

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart C (Section 15.247)
Report No.: RFBCMA-WTW-P24070713-7
FCC ID: RAXXC46BE
Product: Dragon
Brand: Verizon
Model No.: XC46BE
Received Date: 2024/9/27
Test Date: 2024/10/15 ~ 2024/10/29
Issued Date: 2024/11/19

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FCC Registration / 788550 / TW0003 for Test Location(1)
Designation Number: 281270 / TW0032 for Test Location(2)

Approved by: Jeremy Lin, **Date:** 2024/11/19
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Prepared by : Pettie Chen / Senior Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBCMA-WTW-P24070713-7	Original release.	2024/11/19

1 Certificate

Product: Dragon

Brand: Verizon

Test Model: XC46BE

Sample Status: Engineering sample

Applicant: Arcadyan Technology Corporation

Test Date: 2024/10/15 ~ 2024/10/29

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 -11.74 dB at 0.41000 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -2.5 dB at 363.68 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -1.0 dB at 2390.00 and 2483.50 MHz
15.203	Antenna Requirement	Pass	Antenna connector is R-SMA 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	2.90 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3 dB
	30 MHz ~ 1 GHz	2.92 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	1.76 dB
	18 GHz ~ 40 GHz	1.77 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	Dragon
Brand	Verizon
Test Model	XC46BE
Status of EUT	Engineering sample
Power Supply Rating	12.0Vdc from adapter 7.2 Vdc from battery
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	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): 9
Output Power	990.863 mW (29.96 dBm)

Note:

1. The EUT uses following accessories.

Adapter	
Brand	verizon
Model	1A105-1235
Input Power	105-125 Vac, 60Hz, 1.2A
Output Power	12.0Vdc, 3.5A, 42.0W
DC Output Cable	1.8 meter unshielded cable, w/o ferrite core

Battery	
Brand	Atemitech
Model	XC46BE224T-F100
Power Rating	7.2Vdc, 9800mAh (70.56Wh)

2. Simultaneously transmission combination.

Combination	Technology		
1	WLAN (2.4 GHz)	WLAN (5 GHz)	WWAN (LTE)
2	WLAN (2.4 GHz)	WLAN (5 GHz)	WWAN (5G NR)

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 No.	RF Chain No.	Antenna Net Gain (dBi)	Frequency range	Antenna Type	Connector Type
Ant.5	0	3.55	2.4 GHz ~ 2.4835 GHz	Dipole	R-SMA
		5.16	5.15 GHz ~ 5.25 GHz		
		4.3	5.25 GHz ~ 5.35 GHz		
		5.81	5.47 GHz ~ 5.725 GHz		
		5.6	5.725 GHz ~ 5.85 GHz		
Ant.6	1	3.5	2.4 GHz ~ 2.4835 GHz	Dipole	R-SMA
		4.25	5.15 GHz ~ 5.25 GHz		
		4.73	5.25 GHz ~ 5.35 GHz		
		5.89	5.47 GHz ~ 5.725 GHz		
		5.5	5.725 GHz ~ 5.85 GHz		
Ant.7	0 (ZW-DFS Rx only)	4.38	5.15 GHz ~ 5.85 GHz	PIFA	ipex(MHF)

Radio	Frequency range	Directional Gain
2G	2.4~2.4835GHz	5.28
5G	5.15~5.25GHz	6.48
	5.25~5.35GHz	6.33
	5.47~5.725GHz	7.08
	5.725~5.85GHz	6.73

* 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	2TX	2RX
802.11g	2TX	2RX
802.11n (HT20)	2TX	2RX
802.11n (HT40)	2TX	2RX
VHT20	2TX	2RX
VHT40	2TX	2RX
802.11ax (HE20)	2TX	2RX
802.11ax (HE40)	2TX	2RX
802.11be (EHT20)	2TX	2RX
802.11be (EHT40)	2TX	2RX

Note:

1. All of modulation mode support beamforming function except 802.11b/g modulation mode.
2. The EUT support Beamforming and CDD mode, therefore both modes were investigated and the worst case scenario was identified. The worst case data were presented in test report.
3. The modulation and bandwidth are similar for 802.11n mode for 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 is the representative mode in test report.

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:	1. For Unwanted Emission (below 1GHz) items: Battery / POE / AC Adapter. Pre-scan these modes and find the worst case as a representative test condition. 2. For AC power conducted emission items: POE/AC Adapter. Only these modes as a representative test condition. 3. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
Worst Case:	1. For Unwanted Emission (below 1GHz) items worst condition: AC Adapter 2. For AC Power conducted emission items worst condition: AC Adapter 3. EUT only operate on the specific X-axis for tested.

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		1, 6, 11	BPSK	6Mb/s
	802.11be (EHT20)	CDD & Beamforming	1, 6, 11	BPSK	MCS0
	802.11be (EHT40)		3, 6, 9	BPSK	MCS0
Power Spectral Density	802.11b	CDD	1, 6, 11	DBPSK	1Mb/s
	802.11g		1, 6, 11	BPSK	6Mb/s
	802.11be (EHT20)		1, 6, 11	BPSK	MCS0
	802.11be (EHT40)		3, 6, 9	BPSK	MCS0
6 dB Bandwidth / Conducted Out of Band Emissions	802.11b	CDD	1, 6, 11	DBPSK	1Mb/s
	802.11g		1, 6, 11	BPSK	6Mb/s
	802.11be (EHT20)		1, 6, 11	BPSK	MCS0
	802.11be (EHT40)		3, 6, 9	BPSK	MCS0
AC Power Conducted Emissions	802.11be (EHT20)	CDD	6	BPSK	MCS0
Unwanted Emissions below 1 GHz	802.11be (EHT20)	CDD	6	BPSK	MCS0
Unwanted Emissions above 1 GHz	802.11b	CDD	1, 6, 11	DBPSK	1Mb/s
	802.11g		1, 6, 11	BPSK	6Mb/s
	802.11be (EHT20)		1, 6, 11	BPSK	MCS0
	802.11be (EHT40)		3, 6, 9	BPSK	MCS0

Note: Partial RU (resource unit) and channel puncturing mechanisms are not supported.

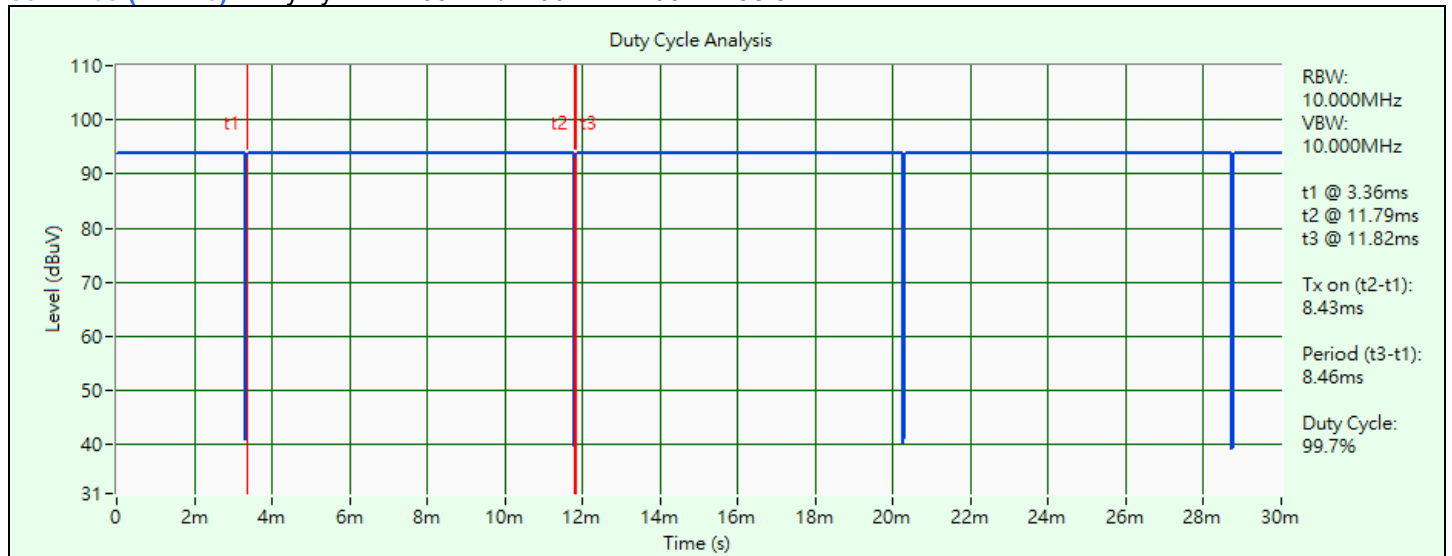
3.5 Duty Cycle of Test Signal

802.11b: Duty cycle = 8.43 ms / 8.46 ms x 100% = 99.7%

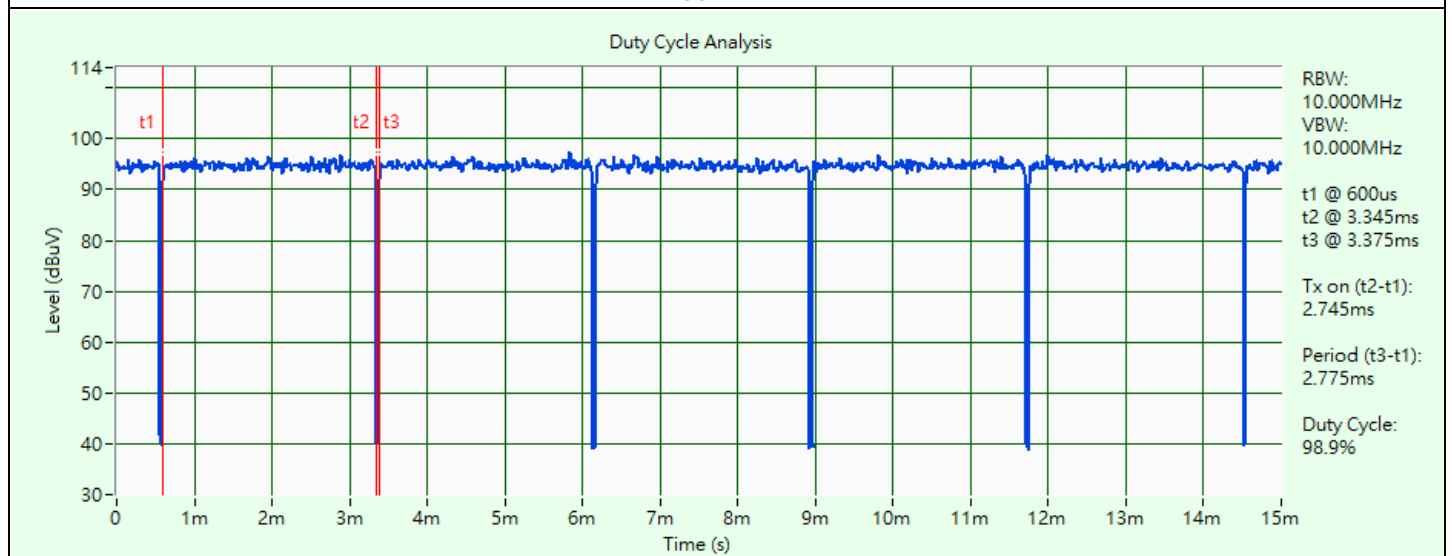
802.11g: Duty cycle = 2.745 ms / 2.775 ms x 100% = 98.9%

802.11be (EHT20): Duty cycle = 2.03 ms / 2.07 ms x 100% = 98.1%

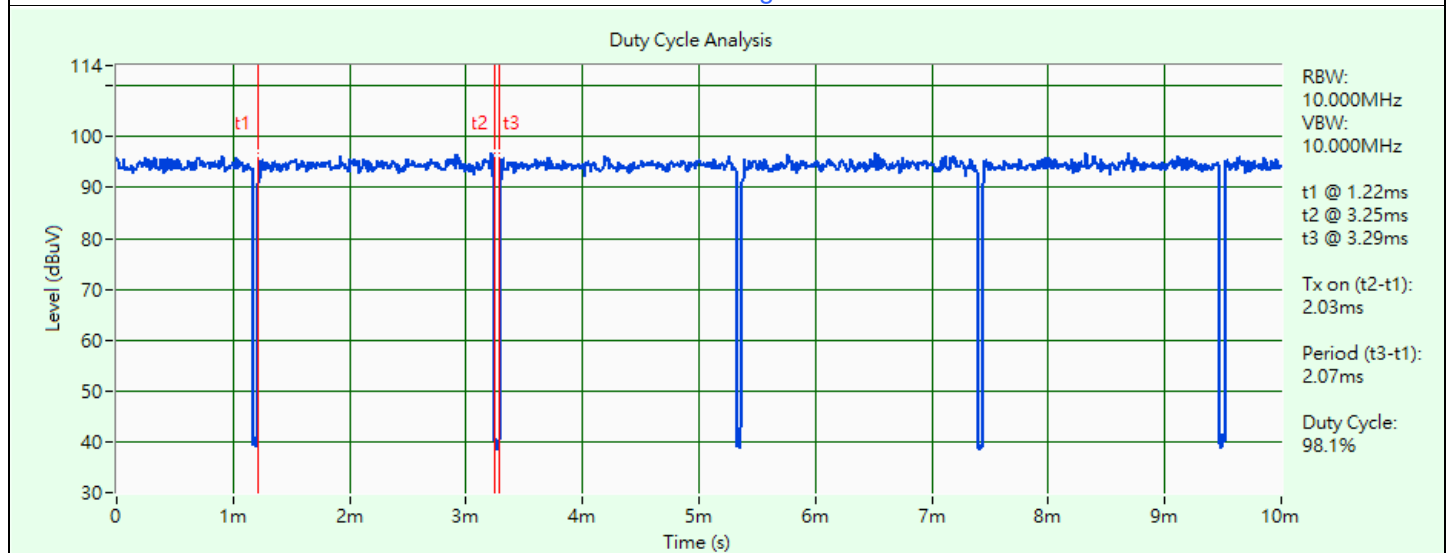
802.11be (EHT40): Duty cycle = 2.03 ms / 2.06 ms x 100% = 98.5%



802.11b

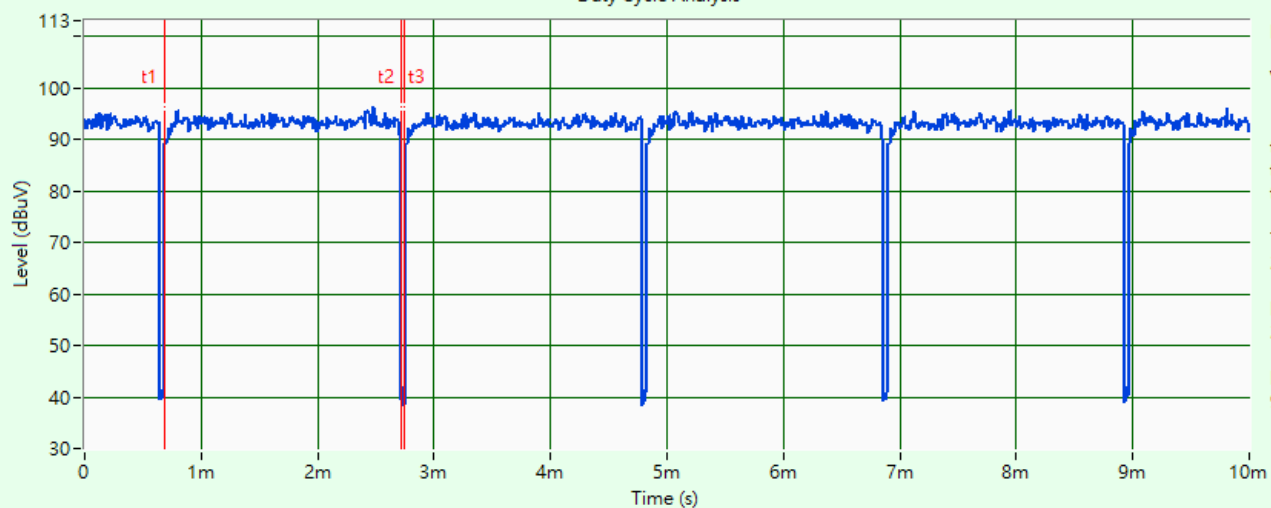


802.11g



802.11be (EHT20)

Duty Cycle Analysis

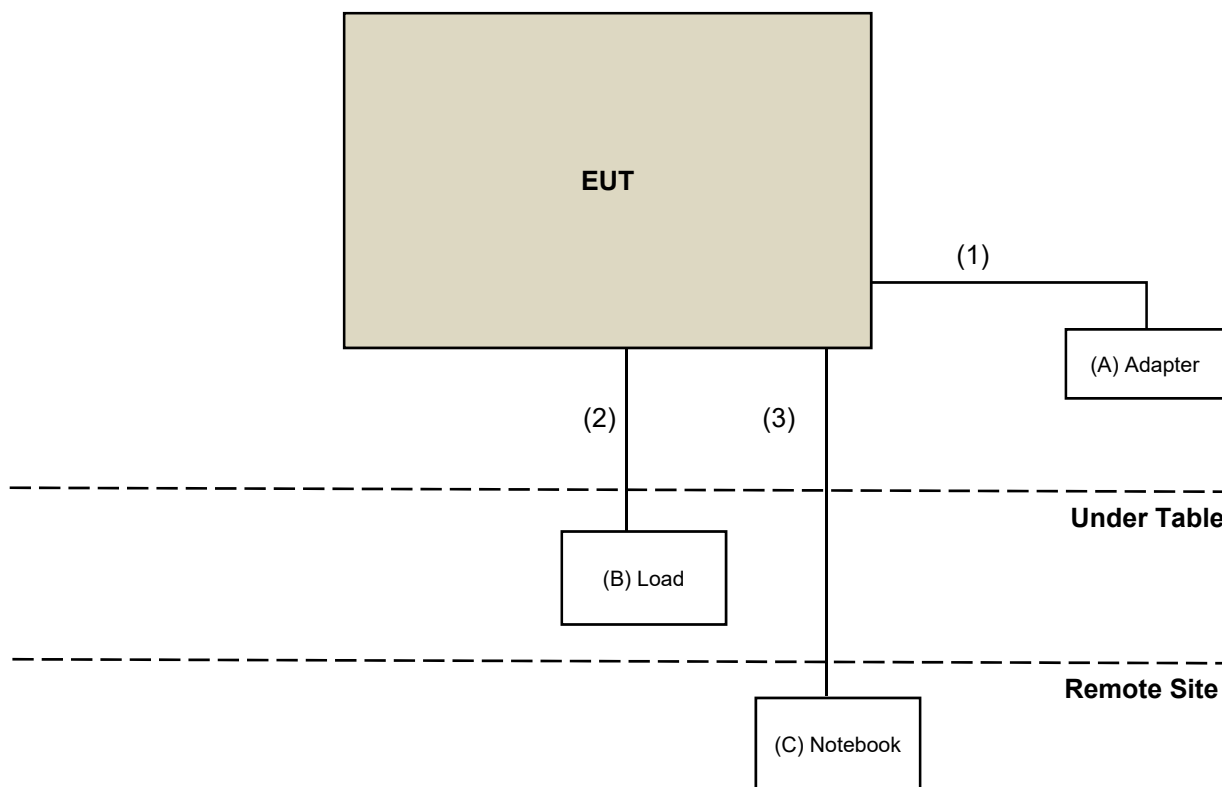


802.11be (EHT40)

3.6 Test Program Used and Operation Descriptions

Controlling software QATool 0.0.2.99 has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Adapter	verizon	1A105-1235	NA	NA	Supplied by applicant
B	Load	NA	NA	NA	NA	Provided by Lab
C	Laptop	Lenovo	20J4 MD A003TW	PF-11H9AK	NA	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	DC Output Cable	1	1.8	No	0	Supplied by applicant
2	LAN cable	2	1.5	No	0	Provided by Lab
3	LAN cable	1	10	No	0	Provided by Lab

4 Test Instruments

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

4.1 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: 2024/10/18

4.2 Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Signal & Spectrum Analyzer R&S	FSV3044	101105	2024/2/27	2025/2/26
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: 2024/10/18

4.3 6 dB Bandwidth

Refer to section 4.2 to get the tested date and information of the instruments.

4.4 Conducted Out of Band Emissions

Refer to section 4.2 to get the tested date and 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	ESR3	102783	2023/12/13	2024/12/12
Fixed Attenuator STI	BNC5W10dB	PAD-COND2-01	2024/8/25	2025/8/24
LISN R&S	ESH2-Z5	100100	2024/3/6	2025/3/5
	ESH3-Z5	100312	2024/9/9	2025/9/8
RF Coaxial Cable Woken	5D-FB	Cable-cond2-01	2024/8/25	2025/8/24
Software BVADT	BVADT_Conf_ V7.4.1.0	N/A	N/A	N/A
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2024/8/28	2025/8/27

Notes:

1. The test was performed in HY - Conduction 2.
2. Tested Date: 2024/10/29

4.6 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower KaiTuo	N/A	N/A	N/A	N/A
Antenna Tower Controller KaiTuo	KT-2000	N/A	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-995	2024/10/9	2025/10/8
Loop Antenna TESEQ	HLA 6121	45745	2024/8/21	2025/8/20
MXE EMI Receiver Agilent	N9038A	MY52260177	2024/9/19	2025/9/18
Preamplifier EMCI	EMC330N	980783	2024/1/15	2025/1/14
	EMC001340	980201	2024/9/24	2025/9/23
PXA Signal Analyzer Keysight	N9030B	MY57140488	2024/3/6	2025/3/5
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-500	201245	2024/1/15	2025/1/14
	EMCCFD400-NM-NM-3000	201250	2024/1/15	2025/1/14
	EMCCFD400-NM-NM-9000	201252(with PAD)	2024/1/15	2025/1/14
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208675	N/A	N/A

Notes:

1. The test was performed in WM - 966 chamber 7.
2. Tested Date: 2024/10/28

4.7 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower KaiTuo	N/A	N/A	N/A	N/A
Antenna Tower Controller KaiTuo	KT-2000	N/A	N/A	N/A
Horn Antenna RFSPIN	DRH18-E	210104A18E	2023/11/12	2024/11/11
Horn Antenna Schwarzbeck	BBHA 9170	9170-1048	2023/11/12	2024/11/11
MXE EMI Receiver Agilent	N9038A	MY52260177	2024/9/19	2025/9/18
Preamplifier EMCI	EMC118A45SE	980810	2023/12/28	2024/12/27
	EMC184045SE	980787	2024/1/15	2025/1/14
PXA Signal Analyzer Keysight	N9030B	MY57140488	2024/3/6	2025/3/5
RF Coaxial Cable EMCI	EMC101G-KM-KM-2000	201254	2024/1/15	2025/1/14
	EMC101G-KM-KM-3000	201258	2024/1/15	2025/1/14
	EMC101G-KM-KM-5000	201261	2024/1/15	2025/1/14
	EMC104-SM-SM-1000	210101	2024/1/15	2025/1/14
	EMC104-SM-SM-3000	201242	2024/1/15	2025/1/14
	EMC104-SM-SM-9000	201230	2024/1/15	2025/1/14
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208675	N/A	N/A

Notes:

1. The test was performed in WM - 966 chamber 7.
2. Tested Date: 2024/10/15 ~ 2024/10/17

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 ≥ 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

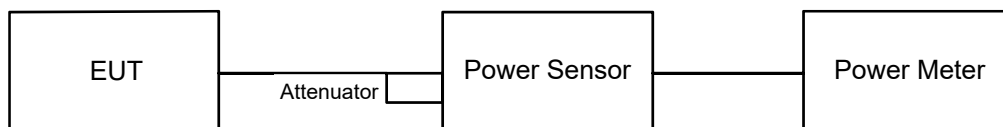
Notes:

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



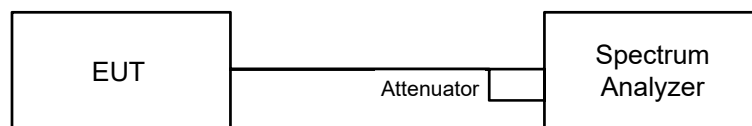
6.1.2 Test Procedure

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



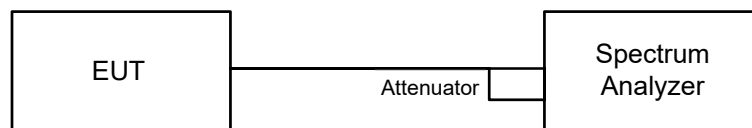
6.2.2 Test Procedure

- 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

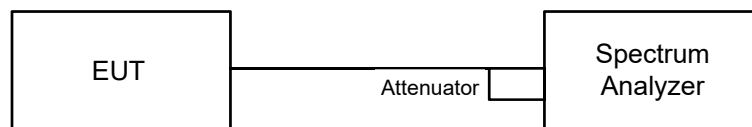


6.3.2 Test Procedure

- 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

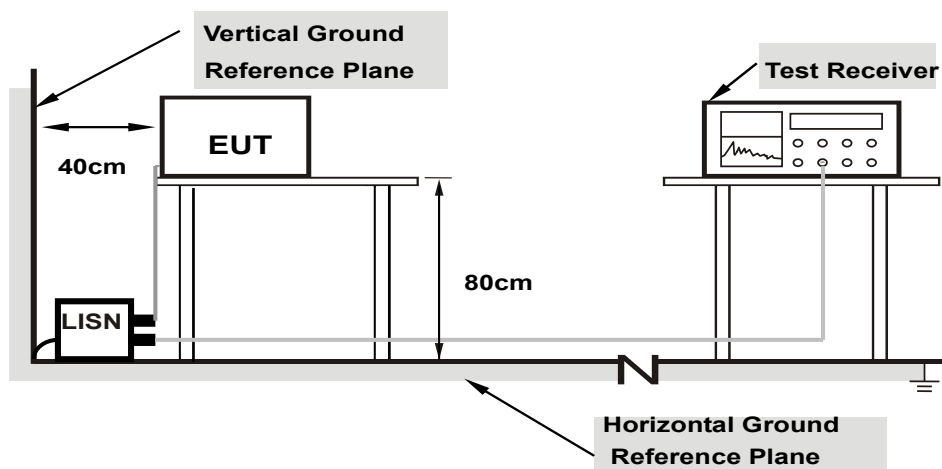
- Set the RBW = 100 kHz.
- Set the VBW ≥ 300 kHz.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOB

- Set RBW = 100 kHz.
- Set VBW ≥ 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

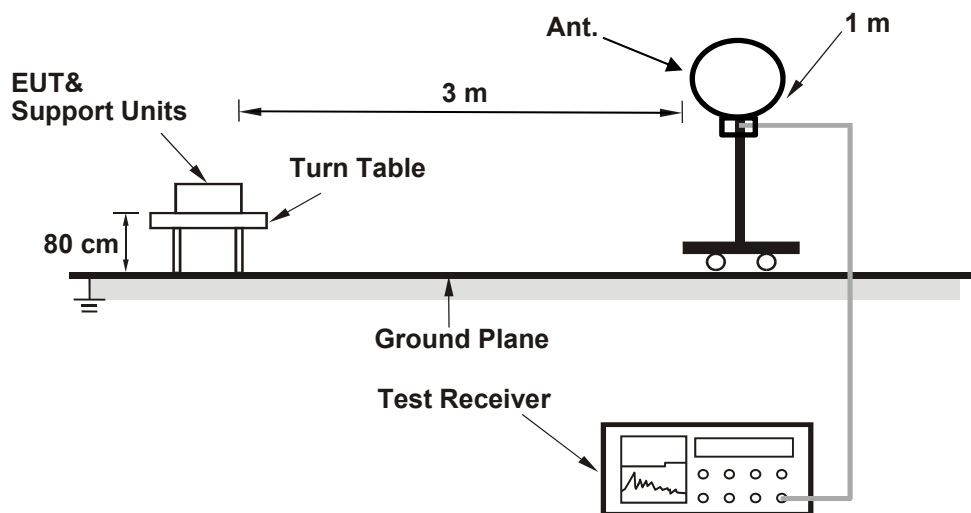
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The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

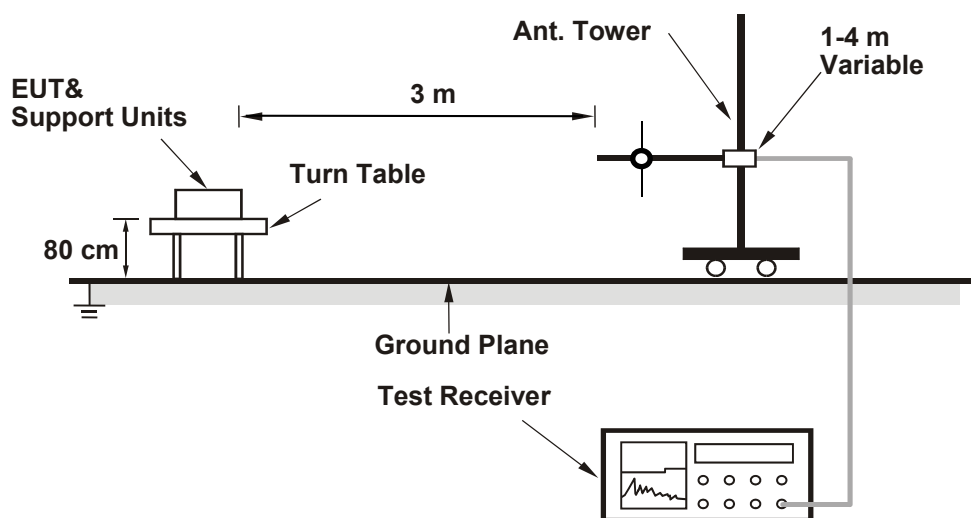
6.6 Unwanted Emissions below 1 GHz

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

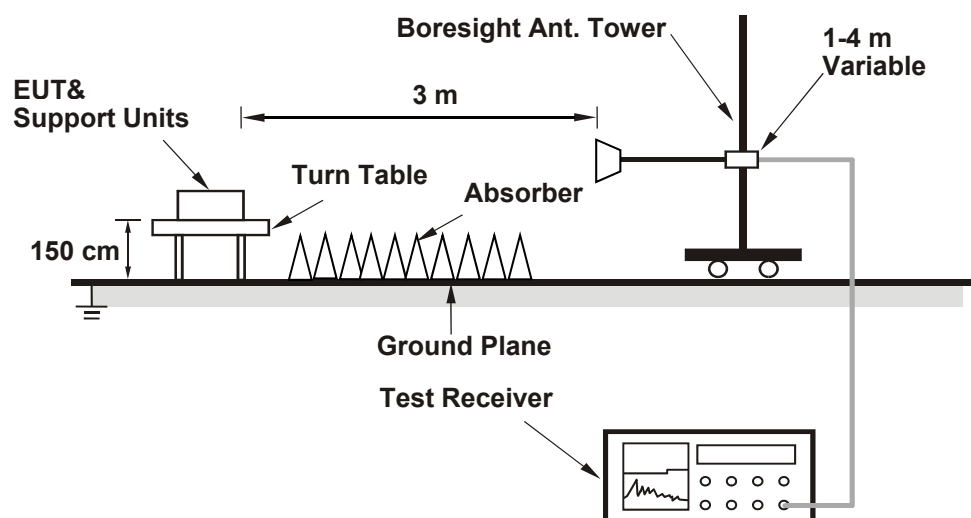
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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:	Gary Lin
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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	27.35	26.11	951.57	29.78	30	Pass
6	2437	26.96	26.60	953.681	29.79	30	Pass
11	2462	27.16	25.96	914.453	29.61	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.55 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	25.10	24.11	581.226	27.64	30	Pass
6	2437	26.75	26.33	902.688	29.56	30	Pass
11	2462	24.61	23.25	500.417	26.99	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.55 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	25.11	24.05	578.437	27.62	30	Pass
6	2437	27.15	26.74	990.863	29.96	30	Pass
11	2462	24.11	22.75	445.997	26.49	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.55 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	25.65	24.89	675.601	28.30	30	Pass
6	2437	25.22	24.32	603.055	27.80	30	Pass
9	2452	24.65	23.70	526.166	27.21	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.55 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	25.11	24.05	578.437	27.62	30	Pass
6	2437	27.15	26.74	990.863	29.96	30	Pass
11	2462	24.11	22.75	445.997	26.49	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 5.28 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	25.65	24.89	675.601	28.30	30	Pass
6	2437	25.22	24.32	603.055	27.80	30	Pass
9	2452	24.65	23.70	526.166	27.21	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 5.28 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:	Gary Lin
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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	-3.02	-4.29	-0.60	8	Pass
6	2437	-3.51	-3.83	-0.66	8	Pass
11	2462	-3.25	-4.33	-0.75	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 5.28 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	-9.53	-10.63	-7.03	8	Pass
6	2437	-7.92	-8.41	-5.15	8	Pass
11	2462	-10.15	-11.43	-7.73	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 5.28 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	-10.44	-11.52	-7.94	8	Pass
6	2437	-8.36	-8.73	-5.53	8	Pass
11	2462	-11.43	-12.74	-9.03	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 5.28 dBi < 6 dBi, so the power density limit shall not be reduced.

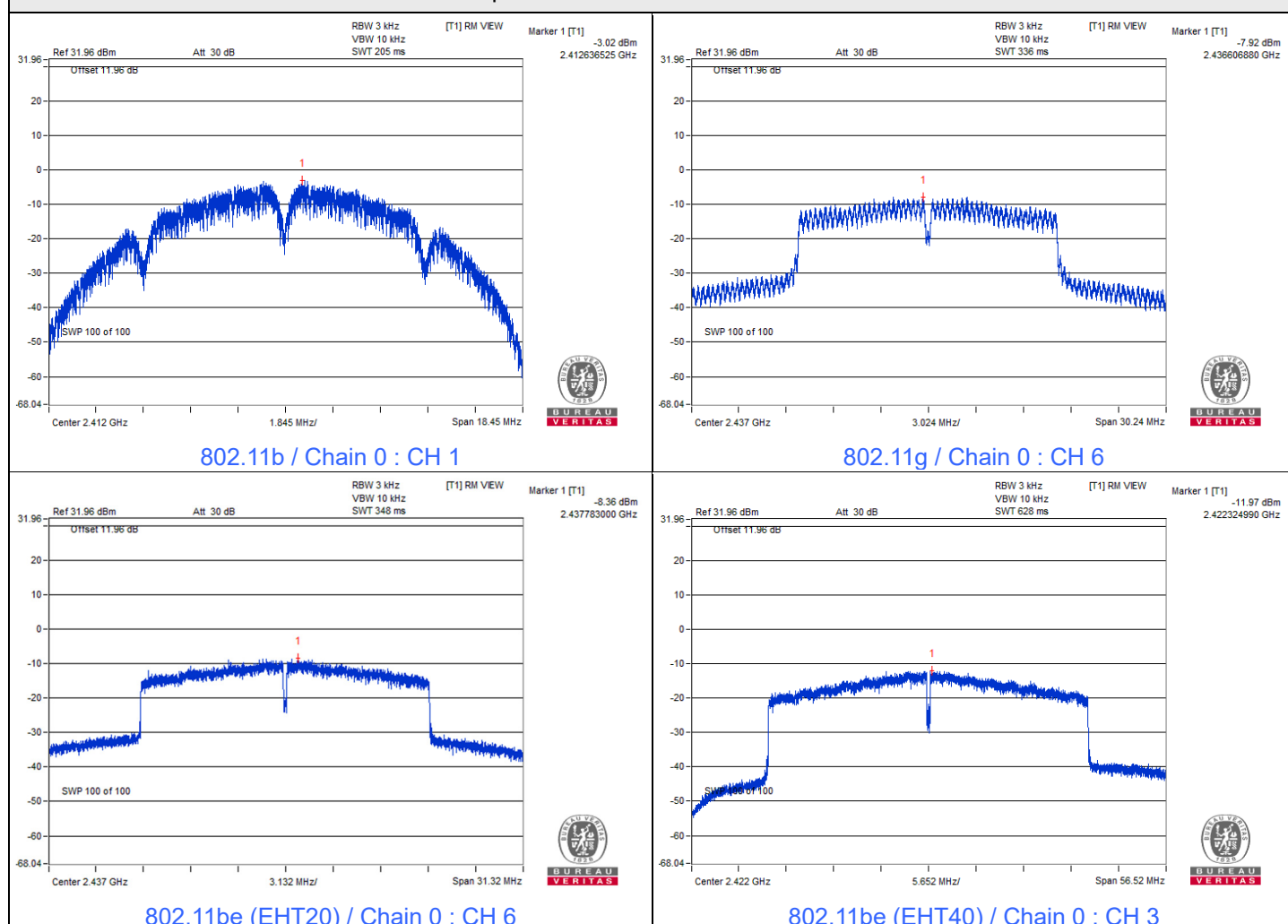
802.11be (EHT40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
3	2422	-11.97	-12.82	-9.36	8	Pass
6	2437	-12.47	-13.28	-9.85	8	Pass
9	2452	-12.97	-13.90	-10.40	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 5.28 dBi < 6 dBi, so the power density limit shall not be reduced.

Spectrum Plot of Maximum Value



7.3 6 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Gary Lin
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802.11b

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	8.08	7.15	0.5	Pass
6	2437	8.09	8.11	0.5	Pass
11	2462	8.11	7.60	0.5	Pass

802.11g

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	15.16	15.19	0.5	Pass
6	2437	15.22	15.19	0.5	Pass
11	2462	15.16	15.12	0.5	Pass

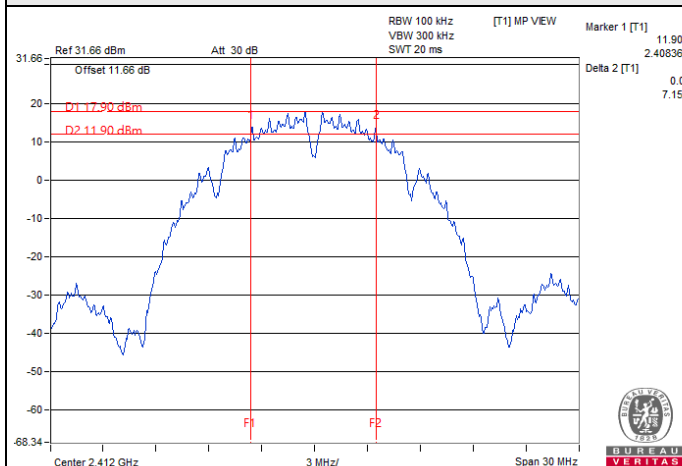
802.11be (EHT20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	16.27	16.50	0.5	Pass
6	2437	17.08	15.22	0.5	Pass
11	2462	17.14	16.47	0.5	Pass

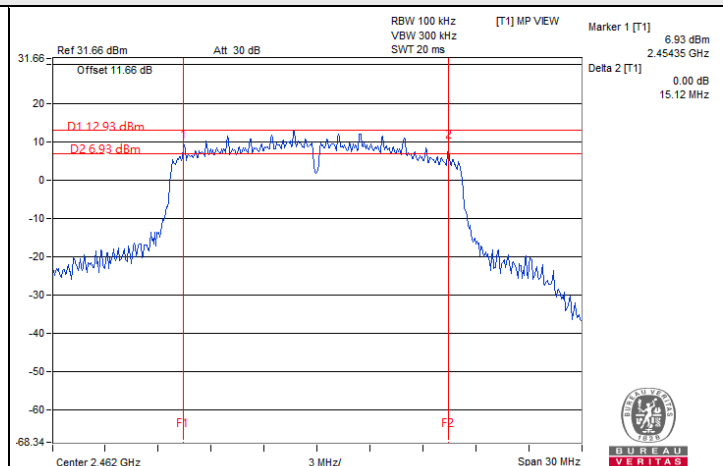
802.11be (EHT40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	2422	32.75	31.37	0.5	Pass
6	2437	34.00	35.08	0.5	Pass
9	2452	32.68	32.70	0.5	Pass

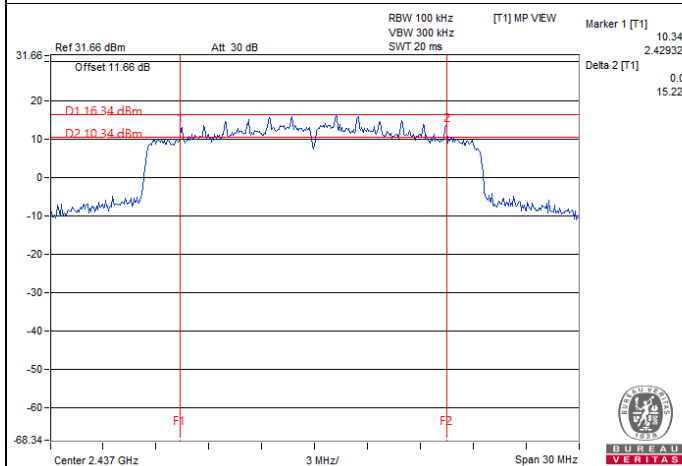
Spectrum Plot of Minimum Value



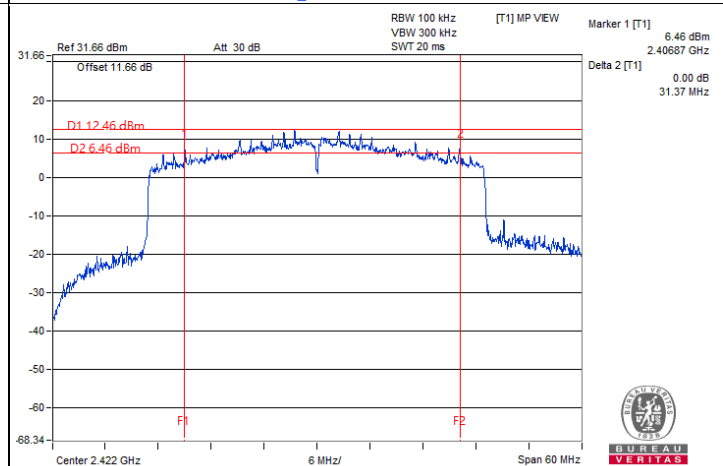
802.11b / Chain 1 : CH 1



802.11g / Chain 1 : CH 11



802.11be (EHT20) / Chain 1 : CH 6

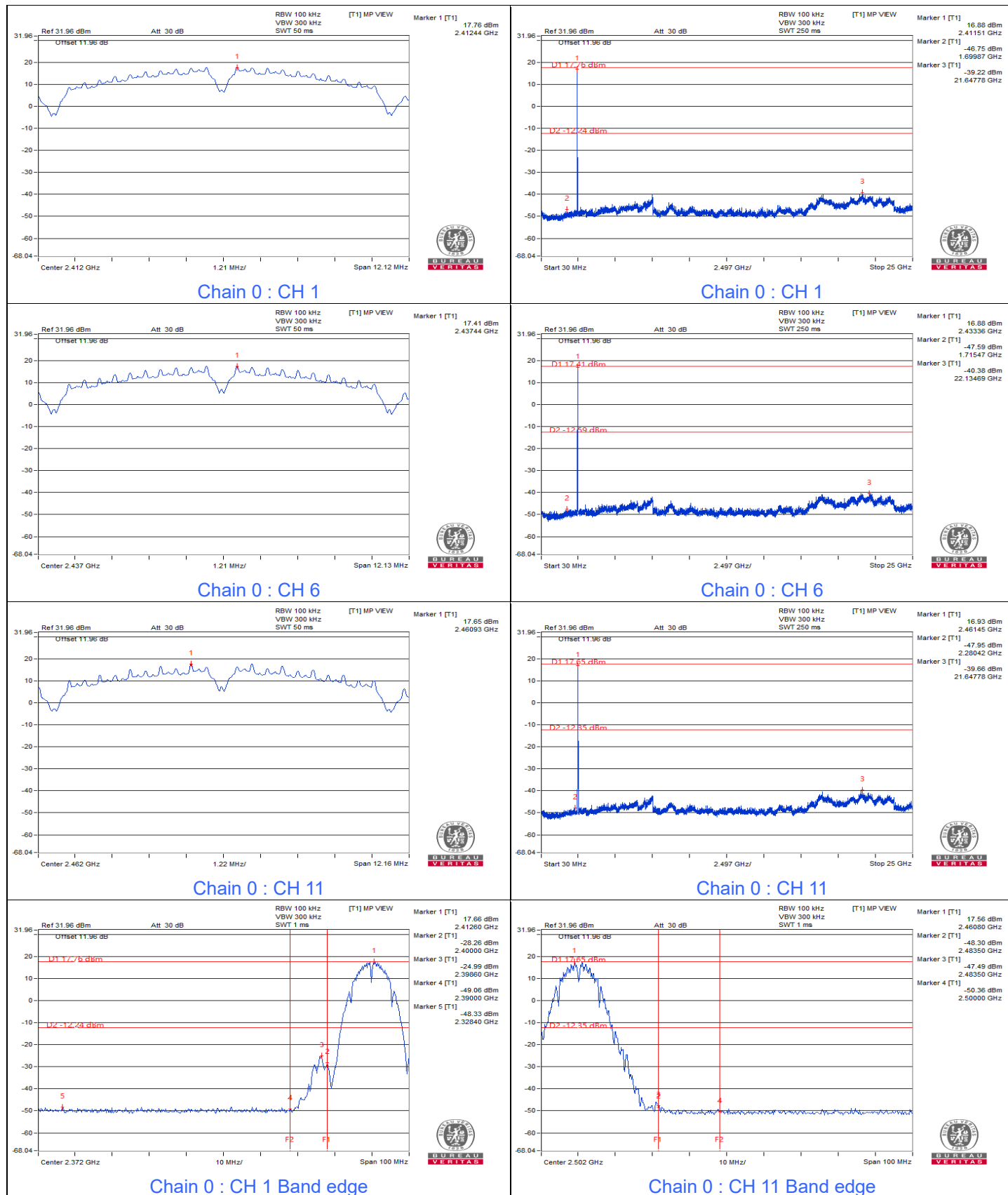


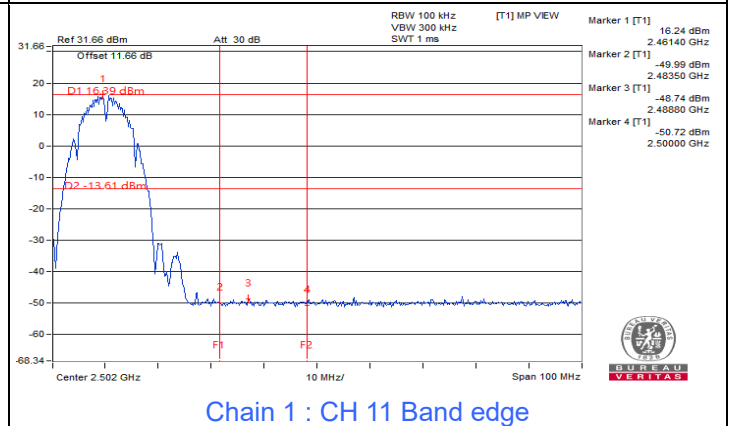
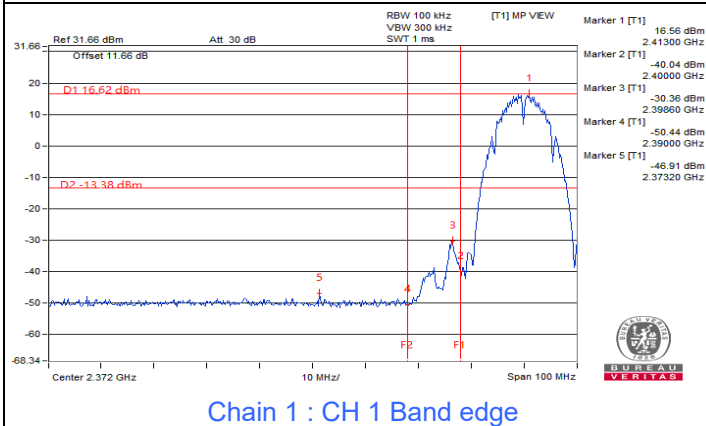
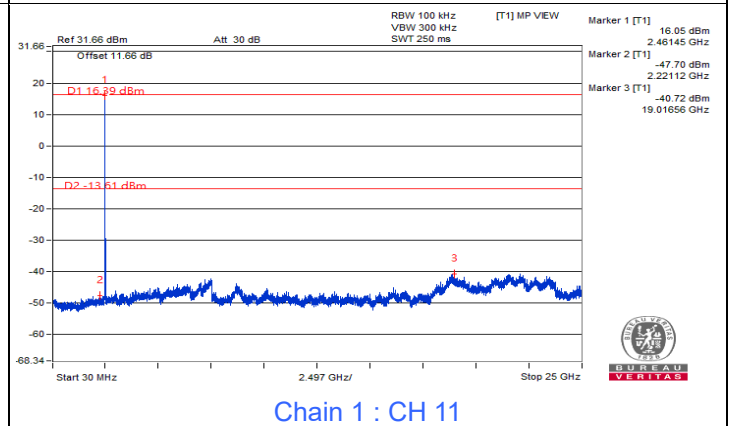
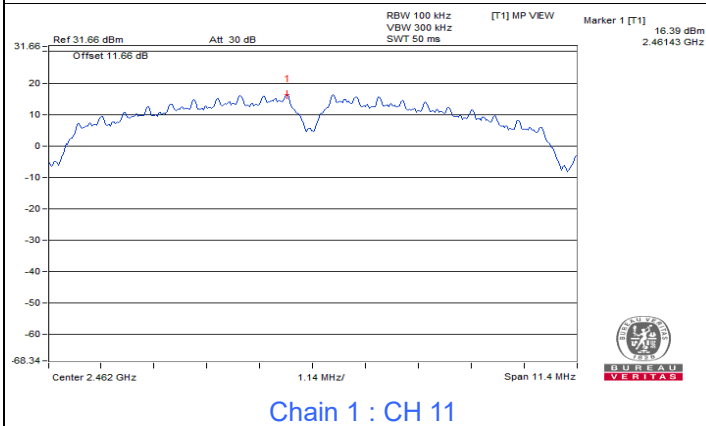
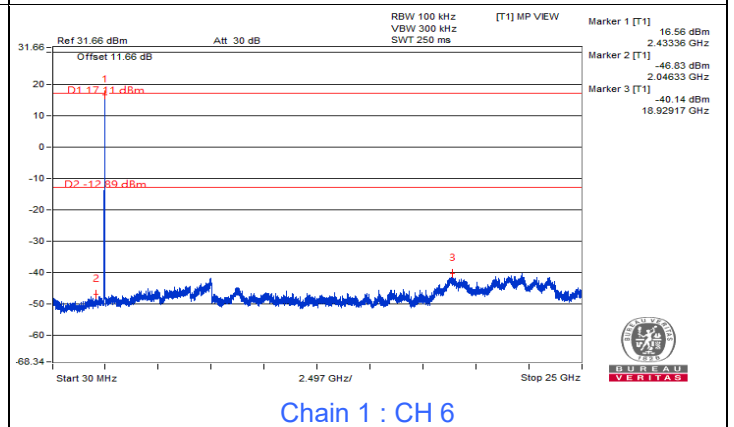
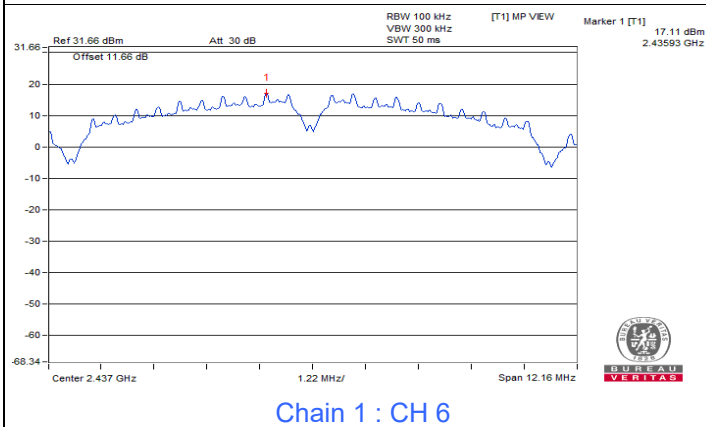
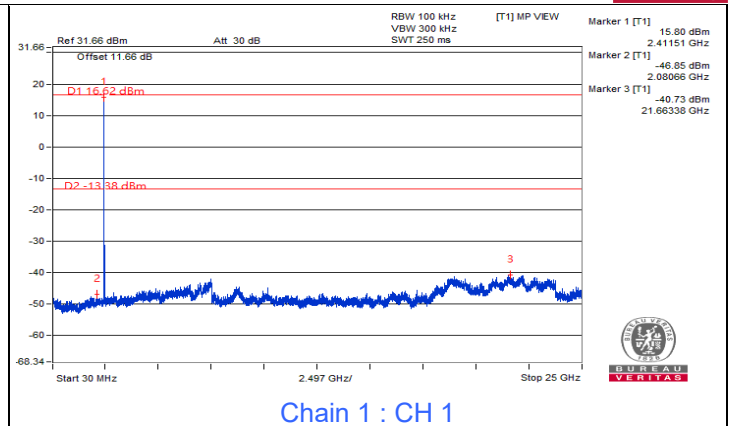
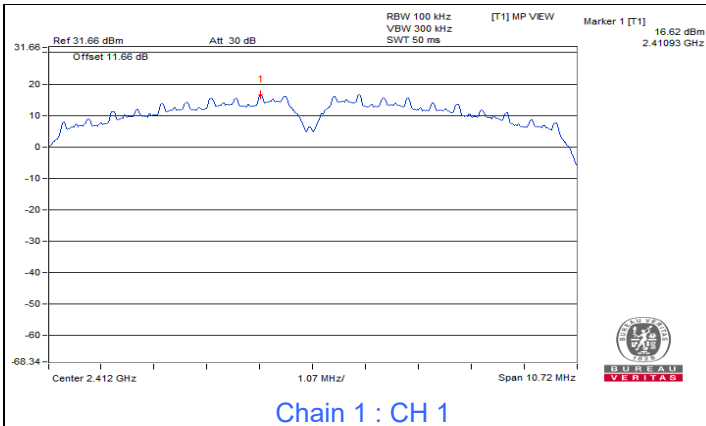
802.11be (EHT40) / Chain 1 : CH 3

7.4 Conducted Out of Band Emissions

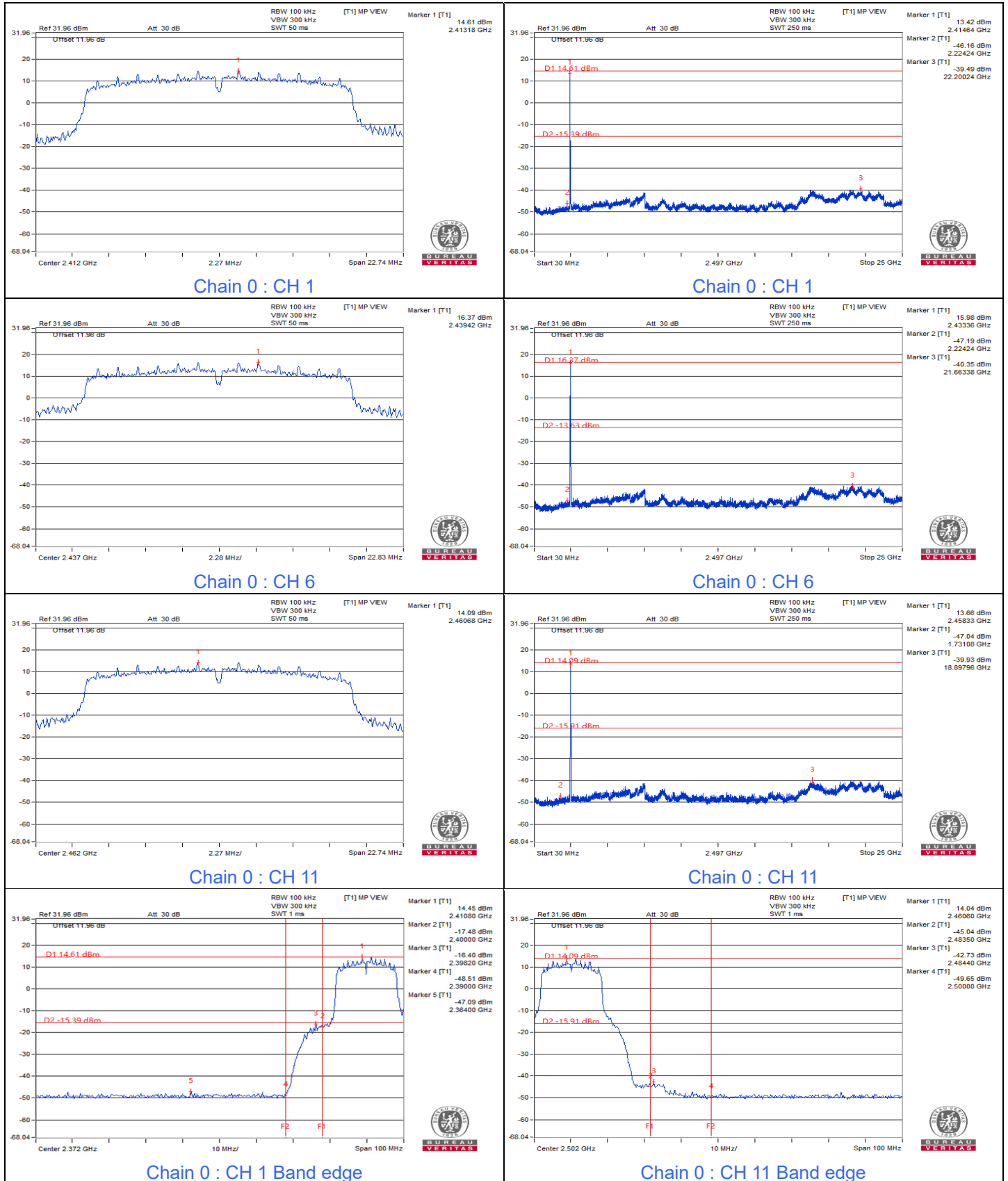
Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Gary Lin
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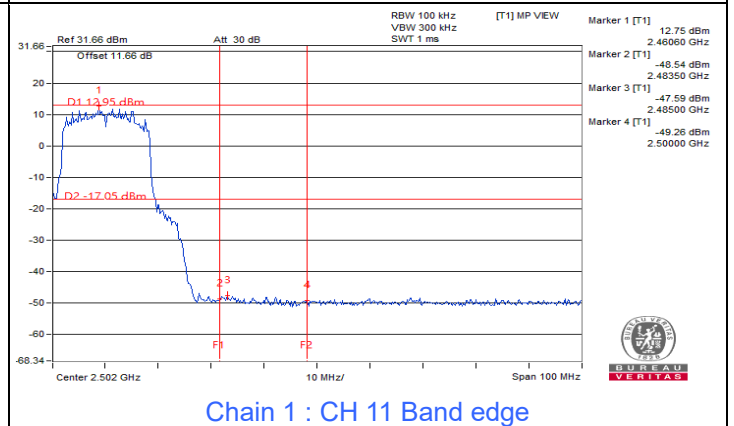
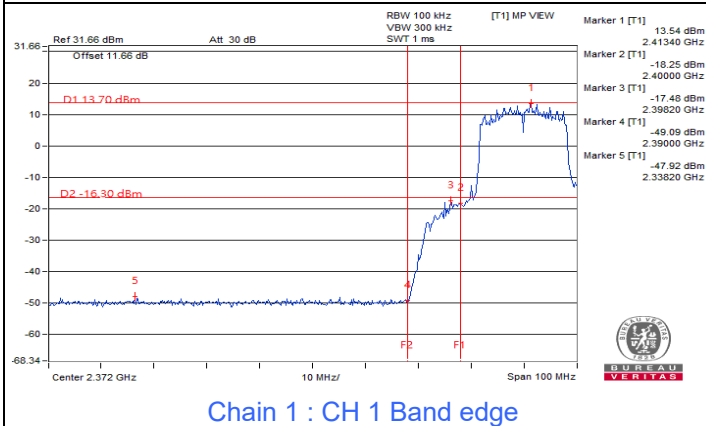
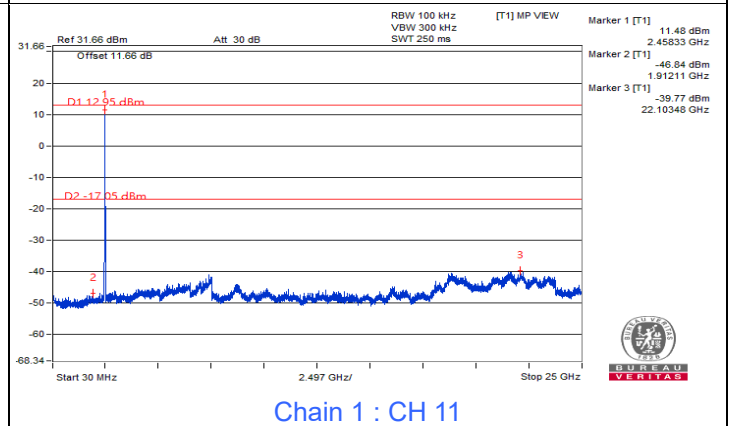
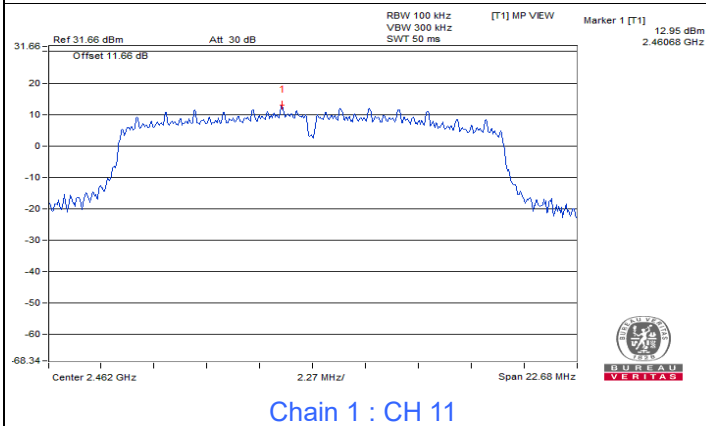
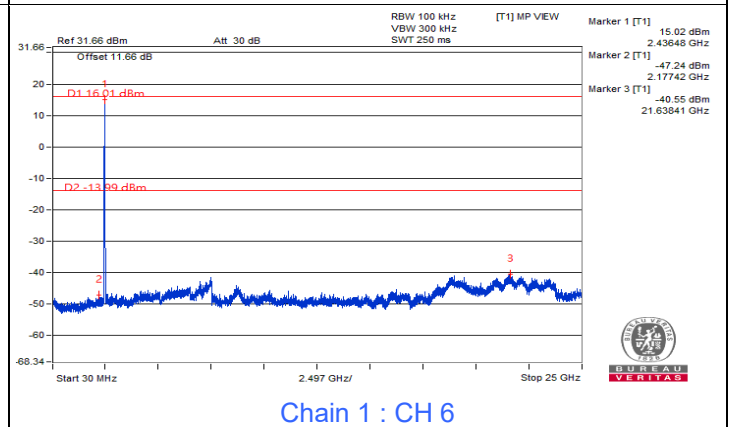
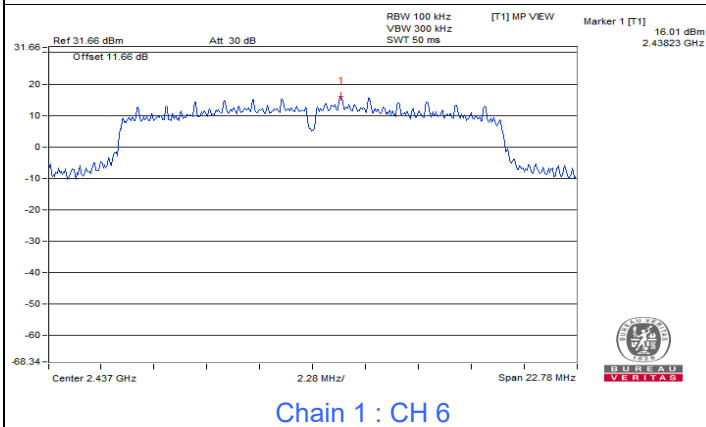
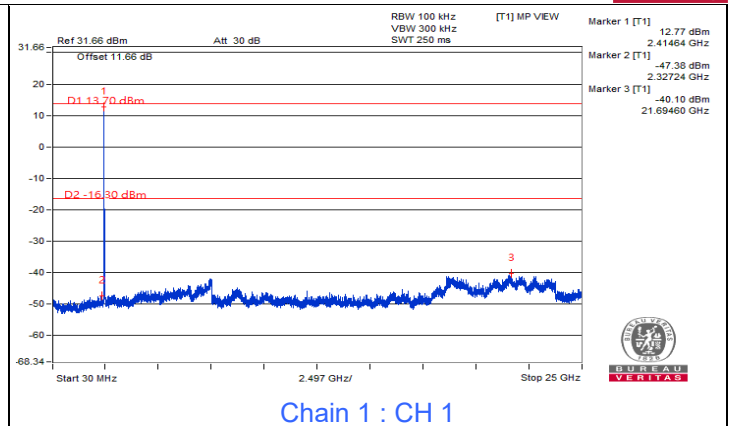
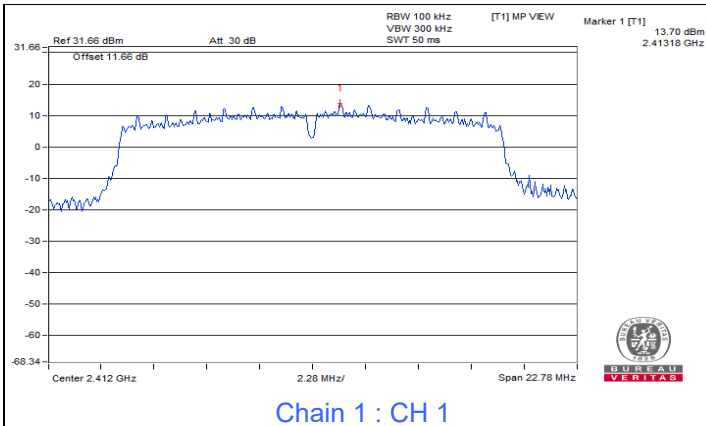
802.11b



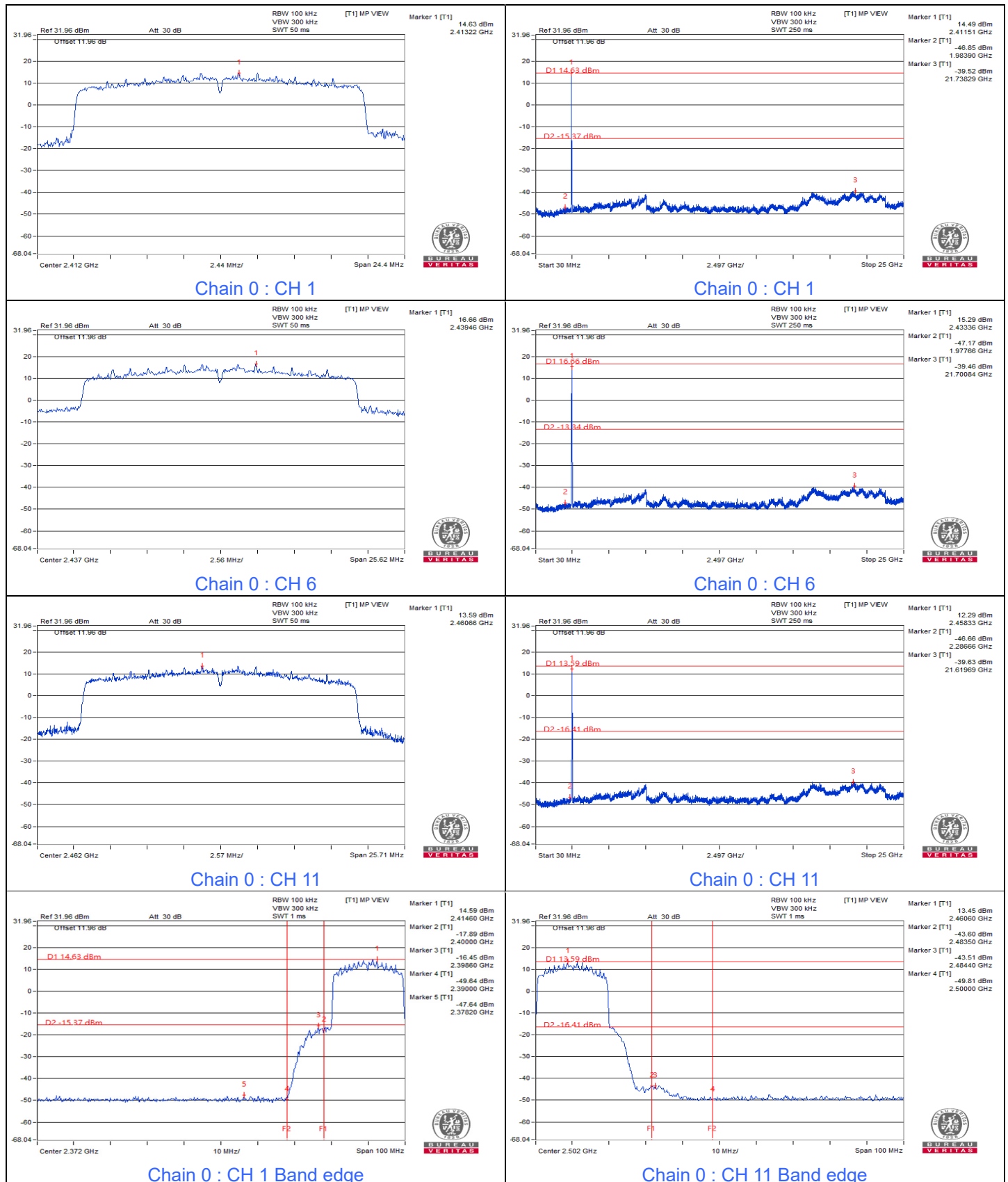


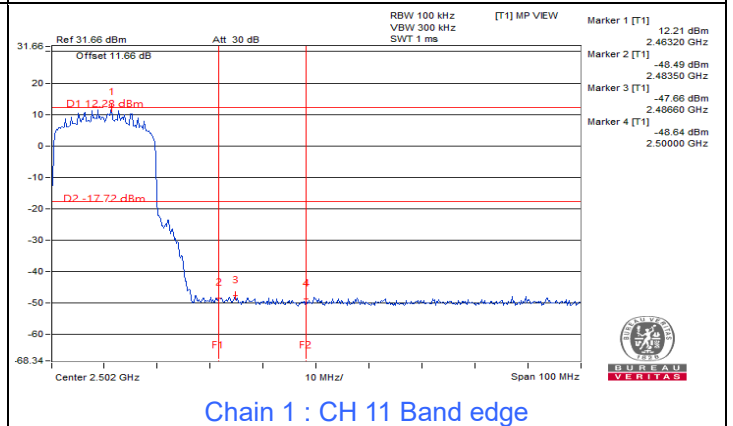
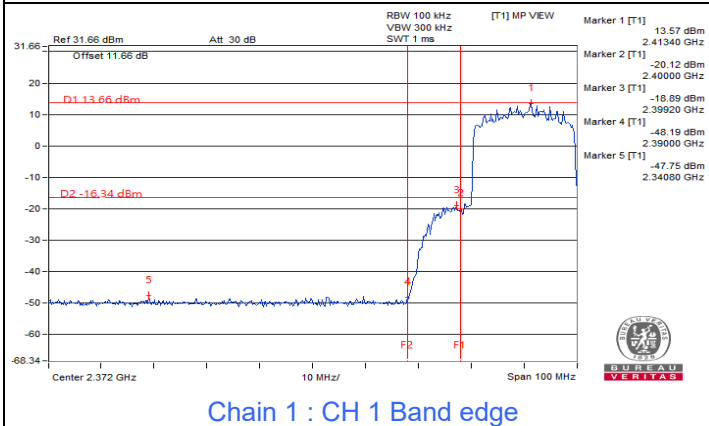
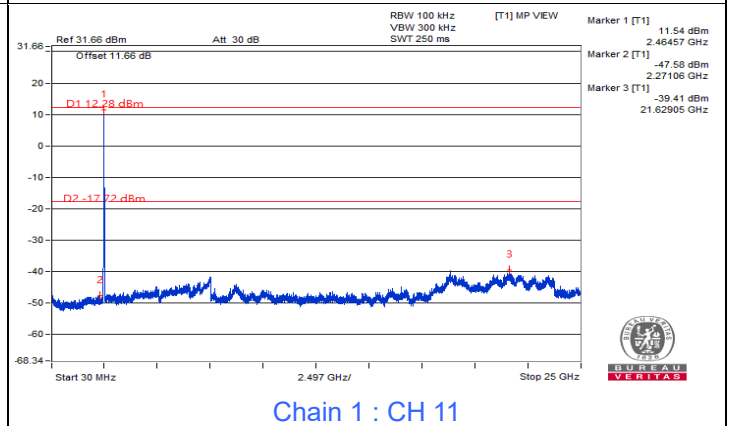
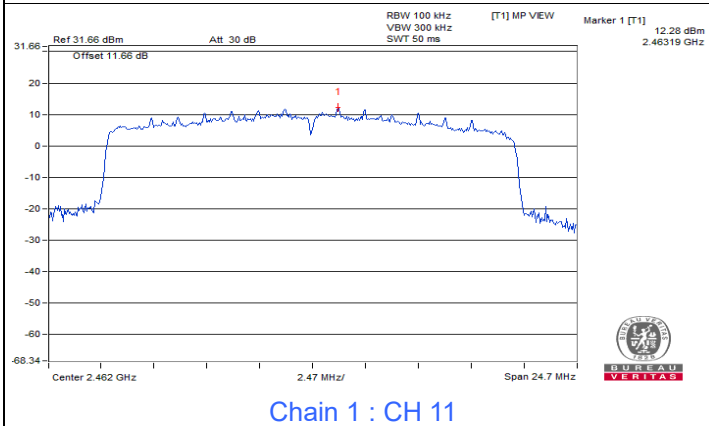
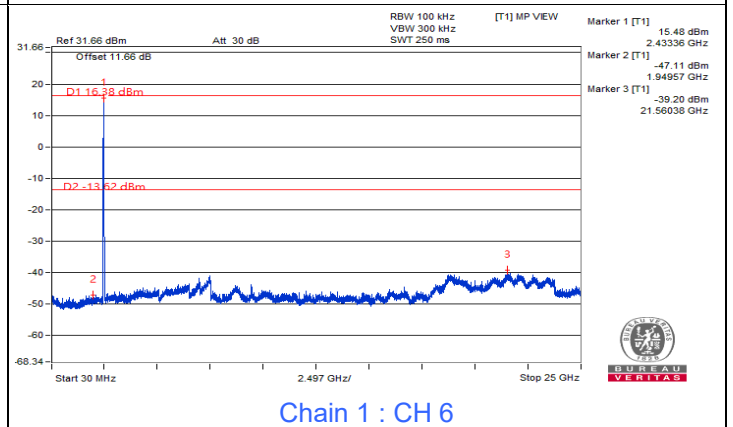
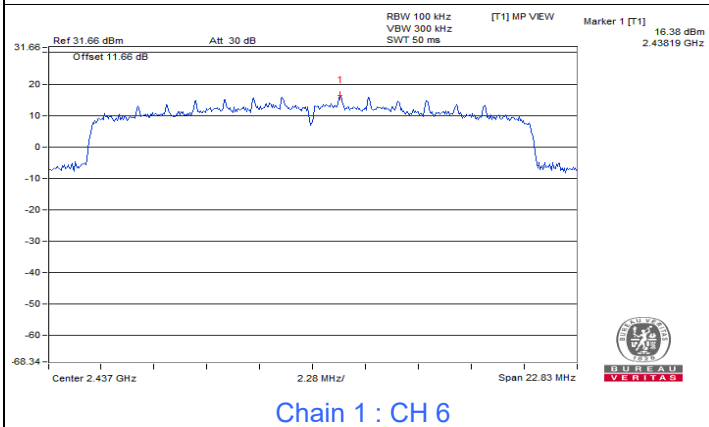
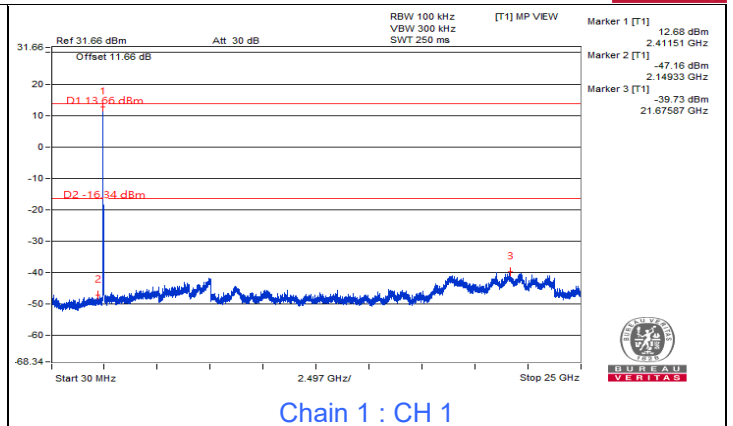
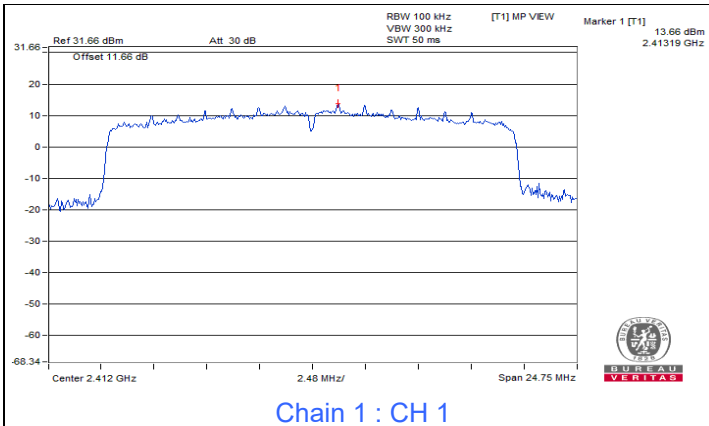
802.11g



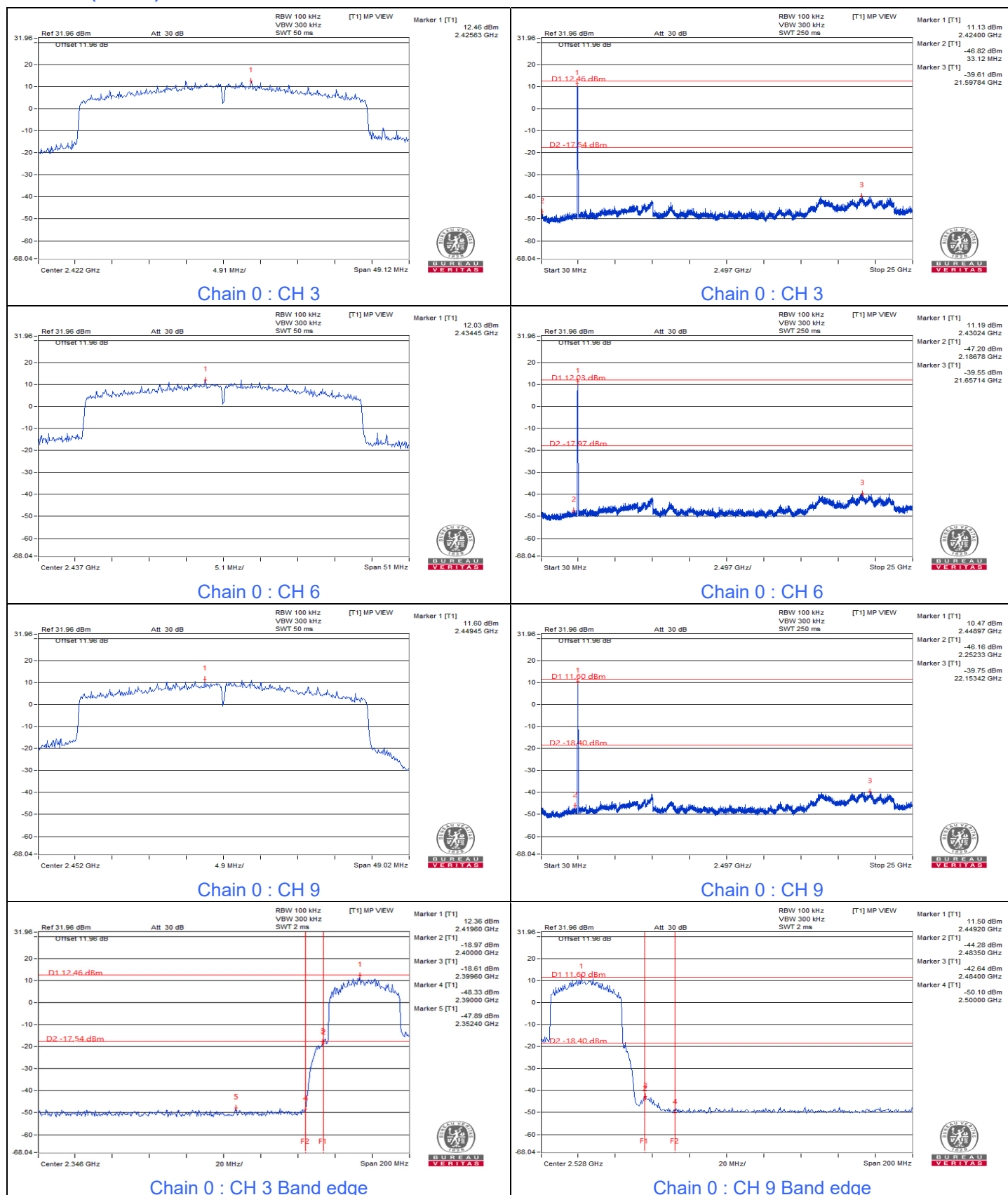


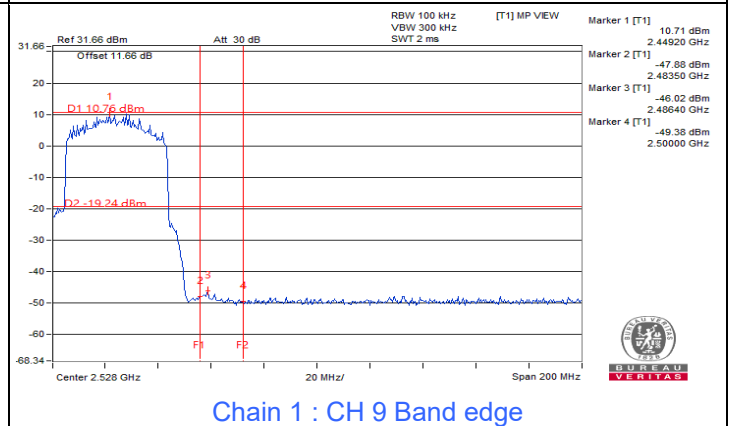
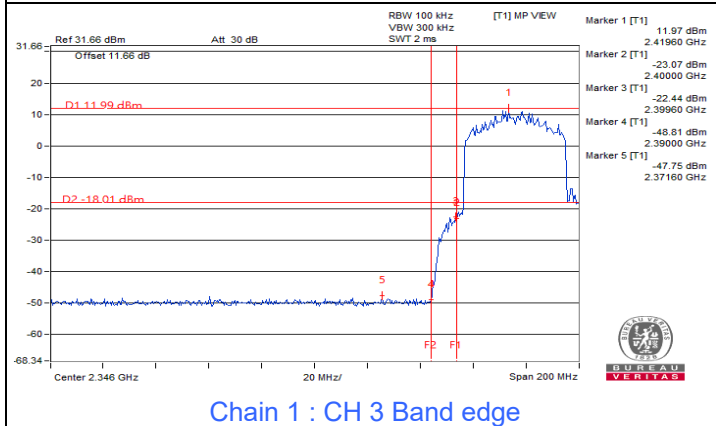
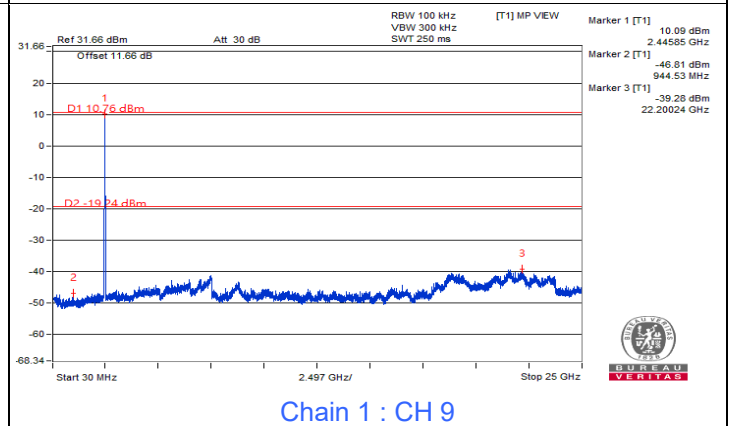
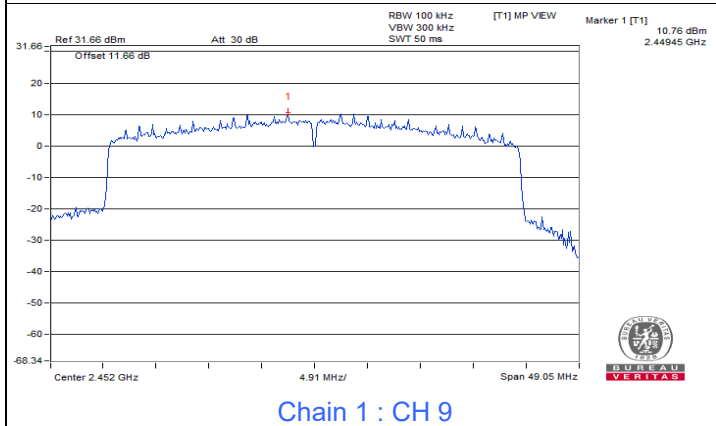
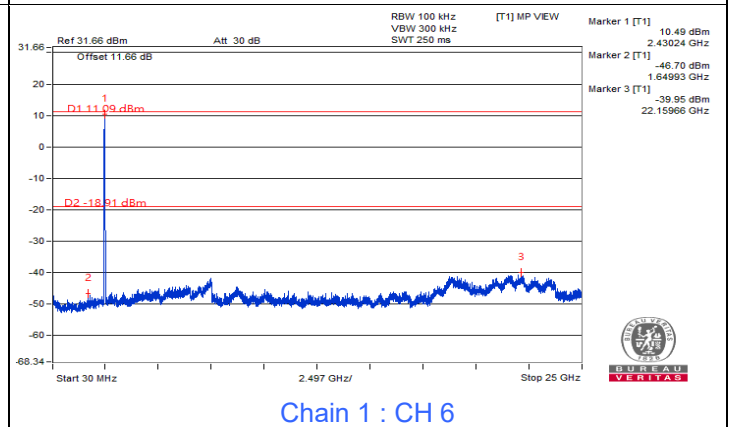
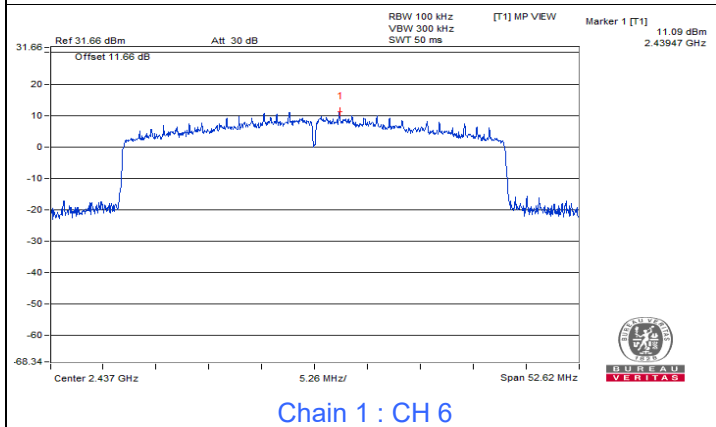
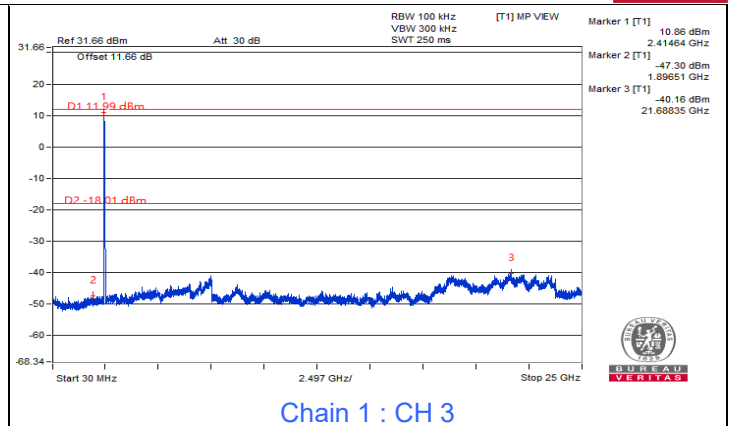
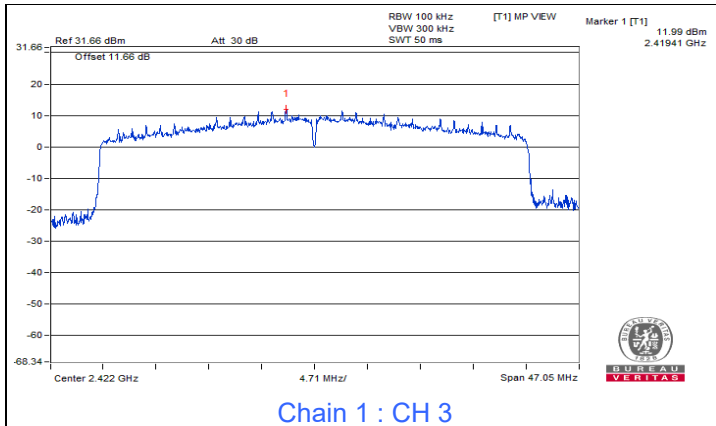
802.11be (EHT20)





802.11be (EHT40)





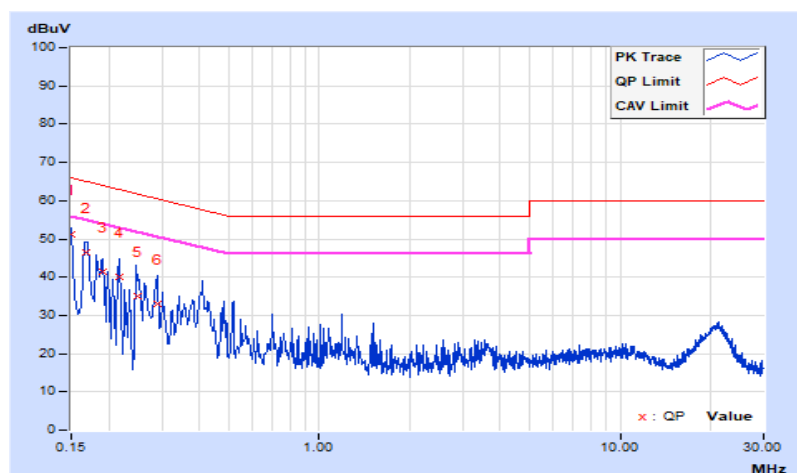
7.5 AC Power Conducted Emissions

RF Mode	802.11be (EHT20)	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	Charles Hsiao		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.15	40.92	25.22	51.07	35.37	66.00	56.00	-14.93	-20.63
2	0.16755	10.16	36.34	21.91	46.50	32.07	65.08	55.08	-18.58	-23.01
3	0.19000	10.17	31.10	16.99	41.27	27.16	64.04	54.04	-22.77	-26.88
4	0.21577	10.17	29.79	12.32	39.96	22.49	62.98	52.98	-23.02	-30.49
5	0.25073	10.17	24.99	9.49	35.16	19.66	61.73	51.73	-26.57	-32.07
6	0.28906	10.17	22.79	12.53	32.96	22.70	60.55	50.55	-27.59	-27.85

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

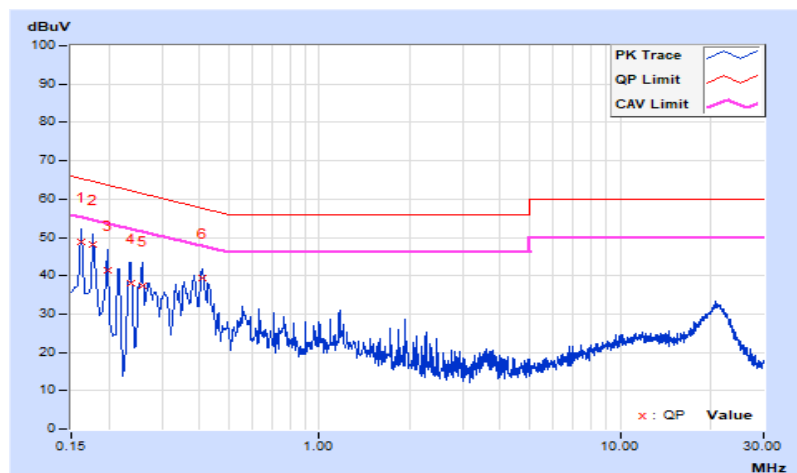


RF Mode	802.11be (EHT20)	Channel	CH 6 : 2437 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75 % RH
Tested By	Charles Hsiao		

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	0.16200	10.20	38.67	23.06	48.87	33.26	65.36	55.36	-16.49	-22.10
2	0.17800	10.21	37.98	24.59	48.19	34.80	64.58	54.58	-16.39	-19.78
3	0.19800	10.22	31.36	15.57	41.58	25.79	63.69	53.69	-22.11	-27.90
4	0.23598	10.22	27.76	12.38	37.98	22.60	62.24	52.24	-24.26	-29.64
5	0.25800	10.22	27.04	17.07	37.26	27.29	61.50	51.50	-24.24	-24.21
6	0.41000	10.23	29.31	25.68	39.54	35.91	57.65	47.65	-18.11	-11.74

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



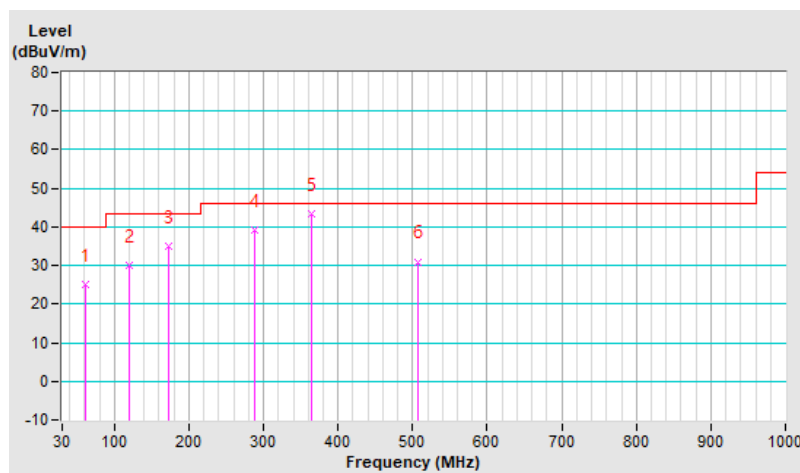
7.6 Unwanted Emissions below 1 GHz

RF Mode	802.11be (EHT20)	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, 68 % RH
Tested By	Wade Huang		

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	61.04	25.1 QP	40.0	-14.9	1.07 H	154	39.2	-14.1
2	119.24	30.0 QP	43.5	-13.5	1.82 H	223	45.4	-15.4
3	172.59	34.9 QP	43.5	-8.6	1.94 H	163	48.7	-13.8
4	288.99	39.2 QP	46.0	-6.8	2.11 H	140	52.4	-13.2
5	363.68	43.5 QP	46.0	-2.5	1.61 H	49	54.8	-11.3
6	506.27	31.0 QP	46.0	-15.0	1.32 H	73	39.1	-8.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 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.

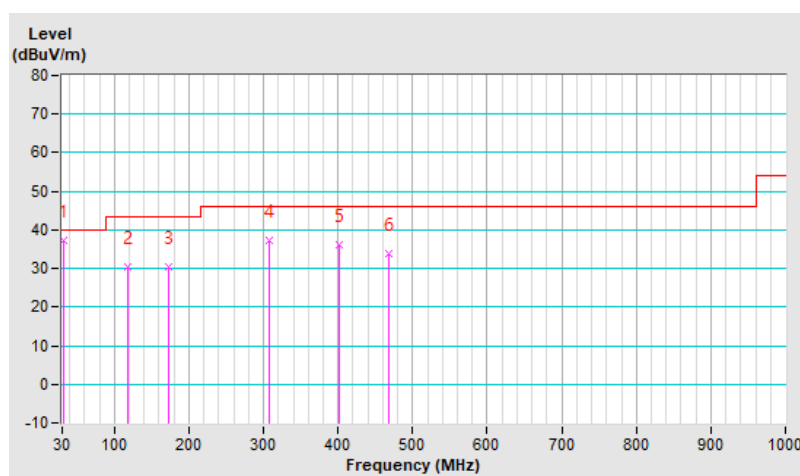


RF Mode	802.11be (EHT20)	Channel	CH 6 : 2437 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 68 % RH
Tested By	Wade Huang		

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	32.91	37.2 QP	40.0	-2.8	1.43 V	81	51.6	-14.4
2	118.27	30.4 QP	43.5	-13.1	1.76 V	249	45.9	-15.5
3	172.59	30.5 QP	43.5	-13.0	1.81 V	284	44.3	-13.8
4	307.42	37.1 QP	46.0	-8.9	1.64 V	208	49.8	-12.7
5	401.51	36.1 QP	46.0	-9.9	1.79 V	94	46.5	-10.4
6	468.44	33.9 QP	46.0	-12.1	1.11 V	19	42.4	-8.5

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 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	22 °C, 68 % RH
Tested By	Wade Huang		

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	60.3 PK	74.0	-13.7	3.76 H	113	29.3	31.0
2	2390.00	41.3 AV	54.0	-12.7	3.76 H	113	10.3	31.0
3	*2412.00	115.5 PK			3.76 H	113	84.6	30.9
4	*2412.00	113.3 AV			3.76 H	113	82.4	30.9
5	4824.00	49.3 PK	74.0	-24.7	1.94 H	220	41.2	8.1
6	4824.00	44.0 AV	54.0	-10.0	1.94 H	220	35.9	8.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	62.8 PK	74.0	-11.2	1.76 V	191	31.8	31.0
2	2390.00	49.6 AV	54.0	-4.4	1.76 V	191	18.6	31.0
3	*2412.00	123.6 PK			1.76 V	191	92.7	30.9
4	*2412.00	121.4 AV			1.76 V	191	90.5	30.9
5	4824.00	50.5 PK	74.0	-23.5	2.70 V	176	42.4	8.1
6	4824.00	45.7 AV	54.0	-8.3	2.70 V	176	37.6	8.1

Remarks:

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

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	22 °C, 68 % RH
Tested By	Wade Huang		

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	114.8 PK			4.00 H	58	83.9	30.9
2	*2437.00	112.6 AV			4.00 H	58	81.7	30.9
3	4874.00	50.7 PK	74.0	-23.3	1.90 H	215	42.6	8.1
4	4874.00	47.0 AV	54.0	-7.0	1.90 H	215	38.9	8.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	123.8 PK			1.52 V	198	92.9	30.9
2	*2437.00	121.5 AV			1.52 V	198	90.6	30.9
3	4874.00	49.2 PK	74.0	-24.8	1.22 V	190	41.1	8.1
4	4874.00	44.2 AV	54.0	-9.8	1.22 V	190	36.1	8.1

Remarks:

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

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	22 °C, 68 % RH
Tested By	Wade Huang		

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			3.65 H	87	87.6	30.9
2	*2462.00	116.2 AV			3.65 H	87	85.3	30.9
3	2483.50	61.1 PK	74.0	-12.9	3.65 H	87	30.2	30.9
4	2483.50	48.6 AV	54.0	-5.4	3.65 H	87	17.7	30.9
5	4924.00	51.9 PK	74.0	-22.1	1.48 H	208	43.7	8.2
6	4924.00	48.4 AV	54.0	-5.6	1.48 H	208	40.2	8.2
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	*2462.00	123.8 PK			1.70 V	198	92.9	30.9
2	*2462.00	121.6 AV			1.70 V	198	90.7	30.9
3	2483.50	64.0 PK	74.0	-10.0	1.70 V	198	33.1	30.9
4	2483.50	53.0 AV	54.0	-1.0	1.70 V	198	22.1	30.9
5	4924.00	48.4 PK	74.0	-25.6	3.22 V	74	40.2	8.2
6	4924.00	44.5 AV	54.0	-9.5	3.22 V	74	36.3	8.2

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	802.11g	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	22 °C, 68 % RH
Tested By	Charles Hsiao		

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	60.2 PK	74.0	-13.8	3.76 H	113	29.2	31.0
2	2390.00	42.1 AV	54.0	-11.9	3.76 H	113	11.1	31.0
3	*2412.00	114.7 PK			3.76 H	113	83.8	30.9
4	*2412.00	107.4 AV			3.76 H	113	76.5	30.9
5	4824.00	48.3 PK	74.0	-25.7	1.95 H	222	40.2	8.1
6	4824.00	38.7 AV	54.0	-15.3	1.95 H	222	30.6	8.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	67.1 PK	74.0	-6.9	1.76 V	192	36.1	31.0
2	2390.00	53.0 AV	54.0	-1.0	1.76 V	192	22.0	31.0
3	*2412.00	122.7 PK			1.76 V	192	91.8	30.9
4	*2412.00	115.8 AV			1.76 V	192	84.9	30.9
5	4824.00	48.4 PK	74.0	-25.6	2.70 V	169	40.3	8.1
6	4824.00	39.7 AV	54.0	-14.3	2.70 V	169	31.6	8.1

Remarks:

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

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	22 °C, 68 % RH
Tested By	Charles Hsiao		

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	117.4 PK			3.75 H	113	86.5	30.9
2	*2437.00	110.3 AV			3.75 H	113	79.4	30.9
3	4874.00	50.4 PK	74.0	-23.6	1.90 H	214	42.3	8.1
4	4874.00	41.6 AV	54.0	-12.4	1.90 H	214	33.5	8.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	125.2 PK			1.76 V	192	94.3	30.9
2	*2437.00	118.3 AV			1.76 V	192	87.4	30.9
3	4874.00	49.4 PK	74.0	-24.6	2.70 V	168	41.3	8.1
4	4874.00	40.0 AV	54.0	-14.0	2.70 V	168	31.9	8.1

Remarks:

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

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	22 °C, 68 % RH
Tested By	Charles Hsiao		

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	114.5 PK			3.76 H	113	83.6	30.9
2	*2462.00	107.7 AV			3.76 H	113	76.8	30.9
3	2485.00	62.9 PK	74.0	-11.1	3.76 H	113	32.0	30.9
4	2485.00	45.6 AV	54.0	-8.4	3.76 H	113	14.7	30.9
5	4924.00	49.4 PK	74.0	-24.6	1.51 H	214	41.2	8.2
6	4924.00	39.5 AV	54.0	-14.5	1.51 H	214	31.3	8.2
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	*2462.00	122.1 PK			1.77 V	192	91.2	30.9
2	*2462.00	115.0 AV			1.77 V	192	84.1	30.9
3	2485.00	66.1 PK	74.0	-7.9	1.77 V	192	35.2	30.9
4	2485.00	52.5 AV	54.0	-1.5	1.77 V	192	21.6	30.9
5	4924.00	48.2 PK	74.0	-25.8	1.15 V	116	40.0	8.2
6	4924.00	38.5 AV	54.0	-15.5	1.15 V	116	30.3	8.2

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 (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	22 °C, 68 % RH
Tested By	Charles Hsiao		

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	3.76 H	113	29.0	31.0
2	2390.00	41.7 AV	54.0	-12.3	3.76 H	113	10.7	31.0
3	*2412.00	114.1 PK			3.76 H	113	83.2	30.9
4	*2412.00	106.3 AV			3.76 H	113	75.4	30.9
5	4824.00	48.3 PK	74.0	-25.7	1.95 H	223	40.2	8.1
6	4824.00	38.6 AV	54.0	-15.4	1.95 H	223	30.5	8.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	70.0 PK	74.0	-4.0	1.76 V	192	39.0	31.0
2	2390.00	53.0 AV	54.0	-1.0	1.76 V	192	22.0	31.0
3	*2412.00	122.2 PK			1.76 V	192	91.3	30.9
4	*2412.00	114.1 AV			1.76 V	192	83.2	30.9
5	4824.00	48.6 PK	74.0	-25.4	2.71 V	170	40.5	8.1
6	4824.00	38.7 AV	54.0	-15.3	2.71 V	170	30.6	8.1

Remarks:

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

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	22 °C, 68 % RH
Tested By	Charles Hsiao		

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	117.0 PK			3.75 H	113	86.1	30.9
2	*2437.00	109.6 AV			3.75 H	113	78.7	30.9
3	4874.00	50.5 PK	74.0	-23.5	1.50 H	219	42.4	8.1
4	4874.00	41.7 AV	54.0	-12.3	1.50 H	219	33.6	8.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	125.8 PK			1.76 V	192	94.9	30.9
2	*2437.00	117.4 AV			1.76 V	192	86.5	30.9
3	4874.00	49.7 PK	74.0	-24.3	1.50 V	126	41.6	8.1
4	4874.00	40.1 AV	54.0	-13.9	1.50 V	126	32.0	8.1

Remarks:

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

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	22 °C, 68 % RH
Tested By	Charles Hsiao		

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			3.61 H	94	86.5	30.9
2	*2462.00	108.9 AV			3.61 H	94	78.0	30.9
3	2483.50	64.7 PK	74.0	-9.3	3.61 H	94	33.8	30.9
4	2483.50	48.7 AV	54.0	-5.3	3.61 H	94	17.8	30.9
5	4924.00	48.9 PK	74.0	-25.1	1.50 H	215	40.7	8.2
6	4924.00	39.2 AV	54.0	-14.8	1.50 H	215	31.0	8.2
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	*2462.00	124.4 PK			1.76 V	186	93.5	30.9
2	*2462.00	115.1 AV			1.76 V	186	84.2	30.9
3	2483.50	66.5 PK	74.0	-7.5	1.76 V	186	35.6	30.9
4	2483.50	52.6 AV	54.0	-1.4	1.76 V	186	21.7	30.9
5	4924.00	48.3 PK	74.0	-25.7	1.50 V	212	40.1	8.2
6	4924.00	38.9 AV	54.0	-15.1	1.50 V	212	30.7	8.2

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 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	22 °C, 68 % RH
Tested By	Charles Hsiao		

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	3.75 H	83	30.1	31.0
2	2390.00	46.0 AV	54.0	-8.0	3.75 H	83	15.0	31.0
3	*2422.00	118.7 PK			3.75 H	83	87.8	30.9
4	*2422.00	108.9 AV			3.75 H	83	78.0	30.9
5	2483.50	61.5 PK	74.0	-12.5	3.75 H	83	30.6	30.9
6	2483.50	43.5 AV	54.0	-10.5	3.75 H	83	12.6	30.9
7	4844.00	48.0 PK	74.0	-26.0	1.53 H	160	40.0	8.0
8	4844.00	38.4 AV	54.0	-15.6	1.53 H	160	30.4	8.0
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	67.6 PK	74.0	-6.4	1.76 V	188	36.6	31.0
2	2390.00	52.9 AV	54.0	-1.1	1.76 V	188	21.9	31.0
3	*2422.00	125.1 PK			1.76 V	188	94.2	30.9
4	*2422.00	115.6 AV			1.76 V	188	84.7	30.9
5	2483.50	63.2 PK	74.0	-10.8	1.76 V	188	32.3	30.9
6	2483.50	48.3 AV	54.0	-5.7	1.76 V	188	17.4	30.9
7	4844.00	48.5 PK	74.0	-25.5	1.54 V	142	40.5	8.0
8	4844.00	39.1 AV	54.0	-14.9	1.54 V	142	31.1	8.0

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 (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	22 °C, 68 % RH
Tested By	Charles Hsiao		

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	3.37 H	83	29.5	31.0
2	2390.00	44.4 AV	54.0	-9.6	3.37 H	83	13.4	31.0
3	*2437.00	117.3 PK			3.37 H	83	86.4	30.9
4	*2437.00	107.5 AV			3.37 H	83	76.6	30.9
5	2483.50	61.7 PK	74.0	-12.3	3.37 H	83	30.8	30.9
6	2483.50	46.2 AV	54.0	-7.8	3.37 H	83	15.3	30.9
7	4874.00	46.6 PK	74.0	-27.4	1.49 H	118	38.5	8.1
8	4874.00	37.5 AV	54.0	-16.5	1.49 H	118	29.4	8.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	63.6 PK	74.0	-10.4	1.76 V	192	32.6	31.0
2	2390.00	50.9 AV	54.0	-3.1	1.76 V	192	19.9	31.0
3	*2437.00	124.5 PK			1.76 V	192	93.6	30.9
4	*2437.00	114.4 AV			1.76 V	192	83.5	30.9
5	2483.50	66.3 PK	74.0	-7.7	1.76 V	192	35.4	30.9
6	2483.50	52.5 AV	54.0	-1.5	1.76 V	192	21.6	30.9
7	4874.00	46.9 PK	74.0	-27.1	1.37 V	332	38.8	8.1
8	4874.00	37.8 AV	54.0	-16.2	1.37 V	332	29.7	8.1

Remarks:

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

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	22 °C, 68 % RH
Tested By	Charles Hsiao		

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	61.0 PK	74.0	-13.0	3.37 H	83	30.0	31.0
2	2390.00	40.9 AV	54.0	-13.1	3.37 H	83	9.9	31.0
3	*2452.00	116.7 PK			3.37 H	83	85.8	30.9
4	*2452.00	106.9 AV			3.37 H	83	76.0	30.9
5	2483.50	63.2 PK	74.0	-10.8	3.37 H	83	32.3	30.9
6	2483.50	46.7 AV	54.0	-7.3	3.37 H	83	15.8	30.9
7	4904.00	46.6 PK	74.0	-27.4	1.59 H	99	38.4	8.2
8	4904.00	37.8 AV	54.0	-16.2	1.59 H	99	29.6	8.2
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	60.5 PK	74.0	-13.5	1.76 V	192	29.5	31.0
2	2390.00	42.5 AV	54.0	-11.5	1.76 V	192	11.5	31.0
3	*2452.00	123.4 PK			1.76 V	192	92.5	30.9
4	*2452.00	113.6 AV			1.76 V	192	82.7	30.9
5	2483.50	71.7 PK	74.0	-2.3	1.76 V	192	40.8	30.9
6	2483.50	52.9 AV	54.0	-1.1	1.76 V	192	22.0	30.9
7	4904.00	47.0 PK	74.0	-27.0	1.54 V	190	38.8	8.2
8	4904.00	38.1 AV	54.0	-15.9	1.54 V	190	29.9	8.2

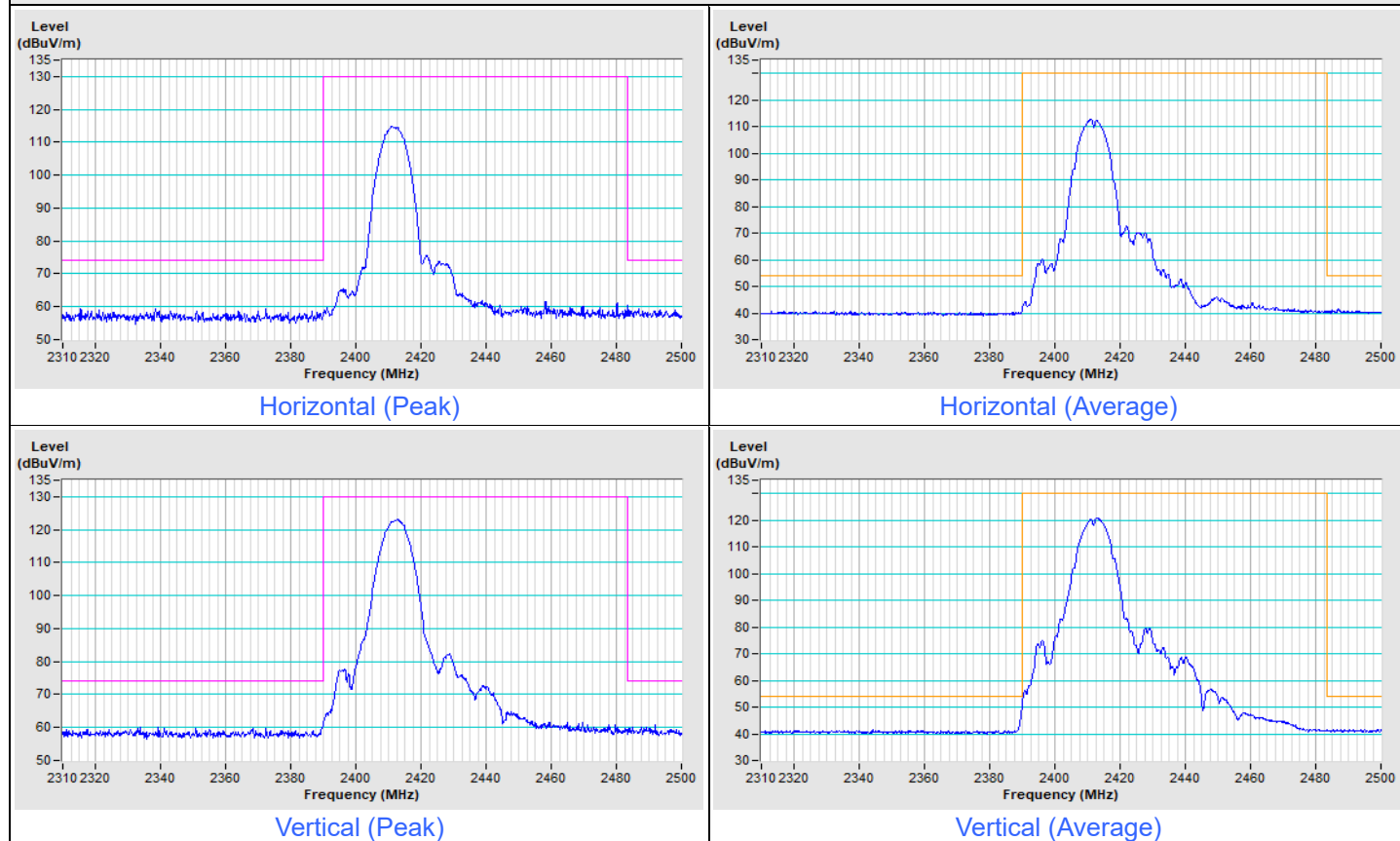
Remarks:

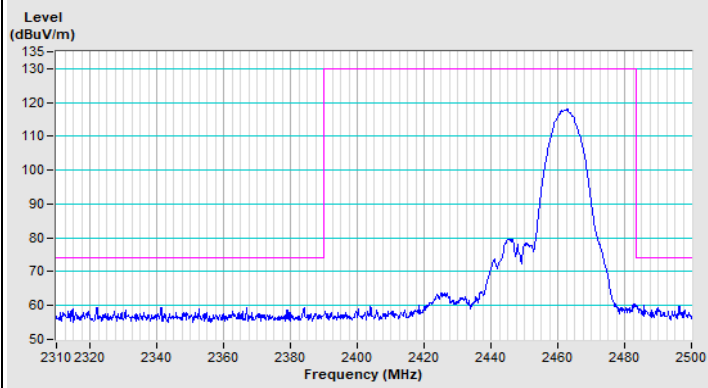
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency,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

Plot of Band Edge

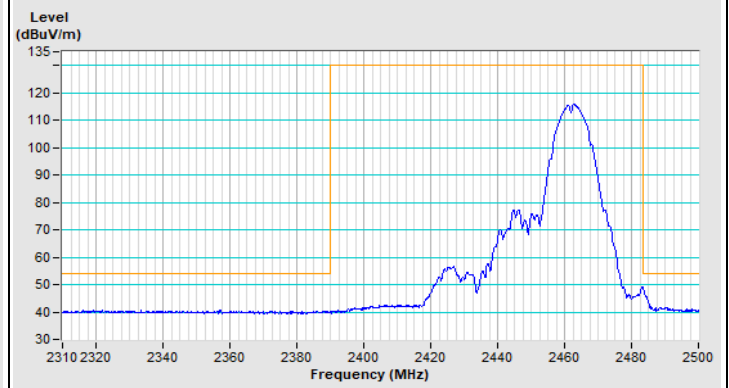
Frequency Range	2.31 GHz ~ 2.5 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11b Channel 1

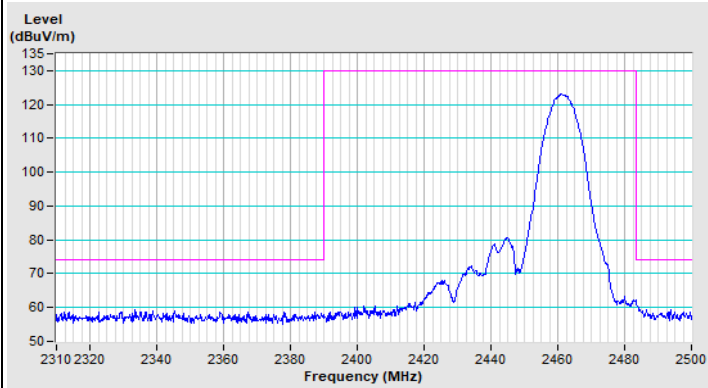


802.11b Channel 11

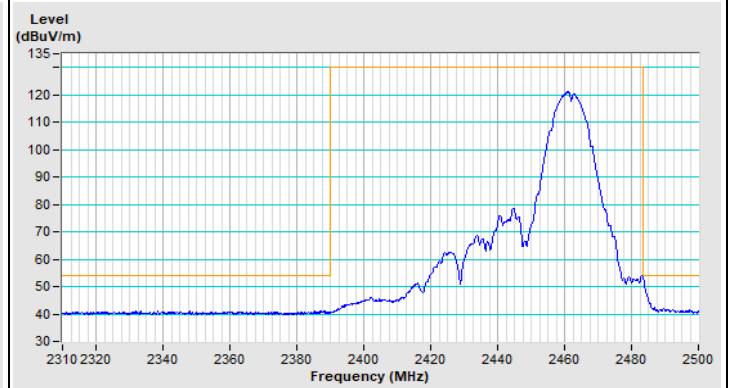
Horizontal (Peak)



Horizontal (Average)



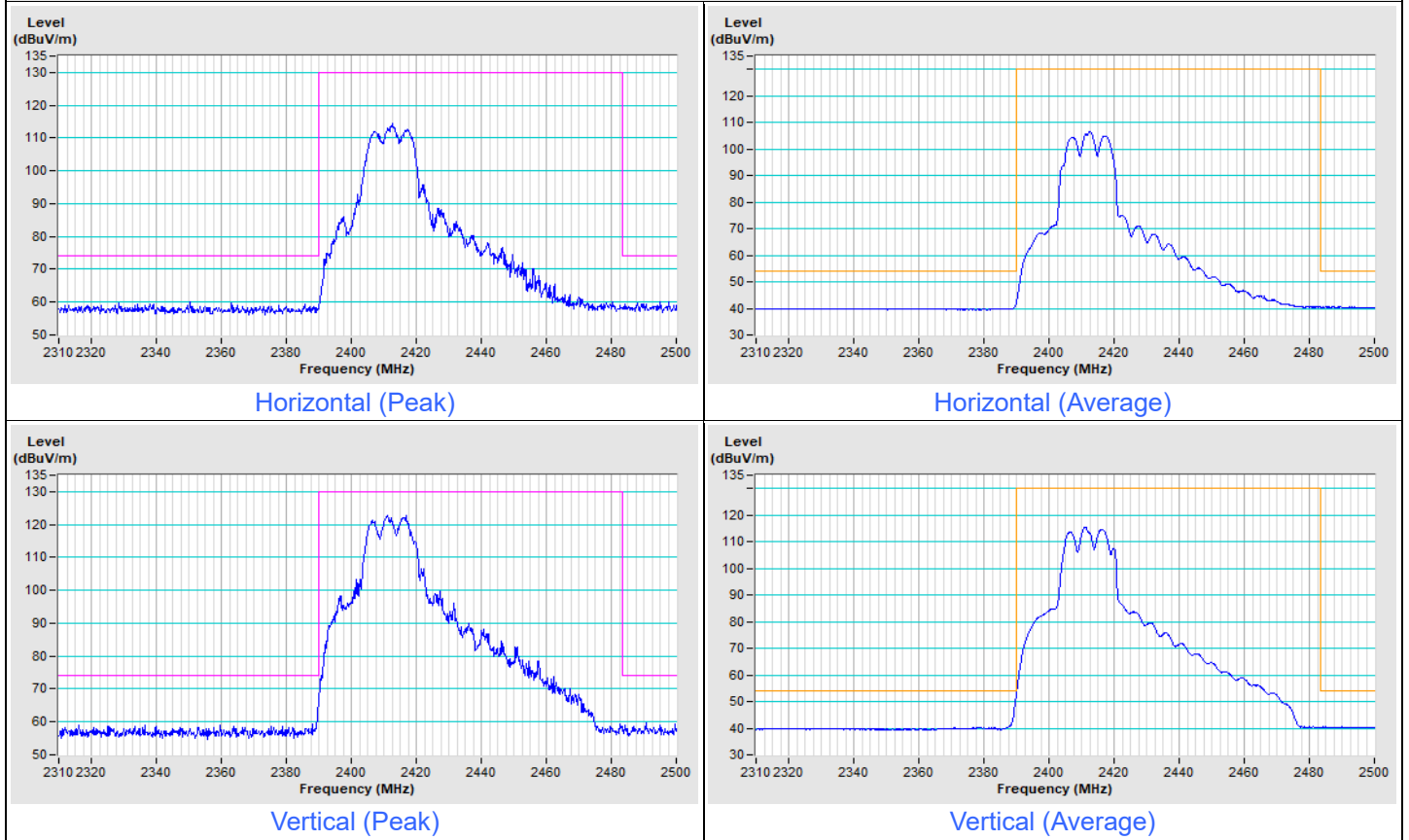
Vertical (Peak)



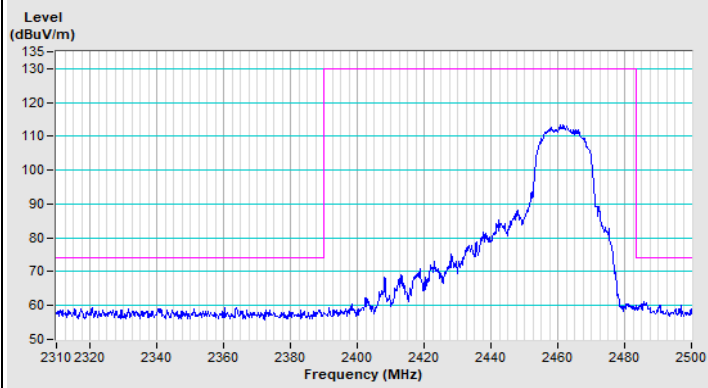
Vertical (Average)

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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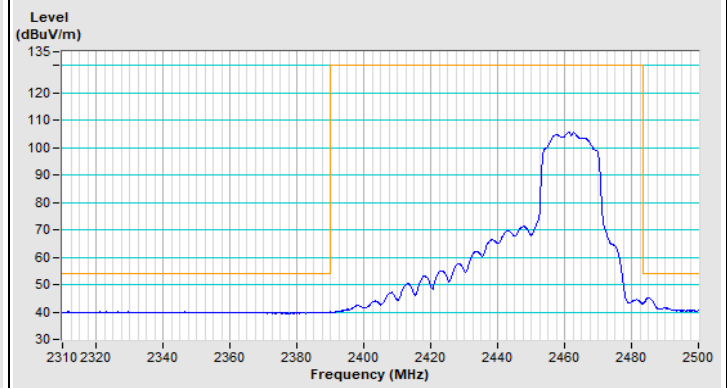
802.11g Channel 1



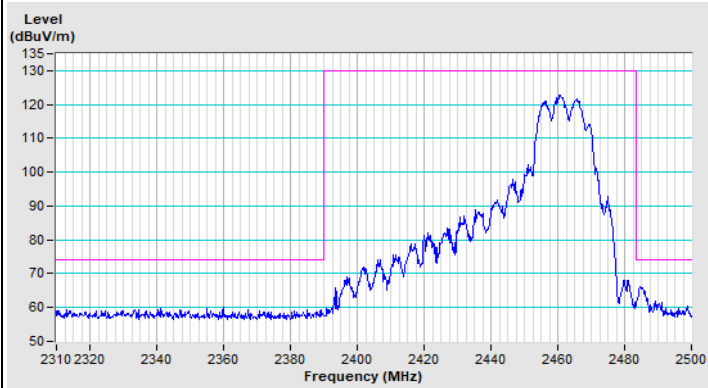
802.11g Channel 11



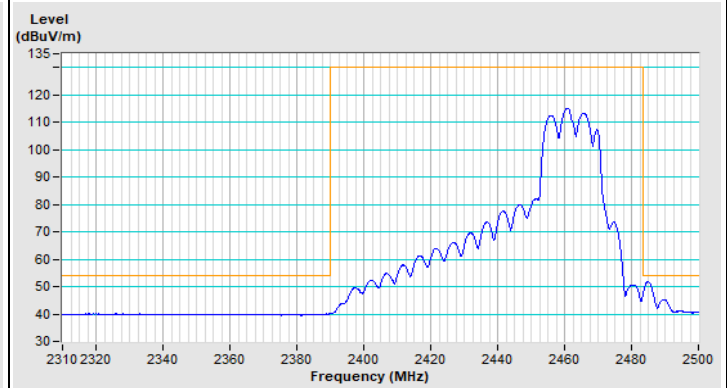
Horizontal (Peak)



Horizontal (Average)



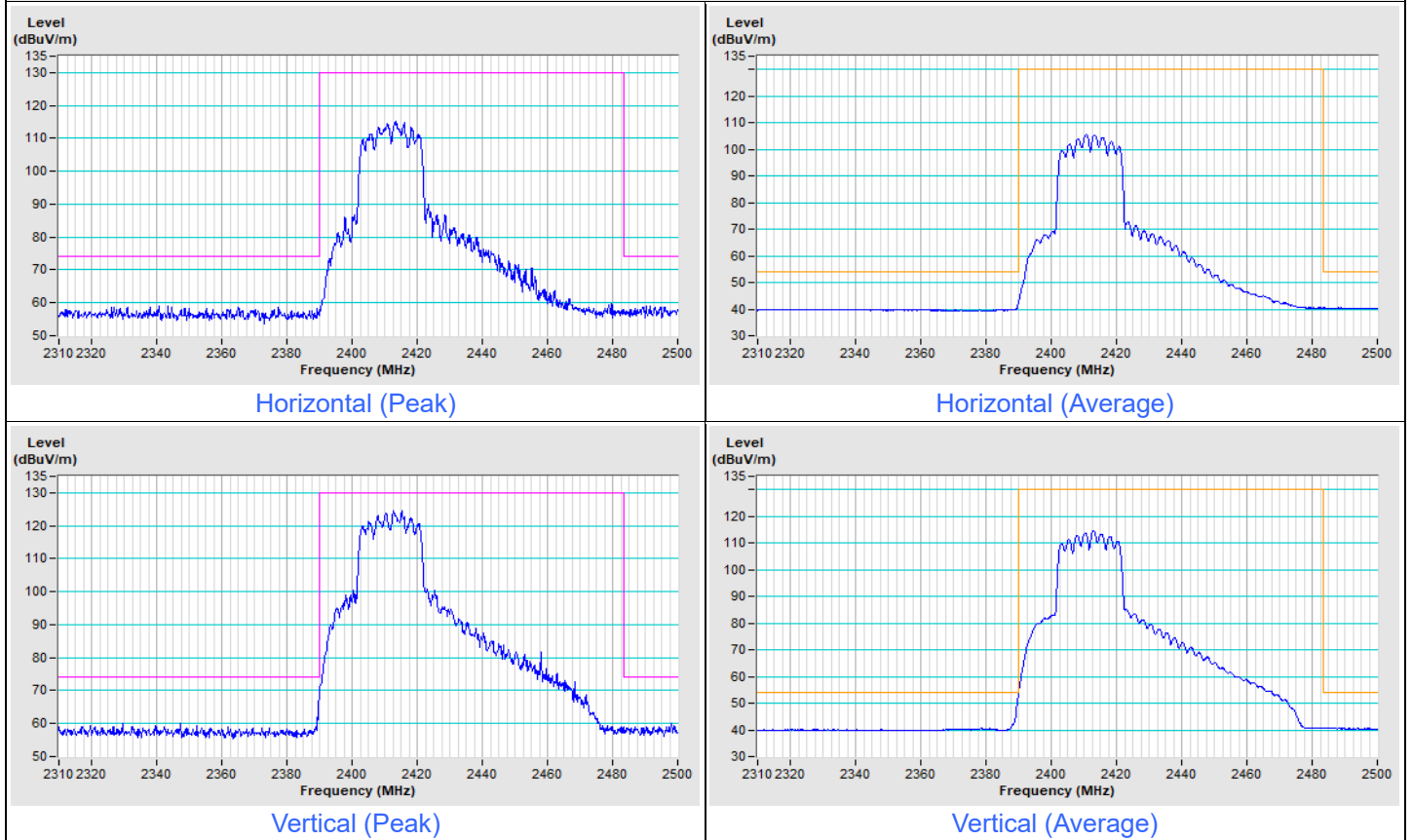
Vertical (Peak)



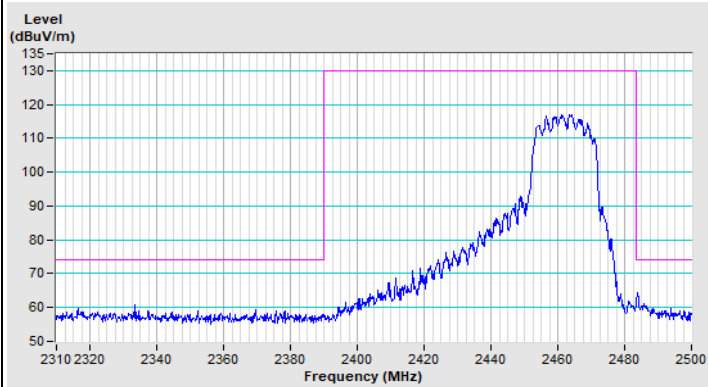
Vertical (Average)

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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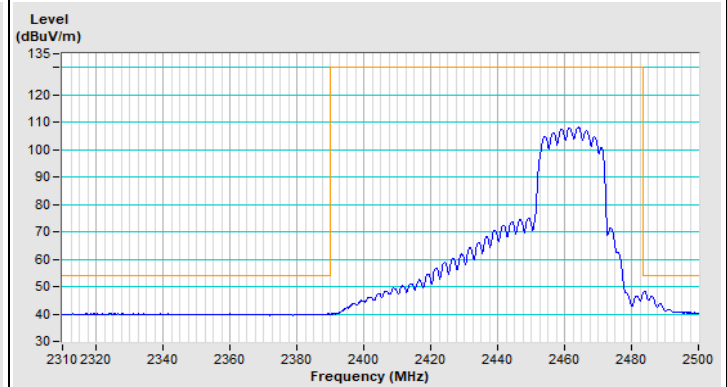
802.11be (EHT20) Channel 1



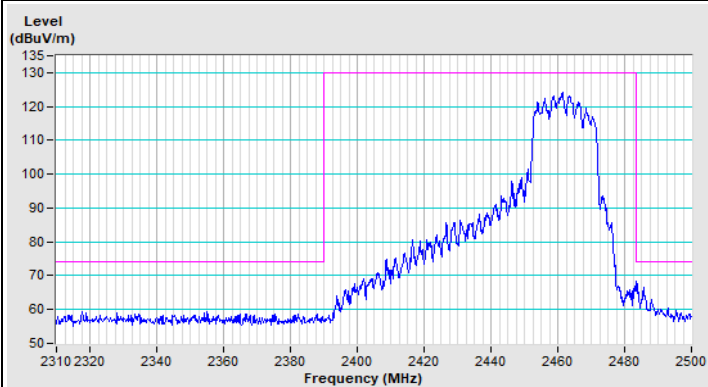
802.11be (EHT20) Channel 11



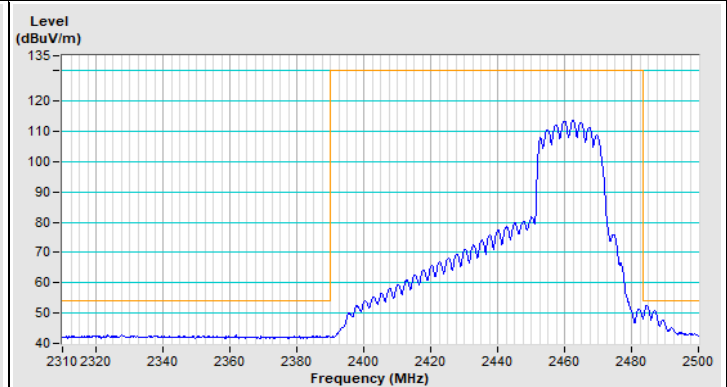
Horizontal (Peak)



Horizontal (Average)



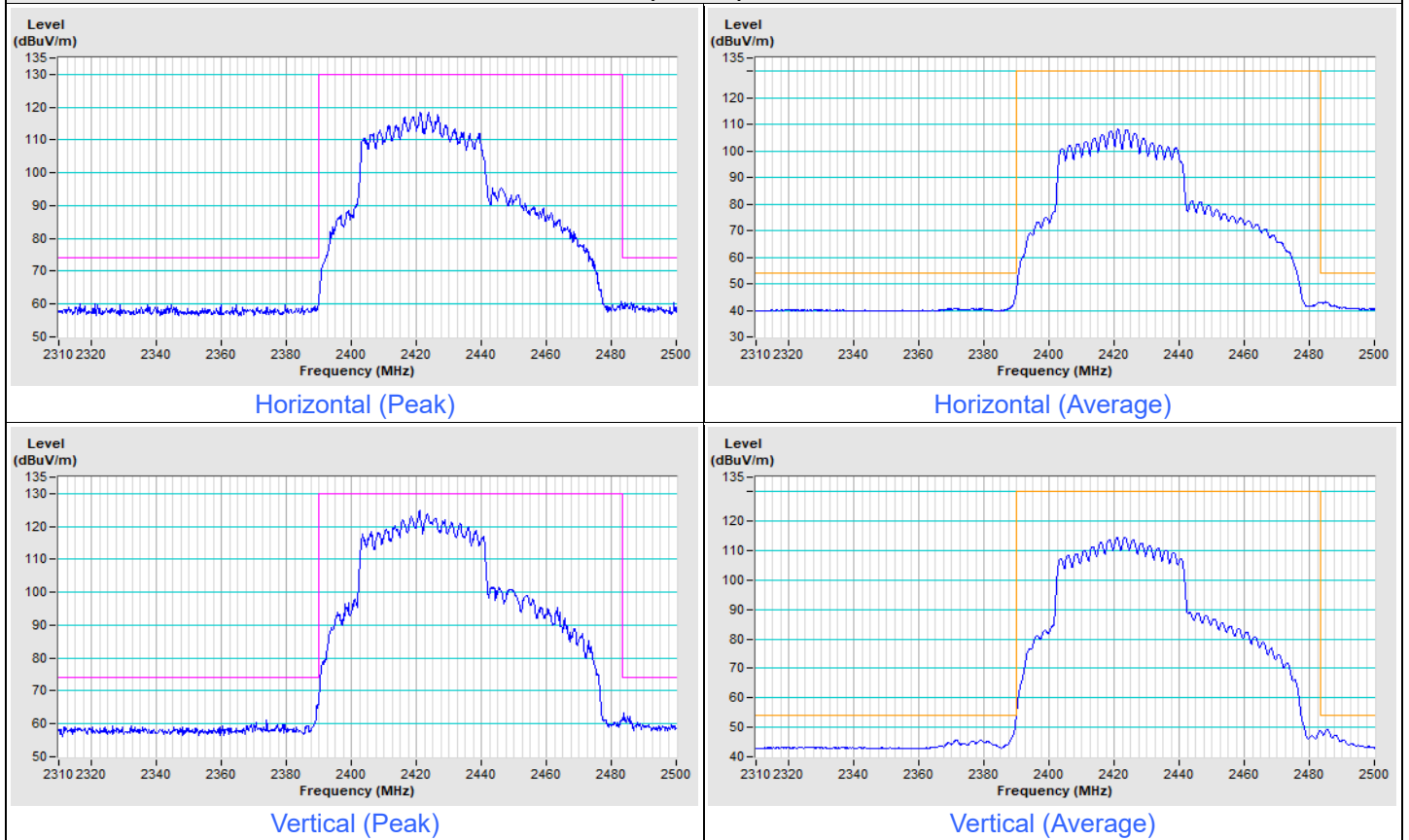
Vertical (Peak)



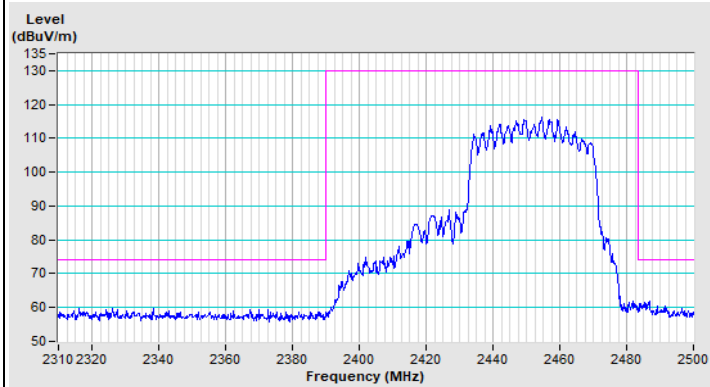
Vertical (Average)

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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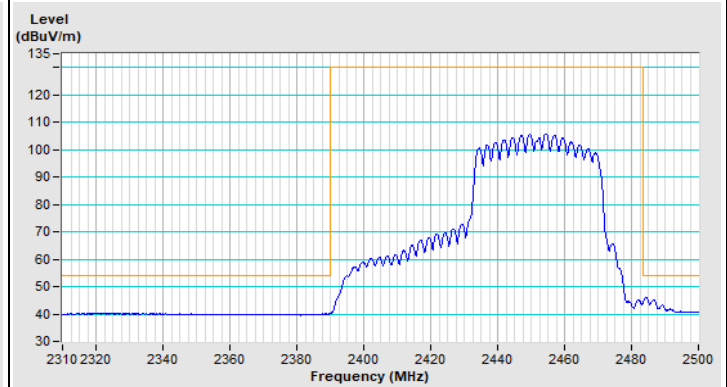
802.11be (EHT40) Channel 3



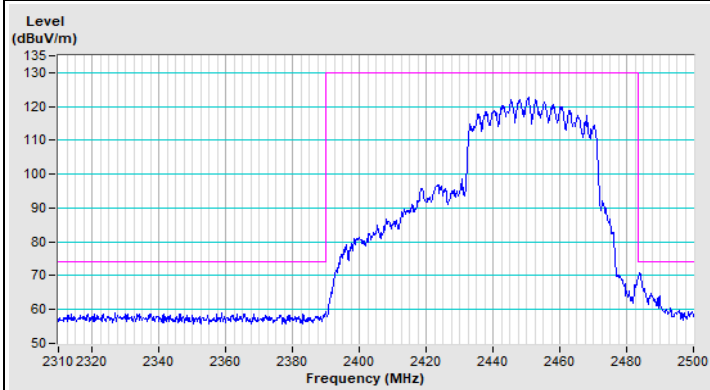
802.11be (EHT40) Channel 9



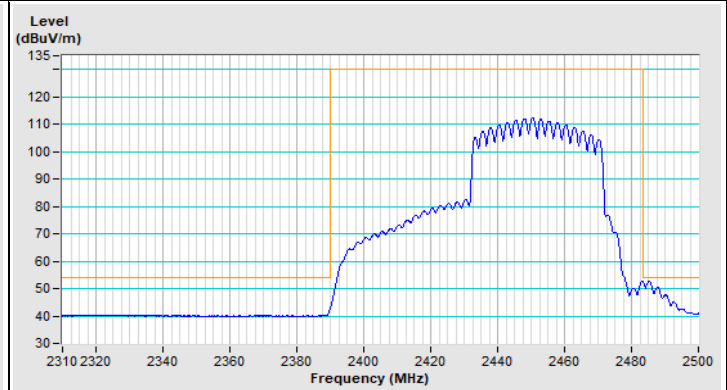
Horizontal (Peak)



Horizontal (Average)



Vertical (Peak)



Vertical (Average)

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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