

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart C (Section 15.247)

Report No.: RFBEQF-WTW-P22100398

FCC ID: BEJNT-14T90R

Product: Notebook Computer

Brand: LG

Model No.: 14T90R, 14TD90R, 14TB90R, 14TG90R, 14T90R*

(* can be 0 to 9 or A to Z or blank denoting buyer request)

Received Date: 2022/10/19

Test Date: 2022/10/21 ~ 2022/11/14

Issued Date: 2022/12/08

Applicant: LG Electronics USA

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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FCC Registration / 788550 / TW0003

Designation Number (1):

FCC Registration / 281270 / TW0032

Designation Number (2):

Approved by:

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Date:

2022/12/08

Jeremy Lin / Project Engineer

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Prepared by : Polly Chien / Specialist



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Release Control Record

Issue No.	Description	Date Issued
RFBEQF-WTW-P22100398	Original release.	2022/12/08

1 Certificate

Product: Notebook Computer

Brand: LG

Test Model: 14T90R, 14TD90R, 14TB90R , 14TG90R, 14T90R*
(* can be 0 to 9 or A to Z or blank denoting buyer request)

Sample Status: Engineering sample

Applicant: LG Electronics USA

Test Date: 2022/10/21 ~ 2022/11/14

Standard: 47 CFR FCC Part 15, Subpart C (Section 15.247)

Measurement procedure: ANSI C63.10-2013
KDB 558074 D01 15.247 Meas Guidance v05r02
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 C (Section 15.247)			
Standard / Clause	Test Item	Result	Remark
15.247(b)	RF Output Power	Pass	Meet the requirement of limit.
15.247(e)	Power Spectral Density	Pass	Meet the requirement of limit.
15.247(a)(2)	6 dB Bandwidth	Pass	Meet the requirement of limit.
15.247(d)	Conducted Out of Band Emissions	Pass	Meet the requirement of limit.
15.207	AC Power Conducted Emissions	Pass	Minimum passing margin is -5.66 dB at 0.16190 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -1.5 dB at 35.62 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.2 dB at 2390.00, 2483.50 MHz
15.203	Antenna Requirement	Pass	Antenna connector is I-PEX 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) (±)
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.79 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.00 dB
	30MHz ~ 200MHz	2.91 dB
	200MHz ~1000MHz	2.93 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	2.93 dB
	18 GHz ~ 40 GHz	1.76 dB

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

2.2 Supplementary Information

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

3 General Information

3.1 General Description

Product	Notebook Computer
Brand	LG
Test Model	14T90R, 14TD90R, 14TB90R , 14TG90R, 14T90R* (* can be 0 to 9 or A to Z or blank denoting buyer request)
Status of EUT	Engineering sample
Power Supply Rating	7.76 Vdc (Battery) 5 Vdc / 15Vdc / 9Vdc / 20Vdc (Adapter)
Modulation Type	CCK, DQPSK, DBPSK for DSSS 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM 1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDMA
Modulation Technology	DSSS, OFDM, OFDMA
Transfer Rate	802.11b: 11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps 802.11n: up to 300Mbps 802.11ax: up to 573.5Mbps
Operating Frequency	2412 ~ 2472MHz
Number of Channel	802.11b, 802.11g, 802.11n (HT20), 802.11ax (HE20): 13 802.11n (HT40), 802.11ax (HE40): 9
Output Power	414.384 mW (26.17 dBm)

Note:

1. The following models are provided to this EUT. The model 14T90R was chosen for final test.

Brand	Model No.	Difference
LG	14T90R	For marketing purpose
	14TD90R	
	14TB90R	
	14TG90R	
	14T90R* (* can be 0 to 9 or A to Z or blank denoting buyer request)	

2. The EUT uses following accessories.

Product	Brand	Model	Description
Battery	LG	LBZ722DM	Rating: 7.76Vdc, 72Wh, Typ 9279mAh
Adapter	LG	LP65WFC20P-NJ	I/P: 100-240Vac, 50-60Hz, 1.6A O/P: (PDO) 5.0Vdc, 3.0A, 15.0W or 9.0 Vdc, 3.0 A, 27.0W or 15.0 Vdc, 3.0 A, 45.0W or 20.0Vdc, 3.25A, 65.0 W (PPS) 5.0Vdc-20.0Vdc, 3.25A, Max 65.0W
Type-C to Type-C cable	Luxshare	L1LUC020-CS-H	2m/20V 5A/USB2.0/Black
Module	Intel	AX211D2W	-

- The EUT support OFDMA and Partial RU mode, therefore partial RU combination were investigated and the worst case scenario was identified. (The worst case data were presented in section 3.4)
- The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

NB:

Ant. Type	Brand	Ant.	Model	Antenna Peak Gain (dBi)					Connector
				2400-2483.5 MHz	5150-5250 MHz	5250-5350 MHz	5470-5725 MHz	5725-5850 MHz	
PIFA	CHILISIN	Main	DQ600111501 (BTEA00111525GC1A02)	2.45	2.14	0.94	1.80	1.72	I-PEX
		Aux.	DQ600111501 (BTEA00111525GC1A02)	1.39	2.12	2.64	2.40	0.90	
	Pulse	Main	DQ602118000 (TZ21180)	2.97	2.18	1.01	2.19	2.29	I-PEX
		Aux.	DQ602118000 (TZ21180)	2.96	2.21	3.69	3.34	1.29	

Tablet:

Ant. Type	Brand	Ant.	Model	Antenna Peak Gain (dBi)					Connector
				2400-2483.5 MHz	5150-5250 MHz	5250-5350 MHz	5470-5725 MHz	5725-5850 MHz	
PIFA	CHILISIN	Main	DQ600111501 (BTEA00111525GC1A02)	-0.50	1.37	0.75	1.30	-0.42	I-PEX
		Aux.	DQ600111501 (BTEA00111525GC1A02)	1.48	1.02	0.86	1.40	1.29	
	Pulse	Main	DQ602118000 (TZ21180)	0.03	1.65	1.05	1.36	0.58	I-PEX
		Aux.	DQ602118000 (TZ21180)	1.91	1.25	0.98	1.91	1.57	

* The worst case (NB mode) with the largest antenna gain was chosen for final test.

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

2. The EUT incorporates a MIMO function:

2.4 GHz Band		
Modulation Mode	Tx & Rx Configuration	
802.11b	1TX	1RX
802.11g	1TX	1RX
802.11n (HT20)	2TX	1RX
802.11n (HT40)	2TX	1RX
802.11ax (HE20)	2TX	1RX
802.11ax (HE40)	2TX	1RX

Note: The bandwidth and modulation are similar for HT20/HT40 on 802.11n mode and HE20/HE40 on 802.11ax mode. Therefore the investigated worst case is the representative mode in test report

3.3 Channel List

13 channels are provided for 802.11b, 802.11g, 802.11n (HT20), 802.11ax (HE20):

Channel	Frequency	Channel	Frequency
1	2412MHz	8	2447MHz
2	2417MHz	9	2452MHz
3	2422MHz	10	2457MHz
4	2427MHz	11	2462MHz
5	2432MHz	12	2467MHz
6	2437MHz	13	2472MHz
7	2442MHz		

9 channels are provided for 802.11n (HT40), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
3	2422MHz	8	2447MHz
4	2427MHz	9	2452MHz
5	2432MHz	10	2457MHz
6	2437MHz	11	2462MHz
7	2442MHz		

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	The EUT's antenna (PIFA) had been pre-tested on the positioned of NB mode and each 3 axis (X-axis/ Y-axis/ Z-axis) of Tablet Mode. Pre-scan these ways and find the worst case as a representative test condition.
Worst Case:	Worst Condition: The worst case was found when positioned on NB mode.

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

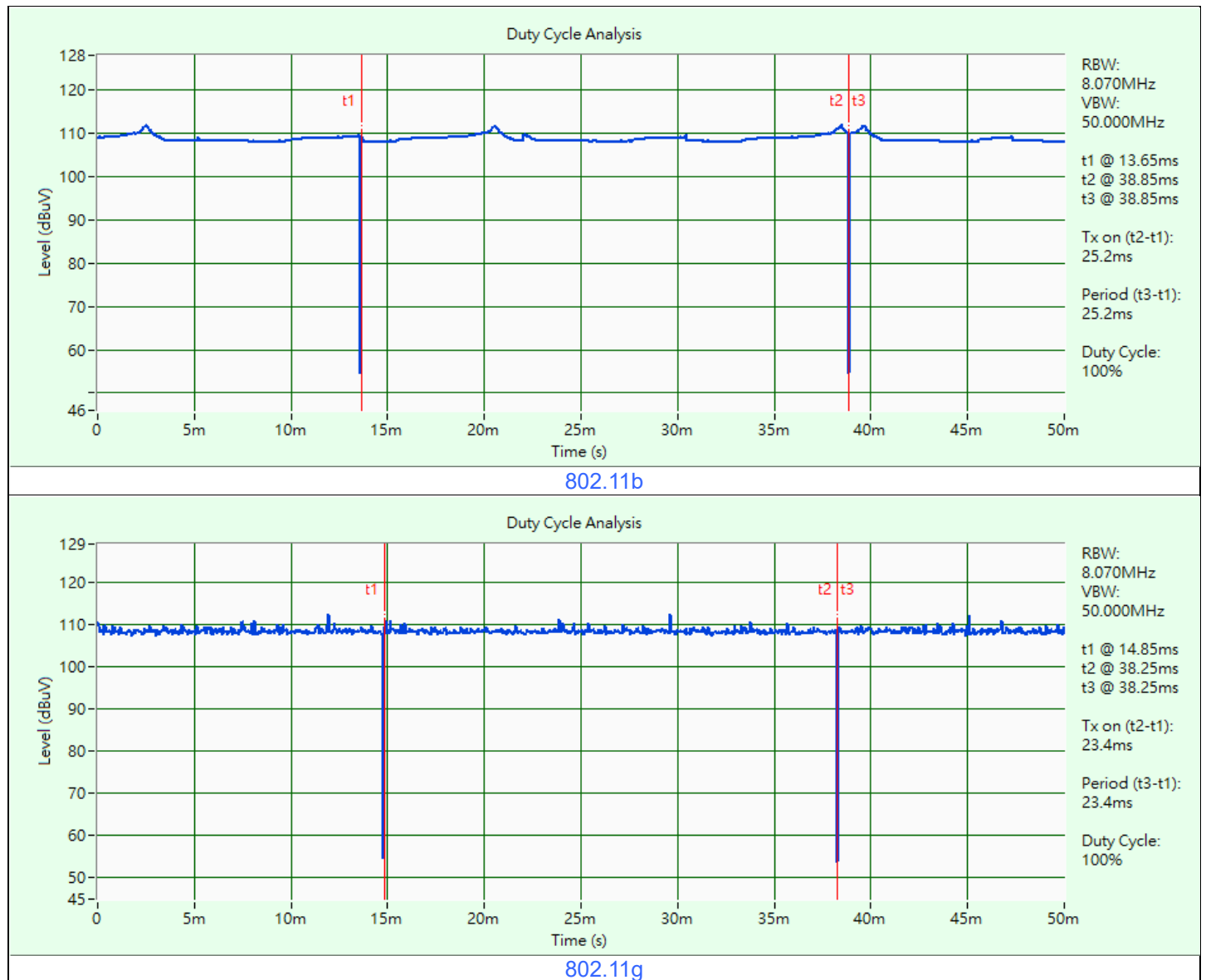
Test Item	Mode	Tested Channel	Modulation	Data Rate Parameter
RF Output Power	802.11b	1, 6, 11, 12, 13	DBPSK	1Mb/s
	802.11g	1, 6, 11, 12, 13	BPSK	6Mb/s
	802.11n (HT20)	1, 6, 11, 12, 13	BPSK	MCS0
	802.11n (HT40)	1, 6, 11, 12, 13	BPSK	MCS0
	802.11ax (HE20)	1, 6, 11, 12, 13	BPSK	MCS0
	802.11ax (HE40)	3, 6, 9, 10, 11	BPSK	MCS0
	20 MHz Preamble 802.11ax (RU26)	1, 13	BPSK	MCS0
	20 MHz Preamble 802.11ax (RU52)	1, 13	BPSK	MCS0
	20 MHz Preamble 802.11ax (RU106)	1, 13	BPSK	MCS0
	40 MHz Preamble 802.11ax (RU242)	3, 11	BPSK	MCS0
Power Spectral Density / 6 dB Bandwidth	802.11b	1, 6, 11, 12, 13	DBPSK	1Mb/s
	802.11g	1, 6, 11, 12, 13	BPSK	6Mb/s
	802.11ax (HE20)	1, 6, 11, 12, 13	BPSK	MCS0
	802.11ax (HE40)	3, 6, 9, 10, 11	BPSK	MCS0
	20 MHz Preamble 802.11ax (RU26)	1, 13	BPSK	MCS0
	20 MHz Preamble 802.11ax (RU52)	1, 13	BPSK	MCS0
	20 MHz Preamble 802.11ax (RU106)	1, 13	BPSK	MCS0
	40 MHz Preamble 802.11ax (RU242)	3, 11	BPSK	MCS0
Conducted Out of Band Emissions	802.11b	1, 6, 11, 12, 13	DBPSK	1Mb/s
	802.11g	1, 6, 11, 12, 13	BPSK	6Mb/s
	802.11ax (HE20)	1, 6, 11, 12, 13	BPSK	MCS0
	802.11ax (HE40)	3, 6, 9, 10, 11	BPSK	MCS0
AC Power Conducted Emissions	802.11ax (HE20)	6	BPSK	MCS0
Unwanted Emissions below 1 GHz	802.11ax (HE20)	6	BPSK	MCS0
Unwanted Emissions above 1 GHz	802.11b	1, 6, 11, 12, 13	DBPSK	1Mb/s
	802.11g	1, 6, 11, 12, 13	BPSK	6Mb/s
	802.11ax (HE20)	1, 6, 11, 12, 13	BPSK	MCS0
	802.11ax (HE40)	3, 6, 9, 10, 11	BPSK	MCS0
	20 MHz Preamble 802.11ax (RU26)	1, 13	BPSK	MCS0
	20 MHz Preamble 802.11ax (RU52)	1, 13	BPSK	MCS0
	20 MHz Preamble 802.11ax (RU106)	1, 13	BPSK	MCS0
	40 MHz Preamble 802.11ax (RU242)	3, 11	BPSK	MCS0

3.5 Duty Cycle of Test Signal

1TX_Chain 0

802.11b: Duty cycle = 25.2 ms / 25.2 ms x 100% = 100.0%

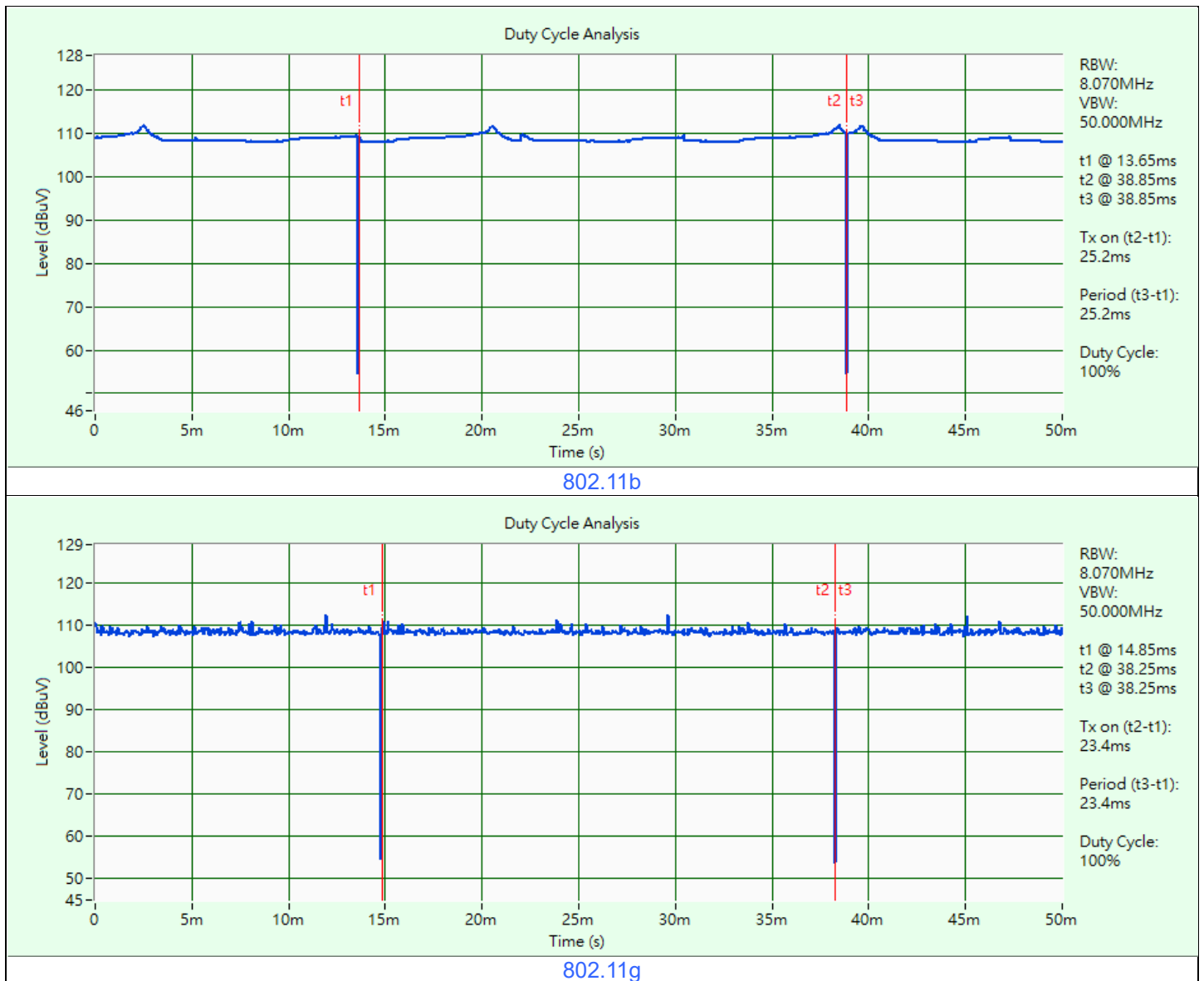
802.11g: Duty cycle = 23.4 ms / 23.4 ms x 100% = 100.0%



1TX_Chain 1

802.11b: Duty cycle = 25.2 ms / 25.2 ms x 100% = 100.0%

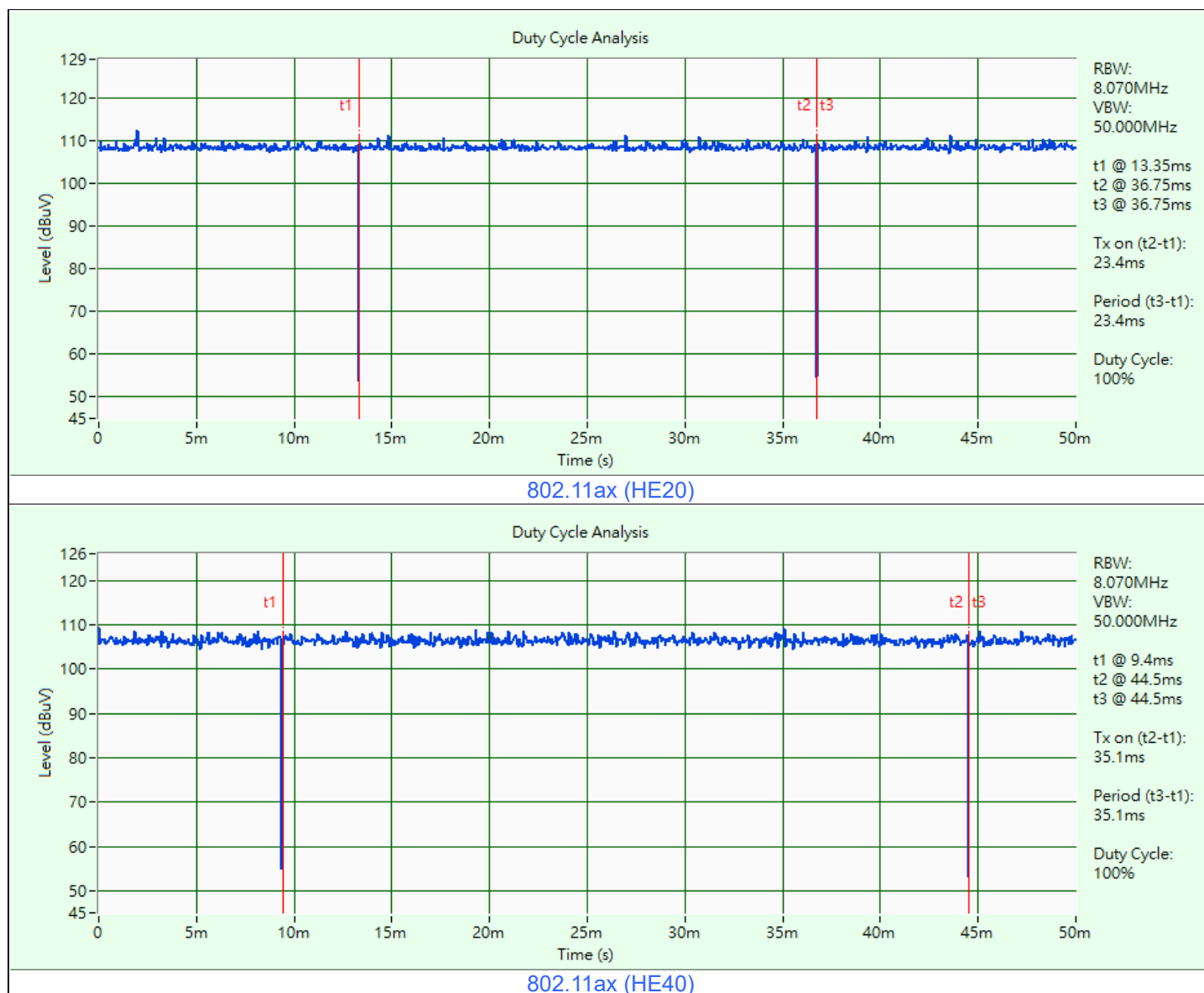
802.11g: Duty cycle = 23.4 ms / 23.4 ms x 100% = 100.0%



2TX

802.11ax (HE20): Duty cycle = 23.4 ms / 23.4 ms x 100% = 100.0%

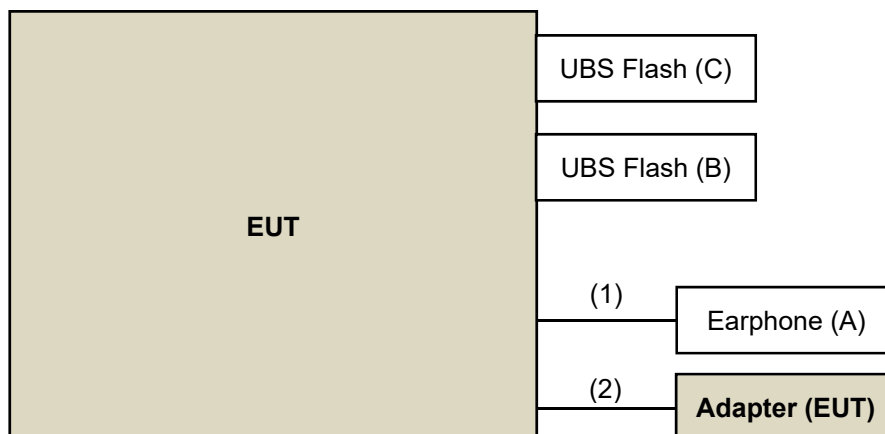
802.11ax (HE40): Duty cycle = 35.1 ms / 35.1 ms x 100% = 100.0%



3.6 Test Program Used and Operation Descriptions

Controlling software DRTU 0.2999.22.180.0 has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Earphone	APPLE	MB77PFEB	N/A	N/A	Provided by Lab
B	USB Flash	Sandisk	N/A	N/A	N/A	Provided by Lab
C	USB Flash	Sandisk	N/A	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	Earphone Cable	1	1.8	N	0	Provided by Lab
2	Type-C to Type-C cable	1	2	Y	0	Accessory of EUT

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 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Peak Power Analyzer KEYSIGHT	8990B	MY51000485	2022/1/18	2023/1/17
Power sensor Keysight	U2021XA	MY55380009	2022/3/23	2023/3/22
Wideband Power Sensor(N1923A) KEYSIGHT	N1923A	MY58020002	2022/1/17	2023/1/16

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2022/11/14

4.2 Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	100979	2022/3/25	2023/3/24

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2022/11/14

4.3 6 dB Bandwidth

Refer to section 4.2 to get information of the instruments.

4.4 Conducted Out of Band Emissions

Refer to section 4.2 to get information of the instruments.

4.5 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
LISN R&S	ESH2-Z5	100100	2022/2/17	2023/2/16
LISN Schwarzbeck	NNLK 8121	8121-731	2022/5/26	2023/5/25
Receiver R&S	ESCI	100412	2022/8/22	2023/8/21
RF Coaxial Cable WORKEN	5D-FB	Cable-cond2-01	2022/9/3	2023/9/2
Software BVADT	BVADT_Cond_ V7.3.7.4	N/A	N/A	N/A
Temperature&Humidity Meter Lufft	5098.00	Lf11015	2022/1/7	2023/1/6
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2022/8/31	2023/8/30

Notes:

1. The test was performed in HY - Conduction 2.
2. Tested Date: 2022/11/3

4.6 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
Bi-log Broadband Antenna Schwarzbeck	VULB9168	9168-1213	2022/10/20	2023/10/19
Loop Antenna EMCI	EM-6879	269	2022/9/19	2023/9/18
Loop Antenna TESEQ	HLA 6121	45745	2022/7/27	2023/7/26
Pre-amplifier EMCI	EMC001340	980201	2022/9/23	2023/9/22
Pre_Amplifier EMCI	EMC330N	980782	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	2022/1/15	2023/1/14
	EMCCFD400-NM-NM-500	201233	2022/1/17	2023/1/16
	EMCCFD400-NM-NM-3000	201235	2022/1/17	2023/1/16
	EMCCFD400-NM-NM-9000	201236	2022/1/17	2023/1/16
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Spectrum Analyzer R&S	FSW43	101866	2022/1/14	2023/1/13
Test Receiver R&S	ESR3+	102782	2021/12/10	2022/12/9
Turn Table Max-Full	MF-7802BS	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208674	N/A	N/A

Notes:

1. The test was performed in WM - 966 chamber 8.
2. Tested Date: 2022/10/21

4.7 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
Horn Antenna RFSPIN	DRH18-E	210103A18E	2021/11/14	2022/11/13
Horn Antenna Schwarzbeck	BBHA 9170	9170-1049	2021/11/14	2022/11/13
Pre_Amplifier EMCI	EMC118A45SE	980808	2021/12/30	2022/12/29
	EMC184045SE	980788	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMC101G-KM-KM-2000	201254	2022/1/17	2023/1/16
	EMC101G-KM-KM-3000	201257	2022/1/17	2023/1/16
	EMC101G-KM-KM-5000	201260	2022/1/17	2023/1/16
	EMC104-SM-SM-1000	210102	2022/1/17	2023/1/16
	EMC104-SM-SM-3000	201231	2022/1/17	2023/1/16
	EMC104-SM-SM-9000	201243	2022/1/17	2023/1/16
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Spectrum Analyzer R&S	FSW43	101866	2022/1/14	2023/1/13
Test Receiver R&S	ESR3+	102782	2021/12/10	2022/12/9
Turn Table Max-Full	MF-7802BS	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208674	N/A	N/A

Notes:

1. The test was performed in WM - 966 chamber 8.
2. Tested Date: 2022/10/25 ~ 2022/10/28

5 Limits of Test Items

5.1 RF Output Power

For systems using digital modulation in the 2400–2483.5 MHz bands: 1 Watt (30 dBm)

Per KDB 662911 D01 Multiple Transmitter Output 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 Power Spectral Density

The Maximum of Power Spectral Density Measurement is 8 dBm in any 3 kHz.

5.3 6 dB Bandwidth

The minimum of 6 dB Bandwidth Measurement is 0.5 MHz.

5.4 Conducted Out of Band Emissions

Below 20 dB of the highest emission level of operating band (in 100 kHz Resolution Bandwidth).

5.5 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.

5.6 Unwanted Emissions below 1 GHz

Radiated emissions up to 1 GHz which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20 dB below the highest level of the desired power:

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).

5.7 Unwanted Emissions above 1 GHz

Radiated emissions above 1 GHz which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20 dB below the highest level of the desired power:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
Above 960	500	3

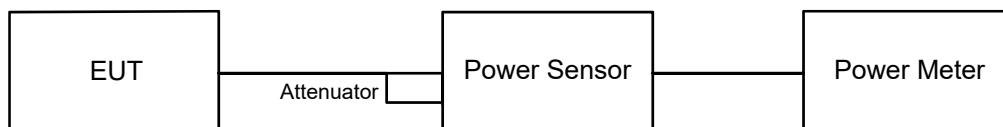
Notes:

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.

6 Test Arrangements

6.1 RF Output Power

6.1.1 Test Setup



6.1.2 Test Procedure

Peak Power:

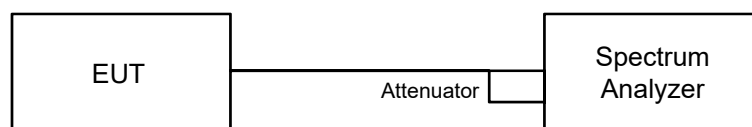
A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the power level.

Average Power:

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

6.2 Power Spectral Density

6.2.1 Test Setup

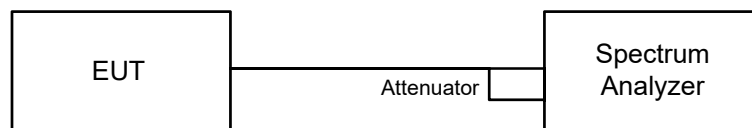


6.2.2 Test Procedure

- Set analyzer center frequency to DTS channel center frequency.
- Set the span to 1.5 times the DTS bandwidth.
- Set the RBW to: 3 kHz.
- Set the VBW $\geq 3 \times$ RBW.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum amplitude level within the RBW.

6.3 6 dB Bandwidth

6.3.1 Test Setup

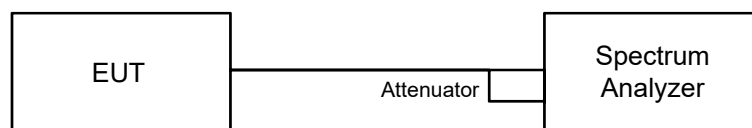


6.3.2 Test Procedure

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

6.4 Conducted Out of Band Emissions

6.4.1 Test Setup



6.4.2 Test Procedure

MEASUREMENT PROCEDURE REF

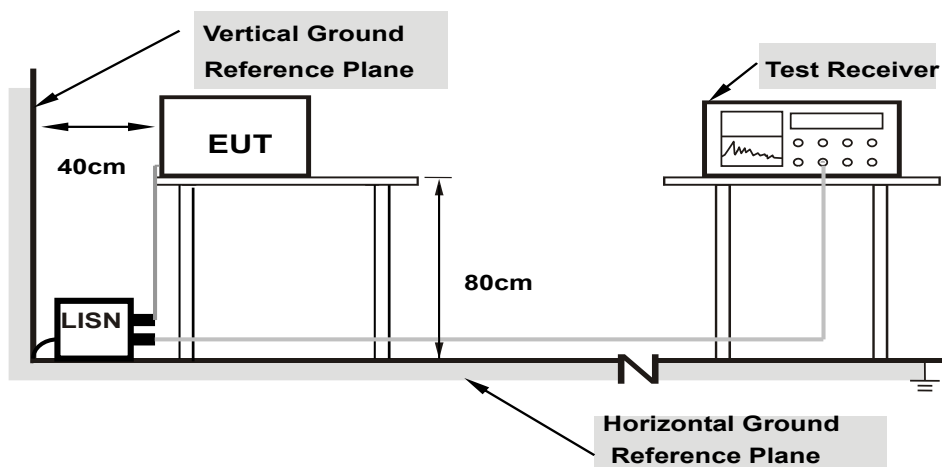
- Set the RBW = 100 kHz.
- Set the VBW ≥ 300 kHz.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOBE

- Set RBW = 100 kHz.
- Set VBW ≥ 300 kHz.
- Detector = peak.
- Sweep = auto couple.
- Trace Mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum amplitude level.

6.5 AC Power Conducted Emissions

6.5.1 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).

6.5.2 Test Procedure

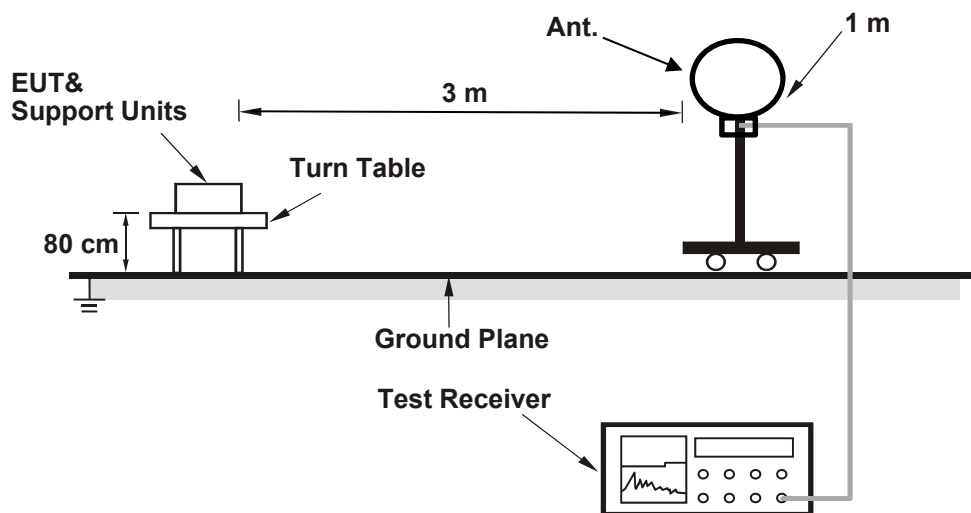
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The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

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

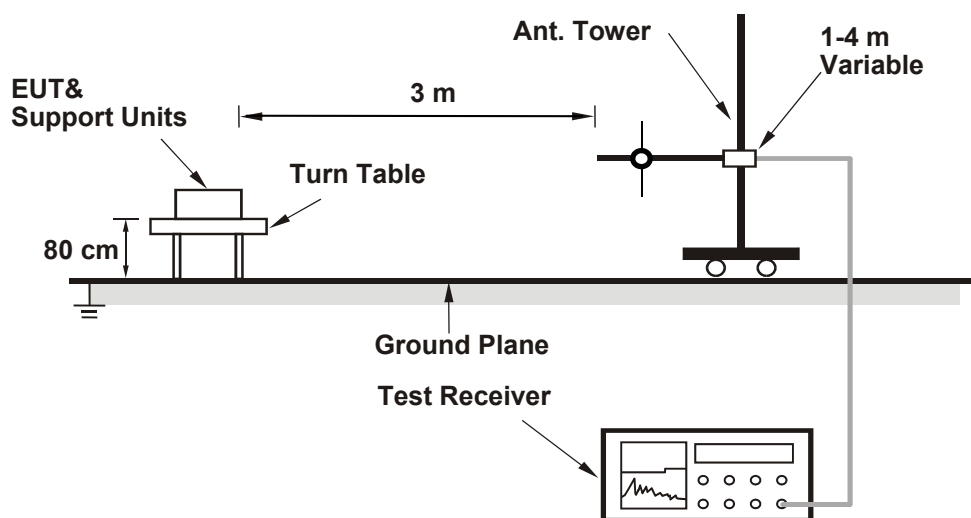
6.6 Unwanted Emissions below 1 GHz

6.6.1 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).

6.6.2 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

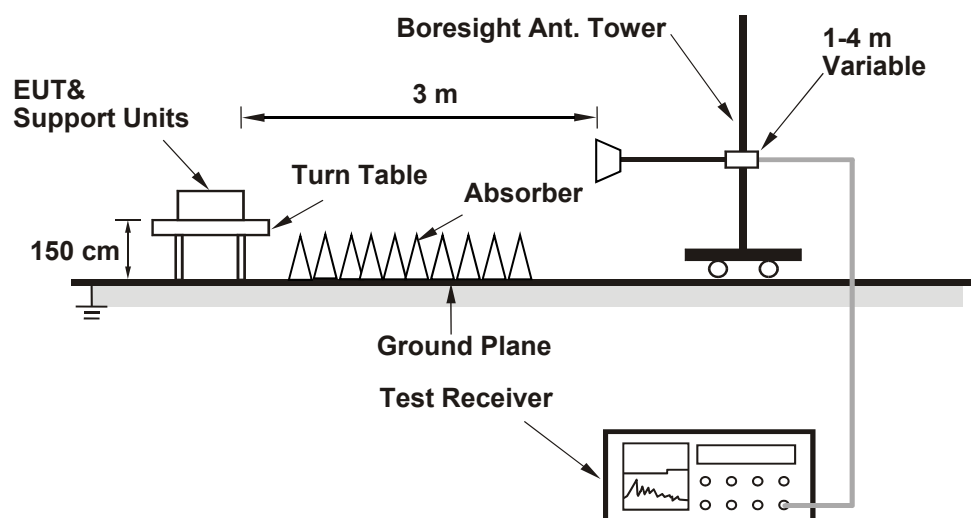
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the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

6.7 Unwanted Emissions above 1 GHz

6.7.1 Test Setup



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

6.7.2 Test Procedure

- 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.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 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.
- 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.
- 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:

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

7 Test Results of Test Item

7.1 RF Output Power

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Vincent Huang
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1TX_Chain 0

For Peak Power

802.11b

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	130.918	21.17	30	Pass
6	2437	126.765	21.03	30	Pass
11	2462	122.18	20.87	30	Pass
12	2467	34.041	15.32	30	Pass
13	2472	28.445	14.54	30	Pass

Note: The antenna gain is 2.96 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	188.799	22.76	30	Pass
6	2437	194.536	22.89	30	Pass
11	2462	108.143	20.34	30	Pass
12	2467	48.865	16.89	30	Pass
13	2472	24.831	13.95	30	Pass

Note: The antenna gain is 2.96 dBi < 6 dBi, so the output power limit shall not be reduced.

For Average Power

802.11b

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	77.090	18.87
6	2437	73.790	18.68
11	2462	75.162	18.76
12	2467	24.155	13.83
13	2472	16.904	12.28

802.11g

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	74.473	18.72
6	2437	75.509	18.78
11	2462	35.975	15.56
12	2467	12.882	11.10
13	2472	7.482	8.74

1TX_Chain 1

For Peak Power

802.11b

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	133.045	21.24	30	Pass
6	2437	133.352	21.25	30	Pass
11	2462	101.391	20.06	30	Pass
12	2467	34.435	15.37	30	Pass
13	2472	28.973	14.62	30	Pass

Note: The antenna gain is 2.97 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	198.609	22.98	30	Pass
6	2437	201.837	23.05	30	Pass
11	2462	113.501	20.55	30	Pass
12	2467	50.466	17.03	30	Pass
13	2472	25.942	14.14	30	Pass

Note: The antenna gain is 2.97 dBi < 6 dBi, so the output power limit shall not be reduced.

For Average Power

802.11b

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	78.524	18.95
6	2437	76.736	18.85
11	2462	78.163	18.93
12	2467	25.061	13.99
13	2472	17.338	12.39

802.11g

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	78.705	18.96
6	2437	79.068	18.98
11	2462	37.670	15.76
12	2467	13.366	11.26
13	2472	7.798	8.92

2TX

For Peak Power

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	20.17	20.36	212.635	23.28	30	Pass
6	2437	22.94	23.29	410.093	26.13	30	Pass
11	2462	18.86	18.92	154.896	21.90	30	Pass
12	2467	15.28	15.42	68.562	18.36	30	Pass
13	2472	12.95	13.13	40.283	16.05	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.97 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT40)

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
3	2422	18.68	18.84	150.350	21.77	30	Pass
6	2437	20.01	20.16	203.983	23.10	30	Pass
9	2452	18.75	18.92	152.972	21.85	30	Pass
10	2457	15.74	15.87	76.134	18.82	30	Pass
11	2462	14.18	14.36	53.472	17.28	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.97 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	20.22	20.43	215.604	23.34	30	Pass
6	2437	22.98	23.34	414.384	26.17	30	Pass
11	2462	18.99	19.06	159.788	22.04	30	Pass
12	2467	15.37	15.52	70.080	18.46	30	Pass
13	2472	13.01	13.26	41.182	16.15	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.97 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
3	2422	18.79	18.92	153.666	21.87	30	Pass
6	2437	20.17	20.23	209.431	23.21	30	Pass
9	2452	18.84	19.03	156.543	21.95	30	Pass
10	2457	15.87	15.98	78.265	18.94	30	Pass
11	2462	14.23	14.53	54.864	17.39	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.97 dBi < 6 dBi, so the output power limit shall not be reduced.

20 MHz Preamble 802.11ax (RU26)

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	21.74	22.05	309.604	24.91	30	Pass
13	2472	17.66	18.21	124.566	20.95	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.97 dBi < 6 dBi, so the output power limit shall not be reduced.

20 MHz Preamble 802.11ax (RU52)

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	21.76	22.08	311.404	24.93	30	Pass
13	2472	18.72	19.04	154.641	21.89	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.97 dBi < 6 dBi, so the output power limit shall not be reduced.

20 MHz Preamble 802.11ax (RU106)

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	21.77	22.03	309.902	24.91	30	Pass
13	2472	18.64	18.98	152.182	21.82	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.97 dBi < 6 dBi, so the output power limit shall not be reduced.

40 MHz Preamble 802.11ax (RU242)

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
3	2422	20.22	20.31	212.595	23.28	30	Pass
11	2462	16.18	16.25	83.665	19.23	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.97 dBi < 6 dBi, so the output power limit shall not be reduced.

For Average Power

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
1	2412	16.62	16.98	95.808	19.81
6	2437	18.71	18.98	153.37	21.86
11	2462	14.58	14.76	58.63	17.68
12	2467	11.01	11.24	25.923	14.14
13	2472	8.23	8.39	13.555	11.32

802.11n (HT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
3	2422	14.06	14.18	51.65	17.13
6	2437	16.54	16.58	90.58	19.57
9	2452	14.13	14.31	52.86	17.23
10	2457	11.59	11.64	29.009	14.63
11	2462	9.55	9.71	18.37	12.64

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
1	2412	16.78	17.06	98.459	19.93
6	2437	18.74	18.95	153.341	21.86
11	2462	14.63	14.89	59.872	17.77
12	2467	11.12	11.37	26.651	14.26
13	2472	8.32	8.47	13.823	11.41

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
3	2422	14.17	14.36	53.411	17.28
6	2437	16.69	16.74	93.872	19.73
9	2452	14.23	14.41	54.091	17.33
10	2457	11.69	11.85	30.068	14.78
11	2462	9.64	9.83	18.821	12.75

20 MHz Preamble 802.11ax (RU26)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
1	2412	18.01	18.24	129.922	21.14
13	2472	8.64	8.92	15.11	11.79

20 MHz Preamble 802.11ax (RU52)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
1	2412	17.97	18.25	129.496	21.12
13	2472	9.63	9.82	18.777	12.74

20 MHz Preamble 802.11ax (RU106)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
1	2412	17.98	18.23	129.333	21.12
13	2472	9.58	9.74	18.497	12.67

40 MHz Preamble 802.11ax (RU242)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
3	2422	15.11	15.38	66.948	18.26
11	2462	8.96	9.13	16.055	12.06

7.2 Power Spectral Density

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Vincent Huang
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1TX_Chain 0

802.11b

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-2.07	8.00	Pass
6	2437	-1.92	8.00	Pass
11	2462	-1.98	8.00	Pass
12	2467	-6.92	8.00	Pass
13	2472	-7.75	8.00	Pass

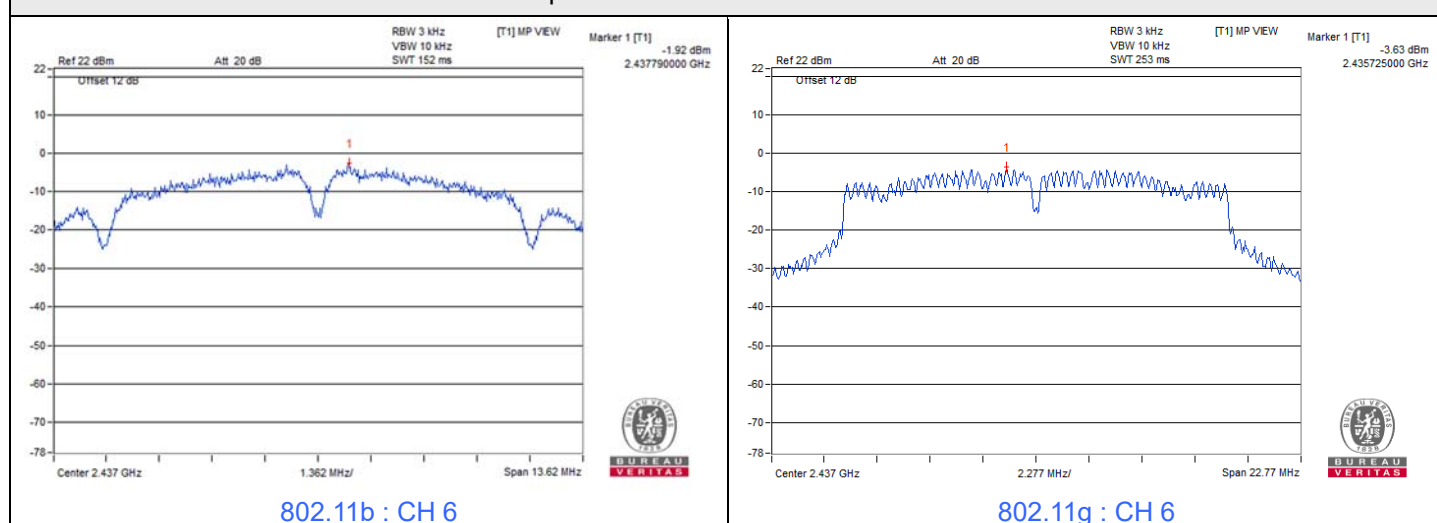
Note: The antenna gain is 2.96 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-3.77	8.00	Pass
6	2437	-3.63	8.00	Pass
11	2462	-6.54	8.00	Pass
12	2467	-10.43	8.00	Pass
13	2472	-13.54	8.00	Pass

Note: The antenna gain is 2.96 dBi < 6 dBi, so the power density limit shall not be reduced.

Spectrum Plot of Maximum Value



1TX_Chain 1

802.11b

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-1.94	8.00	Pass
6	2437	-1.73	8.00	Pass
11	2462	-1.76	8.00	Pass
12	2467	-6.78	8.00	Pass
13	2472	-7.52	8.00	Pass

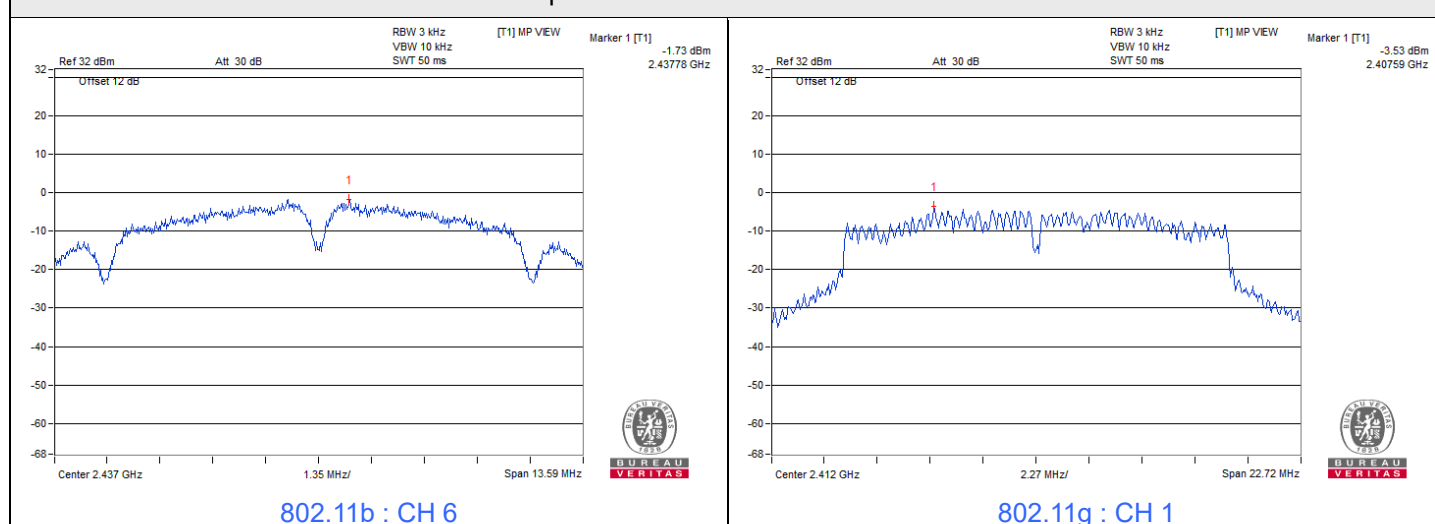
Note: The antenna gain is 2.97 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-3.53	8.00	Pass
6	2437	-3.62	8.00	Pass
11	2462	-6.31	8.00	Pass
12	2467	-10.25	8.00	Pass
13	2472	-13.45	8.00	Pass

Note: The antenna gain is 2.97 dBi < 6 dBi, so the power density limit shall not be reduced.

Spectrum Plot of Maximum Value



2TX

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
1	2412	-7.28	-7.16	-4.21	8.00	Pass
6	2437	-5.22	-5.04	-2.12	8.00	Pass
11	2462	-9.38	-9.45	-6.41	8.00	Pass
12	2467	-12.78	-12.51	-9.63	8.00	Pass
13	2472	-15.82	-15.69	-12.74	8.00	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 5.98 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
3	2422	-11.91	-11.71	-8.80	8.00	Pass
6	2437	-9.05	-8.89	-5.96	8.00	Pass
9	2452	-11.54	-11.50	-8.51	8.00	Pass
10	2457	-14.34	-14.50	-11.41	8.00	Pass
11	2462	-16.38	-16.16	-13.26	8.00	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 5.98 dBi < 6 dBi, so the power density limit shall not be reduced.

20 MHz Preamble 802.11ax (RU26)

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
1	2412	1.99	2.08	5.05	8.00	Pass
13	2472	-6.85	-7.69	-4.24	8.00	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 5.98 dBi < 6 dBi, so the power density limit shall not be reduced.

20 MHz Preamble 802.11ax (RU52)

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
1	2412	-1.46	-1.26	1.65	8.00	Pass
13	2472	-9.47	-9.44	-6.45	8.00	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 5.98 dBi < 6 dBi, so the power density limit shall not be reduced.

20 MHz Preamble 802.11ax (RU106)

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
1	2412	-3.16	-4.00	-0.55	8.00	Pass
13	2472	-11.26	-11.67	-8.45	8.00	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 5.98 dBi < 6 dBi, so the power density limit shall not be reduced.

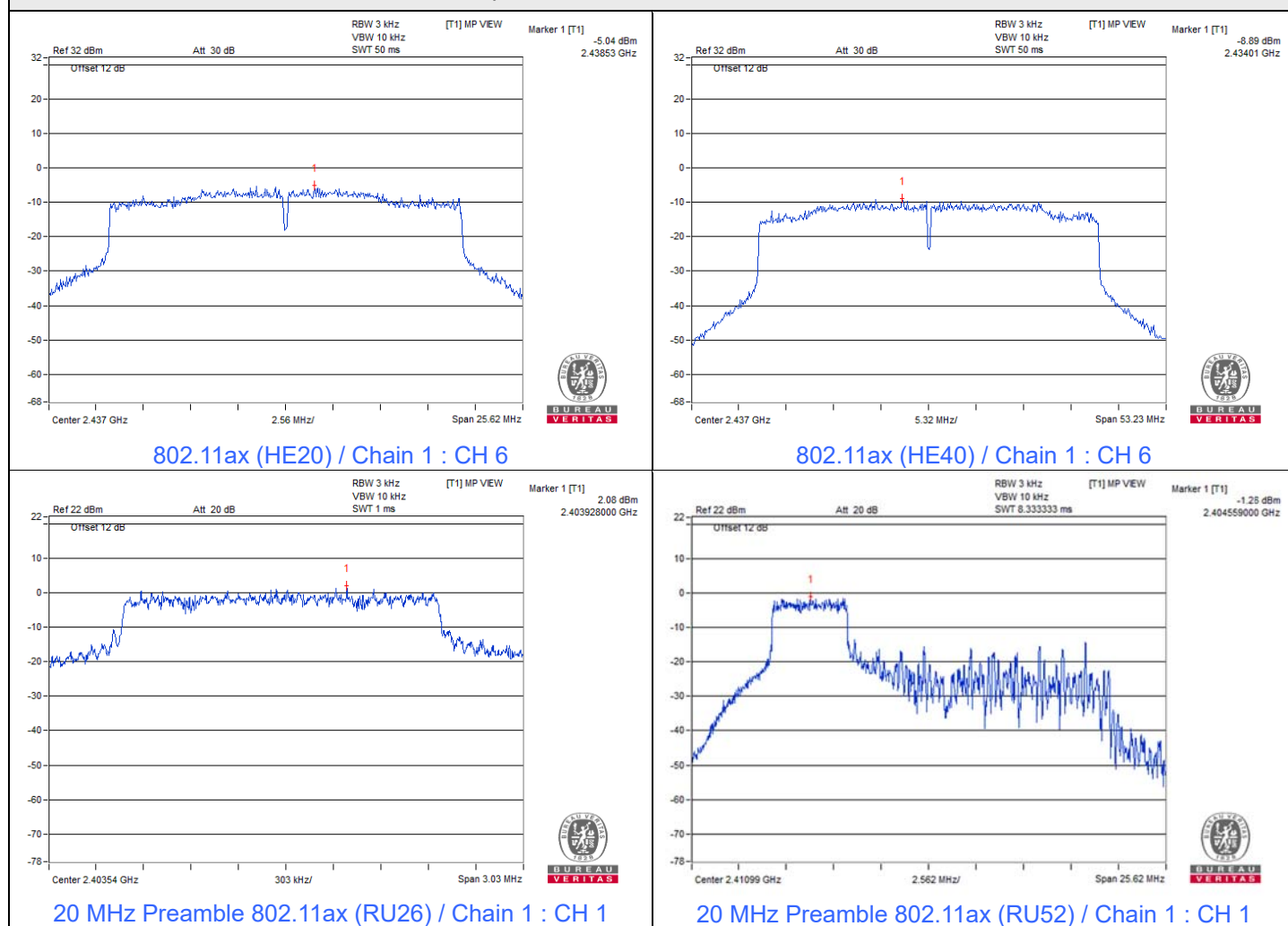
40 MHz Preamble 802.11ax (RU242)

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
3	2422	-9.12	-9.05	-6.07	8.00	Pass
11	2462	-15.16	-16.08	-12.59	8.00	Pass

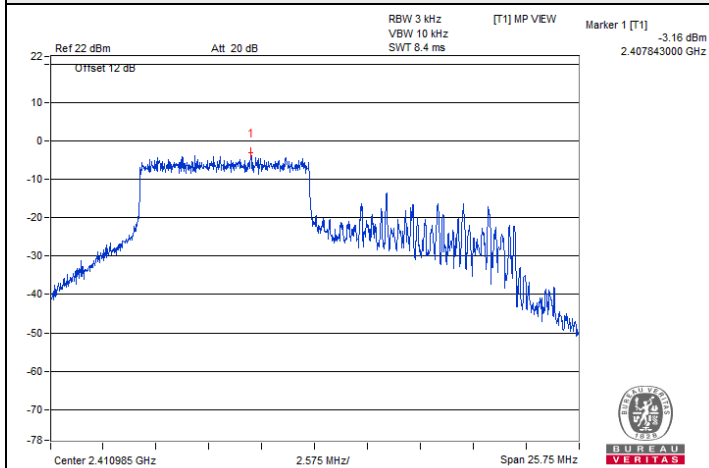
Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 5.98 dBi < 6 dBi, so the power density limit shall not be reduced.

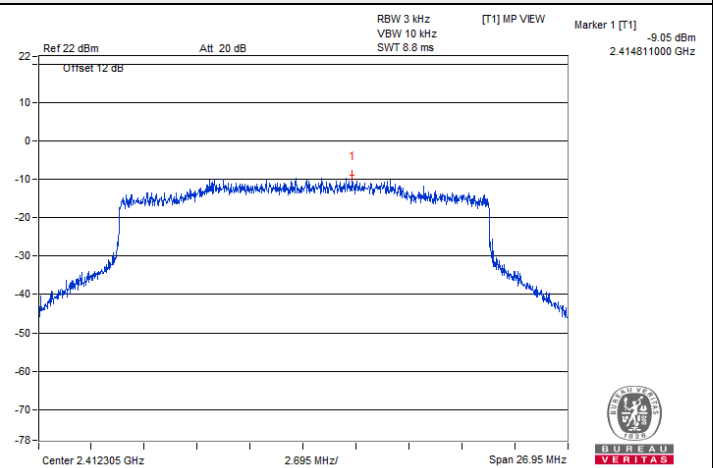
Spectrum Plot of Maximum Value



Spectrum Plot of Maximum Value



20 MHz Preamble 802.11ax (RU106) / Chain 0 : CH 1



40 MHz Preamble 802.11ax (RU242) / Chain 1 : CH 3

7.3 6 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Vincent Huang
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1TX_Chain 0

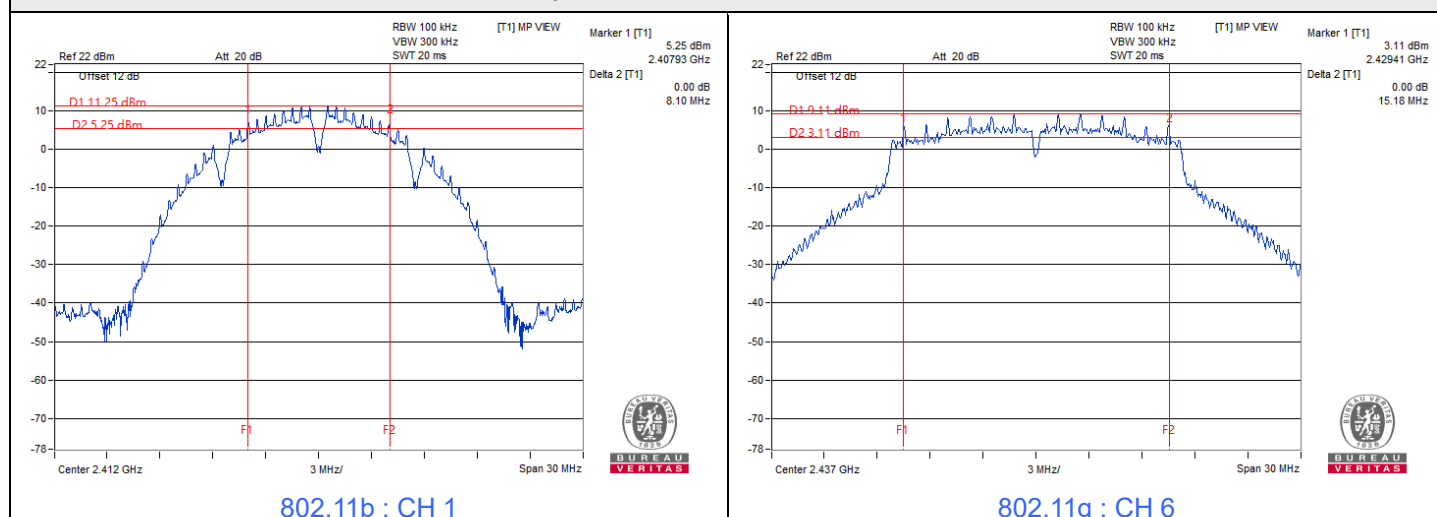
802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	8.1	0.5	Pass
6	2437	9.08	0.5	Pass
11	2462	9.09	0.5	Pass
12	2467	9.08	0.5	Pass
13	2472	9.08	0.5	Pass

802.11g

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	15.2	0.5	Pass
6	2437	15.18	0.5	Pass
11	2462	15.19	0.5	Pass
12	2467	15.19	0.5	Pass
13	2472	16.39	0.5	Pass

Spectrum Plot of Minimum Value



1TX_Chain 1

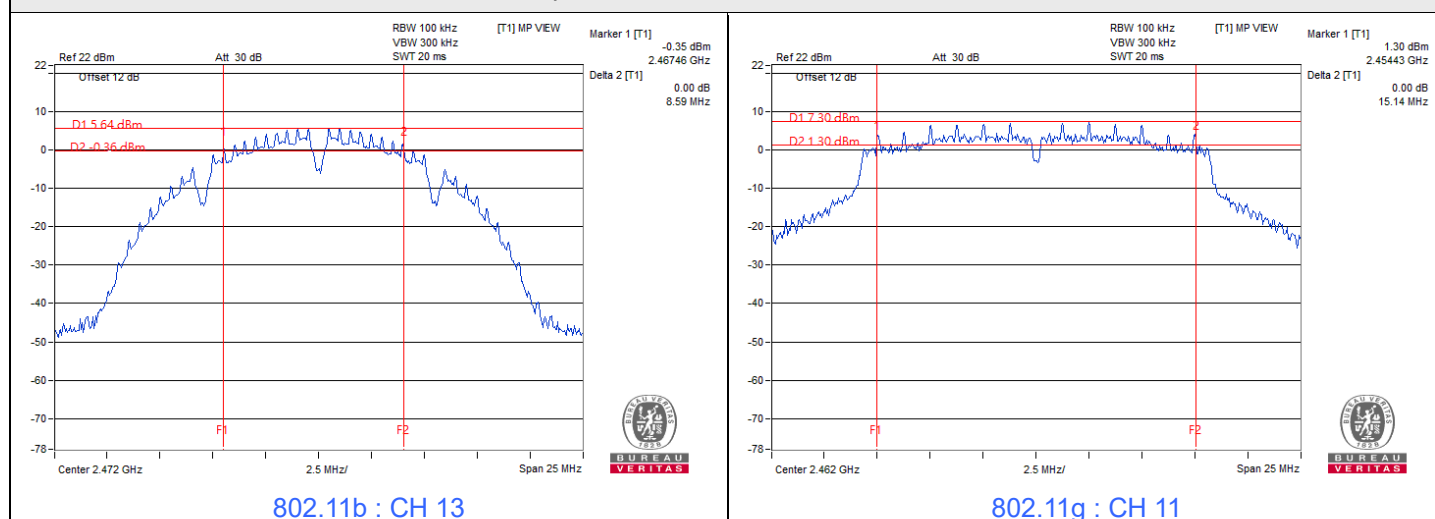
802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	9.08	0.5	Pass
6	2437	9.06	0.5	Pass
11	2462	9.07	0.5	Pass
12	2467	9.06	0.5	Pass
13	2472	8.59	0.5	Pass

802.11g

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	15.15	0.5	Pass
6	2437	15.16	0.5	Pass
11	2462	15.14	0.5	Pass
12	2467	15.17	0.5	Pass
13	2472	16.35	0.5	Pass

Spectrum Plot of Minimum Value



2TX

802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	17.04	16.03	0.5	Pass
6	2437	18.11	17.08	0.5	Pass
11	2462	17.45	17.27	0.5	Pass
12	2467	15.49	16.41	0.5	Pass
13	2472	18.24	18.10	0.5	Pass

802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	2422	33.43	35.91	0.5	Pass
6	2437	36.15	35.49	0.5	Pass
9	2452	36.08	35.13	0.5	Pass
10	2457	34.57	36.46	0.5	Pass
11	2462	37.71	37.44	0.5	Pass

20 MHz Preamble 802.11ax (RU26)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	17.04	17.08	0.5	Pass
13	2472	15.67	16.94	0.5	Pass

20 MHz Preamble 802.11ax (RU52)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	17.04	17.08	0.5	Pass
13	2472	15.67	16.94	0.5	Pass

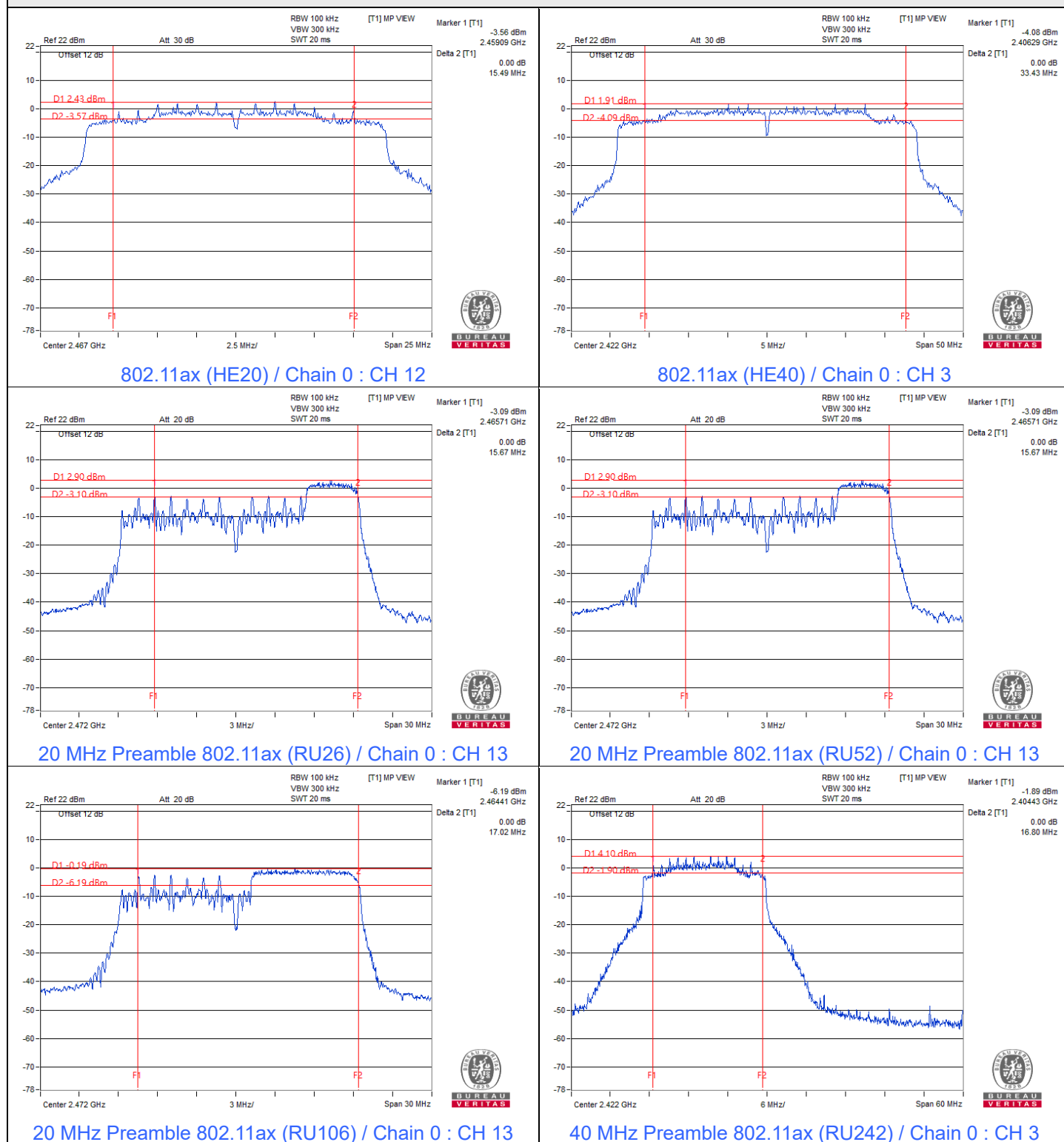
20 MHz Preamble 802.11ax (RU106)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	17.17	17.15	0.5	Pass
13	2472	17.02	17.05	0.5	Pass

40 MHz Preamble 802.11ax (RU242)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	2422	16.80	17.97	0.5	Pass
11	2462	18.42	18.41	0.5	Pass

Spectrum Plot of Minimum Value

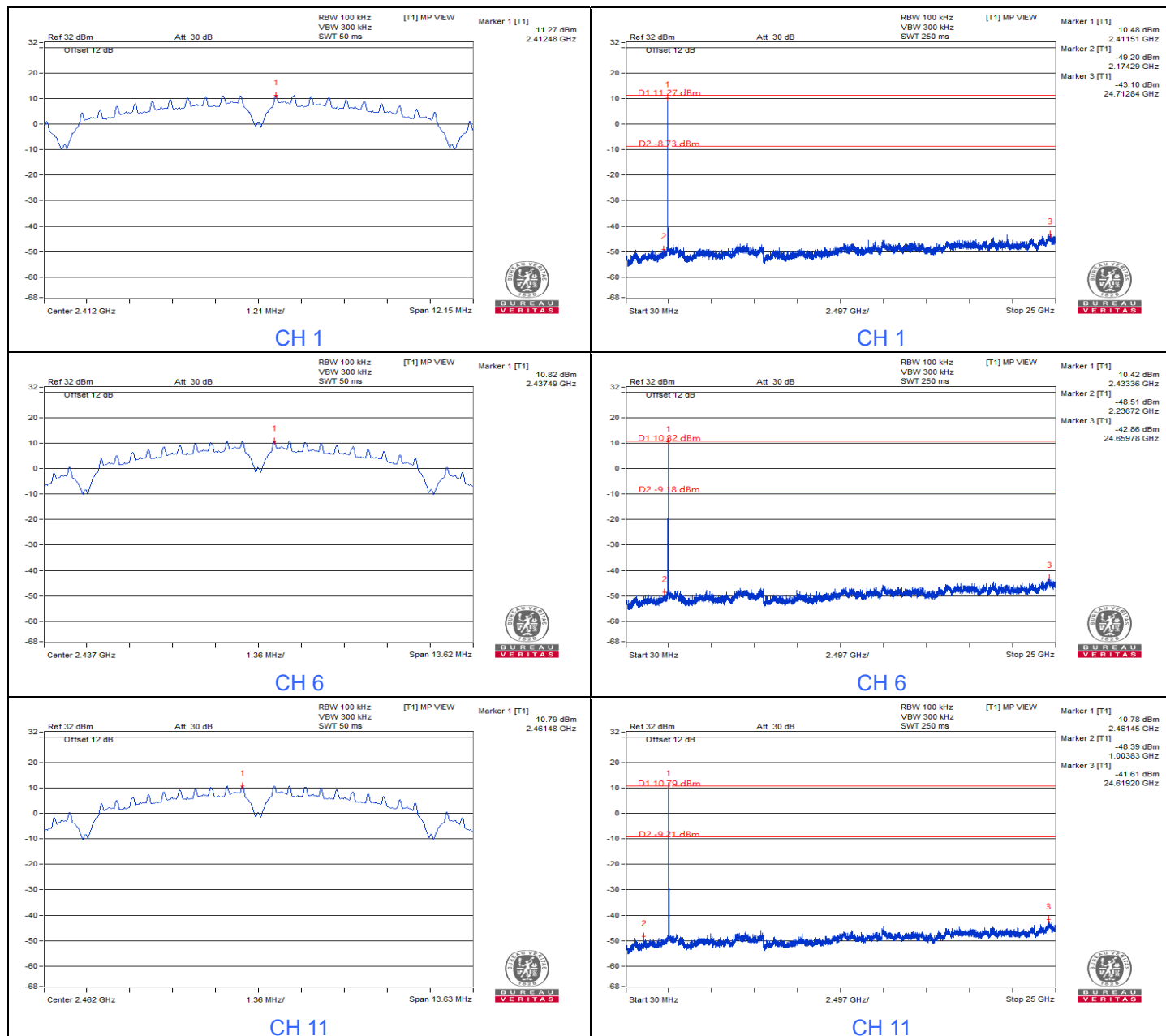


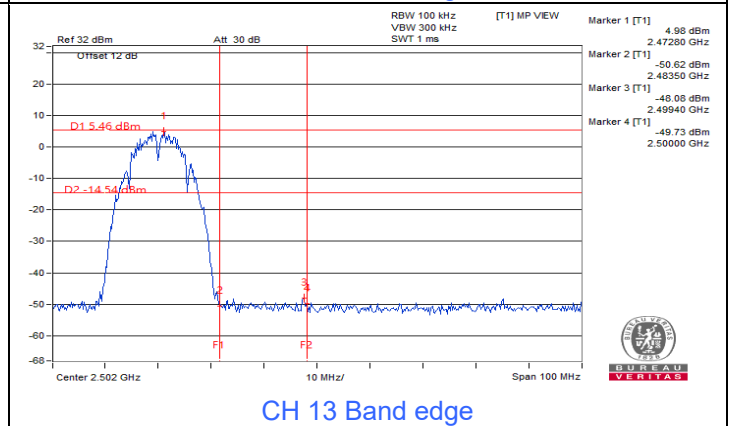
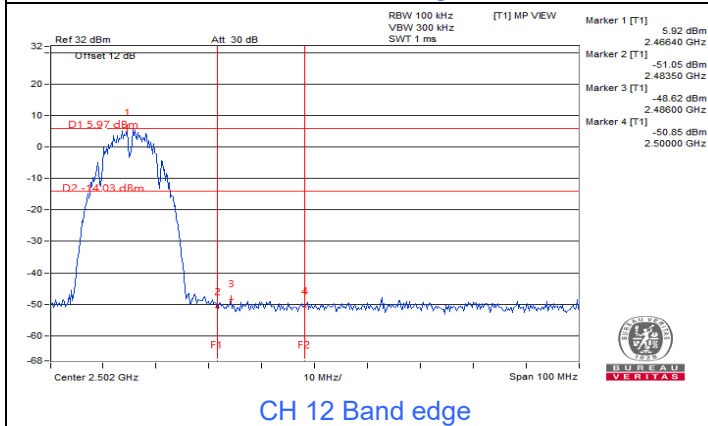
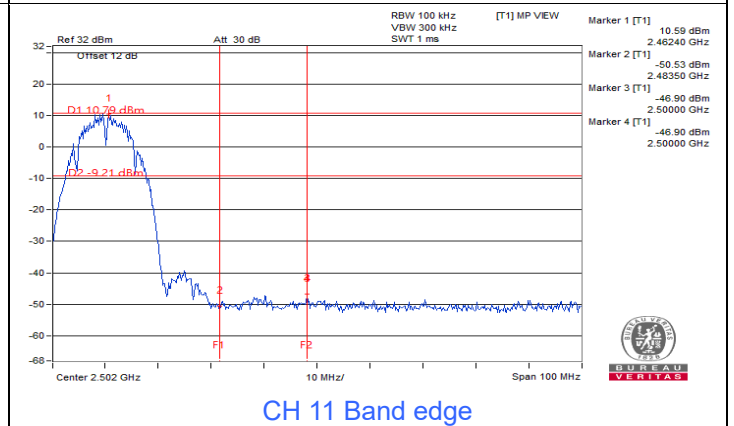
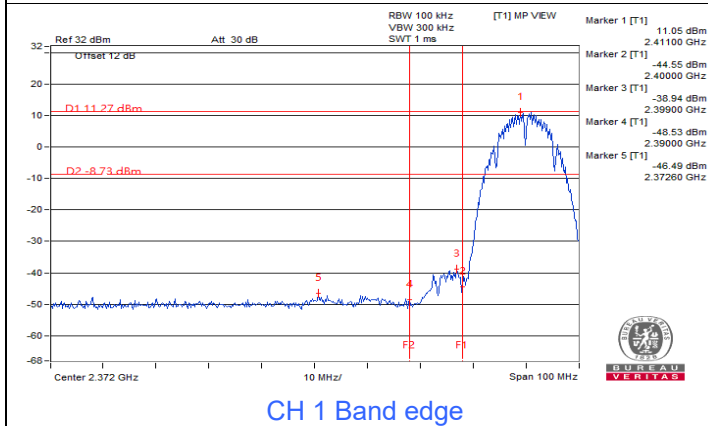
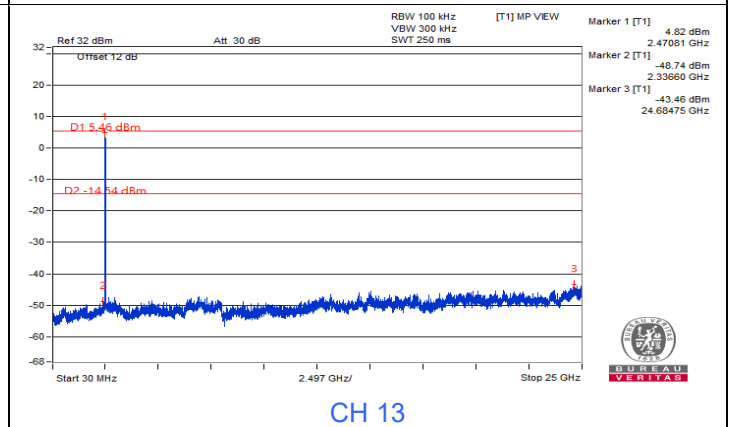
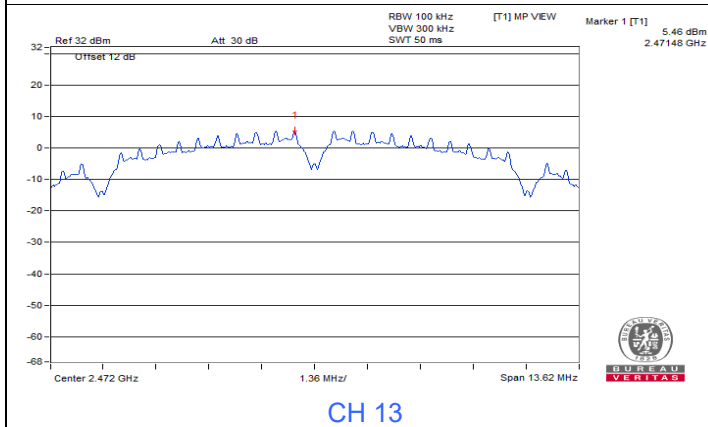
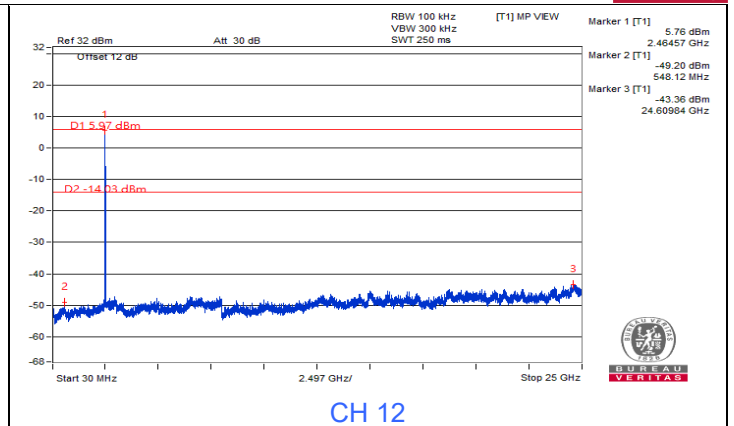
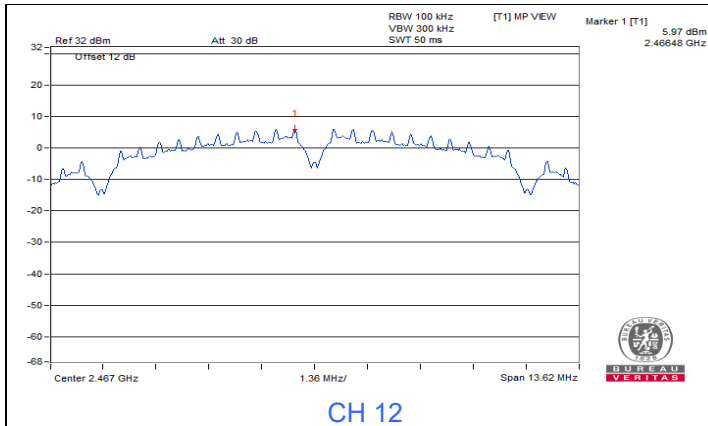
7.4 Conducted Out of Band Emissions

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Vincent Huang
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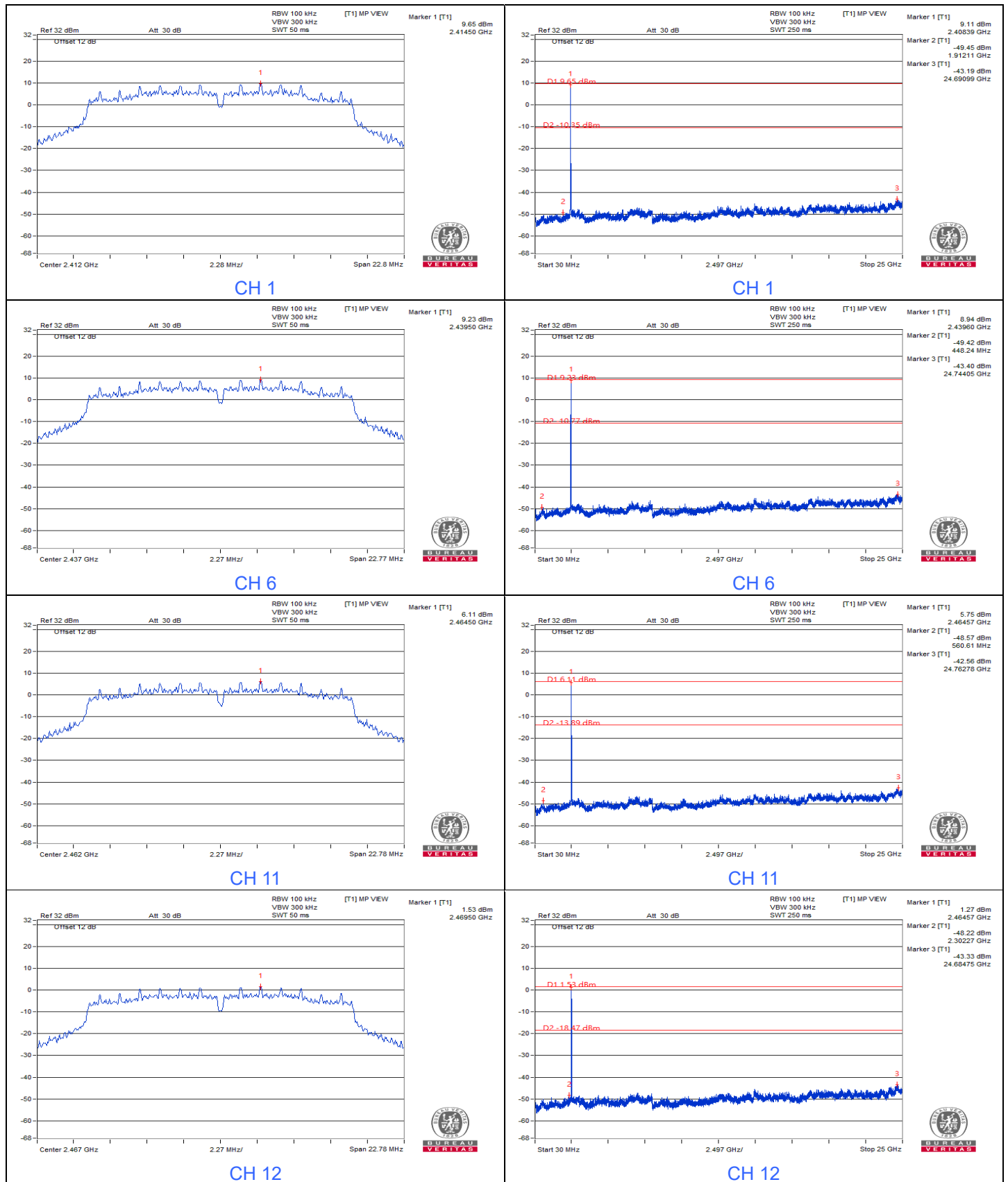
1TX_Chain 0

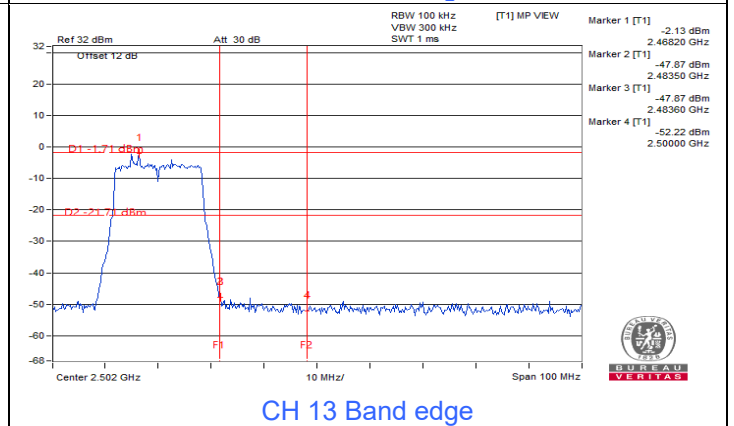
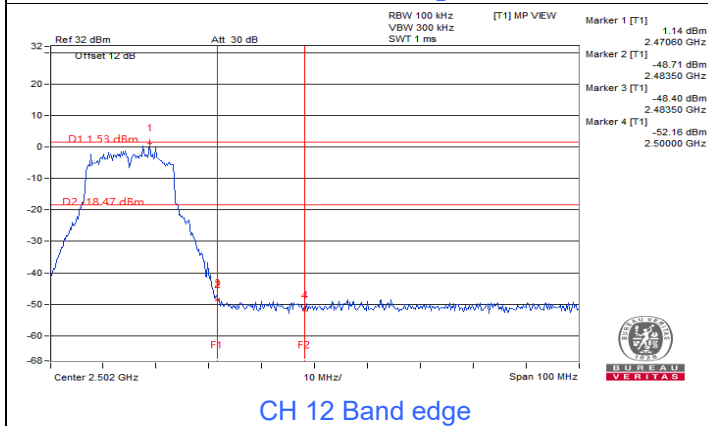
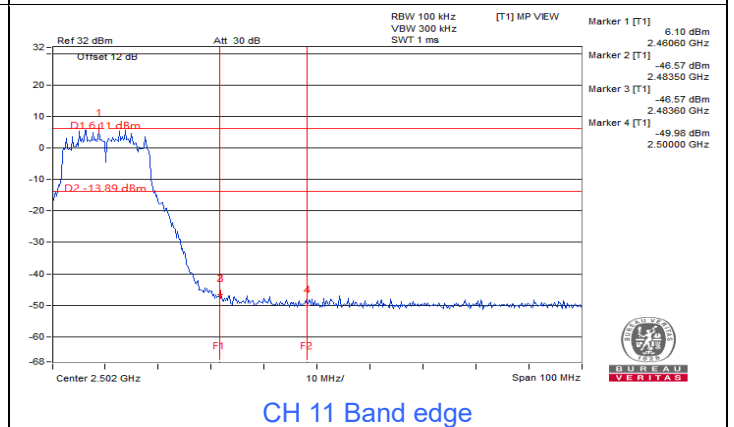
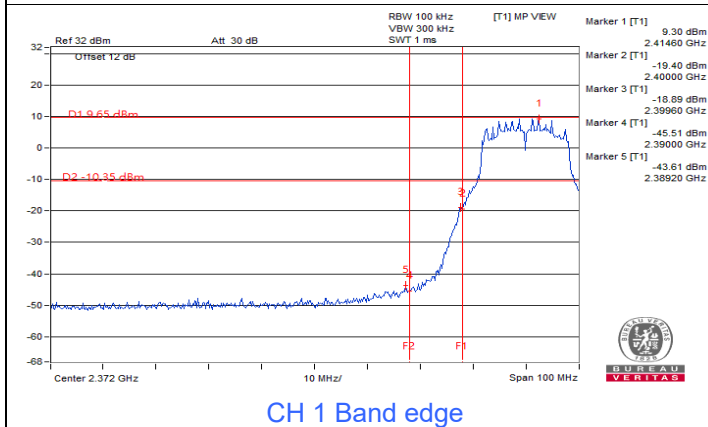
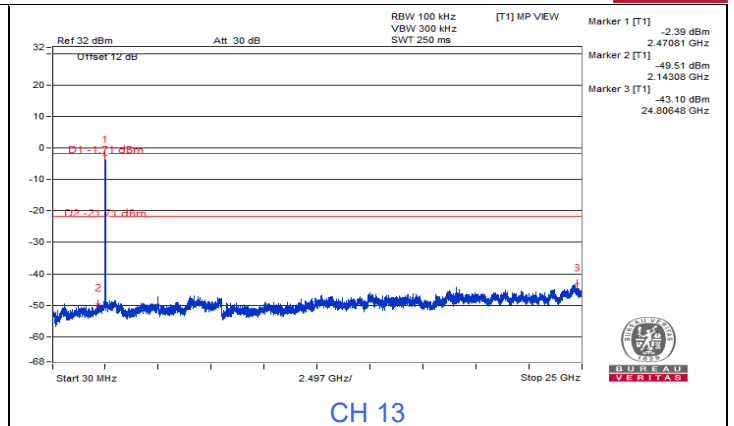
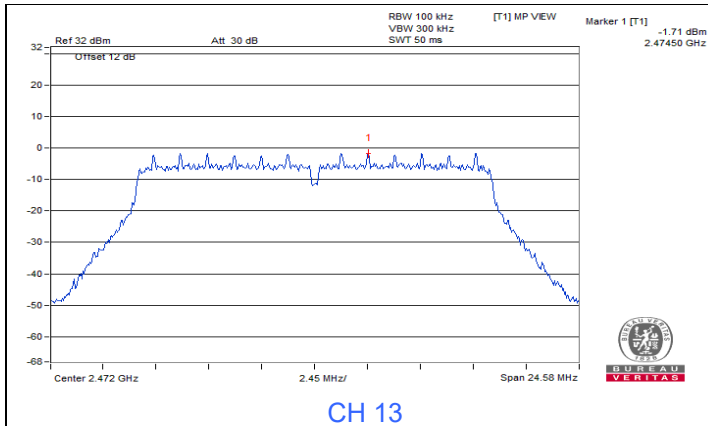
802.11b





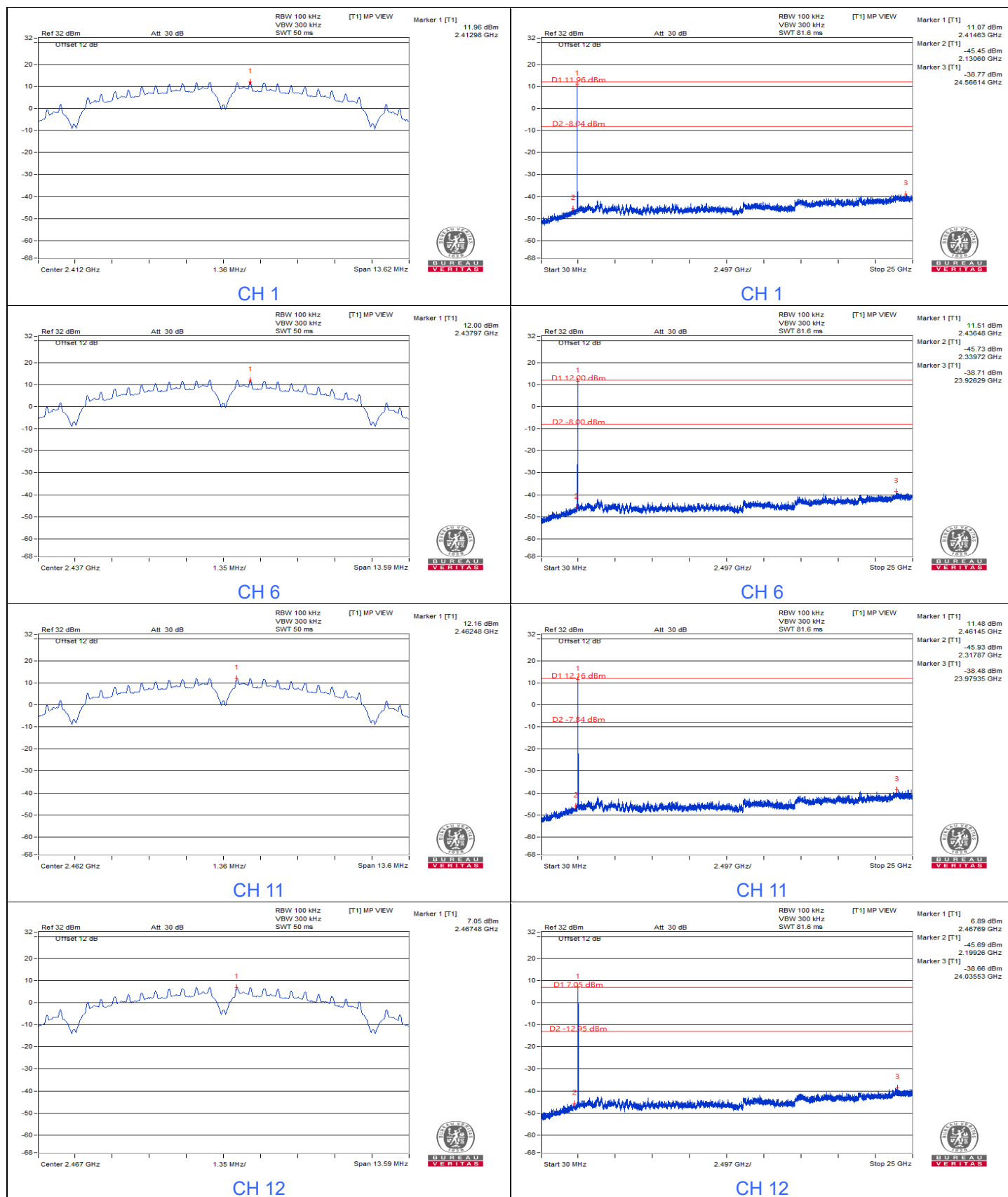
802.11g

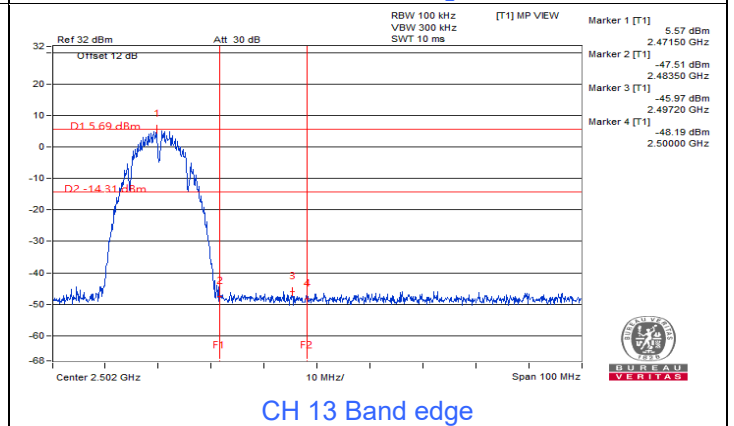
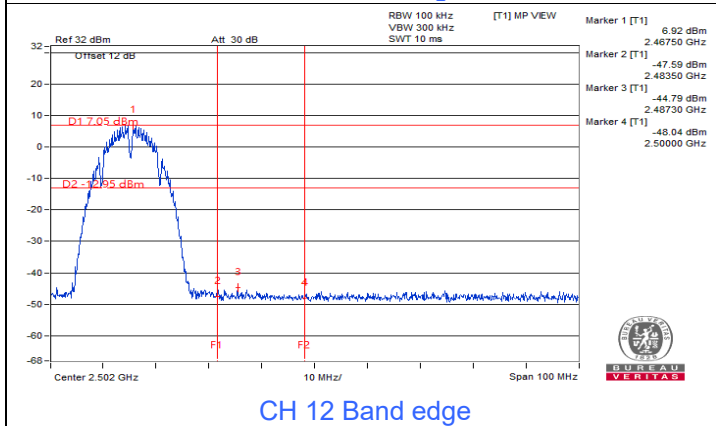
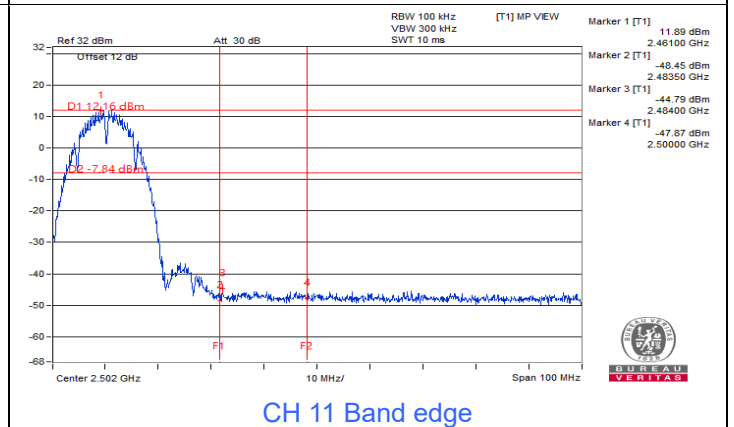
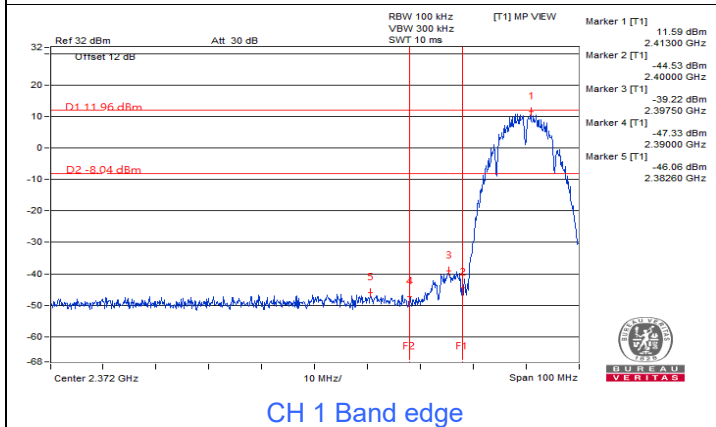
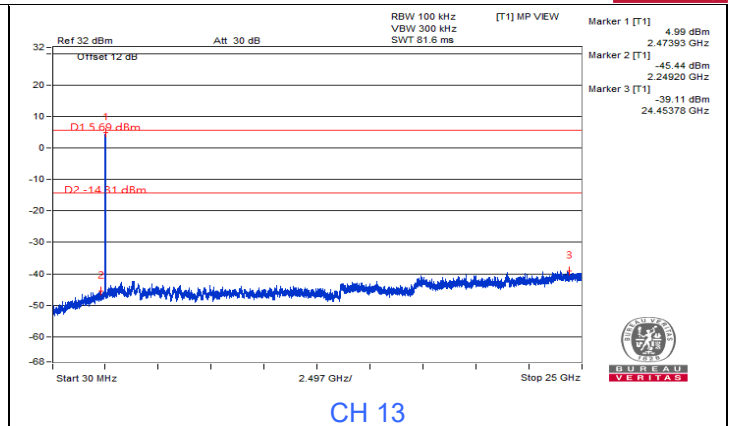
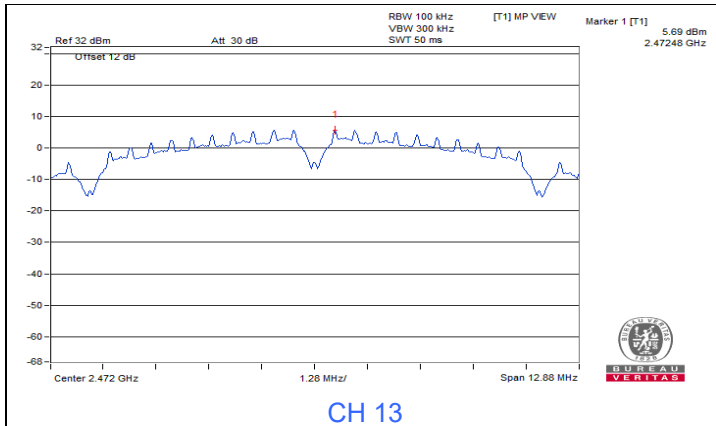




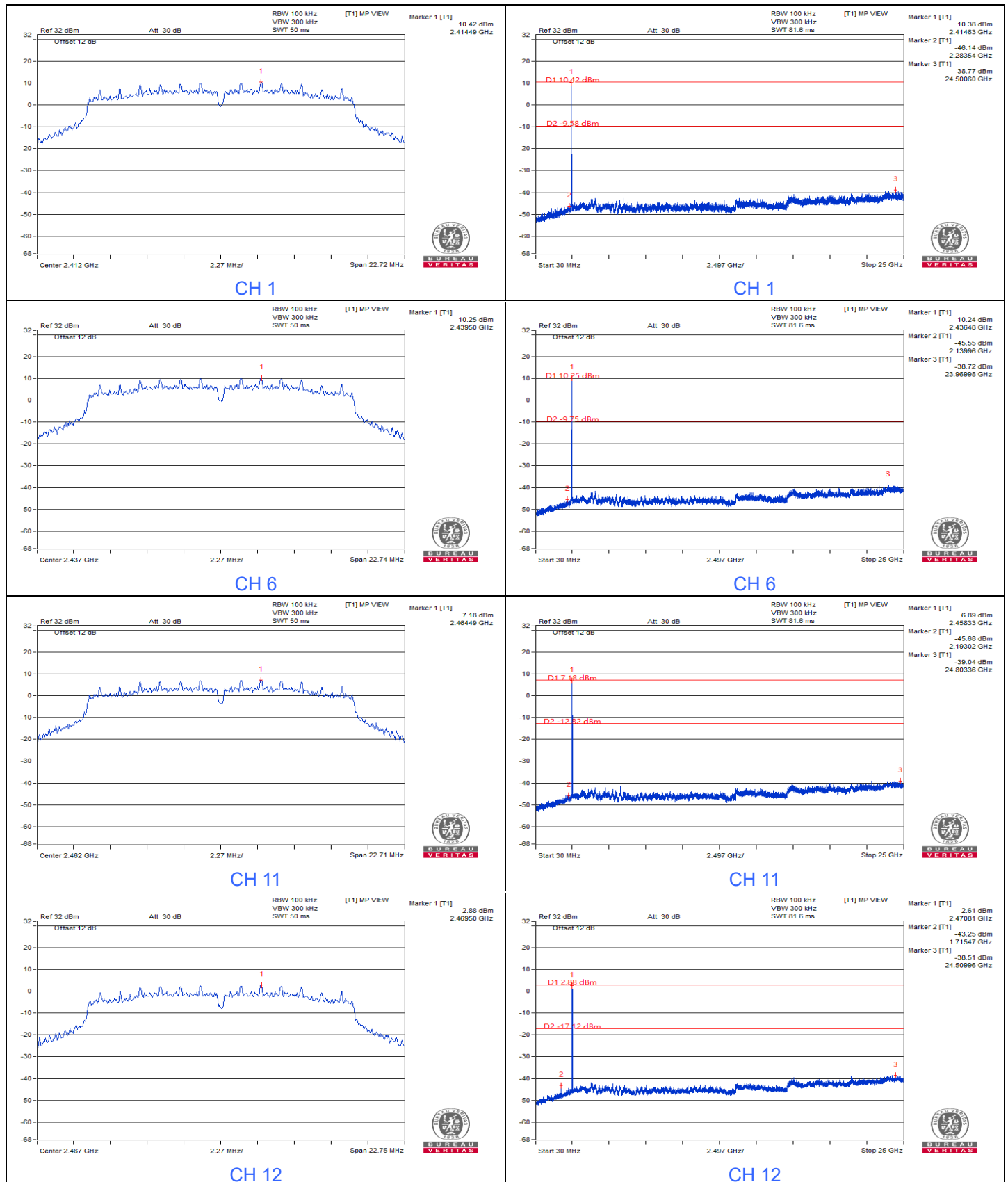
1TX_Chain 1

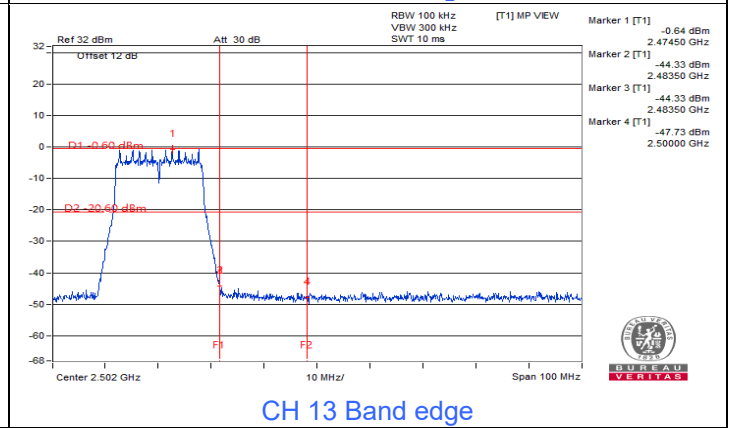
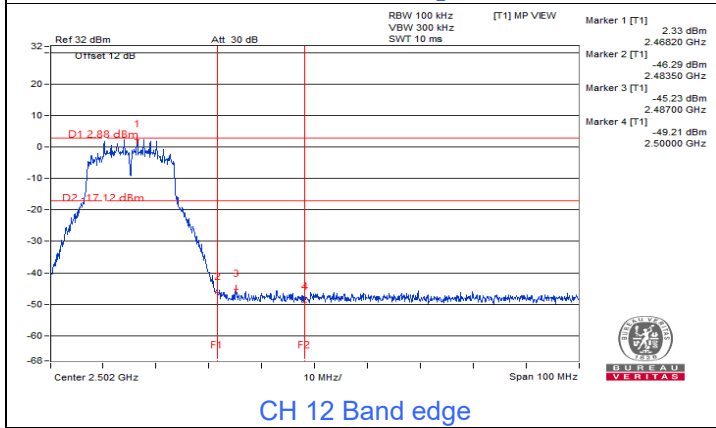
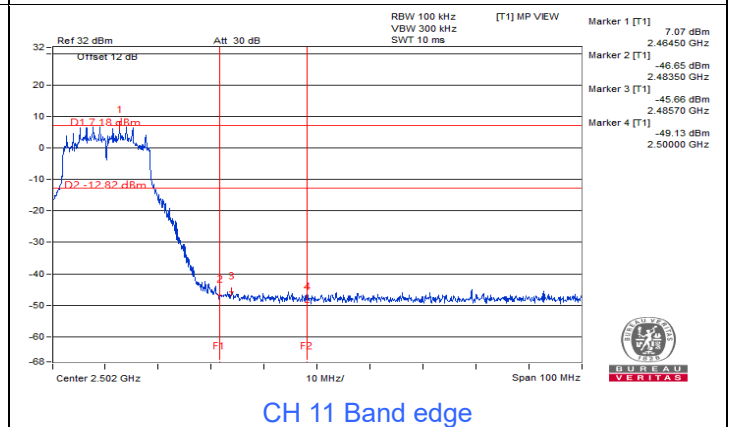
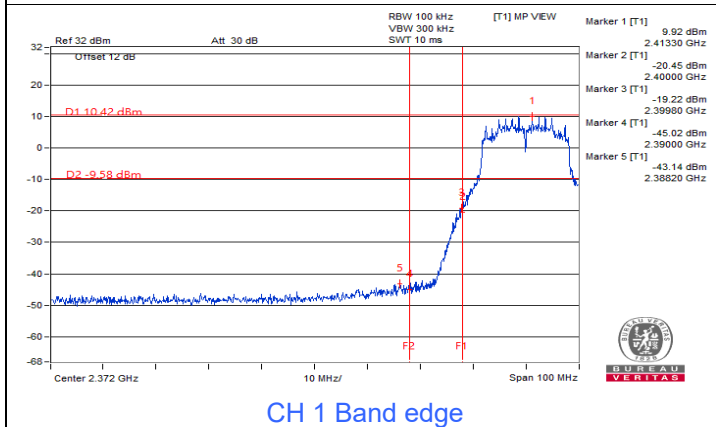
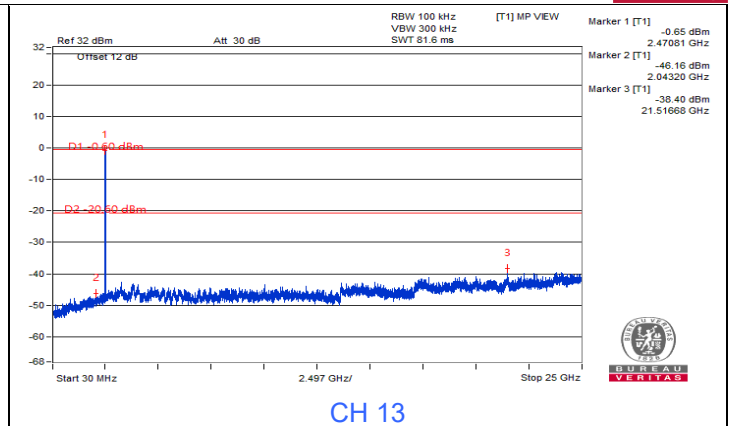
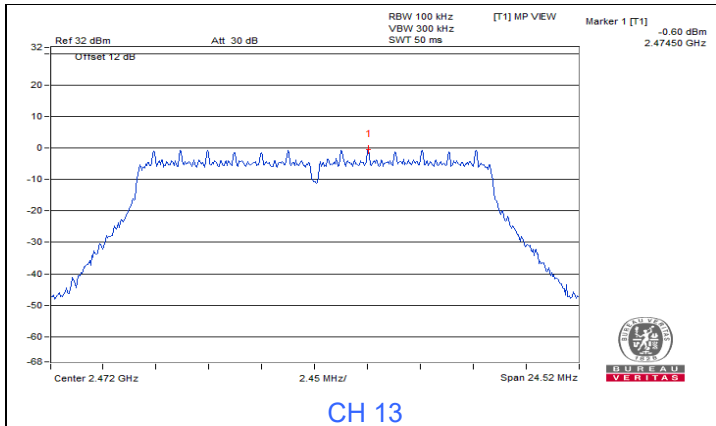
802.11b





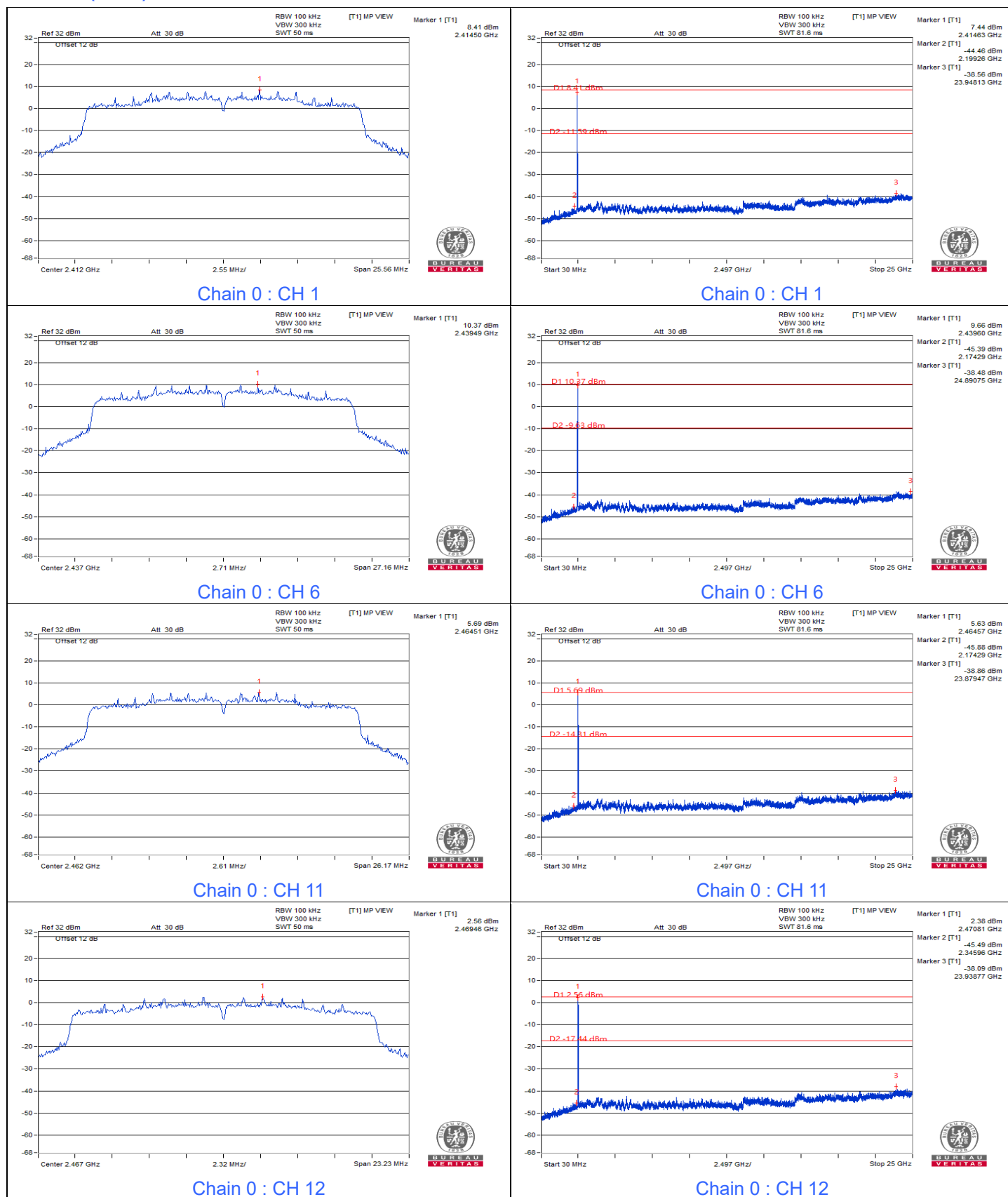
802.11g

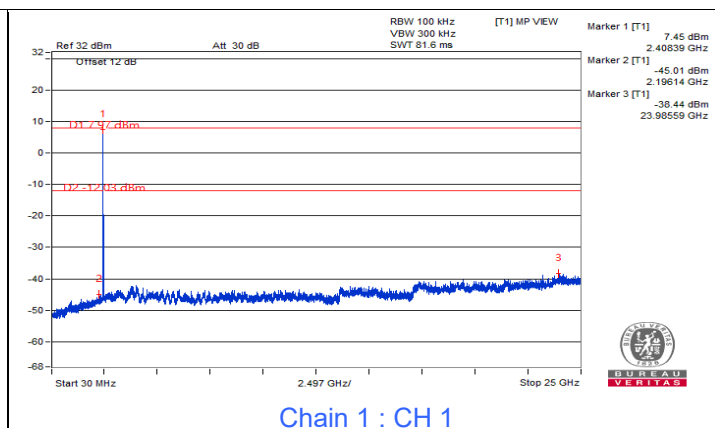
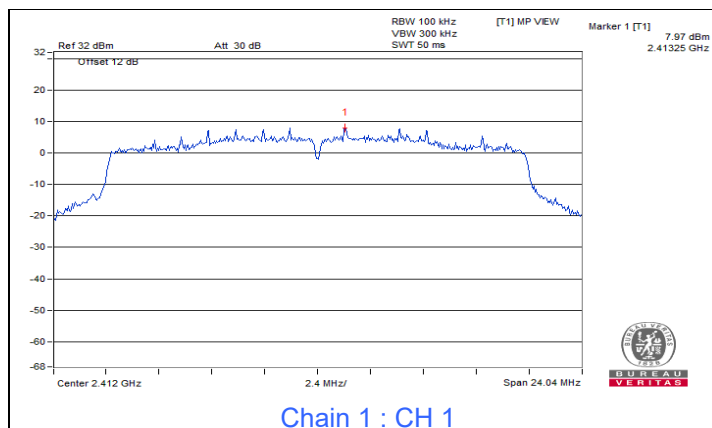
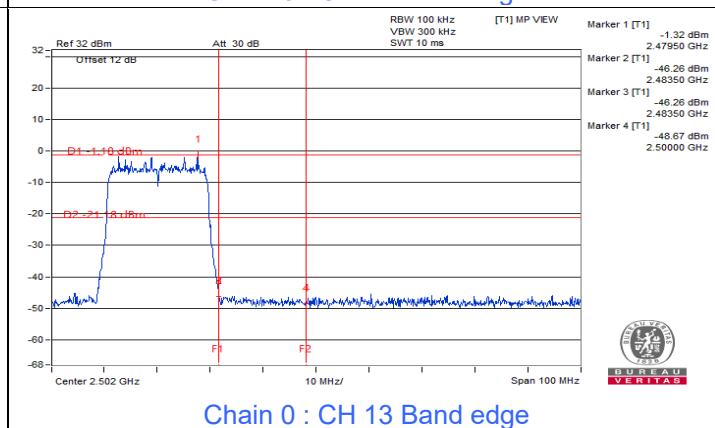
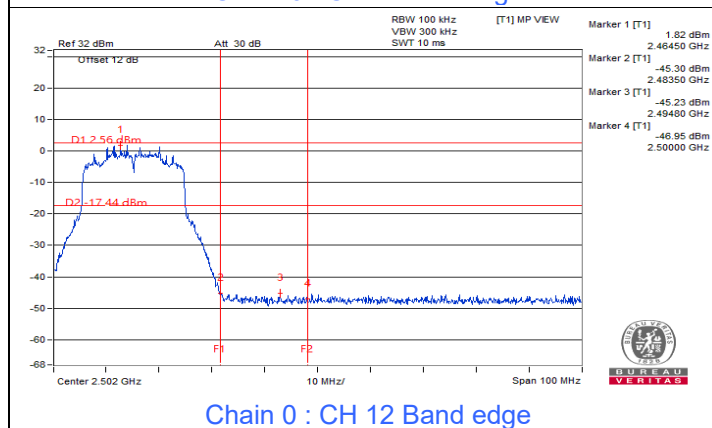
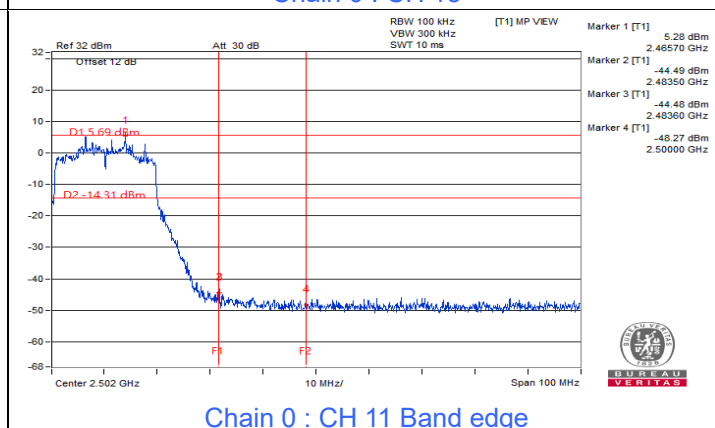
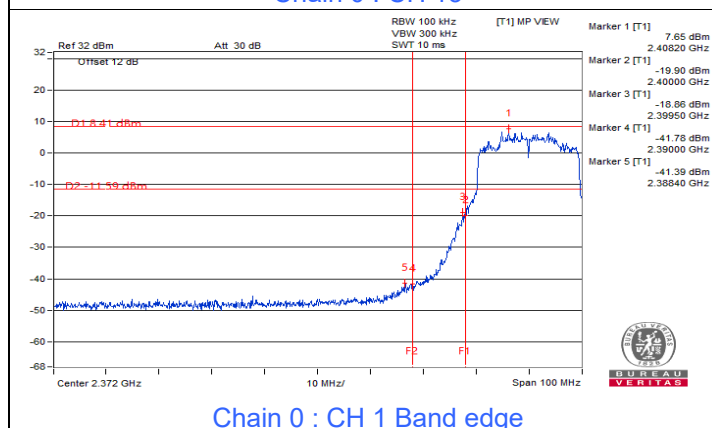
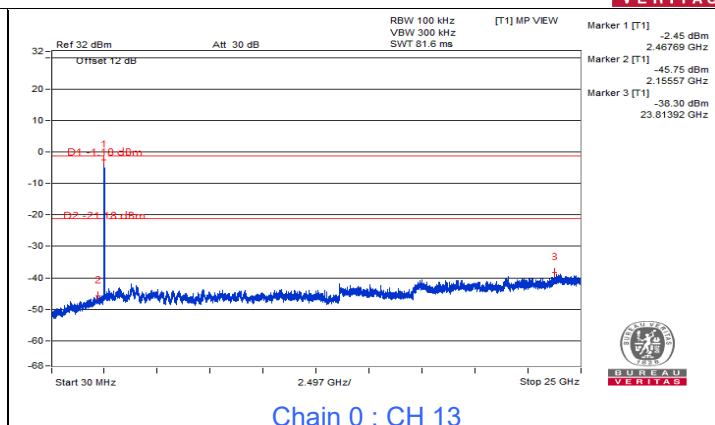
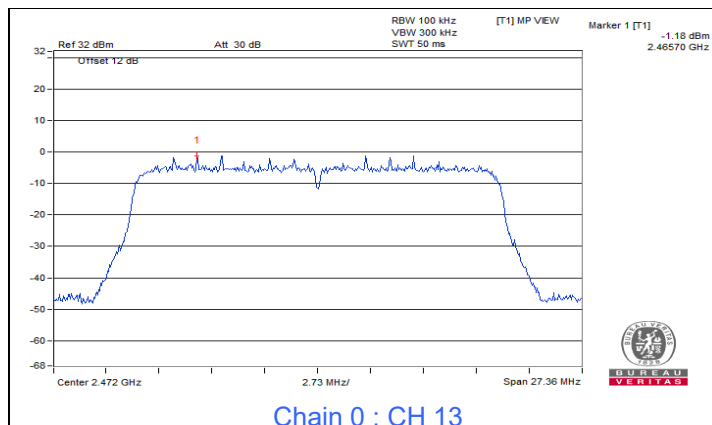


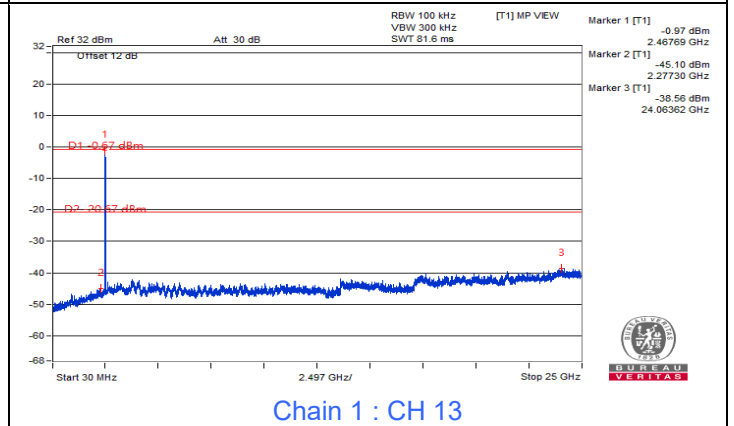
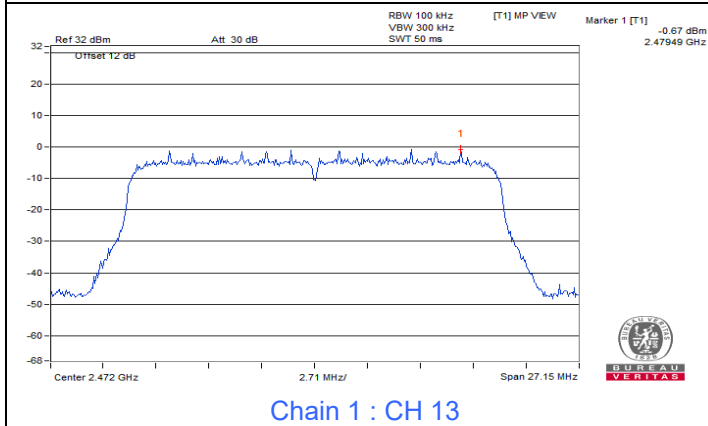
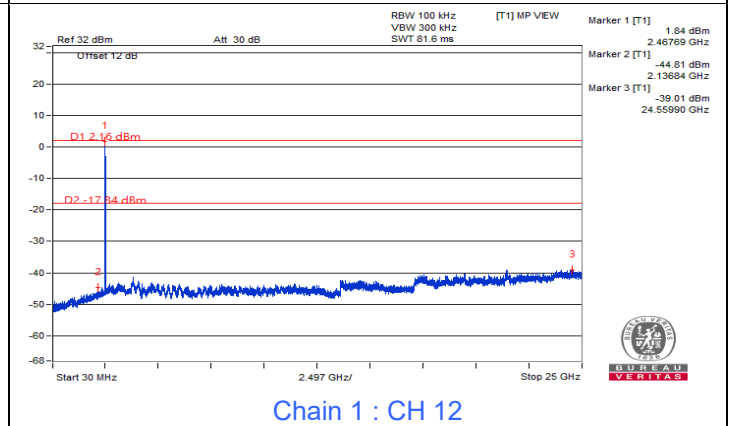
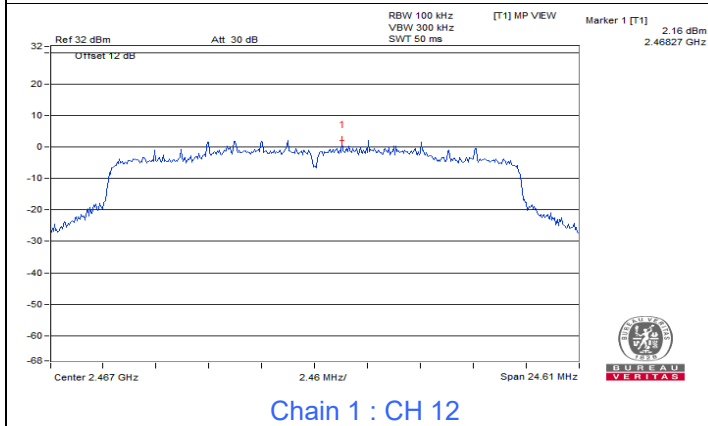
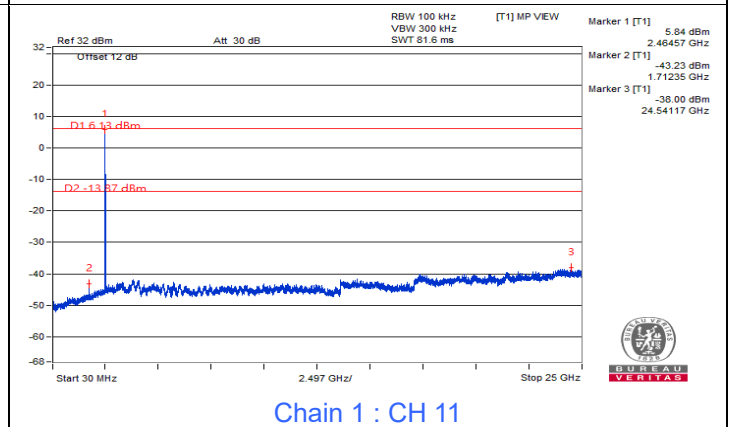
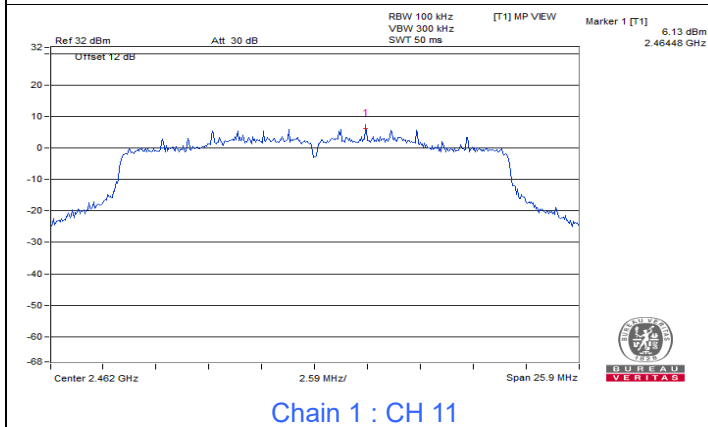
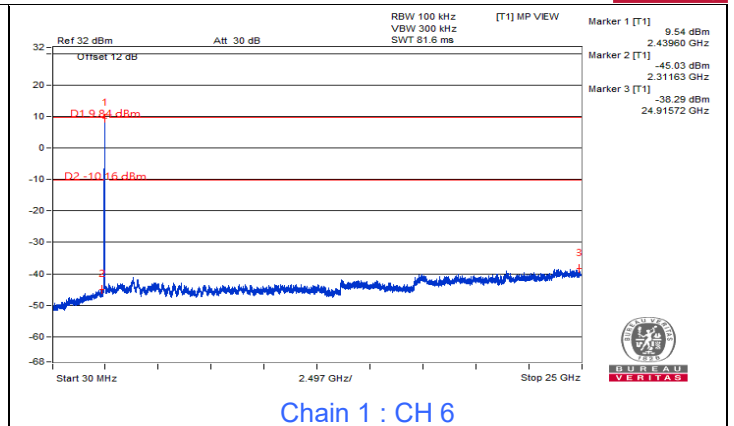
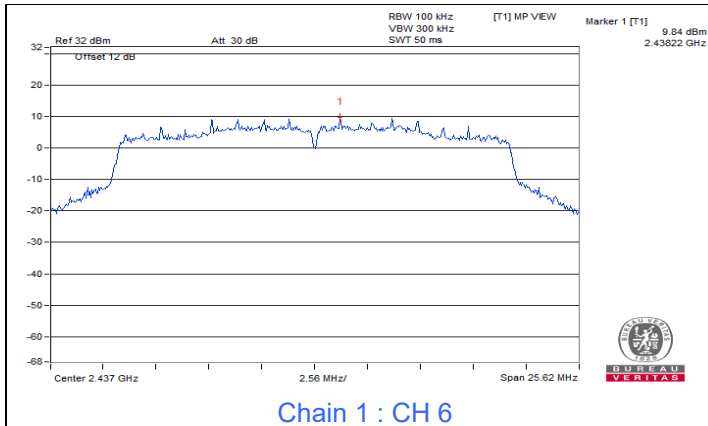


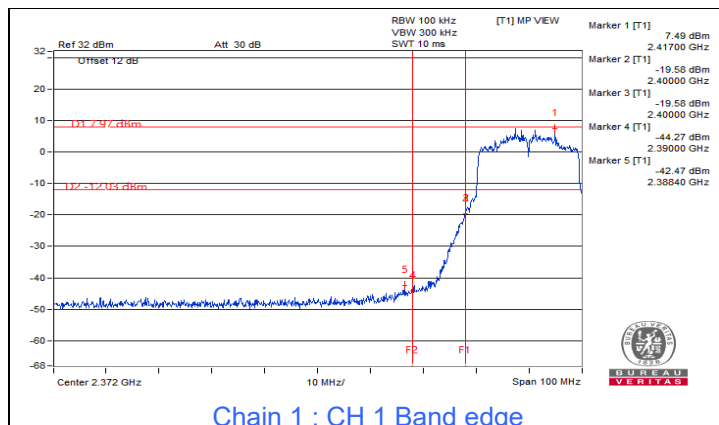
2TX

802.11ax (HE20)

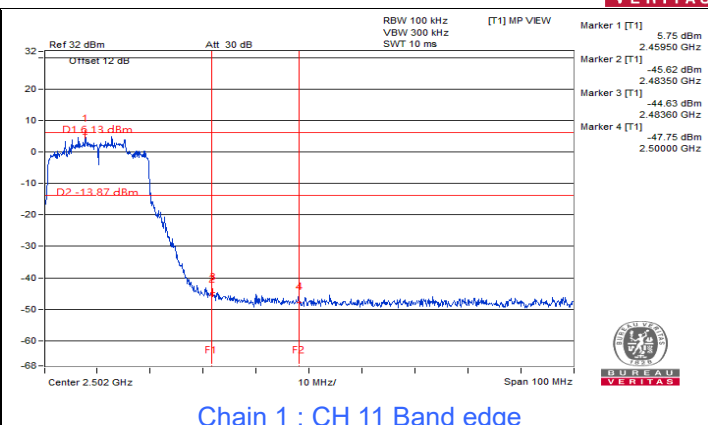




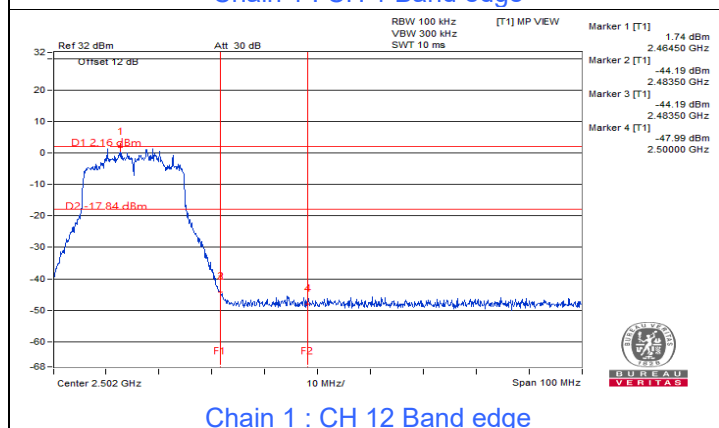




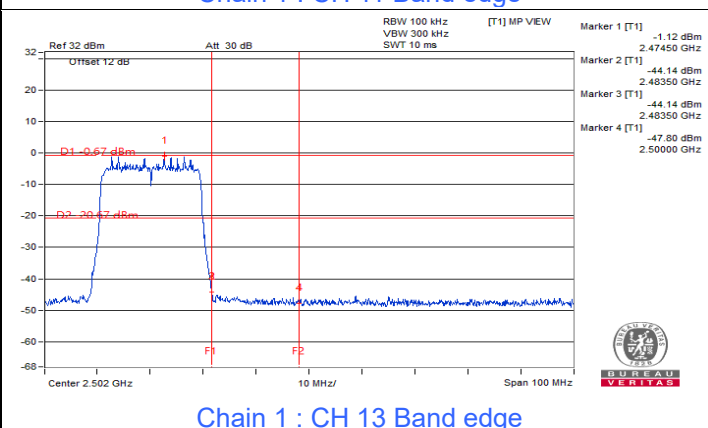
Chain 1 : CH 1 Band edge



Chain 1 : CH 11 Band edge



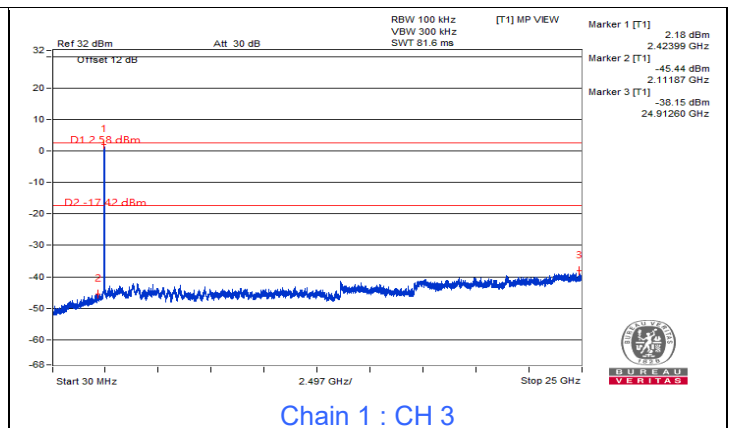
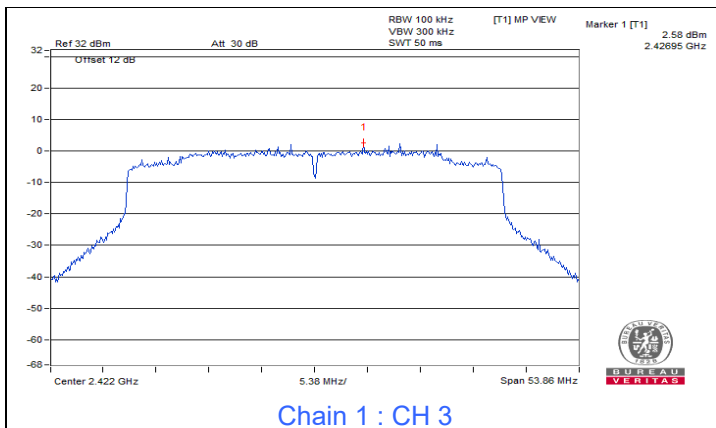
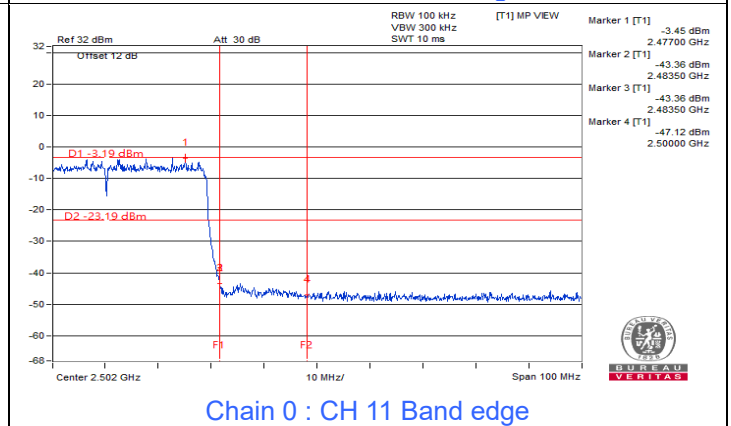
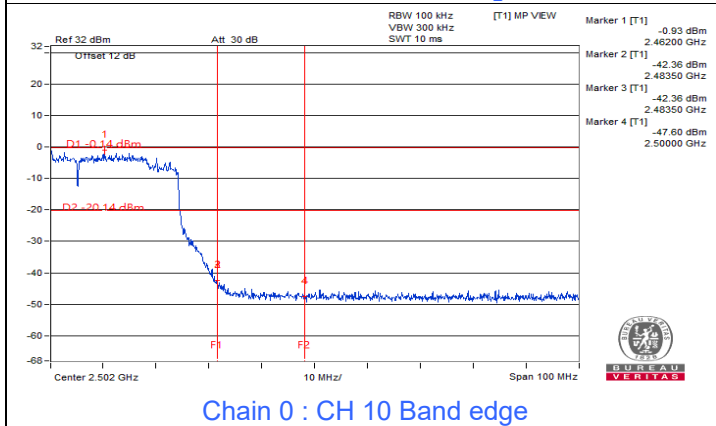
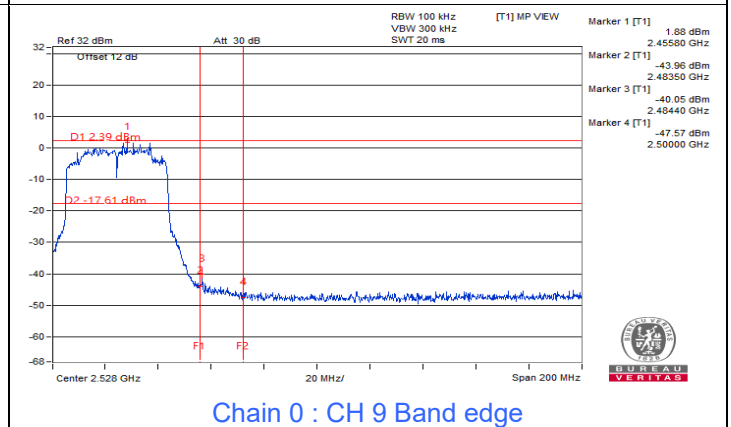
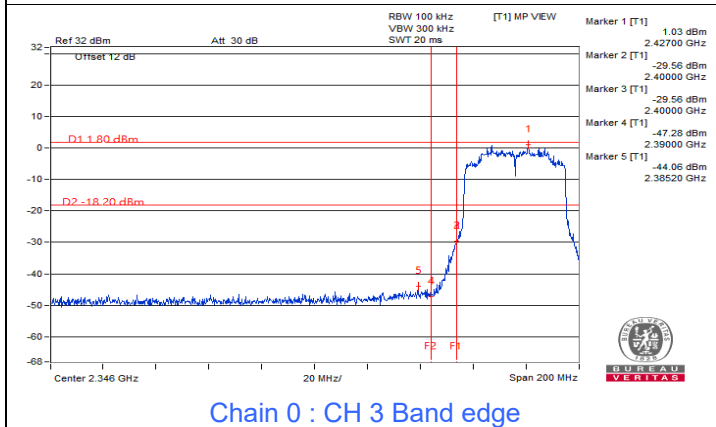
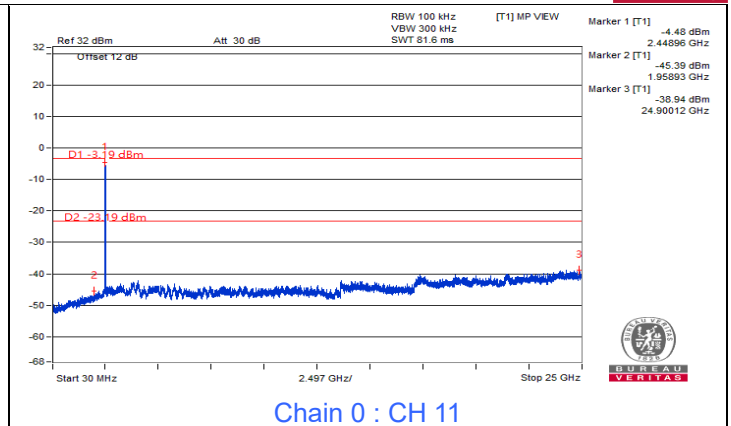
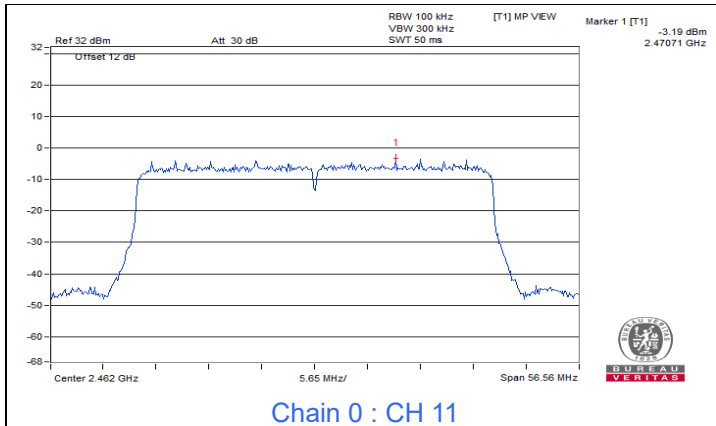
Chain 1 : CH 12 Band edge

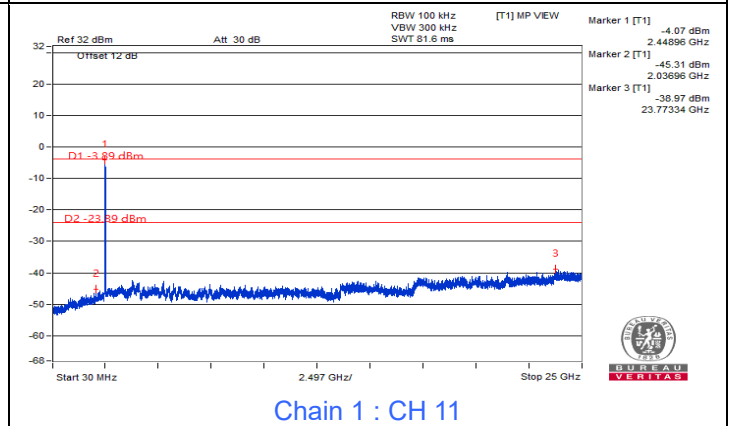
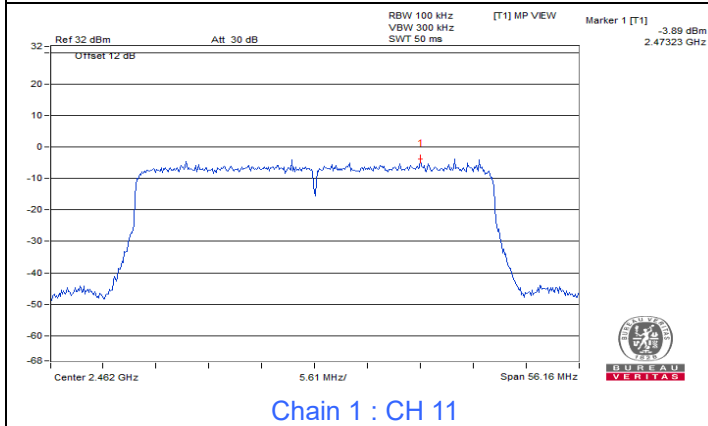
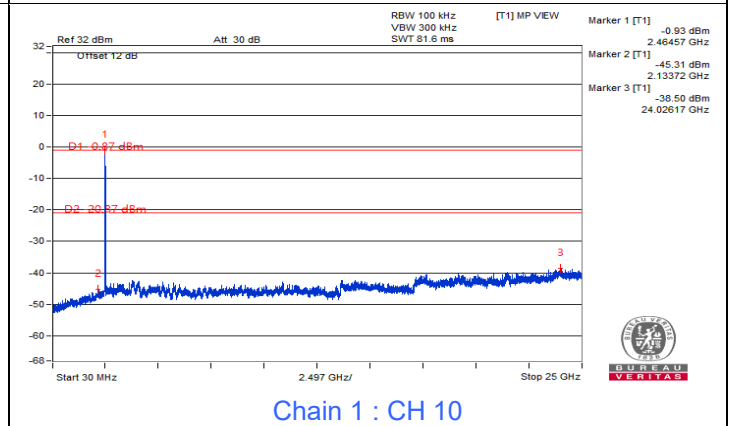
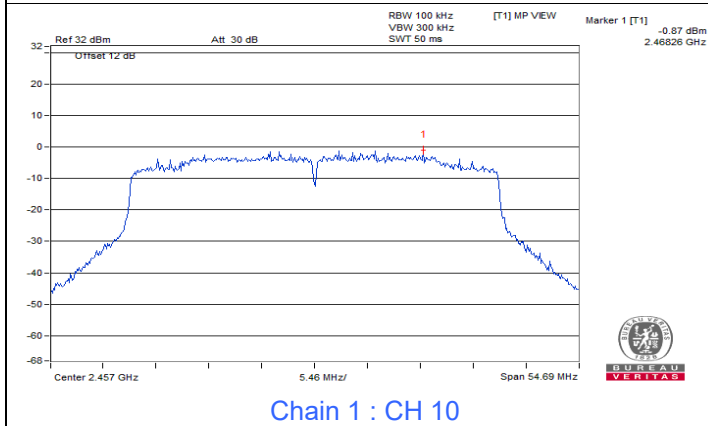
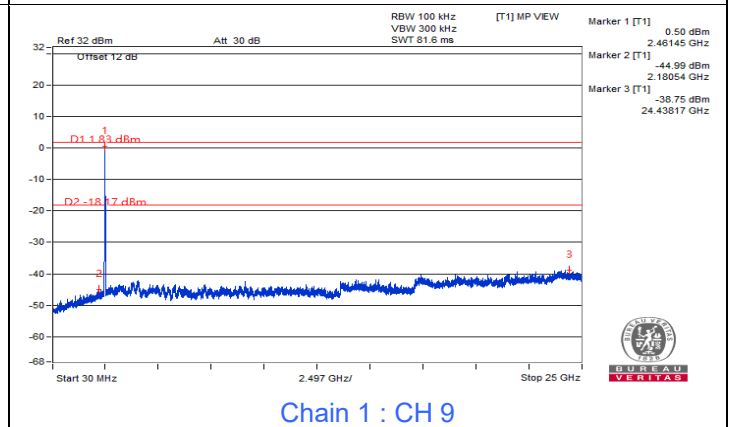
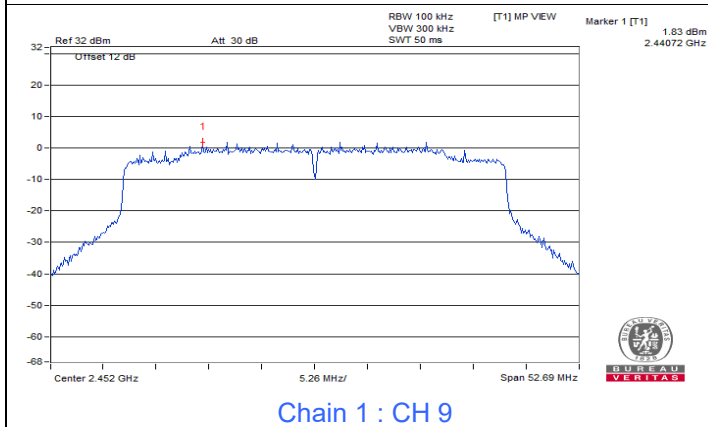
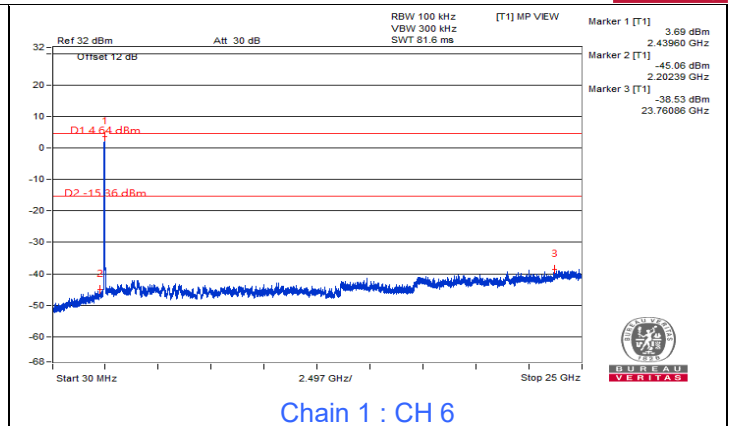
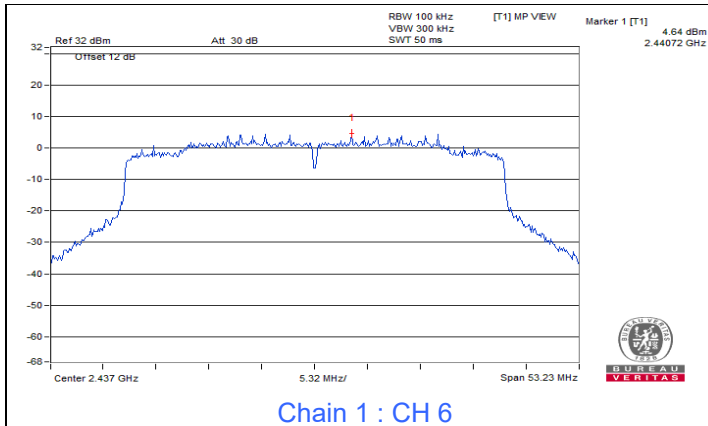


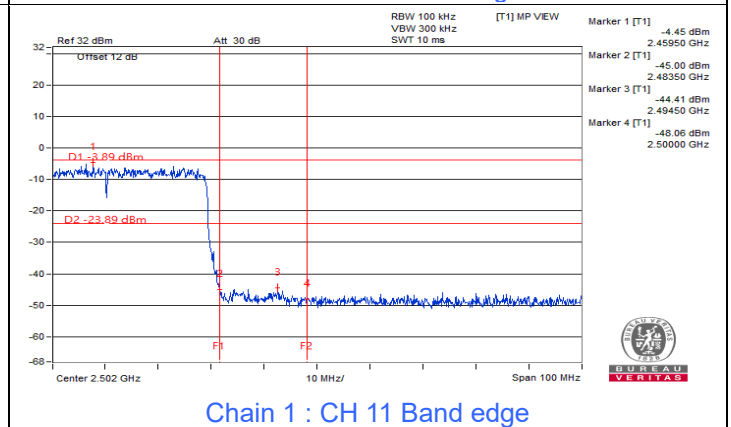
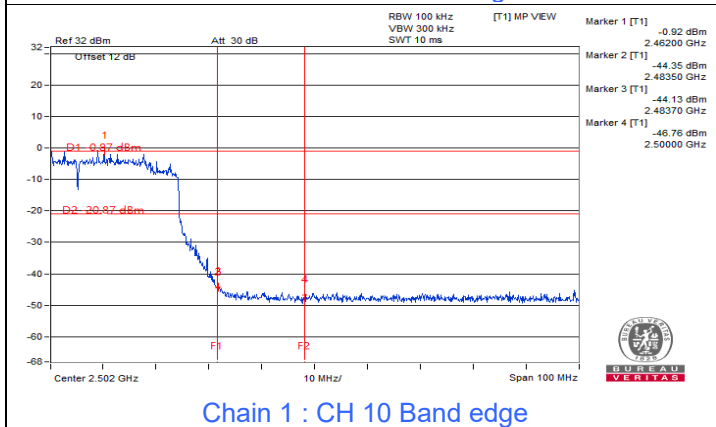
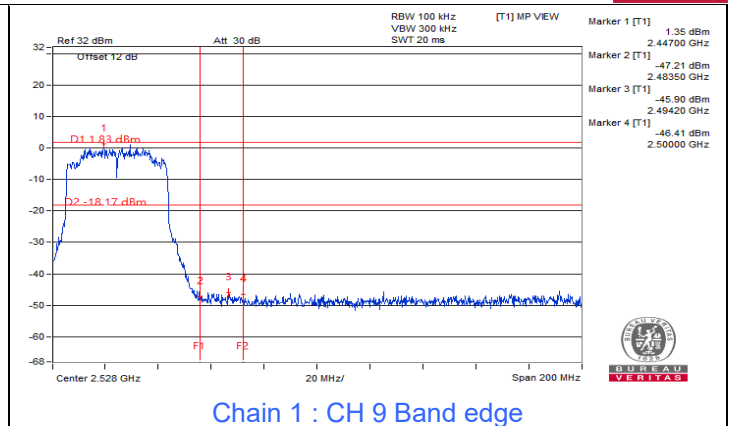
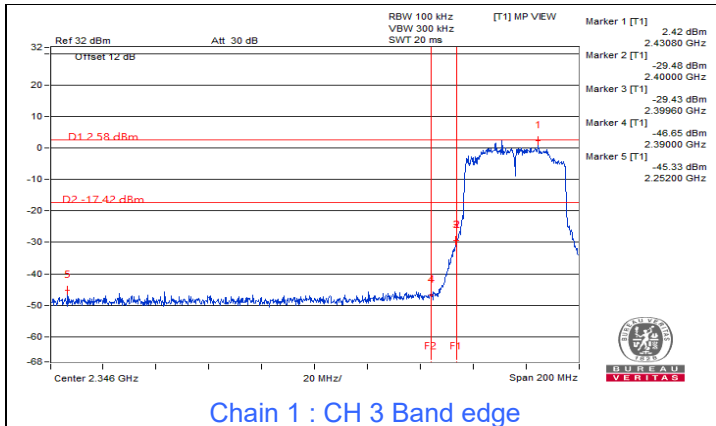
Chain 1 : CH 13 Band edge

802.11ax (HE40)









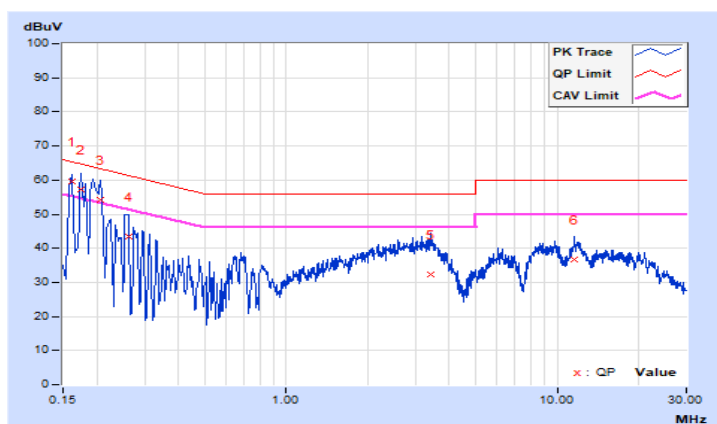
7.5 AC Power Conducted Emissions

RF Mode	802.11ax (HE20)	Channel	CH 6 : 2437 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Edison Lee		

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	0.16190	10.20	49.51	34.39	59.71	44.59	65.37	55.37	-5.66	-10.78
2	0.17400	10.20	47.06	30.40	57.26	40.60	64.77	54.77	-7.51	-14.17
3	0.20600	10.22	43.89	27.26	54.11	37.48	63.37	53.37	-9.26	-15.89
4	0.26083	10.23	33.09	16.49	43.32	26.72	61.40	51.40	-18.08	-24.68
5	3.43400	10.40	21.92	15.39	32.32	25.79	56.00	46.00	-23.68	-20.21
6	11.56600	10.50	26.23	20.80	36.73	31.30	60.00	50.00	-23.27	-18.70

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

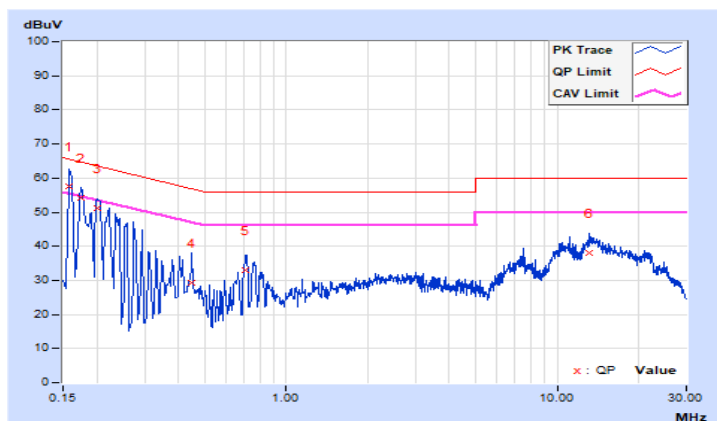


RF Mode	802.11ax (HE20)	Channel	CH 6 : 2437 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Edison Lee		

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	0.15800	10.18	47.41	29.74	57.59	39.92	65.57	55.57	-7.98	-15.65
2	0.17400	10.19	44.10	25.27	54.29	35.46	64.77	54.77	-10.48	-19.31
3	0.20095	10.21	40.99	24.08	51.20	34.29	63.57	53.57	-12.37	-19.28
4	0.45000	10.25	18.97	9.35	29.22	19.60	56.88	46.88	-27.66	-27.28
5	0.70600	10.28	22.80	14.29	33.08	24.57	56.00	46.00	-22.92	-21.43
6	13.19400	10.62	27.52	22.12	38.14	32.74	60.00	50.00	-21.86	-17.26

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



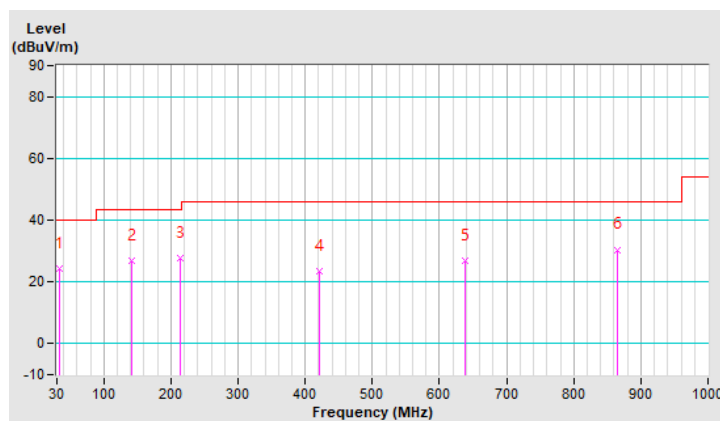
7.6 Unwanted Emissions below 1 GHz

RF Mode	802.11ax (HE20)	Channel	CH 6 : 2437 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 68% RH
Tested By	Greg 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	34.22	24.5 QP	40.0	-15.5	1.00 H	116	38.8	-14.3
2	141.06	26.9 QP	43.5	-16.6	1.00 H	284	40.5	-13.6
3	214.16	27.7 QP	43.5	-15.8	1.00 H	184	44.4	-16.7
4	420.81	23.3 QP	46.0	-22.7	1.00 H	267	32.9	-9.6
5	638.71	26.8 QP	46.0	-19.2	1.00 H	266	31.7	-4.9
6	865.04	30.5 QP	46.0	-15.5	1.00 H	281	32.2	-1.7

Remarks:

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

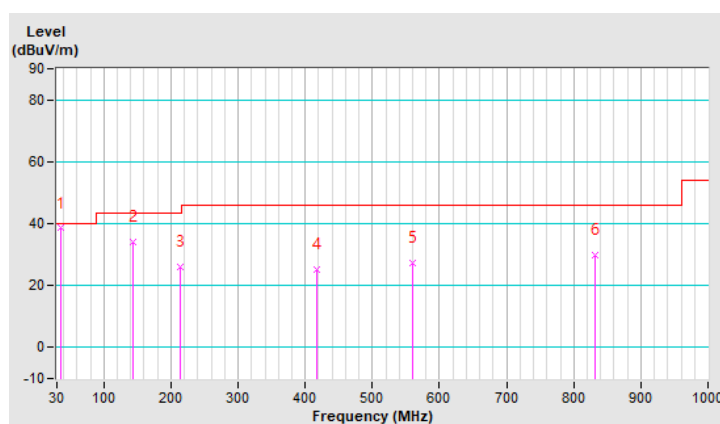


RF Mode	802.11ax (HE20)	Channel	CH 6 : 2437 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 68% RH
Tested By	Greg Lin		

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	35.62	38.5 QP	40.0	-1.5	1.00 V	2	52.7	-14.2
2	142.46	34.0 QP	43.5	-9.5	1.25 V	268	47.4	-13.4
3	214.16	26.0 QP	43.5	-17.5	1.00 V	347	42.7	-16.7
4	418.00	25.1 QP	46.0	-20.9	1.50 V	334	34.8	-9.7
5	559.99	27.4 QP	46.0	-18.6	1.25 V	169	34.2	-6.8
6	832.71	29.7 QP	46.0	-16.3	1.00 V	155	31.7	-2.0

Remarks:

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



7.7 Unwanted Emissions above 1 GHz

RF Mode	802.11b	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	2390.00	58.2 PK	74.0	-15.8	2.98 H	312	26.2	32.0
2	2390.00	48.9 AV	54.0	-5.1	2.98 H	312	16.9	32.0
3	*2412.00	103.8 PK			2.98 H	312	71.8	32.0
4	*2412.00	100.3 AV			2.98 H	312	68.3	32.0
5	4824.00	48.4 PK	74.0	-25.6	2.34 H	130	45.4	3.0
6	4824.00	41.3 AV	54.0	-12.7	2.34 H	130	38.3	3.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	59.5 PK	74.0	-14.5	2.67 V	6	27.5	32.0
2	2390.00	49.4 AV	54.0	-4.6	2.67 V	6	17.4	32.0
3	*2412.00	111.7 PK			2.67 V	6	79.7	32.0
4	*2412.00	108.5 AV			2.67 V	6	76.5	32.0
5	4824.00	51.9 PK	74.0	-22.1	2.39 V	35	48.9	3.0
6	4824.00	48.3 AV	54.0	-5.7	2.39 V	35	45.3	3.0

Remarks:

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

RF Mode	802.11b	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	*2437.00	104.1 PK			2.93 H	314	72.2	31.9
2	*2437.00	100.8 AV			2.93 H	314	68.9	31.9
3	4874.00	48.1 PK	74.0	-25.9	2.35 H	133	45.3	2.8
4	4874.00	41.3 AV	54.0	-12.7	2.35 H	133	38.5	2.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	112.2 PK			2.62 V	360	80.3	31.9
2	*2437.00	108.7 AV			2.62 V	360	76.8	31.9
3	4874.00	51.9 PK	74.0	-22.1	2.40 V	39	49.1	2.8
4	4874.00	48.7 AV	54.0	-5.3	2.40 V	39	45.9	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.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11b	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	*2462.00	103.6 PK			2.95 H	316	71.6	32.0
2	*2462.00	100.5 AV			2.95 H	316	68.5	32.0
3	2483.50	60.4 PK	74.0	-13.6	2.95 H	316	28.4	32.0
4	2483.50	53.0 AV	54.0	-1.0	2.95 H	316	21.0	32.0
5	4924.00	46.5 PK	74.0	-27.5	2.45 H	136	43.7	2.8
6	4924.00	39.2 AV	54.0	-14.8	2.45 H	136	36.4	2.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	112.2 PK			2.63 V	9	80.2	32.0
2	*2462.00	108.7 AV			2.63 V	9	76.7	32.0
3	2483.50	61.9 PK	74.0	-12.1	2.63 V	9	29.9	32.0
4	2483.50	53.2 AV	54.0	-0.8	2.63 V	9	21.2	32.0
5	4924.00	49.7 PK	74.0	-24.3	2.47 V	46	46.9	2.8
6	4924.00	45.3 AV	54.0	-8.7	2.47 V	46	42.5	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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11b	Channel	CH 12 : 2467 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	*2467.00	99.6 PK			2.90 H	314	67.6	32.0
2	*2467.00	97.3 AV			2.90 H	314	65.3	32.0
3	2483.50	60.9 PK	74.0	-13.1	2.90 H	314	28.9	32.0
4	2483.50	53.1 AV	54.0	-0.9	2.90 H	314	21.1	32.0
5	4934.00	46.7 PK	74.0	-27.3	2.39 H	135	43.9	2.8
6	4934.00	39.3 AV	54.0	-14.7	2.39 H	135	36.5	2.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2467.00	106.1 PK			2.97 V	8	74.1	32.0
2	*2467.00	104.4 AV			2.97 V	8	72.4	32.0
3	2483.50	60.7 PK	74.0	-13.3	2.97 V	8	28.7	32.0
4	2483.50	53.3 AV	54.0	-0.7	2.97 V	8	21.3	32.0
5	4934.00	48.6 PK	74.0	-25.4	2.44 V	42	45.8	2.8
6	4934.00	44.3 AV	54.0	-9.7	2.44 V	42	41.5	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.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11b	Channel	CH 13 : 2472 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	*2472.00	97.5 PK			2.91 H	316	65.5	32.0
2	*2472.00	95.7 AV			2.91 H	316	63.7	32.0
3	2483.50	61.5 PK	74.0	-12.5	2.91 H	316	29.5	32.0
4	2483.50	53.3 AV	54.0	-0.7	2.91 H	316	21.3	32.0
5	4944.00	46.4 PK	74.0	-27.6	2.33 H	139	43.5	2.9
6	4944.00	39.2 AV	54.0	-14.8	2.33 H	139	36.3	2.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2472.00	105.7 PK			2.86 V	6	73.7	32.0
2	*2472.00	103.0 AV			2.86 V	6	71.0	32.0
3	2483.50	65.2 PK	74.0	-8.8	2.86 V	6	33.2	32.0
4	2483.50	53.5 AV	54.0	-0.5	2.86 V	6	21.5	32.0
5	4944.00	47.8 PK	74.0	-26.2	2.50 V	33	44.9	2.9
6	4944.00	43.7 AV	54.0	-10.3	2.50 V	33	40.8	2.9

Remarks:

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

RF Mode	802.11g	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	2390.00	58.4 PK	74.0	-15.6	3.00 H	313	26.4	32.0
2	2390.00	49.0 AV	54.0	-5.0	3.00 H	313	17.0	32.0
3	*2412.00	105.1 PK			3.00 H	313	73.1	32.0
4	*2412.00	97.5 AV			3.00 H	313	65.5	32.0
5	4824.00	48.3 PK	74.0	-25.7	2.33 H	132	45.3	3.0
6	4824.00	38.9 AV	54.0	-15.1	2.33 H	132	35.9	3.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	58.5 PK	74.0	-15.5	2.69 V	10	26.5	32.0
2	2390.00	49.4 AV	54.0	-4.6	2.69 V	10	17.4	32.0
3	*2412.00	112.7 PK			2.69 V	10	80.7	32.0
4	*2412.00	105.5 AV			2.69 V	10	73.5	32.0
5	4824.00	49.5 PK	74.0	-24.5	2.39 V	35	46.5	3.0
6	4824.00	40.8 AV	54.0	-13.2	2.39 V	35	37.8	3.0

Remarks:

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

RF Mode	802.11g	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	*2437.00	105.6 PK			2.92 H	316	73.7	31.9
2	*2437.00	98.2 AV			2.92 H	316	66.3	31.9
3	4874.00	48.3 PK	74.0	-25.7	2.35 H	133	45.5	2.8
4	4874.00	38.8 AV	54.0	-15.2	2.35 H	133	36.0	2.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	112.7 PK			2.99 V	6	80.8	31.9
2	*2437.00	105.4 AV			2.99 V	6	73.5	31.9
3	4874.00	49.4 PK	74.0	-24.6	2.35 V	30	46.6	2.8
4	4874.00	40.7 AV	54.0	-13.3	2.35 V	30	37.9	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.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11g	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	*2462.00	103.4 PK			2.97 H	316	71.5	31.9
2	*2462.00	96.0 AV			2.97 H	316	64.1	31.9
3	2483.50	60.3 PK	74.0	-13.7	2.97 H	316	28.3	32.0
4	2483.50	51.5 AV	54.0	-2.5	2.97 H	316	19.5	32.0
5	4924.00	47.8 PK	74.0	-26.2	2.39 H	136	45.0	2.8
6	4924.00	38.6 AV	54.0	-15.4	2.39 H	136	35.8	2.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	111.2 PK			2.91 V	5	79.2	32.0
2	*2462.00	103.4 AV			2.91 V	5	71.4	32.0
3	2483.50	66.5 PK	74.0	-7.5	2.91 V	5	34.5	32.0
4	2483.50	53.1 AV	54.0	-0.9	2.91 V	5	21.1	32.0
5	4924.00	49.2 PK	74.0	-24.8	2.35 V	41	46.4	2.8
6	4924.00	40.3 AV	54.0	-13.7	2.35 V	41	37.5	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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11g	Channel	CH 12 : 2467 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	*2467.00	99.3 PK			3.26 H	314	67.3	32.0
2	*2467.00	91.8 AV			3.26 H	314	59.8	32.0
3	2483.50	62.0 PK	74.0	-12.0	3.26 H	314	30.0	32.0
4	2483.50	51.7 AV	54.0	-2.3	3.26 H	314	19.7	32.0
5	4934.00	47.9 PK	74.0	-26.1	2.29 H	128	45.1	2.8
6	4934.00	38.3 AV	54.0	-15.7	2.29 H	128	35.5	2.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2467.00	106.8 PK			2.92 V	4	74.8	32.0
2	*2467.00	98.7 AV			2.92 V	4	66.7	32.0
3	2483.50	64.2 PK	74.0	-9.8	2.92 V	4	32.2	32.0
4	2483.50	53.3 AV	54.0	-0.7	2.92 V	4	21.3	32.0
5	4934.00	49.0 PK	74.0	-25.0	2.30 V	42	46.2	2.8
6	4934.00	40.3 AV	54.0	-13.7	2.30 V	42	37.5	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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11g	Channel	CH 13 : 2472 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	*2472.00	96.2 PK			3.26 H	316	64.2	32.0
2	*2472.00	88.6 AV			3.26 H	316	56.6	32.0
3	2483.50	61.9 PK	74.0	-12.1	3.26 H	316	29.9	32.0
4	2483.50	52.1 AV	54.0	-1.9	3.26 H	316	20.1	32.0
5	4944.00	48.0 PK	74.0	-26.0	2.36 H	136	45.1	2.9
6	4944.00	38.5 AV	54.0	-15.5	2.36 H	136	35.6	2.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2472.00	104.0 PK			2.84 V	8	72.0	32.0
2	*2472.00	95.8 AV			2.84 V	8	63.8	32.0
3	2483.50	68.4 PK	74.0	-5.6	2.84 V	8	36.4	32.0
4	2483.50	53.5 AV	54.0	-0.5	2.84 V	8	21.5	32.0
5	4944.00	48.9 PK	74.0	-25.1	2.45 V	41	46.0	2.9
6	4944.00	39.8 AV	54.0	-14.2	2.45 V	41	36.9	2.9

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	2390.00	62.5 PK	74.0	-11.5	3.32 H	55	30.5	32.0
2	2390.00	53.0 AV	54.0	-1.0	3.32 H	55	21.0	32.0
3	*2412.00	111.5 PK			3.32 H	55	79.5	32.0
4	*2412.00	102.1 AV			3.32 H	55	70.1	32.0
5	4824.00	48.0 PK	74.0	-26.0	2.29 H	138	45.0	3.0
6	4824.00	38.5 AV	54.0	-15.5	2.29 H	138	35.5	3.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	64.5 PK	74.0	-9.5	3.50 V	40	32.5	32.0
2	2390.00	53.6 AV	54.0	-0.4	3.50 V	40	21.6	32.0
3	*2412.00	114.0 PK			3.50 V	40	82.0	32.0
4	*2412.00	103.8 AV			3.50 V	40	71.8	32.0
5	4824.00	48.9 PK	74.0	-25.1	2.42 V	42	45.9	3.0
6	4824.00	39.0 AV	54.0	-15.0	2.42 V	42	36.0	3.0

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	*2437.00	113.1 PK			3.33 H	56	81.2	31.9
2	*2437.00	103.5 AV			3.33 H	56	71.6	31.9
3	4874.00	47.9 PK	74.0	-26.1	2.41 H	129	45.1	2.8
4	4874.00	38.1 AV	54.0	-15.9	2.41 H	129	35.3	2.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	115.7 PK			3.36 V	45	83.8	31.9
2	*2437.00	105.7 AV			3.36 V	45	73.8	31.9
3	4874.00	48.9 PK	74.0	-25.1	2.37 V	37	46.1	2.8
4	4874.00	39.0 AV	54.0	-15.0	2.37 V	37	36.2	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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11ax (HE20)	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	*2462.00	107.0 PK			3.29 H	55	75.0	32.0
2	*2462.00	98.5 AV			3.29 H	55	66.5	32.0
3	2483.50	60.9 PK	74.0	-13.1	3.29 H	55	28.9	32.0
4	2483.50	50.7 AV	54.0	-3.3	3.29 H	55	18.7	32.0
5	4924.00	47.7 PK	74.0	-26.3	2.28 H	126	44.9	2.8
6	4924.00	38.3 AV	54.0	-15.7	2.28 H	126	35.5	2.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	111.4 PK			2.93 V	6	79.4	32.0
2	*2462.00	102.0 AV			2.93 V	6	70.0	32.0
3	2483.50	64.7 PK	74.0	-9.3	2.93 V	6	32.7	32.0
4	2483.50	53.4 AV	54.0	-0.6	2.93 V	6	21.4	32.0
5	4924.00	48.4 PK	74.0	-25.6	2.43 V	45	45.6	2.8
6	4924.00	38.7 AV	54.0	-15.3	2.43 V	45	35.9	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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11ax (HE20)	Channel	CH 12 : 2467 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	*2467.00	105.6 PK			3.32 H	57	73.6	32.0
2	*2467.00	96.0 AV			3.32 H	57	64.0	32.0
3	2483.50	59.7 PK	74.0	-14.3	3.32 H	57	27.7	32.0
4	2483.50	50.7 AV	54.0	-3.3	3.32 H	57	18.7	32.0
5	4934.00	47.7 PK	74.0	-26.3	2.33 H	132	44.9	2.8
6	4934.00	38.0 AV	54.0	-16.0	2.33 H	132	35.2	2.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2467.00	109.2 PK			2.93 V	5	77.2	32.0
2	*2467.00	99.2 AV			2.93 V	5	67.2	32.0
3	2483.50	63.7 PK	74.0	-10.3	2.93 V	5	31.7	32.0
4	2483.50	53.3 AV	54.0	-0.7	2.93 V	5	21.3	32.0
5	4934.00	48.6 PK	74.0	-25.4	2.37 V	37	45.8	2.8
6	4934.00	38.7 AV	54.0	-15.3	2.37 V	37	35.9	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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11ax (HE20)	Channel	CH 13 : 2472 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	*2472.00	99.5 PK			3.33 H	55	67.5	32.0
2	*2472.00	90.7 AV			3.33 H	55	58.7	32.0
3	2483.50	62.0 PK	74.0	-12.0	3.33 H	55	30.0	32.0
4	2483.50	50.5 AV	54.0	-3.5	3.33 H	55	18.5	32.0
5	4944.00	48.0 PK	74.0	-26.0	2.31 H	119	45.1	2.9
6	4944.00	38.3 AV	54.0	-15.7	2.31 H	119	35.4	2.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2472.00	104.1 PK			2.92 V	6	72.1	32.0
2	*2472.00	94.6 AV			2.92 V	6	62.6	32.0
3	2483.50	64.1 PK	74.0	-9.9	2.92 V	6	32.1	32.0
4	2483.50	53.5 AV	54.0	-0.5	2.92 V	6	21.5	32.0
5	4944.00	48.8 PK	74.0	-25.2	2.39 V	35	45.9	2.9
6	4944.00	38.9 AV	54.0	-15.1	2.39 V	35	36.0	2.9

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 3 : 2422 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	2390.00	61.1 PK	74.0	-12.9	3.34 H	56	29.1	32.0
2	2390.00	51.4 AV	54.0	-2.6	3.34 H	56	19.4	32.0
3	*2422.00	105.1 PK			3.34 H	56	73.2	31.9
4	*2422.00	94.1 AV			3.34 H	56	62.2	31.9
5	4844.00	48.1 PK	74.0	-25.9	2.32 H	134	45.2	2.9
6	4844.00	38.2 AV	54.0	-15.8	2.32 H	134	35.3	2.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	63.2 PK	74.0	-10.8	3.54 V	43	31.2	32.0
2	2390.00	53.5 AV	54.0	-0.5	3.54 V	43	21.5	32.0
3	*2422.00	108.7 PK			3.54 V	43	76.8	31.9
4	*2422.00	97.6 AV			3.54 V	43	65.7	31.9
5	4844.00	48.7 PK	74.0	-25.3	2.53 V	47	45.8	2.9
6	4844.00	38.6 AV	54.0	-15.4	2.53 V	47	35.7	2.9

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	2390.00	62.8 PK	74.0	-11.2	3.35 H	51	30.8	32.0
2	2390.00	51.8 AV	54.0	-2.2	3.35 H	51	19.8	32.0
3	*2437.00	107.3 PK			3.35 H	51	75.4	31.9
4	*2437.00	97.0 AV			3.35 H	51	65.1	31.9
5	4874.00	48.1 PK	74.0	-25.9	2.27 H	126	45.3	2.8
6	4874.00	38.4 AV	54.0	-15.6	2.27 H	126	35.6	2.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	64.5 PK	74.0	-9.5	3.43 V	44	32.5	32.0
2	2390.00	53.4 AV	54.0	-0.6	3.43 V	44	21.4	32.0
3	*2437.00	110.8 PK			3.43 V	44	78.9	31.9
4	*2437.00	100.6 AV			3.43 V	44	68.7	31.9
5	4874.00	49.0 PK	74.0	-25.0	2.48 V	41	46.2	2.8
6	4874.00	38.9 AV	54.0	-15.1	2.48 V	41	36.1	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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11ax (HE40)	Channel	CH 9 : 2452 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	*2452.00	104.6 PK			3.33 H	53	72.6	32.0
2	*2452.00	93.9 AV			3.33 H	53	61.9	32.0
3	2483.50	62.4 PK	74.0	-11.6	3.32 H	53	30.4	32.0
4	2483.50	51.5 AV	54.0	-2.5	3.32 H	53	19.5	32.0
5	4904.00	48.0 PK	74.0	-26.0	2.32 H	134	45.1	2.9
6	4904.00	38.1 AV	54.0	-15.9	2.32 H	134	35.2	2.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2452.00	108.3 PK			3.39 V	1	76.3	32.0
2	*2452.00	97.5 AV			3.39 V	1	65.5	32.0
3	2483.50	65.7 PK	74.0	-8.3	3.39 V	1	33.7	32.0
4	2483.50	53.3 AV	54.0	-0.7	3.39 V	1	21.3	32.0
5	4904.00	48.7 PK	74.0	-25.3	2.54 V	47	45.8	2.9
6	4904.00	38.8 AV	54.0	-15.2	2.54 V	47	35.9	2.9

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 10 : 2457 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	*2457.00	102.8 PK			3.34 H	54	70.8	32.0
2	*2457.00	92.3 AV			3.34 H	54	60.3	32.0
3	2483.50	63.1 PK	74.0	-10.9	3.34 H	54	31.1	32.0
4	2483.50	51.8 AV	54.0	-2.2	3.34 H	54	19.8	32.0
5	4914.00	48.0 PK	74.0	-26.0	2.37 H	125	45.1	2.9
6	4914.00	38.1 AV	54.0	-15.9	2.37 H	125	35.2	2.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2457.00	106.3 PK			2.94 V	3	74.3	32.0
2	*2457.00	95.7 AV			2.94 V	3	63.7	32.0
3	2483.50	65.4 PK	74.0	-8.6	2.94 V	3	33.4	32.0
4	2483.50	53.4 AV	54.0	-0.6	2.94 V	3	21.4	32.0
5	4914.00	48.6 PK	74.0	-25.4	2.62 V	58	45.7	2.9
6	4914.00	38.6 AV	54.0	-15.4	2.62 V	58	35.7	2.9

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 66% RH
Tested By	Edison Lee		

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	*2462.00	100.4 PK			3.37 H	44	68.4	32.0
2	*2462.00	89.8 AV			3.37 H	44	57.8	32.0
3	2483.50	63.3 PK	74.0	-10.7	3.37 H	44	31.3	32.0
4	2483.50	51.7 AV	54.0	-2.3	3.37 H	44	19.7	32.0
5	4924.00	47.8 PK	74.0	-26.2	2.26 H	134	45.0	2.8
6	4924.00	37.7 AV	54.0	-16.3	2.26 H	134	34.9	2.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	103.8 PK			2.93 V	2	71.8	32.0
2	*2462.00	93.2 AV			2.93 V	2	61.2	32.0
3	2483.50	65.8 PK	74.0	-8.2	2.93 V	2	33.8	32.0
4	2483.50	53.7 AV	54.0	-0.3	2.93 V	2	21.7	32.0
5	4924.00	48.4 PK	74.0	-25.6	2.47 V	48	45.6	2.8
6	4924.00	38.4 AV	54.0	-15.6	2.47 V	48	35.6	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.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	20 MHz Preamble 802.11ax (RU26)	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 69% RH
Tested By	Greg 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	2390.00	67.4 PK	74.0	-6.6	3.32 H	62	35.4	32.0
2	2390.00	52.4 AV	54.0	-1.6	3.32 H	62	20.4	32.0
3	*2412.00	117.6 PK			3.32 H	62	85.6	32.0
4	*2412.00	109.9 AV			3.32 H	62	77.9	32.0
5	4824.00	48.6 PK	74.0	-25.4	2.27 H	138	45.6	3.0
6	4824.00	38.8 AV	54.0	-15.2	2.27 H	138	35.8	3.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	69.2 PK	74.0	-4.8	3.47 V	44	37.2	32.0
2	2390.00	53.3 AV	54.0	-0.7	3.47 V	44	21.3	32.0
3	*2412.00	120.2 PK			3.47 V	44	88.2	32.0
4	*2412.00	112.7 AV			3.47 V	44	80.7	32.0
5	4824.00	49.6 PK	74.0	-24.4	2.37 V	48	46.6	3.0
6	4824.00	39.4 AV	54.0	-14.6	2.37 V	48	36.4	3.0

Remarks:

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

RF Mode	20 MHz Preamble 802.11ax (RU26)	Channel	CH 13 : 2472 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 69% RH
Tested By	Greg 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	*2472.00	108.6 PK			3.34 H	67	76.6	32.0
2	*2472.00	99.8 AV			3.34 H	67	67.8	32.0
3	2483.50	68.4 PK	74.0	-5.6	3.34 H	67	36.4	32.0
4	2483.50	51.7 AV	54.0	-2.3	3.34 H	67	19.7	32.0
5	4944.00	48.5 PK	74.0	-25.5	2.29 H	147	45.6	2.9
6	4944.00	38.5 AV	54.0	-15.5	2.29 H	147	35.6	2.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2472.00	111.3 PK			3.72 V	42	79.3	32.0
2	*2472.00	102.5 AV			3.72 V	42	70.5	32.0
3	2483.50	70.7 PK	74.0	-3.3	3.72 V	42	38.7	32.0
4	2483.50	53.1 AV	54.0	-0.9	3.72 V	42	21.1	32.0
5	4944.00	49.4 PK	74.0	-24.6	2.41 V	48	46.5	2.9
6	4944.00	39.3 AV	54.0	-14.7	2.41 V	48	36.4	2.9

Remarks:

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

RF Mode	20 MHz Preamble 802.11ax (RU52)	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 69% RH
Tested By	Greg 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	2390.00	67.6 PK	74.0	-6.4	3.31 H	65	35.6	32.0
2	2390.00	52.5 AV	54.0	-1.5	3.31 H	65	20.5	32.0
3	*2412.00	115.2 PK			3.31 H	65	83.2	32.0
4	*2412.00	107.4 AV			3.31 H	65	75.4	32.0
5	4824.00	48.4 PK	74.0	-25.6	2.31 H	141	45.4	3.0
6	4824.00	38.6 AV	54.0	-15.4	2.31 H	141	35.6	3.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	69.5 PK	74.0	-4.5	3.49 V	45	37.5	32.0
2	2390.00	53.5 AV	54.0	-0.5	3.49 V	45	21.5	32.0
3	*2412.00	118.1 PK			3.49 V	45	86.1	32.0
4	*2412.00	110.2 AV			3.49 V	45	78.2	32.0
5	4824.00	49.4 PK	74.0	-24.6	2.57 V	53	46.4	3.0
6	4824.00	39.3 AV	54.0	-14.7	2.57 V	53	36.3	3.0

Remarks:

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

RF Mode	20 MHz Preamble 802.11ax (RU52)	Channel	CH 13 : 2472 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 69% RH
Tested By	Greg 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	*2472.00	106.6 PK			3.36 H	68	74.6	32.0
2	*2472.00	97.8 AV			3.36 H	68	65.8	32.0
3	2483.50	71.9 PK	74.0	-2.1	3.36 H	68	39.9	32.0
4	2483.50	51.9 AV	54.0	-2.1	3.36 H	68	19.9	32.0
5	4944.00	48.4 PK	74.0	-25.6	2.32 H	149	45.5	2.9
6	4944.00	38.3 AV	54.0	-15.7	2.32 H	149	35.4	2.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2472.00	109.5 PK			3.71 V	42	77.5	32.0
2	*2472.00	100.7 AV			3.71 V	42	68.7	32.0
3	2483.50	72.8 PK	74.0	-1.2	3.71 V	42	40.8	32.0
4	2483.50	53.5 AV	54.0	-0.5	3.71 V	42	21.5	32.0
5	4944.00	49.2 PK	74.0	-24.8	2.38 V	52	46.3	2.9
6	4944.00	39.2 AV	54.0	-14.8	2.38 V	52	36.3	2.9

Remarks:

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

RF Mode	20 MHz Preamble 802.11ax (RU106)	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 69% RH
Tested By	Greg 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	2390.00	67.8 PK	74.0	-6.2	3.35 H	66	35.8	32.0
2	2390.00	52.7 AV	54.0	-1.3	3.35 H	66	20.7	32.0
3	*2412.00	112.1 PK			3.35 H	66	80.1	32.0
4	*2412.00	104.2 AV			3.35 H	66	72.2	32.0
5	4824.00	48.2 PK	74.0	-25.8	2.28 H	137	45.2	3.0
6	4824.00	38.6 AV	54.0	-15.4	2.28 H	137	35.6	3.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	69.8 PK	74.0	-4.2	3.50 V	44	37.8	32.0
2	2390.00	53.8 AV	54.0	-0.2	3.50 V	44	21.8	32.0
3	*2412.00	115.0 PK			3.50 V	44	83.0	32.0
4	*2412.00	107.1 AV			3.50 V	44	75.1	32.0
5	4824.00	49.2 PK	74.0	-24.8	2.52 V	47	46.2	3.0
6	4824.00	39.1 AV	54.0	-14.9	2.52 V	47	36.1	3.0

Remarks:

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

RF Mode	20 MHz Preamble 802.11ax (RU106)	Channel	CH 13 : 2472 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 69% RH
Tested By	Greg 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	*2472.00	103.4 PK			3.33 H	61	71.4	32.0
2	*2472.00	94.8 AV			3.33 H	61	62.8	32.0
3	2483.50	72.1 PK	74.0	-1.9	3.33 H	61	40.1	32.0
4	2483.50	52.1 AV	54.0	-1.9	3.33 H	61	20.1	32.0
5	4944.00	48.2 PK	74.0	-25.8	2.27 H	146	45.3	2.9
6	4944.00	38.4 AV	54.0	-15.6	2.27 H	146	35.5	2.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2472.00	106.5 PK			3.76 V	42	74.5	32.0
2	*2472.00	97.6 AV			3.76 V	42	65.6	32.0
3	2483.50	73.8 PK	74.0	-0.2	3.76 V	42	41.8	32.0
4	2483.50	53.7 AV	54.0	-0.3	3.76 V	42	21.7	32.0
5	4944.00	49.0 PK	74.0	-25.0	2.59 V	49	46.1	2.9
6	4944.00	39.1 AV	54.0	-14.9	2.59 V	49	36.2	2.9

Remarks:

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

RF Mode	40 MHz Preamble 802.11ax (RU242)	Channel	CH 3 : 2422 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 69% RH
Tested By	Greg 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	2390.00	59.5 PK	74.0	-14.5	3.37 H	69	27.5	32.0
2	2390.00	48.2 AV	54.0	-5.8	3.37 H	69	16.2	32.0
3	*2422.00	104.8 PK			3.37 H	69	72.9	31.9
4	*2422.00	95.3 AV			3.37 H	69	63.4	31.9
5	4844.00	48.3 PK	74.0	-25.7	2.27 H	136	45.4	2.9
6	4844.00	38.3 AV	54.0	-15.7	2.27 H	136	35.4	2.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	59.6 PK	74.0	-14.4	3.50 V	42	27.6	32.0
2	2390.00	48.5 AV	54.0	-5.5	3.50 V	42	16.5	32.0
3	*2422.00	107.3 PK			3.50 V	42	75.4	31.9
4	*2422.00	97.8 AV			3.50 V	42	65.9	31.9
5	4844.00	49.0 PK	74.0	-25.0	2.58 V	53	46.1	2.9
6	4844.00	38.8 AV	54.0	-15.2	2.58 V	53	35.9	2.9

Remarks:

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

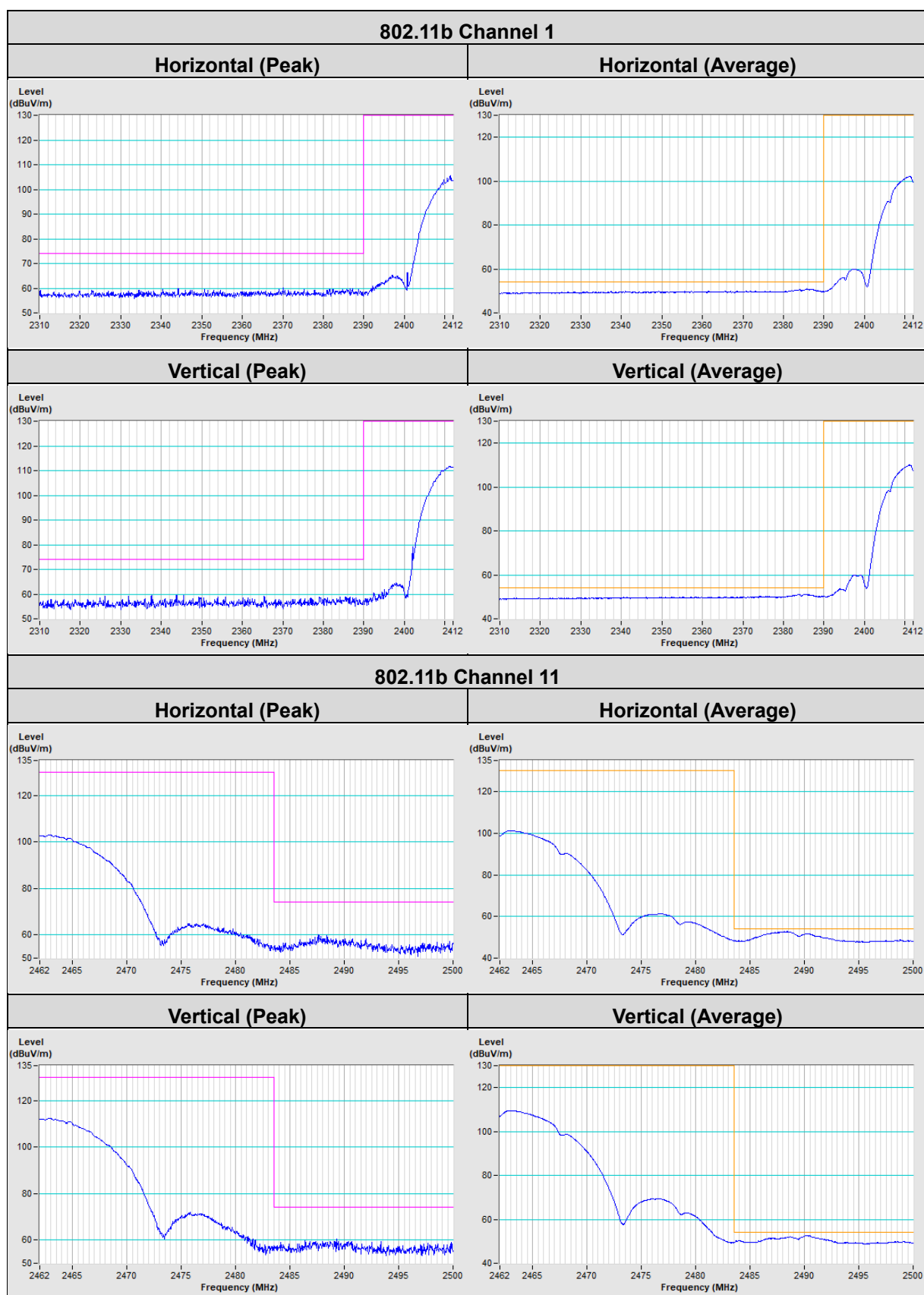
RF Mode	40 MHz Preamble 802.11ax (RU242)	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 69% RH
Tested By	Greg Lin		

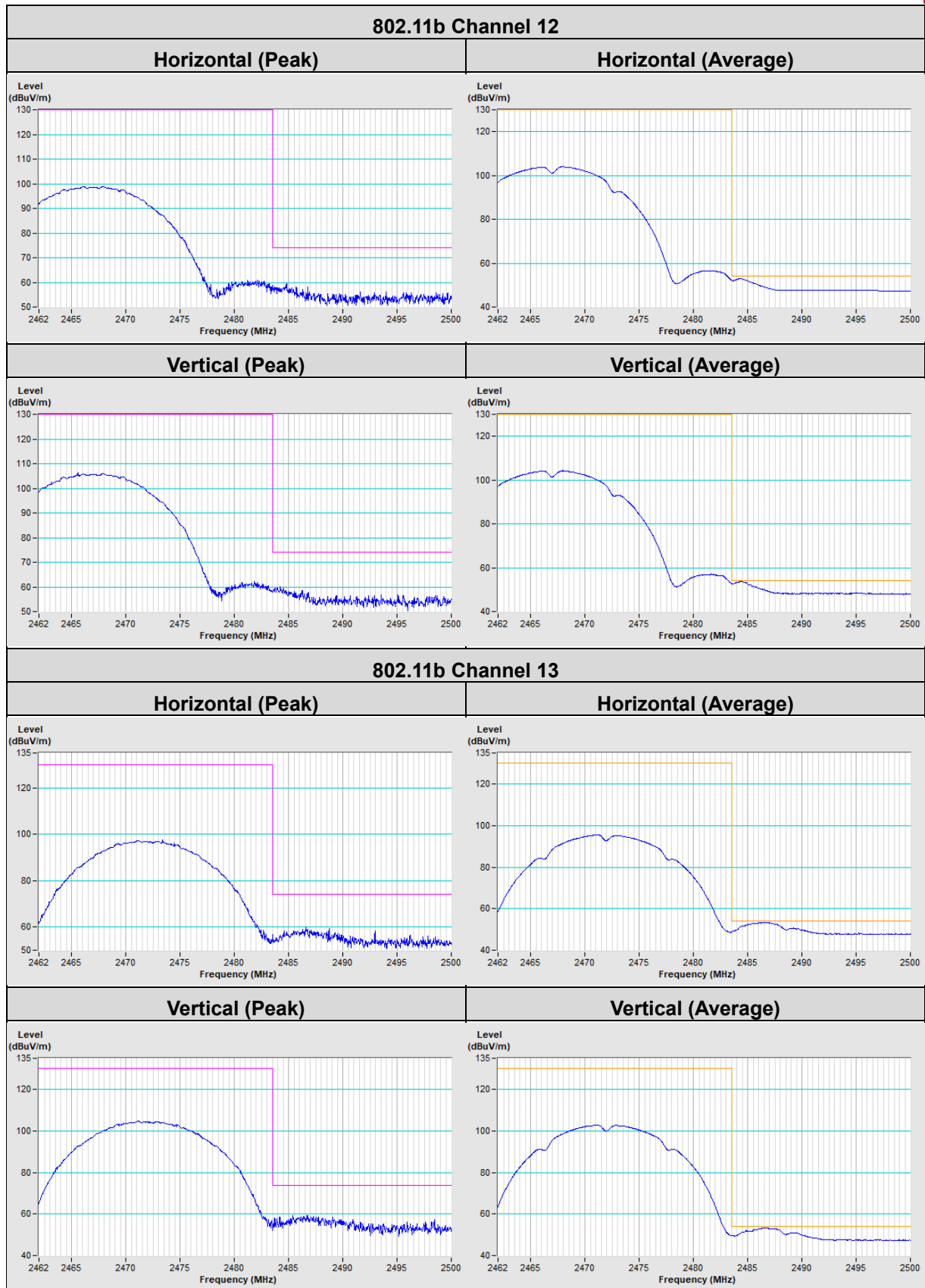
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	101.7 PK			3.32 H	62	69.7	32.0
2	*2462.00	91.5 AV			3.32 H	62	59.5	32.0
3	2483.50	71.4 PK	74.0	-2.6	3.32 H	62	39.4	32.0
4	2483.50	51.3 AV	54.0	-2.7	3.32 H	62	19.3	32.0
5	4924.00	48.1 PK	74.0	-25.9	2.29 H	138	45.3	2.8
6	4924.00	38.0 AV	54.0	-16.0	2.29 H	138	35.2	2.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	104.6 PK			3.73 V	40	72.6	32.0
2	*2462.00	94.2 AV			3.73 V	40	62.2	32.0
3	2483.50	73.5 PK	74.0	-0.5	3.73 V	40	41.5	32.0
4	2483.50	53.5 AV	54.0	-0.5	3.73 V	40	21.5	32.0
5	4924.00	48.7 PK	74.0	-25.3	2.49 V	51	45.9	2.8
6	4924.00	38.6 AV	54.0	-15.4	2.49 V	51	35.8	2.8

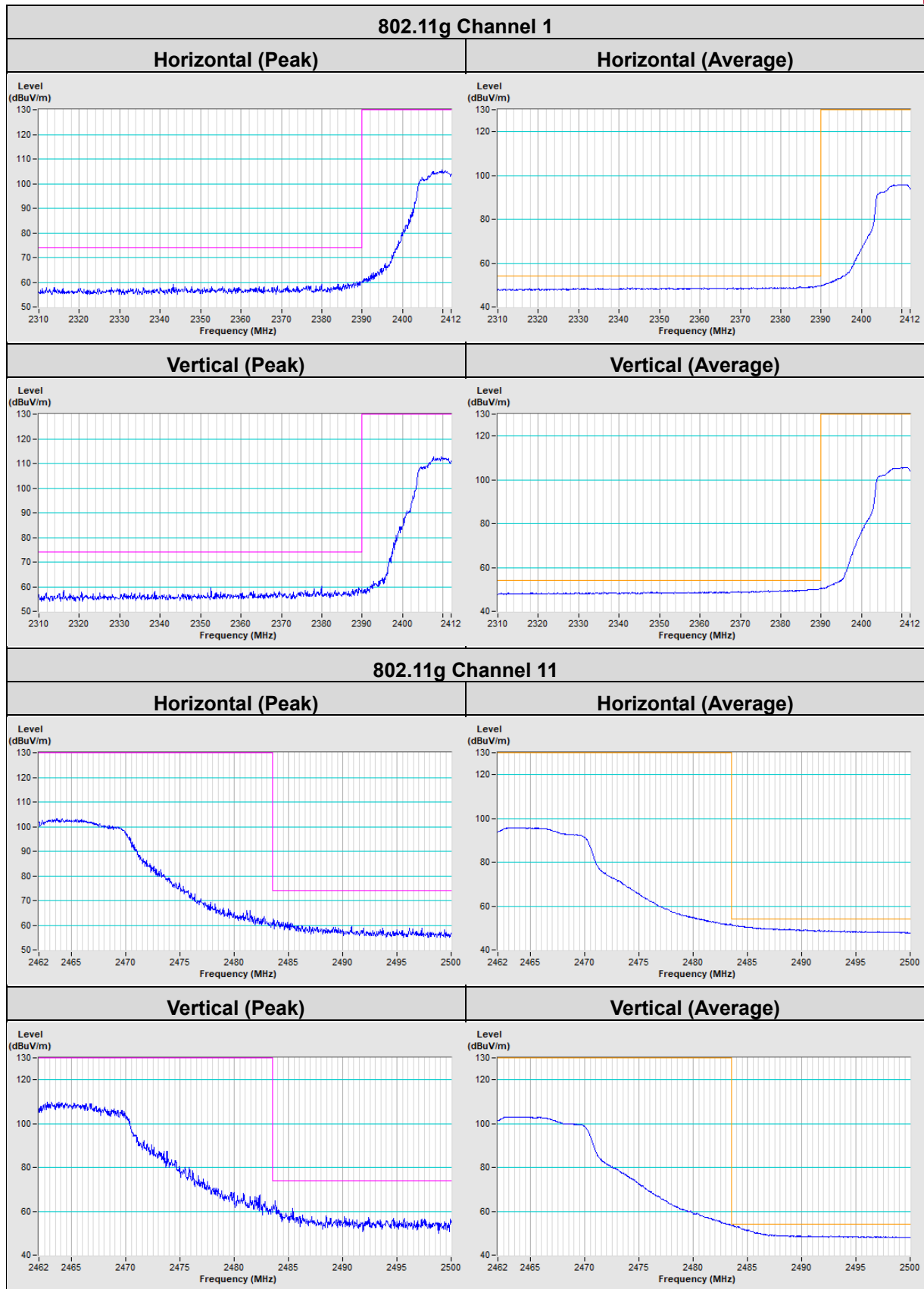
Remarks:

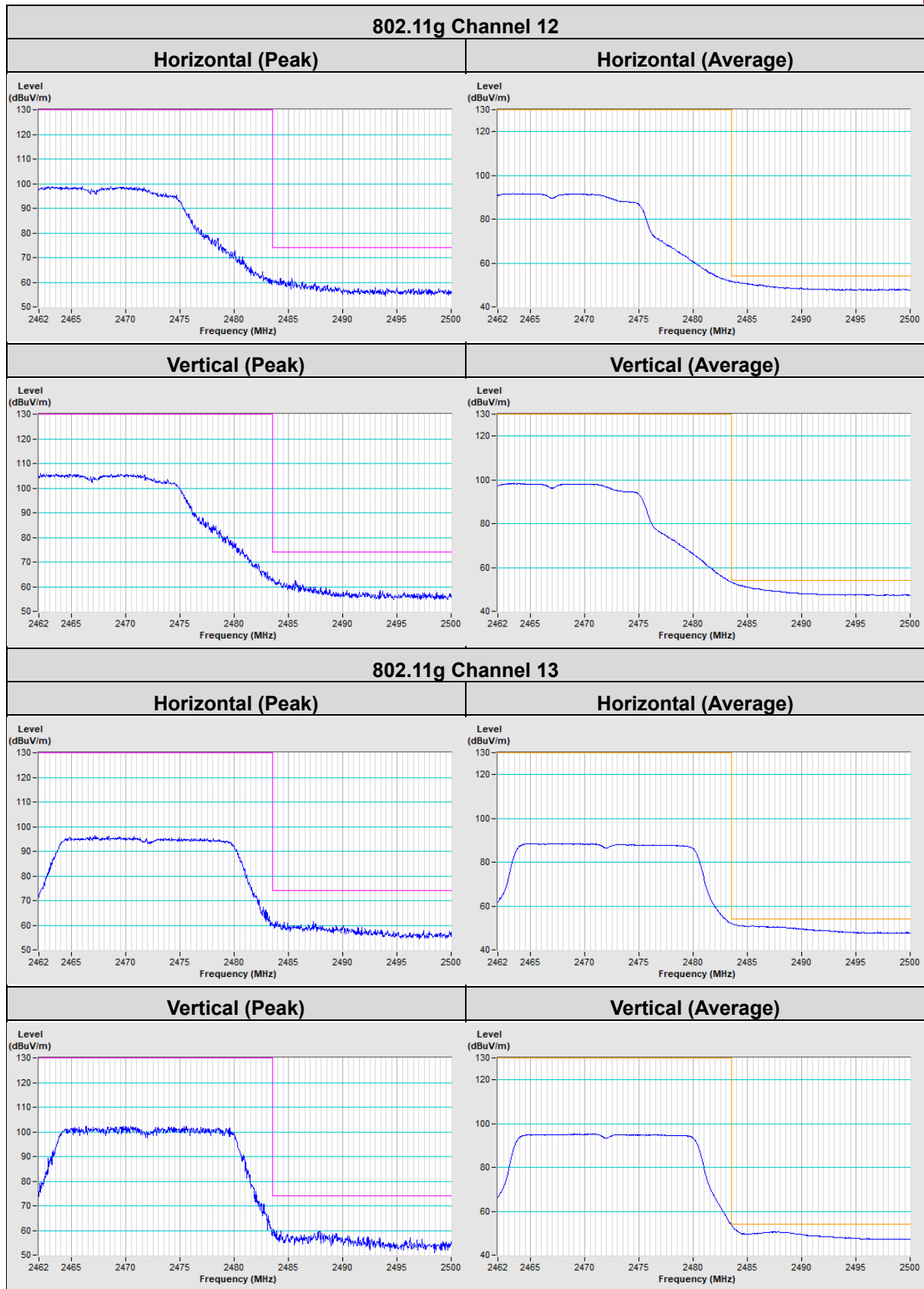
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency,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

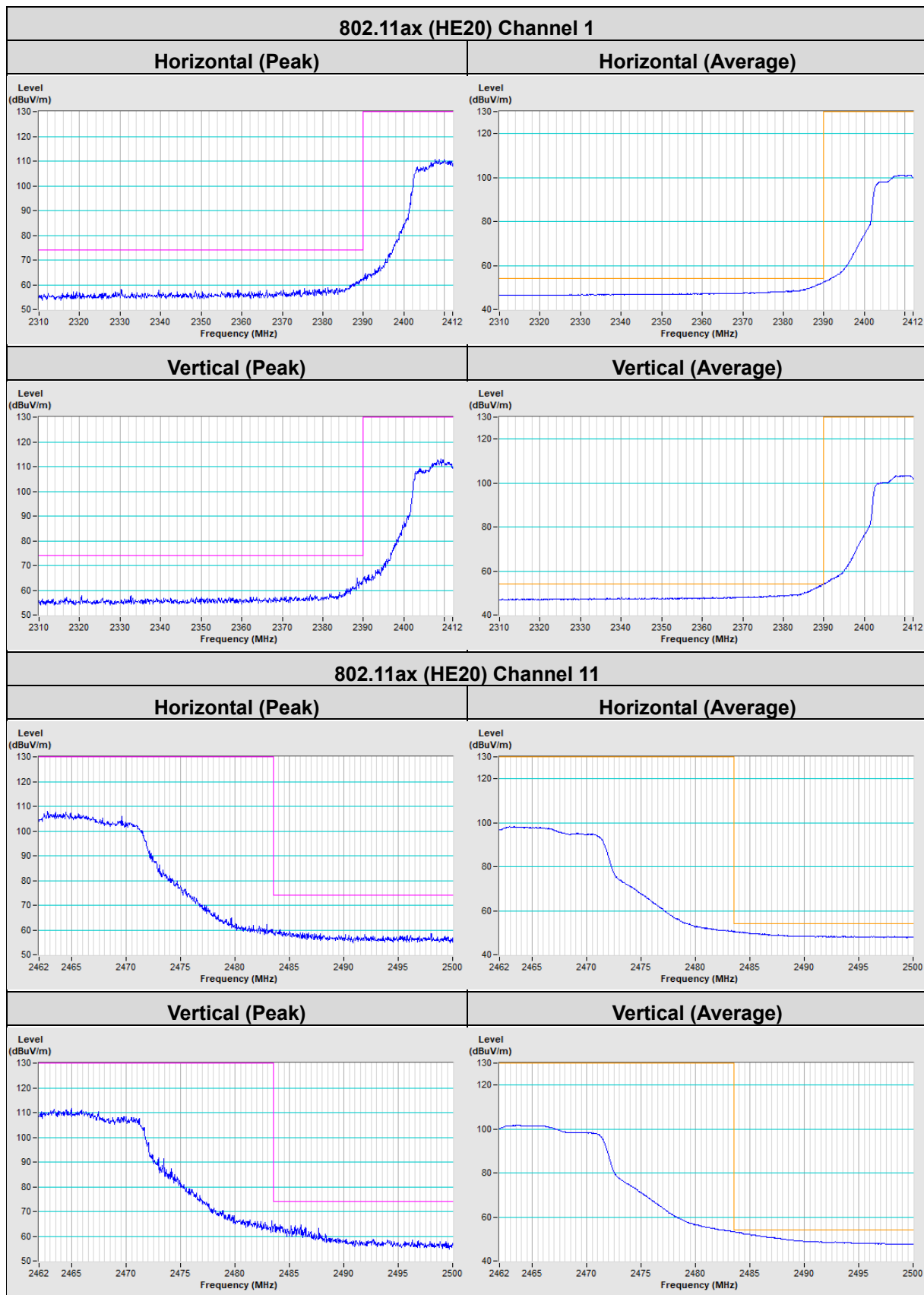
Band Edge

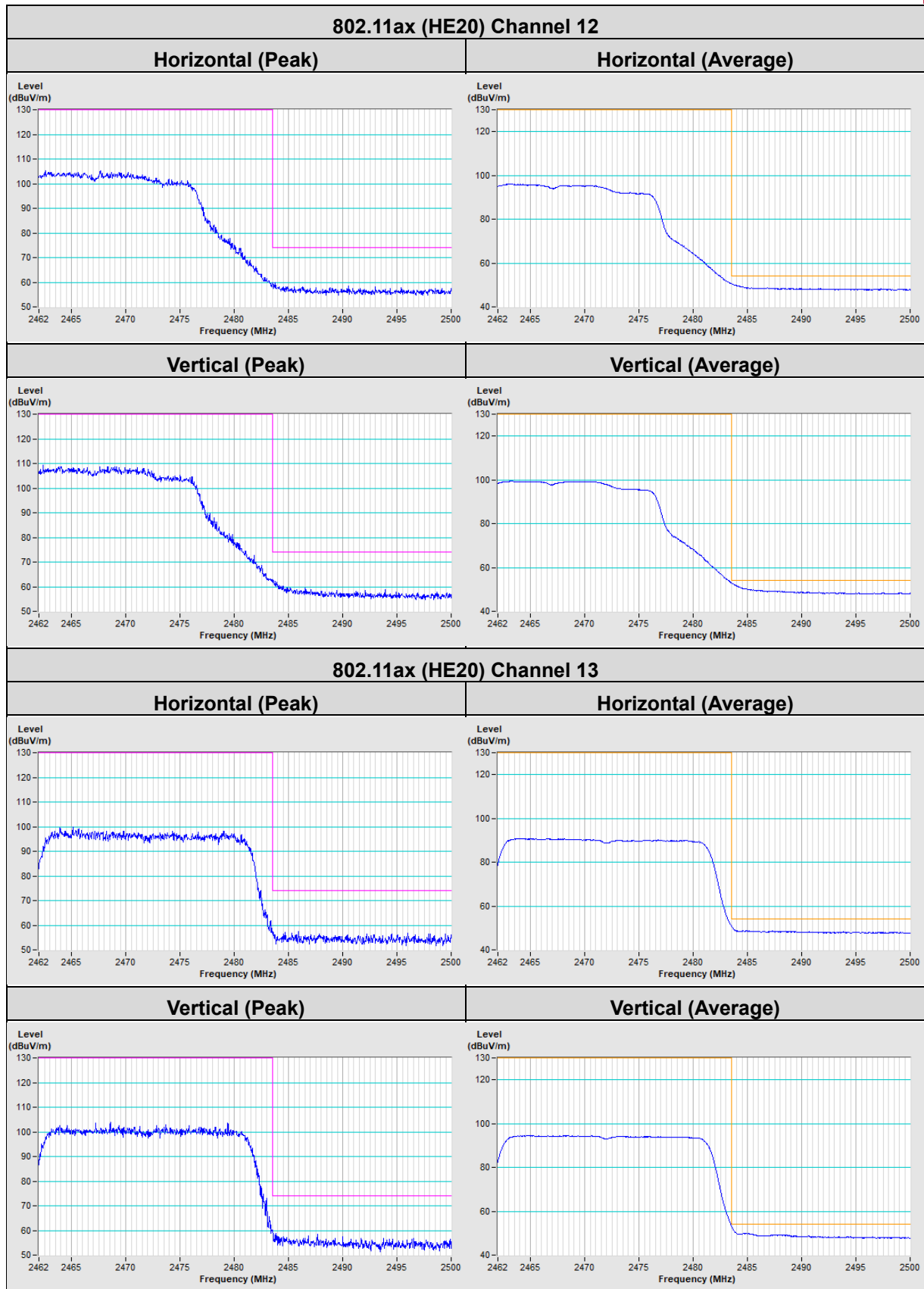


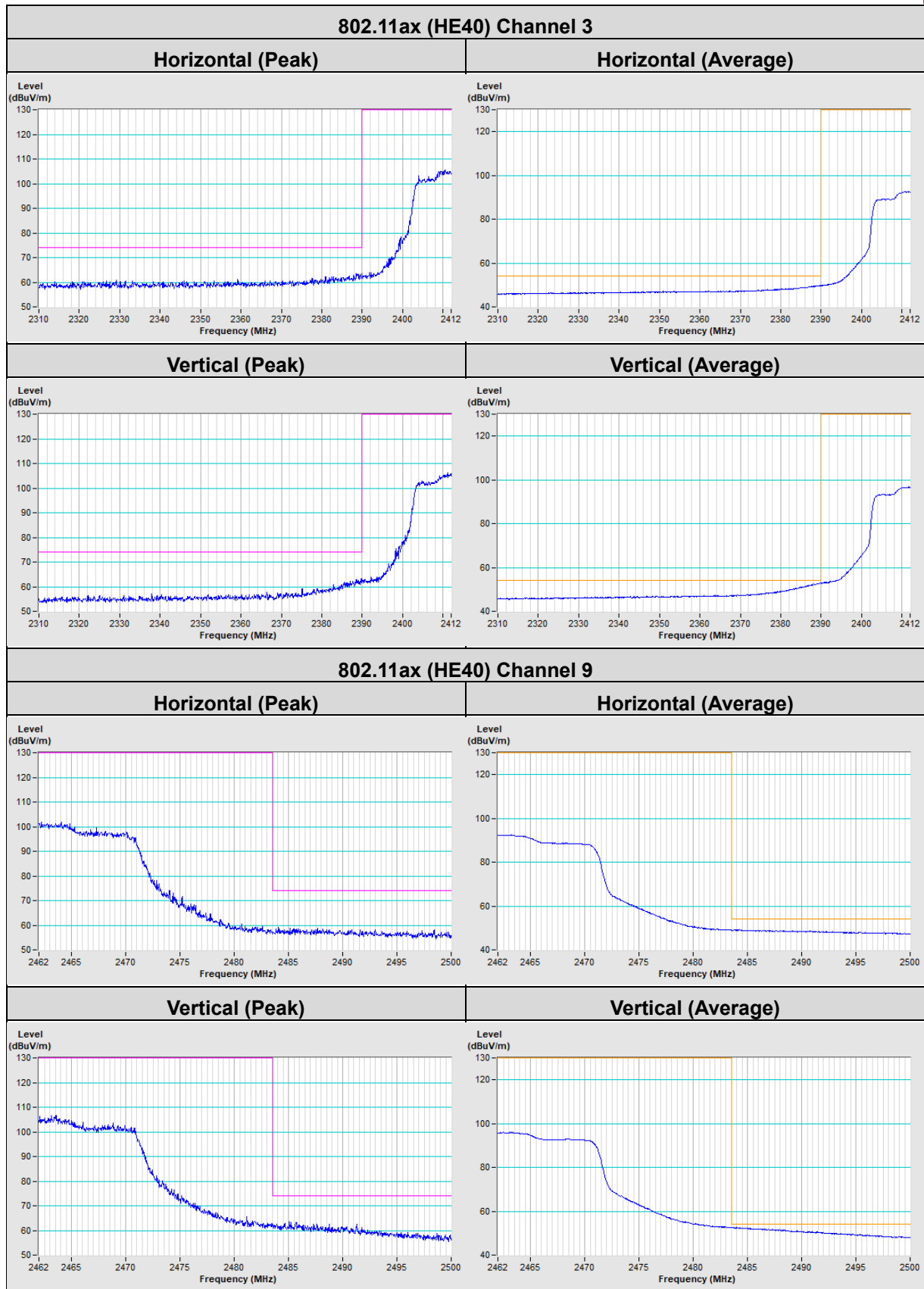


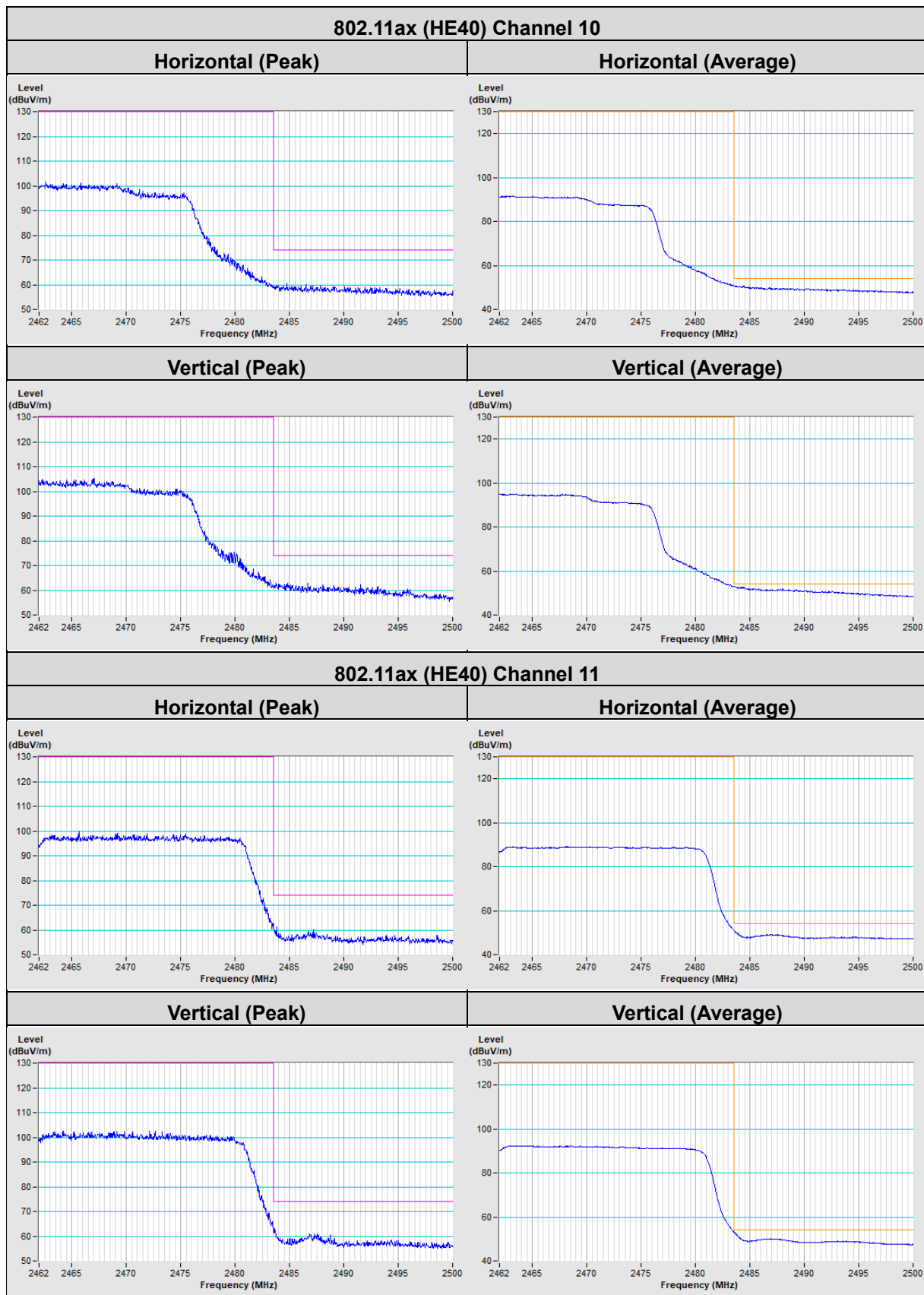


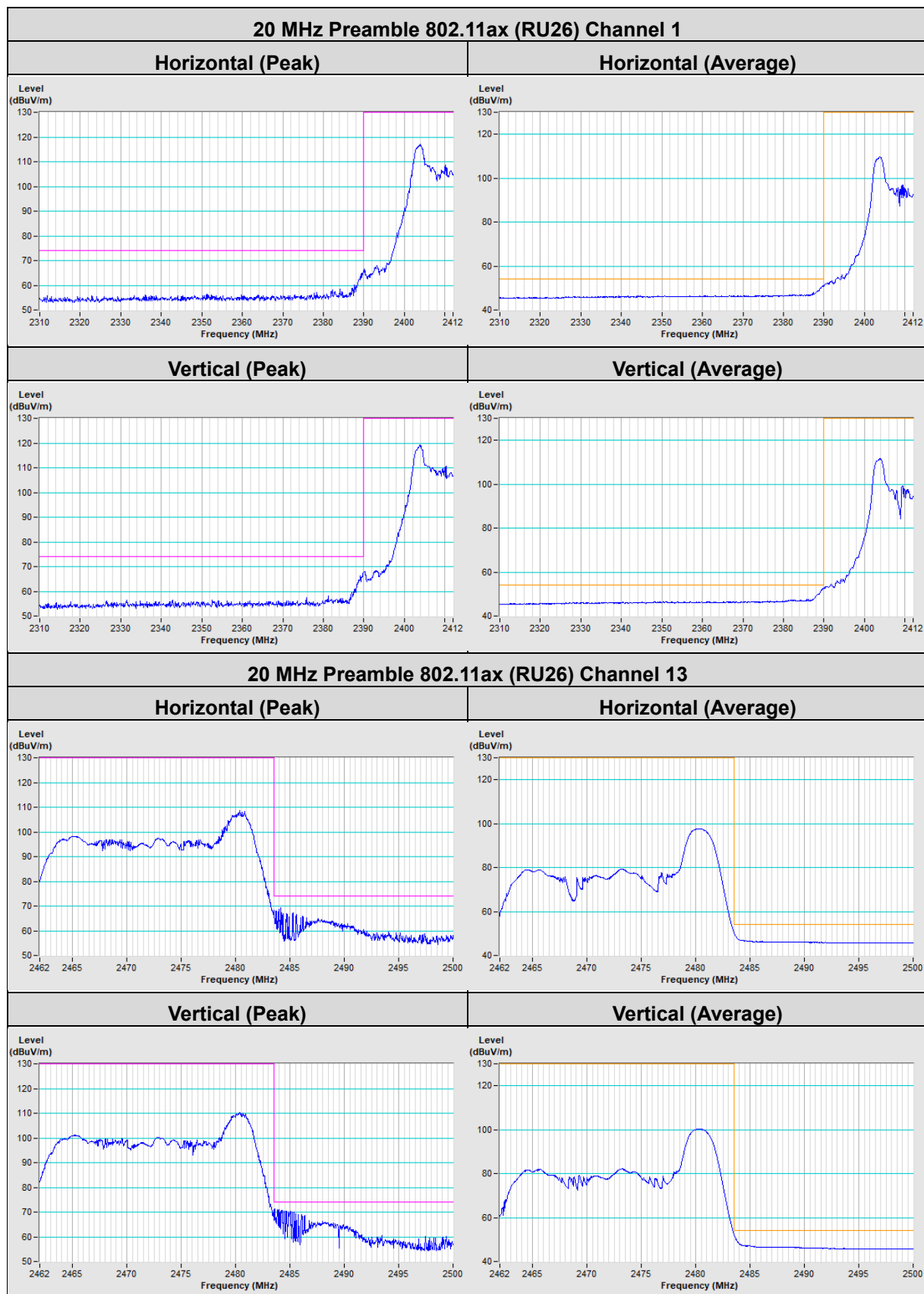


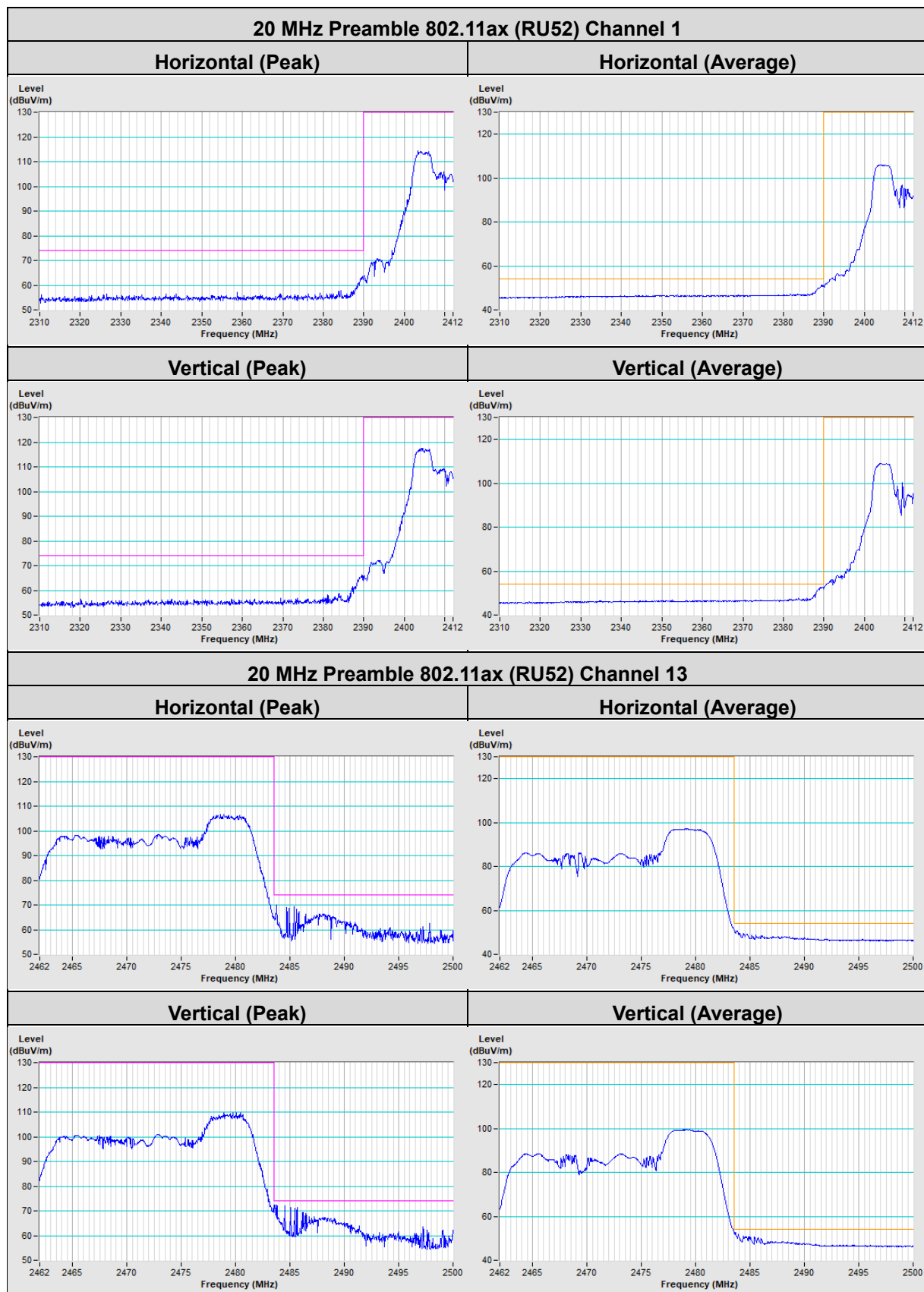


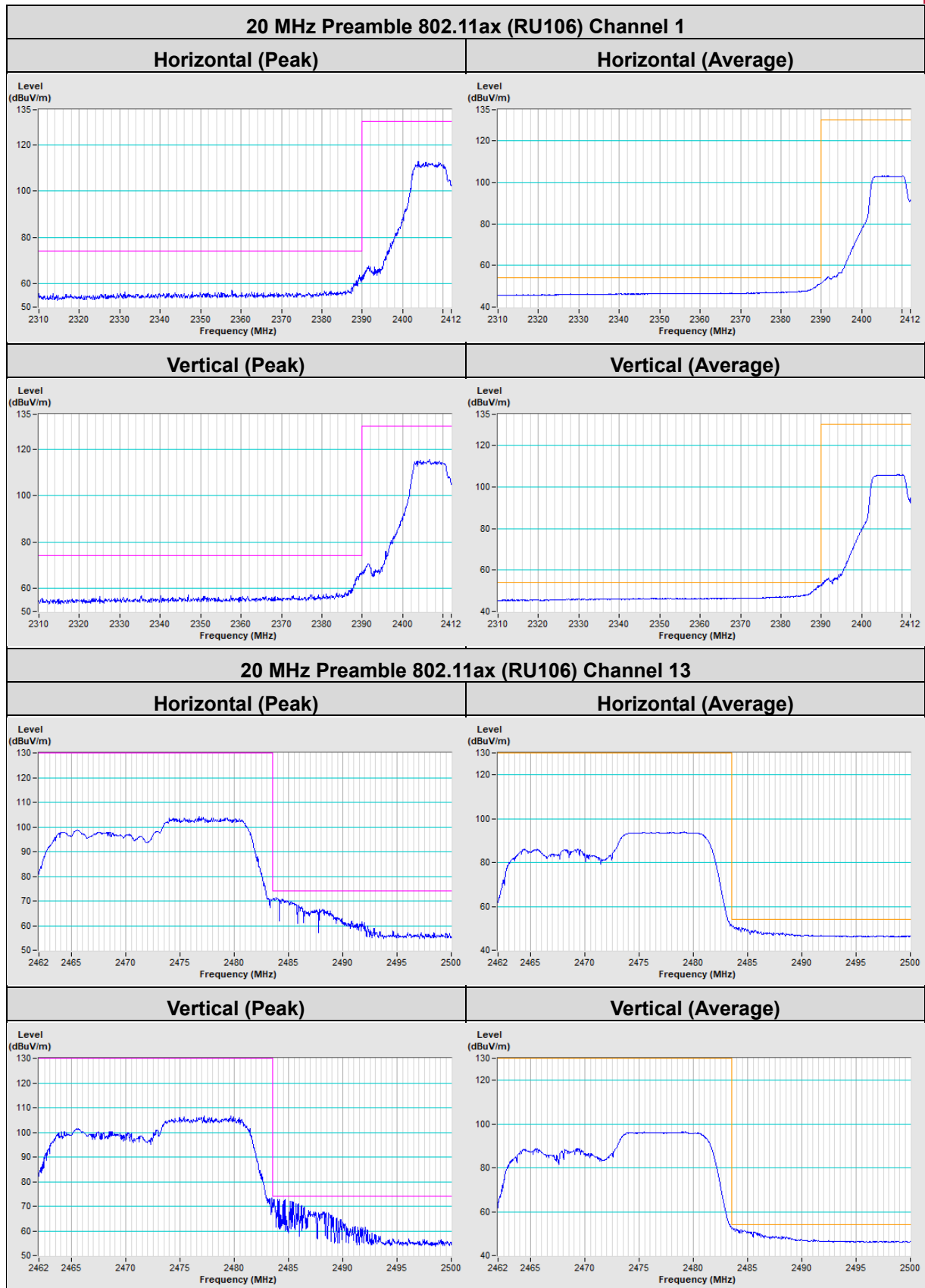


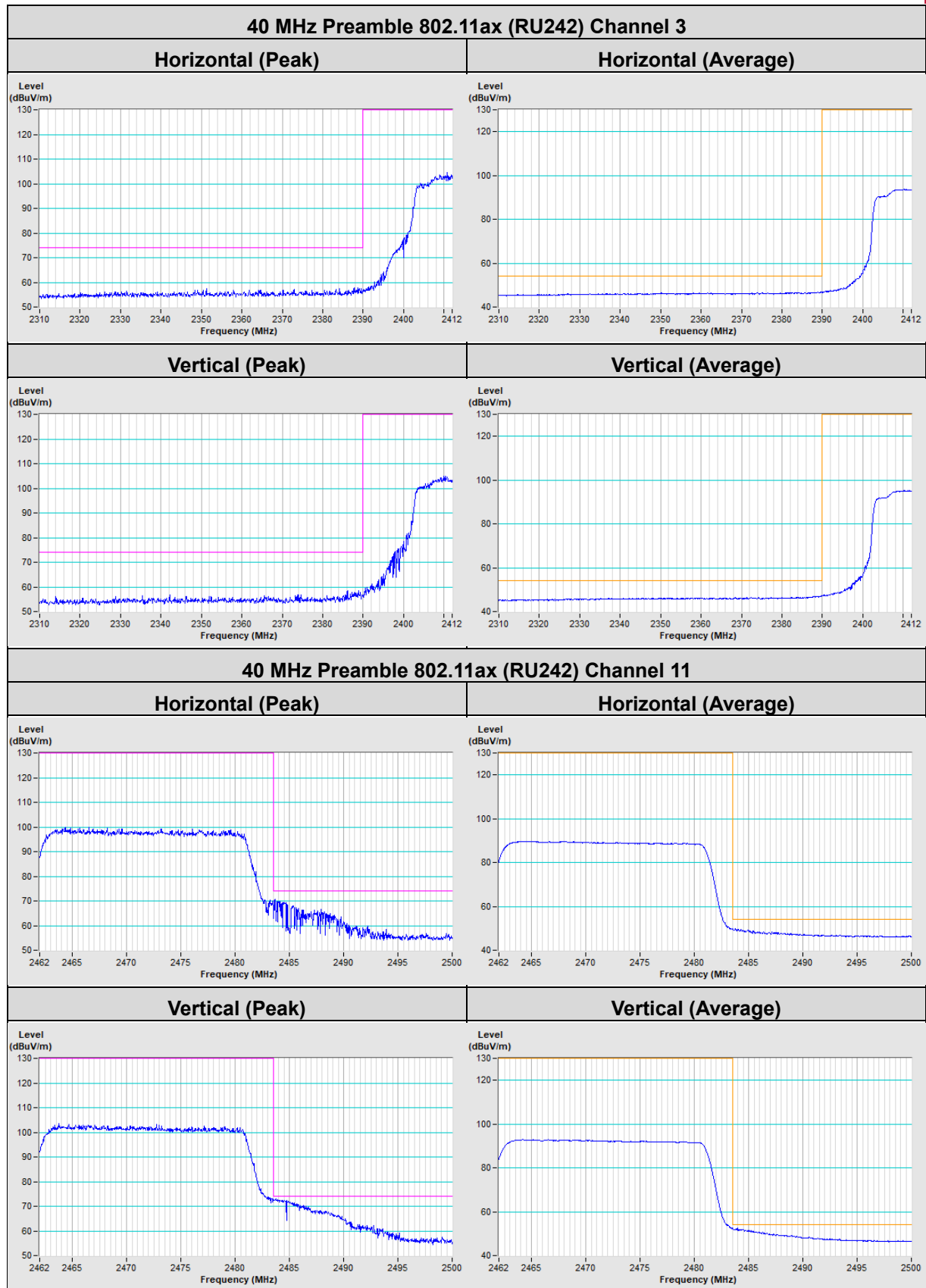












8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

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

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

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Email: service.adt@bureauveritas.com

Web Site: <http://ee.bureauveritas.com.tw>

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

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