

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart C (Section 15.247)
Report No.: RFBCUN-WTW-P25020520-5
FCC ID: H8NPCTE020
Product: Mobile Computer
Brand: Askey
Model No.: RC40
Received Date: 2025/3/11
Test Date: 2025/4/8 ~ 2025/6/2
Issued Date: 2025/7/4
Applicant: Askey Computer Corporation
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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lin Kou Laboratories
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FCC Registration / 788550 / TW0003
Designation Number:

Approved by: _____

Jeremy Lin

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, Date: _____

2025/7/4

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Prepared by : Vera Huang / 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.....	9
3.3 Channel List.....	10
3.4 Test Mode Applicability and Tested Channel Detail.....	11
3.5 Duty Cycle of Test Signal.....	12
3.6 Test Program Used and Operation Descriptions	14
3.7 Connection Diagram of EUT and Peripheral Devices	14
3.8 Configuration of Peripheral Devices and Cable Connections	14
4 Test Instruments	15
4.1 RF Output Power.....	15
4.2 Power Spectral Density	15
4.3 6 dB Bandwidth	15
4.4 Conducted Out of Band Emissions	15
4.5 AC Power Conducted Emissions	16
4.6 Unwanted Emissions below 1 GHz	16
4.7 Unwanted Emissions above 1 GHz.....	17
5 Limits of Test Items.....	18
5.1 RF Output Power.....	18
5.2 Power Spectral Density	18
5.3 6 dB Bandwidth	18
5.4 Conducted Out of Band Emissions	18
5.5 AC Power Conducted Emissions	18
5.6 Unwanted Emissions below 1 GHz	19
5.7 Unwanted Emissions above 1 GHz.....	19
6 Test Arrangements.....	20
6.1 RF Output Power.....	20
6.1.1 Test Setup	20
6.1.2 Test Procedure.....	20
6.2 Power Spectral Density	20
6.2.1 Test Setup	20
6.2.2 Test Procedure.....	20
6.3 6 dB Bandwidth	21
6.3.1 Test Setup	21
6.3.2 Test Procedure.....	21
6.4 Conducted Out of Band Emissions	21
6.4.1 Test Setup	21
6.4.2 Test Procedure.....	21
6.5 AC Power Conducted Emissions	22
6.5.1 Test Setup	22
6.5.2 Test Procedure.....	22
6.6 Unwanted Emissions below 1 GHz	23
6.6.1 Test Setup	23
6.6.2 Test Procedure.....	24
6.7 Unwanted Emissions above 1 GHz.....	25
6.7.1 Test Setup	25
6.7.2 Test Procedure.....	25
7 Test Results of Test Item	26

7.1	RF Output Power.....	26
7.2	Power Spectral Density	29
7.3	6 dB Bandwidth	33
7.4	Conducted Out of Band Emissions	36
7.5	AC Power Conducted Emissions	50
7.6	Unwanted Emissions below 1 GHz	52
7.7	Unwanted Emissions above 1 GHz.....	54
8	Pictures of Test Arrangements	89
9	Information of the Testing Laboratories	90

Issue No.	Description	Date Issued
RFBCUN-WTW-P25020520-5	Original Release	2025/7/4

1 Certificate

Product: Mobile Computer

Brand: Askey

Test Model: RC40

Sample Status: Engineering sample

Applicant: Askey Computer Corporation

Test Date: 2025/4/8 ~ 2025/6/2

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

Measurement ANSI C63.10-2013

procedure: 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 -17.07 dB at 0.65763 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -6.6 dB at 937.92 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -1.0 dB at 2390.00 MHz and 2483.50 MHz
15.203	Antenna Requirement	Pass	Antenna connector is ipex(MHF) not a standard connector.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Specification	Expanded Uncertainty (k=2) (±)
RF Output Power	-	1.371 dB
Power Spectral Density	-	1.017 dB
6 dB Bandwidth	-	206.5 Hz
Conducted Out of Band Emissions	9 kHz ~ 40 GHz	2.79 dB
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.90 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	2.44 dB
	30 MHz ~ 1 GHz	2.95 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	2.26 dB
	18 GHz ~ 40 GHz	1.94 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	Mobile Computer
Brand	Askey
Test Model	RC40
Status of EUT	Engineering sample
Power Supply Rating	5 / 9 / 12 / 15 / 20Vdc (from adapter) 3.85Vdc (from battery) 12Vdc (from Charging Cradle)
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
Modulation Technology	DSSS, OFDM, OFDMA
Transfer Rate	Up to 573.5 Mbps
Operating Frequency	2.412 GHz ~ 2.462 GHz
Number of Channel	802.11b, 802.11g, 802.11n (HT20), VHT20, 802.11ax (HE20):11 802.11n (HT40), VHT40, 802.11ax (HE40):7
Output Power	90.368 mW (19.56 dBm)

Note:

1. The EUT contains following accessories.

Battery	Brand	Askey
	Model	RC40-BR-SBL500
	Nominal Voltage	3.85V
	Nominal Capacity	5000mAh, 19.25Wh
	Rated Capacity	4900mAh, 18.865Wh
	Limited Charging Voltage	4.4V
AC Adapter 1 (for Charging Cradle) (Optional)	Brand	Sunny Computer Technology Co.,LTD.
	Model	SYS1649-5012-T3
	Input	100-240V~, 1.5A MAX,50-60Hz
	Output	+12.0V=4.16A
	Output Power	50.0W MAX.
	Description	1.2M / 1core
Power Cord (for AC Adapter 1 & 3) (Optional)	Brand	I-SHENG
	Model	V5BVS33161218002
	Description	1.8M
AC Adapter 2 (Optional)	Brand	CHANNEL WELL TECHNOLOGY
	Model	A1C030AC
	Input	100-240V~, 50-60Hz, 1.2A
	Output	5.0V= 3.0A 15.0W
		9.0V= 3.0A 27.0W
12.0V= 2.5A 30.0W		
15.0V= 2.0A 30.0W		
20.0V=1.5A 30.0W		
AC Adapter 3 (for Charging Cradle) (Optional)	Brand	MASS POWER
	Model	S050-1A120416B3
	Input	100-240V~ 50-60Hz, 1.5A
	Output	12.0V 4.16A, 49.92W
Charging Cradle (Optional)	Brand	Askey
	Model	RC40-CD-TBE100
Scan Handle (Optional)	Brand	Askey
	Model	RC40-PT-TGH000

2. The EUT uses following support unit.

USB C to C Cable	Brand	HOTRON
	Model	D0018100R7XYY
	Description	0.92m

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	Ant. 5	Ant. 6
Antenna Type	PIFA	PIFA
Connector Type	ipex(MHF)	ipex(MHF)
Brand	HONGBO	HONGBO
Model	290-40738	290-40738
Frequency Range	Antenna Gain (dBi)	
2.4~2.4835GHz	1.46	0.32

* 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
802.11ax (RU26/52/106/242/484)	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 mode 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), and 802.11ax 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):

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):

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: X-axis / Y-axis / Z-axis. Pre-scan these ways and find the worst case as a representative test condition. 2. EUT can be used in the following ways: EUT only + Adapter 2 / EUT + Charging Cradle + Adapter 3 / EUT + Scan Handle + Charging Cradle + Adapter 1. 3. Pre-scan these ways and find the worst case as a representative test condition.
Worst Case:	1. X-axis / Y-axis / Z-axis Worst Condition: Z-axis 2. EUT only + Adapter 2 / EUT + Charging Cradle + Adapter 3 / EUT + Scan Handle + Charging Cradle + Adapter 1 Worst Condition: EUT only + Adapter 2

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

Test Item	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter	RU/MRU Index
RF Output Power	802.11b	CDD	1, 6, 11	DBPSK	1Mb/s	NA
	802.11g	CDD	1, 6, 11	BPSK	6Mb/s	NA
	802.11ax (HE20) 26-tone RU	CDD	1, 6, 11	BPSK	MCS0	0, 0, 8
	802.11ax (HE20) 52-tone RU	CDD	1, 6, 11	BPSK	MCS0	37, 37, 40
	802.11ax (HE20) 106-tone RU	CDD	1, 6, 11	BPSK	MCS0	53, 53, 54
	802.11ax (HE20) Full RU	CDD & Beamforming	1, 6, 11	BPSK	MCS0	NA
	802.11ax (HE40) Full RU	CDD & Beamforming	3, 6, 9	BPSK	MCS0	NA
Power Spectral Density / 6 dB Bandwidth / Conducted Out of Band Emissions	802.11b	CDD	1, 6, 11	DBPSK	1Mb/s	NA
	802.11g	CDD	1, 6, 11	BPSK	6Mb/s	NA
	802.11ax (HE20) 26-tone RU	CDD	1, 6, 11	BPSK	MCS0	0, 0, 8
	802.11ax (HE20) 52-tone RU	CDD	1, 6, 11	BPSK	MCS0	37, 37, 40
	802.11ax (HE20) 106-tone RU	CDD	1, 6, 11	BPSK	MCS0	53, 53, 54
	802.11ax (HE20) Full RU	CDD	1, 6, 11	BPSK	MCS0	NA
	802.11ax (HE40) Full RU	CDD	3, 6, 9	BPSK	MCS0	NA
AC Power Conducted Emissions	802.11b	CDD	6	DBPSK	1Mb/s	NA
Unwanted Emissions below 1 GHz	802.11b	CDD	6	DBPSK	1Mb/s	NA
Unwanted Emissions above 1 GHz	802.11b	CDD	1, 6, 11	DBPSK	1Mb/s	NA
	802.11g	CDD	1, 6, 11	BPSK	6Mb/s	NA
	802.11ax (HE20) 26-tone RU	CDD	1, 6, 11	BPSK	MCS0	0, 0, 8
	802.11ax (HE20) 52-tone RU	CDD	1, 6, 11	BPSK	MCS0	37, 37, 40
	802.11ax (HE20) 106-tone RU	CDD	1, 6, 11	BPSK	MCS0	53, 53, 54
	802.11ax (HE20) Full RU	CDD	1, 6, 11	BPSK	MCS0	NA
	802.11ax (HE40) Full RU	CDD	3, 6, 9	BPSK	MCS0	NA

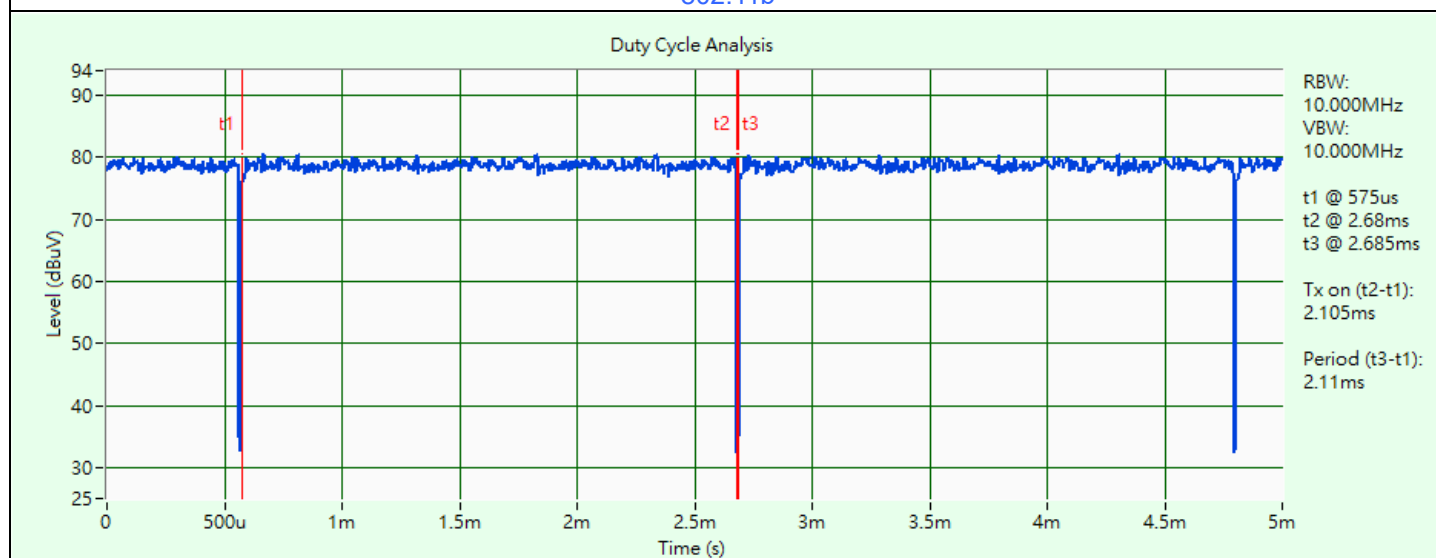
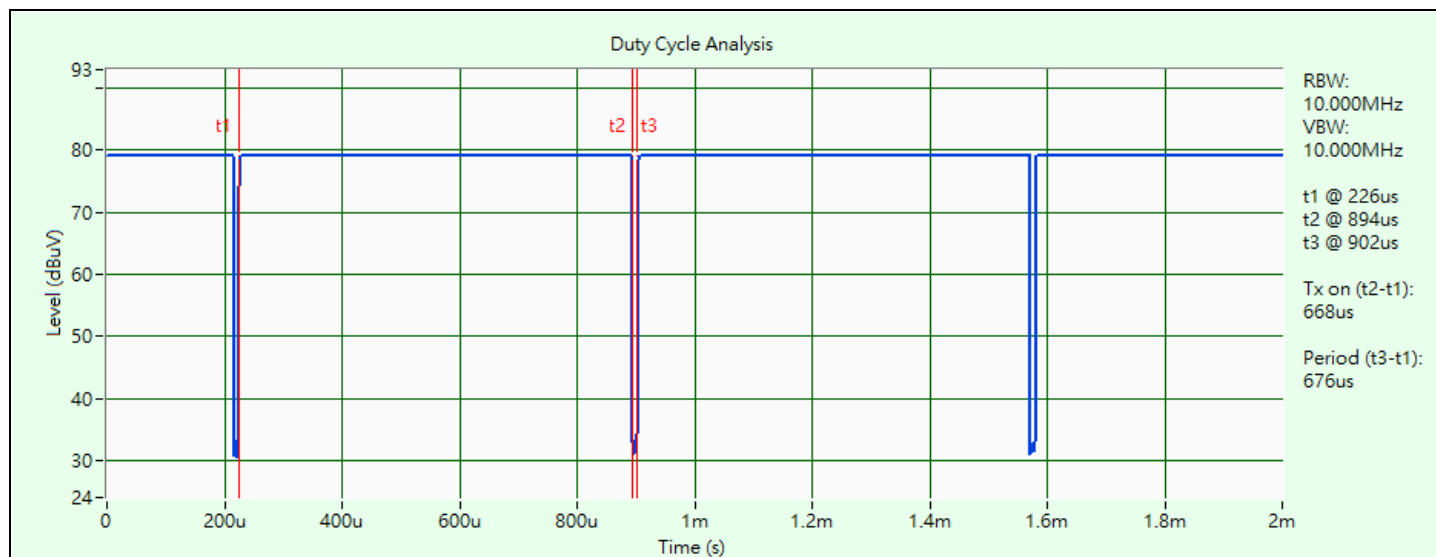
3.5 Duty Cycle of Test Signal

802.11b: Duty cycle = $0.668 \text{ ms} / 0.676 \text{ ms} \times 100\% = 98.8\%$

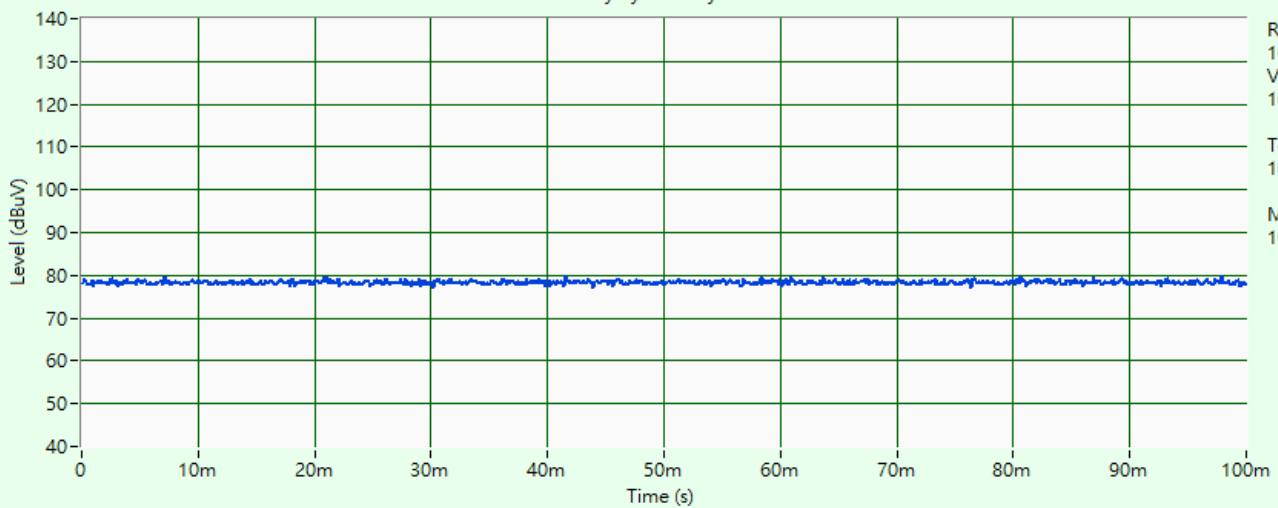
802.11g: Duty cycle = $2.105 \text{ ms} / 2.11 \text{ ms} \times 100\% = 99.8\%$

802.11ax (HE20) Full RU: Duty cycle = $100 \text{ ms} / 100 \text{ ms} \times 100\% = 100.0\%$

802.11ax (HE40) Full RU: Duty cycle = $100 \text{ ms} / 100 \text{ ms} \times 100\% = 100.0\%$

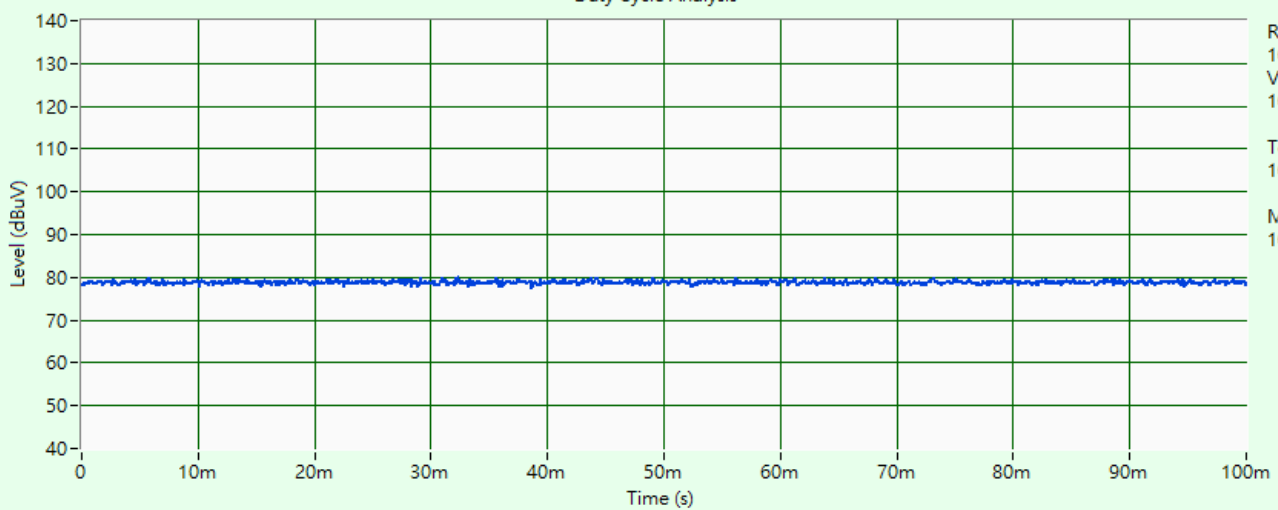


Duty Cycle Analysis



802.11ax (HE20) Full RU

Duty Cycle Analysis



802.11ax (HE40) Full RU

3.6 Test Program Used and Operation Descriptions

Controlling software QRCT V4.0-00211 has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices



Under Table

3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Adapter	CHANNEL WELL TECHNOLOGY	A1C030AC	NA	NA	Supplied by applicant

No.	Cable Descriptions	Qty.	Length (m)	Shielded (Yes/ No)	Cores (Qty.)	Remark
1.	USB C to C Cable	1	0.92	No	0	Supplied by applicant

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-10	00800A1K01A-10-01	2025/5/23	2026/5/22
Peak Power Analyzer Keysight	8990B	MY51000485	2025/1/20	2026/1/19
Wideband Power Sensor Keysight	N1923A	MY58020002	2025/1/21	2026/1/20
		MY58140009	2025/1/21	2026/1/20

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2025/5/28 ~ 2025/6/2

4.2 Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2025/5/23	2026/5/22
Signal & Spectrum Analyzer R&S	FSV3044	101504	2024/6/18	2025/6/17
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: 2025/5/28 ~ 2025/6/2

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	E1-011279	04	2024/11/28	2025/11/27
	E1-011280	05	2024/11/28	2025/11/27
	E1-011311	09	2024/11/28	2025/11/27
DC-LISN Schwarzbeck	NNBM 8126G	8126G-069	2024/11/5	2025/11/4
EMI Test Receiver R&S	ESR3	102783	2024/12/17	2025/12/16
Fixed Attenuator STI	BNC5W10dB	PAD-COND2-01	2024/8/25	2025/8/24
LISN R&S	ESH2-Z5	100100	2025/3/5	2026/3/4
	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_Cond_ 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: 2025/4/18

4.6 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower & Turn Max-Full	MFA-440H	AT93021705	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-472	2024/10/14	2025/10/13
EXA Signal Analyzer Agilent	N9010A	MY52220207	2024/12/30	2025/12/29
Loop Antenna TESEQ	HLA 6121	45745	2024/8/21	2025/8/20
MXE EMI Receiver Agilent	N9038A	MY51210203	2024/8/27	2025/8/26
Preamplifier EMCI	EMC 330H	980112	2024/9/24	2025/9/23
	EMC001340	980201	2024/9/24	2025/9/23
RF Coaxial Cable Woken	8D-FB	Cable-Ch10-01	2024/9/24	2025/9/23
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	MFT-201SS	N/A	N/A	N/A
Turn Table Controller Max-Full	MG-7802	N/A	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 5.
2. Tested Date: 2025/4/11

4.7 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower & Turn Max-Full	MFA-440H	AT93021705	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	7	N/A	N/A
EXA Signal Analyzer Agilent	N9010A	MY52220207	2024/12/30	2025/12/29
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-969	2024/11/10	2025/11/9
	BBHA 9170	148	2024/11/10	2025/11/9
MXE EMI Receiver Keysight	N9038A	MY55420137	2024/5/8	2025/5/7
Preamplifier EMCI	EMC 012645	980115	2024/9/24	2025/9/23
	EMC 184045	980116	2024/9/24	2025/9/23
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2024/7/6	2025/7/5
	EMC102-KM-KM-3000	150929	2024/7/6	2025/7/5
	EMC104-SM-SM- 8000+3000	171005	2024/9/24	2025/9/23
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	EMC104-SM-SM- 1000(140807)	2024/9/24	2025/9/23
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	MFT-201SS	N/A	N/A	N/A
Turn Table Controller Max-Full	MG-7802	N/A	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 5.
2. Tested Date: 2025/4/8 ~ 2025/4/25

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

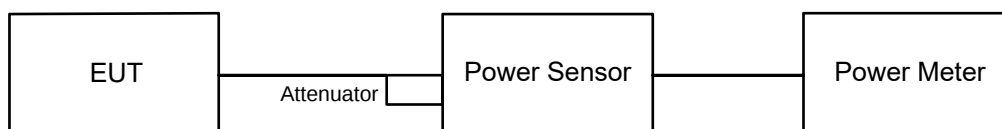
Notes:

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



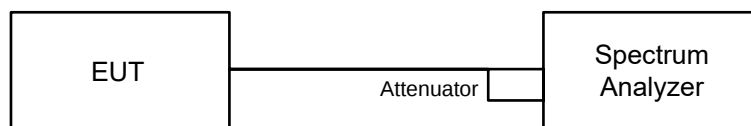
6.1.2 Test Procedure

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



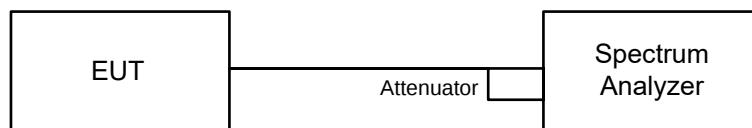
6.2.2 Test Procedure

- Measure the duty cycle (x).
- Set instrument center frequency to DTS channel center frequency.
- Set span to at least 1.5 times the OBW.
- Set RBW to: 3 kHz.
- Set VBW $\geq 3 \times$ RBW.
- Detector = power averaging (RMS) or sample detector (when RMS not available).
- Ensure that the number of measurement points in the sweep $\geq 2 \times$ span/RBW.
- Sweep time = auto couple.
- Do not use sweep triggering. Allow sweep to "free run".
- Employ trace averaging (RMS) mode over a minimum of 100 traces.
- 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

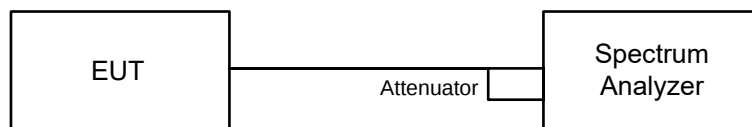


6.3.2 Test Procedure

- 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

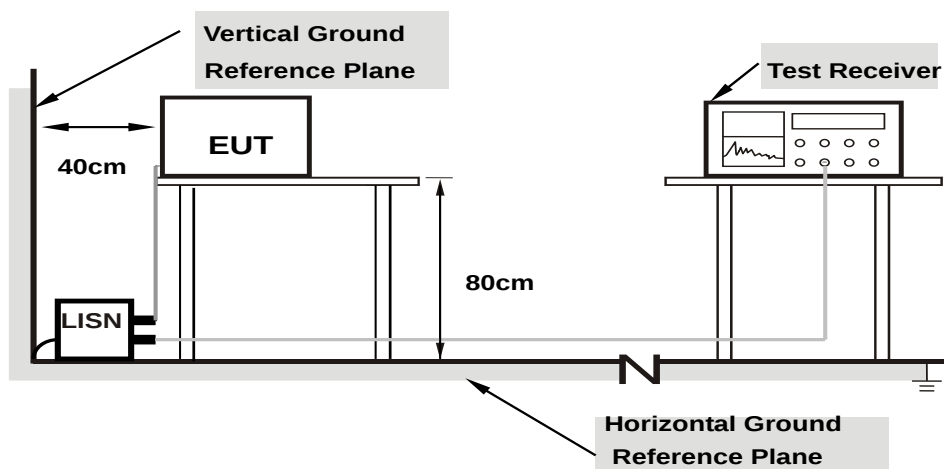
- Set the RBW = 100 kHz.
- Set the VBW ≥ 300 kHz.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOBE

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

6.5 AC Power Conducted Emissions

6.5.1 Test Setup



Note: 1. Support units were connected to second LISN.

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

6.5.2 Test Procedure

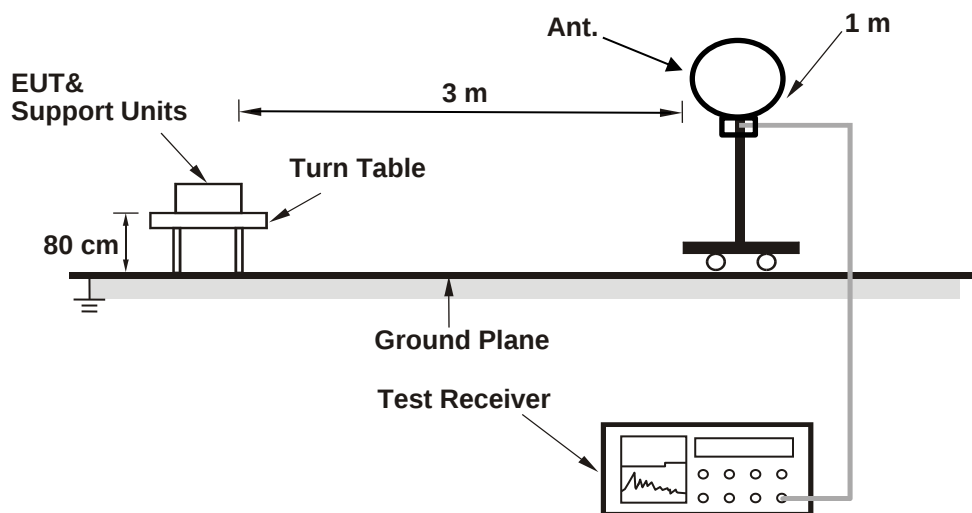
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The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

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

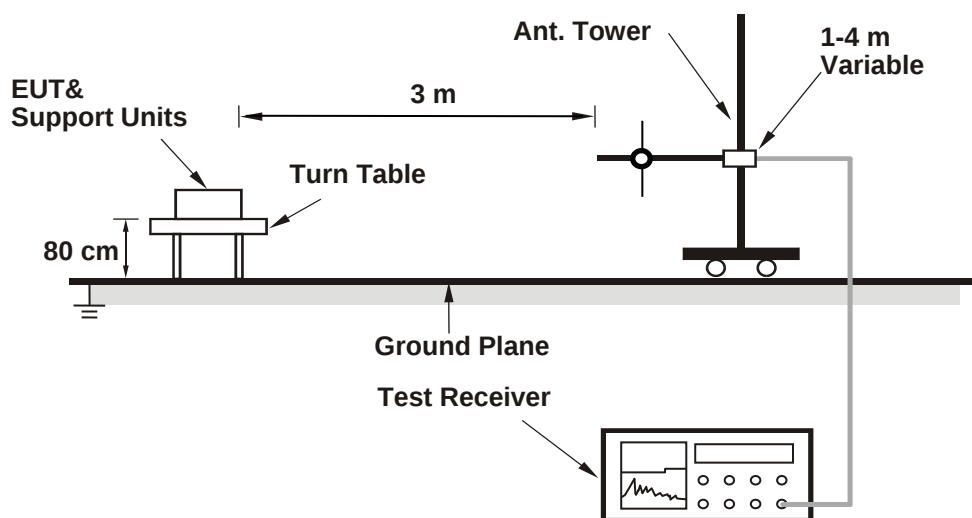
6.6 Unwanted Emissions below 1 GHz

6.6.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



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

6.6.2 Test Procedure

For Radiated emission below 30 MHz

- 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.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- 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.
- 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:

- The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
- The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency (150 kHz to 30 MHz).
- All modes of operation were investigated and the worst-case emissions are reported.

For Radiated emission above 30 MHz

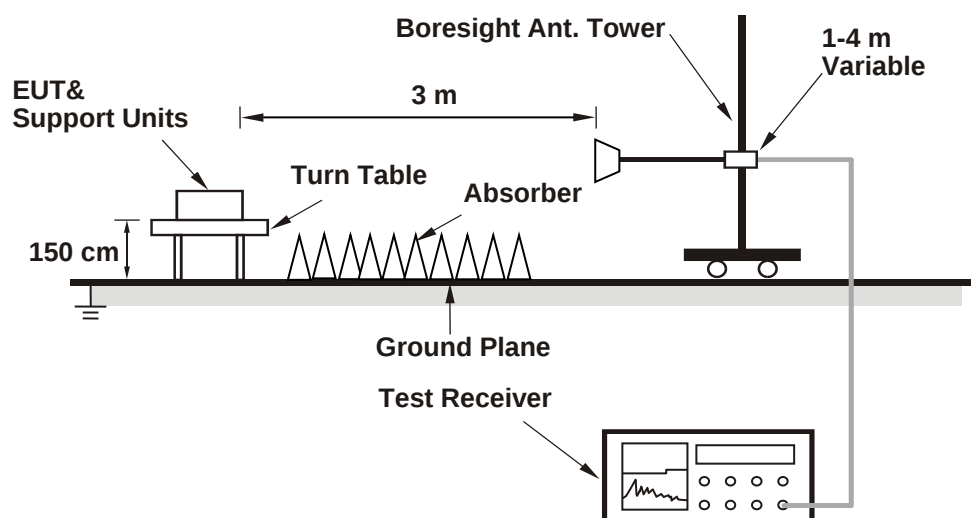
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

Notes:

- The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
- 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:	3.85 Vdc	Environmental Conditions:	24°C, 64% RH	Tested By:	Match Tsui
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802.11b

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	16.31	16.63	88.782	19.48	30	Pass
6	2437	16.06	16.99	90.368	19.56	30	Pass
11	2462	16.39	16.58	89.05	19.50	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 1.46 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	15.66	16.13	77.833	18.91	30	Pass
6	2437	16.36	16.41	87.004	19.40	30	Pass
11	2462	16.10	16.70	87.512	19.42	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 1.46 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) 26-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	16.28	16.56	87.752	19.43	30	Pass
6	2437	16.25	16.53	87.148	19.40	30	Pass
11	2462	15.66	16.04	76.992	18.86	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 1.46 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) 52-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	14.72	15.10	62.008	17.92	30	Pass
6	2437	16.25	16.53	87.148	19.40	30	Pass
11	2462	15.76	16.13	78.691	18.96	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 1.46 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) 106-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	13.54	13.95	47.426	16.76	30	Pass
6	2437	16.25	16.53	87.148	19.40	30	Pass
11	2462	15.69	16.18	78.563	18.95	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 1.46 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) Full RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	16.31	16.60	88.465	19.47	30	Pass
6	2437	16.28	16.53	87.44	19.42	30	Pass
11	2462	15.88	16.04	78.905	18.97	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 1.46 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40) Full RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
3	2422	15.87	15.97	78.173	18.93	30	Pass
6	2437	15.92	16.15	80.294	19.05	30	Pass
9	2452	15.58	16.16	77.446	18.89	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 1.46 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) 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	16.31	16.60	88.465	19.47	30	Pass
6	2437	16.28	16.53	87.44	19.42	30	Pass
11	2462	15.88	16.04	78.905	18.97	30	Pass

Notes:

1. Directional gain = $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
2. The directional gain is 3.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40) 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	15.87	15.97	78.173	18.93	30	Pass
6	2437	15.92	16.15	80.294	19.05	30	Pass
9	2452	15.58	16.16	77.446	18.89	30	Pass

Notes:

1. Directional gain = $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
2. The directional gain is 3.92 dBi < 6 dBi, so the output power limit shall not be reduced.

7.2 Power Spectral Density

Input Power:	3.85 Vdc	Environmental Conditions:	24°C, 64% RH	Tested By:	Match Tsui
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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	-12.28	-12.51	-9.38	8	Pass
6	2437	-13.67	-11.87	-9.67	8	Pass
11	2462	-12.39	-12.12	-9.24	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 = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 3.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
1	2412	-16.36	-16.13	-13.23	8	Pass
6	2437	-15.82	-15.67	-12.73	8	Pass
11	2462	-15.78	-15.86	-12.81	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 = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 3.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 26-tone RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
1	2412	-9.56	-8.86	-6.19	8	Pass
6	2437	-9.73	-9.27	-6.48	8	Pass
11	2462	-10.19	-9.54	-6.84	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 = gain of antenna element + $10 \log(2 \text{ of TX antenna elements})$
3. The directional gain is 4.47 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 52-tone RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
1	2412	-13.99	-13.46	-10.71	8	Pass
6	2437	-12.80	-11.74	-9.23	8	Pass
11	2462	-12.84	-12.65	-9.73	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 = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 3.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 106-tone RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
1	2412	-18.47	-17.35	-14.86	8	Pass
6	2437	-15.71	-14.80	-12.22	8	Pass
11	2462	-15.92	-15.81	-12.85	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 = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 3.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) Full RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
1	2412	-18.91	-18.47	-15.67	8	Pass
6	2437	-19.39	-18.08	-15.68	8	Pass
11	2462	-19.32	-18.59	-15.93	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 = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 3.92 dBi < 6 dBi, so the power density limit shall not be reduced.

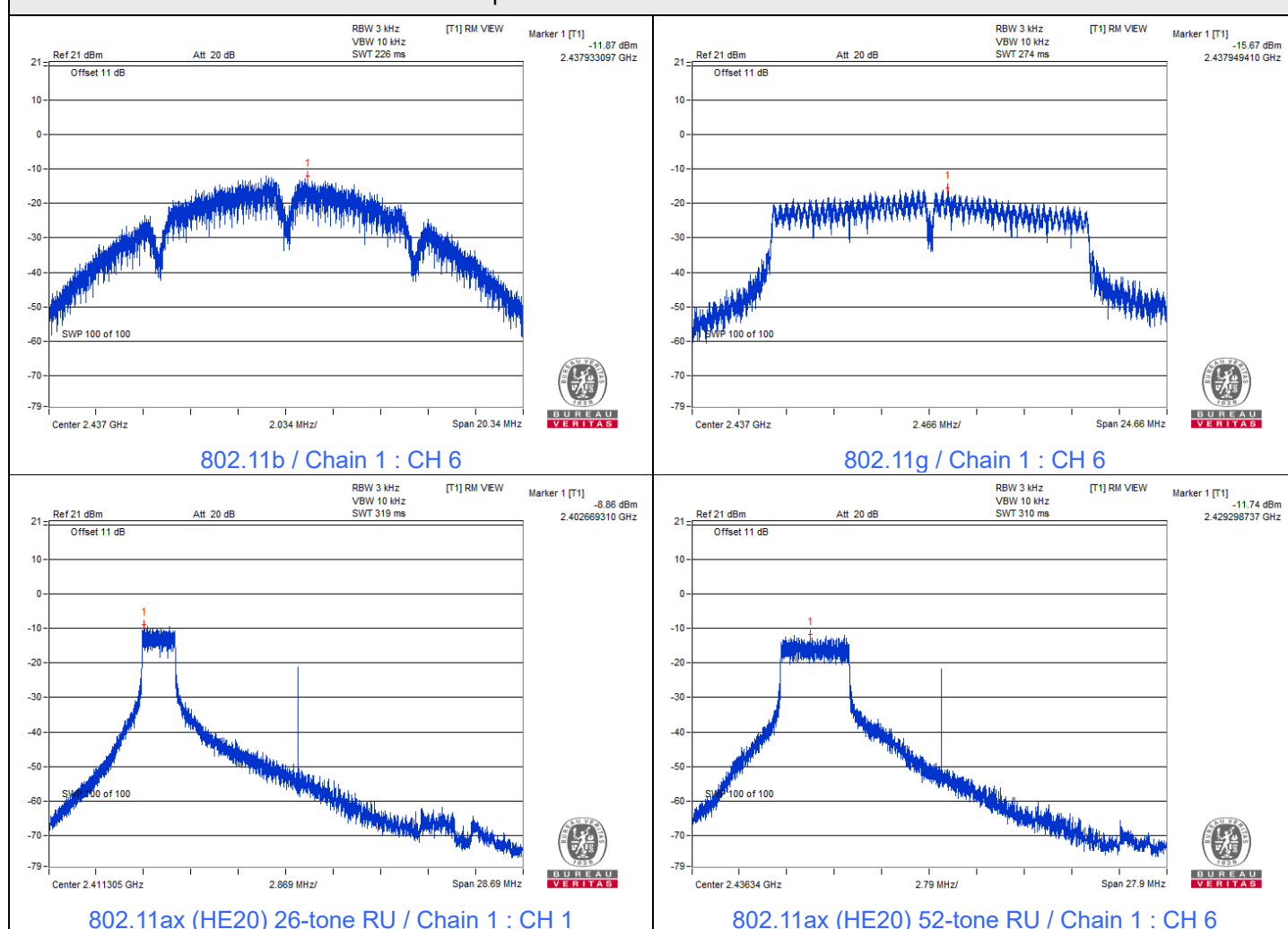
802.11ax (HE40) Full RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1			
3	2422	-21.21	-20.91	-18.05	8	Pass
6	2437	-21.16	-20.96	-18.05	8	Pass
9	2452	-22.32	-21.50	-18.88	8	Pass

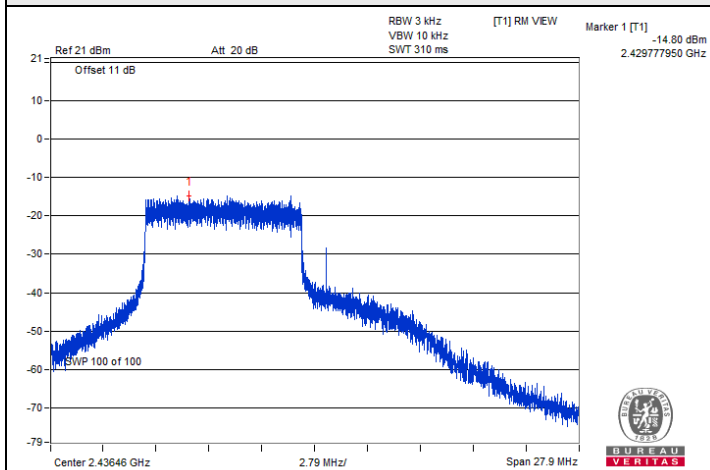
Notes:

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 = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 3.92 dBi < 6 dBi, so the power density limit shall not be reduced.

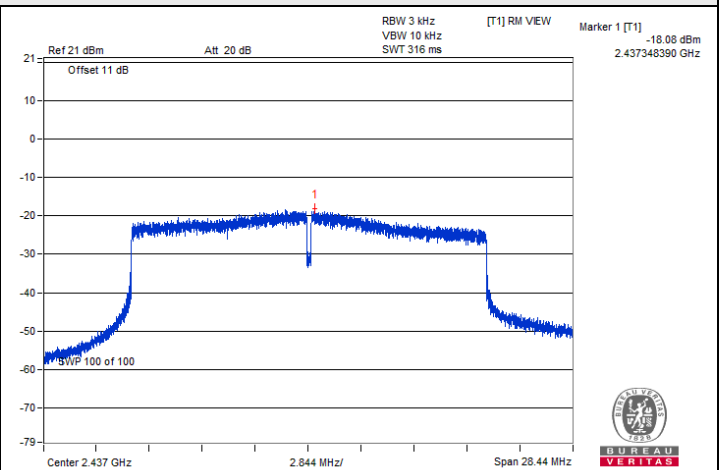
Spectrum Plot of Maximum Value



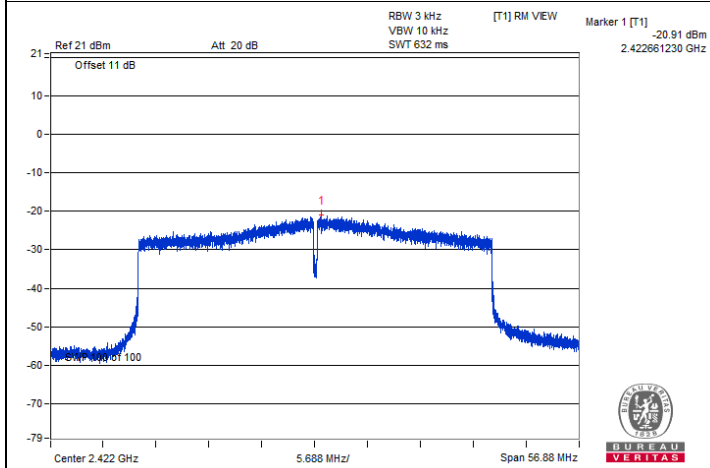
Spectrum Plot of Maximum Value



802.11ax (HE20) 106-tone RU / Chain 1 : CH 6



802.11ax (HE20) Full RU / Chain 1 : CH 6



802.11ax (HE40) Full RU / Chain 1 : CH 3

7.3 6 dB Bandwidth

Input Power:	3.85 Vdc	Environmental Conditions:	24°C, 64% RH	Tested By:	Match Tsui
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802.11b

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	8.12	8.12	0.5	Pass
6	2437	8.13	8.12	0.5	Pass
11	2462	8.12	8.07	0.5	Pass

802.11g

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	15.32	15.33	0.5	Pass
6	2437	15.22	15.22	0.5	Pass
11	2462	15.37	15.33	0.5	Pass

802.11ax (HE20) 26-tone RU

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	2.21	2.16	0.5	Pass
6	2437	2.19	2.16	0.5	Pass
11	2462	2.12	2.12	0.5	Pass

802.11ax (HE20) 52-tone RU

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	17.13	17.15	0.5	Pass
6	2437	17.08	17.13	0.5	Pass
11	2462	17.11	17.11	0.5	Pass

802.11ax (HE20) 106-tone RU

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	18.16	18.17	0.5	Pass
6	2437	17.21	17.23	0.5	Pass
11	2462	17.20	17.21	0.5	Pass

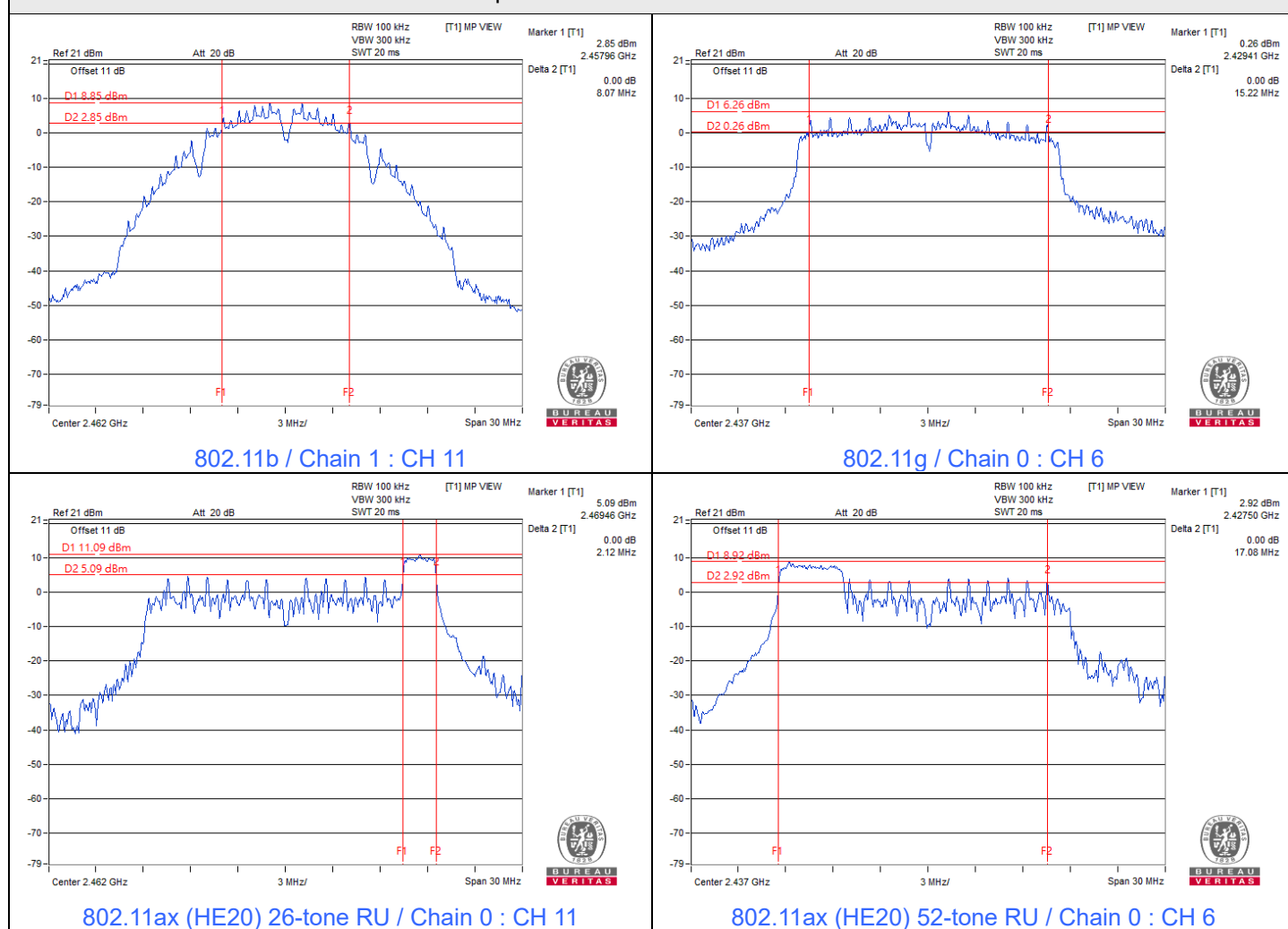
802.11ax (HE20) Full RU

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	16.73	16.76	0.5	Pass
6	2437	15.72	16.78	0.5	Pass
11	2462	15.39	16.67	0.5	Pass

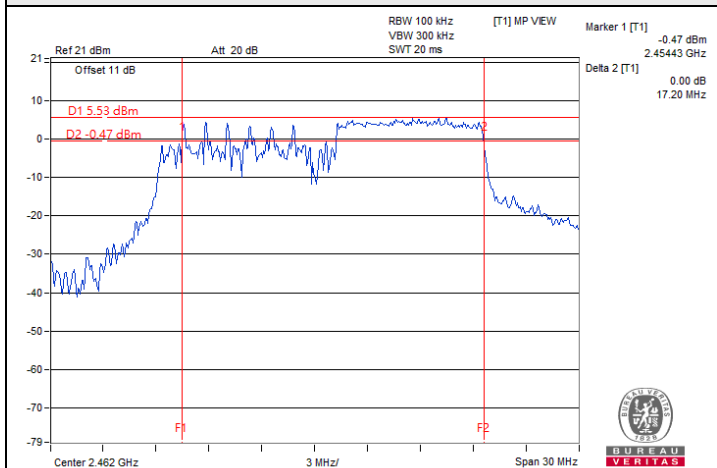
802.11ax (HE40) Full RU

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	2422	34.28	33.41	0.5	Pass
6	2437	33.66	35.25	0.5	Pass
9	2452	36.21	36.14	0.5	Pass

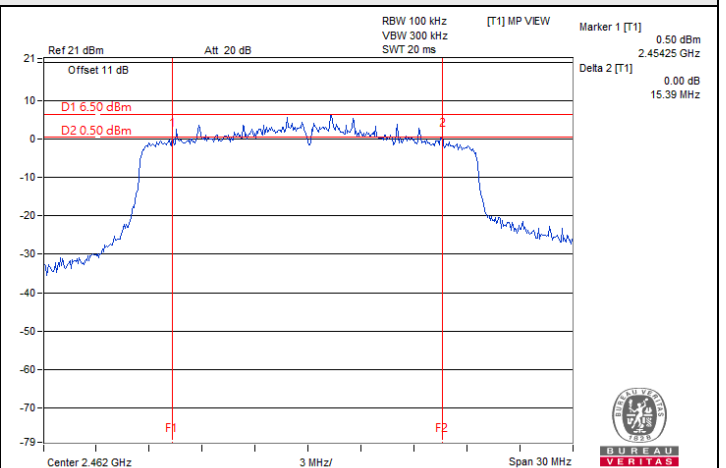
Spectrum Plot of Minimum Value



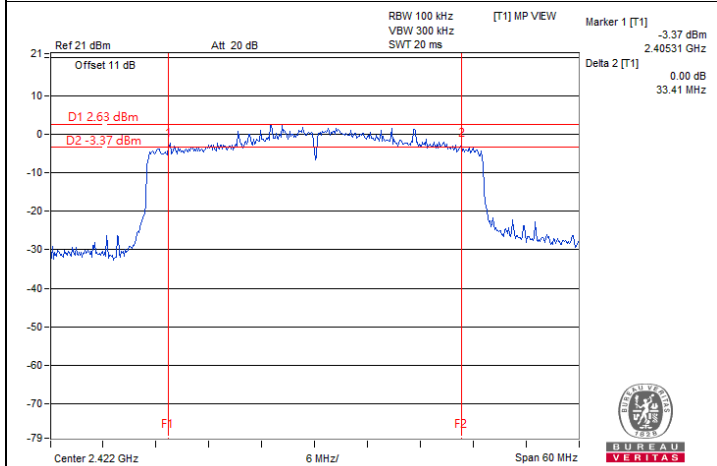
Spectrum Plot of Minimum Value



802.11ax (HE20) 106-tone RU / Chain 0 : CH 11



802.11ax (HE20) Full RU / Chain 0 : CH 11

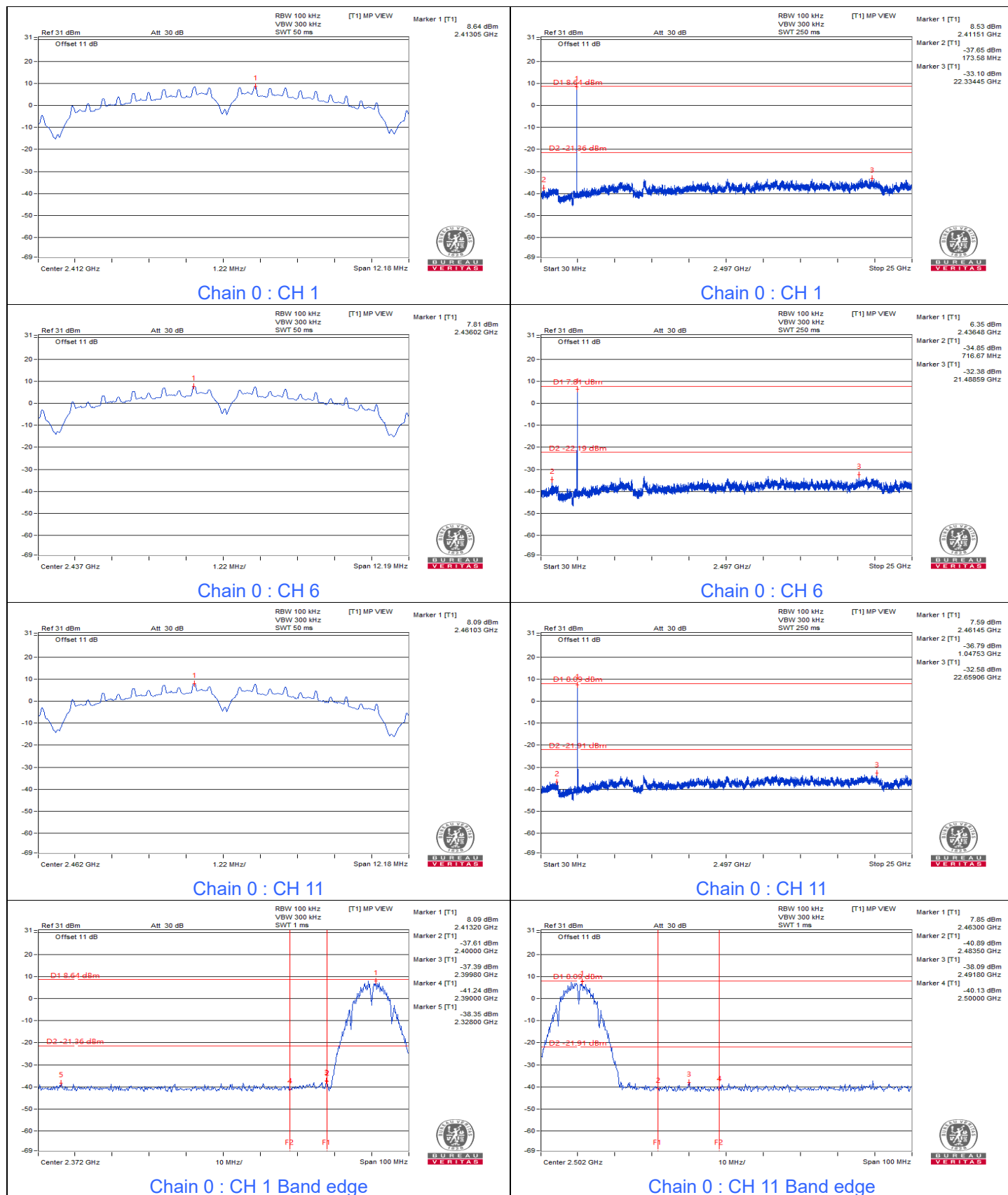


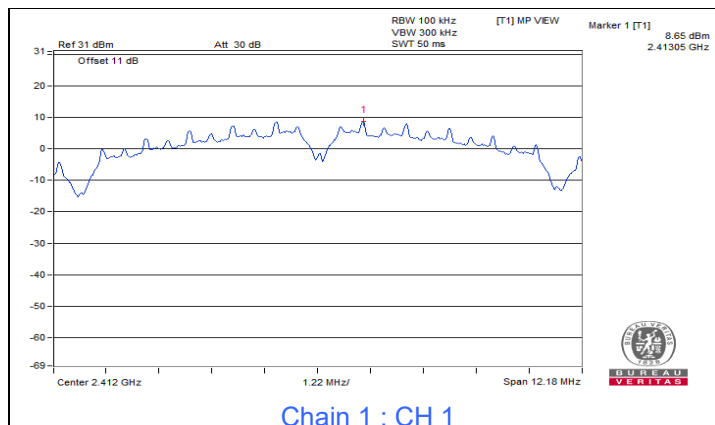
802.11ax (HE40) Full RU / Chain 1 : CH 3

7.4 Conducted Out of Band Emissions

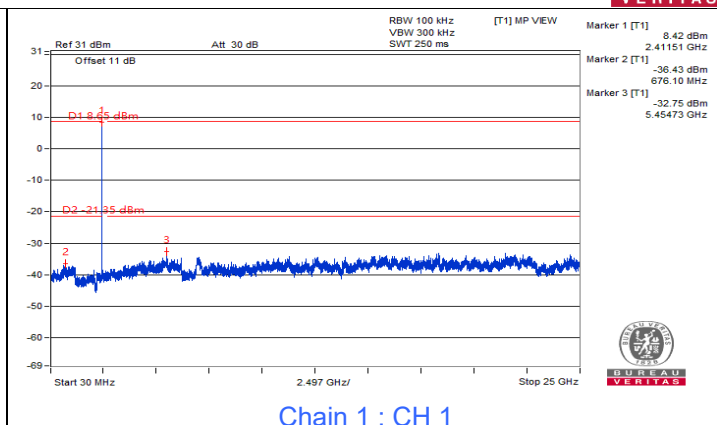
Input Power:	3.85 Vdc	Environmental Conditions:	24°C, 64% RH	Tested By:	Match Tsui
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802.11b

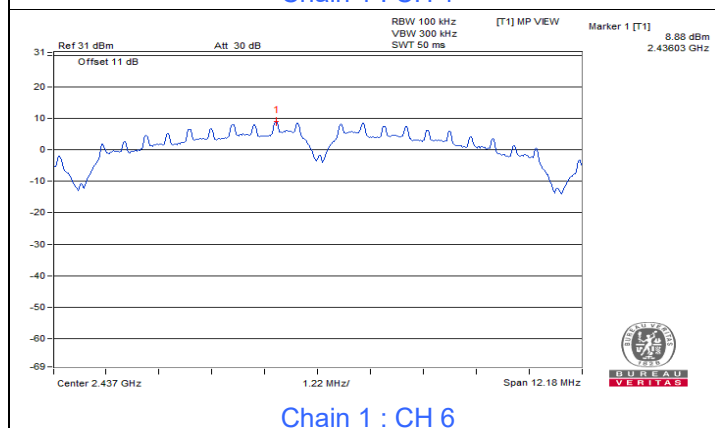




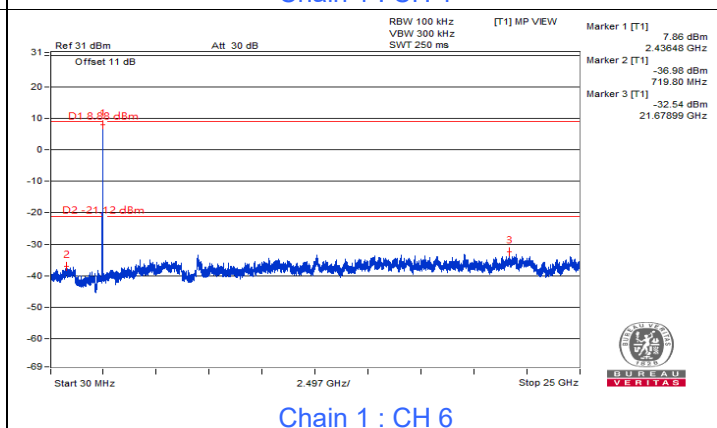
Chain 1 : CH 1



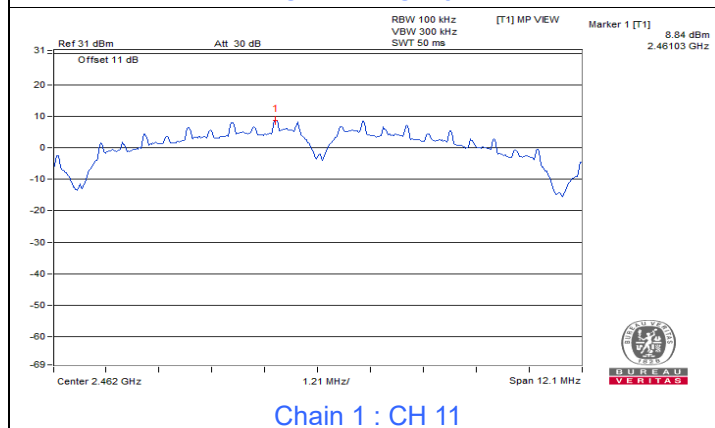
Chain 1 : CH 1



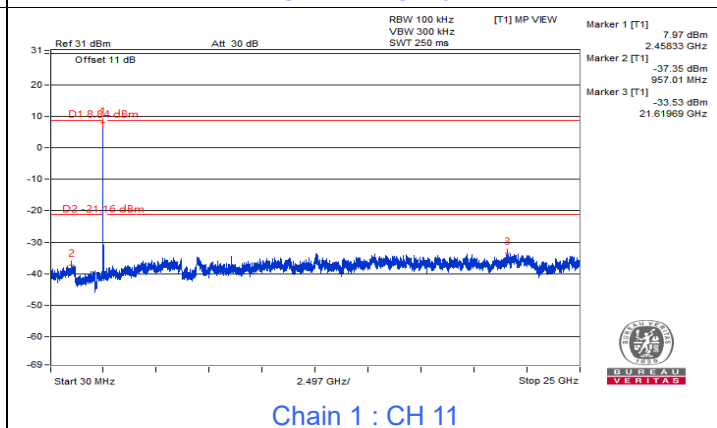
Chain 1 : CH 6



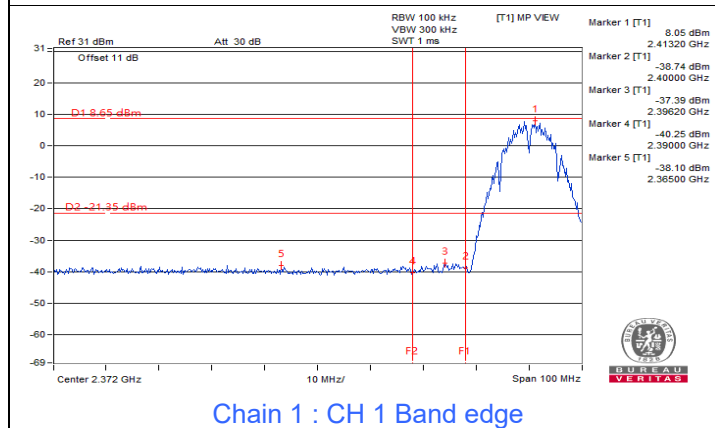
Chain 1 : CH 6



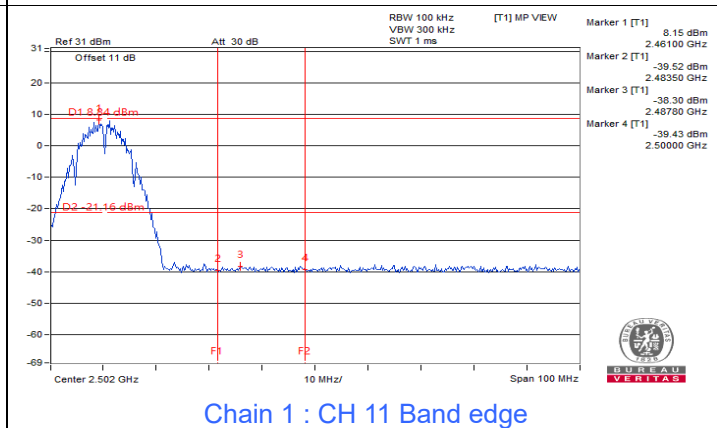
Chain 1 : CH 11



Chain 1 : CH 11

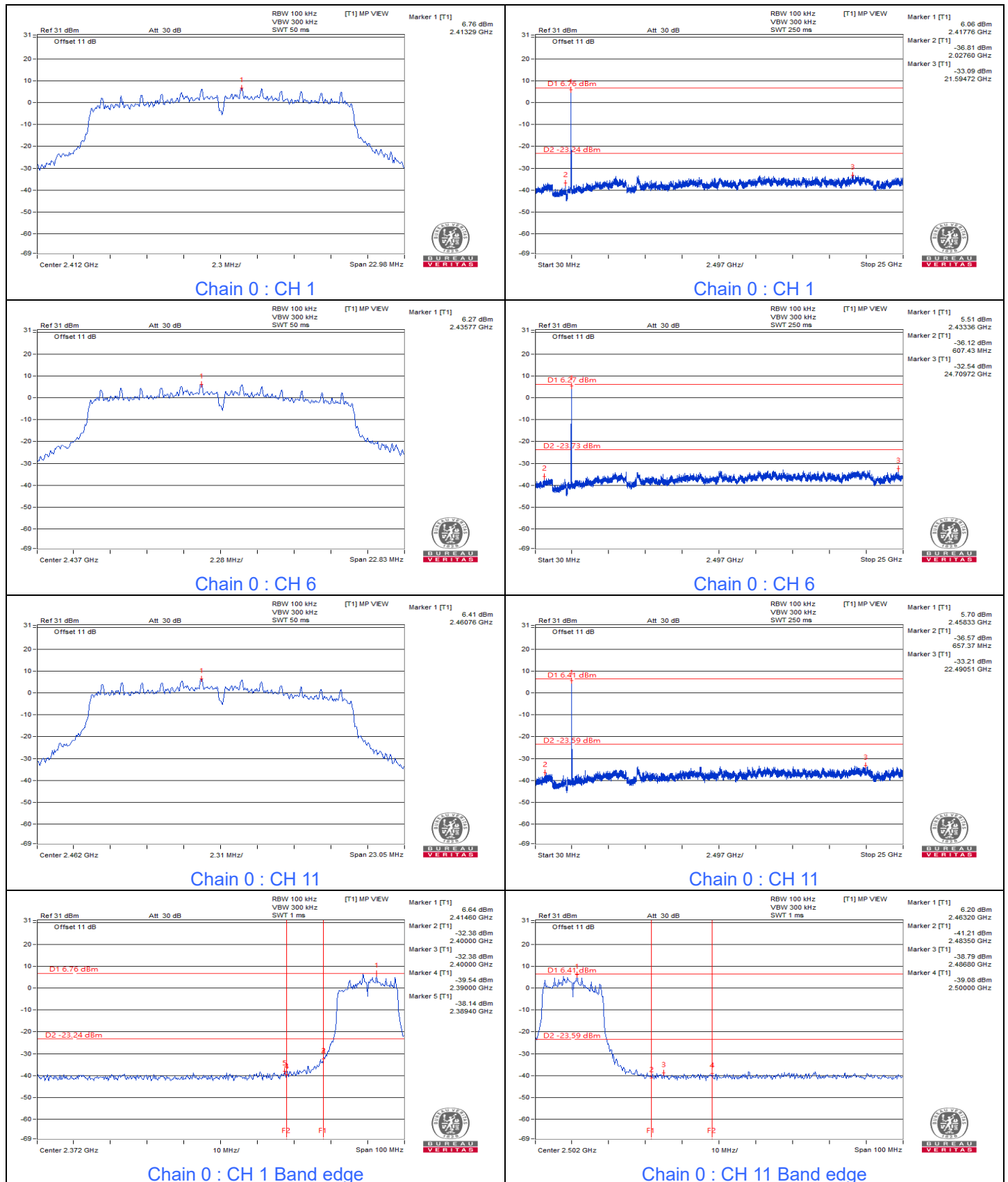


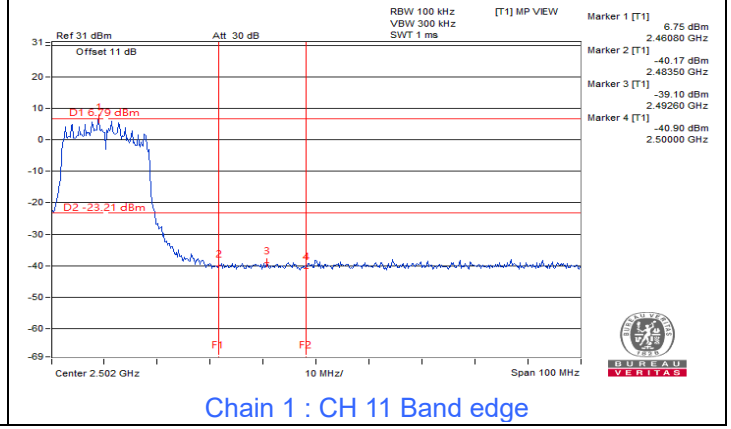
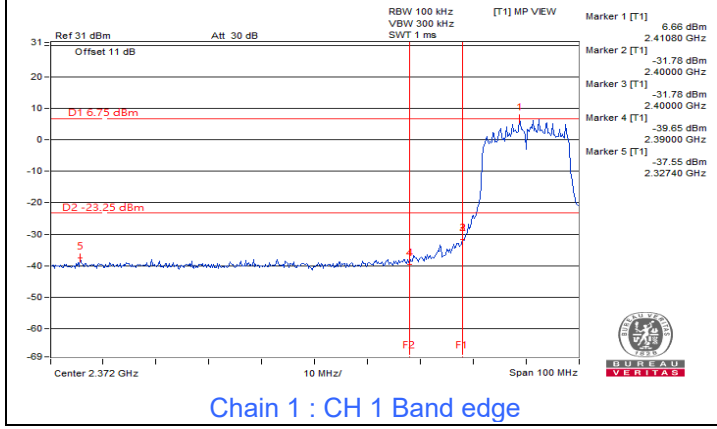
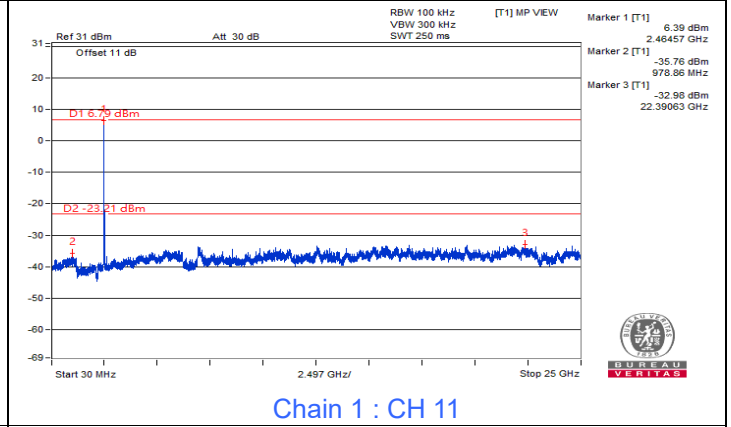
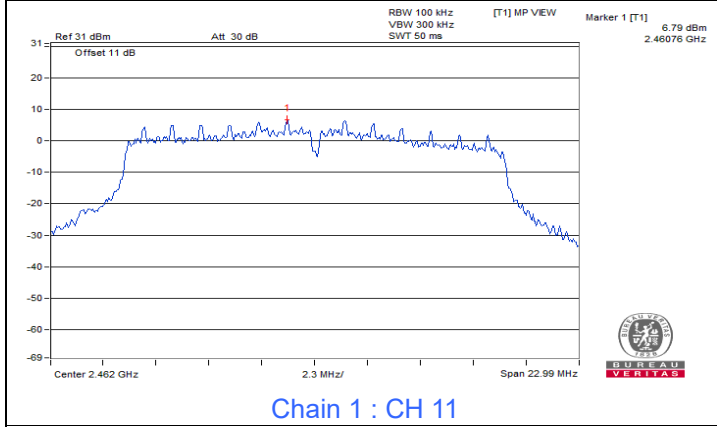
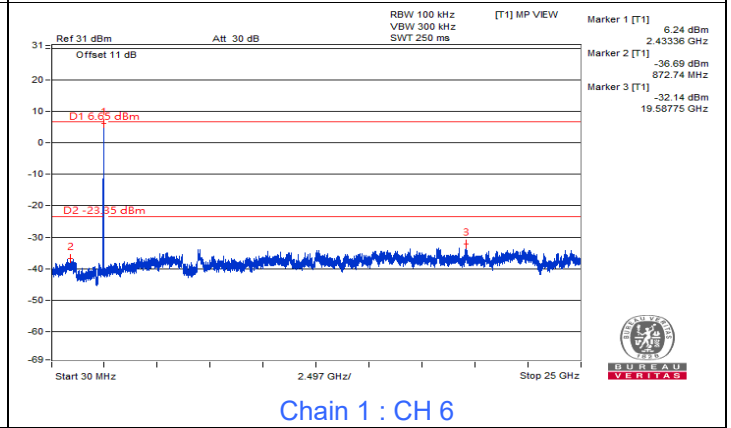
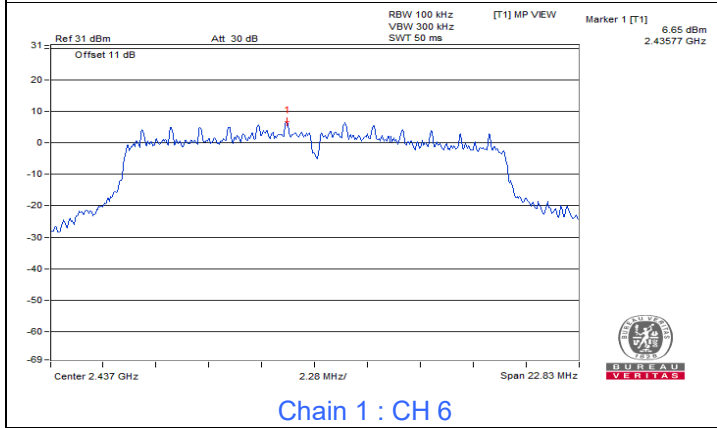
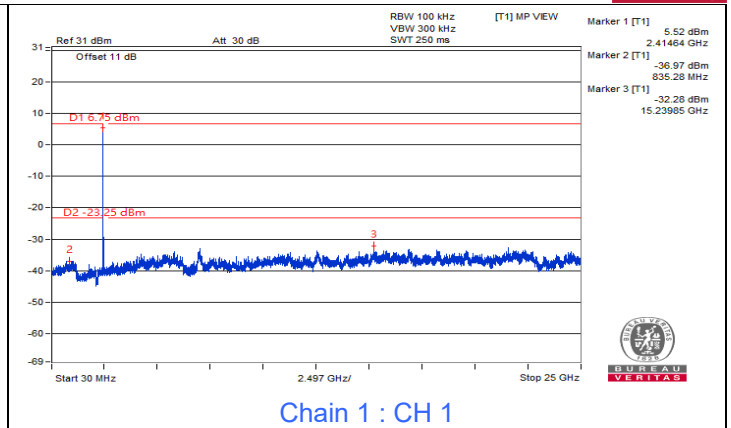
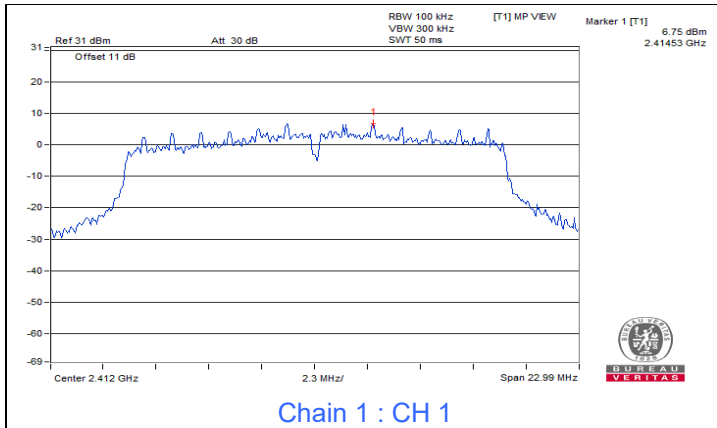
Chain 1 : CH 1 Band edge



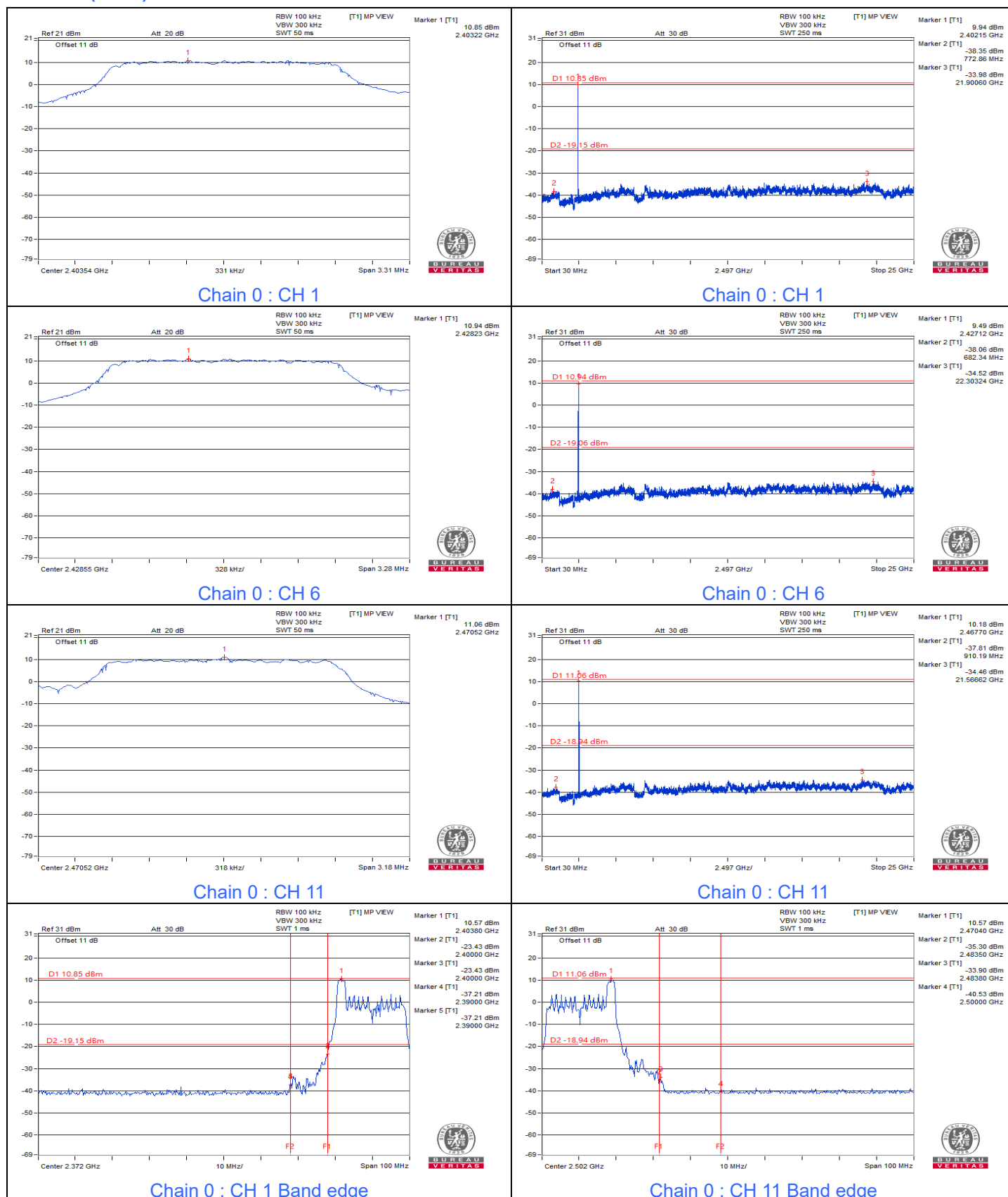
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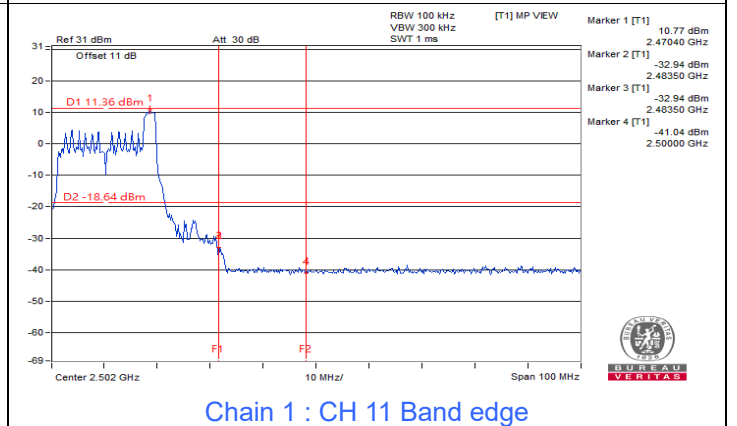
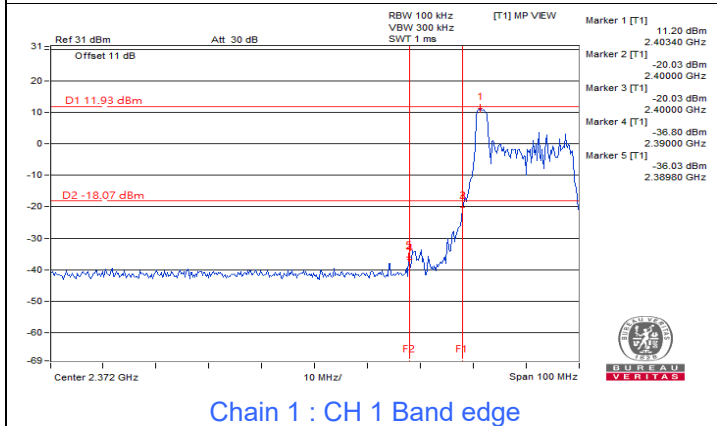
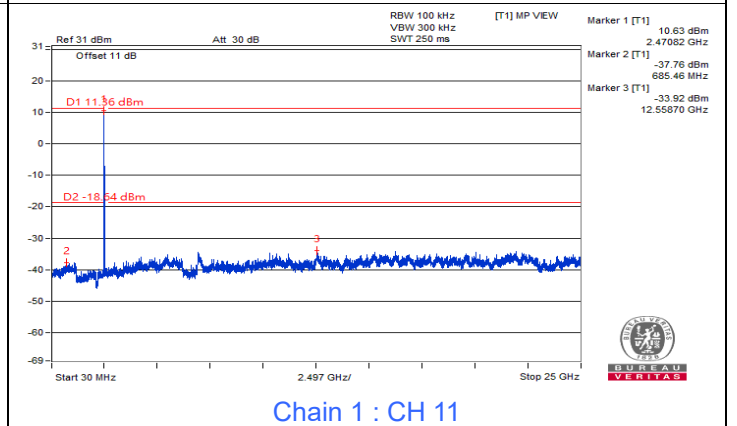
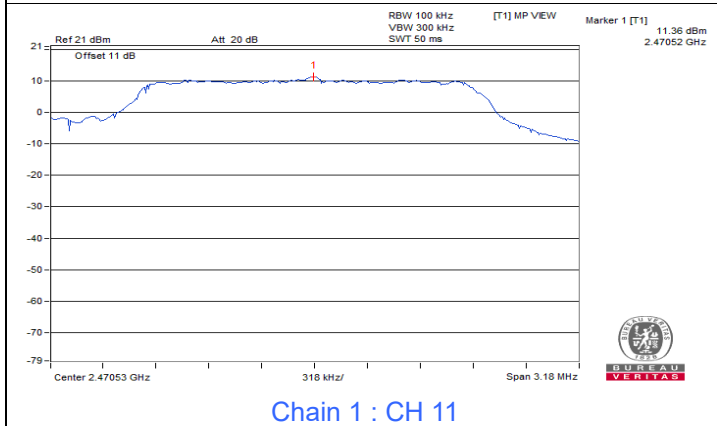
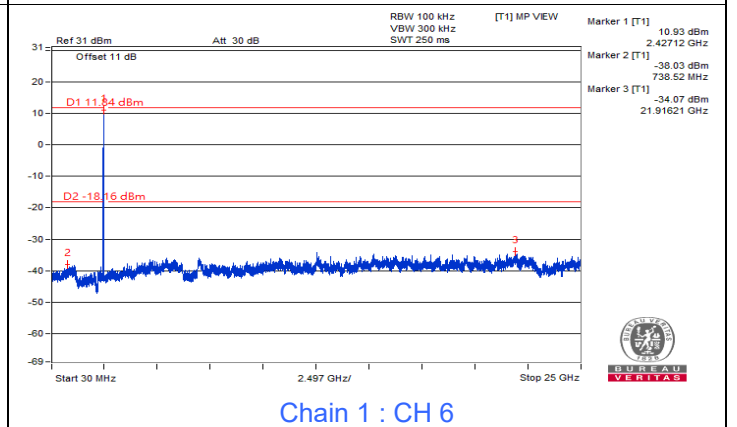
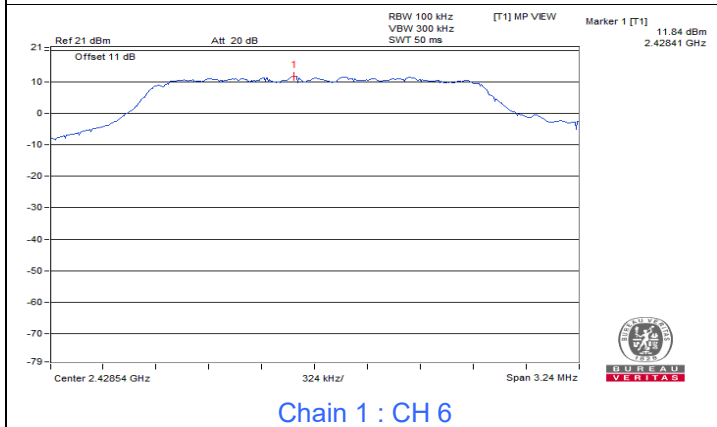
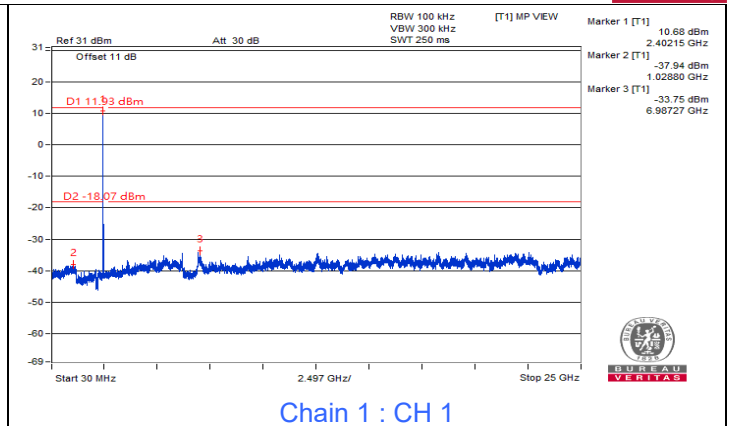
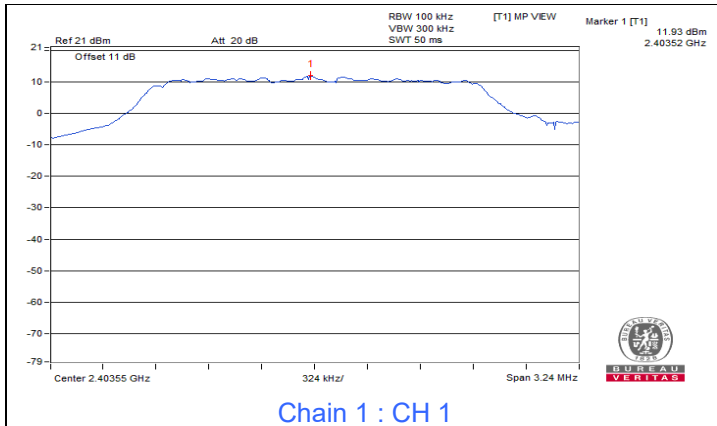
802.11g



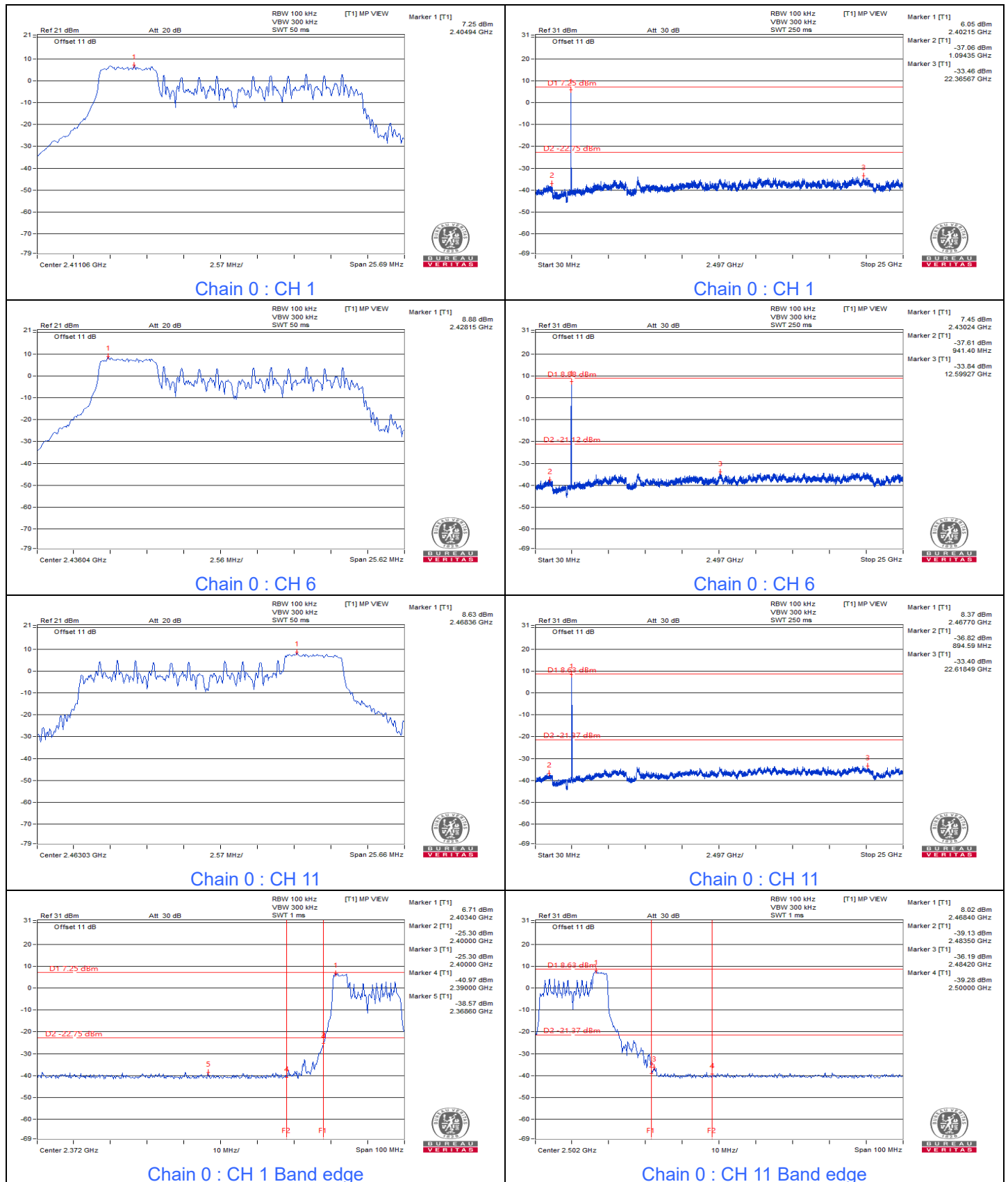


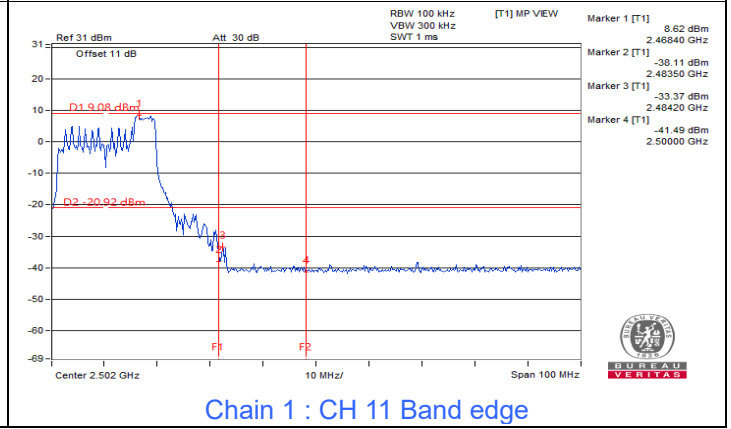
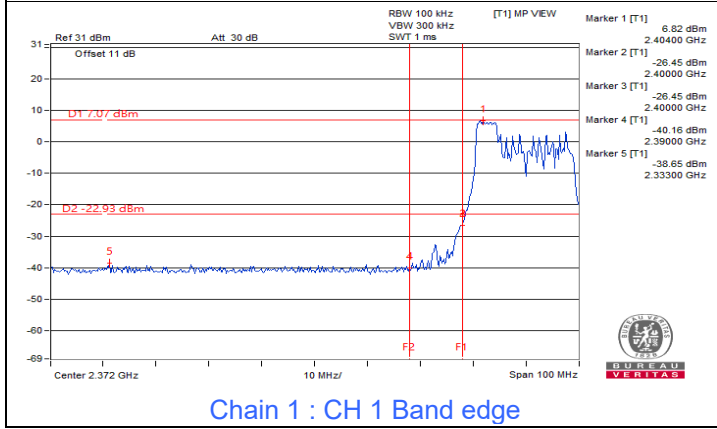
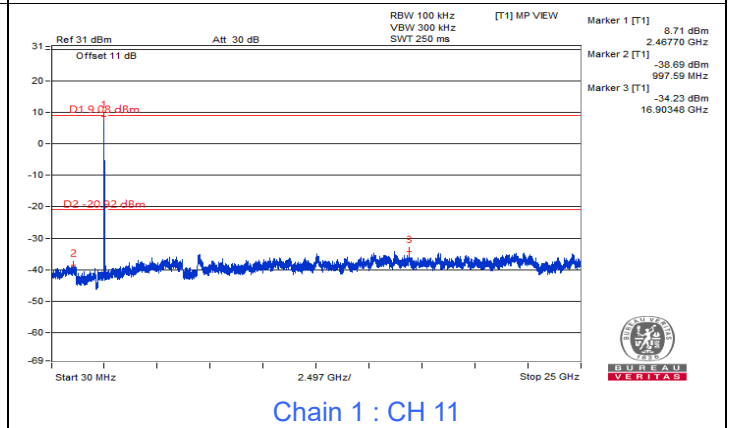
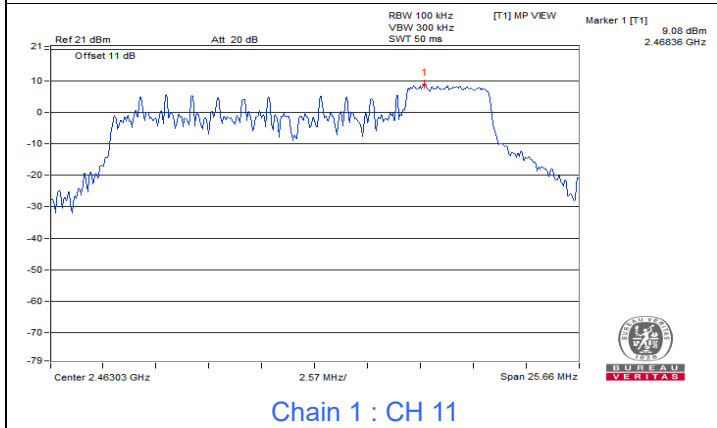
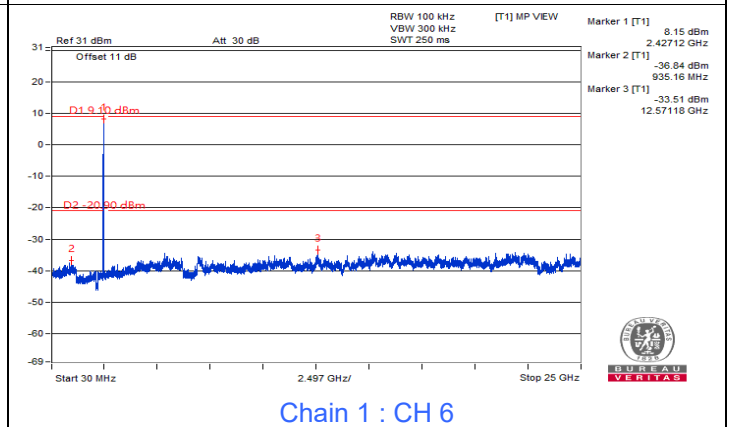
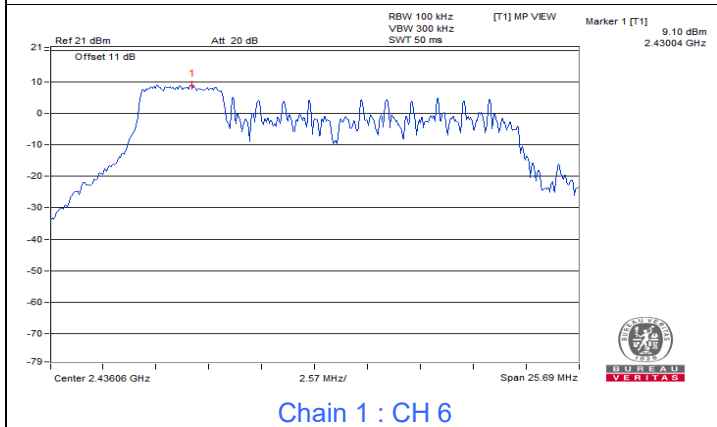
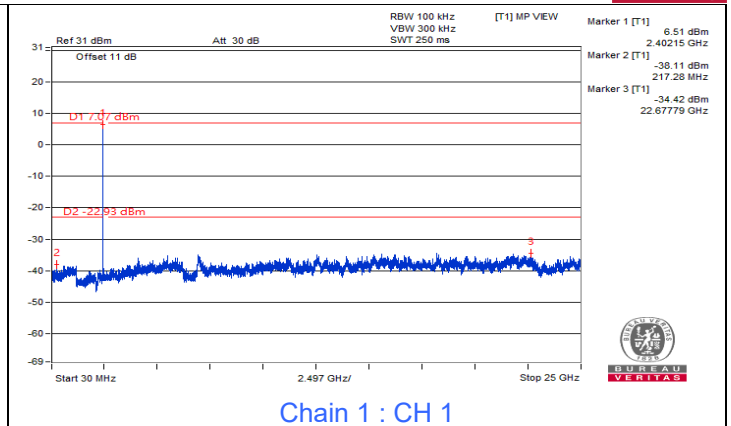
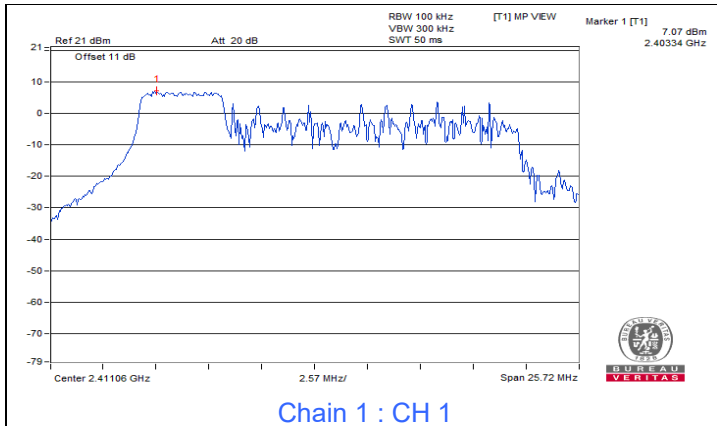
802.11ax (HE20) 26-tone RU



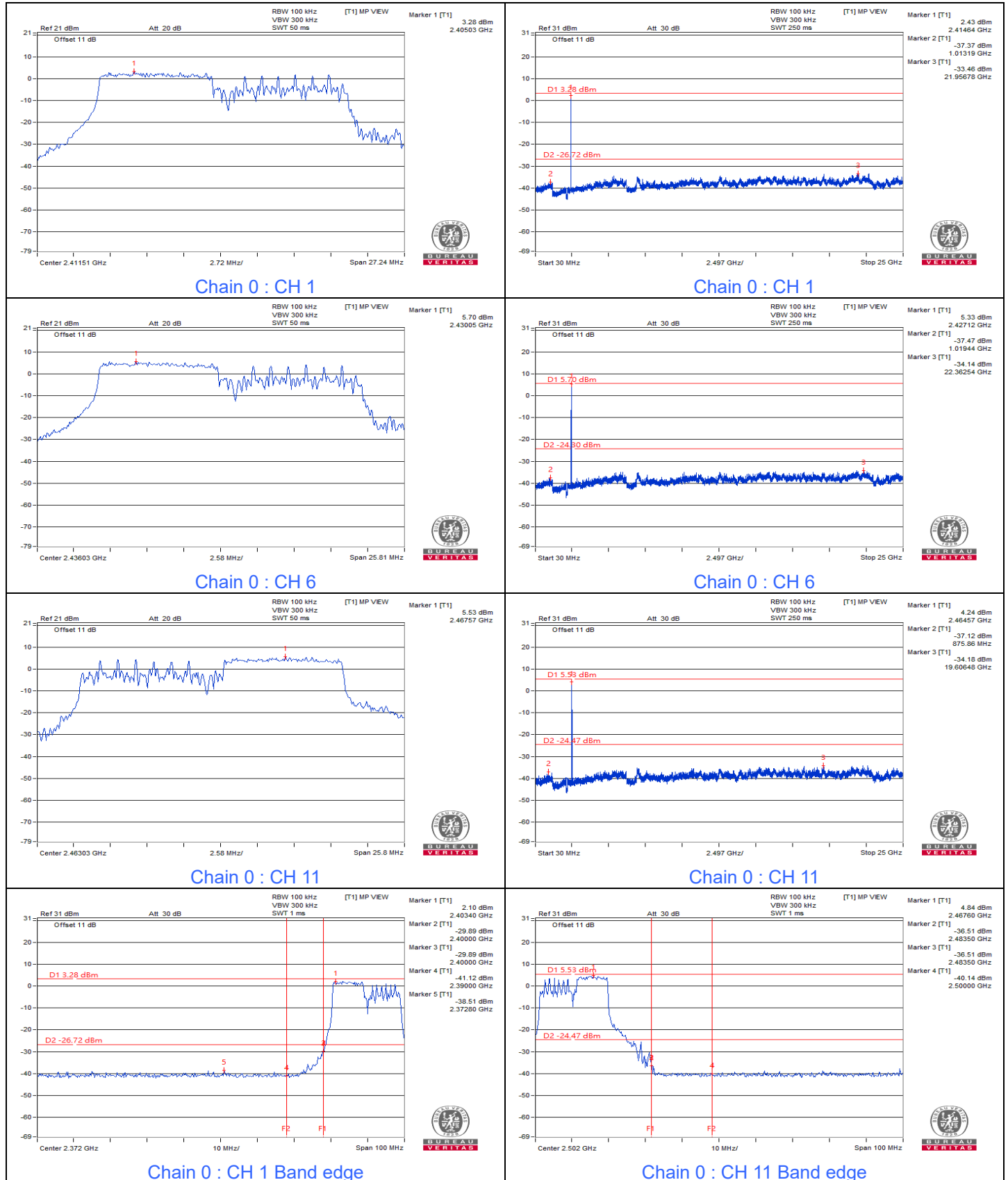


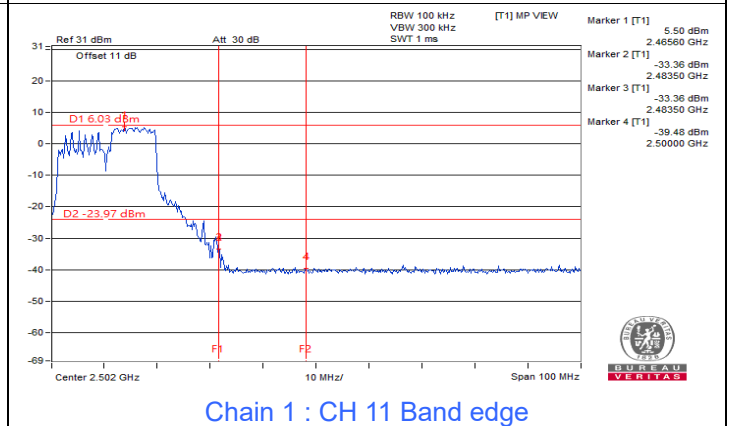
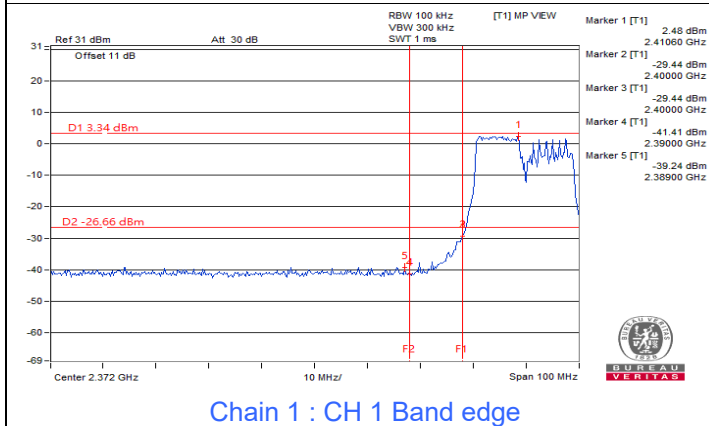
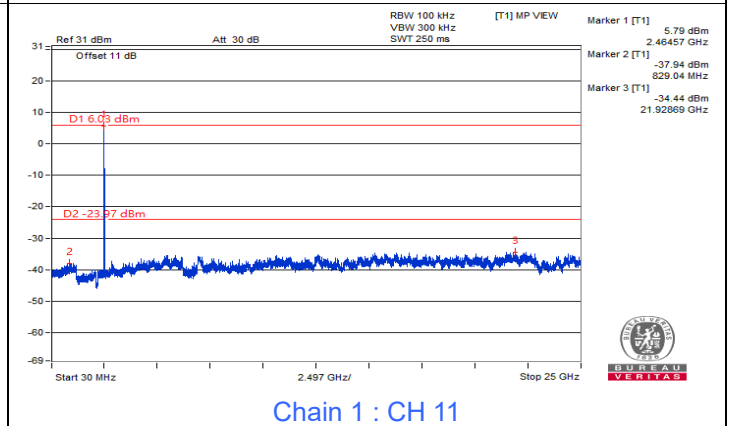
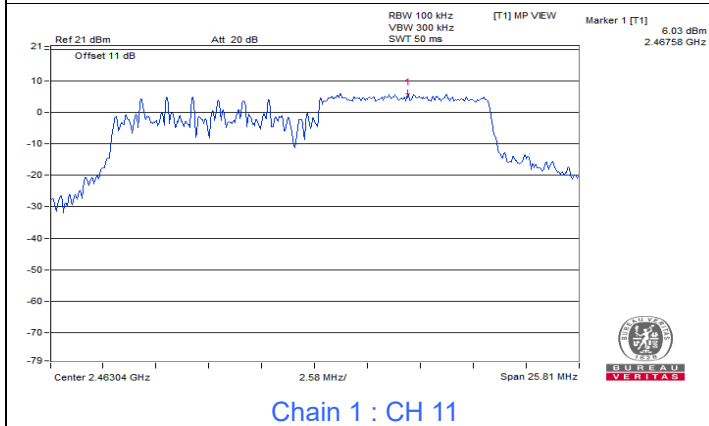
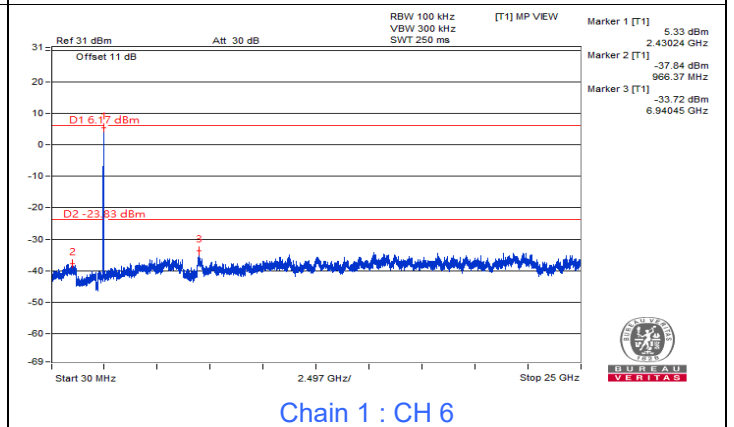
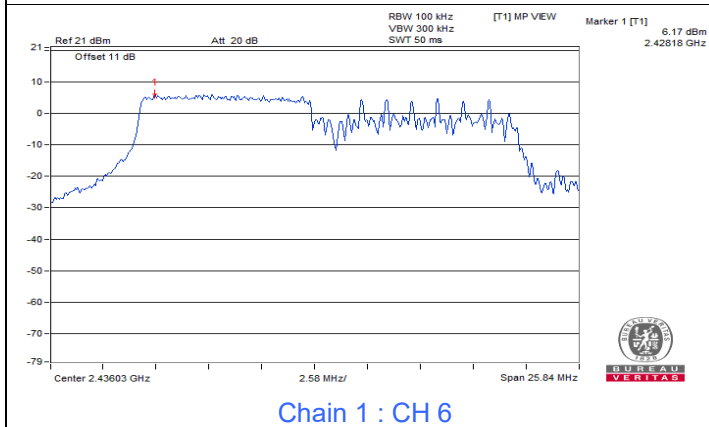
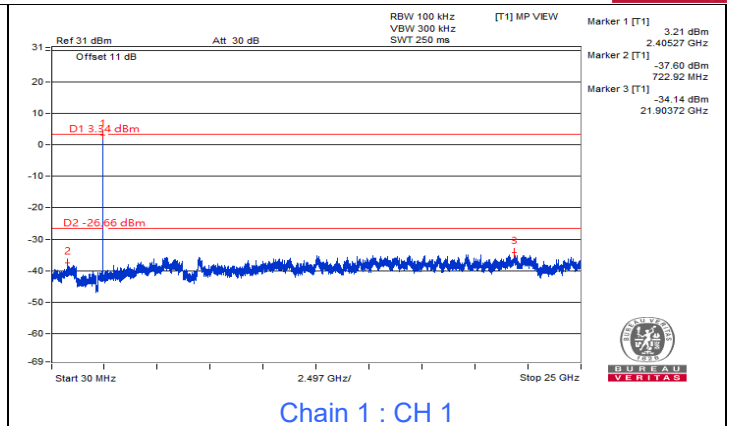
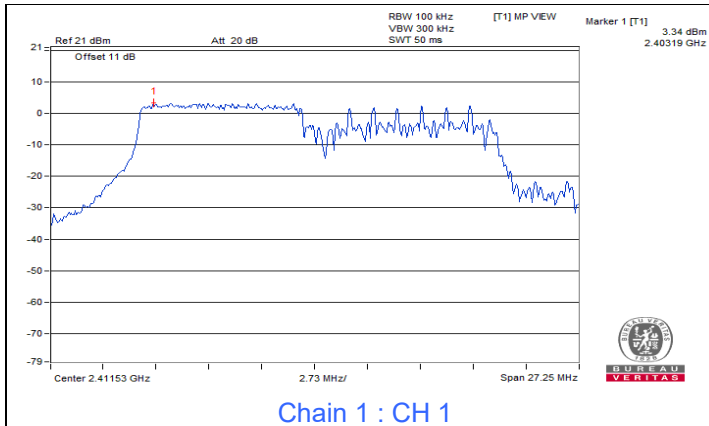
802.11ax (HE20) 52-tone RU



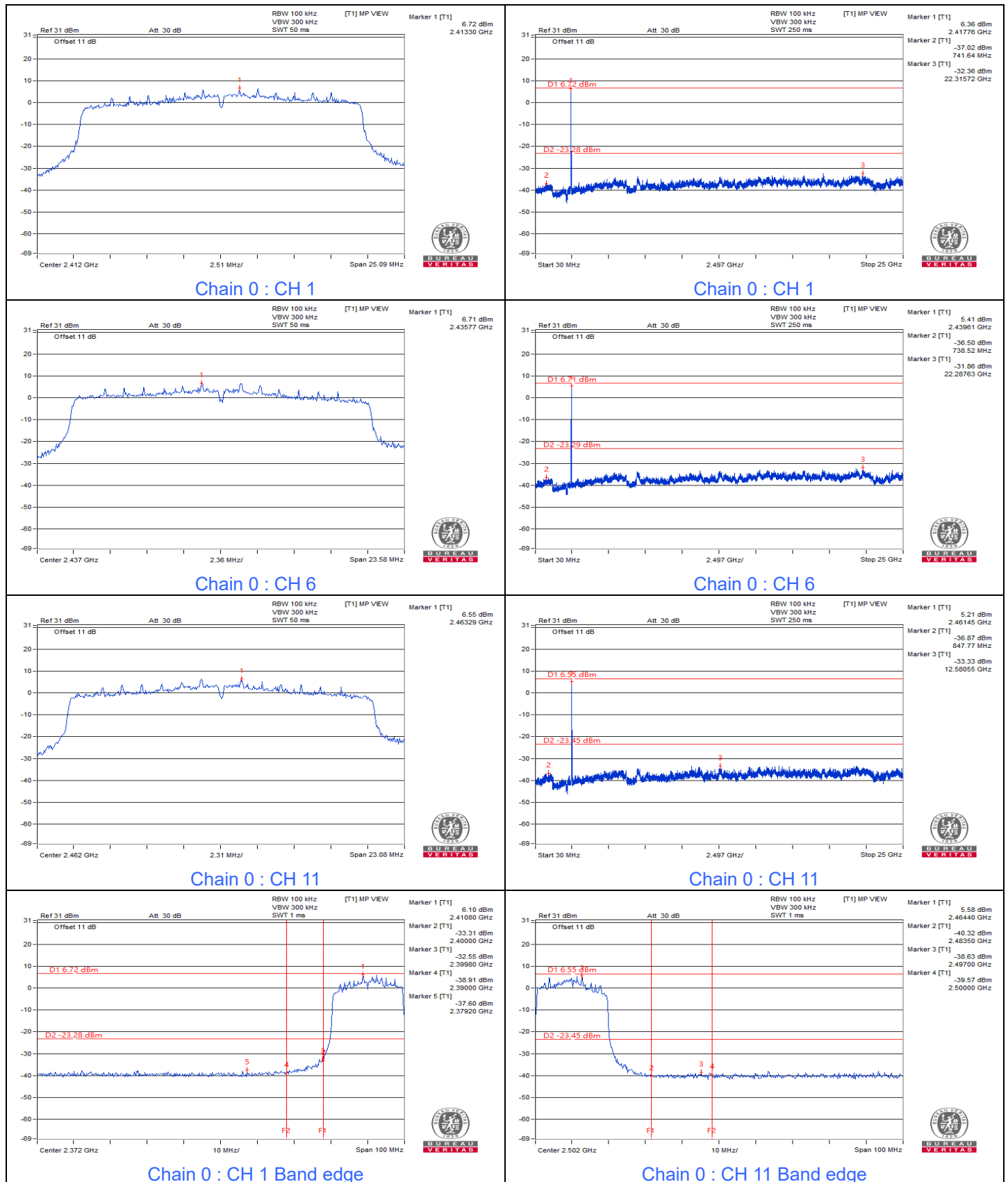


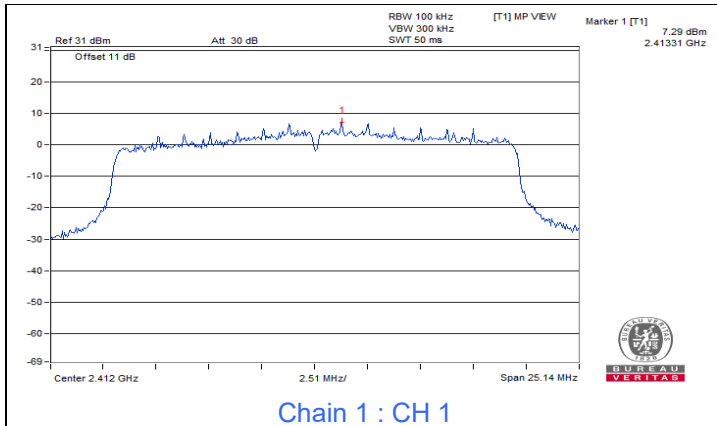
802.11ax (HE20) 106-tone RU



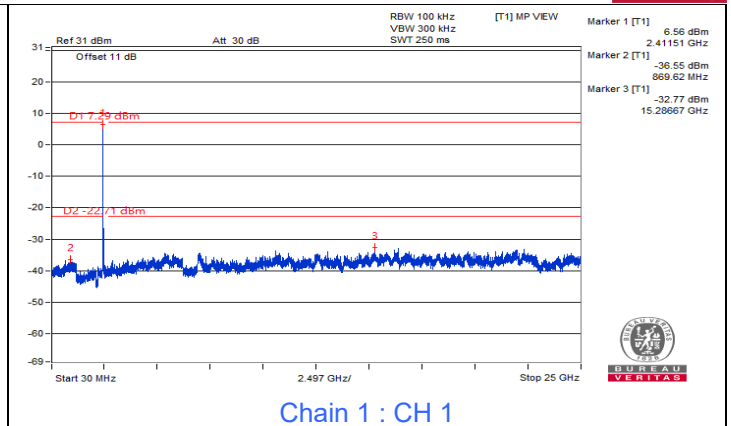


802.11ax (HE20) Full RU

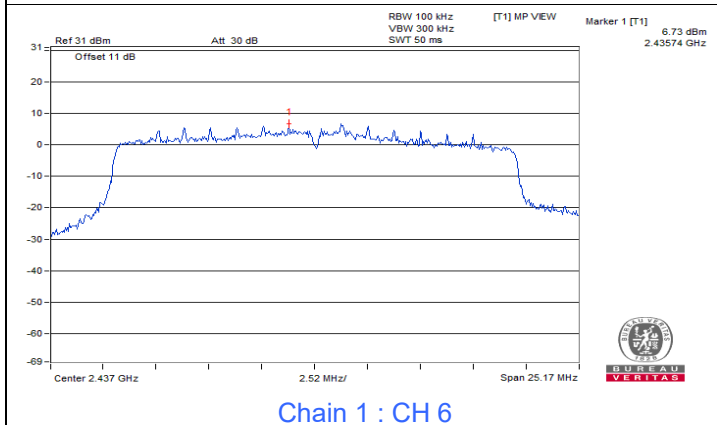




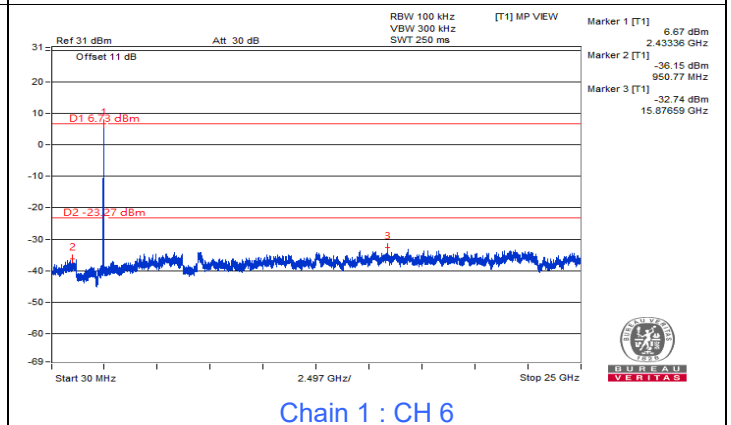
Chain 1 : CH 1



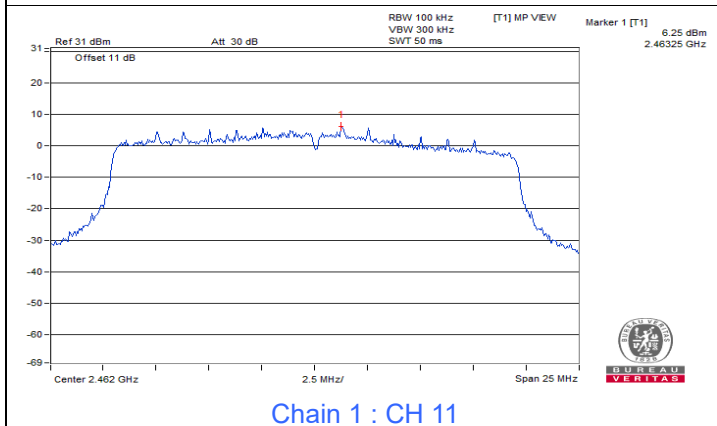
Chain 1 : CH 1



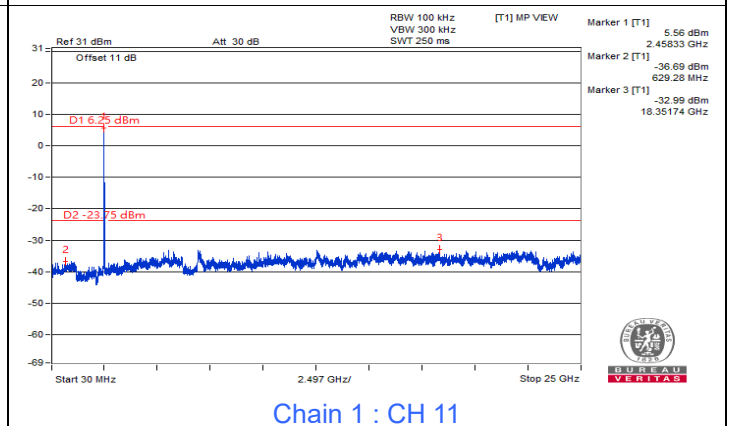
Chain 1 : CH 6



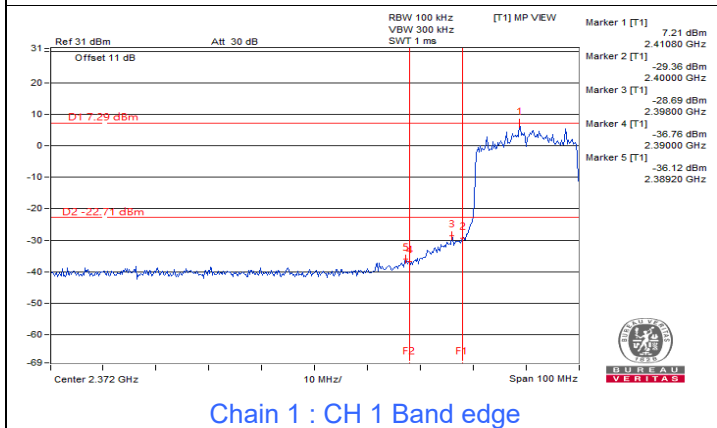
Chain 1 : CH 6



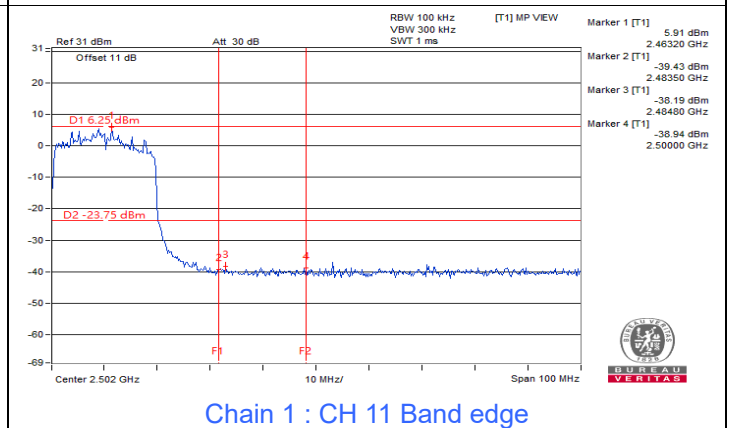
Chain 1 : CH 11



Chain 1 : CH 11



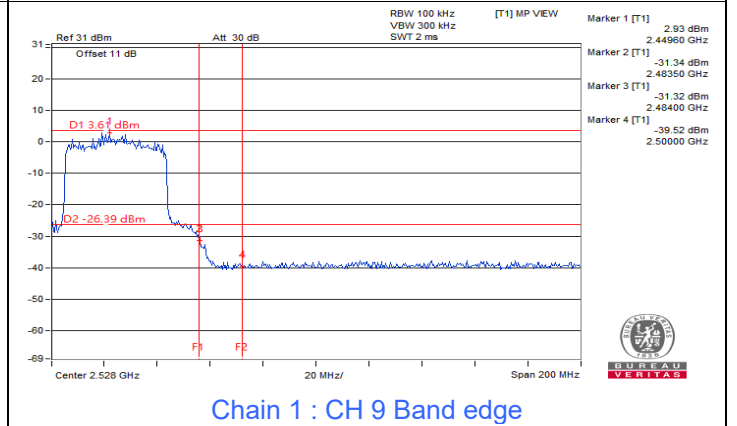
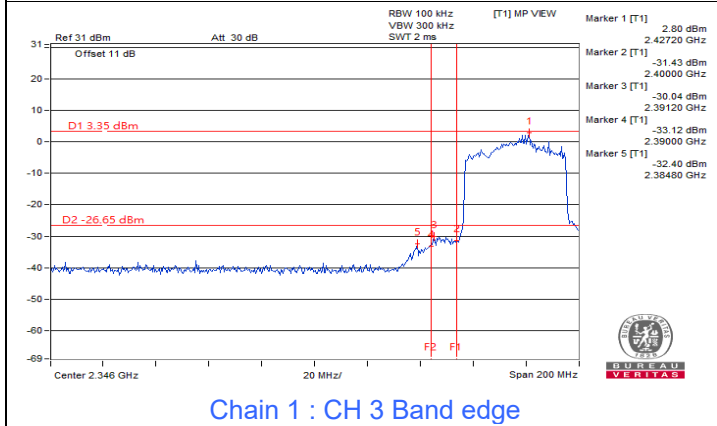
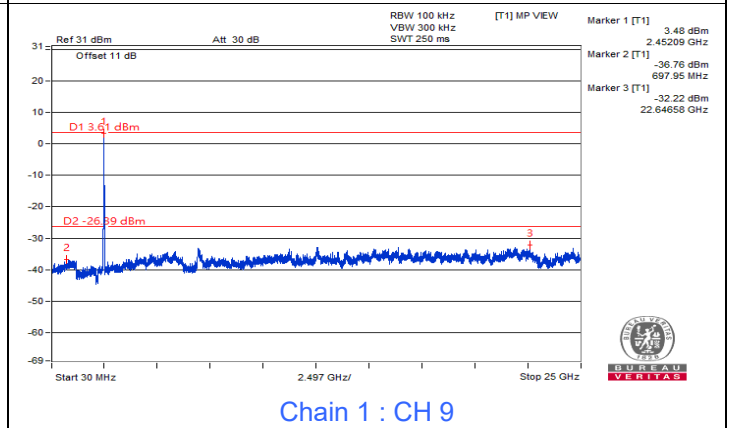
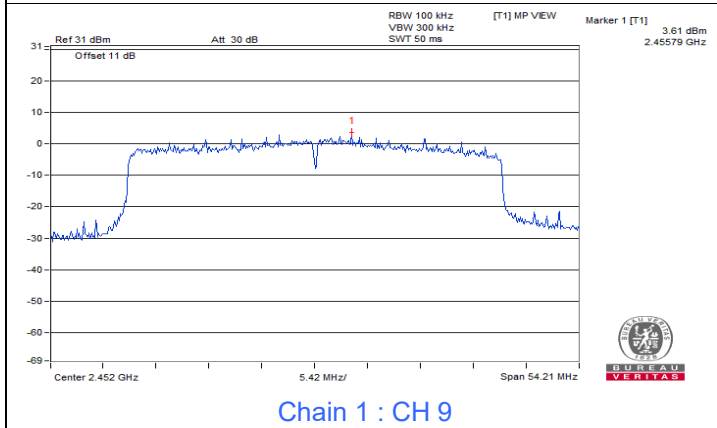
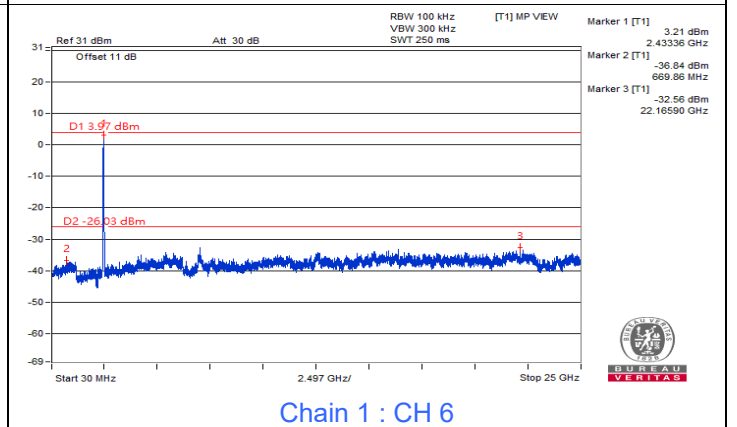
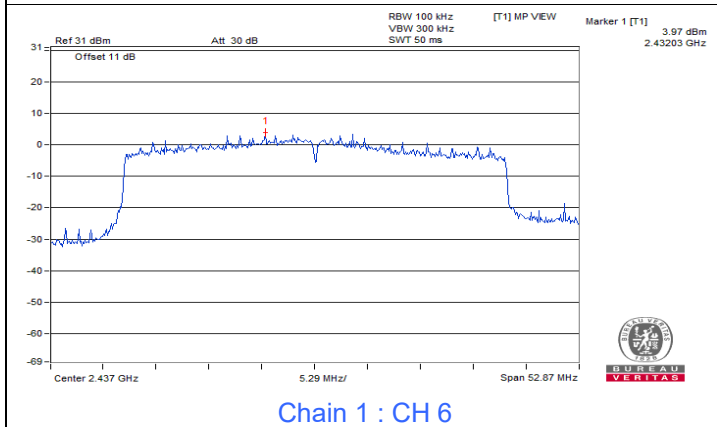
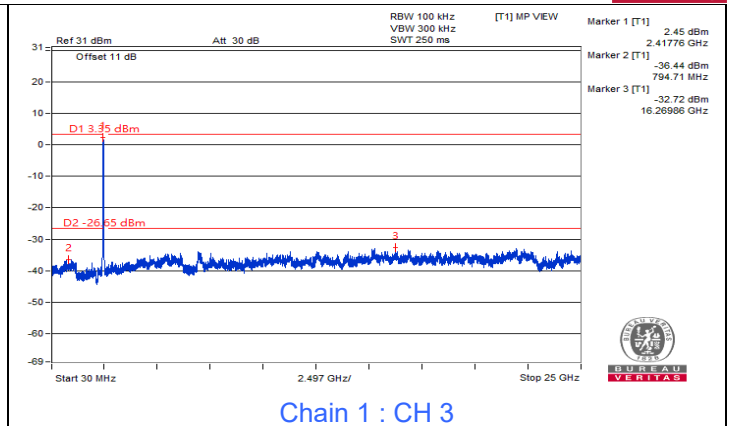
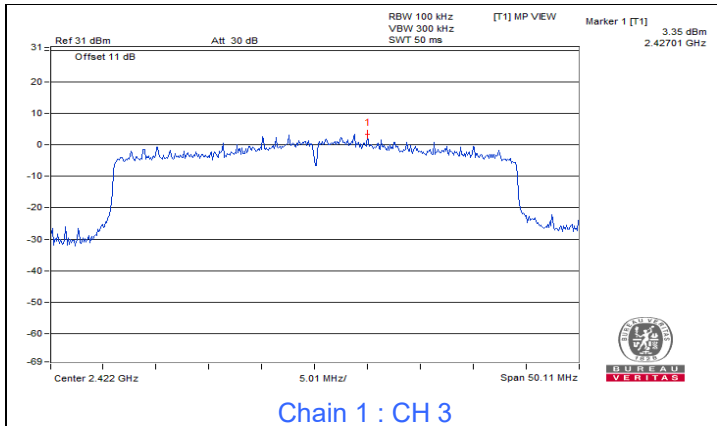
Chain 1 : CH 1 Band edge



Chain 1 : CH 11 Band edge

802.11ax (HE40) Full RU





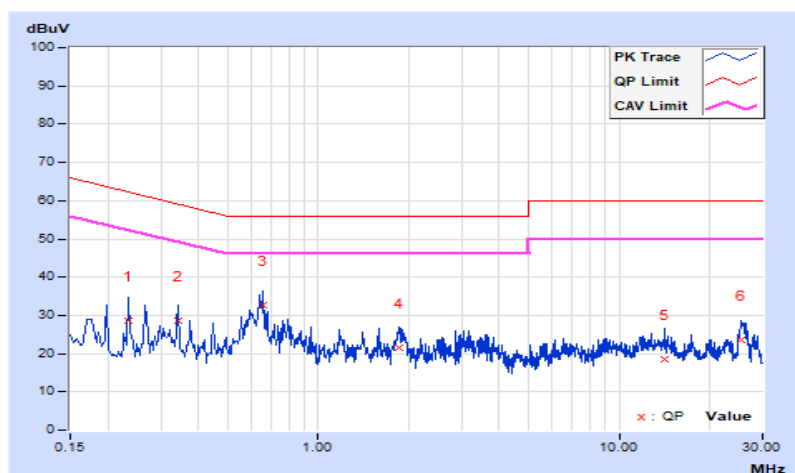
7.5 AC Power Conducted Emissions

RF Mode	802.11b	Channel	CH 6 : 2437 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Adair Peng		

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	0.23400	10.19	18.56	3.70	28.75	13.89	62.31	52.31	-33.56	-38.42
2	0.34200	10.20	18.27	9.11	28.47	19.31	59.15	49.15	-30.68	-29.84
3	0.65800	10.23	22.36	14.14	32.59	24.37	56.00	46.00	-23.41	-21.63
4	1.85000	10.36	11.30	3.59	21.66	13.95	56.00	46.00	-34.34	-32.05
5	14.21800	10.55	7.82	1.61	18.37	12.16	60.00	50.00	-41.63	-37.84
6	25.58200	10.64	12.97	3.45	23.61	14.09	60.00	50.00	-36.39	-35.91

Remarks:

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

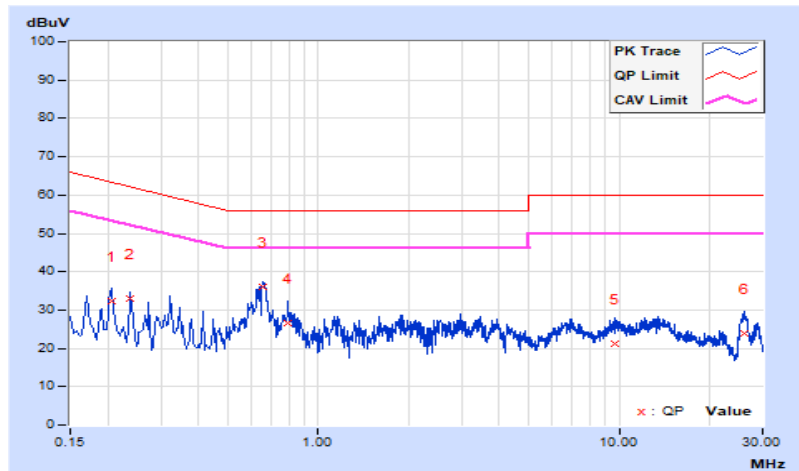


RF Mode	802.11b	Channel	CH 6 : 2437 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Adair Peng		

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	0.20600	10.22	22.24	11.98	32.46	22.20	63.37	53.37	-30.91	-31.17
2	0.23800	10.22	22.73	10.18	32.95	20.40	62.17	52.17	-29.22	-31.77
3	0.65763	10.26	25.88	18.67	36.14	28.93	56.00	46.00	-19.86	-17.07
4	0.79400	10.28	16.43	8.72	26.71	19.00	56.00	46.00	-29.29	-27.00
5	9.66600	10.60	10.78	3.92	21.38	14.52	60.00	50.00	-38.62	-35.48
6	26.16600	10.87	13.19	5.73	24.06	16.60	60.00	50.00	-35.94	-33.40

Remarks:

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



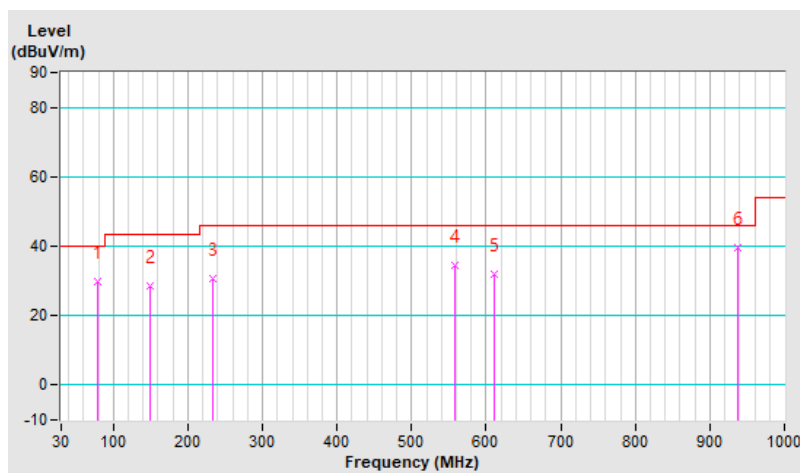
7.6 Unwanted Emissions below 1 GHz

RF Mode	802.11b	Channel	CH 6 : 2437 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	19 °C, 65% RH
Tested By	Thomas Cheng		

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	78.50	29.7 QP	40.0	-10.3	1.00 H	110	46.3	-16.6
2	148.34	28.4 QP	43.5	-15.1	1.00 H	17	40.7	-12.3
3	233.70	30.7 QP	46.0	-15.3	1.00 H	91	45.1	-14.4
4	558.65	34.5 QP	46.0	-11.5	1.49 H	40	40.2	-5.7
5	610.06	31.9 QP	46.0	-14.1	1.00 H	109	36.3	-4.4
6	937.92	39.4 QP	46.0	-6.6	1.99 H	54	39.0	0.4

Remarks:

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

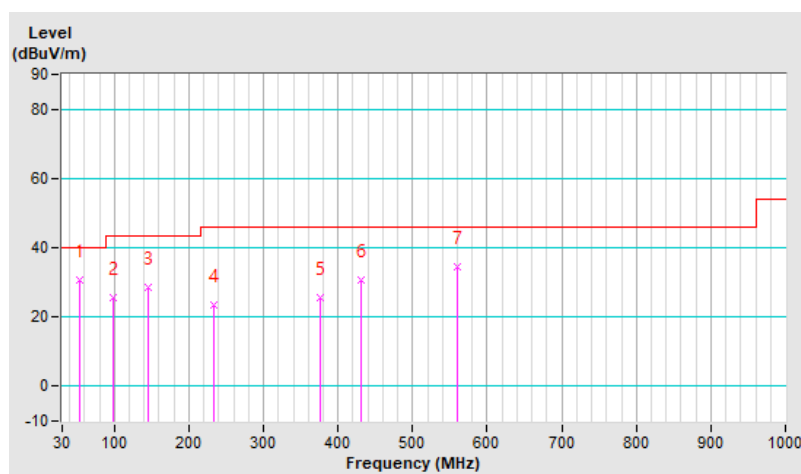


RF Mode	802.11b	Channel	CH 6 : 2437 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	19 °C, 65% RH
Tested By	Thomas Cheng		

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	53.28	30.8 QP	40.0	-9.2	1.00 V	137	43.1	-12.3
2	97.90	25.4 QP	43.5	-18.1	2.00 V	4	42.5	-17.1
3	145.43	28.7 QP	43.5	-14.8	1.51 V	30	41.0	-12.3
4	233.70	23.5 QP	46.0	-22.5	2.00 V	18	37.9	-14.4
5	375.32	25.7 QP	46.0	-20.3	2.00 V	133	35.6	-9.9
6	430.61	30.8 QP	46.0	-15.2	1.00 V	140	38.9	-8.1
7	560.59	34.5 QP	46.0	-11.5	1.00 V	305	40.2	-5.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The 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	19.5 °C, 64.2 % RH
Tested By	Vincent Chen		

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	60.7 PK	74.0	-13.3	1.39 H	151	25.4	35.3
2	2390.00	49.4 AV	54.0	-4.6	1.39 H	151	14.1	35.3
3	*2412.00	104.4 PK			1.39 H	151	69.2	35.2
4	*2412.00	101.9 AV			1.39 H	151	66.7	35.2
5	4824.00	52.8 PK	74.0	-21.2	2.71 H	116	41.4	11.4
6	4824.00	41.0 AV	54.0	-13.0	2.71 H	116	29.6	11.4
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	62.1 PK	74.0	-11.9	1.84 V	139	26.8	35.3
2	2390.00	51.7 AV	54.0	-2.3	1.84 V	139	16.4	35.3
3	*2412.00	108.4 PK			1.84 V	139	73.2	35.2
4	*2412.00	105.8 AV			1.84 V	139	70.6	35.2
5	4824.00	53.1 PK	74.0	-20.9	2.43 V	287	41.7	11.4
6	4824.00	41.3 AV	54.0	-12.7	2.43 V	287	29.9	11.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	19.5 °C, 64.2 % RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	104.1 PK			1.44 H	154	68.8	35.3
2	*2437.00	101.4 AV			1.44 H	154	66.1	35.3
3	4874.00	53.5 PK	74.0	-20.5	1.68 H	302	41.8	11.7
4	4874.00	41.6 AV	54.0	-12.4	1.68 H	302	29.9	11.7
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	109.2 PK			1.81 V	142	73.9	35.3
2	*2437.00	106.6 AV			1.81 V	142	71.3	35.3
3	4874.00	53.6 PK	74.0	-20.4	1.08 V	357	41.9	11.7
4	4874.00	41.9 AV	54.0	-12.1	1.08 V	357	30.2	11.7

Remarks:

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

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	19.5 °C, 64.2 % RH
Tested By	Thomas Cheng		

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	104.6 PK			1.60 H	196	69.4	35.2
2	*2462.00	102.0 AV			1.60 H	196	66.8	35.2
3	2483.50	62.0 PK	74.0	-12.0	1.60 H	196	26.8	35.2
4	2483.50	49.4 AV	54.0	-4.6	1.60 H	196	14.2	35.2
5	4924.00	53.3 PK	74.0	-20.7	1.20 H	241	41.5	11.8
6	4924.00	41.0 AV	54.0	-13.0	1.20 H	241	29.2	11.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	108.7 PK			1.81 V	142	73.5	35.2
2	*2462.00	106.0 AV			1.81 V	142	70.8	35.2
3	2483.50	64.4 PK	74.0	-9.6	1.81 V	142	29.2	35.2
4	2483.50	52.7 AV	54.0	-1.3	1.81 V	142	17.5	35.2
5	4924.00	53.5 PK	74.0	-20.5	3.78 V	327	41.7	11.8
6	4924.00	41.2 AV	54.0	-12.8	3.78 V	327	29.4	11.8

Remarks:

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

RF Mode	802.11g	Channel	CH 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	19.5 °C, 64.2 % RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	65.8 PK	74.0	-8.2	1.44 H	154	30.5	35.3
2	2390.00	52.5 AV	54.0	-1.5	1.44 H	154	17.2	35.3
3	*2412.00	107.3 PK			1.44 H	154	72.1	35.2
4	*2412.00	97.7 AV			1.44 H	154	62.5	35.2
5	4824.00	53.0 PK	74.0	-21.0	1.65 H	32	41.6	11.4
6	4824.00	40.8 AV	54.0	-13.2	1.65 H	32	29.4	11.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	66.5 PK	74.0	-7.5	1.83 V	95	31.2	35.3
2	2390.00	52.8 AV	54.0	-1.2	1.83 V	95	17.5	35.3
3	*2412.00	109.4 PK			1.83 V	95	74.2	35.2
4	*2412.00	99.6 AV			1.83 V	95	64.4	35.2
5	4824.00	53.0 PK	74.0	-21.0	3.95 V	134	41.6	11.4
6	4824.00	41.6 AV	54.0	-12.4	3.95 V	134	30.2	11.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	19.5 °C, 64.2 % RH
Tested By	Thomas Cheng		

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	68.2 PK	74.0	-5.8	1.44 H	193	32.9	35.3
2	2390.00	50.3 AV	54.0	-3.7	1.44 H	193	15.0	35.3
3	*2437.00	108.3 PK			1.44 H	193	73.0	35.3
4	*2437.00	98.8 AV			1.44 H	193	63.5	35.3
5	2483.50	63.9 PK	74.0	-10.1	1.44 H	193	28.7	35.2
6	2483.50	50.5 AV	54.0	-3.5	1.44 H	193	15.3	35.2
7	4874.00	53.5 PK	74.0	-20.5	2.48 H	339	41.8	11.7
8	4874.00	40.7 AV	54.0	-13.3	2.48 H	339	29.0	11.7
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	70.9 PK	74.0	-3.1	1.83 V	140	35.6	35.3
2	2390.00	52.2 AV	54.0	-1.8	1.83 V	140	16.9	35.3
3	*2437.00	110.7 PK			1.83 V	140	75.4	35.3
4	*2437.00	101.2 AV			1.83 V	140	65.9	35.3
5	2483.50	68.6 PK	74.0	-5.4	1.83 V	140	33.4	35.2
6	2483.50	52.4 AV	54.0	-1.6	1.83 V	140	17.2	35.2
7	4874.00	53.8 PK	74.0	-20.2	2.94 V	112	42.1	11.7
8	4874.00	40.9 AV	54.0	-13.1	2.94 V	112	29.2	11.7

Remarks:

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

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	19.5 °C, 64.2 % RH
Tested By	Thomas Cheng		

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	106.0 PK			1.60 H	174	70.8	35.2
2	*2462.00	96.4 AV			1.60 H	174	61.2	35.2
3	2483.50	65.9 PK	74.0	-8.1	1.60 H	174	30.7	35.2
4	2483.50	50.1 AV	54.0	-3.9	1.60 H	174	14.9	35.2
5	4924.00	53.4 PK	74.0	-20.6	1.32 H	148	41.6	11.8
6	4924.00	41.3 AV	54.0	-12.7	1.32 H	148	29.5	11.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	108.9 PK			1.81 V	155	73.7	35.2
2	*2462.00	99.1 AV			1.81 V	155	63.9	35.2
3	2483.50	70.6 PK	74.0	-3.4	1.81 V	155	35.4	35.2
4	2483.50	52.7 AV	54.0	-1.3	1.81 V	155	17.5	35.2
5	4924.00	53.7 PK	74.0	-20.3	2.18 V	92	41.9	11.8
6	4924.00	41.5 AV	54.0	-12.5	2.18 V	92	29.7	11.8

Remarks:

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

RF Mode	802.11ax (HE20) 26-tone RU	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	19.5 °C, 64.2 % RH
Tested By	Thomas Cheng		

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	68.7 PK	74.0	-5.3	1.56 H	144	33.4	35.3
2	2390.00	49.4 AV	54.0	-4.6	1.56 H	144	14.1	35.3
3	*2412.00	115.1 PK			1.56 H	144	79.9	35.2
4	*2412.00	104.3 AV			1.56 H	144	69.1	35.2
5	4824.00	52.7 PK	74.0	-21.3	3.21 H	301	41.3	11.4
6	4824.00	39.6 AV	54.0	-14.4	3.21 H	301	28.2	11.4
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	72.1 PK	74.0	-1.9	1.38 V	208	36.8	35.3
2	2390.00	49.5 AV	54.0	-4.5	1.38 V	208	14.2	35.3
3	*2412.00	117.0 PK			1.38 V	208	81.8	35.2
4	*2412.00	105.5 AV			1.38 V	208	70.3	35.2
5	4824.00	53.1 PK	74.0	-20.9	2.41 V	136	41.7	11.4
6	4824.00	39.8 AV	54.0	-14.2	2.41 V	136	28.4	11.4

Remarks:

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

RF Mode	802.11ax (HE20) 26-tone RU	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	19.5 °C, 64.2 % RH
Tested By	Thomas Cheng		

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	72.0 PK	74.0	-2.0	1.56 H	143	36.7	35.3
2	2390.00	48.9 AV	54.0	-5.1	1.56 H	143	13.6	35.3
3	*2437.00	116.1 PK			1.56 H	143	80.8	35.3
4	*2437.00	105.4 AV			1.56 H	143	70.1	35.3
5	4874.00	53.3 PK	74.0	-20.7	2.13 H	95	41.6	11.7
6	4874.00	41.1 AV	54.0	-12.9	2.13 H	95	29.4	11.7
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	72.9 PK	74.0	-1.1	1.38 V	208	37.6	35.3
2	2390.00	49.2 AV	54.0	-4.8	1.38 V	208	13.9	35.3
3	*2437.00	117.9 PK			1.38 V	208	82.6	35.3
4	*2437.00	107.1 AV			1.38 V	208	71.8	35.3
5	4874.00	53.6 PK	74.0	-20.4	3.43 V	284	41.9	11.7
6	4874.00	41.4 AV	54.0	-12.6	3.43 V	284	29.7	11.7

Remarks:

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

RF Mode	802.11ax (HE20) 26-tone RU	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	19.5 °C, 64.2 % RH
Tested By	Vincent Chen		

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	113.5 PK			2.13 H	200	78.3	35.2
2	*2462.00	101.0 AV			2.13 H	200	65.8	35.2
3	2483.50	73.0 PK	74.0	-1.0	2.13 H	200	37.8	35.2
4	2483.50	48.2 AV	54.0	-5.8	2.13 H	200	13.0	35.2
5	4924.00	52.9 PK	74.0	-21.1	1.63 H	178	41.1	11.8
6	4924.00	39.9 AV	54.0	-14.1	1.63 H	178	28.1	11.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	115.0 PK			1.89 V	77	79.8	35.2
2	*2462.00	103.0 AV			1.89 V	77	67.8	35.2
3	2483.50	72.9 PK	74.0	-1.1	1.89 V	77	37.7	35.2
4	2483.50	48.5 AV	54.0	-5.5	1.89 V	77	13.3	35.2
5	4924.00	53.1 PK	74.0	-20.9	1.23 V	226	41.3	11.8
6	4924.00	40.0 AV	54.0	-14.0	1.23 V	226	28.2	11.8

Remarks:

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

RF Mode	802.11ax (HE20) 52-tone RU	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	19.5 °C, 64.2 % RH
Tested By	Thomas Cheng		

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	72.1 PK	74.0	-1.9	1.56 H	144	36.8	35.3
2	2390.00	50.0 AV	54.0	-4.0	1.56 H	144	14.7	35.3
3	*2412.00	113.9 PK			1.56 H	144	78.7	35.2
4	*2412.00	102.2 AV			1.56 H	144	67.0	35.2
5	4824.00	53.0 PK	74.0	-21.0	2.58 H	27	41.6	11.4
6	4824.00	39.9 AV	54.0	-14.1	2.58 H	27	28.5	11.4
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	72.3 PK	74.0	-1.7	1.38 V	208	37.0	35.3
2	2390.00	50.2 AV	54.0	-3.8	1.38 V	208	14.9	35.3
3	*2412.00	115.3 PK			1.38 V	208	80.1	35.2
4	*2412.00	103.5 AV			1.38 V	208	68.3	35.2
5	4824.00	53.3 PK	74.0	-20.7	1.65 V	154	41.9	11.4
6	4824.00	40.2 AV	54.0	-13.8	1.65 V	154	28.8	11.4

Remarks:

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

RF Mode	802.11ax (HE20) 52-tone RU	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	19.5 °C, 64.2 % RH
Tested By	Thomas Cheng		

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	70.0 PK	74.0	-4.0	1.74 H	145	34.7	35.3
2	2390.00	49.1 AV	54.0	-4.9	1.74 H	145	13.8	35.3
3	*2437.00	114.5 PK			1.74 H	145	79.2	35.3
4	*2437.00	102.9 AV			1.74 H	145	67.6	35.3
5	4874.00	53.3 PK	74.0	-20.7	1.96 H	60	41.6	11.7
6	4874.00	40.8 AV	54.0	-13.2	1.96 H	60	29.1	11.7
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	72.1 PK	74.0	-1.9	1.55 V	207	36.8	35.3
2	2390.00	49.5 AV	54.0	-4.5	1.55 V	207	14.2	35.3
3	*2437.00	117.1 PK			1.55 V	207	81.8	35.3
4	*2437.00	105.4 AV			1.55 V	207	70.1	35.3
5	4874.00	53.6 PK	74.0	-20.4	2.44 V	355	41.9	11.7
6	4874.00	41.2 AV	54.0	-12.8	2.44 V	355	29.5	11.7

Remarks:

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

RF Mode	802.11ax (HE20) 52-tone RU	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	19.5 °C, 64.2 % RH
Tested By	Vincent Chen		

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	109.3 PK			1.21 H	64	74.1	35.2
2	*2462.00	97.9 AV			1.21 H	64	62.7	35.2
3	2483.50	69.7 PK	74.0	-4.3	1.21 H	64	34.5	35.2
4	2483.50	48.4 AV	54.0	-5.6	1.21 H	64	13.2	35.2
5	4924.00	52.9 PK	74.0	-21.1	2.16 H	169	41.1	11.8
6	4924.00	39.9 AV	54.0	-14.1	2.16 H	169	28.1	11.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	112.1 PK			1.87 V	79	76.9	35.2
2	*2462.00	100.4 AV			1.87 V	79	65.2	35.2
3	2483.50	72.4 PK	74.0	-1.6	1.87 V	79	37.2	35.2
4	2483.50	48.9 AV	54.0	-5.1	1.87 V	79	13.7	35.2
5	4924.00	53.1 PK	74.0	-20.9	1.43 V	223	41.3	11.8
6	4924.00	40.2 AV	54.0	-13.8	1.43 V	223	28.4	11.8

Remarks:

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

RF Mode	802.11ax (HE20) 106-tone RU	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	19.5 °C, 64.2 % RH
Tested By	Vincent Chen		

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	72.9 PK	74.0	-1.1	2.09 H	185	37.6	35.3
2	2390.00	48.6 AV	54.0	-5.4	2.09 H	185	13.3	35.3
3	*2412.00	104.2 PK			2.09 H	185	69.0	35.2
4	*2412.00	94.0 AV			2.09 H	185	58.8	35.2
5	4824.00	52.8 PK	74.0	-21.2	1.46 H	298	41.4	11.4
6	4824.00	39.7 AV	54.0	-14.3	1.46 H	298	28.3	11.4
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	73.0 PK	74.0	-1.0	1.81 V	53	37.7	35.3
2	2390.00	49.7 AV	54.0	-4.3	1.81 V	53	14.4	35.3
3	*2412.00	108.5 PK			1.81 V	53	73.3	35.2
4	*2412.00	97.7 AV			1.81 V	53	62.5	35.2
5	4824.00	53.0 PK	74.0	-21.0	2.76 V	223	41.6	11.4
6	4824.00	39.9 AV	54.0	-14.1	2.76 V	223	28.5	11.4

Remarks:

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

RF Mode	802.11ax (HE20) 106-tone RU	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	19.5 °C, 64.2 % RH
Tested By	Thomas Cheng		

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	72.0 PK	74.0	-2.0	1.87 H	184	36.7	35.3
2	2390.00	49.5 AV	54.0	-4.5	1.87 H	184	14.2	35.3
3	*2437.00	113.1 PK			1.87 H	184	77.8	35.3
4	*2437.00	100.0 AV			1.87 H	184	64.7	35.3
5	4874.00	53.0 PK	74.0	-21.0	1.68 H	153	41.3	11.7
6	4874.00	40.8 AV	54.0	-13.2	1.68 H	153	29.1	11.7
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	72.1 PK	74.0	-1.9	1.42 V	144	36.8	35.3
2	2390.00	49.7 AV	54.0	-4.3	1.42 V	144	14.4	35.3
3	*2437.00	114.5 PK			1.42 V	144	79.2	35.3
4	*2437.00	102.1 AV			1.42 V	144	66.8	35.3
5	4874.00	53.3 PK	74.0	-20.7	2.59 V	173	41.6	11.7
6	4874.00	41.3 AV	54.0	-12.7	2.59 V	173	29.6	11.7

Remarks:

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

RF Mode	802.11ax (HE20) 106-tone RU	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	19.5 °C, 64.2 % RH
Tested By	Vincent Chen		

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	108.1 PK			2.14 H	198	72.9	35.2
2	*2462.00	95.4 AV			2.14 H	198	60.2	35.2
3	2483.50	70.6 PK	74.0	-3.4	2.14 H	198	35.4	35.2
4	2483.50	48.1 AV	54.0	-5.9	2.14 H	198	12.9	35.2
5	4924.00	52.9 PK	74.0	-21.1	1.03 H	191	41.1	11.8
6	4924.00	39.9 AV	54.0	-14.1	1.03 H	191	28.1	11.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	109.6 PK			2.01 V	143	74.4	35.2
2	*2462.00	97.1 AV			2.01 V	143	61.9	35.2
3	2483.50	73.0 PK	74.0	-1.0	2.01 V	143	37.8	35.2
4	2483.50	48.7 AV	54.0	-5.3	2.01 V	143	13.5	35.2
5	4924.00	53.2 PK	74.0	-20.8	1.53 V	221	41.4	11.8
6	4924.00	40.0 AV	54.0	-14.0	1.53 V	221	28.2	11.8

Remarks:

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

RF Mode	802.11ax (HE20) Full RU	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	19.5 °C, 64.2 % RH
Tested By	Thomas Cheng		

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	62.9 PK	74.0	-11.1	1.42 H	155	27.6	35.3
2	2390.00	50.3 AV	54.0	-3.7	1.42 H	155	15.0	35.3
3	*2412.00	108.3 PK			1.42 H	155	73.1	35.2
4	*2412.00	95.4 AV			1.42 H	155	60.2	35.2
5	4824.00	52.9 PK	74.0	-21.1	1.44 H	150	41.5	11.4
6	4824.00	40.2 AV	54.0	-13.8	1.44 H	150	28.8	11.4
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	65.2 PK	74.0	-8.8	1.83 V	97	29.9	35.3
2	2390.00	52.5 AV	54.0	-1.5	1.83 V	97	17.2	35.3
3	*2412.00	111.3 PK			1.83 V	97	76.1	35.2
4	*2412.00	98.6 AV			1.83 V	97	63.4	35.2
5	4824.00	53.2 PK	74.0	-20.8	2.21 V	189	41.8	11.4
6	4824.00	40.4 AV	54.0	-13.6	2.21 V	189	29.0	11.4

Remarks:

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

RF Mode	802.11ax (HE20) Full RU	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	19.5 °C, 64.2 % RH
Tested By	Thomas Cheng		

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	64.9 PK	74.0	-9.1	1.44 H	193	29.6	35.3
2	2390.00	49.4 AV	54.0	-4.6	1.44 H	193	14.1	35.3
3	*2437.00	110.6 PK			1.44 H	193	75.3	35.3
4	*2437.00	97.7 AV			1.44 H	193	62.4	35.3
5	2483.50	64.1 PK	74.0	-9.9	1.44 H	193	28.9	35.2
6	2483.50	50.1 AV	54.0	-3.9	1.44 H	193	14.9	35.2
7	4874.00	53.4 PK	74.0	-20.6	3.67 H	112	41.7	11.7
8	4874.00	40.5 AV	54.0	-13.5	3.67 H	112	28.8	11.7
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	69.3 PK	74.0	-4.7	1.83 V	142	34.0	35.3
2	2390.00	52.2 AV	54.0	-1.8	1.83 V	142	16.9	35.3
3	*2437.00	114.9 PK			1.83 V	142	79.6	35.3
4	*2437.00	101.0 AV			1.83 V	142	65.7	35.3
5	2483.50	70.9 PK	74.0	-3.1	1.83 V	142	35.7	35.2
6	2483.50	52.8 AV	54.0	-1.2	1.83 V	142	17.6	35.2
7	4874.00	53.8 PK	74.0	-20.2	1.73 V	204	42.1	11.7
8	4874.00	40.8 AV	54.0	-13.2	1.73 V	204	29.1	11.7

Remarks:

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

RF Mode	802.11ax (HE20) Full RU	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	19.5 °C, 64.2 % RH
Tested By	Thomas Cheng		

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	108.0 PK			1.55 H	193	72.8	35.2
2	*2462.00	95.6 AV			1.55 H	193	60.4	35.2
3	2483.50	62.8 PK	74.0	-11.2	1.55 H	193	27.6	35.2
4	2483.50	49.5 AV	54.0	-4.5	1.55 H	193	14.3	35.2
5	4924.00	53.0 PK	74.0	-21.0	3.17 H	342	41.2	11.8
6	4924.00	41.1 AV	54.0	-12.9	3.17 H	342	29.3	11.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	112.3 PK			1.81 V	142	77.1	35.2
2	*2462.00	99.0 AV			1.81 V	142	63.8	35.2
3	2483.50	64.4 PK	74.0	-9.6	1.81 V	142	29.2	35.2
4	2483.50	52.5 AV	54.0	-1.5	1.81 V	142	17.3	35.2
5	4924.00	53.2 PK	74.0	-20.8	2.94 V	32	41.4	11.8
6	4924.00	41.9 AV	54.0	-12.1	2.94 V	32	30.1	11.8

Remarks:

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

RF Mode	802.11ax (HE40) Full RU	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	19.5 °C, 64.2 % RH
Tested By	Thomas Cheng		

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	61.9 PK	74.0	-12.1	1.43 H	153	26.6	35.3
2	2390.00	48.9 AV	54.0	-5.1	1.43 H	153	13.6	35.3
3	*2422.00	104.6 PK			1.43 H	153	69.4	35.2
4	*2422.00	91.9 AV			1.43 H	153	56.7	35.2
5	4844.00	52.7 PK	74.0	-21.3	3.34 H	230	41.3	11.4
6	4844.00	40.2 AV	54.0	-13.8	3.34 H	230	28.8	11.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	64.9 PK	74.0	-9.1	1.82 V	143	29.6	35.3
2	2390.00	53.0 AV	54.0	-1.0	1.82 V	143	17.7	35.3
3	*2422.00	105.9 PK			1.82 V	143	70.7	35.2
4	*2422.00	93.2 AV			1.82 V	143	58.0	35.2
5	4844.00	53.0 PK	74.0	-21.0	1.56 V	331	41.6	11.4
6	4844.00	40.6 AV	54.0	-13.4	1.56 V	331	29.2	11.4

Remarks:

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

RF Mode	802.11ax (HE40) Full RU	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	19.5 °C, 64.2 % RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	65.8 PK	74.0	-8.2	1.70 H	193	30.5	35.3
2	2390.00	51.3 AV	54.0	-2.7	1.70 H	193	16.0	35.3
3	*2437.00	108.6 PK			1.70 H	193	73.3	35.3
4	*2437.00	95.3 AV			1.70 H	193	60.0	35.3
5	2483.50	66.5 PK	74.0	-7.5	1.70 H	193	31.3	35.2
6	2483.50	51.6 AV	54.0	-2.4	1.70 H	193	16.4	35.2
7	4874.00	53.4 PK	74.0	-20.6	1.66 H	221	41.7	11.7
8	4874.00	40.4 AV	54.0	-13.6	1.66 H	221	28.7	11.7
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	67.7 PK	74.0	-6.3	1.81 V	142	32.4	35.3
2	2390.00	52.9 AV	54.0	-1.1	1.81 V	142	17.6	35.3
3	*2437.00	110.0 PK			1.81 V	142	74.7	35.3
4	*2437.00	97.7 AV			1.81 V	142	62.4	35.3
5	2483.50	67.9 PK	74.0	-6.1	1.81 V	142	32.7	35.2
6	2483.50	52.4 AV	54.0	-1.6	1.81 V	142	17.2	35.2
7	4874.00	53.7 PK	74.0	-20.3	1.16 V	271	42.0	11.7
8	4874.00	40.6 AV	54.0	-13.4	1.16 V	271	28.9	11.7

Remarks:

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

RF Mode	802.11ax (HE40) Full RU	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	19.5 °C, 64.2 % RH
Tested By	Thomas Cheng		

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	106.0 PK			1.67 H	193	70.8	35.2
2	*2452.00	92.9 AV			1.67 H	193	57.7	35.2
3	2483.50	64.4 PK	74.0	-9.6	1.67 H	193	29.2	35.2
4	2483.50	51.5 AV	54.0	-2.5	1.67 H	193	16.3	35.2
5	4904.00	53.7 PK	74.0	-20.3	1.95 H	124	41.8	11.9
6	4904.00	40.7 AV	54.0	-13.3	1.95 H	124	28.8	11.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2452.00	108.0 PK			1.90 V	147	72.8	35.2
2	*2452.00	95.5 AV			1.90 V	147	60.3	35.2
3	2483.50	67.9 PK	74.0	-6.1	1.90 V	147	32.7	35.2
4	2483.50	52.8 AV	54.0	-1.2	1.90 V	147	17.6	35.2
5	4904.00	54.0 PK	74.0	-20.0	3.43 V	92	42.1	11.9
6	4904.00	40.9 AV	54.0	-13.1	3.43 V	92	29.0	11.9

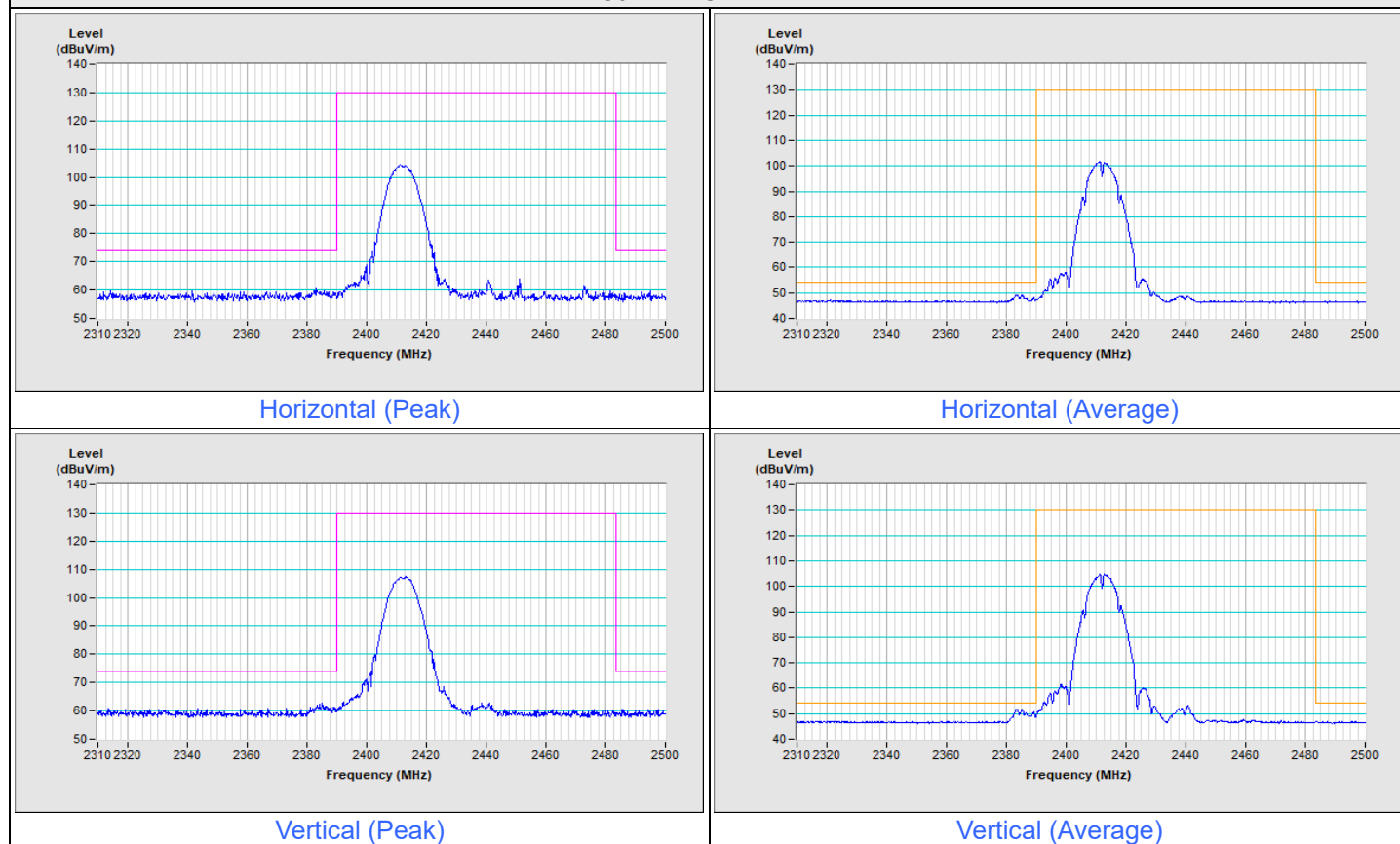
Remarks:

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.

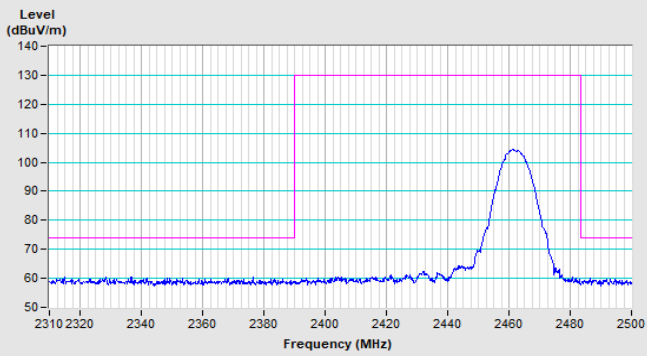
Plot of Band Edge

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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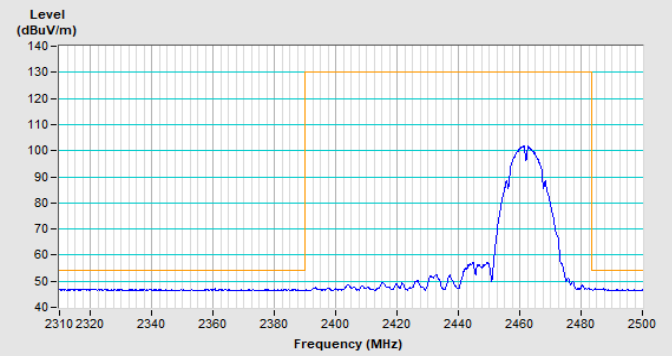
802.11b Channel 1



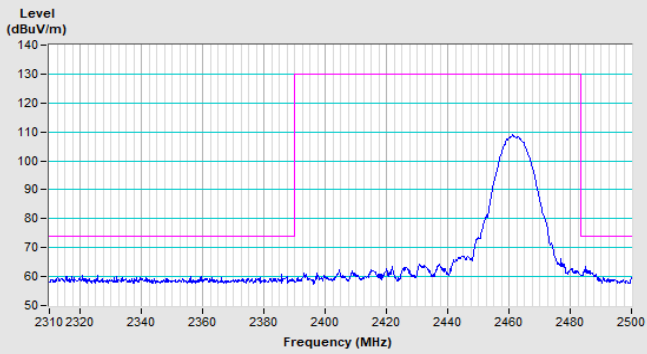
802.11b Channel 11



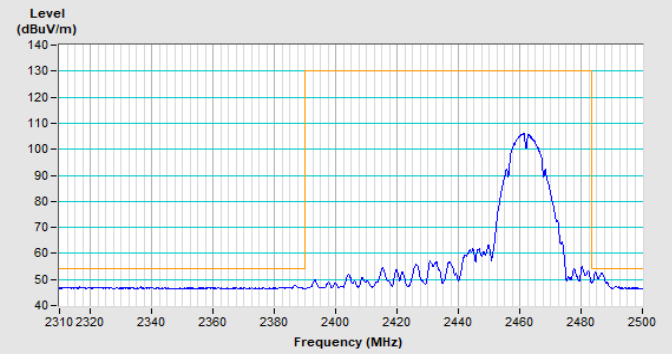
Horizontal (Peak)



Horizontal (Average)



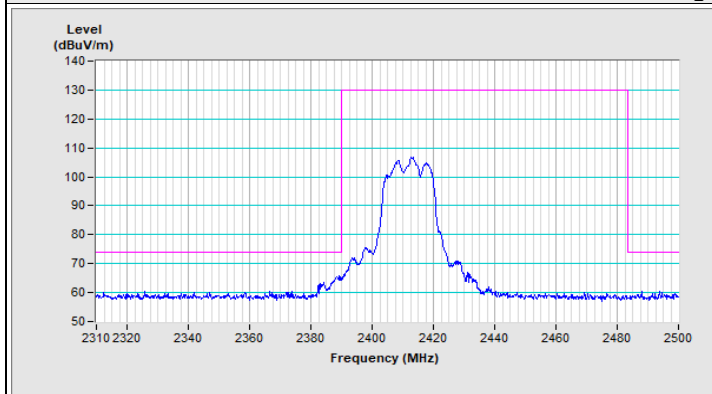
Vertical (Peak)



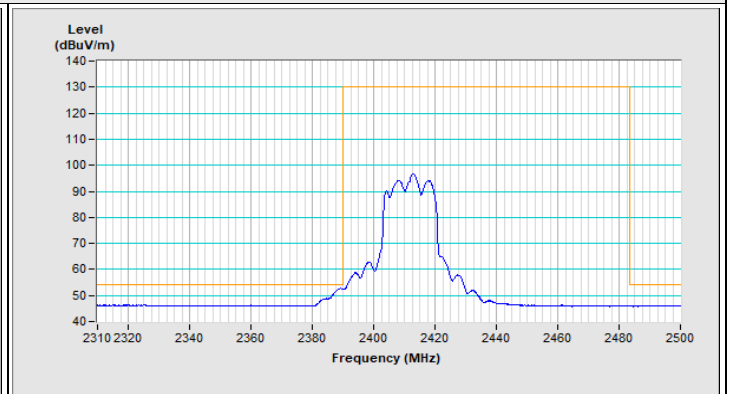
Vertical (Average)

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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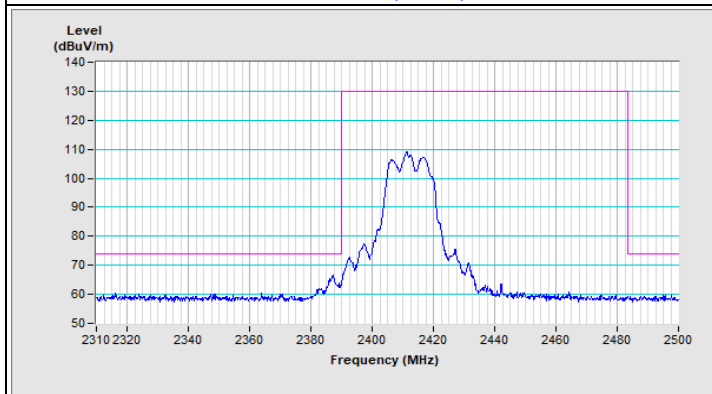
802.11g Channel 1



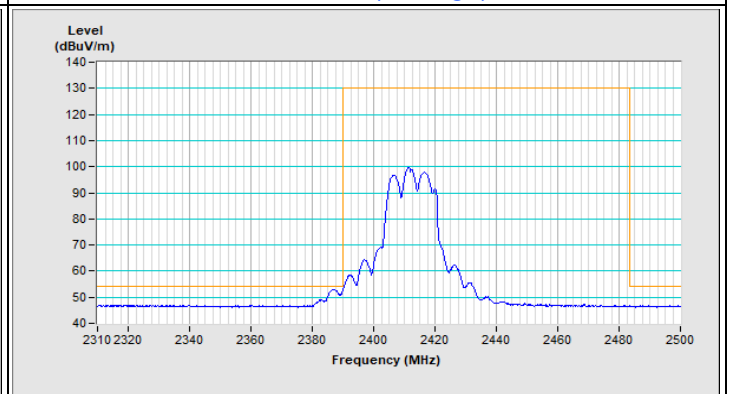
Horizontal (Peak)



Horizontal (Average)

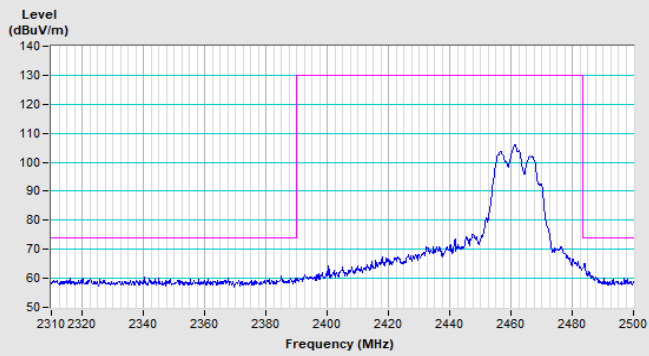


Vertical (Peak)

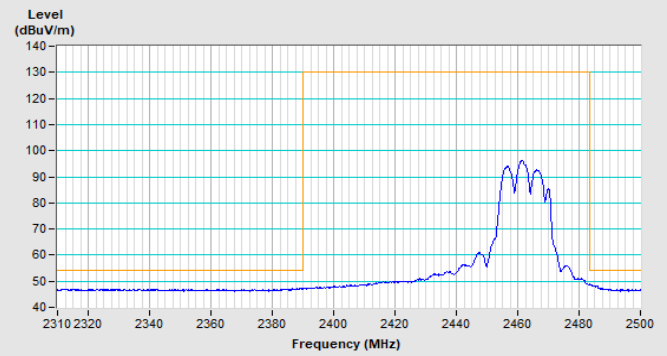


Vertical (Average)

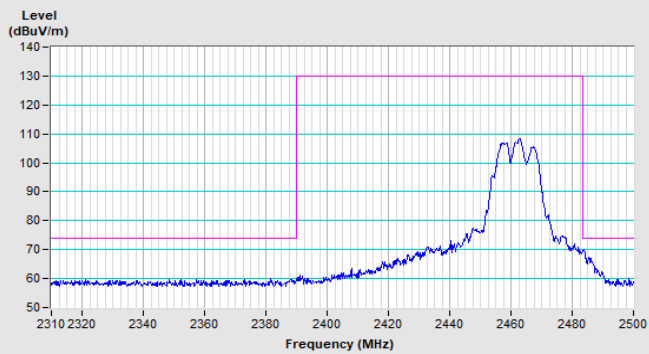
802.11g Channel 11



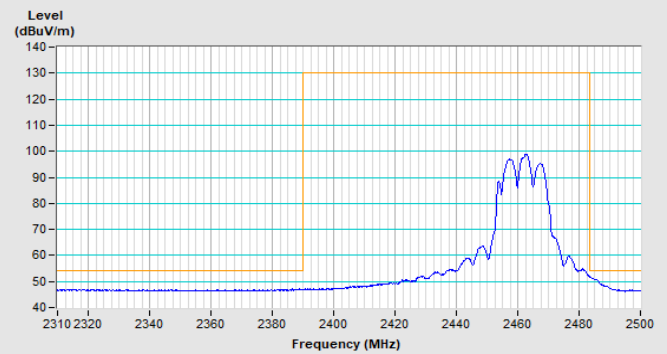
Horizontal (Peak)



Horizontal (Average)



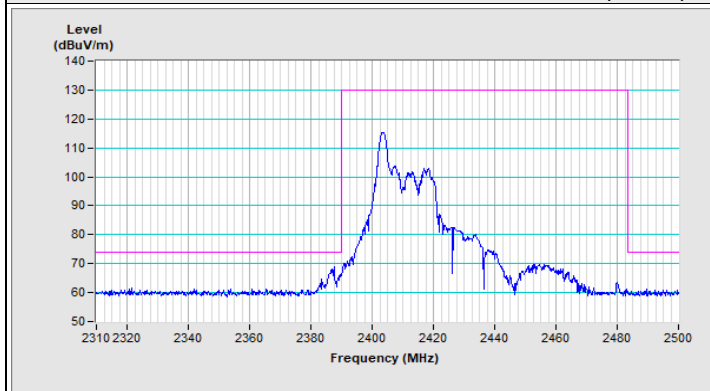
Vertical (Peak)



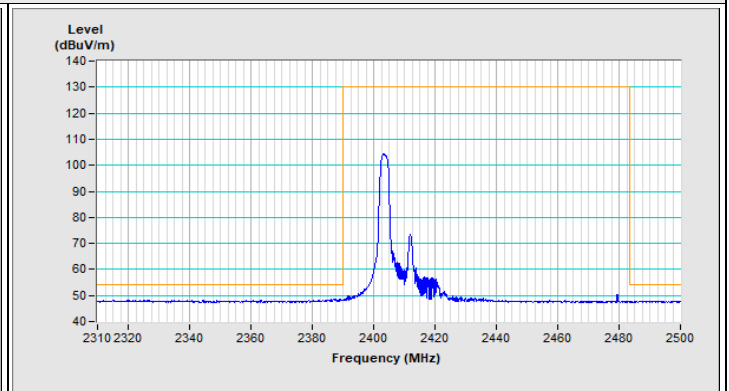
Vertical (Average)

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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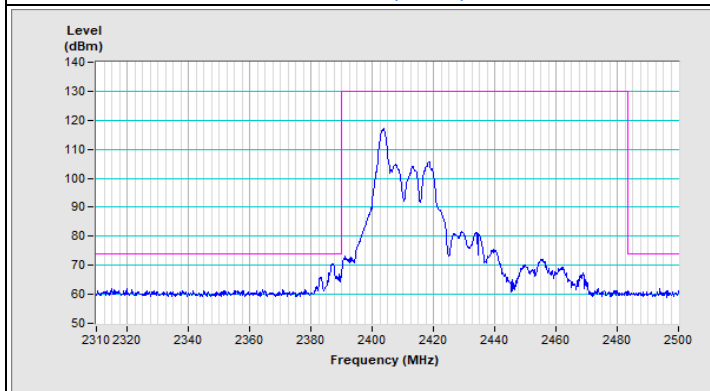
802.11ax (HE20) 26-tone RU Channel 1



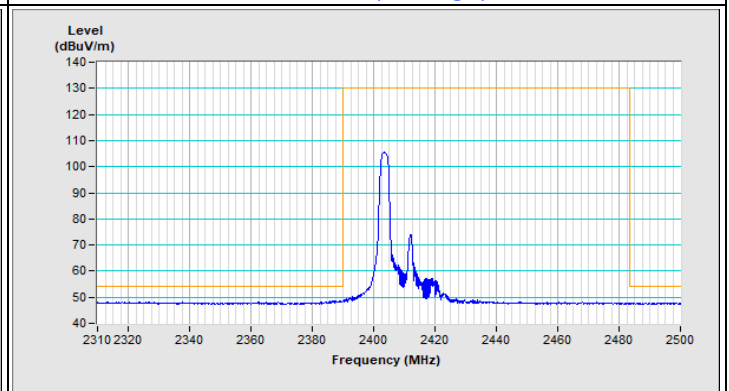
Horizontal (Peak)



Horizontal (Average)

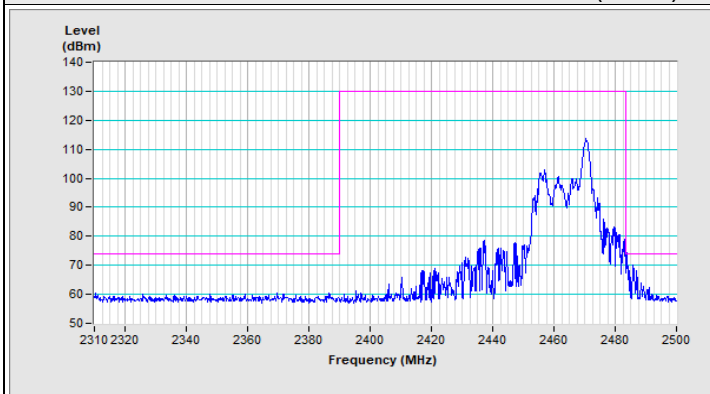


Vertical (Peak)

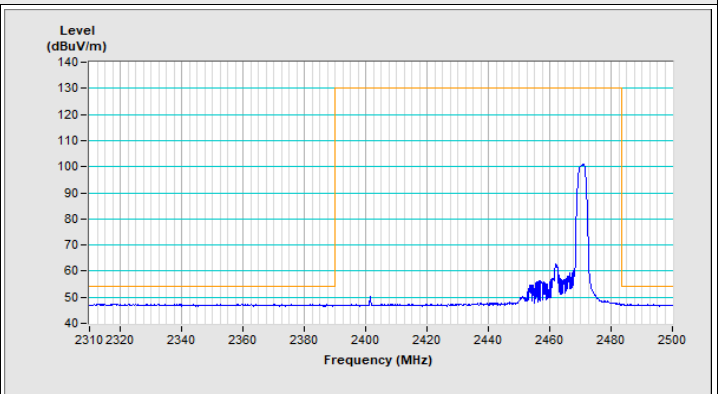


Vertical (Average)

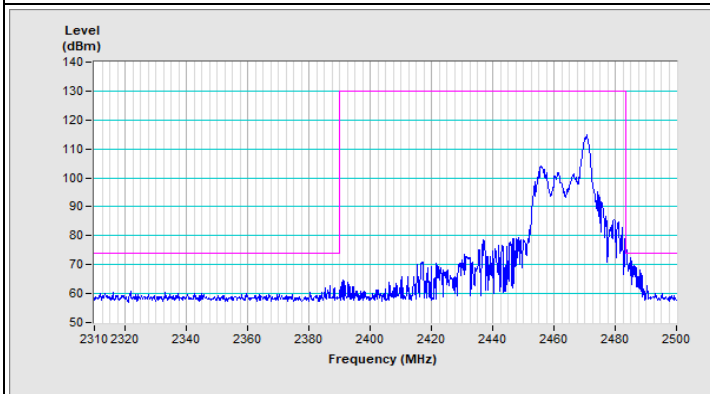
802.11ax (HE20) 26-tone RU Channel 11



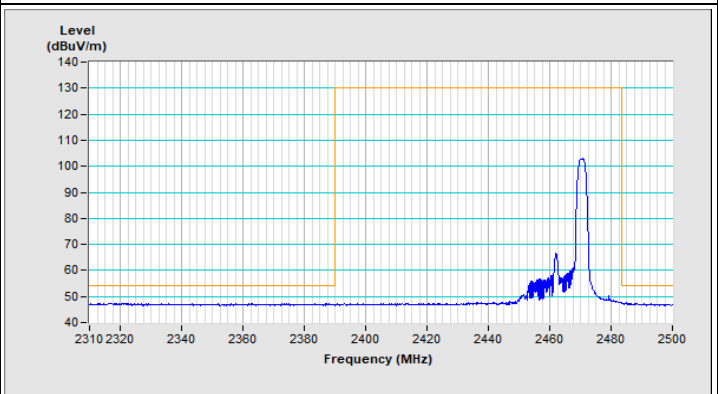
Horizontal (Peak)



Horizontal (Average)



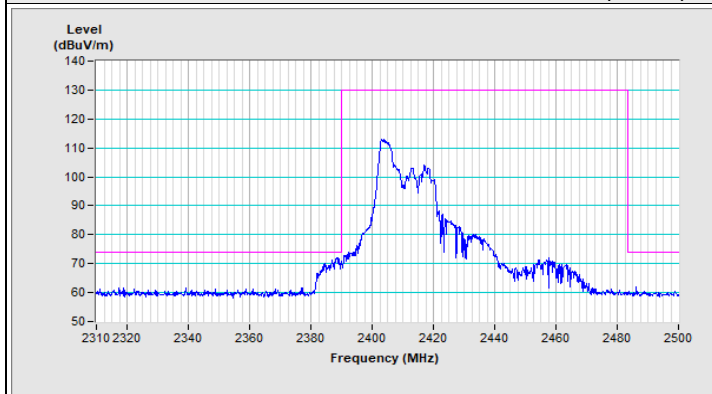
Vertical (Peak)



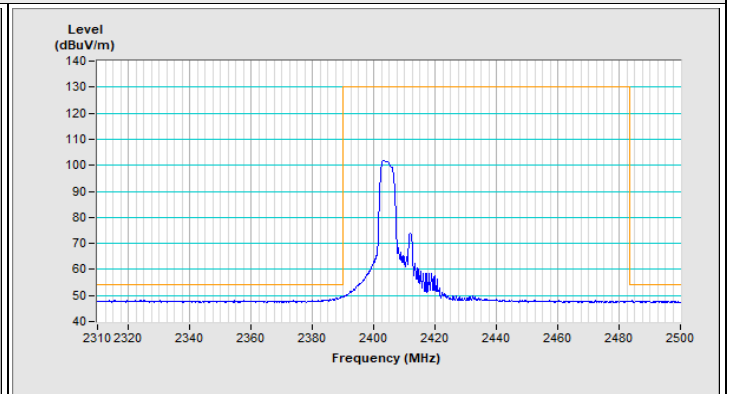
Vertical (Average)

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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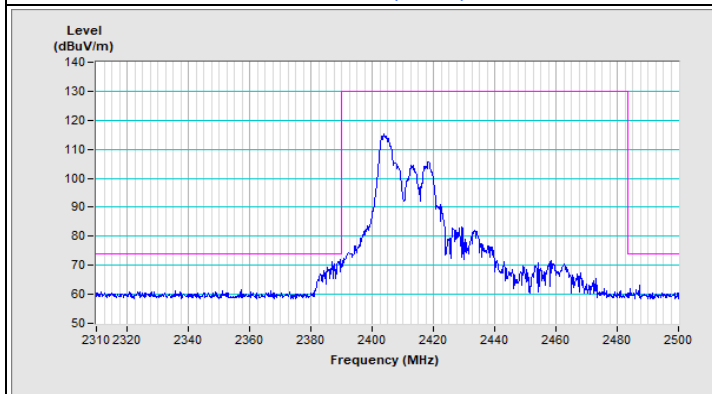
802.11ax (HE20) 52-tone RU Channel 1



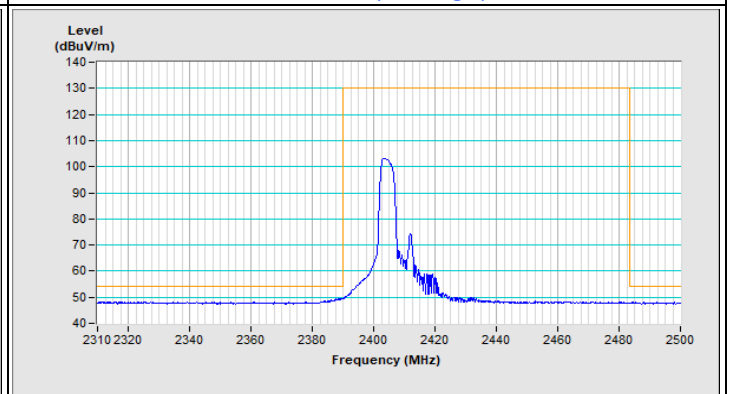
Horizontal (Peak)



Horizontal (Average)

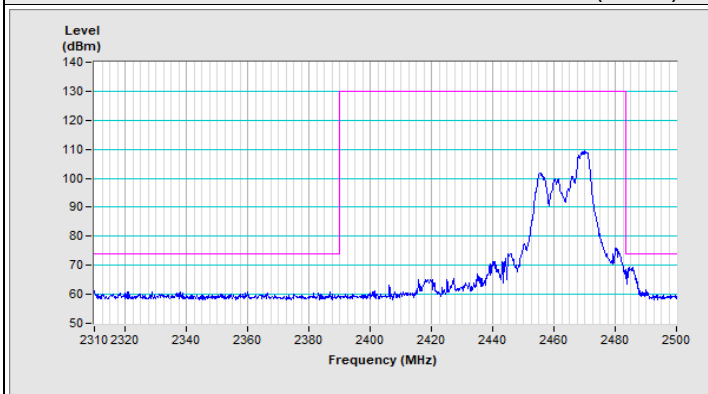


Vertical (Peak)

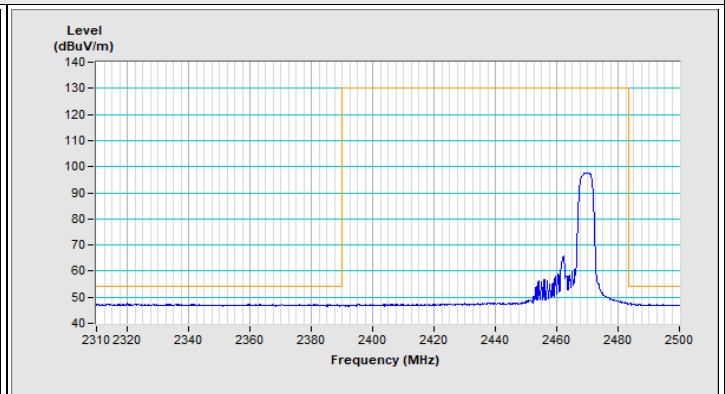


Vertical (Average)

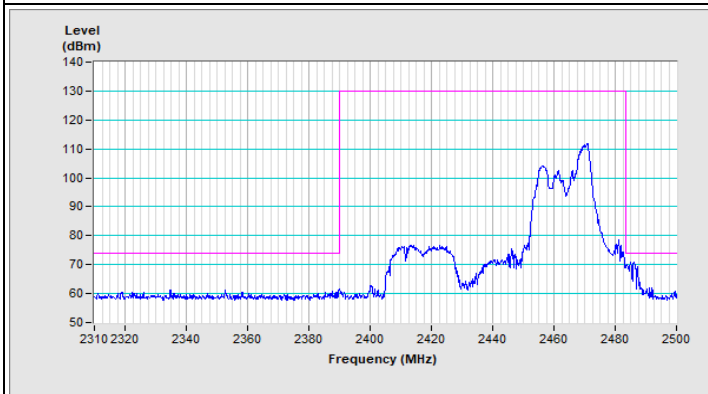
802.11ax (HE20) 52-tone RU Channel 11



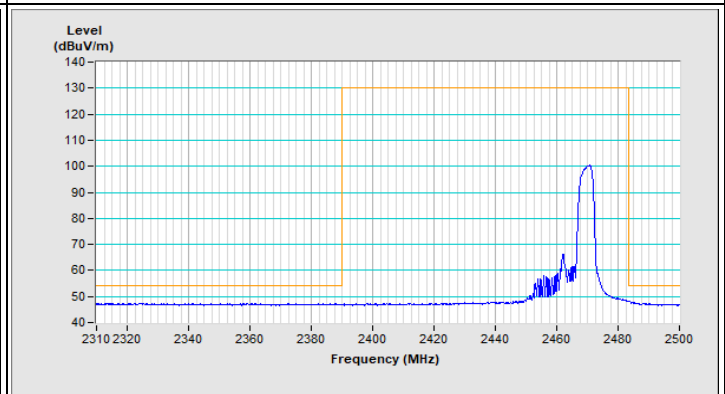
Horizontal (Peak)



Horizontal (Average)



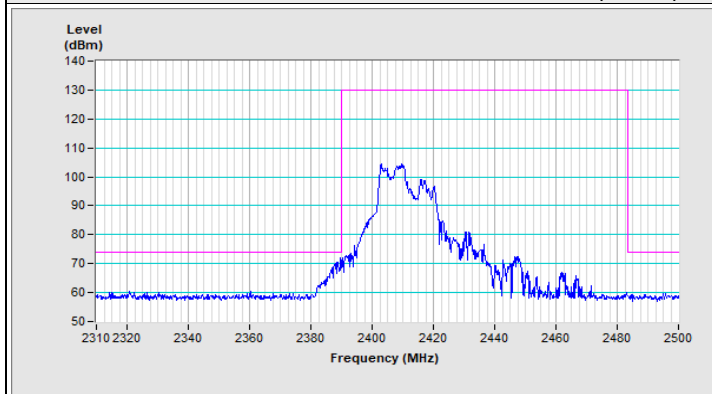
Vertical (Peak)



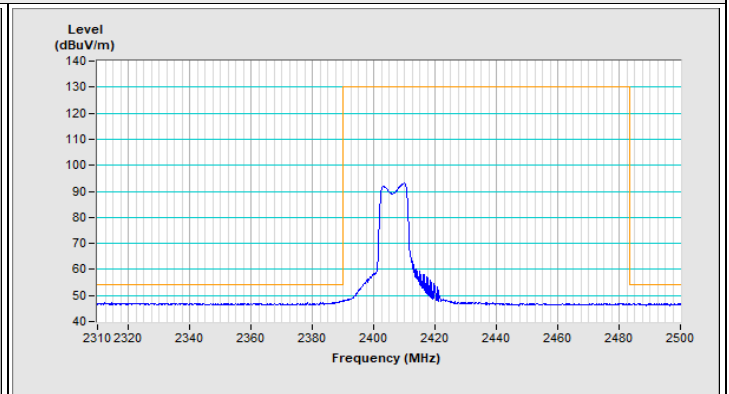
Vertical (Average)

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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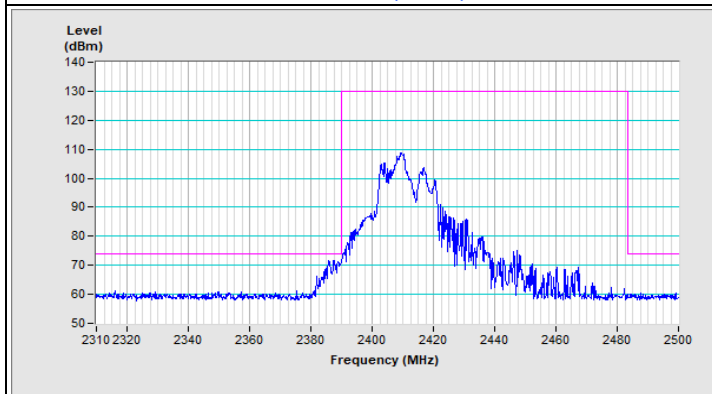
802.11ax (HE20) 106-tone RU Channel 1



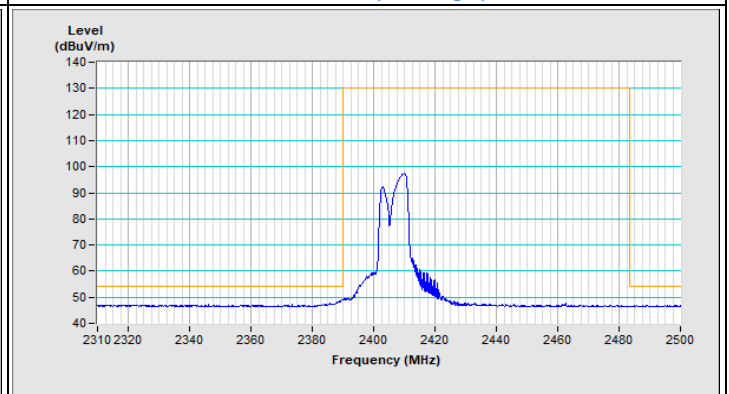
Horizontal (Peak)



Horizontal (Average)

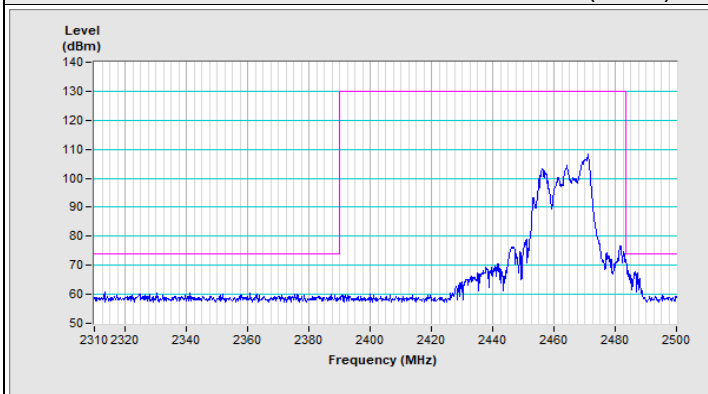


Vertical (Peak)

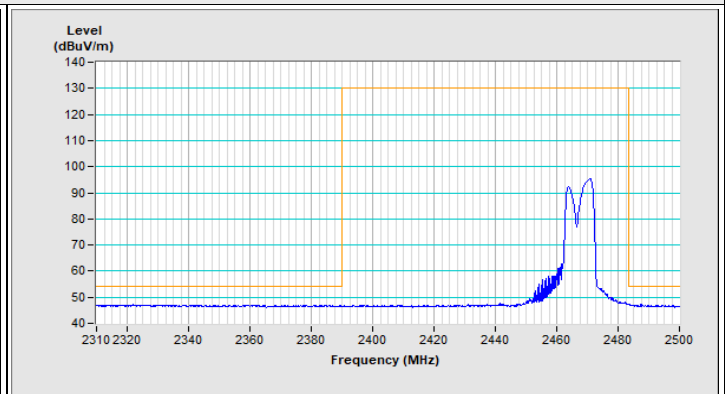


Vertical (Average)

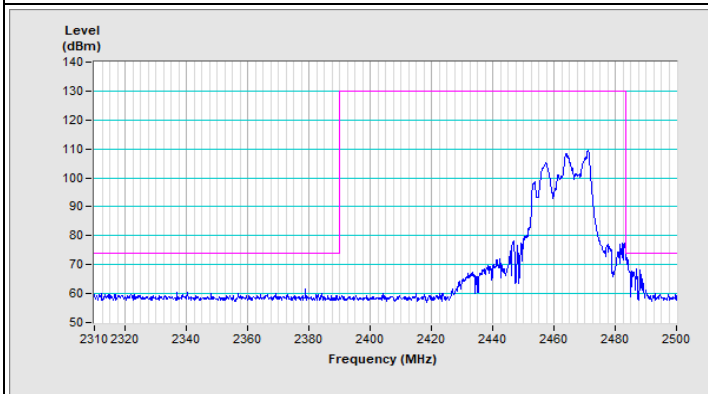
802.11ax (HE20) 106-tone RU Channel 11



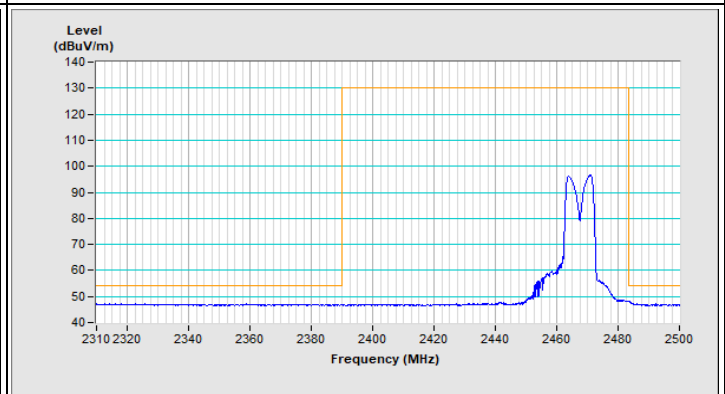
Horizontal (Peak)



Horizontal (Average)



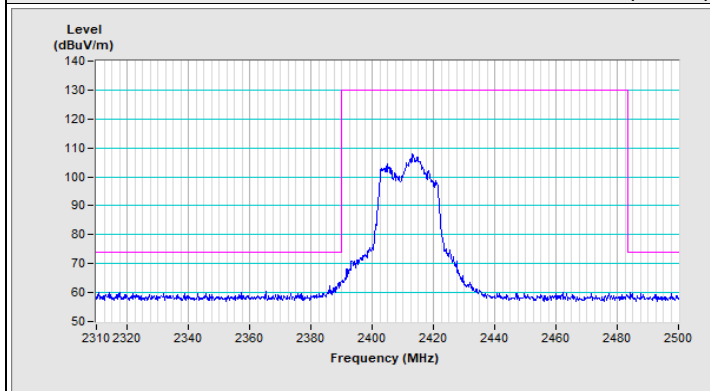
Vertical (Peak)



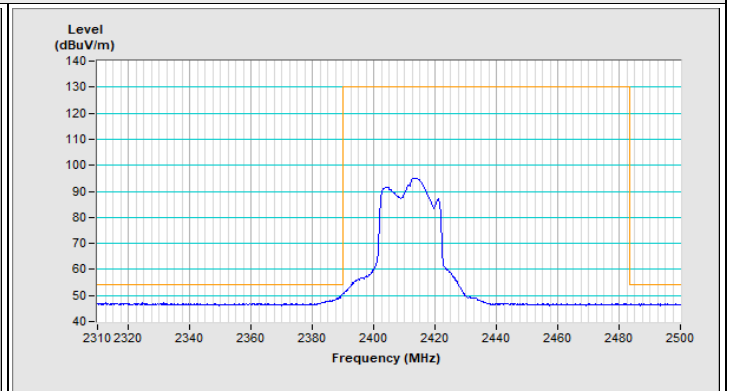
Vertical (Average)

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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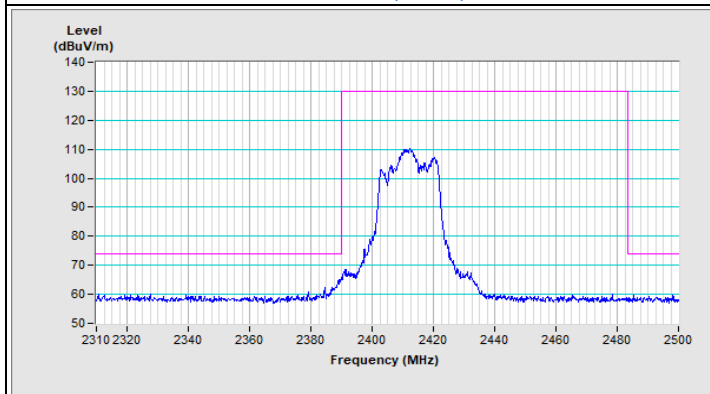
802.11ax (HE20) Full RU Channel 1



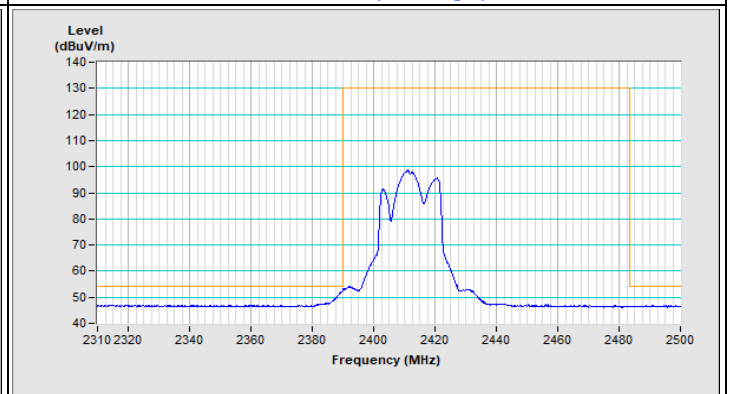
Horizontal (Peak)



Horizontal (Average)

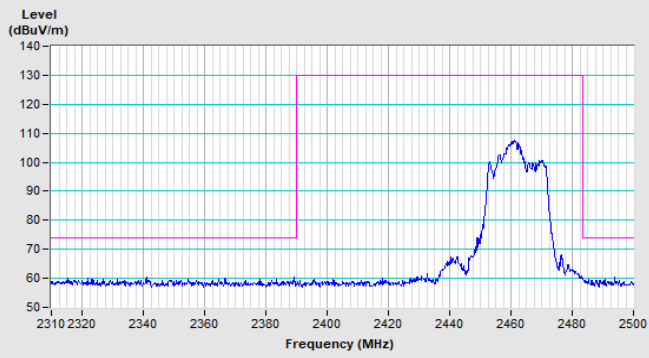


Vertical (Peak)

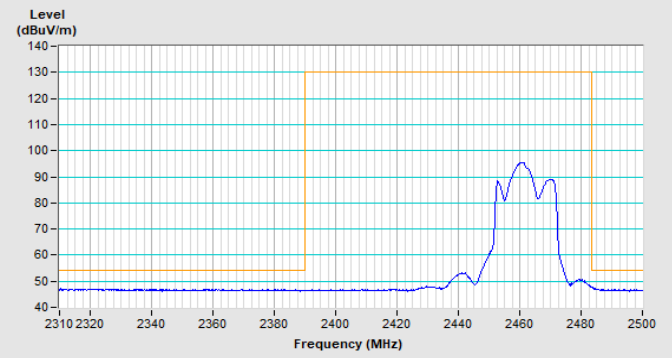


Vertical (Average)

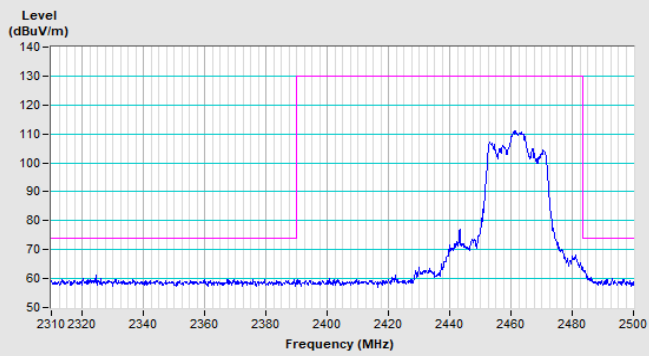
802.11ax (HE20) Full RU Channel 11



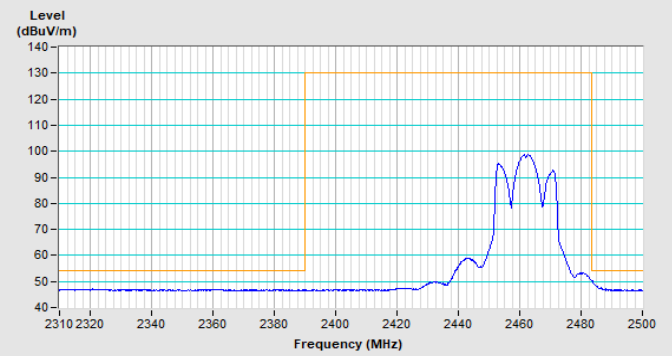
Horizontal (Peak)



Horizontal (Average)



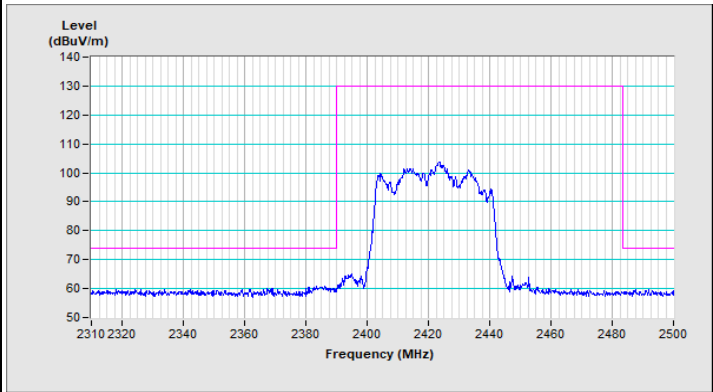
Vertical (Peak)



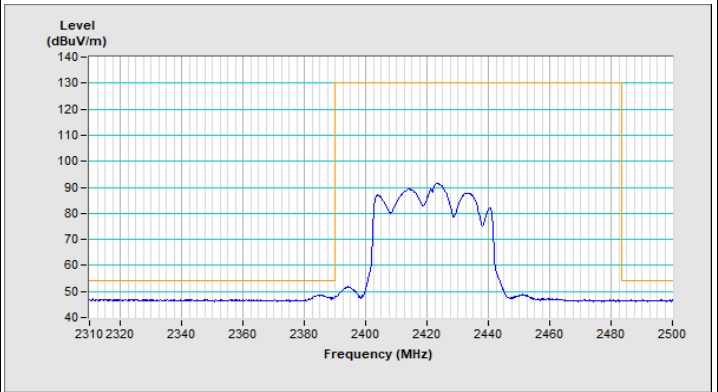
Vertical (Average)

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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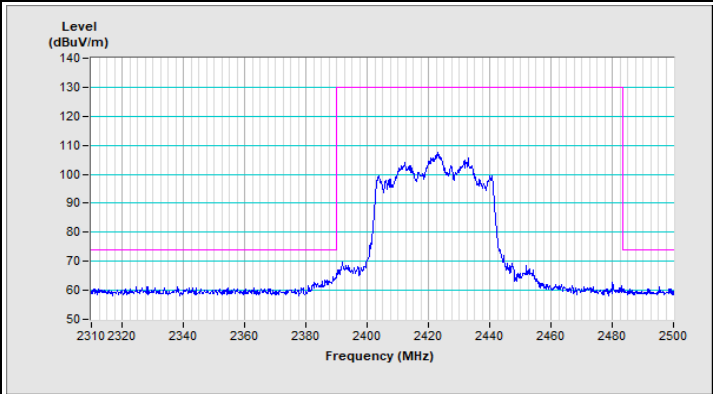
802.11ax (HE40) Full RU Channel 3



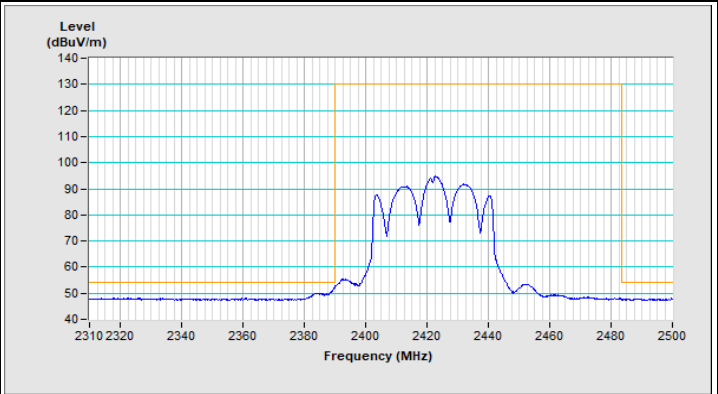
Horizontal (Peak)



Horizontal (Average)

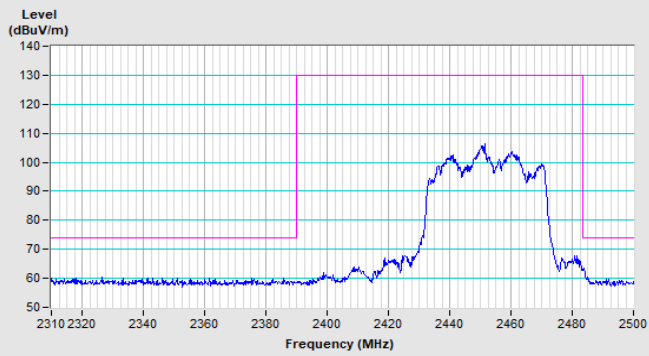


Vertical (Peak)

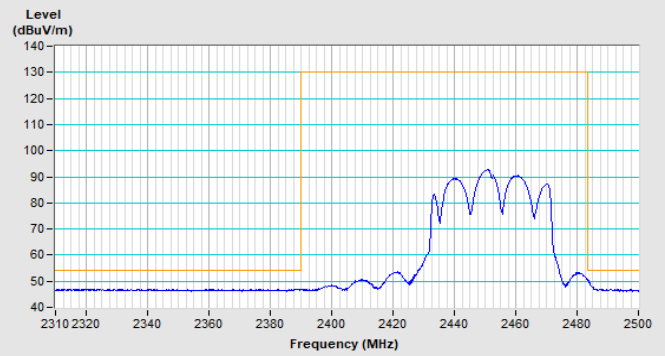


Vertical (Average)

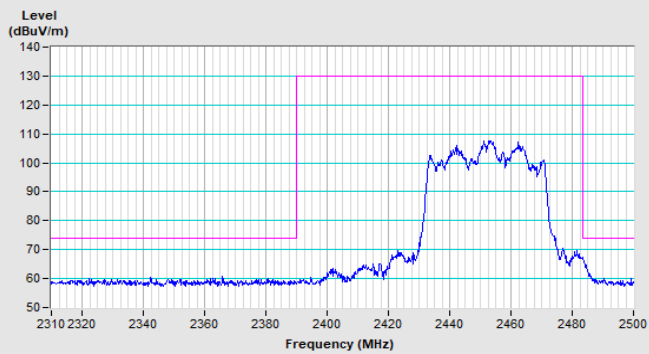
802.11ax (HE40) Full RU Channel 9



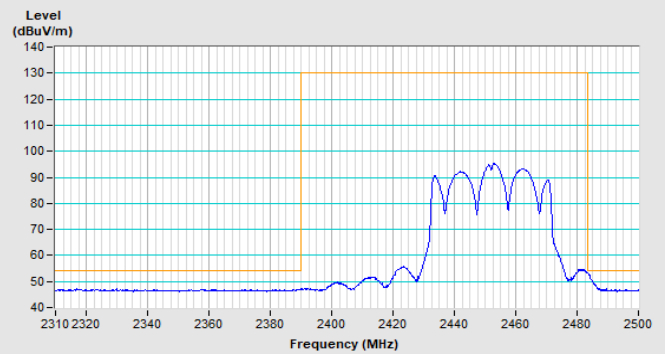
Horizontal (Peak)



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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