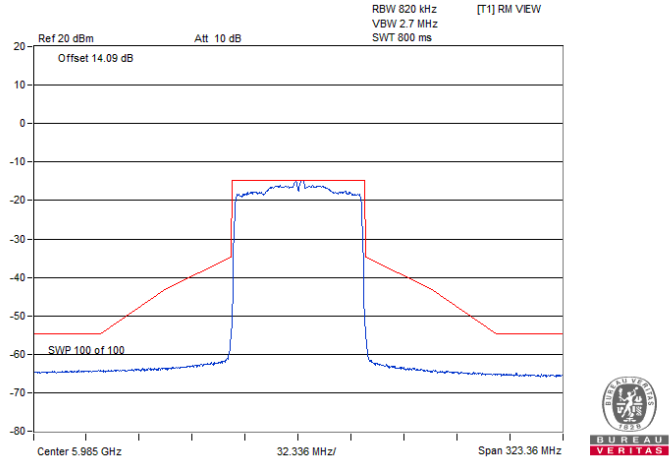
802.11ax (HE80) CDD-2Tx / Chain 0 : CH 183



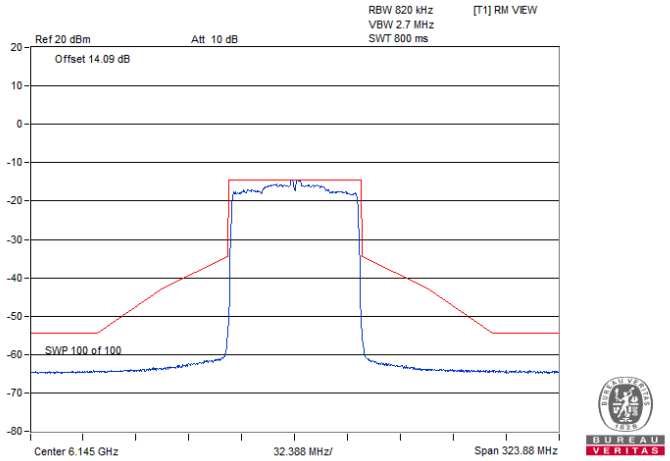
802.11ax (HE80) CDD-2Tx / Chain 0 : CH 199



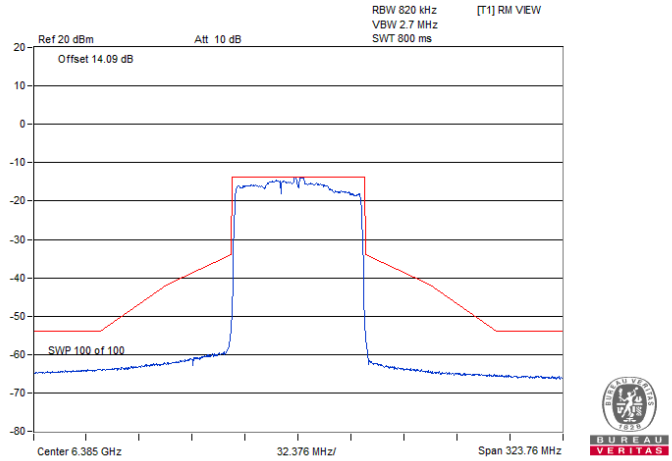
802.11ax (HE80) CDD-2Tx / Chain 0 : CH 215



802.11ax (HE80) CDD-2Tx / Chain 1 : CH 7

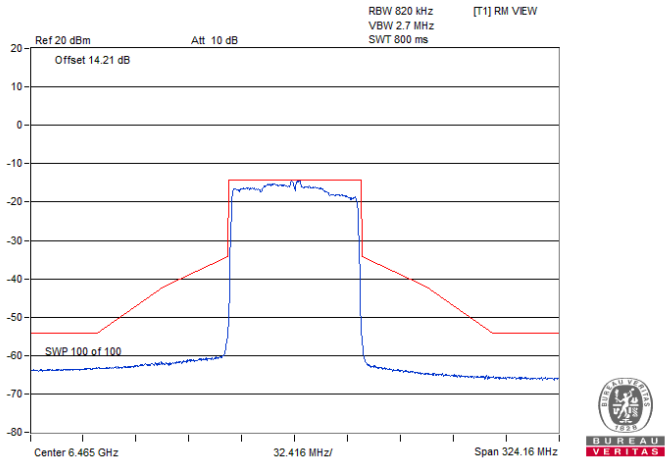


802.11ax (HE80) CDD-2Tx / Chain 1 : CH 39

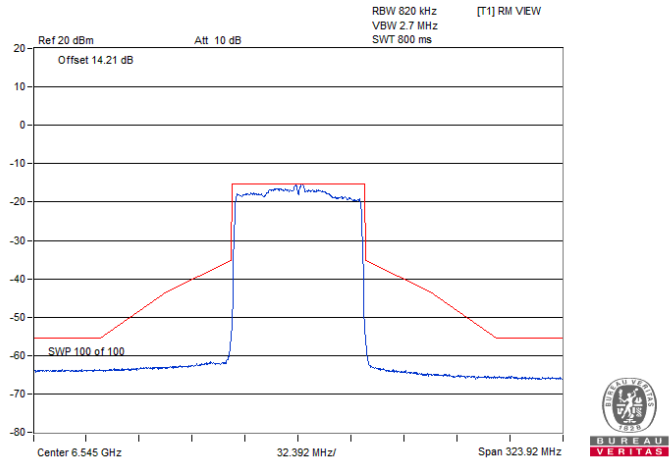


802.11ax (HE80) CDD-2Tx / Chain 1 : CH 87

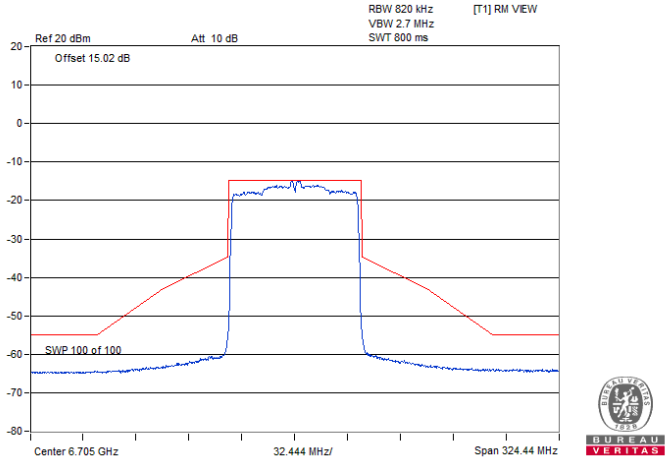
Spectrum Plot



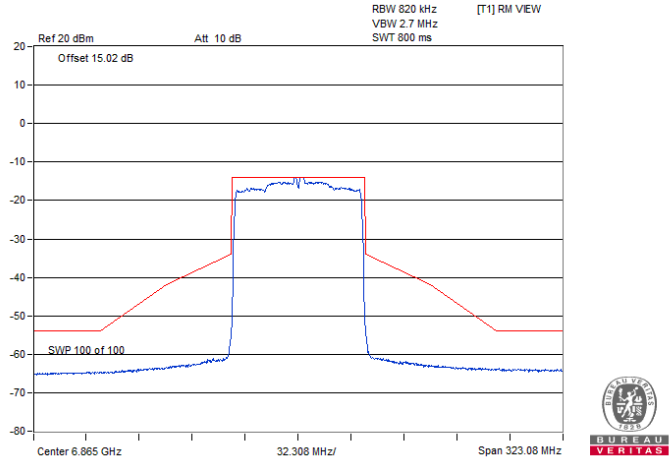
802.11ax (HE80) CDD-2Tx / Chain 1 : CH 103



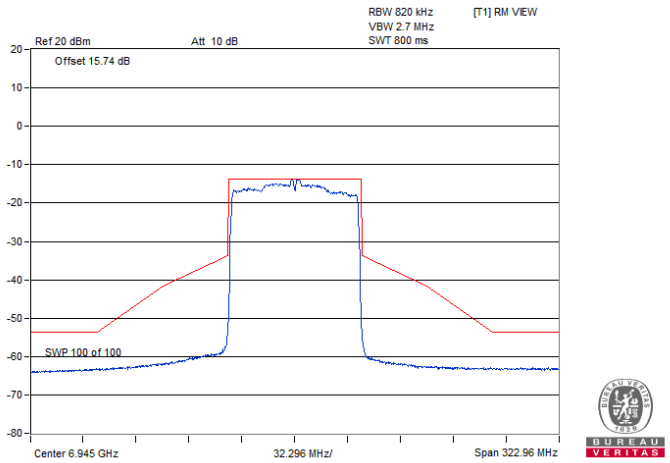
802.11ax (HE80) CDD-2Tx / Chain 1 : CH 119



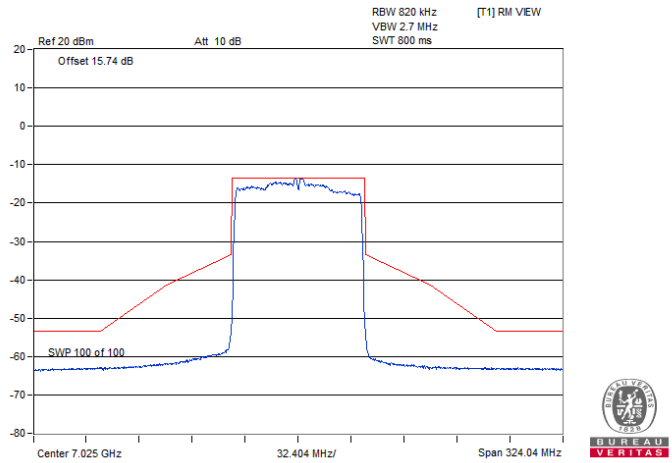
802.11ax (HE80) CDD-2Tx / Chain 1 : CH 151



802.11ax (HE80) CDD-2Tx / Chain 1 : CH 183

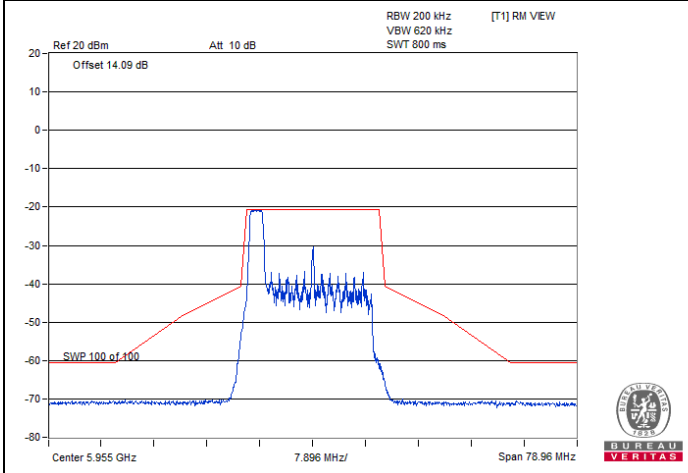
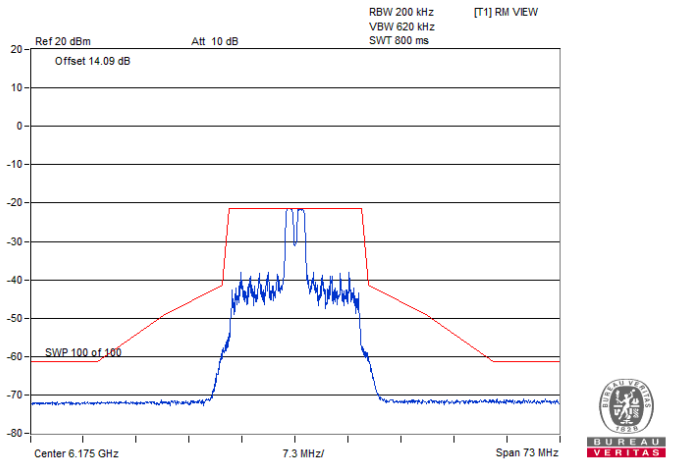
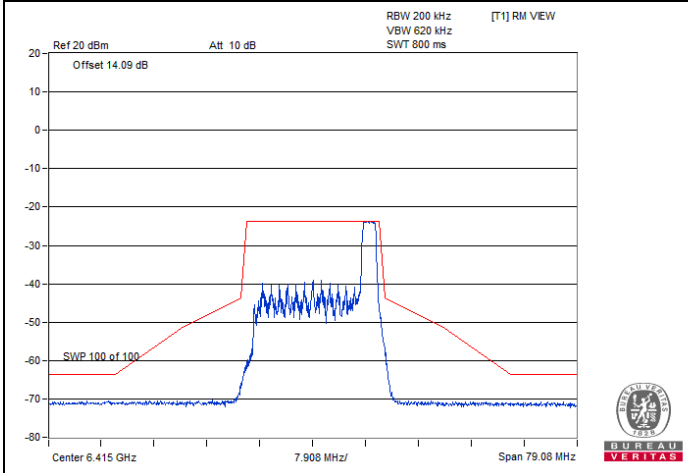
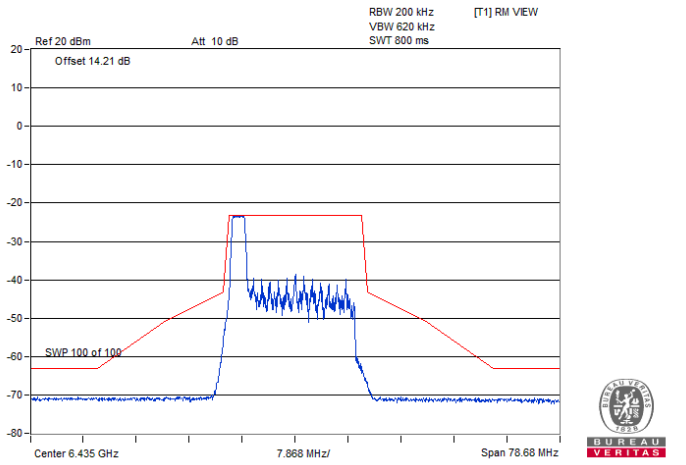
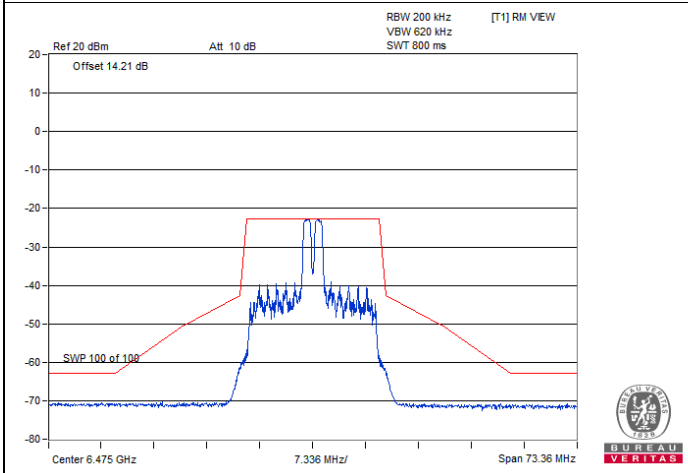
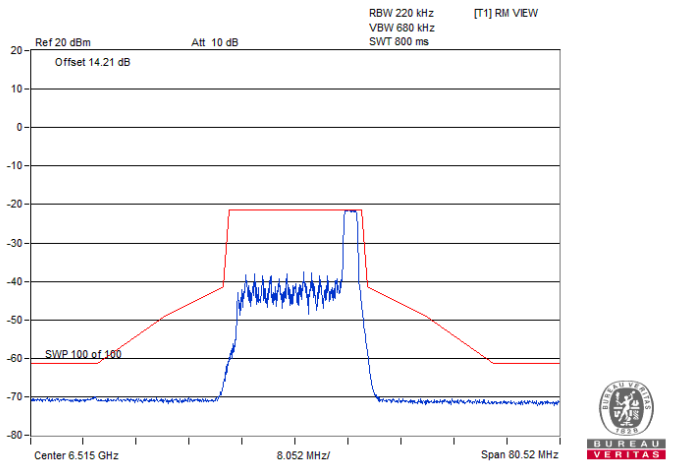


802.11ax (HE80) CDD-2Tx / Chain 1 : CH 199

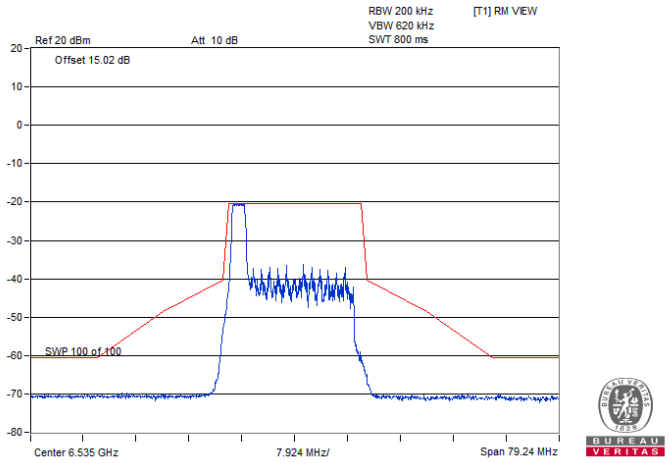


802.11ax (HE80) CDD-2Tx / Chain 1 : CH 215

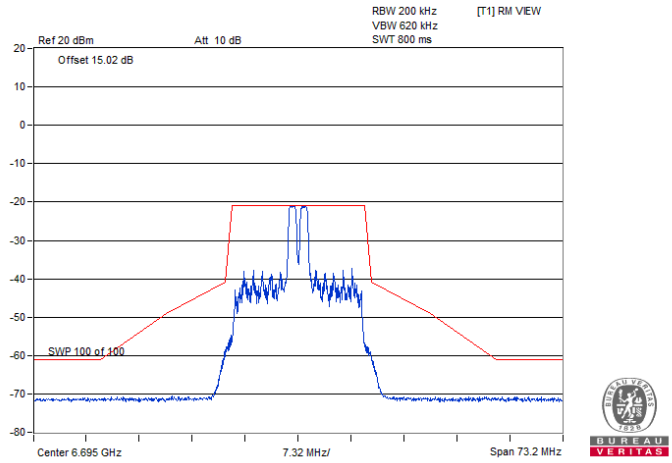
802.11ax (HE20) 26-tone RU CDD-2Tx

Spectrum Plot	
	
802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 0 : CH 1@0	802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 0 : CH 45@4
	
802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 0 : CH 93@8	802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 0 : CH 97@0
	
802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 0 : CH 105@4	802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 0 : CH 113@8

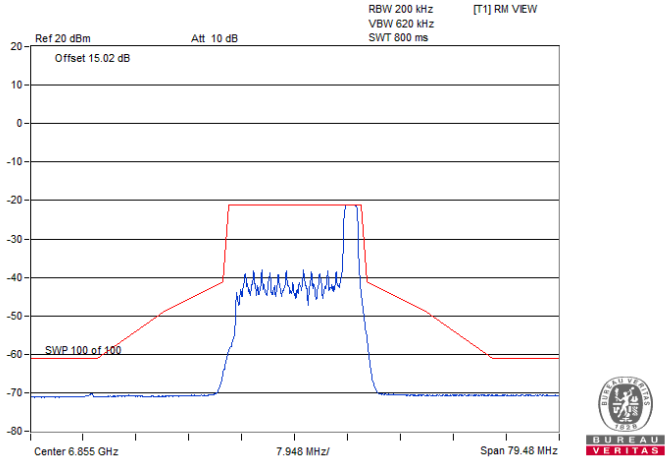
Spectrum Plot



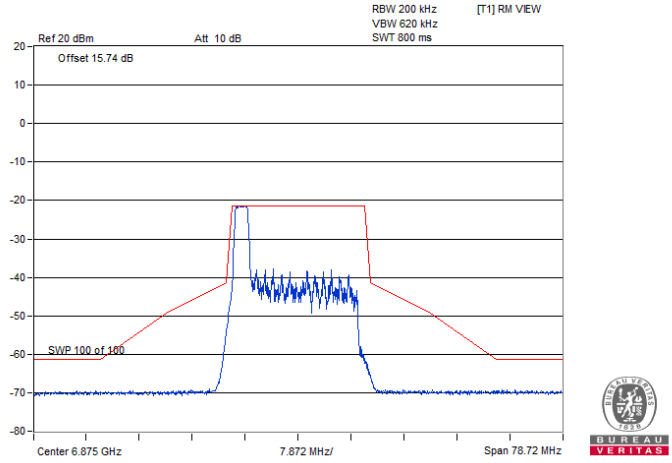
802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 0 : CH 117@0



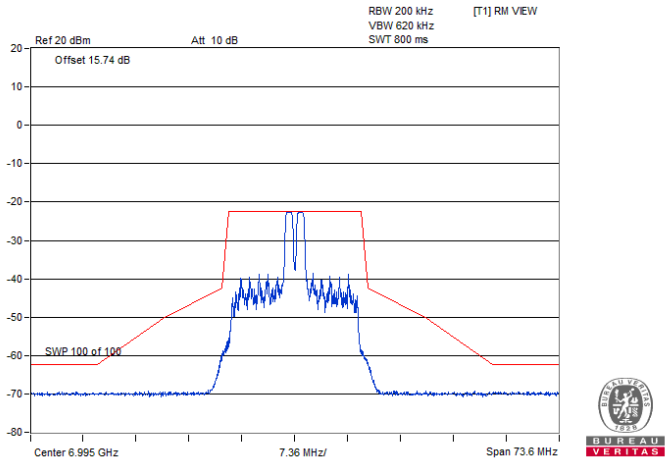
802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 0 : CH 149@4



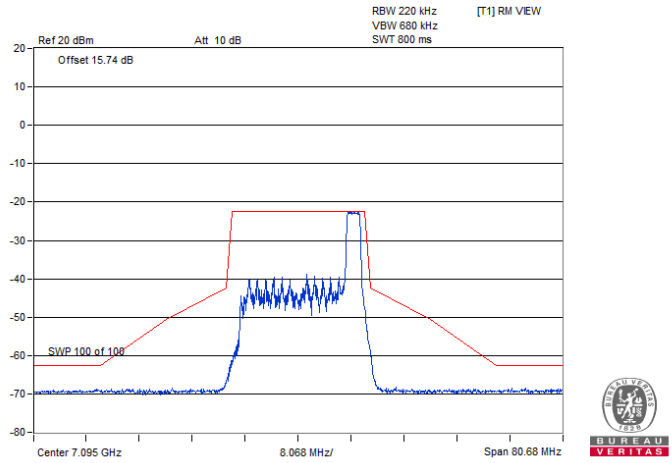
802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 0 : CH 181@8



802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 0 : CH 185@0

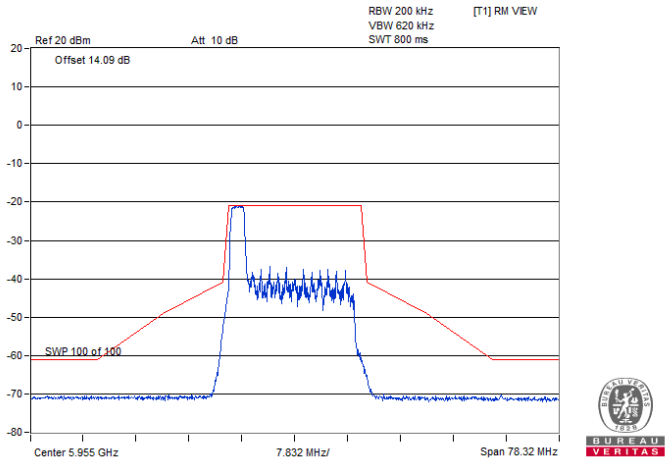


802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 0 : CH 209@4

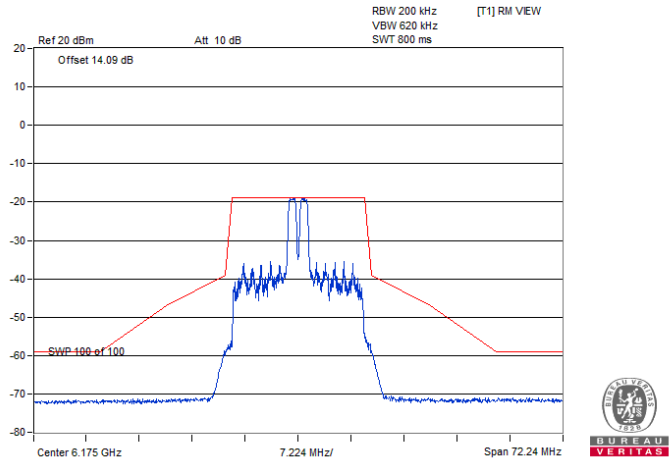


802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 0 : CH 229@8

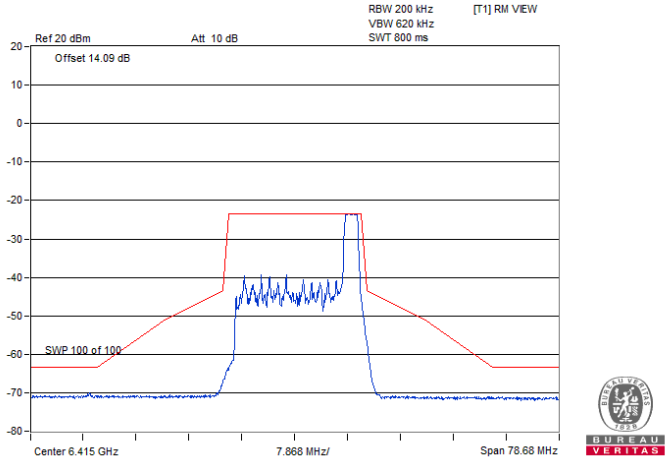
Spectrum Plot



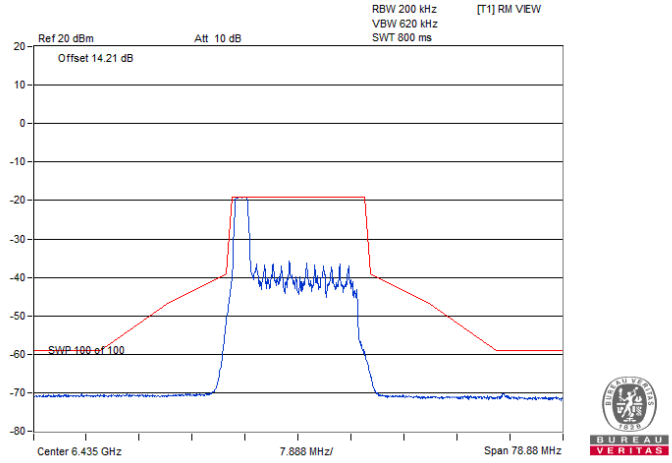
802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 1 : CH 1@0



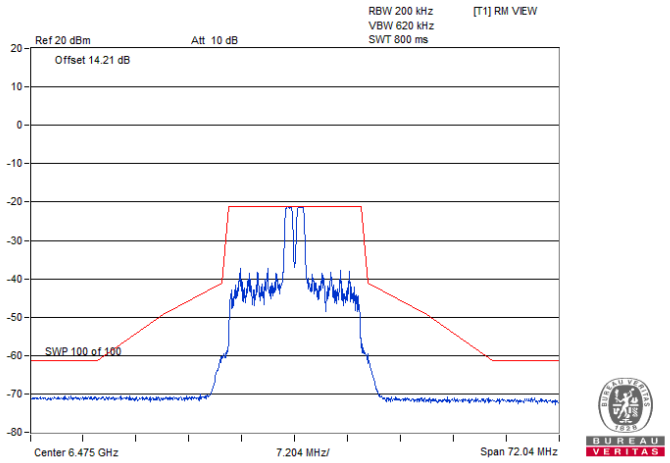
802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 1 : CH 45@4



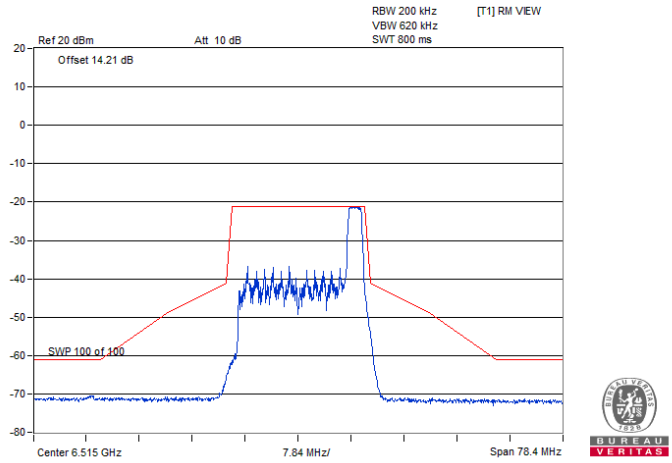
802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 1 : CH 93@8



802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 1 : CH 97@0

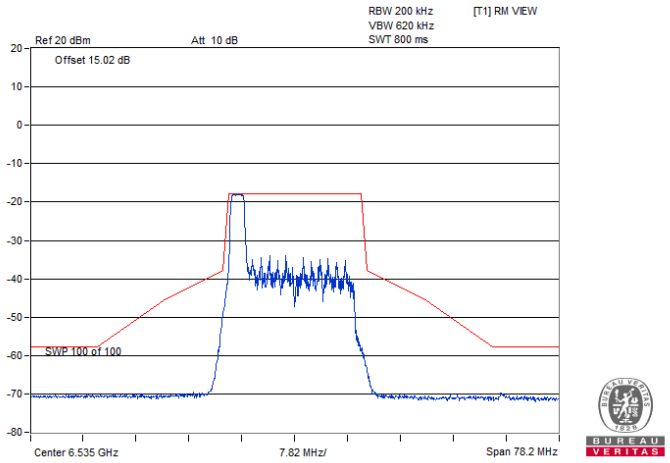


802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 1 : CH 105@4



802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 1 : CH 113@8

Spectrum Plot



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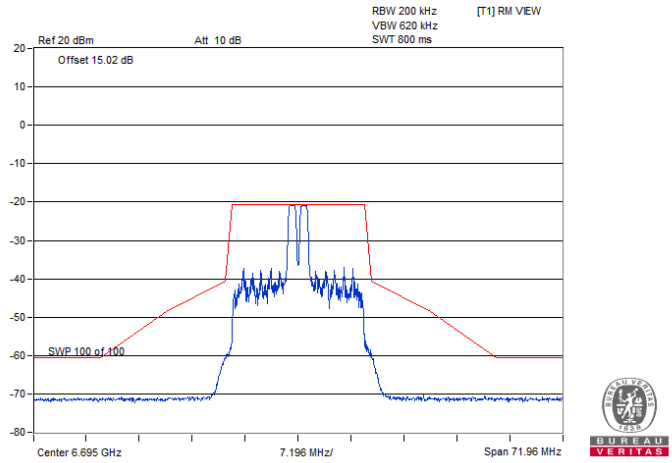
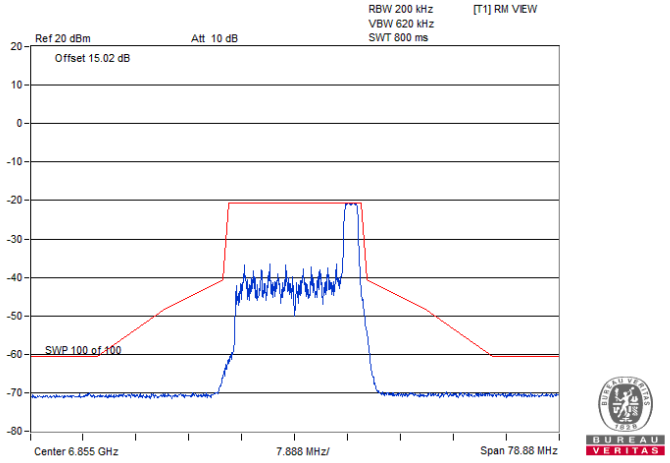
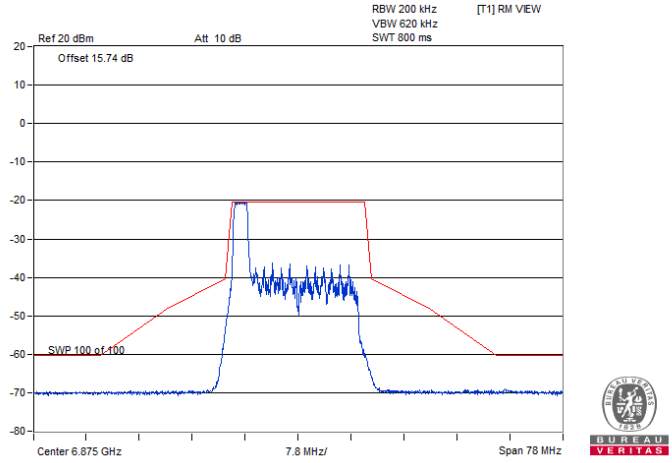


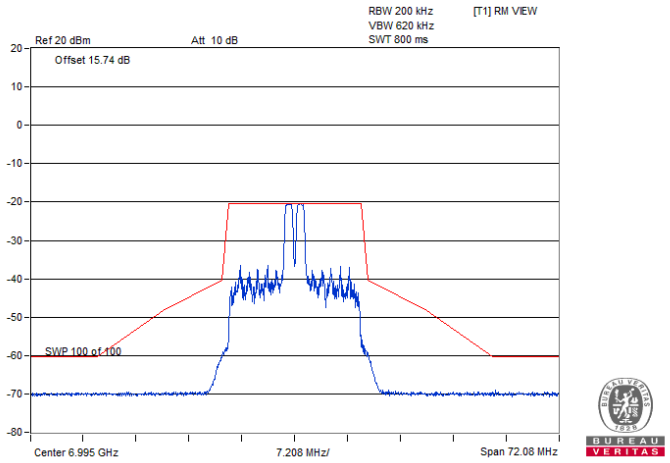
802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 1 : CH 149@4



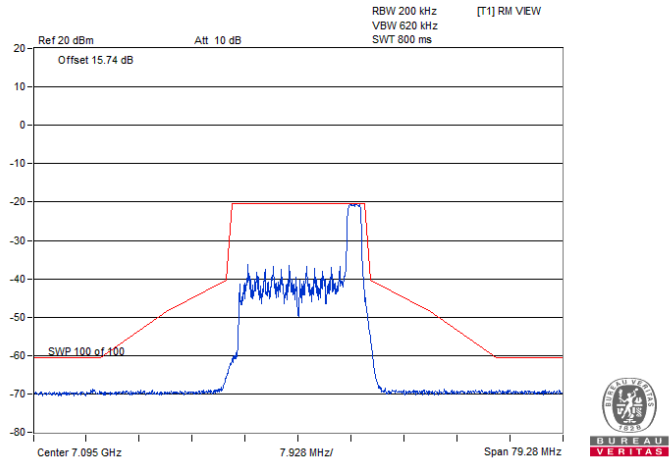
802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 1 : CH 181@8



802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 1 : CH 185@0

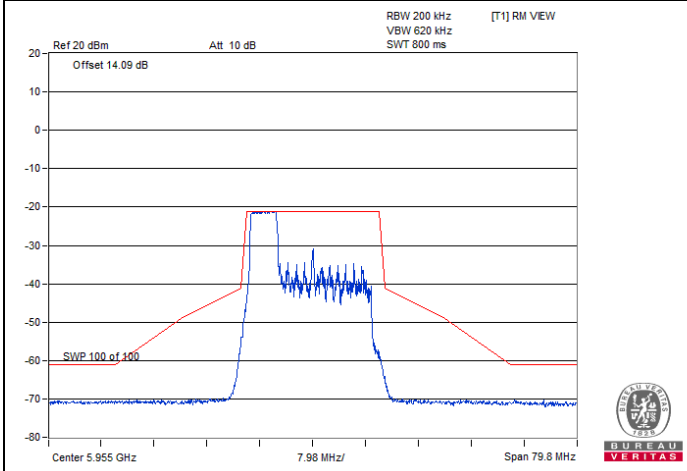
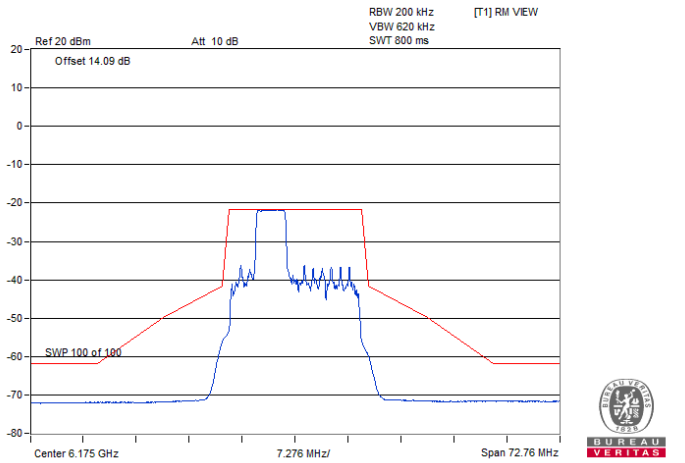
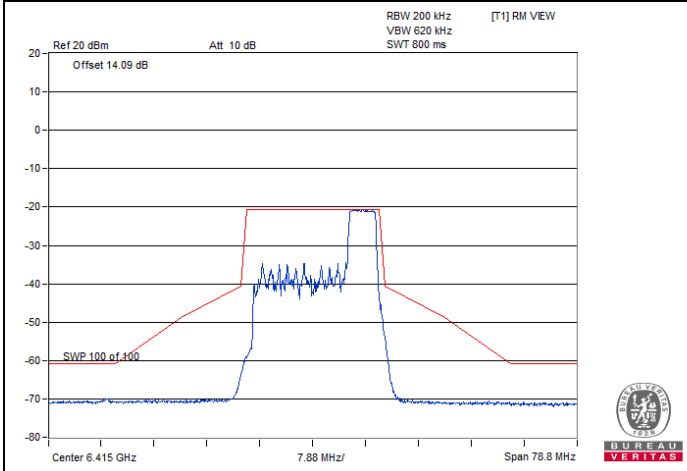
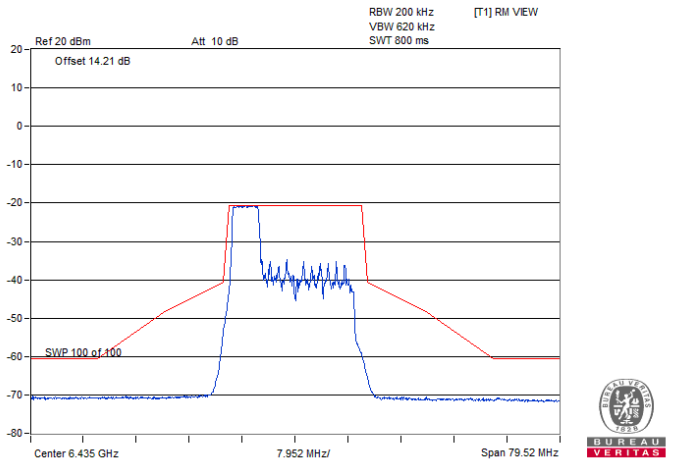
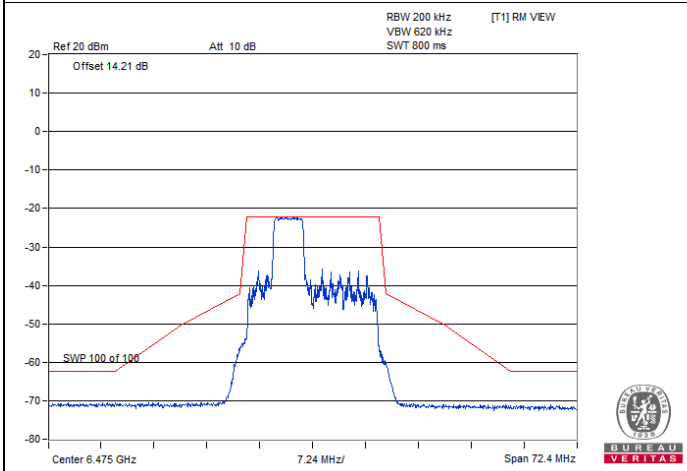
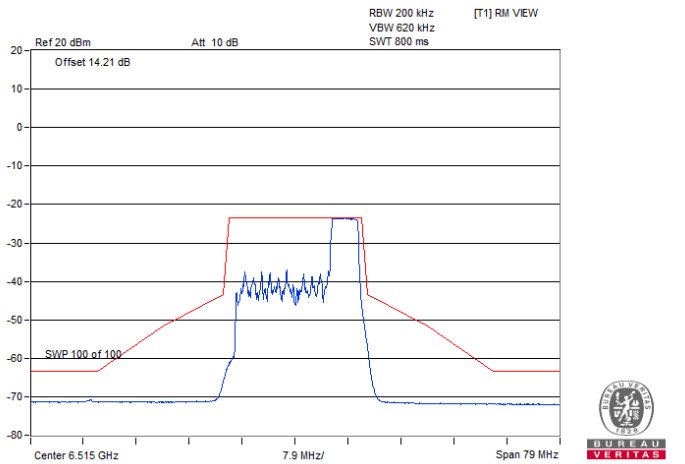


802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 1 : CH 209@4

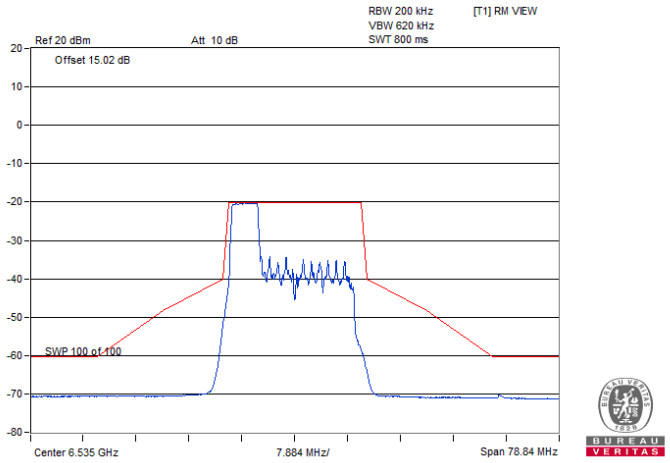


802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 1 : CH 229@8

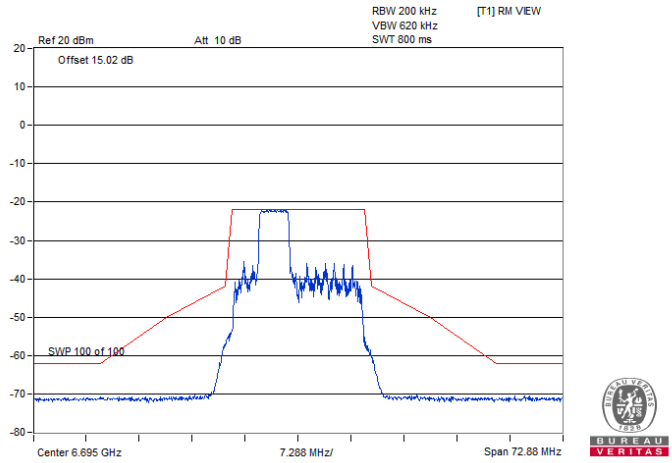
802.11ax (HE20) 52-tone RU CDD-2Tx

Spectrum Plot	
	
802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 0 : CH 1@37	802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 0 : CH 45@38
	
802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 0 : CH 93@40	802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 0 : CH 97@37
	
802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 0 : CH 105@38	802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 0 : CH 113@40

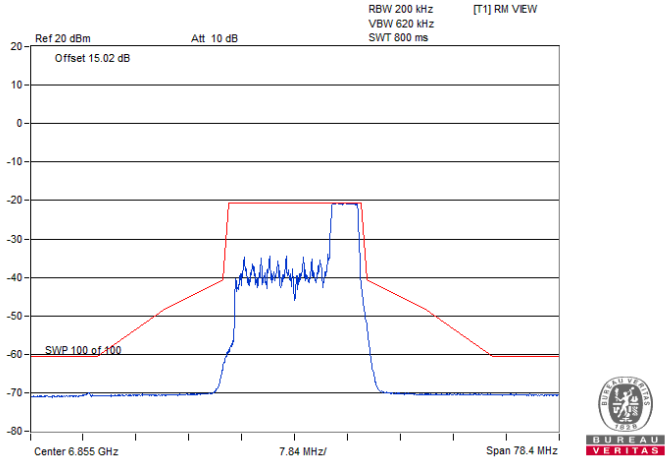
Spectrum Plot



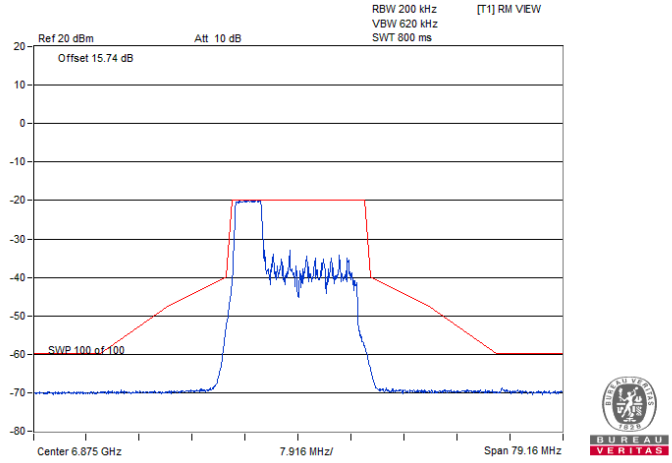
802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 0 : CH 117@37



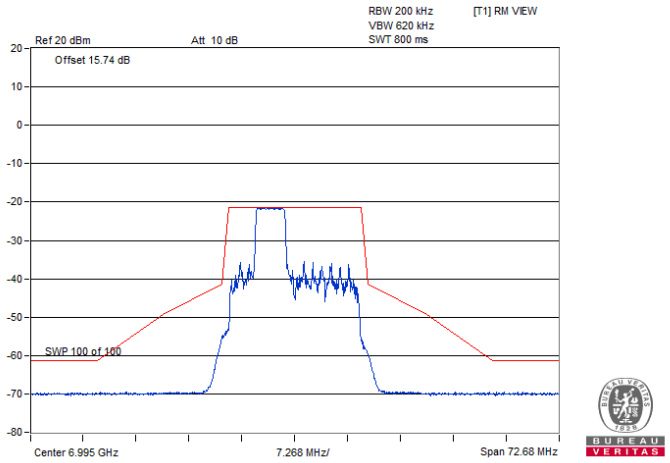
802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 0 : CH 149@38



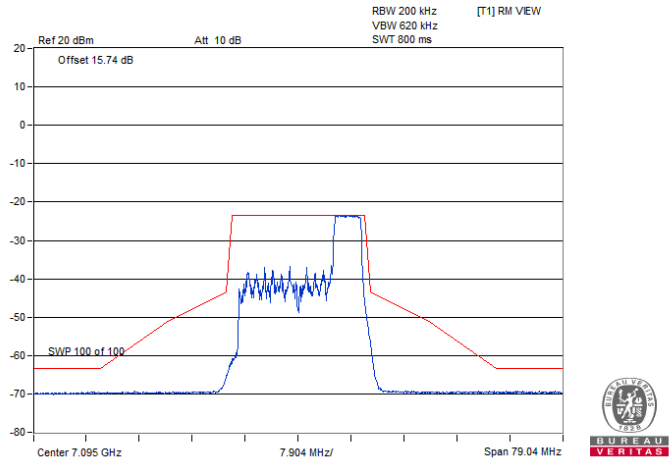
802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 0 : CH 181@40



802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 0 : CH 185@37

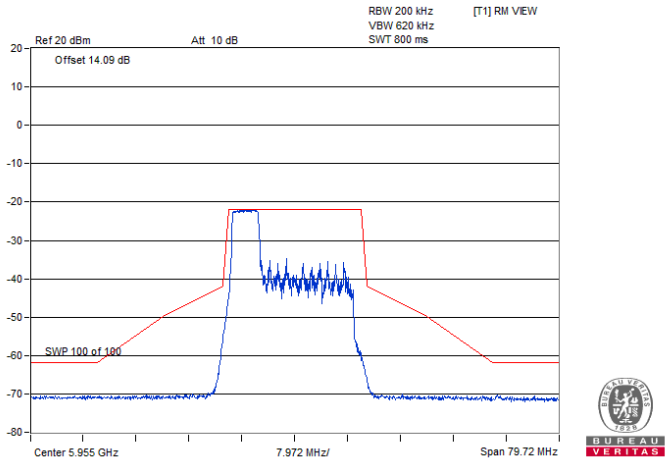


802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 0 : CH 209@38

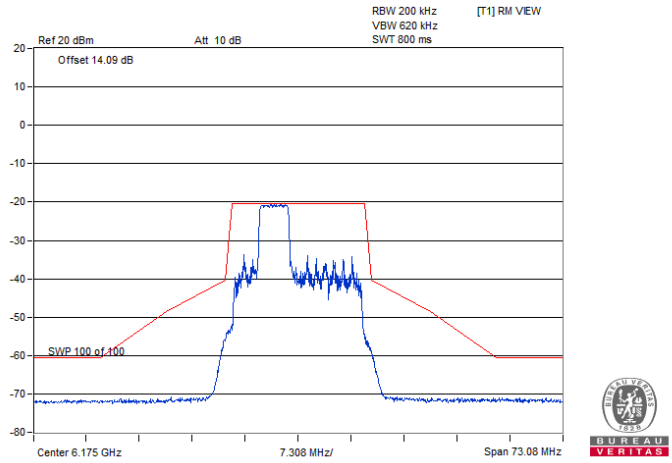


802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 0 : CH 229@40

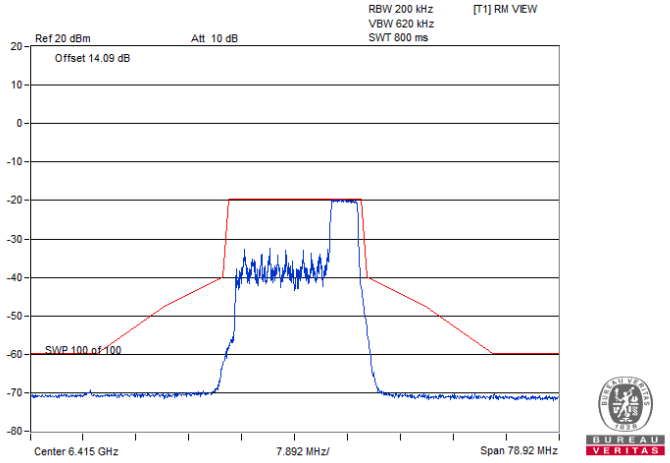
Spectrum Plot



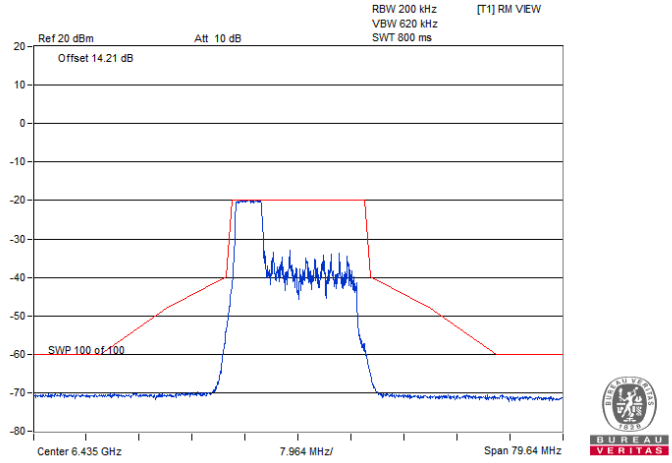
802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 1 : CH 1@37



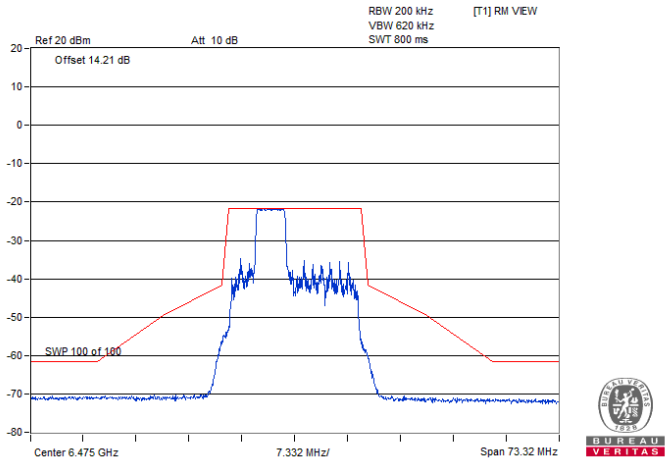
802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 1 : CH 45@38



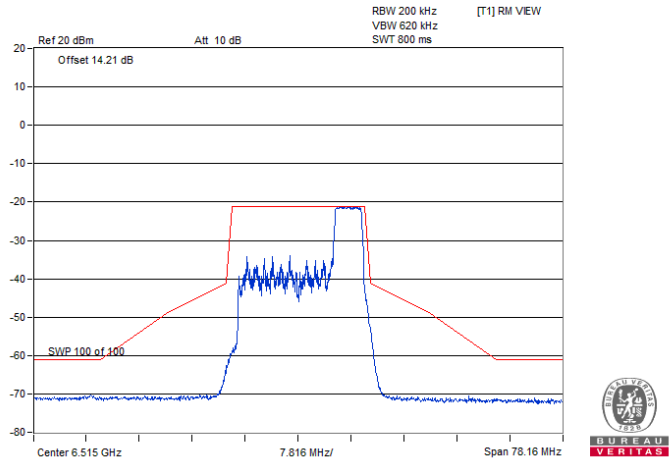
802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 1 : CH 93@40



802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 1 : CH 97@37

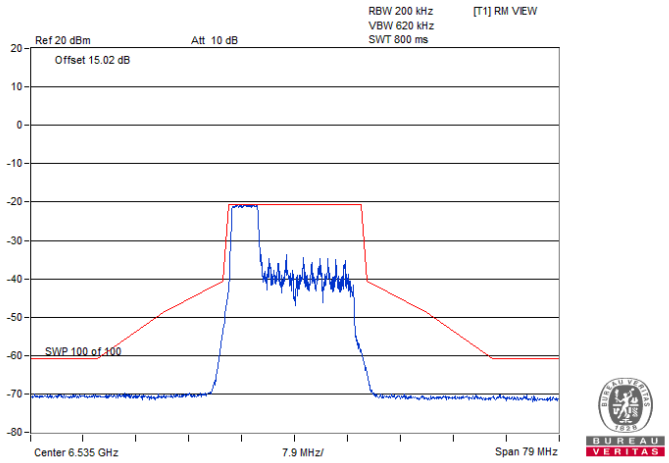


802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 1 : CH 105@38

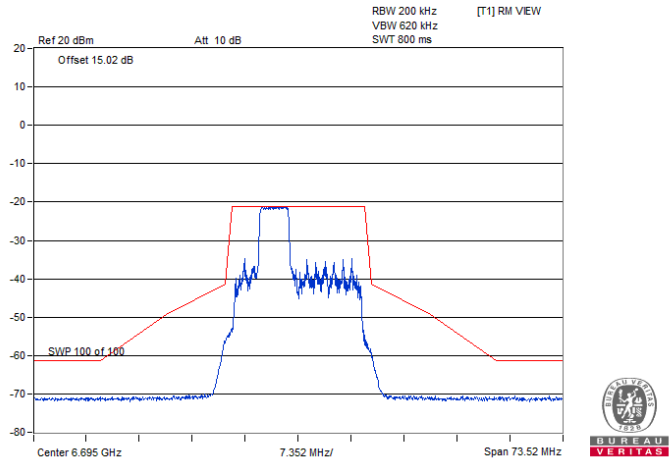


802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 1 : CH 113@40

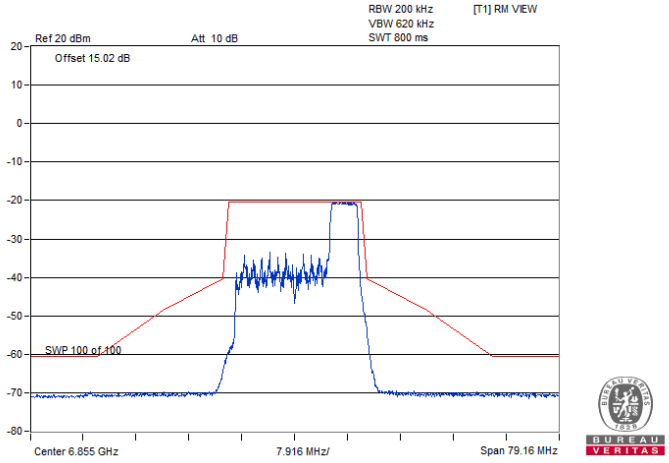
Spectrum Plot



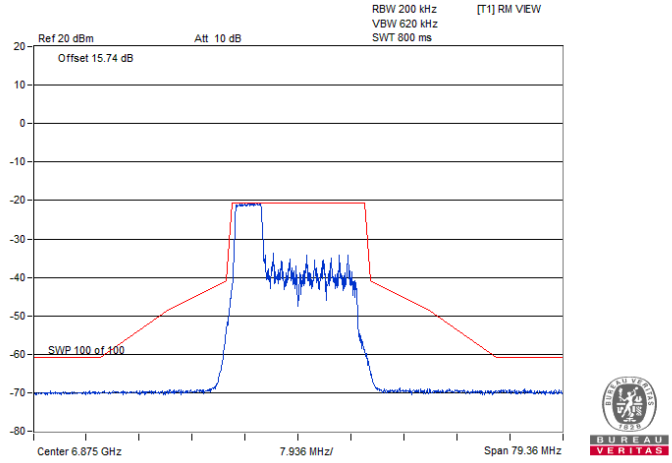
802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 1 : CH 117@37



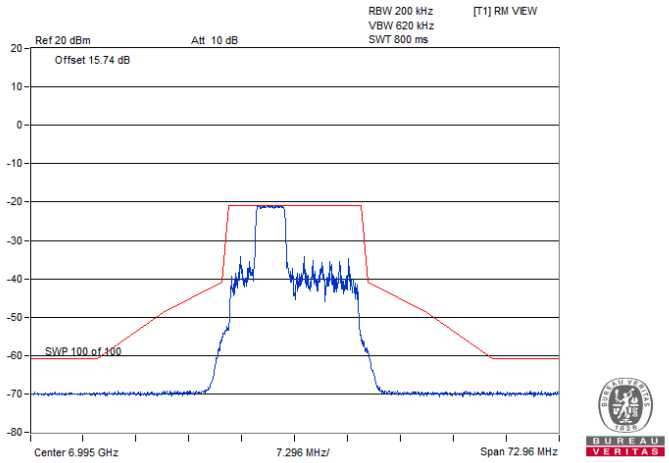
802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 1 : CH 149@38



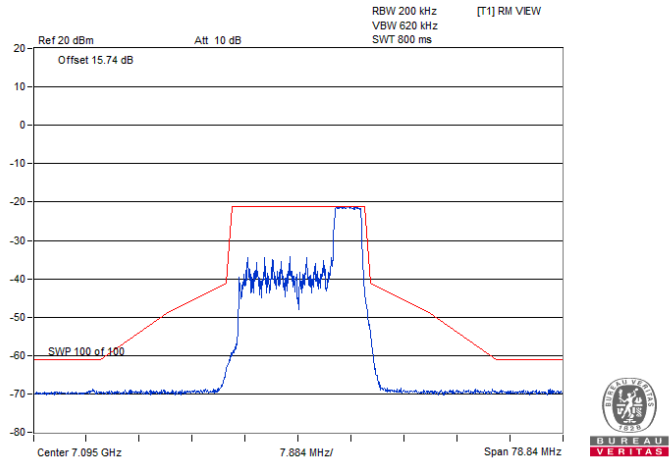
802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 1 : CH 181@40



802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 1 : CH 185@37

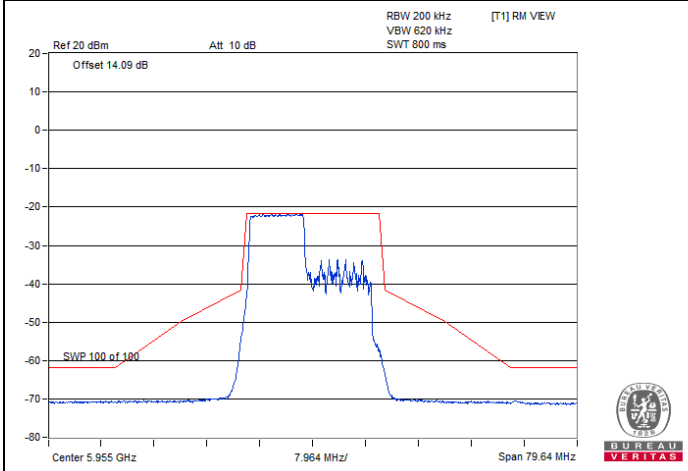
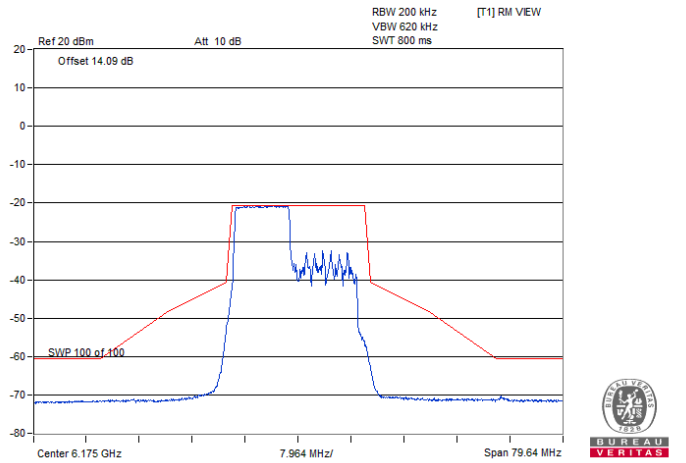
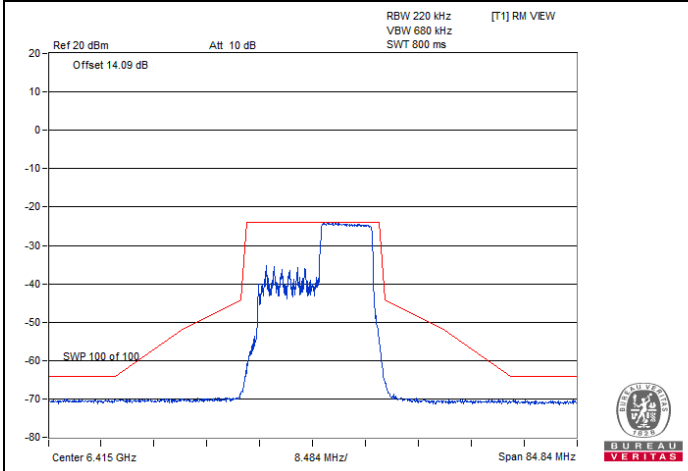
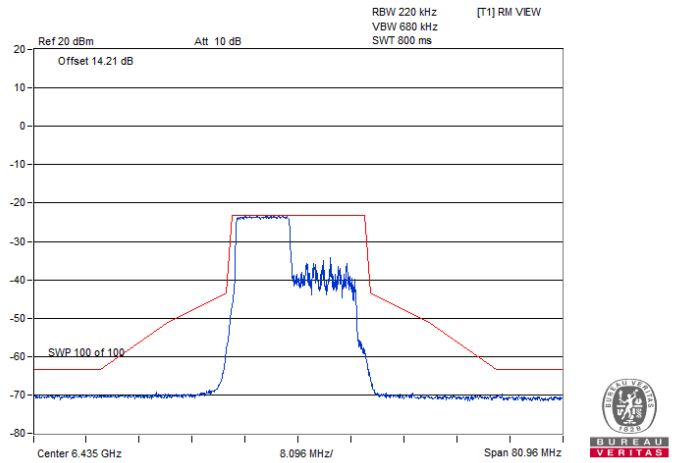
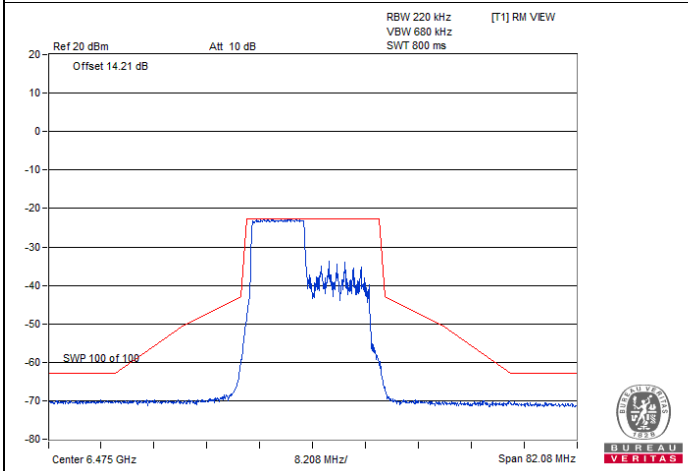
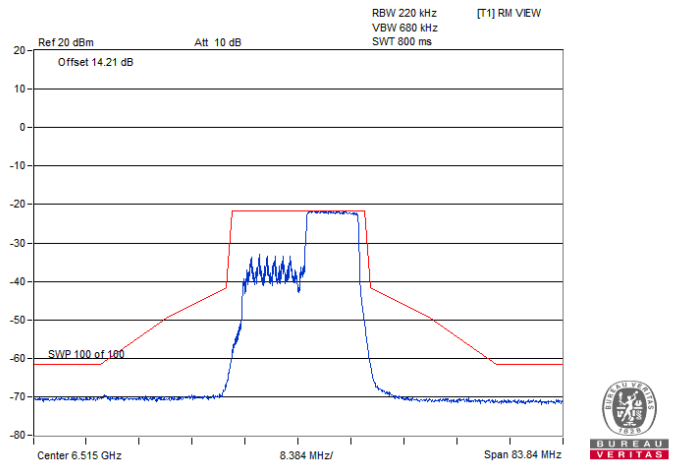


802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 1 : CH 209@38

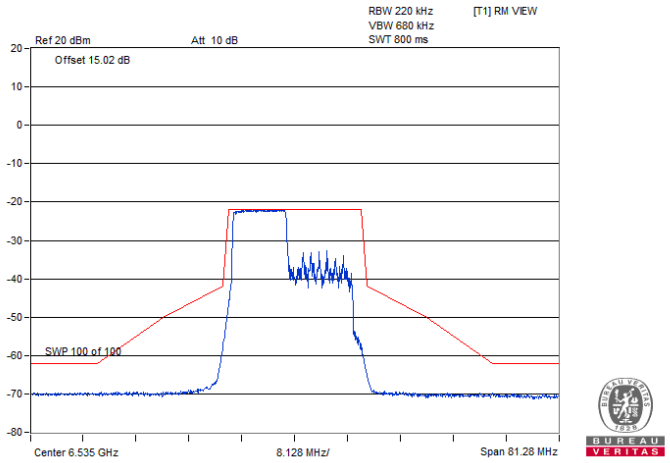


802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 1 : CH 229@40

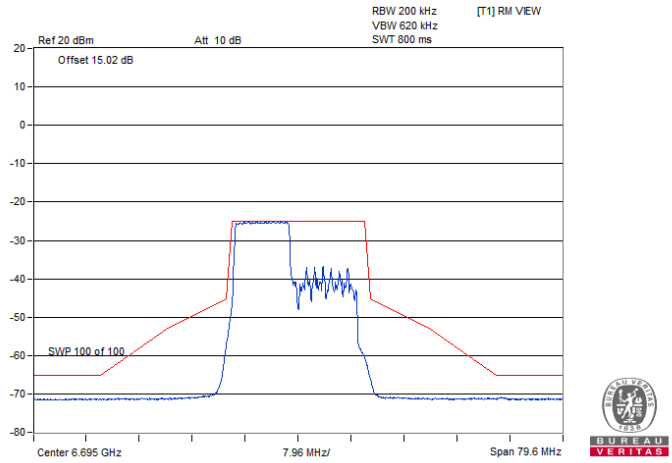
802.11ax (HE20) 106-tone RU CDD-2Tx

Spectrum Plot	
	
802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 0 : CH 1@53	802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 0 : CH 45@53
	
802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 0 : CH 93@54	802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 0 : CH 97@53
	
802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 0 : CH 105@53	802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 0 : CH 113@54

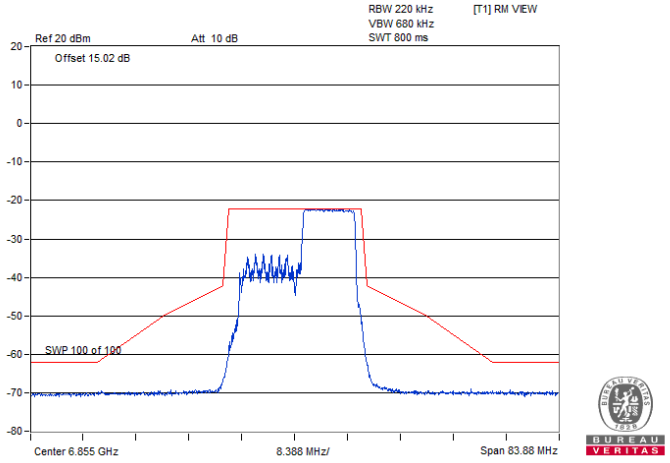
Spectrum Plot



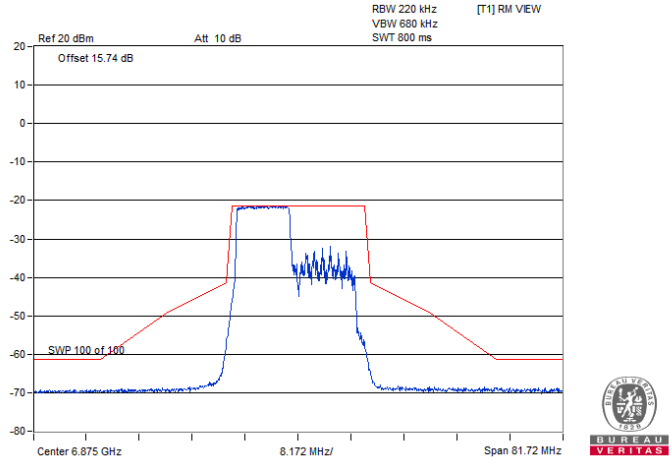
802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 0 : CH 117@53



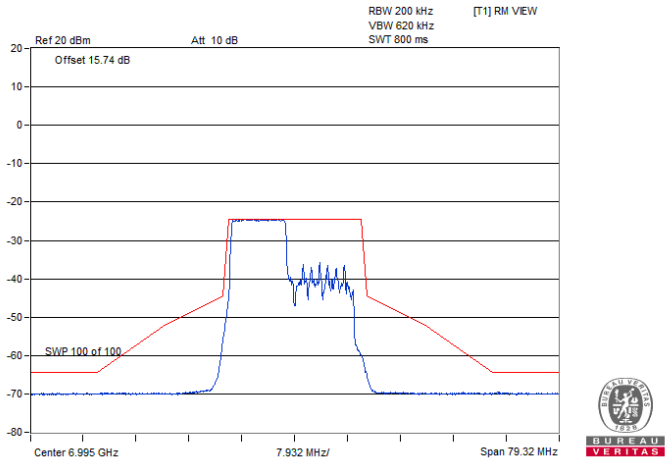
802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 0 : CH 149@53



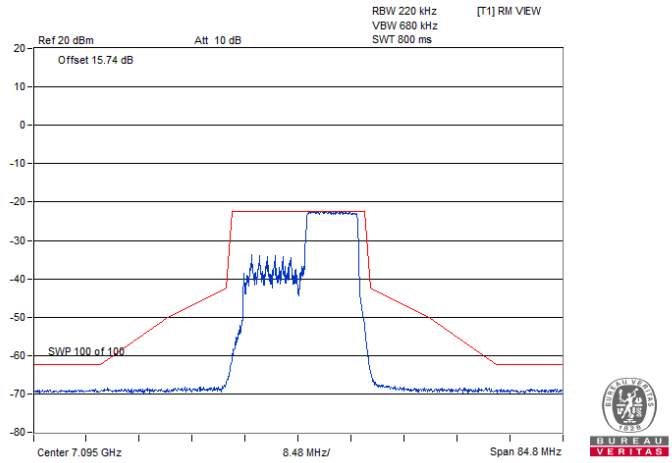
802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 0 : CH 181@54



802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 0 : CH 185@53

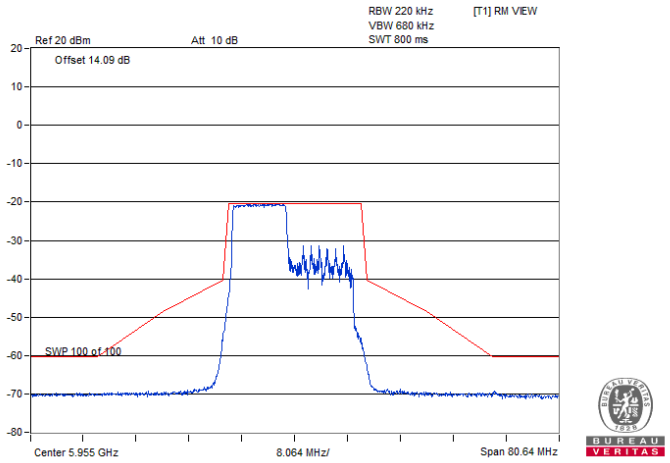


802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 0 : CH 209@53

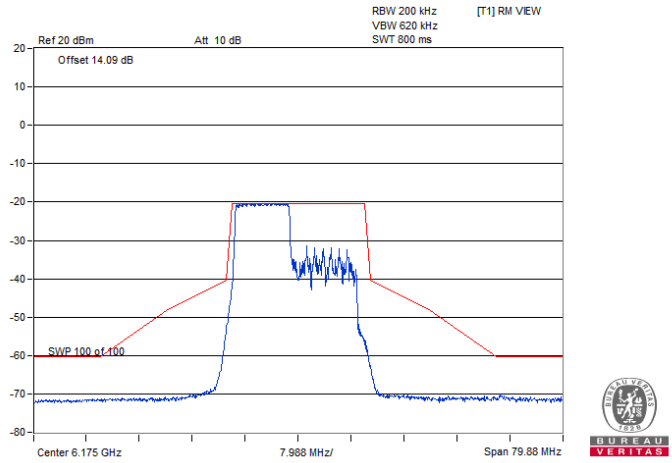


802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 0 : CH 229@54

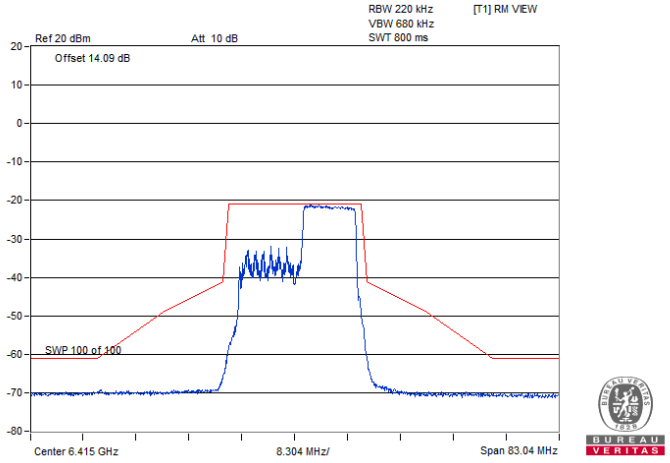
Spectrum Plot



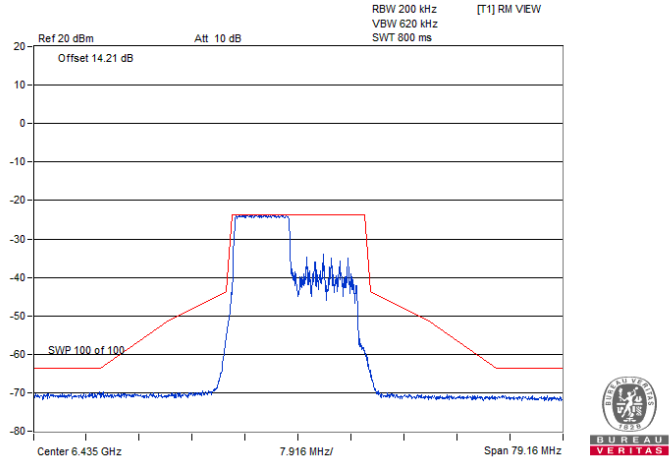
802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 1 : CH 1@53



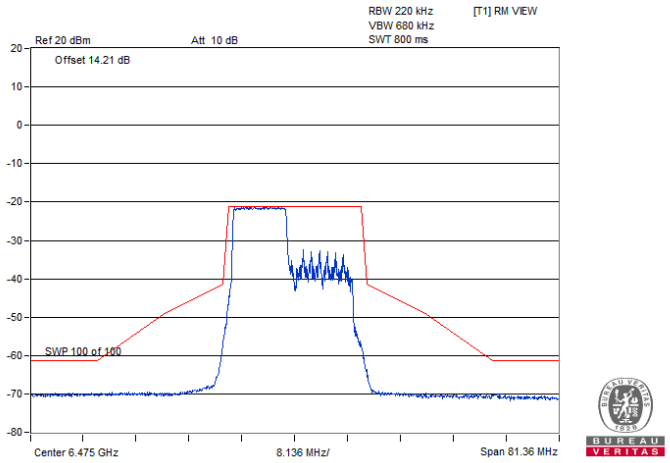
802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 1 : CH 45@53



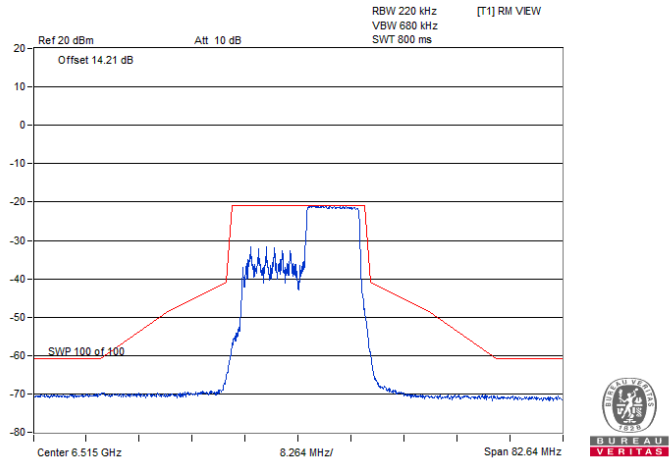
802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 1 : CH 93@54



802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 1 : CH 97@53

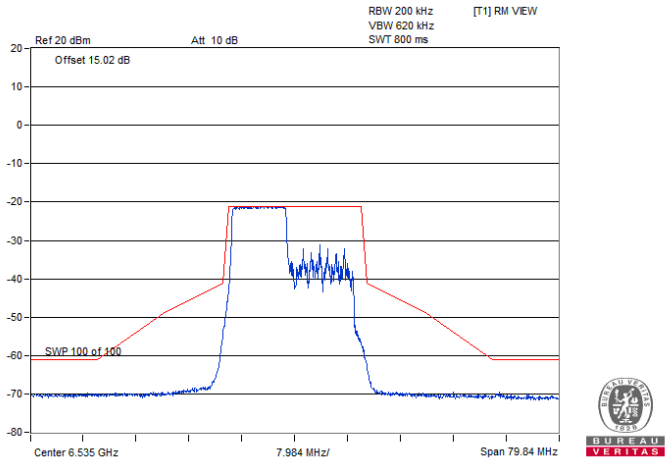


802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 1 : CH 105@53

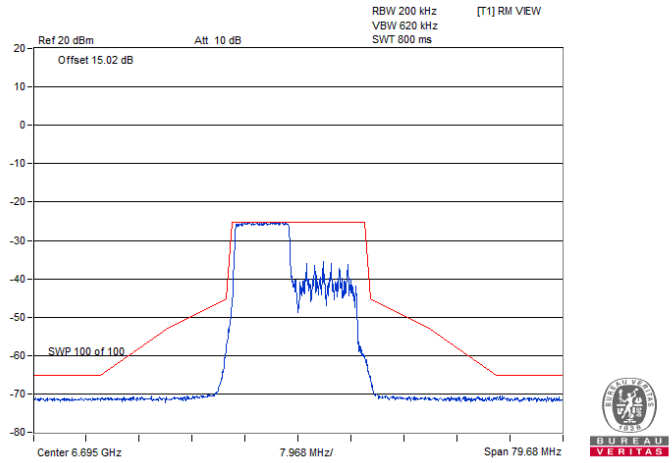


802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 1 : CH 113@54

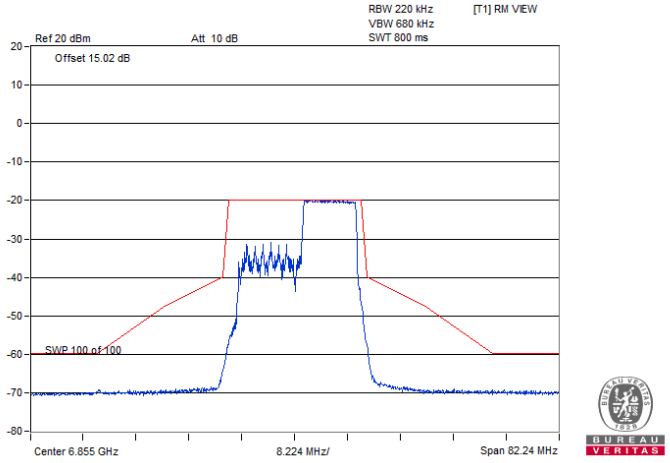
Spectrum Plot



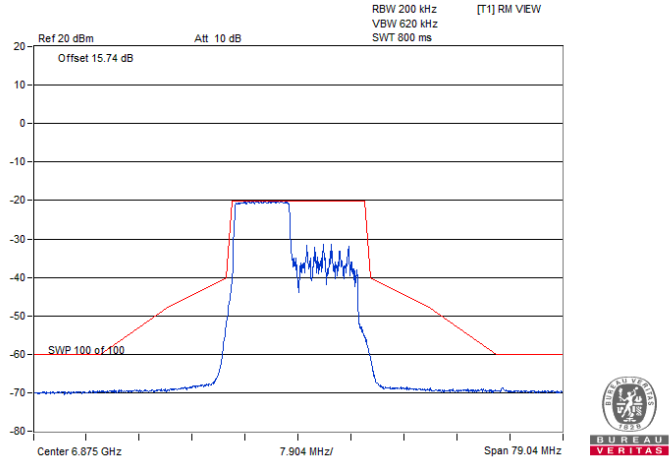
802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 1 : CH 117@53



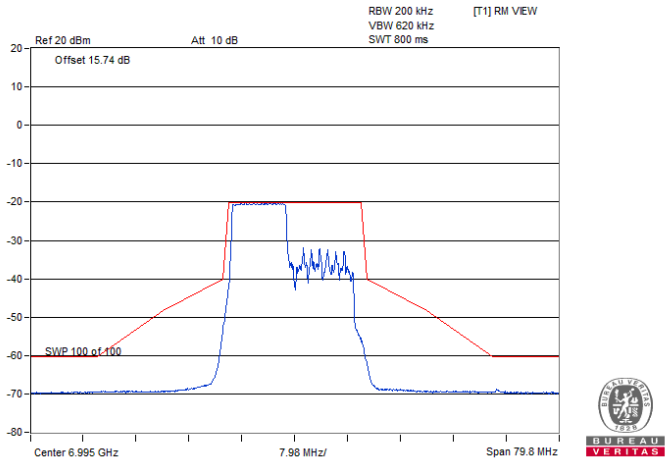
802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 1 : CH 149@53



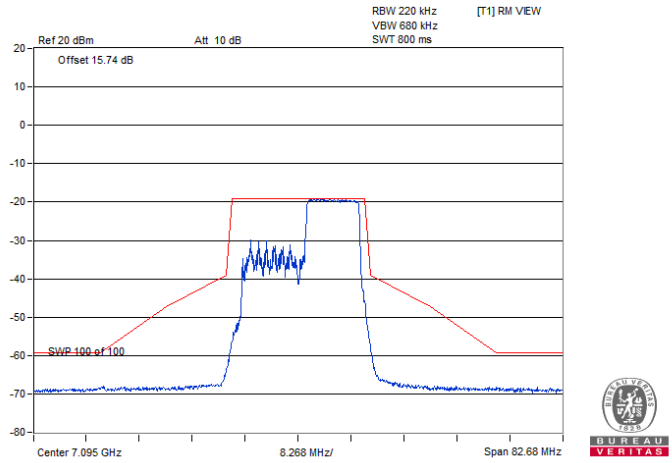
802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 1 : CH 181@54



802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 1 : CH 185@53



802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 1 : CH 209@53



802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 1 : CH 229@54

7.5 Occupied Bandwidth

Input Power:	3.6 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng

802.11a 1Tx

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Maximum Limit (MHz)	Test Result
1	5955	16.56	320	Pass
45	6175	16.68	320	Pass
93	6415	16.62	320	Pass
97	6435	16.68	320	Pass
105	6475	16.68	320	Pass
113	6515	16.74	320	Pass
117	6535	16.74	320	Pass
149	6695	16.74	320	Pass
181	6855	16.62	320	Pass
185	6875	16.68	320	Pass
209	6995	16.68	320	Pass
229	7095	16.68	320	Pass

802.11ax (HE20) 1Tx

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Maximum Limit (MHz)	Test Result
1	5955	19.02	320	Pass
45	6175	16.62	320	Pass
93	6415	19.02	320	Pass
97	6435	19.02	320	Pass
105	6475	18.9	320	Pass
113	6515	18.9	320	Pass
117	6535	18.96	320	Pass
149	6695	18.96	320	Pass
181	6855	19.02	320	Pass
185	6875	19.02	320	Pass
209	6995	18.96	320	Pass
229	7095	19.02	320	Pass

802.11ax (HE40) 1Tx

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Maximum Limit (MHz)	Test Result
3	5965	37.68	320	Pass
43	6165	37.44	320	Pass
91	6405	37.56	320	Pass
99	6445	37.44	320	Pass
107	6485	37.68	320	Pass
115	6525	37.68	320	Pass
123	6565	37.44	320	Pass
155	6725	37.44	320	Pass
179	6845	37.68	320	Pass
187	6885	37.56	320	Pass
211	7005	37.56	320	Pass
227	7085	37.56	320	Pass

802.11ax (HE80) 1Tx

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Maximum Limit (MHz)	Test Result
7	5985	76.8	320	Pass
39	6145	76.8	320	Pass
87	6385	76.8	320	Pass
103	6465	76.8	320	Pass
119	6545	77.04	320	Pass
151	6705	76.8	320	Pass
183	6865	76.8	320	Pass
199	6945	76.8	320	Pass
215	7025	76.56	320	Pass

802.11ax (HE20) 26-tone RU 1Tx

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Maximum Limit (MHz)	Test Result
1	5955	18.42	320	Pass
45	6175	17.04	320	Pass
93	6415	18.54	320	Pass
97	6435	18.42	320	Pass
105	6475	17.1	320	Pass
113	6515	18.18	320	Pass
117	6535	18.3	320	Pass
149	6695	17.04	320	Pass
181	6855	18.18	320	Pass
185	6875	18.42	320	Pass
209	6995	17.16	320	Pass
229	7095	18.48	320	Pass

802.11ax (HE20) 52-tone RU 1Tx

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Maximum Limit (MHz)	Test Result
1	5955	18.24	320	Pass
45	6175	17.22	320	Pass
93	6415	18.36	320	Pass
97	6435	18.3	320	Pass
105	6475	17.16	320	Pass
113	6515	18.48	320	Pass
117	6535	18.3	320	Pass
149	6695	17.22	320	Pass
181	6855	17.88	320	Pass
185	6875	18.36	320	Pass
209	6995	17.28	320	Pass
229	7095	18.48	320	Pass

802.11ax (HE20) 106-tone RU 1Tx

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Maximum Limit (MHz)	Test Result
1	5955	18.18	320	Pass
45	6175	18.24	320	Pass
93	6415	18.24	320	Pass
97	6435	18.3	320	Pass
105	6475	18.06	320	Pass
113	6515	18.18	320	Pass
117	6535	18.24	320	Pass
149	6695	18.18	320	Pass
181	6855	18.3	320	Pass
185	6875	18.12	320	Pass
209	6995	18.12	320	Pass
229	7095	18.24	320	Pass

802.11a CDD-2Tx

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	16.62	16.74	320	Pass
45	6175	16.68	16.62	320	Pass
93	6415	16.68	16.62	320	Pass
97	6435	16.62	16.68	320	Pass
105	6475	16.68	16.74	320	Pass
113	6515	16.62	16.74	320	Pass
117	6535	16.68	16.56	320	Pass
149	6695	16.62	16.74	320	Pass
181	6855	16.74	16.74	320	Pass
185	6875	16.62	16.68	320	Pass
209	6995	16.68	16.62	320	Pass
229	7095	16.68	16.68	320	Pass

802.11ax (HE20) CDD-2Tx

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	18.96	18.96	320	Pass
45	6175	18.96	19.02	320	Pass
93	6415	18.96	19.02	320	Pass
97	6435	19.02	19.02	320	Pass
105	6475	19.02	19.02	320	Pass
113	6515	19.02	19.02	320	Pass
117	6535	19.02	19.02	320	Pass
149	6695	18.96	19.02	320	Pass
181	6855	18.96	19.08	320	Pass
185	6875	19.02	19.02	320	Pass
209	6995	19.02	19.02	320	Pass
229	7095	18.90	18.96	320	Pass

802.11ax (HE40) CDD-2Tx

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	5965	37.56	37.56	320	Pass
43	6165	37.56	37.68	320	Pass
91	6405	37.56	37.56	320	Pass
99	6445	37.68	37.44	320	Pass
107	6485	37.56	37.44	320	Pass
115	6525	37.68	37.56	320	Pass
123	6565	37.44	37.68	320	Pass
155	6725	37.68	37.68	320	Pass
179	6845	37.56	37.68	320	Pass
187	6885	37.68	37.56	320	Pass
211	7005	37.68	37.68	320	Pass
227	7085	37.44	37.56	320	Pass

802.11ax (HE80) CDD-2Tx

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
7	5985	76.80	77.04	320	Pass
39	6145	76.56	76.80	320	Pass
87	6385	76.80	76.56	320	Pass
103	6465	76.80	77.04	320	Pass
119	6545	76.80	76.80	320	Pass
151	6705	76.80	76.80	320	Pass
183	6865	76.80	76.80	320	Pass
199	6945	77.04	76.80	320	Pass
215	7025	77.28	77.04	320	Pass

802.11ax (HE20) 26-tone RU CDD-2Tx

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	18.48	18.48	320	Pass
45	6175	16.80	17.16	320	Pass
93	6415	18.66	18.60	320	Pass
97	6435	18.54	18.48	320	Pass
105	6475	17.34	17.22	320	Pass
113	6515	18.66	18.48	320	Pass
117	6535	18.54	18.36	320	Pass
149	6695	17.28	17.16	320	Pass
181	6855	18.54	18.36	320	Pass
185	6875	18.54	18.48	320	Pass
209	6995	17.40	17.16	320	Pass
229	7095	18.66	18.54	320	Pass

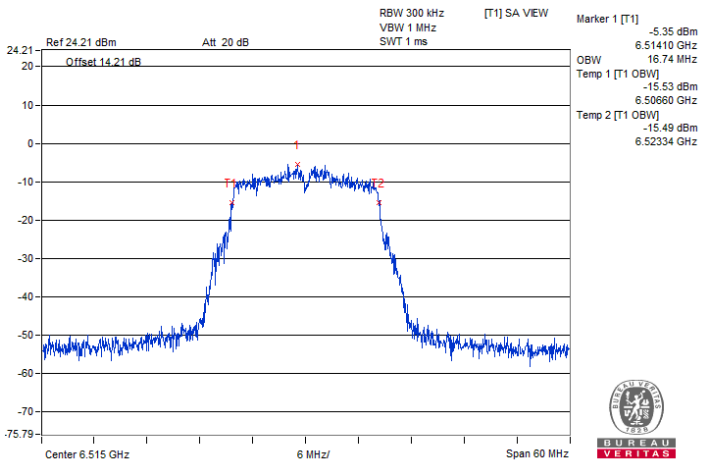
802.11ax (HE20) 52-tone RU CDD-2Tx

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	18.30	18.30	320	Pass
45	6175	17.16	17.16	320	Pass
93	6415	18.30	18.30	320	Pass
97	6435	18.18	18.18	320	Pass
105	6475	17.04	17.22	320	Pass
113	6515	18.36	18.42	320	Pass
117	6535	18.24	18.24	320	Pass
149	6695	17.10	17.16	320	Pass
181	6855	18.30	18.30	320	Pass
185	6875	18.24	18.30	320	Pass
209	6995	17.10	17.22	320	Pass
229	7095	18.36	18.42	320	Pass

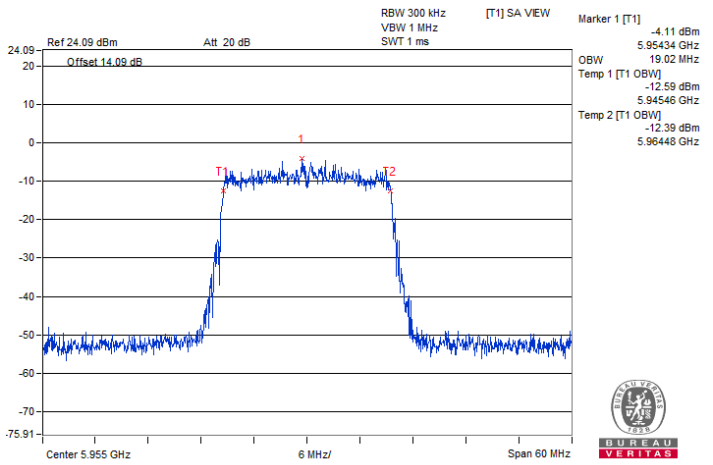
802.11ax (HE20) 106-tone RU CDD-2Tx

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	18.12	18.18	320	Pass
45	6175	18.24	18.24	320	Pass
93	6415	18.36	18.36	320	Pass
97	6435	18.06	18.06	320	Pass
105	6475	18.24	18.30	320	Pass
113	6515	18.12	18.36	320	Pass
117	6535	18.24	18.24	320	Pass
149	6695	18.18	18.30	320	Pass
181	6855	18.30	18.18	320	Pass
185	6875	18.30	18.24	320	Pass
209	6995	18.24	18.24	320	Pass
229	7095	18.42	18.42	320	Pass

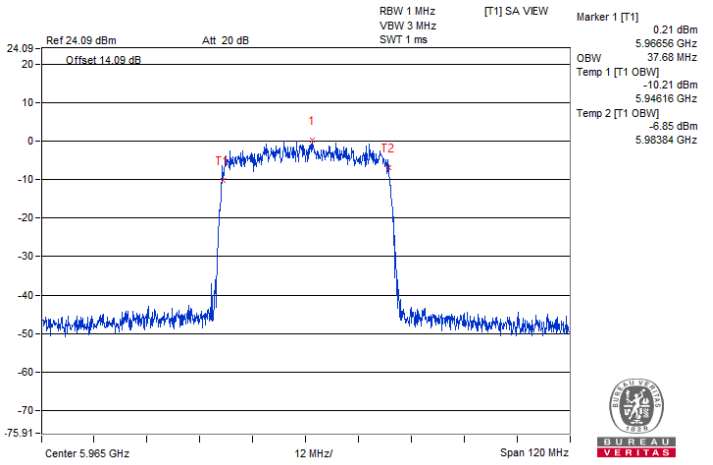
Spectrum Plot of Maximum Value



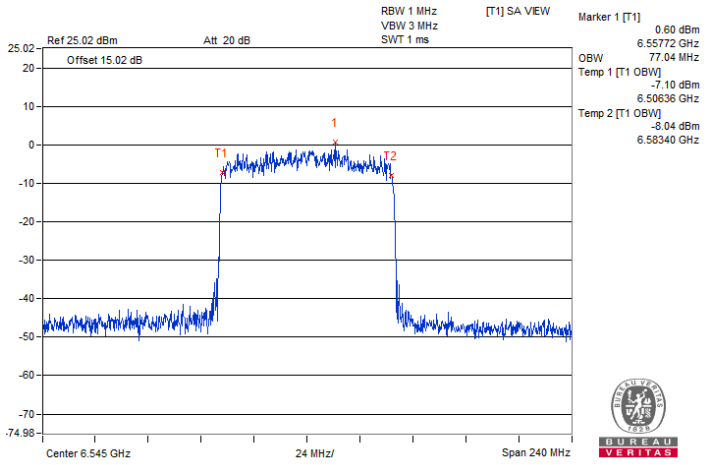
802.11a 1Tx / Chain 0 : CH 113



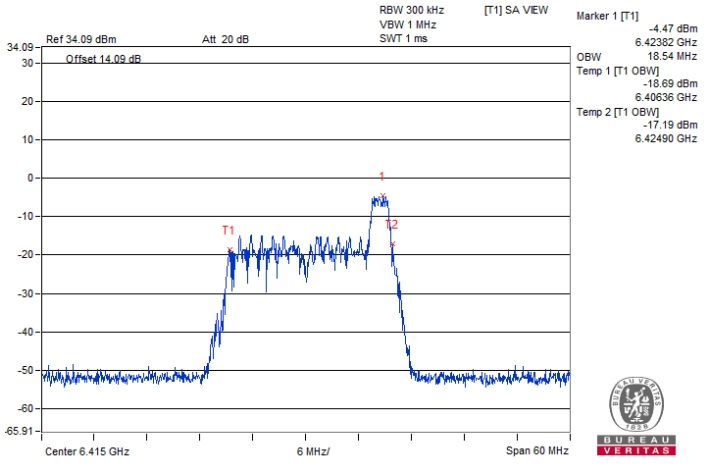
802.11ax (HE20) 1Tx / Chain 0 : CH 1



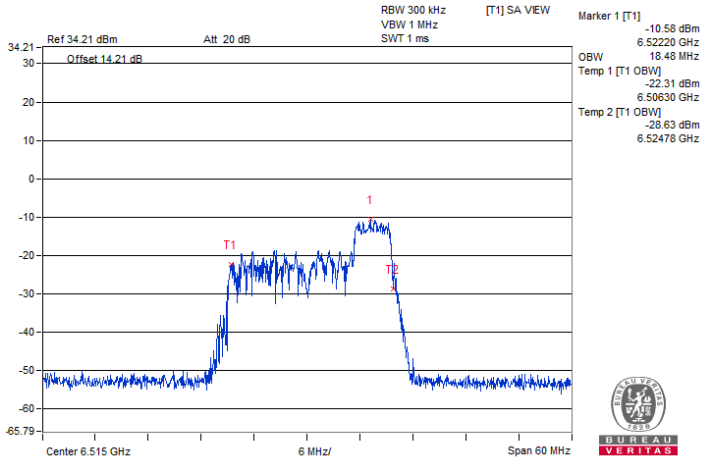
802.11ax (HE40) 1Tx / Chain 0 : CH 3



802.11ax (HE80) 1Tx / Chain 0 : CH 119

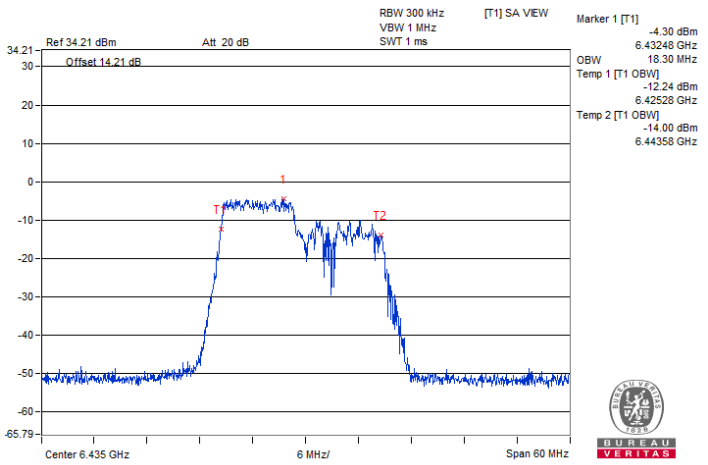


802.11ax (HE20) 26-tone RU 1Tx / Chain 0 : CH 93@8

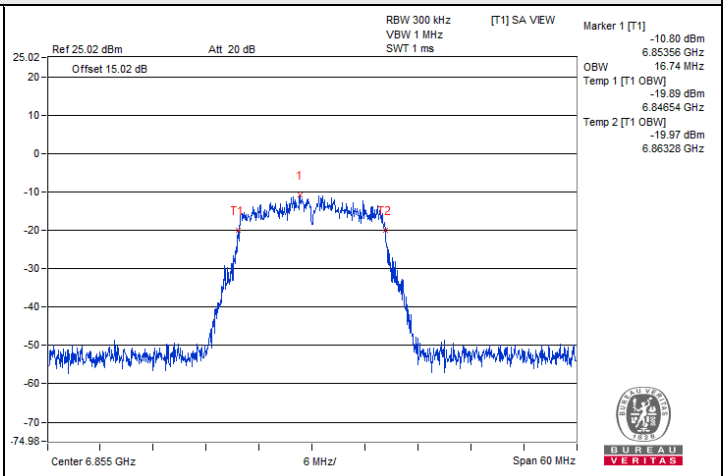


802.11ax (HE20) 52-tone RU 1Tx / Chain 0 : CH 113@40

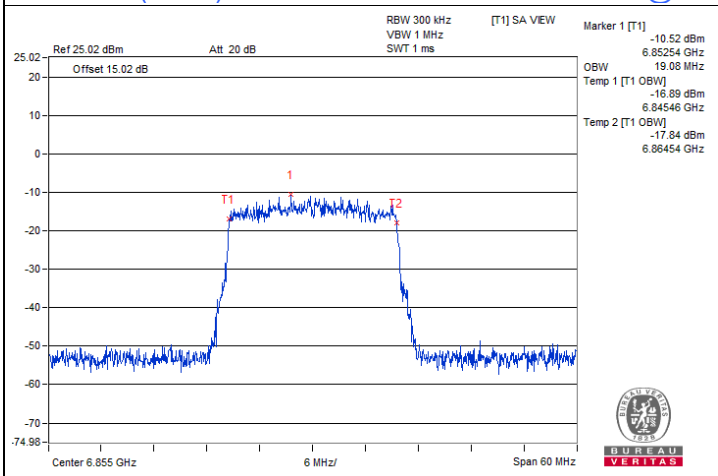
Spectrum Plot of Maximum Value



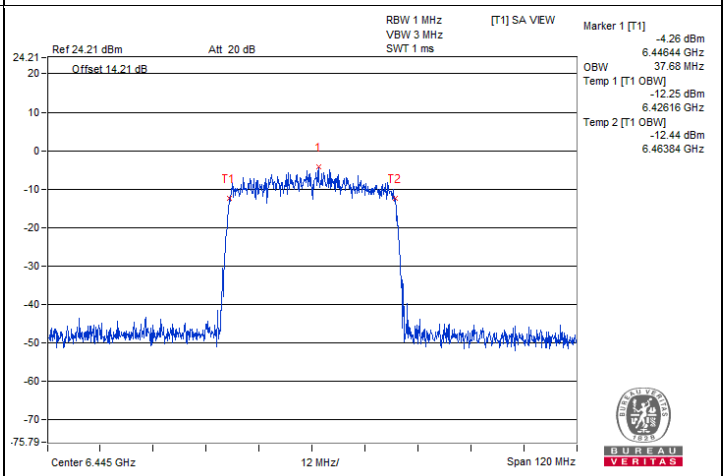
802.11ax (HE20) 106-tone RU 1Tx / Chain 0 : CH 97@53



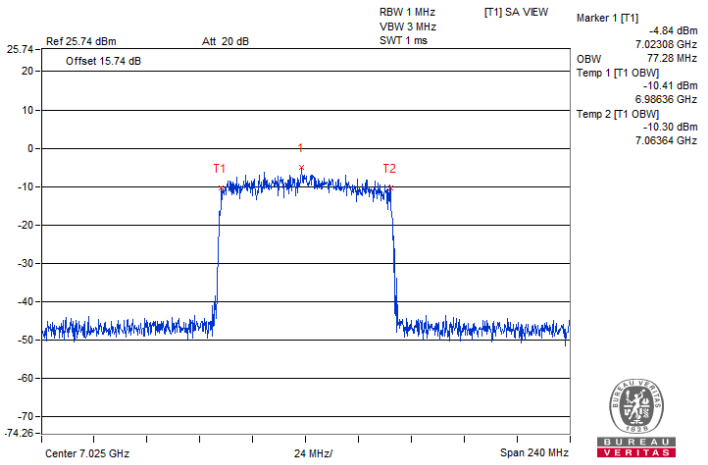
802.11a CDD-2Tx / Chain 0 : CH 181



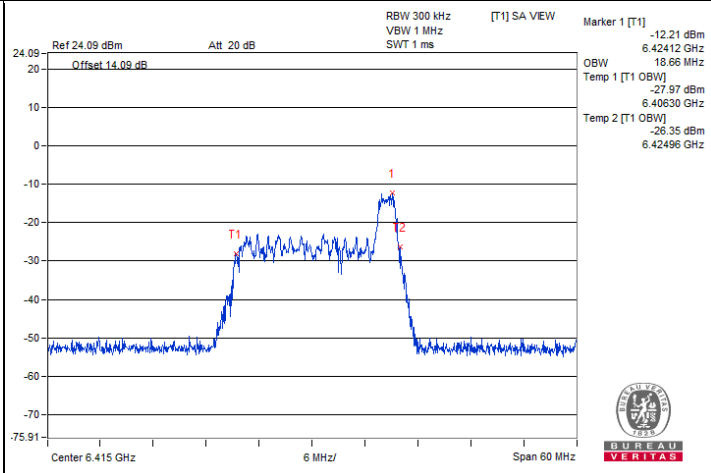
802.11ax (HE20) CDD-2Tx / Chain 1 : CH 181



802.11ax (HE40) CDD-2Tx / Chain 0 : CH 99

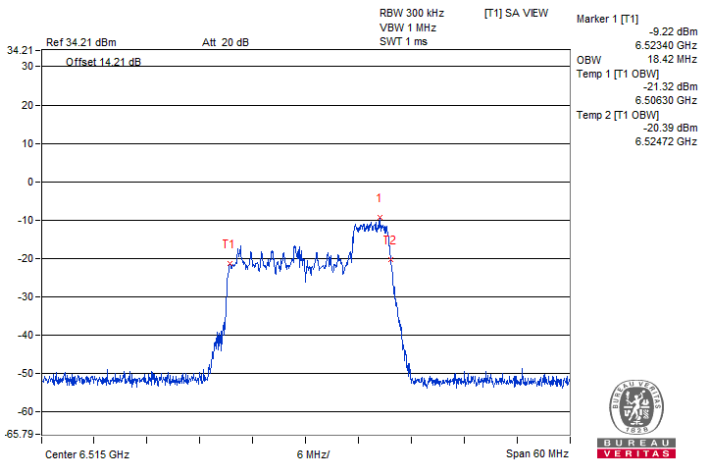


802.11ax (HE80) CDD-2Tx / Chain 0 : CH 215

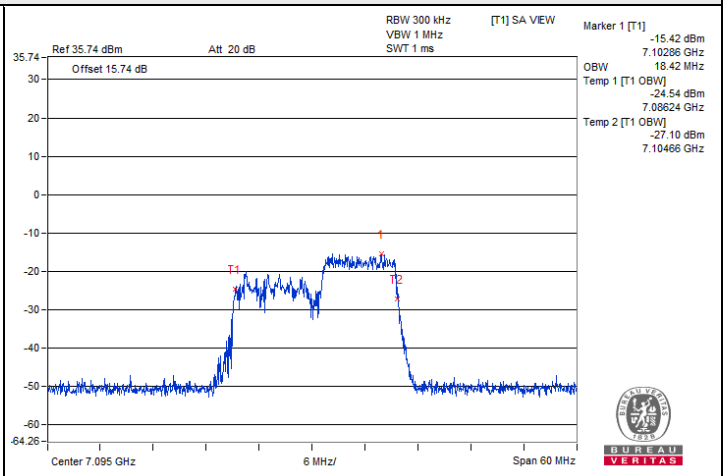


802.11ax (HE20) 26-tone RU CDD-2Tx / Chain 0 : CH 93@8

Spectrum Plot of Maximum Value



802.11ax (HE20) 52-tone RU CDD-2Tx / Chain 1 : CH 113@40



802.11ax (HE20) 106-tone RU CDD-2Tx / Chain 0 : CH 229@54

7.6 Frequency Stability

Input Power:	3.6 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng

Frequency Stability Versus Temperature									
Operating Frequency: 5955 MHz									
Temp. (℃)	Power Supply (Vdc)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
50	3.6	5955.0147	Pass	5955.0134	Pass	5955.0157	Pass	5955.0146	Pass
40	3.6	5954.999	Pass	5955.0001	Pass	5954.9982	Pass	5954.9981	Pass
30	3.6	5954.9881	Pass	5954.9912	Pass	5954.9878	Pass	5954.9893	Pass
20	3.6	5955.0012	Pass	5955.0032	Pass	5955.0016	Pass	5955.002	Pass
10	3.6	5955.0205	Pass	5955.0202	Pass	5955.0195	Pass	5955.0216	Pass
0	3.6	5955.0119	Pass	5955.0145	Pass	5955.0113	Pass	5955.012	Pass
-10	3.6	5954.9754	Pass	5954.9757	Pass	5954.9774	Pass	5954.9739	Pass
-20	3.6	5954.9758	Pass	5954.9769	Pass	5954.9763	Pass	5954.9797	Pass
-30	3.6	5954.986	Pass	5954.9823	Pass	5954.9845	Pass	5954.9839	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5955 MHz									
Temp. (℃)	Power Supply (Vdc)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
20	4.14	5954.9917	Pass	5954.9927	Pass	5954.9928	Pass	5954.9926	Pass
	3.6	5955.0012	Pass	5955.0032	Pass	5955.0016	Pass	5955.002	Pass
	3.06	5955.0119	Pass	5955.0111	Pass	5955.0119	Pass	5955.0094	Pass

7.7 Contention-based Protocol

Input Power:	3.6 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Tobey Chen

Companion Device Information			
Product	**Brand**	**Model No.**	**Software/Firmware Version**
Nighthawk AXE11000 Tri-Band WiFi 6E Router	NETGEAR	RAXE500	V1.0.10.82_2.0.39

For U-NII-5

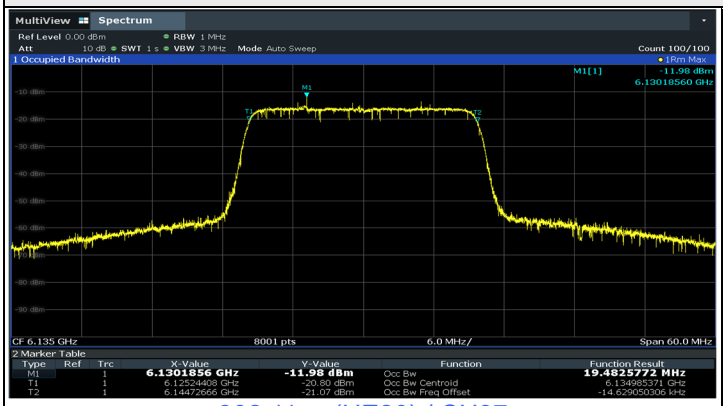
Contention Based Protocol Measurement										
Operation Mode	**Channel Bandwidth (MHz)**	**Channel Number**	**Channel Freq. (MHz)**	**Injected Signal (AWGN)**		**Antenna Gain (dBi)**	**Path Loss (dB) (Note 3)**	**Adjusted Power (dBm)**	**Detection Limit**	**EUT Tx Status**
				Freq. (MHz)	**Power (dBm)**					
802.11ax	20	37	6135	6135	-66.08	2.8	0	-68.88	-62	OFF
					-66.58	2.8	0	-69.38	-62	Minimal
					-79.2	2.8	0	-82	-62	ON
	80	39	6145	6110	-66.09	2.8	0	-68.89	-62	OFF
					-66.59	2.8	0	-69.39	-62	Minimal
					-79.2	2.8	0	-82	-62	ON
				6145	-64.09	2.8	0	-66.89	-62	OFF
					-64.59	2.8	0	-67.39	-62	Minimal
					-79.2	2.8	0	-82	-62	ON
				6180	-65.12	2.8	0	-67.92	-62	OFF
					-65.62	2.8	0	-68.42	-62	Minimal
					-79.2	2.8	0	-82	-62	ON

Notes:

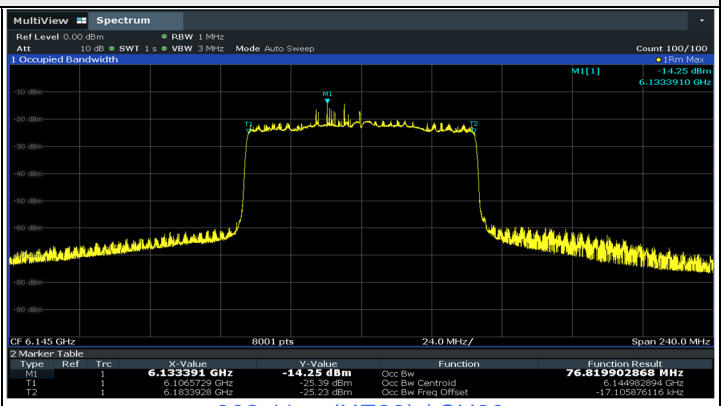
1. After investigation (consider antenna gain and path loss) , the one representative port (Chain 0) was measured and presented in the report.
2. Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
3. Antenna gain values include all the applicable path losses.

Contention Based Protocol Detection Probability															
Operation Mode	**Channel Bandwidth (MHz)**	**AWGN Signal Freq. (MHz)**	**#01**	**#02**	**#03**	**#04**	**#05**	**#06**	**#07**	**#08**	**#09**	**#10**	**Detection Probability**	**Detection Limit**	**Test Result**
802.11ax	20	6135	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
	80	6110	v	v	v	v	v	v	v	x	v	v	90%	90%	Pass
		6145	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6180	v	v	v	x	v	v	v	v	v	v	90%	90%	Pass

Plots of EUT Tx waveform

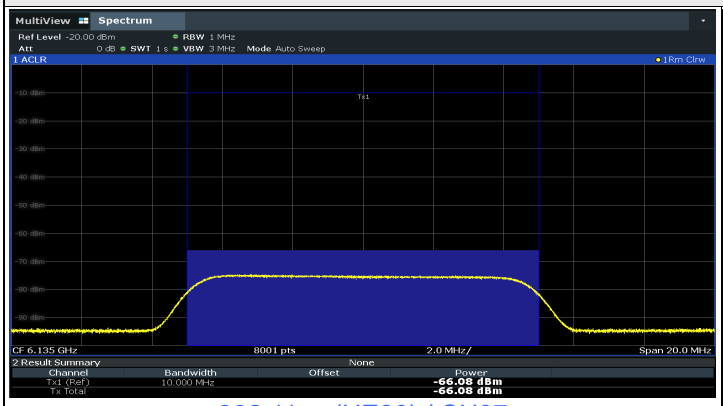


802.11ax (HE20) / CH37

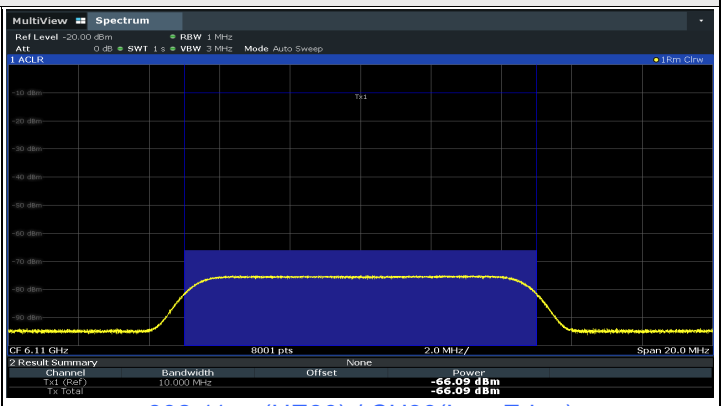


802.11ax (HE80) / CH39

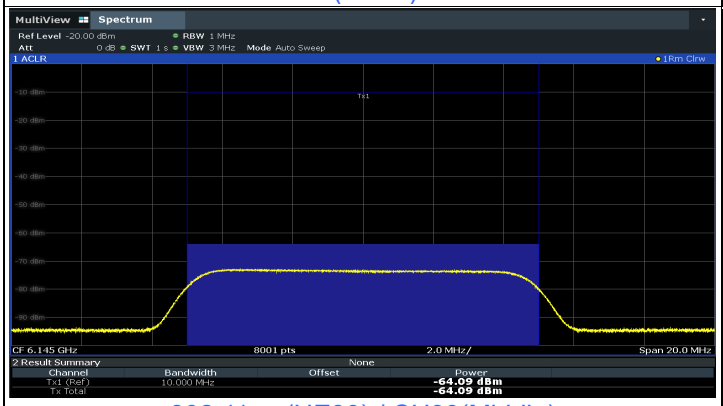
Plots of Injected signal (AWGN) level



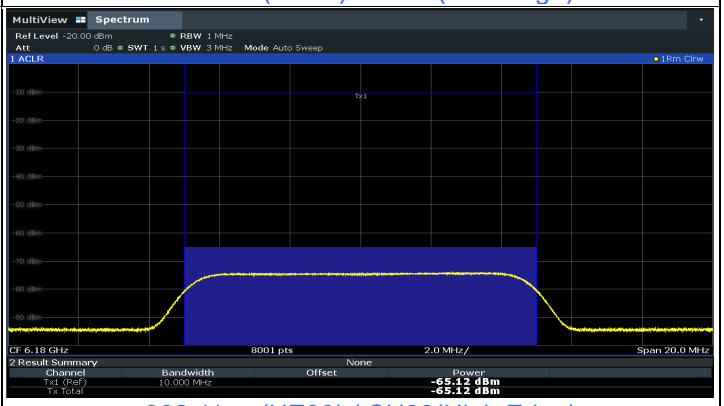
802.11ax (HE20) / CH37



802.11ax (HE80) / CH39(Low Edge)



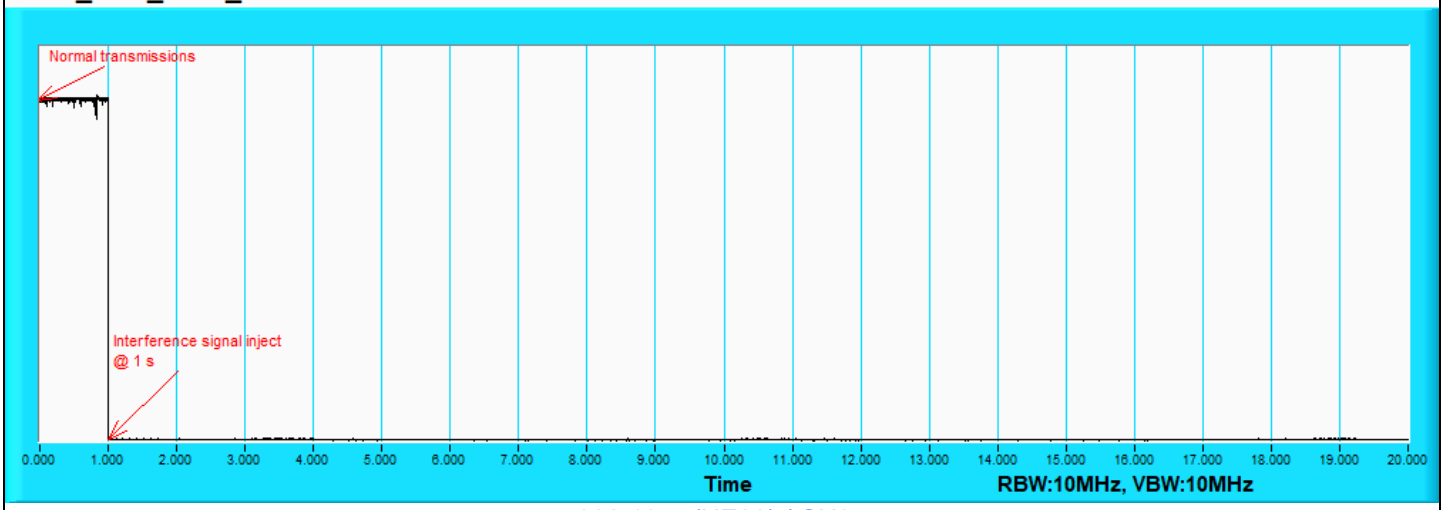
802.11ax (HE80) / CH39(Middle)



802.11ax (HE80) / CH39(High Edge)

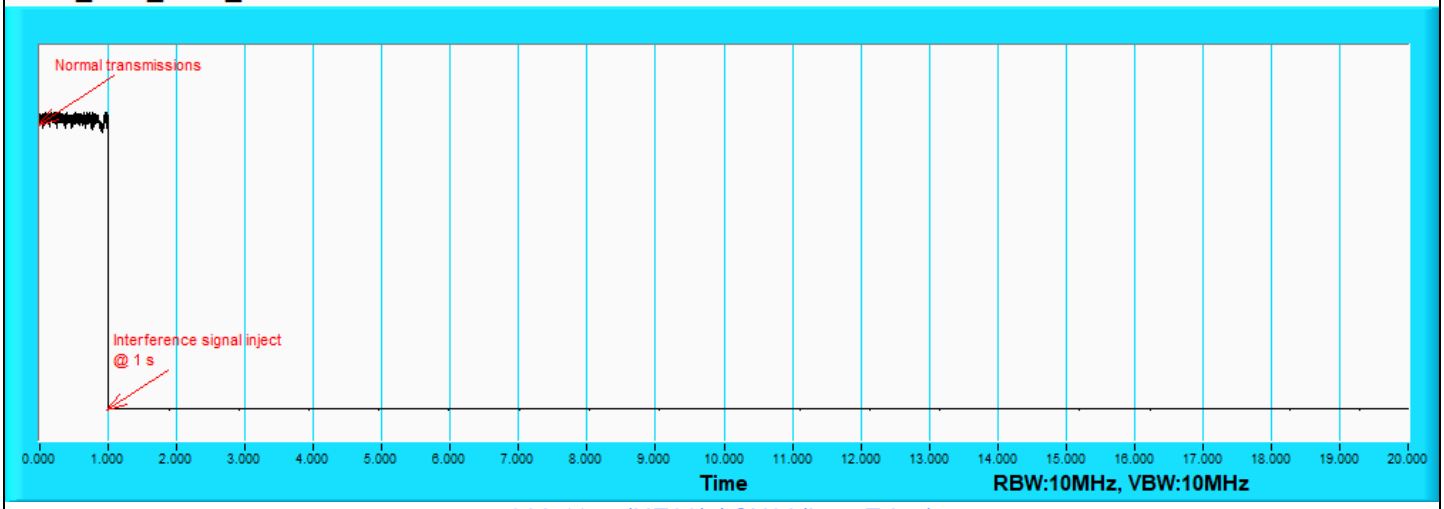
Plots of EUT ceased transmission in the time domain

UNII5_20M_6135_Test Result



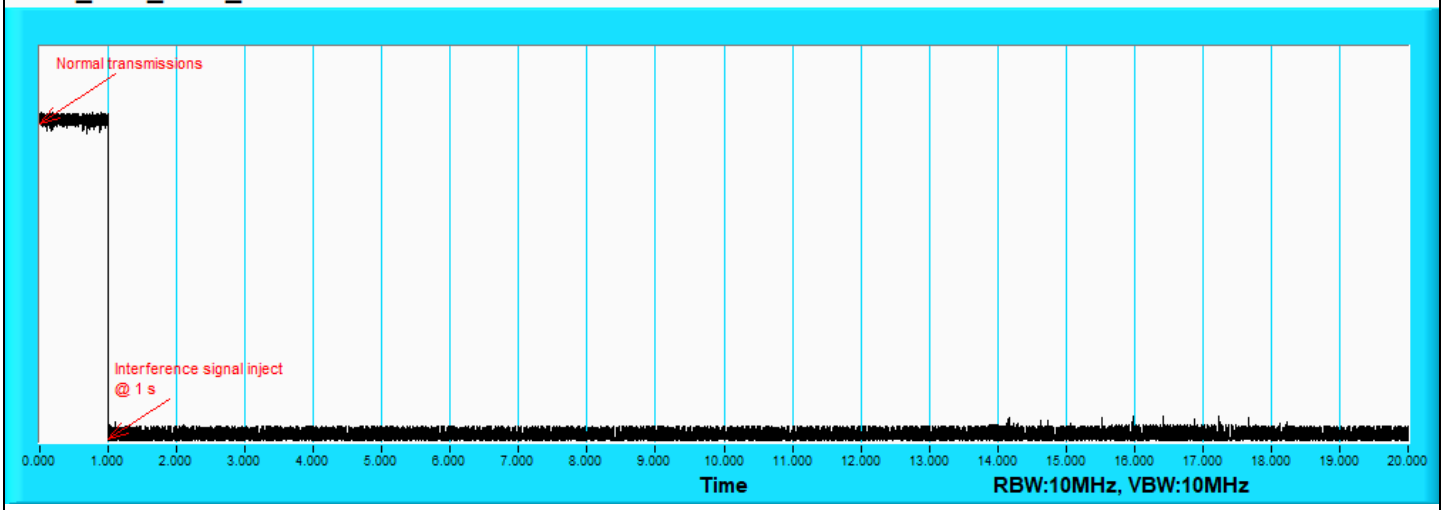
802.11ax (HE20) / CH37

UNII5_80M_6110_Test Result



802.11ax (HE80) / CH39(Low Edge)

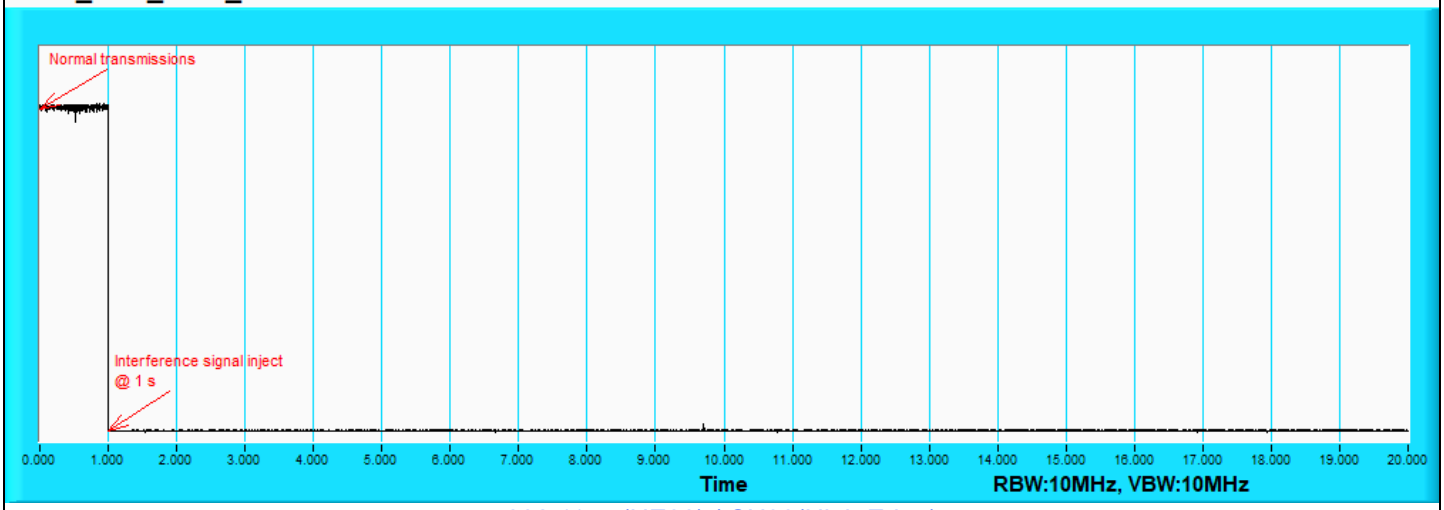
UNII5_80M_6145_Test Result



802.11ax (HE80) / CH39(Middle)

Plots of EUT ceased transmission in the time domain

UNII5_80M_6180_Test Result



802.11ax (HE80) / CH39(High Edge)

For U-NII-6

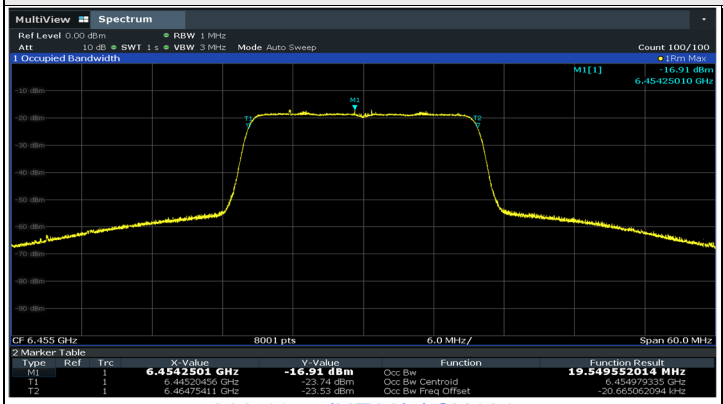
Contention Based Protocol Measurement										
Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB) (Note 3)	Adjusted Power (dBm)	Detection Limit	EUT Tx Status
				Freq. (MHz)	Power (dBm)					
802.11ax	20	101	6455	6455	-65.07	4.78	0	-69.85	-62	OFF
					-65.57	4.78	0	-70.35	-62	Minimal
					-77.22	4.78	0	-82	-62	ON
	80	103	6465	6430	-62.12	4.78	0	-66.9	-62	OFF
					-62.62	4.78	0	-67.4	-62	Minimal
					-77.22	4.78	0	-82	-62	ON
				6465	-61.09	4.78	0	-65.87	-62	OFF
					-61.59	4.78	0	-66.37	-62	Minimal
					-77.22	4.78	0	-82	-62	ON
				6500	-62.08	4.78	0	-66.86	-62	OFF
					-62.58	4.78	0	-67.36	-62	Minimal
					-77.22	4.78	0	-82	-62	ON

Notes:

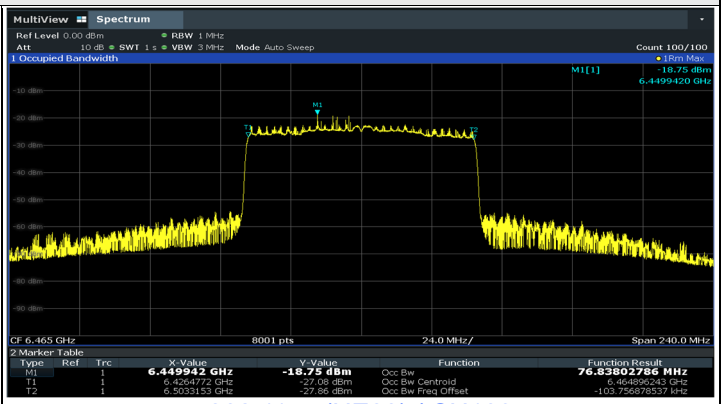
1. After investigation (consider antenna gain and path loss) , the one representative port (Chain 1) was measured and presented in the report.
2. Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
3. Antenna gain values include all the applicable path losses.

Contention Based Protocol Detection Probability														
Operation Mode	Channel Bandwidth (MHz)	AWGN Signal Freq. (MHz)	#01	#02	#03	#04	#05	#06	#07	#08	#09	#10	Detection Probability	Detection Limit	Test Result
802.11ax	20	6455	v	v	v	v	v	v	x	v	v	v	90%	90%	Pass
	80	6430	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6465	v	v	v	v	v	x	v	v	v	v	90%	90%	Pass
		6500	v	v	v	v	v	v	v	v	x	v	90%	90%	Pass

Plots of EUT Tx waveform

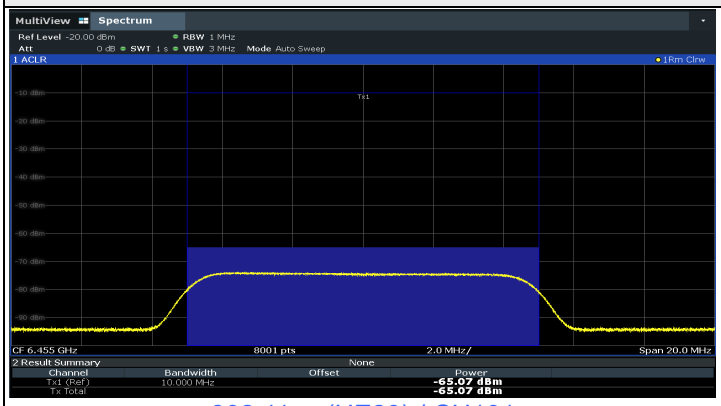


802.11ax (HE20) / CH101

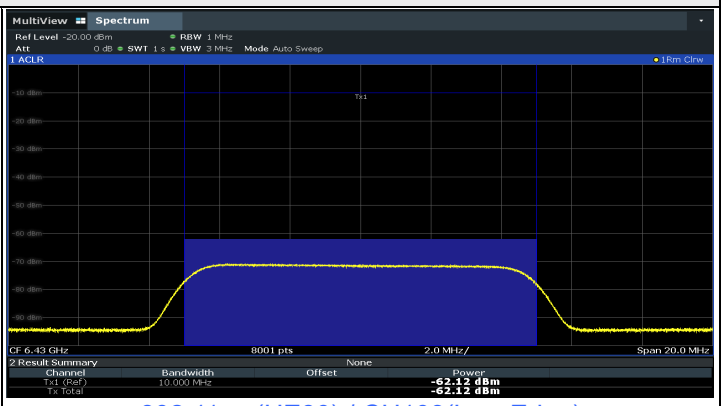


802.11ax (HE80) / CH103

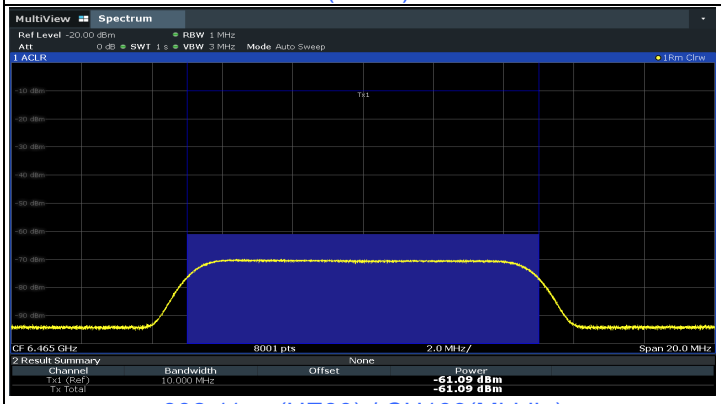
Plots of Injected signal (AWGN) level



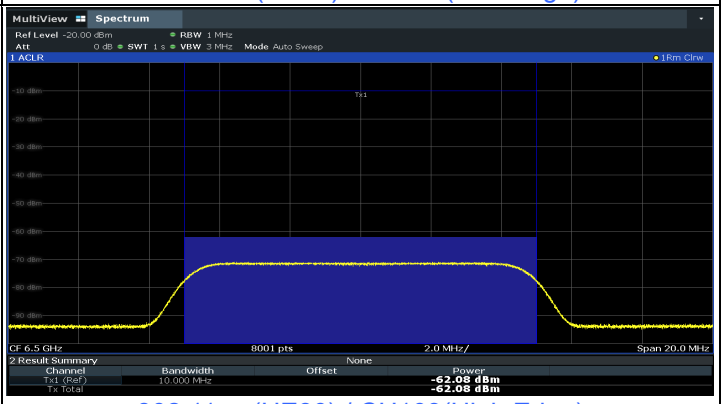
802.11ax (HE20) / CH101



802.11ax (HE80) / CH103(Low Edge)

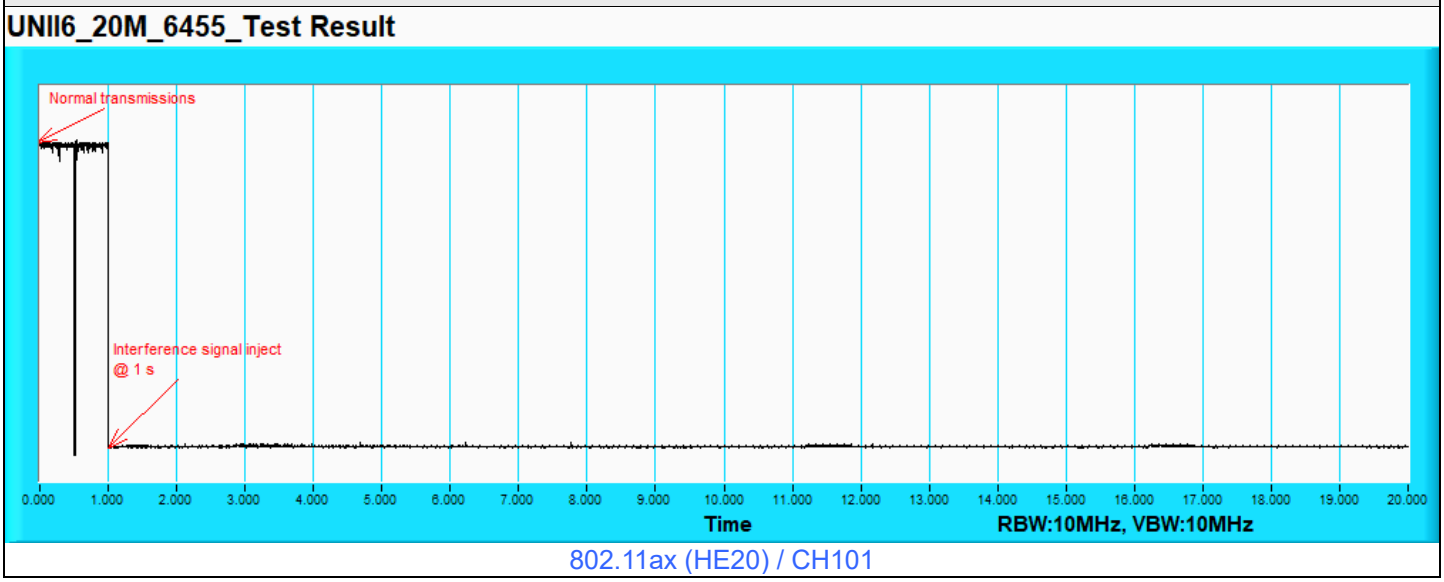


802.11ax (HE80) / CH103(Middle)



802.11ax (HE80) / CH103(High Edge)

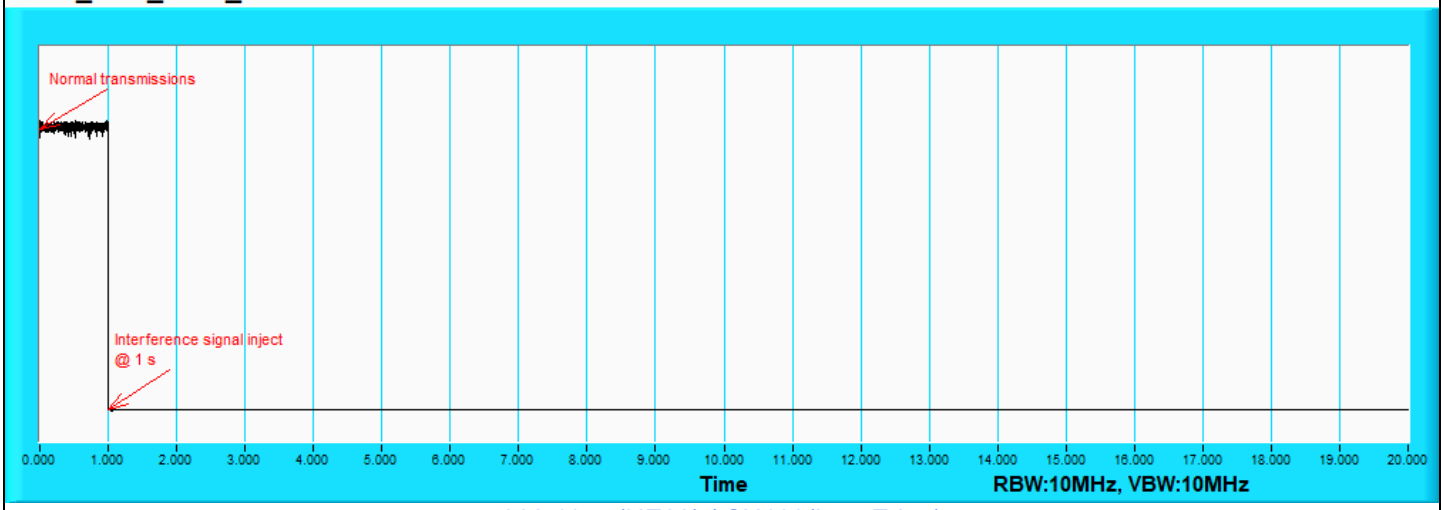
Plots of EUT ceased transmission in the time domain



802.11ax (HE20) / CH101

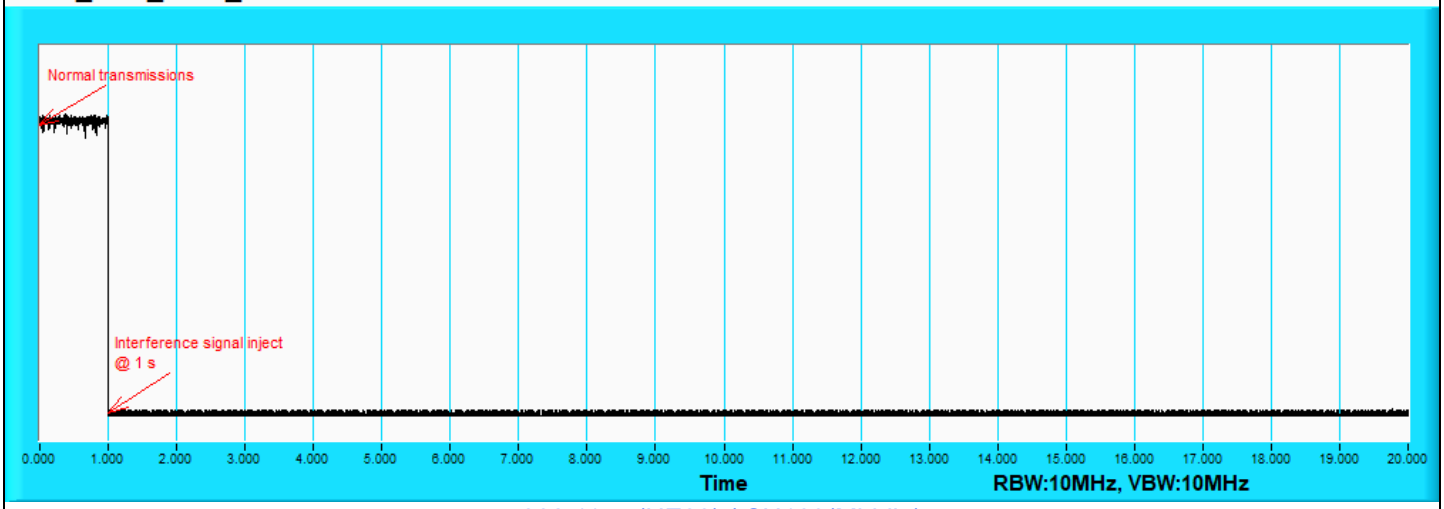
Plots of EUT ceased transmission in the time domain

UNII6_80M_6430_Test Result



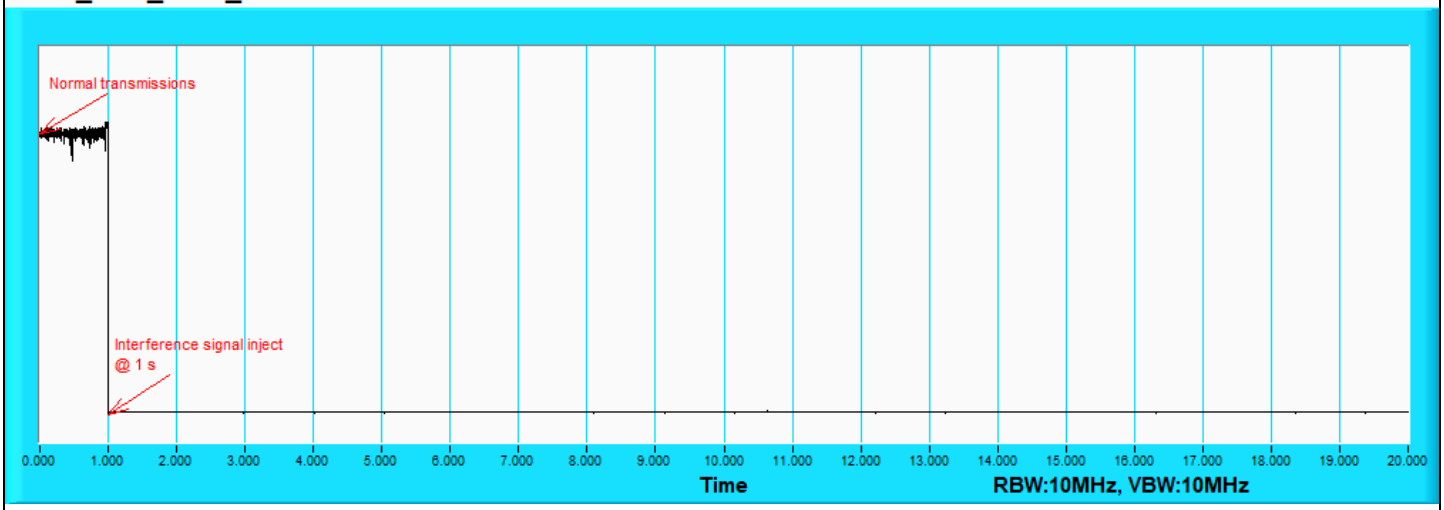
802.11ax (HE80) / CH103(Low Edge)

UNII6_80M_6465_Test Result



802.11ax (HE80) / CH103(Middle)

UNII6_80M_6500_Test Result



802.11ax (HE80) / CH103(High Edge)

For U-NII-7

Contention Based Protocol Measurement										
Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB) (Note 3)	Adjusted Power (dBm)	Detection Limit	EUT Tx Status
				Freq. (MHz)	Power (dBm)					
802.11ax	20	149	6695	6695	-63.11	3.46	0	-66.57	-62	OFF
					-63.61	3.46	0	-67.07	-62	Minimal
					-78.54	3.46	0	-82	-62	ON
	80	151	6705	6670	-63.07	3.46	0	-66.53	-62	OFF
					-63.57	3.46	0	-67.03	-62	Minimal
					-78.54	3.46	0	-82	-62	ON
				6705	-63.12	3.46	0	-66.58	-62	OFF
					-63.62	3.46	0	-67.08	-62	Minimal
					-78.54	3.46	0	-82	-62	ON
				6740	-66.52	3.46	0	-69.98	-62	OFF
					-67.02	3.46	0	-70.48	-62	Minimal
					-78.54	3.46	0	-82	-62	ON

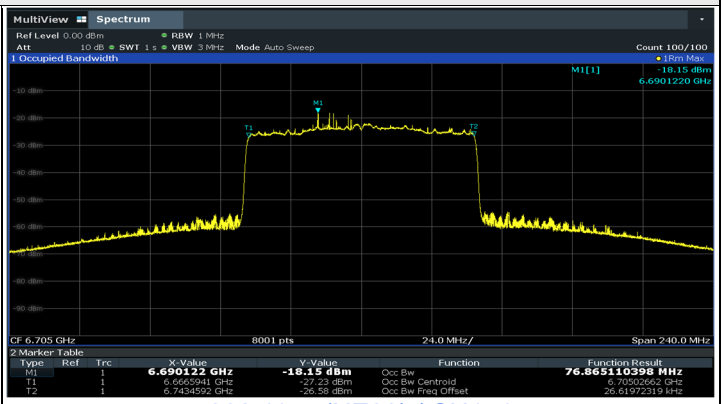
Notes:

1. After investigation (consider antenna gain and path loss) , the one representative port (Chain 1) was measured and presented in the report.
2. Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
3. Antenna gain values include all the applicable path losses.

Contention Based Protocol Detection Probability														
Operation Mode	Channel Bandwidth (MHz)	AWGN Signal Freq. (MHz)	#01	#02	#03	#04	#05	#06	#07	#08	#09	#10	Detection Probability	Detection Limit	Test Result
802.11ax	20	6695	v	v	v	v	v	v	v	v	x	v	90%	90%	Pass
	80	6670	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6705	v	v	v	v	v	v	v	x	v	v	90%	90%	Pass
		6740	v	v	v	v	v	x	v	v	v	v	90%	90%	Pass

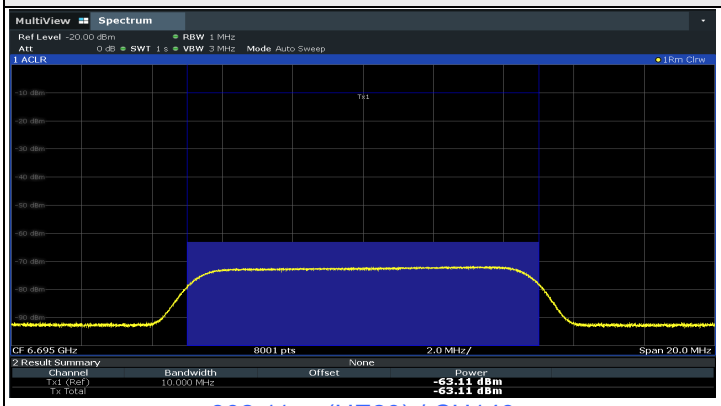
Plots of EUT Tx waveform

802.11ax (HE20) / CH149

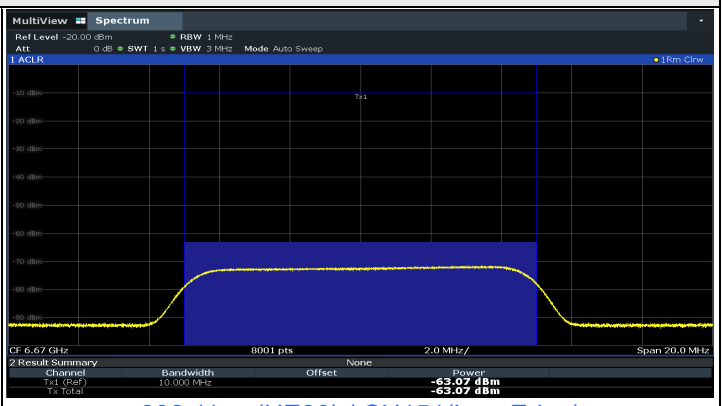


802.11ax (HE80) / CH151

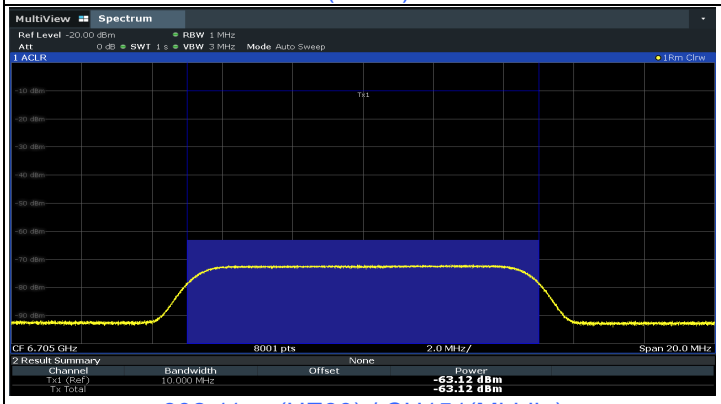
Plots of Injected signal (AWGN) level



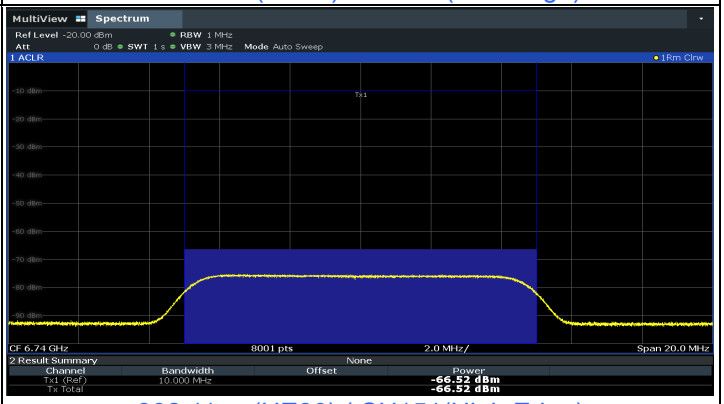
802.11ax (HE20) / CH149



802.11ax (HE80) / CH151(Low Edge)

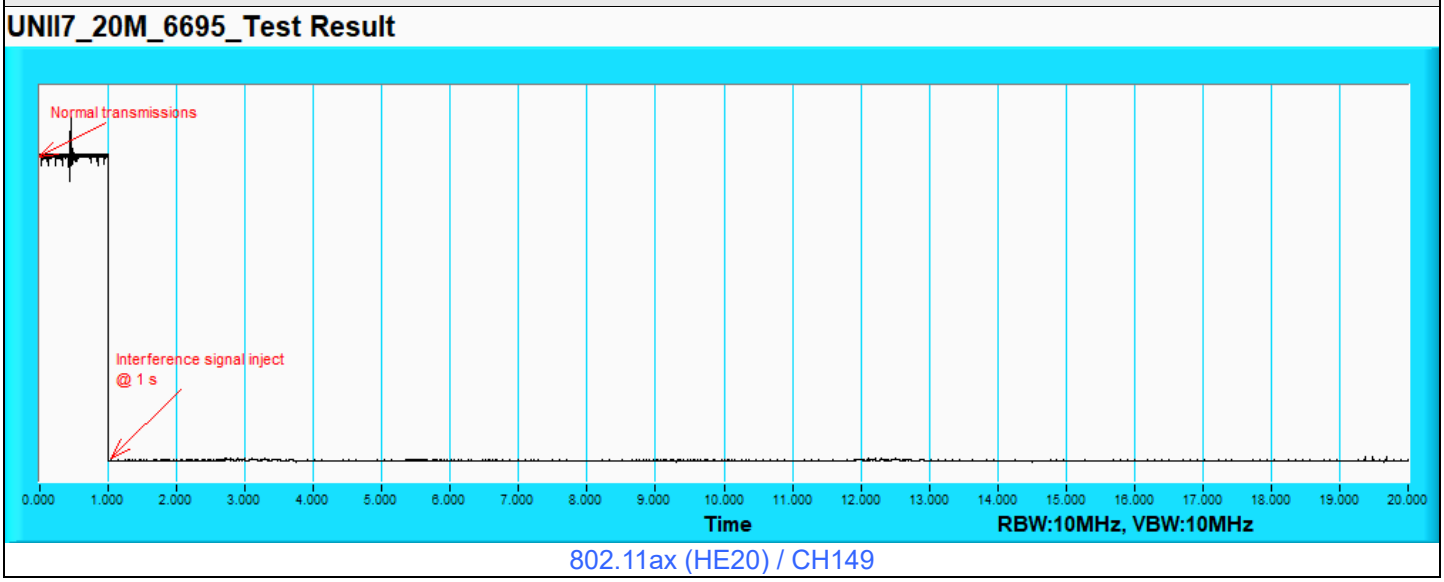


802.11ax (HE80) / CH151(Middle)



802.11ax (HE80) / CH151(High Edge)

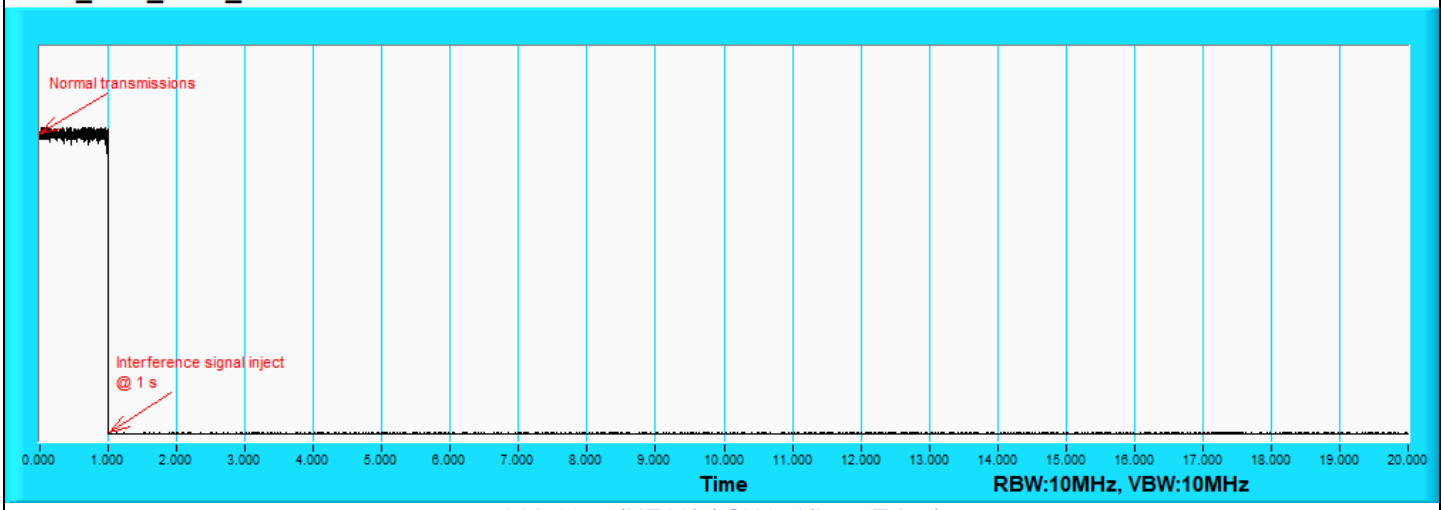
Plots of EUT ceased transmission in the time domain



802.11ax (HE20) / CH149

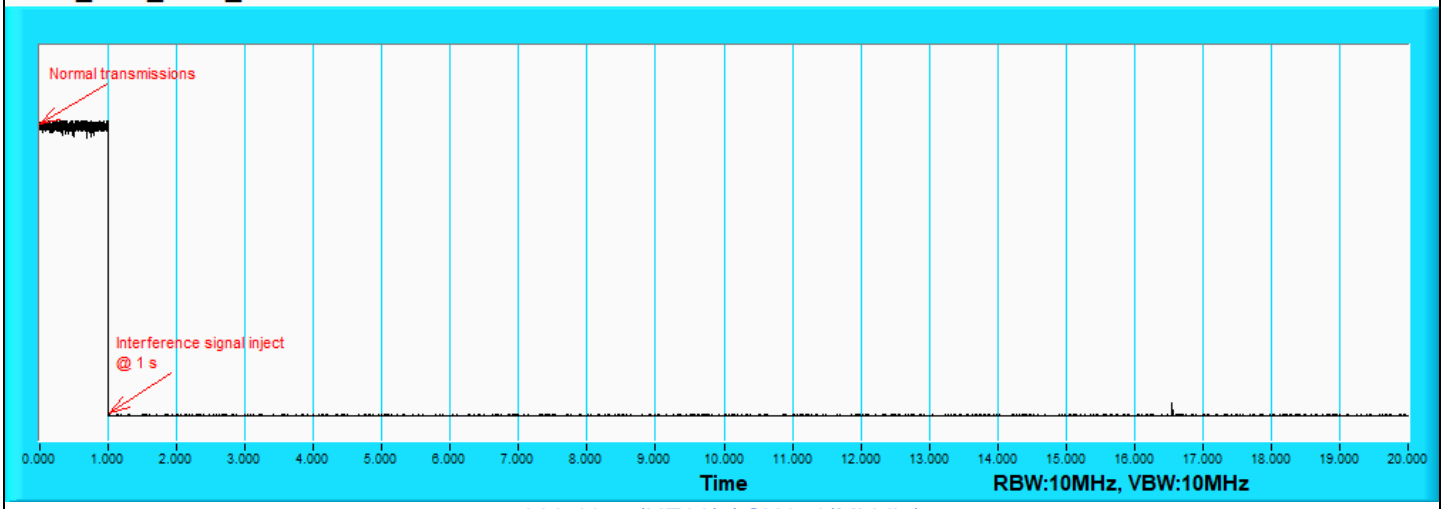
Plots of EUT ceased transmission in the time domain

UNII7_80M_6670_Test Result



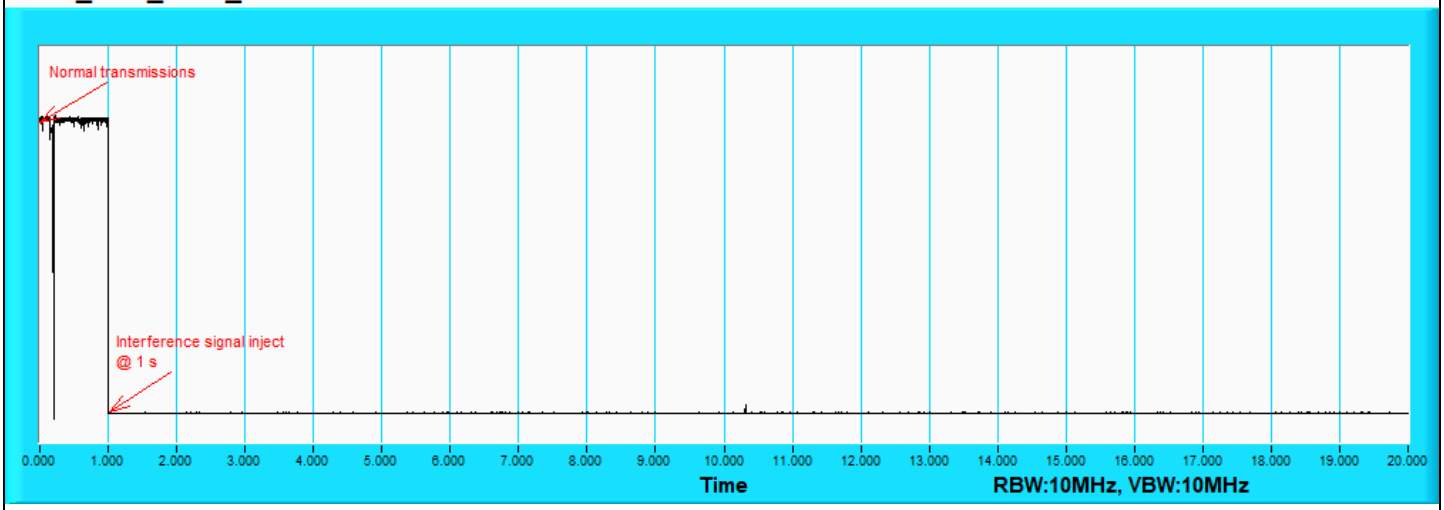
802.11ax (HE80) / CH151(Low Edge)

UNII7_80M_6705_Test Result



802.11ax (HE80) / CH151(Middle)

UNII7_80M_6740_Test Result



802.11ax (HE80) / CH151(High Edge)

For U-NII-8

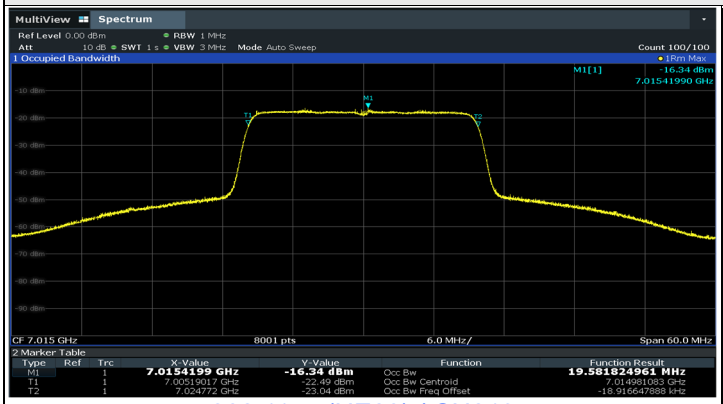
Contention Based Protocol Measurement										
Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB) (Note 3)	Adjusted Power (dBm)	Detection Limit	EUT Tx Status
				Freq. (MHz)	Power (dBm)					
802.11ax	20	213	7015	7015	-63.13	-1.11	0	-62.02	-62	OFF
					-63.63	-1.11	0	-62.52	-62	Minimal
					-83.11	-1.11	0	-82	-62	ON
	80	215	7025	6990	-65.03	-1.11	0	-63.92	-62	OFF
					-65.53	-1.11	0	-64.42	-62	Minimal
					-83.11	-1.11	0	-82	-62	ON
				7025	-64.18	-1.11	0	-63.07	-62	OFF
					-64.68	-1.11	0	-63.57	-62	Minimal
					-83.11	-1.11	0	-82	-62	ON
				7060	-67.03	-1.11	0	-65.92	-62	OFF
					-67.53	-1.11	0	-66.42	-62	Minimal
					-83.11	-1.11	0	-82	-62	ON

Notes:

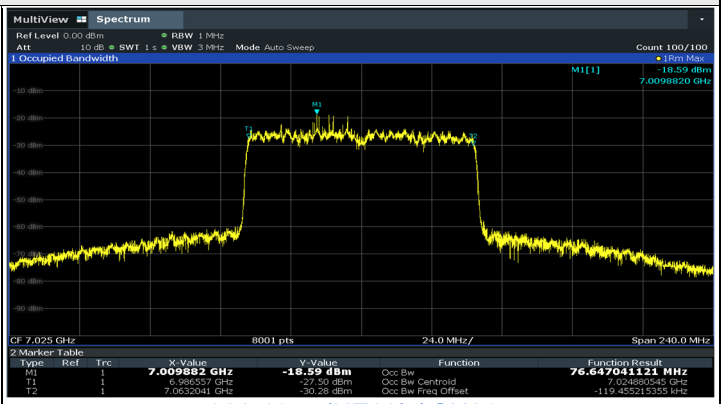
1. After investigation (consider antenna gain and path loss) , the one representative port (Chain 1) was measured and presented in the report.
2. Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
3. Antenna gain values include all the applicable path losses.

Contention Based Protocol Detection Probability														
Operation Mode	Channel Bandwidth (MHz)	AWGN Signal Freq. (MHz)	#01	#02	#03	#04	#05	#06	#07	#08	#09	#10	Detection Probability	Detection Limit	Test Result
802.11ax	20	7015	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
	80	6990	v	v	v	v	x	v	v	v	v	v	90%	90%	Pass
		7025	v	v	v	v	v	v	v	x	v	v	90%	90%	Pass
		7060	v	v	v	v	v	v	v	x	v	v	90%	90%	Pass

Plots of EUT Tx waveform

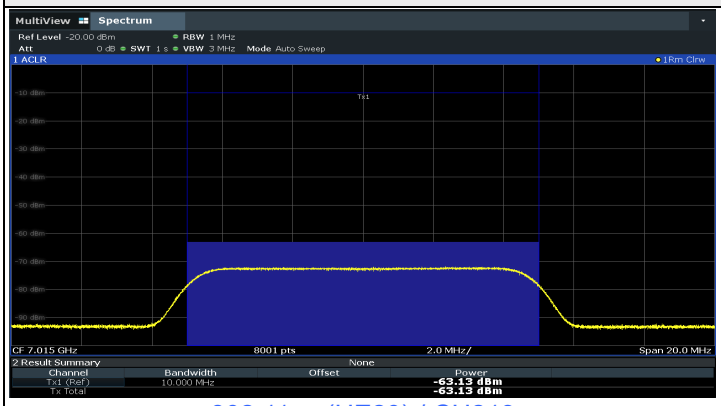


802.11ax (HE20) / CH213

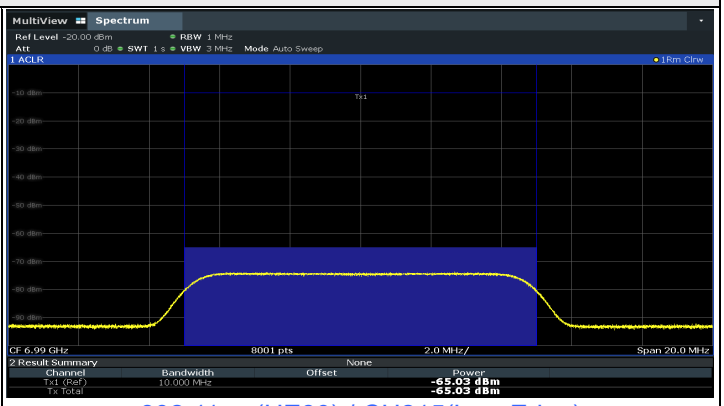


802.11ax (HE80) / CH215

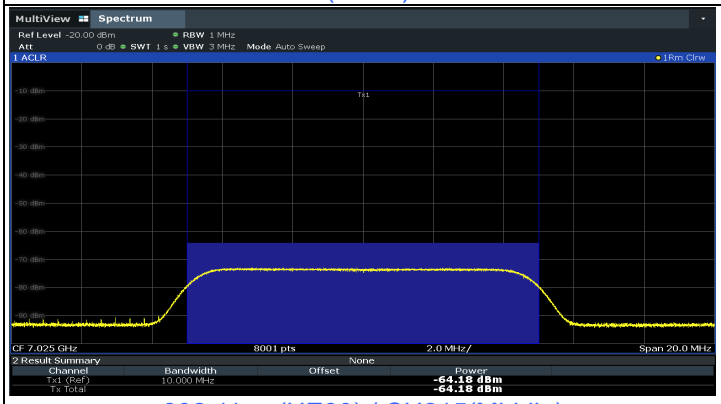
Plots of Injected signal (AWGN) level



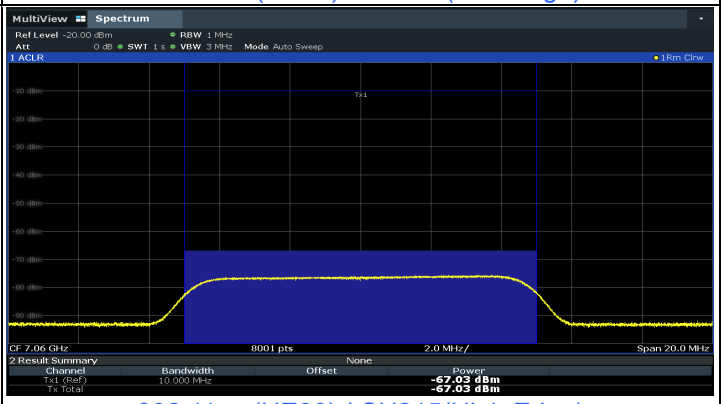
802.11ax (HE20) / CH213



802.11ax (HE80) / CH215(Low Edge)

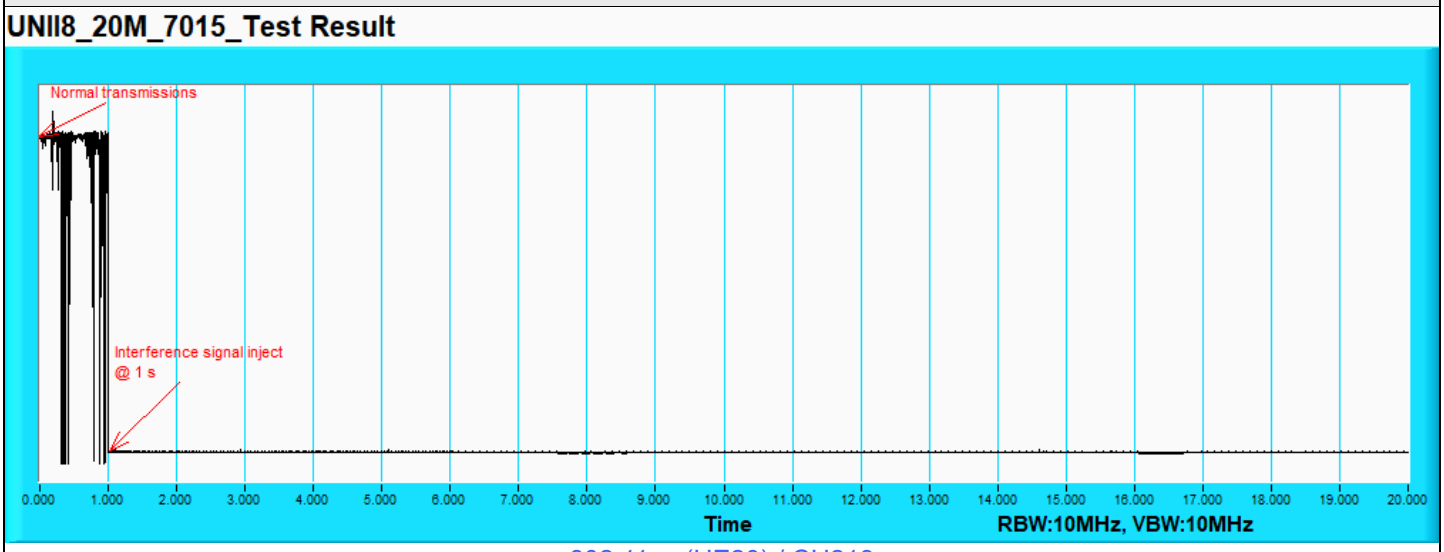


802.11ax (HE80) / CH215(Middle)



802.11ax (HE80) / CH215(High Edge)

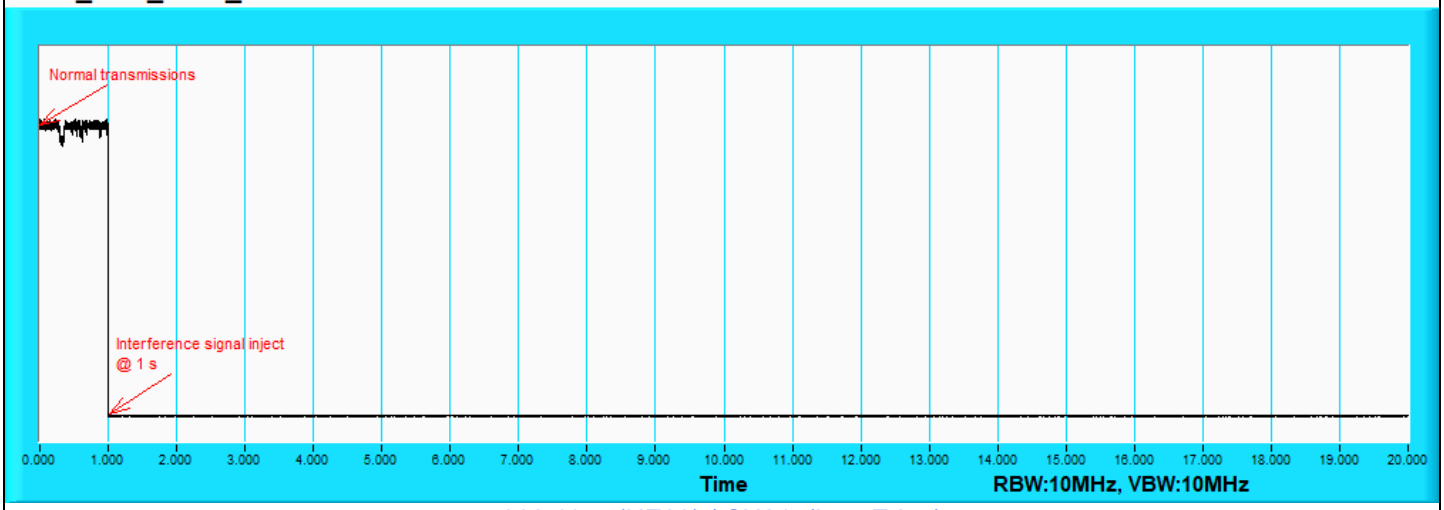
Plots of EUT ceased transmission in the time domain



802.11ax (HE20) / CH213

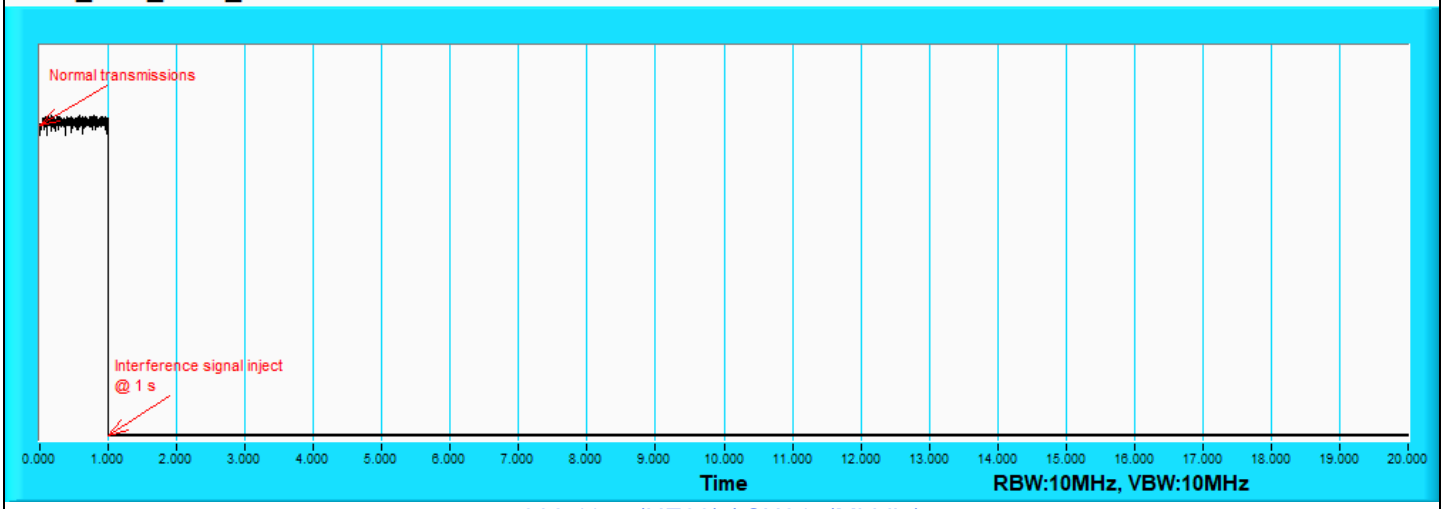
Plots of EUT ceased transmission in the time domain

UNII8_80M_6990_Test Result



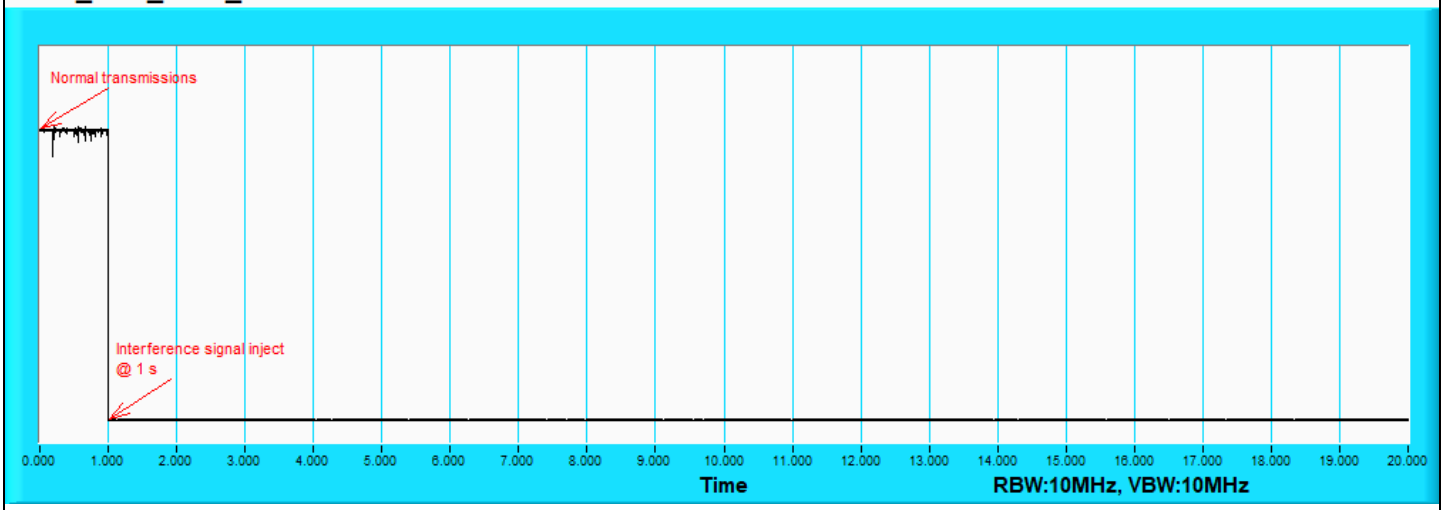
802.11ax (HE80) / CH215(Low Edge)

UNII8_80M_7025_Test Result



802.11ax (HE80) / CH215(Middle)

UNII8_80M_7060_Test Result



802.11ax (HE80) / CH215(High Edge)

7.8 AC Power Conducted Emissions

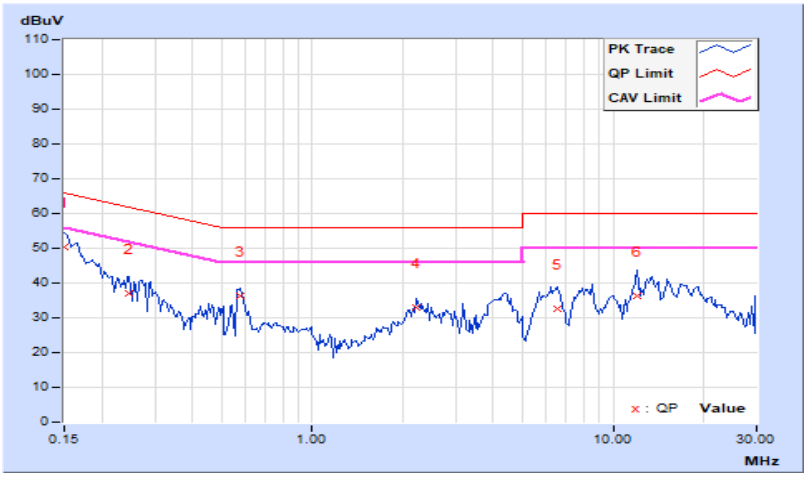
1Tx

RF Mode	802.11ax (HE80)	**Channel**	CH 7：5985 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	26°C, 67% RH
Tested By	Sampson Chen		

Phase Of Power : Line (L)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.15000	9.94	40.33	26.70	50.27	36.64	66.00	56.00	-15.73	-19.36
2	0.24766	9.93	27.27	15.88	37.20	25.81	61.84	51.84	-24.64	-26.03
3	0.57969	9.95	26.47	20.11	36.42	30.06	56.00	46.00	-19.58	-15.94
4	2.21875	10.01	23.07	13.84	33.08	23.85	56.00	46.00	-22.92	-22.15
5	6.51563	10.25	22.28	15.90	32.53	26.15	60.00	50.00	-27.47	-23.85
6	12.07813	10.60	25.68	15.65	36.28	26.25	60.00	50.00	-23.72	-23.75

Remarks:

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

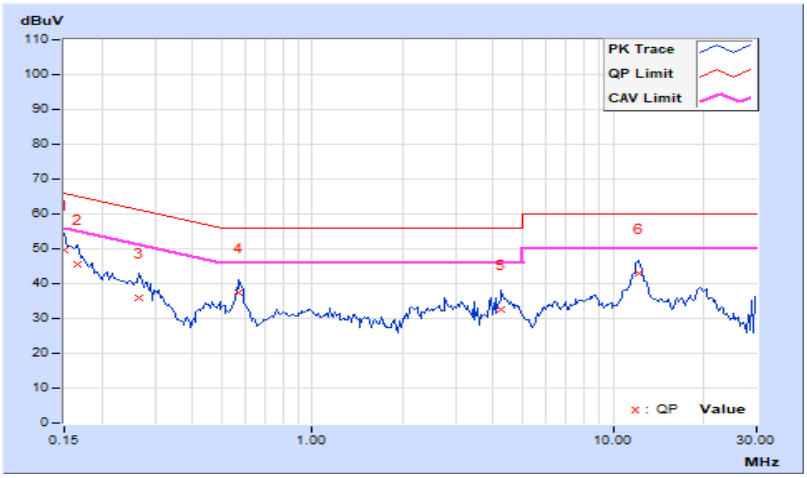


RF Mode	802.11ax (HE80)	Channel	CH 7：5985 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	26°C, 67% RH
Tested By	Sampson Chen		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.00	39.74	24.27	49.74	34.27	66.00	56.00	-16.26	-21.73
2	0.16562	9.99	35.63	22.80	45.62	32.79	65.18	55.18	-19.56	-22.39
3	0.26719	9.99	25.98	14.31	35.97	24.30	61.20	51.20	-25.23	-26.90
4	0.57188	10.01	27.25	20.86	37.26	30.87	56.00	46.00	-18.74	-15.13
5	4.23047	10.16	22.46	13.37	32.62	23.53	56.00	46.00	-23.38	-22.47
6	**12.20313**	**10.51**	**32.50**	**25.94**	**43.01**	**36.45**	**60.00**	**50.00**	**-16.99**	**-13.55**

Remarks:

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



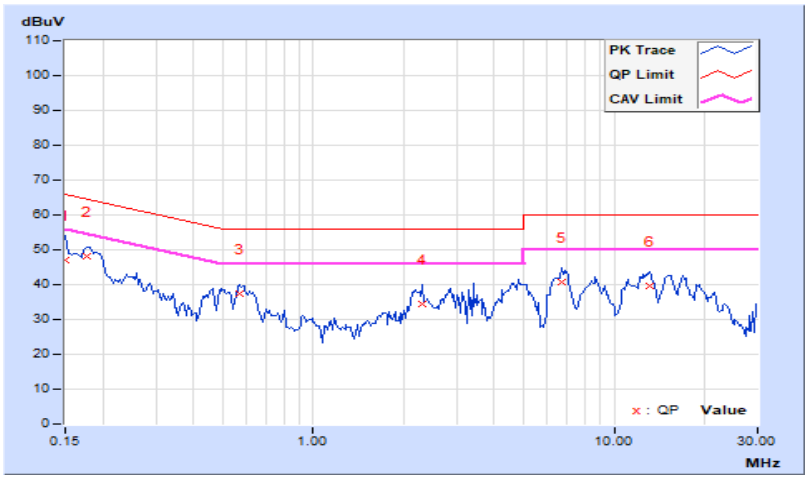
2Tx

RF Mode	802.11ax (HE80)	**Channel**	CH 7：5985 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	23°C, 71% RH
Tested By	Willy Lin		

Phase Of Power : Line (L)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.15000	9.95	36.97	23.73	46.92	33.68	66.00	56.00	-19.08	-22.32
2	0.17734	9.94	38.12	25.00	48.06	34.94	64.61	54.61	-16.55	-19.67
3	0.56797	9.96	27.33	16.73	37.29	26.69	56.00	46.00	-18.71	-19.31
4	2.30078	10.03	24.34	14.33	34.37	24.36	56.00	46.00	-21.63	-21.64
5	6.67578	10.29	30.32	25.01	40.61	35.30	60.00	50.00	-19.39	-14.70
6	13.09766	10.62	28.98	23.98	39.60	34.60	60.00	50.00	-20.40	-15.40

Remarks:

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

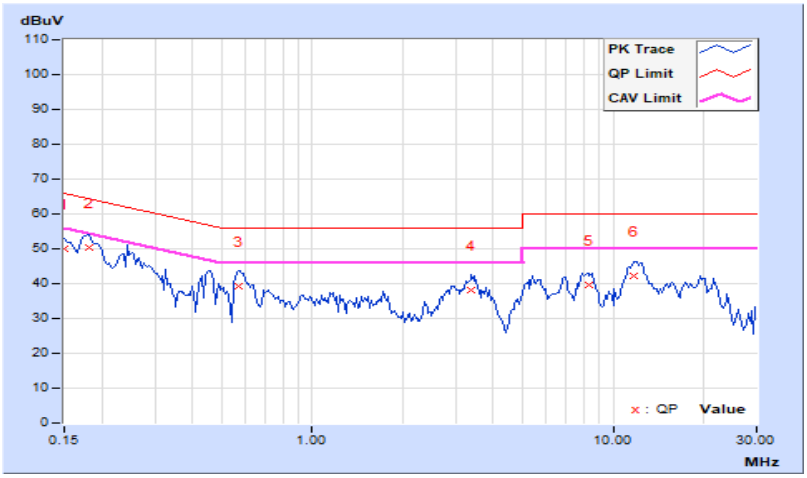


RF Mode	802.11ax (HE80)	Channel	CH 7：5985 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	23°C, 71% RH
Tested By	Willy Lin		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.99	39.98	26.86	49.97	36.85	66.00	56.00	-16.03	-19.15
2	0.18125	9.99	40.56	27.41	50.55	37.40	64.43	54.43	-13.88	-17.03
3	0.56797	10.01	29.24	18.49	39.25	28.50	56.00	46.00	-16.75	-17.50
4	3.37891	10.14	28.05	20.29	38.19	30.43	56.00	46.00	-17.81	-15.57
5	8.27344	10.37	29.31	24.49	39.68	34.86	60.00	50.00	-20.32	-15.14
6	11.76563	10.50	31.60	25.15	42.10	35.65	60.00	50.00	-17.90	-14.35

Remarks:

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



7.9 Unwanted Emissions below 1 GHz

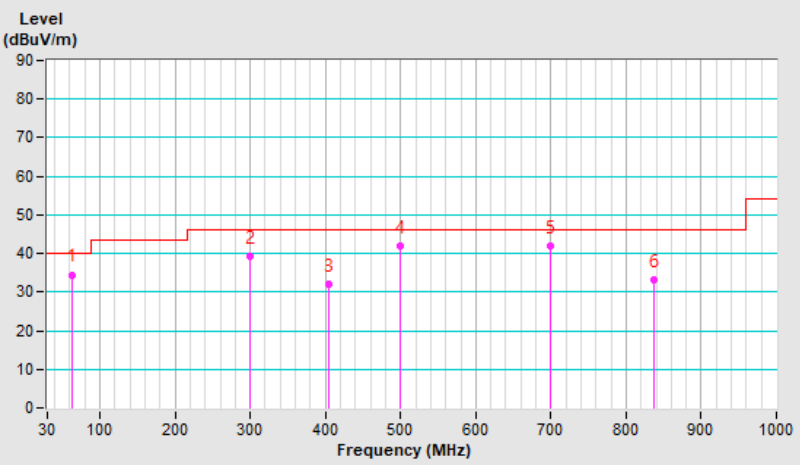
1Tx

RF Mode	802.11ax (HE80)	**Channel**	CH 7：5985 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	QP: RB=120kHz, DET=Quasi-Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 73% RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	62.01	34.5 QP	40.0	-5.5	3.00 H	28	48.3	-13.8
2	300.02	39.1 QP	46.0	-6.9	1.00 H	0	50.7	-11.6
3	403.67	31.9 QP	46.0	-14.1	1.00 H	128	41.0	-9.1
4	**500.01**	**42.0 QP**	**46.0**	**-4.0**	**1.50 H**	**335**	**48.7**	**-6.7**
5	700.03	41.8 QP	46.0	-4.2	1.00 H	295	44.6	-2.8
6	836.55	33.2 QP	46.0	-12.8	1.00 H	275	33.4	-0.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

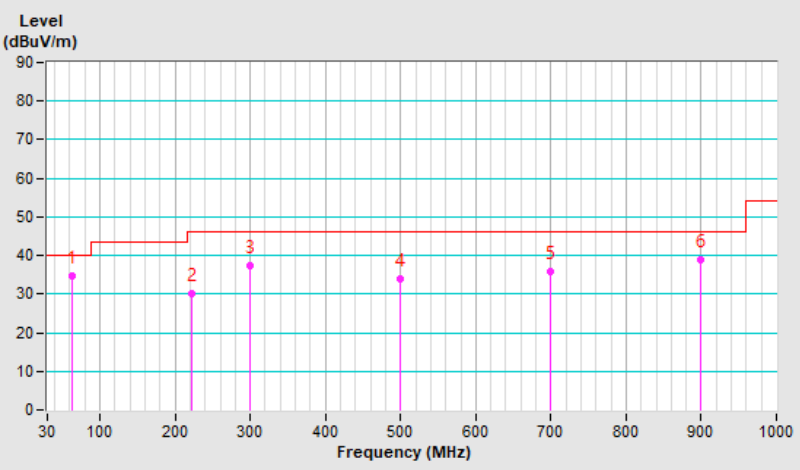


RF Mode	802.11ax (HE80)	**Channel**	CH 7：5985 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	QP: RB=120kHz, DET=Quasi-Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 73% RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	62.35	34.7 QP	40.0	-5.3	1.00 V	130	48.4	-13.7
2	221.16	30.0 QP	46.0	-16.0	1.50 V	344	45.8	-15.8
3	300.02	37.5 QP	46.0	-8.5	1.50 V	256	49.1	-11.6
4	500.01	34.0 QP	46.0	-12.0	1.00 V	272	40.7	-6.7
5	700.03	35.7 QP	46.0	-10.3	1.50 V	324	38.5	-2.8
6	899.99	38.8 QP	46.0	-7.2	1.50 V	339	38.5	0.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



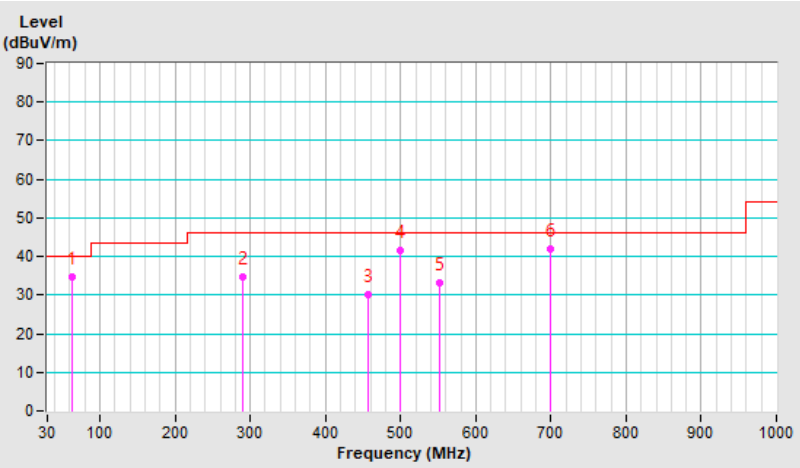
2Tx

RF Mode	802.11ax (HE80)	Channel	CH 7：5985 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 73% RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	62.42	34.5 QP	40.0	-5.5	3.00 H	28	48.2	-13.7
2	289.69	34.6 QP	46.0	-11.4	1.00 H	292	46.6	-12.0
3	456.02	30.0 QP	46.0	-16.0	2.00 H	36	37.6	-7.6
4	499.93	41.4 QP	46.0	-4.6	1.50 H	340	48.1	-6.7
5	552.03	33.1 QP	46.0	-12.9	1.50 H	20	38.9	-5.8
6	700.16	41.8 QP	46.0	-4.2	1.00 H	305	44.6	-2.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

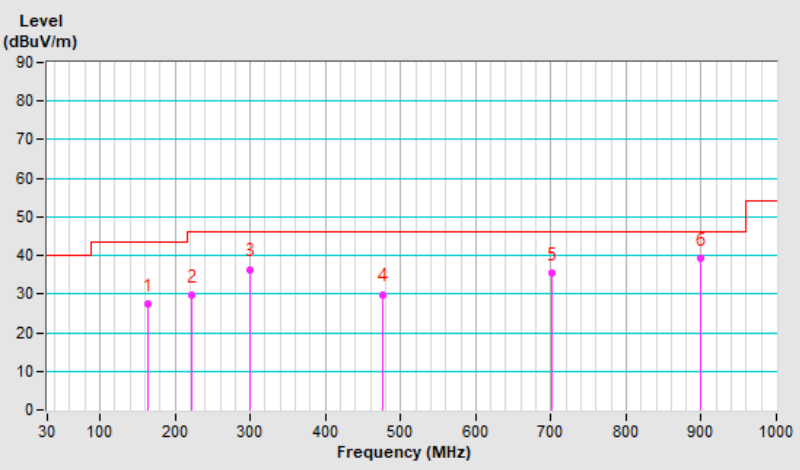


RF Mode	802.11ax (HE80)	**Channel**	CH 7：5985 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	QP: RB=120kHz, DET=Quasi-Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 73% RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	164.68	27.5 QP	43.5	-16.0	1.00 V	158	40.4	-12.9
2	221.19	29.8 QP	46.0	-16.2	1.00 V	341	45.6	-15.8
3	299.89	36.4 QP	46.0	-9.6	1.00 V	260	48.1	-11.7
4	476.49	29.9 QP	46.0	-16.1	2.00 V	360	37.2	-7.3
5	700.85	35.6 QP	46.0	-10.4	3.00 V	12	38.4	-2.8
6	899.94	39.3 QP	46.0	-6.7	1.00 V	358	39.0	0.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



7.10 Unwanted Emissions above 1 GHz

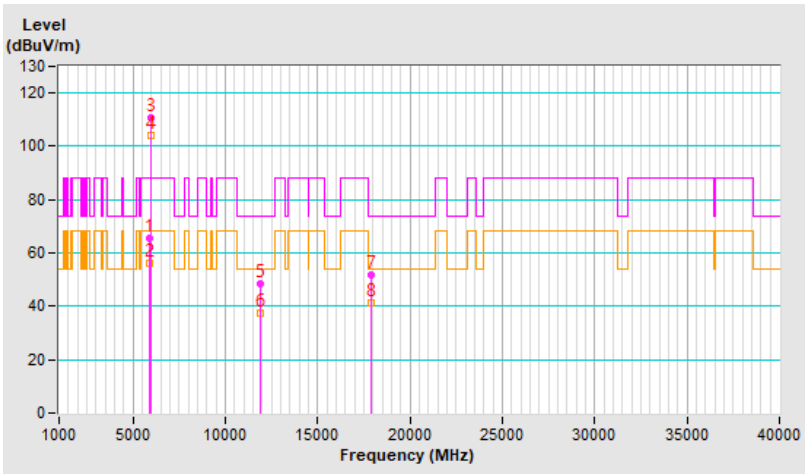
1Tx

RF Mode	802.11a	**Channel**	CH 1：5955 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	#5925.00	65.6 PK	88.2	-22.6	2.16 H	360	61.9	3.7
2	#5925.00	56.0 AV	68.2	-12.2	2.16 H	360	52.3	3.7
3	*5955.00	110.5 PK			2.16 H	360	106.8	3.7
4	*5955.00	104.1 AV			2.16 H	360	100.4	3.7
5	11910.00	48.2 PK	74.0	-25.8	1.84 H	141	36.7	11.5
6	11910.00	37.3 AV	54.0	-16.7	1.84 H	141	25.8	11.5
7	17865.00	51.6 PK	74.0	-22.4	1.58 H	57	30.6	21.0
8	17865.00	41.2 AV	54.0	-12.8	1.58 H	57	20.2	21.0

Remarks:

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

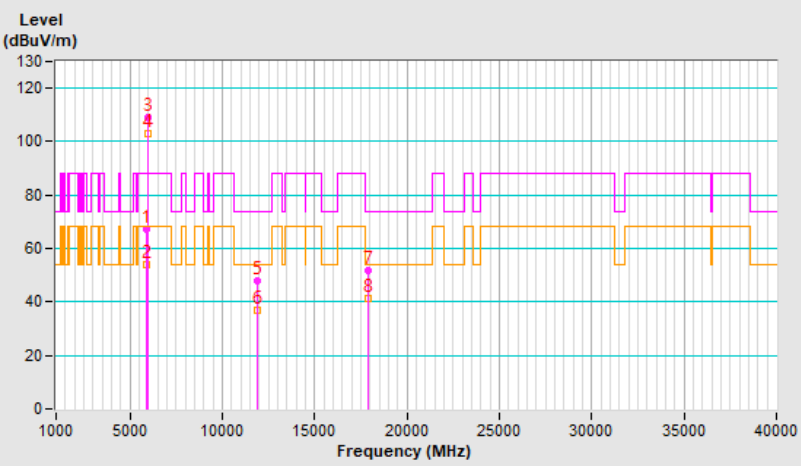


RF Mode	802.11a	Channel	CH 1：5955 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5925.00	67.1 PK	88.2	-21.1	2.80 V	347	63.4	3.7
2	#5925.00	54.2 AV	68.2	-14.0	2.80 V	347	50.5	3.7
3	*5955.00	109.1 PK			2.80 V	347	105.4	3.7
4	*5955.00	102.9 AV			2.80 V	347	99.2	3.7
5	11910.00	47.8 PK	74.0	-26.2	1.85 V	143	36.3	11.5
6	11910.00	36.9 AV	54.0	-17.1	1.85 V	143	25.4	11.5
7	17865.00	51.8 PK	74.0	-22.2	1.56 V	70	30.8	21.0
8	17865.00	41.5 AV	54.0	-12.5	1.56 V	70	20.5	21.0

Remarks:

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

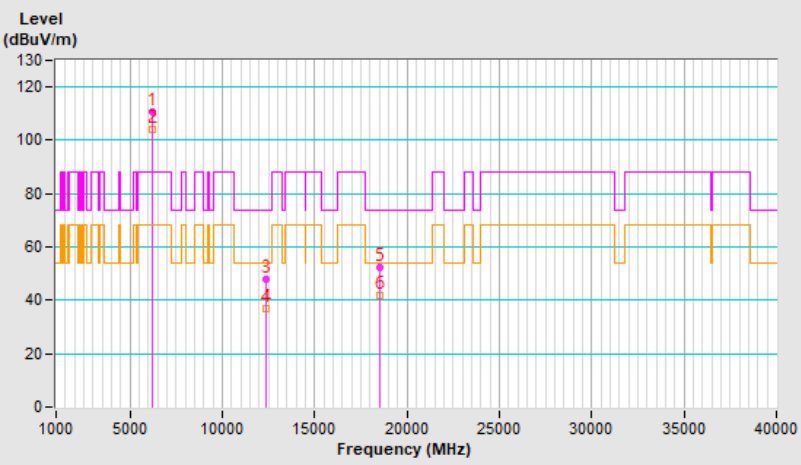


RF Mode	802.11a	**Channel**	CH 45：6175 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	*6175.00	110.7 PK			2.20 H	352	106.7	4.0
2	*6175.00	104.3 AV			2.20 H	352	100.3	4.0
3	12350.00	47.9 PK	74.0	-26.1	1.79 H	146	36.4	11.5
4	12350.00	36.7 AV	54.0	-17.3	1.79 H	146	25.2	11.5
5	18525.00	52.1 PK	74.0	-21.9	1.49 H	72	55.4	-3.3
6	18525.00	41.6 AV	54.0	-12.4	1.49 H	72	44.9	-3.3

Remarks:

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

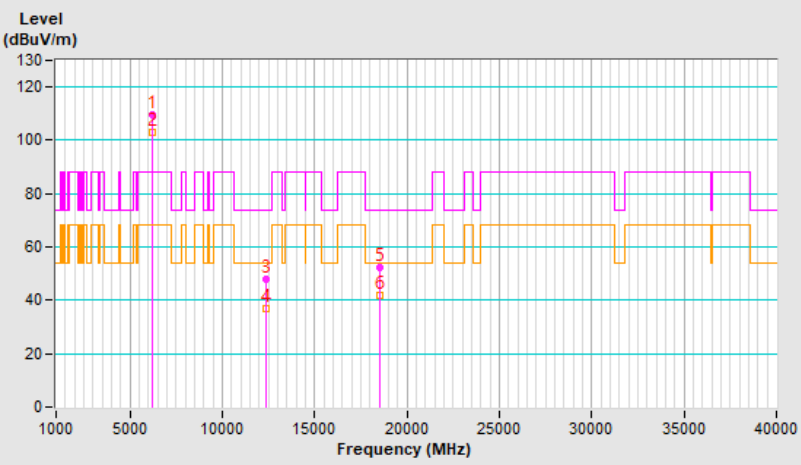


RF Mode	802.11a	**Channel**	CH 45：6175 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	*6175.00	109.5 PK			2.79 V	335	105.5	4.0
2	*6175.00	103.1 AV			2.79 V	335	99.1	4.0
3	12350.00	48.0 PK	74.0	-26.0	1.79 V	138	36.5	11.5
4	12350.00	36.8 AV	54.0	-17.2	1.79 V	138	25.3	11.5
5	18525.00	52.3 PK	74.0	-21.7	1.54 V	64	55.6	-3.3
6	18525.00	41.9 AV	54.0	-12.1	1.54 V	64	45.2	-3.3

Remarks:

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

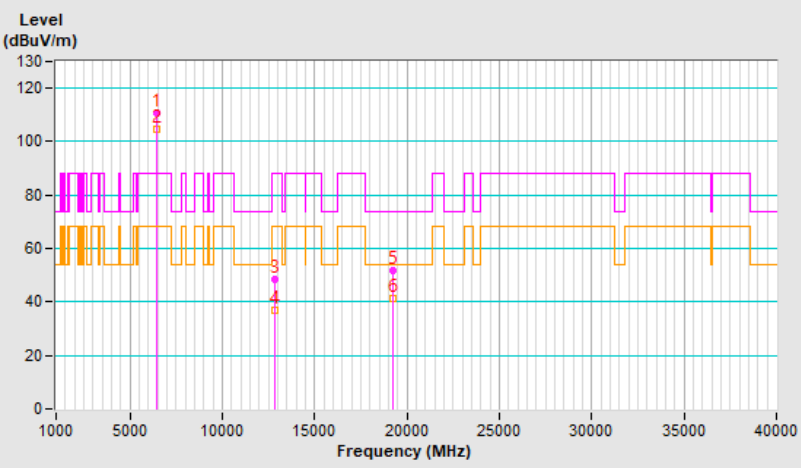


RF Mode	802.11a	Channel	CH 93：6415 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*6415.00	110.5 PK			2.16 H	352	105.5	5.0
2	*6415.00	104.4 AV			2.16 H	352	99.4	5.0
3	#12830.00	48.2 PK	88.2	-40.0	1.87 H	155	36.3	11.9
4	#12830.00	36.8 AV	68.2	-31.4	1.87 H	155	24.9	11.9
5	19245.00	51.9 PK	74.0	-22.1	1.54 H	61	54.1	-2.2
6	19245.00	41.4 AV	54.0	-12.6	1.54 H	61	43.6	-2.2

Remarks:

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

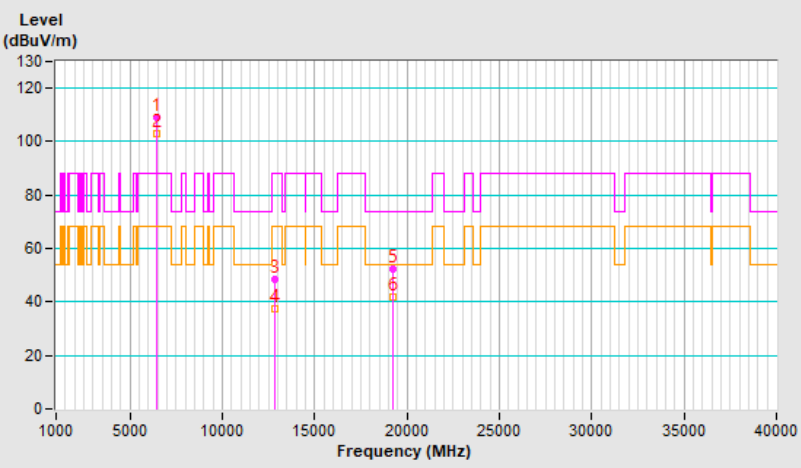


RF Mode	802.11a	Channel	CH 93：6415 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*6415.00	109.3 PK			2.82 V	360	104.3	5.0
2	*6415.00	102.8 AV			2.82 V	360	97.8	5.0
3	#12830.00	48.6 PK	88.2	-39.6	1.82 V	155	36.7	11.9
4	#12830.00	37.4 AV	68.2	-30.8	1.82 V	155	25.5	11.9
5	19245.00	52.3 PK	74.0	-21.7	1.50 V	84	54.5	-2.2
6	19245.00	41.6 AV	54.0	-12.4	1.50 V	84	43.8	-2.2

Remarks:

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

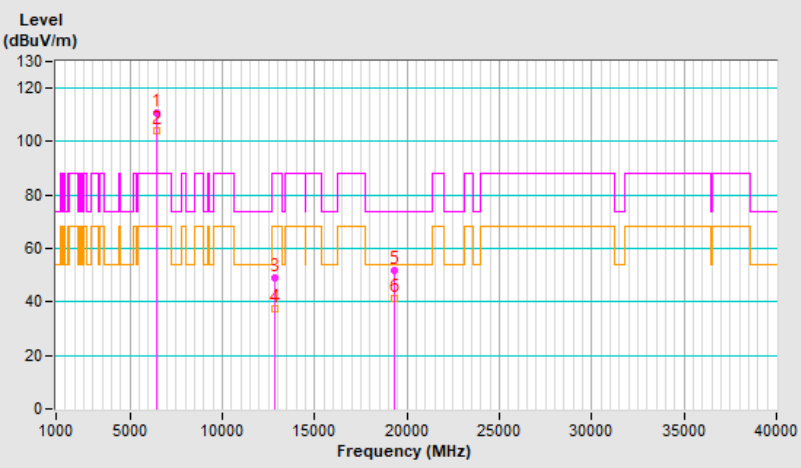


RF Mode	802.11a	Channel	CH 97：6435 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*6435.00	110.8 PK			2.23 H	353	105.6	5.2
2	*6435.00	104.3 AV			2.23 H	353	99.1	5.2
3	#12870.00	48.8 PK	88.2	-39.4	1.80 H	161	36.9	11.9
4	#12870.00	37.6 AV	68.2	-30.6	1.80 H	161	25.7	11.9
5	19305.00	51.8 PK	74.0	-22.2	1.51 H	87	53.9	-2.1
6	19305.00	41.3 AV	54.0	-12.7	1.51 H	87	43.4	-2.1

Remarks:

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

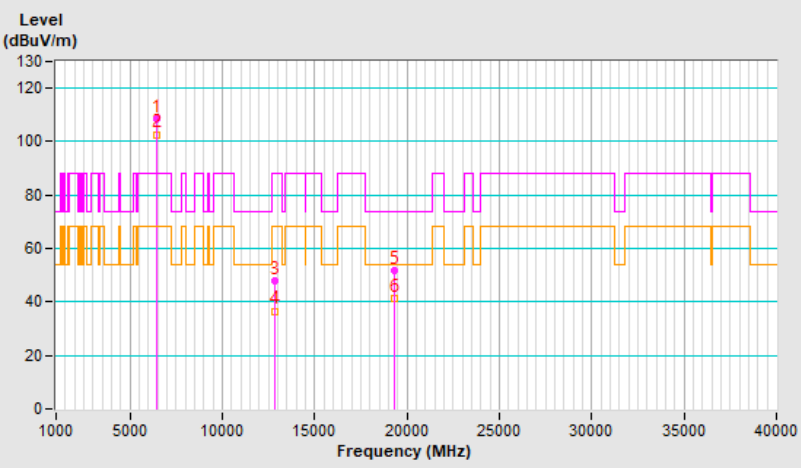


RF Mode	802.11a	Channel	CH 97：6435 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*6435.00	108.6 PK			2.79 V	340	103.4	5.2
2	*6435.00	102.7 AV			2.79 V	340	97.5	5.2
3	#12870.00	48.0 PK	88.2	-40.2	1.83 V	152	36.1	11.9
4	#12870.00	36.6 AV	68.2	-31.6	1.83 V	152	24.7	11.9
5	19305.00	51.9 PK	74.0	-22.1	1.60 V	56	54.0	-2.1
6	19305.00	41.2 AV	54.0	-12.8	1.60 V	56	43.3	-2.1

Remarks:

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

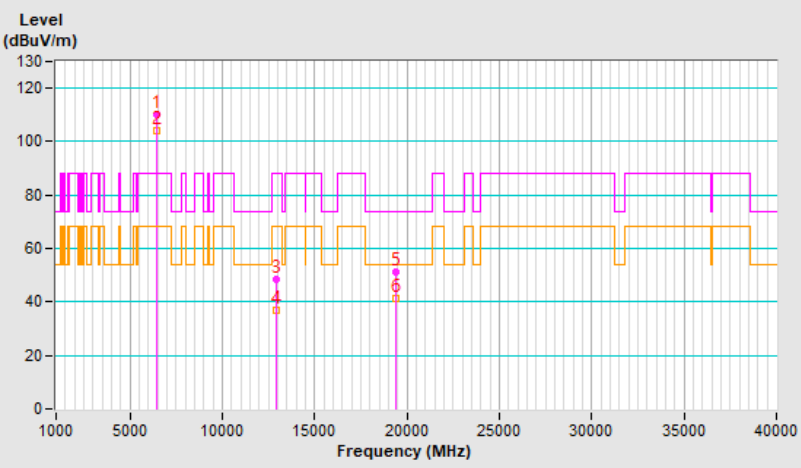


RF Mode	802.11a	Channel	CH 105：6475 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*6475.00	110.2 PK			2.22 H	346	104.6	5.6
2	*6475.00	104.1 AV			2.22 H	346	98.5	5.6
3	#12950.00	48.3 PK	88.2	-39.9	1.86 H	136	36.2	12.1
4	#12950.00	36.8 AV	68.2	-31.4	1.86 H	136	24.7	12.1
5	19425.00	51.2 PK	74.0	-22.8	1.56 H	56	53.9	-2.7
6	19425.00	41.1 AV	54.0	-12.9	1.56 H	56	43.8	-2.7

Remarks:

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



RF Mode	802.11a	Channel	CH 105：6475 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*6475.00	108.4 PK			2.78 V	338	102.8	5.6
2	*6475.00	102.5 AV			2.78 V	338	96.9	5.6
3	#12950.00	48.4 PK	88.2	-39.8	1.89 V	142	36.3	12.1
4	#12950.00	37.1 AV	68.2	-31.1	1.89 V	142	25.0	12.1
5	19425.00	52.0 PK	74.0	-22.0	1.56 V	71	54.7	-2.7
6	19425.00	41.7 AV	54.0	-12.3	1.56 V	71	44.4	-2.7

Remarks:

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