

# TEST REPORT

## CERTIFICATE OF CONFORMITY

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

**Report No.:** RFBBQZ-WTW-P23090412

**FCC ID:** PY323400613

**Product:** BE9400 Tri-Band PoE 2.5G Insight Managed WiFi 7 Access Point

**Brand:** NETGEAR

**Model No.:** WBE710

**Series Model:** WBE718 (Refer to item 3.1 for more details)

**Received Date:** 2023/10/4

**Test Date:** 2023/11/14 ~ 2024/4/29

**Issued Date:** 2024/5/17

**Applicant and Manufacturer:** NETGEAR, INC.

**Address:** 350 East Plumeria Drive San Jose CA 95134

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

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**FCC Registration /** 788550 / TW0003

**Designation Number:**

**Approved by:**

*Jeremy Lin*

**Date:**

2024/5/17

Jeremy Lin / Project Engineer

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Prepared by : Vera Huang / Specialist



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## Release Control Record

Issue No.	Description	Date Issued
RFBBQZ-WTW-P23090412	Original Release	2024/5/17

## 1 Certificate

**Product:** BE9400 Tri-Band PoE 2.5G Insight Managed WiFi 7 Access Point

**Brand:** NETGEAR

**Test Model:** WBE710

**Series Model:** WBE718

**Sample Status:** Engineering sample

**Applicant and Manufacturer:** NETGEAR, INC.

**Test Date:** 2023/11/14 ~ 2024/4/29

**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 -16.28 dB at 0.15400 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -10.3 dB at 48.43 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.1 dB at 2483.50 MHz
15.203	Antenna Requirement	Pass	Antenna connector is ipex(MHF) 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) (±)
RF Output Power	-	1.371 dB
Power Spectral Density	-	1.017 dB
6 dB Bandwidth	-	206.5 Hz
Conducted Out of Band Emissions	9 kHz ~ 40 GHz	2.79 dB
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.88 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.59 dB
	30 MHz ~ 1 GHz	3.64 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	2.29 dB
	18 GHz ~ 40 GHz	2.29 dB

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

### 2.2 Supplementary Information

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

### 3 General Information

#### 3.1 General Description

Product	BE9400 Tri-Band PoE 2.5G Insight Managed WiFi 7 Access Point
Brand	NETGEAR
Test Model	WBE710
Series Model	WBE718
Model Difference	Refer to note
Status of EUT	Engineering sample
Power Supply Rating	Refer to note
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in VHT mode 1024QAM for OFDMA in 11ax/be mode
Modulation Technology	DSSS, OFDM, OFDMA
Transfer Rate	802.11b: up to 11 Mbps 802.11g: up to 54 Mbps 802.11n: up to 300 Mbps VHT: up to 400 Mbps 802.11ax: up to 573.5 Mbps 802.11be: up to 688.2 Mbps
Operating Frequency	2.412 GHz ~ 2.462 GHz
Number of Channel	802.11b, 802.11g, 802.11n (HT20), VHT20, 802.11ax (HE20), 802.11be (EHT20): 11 802.11n (HT40), VHT40, 802.11ax (HE40), 802.11be (EHT40): 7
Output Power	CDD Mode: 874.322 mW (29.42 dBm) Beamforming Mode: 809.091 mW (29.08 dBm)

Note:

1. All models are listed as below. Model WBE710 is the representative for final test.

Brand	Model	Difference
NETGEAR	WBE710	Same HW, only change model name from SW
	WBE718	

2. The EUT uses following support units.

AC Adapter 1	Brand	NETGEAR
	Model	ADS-40FPC-12 12030E
	Part Number	332-11699-01
	AC Input	100-240V ~ 50/60 Hz
	DC Output	12.0V 2.5A 30.0W
	DC Output Cable	1.76M / without core
	Plug	Changeable
	Manufacturer	Vietnam Honor High Tech Company Limited
AC Adapter 2	Brand	NETGEAR
	Model	ADS-40FPA-12 12030EPCU-L ADS-40FPA-12 12030EPC-L
	Part Number	332-11584-01
	AC Input	100-120V ~ 60Hz MAX 1.0A
	DC Output	12V 2.5A
	DC Output Cable	1.77M / without core
	Plug	US
	Manufacturer	Vietnam Honor High Tech Company Limited
AC Adapter 3	Brand	NETGEAR
	Model	2AED030FC
	Part Number	332-1171201
	AC Input	100-240V ~50- 60Hz MAX 1.0A
	DC Output	12.0V 2.5A 30.0W
	DC Output Cable	1.77M / without core
	Plug	Changeable
	Manufacturer	Channel Well Technology (Guangzhou) Co., Ltd
POE	Brand	NETGEAR
	Model	MS108UP
	DC Input	54V- 4.7A

\* After pretesting, Adapter 1 was the worst case and representative for final test.

3. 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.

Antenna Type	Connector Type	Frequency Range	Antenna Gain (dBi)		Directional Antenna Gain (dBi)
			Chain 0	Chain 1	
PIFA	ipex(MHF)	2400~2483.5 MHz	2.83	2.37	4.92
PIFA	ipex(MHF)	5150~5250 MHz	5.04	4.89	6.21
PIFA	ipex(MHF)	5250~5350 MHz	5.04	4.89	6.18
PIFA	ipex(MHF)	5470~5725 MHz	5.15	5.13	6.46
PIFA	ipex(MHF)	5725~5850 MHz	4.95	5.07	6.37

\* The detailed antenna information, please refer to the BV CPS report no.: RFBBQZ-WTW-P23090412-5.

2. The EUT incorporates a MIMO function.

2.4 GHz Band			
Modulation Mode	Beamforming Mode	TX & RX Configuration	
802.11b	Not Support	2TX	2RX
802.11g	Not Support	2TX	2RX
802.11n (HT20)	Support	2TX	2RX
802.11n (HT40)	Support	2TX	2RX
VHT20	Support	2TX	2RX
VHT40	Support	2TX	2RX
802.11ax (HE20)	Support	2TX	2RX
802.11ax (HE40)	Support	2TX	2RX
802.11be (EHT20)	Support	2TX	2RX
802.11be (EHT40)	Support	2TX	2RX

Note:

- All of modulation mode support beamforming function except 802.11b/g modulation mode.
- The EUT support Beamforming and CDD mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.
- The modulation and bandwidth are similar for 802.11n mode for 20 MHz (40 MHz), VHT mode for 20 MHz (40 MHz), 802.11ax mode for 20 MHz (40 MHz) and 802.11be mode for 20 MHz (40 MHz), therefore the investigated worst case to representative mode in test report.
- The EUT device modulation technique OFDMA does not support partial RUs (resource units) and channel puncturing/bandwidth reduction mechanisms.

### 3.3 Channel List

11 channels are provided for 802.11b, 802.11g, 802.11n (HT20), VHT20, 802.11ax (HE20), 802.11be (EHT20):

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

7 channels are provided for 802.11n (HT40), VHT40, 802.11ax (HE40), 802.11be (EHT40):

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

### 3.4 Test Mode Applicability and Tested Channel Detail

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

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

Test Item	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
RF Output Power	802.11b	CDD	1, 6, 11	DBPSK	1Mb/s
	802.11g	CDD	1, 6, 11	BPSK	6Mb/s
	802.11be (EHT20)	CDD & Beamforming	1, 6, 11	BPSK	MCS0
	802.11be (EHT40)	CDD & Beamforming	3, 6, 9	BPSK	MCS0
Power Spectral Density / 6 dB Bandwidth / Conducted Out of Band Emissions	802.11b	CDD	1, 6, 11	DBPSK	1Mb/s
	802.11g	CDD	1, 6, 11	BPSK	6Mb/s
	802.11be (EHT20)	CDD	1, 6, 11	BPSK	MCS0
	802.11be (EHT40)	CDD	3, 6, 9	BPSK	MCS0
AC Power Conducted Emissions	802.11b	CDD	6	BPSK	6Mb/s
Unwanted Emissions below 1 GHz	802.11b	CDD	6	BPSK	6Mb/s
Unwanted Emissions above 1 GHz	802.11b	CDD	1, 6, 11	DBPSK	1Mb/s
	802.11g	CDD	1, 6, 11	BPSK	6Mb/s
	802.11be (EHT20)	CDD	1, 6, 11	BPSK	MCS0
	802.11be (EHT40)	CDD	3, 6, 9	BPSK	MCS0

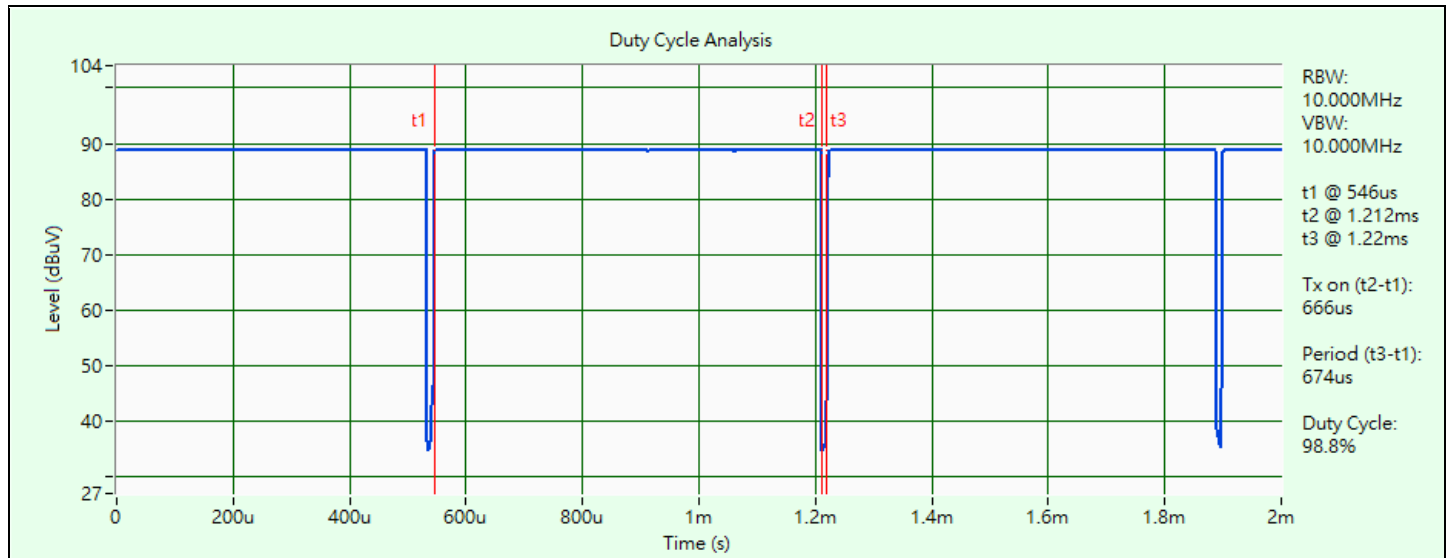
### 3.5 Duty Cycle of Test Signal

**802.11b:** Duty cycle = 0.666 ms / 0.674 ms x 100% = 98.8%

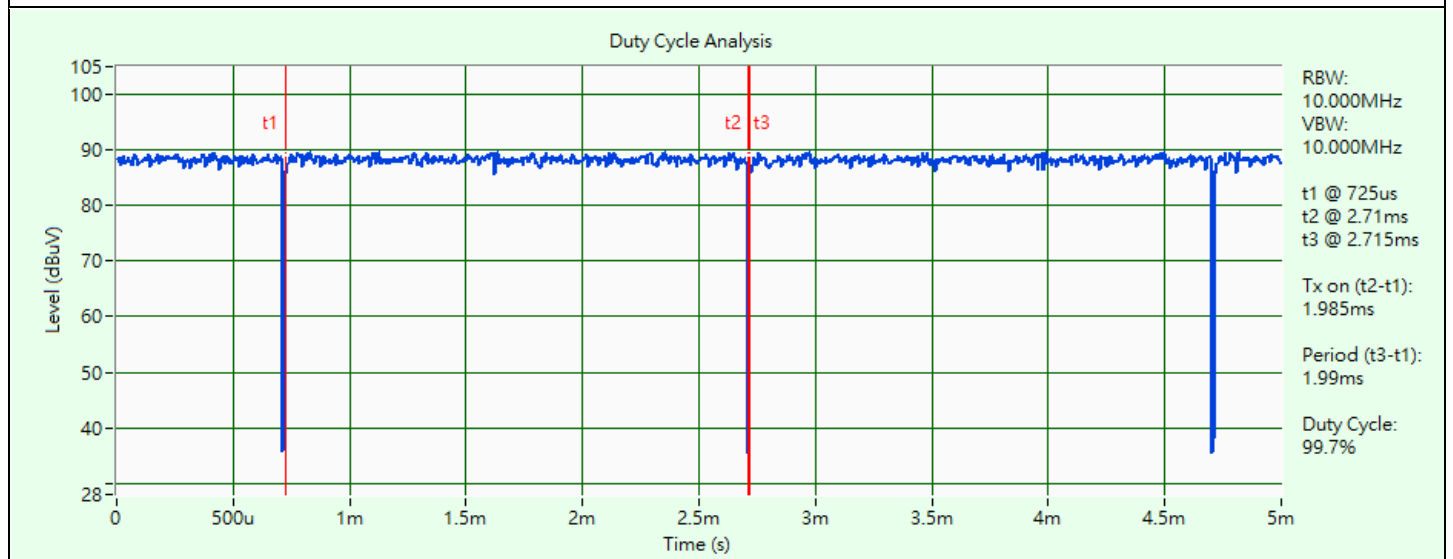
**802.11g:** Duty cycle = 1.985 ms / 1.99 ms x 100% = 99.7%

**802.11be (EHT20):** Duty cycle = 100 ms / 100 ms x 100% = 100.0%

**802.11be (EHT40):** Duty cycle = 100 ms / 100 ms x 100% = 100.0%



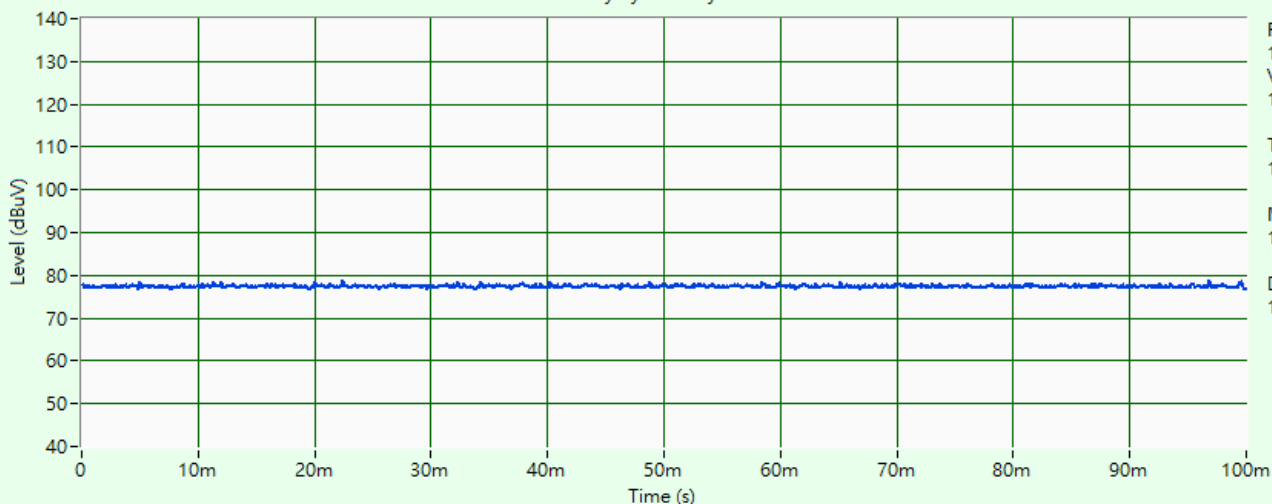
802.11b



802.11g

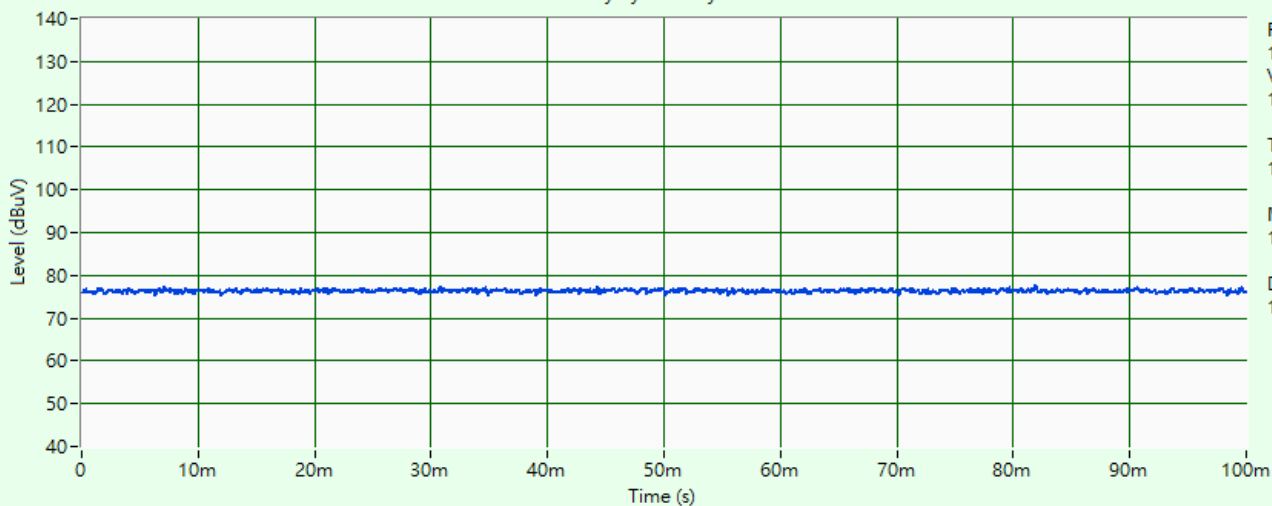


### Duty Cycle Analysis



802.11be (EHT20)

### Duty Cycle Analysis

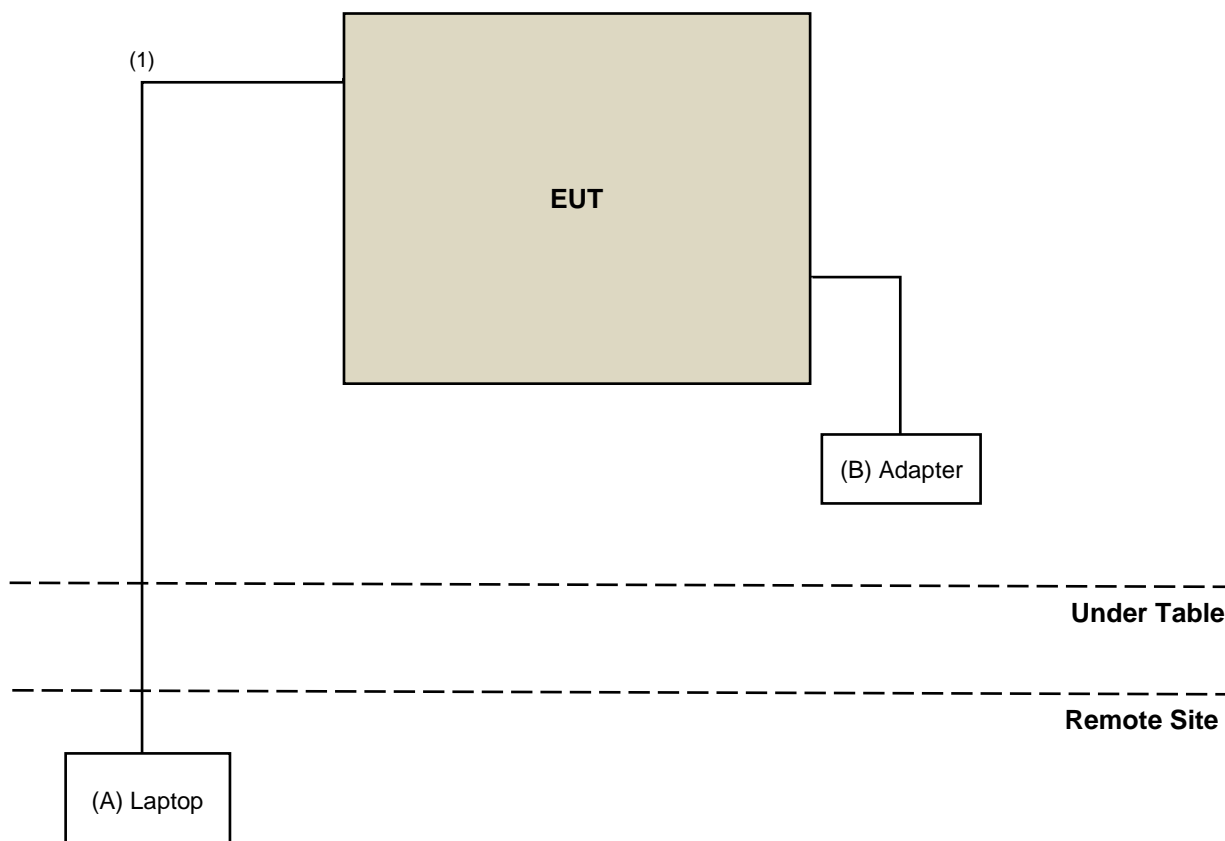


802.11be (EHT40)

### 3.6 Test Program Used and Operation Descriptions

Controlling software QSPR V5.0.188.0 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	Laptop	DELL	E5430	2RL3YW1	N/A	Provided by Lab
B	Adapter	NETGEAR	ADS-40FPC-12 12030E	N/A	N/A	Supplied by applicant

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

## 4 Test Instruments

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

### 4.1 RF Output Power

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

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/4/29

### 4.2 Power Spectral Density

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

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/4/29

### 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
50 ohm terminal resistance HUBER+SUHNER	E1-011315	13	2023/11/22	2024/11/21
50 ohm terminal resistance	E1-011279	04	2023/11/22	2024/11/21
	E1-011280	05	2023/11/22	2024/11/21
DC-LISN Schwarzbeck	NNBM 8126G	8126G-069	2023/11/7	2024/11/6
EMI Test Receiver R&S	ESCI	100613	2023/12/4	2024/12/3
Fixed Attenuator Mini-Circuits	HAT-10+	PAD-COND1-01	2024/1/6	2025/1/5
LISN R&S	ENV216	101826	2024/3/25	2025/3/24
	ESH3-Z5	100311	2023/9/6	2024/9/5
RF Coaxial Cable Woken	5D-FB	Cable-cond1-01	2024/1/6	2025/1/5
Software BVADT	BVADT_Cond_ V7.4.1.0	N/A	N/A	N/A
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2023/8/31	2024/8/30

Notes:

1. The test was performed in HY - Conduction 1.
2. Tested Date: 2024/4/24



#### 4.6 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower inn-co GmbH	MA 4000	010303	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-155	2023/10/13	2024/10/12
EMI Test Receiver R&S	ESR3	102782	2023/12/7	2024/12/6
Loop Antenna Electro-Metrics	EM-6879	269	2023/9/23	2024/9/22
Loop Antenna TESEQ	HLA 6121	45745	2023/8/8	2024/8/7
Preamplifier Agilent	8447D	2944A10631	2023/5/7	2024/5/6
Preamplifier EMCI	EMC001340	980201	2023/9/27	2024/9/26
RF Coaxial Cable Woken	8D-FB	Cable-CH4-01	2023/7/8	2024/7/7
Signal & Spectrum Analyzer R&S	FSW43	101582	2024/4/12	2025/4/11
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 3.
2. Tested Date: 2024/4/24

#### 4.7 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower inn-co GmbH	MA 4000	010303	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	5	N/A	N/A
EMI Test Receiver R&S	ESR3	102782	2022/12/12 2023/12/7	2023/12/11 2024/12/6
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-408	2023/11/12	2024/11/11
	BBHA 9170	9170-480	2023/11/12	2024/11/11
		BBHA9170241	2023/10/16	2024/10/15
		BBHA9170243	2023/11/12	2024/11/11
Preamplifier EMCI	EMC 184045	980116	2023/9/27	2024/9/26
Preamplifier Keysight	83017A	MY53270295	2023/5/7	2024/5/6
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2023/7/8	2024/7/7
	EMC102-KM-KM-3000	150929	2023/7/8	2024/7/7
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03(250724)	2023/5/7	2024/5/6
	Sucoflex 104	MY 13380+295012/04	2023/5/7	2024/5/6
Signal & Spectrum Analyzer R&S	FSW43	101582	2023/4/13 2024/4/12	2024/4/12 2025/4/11
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 3.
2. Tested Date: 2023/11/14 ~ 2024/4/17

## 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  $\geq 40$  MHz for any  $N_{ANT}$ ;

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

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

### 5.2 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 30 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 30 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 30 dB below the highest level of the desired power:

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

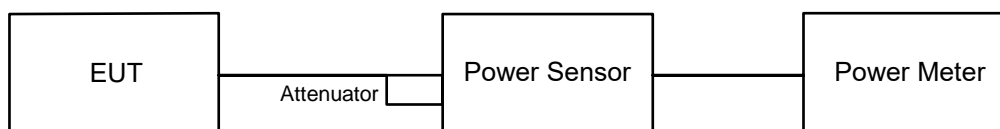
Notes:

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



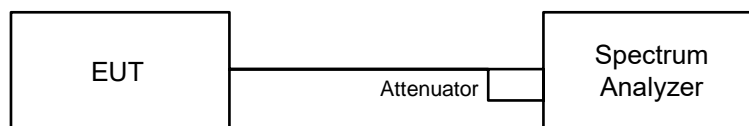
#### 6.1.2 Test Procedure

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



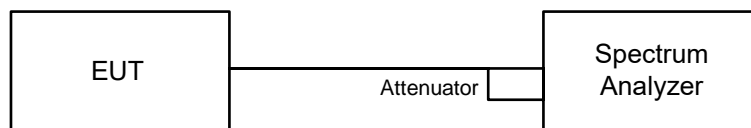
#### 6.2.2 Test Procedure

- a. Measure the duty cycle (x).
- b. Set instrument center frequency to DTS channel center frequency.
- c. Set span to at least 1.5 times the OBW.
- d. Set RBW to: 3 kHz.
- e. Set VBW  $\geq 3 \times$  RBW.
- f. Detector = power averaging (RMS) or sample detector (when RMS not available).
- g. Ensure that the number of measurement points in the sweep  $\geq 2 \times$  span/RBW.
- h. Sweep time = auto couple.
- i. Do not use sweep triggering. Allow sweep to "free run".
- j. Employ trace averaging (RMS) mode over a minimum of 100 traces.
- k. Use the peak marker function to determine the maximum amplitude level.

Note: If Duty cycle < 98%, Add  $10 \log (1/x)$ , where x is the duty cycle measured in step (a), to the measured PSD to compute the average PSD during the actual transmission time.

### 6.3 6 dB Bandwidth

#### 6.3.1 Test Setup

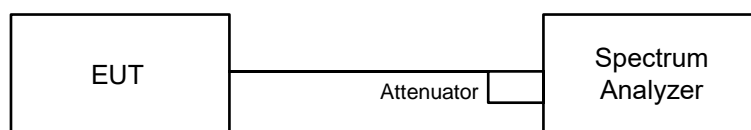


#### 6.3.2 Test Procedure

- 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

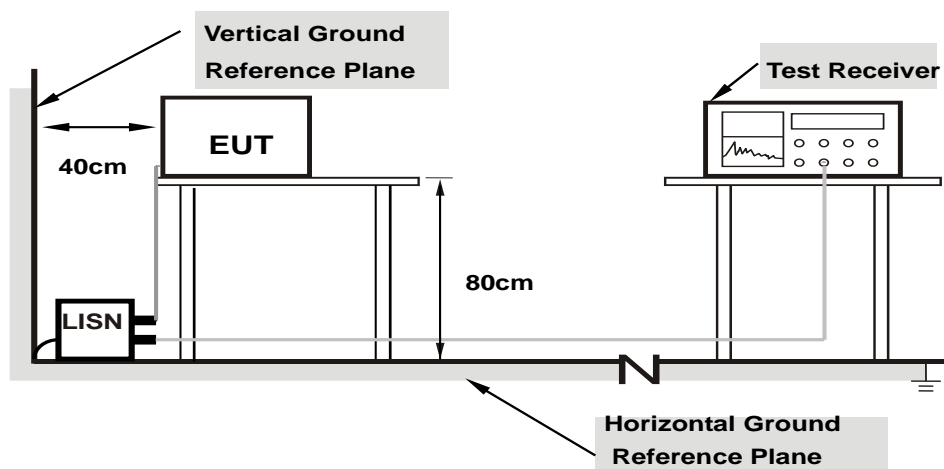
- Set the RBW = 100 kHz.
- Set the VBW  $\geq 300$  kHz.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

##### MEASUREMENT PROCEDURE OOB

- Set RBW = 100 kHz.
- Set VBW  $\geq 300$  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

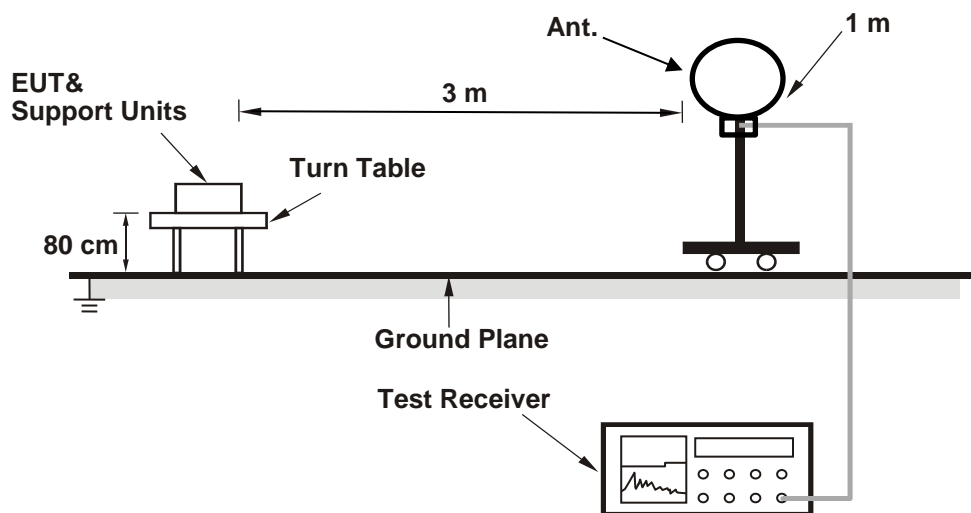
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The 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.

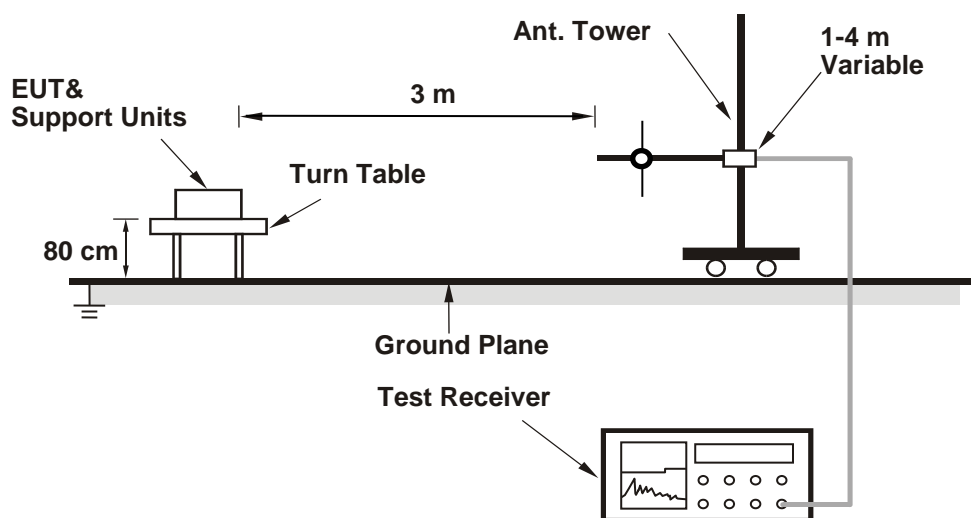
## 6.6 Unwanted Emissions below 1 GHz

### 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

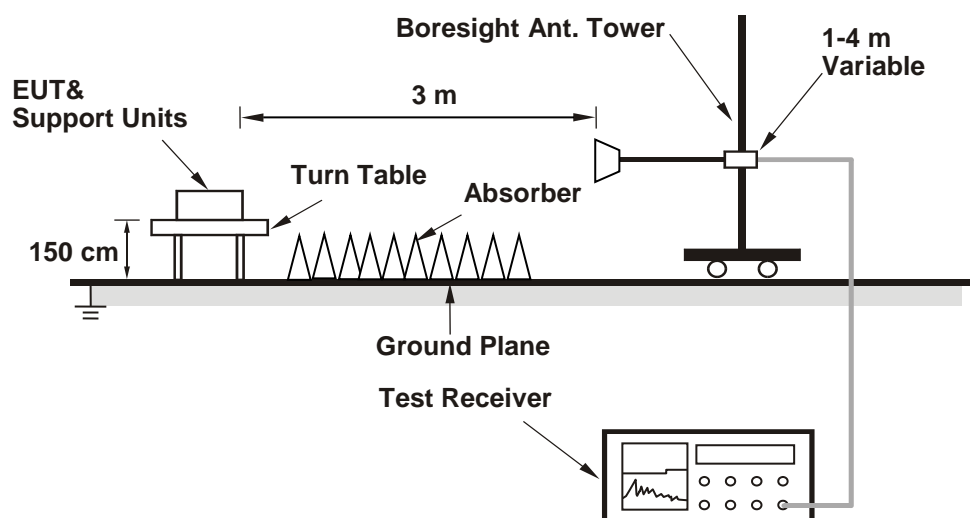
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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:	Jisyong Wang
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#### 802.11b CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	25.92	26.25	812.537	29.10	30	Pass
6	2437	26.08	26.71	<b>874.322</b>	<b>29.42</b>	30	Pass
11	2462	25.06	25.71	693.019	28.41	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.83 dBi < 6 dBi, so the output power limit shall not be reduced.

#### 802.11g CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	24.41	24.56	561.817	27.50	30	Pass
6	2437	25.49	26.47	797.606	29.02	30	Pass
11	2462	21.51	22.62	324.389	25.11	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.83 dBi < 6 dBi, so the output power limit shall not be reduced.

#### 802.11be (EHT20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	23.57	23.66	459.783	26.63	30	Pass
6	2437	26.35	25.77	809.091	29.08	30	Pass
11	2462	20.87	21.67	269.073	24.30	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.83 dBi < 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
3	2422	22.62	22.65	366.887	25.65	30	Pass
6	2437	23.05	23.08	405.072	26.08	30	Pass
9	2452	20.82	20.79	240.731	23.82	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.83 dBi < 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	23.57	23.66	459.783	26.63	30	Pass
6	2437	26.35	25.77	<b>809.091</b>	<b>29.08</b>	30	Pass
11	2462	20.87	21.67	269.073	24.30	30	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. The directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
3	2422	22.62	22.65	366.887	25.65	30	Pass
6	2437	23.05	23.08	405.072	26.08	30	Pass
9	2452	20.82	20.79	240.731	23.82	30	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. The directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

## 7.2 Power Spectral Density

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyong Wang
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### 802.11b

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
1	2412	-3.01	-3.51	-0.24	8	Pass
6	2437	-2.85	-3.29	-0.05	8	Pass
11	2462	-3.90	-3.54	-0.71	8	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 is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

### 802.11g

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
1	2412	-6.96	-6.06	-3.48	8	Pass
6	2437	-5.45	-4.98	-2.20	8	Pass
11	2462	-9.01	-9.07	-6.03	8	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 is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

### 802.11be (EHT20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
1	2412	-11.86	-11.94	-8.89	8	Pass
6	2437	-8.00	-8.95	-5.44	8	Pass
11	2462	-14.12	-13.72	-10.90	8	Pass

#### Notes:

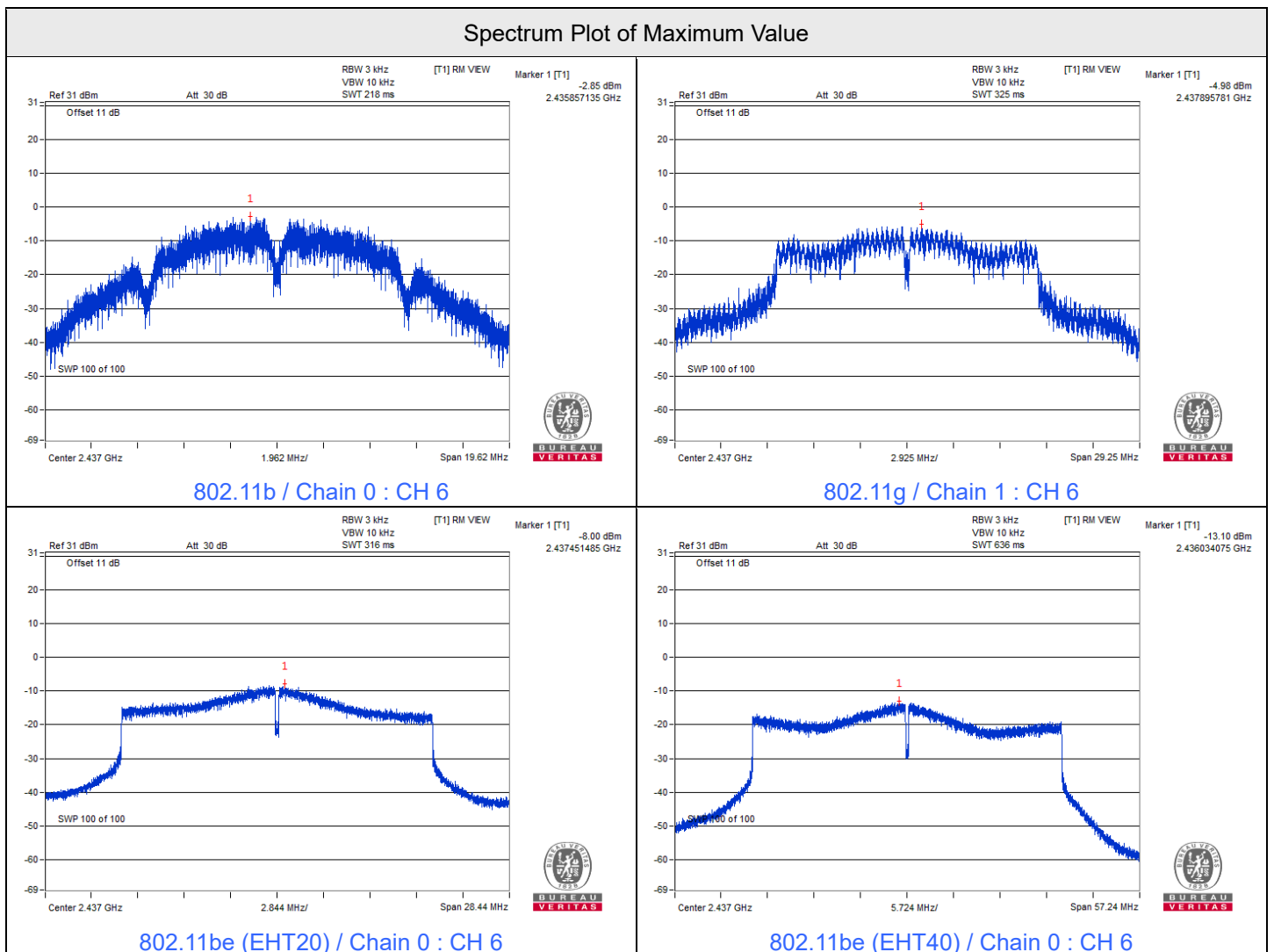
1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
3	2422	-14.81	-14.93	-11.86	8	Pass
6	2437	-13.10	-13.31	-10.19	8	Pass
9	2452	-15.82	-16.16	-12.98	8	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 is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.



### 7.3 6 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyong Wang
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#### 802.11b

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	6.15	6.15	0.5	Pass
6	2437	8.14	8.15	0.5	Pass
11	2462	8.15	8.16	0.5	Pass

#### 802.11g

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	15.13	15.11	0.5	Pass
6	2437	15.24	15.22	0.5	Pass
11	2462	15.13	15.24	0.5	Pass

#### 802.11be (EHT20)

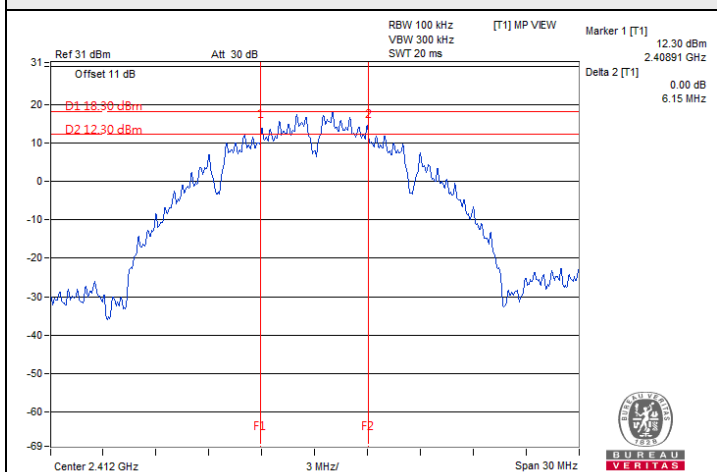
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	16.65	18.29	0.5	Pass
6	2437	13.87	12.64	0.5	Pass
11	2462	18.48	18.28	0.5	Pass

#### 802.11be (EHT40)

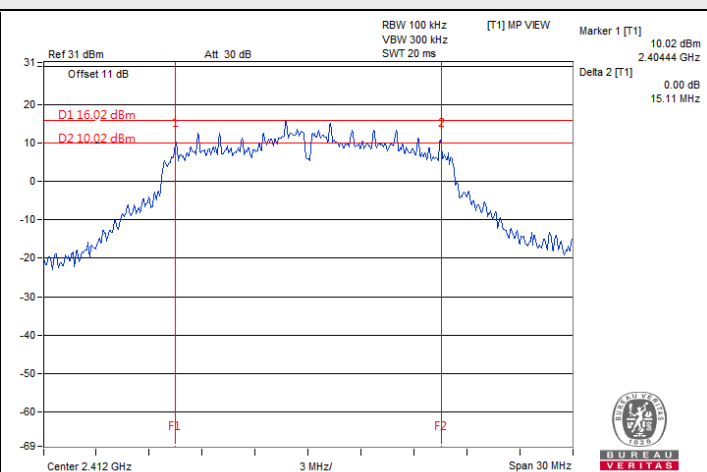
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	2422	35.17	28.83	0.5	Pass
6	2437	36.76	36.39	0.5	Pass
9	2452	36.90	37.29	0.5	Pass



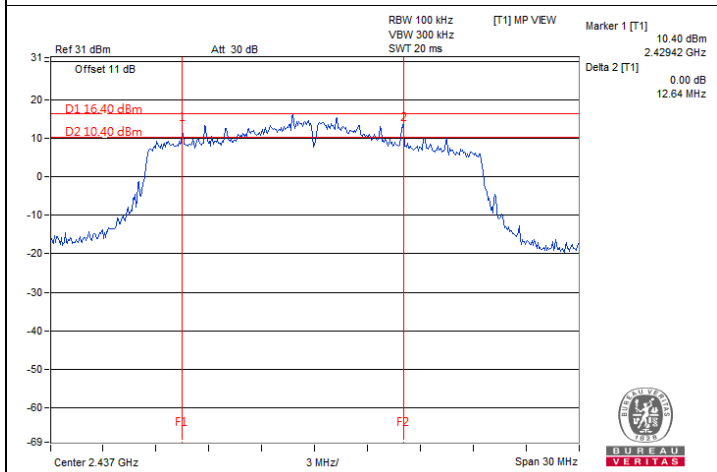
### Spectrum Plot of Minimum Value



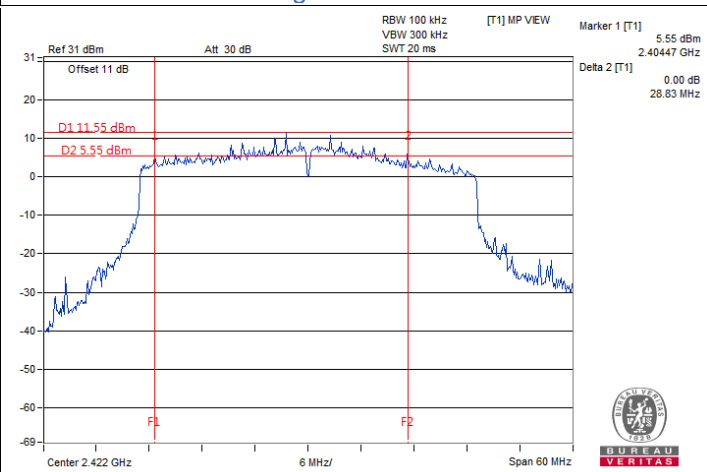
802.11b / Chain 0 : CH 1



802.11g / Chain 1 : CH 1



802.11be (EHT20) / Chain 1 : CH 6



802.11be (EHT40) / Chain 1 : CH 3





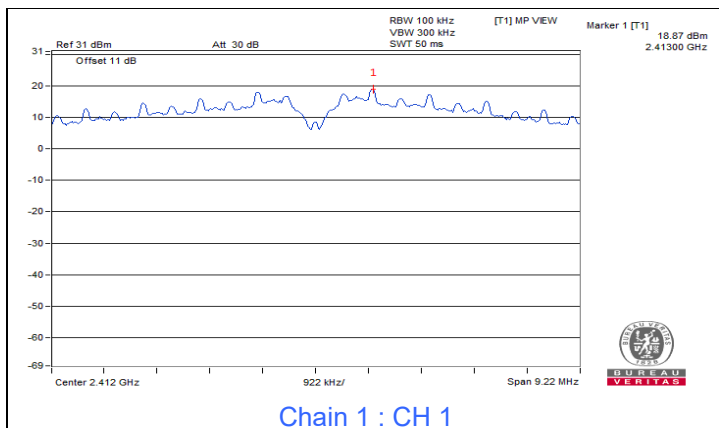
BUREAU VERITAS

### 7.4 Conducted Out of Band Emissions

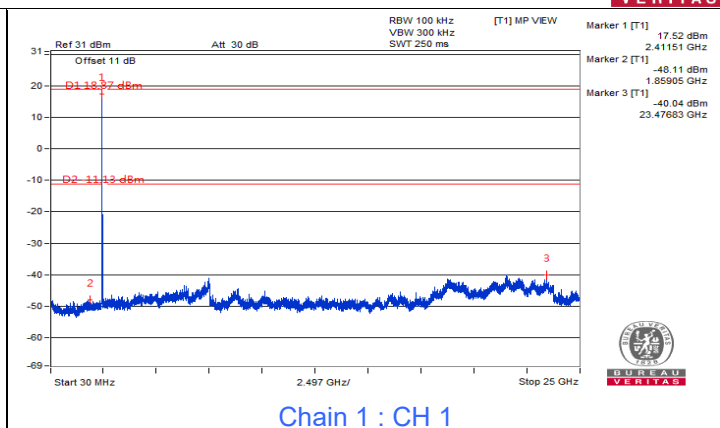
Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyong Wang
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#### 802.11b

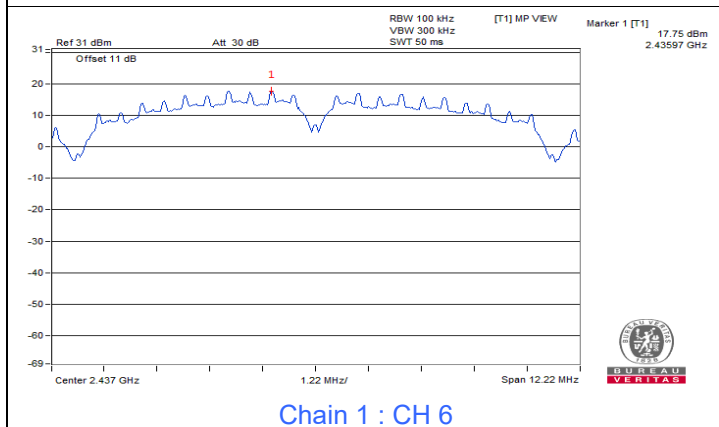




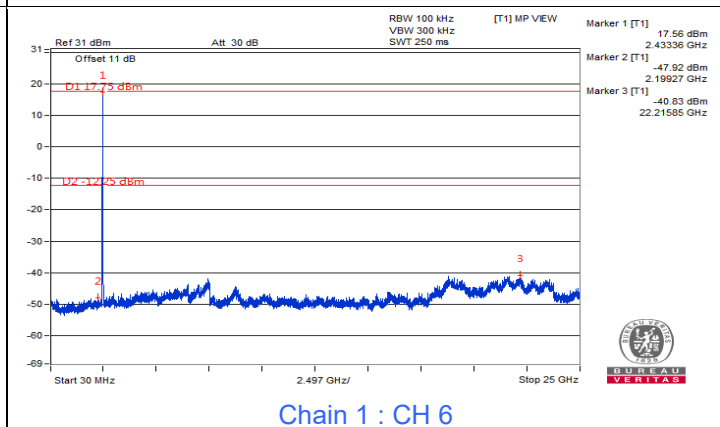
Chain 1 : CH 1



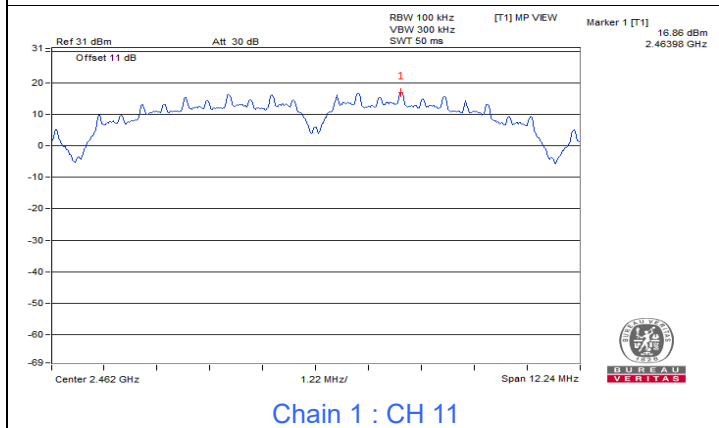
Chain 1 : CH 1



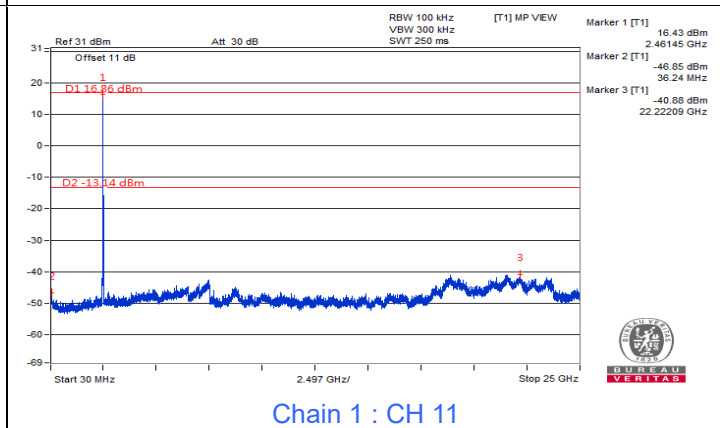
Chain 1 : CH 6



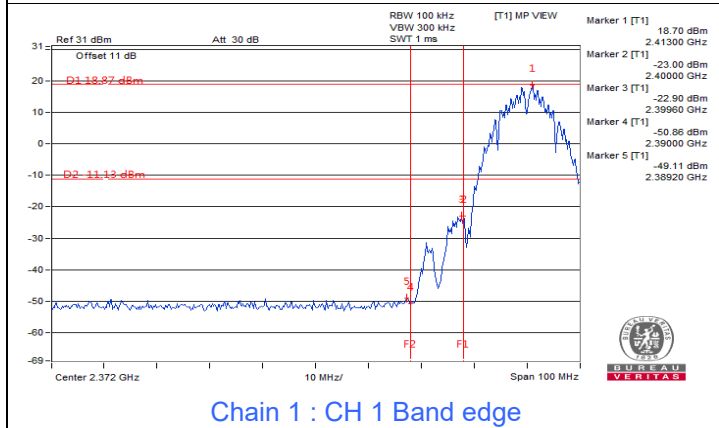
Chain 1 : CH 6



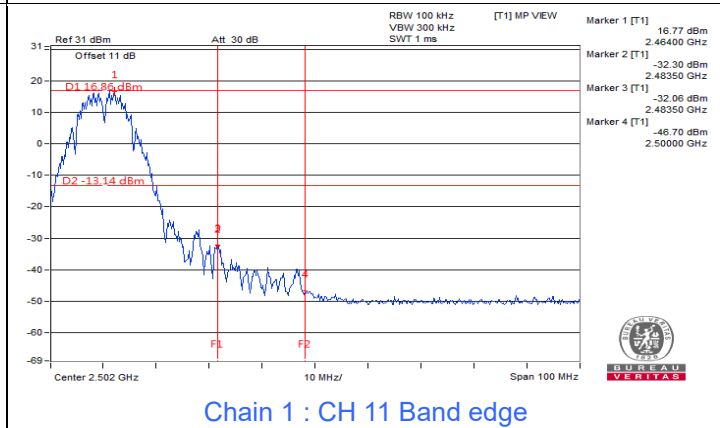
Chain 1 : CH 11



Chain 1 : CH 11



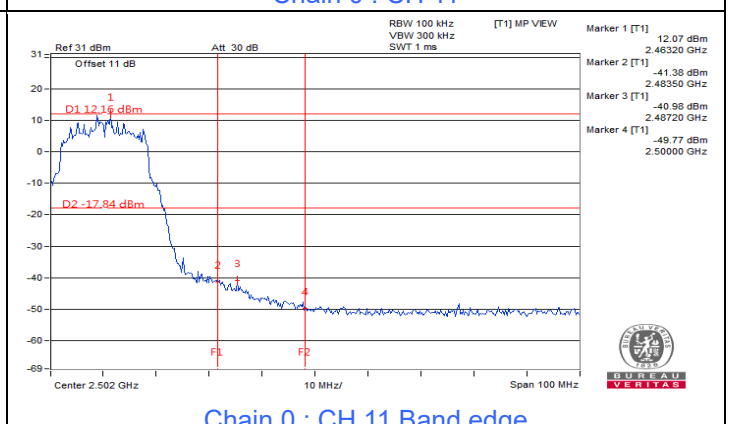
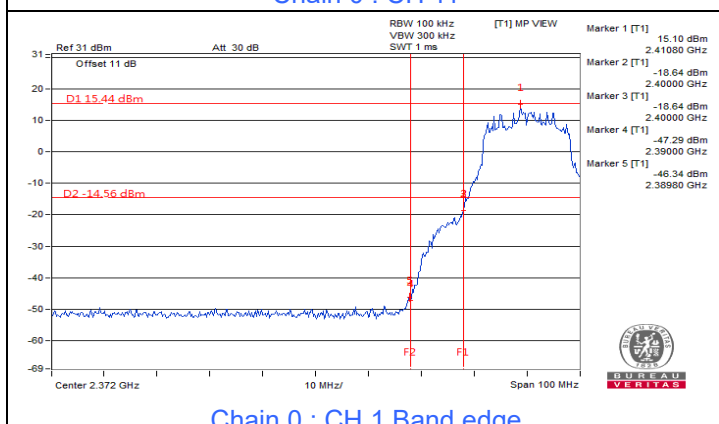
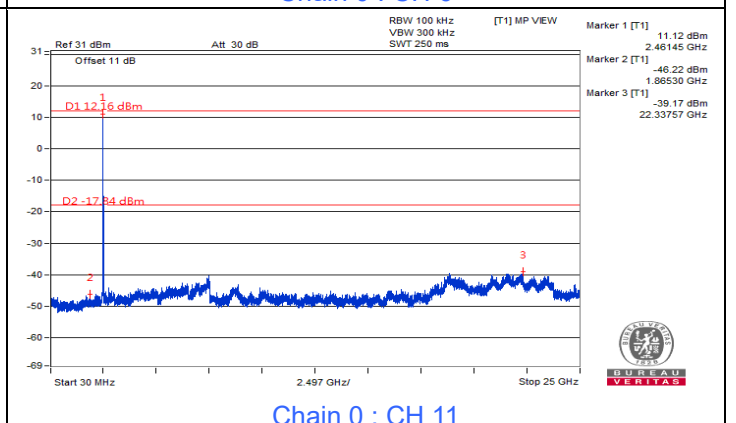
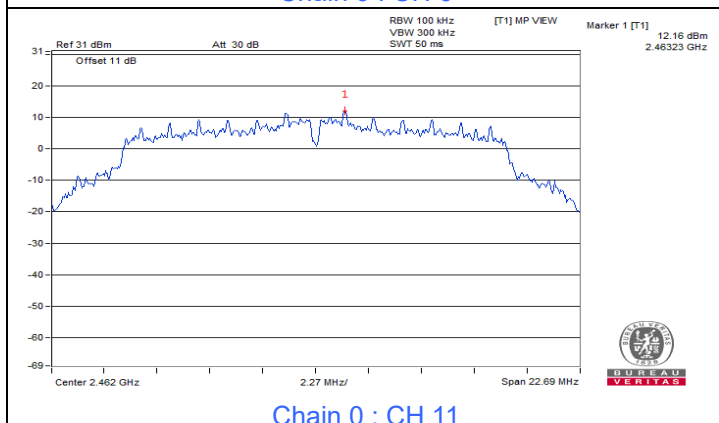
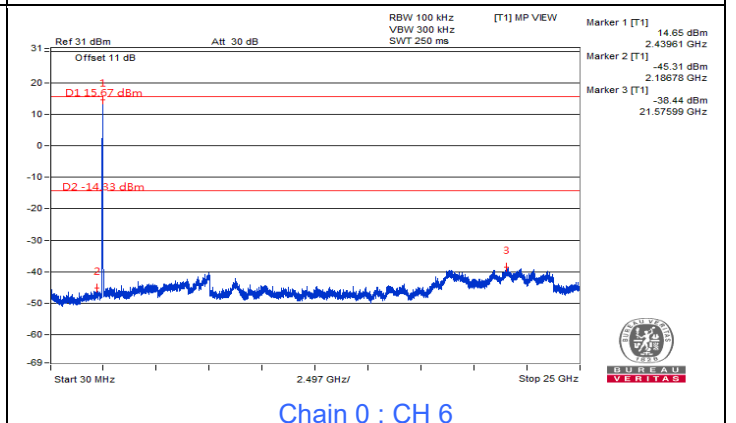
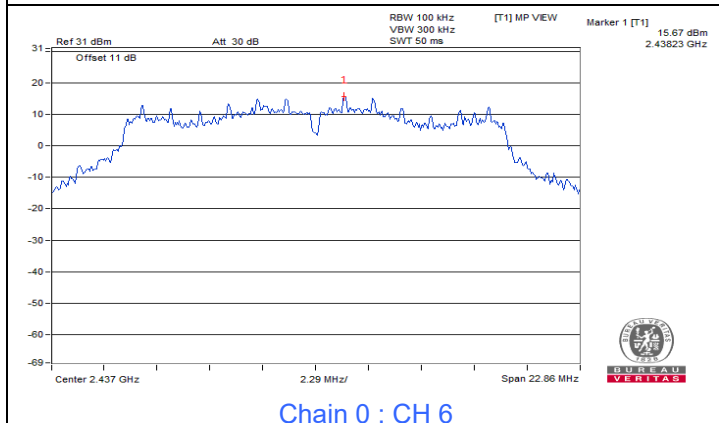
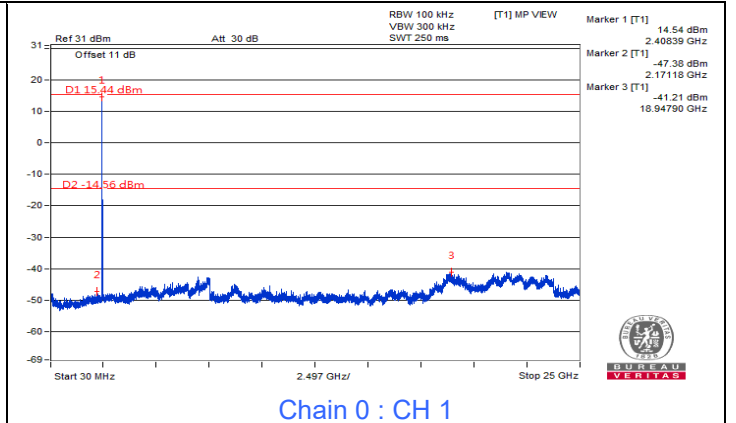
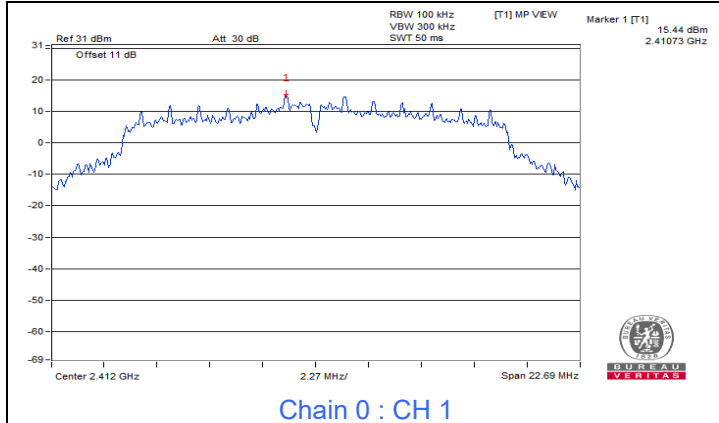
Chain 1 : CH 1 Band edge

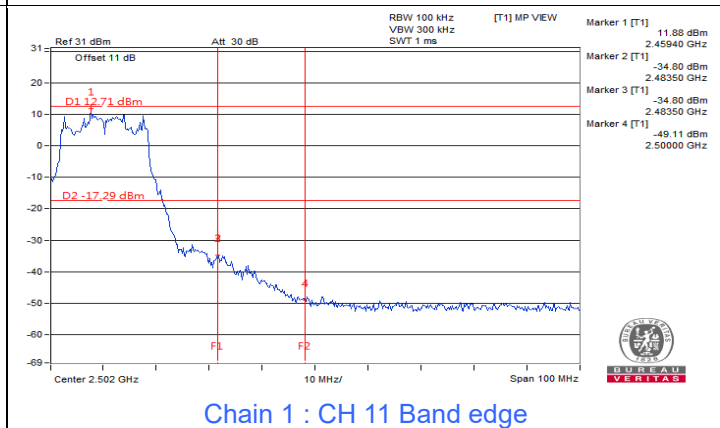
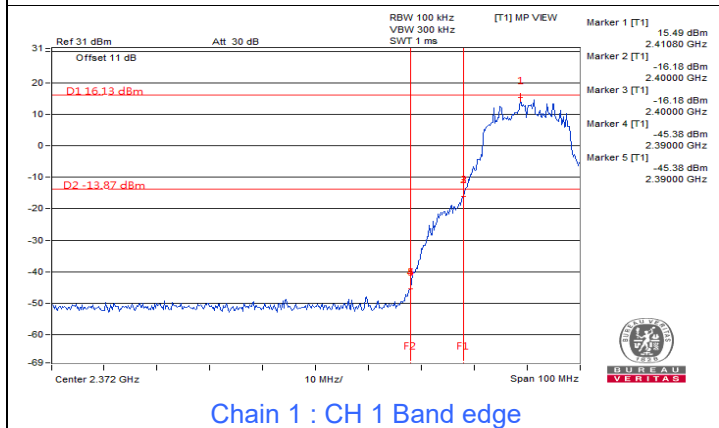
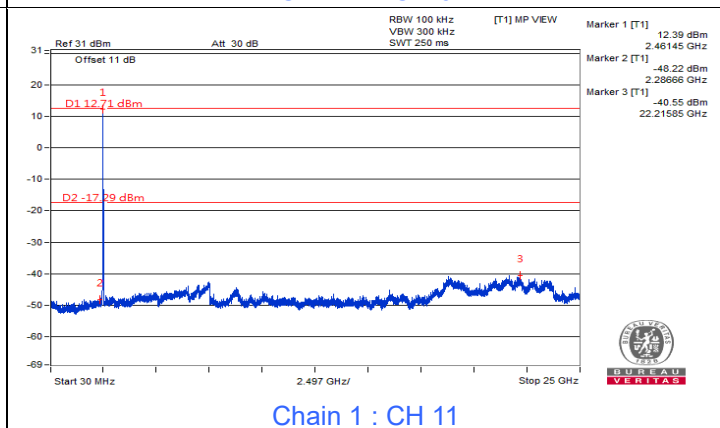
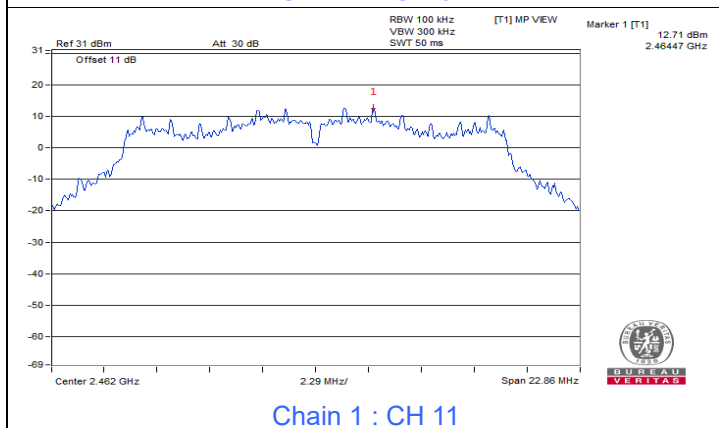
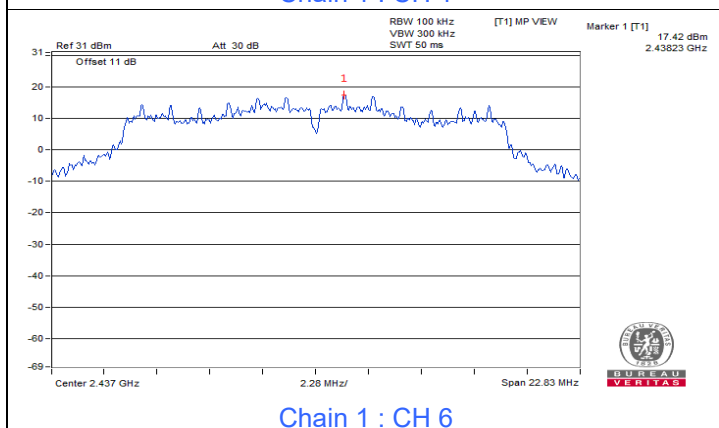
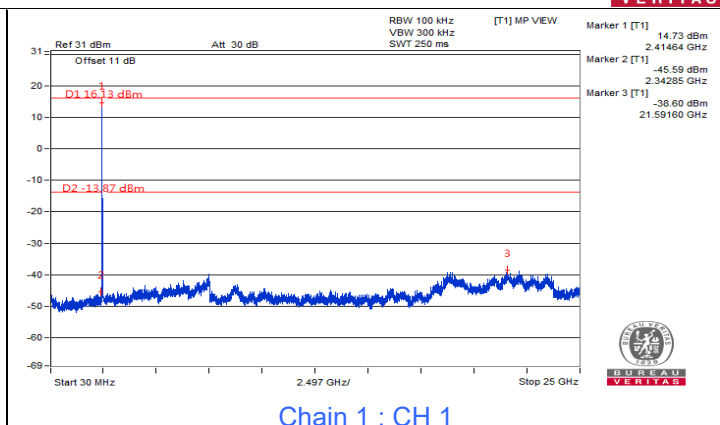
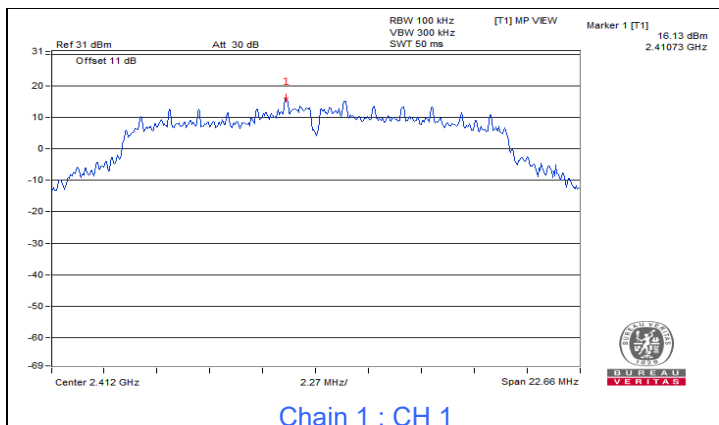


Chain 1 : CH 11 Band edge



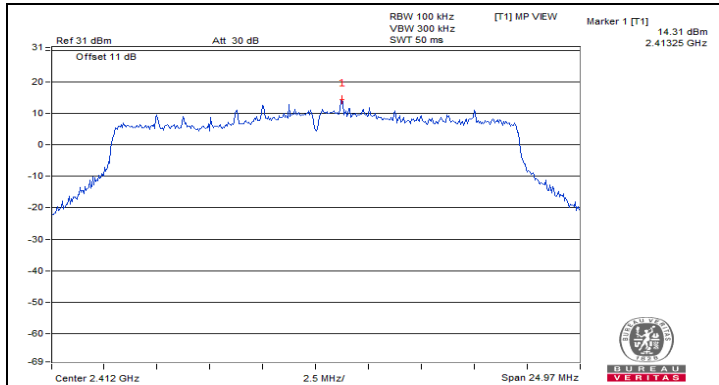
802.11g



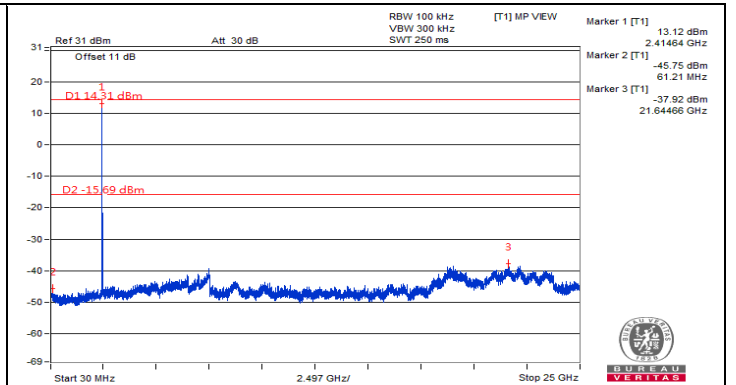




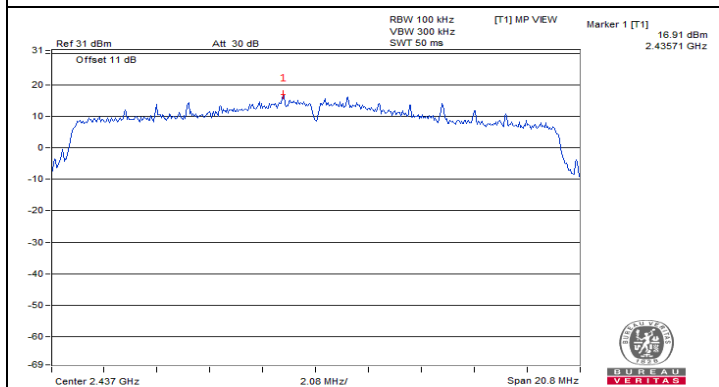
### 802.11be (EHT20)



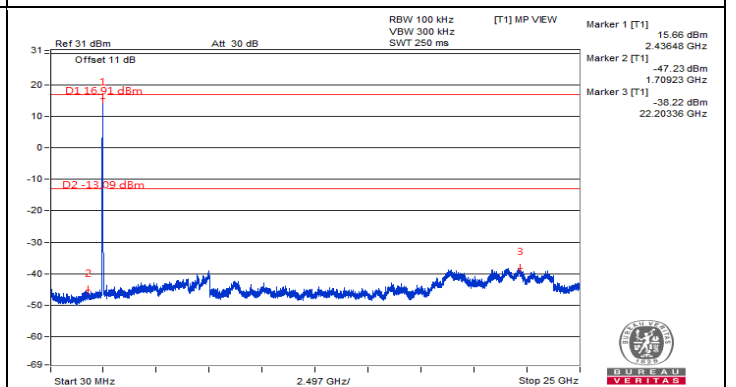
Chain 0 : CH 1



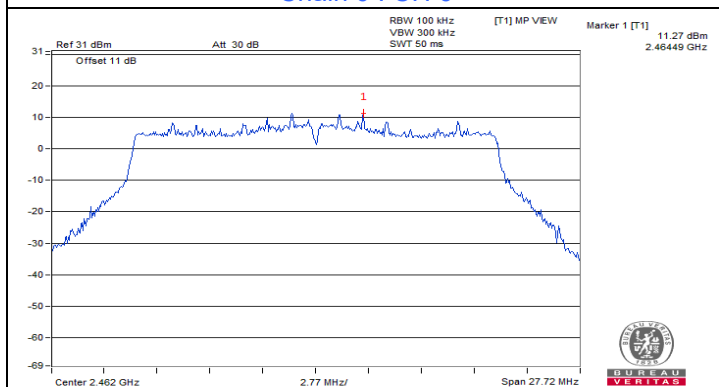
Chain 0 : CH 1



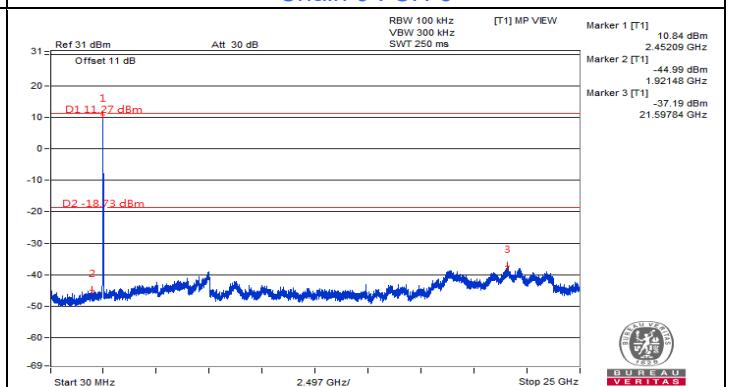
Chain 0 : CH 6



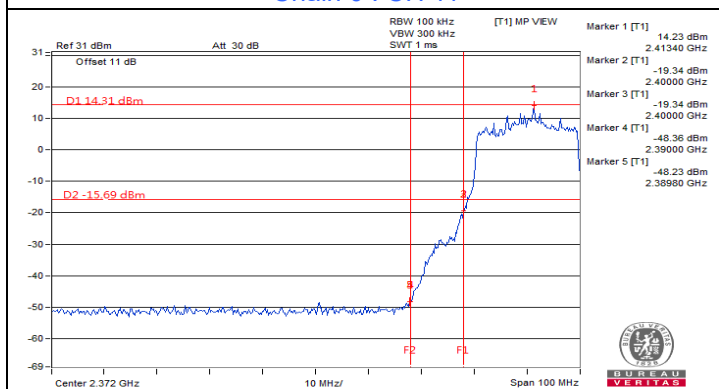
Chain 0 : CH 6



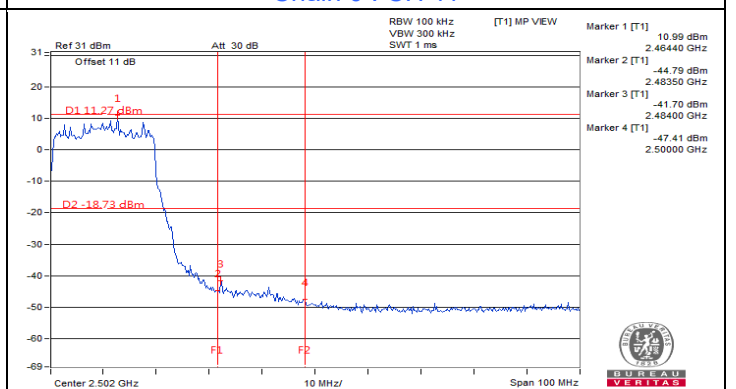
Chain 0 : CH 11



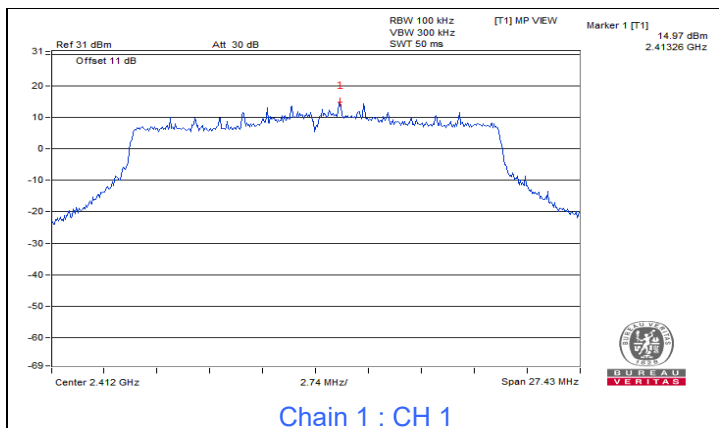
Chain 0 : CH 11



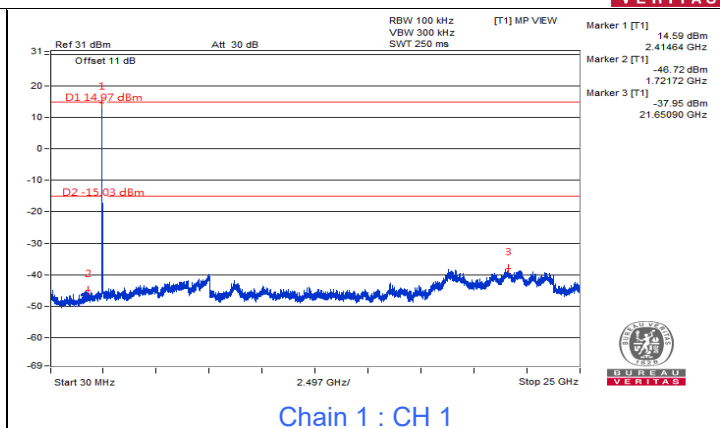
Chain 0 : CH 1 Band edge



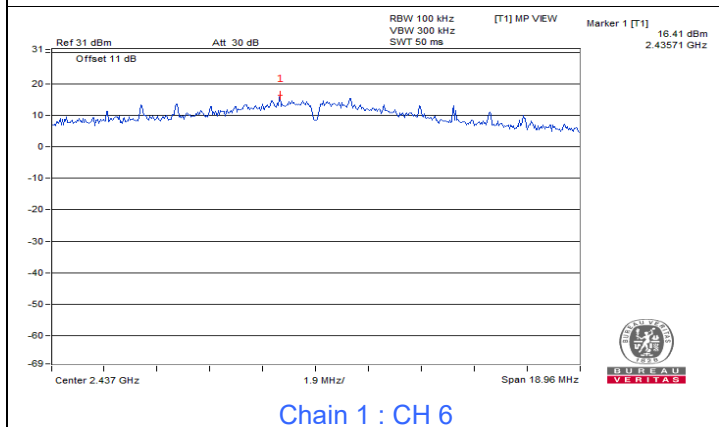
Chain 0 : CH 11 Band edge



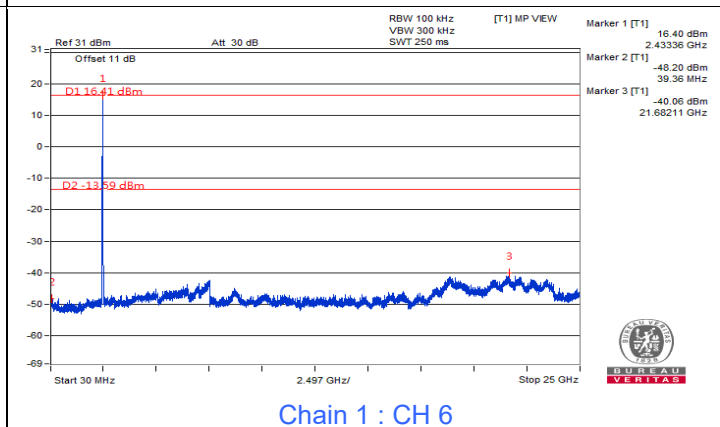
Chain 1 : CH 1



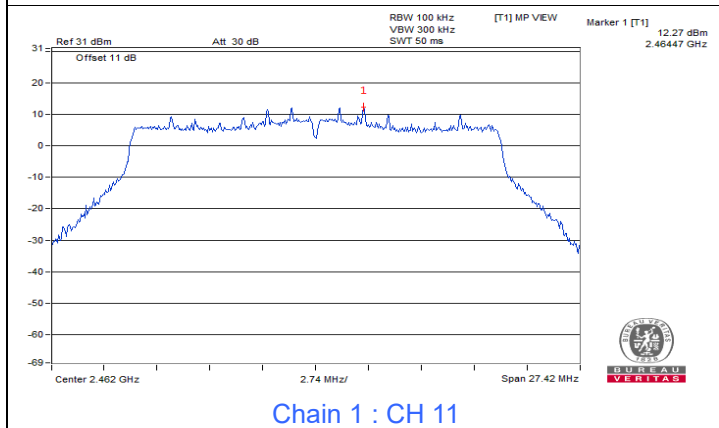
Chain 1 : CH 1



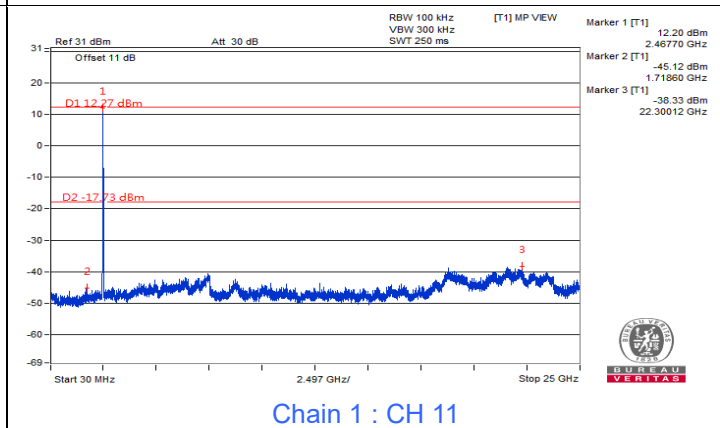
Chain 1 : CH 6



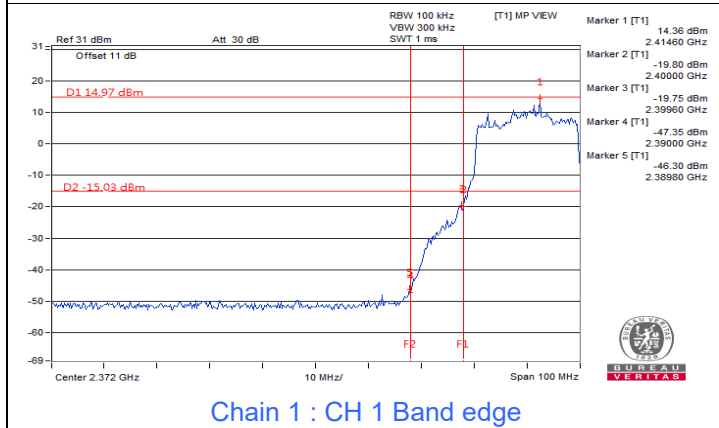
Chain 1 : CH 6



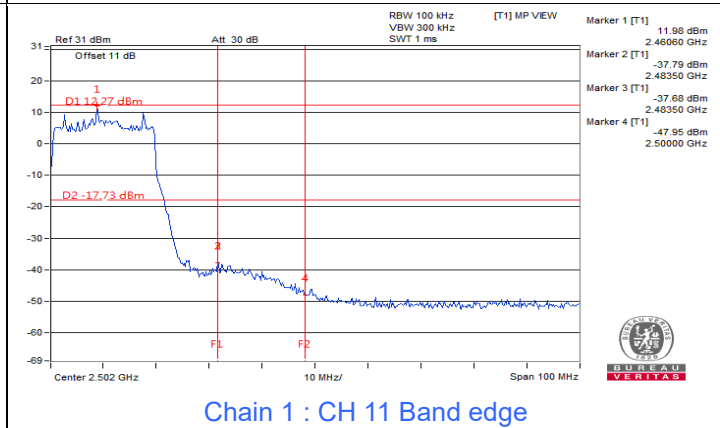
Chain 1 : CH 11



Chain 1 : CH 11



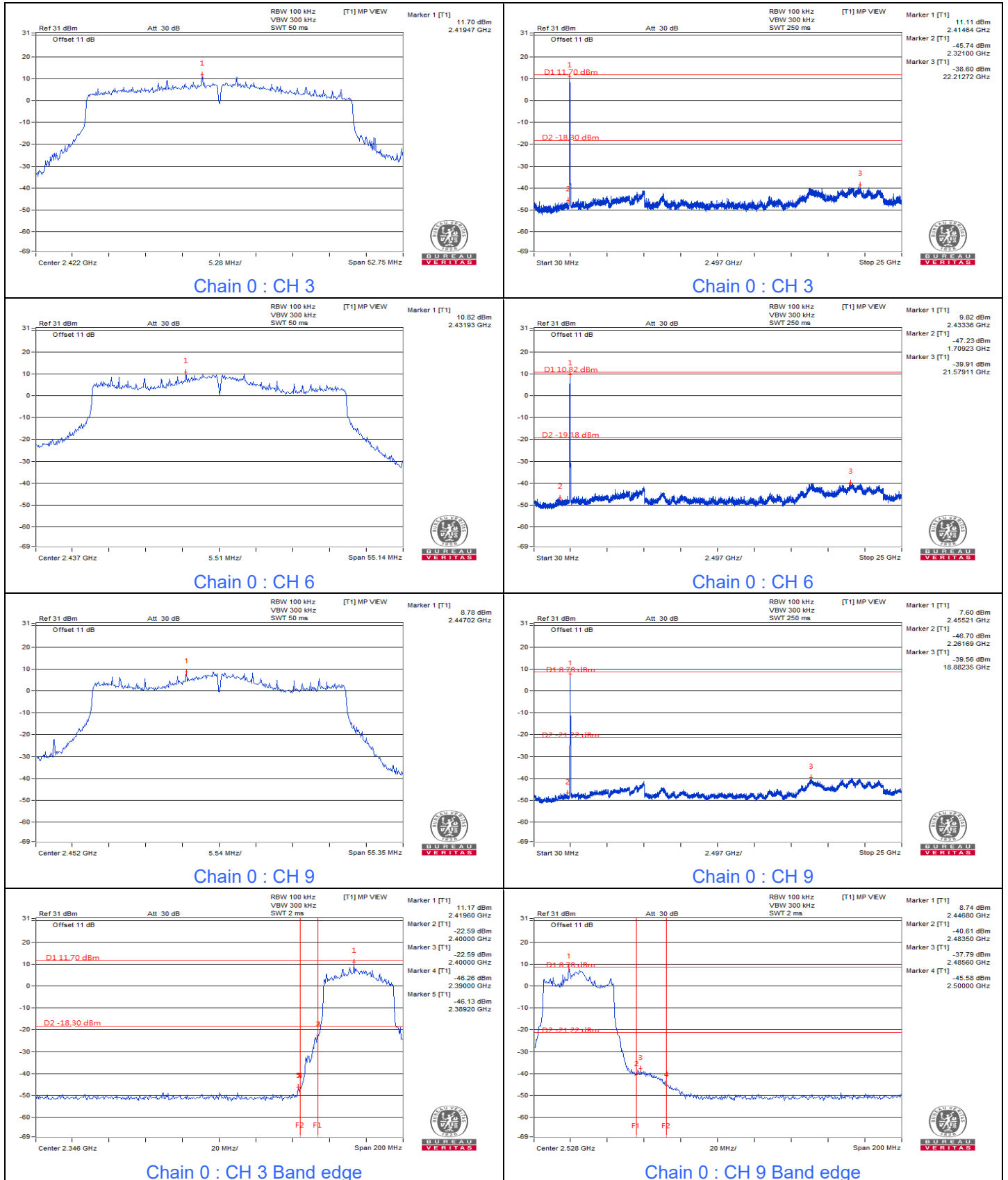
Chain 1 : CH 1 Band edge

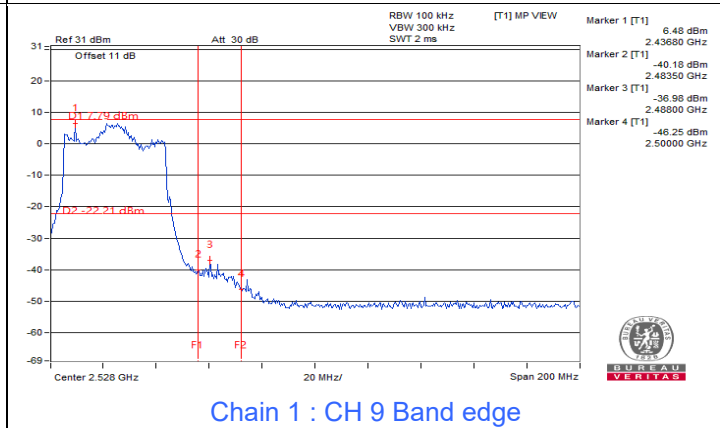
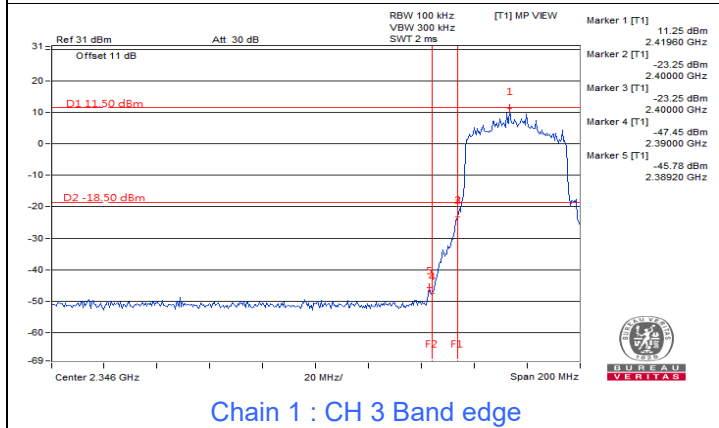
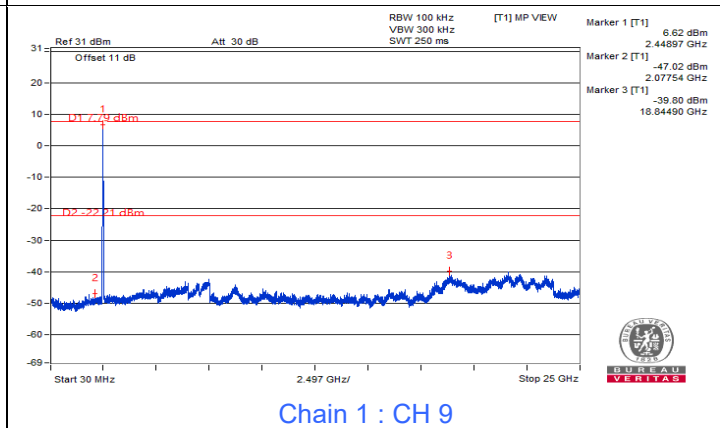
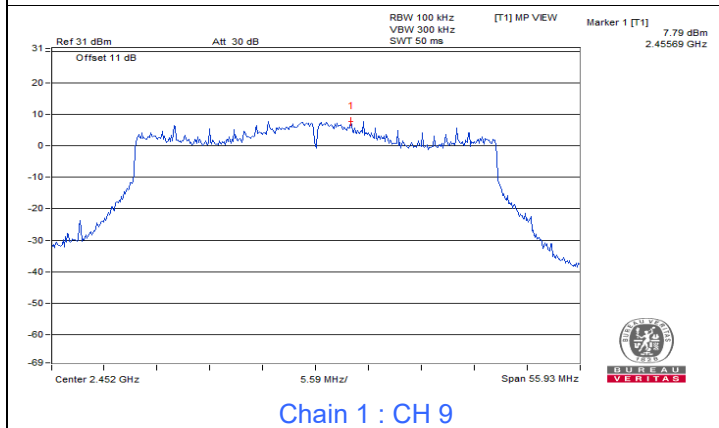
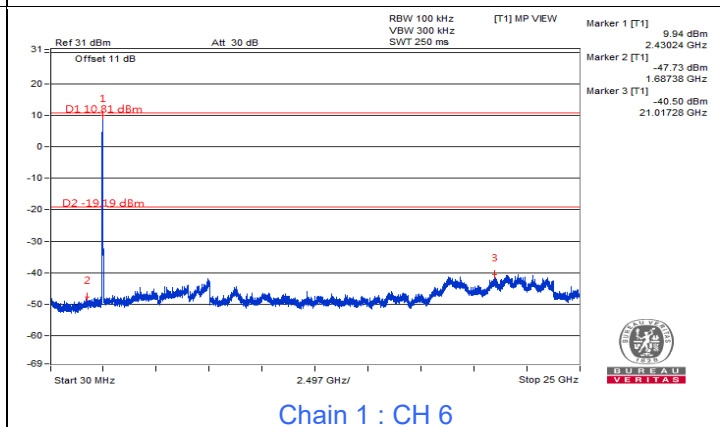
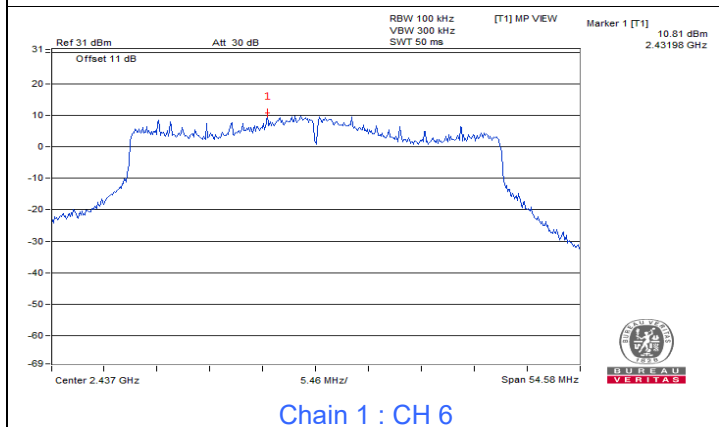
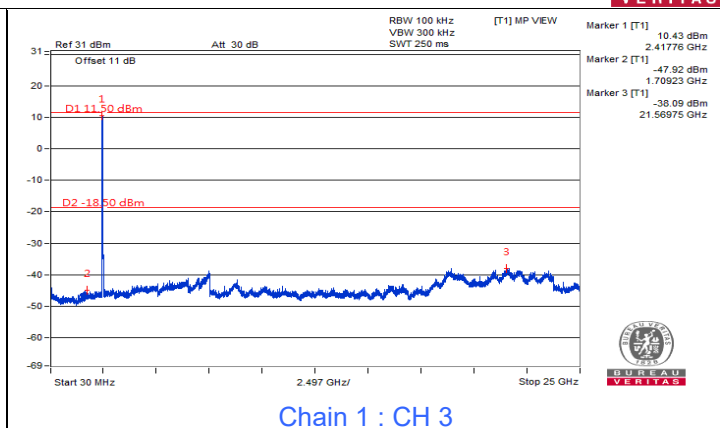
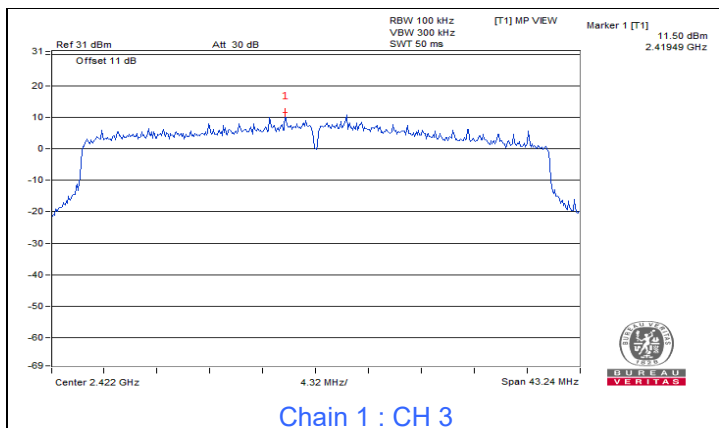


Chain 1 : CH 11 Band edge



### 802.11be (EHT40)







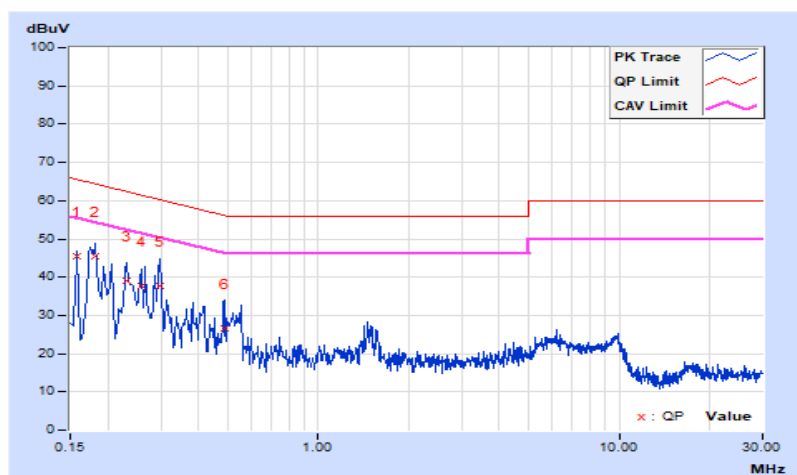
## 7.5 AC Power Conducted Emissions

RF Mode	802.11b	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	23°C, 68% RH
Tested By	Luis 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	0.15800	9.67	35.65	22.42	45.32	32.09	65.57	55.57	-20.25	-23.48
2	0.18180	9.66	35.64	25.10	45.30	34.76	64.40	54.40	-19.10	-19.64
3	0.23000	9.66	29.24	18.18	38.90	27.84	62.45	52.45	-23.55	-24.61
4	0.25800	9.67	28.20	16.89	37.87	26.56	61.50	51.50	-23.63	-24.94
5	0.29800	9.67	27.97	15.97	37.64	25.64	60.30	50.30	-22.66	-24.66
6	0.48600	9.70	16.94	5.01	26.64	14.71	56.24	46.24	-29.60	-31.53

### 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

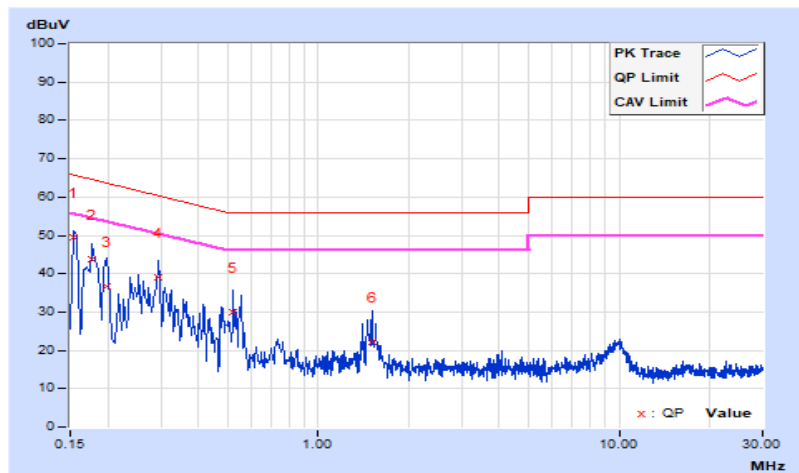


RF Mode	802.11b	Channel	CH 6 : 2437 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 68% RH
Tested By	Luis Lee		

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	0.15400	9.64	39.86	23.00	49.50	32.64	65.78	55.78	-16.28	-23.14
2	0.17800	9.65	34.07	24.65	43.72	34.30	64.58	54.58	-20.86	-20.28
3	0.19780	9.65	27.08	11.79	36.73	21.44	63.70	53.70	-26.97	-32.26
4	0.29400	9.68	29.33	16.67	39.01	26.35	60.41	50.41	-21.40	-24.06
5	0.52200	9.72	20.33	7.58	30.05	17.30	56.00	46.00	-25.95	-28.70
6	1.51400	9.75	12.46	3.67	22.21	13.42	56.00	46.00	-33.79	-32.58

Remarks:

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



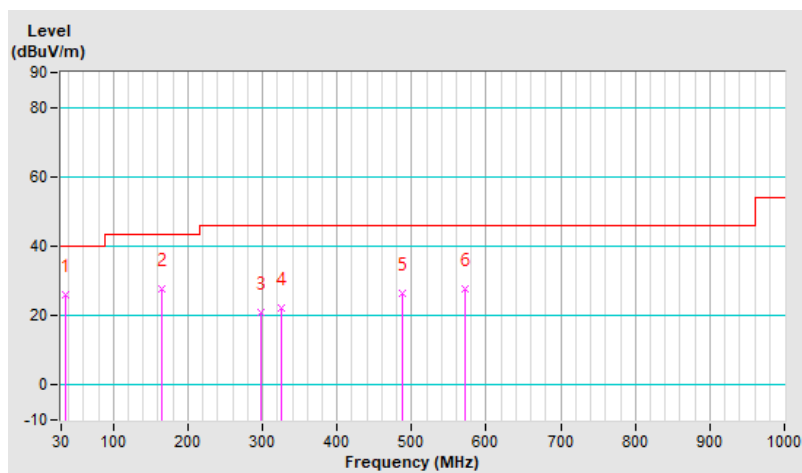
## 7.6 Unwanted Emissions below 1 GHz

RF Mode	802.11b	Channel	CH 6 : 2437 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis 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	36.79	26.1 QP	40.0	-13.9	1.49 H	270	35.8	-9.7
2	165.80	27.8 QP	43.5	-15.7	1.01 H	18	36.5	-8.7
3	298.69	21.0 QP	46.0	-25.0	1.49 H	14	28.5	-7.5
4	325.85	22.3 QP	46.0	-23.7	1.01 H	81	29.1	-6.8
5	486.87	26.6 QP	46.0	-19.4	1.49 H	303	30.7	-4.1
6	571.26	27.7 QP	46.0	-18.3	1.01 H	194	30.1	-2.4

### Remarks:

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

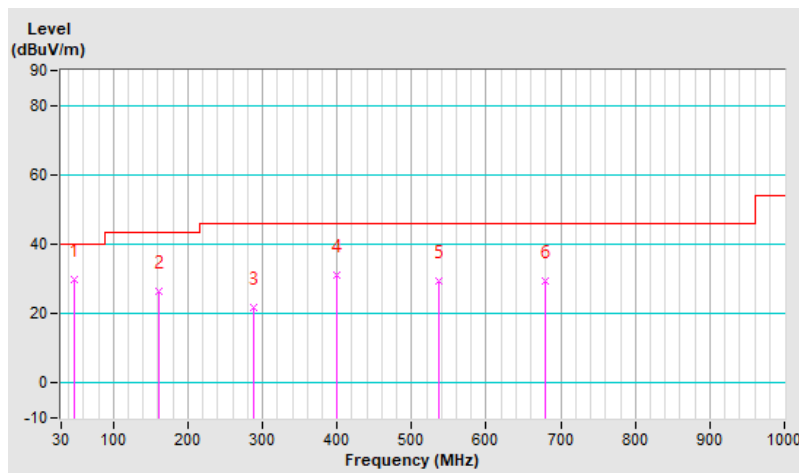


RF Mode	802.11b	Channel	CH 6 : 2437 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

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	48.43	29.7 QP	40.0	-10.3	1.00 V	252	38.3	-8.6
2	161.92	26.5 QP	43.5	-17.0	1.00 V	321	35.0	-8.5
3	288.99	21.8 QP	46.0	-24.2	1.00 V	221	29.6	-7.8
4	400.54	30.9 QP	46.0	-15.1	1.00 V	329	36.7	-5.8
5	536.34	29.3 QP	46.0	-16.7	1.00 V	70	32.6	-3.3
6	678.93	29.6 QP	46.0	-16.4	1.00 V	333	29.8	-0.2

Remarks:

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



## 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, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 66% RH
Tested By	TitanHSU		

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	60.0 PK	74.0	-14.0	1.53 H	306	26.2	33.8
2	2390.00	48.8 AV	54.0	-5.2	1.53 H	306	15.0	33.8
3	*2412.00	117.8 PK			1.53 H	306	84.0	33.8
4	*2412.00	115.2 AV			1.53 H	306	81.4	33.8
5	4824.00	55.5 PK	74.0	-18.5	1.68 H	3	42.5	13.0
6	4824.00	50.7 AV	54.0	-3.3	1.68 H	3	37.7	13.0
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	59.6 PK	74.0	-14.4	3.05 V	2	25.8	33.8
2	2390.00	47.6 AV	54.0	-6.4	3.05 V	2	13.8	33.8
3	*2412.00	116.0 PK			3.05 V	2	82.2	33.8
4	*2412.00	113.5 AV			3.05 V	2	79.7	33.8
5	4824.00	53.5 PK	74.0	-20.5	2.61 V	2	40.5	13.0
6	4824.00	46.7 AV	54.0	-7.3	2.61 V	2	33.7	13.0

### 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, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 66% RH
Tested By	TitanHSU		

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	118.5 PK			1.50 H	316	84.7	33.8
2	*2437.00	116.1 AV			1.50 H	316	82.3	33.8
3	4874.00	51.1 PK	74.0	-22.9	2.65 H	10	37.8	13.3
4	4874.00	38.7 AV	54.0	-15.3	2.65 H	10	25.4	13.3

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	117.8 PK			1.17 V	333	84.0	33.8
2	*2437.00	115.6 AV			1.17 V	333	81.8	33.8
3	4874.00	50.3 PK	74.0	-23.7	2.55 V	5	37.0	13.3
4	4874.00	38.1 AV	54.0	-15.9	2.55 V	5	24.8	13.3

Remarks:

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



RF Mode	802.11b	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 66% RH
Tested By	TitanHSU		

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	117.4 PK			1.46 H	316	83.5	33.9
2	*2462.00	114.8 AV			1.46 H	316	80.9	33.9
3	2483.50	62.8 PK	74.0	-11.2	1.46 H	316	29.0	33.8
4	2483.50	53.2 AV	54.0	-0.8	1.46 H	316	19.4	33.8
5	4924.00	50.8 PK	74.0	-23.2	2.52 H	5	37.5	13.3
6	4924.00	38.5 AV	54.0	-15.5	2.52 H	5	25.2	13.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	114.8 PK			1.09 V	336	80.9	33.9
2	*2462.00	112.5 AV			1.09 V	336	78.6	33.9
3	2483.50	62.0 PK	74.0	-12.0	1.09 V	336	28.2	33.8
4	2483.50	52.3 AV	54.0	-1.7	1.09 V	336	18.5	33.8
5	4924.00	50.3 PK	74.0	-23.7	2.50 V	9	37.0	13.3
6	4924.00	38.1 AV	54.0	-15.9	2.50 V	9	24.8	13.3

## Remarks:

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

RF Mode	802.11g	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 66% RH
Tested By	TitanHSU		

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	61.8 PK	74.0	-12.2	1.70 H	55	28.0	33.8
2	2390.00	49.4 AV	54.0	-4.6	1.70 H	55	15.6	33.8
3	*2412.00	119.5 PK			1.70 H	55	85.7	33.8
4	*2412.00	110.5 AV			1.70 H	55	76.7	33.8
5	4824.00	50.6 PK	74.0	-23.4	2.62 H	10	37.6	13.0
6	4824.00	39.2 AV	54.0	-14.8	2.62 H	10	26.2	13.0
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	66.5 PK	74.0	-7.5	1.23 V	326	32.7	33.8
2	2390.00	51.2 AV	54.0	-2.8	1.23 V	326	17.4	33.8
3	*2412.00	117.9 PK			1.23 V	326	84.1	33.8
4	*2412.00	108.3 AV			1.23 V	326	74.5	33.8
5	4824.00	50.2 PK	74.0	-23.8	2.55 V	5	37.2	13.0
6	4824.00	38.8 AV	54.0	-15.2	2.55 V	5	25.8	13.0

**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, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 66% RH
Tested By	Noah Chang		

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	121.0 PK			2.72 H	305	87.2	33.8
2	*2437.00	111.9 AV			2.72 H	305	78.1	33.8
3	4874.00	50.2 PK	74.0	-23.8	2.11 H	158	36.9	13.3
4	4874.00	38.9 AV	54.0	-15.1	2.11 H	158	25.6	13.3

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	119.7 PK			1.18 V	335	85.9	33.8
2	*2437.00	109.8 AV			1.18 V	335	76.0	33.8
3	4874.00	50.0 PK	74.0	-24.0	2.48 V	10	36.7	13.3
4	4874.00	38.5 AV	54.0	-15.5	2.48 V	10	25.2	13.3

Remarks:

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



RF Mode	802.11g	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 66% RH
Tested By	Noah Chang		

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	117.9 PK			3.00 H	309	84.0	33.9
2	*2462.00	108.9 AV			3.00 H	309	75.0	33.9
3	2484.00	68.9 PK	74.0	-5.1	3.00 H	309	35.1	33.8
4	2484.00	53.3 AV	54.0	-0.7	3.00 H	309	19.5	33.8
5	4924.00	49.5 PK	74.0	-24.5	2.15 H	76	36.2	13.3
6	4924.00	38.5 AV	54.0	-15.5	2.15 H	76	25.2	13.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	116.3 PK			1.30 V	336	82.4	33.9
2	*2462.00	107.3 AV			1.30 V	336	73.4	33.9
3	2483.50	63.8 PK	74.0	-10.2	1.30 V	336	30.0	33.8
4	2483.50	51.5 AV	54.0	-2.5	1.30 V	336	17.7	33.8
5	4924.00	49.3 PK	74.0	-24.7	2.25 V	9	36.0	13.3
6	4924.00	38.1 AV	54.0	-15.9	2.25 V	9	24.8	13.3

Remarks:

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



RF Mode	802.11be (EHT20)	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 66% RH
Tested By	Noah Chang		

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	65.8 PK	74.0	-8.2	1.97 H	319	32.0	33.8
2	2390.00	51.7 AV	54.0	-2.3	1.97 H	319	17.9	33.8
3	*2412.00	121.0 PK			1.97 H	319	87.2	33.8
4	*2412.00	109.7 AV			1.97 H	319	75.9	33.8
5	4824.00	50.2 PK	74.0	-23.8	2.25 H	75	37.2	13.0
6	4824.00	38.5 AV	54.0	-15.5	2.25 H	75	25.5	13.0
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	61.0 PK	74.0	-13.0	1.24 V	338	27.2	33.8
2	2390.00	48.9 AV	54.0	-5.1	1.24 V	338	15.1	33.8
3	*2412.00	119.6 PK			1.24 V	338	85.8	33.8
4	*2412.00	108.0 AV			1.24 V	338	74.2	33.8
5	4824.00	50.0 PK	74.0	-24.0	2.56 V	3	37.0	13.0
6	4824.00	38.1 AV	54.0	-15.9	2.56 V	3	25.1	13.0

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	802.11be (EHT20)	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 66% RH
Tested By	Noah Chang		

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	124.0 PK			1.23 H	47	90.2	33.8
2	*2437.00	112.5 AV			1.23 H	47	78.7	33.8
3	2483.50	72.0 PK	74.0	-2.0	1.23 H	47	38.2	33.8
4	2483.50	52.6 AV	54.0	-1.4	1.23 H	47	18.8	33.8
5	4874.00	50.8 PK	74.0	-23.2	1.58 H	322	37.5	13.3
6	4874.00	38.8 AV	54.0	-15.2	1.58 H	322	25.5	13.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	121.7 PK			1.20 V	340	87.9	33.8
2	*2437.00	110.7 AV			1.20 V	340	76.9	33.8
3	2483.50	67.3 PK	74.0	-6.7	1.20 V	340	33.5	33.8
4	2483.50	51.5 AV	54.0	-2.5	1.20 V	340	17.7	33.8
5	4874.00	50.3 PK	74.0	-23.7	2.49 V	10	37.0	13.3
6	4874.00	38.4 AV	54.0	-15.6	2.49 V	10	25.1	13.3

Remarks:

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

RF Mode	802.11be (EHT20)	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 66% RH
Tested By	Noah Chang		

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	118.5 PK			2.06 H	305	84.6	33.9
2	*2462.00	107.8 AV			2.06 H	305	73.9	33.9
3	2483.50	69.7 PK	74.0	-4.3	2.06 H	305	35.9	33.8
4	2483.50	53.5 AV	54.0	-0.5	2.06 H	305	19.7	33.8
5	4924.00	51.6 PK	74.0	-22.4	2.15 H	321	38.3	13.3
6	4924.00	39.0 AV	54.0	-15.0	2.15 H	321	25.7	13.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	116.7 PK			2.14 V	334	82.8	33.9
2	*2462.00	105.1 AV			2.14 V	334	71.2	33.9
3	2483.50	36.1 PK	74.0	-37.9	2.14 V	334	34.0	2.1
4	2483.50	20.1 AV	54.0	-33.9	2.14 V	334	18.0	2.1
5	4924.00	50.5 PK	74.0	-23.5	2.35 V	11	37.2	13.3
6	4924.00	38.5 AV	54.0	-15.5	2.35 V	11	25.2	13.3

**Remarks:**

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

RF Mode	802.11be (EHT40)	Channel	CH 3 : 2422 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 66% RH
Tested By	TitanHSU		

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	60.5 PK	74.0	-13.5	1.18 H	50	26.7	33.8
2	2390.00	48.5 AV	54.0	-5.5	1.18 H	50	14.7	33.8
3	*2422.00	119.8 PK			1.18 H	50	86.0	33.8
4	*2422.00	107.7 AV			1.18 H	50	73.9	33.8
5	2483.50	65.0 PK	74.0	-9.0	1.18 H	50	31.2	33.8
<b>6</b>	<b>2483.50</b>	<b>53.9 AV</b>	<b>54.0</b>	<b>-0.1</b>	<b>1.18 H</b>	<b>50</b>	<b>20.1</b>	<b>33.8</b>
7	4844.00	50.0 PK	74.0	-24.0	2.28 H	10	36.8	13.2
8	4844.00	38.0 AV	54.0	-16.0	2.28 H	10	24.8	13.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	60.0 PK	74.0	-14.0	1.43 V	340	26.2	33.8
2	2390.00	48.0 AV	54.0	-6.0	1.43 V	340	14.2	33.8
3	*2422.00	117.1 PK			1.43 V	340	83.3	33.8
4	*2422.00	105.3 AV			1.43 V	340	71.5	33.8
5	2483.50	64.3 PK	74.0	-9.7	1.43 V	340	30.5	33.8
6	2483.50	52.8 AV	54.0	-1.2	1.43 V	340	19.0	33.8
7	4844.00	49.7 PK	74.0	-24.3	2.56 V	8	36.5	13.2
8	4844.00	37.7 AV	54.0	-16.3	2.56 V	8	24.5	13.2

**Remarks:**

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

RF Mode	802.11be (EHT40)	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 66% RH
Tested By	TitanHSU		

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	118.8 PK			1.74 H	313	85.0	33.8
2	*2437.00	106.5 AV			1.74 H	313	72.7	33.8
3	2483.50	69.0 PK	74.0	-5.0	1.74 H	313	35.2	33.8
4	2483.50	53.8 AV	54.0	-0.2	1.74 H	313	20.0	33.8
5	4874.00	50.3 PK	74.0	-23.7	3.32 H	195	37.0	13.3
6	4874.00	38.1 AV	54.0	-15.9	3.32 H	195	24.8	13.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	115.5 PK			2.87 V	2	81.7	33.8
2	*2437.00	103.1 AV			2.87 V	2	69.3	33.8
3	2483.50	64.8 PK	74.0	-9.2	2.87 V	2	31.0	33.8
4	2483.50	51.0 AV	54.0	-3.0	2.87 V	2	17.2	33.8
5	4874.00	50.1 PK	74.0	-23.9	2.29 V	10	36.8	13.3
6	4874.00	37.8 AV	54.0	-16.2	2.29 V	10	24.5	13.3

**Remarks:**

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



RF Mode	802.11be (EHT40)	Channel	CH 9 : 2452 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 66% RH
Tested By	TitanHSU		

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	117.0 PK			1.69 H	311	83.1	33.9
2	*2452.00	104.7 AV			1.69 H	311	70.8	33.9
3	2483.50	67.3 PK	74.0	-6.7	1.69 H	311	33.5	33.8
4	2483.50	53.8 AV	54.0	-0.2	1.69 H	311	20.0	33.8
5	4904.00	50.7 PK	74.0	-23.3	2.25 H	185	37.2	13.5
6	4904.00	38.0 AV	54.0	-16.0	2.25 H	185	24.5	13.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2452.00	114.5 PK			3.04 V	341	80.6	33.9
2	*2452.00	101.3 AV			3.04 V	341	67.4	33.9
3	2483.50	65.8 PK	74.0	-8.2	3.04 V	341	32.0	33.8
4	2483.50	50.5 AV	54.0	-3.5	3.04 V	341	16.7	33.8
5	4904.00	50.5 PK	74.0	-23.5	2.29 V	5	37.0	13.5
6	4904.00	37.8 AV	54.0	-16.2	2.29 V	5	24.3	13.5

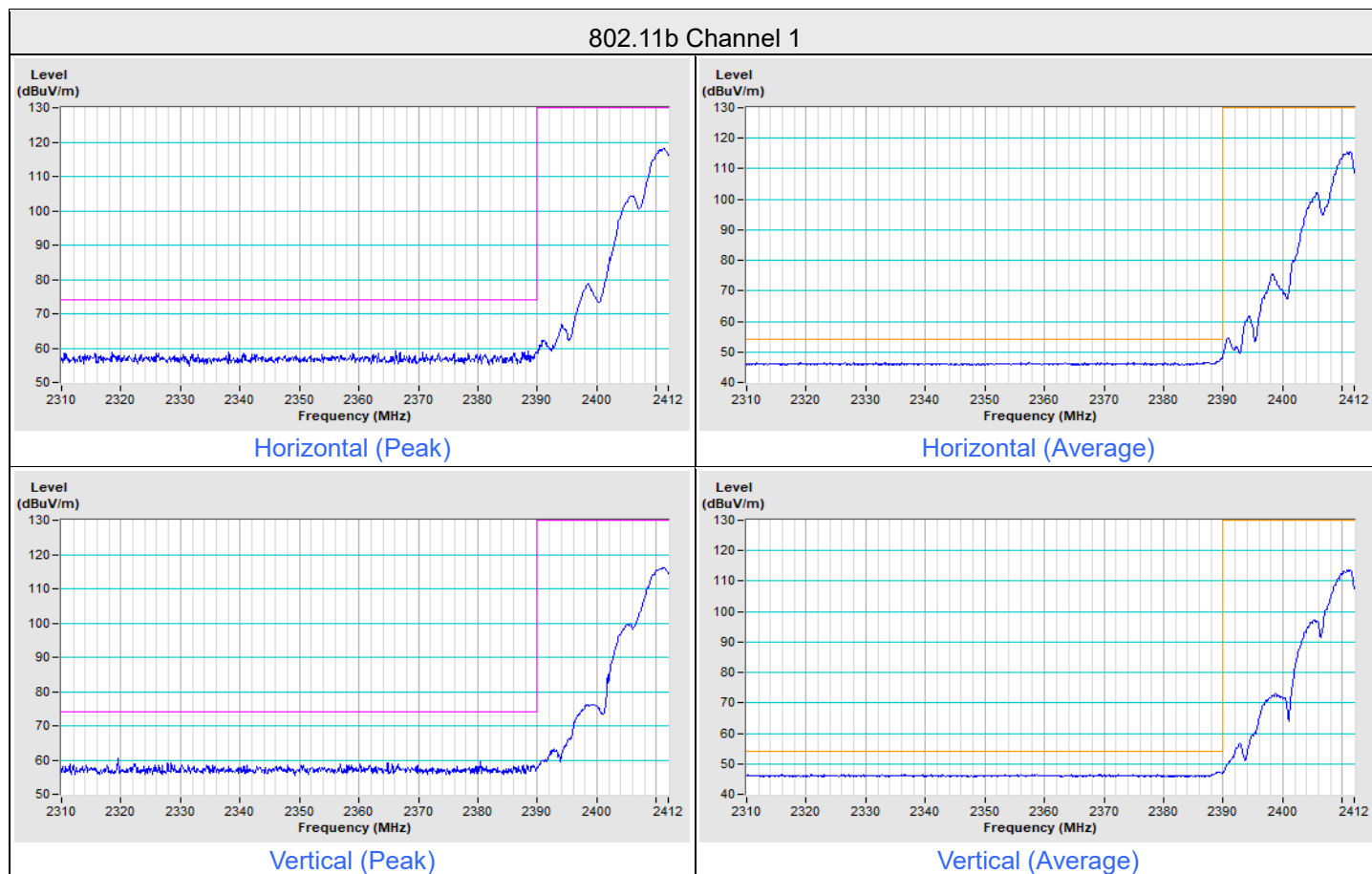
Remarks:

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



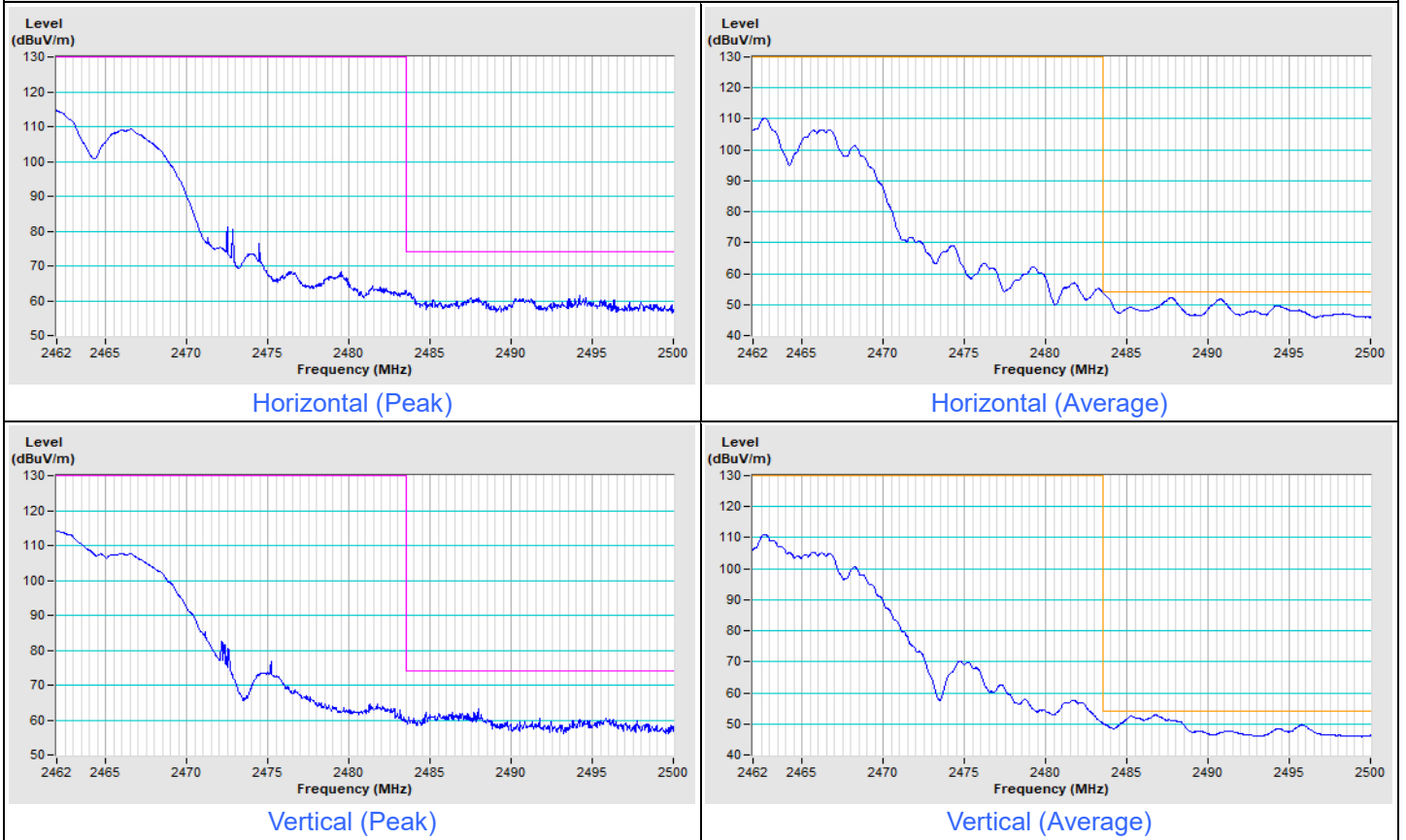
### Plot of Band Edge

Frequency Range	2.31 GHz ~ 2.412 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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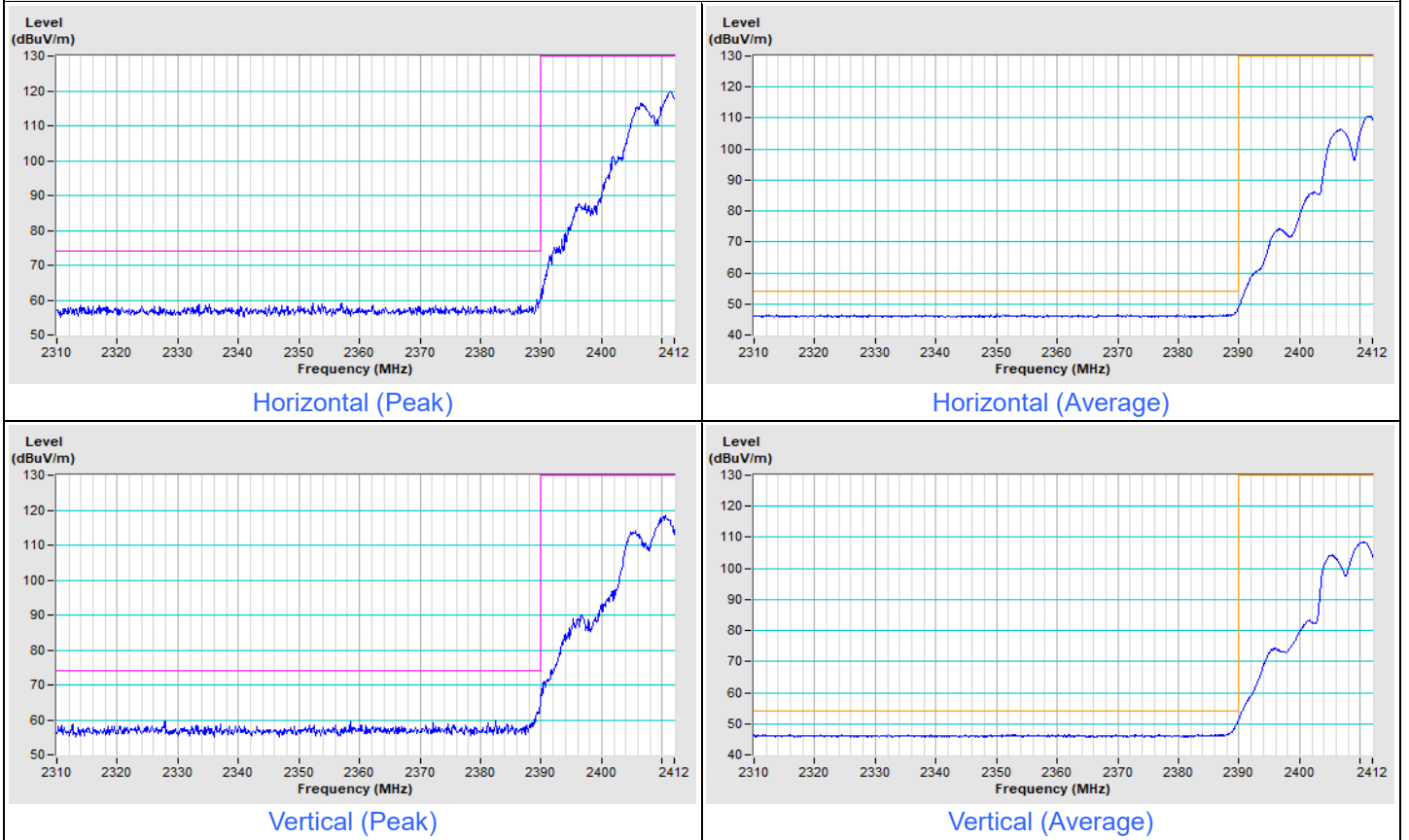
Frequency Range	2.462 GHz ~ 2.5 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11b Channel 11



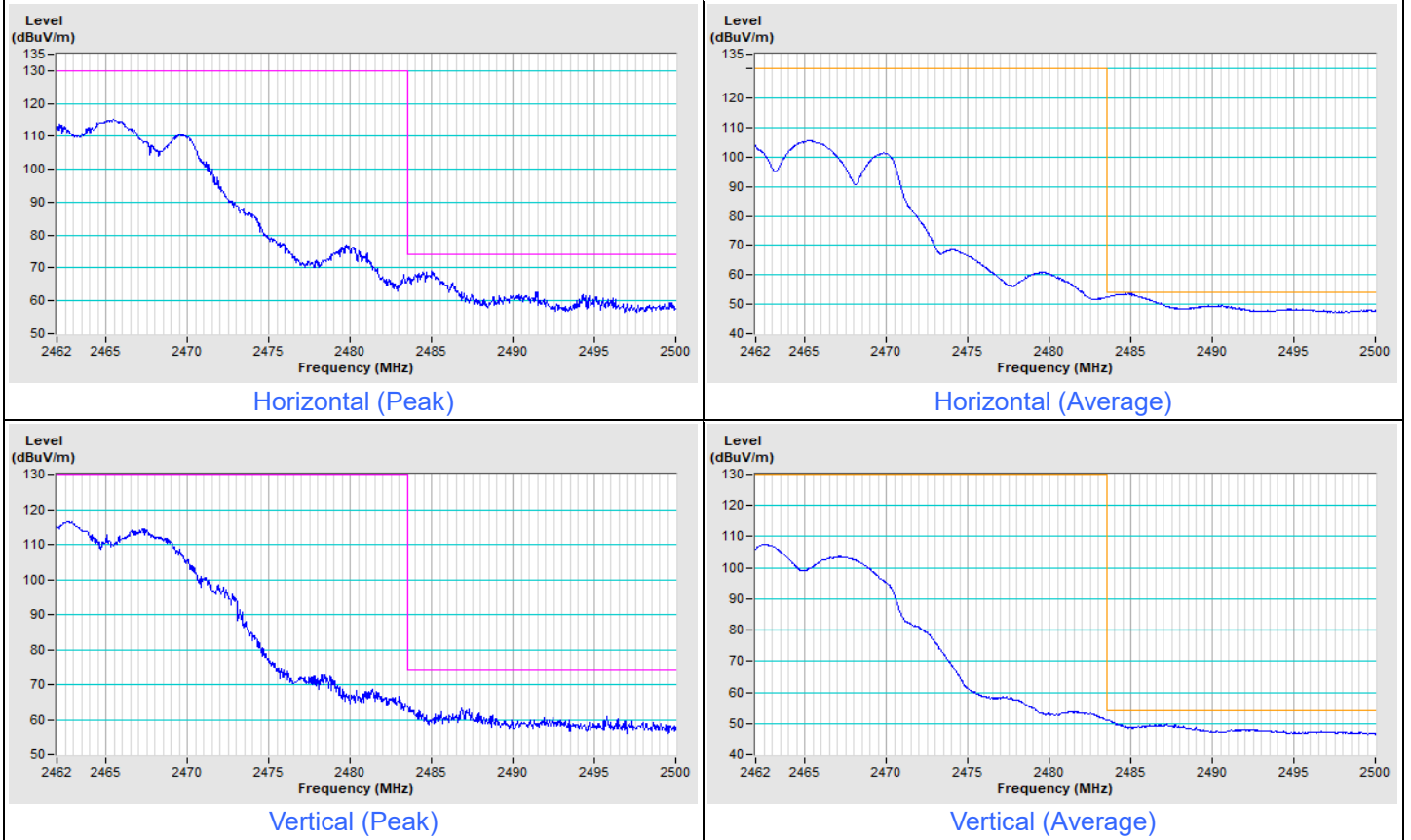
Frequency Range	2.31 GHz ~ 2.412 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11g Channel 1



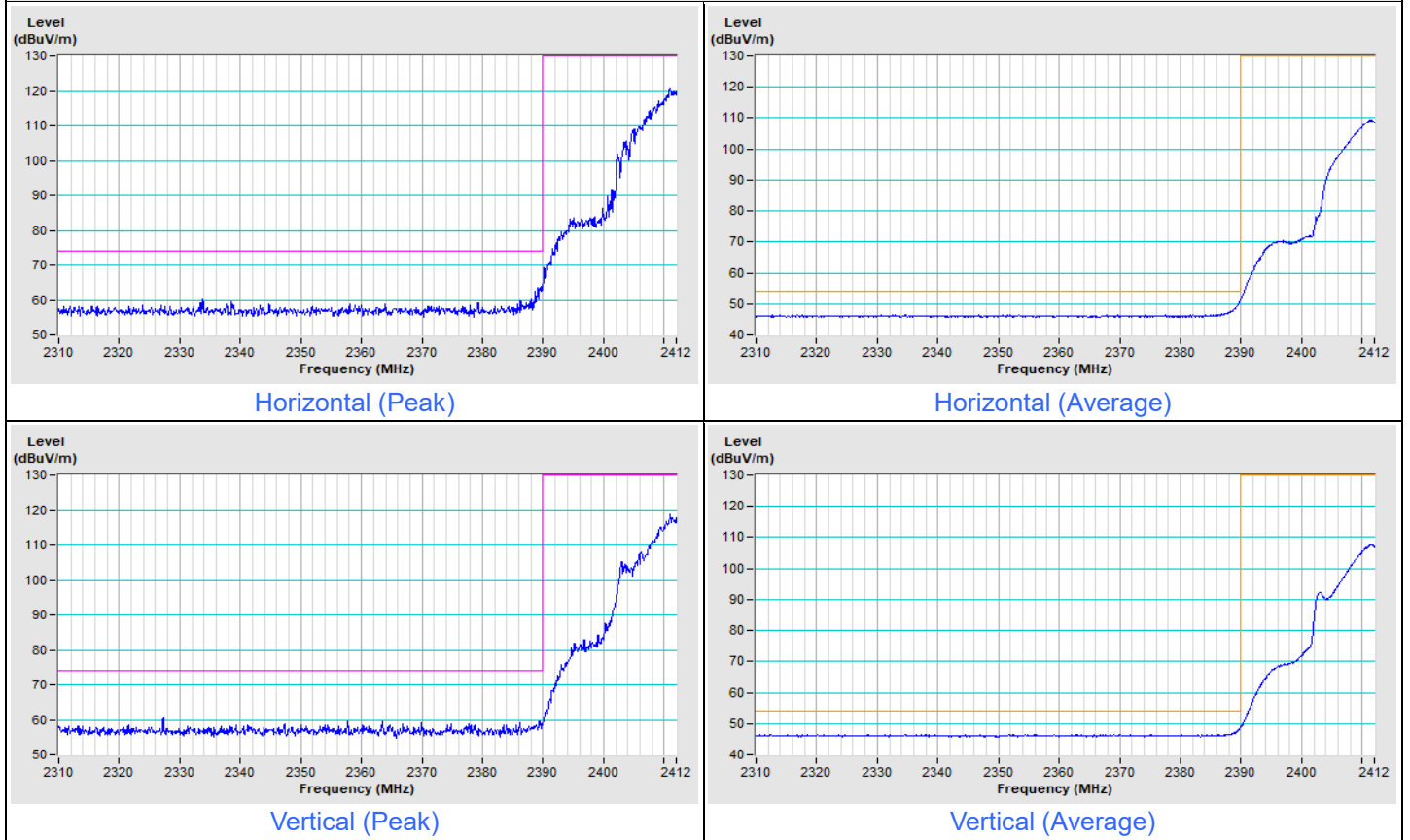
Frequency Range	2.462 GHz ~ 2.5 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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### 802.11g Channel 11



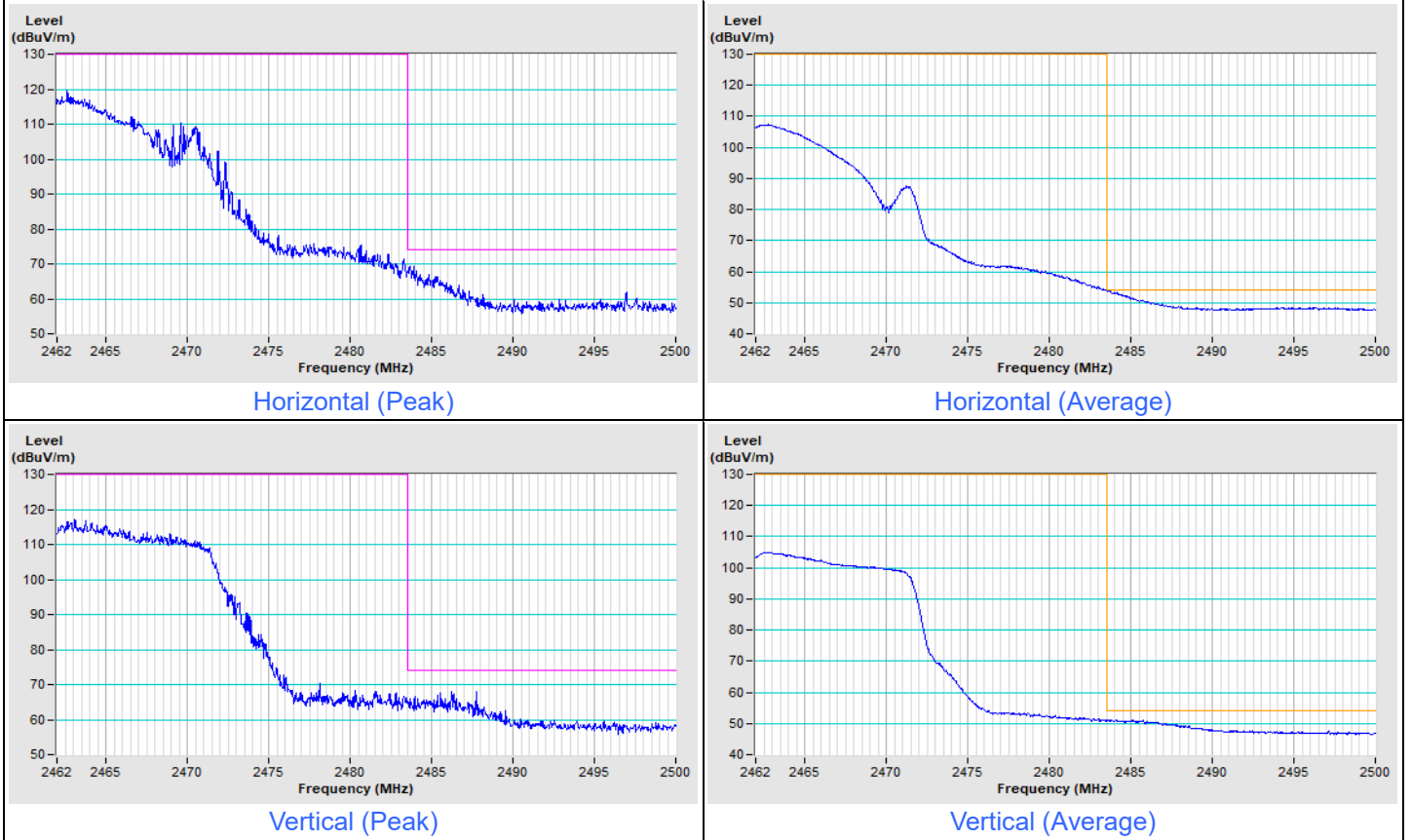
Frequency Range	2.31 GHz ~ 2.412 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11be (EHT20) Channel 1



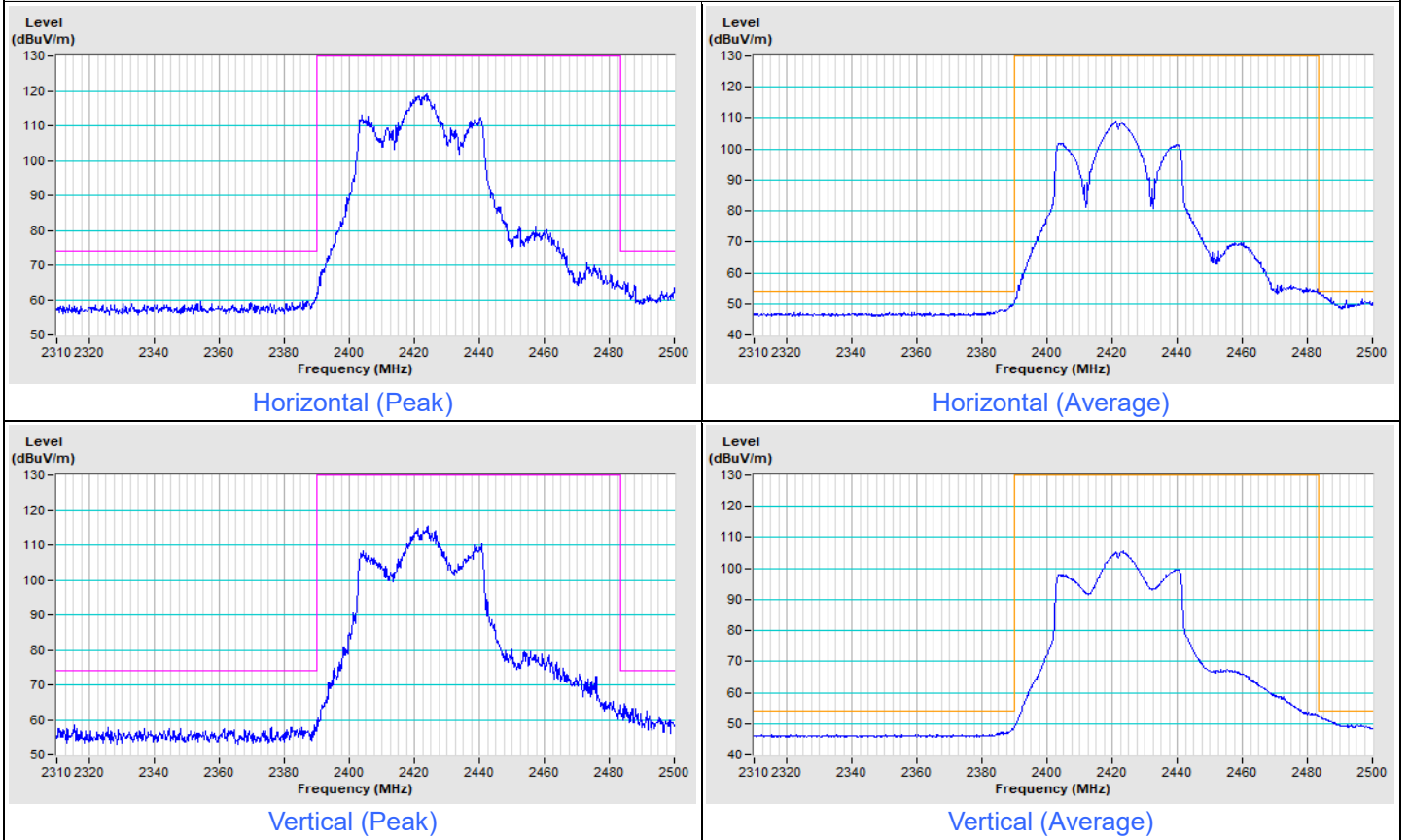
Frequency Range	2.462 GHz ~ 2.5 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11be (EHT20) Channel 11



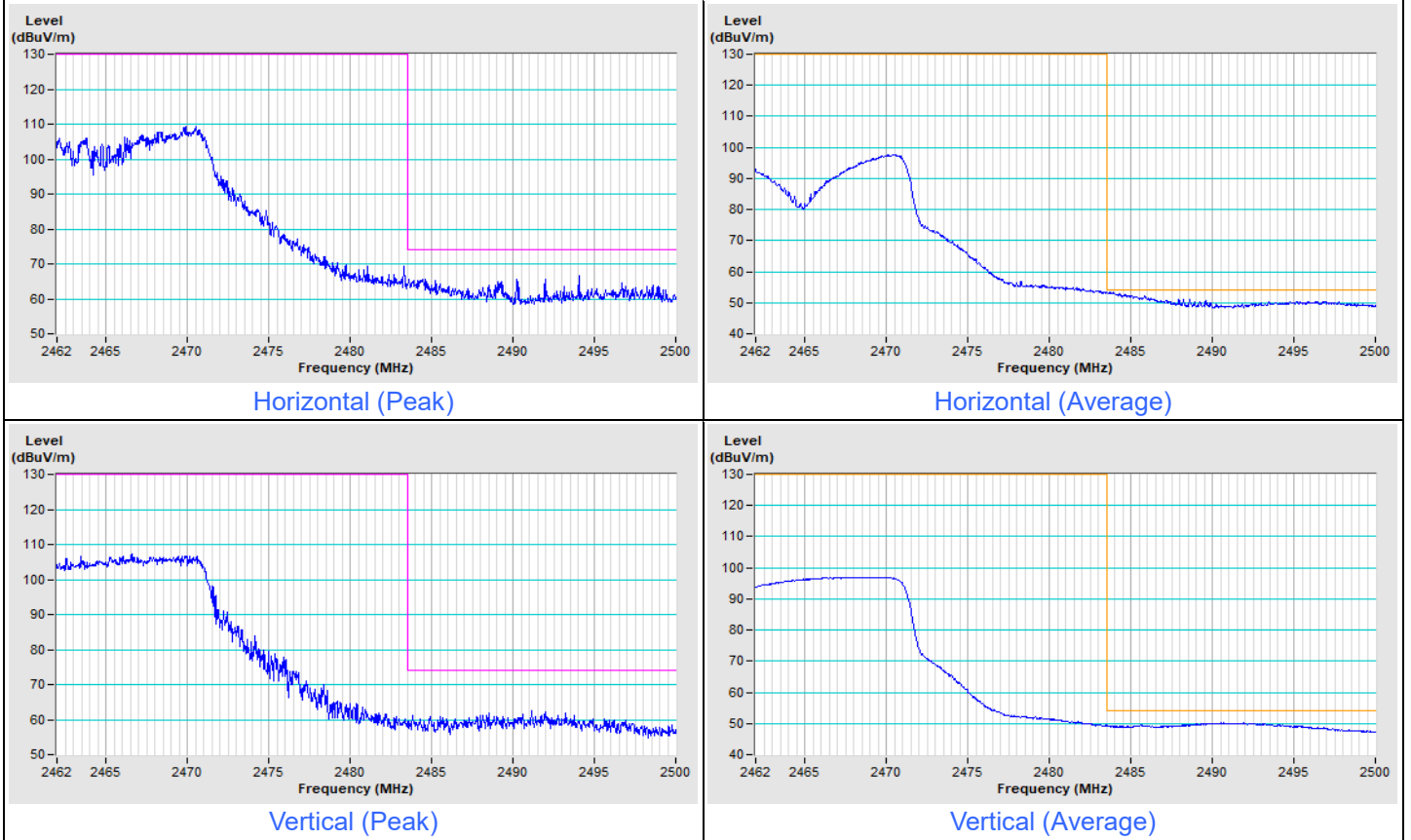
Frequency Range	2.31 GHz ~ 2.5 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11be (EHT40) Channel 3



Frequency Range	2.462 GHz ~ 2.5 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11be (EHT40) Channel 9





## 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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**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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