

TEST REPORT

CERTIFICATE OF CONFORMITY

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

Report No.: RFBDMW-WTW-P26020388

FCC ID: M4Y-AS710

Product: Wi-Fi 7 Indoor Access Point

Brand: ZCOM

Model No.: AS710

Received Date: 2026/3/2

Test Date: 2026/5/13 ~ 2026/6/17

Issued Date: 2026/8/5

Applicant: Z-COM, INC.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Hsin Chu Laboratory

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FCC Registration / 723255 / TW2022

Designation Number:

Approved by: _____, **Date:** 2026/8/5
May Chen / Manager

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Prepared by: Vito Lung / Specialist



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Table of Contents

Release Control Record	4
1 Certificate.....	5
2 Summary of Test Results	6
2.1 Measurement Uncertainty	6
2.2 Supplementary Information	6
3 General Information	7
3.1 General Description	7
3.2 Antenna Description of EUT	8
3.3 Channel List	9
3.4 Test Mode Applicability and Tested Channel Detail	10
3.5 Duty Cycle of Test Signal	11
3.6 Test Program Used and Operation Descriptions	13
3.7 Connection Diagram of EUT and Peripheral Devices	13
3.8 Configuration of Peripheral Devices and Cable Connections	15
4 Test Instruments	16
4.1 RF Output Power	16
4.2 Power Spectral Density	16
4.3 6 dB Bandwidth	16
4.4 Conducted Out of Band Emissions	16
4.5 AC Power Conducted Emissions	17
4.6 Unwanted Emissions below 1 GHz	17
4.7 Unwanted Emissions above 1 GHz	18
5 Limits of Test Items.....	19
5.1 RF Output Power	19
5.2 Power Spectral Density	19
5.3 6 dB Bandwidth	19
5.4 Conducted Out of Band Emissions	19
5.5 AC Power Conducted Emissions	19
5.6 Unwanted Emissions below 1 GHz	19
5.7 Unwanted Emissions above 1 GHz	20
6 Test Arrangements	21
6.1 RF Output Power	21
6.1.1 Test Setup	21
6.1.2 Test Procedure	21
6.2 Power Spectral Density	21
6.2.1 Test Setup	21
6.2.2 Test Procedure	21
6.3 6 dB Bandwidth	22
6.3.1 Test Setup	22
6.3.2 Test Procedure	22
6.4 Conducted Out of Band Emissions	23
6.4.1 Test Setup	23
6.4.2 Test Procedure	23
6.5 AC Power Conducted Emissions	24
6.5.1 Test Setup	24
6.5.2 Test Procedure	24
6.6 Unwanted Emissions below 1 GHz	25
6.6.1 Test Setup	25
6.6.2 Test Procedure	26
6.7 Unwanted Emissions above 1 GHz	27
6.7.1 Test Setup	27
6.7.2 Test Procedure	27
7 Test Results of Test Item	28

7.1	RF Output Power.....	28
7.2	Power Spectral Density	32
7.3	6 dB Bandwidth	34
7.4	Conducted Out of Band Emissions	36
7.5	AC Power Conducted Emissions	44
7.6	Unwanted Emissions below 1 GHz	46
7.7	Unwanted Emissions above 1 GHz.....	48
8	Pictures of Test Arrangements	72
9	Information of the Testing Laboratories	73

Release Control Record

Issue No.	Description	Date Issued
RFBDMW-WTW-P26020388	Original release.	2026/8/5

1 Certificate

Product: Wi-Fi 7 Indoor Access Point

Brand: ZCOM

Test Model: AS710

Sample Status: Engineering sample

Applicant: Z-COM, INC.

Test Date: 2026/5/13 ~ 2026/6/17

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

Measurement procedure: ANSI C63.10-2020
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 -16.36 dB at 0.15391 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -5.2 dB at 50.47 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.4 dB at 2390.00 MHz and 4824.00 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	-	1.1 dB
Power Spectral Density	-	1.3 dB
6 dB Bandwidth	-	1050.00 Hz
Conducted Out of Band Emissions	9 kHz ~ 40 GHz	2.6 dB
AC Power Conducted Emissions	150 kHz ~ 30 MHz	1.9 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.1 dB
	30 MHz ~ 1 GHz	5.5 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	5.1 dB
	18 GHz ~ 40 GHz	5.3 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	Wi-Fi 7 Indoor Access Point
Brand	ZCOM
Test Model	AS710
Status of EUT	Engineering sample
Power Supply Rating	12 Vdc from AC adapter 55 Vdc from PoE adapter
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in VHT mode 1024QAM for OFDMA in 11ax mode 4096QAM for OFDMA in 11be 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
Partial RU Mode	Not support
Channel Puncturing	Not support
Output Power	997.78 mW (29.99 dBm)

Note:

1. There are WLAN (2.4 GHz & 5 GHz & 6 GHz) technology used for the EUT.
2. Simultaneously transmission combination.

Combination	Technology		
1	WLAN (2.4 GHz)	WLAN (5 GHz)	WLAN (6 GHz)

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

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.	Brand	Model	Antenna Net Gain(dBi)	Frequency range (GHz)	Antenna Type	Connector Type	Cable Length (mm)
1	2G-1	Bdtron	1001A0049	3.83	2.4~2.5	PIFA	ipex(MHF)	130
2	2G-2			4.21	2.4~2.5	PIFA	ipex(MHF)	255
3	5G-1			4.31	5.15~5.25	PIFA	ipex(MHF)	140
				3.97	5.25~5.35			
				4.37	5.47~5.725			
				4.63	5.725~5.85			
4	5G-2			3.79	5.15~5.25	PIFA	ipex(MHF)	200
				3.67	5.25~5.35			
				5.85	5.47~5.725			
				4.61	5.725~5.85			
5	6G-1			6.64	5.925~6.425	PIFA	ipex(MHF)	50
6	6G-2			6	5.925~6.425	PIFA	ipex(MHF)	190

* 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:

- 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 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. EUT can be used in the following ways: Ceiling/ Wall mount. Pre-scan these ways and find the worst case as a representative test condition. 2. EUT can be powered by: POE (Model: PD-9001-10GC/AC)/ AC Adapter (Model: DSA-36PFN-12 FUS 120300). Pre-scan these modes and find the worst case 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. EUT worst condition of placement: Ceiling 2. EUT worst condition of powered: AC Adapter (Model: DSA-36PFN-12 FUS 120300)

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	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
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	11	DBPSK	1Mb/s
Unwanted Emissions below 1 GHz	802.11b	CDD	11	DBPSK	1Mb/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

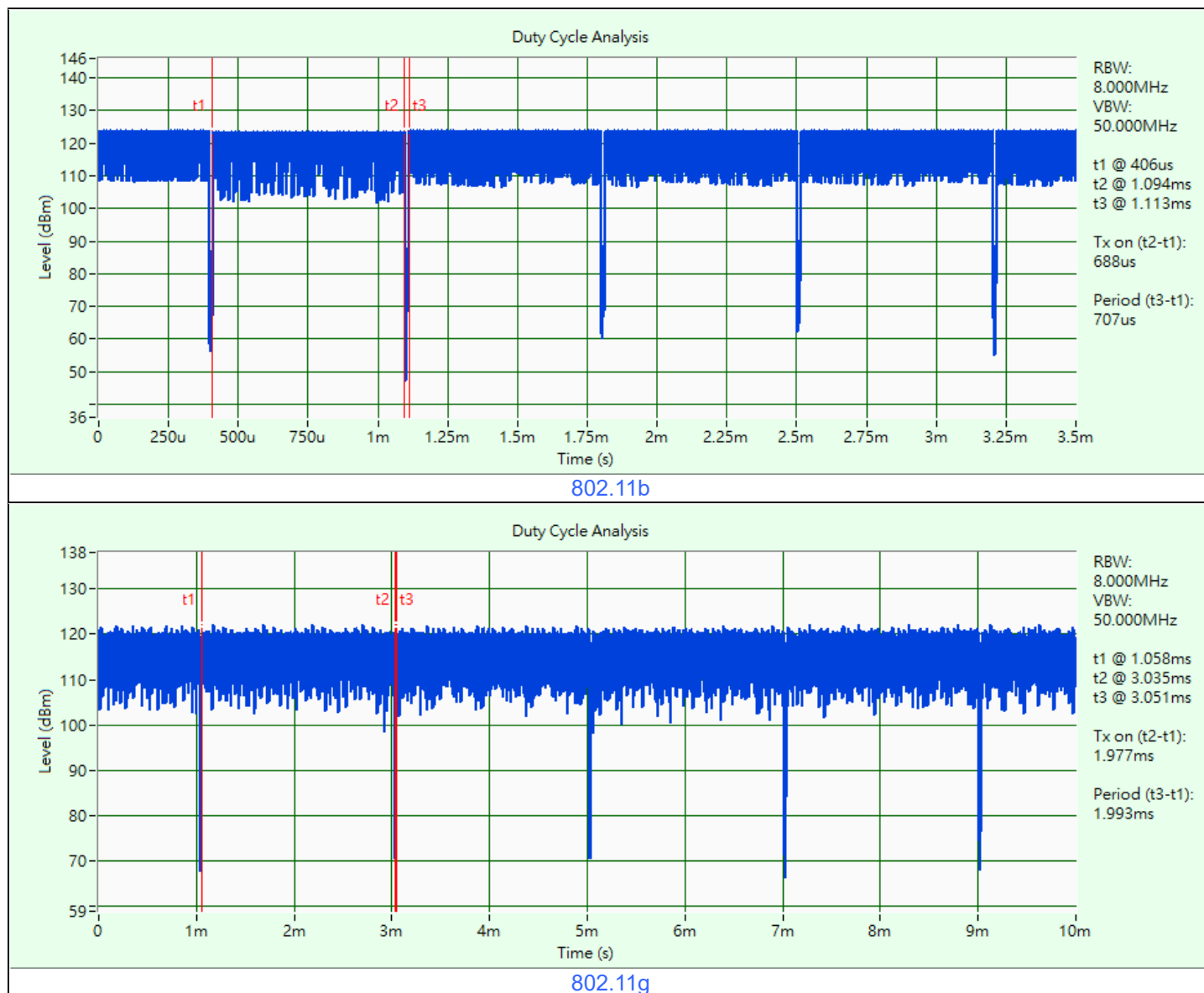
3.5 Duty Cycle of Test Signal

802.11b: Duty cycle = $0.688 \text{ ms} / 0.707 \text{ ms} \times 100\% = 97.3\%$, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.12 \text{ dB}$

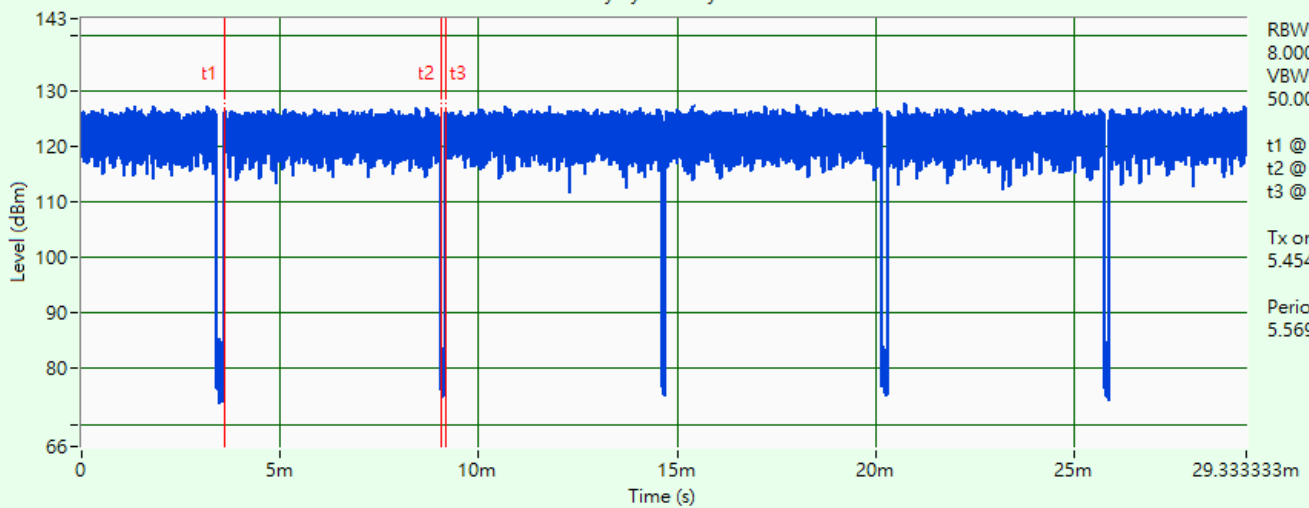
802.11g: Duty cycle = $1.977 \text{ ms} / 1.993 \text{ ms} \times 100\% = 99.2\%$

802.11be (EHT20): Duty cycle = $5.454 \text{ ms} / 5.569 \text{ ms} \times 100\% = 97.9\%$, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.09 \text{ dB}$

802.11be (EHT40): Duty cycle = $5.453 \text{ ms} / 5.622 \text{ ms} \times 100\% = 97.0\%$, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.13 \text{ dB}$

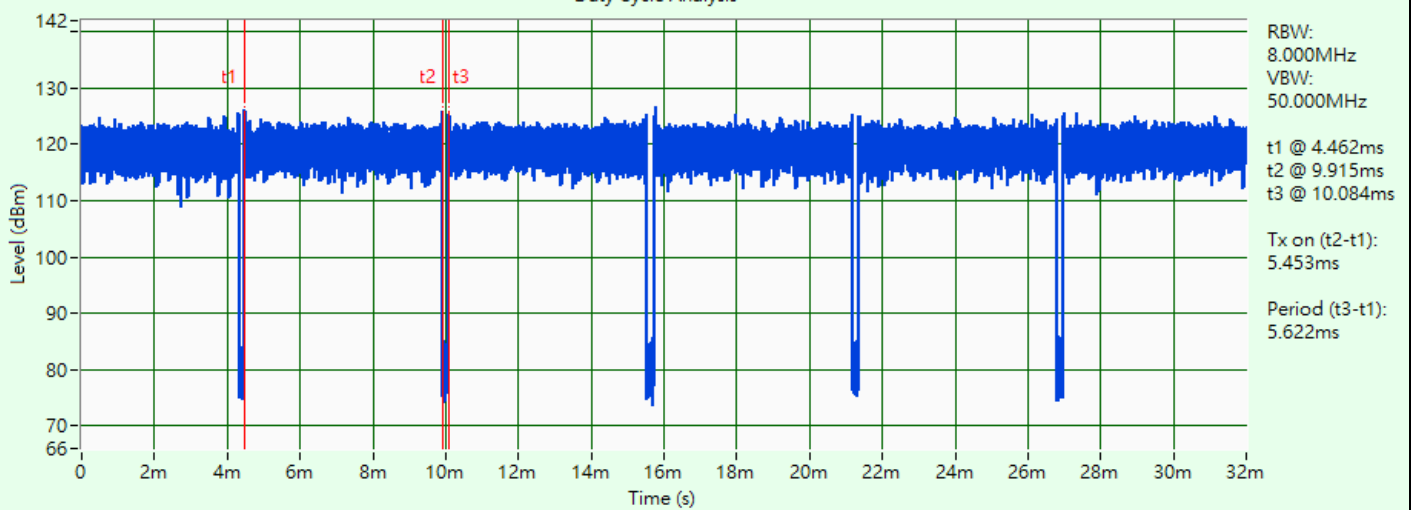


Duty Cycle Analysis



802.11be (EHT20)

Duty Cycle Analysis



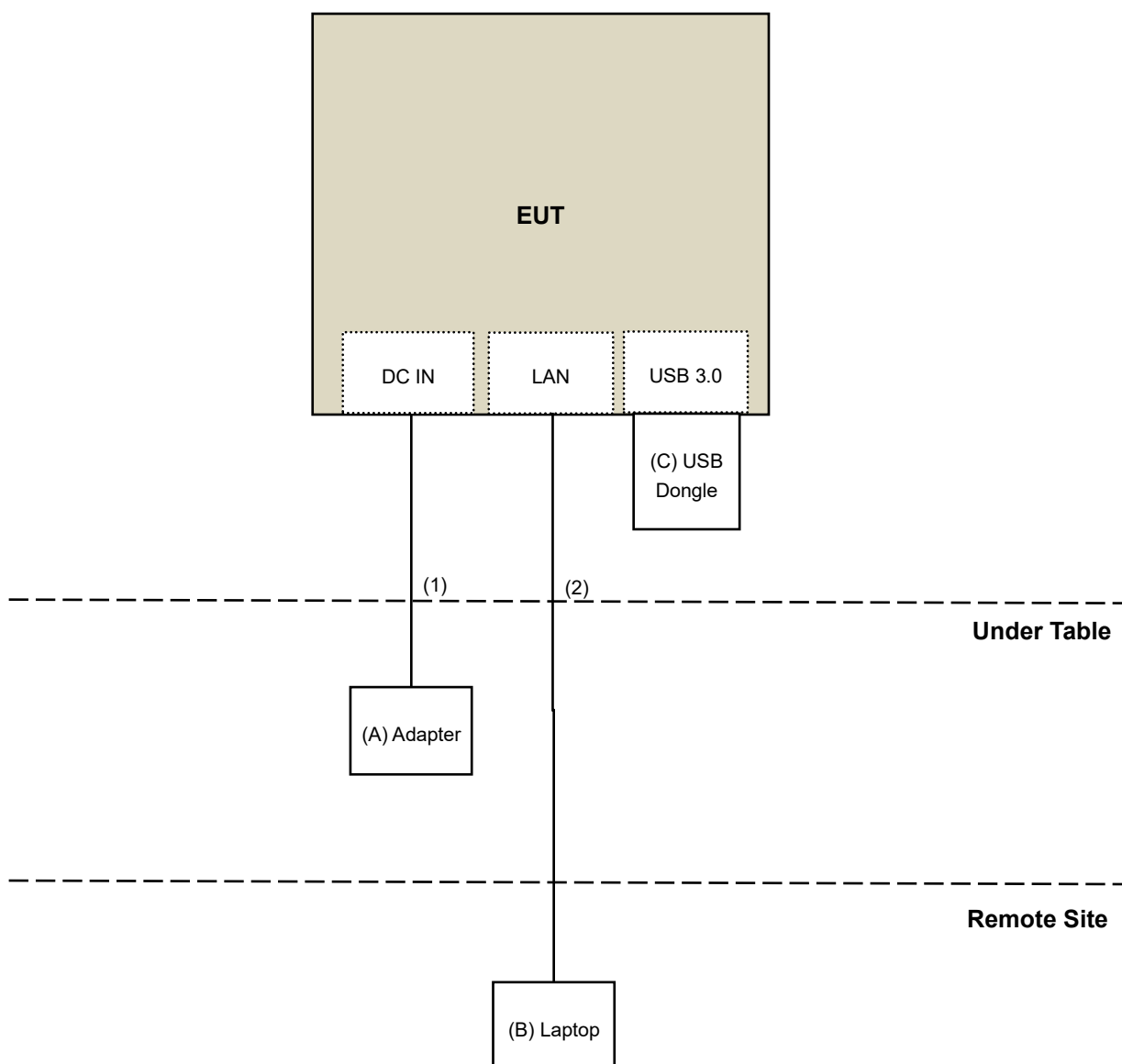
802.11be (EHT40)

3.6 Test Program Used and Operation Descriptions

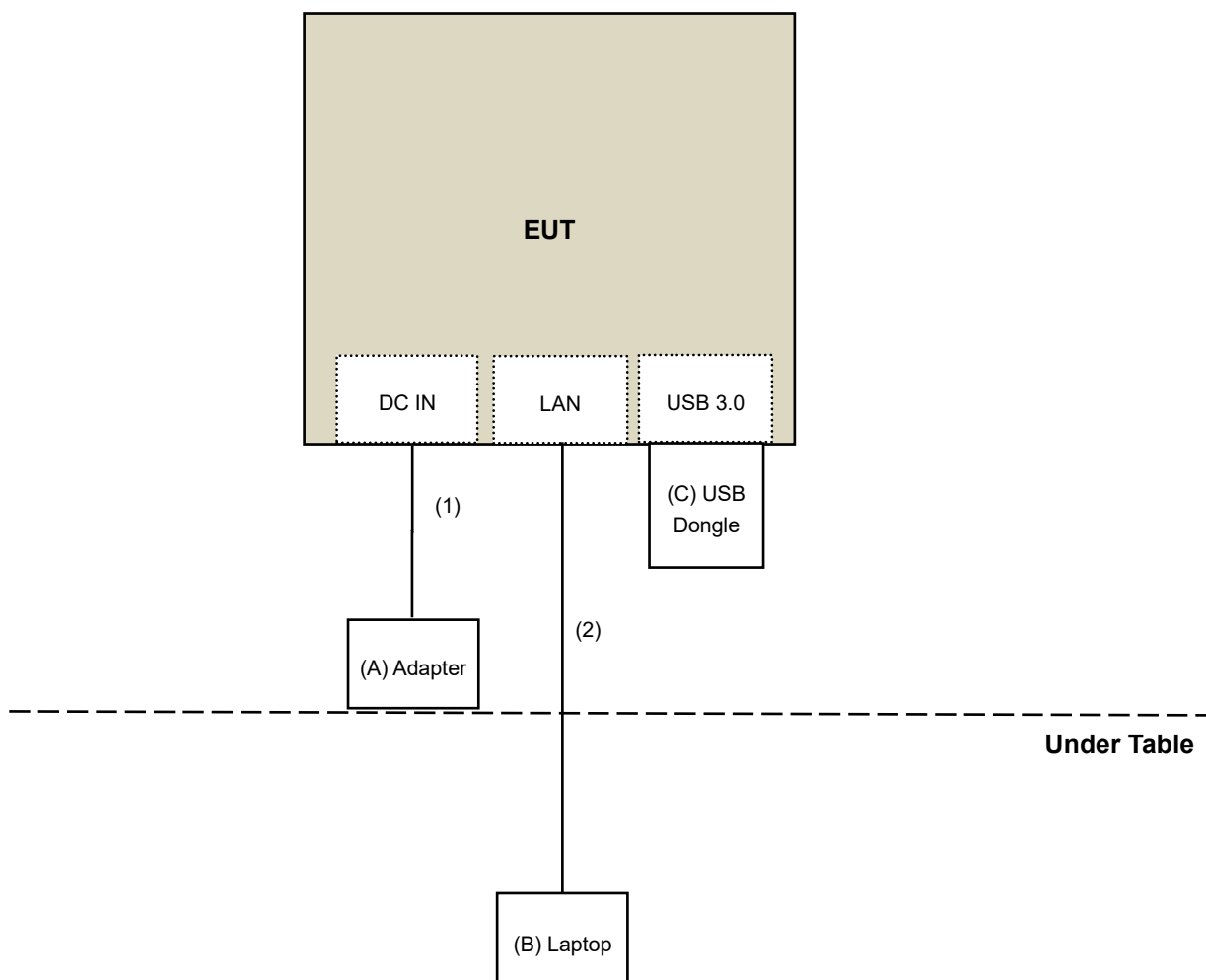
Controlling software (QPSR V6.00.00228.1) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices

For Unwanted Emissions test:



For AC Power Conducted Emission test:



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Adaptor	DEE VAN	DSA-36PFN-12 FUS 120300	E135856	N/A	Supplied by applicant
B	Laptop	DELL	E6230	9CGDLX1	N/A	Provided by Lab
C	USB Dongle	SANDISK	SDDDC3-032G- I35NB	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	DC Cable	1	1.5	No	0	Supplied by applicant
2	RJ-45 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
Fixed Attenuator Woken	00800A1K01A-20	00800A1K01A-20-02	2026/5/21	2027/5/20
Pulse Power Sensor Anritsu	MA2411B	1726434	2025/6/3	2026/6/2
RF Power Meter Anritsu	ML2495A	1529002	2025/6/3	2026/6/2

Notes:

1. The test was performed in HC - Oven room 2(Hsinchu).
2. Tested Date: 2026/5/21

4.2 Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2026/5/21	2027/5/20
PXA Signal Analyzer Keysight	N9030B	MY57142938	2026/4/17	2027/4/16
Software	ADT_RF Test Software v8.5.6.4	N/A	N/A	N/A

Notes:

1. The test was performed in HC - Oven room 2(Hsinchu).
2. Tested Date: 2026/5/21

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 Telegartner	50 ohm	3	2025/10/29	2026/10/28
EMI Test Receiver R&S	ESCS 30	100375	2026/5/20	2027/5/19
Fixed Attenuator STI	STI02-2200-10	005	2026/2/9	2027/2/8
LISN R&S	ESH3-Z5	835239/001	2026/3/30	2027/3/29
		848773/004	2025/10/3	2026/10/2
RF Coaxial Cable JYEBAO	5D-FB	COCCAB-001	2026/2/9	2027/2/8
Software BVADT	BVADT_Cond_V7.4.1.0	N/A	N/A	N/A

Notes:

1. The test was performed in HC - Conduction 1(Hsinchu).
2. Tested Date: 2026/6/17

4.6 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-406	2025/9/17	2026/9/16
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Fixed Attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-03	2026/2/7	2027/2/6
Loop Antenna TESEQ	HLA 6121	63620	2025/10/20	2026/10/19
MXE EMI Receiver Agilent	N9038A	MY51210202	2025/7/30	2026/7/29
Preamplifier EMCI	EMC330N	980701	2026/2/7	2027/2/6
RF Coaxial Cable mTJ	100100-CFD400LW-200	CFD400-200	2026/2/7	2027/2/6
	100100-CFD400LW-400	CFD400-400	2026/2/7	2027/2/6
	100100-CFD400LW-800	CFD400-800	2026/2/7	2027/2/6
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in HC - 966 Chamber No. 4(Hsinchu).
2. Tested Date: 2026/6/16

4.7 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-783	2025/11/9	2026/11/8
	BBHA 9170	9170-739	2025/11/9	2026/11/8
MXA Signal Analyzer Keysight	N9020B	MY60112410	2026/3/26	2027/3/25
Preamplifier EMCI	EMC12630SE	980688	2025/8/7	2026/8/6
	EMC184045SE	980387	2025/8/7	2026/8/6
RF Coaxial Cable EMCI	EMC102-KM-KM-1200	160924	2026/1/15	2027/1/14
	EMC102-KM-KM-4000	200214	2026/1/15	2027/1/14
	EMC104-SM-SM-1200	160922	2026/1/10	2027/1/9
	EMC104-SM-SM-2000	180502	2026/1/10	2027/1/9
	EMC104-SM-SM-6000	210704	2025/10/22	2026/10/21
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in HC - 966 Chamber No. 4(Hsinchu).
2. Tested Date: 2026/5/13 ~ 2026/5/28

5 Limits of Test Items

5.1 RF Output Power

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

Per KDB 662911 D01 Multiple Transmitter Output Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

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

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

5.2 Power Spectral Density

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

5.3 6 dB Bandwidth

The minimum of 6 dB Bandwidth Measurement is 0.5 MHz.

5.4 Conducted Out of Band Emissions

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

5.5 AC Power Conducted Emissions

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Notes:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

5.6 Unwanted Emissions below 1 GHz

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

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	$2400/F(\text{kHz})$	300
0.490 ~ 1.705	$24000/F(\text{kHz})$	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Notes:

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

5.7 Unwanted Emissions above 1 GHz

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

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

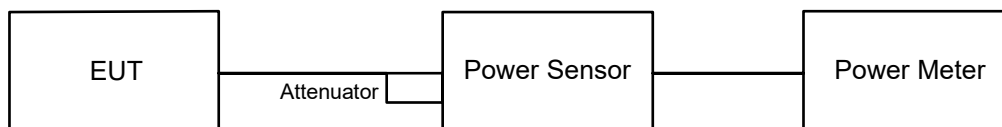
Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

6 Test Arrangements

6.1 RF Output Power

6.1.1 Test Setup



6.1.2 Test Procedure

Peak Power:

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

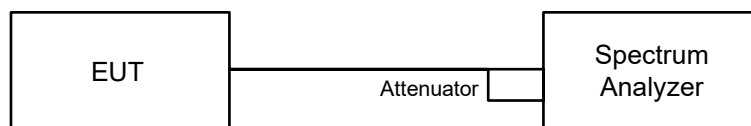
The power meter video bandwidth is greater than or equal to the DTS bandwidth and use a fast responding diode detector.

Average Power:

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

6.2 Power Spectral Density

6.2.1 Test Setup

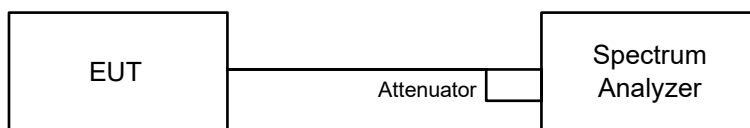


6.2.2 Test Procedure

- Set analyzer center frequency to DTS channel center frequency.
- Set the span > 1.5 times the DTS bandwidth.
- Set the RBW to: 3 kHz.
- Set the VBW $\geq 3 \times$ RBW.
- Detector = peak.
- Sweep time = No faster than coupled (auto) time.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum amplitude level within the RBW.

6.3 6 dB Bandwidth

6.3.1 Test Setup

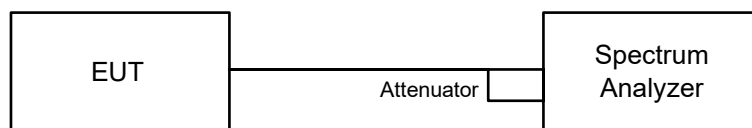


6.3.2 Test Procedure

- a. Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz.
- b. Set the VBW $\geq [3 \times \text{RBW}]$.
- c. Detector = peak.
- d. Trace mode = max-hold.
- e. Sweep = No faster than coupled (auto) time.
- f. Allow the trace to stabilize.
- g. Measure the maximum width of the emission by placing two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “-6 dB down amplitude”. If a marker is below this “-6 dB down amplitude” value, then it shall be as close as possible to this value.

6.4 Conducted Out of Band Emissions

6.4.1 Test Setup



6.4.2 Test Procedure

MEASUREMENT PROCEDURE REF

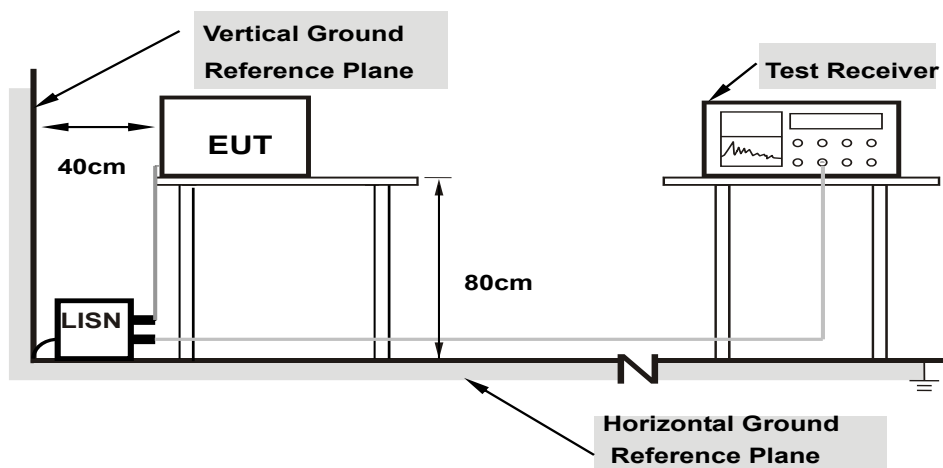
- Set instrument center frequency to DTS channel center frequency.
- Set the span to ≥ 1.5 times the DTS bandwidth.
- Set the RBW = 100 kHz.
- Set the VBW ≥ 300 kHz.
- Detector = peak.
- Sweep time = No faster than coupled (auto) time.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum PSD level.

MEASUREMENT PROCEDURE OOB

- Set the center frequency and span to encompass frequency range to be measured. Note that the frequency range might need to be divided into multiple frequency ranges to retain frequency resolution.
- Set RBW = 100 kHz.
- Set VBW ≥ 300 kHz.
- Detector = peak.
- Sweep = No faster than coupled (auto) time.
- 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

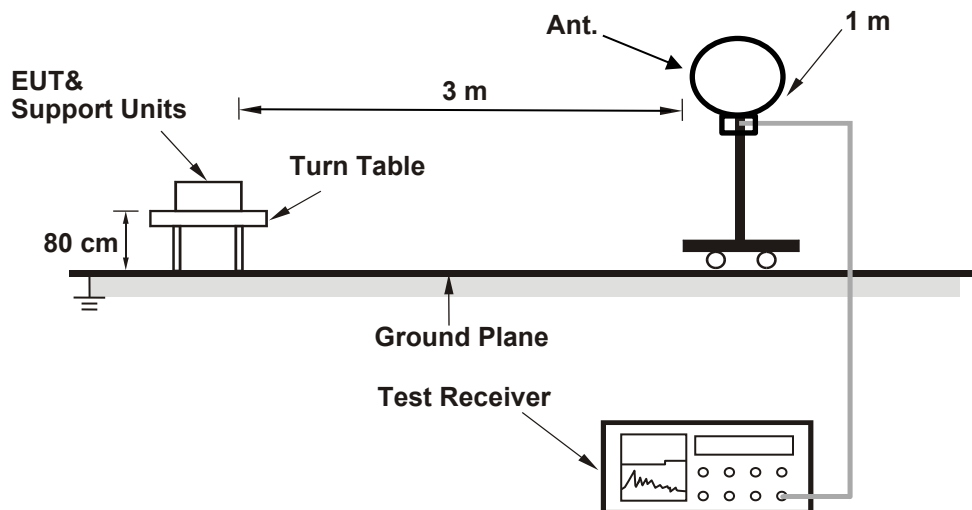
- Exploratory ac power-line conducted emission measurements: The EUT shall be operated on the mid channel and in the mode with highest output power unless the fundamental operates in the AC power-line emission test range then the EUT shall be operated in the range of typical modes of operation.
- The 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.

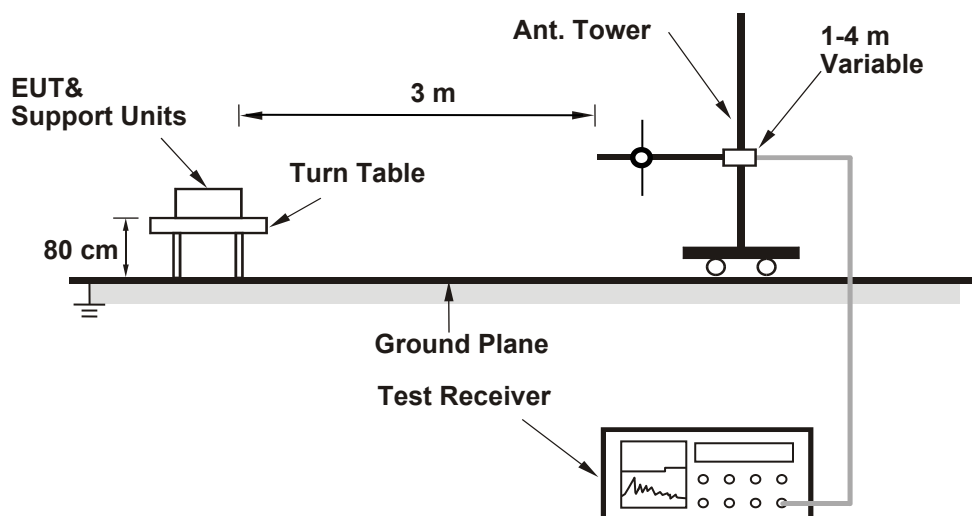
6.6 Unwanted Emissions below 1 GHz

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 (however, peak detector measurements may be used to determine compliance with QP requirements), 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

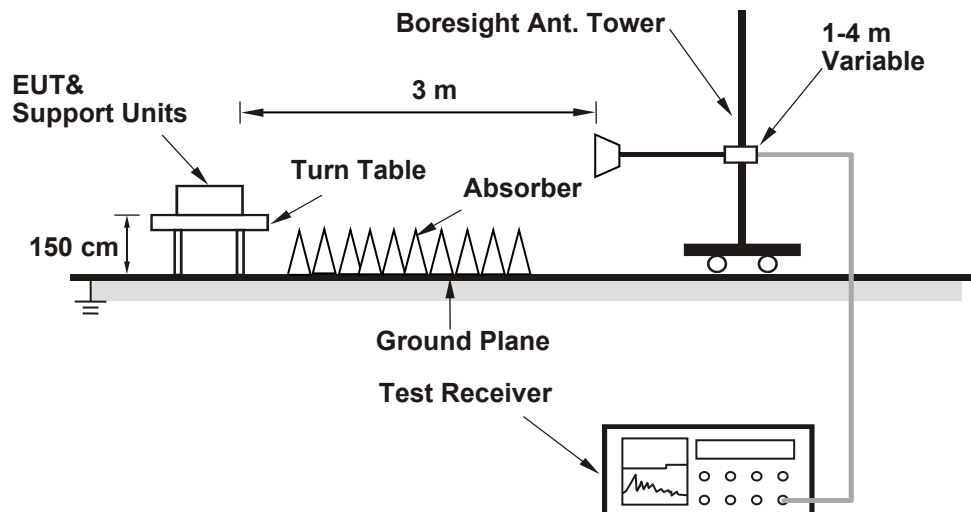
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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(QP) detect function, Average(AV) detect function, Peak(PK) detect function and specified bandwidth with maximum hold mode when the test frequencies less than or equal to 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 (however, peak detector measurements may be used to determine compliance with QP requirements).
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:	12 Vdc	Environmental Conditions:	27°C, 61% RH	Tested By:	Tank Wu
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For Peak Power

802.11b CDD

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	27.10	26.65	975.242	29.89	30	Pass
6	2437	26.99	26.78	976.466	29.90	30	Pass
11	2462	26.91	26.97	988.645	29.95	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 4.21 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.

802.11g CDD

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	26.67	26.83	946.463	29.76	30	Pass
6	2437	26.98	26.94	993.195	29.97	30	Pass
11	2462	26.93	27.00	994.361	29.98	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 4.21 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT20) CDD

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	26.56	27.30	989.929	29.96	30	Pass
6	2437	26.70	26.59	923.772	29.66	30	Pass
11	2462	26.81	27.12	994.962	29.98	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 4.21 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT40) CDD

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
3	2422	27.00	26.96	997.78	29.99	30	Pass
6	2437	26.99	26.90	989.813	29.96	30	Pass
9	2452	26.90	27.05	996.77	29.99	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 4.21 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT20) Beamforming

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	25.90	26.00	787.152	28.96	28.97	Pass
6	2437	25.33	26.05	743.91	28.72	28.97	Pass
11	2462	26.01	25.88	786.283	28.96	28.97	Pass

Notes:

1. Directional gain = $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
2. The directional gain is 7.03 dBi $>$ 6 dBi, so the output power limit shall be reduced to $30 - (7.03 - 6) = 28.97$ dBm.

802.11be (EHT40) Beamforming

Chan.	Chan. Freq. (MHz)	Peak Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
3	2422	25.71	25.76	749.096	28.75	28.97	Pass
6	2437	25.87	25.90	775.412	28.90	28.97	Pass
9	2452	25.59	25.44	712.188	28.53	28.97	Pass

Notes:

1. Directional gain = $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
2. The directional gain is 7.03 dBi $>$ 6 dBi, so the output power limit shall be reduced to $30 - (7.03 - 6) = 28.97$ dBm.

For Average Power

802.11b CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
1	2412	23.98	23.95	498.348	26.98
6	2437	23.96	23.90	494.357	26.94
11	2462	24.14	24.09	515.866	27.13

802.11g CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
1	2412	20.81	21.02	246.977	23.93
6	2437	21.22	21.26	266.094	24.25
11	2462	21.23	21.25	266.092	24.25

802.11be (EHT20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
1	2412	20.45	20.85	232.536	23.66
6	2437	20.55	20.28	220.161	23.43
11	2462	20.46	20.69	228.393	23.59

802.11be (EHT40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
3	2422	20.54	20.65	229.385	23.61
6	2437	20.84	20.60	236.154	23.73
9	2452	20.77	20.72	237.431	23.76

802.11be (EHT20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
1	2412	19.65	19.25	176.397	22.46
6	2437	19.18	19.50	171.919	22.35
11	2462	19.48	19.54	178.665	22.52

802.11be (EHT40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Average Power (mW)	Total Average Power (dBm)
		Chain 0	Chain 1		
3	2422	19.10	19.32	166.79	22.22
6	2437	19.44	19.27	172.43	22.37
9	2452	19.37	19.38	173.193	22.39

7.2 Power Spectral Density

Input Power:	12 Vdc	Environmental Conditions:	27°C, 61% RH	Tested By:	Tank Wu
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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	0.15	1.04	3.63	6.97	Pass
6	2437	1.52	0.79	4.18	6.97	Pass
11	2462	0.00	0.15	3.09	6.97	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 7.03 dBi > 6 dBi, so the power density limit shall be reduced to $8 - (7.03 - 6) = 6.97$ dBm/3kHz.

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	-1.19	-2.20	1.34	6.97	Pass
6	2437	-1.76	-1.94	1.16	6.97	Pass
11	2462	-1.99	-1.40	1.33	6.97	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 7.03 dBi > 6 dBi, so the power density limit shall be reduced to $8 - (7.03 - 6) = 6.97$ dBm/3kHz.

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	-3.63	-2.51	-0.02	6.97	Pass
6	2437	-2.75	-2.65	0.31	6.97	Pass
11	2462	-2.91	-2.63	0.24	6.97	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 7.03 dBi > 6 dBi, so the power density limit shall be reduced to $8 - (7.03 - 6) = 6.97$ dBm/3kHz.

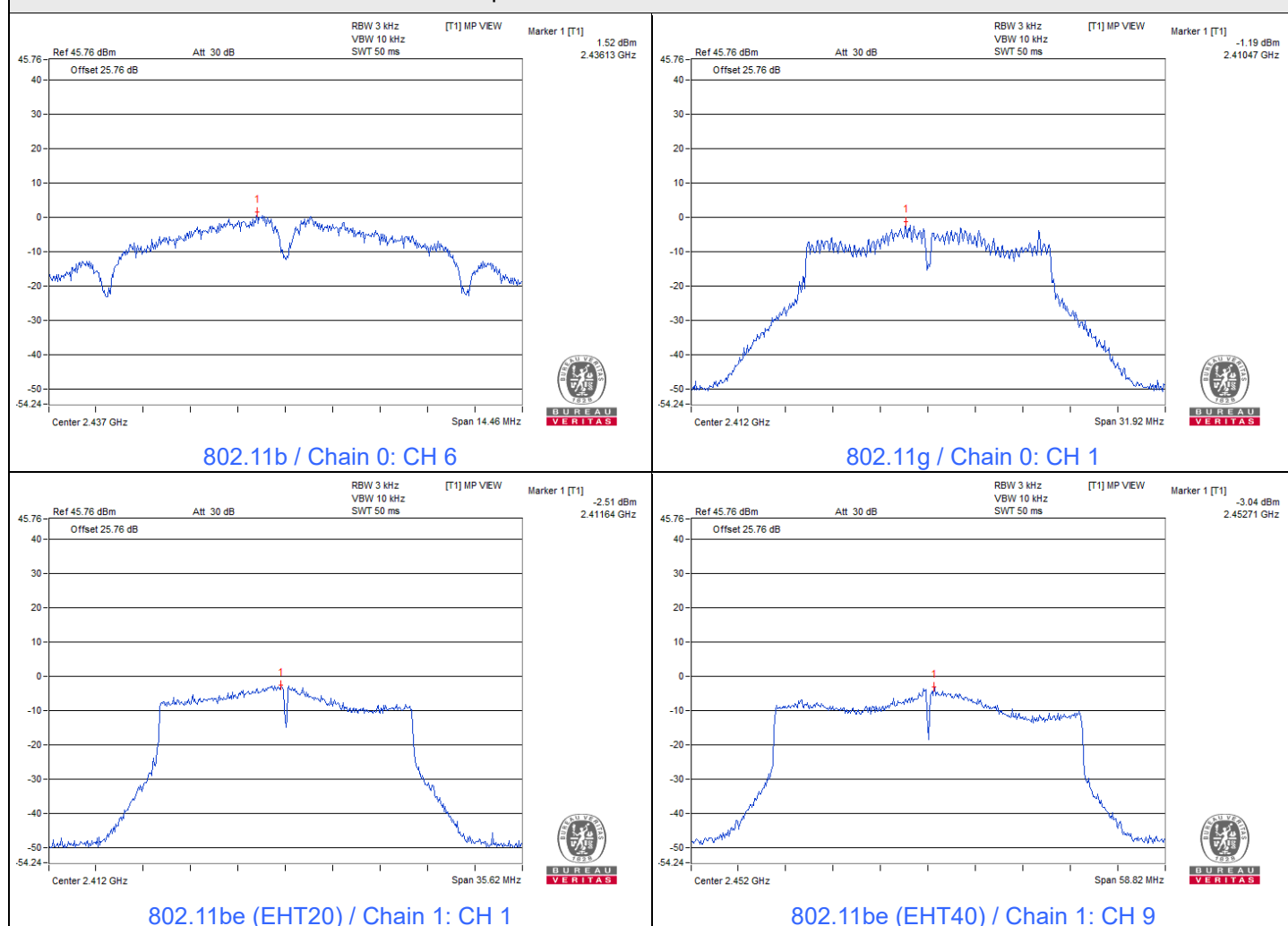
802.11be (EHT40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
3	2422	-4.20	-4.16	-1.17	6.97	Pass
6	2437	-4.03	-4.27	-1.14	6.97	Pass
9	2452	-3.41	-3.04	-0.21	6.97	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 7.03 dBi > 6 dBi, so the power density limit shall be reduced to $8 - (7.03 - 6) = 6.97$ dBm/3kHz.

Spectrum Plot of Maximum Value



7.3 6 dB Bandwidth

Input Power:	12 Vdc	Environmental Conditions:	27°C, 61% RH	Tested By:	Tank Wu
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802.11b

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	8.70	7.74	0.5	Pass
6	2437	7.23	7.25	0.5	Pass
11	2462	8.21	8.26	0.5	Pass

802.11g

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	15.96	15.25	0.5	Pass
6	2437	15.15	15.71	0.5	Pass
11	2462	15.78	15.20	0.5	Pass

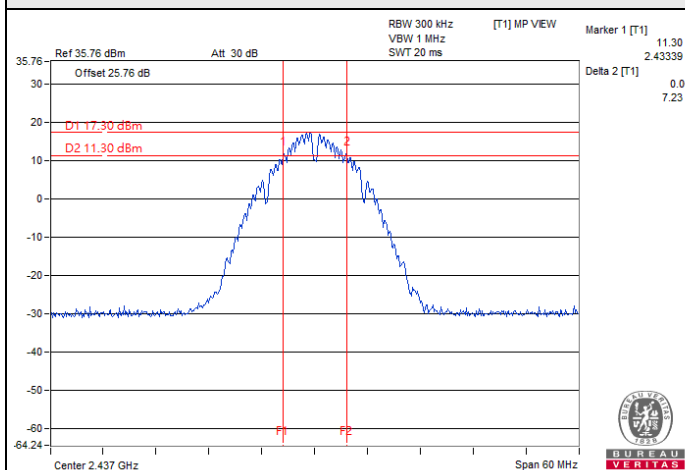
802.11be (EHT20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	18.86	17.81	0.5	Pass
6	2437	16.45	17.70	0.5	Pass
11	2462	18.83	18.78	0.5	Pass

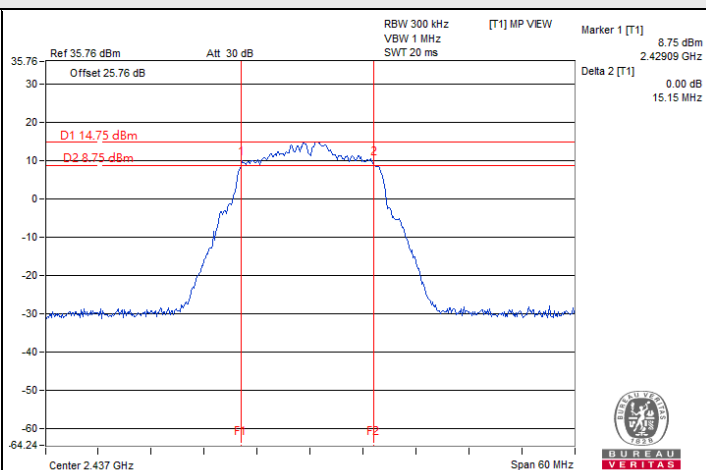
802.11be (EHT40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	2422	37.28	36.72	0.5	Pass
6	2437	37.56	28.24	0.5	Pass
9	2452	36.27	29.41	0.5	Pass

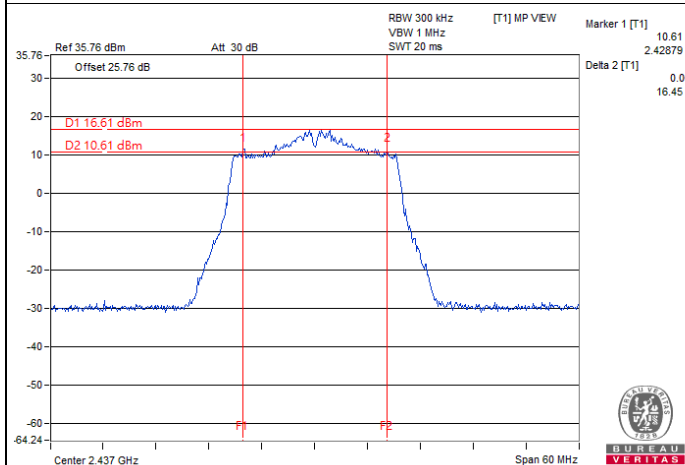
Spectrum Plot of Minimum Value



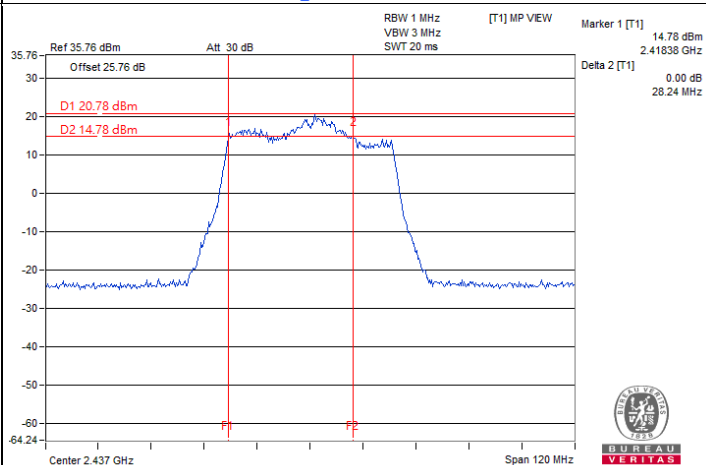
802.11b / Chain 0: CH 6



802.11g / Chain 0: CH 6



802.11be (EHT20) / Chain 0: CH 6

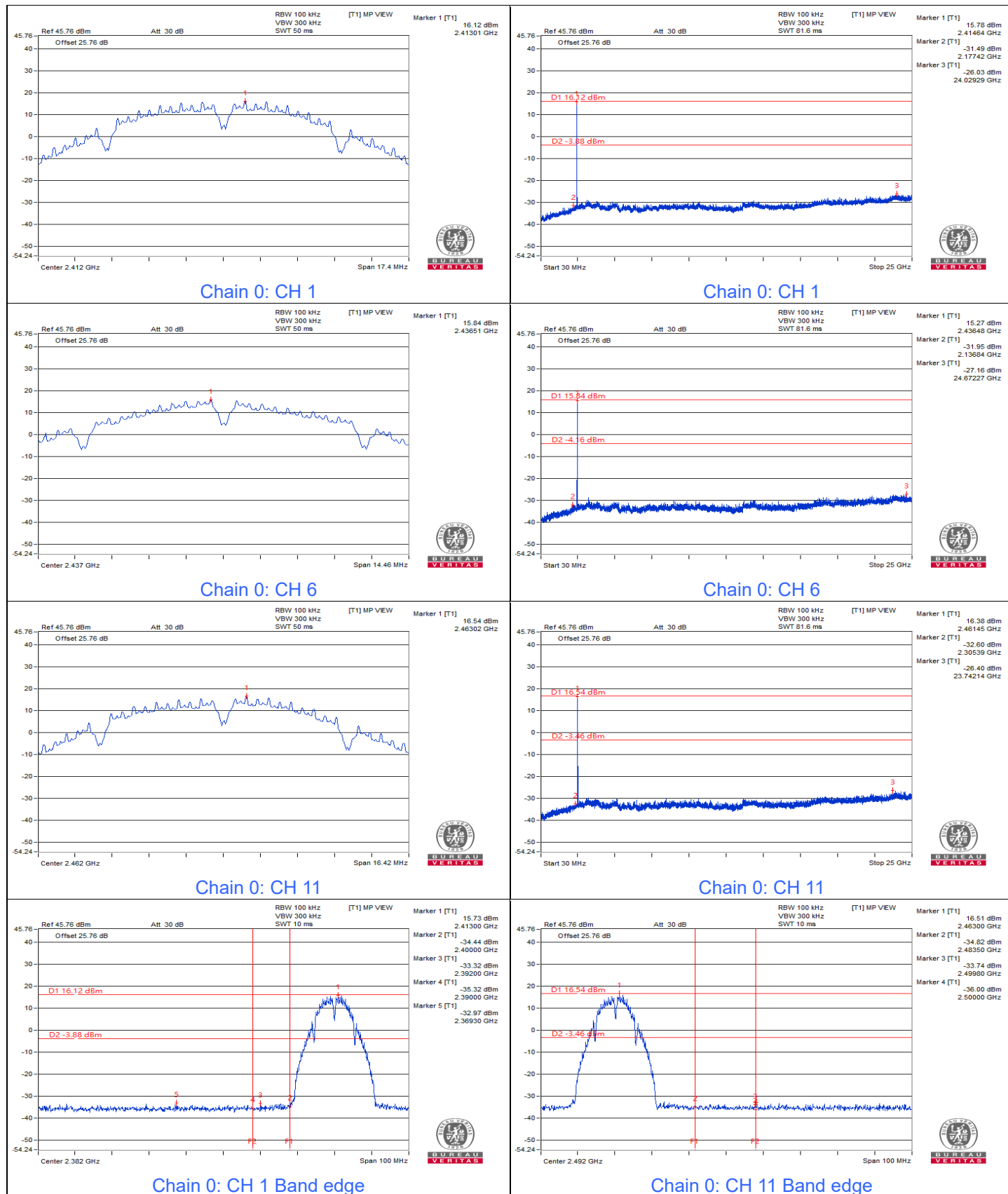


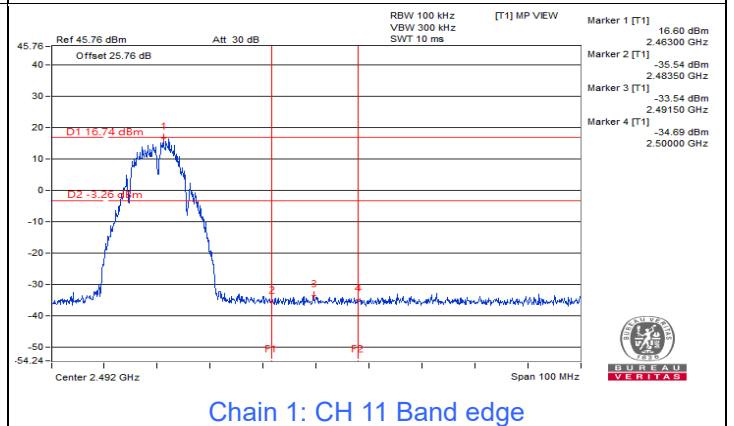
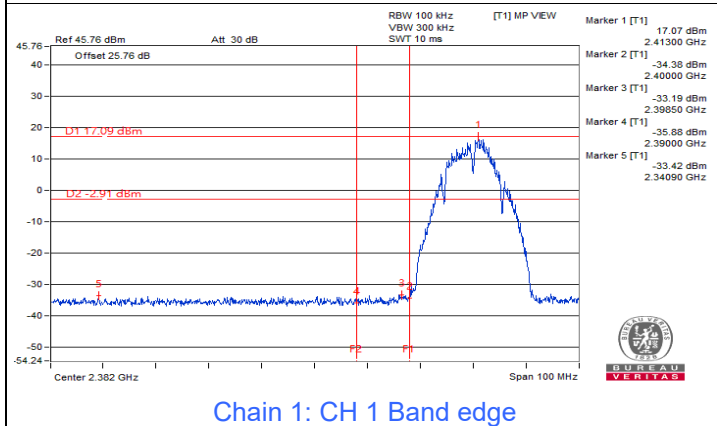
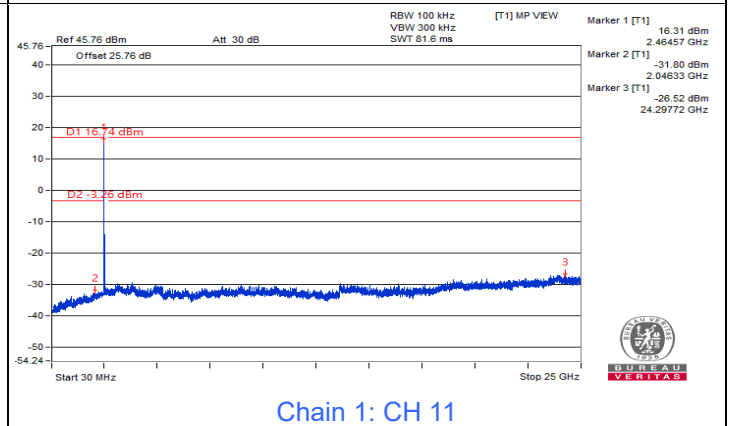
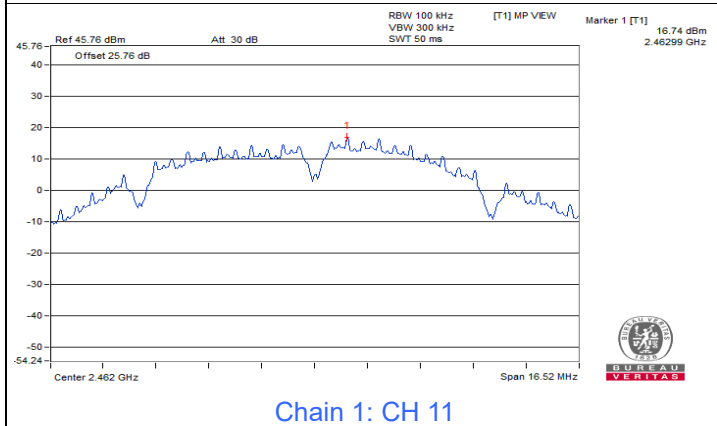
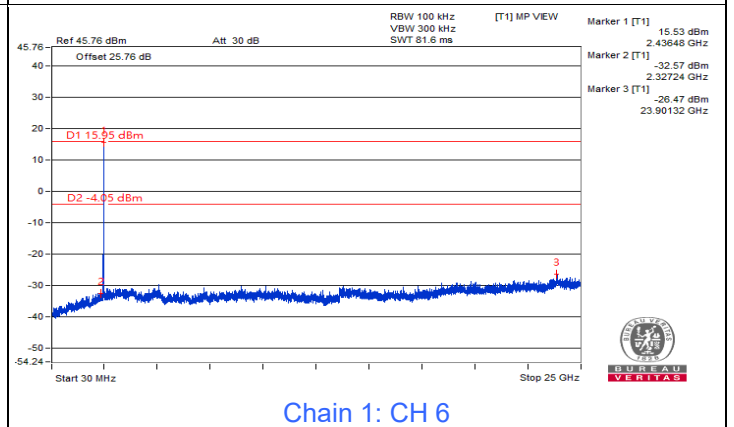
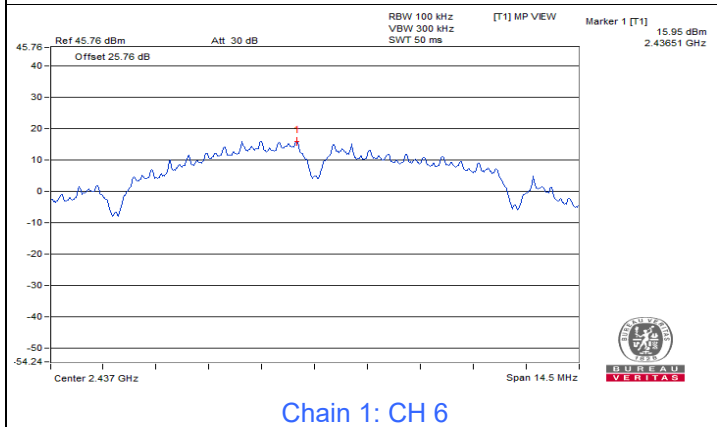
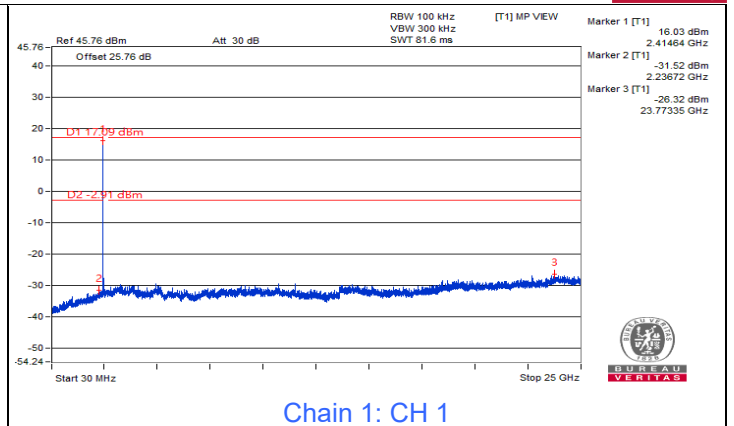
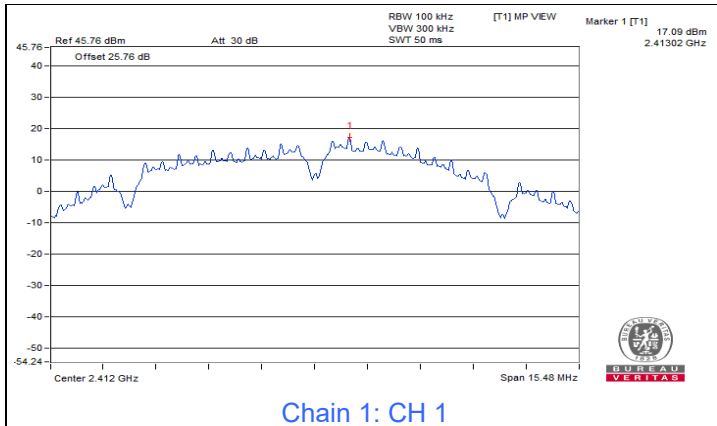
802.11be (EHT40) / Chain 1: CH 6

7.4 Conducted Out of Band Emissions

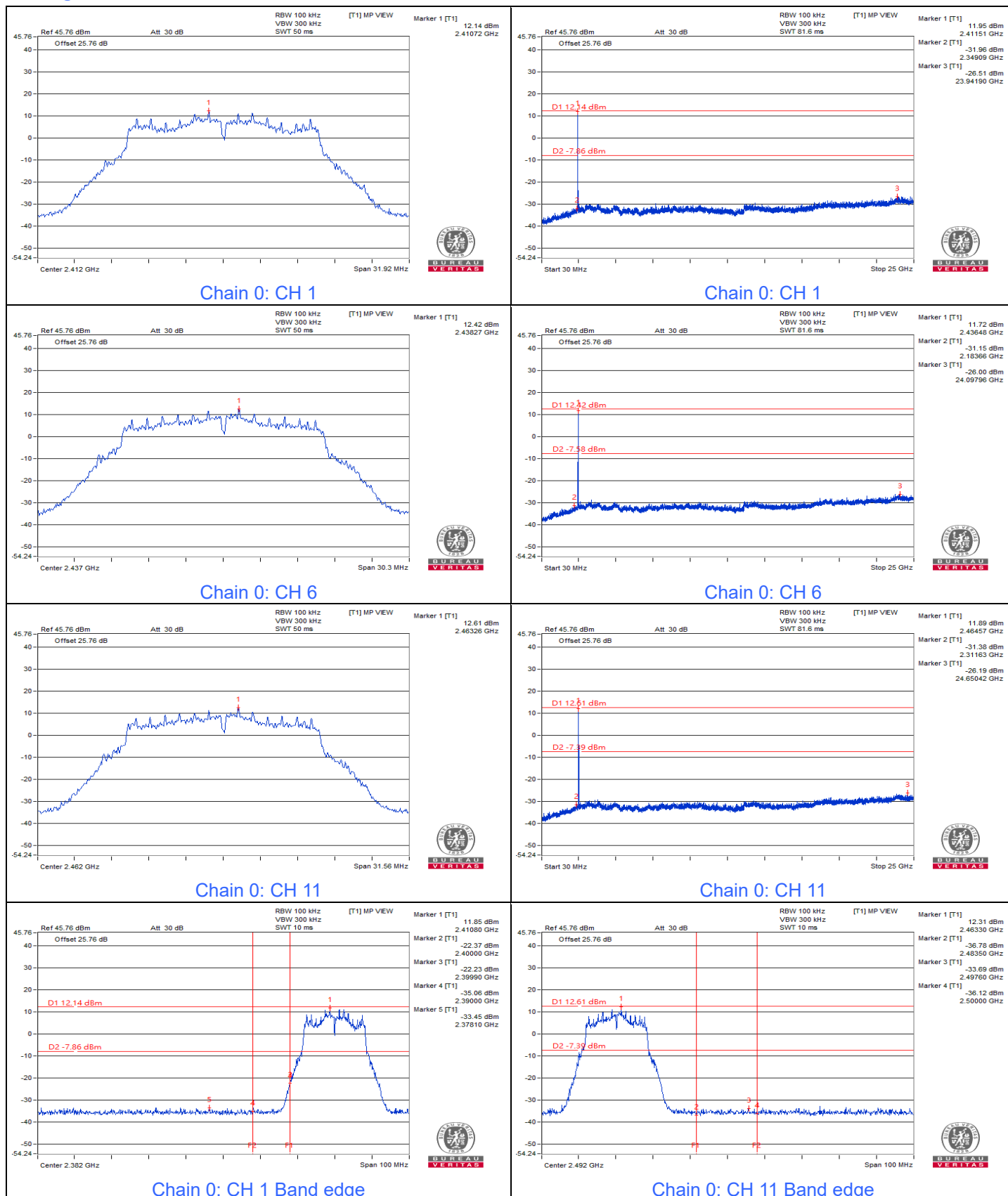
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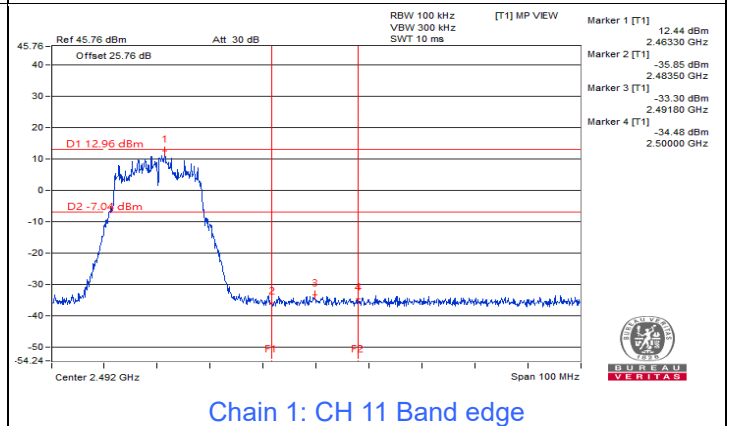
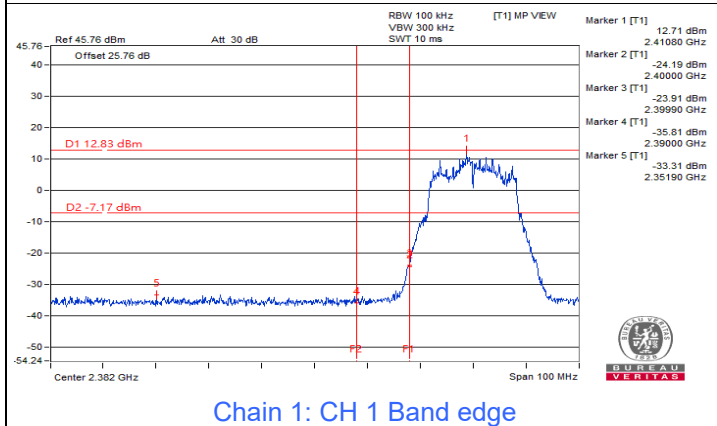
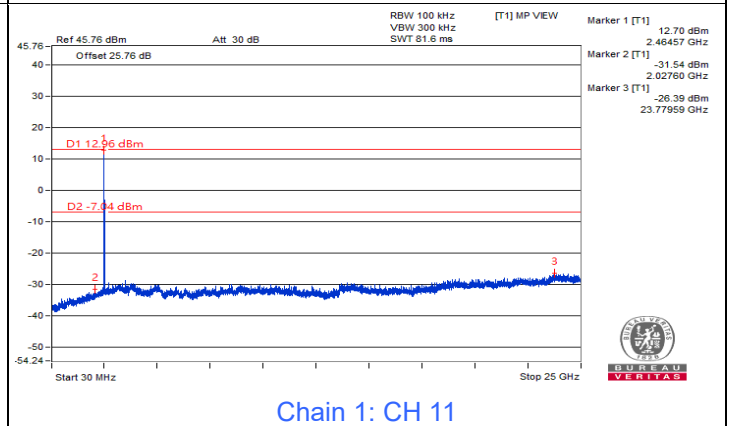
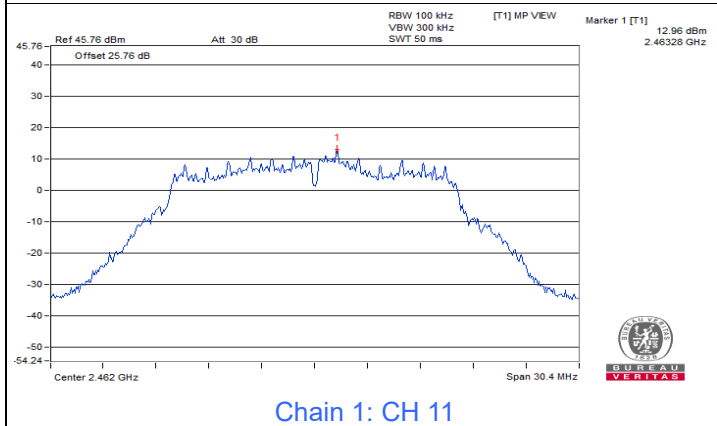
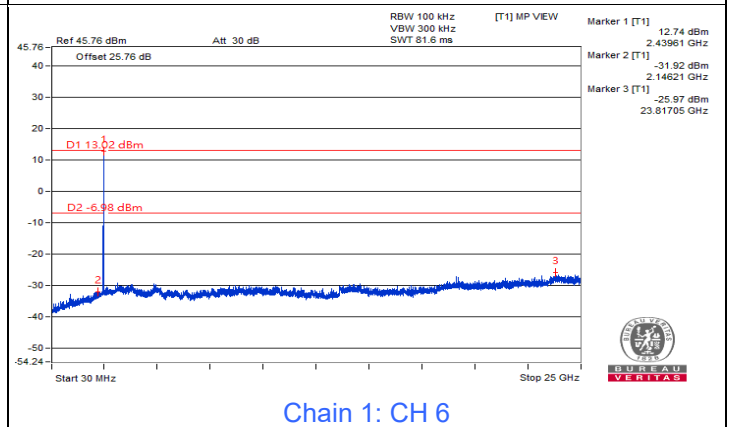
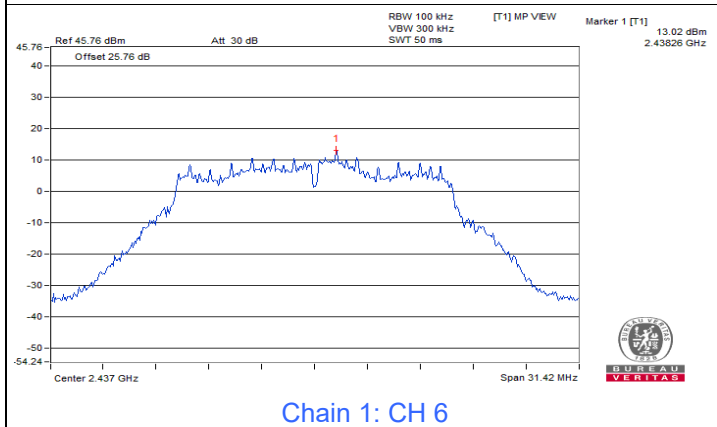
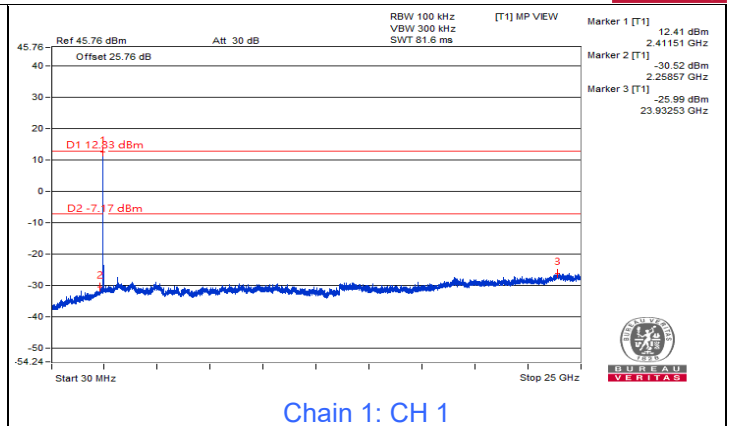
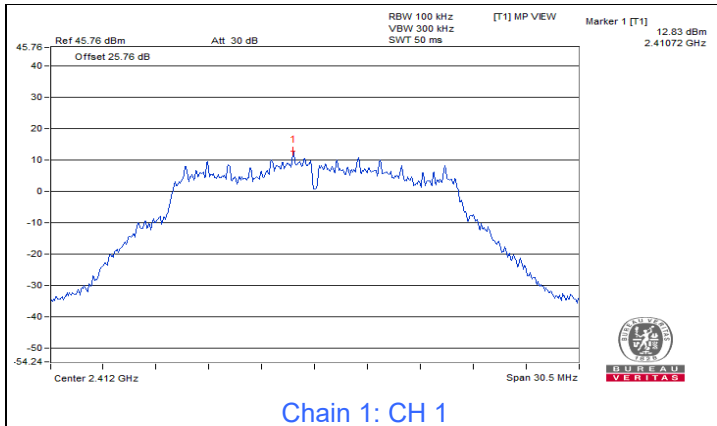
802.11b



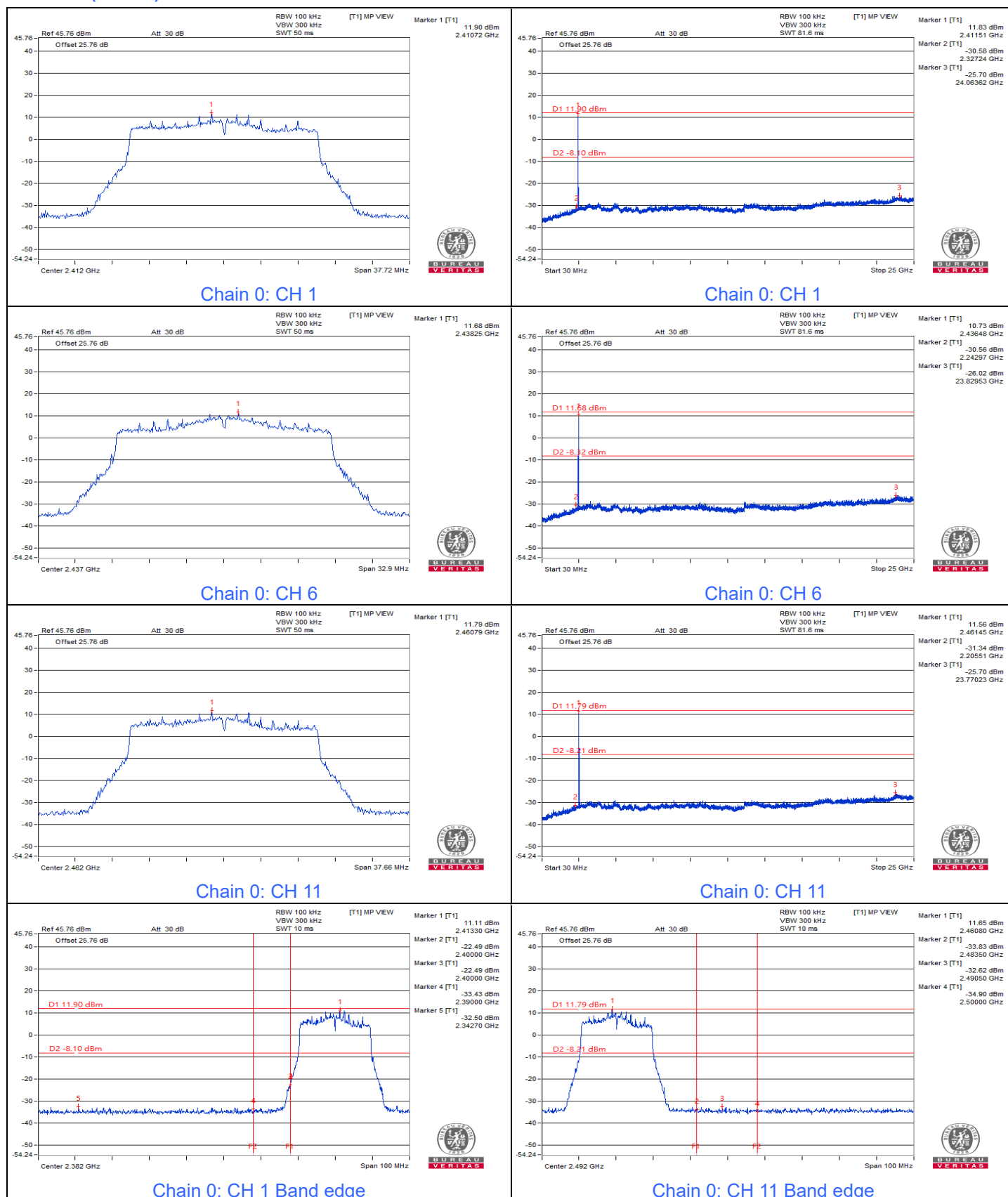


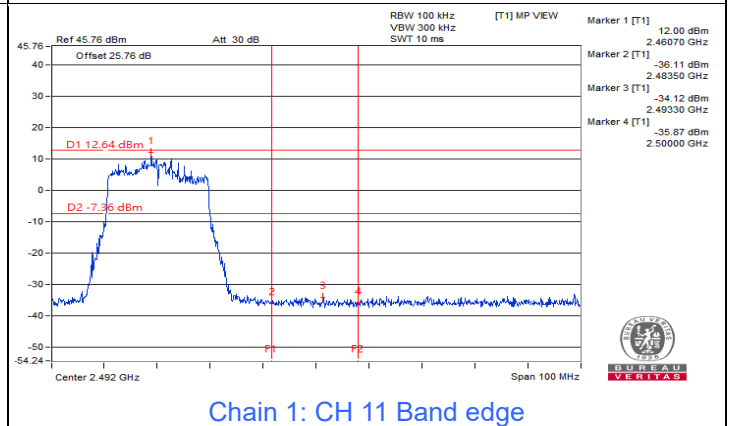
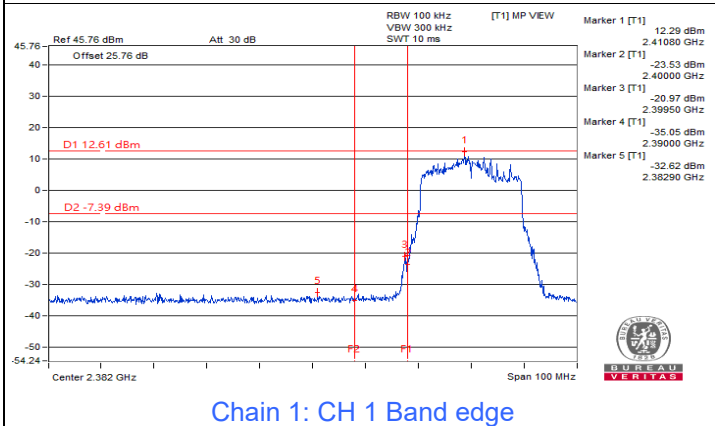
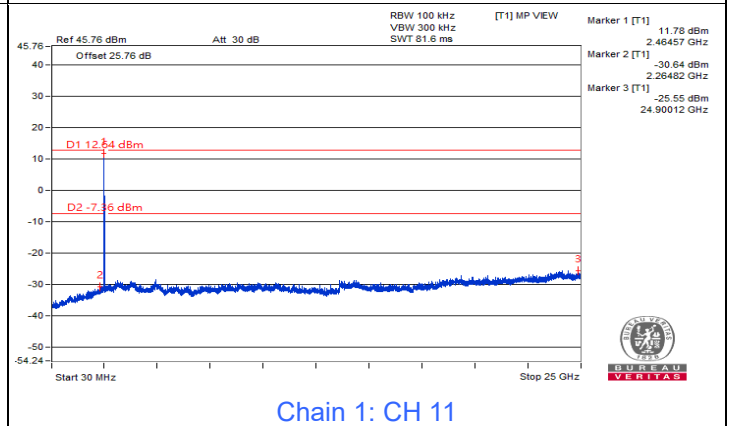
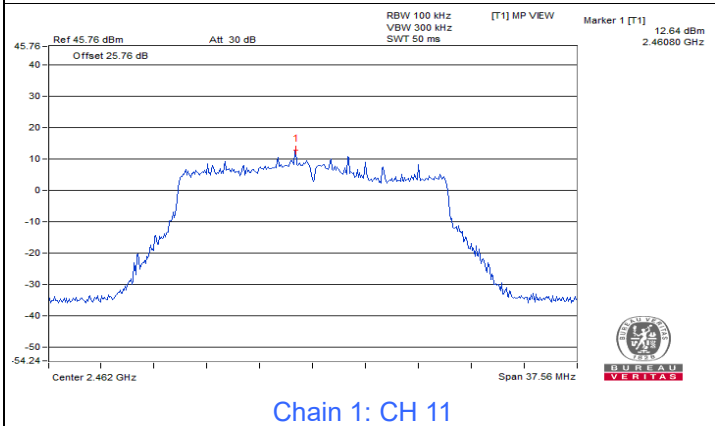
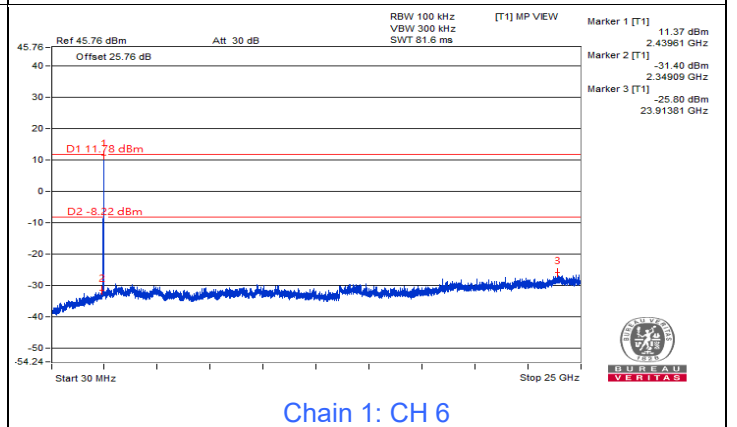
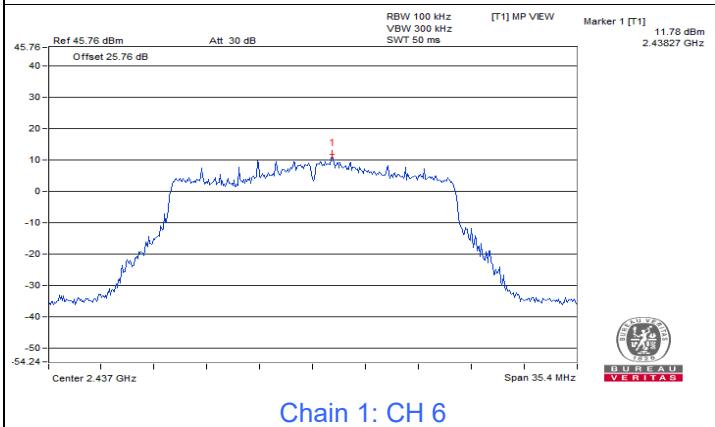
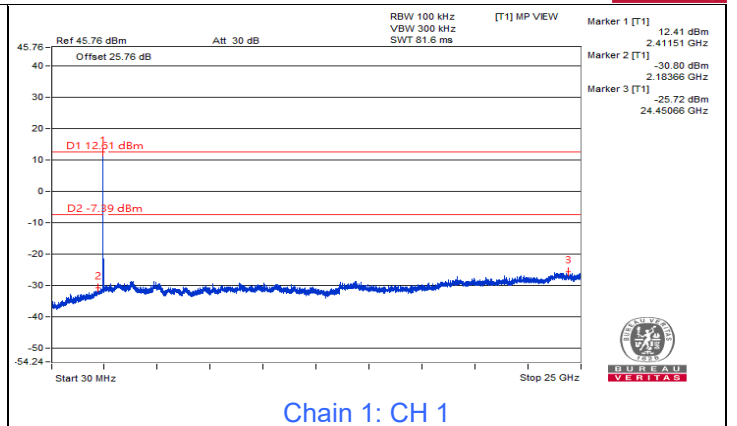
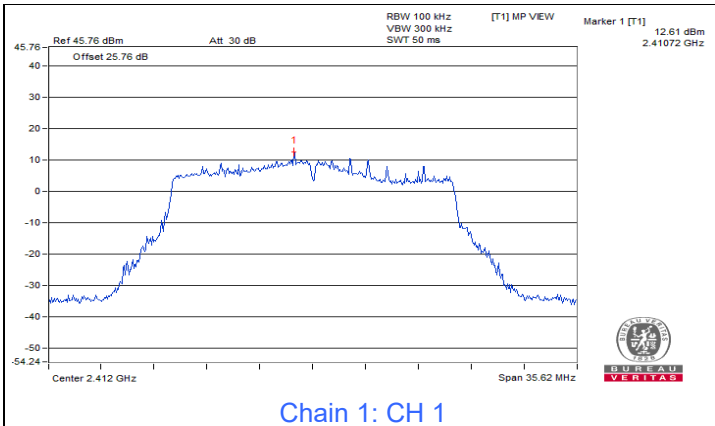
802.11g



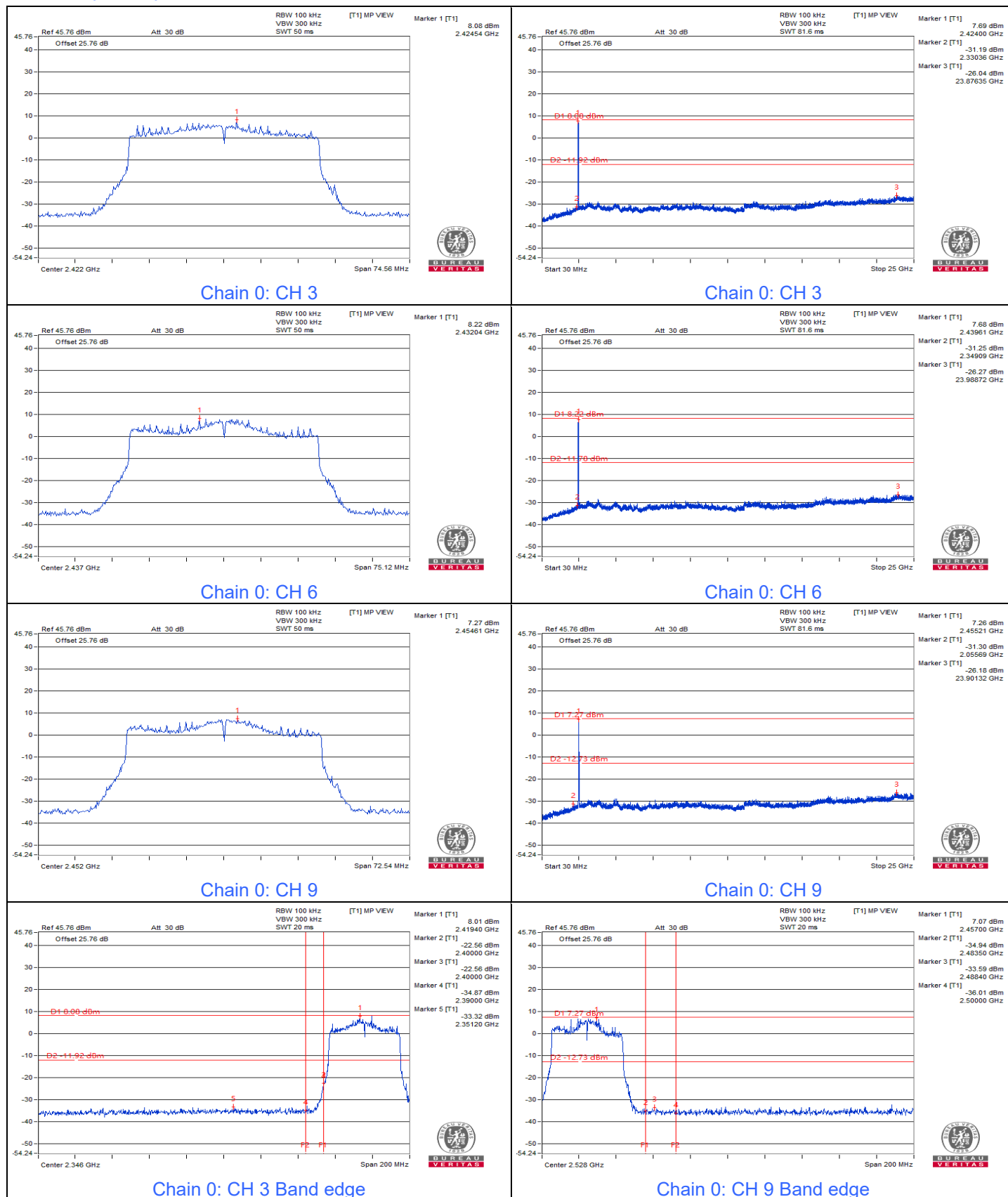


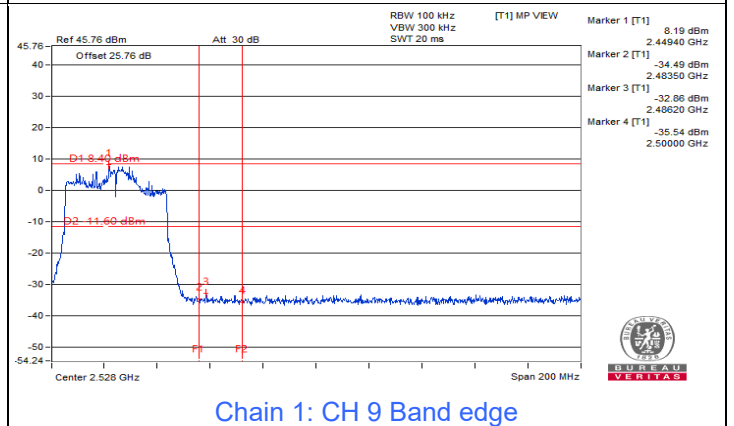
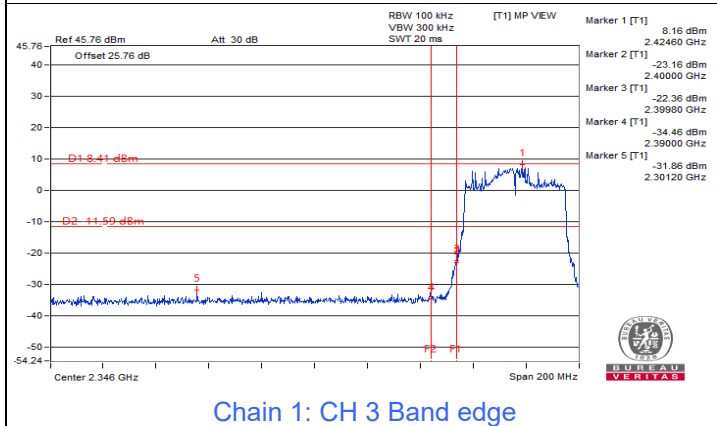
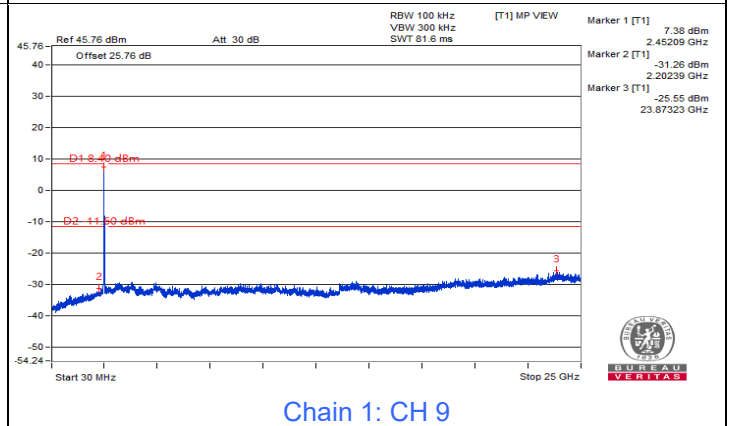
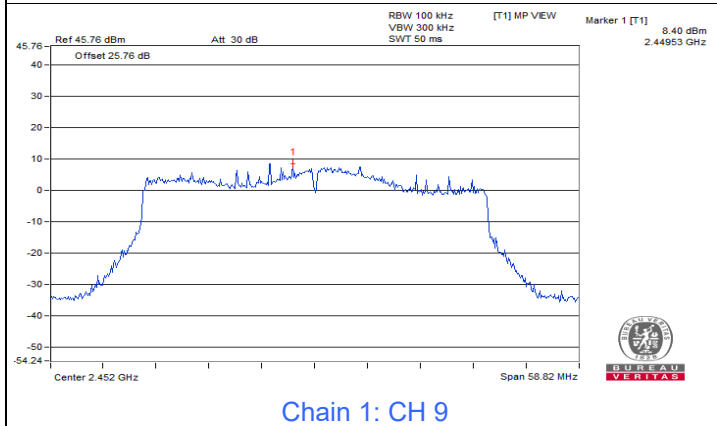
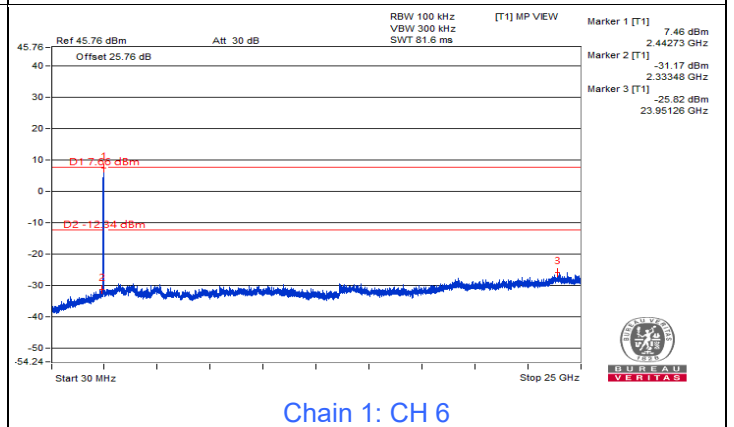
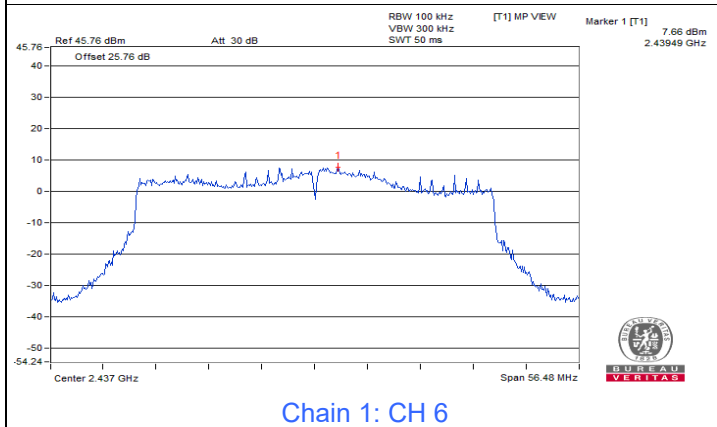
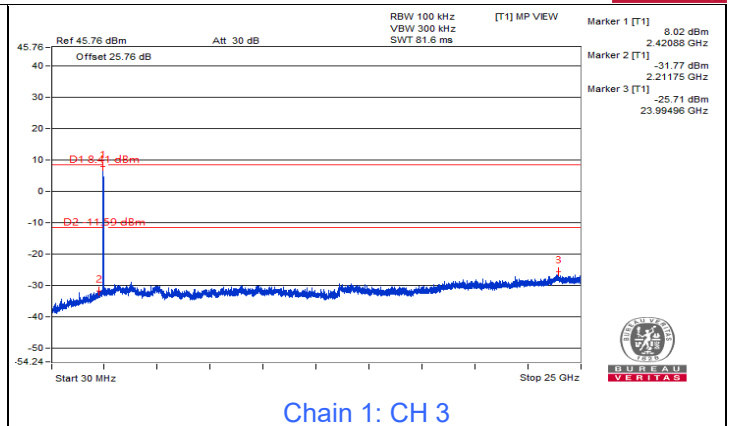
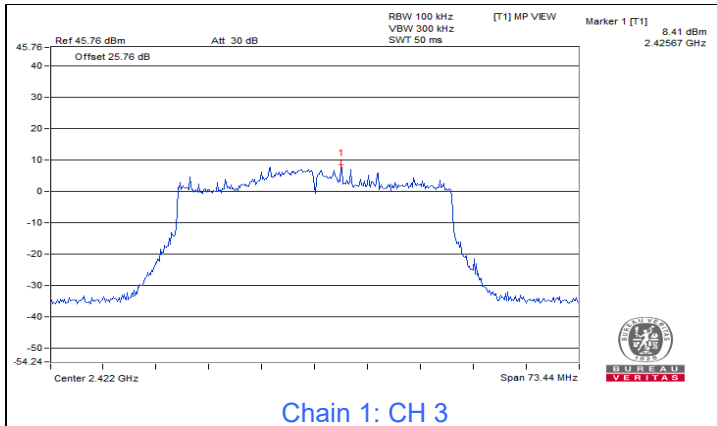
802.11be (EHT20)





802.11be (EHT40)





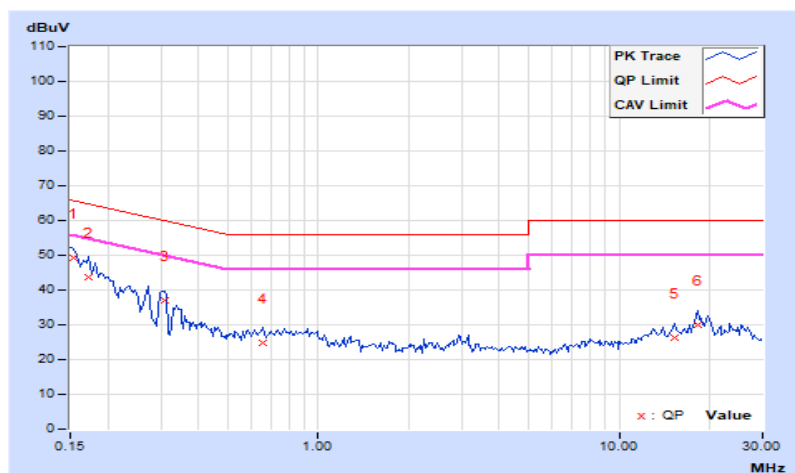
7.5 AC Power Conducted Emissions

RF Mode	802.11b	Channel	CH 11 : 2462 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	0.15391	9.97	39.46	22.57	49.43	32.54	65.79	55.79	-16.36	-23.25
2	0.17344	9.97	33.74	18.43	43.71	28.40	64.79	54.79	-21.08	-26.39
3	0.31016	9.99	27.22	15.50	37.21	25.49	59.97	49.97	-22.76	-24.48
4	0.65391	10.03	14.89	5.40	24.92	15.43	56.00	46.00	-31.08	-30.57
5	15.35547	10.99	15.38	10.58	26.37	21.57	60.00	50.00	-33.63	-28.43
6	18.28516	11.17	18.65	14.28	29.82	25.45	60.00	50.00	-30.18	-24.55

Remarks:

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

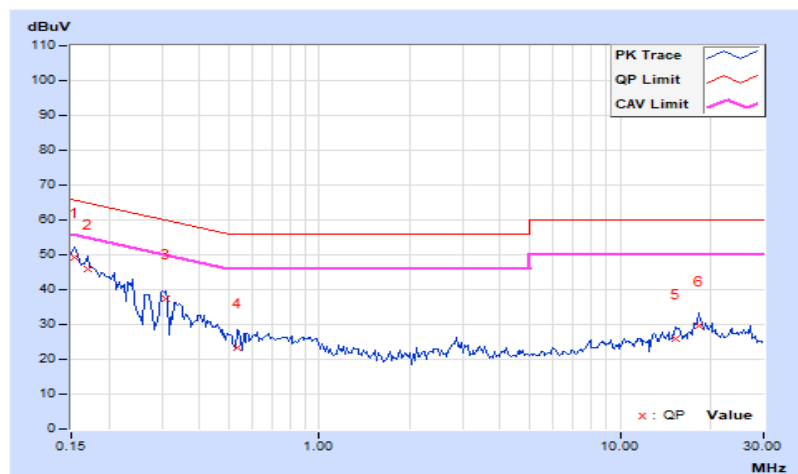


RF Mode	802.11b	Channel	CH 11 : 2462 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	0.15391	9.99	39.44	22.45	49.43	32.44	65.79	55.79	-16.36	-23.35
2	0.16953	9.99	36.04	20.77	46.03	30.76	64.98	54.98	-18.95	-24.22
3	0.31016	9.96	27.53	18.73	37.49	28.69	59.97	49.97	-22.48	-21.28
4	0.53672	9.95	13.40	7.37	23.35	17.32	56.00	46.00	-32.65	-28.68
5	15.36328	10.74	15.21	10.80	25.95	21.54	60.00	50.00	-34.05	-28.46
6	18.28516	10.89	18.59	14.14	29.48	25.03	60.00	50.00	-30.52	-24.97

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



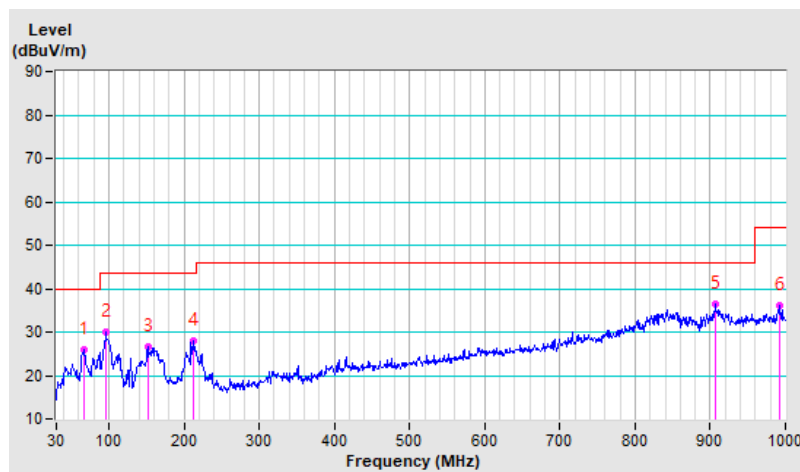
7.6 Unwanted Emissions below 1 GHz

RF Mode	802.11b	Channel	CH 11 : 2462 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	PK: RB=120 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	66.06	26.0 PK	40.0	-14.0	4.00 H	247	40.3	-14.3
2	95.77	30.2 PK	43.5	-13.3	3.00 H	86	48.4	-18.2
3	151.95	26.6 PK	43.5	-16.9	2.00 H	114	39.3	-12.7
4	211.56	28.1 PK	43.5	-15.4	1.00 H	87	44.3	-16.2
5	906.44	36.4 PK	46.0	-9.6	1.00 H	203	36.7	-0.3
6	992.17	36.2 PK	54.0	-17.8	1.00 H	193	35.3	0.9

Remarks:

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

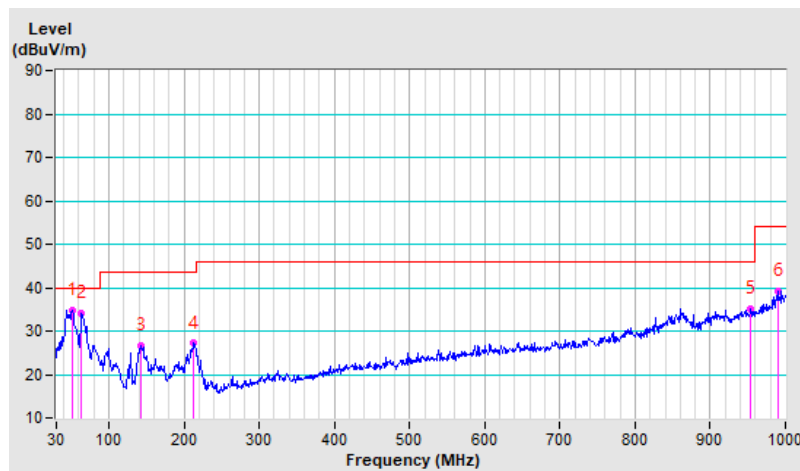


RF Mode	802.11b	Channel	CH 11 : 2462 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	PK: RB=120 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	50.47	34.8 PK	40.0	-5.2	1.00 V	360	47.6	-12.8
2	63.80	34.1 PK	40.0	-5.9	1.00 V	82	47.9	-13.8
3	141.62	26.8 PK	43.5	-16.7	1.00 V	122	39.9	-13.1
4	212.60	27.2 PK	43.5	-16.3	1.00 V	201	43.4	-16.2
5	954.17	35.2 PK	46.0	-10.8	2.00 V	134	34.6	0.6
6	990.37	39.2 PK	54.0	-14.8	1.00 V	61	38.3	0.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit 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=2 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	56.9 PK	74.0	-17.1	3.89 H	19	57.0	-0.1
2	2390.00	44.9 AV	54.0	-9.1	3.89 H	19	45.0	-0.1
3	*2412.00	111.7 PK			3.89 H	19	111.9	-0.2
4	*2412.00	109.3 AV			3.89 H	19	109.5	-0.2
5	4824.00	50.5 PK	74.0	-23.5	2.98 H	79	46.0	4.5
6	4824.00	48.5 AV	54.0	-5.5	2.98 H	79	44.0	4.5
7	12060.00	57.1 PK	74.0	-16.9	3.21 H	92	41.2	15.9
8	12060.00	50.9 AV	54.0	-3.1	3.21 H	92	35.0	15.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	58.1 PK	74.0	-15.9	2.18 V	35	58.2	-0.1
2	2390.00	48.4 AV	54.0	-5.6	2.18 V	35	48.5	-0.1
3	*2412.00	119.1 PK			2.18 V	35	119.3	-0.2
4	*2412.00	116.7 AV			2.18 V	35	116.9	-0.2
5	4824.00	54.9 PK	74.0	-19.1	2.83 V	3	50.4	4.5
6	4824.00	53.6 AV	54.0	-0.4	2.83 V	3	49.1	4.5
7	12060.00	57.7 PK	74.0	-16.3	3.20 V	48	41.8	15.9
8	12060.00	53.3 AV	54.0	-0.7	3.20 V	48	37.4	15.9

Remarks:

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

RF Mode	802.11b	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=2 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	56.2 PK	74.0	-17.8	3.79 H	23	56.3	-0.1
2	2390.00	44.8 AV	54.0	-9.2	3.79 H	23	44.9	-0.1
3	*2437.00	111.8 PK			3.79 H	23	112.0	-0.2
4	*2437.00	109.4 AV			3.79 H	23	109.6	-0.2
5	2483.50	55.6 PK	74.0	-18.4	3.79 H	23	55.9	-0.3
6	2483.50	43.8 AV	54.0	-10.2	3.79 H	23	44.1	-0.3
7	4874.00	50.8 PK	74.0	-23.2	3.02 H	81	46.3	4.5
8	4874.00	48.6 AV	54.0	-5.4	3.02 H	81	44.1	4.5
9	7311.00	50.3 PK	74.0	-23.7	2.99 H	289	38.5	11.8
10	7311.00	44.5 AV	54.0	-9.5	2.99 H	289	32.7	11.8
11	12185.00	56.6 PK	74.0	-17.4	3.23 H	83	40.4	16.2
12	12185.00	50.6 AV	54.0	-3.4	3.23 H	83	34.4	16.2
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	58.7 PK	74.0	-15.3	2.42 V	38	58.8	-0.1
2	2390.00	48.2 AV	54.0	-5.8	2.42 V	38	48.3	-0.1
3	*2437.00	119.4 PK			2.42 V	38	119.6	-0.2
4	*2437.00	117.1 AV			2.42 V	38	117.3	-0.2
5	2483.50	57.5 PK	74.0	-16.5	2.42 V	38	57.8	-0.3
6	2483.50	44.8 AV	54.0	-9.2	2.42 V	38	45.1	-0.3
7	4874.00	54.1 PK	74.0	-19.9	2.62 V	3	49.6	4.5
8	4874.00	53.3 AV	54.0	-0.7	2.62 V	3	48.8	4.5
9	7311.00	53.3 PK	74.0	-20.7	1.02 V	207	41.5	11.8
10	7311.00	49.4 AV	54.0	-4.6	1.02 V	207	37.6	11.8
11	12185.00	57.1 PK	74.0	-16.9	3.13 V	316	40.9	16.2
12	12185.00	53.1 AV	54.0	-0.9	3.13 V	316	36.9	16.2

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	802.11b	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=2 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	111.4 PK			3.98 H	87	111.7	-0.3
2	*2462.00	108.9 AV			3.98 H	87	109.2	-0.3
3	2483.50	56.3 PK	74.0	-17.7	3.98 H	87	56.6	-0.3
4	2483.50	44.7 AV	54.0	-9.3	3.98 H	87	45.0	-0.3
5	4924.00	51.1 PK	74.0	-22.9	3.02 H	71	46.4	4.7
6	4924.00	48.9 AV	54.0	-5.1	3.02 H	71	44.2	4.7
7	7386.00	50.4 PK	74.0	-23.6	3.01 H	294	38.4	12.0
8	7386.00	44.8 AV	54.0	-9.2	3.01 H	294	32.8	12.0
9	12310.00	56.2 PK	74.0	-17.8	3.21 H	86	39.9	16.3
10	12310.00	50.3 AV	54.0	-3.7	3.21 H	86	34.0	16.3
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	118.7 PK			2.72 V	43	119.0	-0.3
2	*2462.00	116.2 AV			2.72 V	43	116.5	-0.3
3	2483.50	58.6 PK	74.0	-15.4	2.72 V	43	58.9	-0.3
4	2483.50	48.3 AV	54.0	-5.7	2.72 V	43	48.6	-0.3
5	4924.00	53.2 PK	74.0	-20.8	2.40 V	11	48.5	4.7
6	4924.00	52.7 AV	54.0	-1.3	2.40 V	11	48.0	4.7
7	7386.00	52.9 PK	74.0	-21.1	1.00 V	209	40.9	12.0
8	7386.00	48.9 AV	54.0	-5.1	1.00 V	209	36.9	12.0
9	12310.00	58.1 PK	74.0	-15.9	3.21 V	14	41.8	16.3
10	12310.00	53.5 AV	54.0	-0.5	3.21 V	14	37.2	16.3

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 (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	60.6 PK	74.0	-13.4	3.95 H	22	60.7	-0.1
2	2390.00	46.6 AV	54.0	-7.4	3.95 H	22	46.7	-0.1
3	*2412.00	114.6 PK			3.95 H	22	114.8	-0.2
4	*2412.00	105.7 AV			3.95 H	22	105.9	-0.2
5	4824.00	50.3 PK	74.0	-23.7	3.00 H	81	45.8	4.5
6	4824.00	39.3 AV	54.0	-14.7	3.00 H	81	34.8	4.5
7	12060.00	59.8 PK	74.0	-14.2	3.27 H	88	43.9	15.9
8	12060.00	45.6 AV	54.0	-8.4	3.27 H	88	29.7	15.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	69.2 PK	74.0	-4.8	2.39 V	49	69.3	-0.1
2	2390.00	53.2 AV	54.0	-0.8	2.39 V	49	53.3	-0.1
3	*2412.00	121.2 PK			2.39 V	49	121.4	-0.2
4	*2412.00	112.5 AV			2.39 V	49	112.7	-0.2
5	4824.00	53.7 PK	74.0	-20.3	2.64 V	4	49.2	4.5
6	4824.00	42.6 AV	54.0	-11.4	2.64 V	4	38.1	4.5
7	12060.00	63.6 PK	74.0	-10.4	3.48 V	46	47.7	15.9
8	12060.00	48.4 AV	54.0	-5.6	3.48 V	46	32.5	15.9

Remarks:

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

RF Mode	802.11g	Channel	CH 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 (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	58.5 PK	74.0	-15.5	3.98 H	85	58.6	-0.1
2	2390.00	44.9 AV	54.0	-9.1	3.98 H	85	45.0	-0.1
3	*2437.00	115.6 PK			3.98 H	85	115.8	-0.2
4	*2437.00	107.1 AV			3.98 H	85	107.3	-0.2
5	2483.50	56.3 PK	74.0	-17.7	3.98 H	85	56.6	-0.3
6	2483.50	44.2 AV	54.0	-9.8	3.98 H	85	44.5	-0.3
7	4874.00	50.6 PK	74.0	-23.4	3.02 H	81	46.1	4.5
8	4874.00	39.7 AV	54.0	-14.3	3.02 H	81	35.2	4.5
9	7311.00	54.8 PK	74.0	-19.2	2.89 H	291	43.0	11.8
10	7311.00	41.6 AV	54.0	-12.4	2.89 H	291	29.8	11.8
11	12185.00	60.3 PK	74.0	-13.7	3.25 H	80	44.1	16.2
12	12185.00	45.9 AV	54.0	-8.1	3.25 H	80	29.7	16.2
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	62.6 PK	74.0	-11.4	2.52 V	39	62.7	-0.1
2	2390.00	50.5 AV	54.0	-3.5	2.52 V	39	50.6	-0.1
3	*2437.00	123.7 PK			2.52 V	39	123.9	-0.2
4	*2437.00	115.1 AV			2.52 V	39	115.3	-0.2
5	2483.50	61.5 PK	74.0	-12.5	2.52 V	39	61.8	-0.3
6	2483.50	47.5 AV	54.0	-6.5	2.52 V	39	47.8	-0.3
7	4874.00	54.6 PK	74.0	-19.4	2.61 V	4	50.1	4.5
8	4874.00	43.1 AV	54.0	-10.9	2.61 V	4	38.6	4.5
9	7311.00	57.3 PK	74.0	-16.7	1.00 V	211	45.5	11.8
10	7311.00	44.3 AV	54.0	-9.7	1.00 V	211	32.5	11.8
11	12185.00	64.1 PK	74.0	-9.9	3.50 V	48	47.9	16.2
12	12185.00	49.6 AV	54.0	-4.4	3.50 V	48	33.4	16.2

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 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 (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	114.3 PK			3.97 H	83	114.6	-0.3
2	*2462.00	105.6 AV			3.97 H	83	105.9	-0.3
3	2483.50	60.7 PK	74.0	-13.3	3.97 H	83	61.0	-0.3
4	2483.50	46.3 AV	54.0	-7.7	3.97 H	83	46.6	-0.3
5	4924.00	51.1 PK	74.0	-22.9	3.00 H	82	46.4	4.7
6	4924.00	40.1 AV	54.0	-13.9	3.00 H	82	35.4	4.7
7	7386.00	54.9 PK	74.0	-19.1	2.89 H	292	42.9	12.0
8	7386.00	41.4 AV	54.0	-12.6	2.89 H	292	29.4	12.0
9	12310.00	60.2 PK	74.0	-13.8	3.29 H	81	43.9	16.3
10	12310.00	45.9 AV	54.0	-8.1	3.29 H	81	29.6	16.3
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	121.8 PK			2.50 V	51	122.1	-0.3
2	*2462.00	113.3 AV			2.50 V	51	113.6	-0.3
3	2483.50	67.1 PK	74.0	-6.9	2.50 V	51	67.4	-0.3
4	2483.50	52.9 AV	54.0	-1.1	2.50 V	51	53.2	-0.3
5	4924.00	54.4 PK	74.0	-19.6	2.60 V	10	49.7	4.7
6	4924.00	43.1 AV	54.0	-10.9	2.60 V	10	38.4	4.7
7	7386.00	57.6 PK	74.0	-16.4	1.06 V	213	45.6	12.0
8	7386.00	44.7 AV	54.0	-9.3	1.06 V	213	32.7	12.0
9	12310.00	63.9 PK	74.0	-10.1	3.49 V	63	47.6	16.3
10	12310.00	49.1 AV	54.0	-4.9	3.49 V	63	32.8	16.3

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=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	62.7 PK	74.0	-11.3	3.99 H	79	62.8	-0.1
2	2390.00	48.7 AV	54.0	-5.3	3.99 H	79	48.8	-0.1
3	*2412.00	114.4 PK			3.99 H	79	114.6	-0.2
4	*2412.00	102.8 AV			3.99 H	79	103.0	-0.2
5	4824.00	50.1 PK	74.0	-23.9	2.97 H	69	45.6	4.5
6	4824.00	39.1 AV	54.0	-14.9	2.97 H	69	34.6	4.5
7	12060.00	59.9 PK	74.0	-14.1	3.28 H	79	44.0	15.9
8	12060.00	45.6 AV	54.0	-8.4	3.28 H	79	29.7	15.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	70.8 PK	74.0	-3.2	2.42 V	57	70.9	-0.1
2	2390.00	53.6 AV	54.0	-0.4	2.42 V	57	53.7	-0.1
3	*2412.00	122.5 PK			2.42 V	57	122.7	-0.2
4	*2412.00	111.6 AV			2.42 V	57	111.8	-0.2
5	4824.00	53.9 PK	74.0	-20.1	2.69 V	20	49.4	4.5
6	4824.00	42.8 AV	54.0	-11.2	2.69 V	20	38.3	4.5
7	12060.00	63.6 PK	74.0	-10.4	3.48 V	39	47.7	15.9
8	12060.00	48.5 AV	54.0	-5.5	3.48 V	39	32.6	15.9

Remarks:

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

RF Mode	802.11be (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=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	56.9 PK	74.0	-17.1	3.97 H	108	57.0	-0.1
2	2390.00	44.8 AV	54.0	-9.2	3.97 H	108	44.9	-0.1
3	*2437.00	116.7 PK			3.97 H	108	116.9	-0.2
4	*2437.00	105.5 AV			3.97 H	108	105.7	-0.2
5	2483.50	56.7 PK	74.0	-17.3	3.97 H	108	57.0	-0.3
6	2483.50	44.5 AV	54.0	-9.5	3.97 H	108	44.8	-0.3
7	4874.00	50.2 PK	74.0	-23.8	3.04 H	88	45.7	4.5
8	4874.00	39.3 AV	54.0	-14.7	3.04 H	88	34.8	4.5
9	7311.00	55.1 PK	74.0	-18.9	2.94 H	307	43.3	11.8
10	7311.00	41.7 AV	54.0	-12.3	2.94 H	307	29.9	11.8
11	12185.00	59.9 PK	74.0	-14.1	3.24 H	74	43.7	16.2
12	12185.00	45.6 AV	54.0	-8.4	3.24 H	74	29.4	16.2
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	59.9 PK	74.0	-14.1	2.71 V	59	60.0	-0.1
2	2390.00	48.3 AV	54.0	-5.7	2.71 V	59	48.4	-0.1
3	*2437.00	125.8 PK			2.71 V	59	126.0	-0.2
4	*2437.00	114.2 AV			2.71 V	59	114.4	-0.2
5	2483.50	64.1 PK	74.0	-9.9	2.71 V	59	64.4	-0.3
6	2483.50	49.9 AV	54.0	-4.1	2.71 V	59	50.2	-0.3
7	4874.00	54.8 PK	74.0	-19.2	2.64 V	12	50.3	4.5
8	4874.00	43.2 AV	54.0	-10.8	2.64 V	12	38.7	4.5
9	7311.00	57.6 PK	74.0	-16.4	1.04 V	224	45.8	11.8
10	7311.00	44.6 AV	54.0	-9.4	1.04 V	224	32.8	11.8
11	12185.00	64.5 PK	74.0	-9.5	3.51 V	54	48.3	16.2
12	12185.00	49.3 AV	54.0	-4.7	3.51 V	54	33.1	16.2

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 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=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	115.2 PK			3.98 H	70	115.5	-0.3
2	*2462.00	103.7 AV			3.98 H	70	104.0	-0.3
3	2483.50	57.3 PK	74.0	-16.7	3.98 H	70	57.6	-0.3
4	2483.50	45.4 AV	54.0	-8.6	3.98 H	70	45.7	-0.3
5	4924.00	50.9 PK	74.0	-23.1	3.01 H	83	46.2	4.7
6	4924.00	39.8 AV	54.0	-14.2	3.01 H	83	35.1	4.7
7	7386.00	55.4 PK	74.0	-18.6	2.83 H	288	43.4	12.0
8	7386.00	41.8 AV	54.0	-12.2	2.83 H	288	29.8	12.0
9	12310.00	60.1 PK	74.0	-13.9	3.27 H	70	43.8	16.3
10	12310.00	45.8 AV	54.0	-8.2	3.27 H	70	29.5	16.3
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	122.9 PK			2.42 V	57	123.2	-0.3
2	*2462.00	111.1 AV			2.42 V	57	111.4	-0.3
3	2483.50	67.1 PK	74.0	-6.9	2.42 V	57	67.4	-0.3
4	2483.50	52.8 AV	54.0	-1.2	2.42 V	57	53.1	-0.3
5	4924.00	54.7 PK	74.0	-19.3	2.63 V	13	50.0	4.7
6	4924.00	43.6 AV	54.0	-10.4	2.63 V	13	38.9	4.7
7	7386.00	58.1 PK	74.0	-15.9	1.08 V	201	46.1	12.0
8	7386.00	44.9 AV	54.0	-9.1	1.08 V	201	32.9	12.0
9	12310.00	64.1 PK	74.0	-9.9	3.50 V	76	47.8	16.3
10	12310.00	49.1 AV	54.0	-4.9	3.50 V	76	32.8	16.3

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=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	58.4 PK	74.0	-15.6	3.93 H	104	58.5	-0.1
2	2390.00	44.8 AV	54.0	-9.2	3.93 H	104	44.9	-0.1
3	*2422.00	110.7 PK			3.93 H	104	110.9	-0.2
4	*2422.00	99.1 AV			3.93 H	104	99.3	-0.2
5	4844.00	50.1 PK	74.0	-23.9	3.03 H	78	45.7	4.4
6	4844.00	39.1 AV	54.0	-14.9	3.03 H	78	34.7	4.4
7	7266.00	55.2 PK	74.0	-18.8	2.97 H	322	43.4	11.8
8	7266.00	41.6 AV	54.0	-12.4	2.97 H	322	29.8	11.8
9	12110.00	60.3 PK	74.0	-13.7	3.24 H	81	44.0	16.3
10	12110.00	45.9 AV	54.0	-8.1	3.24 H	81	29.6	16.3
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	2390.00	67.1 PK	74.0	-6.9	2.26 V	35	67.2	-0.1
2	2390.00	53.4 AV	54.0	-0.6	2.26 V	35	53.5	-0.1
3	*2422.00	119.4 PK			2.26 V	35	119.6	-0.2
4	*2422.00	107.2 AV			2.26 V	35	107.4	-0.2
5	4844.00	54.7 PK	74.0	-19.3	2.58 V	3	50.3	4.4
6	4844.00	43.4 AV	54.0	-10.6	2.58 V	3	39.0	4.4
7	7266.00	57.6 PK	74.0	-16.4	1.02 V	201	45.8	11.8
8	7266.00	44.6 AV	54.0	-9.4	1.02 V	201	32.8	11.8
9	12110.00	64.1 PK	74.0	-9.9	3.52 V	79	47.8	16.3
10	12110.00	48.7 AV	54.0	-5.3	3.52 V	79	32.4	16.3

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 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=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	57.9 PK	74.0	-16.1	3.97 H	248	58.0	-0.1
2	2390.00	45.3 AV	54.0	-8.7	3.97 H	248	45.4	-0.1
3	*2437.00	113.7 PK			3.97 H	248	113.9	-0.2
4	*2437.00	102.7 AV			3.97 H	248	102.9	-0.2
5	2483.50	61.5 PK	74.0	-12.5	3.97 H	248	61.8	-0.3
6	2483.50	47.6 AV	54.0	-6.4	3.97 H	248	47.9	-0.3
7	4874.00	50.5 PK	74.0	-23.5	3.06 H	97	46.0	4.5
8	4874.00	39.7 AV	54.0	-14.3	3.06 H	97	35.2	4.5
9	7311.00	55.4 PK	74.0	-18.6	2.89 H	310	43.6	11.8
10	7311.00	41.9 AV	54.0	-12.1	2.89 H	310	30.1	11.8
11	12185.00	60.2 PK	74.0	-13.8	3.22 H	83	44.0	16.2
12	12185.00	46.1 AV	54.0	-7.9	3.22 H	83	29.9	16.2

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	70.1 PK	74.0	-3.9	2.27 V	38	70.2	-0.1
2	2390.00	52.8 AV	54.0	-1.2	2.27 V	38	52.9	-0.1
3	*2437.00	121.7 PK			2.27 V	38	121.9	-0.2
4	*2437.00	110.6 AV			2.27 V	38	110.8	-0.2
5	2483.50	69.7 PK	74.0	-4.3	2.27 V	38	70.0	-0.3
6	2483.50	53.5 AV	54.0	-0.5	2.27 V	38	53.8	-0.3
7	4874.00	54.6 PK	74.0	-19.4	2.61 V	19	50.1	4.5
8	4874.00	43.1 AV	54.0	-10.9	2.61 V	19	38.6	4.5
9	7311.00	57.1 PK	74.0	-16.9	1.00 V	214	45.3	11.8
10	7311.00	44.2 AV	54.0	-9.8	1.00 V	214	32.4	11.8
11	12185.00	64.3 PK	74.0	-9.7	3.50 V	63	48.1	16.2
12	12185.00	49.3 AV	54.0	-4.7	3.50 V	63	33.1	16.2

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 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=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Tank Wu		

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	111.2 PK			3.98 H	87	111.5	-0.3
2	*2452.00	99.8 AV			3.98 H	87	100.1	-0.3
3	2483.50	60.9 PK	74.0	-13.1	3.98 H	87	61.2	-0.3
4	2483.50	47.4 AV	54.0	-6.6	3.98 H	87	47.7	-0.3
5	4904.00	50.5 PK	74.0	-23.5	3.09 H	66	45.9	4.6
6	4904.00	39.2 AV	54.0	-14.8	3.09 H	66	34.6	4.6
7	7356.00	55.1 PK	74.0	-18.9	3.00 H	309	43.3	11.8
8	7356.00	41.7 AV	54.0	-12.3	3.00 H	309	29.9	11.8
9	12260.00	60.1 PK	74.0	-13.9	3.28 H	94	43.9	16.2
10	12260.00	45.7 AV	54.0	-8.3	3.28 H	94	29.5	16.2
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	*2452.00	120.2 PK			2.49 V	37	120.5	-0.3
2	*2452.00	108.1 AV			2.49 V	37	108.4	-0.3
3	2483.50	66.2 PK	74.0	-7.8	2.49 V	37	66.5	-0.3
4	2483.50	53.2 AV	54.0	-0.8	2.49 V	37	53.5	-0.3
5	4904.00	54.7 PK	74.0	-19.3	2.53 V	12	50.1	4.6
6	4904.00	43.4 AV	54.0	-10.6	2.53 V	12	38.8	4.6
7	7356.00	57.5 PK	74.0	-16.5	1.00 V	194	45.7	11.8
8	7356.00	44.5 AV	54.0	-9.5	1.00 V	194	32.7	11.8
9	12260.00	63.9 PK	74.0	-10.1	3.51 V	64	47.7	16.2
10	12260.00	48.6 AV	54.0	-5.4	3.51 V	64	32.4	16.2

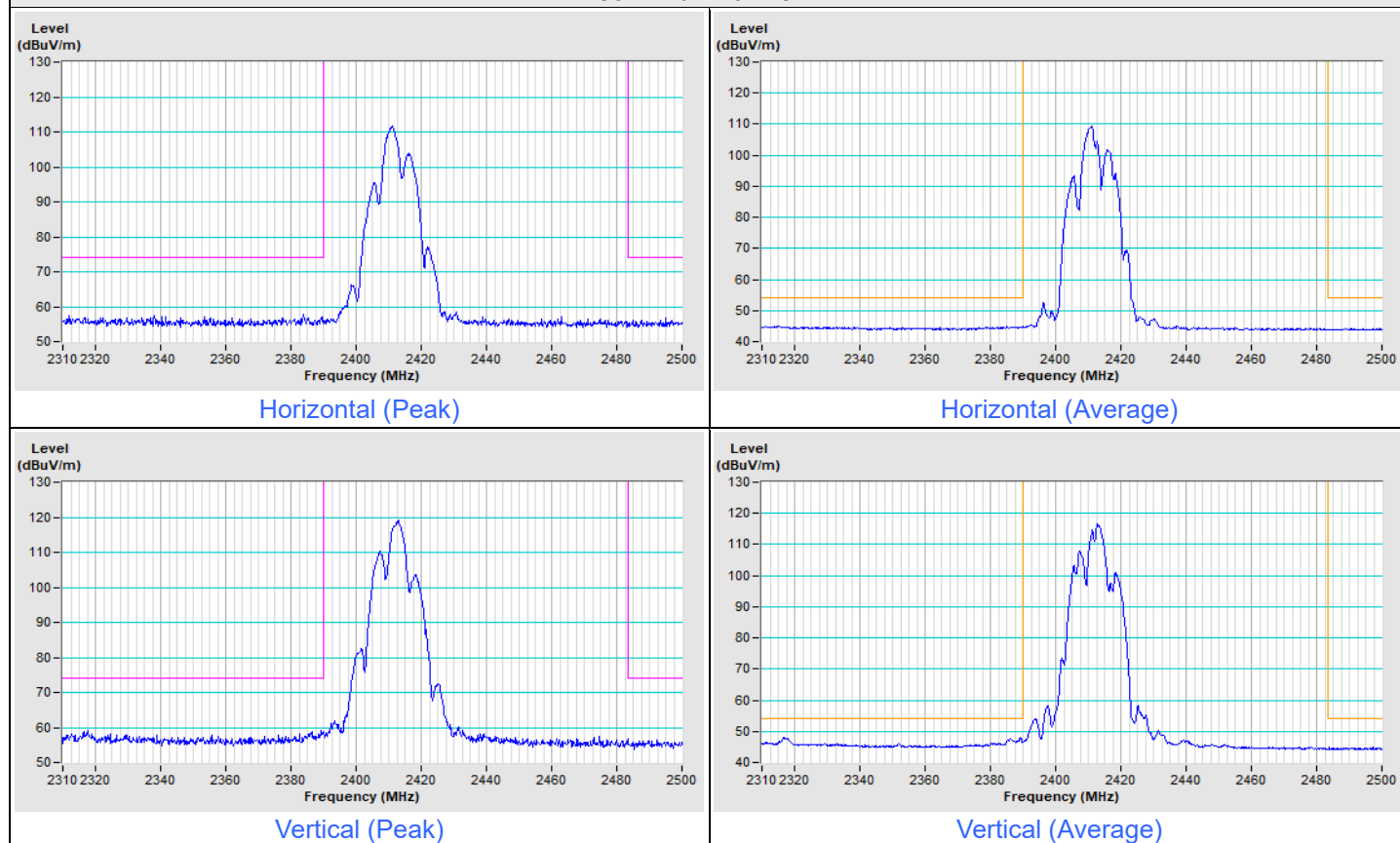
Remarks:

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.

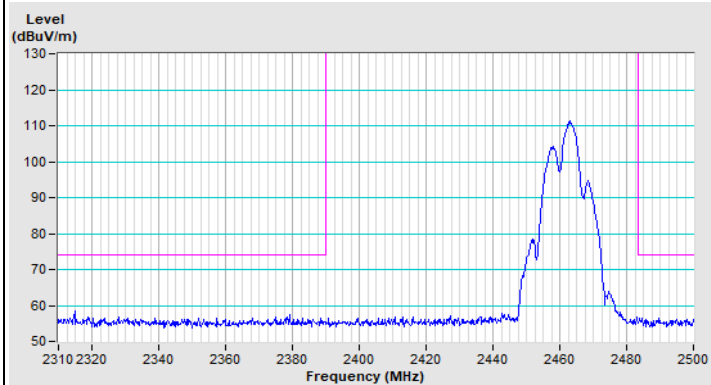
Plot of Band Edge

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=2 kHz, DET=Peak
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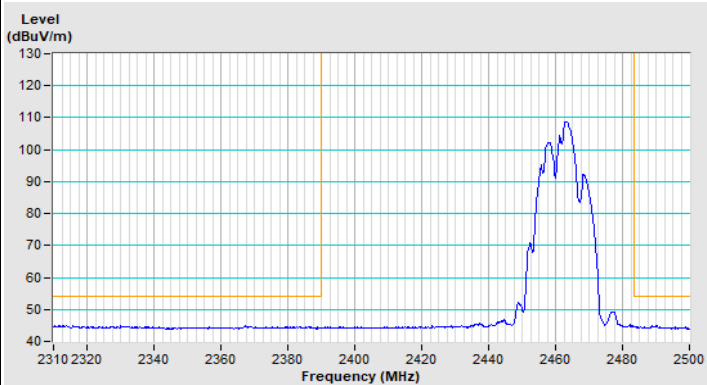
802.11b Channel 1



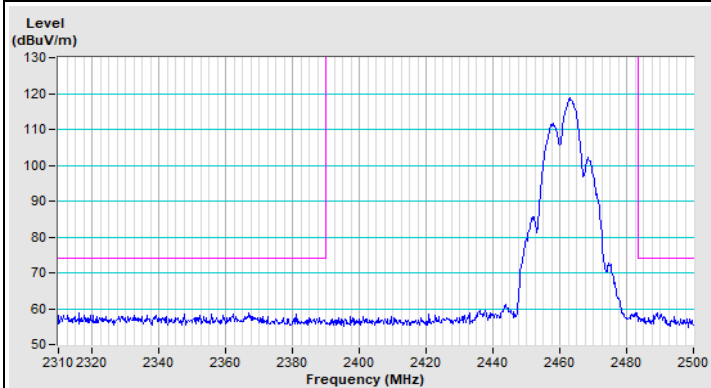
802.11b Channel 11



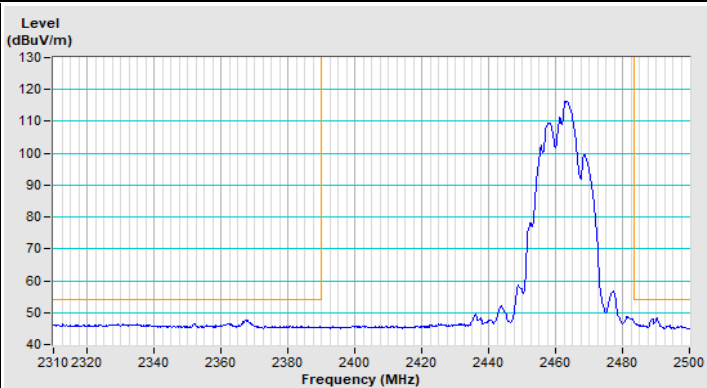
Horizontal (Peak)



Horizontal (Average)



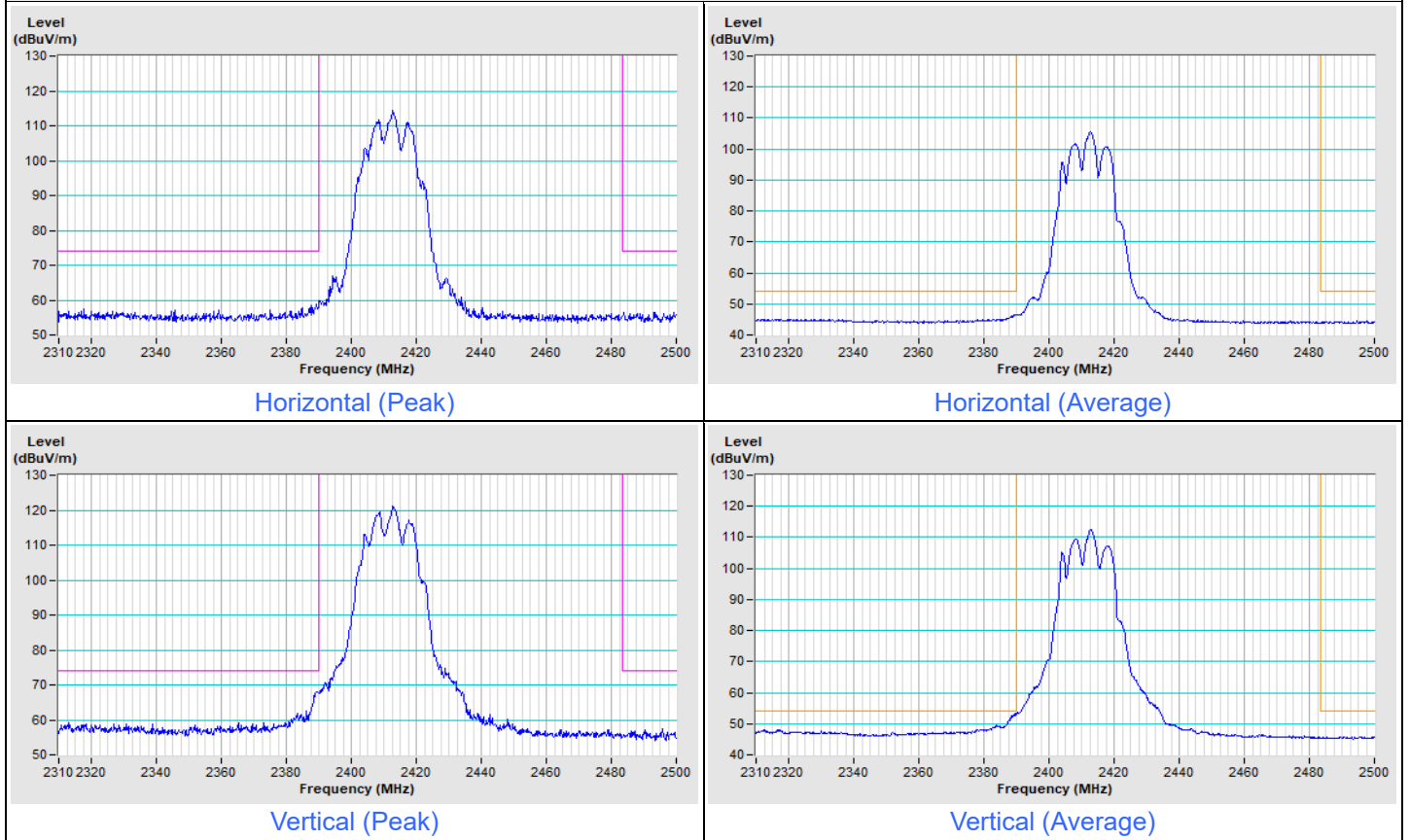
Vertical (Peak)



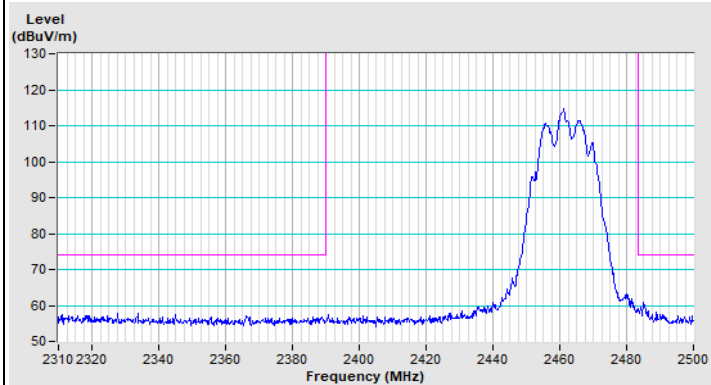
Vertical (Average)

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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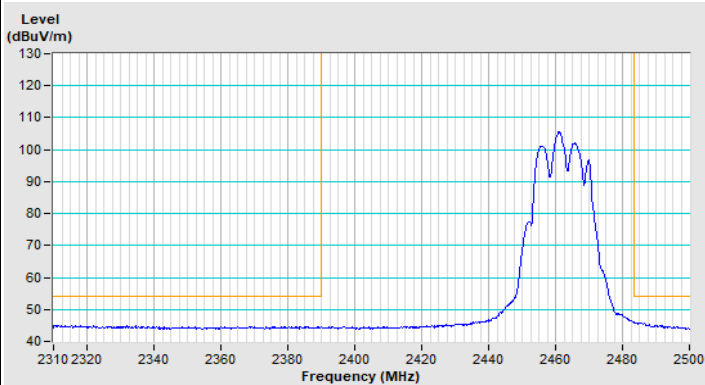
802.11g Channel 1



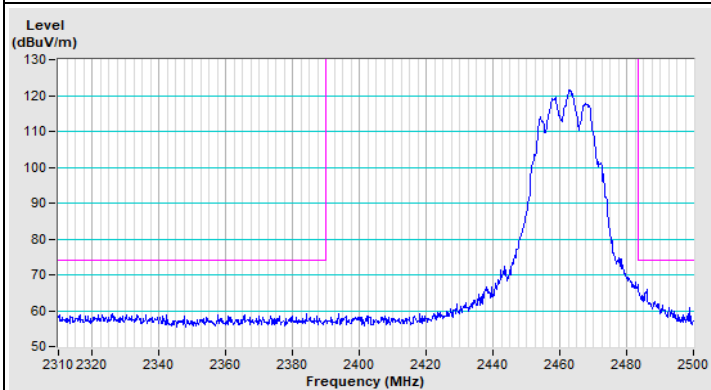
802.11g Channel 11



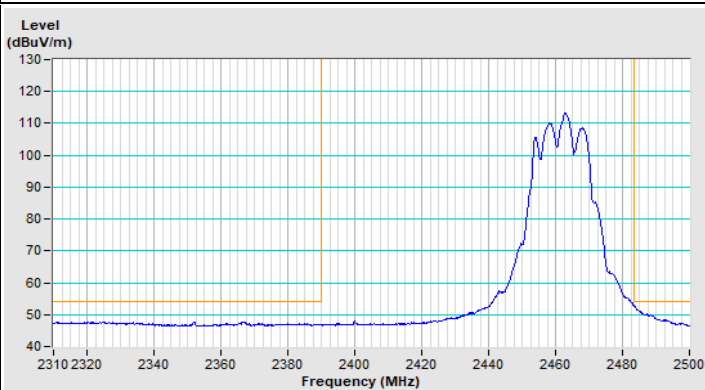
Horizontal (Peak)



Horizontal (Average)



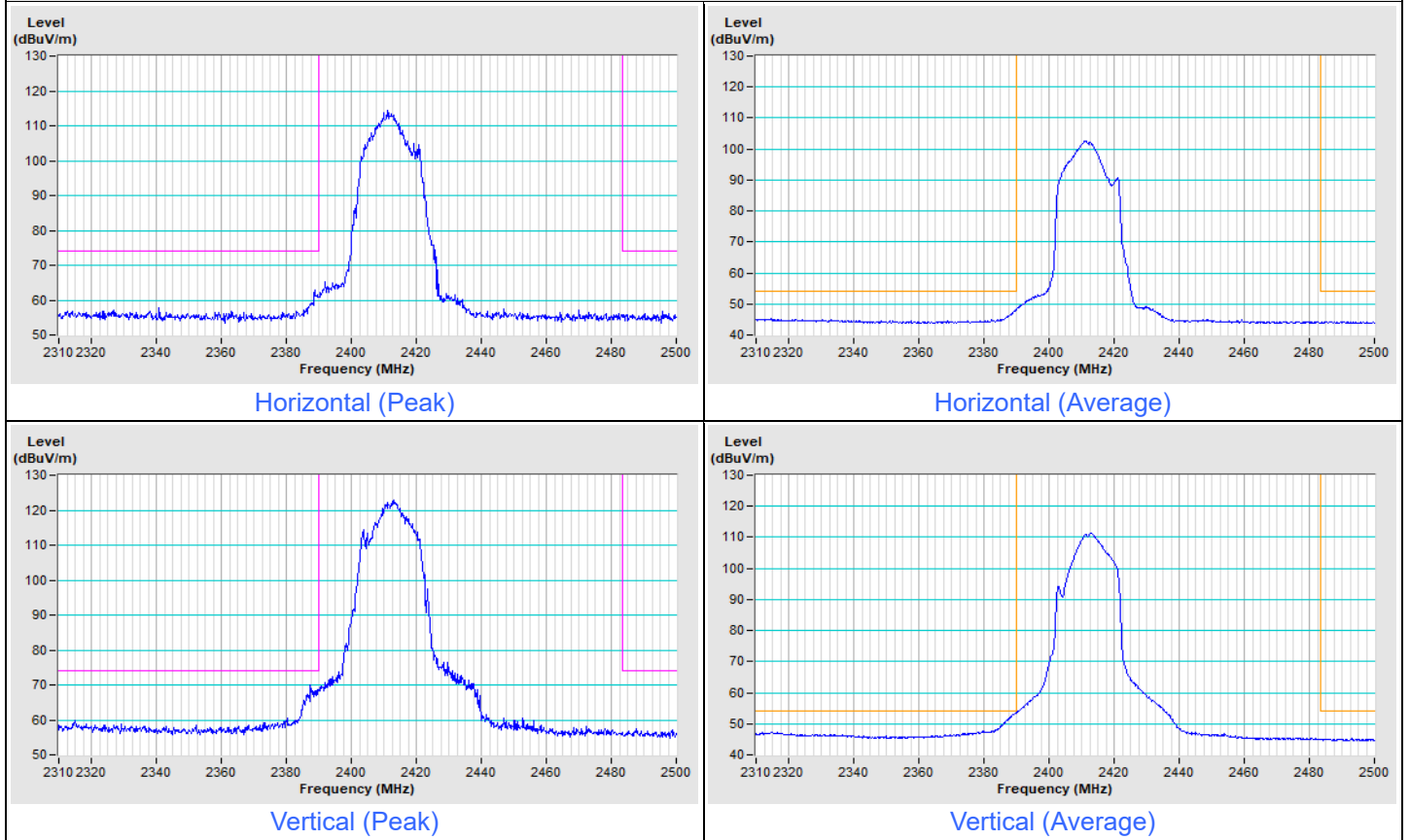
Vertical (Peak)



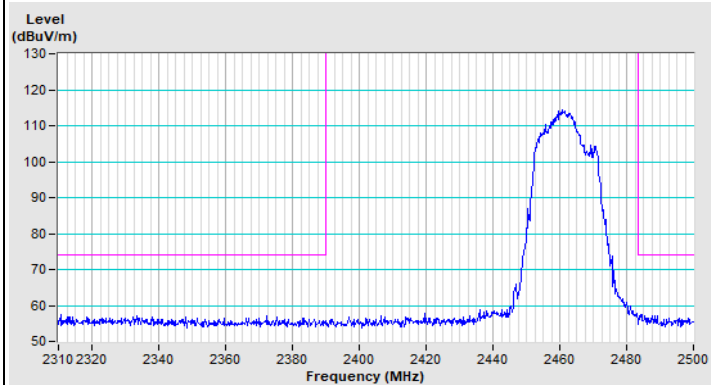
Vertical (Average)

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=200 Hz, DET=Peak
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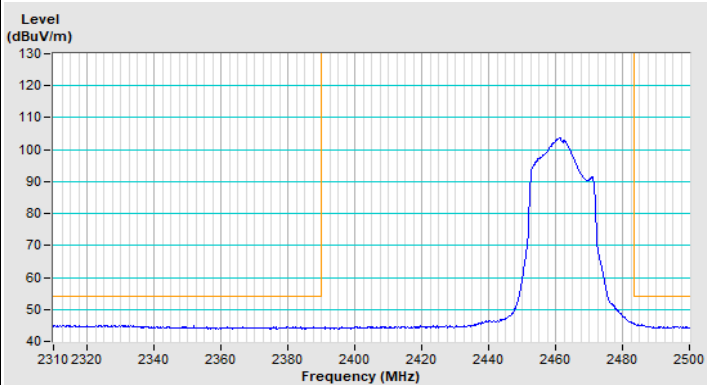
802.11be (EHT20) Channel 1



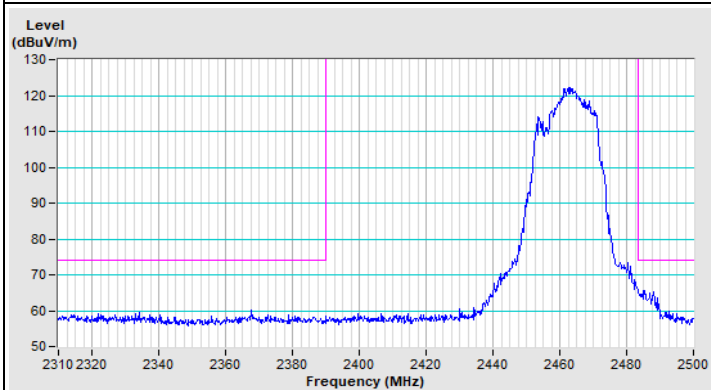
802.11be (EHT20) Channel 11



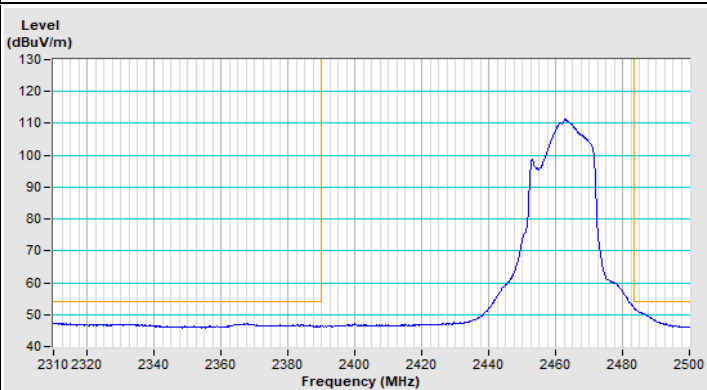
Horizontal (Peak)



Horizontal (Average)



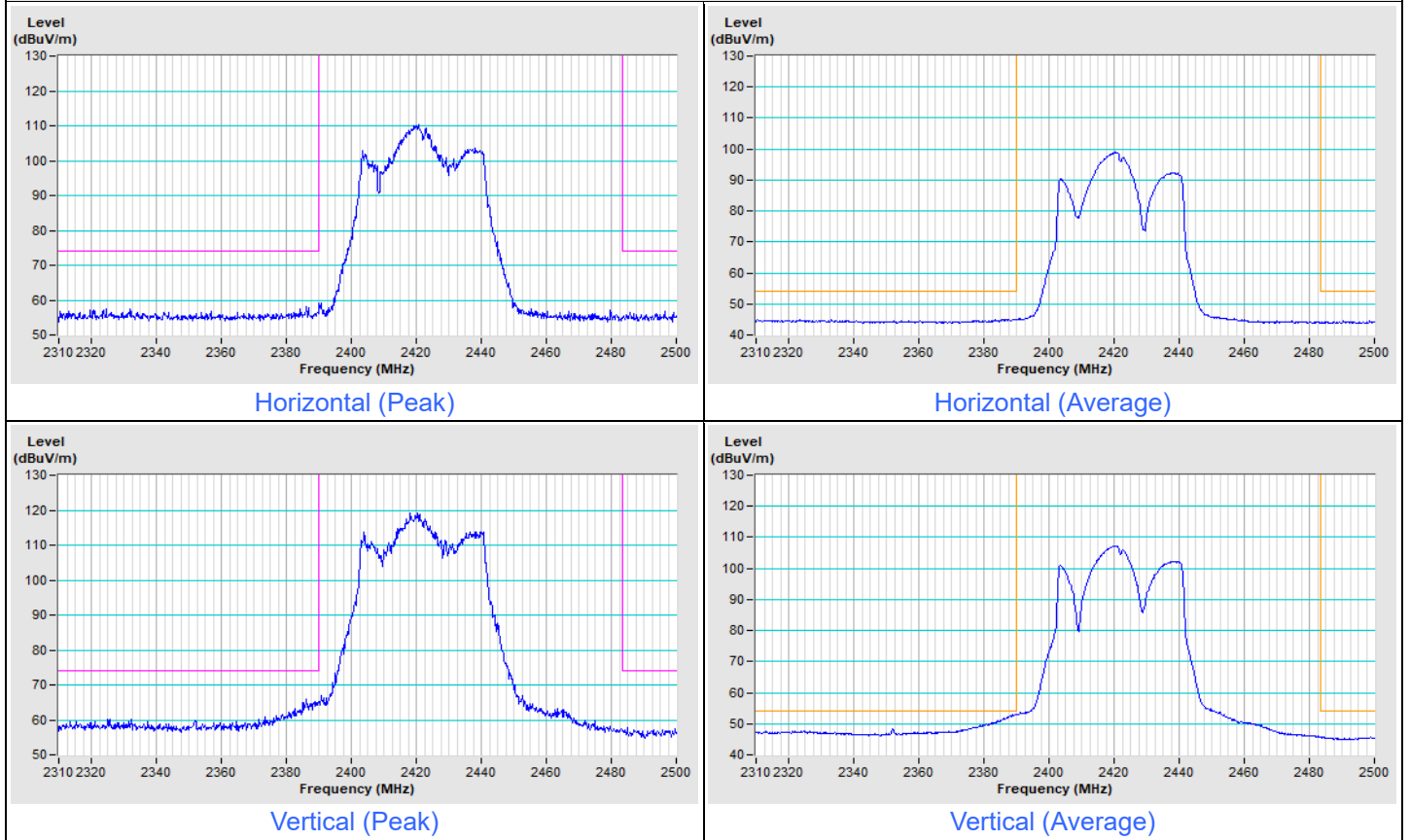
Vertical (Peak)



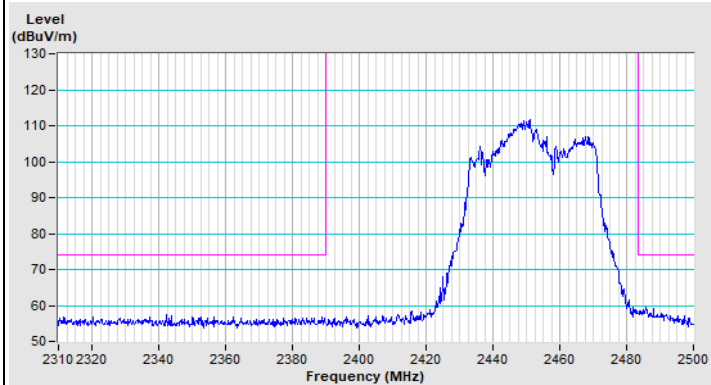
Vertical (Average)

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=200 Hz, DET=Peak
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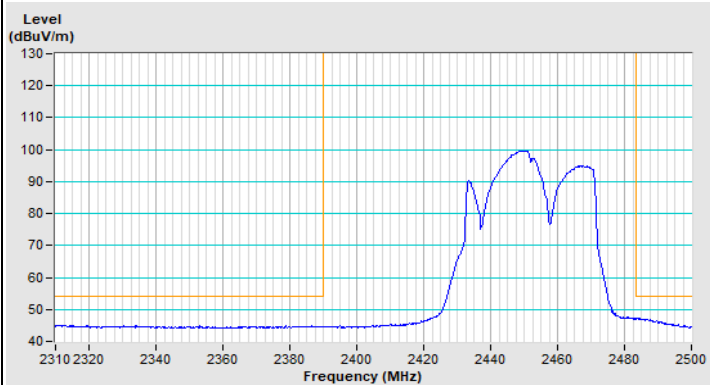
802.11be (EHT40) Channel 3



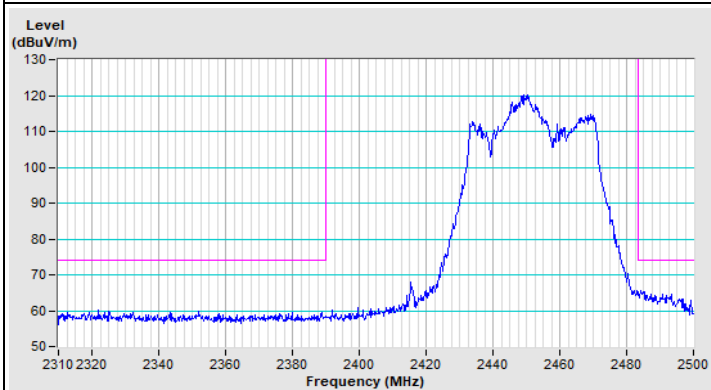
802.11be (EHT40) Channel 9



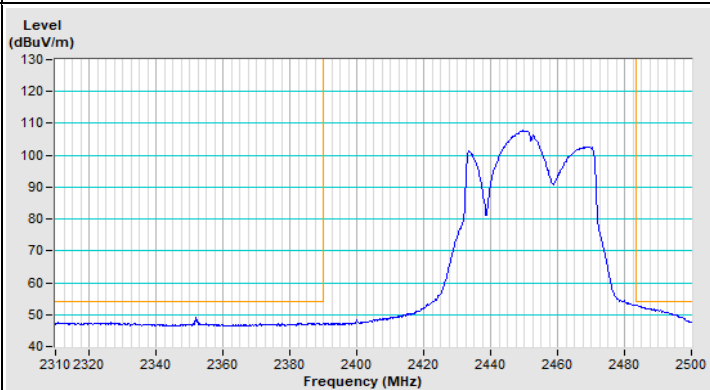
Horizontal (Peak)



Horizontal (Average)



Vertical (Peak)

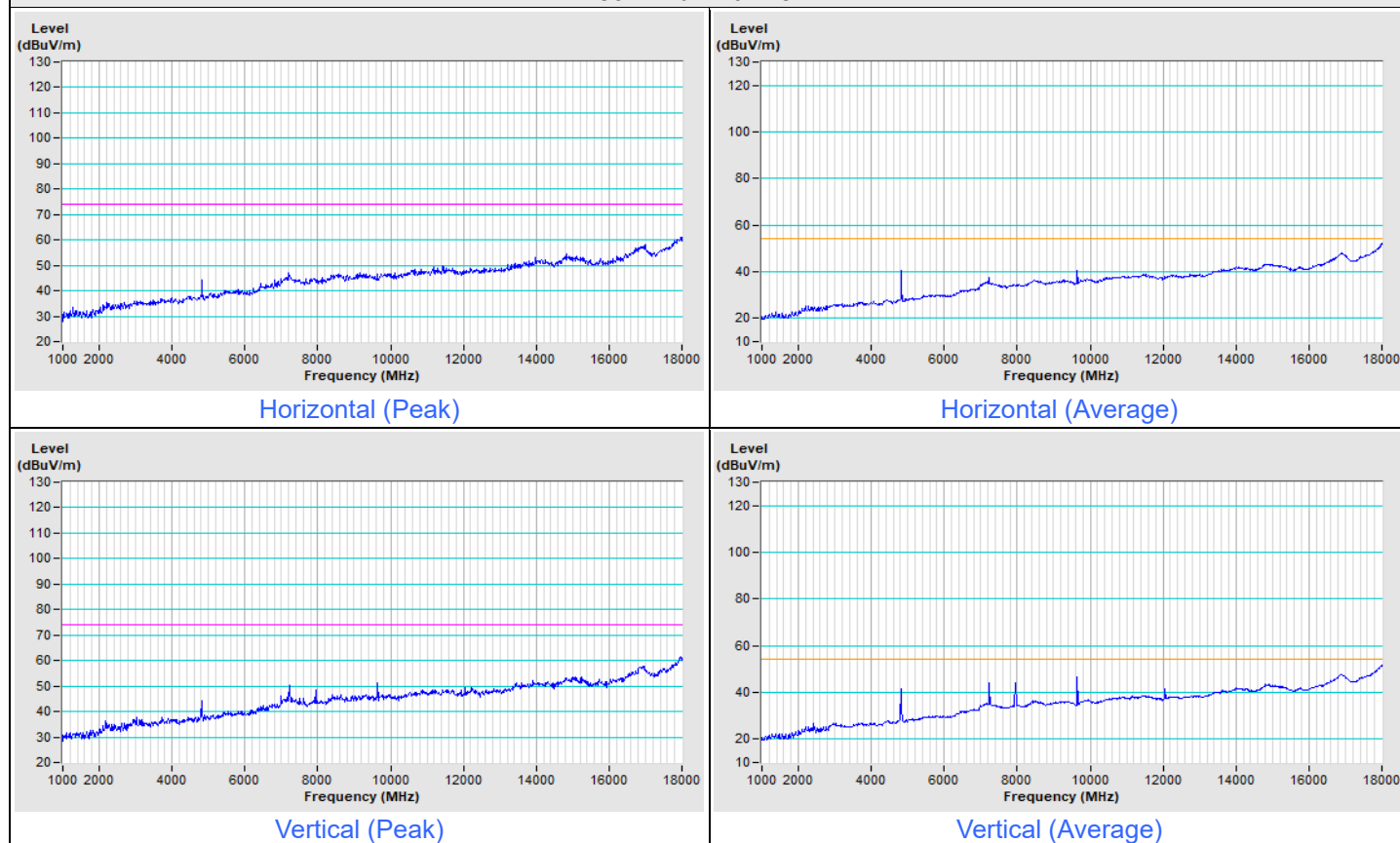


Vertical (Average)

Plot of Other Emission

Frequency Range	1 GHz ~ 18 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=3 MHz, DET=RMS
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802.11b Channel 1

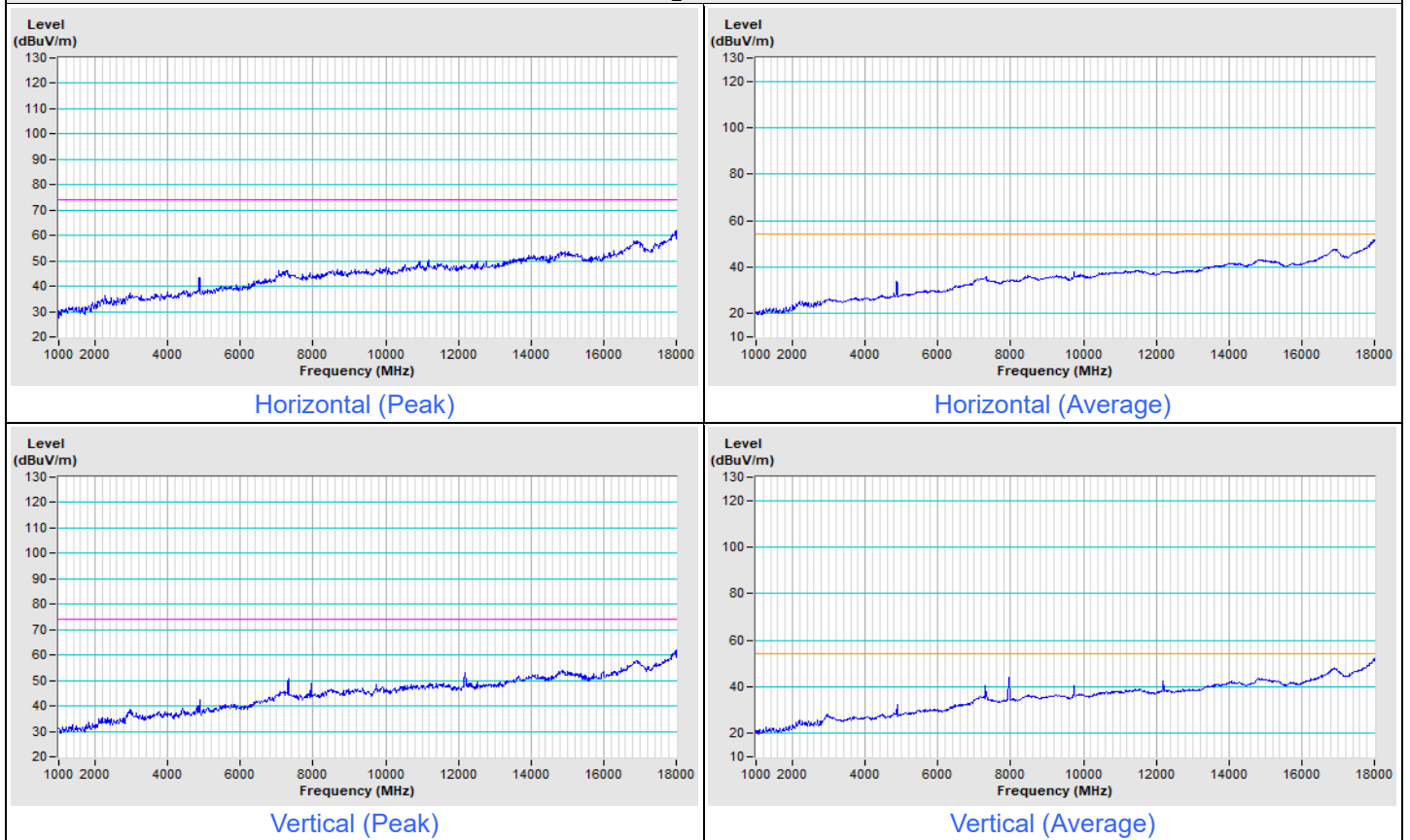


Notes:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 25 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

Frequency Range	1 GHz ~ 18 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=3 MHz, DET=RMS
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802.11g Channel 6

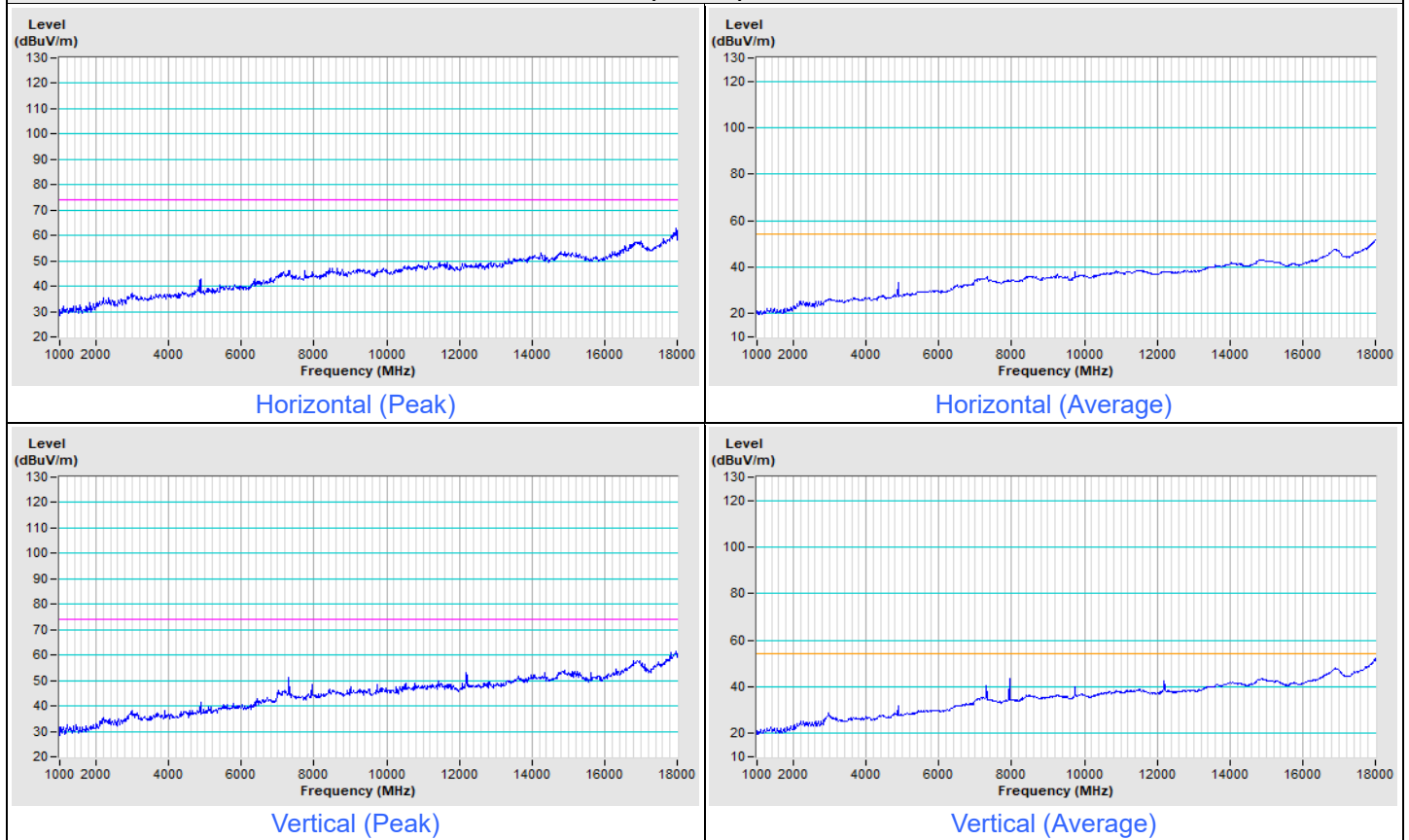


Notes:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 25 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

Frequency Range	1 GHz ~ 18 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=3 MHz, DET=RMS
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802.11be (EHT20) Channel 6

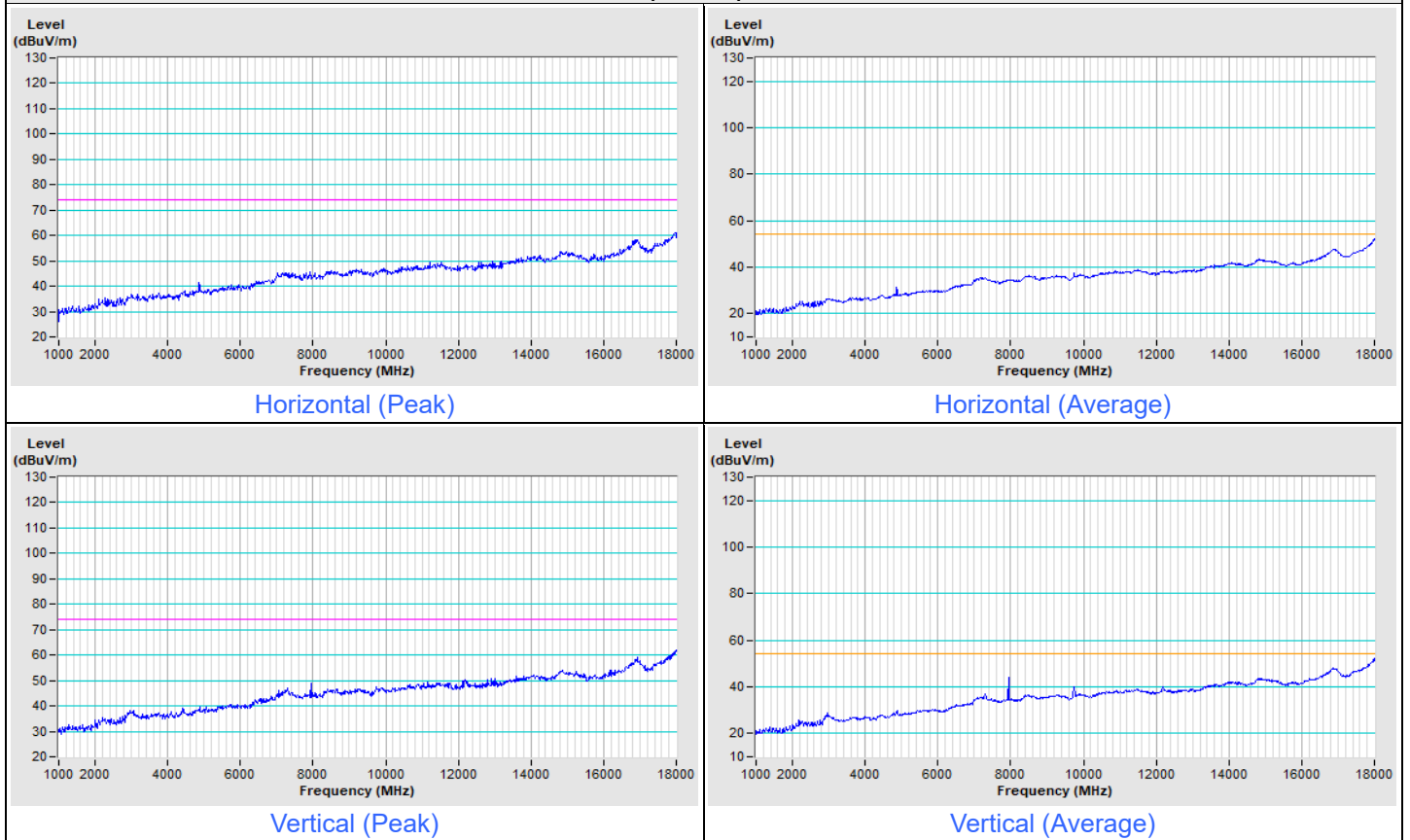


Notes:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 25 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

Frequency Range	1 GHz ~ 18 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=3 MHz, DET=RMS
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802.11be (EHT40) Channel 6



Notes:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 25 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

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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