

TEST REPORT

CERTIFICATE OF CONFORMITY

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

Report No.: RFBHVI-WTW-P22120237

FCC ID: N6C-SDMAX

Product: Wireless Embedded Module

Brand: Silex Technology

Model No.: SX-SDMAX

Received Date: 2022/12/7

Test Date: 2022/12/29 ~ 2023/2/13

Issued Date: 2023/4/20

Applicant: Silex Technology, Inc.

Address: 2-3-1 Hikaridai, Seika-cho, Soraku-gun, Kyoto 619-0237, Japan

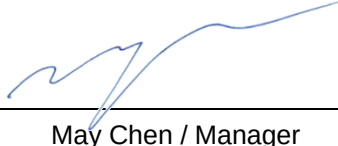
Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Hsin Chu Laboratory

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Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan

FCC Registration / 723255 / TW2022

Designation Number:

Approved by:  , **Date:** 2023/4/20
May Chen / Manager

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Prepared by : Claire Kuan / Specialist



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Release Control Record

Issue No.	Description	Date Issued
RFBHVI-WTW-P22120237	Original release.	2023/4/20

1 Certificate

Product: Wireless Embedded Module
Brand: Silex Technology
Test Model: SX-SDMAX
Sample Status: Engineering sample
Applicant: Silex Technology, Inc.
Test Date: 2022/12/29 ~ 2023/2/13
Standard: 47 CFR FCC Part 15, Subpart C (Section 15.247)
Measurement procedure: ANSI C63.10-2013
KDB 558074 D01 15.247 Meas Guidance v05r02

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 -10.87 dB at 27.96875 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -6.7 dB at 399.99 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -6.8 dB at 4874.00 MHz
15.203	Antenna Requirement	Pass	Antenna connector is ipex(MHF) not a standard connector.

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

2.1 Measurement Uncertainty

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

Measurement	Specification	Expanded Uncertainty (k=2) (±)
Conducted Out of Band Emissions	9 kHz ~ 40 GHz	2.5 dB
AC Power Conducted Emissions	150 kHz ~ 30 MHz	1.9 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.1 dB
	30 MHz ~ 1 GHz	5.5 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	5.1 dB
	18 GHz ~ 40 GHz	5.3 dB

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

2.2 Supplementary Information

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

3 General Information

3.1 General Description

Product	Wireless Embedded Module
Brand	Silex Technology
Test Model	SX-SDMAX
Status of EUT	Engineering sample
Power Supply Rating	3.3 Vdc from host equipment
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	802.11b: up to 11 Mbps 802.11g: up to 54 Mbps 802.11n: up to 150 Mbps VHT: up to 200 Mbps 802.11ax: up to 286.8 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	226.986 mW (23.56 dBm)

Note:

1. There are Bluetooth and WLAN (2.4 GHz & 5 GHz) technology used for the EUT.
2. Simultaneously transmission condition.

Condition	Technology	
1	WLAN (5 GHz)	Bluetooth

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

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

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna NO.	Brand	Model	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connector Type	Cable Length
1	Molex	1461530050	3.18	2.4~2.4835GHz	Dipole	ipex(MHF)	50mm
			3.15	5.15~5.25GHz			
			2.75	5.25~5.35GHz			
			4.25	5.47~5.725GHz			
			3.85	5.725~5.85GHz			

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

2. The EUT incorporates a SISO function:

2.4 GHz Band		
Modulation Mode	TX & RX Configuration	
802.11b	1TX	1RX
802.11g	1TX	1RX
802.11n (HT20)	1TX	1RX
802.11n (HT40)	1TX	1RX
VHT20	1TX	1RX
VHT40	1TX	1RX
802.11ax (HE20)	1TX	1RX
802.11ax (HE40)	1TX	1RX
802.11ax (RU26/52/106/242/484)	1TX	1RX

Note:

- The modulation and bandwidth are similar for 802.11n mode for 20MHz (40MHz), VHT mode for 20MHz (40MHz) and 802.11ax mode for 20MHz (40MHz), therefore the manufacturer will control the power for 802.11n/ VHT mode is the same as the 802.11ax mode or more lower than it and investigated worst case to 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.For Partial RU modes of 20MHz and 40MHz bandwidth needs to be pre-worst. 2.Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
Worst Case:	1.The worst case occurs in 20 MHz bandwidth(partial RU 26/52/106).

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

Test Item	EUT Configure Mode	Mode	Tested Channel	Modulation	Data Rate Parameter	RU Configuration
RF Output Power	A	802.11b	1, 6, 11	DBPSK	1Mb/s	-
		802.11g	1, 6, 11	BPSK	6Mb/s	-
		VHT20	1, 6, 11	BPSK	MCS0	-
		VHT40	3, 6, 9	BPSK	MCS0	-
		802.11ax (HE20)	3, 6, 9	BPSK	MCS0	-
		802.11ax (HE40)	3, 6, 9	BPSK	MCS0	-
		20 MHz Preamble 802.11ax (RU26)	1, 6, 11	BPSK	MCS0	26/0, 26/4, 26/8
		20 MHz Preamble 802.11ax (RU52)	1, 6, 11	BPSK	MCS0	52/37, 52/39, 52/40
		20 MHz Preamble 802.11ax (RU106)	1, 6, 11	BPSK	MCS0	106/53, 106/54, 106/54
Power Spectral Density	A	802.11b	1, 6, 11	DBPSK	1Mb/s	-
		802.11g	1, 6, 11	BPSK	6Mb/s	-
		802.11ax (HE20)	1, 6, 11	BPSK	MCS0	-
		802.11ax (HE40)	3, 6, 9	BPSK	MCS0	-
		20 MHz Preamble 802.11ax (RU26)	1, 6, 11	BPSK	MCS0	26/0, 26/4, 26/8
		20 MHz Preamble 802.11ax (RU52)	1, 6, 11	BPSK	MCS0	52/37, 52/39, 52/40
		20 MHz Preamble 802.11ax (RU106)	1, 6, 11	BPSK	MCS0	106/53, 106/54, 106/54

6 dB Bandwidth / Conducted Out of Band Emissions	A	802.11b	1, 6, 11	DBPSK	1Mb/s	-
		802.11g	1, 6, 11	BPSK	6Mb/s	-
		802.11ax (HE20)	1, 6, 11	BPSK	MCS0	-
		802.11ax (HE40)	3, 6, 9	BPSK	MCS0	-
		20 MHz Preamble 802.11ax (RU26)	1, 6, 11	BPSK	MCS0	26/0, 26/4, 26/8
		20 MHz Preamble 802.11ax (RU52)	1, 6, 11	BPSK	MCS0	52/37, 52/39, 52/40
		20 MHz Preamble 802.11ax (RU106)	1, 6, 11	BPSK	MCS0	106/53, 106/54, 106/54
AC Power Conducted Emissions	B	802.11b	1	DBPSK	1Mb/s	-
Unwanted Emissions below 1 GHz	A, B	802.11b	1	DBPSK	1Mb/s	-
Unwanted Emissions above 1 GHz	A, B	802.11b	1, 6, 11	DBPSK	1Mb/s	-
		802.11g	1, 6, 11	BPSK	6Mb/s	-
		802.11ax (HE20)	1, 6, 11	BPSK	MCS0	-
		802.11ax (HE40)	3, 6, 9	BPSK	MCS0	-
		20 MHz Preamble 802.11ax (RU26)	1, 6, 11	BPSK	MCS0	26/0, 26/4, 26/8
		20 MHz Preamble 802.11ax (RU52)	1, 6, 11	BPSK	MCS0	52/37, 52/39, 52/40
		20 MHz Preamble 802.11ax (RU106)	1, 6, 11	BPSK	MCS0	106/53, 106/54, 106/54
EUT Configure Mode:	A	Antenna Port				
	B	with 50ohm terminator				

3.5 Duty Cycle of Test Signal

802.11b: Duty cycle = 8.615 ms / 8.635 ms x 100% = 99.8%

802.11g: Duty cycle = 1.431 ms / 1.448 ms x 100% = 98.8%

802.11ax (HE20): Duty cycle = 1.041 ms / 1.06 ms x 100% = 98.2%

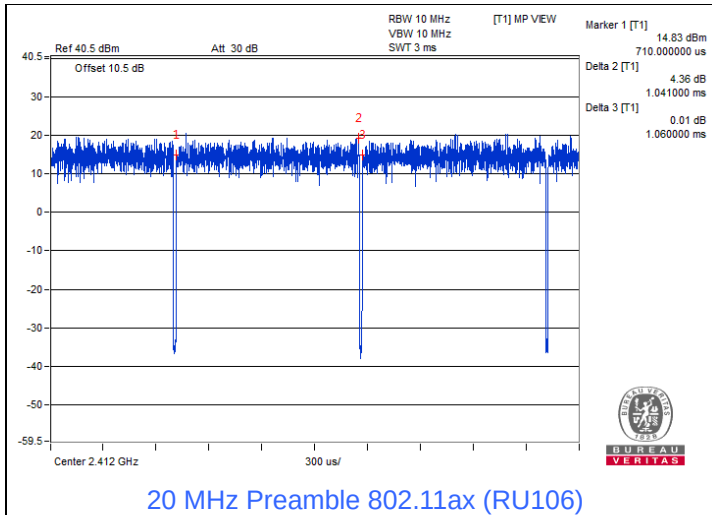
802.11ax (HE40): Duty cycle = 0.55 ms / 0.567 ms x 100% = 97.0%, duty factor = 10 * log (1/Duty cycle) = 0.13 dB

20 MHz Preamble 802.11ax (RU26): Duty cycle = 1.041 ms / 1.06 ms x 100% = 98.2%

20 MHz Preamble 802.11ax (RU52): Duty cycle = 1.041 ms / 1.06 ms x 100% = 98.2%

20 MHz Preamble 802.11ax (RU106): Duty cycle = 1.041 ms / 1.06 ms x 100% = 98.2%



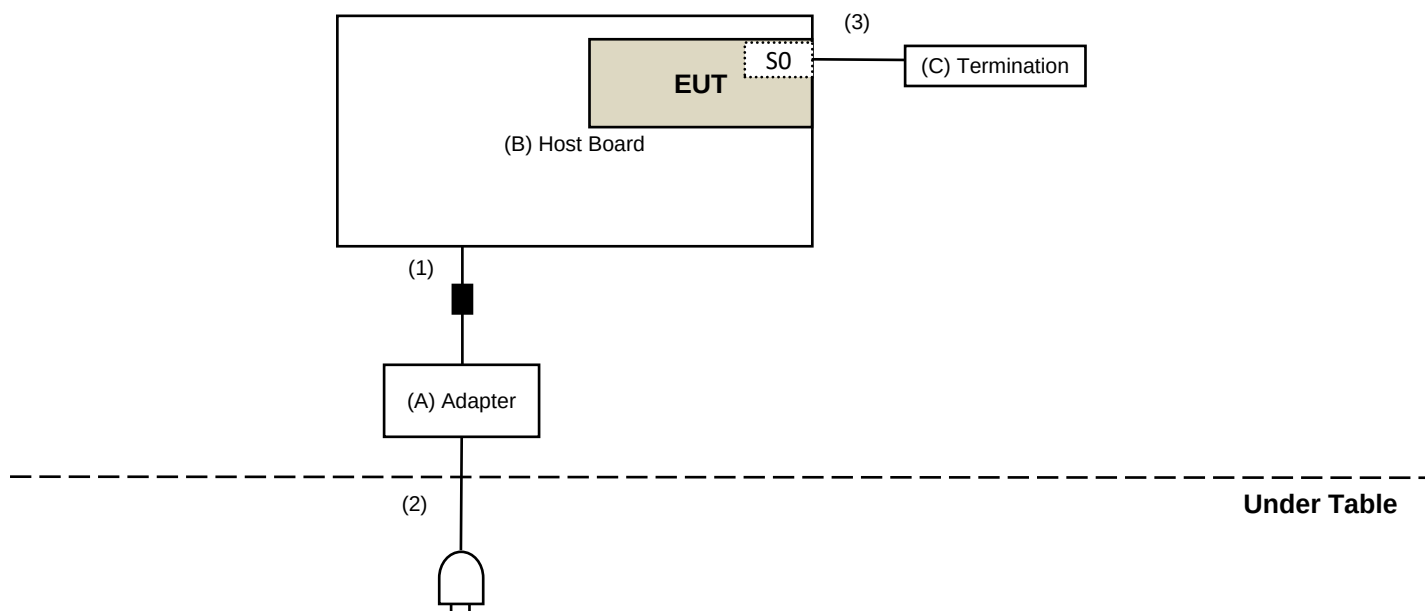


3.6 Test Program Used and Operation Descriptions

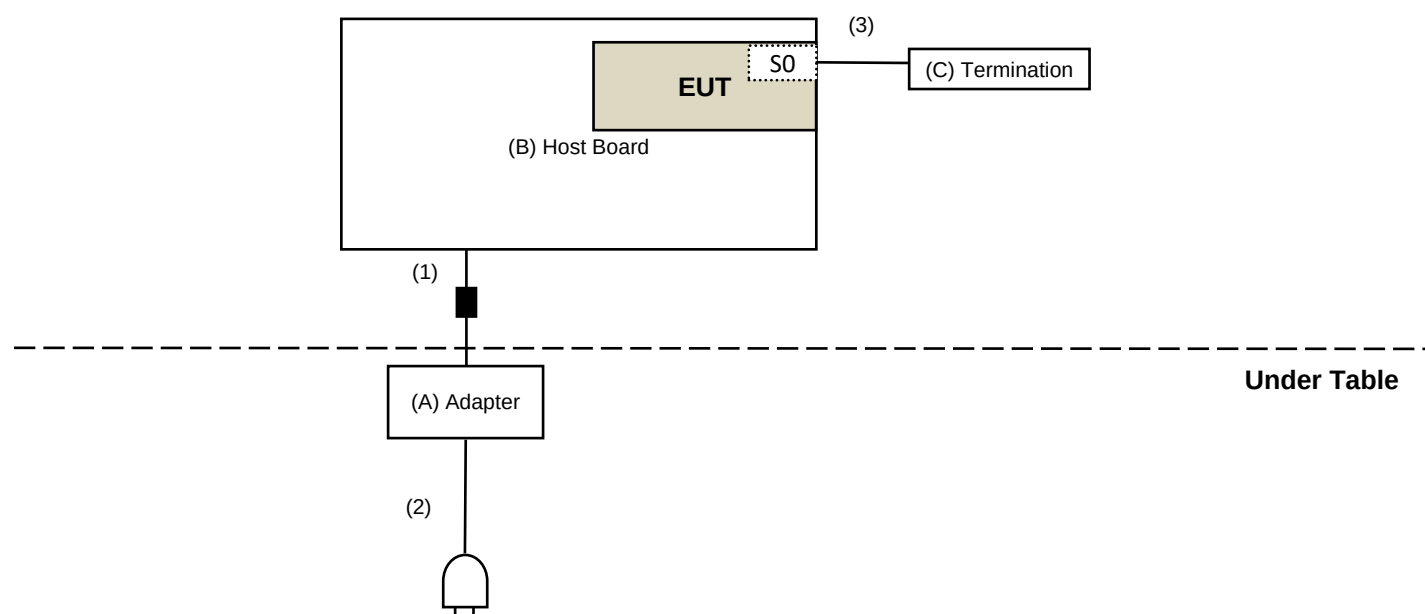
Controlling software (Tera Term Version 4.98) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices

For AC Power Conducted Emission test



For Unwanted Emission test



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Adapter	EDACPOWER ELEC.	EA10682N-120	N/A	N/A	Supplied by applicant
B	Host Board	NXP	MCIMX8M-EVKB	N/A	N/A	Supplied by applicant
C	Termination	Marvelous	MVE5185	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	DC Cable	1	1.2	No	1	Supplied by applicant
2	AC Cable	1	1.5	No	0	Supplied by applicant
3	RF Cable	1	0.15	No	0	Provided by Lab

4 Test Instruments

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

4.1 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Power Meter Anritsu	ML2495A	1529002	2022/6/22	2023/6/21
Pulse Power Sensor Anritsu	MA2411B	1726434	2022/6/22	2023/6/21
Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	2022/4/5	2023/4/4
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2022/12/29 ~ 2023/1/5

4.2 Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	2022/4/5	2023/4/4
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer Keysight	N9020B	MY60112409	2022/3/11	2023/3/10

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2022/12/29 ~ 2023/1/5

4.3 6 dB Bandwidth

Refer to section 4.2 to get information of the instruments.

4.4 Conducted Out of Band Emissions

Refer to section 4.2 to get information of the instruments.

4.5 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance	N/A	EMC-01	2022/9/27	2023/9/26
Fixed attenuator STI	STI02-2200-10	005	2022/8/24	2023/8/23
LISN R&S	ESH3-Z5	848773/004	2022/10/18	2023/10/17
RF Coaxial Cable JYEBO	5D-FB	COCCAB-001	2022/8/24	2023/8/23
Software BVADT	BVADT_Cond_V7.3.7.4	N/A	N/A	N/A
TEST RECEIVER R&S	ESCS 30	847124/029	2022/10/14	2023/10/13

Notes:

1. The test was performed in Conduction 1
2. Tested Date: 2023/2/13

4.6 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-03	2022/12/28	2023/12/27
LOOP ANTENNA Electro-Metrics	EM-6879	264	2022/3/18	2023/3/17
Pre_Amplifier Agilent	8447D	2944A10636	2022/3/19	2023/3/18
Pre_Amplifier EMCI	EMC330N	980701	2022/3/8	2023/3/7
RF Coaxial Cable COMMATE/PEWC	8D	966-4-1	2022/3/8	2023/3/7
		966-4-2	2022/3/8	2023/3/7
		966-4-3	2022/3/8	2023/3/7
RF Coaxial Cable JYEBO	5D-FB	LOOPCAB-001	2022/12/19	2023/12/18
		LOOPCAB-002	2022/12/19	2023/12/18
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A
Spectrum Analyzer KEYSIGHT	N9030B	MY57142938	2022/4/26	2023/4/25
Trilog Broadband Antenna Schwarzbeck	VULB 9168	9168-406	2022/10/21	2023/10/20

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2023/2/13

4.7 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-783	2022/11/13	2023/11/12
	BBHA 9170	9170-739	2022/11/13	2023/11/12
Pre_Amplifier EMCI	EMC12630SE	980688	2022/10/4	2023/10/3
	EMC184045SE	980387	2022/12/28	2023/12/27
RF Cable-Frequency Range : 1- 26.5GHz EMCI	EMC104-SM-SM-1200	160922	2022/12/15	2023/12/14
RF Cable-Frequency range: 1- 40GHz EMCI	EMC102-KM-KM-1200	160924	2022/12/28	2023/12/27
RF Coaxial Cable EMCI	EMC-KM-KM-4000	200214	2022/3/8	2023/3/7
	EMC104-SM-SM-2000	180502	2022/4/25	2023/4/24
	EMC104-SM-SM-6000	210704	2022/11/4	2023/11/3
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A
Spectrum Analyzer KEYSIGHT	N9030B	MY57142938	2022/4/26	2023/4/25

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2023/2/13

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)

5.2 Power Spectral Density

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

5.3 6 dB Bandwidth

The minimum of 6 dB Bandwidth Measurement is 0.5 MHz.

5.4 Conducted Out of Band Emissions

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

5.5 AC Power Conducted Emissions

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

Notes:

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

5.6 Unwanted Emissions below 1 GHz

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

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

Notes:

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

5.7 Unwanted Emissions above 1 GHz

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

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

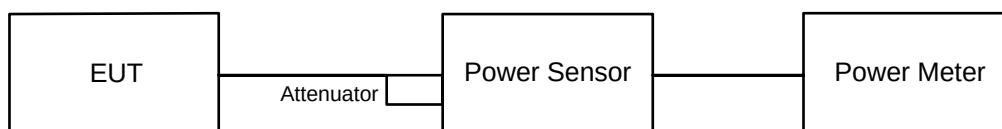
Notes:

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

6 Test Arrangements

6.1 RF Output Power

6.1.1 Test Setup



6.1.2 Test Procedure

Peak Power:

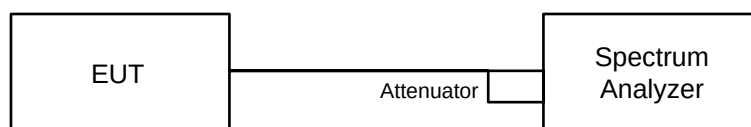
A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the power level.

Average Power:

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

6.2 Power Spectral Density

6.2.1 Test Setup

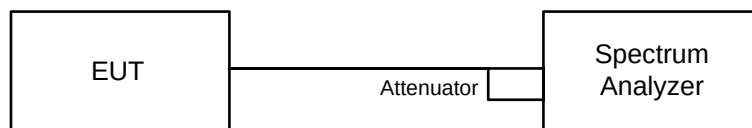


6.2.2 Test Procedure

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

6.3 6 dB Bandwidth

6.3.1 Test Setup

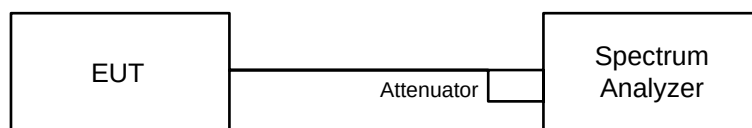


6.3.2 Test Procedure

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

6.4 Conducted Out of Band Emissions

6.4.1 Test Setup



6.4.2 Test Procedure

MEASUREMENT PROCEDURE REF

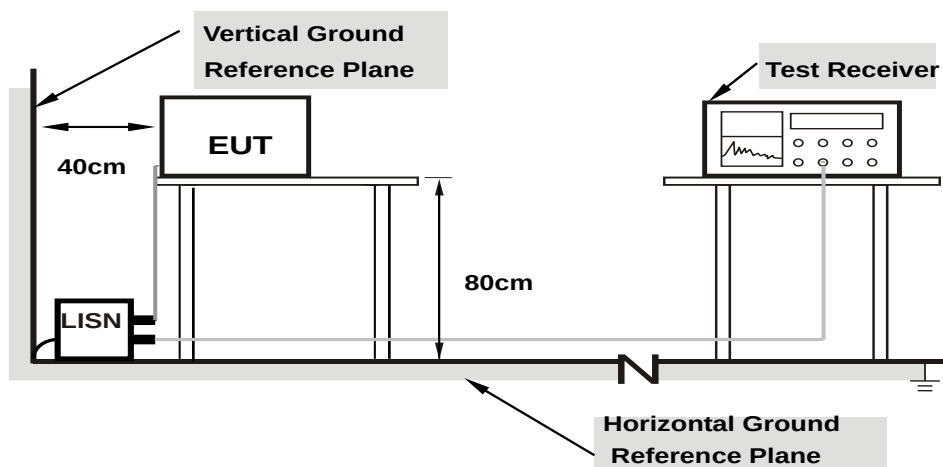
- Set the RBW = 100 kHz.
- Set the VBW ≥ 300 kHz.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOBE

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

6.5 AC Power Conducted Emissions

6.5.1 Test Setup



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

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

6.5.2 Test Procedure

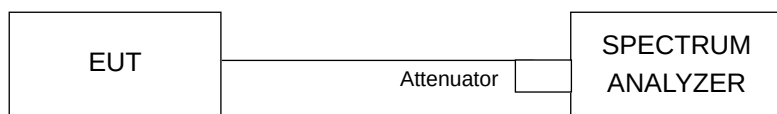
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The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

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

6.6 Unwanted Emissions below 1 GHz

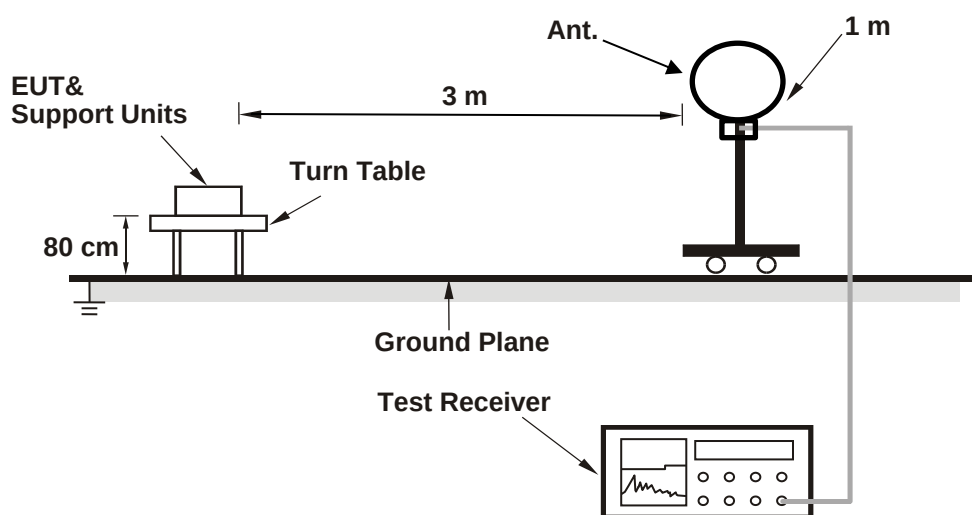
6.6.1 Test Setup

For conducted configuration:

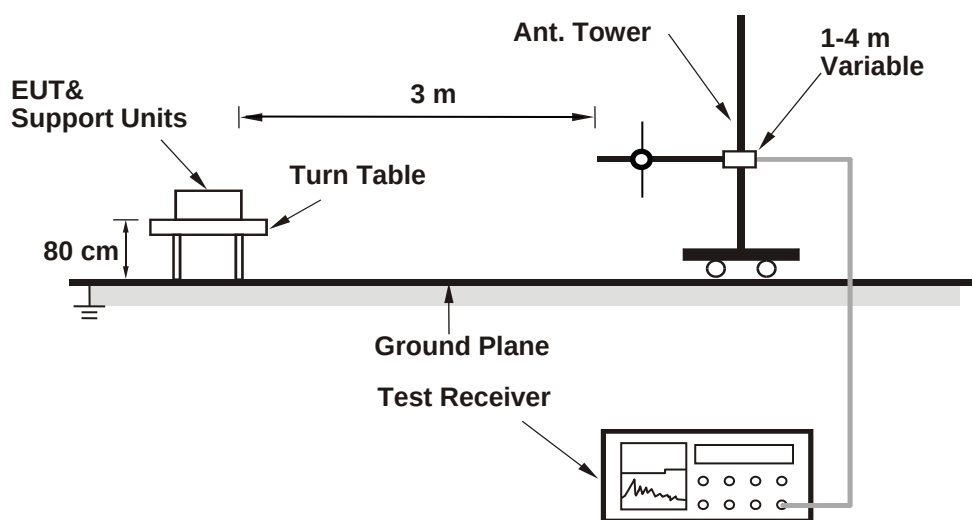


For radiated configuration:

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

Following FCC KDB 558074 D01 DTS Meas. Guidance:

Radiated versus Conducted Measurements.

The unwanted emission limits in both the restricted and non-restricted bands are based on antenna-port conducted measurements in conjunction with cabinet emissions tests are permitted to demonstrate compliance.

The following steps was performed:

- a. Cabinet emissions measurements. Radiated measurement was performed to ensure that cabinet emissions are below the emission limits. For the cabinet-emission measurements the antenna was replaced by a termination matching the nominal impedance of the antenna.
- b. Conducted tests was performed using equipment that matches the nominal impedance of the antenna assembly used with the EUT.
- c. EIRP calculation. A value representative of an upper bound on out-of-band antenna gain (in dBi) shall be added to the measured antenna-port conducted emission power to compute EIRP within the specified measurement bandwidth. (For emissions in the restricted bands, additional calculations are required to convert EIRP to field strength at the specified distance.) The upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands or 2 dBi, whichever is greater.
- d. For all of Radiation emission test

For Radiated emission below 30MHz

- d-1.1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- d-1.2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d-1.3. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d-1.4. 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.
- d-1.5. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.
2. KDB 414788 OATS and Chamber Correlation Justification
 - Based on FCC 15.31(f)(2) : measurements may be performed at a distance closer than that specified in the regulations; however, an attempts should be made to avoid making measurements in the near field.
 - OATs and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

For Radiated emission above 30MHz

- d-2.1. 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.
- d-2.2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d-2.3. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d-2.4. 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.
- d-2.5. 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.

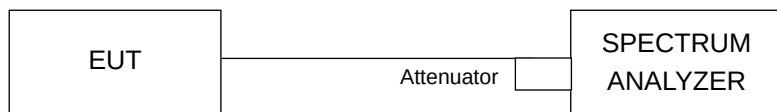
Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

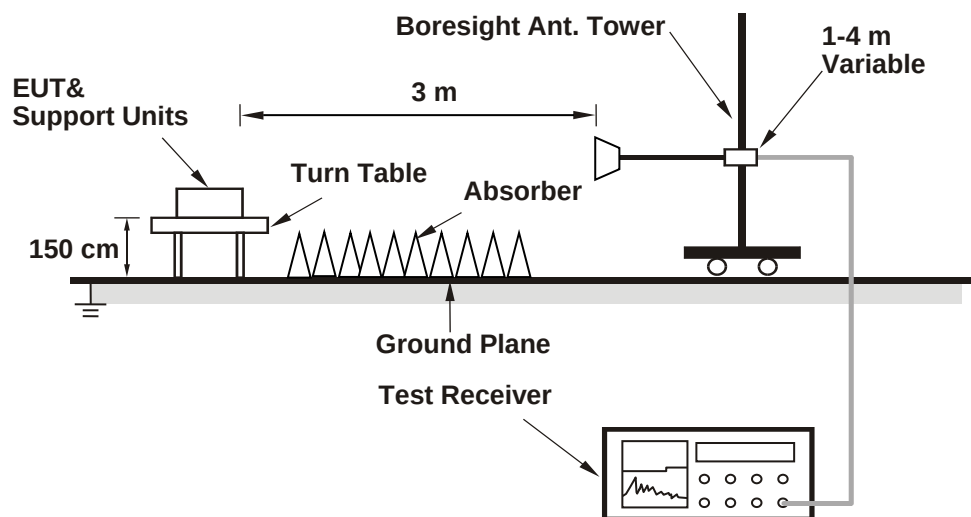
6.7 Unwanted Emissions above 1 GHz

6.7.1 Test Setup

For conducted configuration:



For radiated configuration:



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

6.7.2 Test Procedure

Following FCC KDB 558074 D01 DTS Meas. Guidance:

Radiated versus Conducted Measurements.

The unwanted emission limits in both the restricted and non-restricted bands are based on antenna-port conducted measurements in conjunction with cabinet emissions tests are permitted to demonstrate compliance.

The following steps was performed:

- a. Cabinet emissions measurements. Radiated measurement was performed to ensure that cabinet emissions are below the emission limits. For the cabinet-emission measurements the antenna was replaced by a termination matching the nominal impedance of the antenna.
- b. Conducted tests was performed using equipment that matches the nominal impedance of the antenna assembly used with the EUT.
- c. EIRP calculation. A value representative of an upper bound on out-of-band antenna gain (in dBi) shall be added to the measured antenna-port conducted emission power to compute EIRP within the specified measurement bandwidth. (For emissions in the restricted bands, additional calculations are required to convert EIRP to field strength at the specified distance.) The upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands or 2 dBi, whichever is greater.
- d. For all of Radiation emission test
 - d-1.1. 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.
 - d-1.2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
 - d-1.3. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
 - d-1.4. 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.
 - d-1.5. 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.

Note:

1. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle $< 98\%$) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.
3. All modes of operation were investigated and the worst-case emissions are reported.

7 Test Results of Test Item

7.1 RF Output Power

Mode A

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyong Wang
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For Peak Power

802.11b

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	117.761	20.71	30	Pass
6	2437	116.145	20.65	30	Pass
11	2462	115.878	20.64	30	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	113.24	20.54	30	Pass
6	2437	226.986	23.56	30	Pass
11	2462	114.551	20.59	30	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the output power limit shall not be reduced.

VHT20

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	134.586	21.29	30	Pass
6	2437	218.776	23.40	30	Pass
11	2462	136.144	21.34	30	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the output power limit shall not be reduced.

VHT40

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
3	2422	143.88	21.58	30	Pass
6	2437	157.398	21.97	30	Pass
9	2452	92.257	19.65	30	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	138.038	21.40	30	Pass
6	2437	222.844	23.48	30	Pass
11	2462	138.676	21.42	30	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
3	2422	146.218	21.65	30	Pass
6	2437	158.489	22.00	30	Pass
9	2452	92.897	19.68	30	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the output power limit shall not be reduced.

20 MHz Preamble 802.11ax (RU26)

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	131.826	21.20	30	Pass
6	2437	212.324	23.27	30	Pass
11	2462	133.045	21.24	30	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the output power limit shall not be reduced.

20 MHz Preamble 802.11ax (RU52)

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	133.045	21.24	30	Pass
6	2437	214.289	23.31	30	Pass
11	2462	134.276	21.28	30	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the output power limit shall not be reduced.

20 MHz Preamble 802.11ax (RU106)

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2412	134.276	21.28	30	Pass
6	2437	218.273	23.39	30	Pass
11	2462	135.207	21.31	30	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the output power limit shall not be reduced.

For Average Power

802.11b

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	67.92	18.32
6	2437	67.608	18.30
11	2462	67.298	18.28

802.11g

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	21.038	13.23
6	2437	59.566	17.75
11	2462	21.38	13.30

VHT20

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	21.627	13.35
6	2437	45.499	16.58
11	2462	21.928	13.41

VHT40

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
3	2422	25.468	14.06
6	2437	32.584	15.13
9	2452	16.218	12.10

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	22.284	13.48
6	2437	46.452	16.67
11	2462	22.336	13.49

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
3	2422	26.002	14.15
6	2437	32.81	15.16
9	2452	16.482	12.17

20 MHz Preamble 802.11ax (RU26)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	21.232	13.27
6	2437	44.668	16.50
11	2462	21.478	13.32

20 MHz Preamble 802.11ax (RU52)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	21.429	13.31
6	2437	44.978	16.53
11	2462	21.528	13.33

20 MHz Preamble 802.11ax (RU106)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	21.677	13.36
6	2437	45.499	16.58
11	2462	21.827	13.39

7.2 Power Spectral Density

Mode A

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyong Wang
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802.11b

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-4.48	8	Pass
6	2437	-4.56	8	Pass
11	2462	-4.64	8	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-11.93	8	Pass
6	2437	-8.91	8	Pass
11	2462	-11.87	8	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-12.77	8	Pass
6	2437	-10.66	8	Pass
11	2462	-12.69	8	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
3	2422	-13.79	8	Pass
6	2437	-13.41	8	Pass
9	2452	-15.71	8	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the power density limit shall not be reduced.

20 MHz Preamble 802.11ax (RU26)

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-3.74	8	Pass
6	2437	-1.62	8	Pass
11	2462	-3.60	8	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the power density limit shall not be reduced.

20 MHz Preamble 802.11ax (RU52)

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-6.75	8	Pass
6	2437	-4.59	8	Pass
11	2462	-6.70	8	Pass

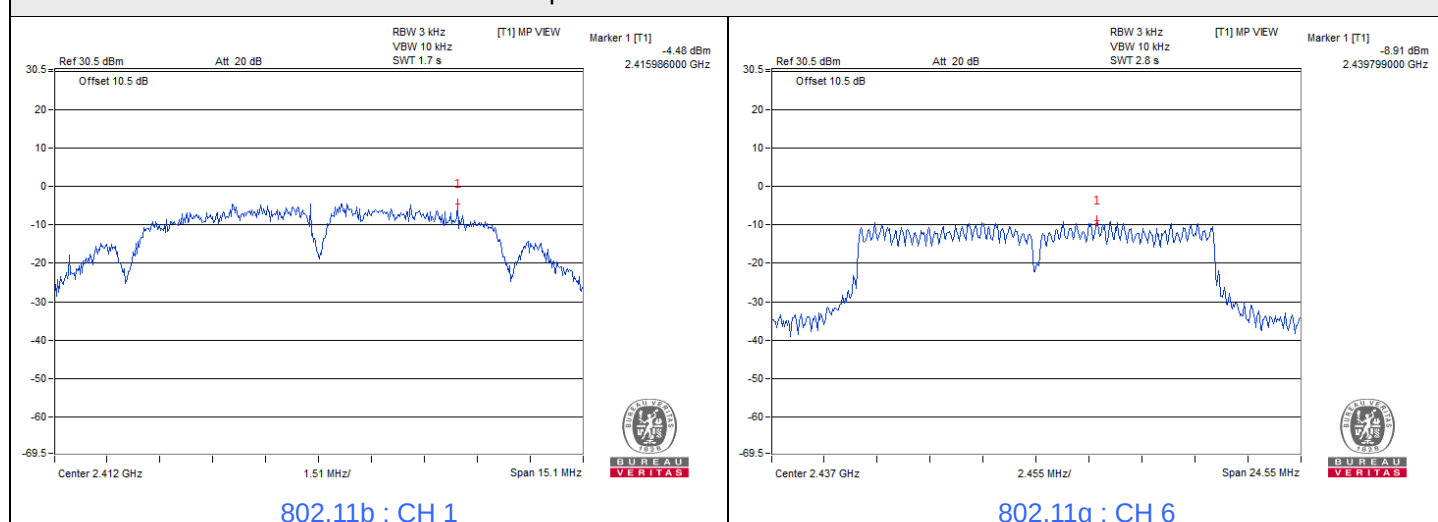
Note: The antenna gain is 3.18 dBi < 6 dBi, so the power density limit shall not be reduced.

20 MHz Preamble 802.11ax (RU106)

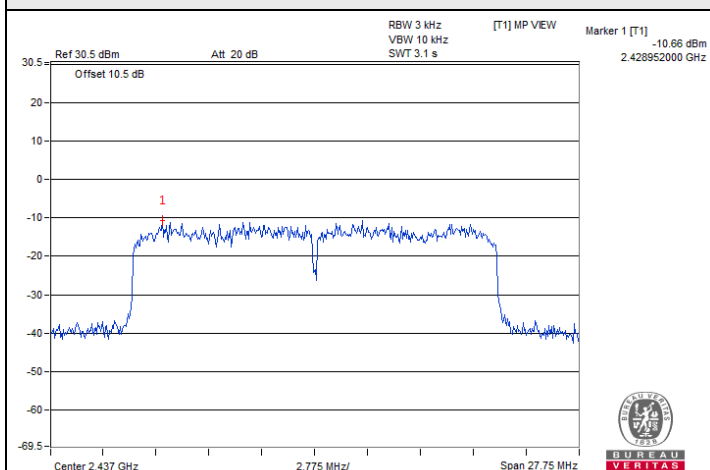
Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2412	-9.78	8	Pass
6	2437	-7.62	8	Pass
11	2462	-9.70	8	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the power density limit shall not be reduced.

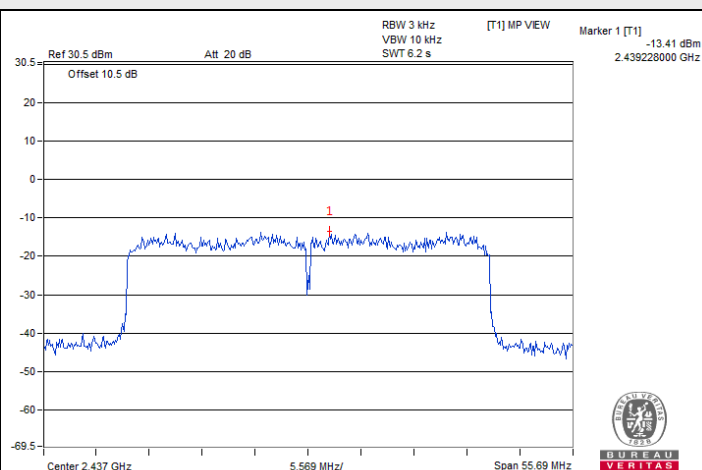
Spectrum Plot of Maximum Value



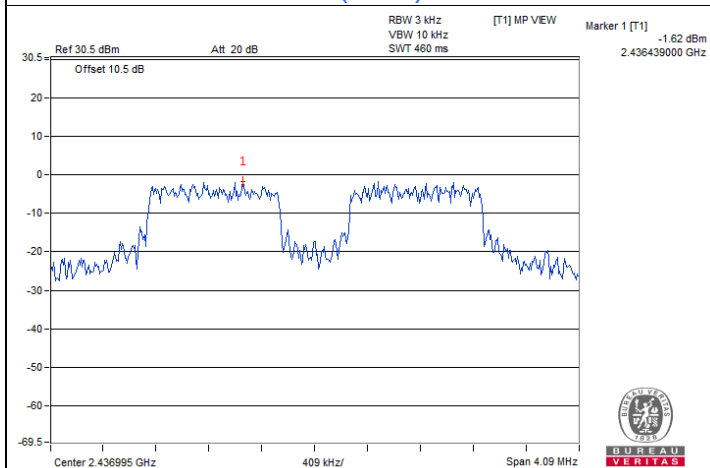
Spectrum Plot of Maximum Value



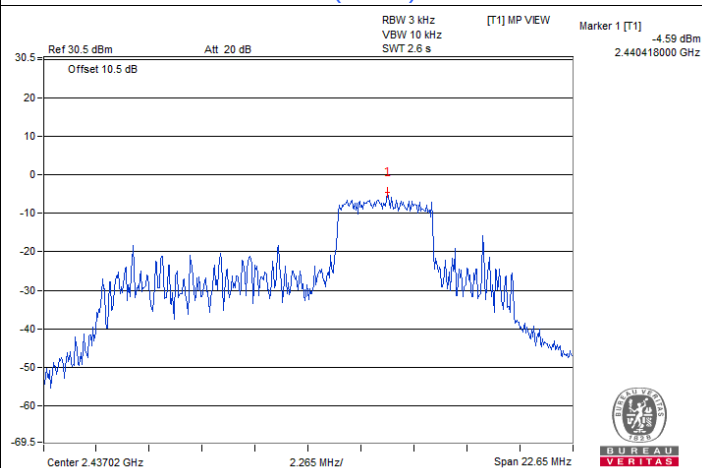
802.11ax (HE20) : CH 6



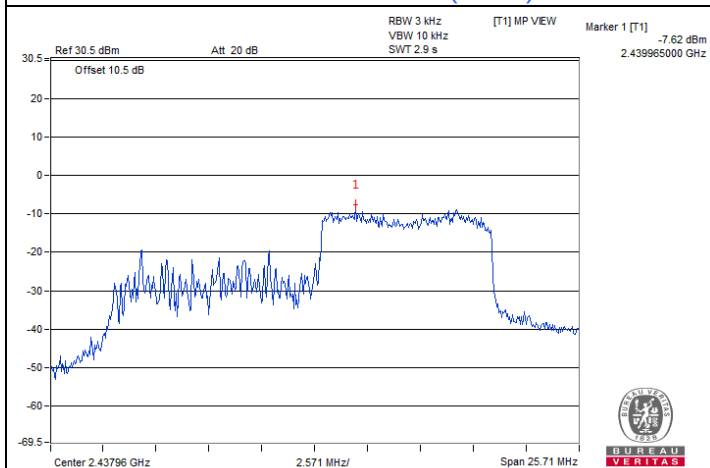
802.11ax (HE40) : CH 6



20 MHz Preamble 802.11ax (RU26) : CH 6



20 MHz Preamble 802.11ax (RU52) : CH 6



20 MHz Preamble 802.11ax (RU106) : CH 6

7.3 6 dB Bandwidth

Mode A

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyong Wang
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802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	10.07	0.5	Pass
6	2437	10.08	0.5	Pass
11	2462	10.11	0.5	Pass

802.11g

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	16.44	0.5	Pass
6	2437	16.37	0.5	Pass
11	2462	16.43	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	18.43	0.5	Pass
6	2437	18.5	0.5	Pass
11	2462	18.39	0.5	Pass

802.11ax (HE40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
3	2422	36.81	0.5	Pass
6	2437	37.13	0.5	Pass
9	2452	36.82	0.5	Pass

20 MHz Preamble 802.11ax (RU26)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	1.98	0.5	Pass
6	2437	2.73	0.5	Pass
11	2462	2.04	0.5	Pass

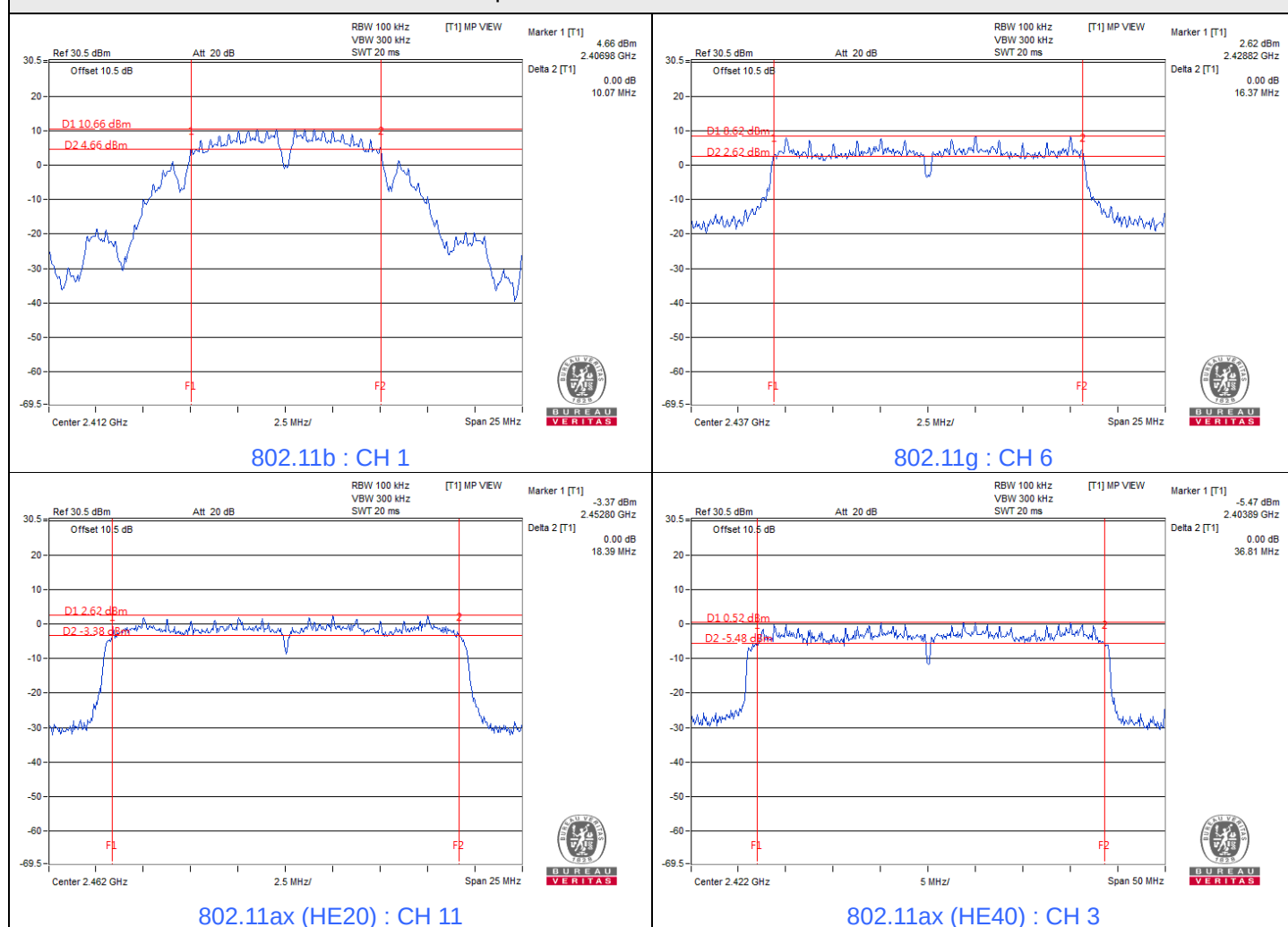
20 MHz Preamble 802.11ax (RU52)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	17.01	0.5	Pass
6	2437	15.1	0.5	Pass
11	2462	16.97	0.5	Pass

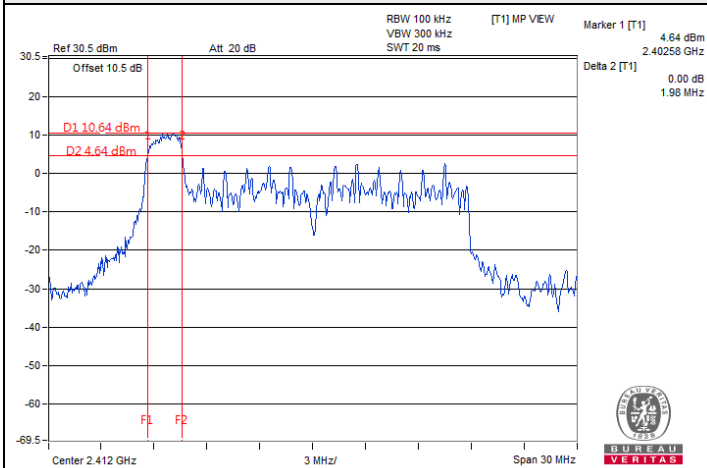
20 MHz Preamble 802.11ax (RU106)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2412	17.05	0.5	Pass
6	2437	17.14	0.5	Pass
11	2462	17.02	0.5	Pass

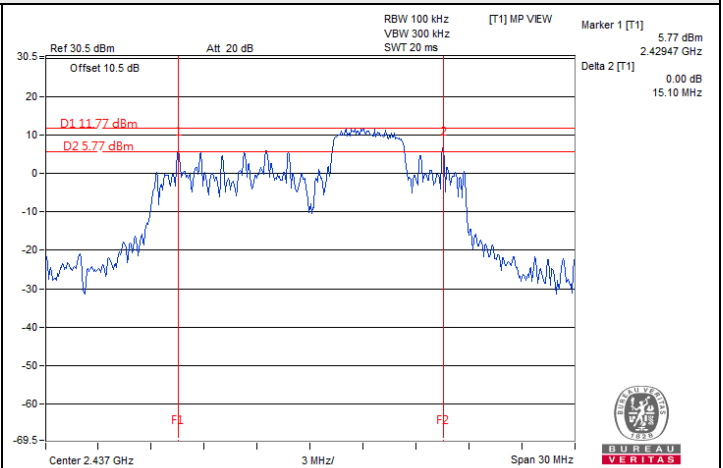
Spectrum Plot of Minimum Value



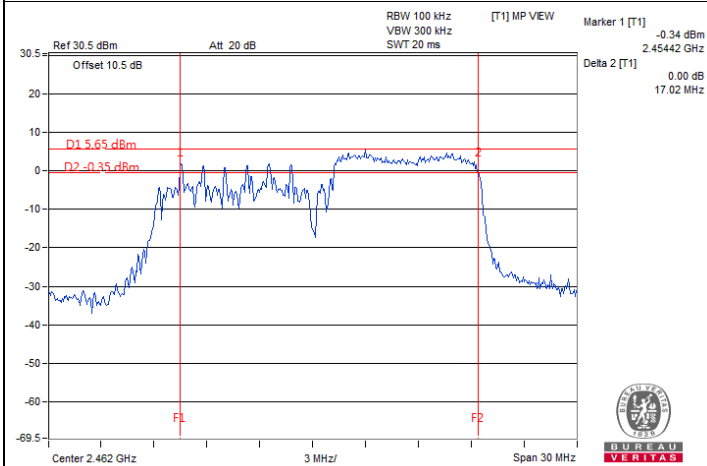
Spectrum Plot of Minimum Value



20 MHz Preamble 802.11ax (RU26) : CH 1



20 MHz Preamble 802.11ax (RU52) : CH 6



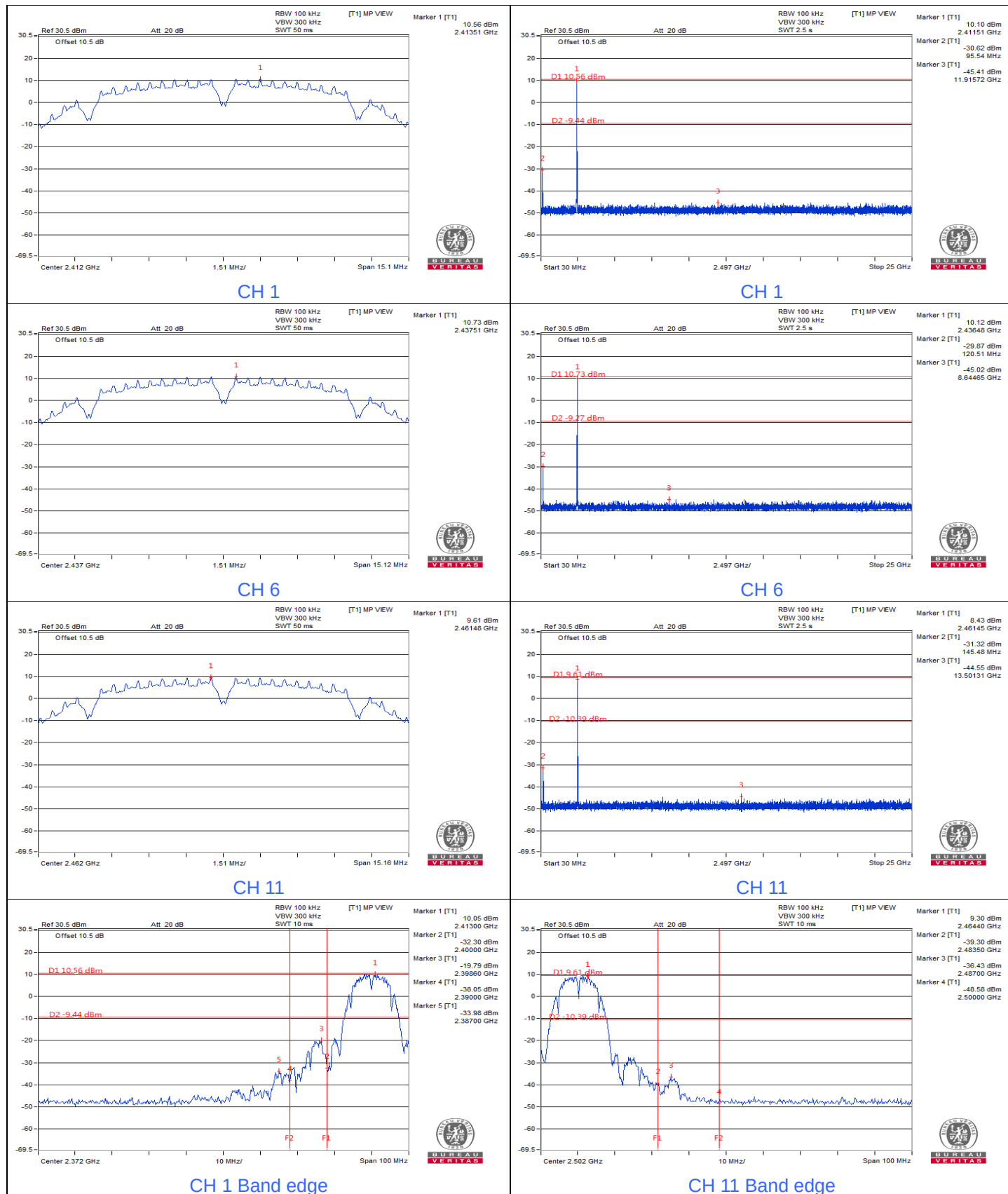
20 MHz Preamble 802.11ax (RU106) : CH 11

7.4 Conducted Out of Band Emissions

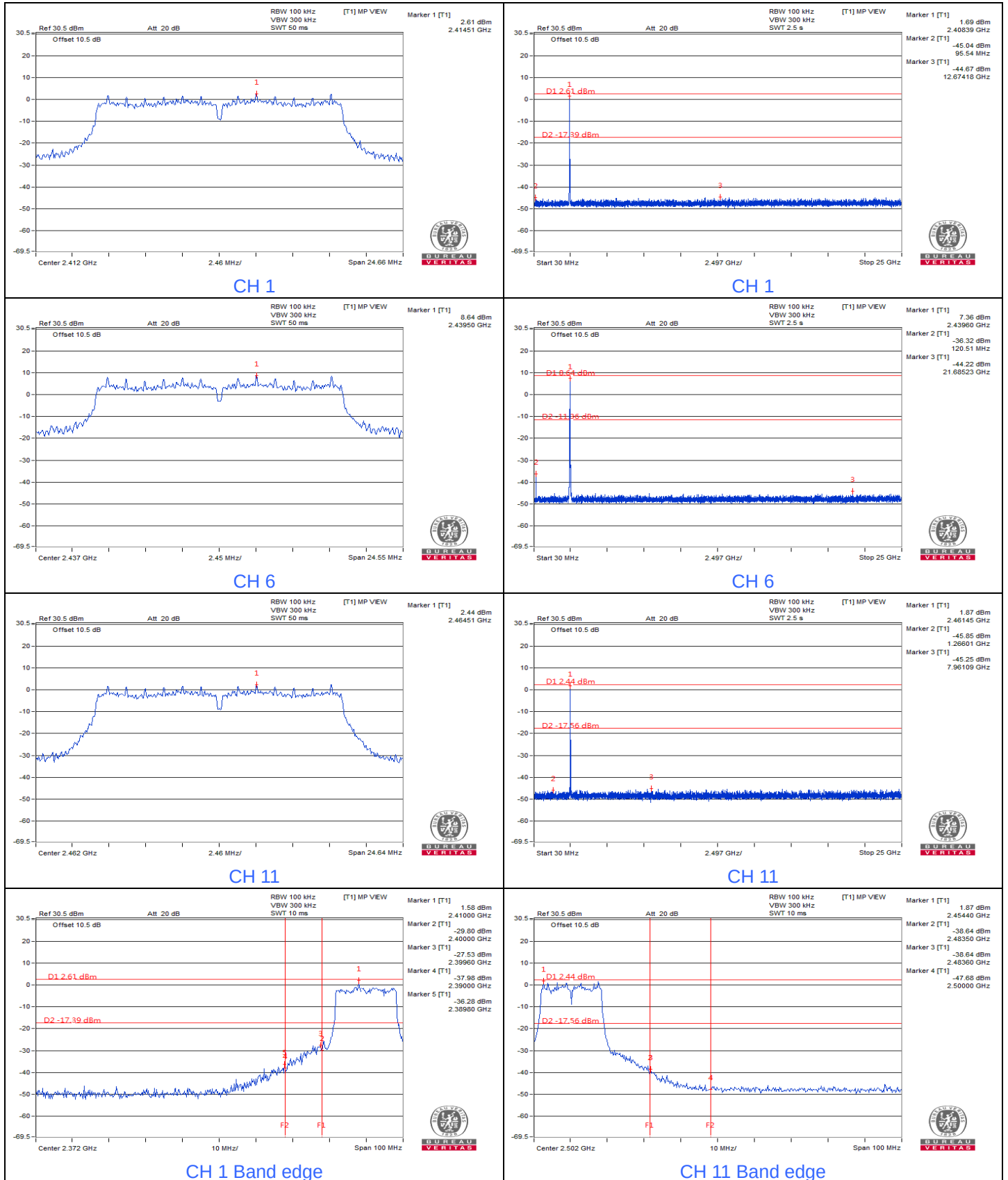
Mode A

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyong Wang
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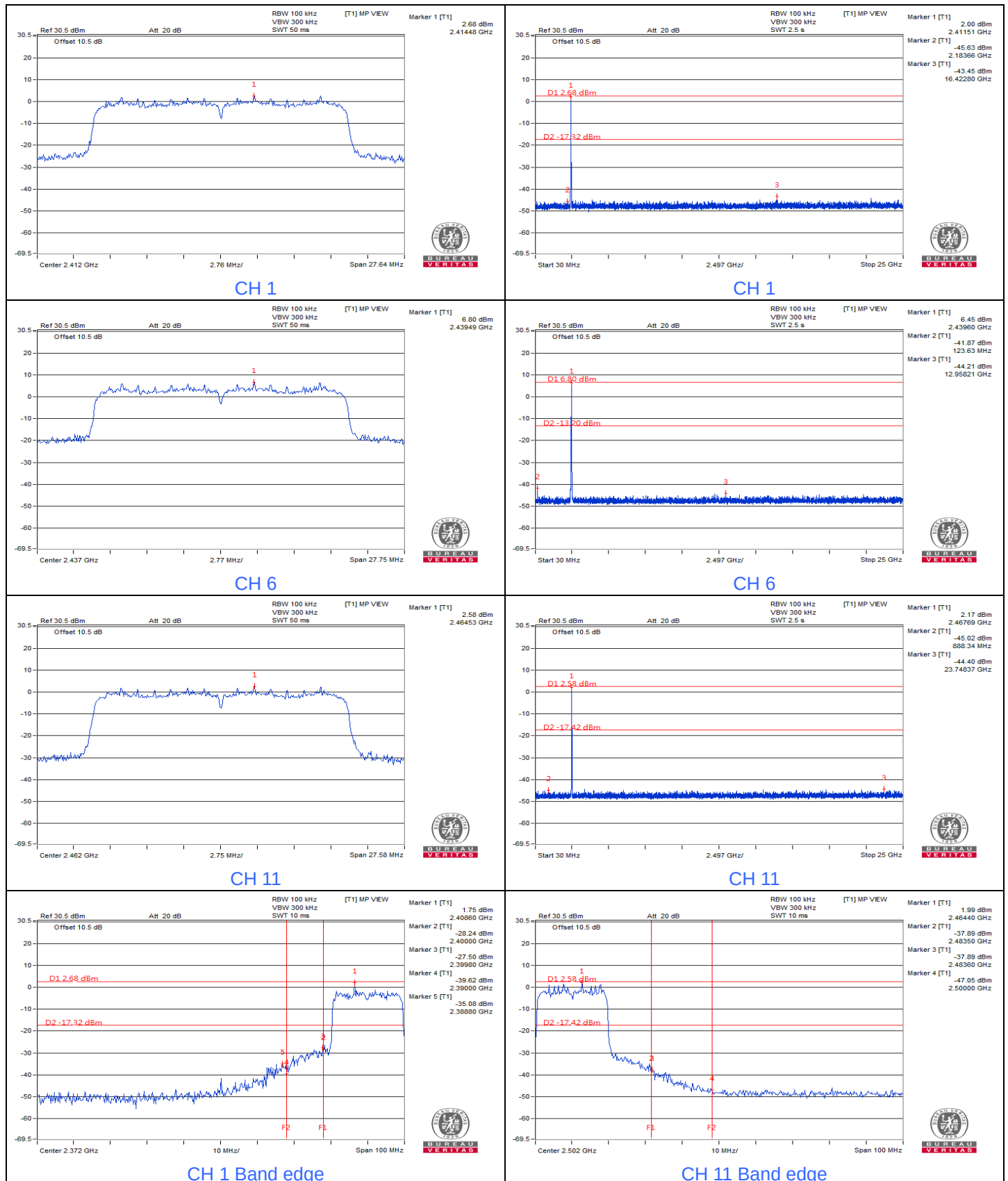
802.11b



802.11g



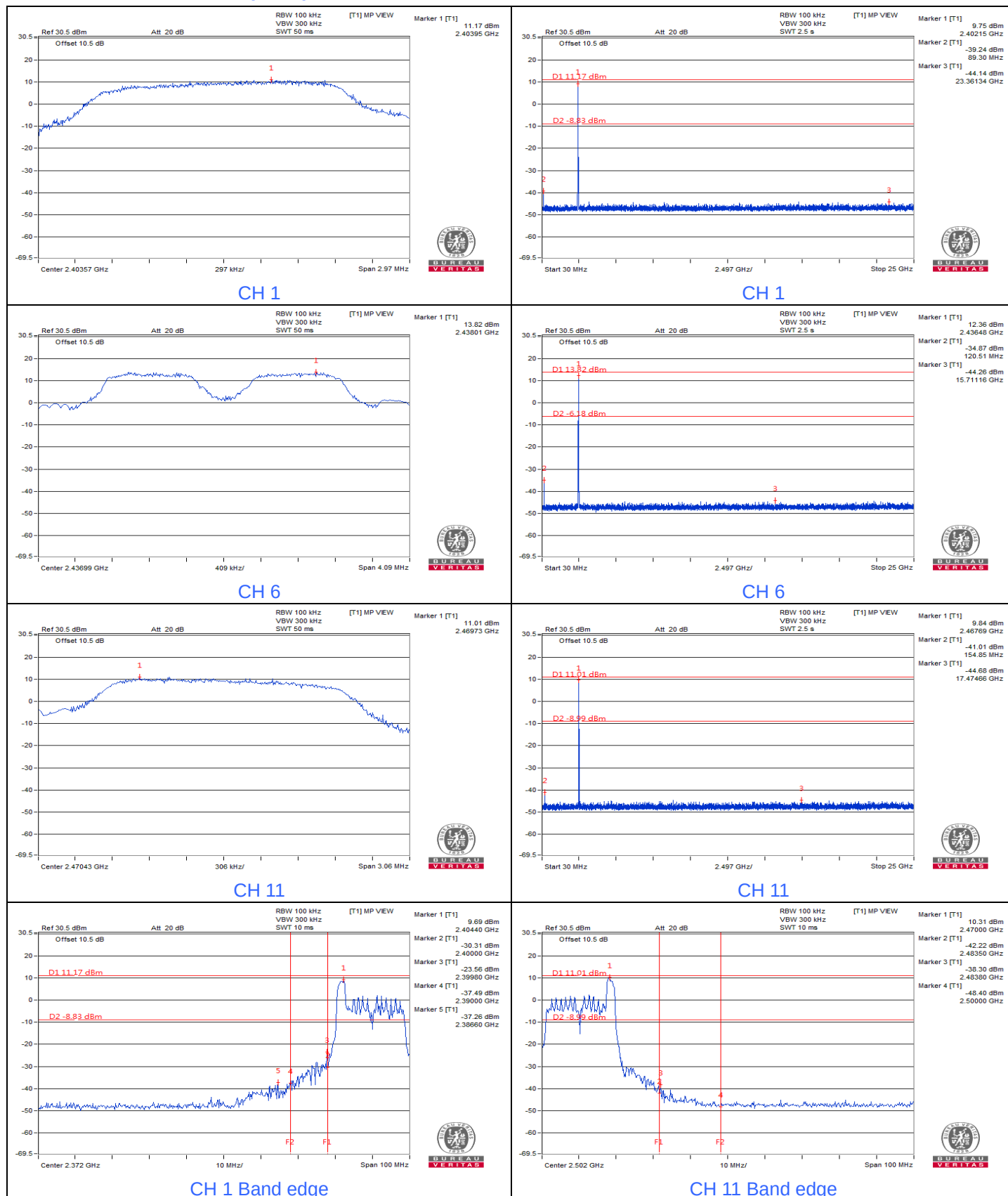
802.11ax (HE20)



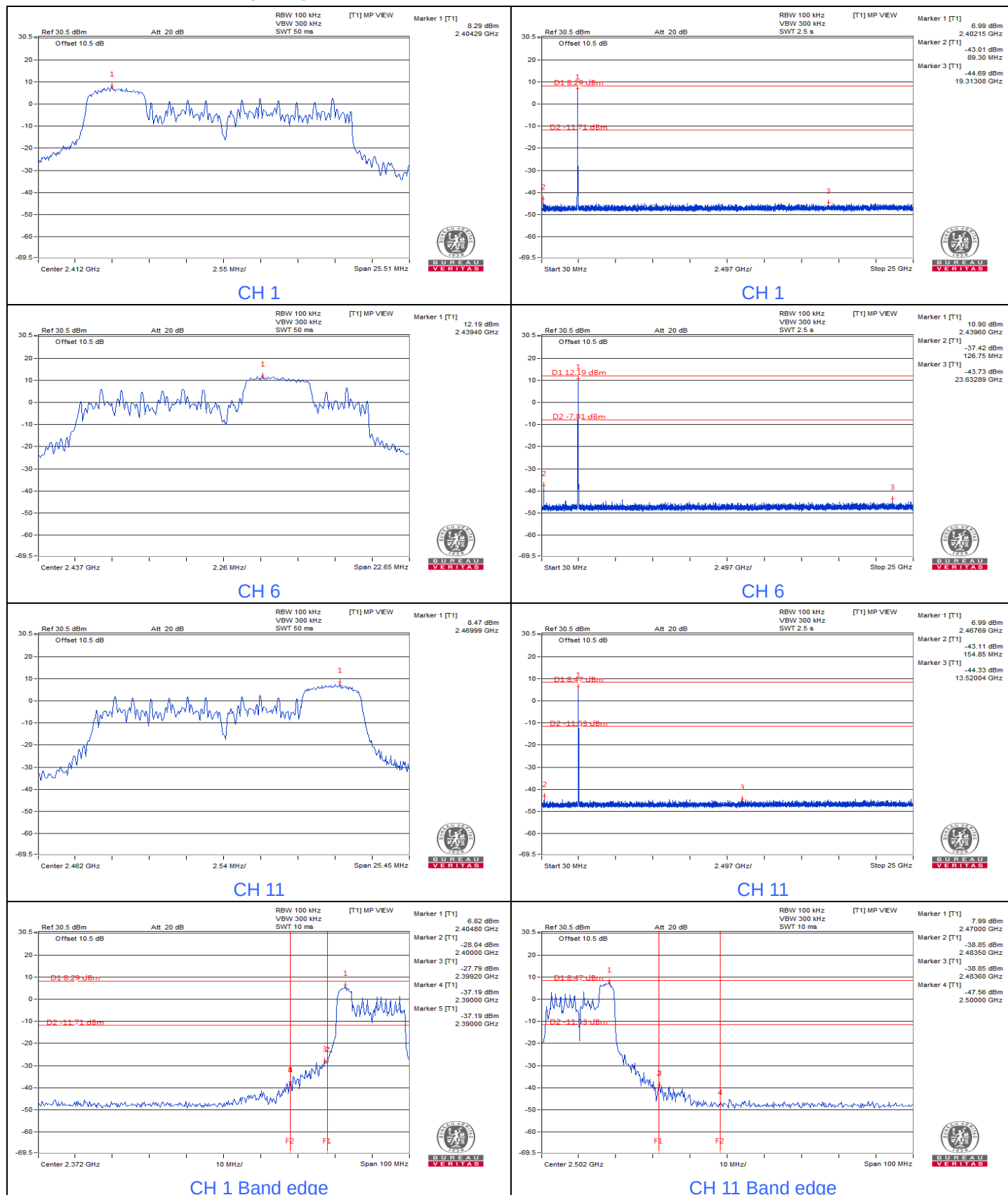
802.11ax (HE40)



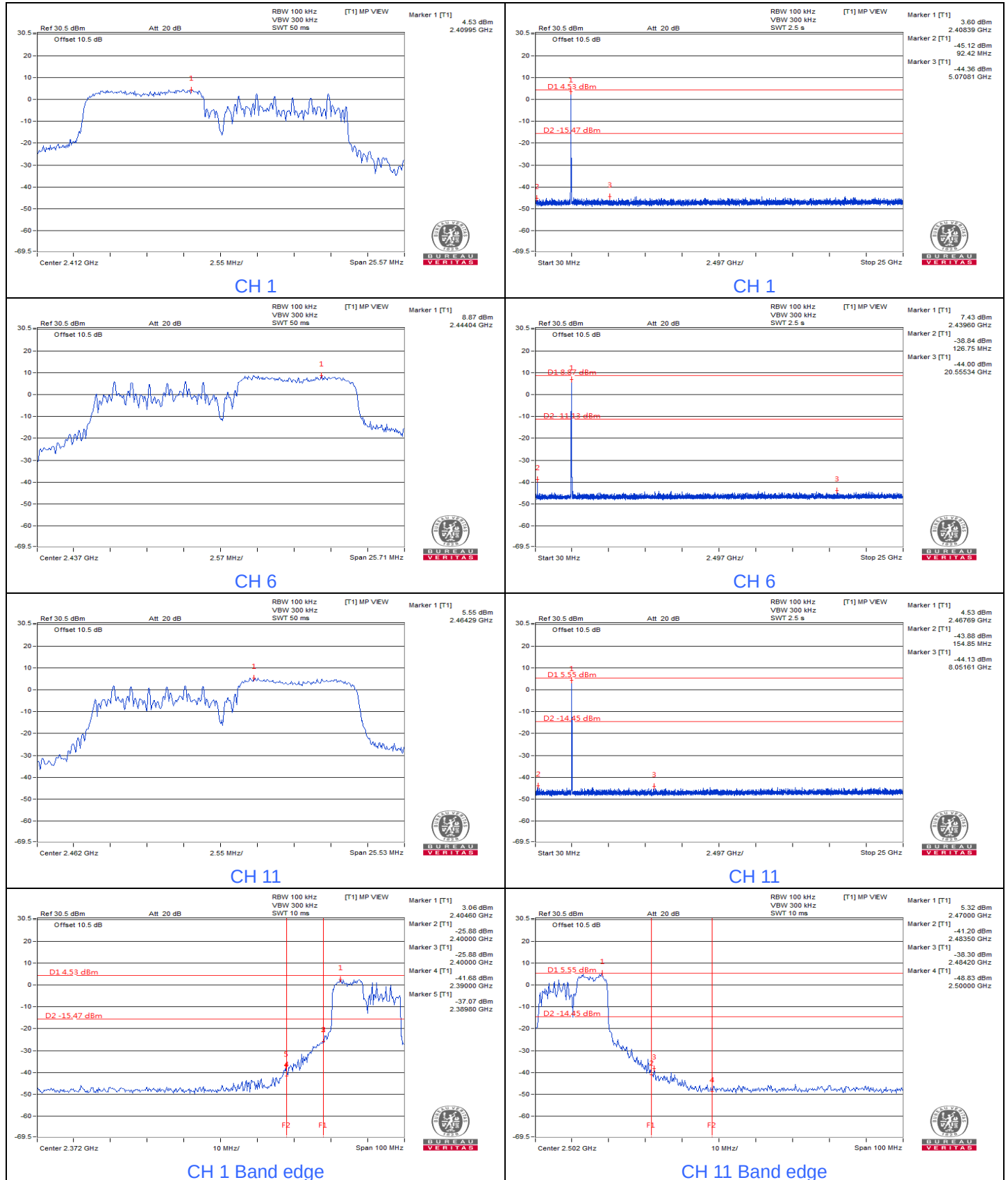
20 MHz Preamble 802.11ax (RU26)



20 MHz Preamble 802.11ax (RU52)



20 MHz Preamble 802.11ax (RU106)



7.5 AC Power Conducted Emissions

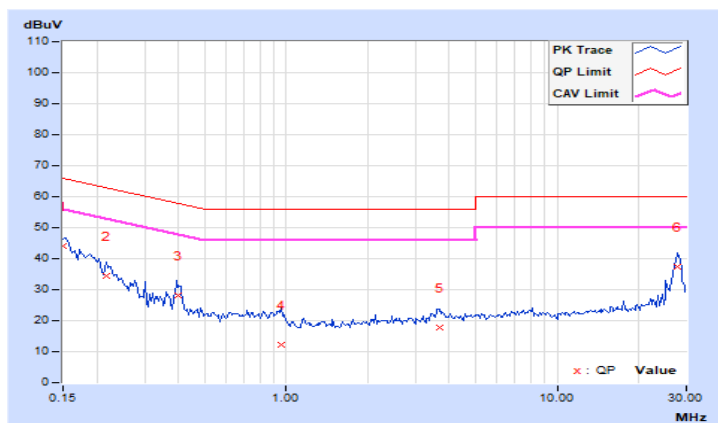
Mode B

RF Mode	802.11b	Channel	CH 1 : 2412 MHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 67% RH
Tested By	Tom Yang		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.96	34.29	15.29	44.25	25.25	66.00	56.00	-21.75	-30.75
2	0.21641	9.96	24.38	6.81	34.34	16.77	62.96	52.96	-28.62	-36.19
3	0.40000	9.97	18.23	7.80	28.20	17.77	57.85	47.85	-29.65	-30.08
4	0.95469	10.00	2.34	-4.28	12.34	5.72	56.00	46.00	-43.66	-40.28
5	3.66406	10.13	7.81	-1.88	17.94	8.25	56.00	46.00	-38.06	-37.75
6	27.96484	11.23	26.25	25.66	37.48	36.89	60.00	50.00	-22.52	-13.11

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

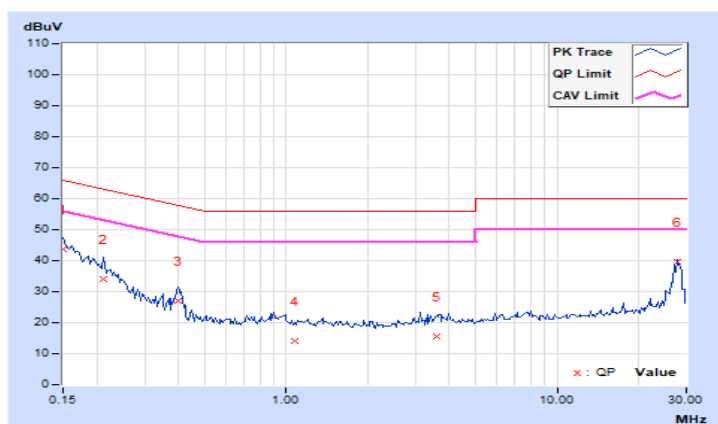


RF Mode	802.11b	Channel	CH 1 : 2412 MHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 67% RH
Tested By	Tom Yang		

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	0.15000	9.93	33.84	14.14	43.77	24.07	66.00	56.00	-22.23	-31.93
2	0.21250	9.94	23.96	4.78	33.90	14.72	63.11	53.11	-29.21	-38.39
3	0.40000	9.94	16.94	6.70	26.88	16.64	57.85	47.85	-30.97	-31.21
4	1.08000	9.97	4.13	-1.95	14.10	8.02	56.00	46.00	-41.90	-37.98
5	3.59766	10.08	5.64	-5.05	15.72	5.03	56.00	46.00	-40.28	-40.97
6	27.96875	10.87	28.87	28.26	39.74	39.13	60.00	50.00	-20.26	-10.87

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

Radiated versus Conducted Measurement

For Radiated measurement:

The level of unwanted emissions was measured when radiated by the cabinet or structure of the equipment with the antenna connector(s) terminated by a specified load (cabinet radiation)

For Conducted measurement:

The level of unwanted emissions was measured as their power in a specified load (conducted spurious emissions).

Conducted Emission Convert Formula

- a. Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
 - b. EIRP Level (dBm) = Raw Value(dBm) + Correction Factor(dB)
 - c. Correction Factor is directional gain, and the composite gain will be used when signal support the correlated signal
For the out of band spurious the gain for the specific band may have been used rather than the highest gain across all bands.
For the band edge the gain for the specific band may have been used.
- Notes:
1. In restricted bands below 1000 MHz, add upper bound on ground plane reflection:
For f = 30 – 1000 MHz, add 4.7 dB.
Offset = 10 dB + 0.5 dB(cable loss) + 4.7 dB
 2. The conducted emission test was considered some factor to compute test result.3.

Mode A

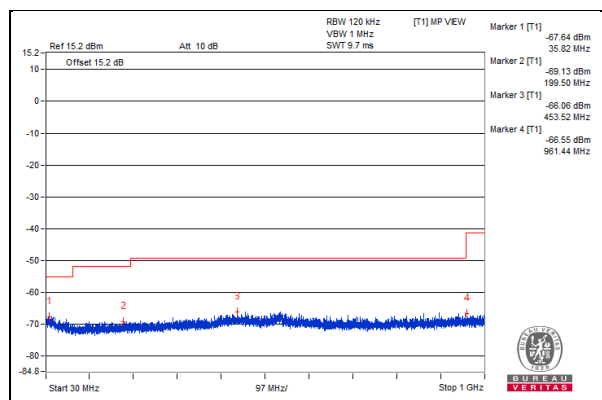
802.11b - Channel 1

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	32.91	34.29	40	-5.71	-66.79	5.825	-60.97
2	160.82	32.96	43.5	-10.54	-68.12	5.825	-62.30
3	360.16	34.01	46	-11.99	-67.07	5.825	-61.25
4	545.79	36.36	46	-9.64	-64.72	5.825	-58.90
5	631.64	34.66	46	-11.34	-66.42	5.825	-60.60
6	985.69	35.23	54	-18.77	-65.85	5.825	-60.03

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



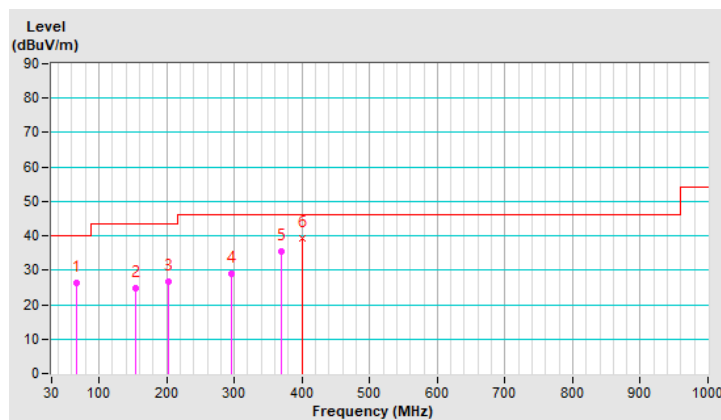
Mode B

RF Mode	802.11b	Channel	CH 1 : 2412 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Tom Yang		

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	67.68	26.4 QP	40.0	-13.6	3.00 H	49	40.6	-14.2
2	153.41	24.9 QP	43.5	-18.6	2.00 H	233	36.8	-11.9
3	202.44	26.8 QP	43.5	-16.7	2.00 H	200	41.9	-15.1
4	295.17	29.1 QP	46.0	-16.9	2.00 H	2	40.1	-11.0
5	369.06	35.3 QP	46.0	-10.7	1.00 H	344	44.1	-8.8
6	399.99	39.3 QP	46.0	-6.7	1.00 H	317	47.2	-7.9

Remarks:

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

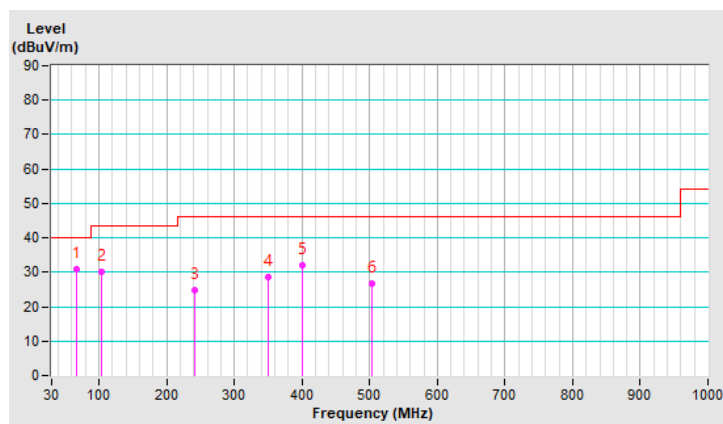


RF Mode	802.11b	Channel	CH 1 : 2412 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Tom Yang		

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	66.42	30.8 QP	40.0	-9.2	1.00 V	4	44.8	-14.0
2	104.23	30.2 QP	43.5	-13.3	1.00 V	256	45.9	-15.7
3	241.75	24.9 QP	46.0	-21.1	1.00 V	190	38.1	-13.2
4	350.95	28.7 QP	46.0	-17.3	1.50 V	300	38.2	-9.5
5	399.98	32.0 QP	46.0	-14.0	2.00 V	94	39.9	-7.9
6	504.26	26.6 QP	46.0	-19.4	1.00 V	216	31.5	-4.9

Remarks:

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



7.7 Unwanted Emissions above 1 GHz

Radiated versus Conducted Measurement

For Radiated measurement:

The level of unwanted emissions was measured when radiated by the cabinet or structure of the equipment with the antenna connector(s) terminated by a specified load (cabinet radiation)

For Conducted measurement:

The level of unwanted emissions was measured as their power in a specified load (conducted spurious emissions).

Conducted Emission Convert Formula

- a. Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
 d = measurement distance in 3 meters.
- b. EIRP Level (dBm) = Raw Value(dBm) + Correction Factor(dB)
- c. Correction Factor is directional gain, and the composite gain will be used when signal support the correlated signal
 For the out of band spurious the gain for the specific band may have been used rather than the highest gain across all bands.
 For the band edge the gain for the specific band may have been used.

Notes:

1. In restricted bands below 1000 MHz, add upper bound on ground plane reflection:
 For f = 30 – 1000 MHz, add 4.7 dB.
2. The conducted emission test was considered some factor to compute test result.

Mode A

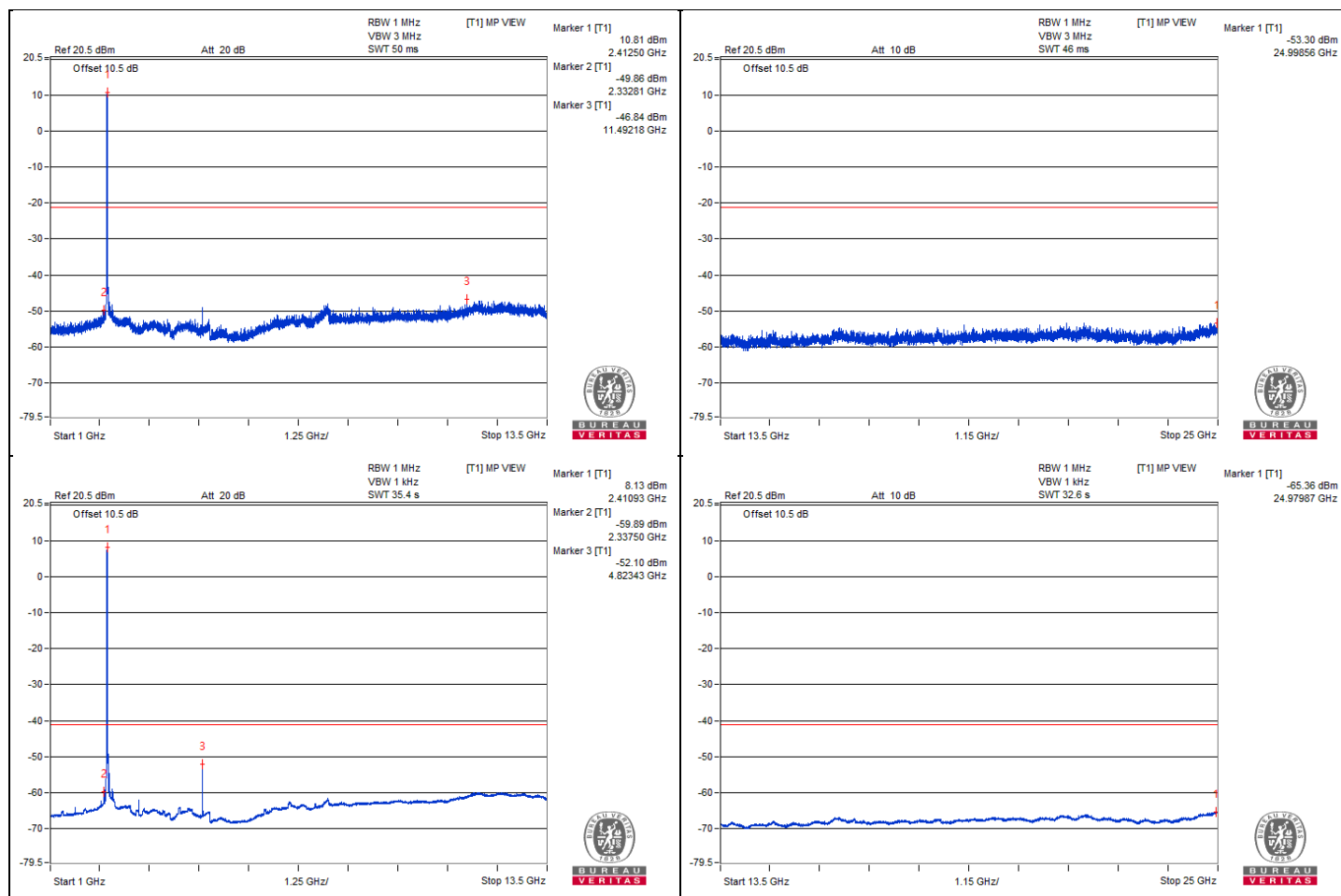
802.11b - Channel 1

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4823.43	51.93 PK	74	-22.07	-49.15	5.825	-43.33
2	4823.43	48.98 AV	54	-5.02	-52.1	5.825	-46.28
3	7346.87	50.18 PK	74	-23.82	-50.9	5.825	-45.08
4	7359.37	37.79 AV	54	-16.21	-63.29	5.825	-57.47

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

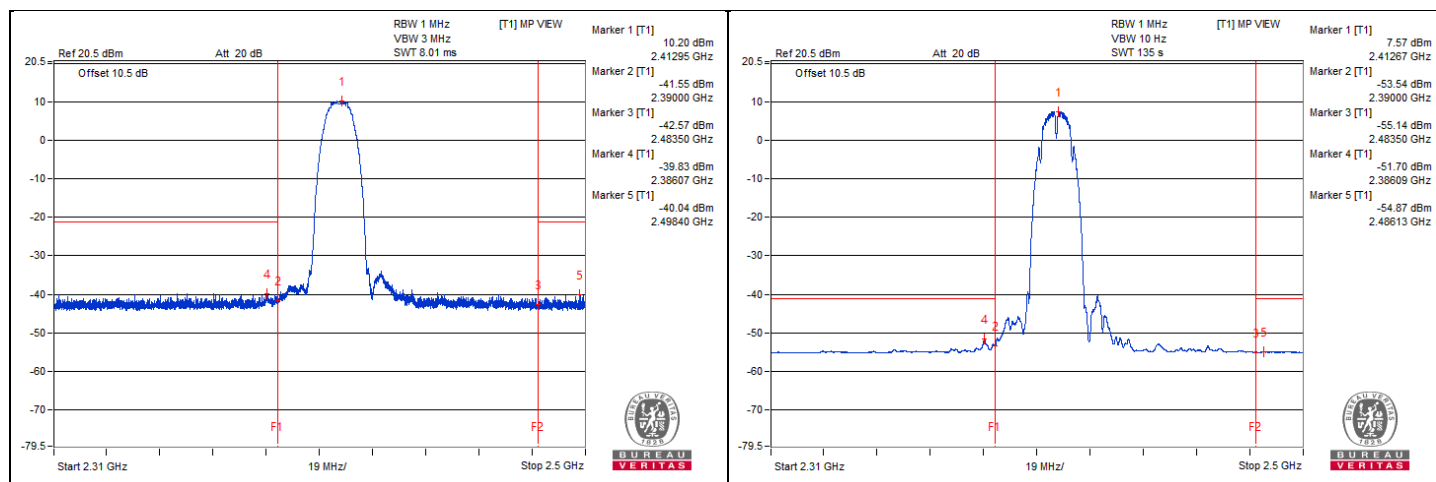


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2386.07	58.61 PK	74	-15.39	-39.83	3.18	-36.65
2	2386.09	46.74 AV	54	-7.26	-51.7	3.18	-48.52
3	2498.4	58.4 PK	74	-15.6	-40.04	3.18	-36.86
4	2486.13	43.57 AV	54	-10.43	-54.87	3.18	-51.69

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



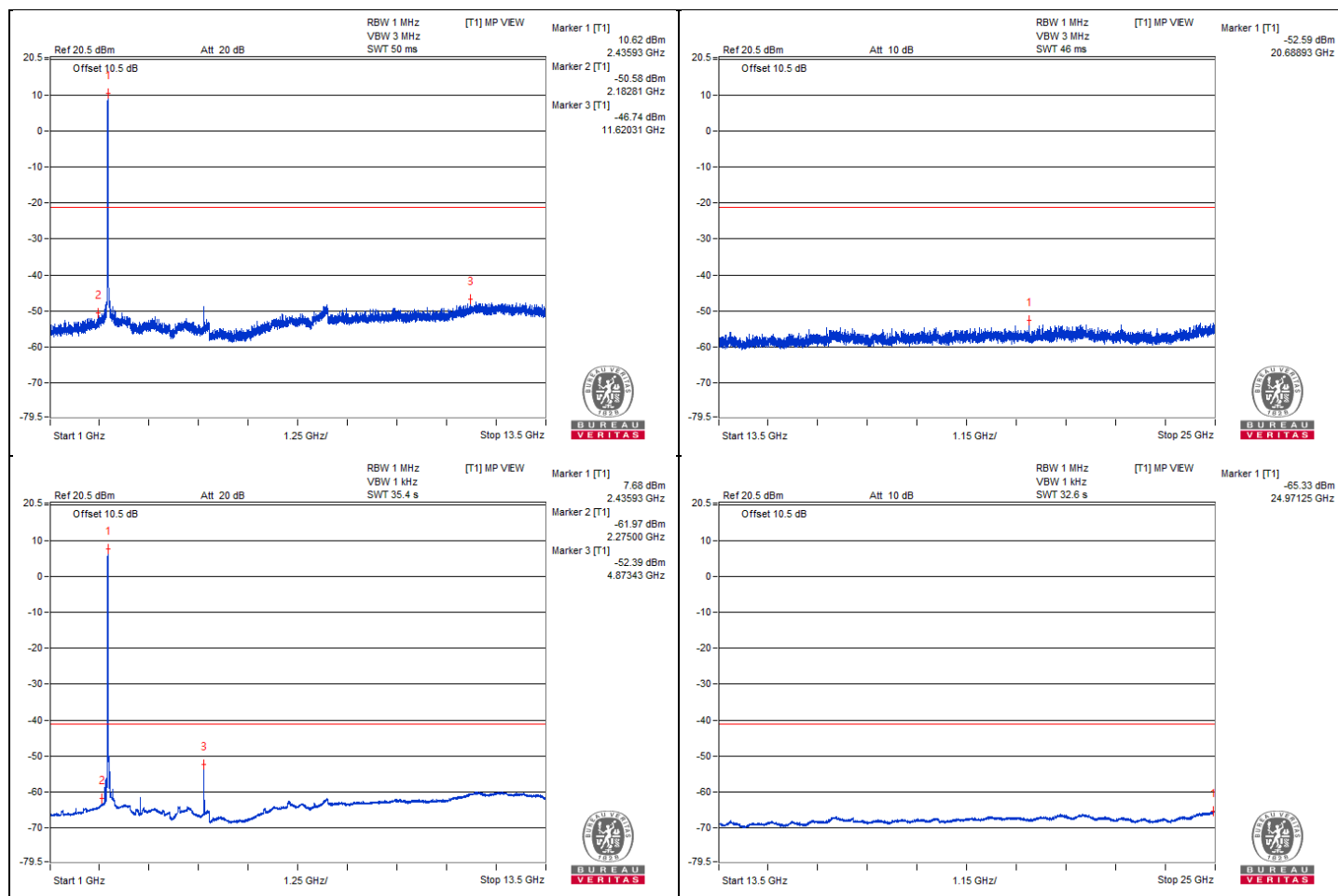
802.11b - Channel 6

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4873.43	52.23 PK	74	-21.77	-48.85	5.825	-43.03
2	4873.43	48.69 AV	54	-5.31	-52.39	5.825	-46.57
3	7314.06	50.35 PK	74	-23.65	-50.73	5.825	-44.91
4	7323.43	37.72 AV	54	-16.28	-63.36	5.825	-57.54
5	20688.93	48.49 PK	74	-25.51	-52.59	5.825	-46.77
6	20688.93	32.96 AV	54	-21.04	-68.12	5.825	-62.30

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

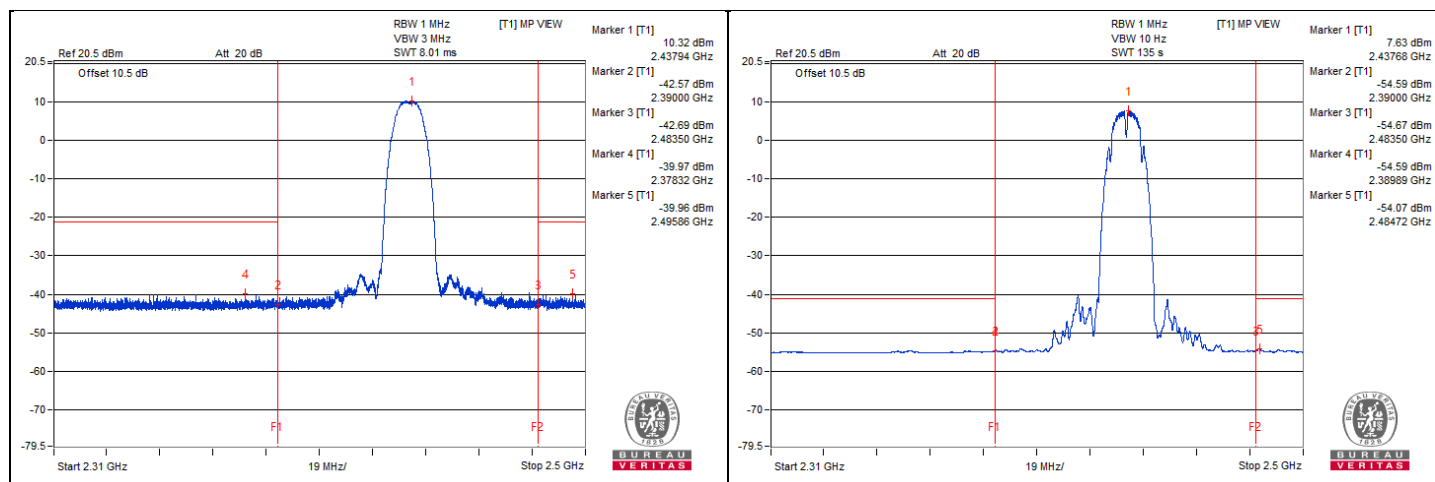


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2378.32	58.47 PK	74	-15.53	-39.97	3.18	-36.79
2	2389.89	43.85 AV	54	-10.15	-54.59	3.18	-51.41
3	2495.86	58.48 PK	74	-15.52	-39.96	3.18	-36.78
4	2484.72	44.37 AV	54	-9.63	-54.07	3.18	-50.89

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



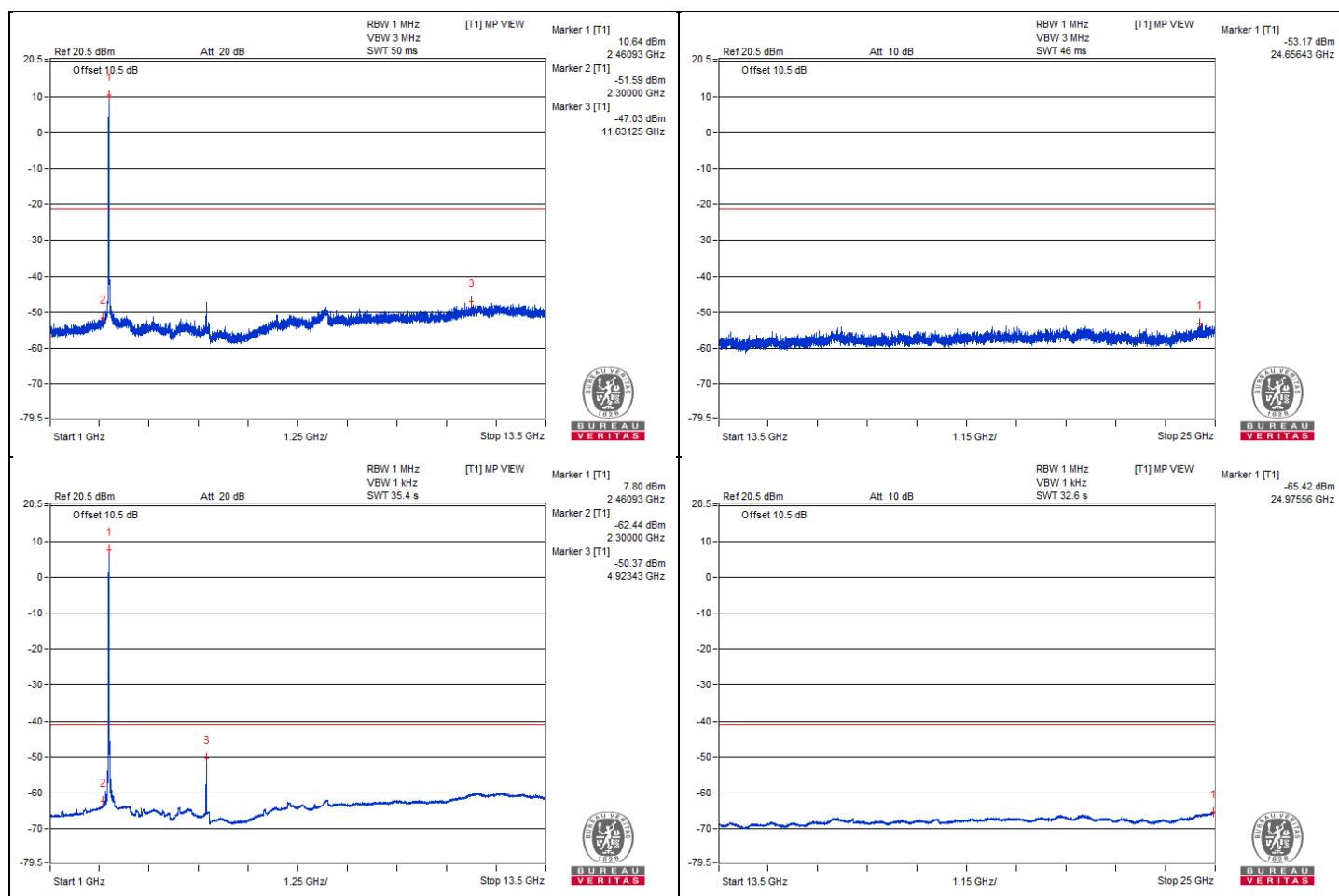
802.11b - Channel 11

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4923.43	53.81 PK	74	-20.19	-47.27	5.825	-41.45
2	4923.43	50.71 AV	54	-3.29	-50.37	5.825	-44.55
3	7357.81	49.66 PK	74	-24.34	-51.42	5.825	-45.60
4	7334.37	37.72 AV	54	-16.28	-63.36	5.825	-57.54

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

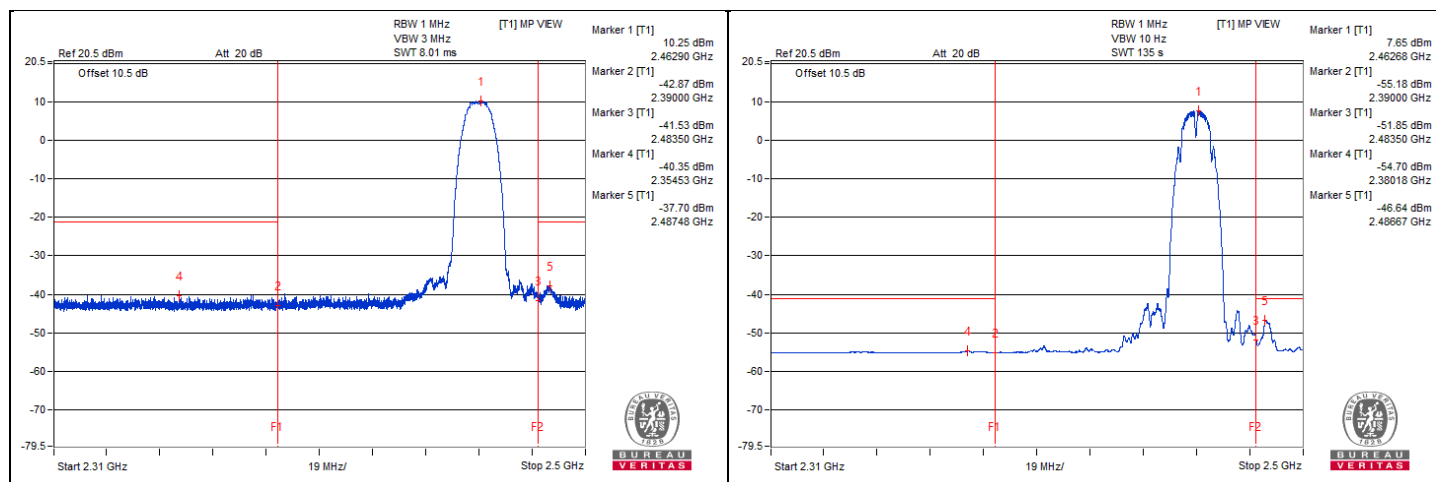


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2354.53	58.09 PK	74	-15.91	-40.35	3.18	-37.17
2	2380.18	43.74 AV	54	-10.26	-54.7	3.18	-51.52
3	2487.48	60.74 PK	74	-13.26	-37.7	3.18	-34.52
4	2486.67	51.8 AV	54	-2.2	-46.64	3.18	-43.46

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



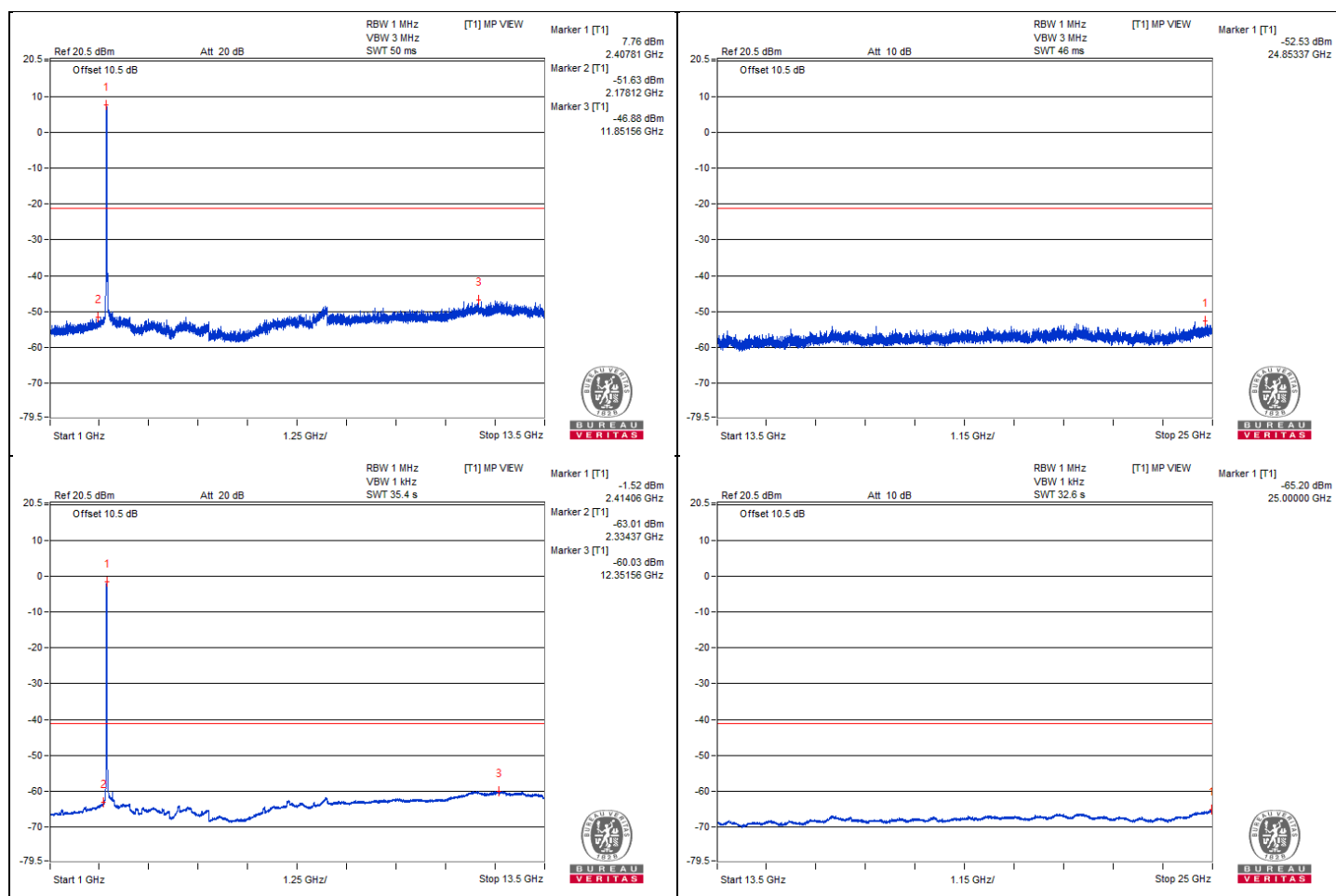
802.11g - Channel 1

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4998.43	48.15 PK	74	-25.85	-52.93	5.825	-47.11
2	4996.87	35.74 AV	54	-18.26	-65.34	5.825	-59.52
3	7325	50.2 PK	74	-23.8	-50.88	5.825	-45.06
4	7353.12	37.75 AV	54	-16.25	-63.33	5.825	-57.51

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

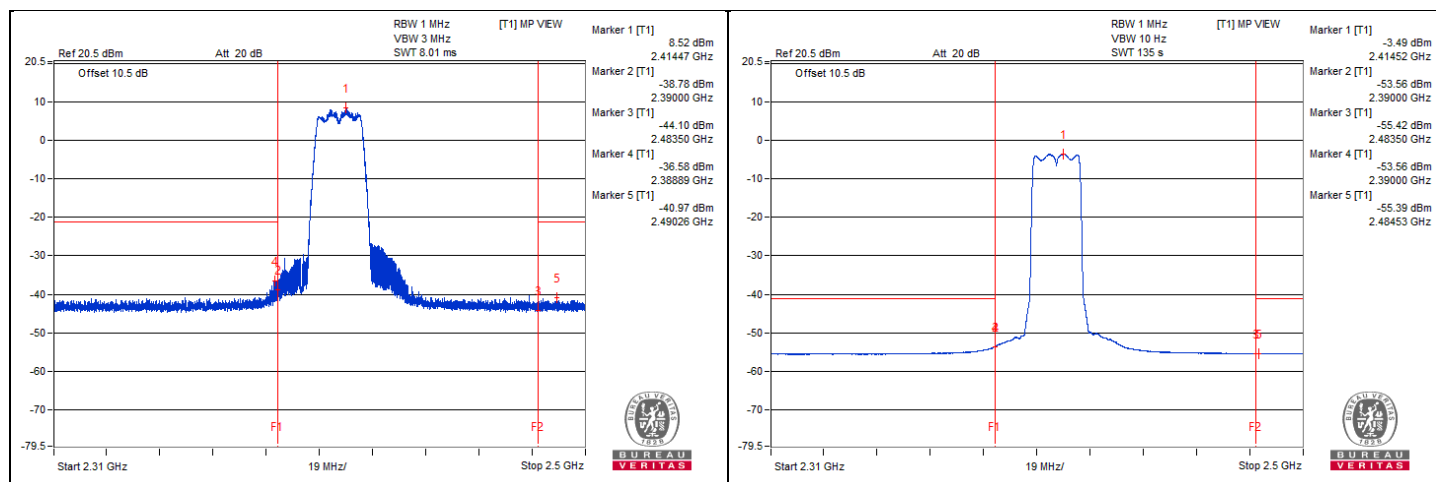


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2388.89	61.86 PK	74	-12.14	-36.58	3.18	-33.40
2	2389.84	44.88 AV	54	-9.12	-53.56	3.18	-50.38
3	2490.26	57.47 PK	74	-16.53	-40.97	3.18	-37.79
4	2483.68	43.05 AV	54	-10.95	-55.39	3.18	-52.21

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



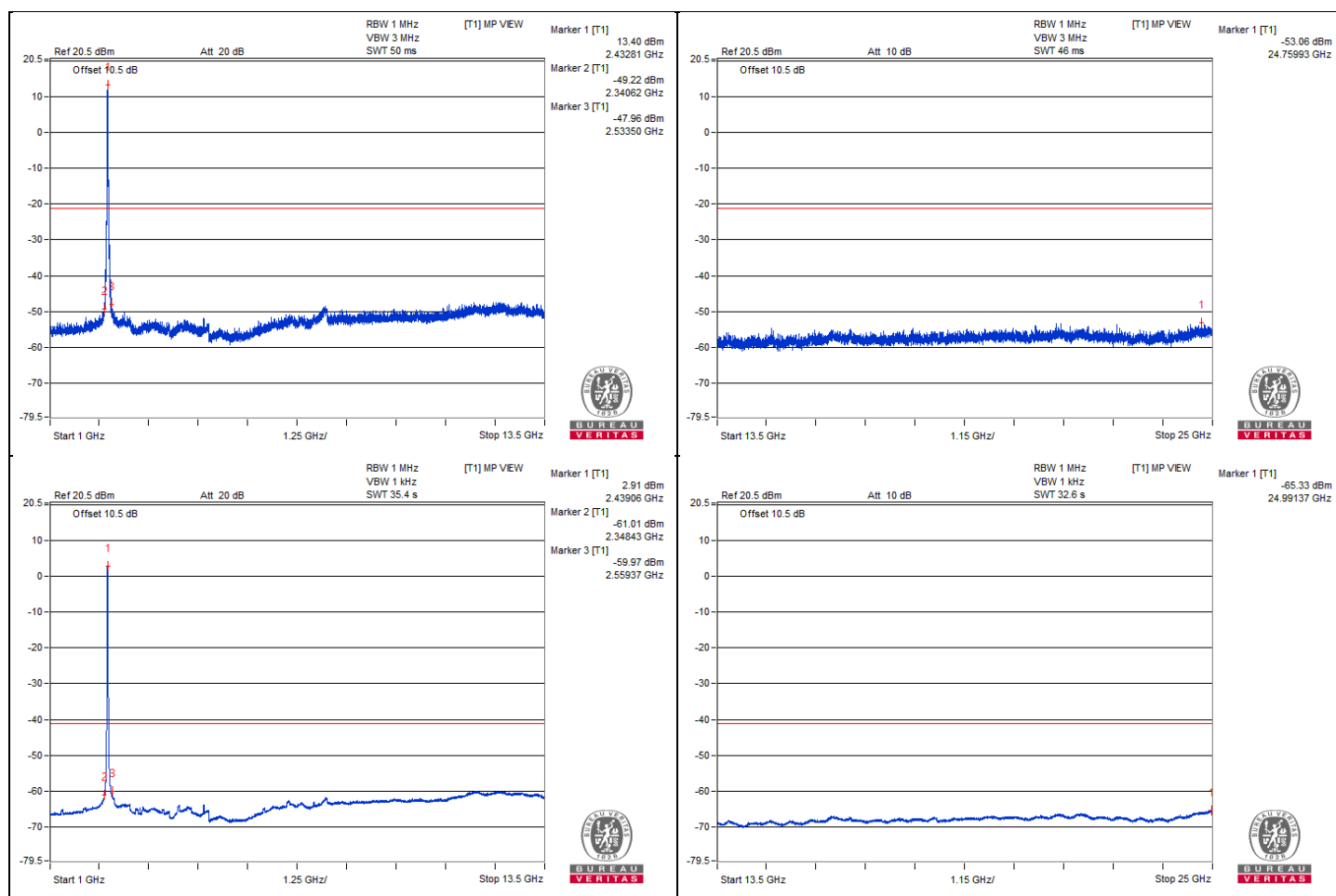
802.11g - Channel 6

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4871.87	49.2 PK	74	-24.8	-51.88	5.825	-46.06
2	4873.43	37.3 AV	54	-16.7	-63.78	5.825	-57.96
3	7295.31	49.97 PK	74	-24.03	-51.11	5.825	-45.29
4	7350	38.02 AV	54	-15.98	-63.06	5.825	-57.24

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

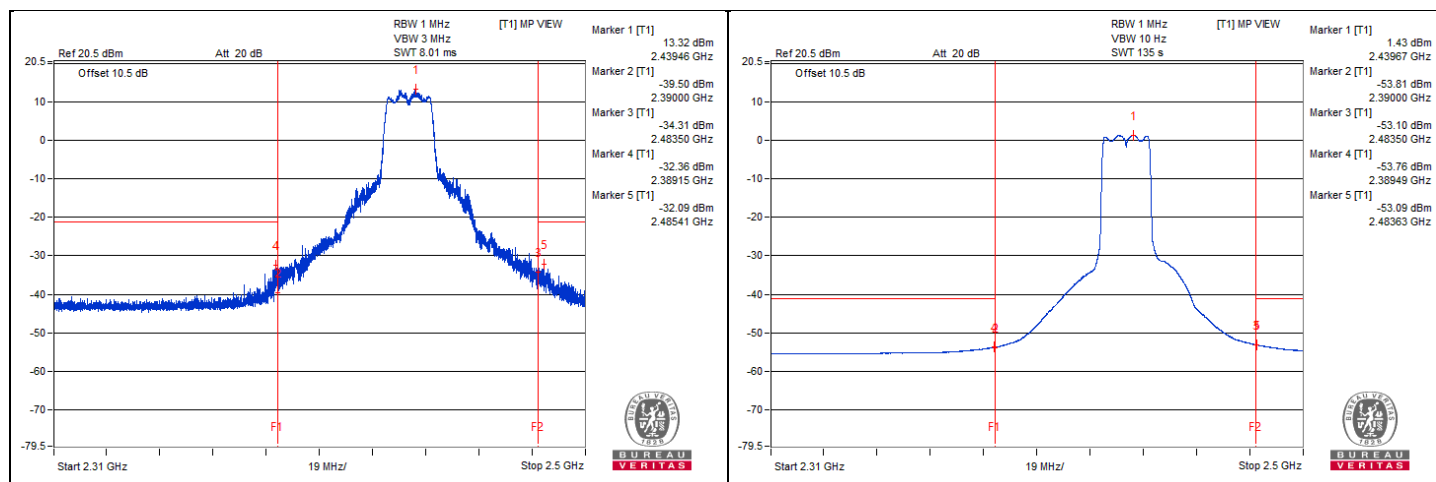


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2389.15	66.08 PK	74	-7.92	-32.36	3.18	-29.18
2	2389.49	44.68 AV	54	-9.32	-53.76	3.18	-50.58
3	2485.41	66.35 PK	74	-7.65	-32.09	3.18	-28.91
4	2483.63	45.35 AV	54	-8.65	-53.09	3.18	-49.91

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



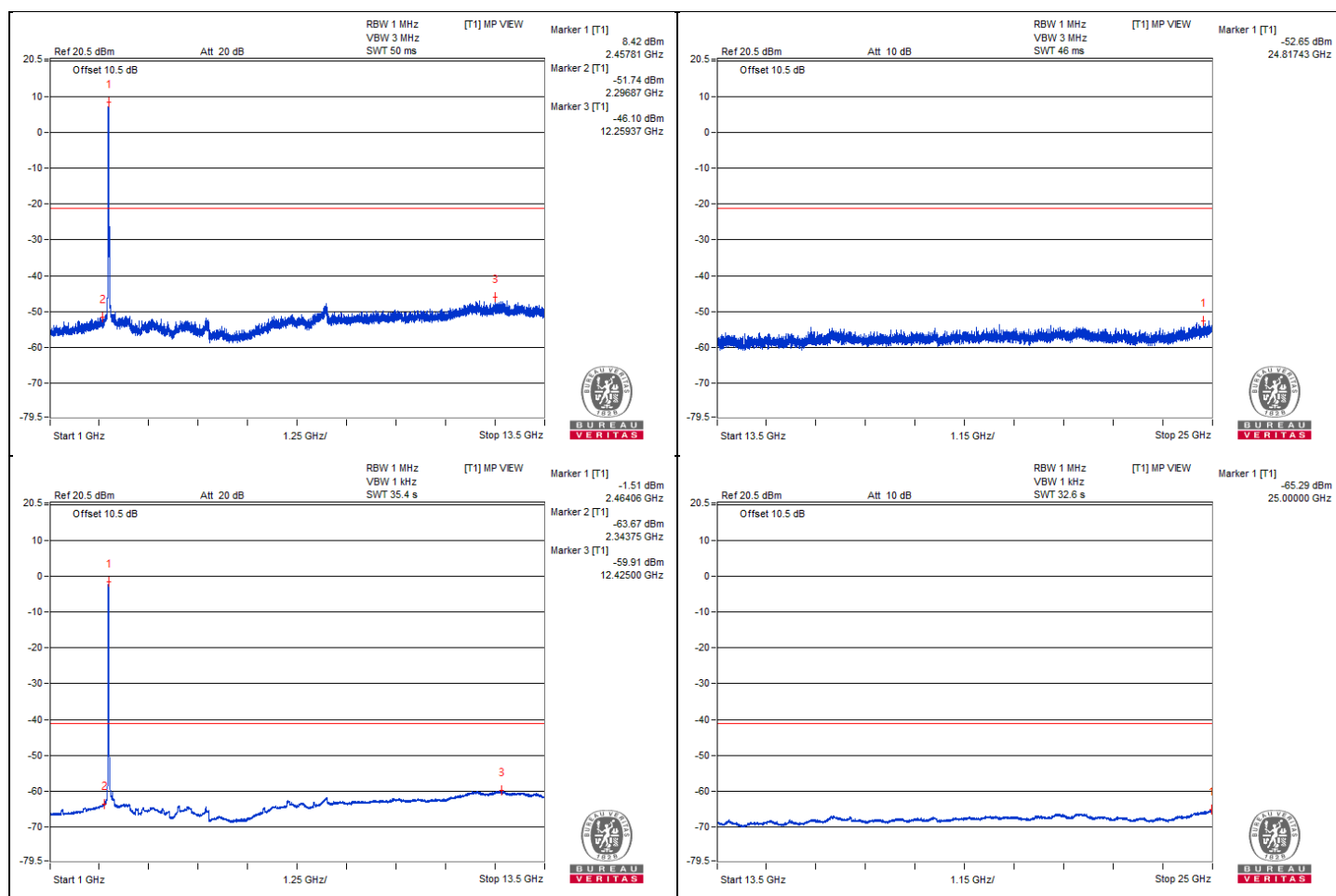
802.11g - Channel 11

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4926.56	49.21 PK	74	-24.79	-51.87	5.825	-46.05
2	4926.56	36.74 AV	54	-17.26	-64.34	5.825	-58.52
3	7354.68	50.2 PK	74	-23.8	-50.88	5.825	-45.06
4	7357.81	37.7 AV	54	-16.3	-63.38	5.825	-57.56

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

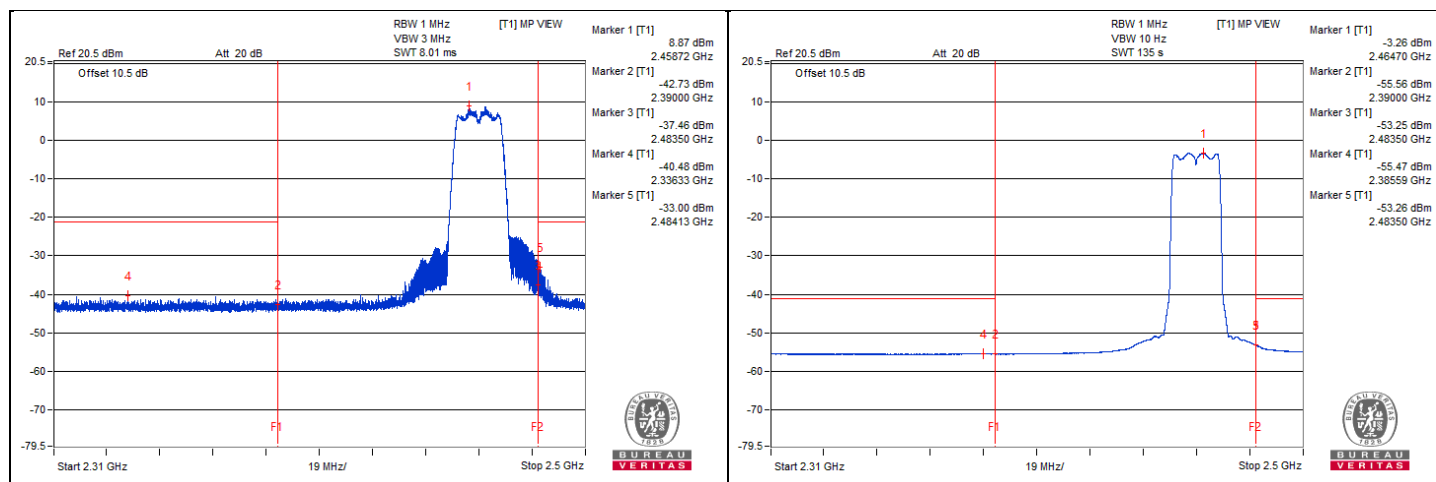


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2336.33	57.96 PK	74	-16.04	-40.48	3.18	-37.30
2	2313.82	43 AV	54	-11	-55.44	3.18	-52.26
3	2484.13	65.44 PK	74	-8.56	-33	3.18	-29.82
4	2483.51	45.15 AV	54	-8.85	-53.29	3.18	-50.11

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



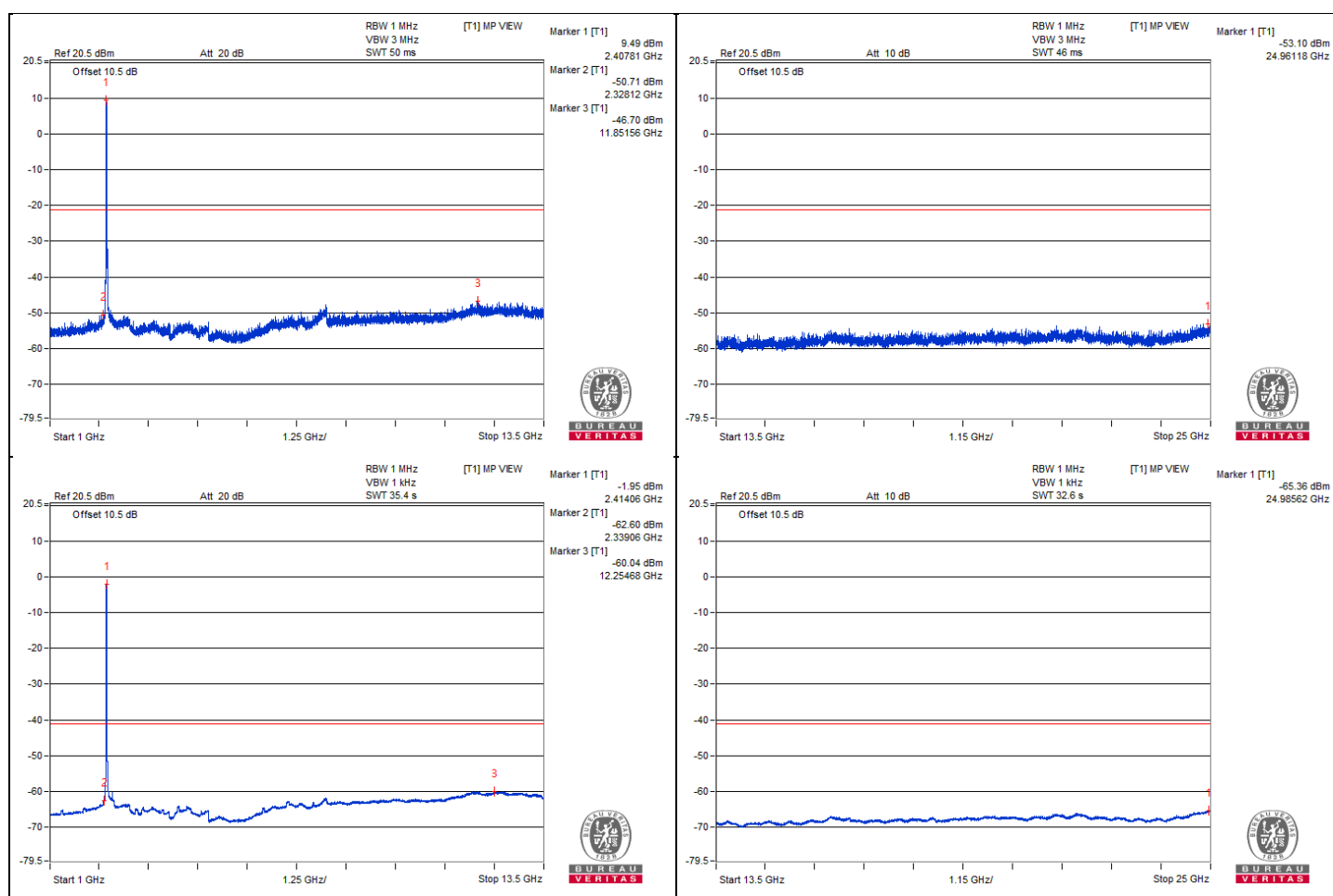
802.11ax (HE20) - Channel 1

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4815.62	47.5 PK	74	-26.5	-53.58	5.825	-47.76
2	4942.18	35.76 AV	54	-18.24	-65.32	5.825	-59.50
3	7350	51.22 PK	74	-22.78	-49.86	5.825	-44.04
4	7346.87	37.8 AV	54	-16.2	-63.28	5.825	-57.46

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

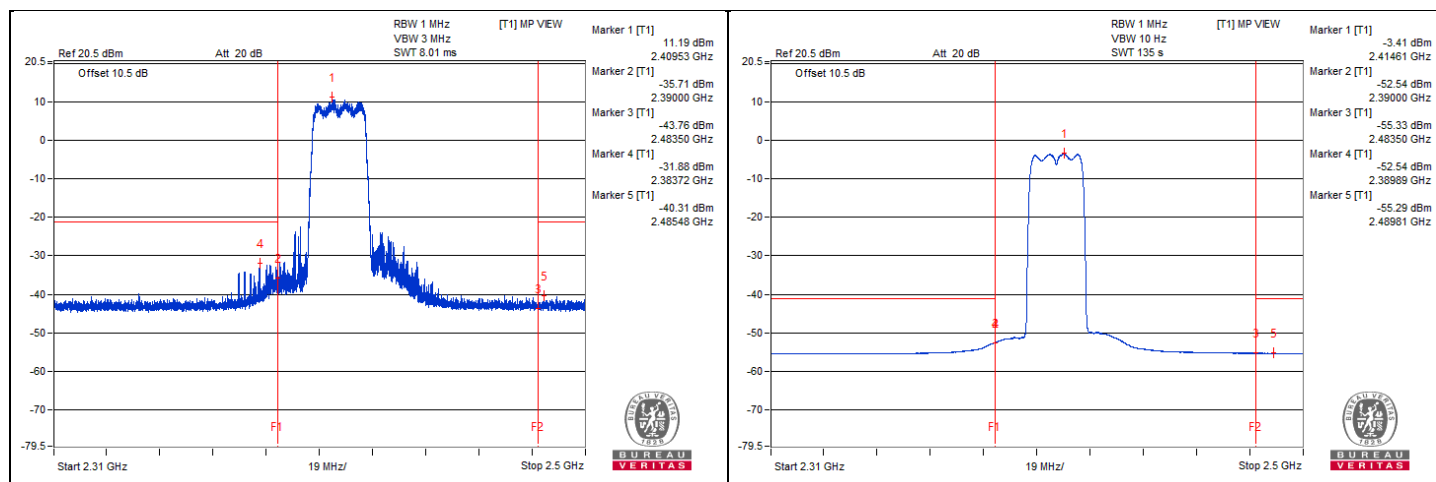


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2383.72	66.56 PK	74	-7.44	-31.88	3.18	-28.70
2	2389.89	45.9 AV	54	-8.1	-52.54	3.18	-49.36
3	2485.48	58.13 PK	74	-15.87	-40.31	3.18	-37.13
4	2483.54	43.15 AV	54	-10.85	-55.29	3.18	-52.11

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



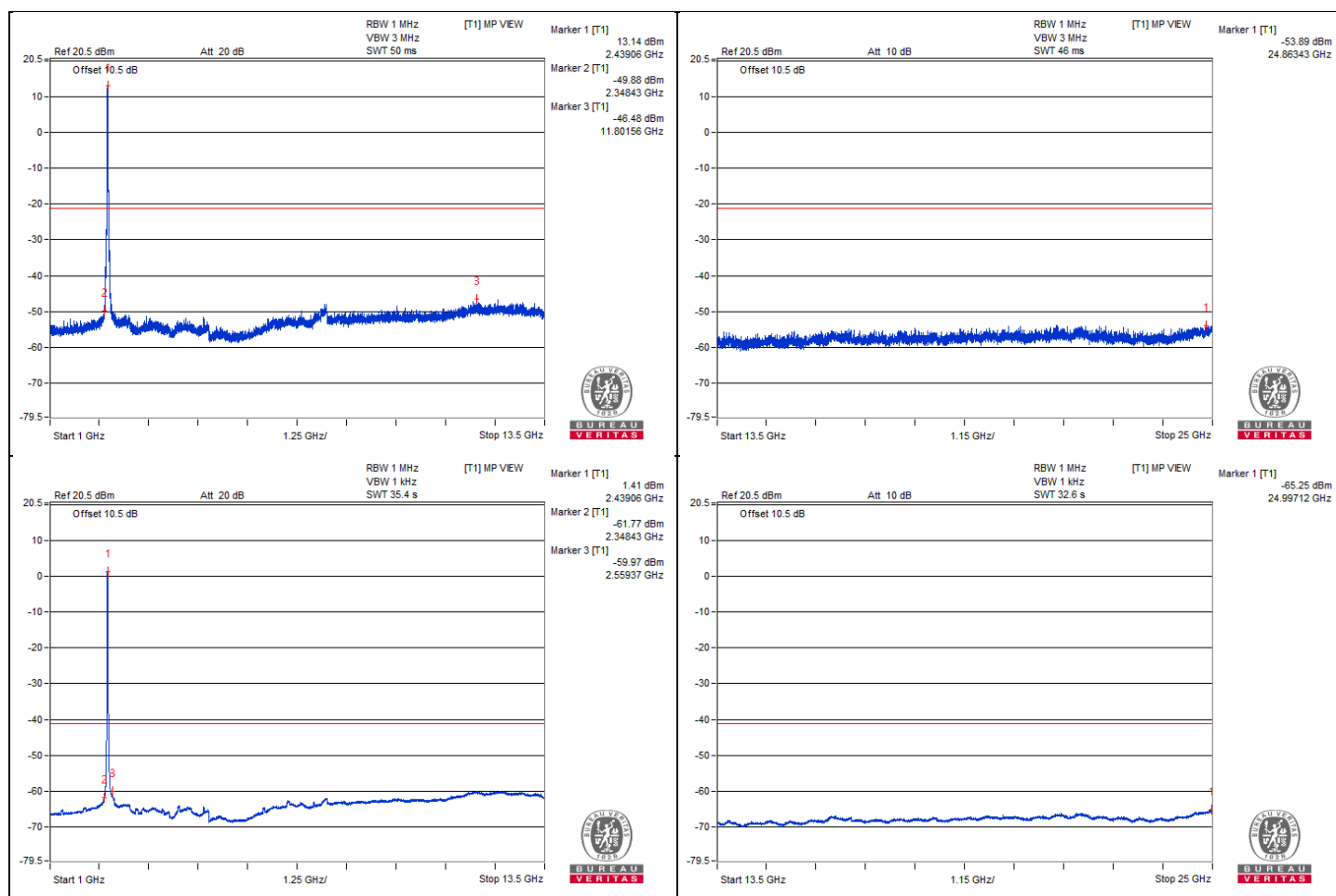
802.11ax (HE20) - Channel 6

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4873.43	49.51 PK	74	-24.49	-51.57	5.825	-45.75
2	4875	36.62 AV	54	-17.38	-64.46	5.825	-58.64
3	7362.5	51.16 PK	74	-22.84	-49.92	5.825	-44.10
4	7342.18	37.89 AV	54	-16.11	-63.19	5.825	-57.37

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

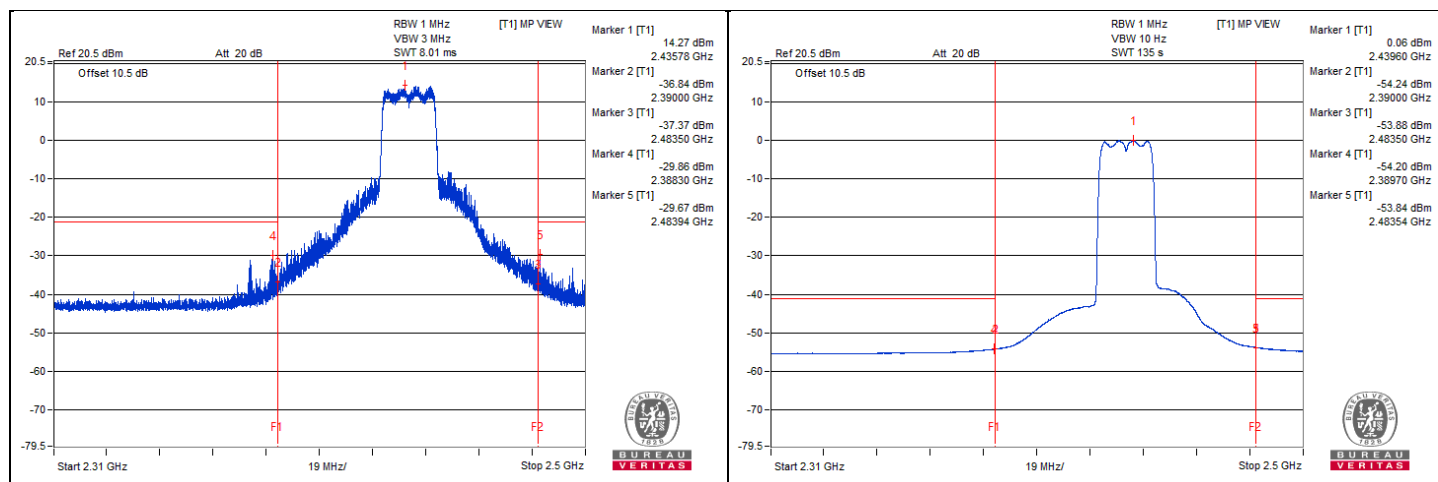


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2388.3	68.58 PK	74	-5.42	-29.86	3.18	-26.68
2	2389.7	44.24 AV	54	-9.76	-54.2	3.18	-51.02
3	2483.94	68.77 PK	74	-5.23	-29.67	3.18	-26.49
4	2483.51	44.6 AV	54	-9.4	-53.84	3.18	-50.66

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



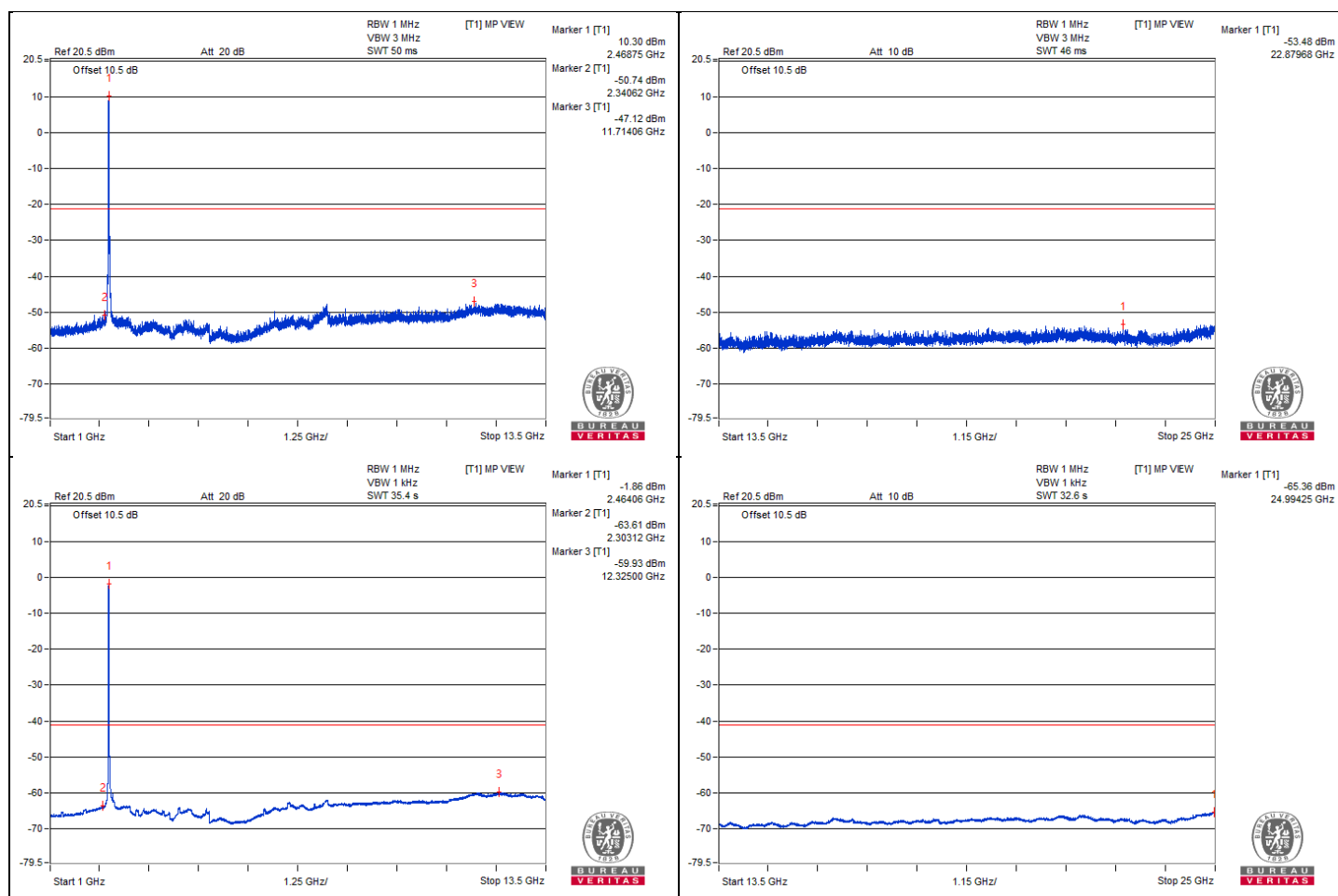
802.11ax (HE20) - Channel 11

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4954.68	47.87 PK	74	-26.13	-53.21	5.825	-47.39
2	4925	36.58 AV	54	-17.42	-64.5	5.825	-58.68
3	7342.18	49.86 PK	74	-24.14	-51.22	5.825	-45.40
4	7359.37	37.71 AV	54	-16.29	-63.37	5.825	-57.55

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

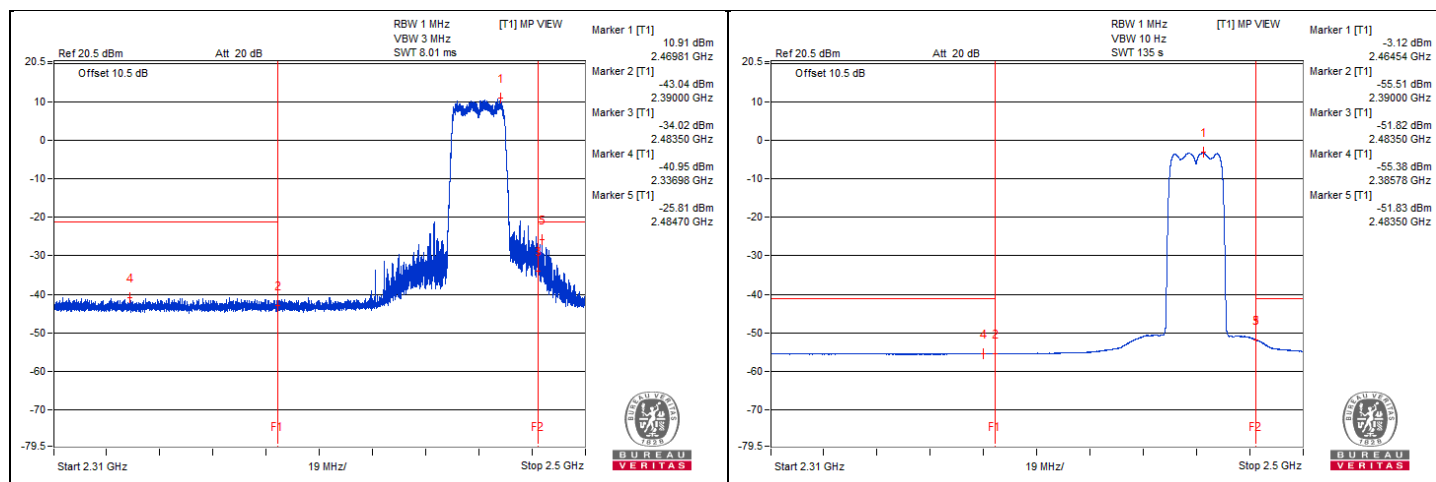


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2336.98	57.49 PK	74	-16.51	-40.95	3.18	-37.77
2	2385.78	43.06 AV	54	-10.94	-55.38	3.18	-52.20
3	2484.7	72.63 PK	74	-1.37	-25.81	3.18	-22.63
4	2483.51	46.58 AV	54	-7.42	-51.86	3.18	-48.68

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



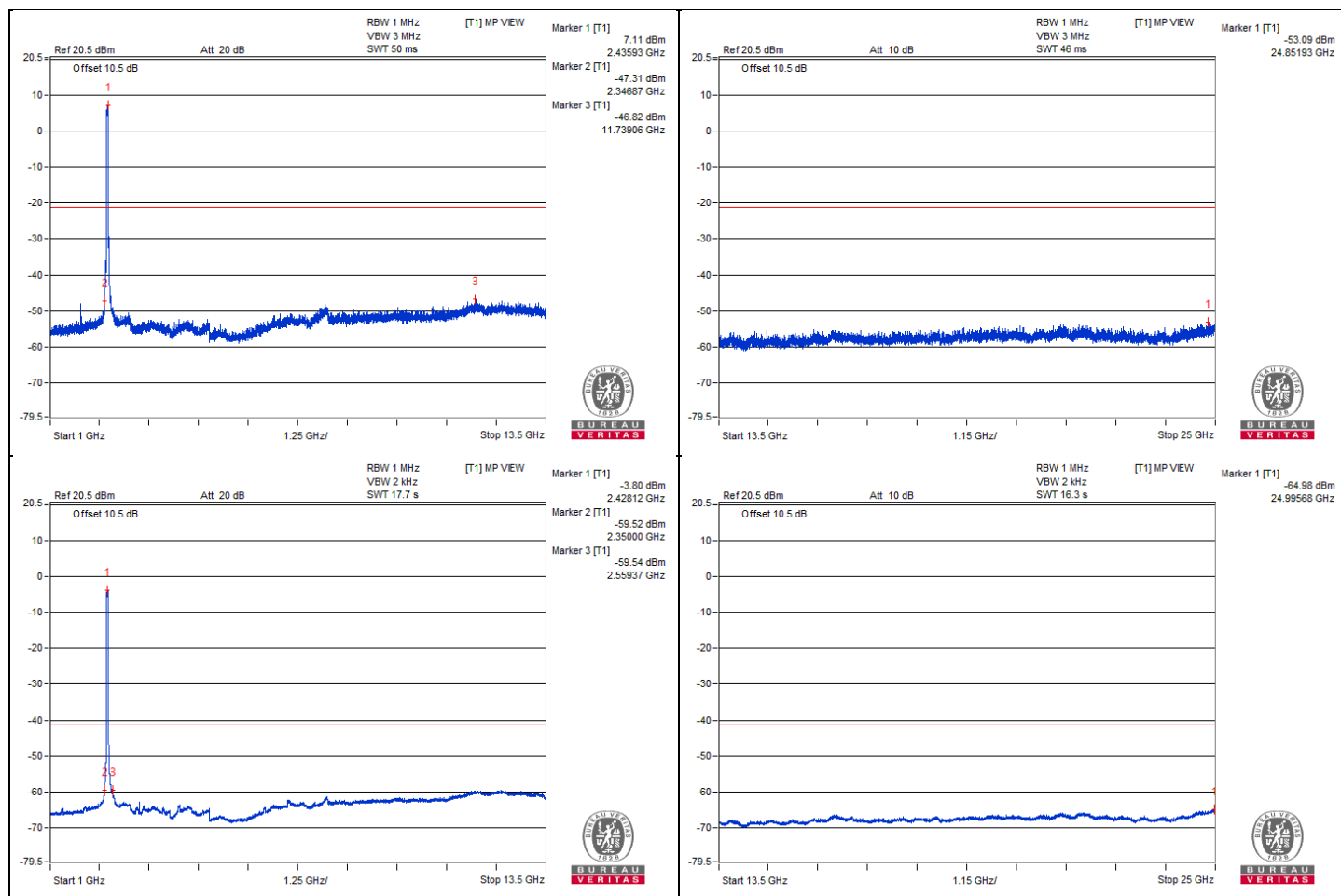
802.11ax (HE40) - Channel 3

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4965.62	48.81 PK	74	-25.19	-52.27	5.825	-46.45
2	4954.68	35.99 AV	54	-18.01	-65.09	5.825	-59.27
3	7278.12	49.97 PK	74	-24.03	-51.11	5.825	-45.29
4	7384.37	38.23 AV	54	-15.77	-62.85	5.825	-57.03
5	11739.06	54.26 PK	74	-19.74	-46.82	5.825	-41.00
6	11739.06	40.99 AV	54	-13.01	-60.09	5.825	-54.27

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

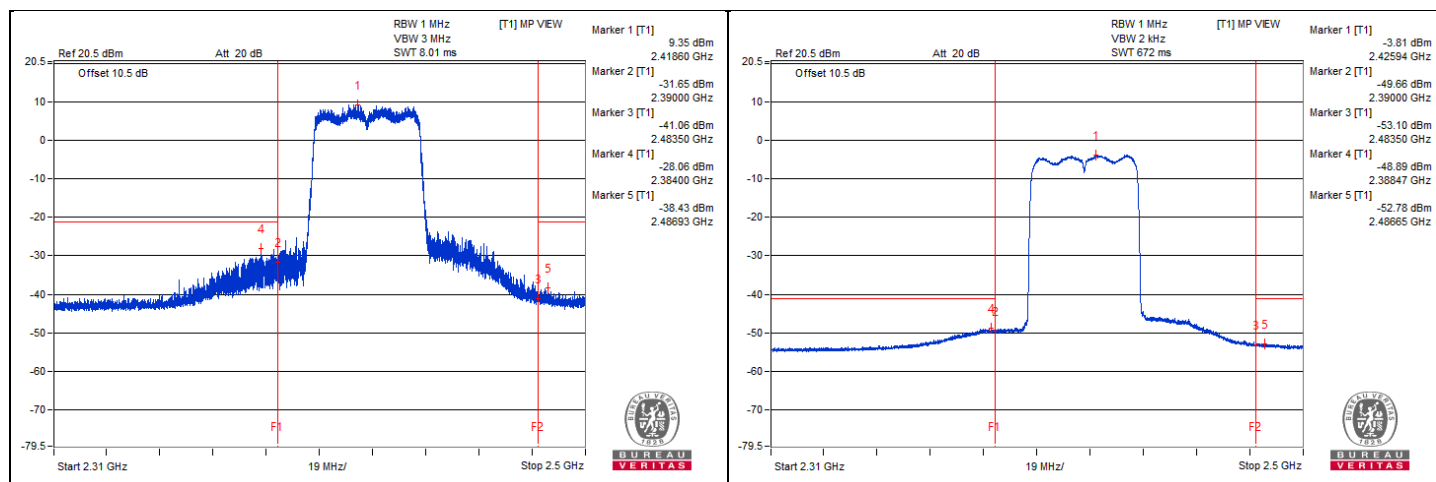


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2384	70.38 PK	74	-3.62	-28.06	3.18	-24.88
2	2388.47	49.55 AV	54	-4.45	-48.89	3.18	-45.71
3	2486.93	60.01 PK	74	-13.99	-38.43	3.18	-35.25
4	2486.65	45.66 AV	54	-8.34	-52.78	3.18	-49.60

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



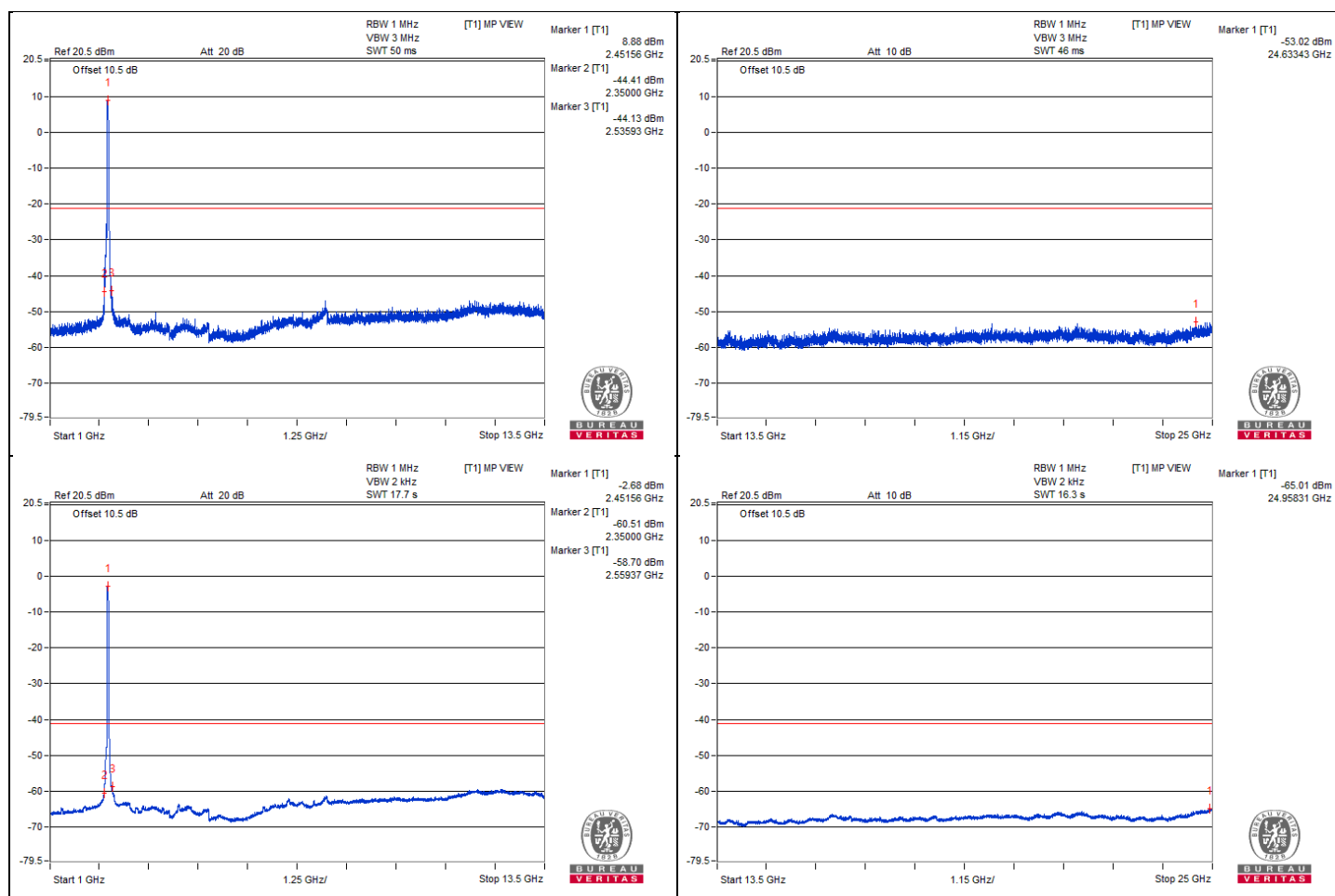
802.11ax (HE40) - Channel 6

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4957.81	48.05 PK	74	-25.95	-53.03	5.825	-47.21
2	4982.81	36.18 AV	54	-17.82	-64.9	5.825	-59.08
3	7385.93	50.81 PK	74	-23.19	-50.27	5.825	-44.45
4	7389.06	38.18 AV	54	-15.82	-62.9	5.825	-57.08

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

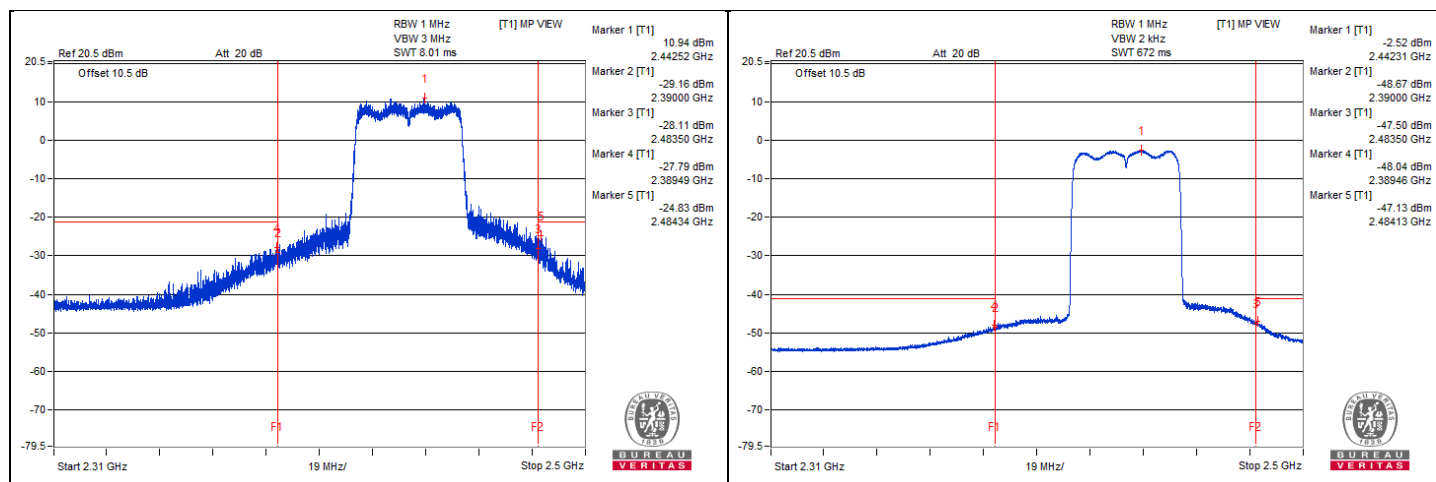


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2389.49	70.65 PK	74	-3.35	-27.79	3.18	-24.61
2	2389.46	50.4 AV	54	-3.6	-48.04	3.18	-44.86
3	2484.34	73.61 PK	74	-0.39	-24.83	3.18	-21.65
4	2484.13	51.31 AV	54	-2.69	-47.13	3.18	-43.95

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



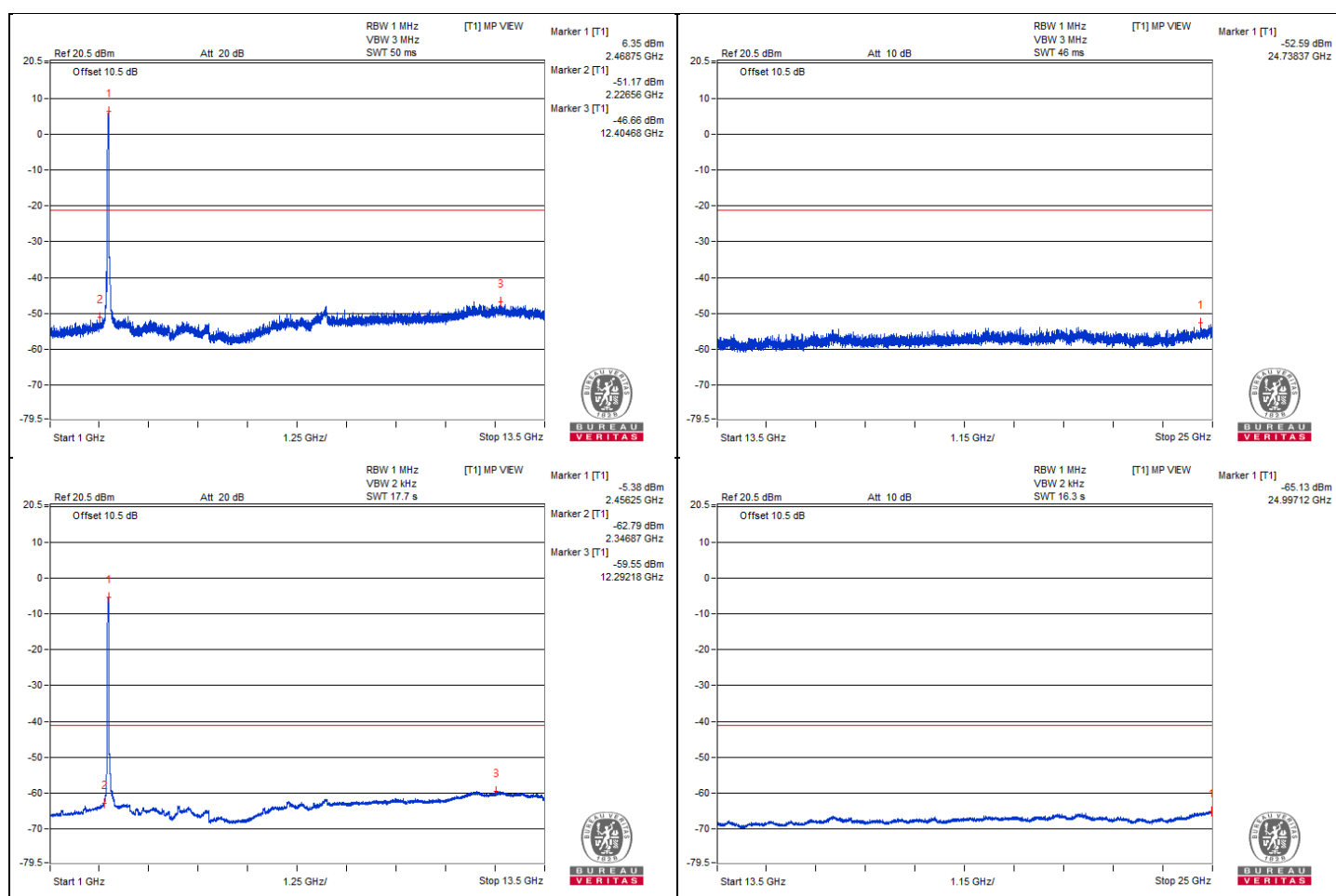
802.11ax (HE40) - Channel 9

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4995.31	48.22 PK	74	-25.78	-52.86	5.825	-47.04
2	4925	36.22 AV	54	-17.78	-64.86	5.825	-59.04
3	7351.56	49.87 PK	74	-24.13	-51.21	5.825	-45.39
4	7359.37	38.36 AV	54	-15.64	-62.72	5.825	-56.90

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

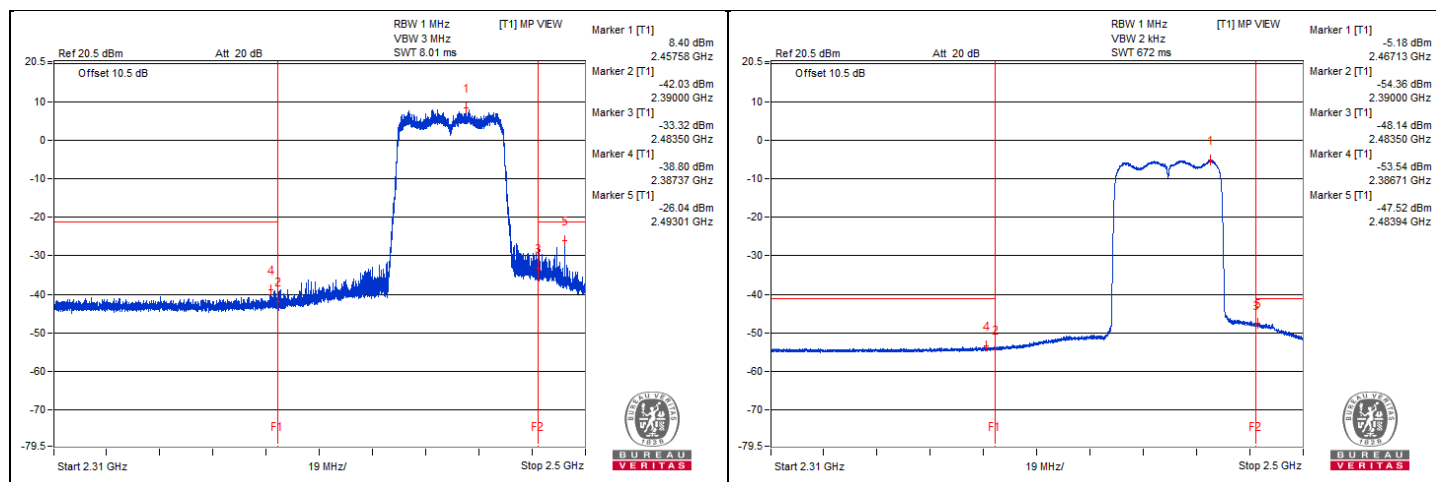


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2387.37	59.64 PK	74	-14.36	-38.8	3.18	-35.62
2	2386.71	44.9 AV	54	-9.1	-53.54	3.18	-50.36
3	2493.01	72.4 PK	74	-1.6	-26.04	3.18	-22.86
4	2483.94	50.92 AV	54	-3.08	-47.52	3.18	-44.34

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



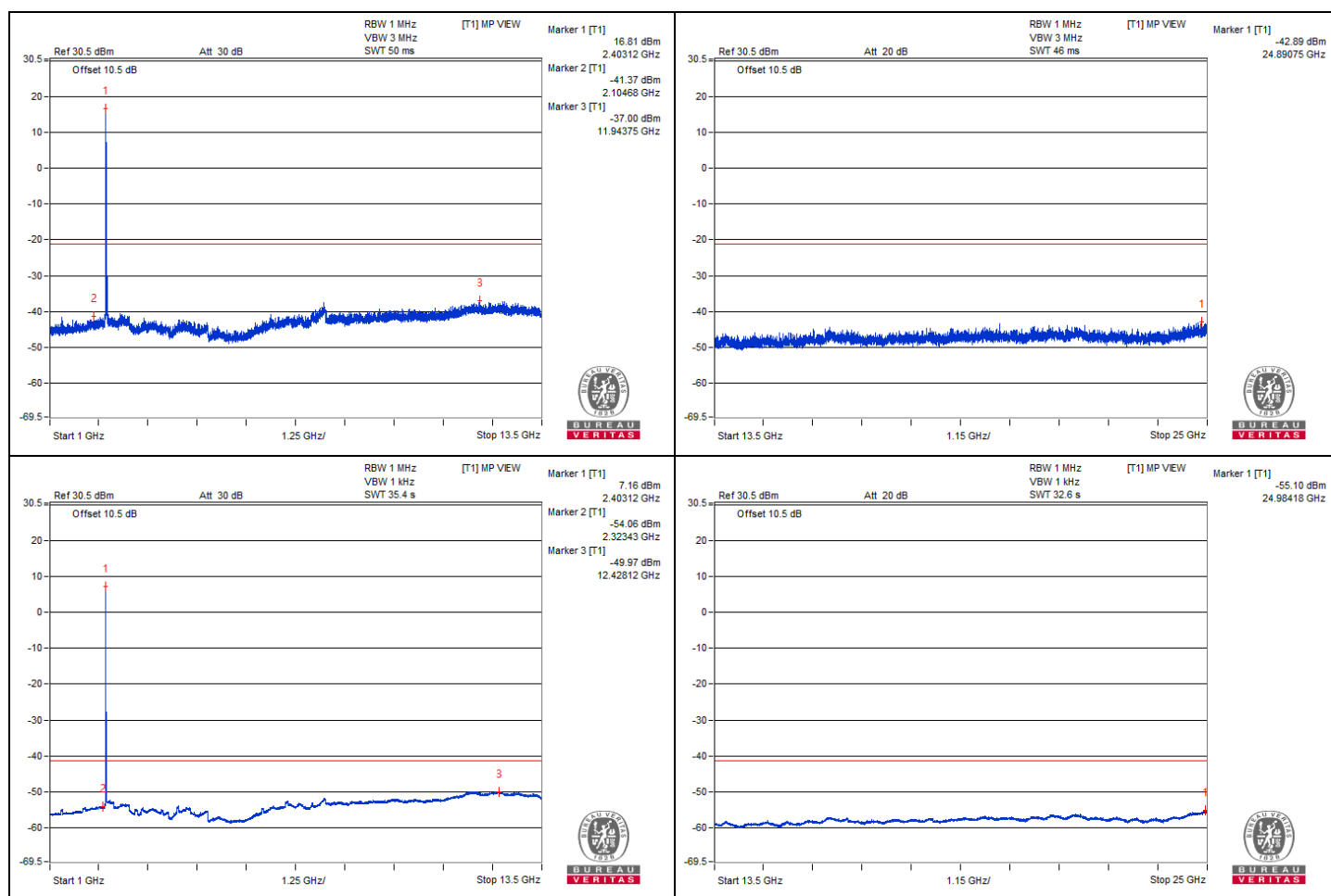
20 MHz Preamble 802.11ax (RU26) - Channel 1

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4975	58.02 PK	74	-15.98	-43.06	5.825	-37.24
2	4975	45.73 AV	54	-8.27	-55.35	5.825	-49.53
3	7332.81	60.21 PK	74	-13.79	-40.87	5.825	-35.05
4	7328.12	47.89 AV	54	-6.11	-53.19	5.825	-47.37

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

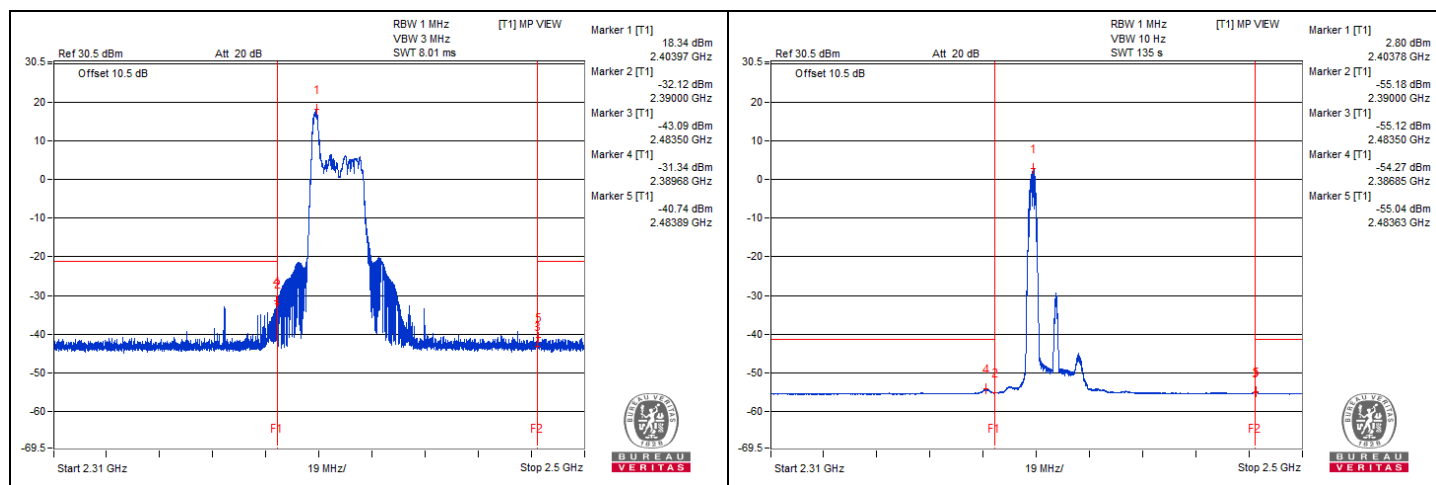


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2389.68	67.1 PK	74	-6.9	-31.34	3.18	-28.16
2	2386.85	44.17 AV	54	-9.83	-54.27	3.18	-51.09
3	2483.89	57.7 PK	74	-16.3	-40.74	3.18	-37.56
4	2483.63	43.4 AV	54	-10.6	-55.04	3.18	-51.86

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



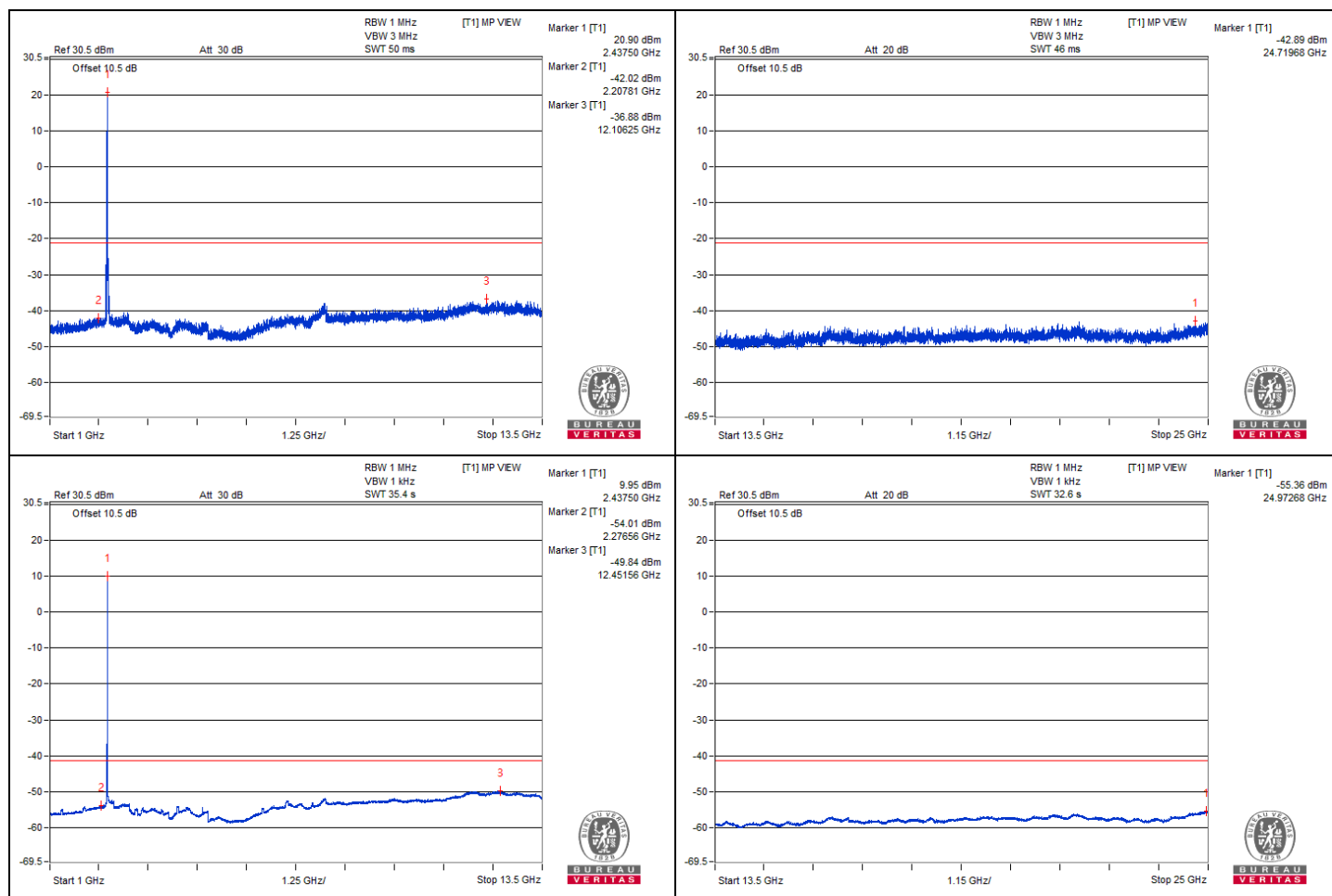
20 MHz Preamble 802.11ax (RU26) - Channel 6

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4964.06	57.98 PK	74	-16.02	-43.1	5.825	-37.28
2	4873.43	46.58 AV	54	-7.42	-54.5	5.825	-48.68
3	7425	59.81 PK	74	-14.19	-41.27	5.825	-35.45
4	7334.37	47.8 AV	54	-6.2	-53.28	5.825	-47.46
5	12106.25	64.2 PK	74	-9.8	-36.88	5.825	-31.06
6	12106.25	50.19 AV	54	-3.81	-50.89	5.825	-45.07

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

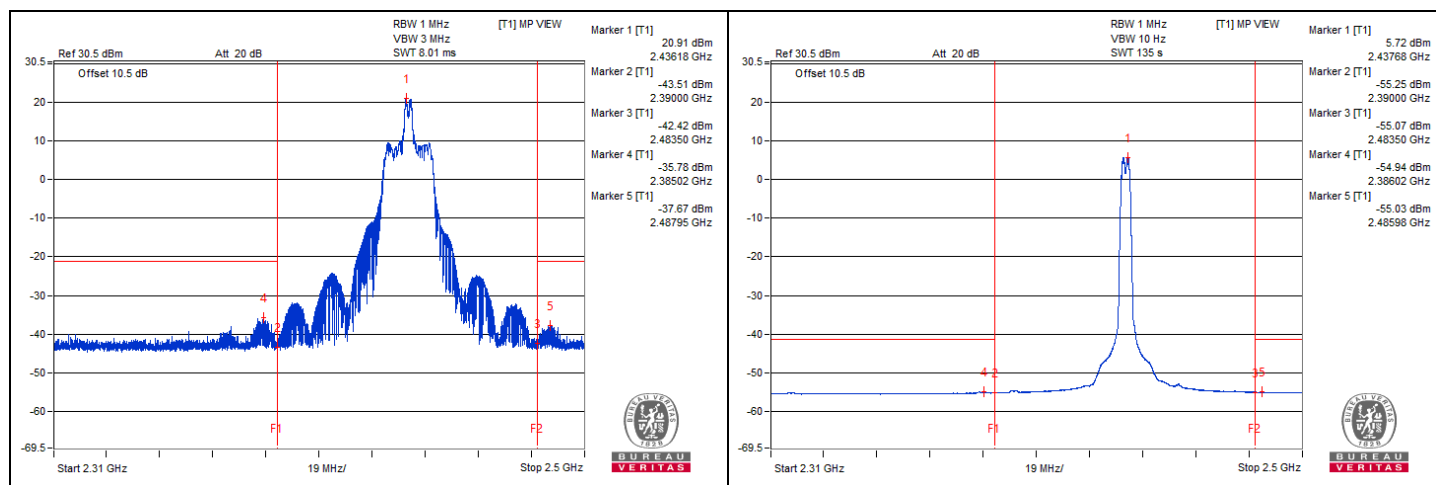


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2385.02	62.66 PK	74	-11.34	-35.78	3.18	-32.60
2	2386.02	43.5 AV	54	-10.5	-54.94	3.18	-51.76
3	2487.95	60.77 PK	74	-13.23	-37.67	3.18	-34.49
4	2485.29	43.41 AV	54	-10.59	-55.03	3.18	-51.85

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

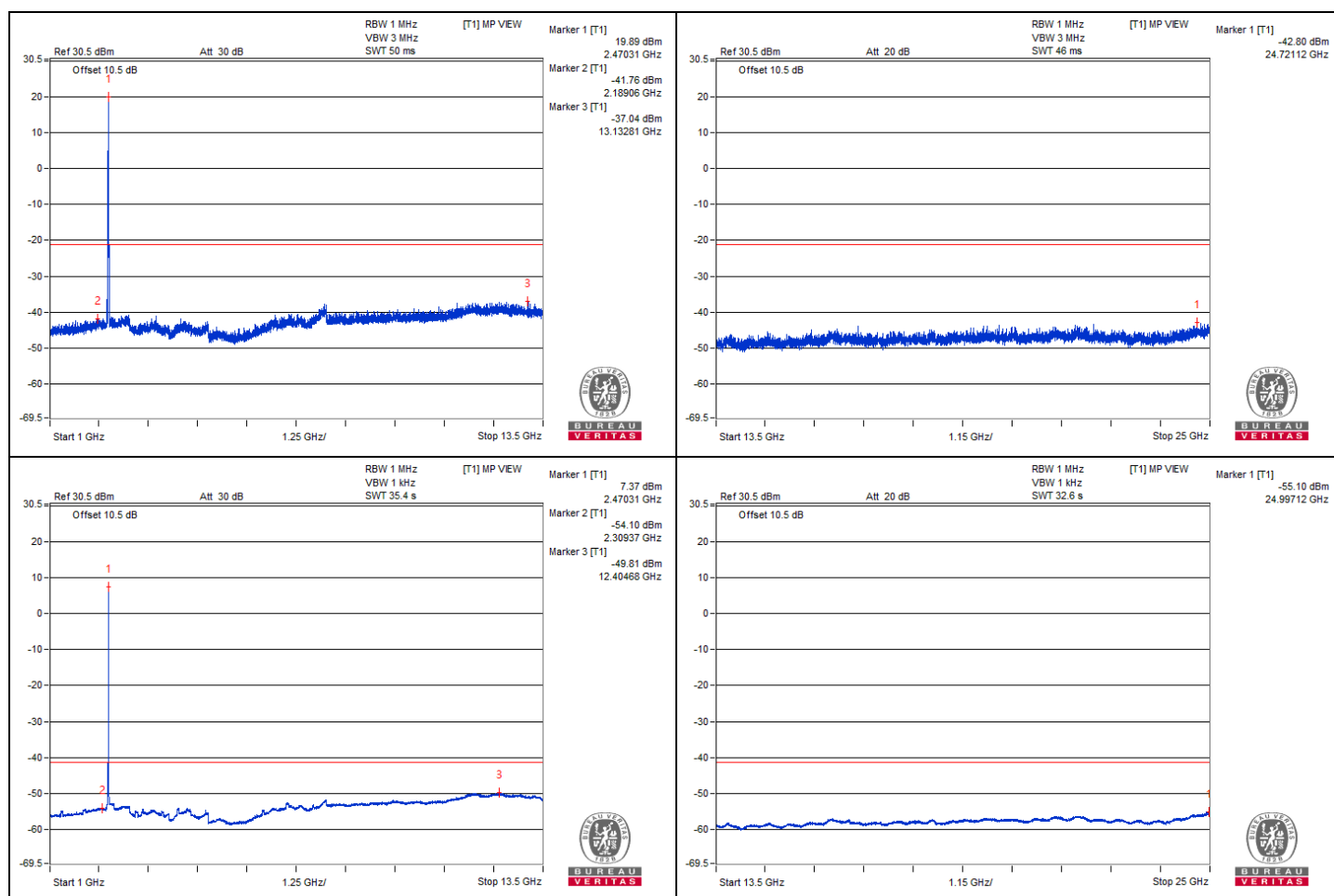


20 MHz Preamble 802.11ax (RU26) - Channel 11 Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4975	58.37 PK	74	-15.63	-42.71	5.825	-36.89
2	4940.62	46.49 AV	54	-7.51	-54.59	5.825	-48.77
3	7273.43	60.41 PK	74	-13.59	-40.67	5.825	-34.85
4	7348.43	47.75 AV	54	-6.25	-53.33	5.825	-47.51

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

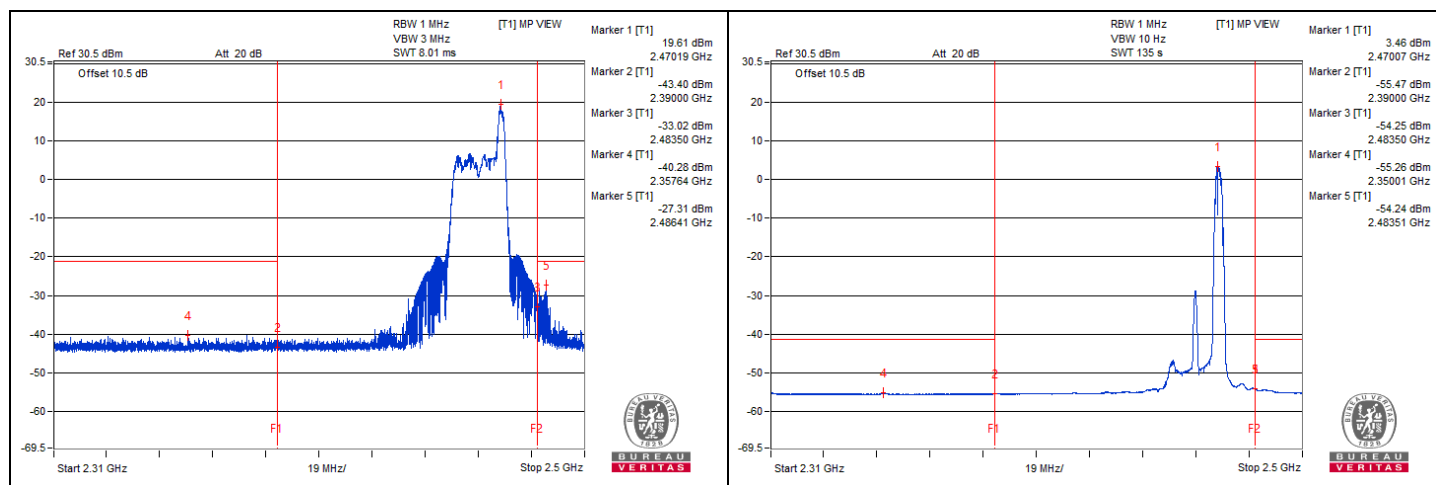


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2357.64	58.16 PK	74	-15.84	-40.28	3.18	-37.10
2	2350.01	43.18 AV	54	-10.82	-55.26	3.18	-52.08
3	2486.41	71.13 PK	74	-2.87	-27.31	3.18	-24.13
4	2483.51	44.2 AV	54	-9.8	-54.24	3.18	-51.06

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



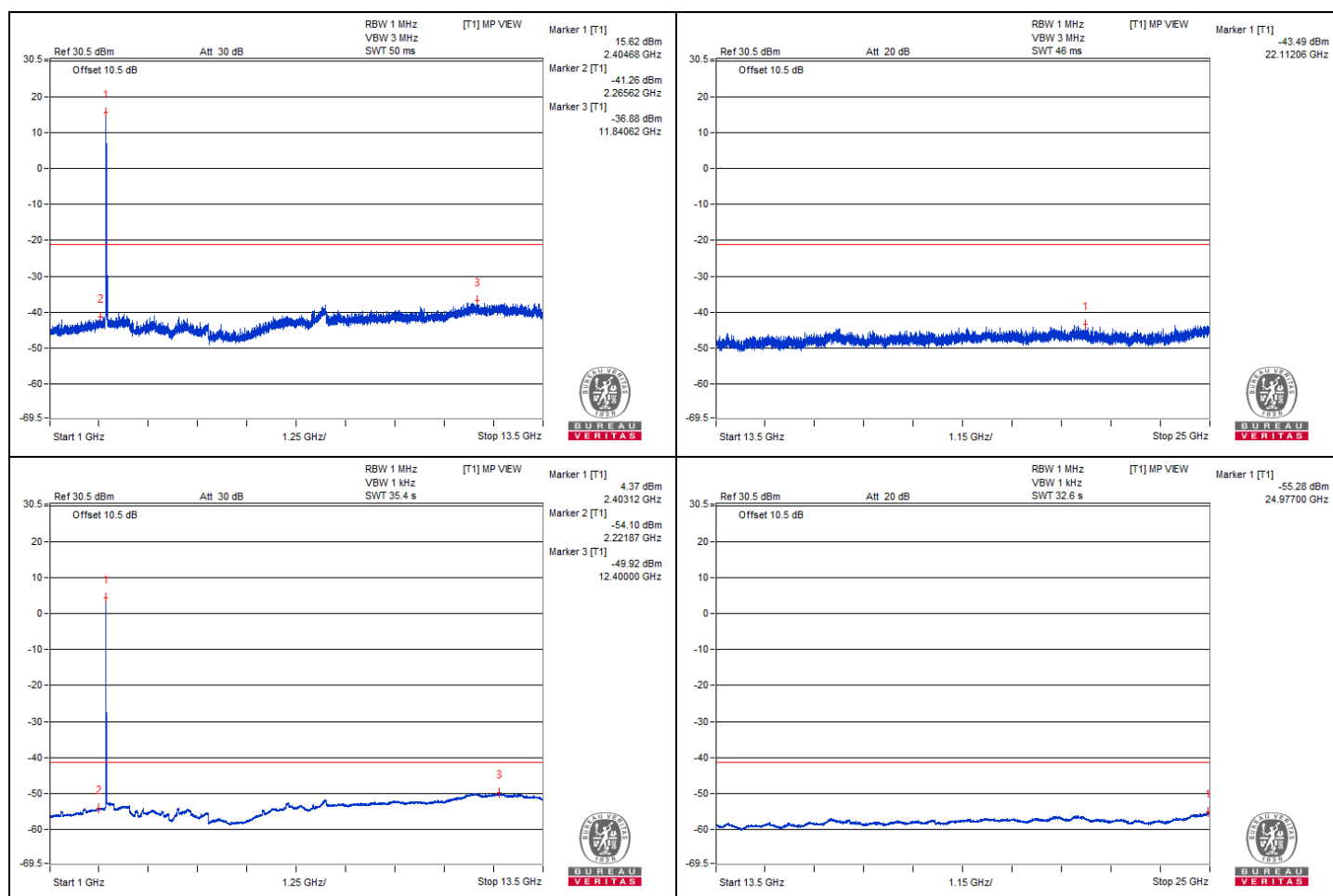
20 MHz Preamble 802.11ax (RU52) - Channel 1

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	5000	57.87 PK	74	-16.13	-43.21	5.825	-37.39
2	4987.5	45.64 AV	54	-8.36	-55.44	5.825	-49.62
3	7381.25	60.13 PK	74	-13.87	-40.95	5.825	-35.13
4	7337.5	47.8 AV	54	-6.2	-53.28	5.825	-47.46

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

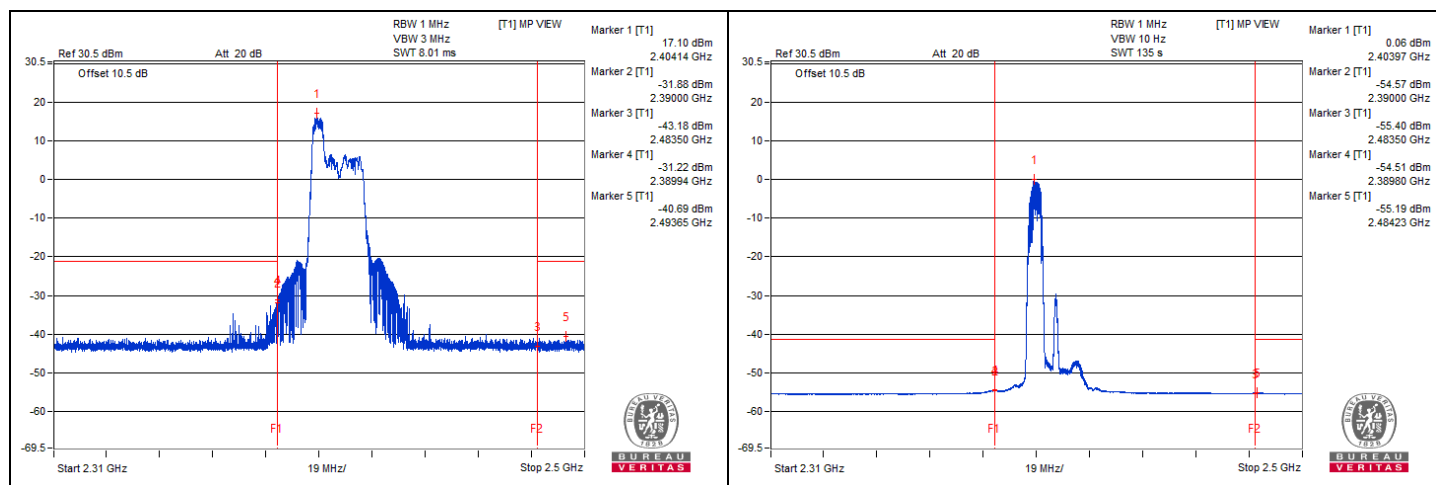


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2389.94	67.22 PK	74	-6.78	-31.22	3.18	-28.04
2	2389.8	43.93 AV	54	-10.07	-54.51	3.18	-51.33
3	2493.65	57.75 PK	74	-16.25	-40.69	3.18	-37.51
4	2484.23	43.25 AV	54	-10.75	-55.19	3.18	-52.01

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



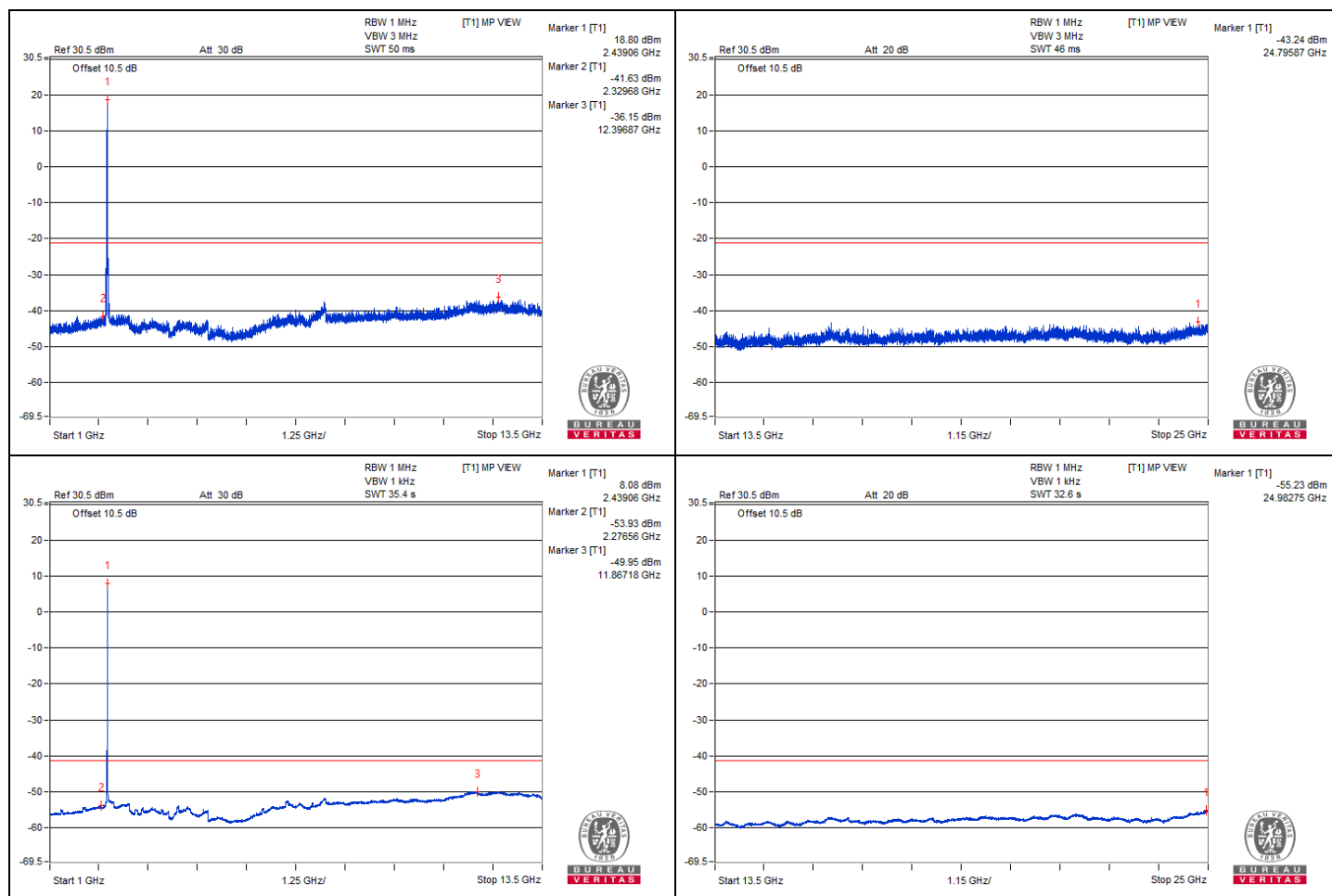
20 MHz Preamble 802.11ax (RU52) - Channel 6

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4987.5	58.36 PK	74	-15.64	-42.72	5.825	-36.90
2	4879.68	46.16 AV	54	-7.84	-54.92	5.825	-49.10
3	7248.43	61.31 PK	74	-12.69	-39.77	5.825	-33.95
4	7331.25	47.85 AV	54	-6.15	-53.23	5.825	-47.41
5	12396.87	64.93 PK	74	-9.07	-36.15	5.825	-30.33
6	12396.87	50.86 AV	54	-3.14	-50.22	5.825	-44.40

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

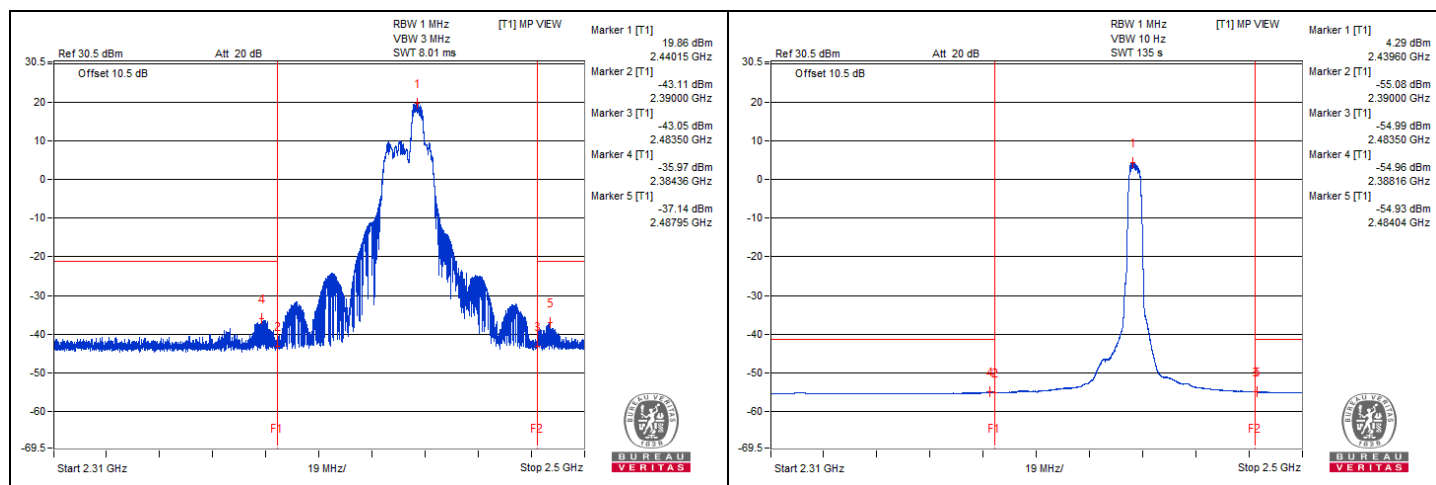


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2384.36	62.47 PK	74	-11.53	-35.97	3.18	-32.79
2	2388.16	43.48 AV	54	-10.52	-54.96	3.18	-51.78
3	2487.95	61.3 PK	74	-12.7	-37.14	3.18	-33.96
4	2484.04	43.51 AV	54	-10.49	-54.93	3.18	-51.75

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



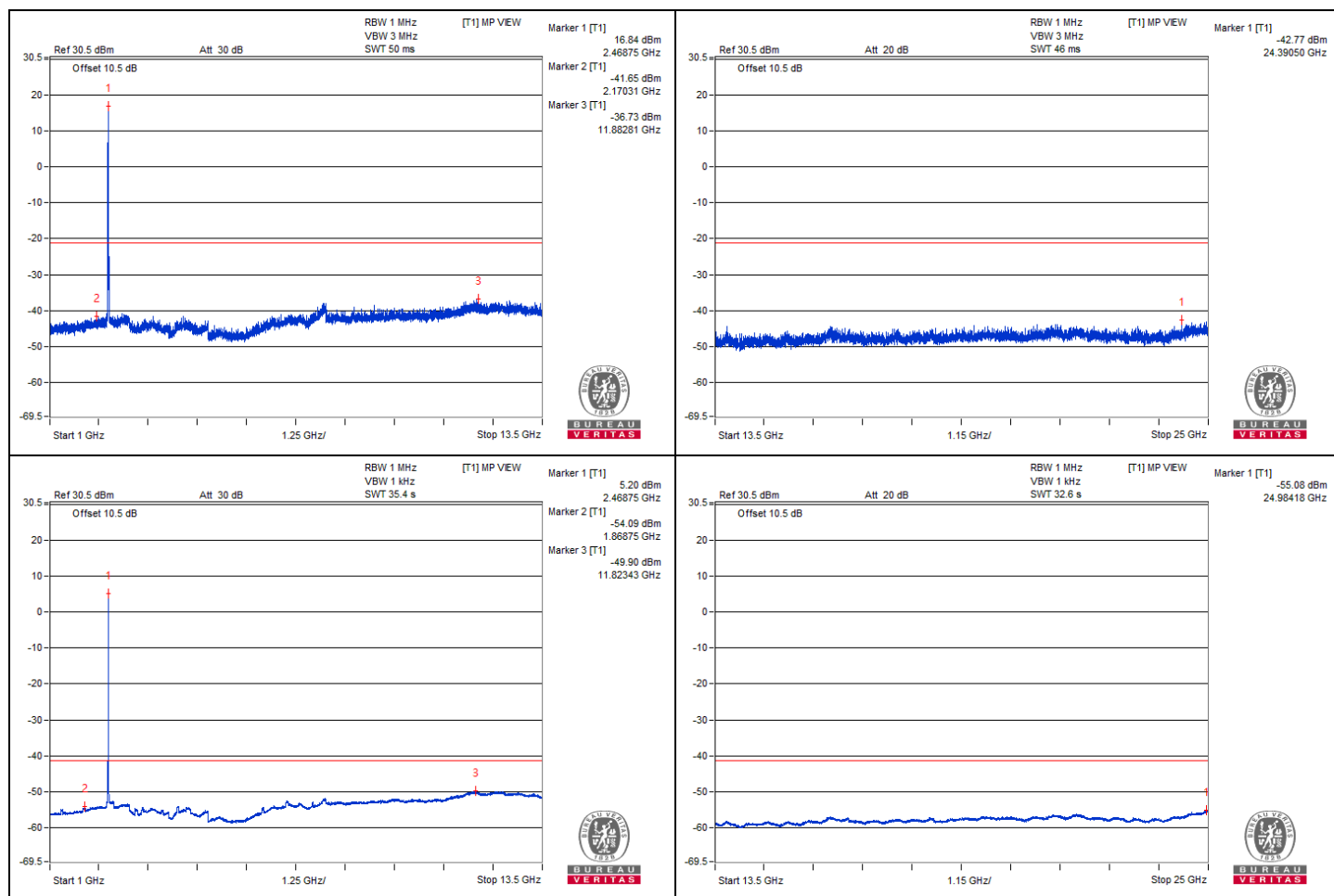
20 MHz Preamble 802.11ax (RU52) - Channel 11

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4940.62	58.31 PK	74	-15.69	-42.77	5.825	-36.95
2	4939.06	46 AV	54	-8	-55.08	5.825	-49.26
3	7354.68	60.06 PK	74	-13.94	-41.02	5.825	-35.20
4	7334.37	47.93 AV	54	-6.07	-53.15	5.825	-47.33
5	24390.5	58.31 PK	74	-15.69	-42.77	5.825	-36.95
6	24389.06	43.75 AV	54	-10.25	-57.33	5.825	-51.51

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

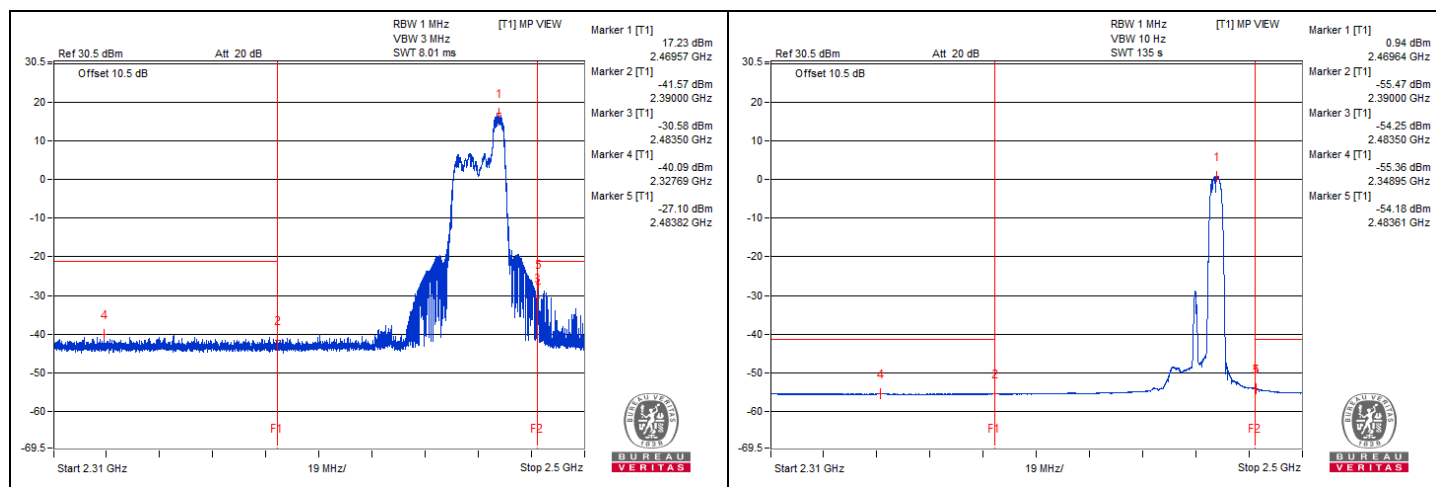


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2327.69	58.35 PK	74	-15.65	-40.09	3.18	-36.91
2	2348.95	43.08 AV	54	-10.92	-55.36	3.18	-52.18
3	2483.82	71.34 PK	74	-2.66	-27.1	3.18	-23.92
4	2483.61	44.26 AV	54	-9.74	-54.18	3.18	-51.00

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



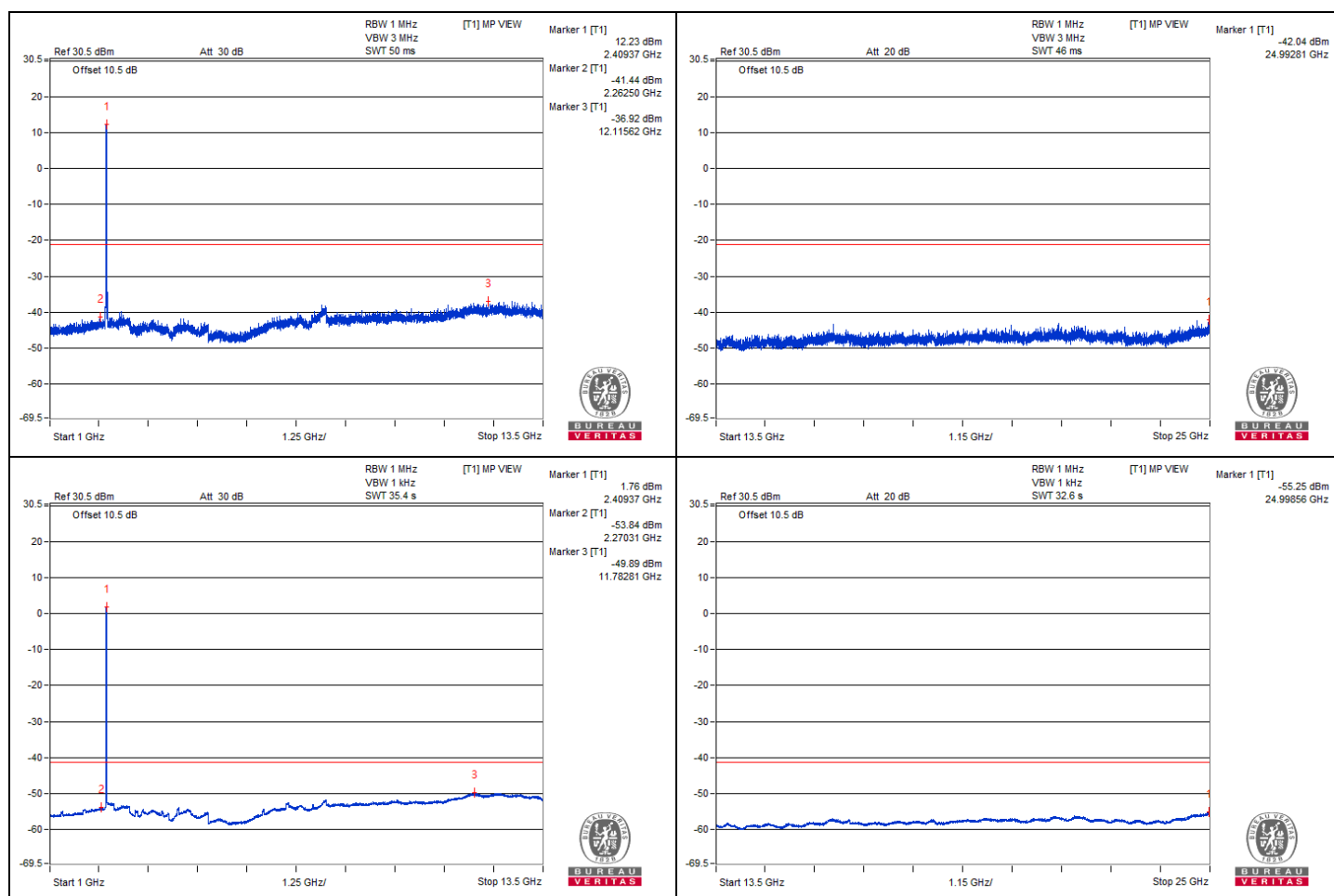
20 MHz Preamble 802.11ax (RU106) - Channel 1

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4920.31	58.14 PK	74	-15.86	-42.94	5.825	-37.12
2	4971.87	45.86 AV	54	-8.14	-55.22	5.825	-49.40
3	7290.62	61 PK	74	-13	-40.08	5.825	-34.26
4	7337.5	47.8 AV	54	-6.2	-53.28	5.825	-47.46

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

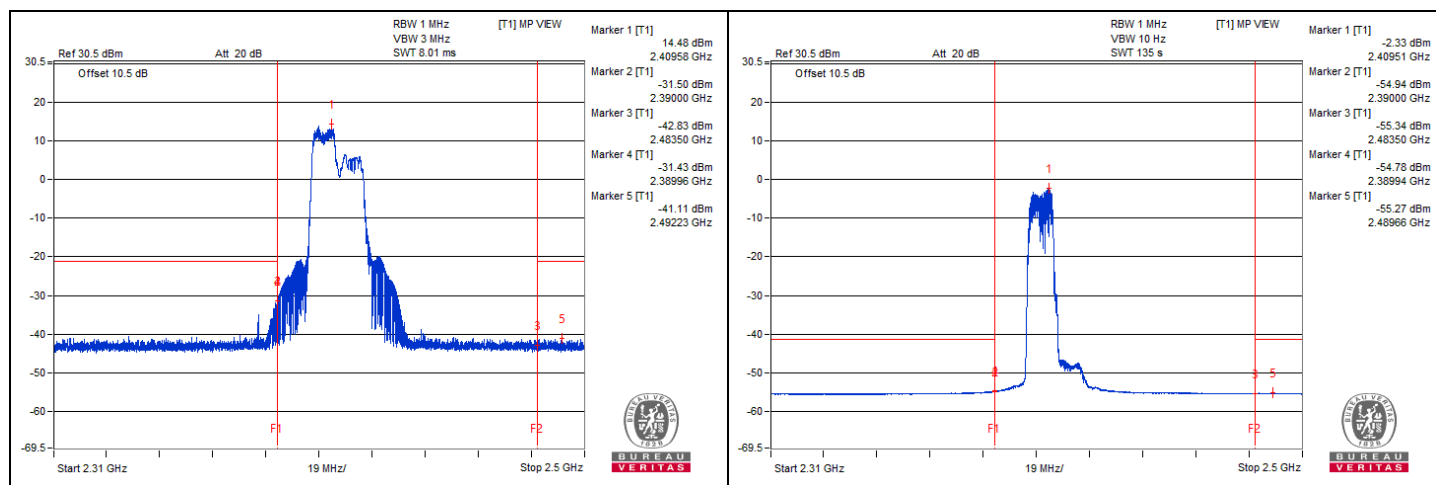


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2389.96	67.01 PK	74	-6.99	-31.43	3.18	-28.25
2	2389.94	43.66 AV	54	-10.34	-54.78	3.18	-51.60
3	2492.23	57.33 PK	74	-16.67	-41.11	3.18	-37.93
4	2489.66	43.17 AV	54	-10.83	-55.27	3.18	-52.09

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



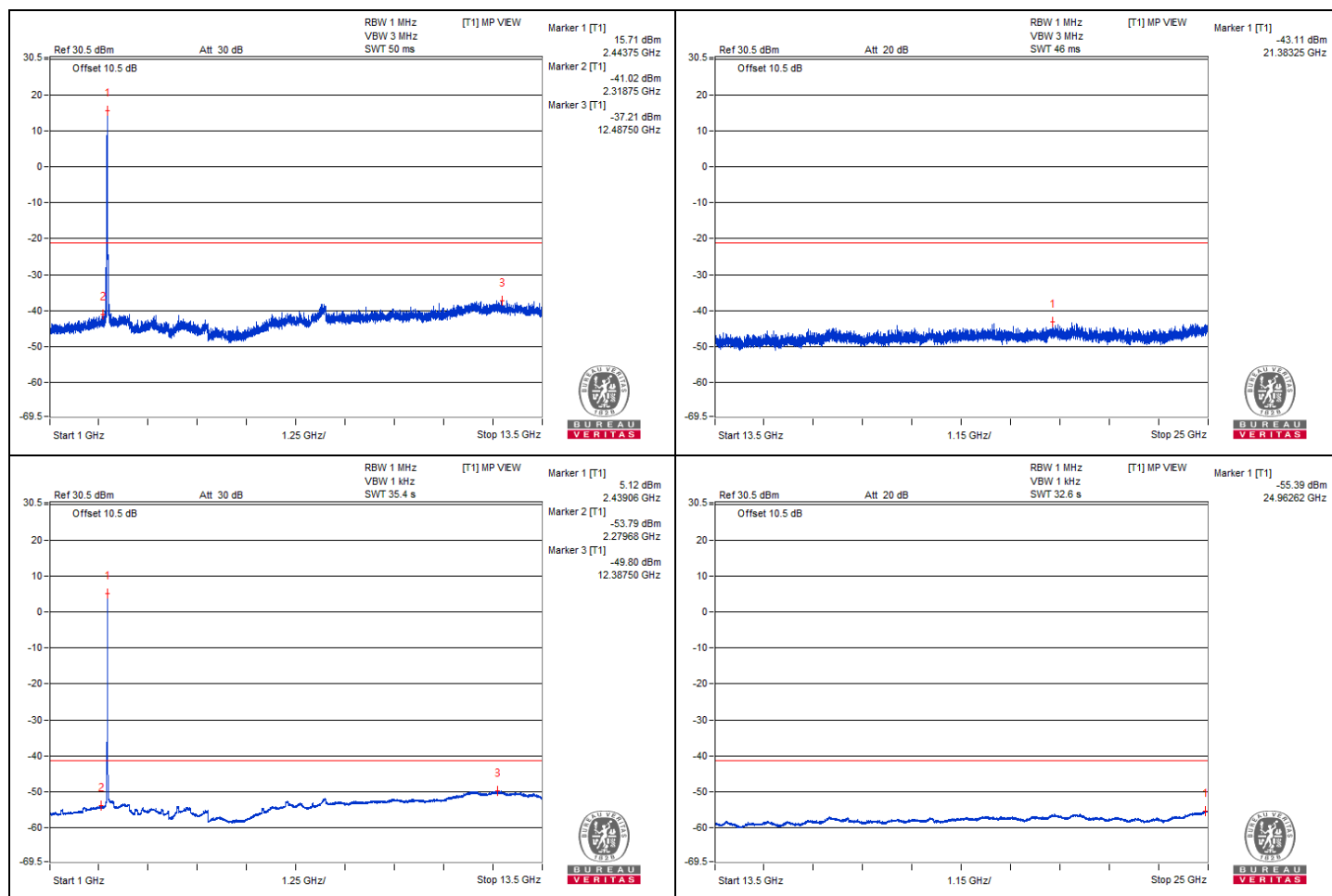
20 MHz Preamble 802.11ax (RU106) - Channel 6

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4934.37	58.38 PK	74	-15.62	-42.7	5.825	-36.88
2	4992.18	46.01 AV	54	-7.99	-55.07	5.825	-49.25
3	7326.56	60.65 PK	74	-13.35	-40.43	5.825	-34.61
4	7356.25	47.9 AV	54	-6.1	-53.18	5.825	-47.36
5	21383.25	57.97 PK	74	-16.03	-43.11	5.825	-37.29
6	21381.81	44.61 AV	54	-9.39	-56.47	5.825	-50.65

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

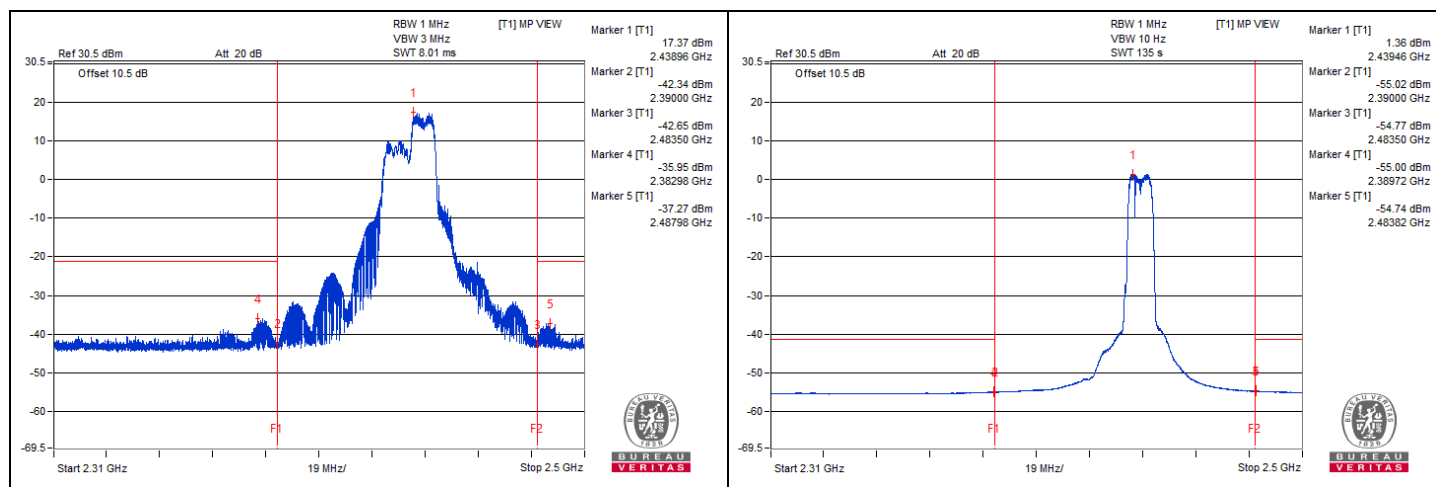


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2382.98	62.49 PK	74	-11.51	-35.95	3.18	-32.77
2	2389.72	43.44 AV	54	-10.56	-55	3.18	-51.82
3	2487.98	61.17 PK	74	-12.83	-37.27	3.18	-34.09
4	2483.82	43.7 AV	54	-10.3	-54.74	3.18	-51.56

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



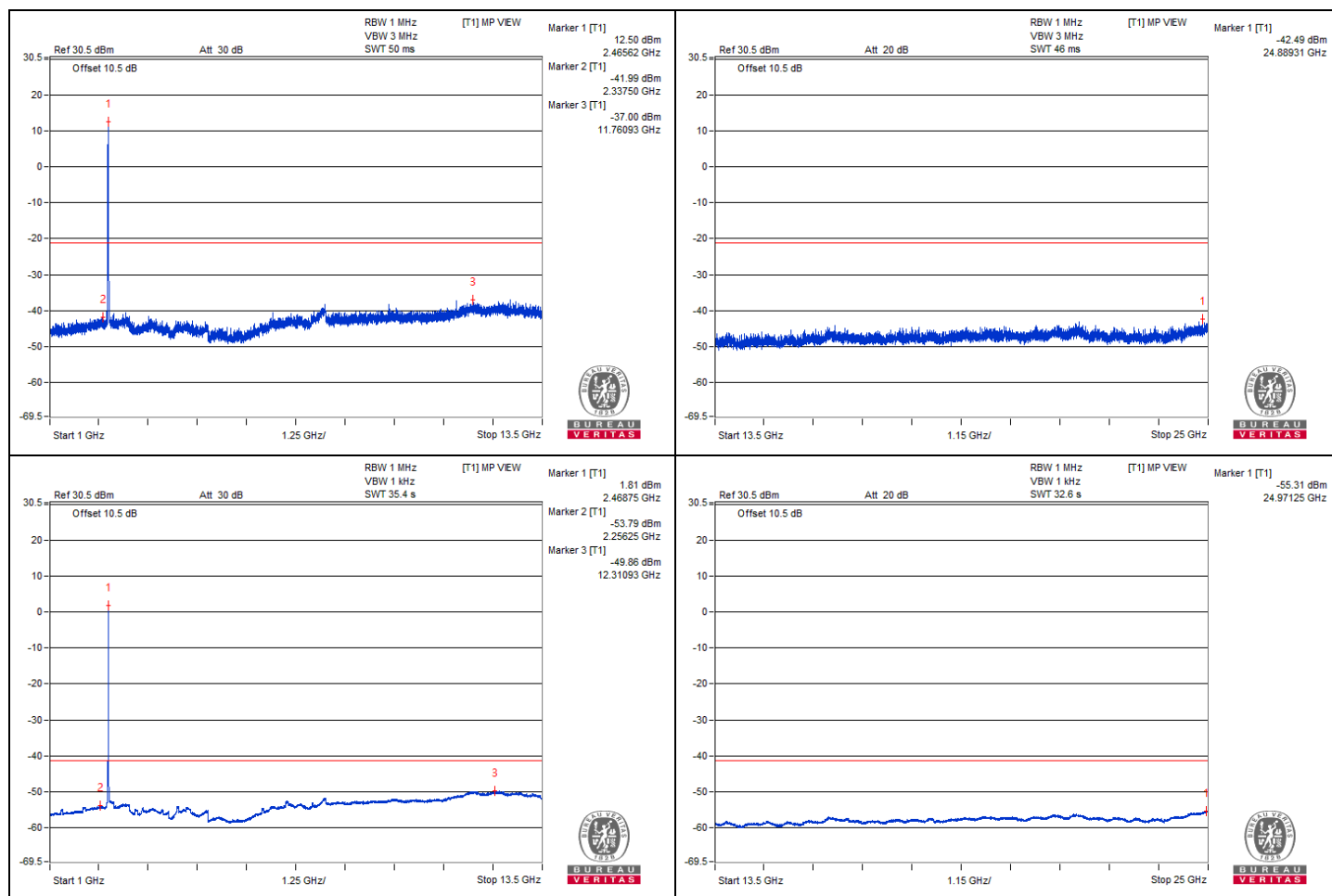
20 MHz Preamble 802.11ax (RU106) - Channel 11

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	4929.68	57.83 PK	74	-16.17	-43.25	5.825	-37.43
2	4954.68	45.88 AV	54	-8.12	-55.2	5.825	-49.38
3	7282.81	59.87 PK	74	-14.13	-41.21	5.825	-35.39
4	7351.56	47.8 AV	54	-6.2	-53.28	5.825	-47.46
5	11760.93	64.08 PK	74	-9.92	-37	5.825	-31.18
6	11759.37	50.92 AV	54	-3.08	-50.16	5.825	-44.34

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.

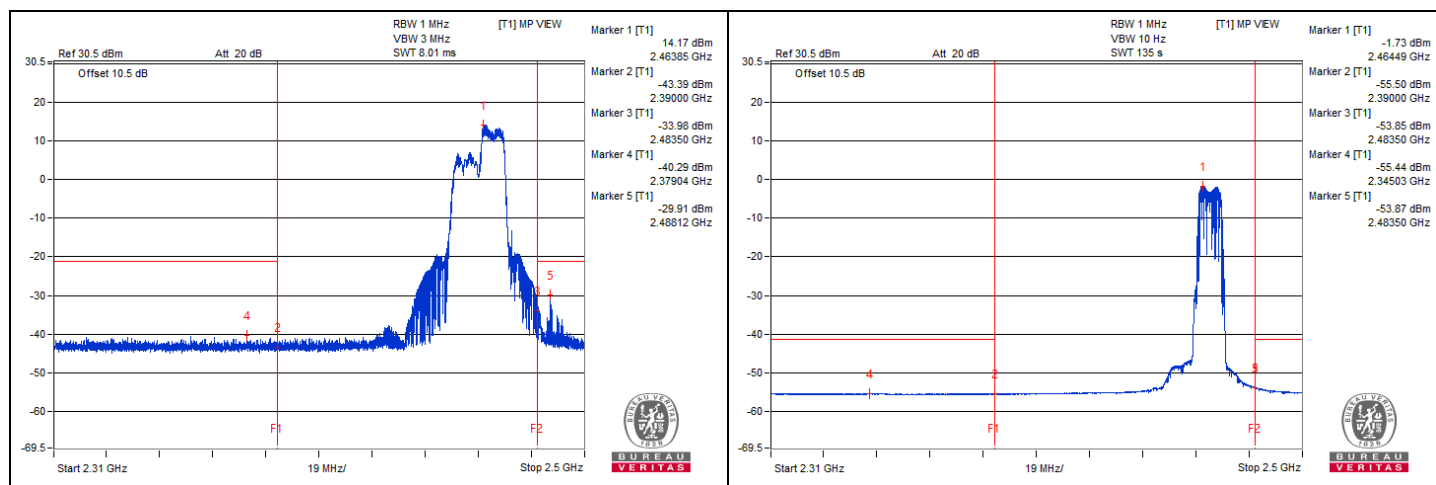


Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2379.04	58.15 PK	74	-15.85	-40.29	3.18	-37.11
2	2311.11	43.01 AV	54	-10.99	-55.43	3.18	-52.25
3	2488.12	68.53 PK	74	-5.47	-29.91	3.18	-26.73
4	2483.51	44.53 AV	54	-9.47	-53.91	3.18	-50.73

Remarks:

1. Margin value = Emission Level – Limit value
2. The other emission levels were very low against the limit.



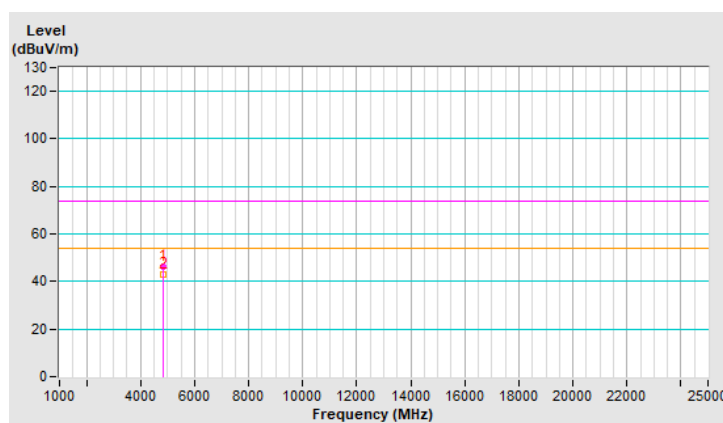
Mode B

RF Mode	802.11b	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4824.00	46.4 PK	74.0	-27.6	1.06 H	66	43.1	3.3
2	4824.00	42.9 AV	54.0	-11.1	1.06 H	66	39.6	3.3

Remarks:

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

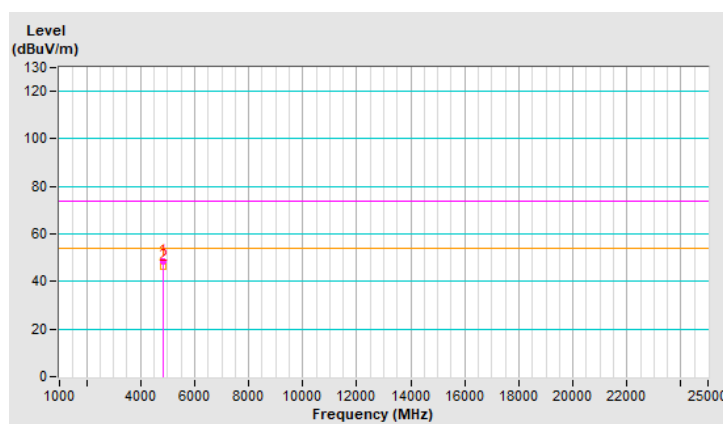


RF Mode	802.11b	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4824.00	48.3 PK	74.0	-25.7	1.07 V	348	45.0	3.3
2	4824.00	46.5 AV	54.0	-7.5	1.07 V	348	43.2	3.3

Remarks:

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

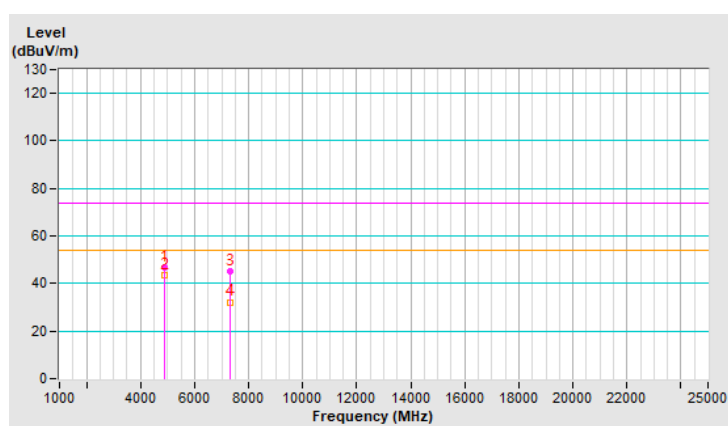


RF Mode	802.11b	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4874.00	46.7 PK	74.0	-27.3	1.13 H	67	43.3	3.4
2	4874.00	43.4 AV	54.0	-10.6	1.13 H	67	40.0	3.4
3	7311.00	45.3 PK	74.0	-28.7	1.54 H	193	35.2	10.1
4	7311.00	32.2 AV	54.0	-21.8	1.54 H	193	22.1	10.1

Remarks:

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

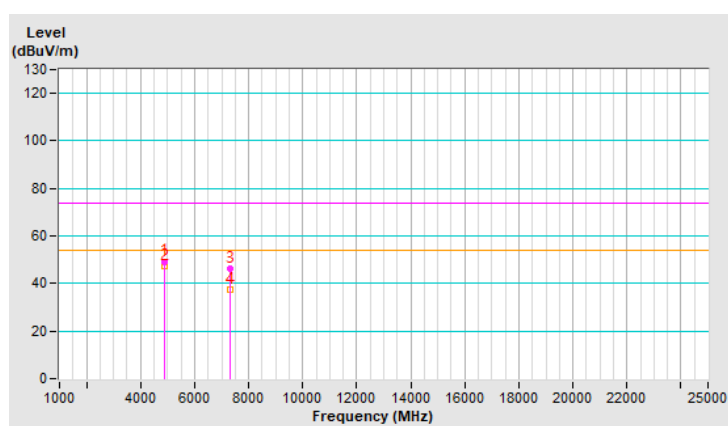


RF Mode	802.11b	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4874.00	49.3 PK	74.0	-24.7	1.00 V	339	45.9	3.4
2	4874.00	47.2 AV	54.0	-6.8	1.00 V	339	43.8	3.4
3	7311.00	46.2 PK	74.0	-27.8	1.02 V	156	36.1	10.1
4	7311.00	37.4 AV	54.0	-16.6	1.02 V	156	27.3	10.1

Remarks:

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

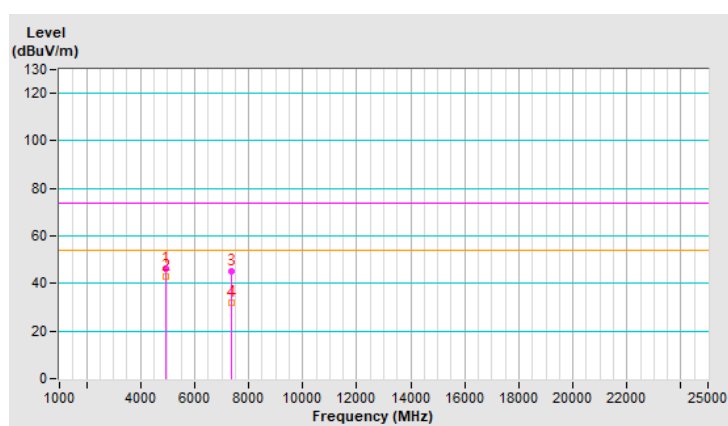


RF Mode	802.11b	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4924.00	46.1 PK	74.0	-27.9	1.08 H	74	42.6	3.5
2	4924.00	42.9 AV	54.0	-11.1	1.08 H	74	39.4	3.5
3	7386.00	45.2 PK	74.0	-28.8	1.49 H	203	35.1	10.1
4	7386.00	32.0 AV	54.0	-22.0	1.49 H	203	21.9	10.1

Remarks:

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

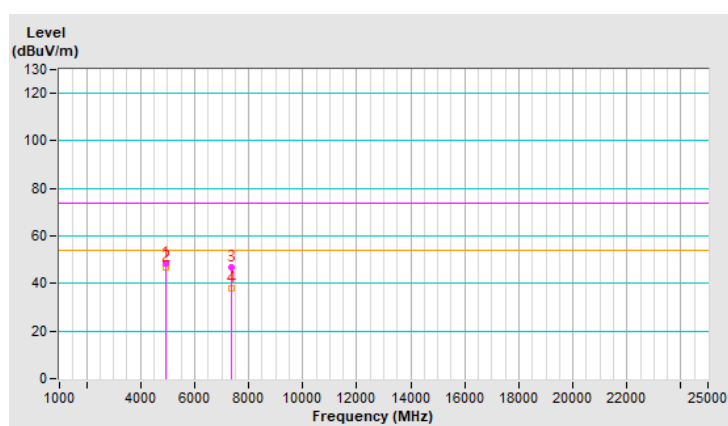


RF Mode	802.11b	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4924.00	48.5 PK	74.0	-25.5	1.03 V	337	45.0	3.5
2	4924.00	46.7 AV	54.0	-7.3	1.03 V	337	43.2	3.5
3	7386.00	46.8 PK	74.0	-27.2	1.02 V	159	36.7	10.1
4	7386.00	37.8 AV	54.0	-16.2	1.02 V	159	27.7	10.1

Remarks:

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

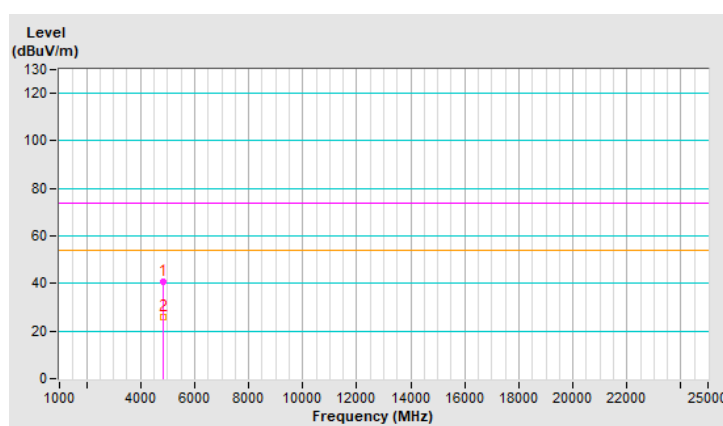


RF Mode	802.11g	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4824.00	40.6 PK	74.0	-33.4	1.09 H	72	37.3	3.3
2	4824.00	25.7 AV	54.0	-28.3	1.09 H	72	22.4	3.3

Remarks:

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

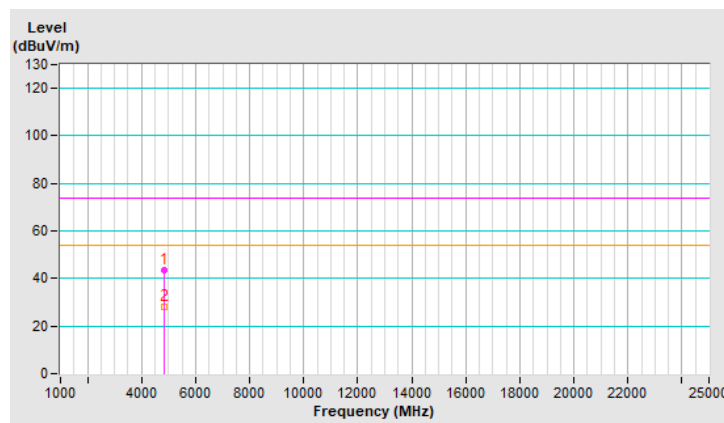


RF Mode	802.11g	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4824.00	43.3 PK	74.0	-30.7	1.12 V	320	40.0	3.3
2	4824.00	28.3 AV	54.0	-25.7	1.12 V	320	25.0	3.3

Remarks:

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

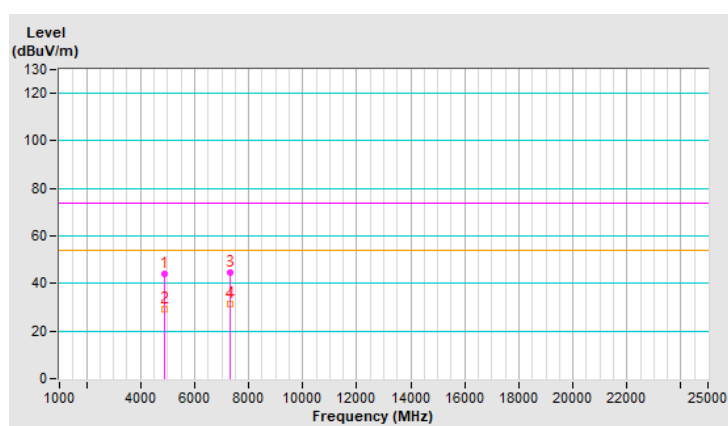


RF Mode	802.11g	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4874.00	44.2 PK	74.0	-29.8	1.06 H	85	40.8	3.4
2	4874.00	29.3 AV	54.0	-24.7	1.06 H	85	25.9	3.4
3	7311.00	44.6 PK	74.0	-29.4	1.47 H	202	34.5	10.1
4	7311.00	31.5 AV	54.0	-22.5	1.47 H	202	21.4	10.1

Remarks:

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

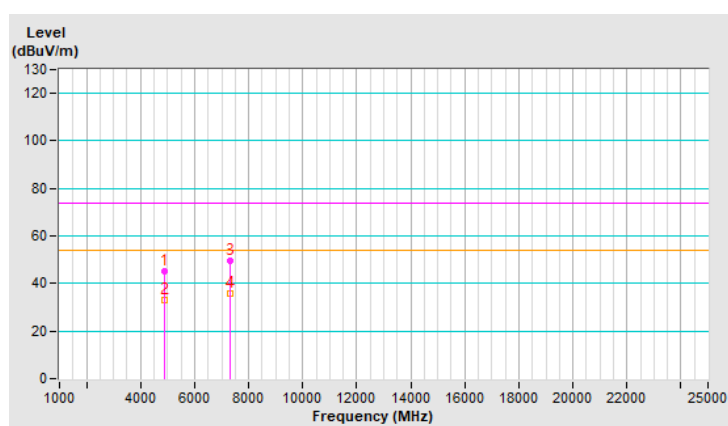


RF Mode	802.11g	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4874.00	45.3 PK	74.0	-28.7	1.11 V	329	41.9	3.4
2	4874.00	32.9 AV	54.0	-21.1	1.11 V	329	29.5	3.4
3	7311.00	49.4 PK	74.0	-24.6	1.02 V	156	39.3	10.1
4	7311.00	35.9 AV	54.0	-18.1	1.02 V	156	25.8	10.1

Remarks:

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

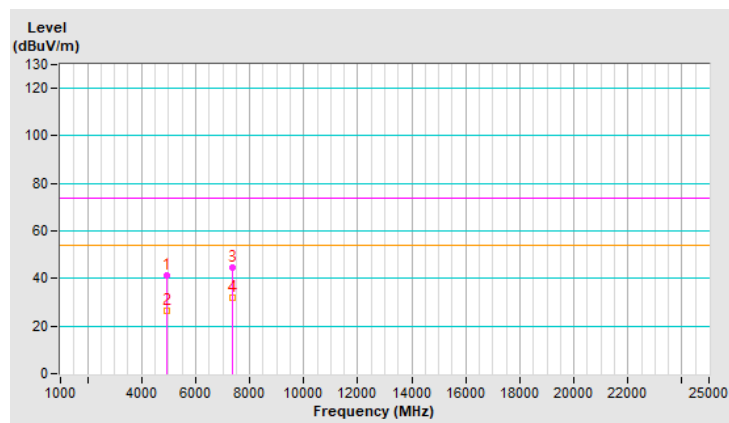


RF Mode	802.11g	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4924.00	41.4 PK	74.0	-32.6	1.09 H	70	37.9	3.5
2	4924.00	26.2 AV	54.0	-27.8	1.09 H	70	22.7	3.5
3	7386.00	44.7 PK	74.0	-29.3	1.51 H	210	34.6	10.1
4	7386.00	31.9 AV	54.0	-22.1	1.51 H	210	21.8	10.1

Remarks:

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

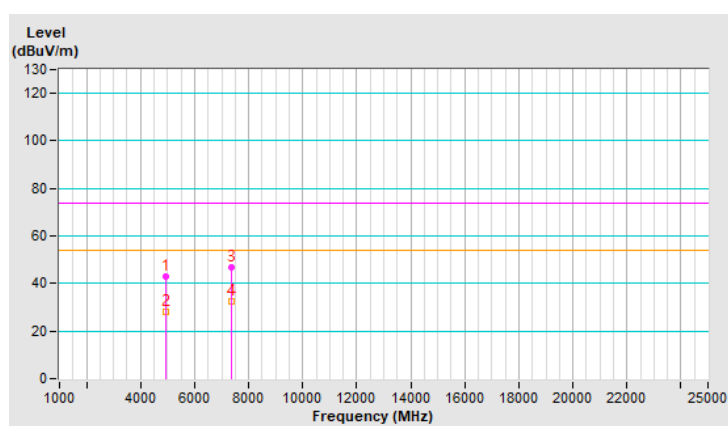


RF Mode	802.11g	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4924.00	43.1 PK	74.0	-30.9	1.17 V	309	39.6	3.5
2	4924.00	28.1 AV	54.0	-25.9	1.17 V	309	24.6	3.5
3	7386.00	46.8 PK	74.0	-27.2	1.01 V	159	36.7	10.1
4	7386.00	32.7 AV	54.0	-21.3	1.01 V	159	22.6	10.1

Remarks:

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

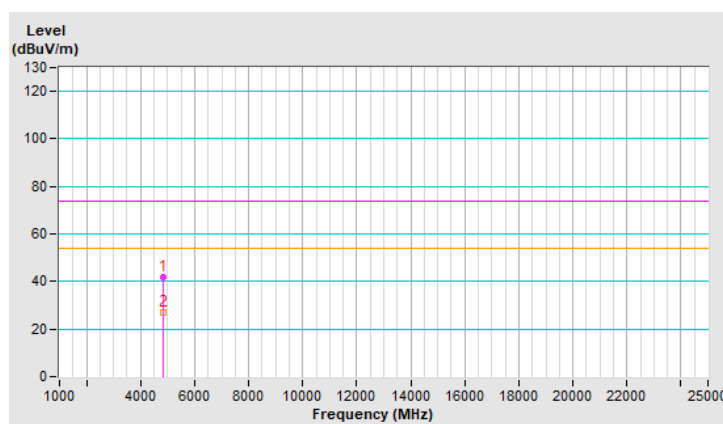


RF Mode	802.11ax (HE20)	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4824.00	41.7 PK	74.0	-32.3	1.10 H	63	38.4	3.3
2	4824.00	26.8 AV	54.0	-27.2	1.10 H	63	23.5	3.3

Remarks:

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

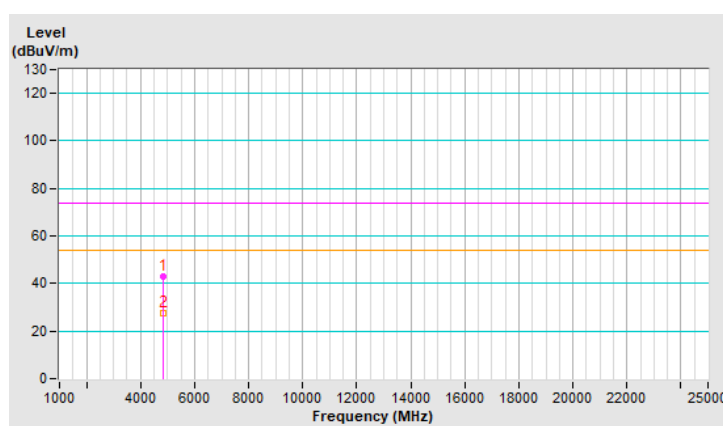


RF Mode	802.11ax (HE20)	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4824.00	42.7 PK	74.0	-31.3	1.18 V	330	39.4	3.3
2	4824.00	27.6 AV	54.0	-26.4	1.18 V	330	24.3	3.3

Remarks:

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

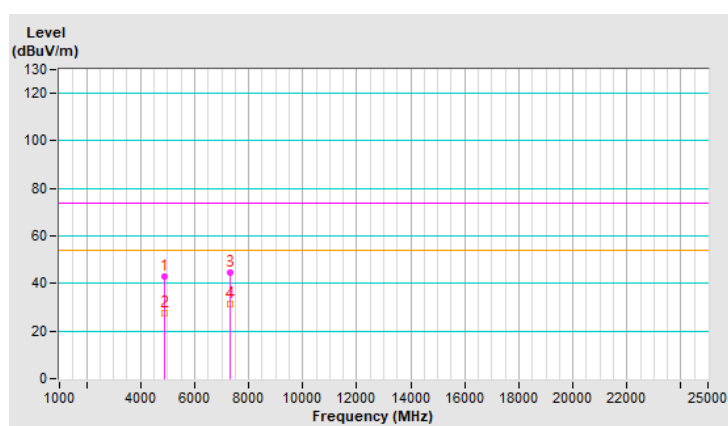


RF Mode	802.11ax (HE20)	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4874.00	42.8 PK	74.0	-31.2	1.04 H	83	39.4	3.4
2	4874.00	27.6 AV	54.0	-26.4	1.04 H	83	24.2	3.4
3	7311.00	44.5 PK	74.0	-29.5	1.48 H	197	34.4	10.1
4	7311.00	31.3 AV	54.0	-22.7	1.48 H	197	21.2	10.1

Remarks:

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

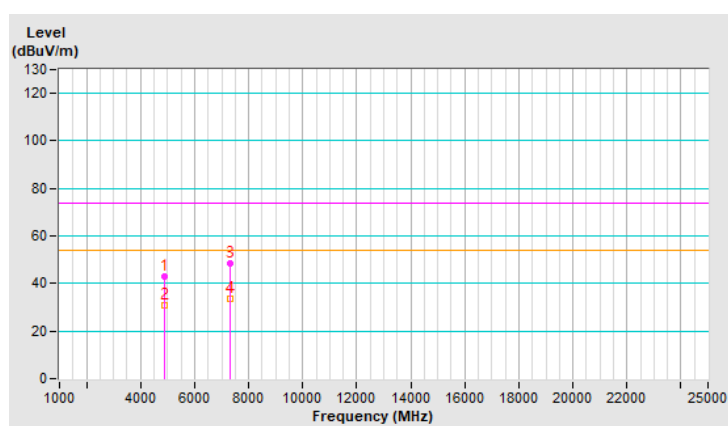


RF Mode	802.11ax (HE20)	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4874.00	43.0 PK	74.0	-31.0	1.09 V	333	39.6	3.4
2	4874.00	30.6 AV	54.0	-23.4	1.09 V	333	27.2	3.4
3	7311.00	48.3 PK	74.0	-25.7	1.00 V	168	38.2	10.1
4	7311.00	33.7 AV	54.0	-20.3	1.00 V	168	23.6	10.1

Remarks:

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

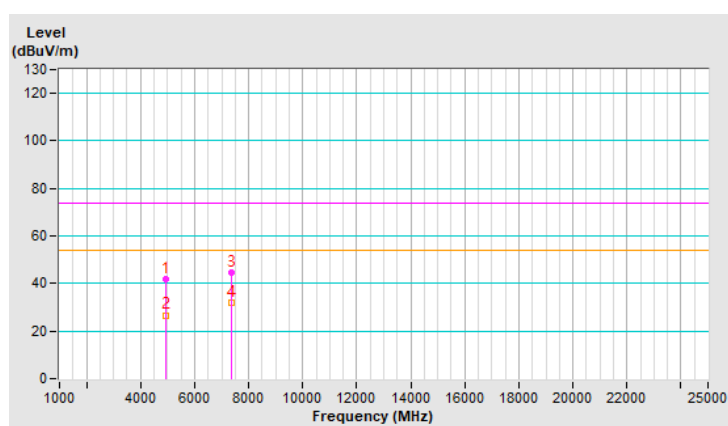


RF Mode	802.11ax (HE20)	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4924.00	41.6 PK	74.0	-32.4	1.14 H	67	38.1	3.5
2	4924.00	26.7 AV	54.0	-27.3	1.14 H	67	23.2	3.5
3	7386.00	44.5 PK	74.0	-29.5	1.49 H	196	34.4	10.1
4	7386.00	31.7 AV	54.0	-22.3	1.49 H	196	21.6	10.1

Remarks:

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

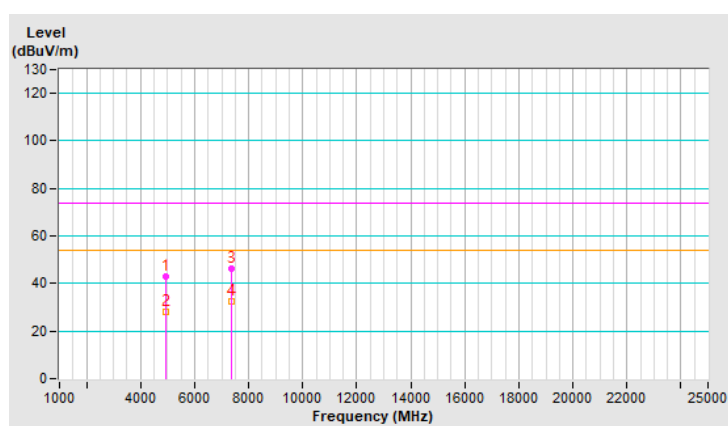


RF Mode	802.11ax (HE20)	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4924.00	43.1 PK	74.0	-30.9	1.14 V	317	39.6	3.5
2	4924.00	27.9 AV	54.0	-26.1	1.14 V	317	24.4	3.5
3	7386.00	46.5 PK	74.0	-27.5	1.06 V	173	36.4	10.1
4	7386.00	32.4 AV	54.0	-21.6	1.06 V	173	22.3	10.1

Remarks:

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

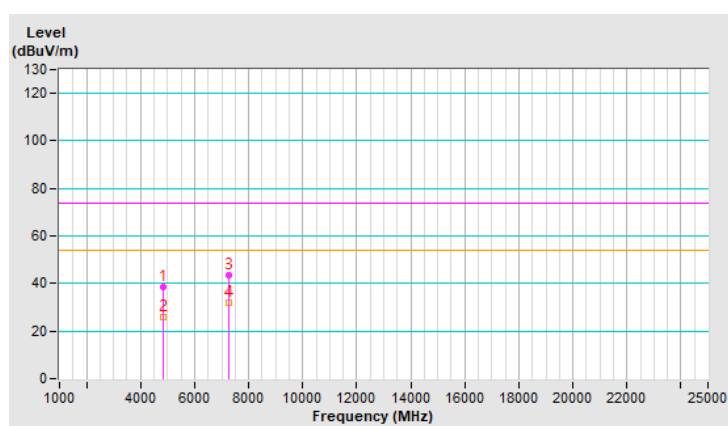


RF Mode	802.11ax (HE40)	Channel	CH 3 : 2422 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4844.00	38.7 PK	74.0	-35.3	1.07 H	98	35.4	3.3
2	4844.00	25.8 AV	54.0	-28.2	1.07 H	98	22.5	3.3
3	7266.00	43.5 PK	74.0	-30.5	1.48 H	182	33.7	9.8
4	7266.00	31.9 AV	54.0	-22.1	1.48 H	182	22.1	9.8

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.

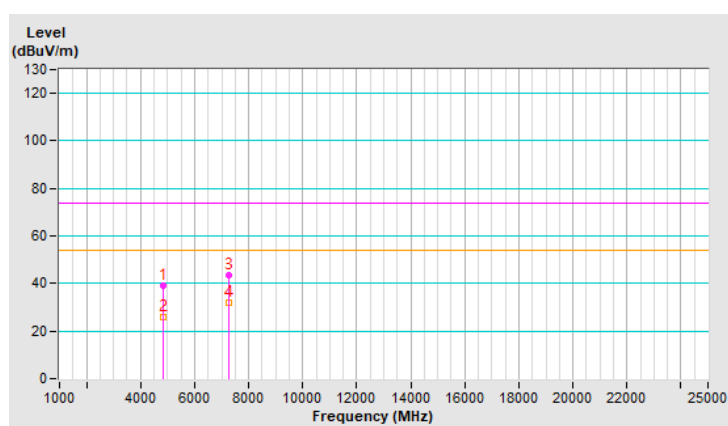


RF Mode	802.11ax (HE40)	Channel	CH 3 : 2422 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4844.00	39.0 PK	74.0	-35.0	1.17 V	336	35.7	3.3
2	4844.00	26.0 AV	54.0	-28.0	1.17 V	336	22.7	3.3
3	7266.00	43.7 PK	74.0	-30.3	1.09 V	189	33.9	9.8
4	7266.00	32.1 AV	54.0	-21.9	1.09 V	189	22.3	9.8

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.

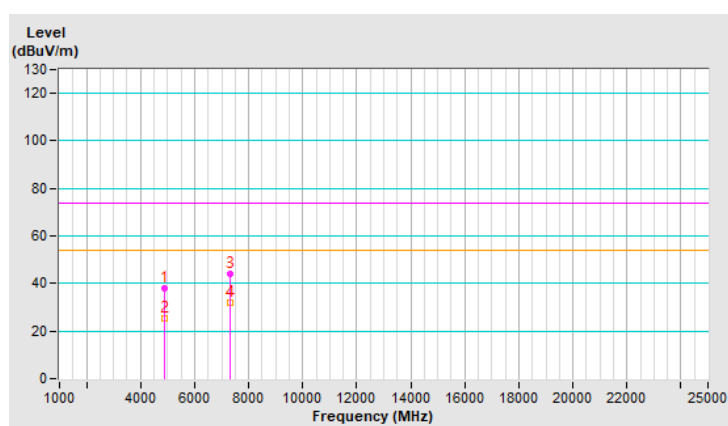


RF Mode	802.11ax (HE40)	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4874.00	38.1 PK	74.0	-35.9	1.06 H	83	34.7	3.4
2	4874.00	25.3 AV	54.0	-28.7	1.06 H	83	21.9	3.4
3	7311.00	44.0 PK	74.0	-30.0	1.51 H	203	33.9	10.1
4	7311.00	32.1 AV	54.0	-21.9	1.51 H	203	22.0	10.1

Remarks:

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

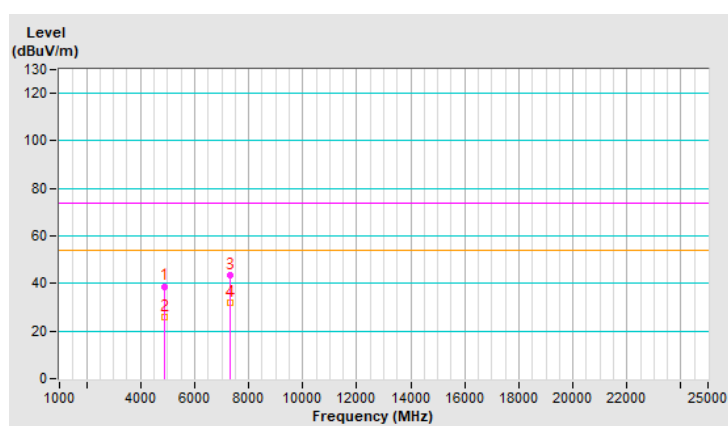


RF Mode	802.11ax (HE40)	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4874.00	38.8 PK	74.0	-35.2	1.10 V	323	35.4	3.4
2	4874.00	25.7 AV	54.0	-28.3	1.10 V	323	22.3	3.4
3	7311.00	43.6 PK	74.0	-30.4	1.00 V	179	33.5	10.1
4	7311.00	31.9 AV	54.0	-22.1	1.00 V	179	21.8	10.1

Remarks:

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

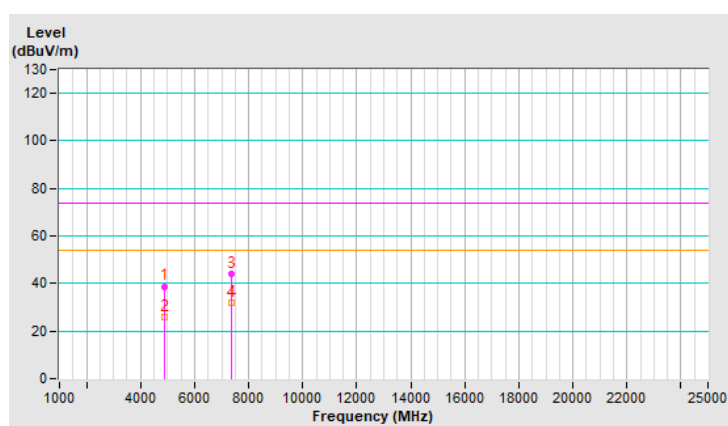


RF Mode	802.11ax (HE40)	Channel	CH 9 : 2452 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4904.00	38.8 PK	74.0	-35.2	1.01 H	84	35.4	3.4
2	4904.00	25.9 AV	54.0	-28.1	1.01 H	84	22.5	3.4
3	7356.00	43.9 PK	74.0	-30.1	1.51 H	185	33.7	10.2
4	7356.00	31.8 AV	54.0	-22.2	1.51 H	185	21.6	10.2

Remarks:

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

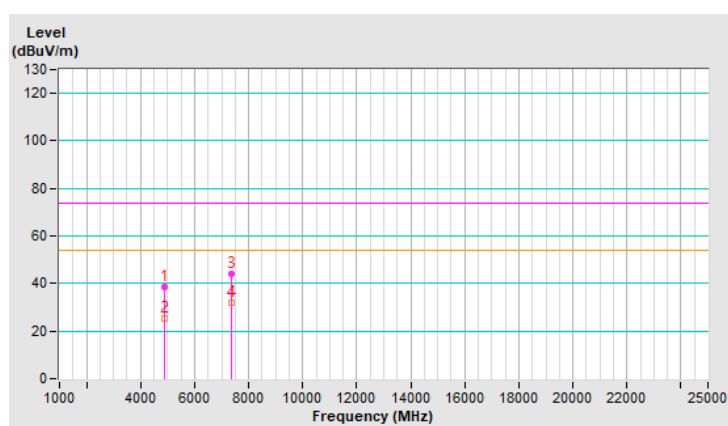


RF Mode	802.11ax (HE40)	Channel	CH 9 : 2452 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 2 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4904.00	38.4 PK	74.0	-35.6	1.13 V	328	35.0	3.4
2	4904.00	25.5 AV	54.0	-28.5	1.13 V	328	22.1	3.4
3	7356.00	43.8 PK	74.0	-30.2	1.01 V	190	33.6	10.2
4	7356.00	32.0 AV	54.0	-22.0	1.01 V	190	21.8	10.2

Remarks:

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

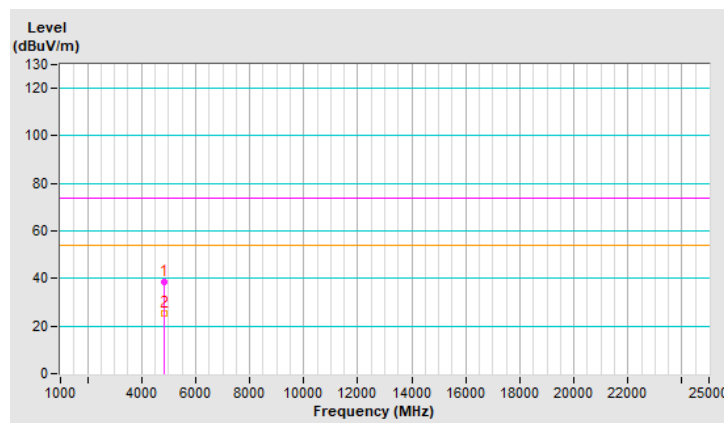


RF Mode	20 MHz Preamble 802.11ax (RU26)	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4824.00	38.7 PK	74.0	-35.3	1.00 H	71	35.4	3.3
2	4824.00	25.5 AV	54.0	-28.5	1.00 H	71	22.2	3.3

Remarks:

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

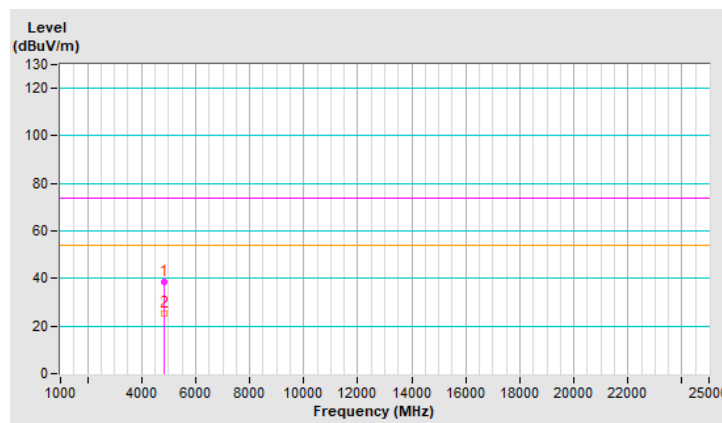


RF Mode	20 MHz Preamble 802.11ax (RU26)	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4824.00	38.4 PK	74.0	-35.6	1.07 V	322	35.1	3.3
2	4824.00	25.3 AV	54.0	-28.7	1.07 V	322	22.0	3.3

Remarks:

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

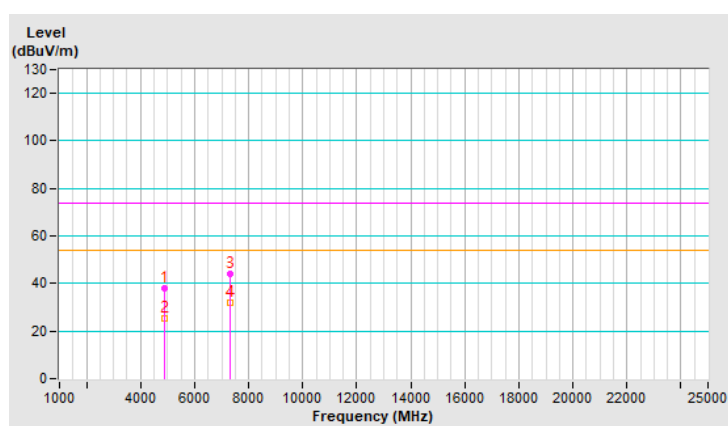


RF Mode	20 MHz Preamble 802.11ax (RU26)	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4874.00	38.2 PK	74.0	-35.8	1.07 H	87	34.8	3.4
2	4874.00	25.4 AV	54.0	-28.6	1.07 H	87	22.0	3.4
3	7311.00	44.0 PK	74.0	-30.0	1.54 H	216	33.9	10.1
4	7311.00	32.0 AV	54.0	-22.0	1.54 H	216	21.9	10.1

Remarks:

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

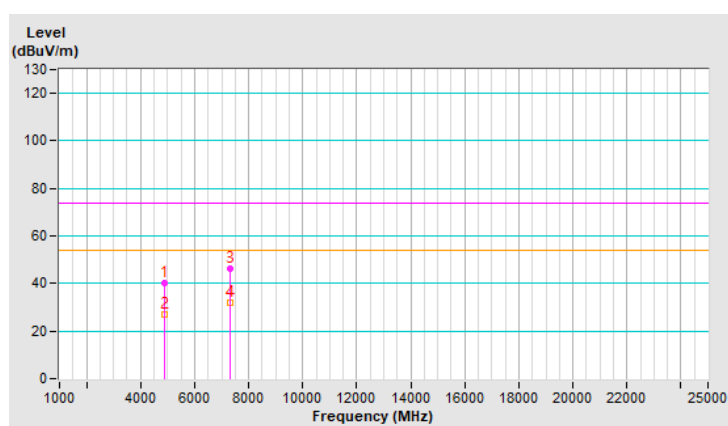


RF Mode	20 MHz Preamble 802.11ax (RU26)	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4874.00	40.3 PK	74.0	-33.7	1.11 V	331	36.9	3.4
2	4874.00	26.8 AV	54.0	-27.2	1.11 V	331	23.4	3.4
3	7311.00	46.3 PK	74.0	-27.7	1.02 V	164	36.2	10.1
4	7311.00	32.1 AV	54.0	-21.9	1.02 V	164	22.0	10.1

Remarks:

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

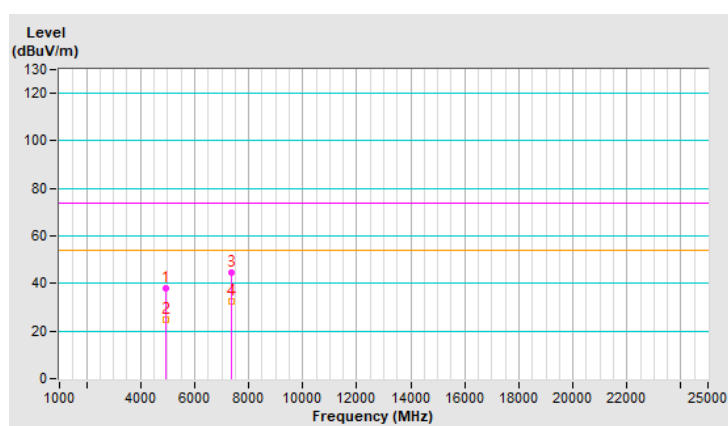


RF Mode	20 MHz Preamble 802.11ax (RU26)	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4924.00	38.0 PK	74.0	-36.0	1.07 H	96	34.5	3.5
2	4924.00	24.9 AV	54.0	-29.1	1.07 H	96	21.4	3.5
3	7386.00	44.4 PK	74.0	-29.6	1.47 H	211	34.3	10.1
4	7386.00	32.3 AV	54.0	-21.7	1.47 H	211	22.2	10.1

Remarks:

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

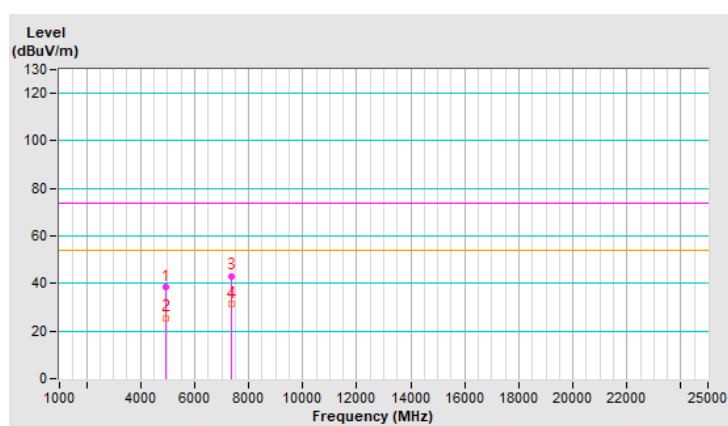


RF Mode	20 MHz Preamble 802.11ax (RU26)	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4924.00	38.4 PK	74.0	-35.6	1.16 V	331	34.9	3.5
2	4924.00	25.6 AV	54.0	-28.4	1.16 V	331	22.1	3.5
3	7386.00	43.2 PK	74.0	-30.8	1.15 V	193	33.1	10.1
4	7386.00	31.6 AV	54.0	-22.4	1.15 V	193	21.5	10.1

Remarks:

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

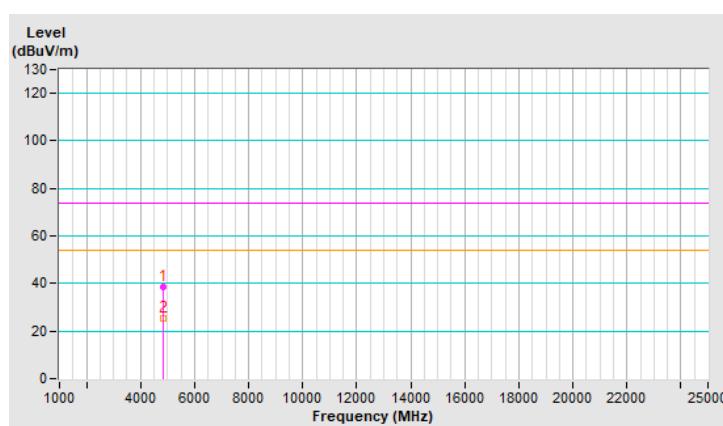


RF Mode	20 MHz Preamble 802.11ax (RU52)	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4824.00	38.3 PK	74.0	-35.7	1.00 H	90	35.0	3.3
2	4824.00	25.5 AV	54.0	-28.5	1.00 H	90	22.2	3.3

Remarks:

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

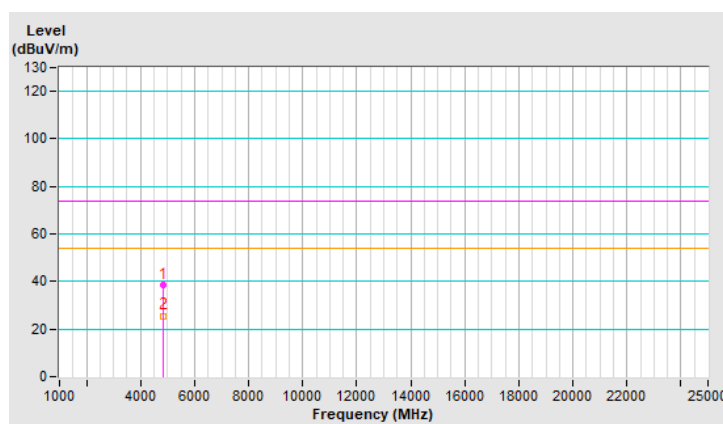


RF Mode	20 MHz Preamble 802.11ax (RU52)	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4824.00	38.5 PK	74.0	-35.5	1.15 V	333	35.2	3.3
2	4824.00	25.6 AV	54.0	-28.4	1.15 V	333	22.3	3.3

Remarks:

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

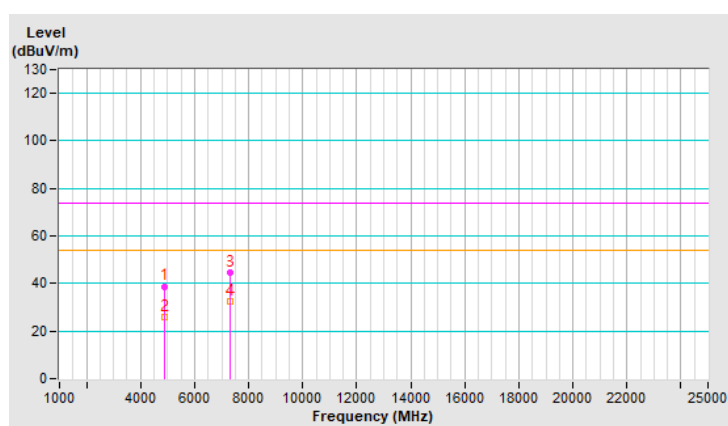


RF Mode	20 MHz Preamble 802.11ax (RU52)	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4874.00	38.8 PK	74.0	-35.2	1.05 H	78	35.4	3.4
2	4874.00	25.8 AV	54.0	-28.2	1.05 H	78	22.4	3.4
3	7311.00	44.5 PK	74.0	-29.5	1.52 H	194	34.4	10.1
4	7311.00	32.5 AV	54.0	-21.5	1.52 H	194	22.4	10.1

Remarks:

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

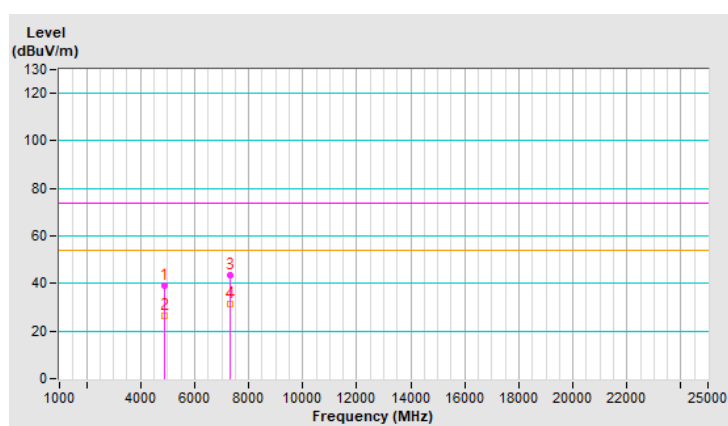


RF Mode	20 MHz Preamble 802.11ax (RU52)	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4874.00	39.3 PK	74.0	-34.7	1.23 V	341	35.9	3.4
2	4874.00	26.4 AV	54.0	-27.6	1.23 V	341	23.0	3.4
3	7311.00	43.3 PK	74.0	-30.7	1.10 V	185	33.2	10.1
4	7311.00	31.6 AV	54.0	-22.4	1.10 V	185	21.5	10.1

Remarks:

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

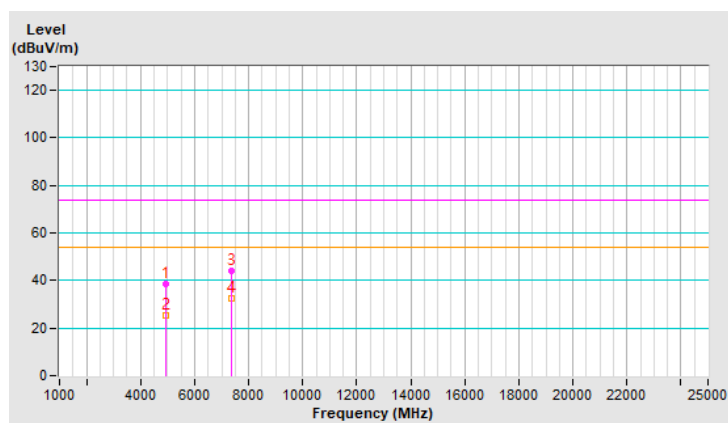


RF Mode	20 MHz Preamble 802.11ax (RU52)	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4924.00	38.4 PK	74.0	-35.6	1.09 H	88	34.9	3.5
2	4924.00	25.4 AV	54.0	-28.6	1.09 H	88	21.9	3.5
3	7386.00	44.1 PK	74.0	-29.9	1.55 H	196	34.0	10.1
4	7386.00	32.4 AV	54.0	-21.6	1.55 H	196	22.3	10.1

Remarks:

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

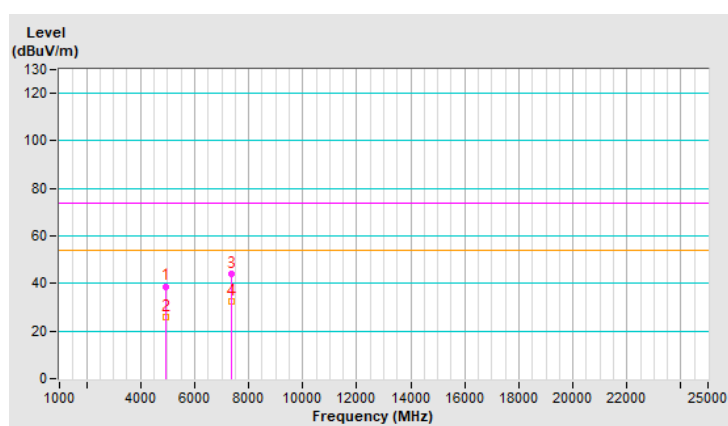


RF Mode	20 MHz Preamble 802.11ax (RU52)	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4924.00	38.8 PK	74.0	-35.2	1.18 V	343	35.3	3.5
2	4924.00	25.9 AV	54.0	-28.1	1.18 V	343	22.4	3.5
3	7386.00	44.2 PK	74.0	-29.8	1.08 V	200	34.1	10.1
4	7386.00	32.4 AV	54.0	-21.6	1.08 V	200	22.3	10.1

Remarks:

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

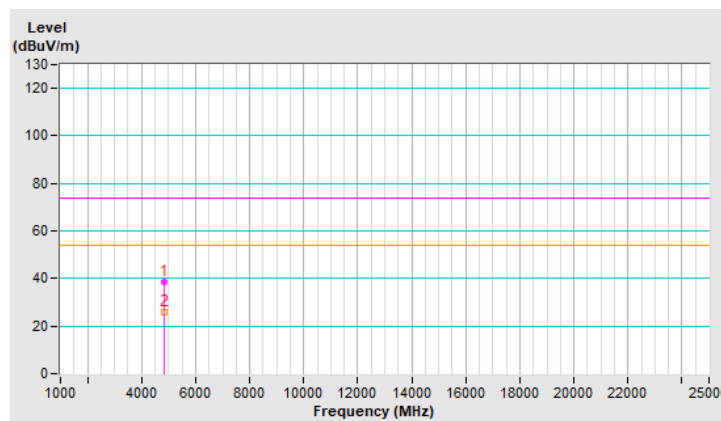


RF Mode	20 MHz Preamble 802.11ax (RU106)	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4824.00	38.5 PK	74.0	-35.5	1.00 H	81	35.2	3.3
2	4824.00	25.8 AV	54.0	-28.2	1.00 H	81	22.5	3.3

Remarks:

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

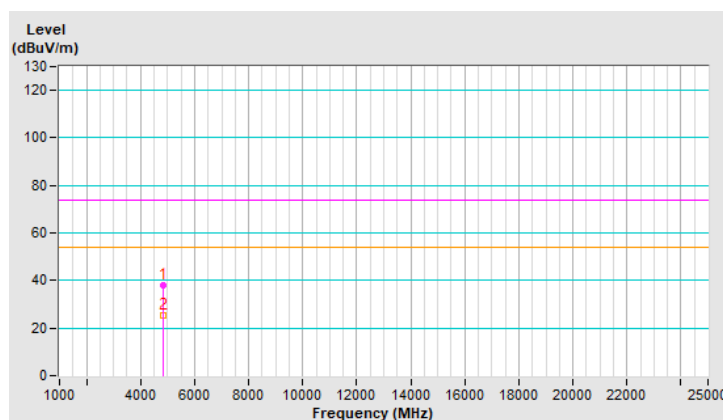


RF Mode	20 MHz Preamble 802.11ax (RU106)	Channel	CH 1 : 2412 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4824.00	38.1 PK	74.0	-35.9	1.12 V	329	34.8	3.3
2	4824.00	25.3 AV	54.0	-28.7	1.12 V	329	22.0	3.3

Remarks:

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

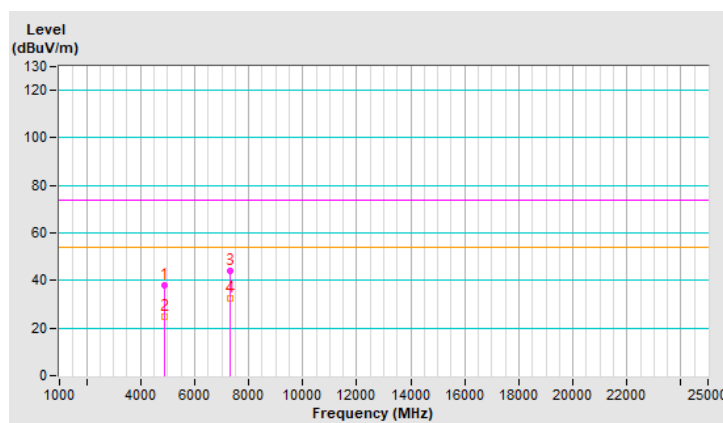


RF Mode	20 MHz Preamble 802.11ax (RU106)	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4874.00	37.9 PK	74.0	-36.1	1.11 H	74	34.5	3.4
2	4874.00	24.8 AV	54.0	-29.2	1.11 H	74	21.4	3.4
3	7311.00	44.1 PK	74.0	-29.9	1.47 H	200	34.0	10.1
4	7311.00	32.3 AV	54.0	-21.7	1.47 H	200	22.2	10.1

Remarks:

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

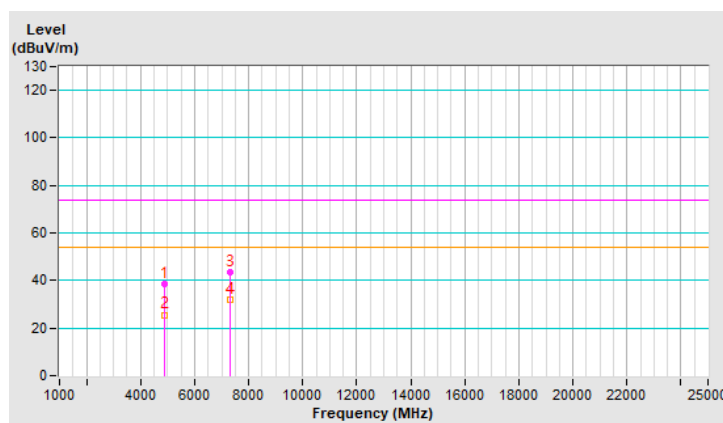


RF Mode	20 MHz Preamble 802.11ax (RU106)	Channel	CH 6 : 2437 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4874.00	38.7 PK	74.0	-35.3	1.20 V	323	35.3	3.4
2	4874.00	25.6 AV	54.0	-28.4	1.20 V	323	22.2	3.4
3	7311.00	43.5 PK	74.0	-30.5	1.14 V	193	33.4	10.1
4	7311.00	31.8 AV	54.0	-22.2	1.14 V	193	21.7	10.1

Remarks:

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

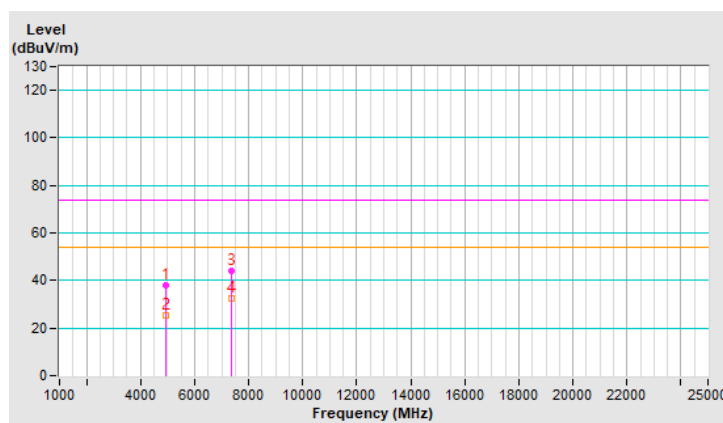


RF Mode	20 MHz Preamble 802.11ax (RU106)	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4924.00	38.2 PK	74.0	-35.8	1.07 H	93	34.7	3.5
2	4924.00	25.5 AV	54.0	-28.5	1.07 H	93	22.0	3.5
3	7386.00	44.2 PK	74.0	-29.8	1.53 H	196	34.1	10.1
4	7386.00	32.4 AV	54.0	-21.6	1.53 H	196	22.3	10.1

Remarks:

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

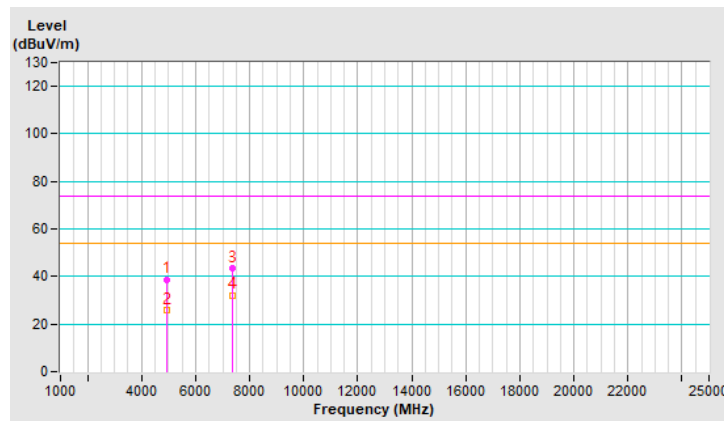


RF Mode	20 MHz Preamble 802.11ax (RU106)	Channel	CH 11 : 2462 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 68% RH
Tested By	Tom Yang		

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	4924.00	38.8 PK	74.0	-35.2	1.19 V	325	35.3	3.5
2	4924.00	26.0 AV	54.0	-28.0	1.19 V	325	22.5	3.5
3	7386.00	43.7 PK	74.0	-30.3	1.06 V	195	33.6	10.1
4	7386.00	32.2 AV	54.0	-21.8	1.06 V	195	22.1	10.1

Remarks:

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



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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