FCC Radio Test Report

FCC ID: M82-SCN100

Report No.	:	BTL-FCCP-3-2212T004
Equipment	:	Computer
Model Name	:	SCN-100-9, SCN-100-9xxxxxxxxxxxxxxx (where “x” may be any alphanumeric character, “-” or blank for marketing purpose and no impact safety related critical components and constructions)
Brand Name	:	(1) ADVANTECH or (2)
Applicant	:	Advantech Co., Ltd.
Address	:	No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 11491, Taiwan.
Radio Function	:	WLAN 2.4 GHz
FCC Rule Part(s)	:	FCC CFR Title 47, Part 15, Subpart C (15.247)
Measurement Procedure(s)	:	ANSI C63.10-2013
Date of Receipt	:	2022/12/9
Date of Test	:	2023/1/30 ~ 2023/10/13
Date of Receipt	:	2023/11/7

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

Prepared by : Jerry Chuang, Supervisor

Approved by : Peter Chen, Manager

BTL Inc.

No.18, Ln. 171, Sec. 2, Jiuzong Rd., Neihu Dist., Taipei City 114, Taiwan

Tel: +886-2-2657-3299 Fax: +886-2-2657-3331 Web: www.newbtl.com Service mail: btl_qa@newbtl.com

Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

BTL's laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

CONTENTS

REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-3-2212T004	R00	Original Report.	2023/9/4	Invalid
BTL-FCCP-3-2212T004	R01	Added conducted test items.	2023/11/7	Valid

1 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

Standard(s) Section	Description	Test Result	Judgement	Remark
15.207	AC Power Line Conducted Emissions	APPENDIX A	Pass	------
15.205 15.209 15.247(d)	Radiated Emissions	APPENDIX B APPENDIX C	Pass	------
15.247(a)	Bandwidth	APPENDIX D	Pass	------
15.247(b)	Output Power	APPENDIX E	Pass	------
15.247(e)	Power Spectral Density	APPENDIX F	Pass	------
15.247(d)	Antenna conducted Spurious Emission	APPENDIX G	Pass	------
15.203	Antenna Requirement	------	Pass	------

NOTE:
(1) ”N/A” denotes test is not applicable in this Test Report.
(2) The report format version is TP.1.1.1.

1.1 TEST FACILITY

The test locations stated below are under the TAF Accreditation Number 0659.
The test location(s) used to collect the test data in this report are:
No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
(FCC DN: TW0659)
☒ C05 ☐ CB08 ☐ CB11 ☒ SR10 ☒ SR11
No. 72, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
(FCC DN: TW0659)
☐ C06 ☒ CB21 ☐ CB22

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y** ± **U**, where expanded uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k = 2**, providing a level of confidence of approximately **95 %**. The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2 U_{cispr} requirement.

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U (dB)
C05	CISPR	150 kHz ~ 30MHz	3.44

B. Radiated emissions test :

Test Site	Measurement Frequency Range	U,(dB)
CB21	0.03 GHz ~ 0.2 GHz	4.17
	0.2 GHz ~ 1 GHz	4.72
	1 GHz ~ 6 GHz	5.21
	6 GHz ~ 18 GHz	5.51
	18 GHz ~ 26 GHz	3.69
	26 GHz ~ 40 GHz	4.23

C. Conducted test :

Test Item	U,(dB)
Occupied Bandwidth	0.5334
Output Power	0.3669
Power Spectral Density	0.6591
Conducted Spurious emissions	0.5416
Conducted Band edges	0.5348

NOTE:
Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

1.3 TEST ENVIRONMENT CONDITIONS

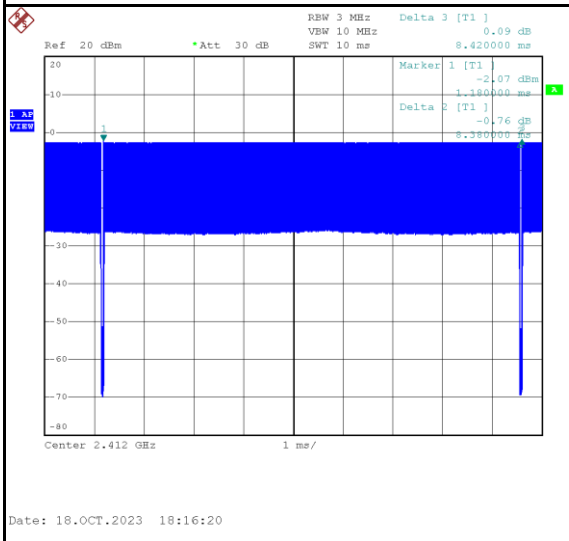
Test Item	Environment Condition	Test Voltage	Tested by
AC Power Line Conducted Emissions	16 °C, 63 %	AC 120V	Jay Tien
Radiated emissions below 1 GHz	Refer to data	AC 120V	Mark Wang
Radiated emissions above 1 GHz	Refer to data	AC 120V	Mark Wang
Bandwidth	25.8 °C, 56 %	AC 120V	Jerry Chuang
Output Power	22 °C, 69 %	AC 120V	Jay Tien
Power Spectral Density	25.8 °C, 56 %	AC 120V	Jerry Chuang
Antenna conducted Spurious Emission	25.8 °C, 56 %	AC 120V	Jerry Chuang

1.4 DUTY CYCLE

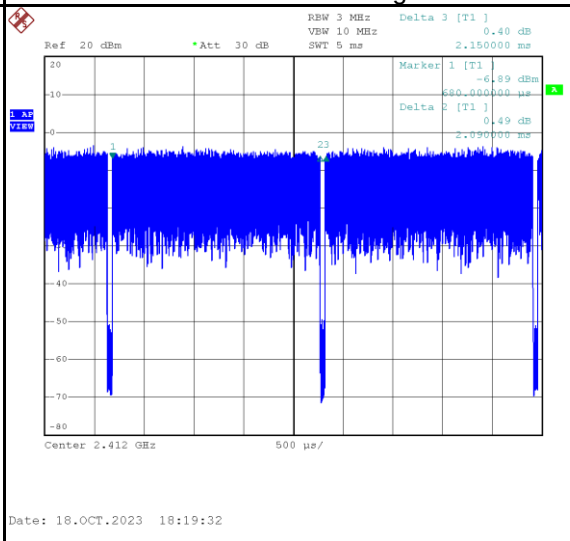
If duty cycle is ≥ 98 %, duty factor is not required.
If duty cycle is < 98 %, duty factor shall be considered.

Remark	Delta 1			Delta 2	On Time/Period	10 log(1/Duty Cycle)
Mode	ON (ms)	Numbers (ON)	On Time (B) (ms)	Period (ON+OFF) (ms)	Duty Cycle (%)	Duty Factor (dB)
IEEE 802.11b	8.380	1	8.380	8.420	99.52%	0.02
IEEE 802.11g	2.090	1	2.090	2.150	97.21%	0.12
IEEE 802.11n (HT20)	4.030	1	4.030	4.090	98.53%	0.06
IEEE 802.11n (HT40)	3.960	1	3.960	4.070	97.30%	0.12
IEEE 802.11ax (HE20)	4.020	1	4.020	4.090	98.29%	0.07
IEEE 802.11ax (HE40)	3.950	1	3.950	4.050	97.53%	0.11

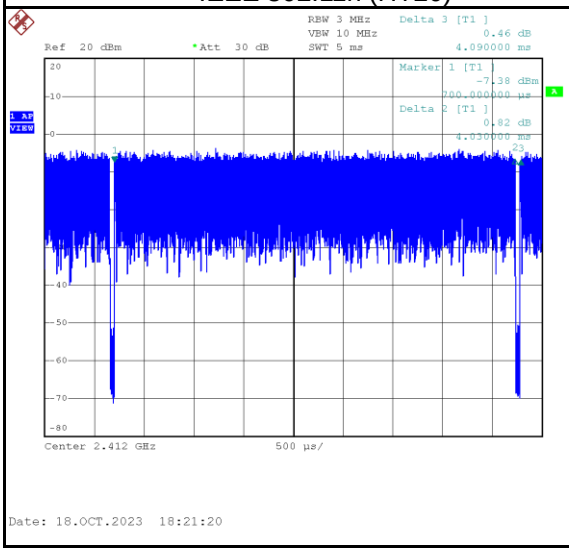
IEEE 802.11b



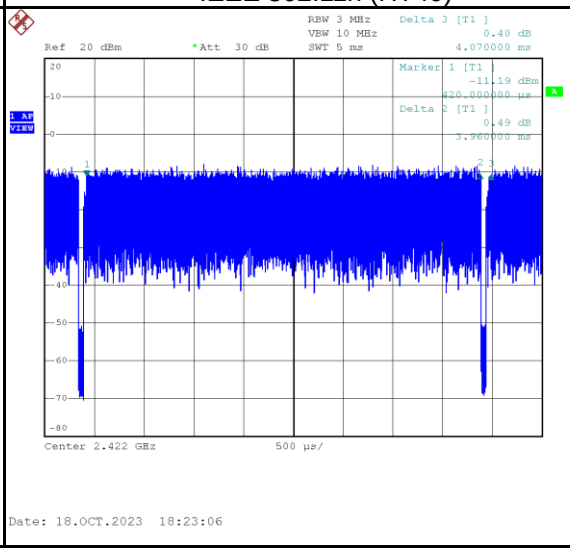
IEEE 802.11g

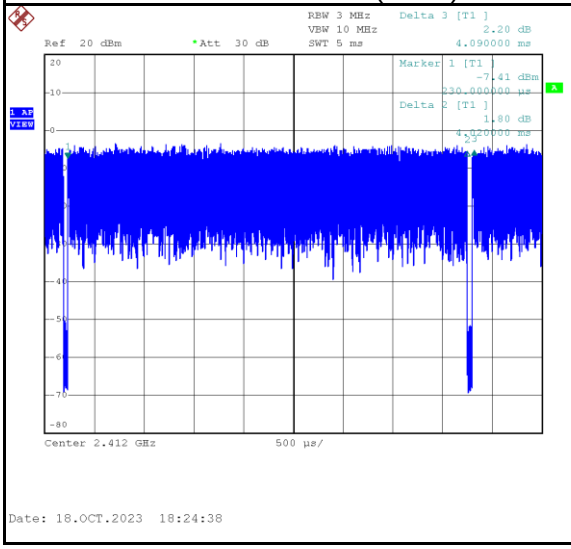
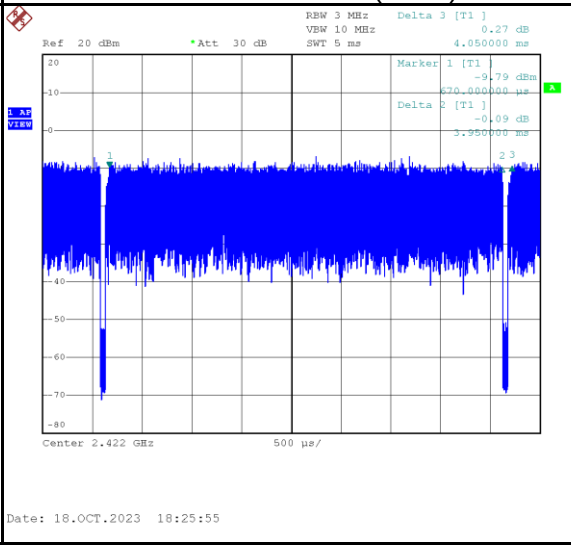


IEEE 802.11n (HT20)



IEEE 802.11n (HT40)



IEEE 802.11ax (HE20)	IEEE 802.11ax (HE40)
	

2 GENERAL INFORMATION

2.1 DESCRIPTION OF EUT

Equipment	Computer
Model Name	SCN-100-9, SCN-100-9xxxxxxxxxxxxxxx (where “x” may be any alphanumeric character, “-” or blank for marketing purpose and no impact safety related critical components and constructions)
Brand Name	(1) ADVANTECH or (2)
Model Difference	Different model distribute to different area.
Power Source	DC voltage supplied from AC/DC Adapter.
Power Rating	EUT: 12-32Vdc, 10-3.75A For Adapter: I/P: 100-240V~2.3A, 50-60Hz O/P: 24.0V⎓7.5A 180.0W
Products Covered	1 * Adapter: FSP / FSP180-AAAN3
WIFI+BT Module	Intel® Wi-Fi 6E AX210 / AX210NGW
Operation Band	2400 MHz ~ 2483.5 MHz
Operation Frequency	2412 MHz ~ 2472 MHz
Maximum Output Power -Antenna 1	IEEE 802.11b: 23.37 dBm (0.2173 W) IEEE 802.11g: 24.37 dBm (0.2735 W) IEEE 802.11n (HT20): 24.31 dBm (0.2698 W) IEEE 802.11n (HT40): 23.57 dBm (0.2275 W) IEEE 802.11ax (HEW 20): 24.36 dBm (0.2729 W) IEEE 802.11ax (HEW 40): 22.75 dBm (0.1884 W)
Maximum Output Power -Antenna 2	IEEE 802.11b: 23.20 dBm (0.2089 W) IEEE 802.11g: 24.27 dBm (0.2673 W) IEEE 802.11n (HT20): 24.20 dBm (0.2630 W) IEEE 802.11n (HT40): 22.73 dBm (0.1875 W) IEEE 802.11ax (HEW 20): 24.13 dBm (0.2588 W) IEEE 802.11ax (HEW 40): 22.71 dBm (0.1866 W)
Test Software Version	DRTU V03227.22.190.0
Test Model	SCN-100-9
Sample Status	Engineering Sample
EUT Modification(s)	N/A

NOTE:
(1) The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

(2) Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	06	2437	11	2462
02	2417	07	2442	12	2467
03	2422	08	2447	13	2472
04	2427	09	2452		
05	2432	10	2457		

(3) Table for Filed Antenna:

Antenna	Manufacture	Part Number	Type	Connector	Frequency Range (MHz)	Gain (dBi)
1	TAOGLAS.	PC165.54.0076A	PCB	I-PEX MFH4L	2400-2500	5.34
					5150-5725	4.95
					5725-5850	5.33
2	TAOGLAS.	PC166.54.0061A	PCB	I-PEX MFH4L	2400-2500	4.14
					5150-5725	6.76
					5725-5850	6.52

NOTE:

(a) The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitters and receivers (1T1R).

(b) The Directional Gain = maximum antenna gain is 5.34 dBi < 6 dBi.
Thus, the limits of Power Spectral Density and Output Power should not be reduced.

(4) The above Antenna information are derived from the antenna data sheet provided by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

(5) Operating Mode and Antenna Configuration

TX Mode / Operating Mode	1 TX
IEEE 802.11b	V (Antenna 1 or Antenna 2)
IEEE 802.11g	V (Antenna 1 or Antenna 2)
IEEE 802.11n (HT20)	V (Antenna 1 or Antenna 2)
IEEE 802.11n (HT40)	V (Antenna 1 or Antenna 2)
IEEE 802.11ax (HE20)	V (Antenna 1 or Antenna 2)
IEEE 802.11ax (HE40)	V (Antenna 1 or Antenna 2)

(6)

2.2 TEST MODES

Test Items	Test mode	Channel	Note
AC power line conducted emissions	Normal/Idle	-	-
Transmitter Radiated Emissions (below 1GHz)	IEEE 802.11b	07	-
Transmitter Radiated Emissions (above 1GHz)	IEEE 802.11b	01/11/12/13	Bandedge
	IEEE 802.11g		
	IEEE 802.11n (HT20)		
	IEEE 802.11ax (HE20)		
	IEEE 802.11n (HT40)	03/09/10/11	
	IEEE 802.11ax (HE40)		
Transmitter Radiated Emissions (above 1GHz)	IEEE 802.11b	01/07/11/12/13	Harmonic
	IEEE 802.11g		
	IEEE 802.11n (HT20)		
	IEEE 802.11ax (HE20)		
	IEEE 802.11n (HT40)	03/07/09/10/11	
	IEEE 802.11ax (HE40)		
Bandwidth & Output Power & Power Spectral Density & Antenna conducted Spurious Emission	IEEE 802.11b	01/07/11/12/13	-
	IEEE 802.11g		
	IEEE 802.11n (HT20)		
	IEEE 802.11ax (HE20)		
	IEEE 802.11n (HT40)	03/07/09/10/11	
	IEEE 802.11ax (HE40)		

NOTE:

(1) For radiated emission band edge test, both Vertical and Horizontal are evaluated, but only the worst case (Horizontal) is recorded.

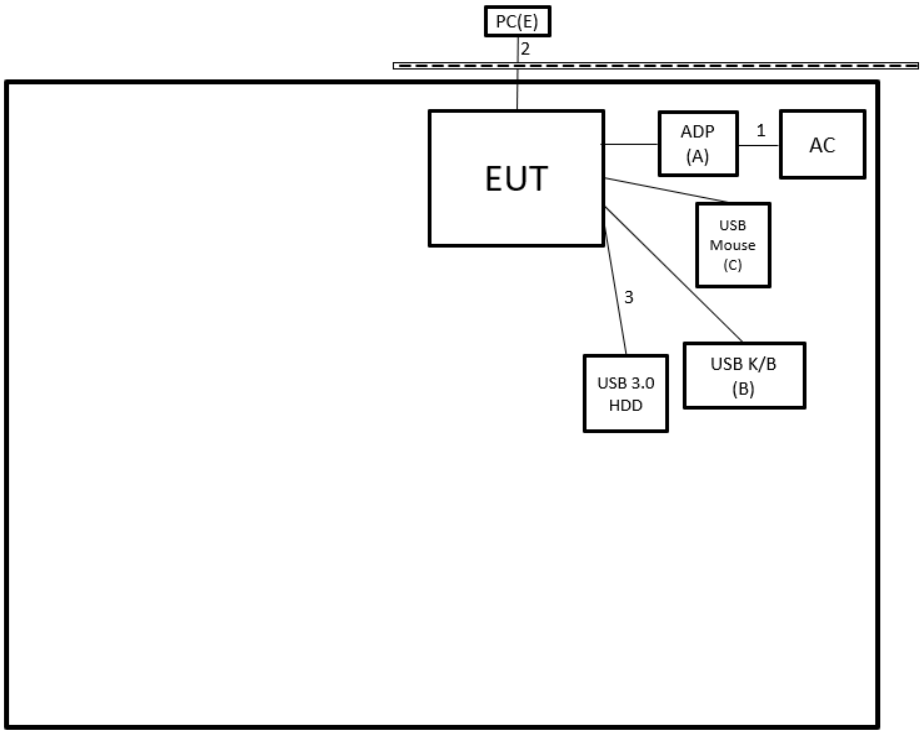
(2) All X, Y and Z axes are evaluated, but only the worst case (Y axis) is recorded.

(3) For IEEE 802.11ax modes, refer to TCB Workshop presentations on October 3, 2018, after evaluated, all testing are performed under fully loaded conditions (Full RU). In the test data, only the partially loaded conditions data are marked with tones.

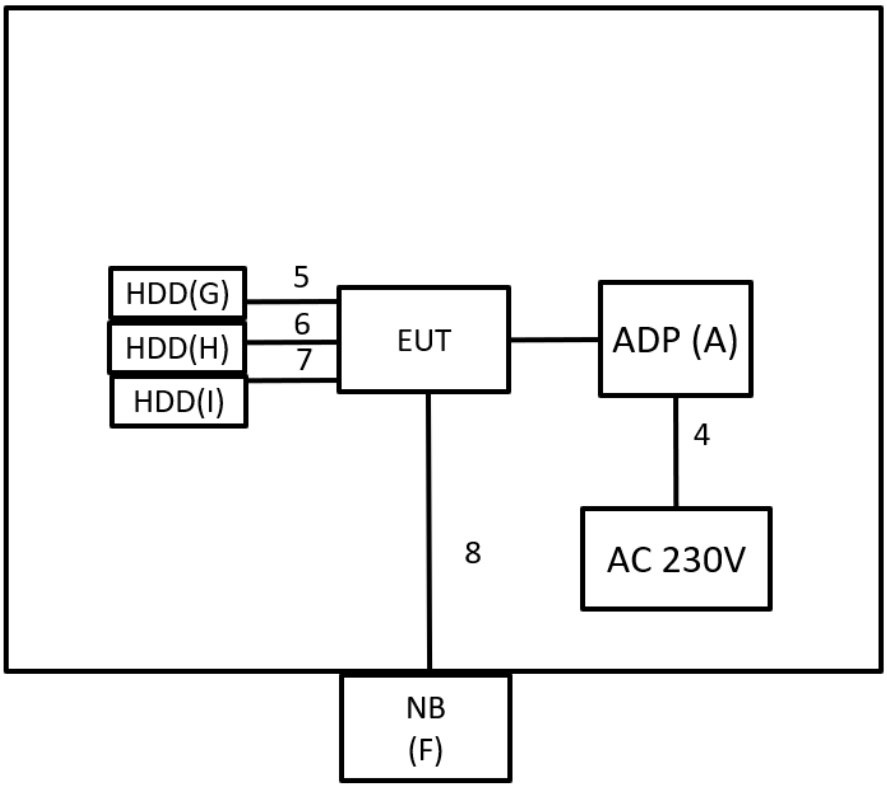
2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 2.4.

AC Power Line Conducted Emissions Test



Radiated Emissions Test



2.4 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.	Remarks
A	ADP	FSP GROUP	FSP180-AAAN3	N/A	Supplied by test requester.
B	USB K/B	DELL	KB216t	CN-0W33XP-L0300-797-05TY-A03	Furnished by test lab.
C	USB Mouse	DELL	MOCZUL	CN-049TWY-PRC00-79E-01HA	Furnished by test lab.
D	USB 3.0 HDD	WD	WDBC3C0010BSL-0B	WX81A88ALJUC	Furnished by test lab.
E	PC	DELL	OptiPlex 790 MT	64NJVBX	Furnished by test lab.
F	NB	HP	TPN-C125	N/A	Furnished by test lab.
G	USB 2.5" HDD	AKITIO	Neutrino U3.1	SK21D1621D003F	Furnished by test lab.
H	USB 2.5" HDD	AKITIO	Neutrino U3.1	SK21D1621D003F	Furnished by test lab.
I	USB 3.0 HDD	WD	WDBC3C0010BSL-0B	WX81A88ALJUC	Furnished by test lab.

Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	N/A	N/A	1.8m	Power Cable	Furnished by test lab.
2	N/A	N/A	6m	RJ-45 Cable	Furnished by test lab.
3	N/A	N/A	1.5m	USB to TypeC Cale	Furnished by test lab.
4	N/A	N/A	1m	Power Cable	Furnished by test lab.
5	N/A	N/A	0.6m	TypeC to TypeC Cable	Furnished by test lab.
6	N/A	N/A	1m	TypeC to TypeC Cable	Furnished by test lab.
7	N/A	N/A	0.3m	TypeC to TypeC Cable	Furnished by test lab.
8	N/A	N/A	12m	RJ45 Cable	Furnished by test lab.

3 AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

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

NOTE:
(1) The tighter limit applies at the band edges.
(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
(3) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor (if use)
Margin Level = Measurement Value – Limit Value
Calculation example:

Reading Level (dBuV)		Correct Factor (dB)		Measurement Value (dBuV)
38.22	+	3.45	=	41.67

Measurement Value (dBuV)		Limit Value (dBuV)		Margin Level (dB)
41.67	-	60	=	-18.33

The following table is the setting of the receiver.

Receiver Parameter	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 KHz

3.2 TEST PROCEDURE

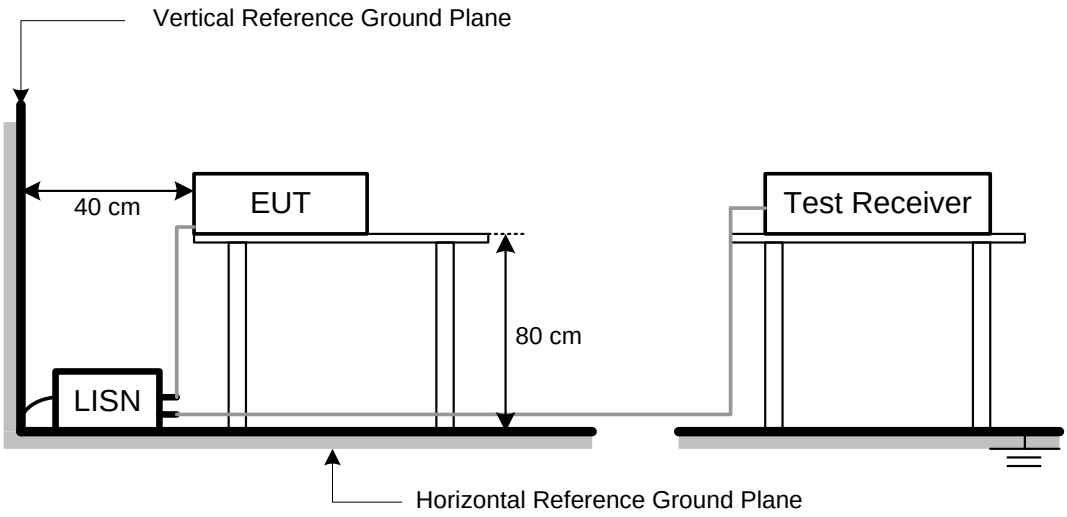
a. The EUT was placed 0.8 m above the horizontal ground plane with the EUT being connected to the power mains through a line impedance stabilization network (LISN).
All other support equipment were powered from an additional LISN(s).
The LISN provides 50 Ohm/50uH of impedance for the measuring instrument.
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle to keep the cable above 40 cm.
c. Excess I/O cables that are not connected to a peripheral shall be bundled in the center.
The end of the cable will be terminated, using the correct terminating impedance.
The overall length shall not exceed 1 m.
d. The LISN is spaced at least 80 cm from the nearest part of the EUT chassis.
e. For the actual test configuration, please refer to the related Item - EUT TEST PHOTO.

NOTE:
(1) In the results, each reading is marked as Peak, QP or AVG per the detector used.
BW=9 kHz (6 dB Bandwidth)
(2) All readings are Peak unless otherwise stated QP or AVG in column of Note. Both the QP and the AVG readings must be less than the limit for compliance.

3.3 DEVIATION FROM TEST STANDARD

No deviation.

3.4 TEST SETUP



3.5 TEST RESULT

Please refer to the APPENDIX A.

4 RADIATED EMISSIONS TEST

4.1 LIMIT

In case the emission fall within the restricted band specified on 15.205, then the 15.209 limit in the table below has to be followed.

LIMITS OF RADIATED EMISSIONS MEASUREMENT (9 kHz to 1000 MHz)

Frequency (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
960~1000	500	3

LIMITS OF RADIATED EMISSIONS MEASUREMENT (Above 1000 MHz)

Frequency (MHz)	Radiated Emissions (dBuV/m)		Measurement Distance (meters)
	Peak	Average	
Above 1000	74	54	3

NOTE:
(1) The limit for radiated test was performed according to FCC Part 15, Subpart C.
(2) The tighter limit applies at the band edges.
(3) Emission level (dBuV/m)=20log Emission level (uV/m).
(4) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)
Margin Level = Measurement Value - Limit Value
Calculation example:

Reading Level (dBuV)		Correct Factor (dB)		Measurement Value (dBuV/m)
19.11	+	2.11	=	21.22

Measurement Value (dBuV/m)		Limit Value (dBuV/m)		Margin Level (dB)
21.22	-	54	=	-32.78

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emission in restricted band)	1MHz / 3MHz for Peak, 1MHz / 1/T for Average

Spectrum Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9KHz~90KHz for PK/AVG detector
Start ~ Stop Frequency	90KHz~110KHz for QP detector
Start ~ Stop Frequency	110KHz~490KHz for PK/AVG detector
Start ~ Stop Frequency	490KHz~30MHz for QP detector
Start ~ Stop Frequency	30MHz~1000MHz for QP detector

4.2 TEST PROCEDURE

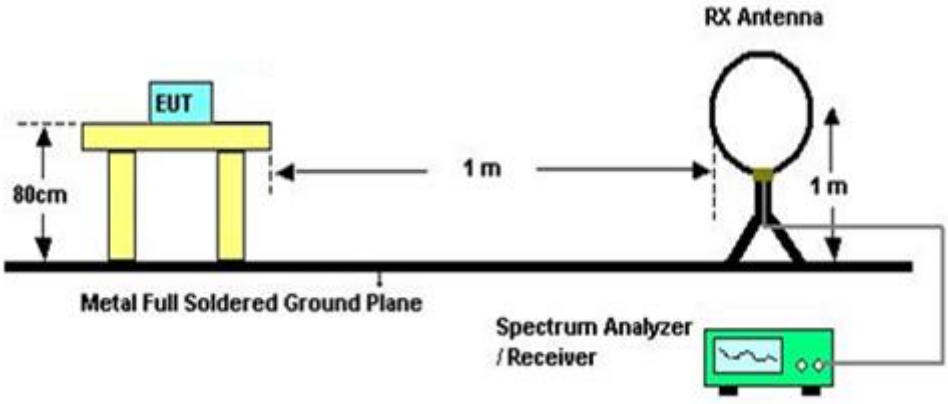
a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
c. The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5 m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn‘t perform. (below 1GHz)
h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn‘t perform. (above 1GHz)
i. For the actual test configuration, please refer to the related Item – EUT TEST PHOTO.

4.3 DEVIATION FROM TEST STANDARD

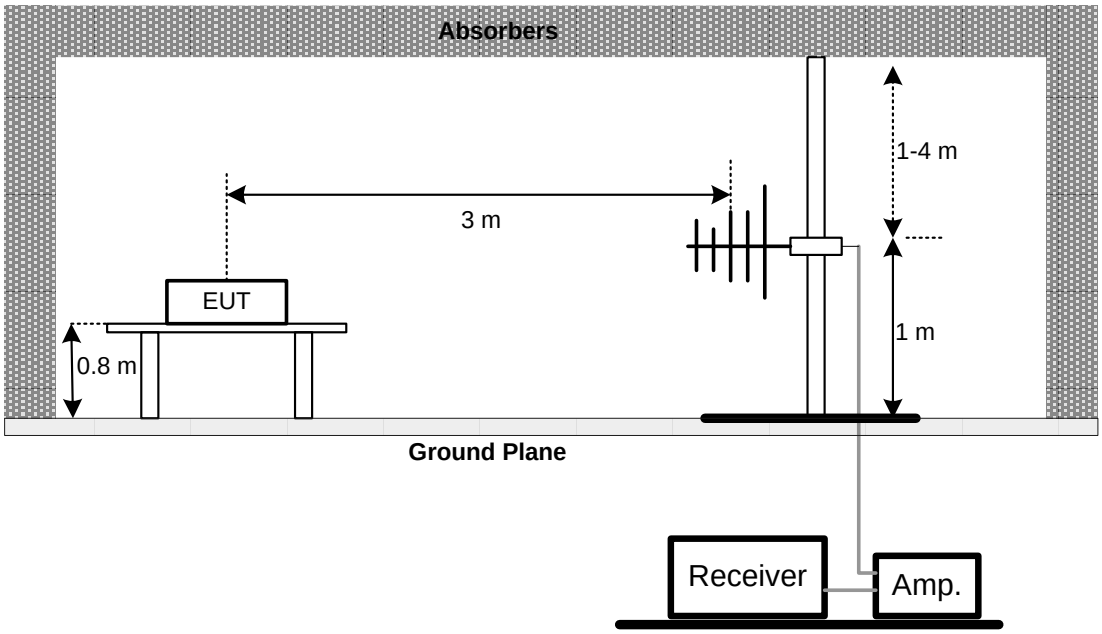
No deviation.

4.4 TEST SETUP

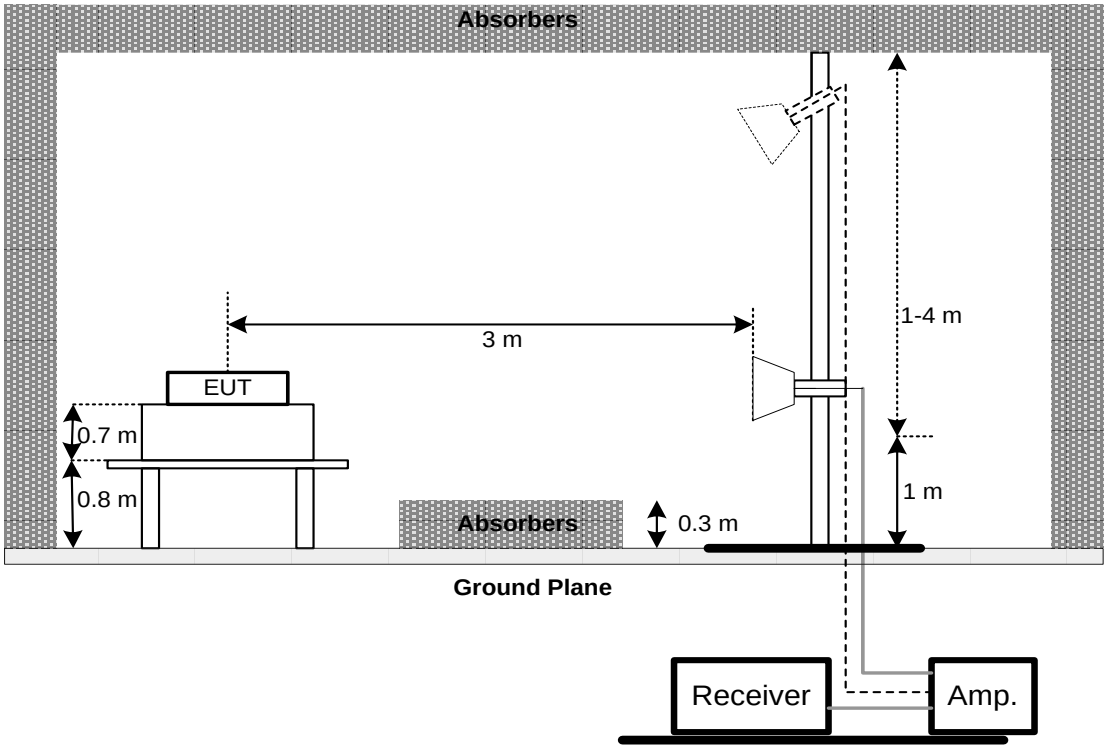
9 kHz to 30 MHz



30 MHz to 1 GHz



Above 1 GHz



4.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

NOTE:

(1) Distance extrapolation factor = 40 log (specific distance / test distance) (dB).
(2) Limit line = specific limits (dBuV) + distance extrapolation factor.

4.6 TEST RESULT – BELOW 30 MHZ

There were no emissions found below 30 MHz within 20 dB of the limit.

4.7 TEST RESULT – 30 MHZ TO 1 GHZ

Please refer to the APPENDIX B.

4.8 TEST RESULT – ABOVE 1 GHZ

Please refer to the APPENDIX C.

NOTE:

(1) No limit: This is fundamental signal, the judgment is not applicable.
For fundamental signal judgment was referred to Peak output test.

5 BANDWIDTH TEST

5.1 LIMIT

Section	Test Item	Limit
15.247(a)	6 dB Bandwidth	500 kHz

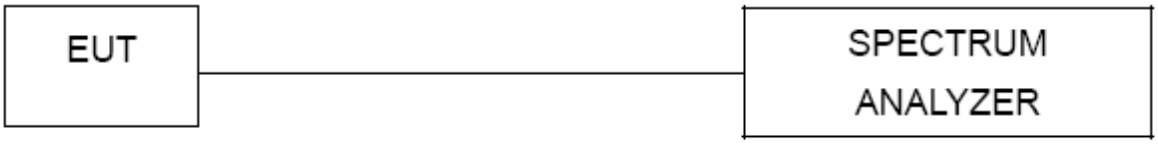
5.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
b. Spectrum Setting: RBW= 100KHz, VBW=300KHz, Sweep time = 2.5 ms.

5.3 DEVIATION FROM TEST STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 TEST RESULT

Please refer to the APPENDIX D.

6 OUTPUT POWER TEST

6.1 LIMIT

Section	Test Item	Limit
15.247(b)	Maximum Output Power	1 Watt or 30dBm

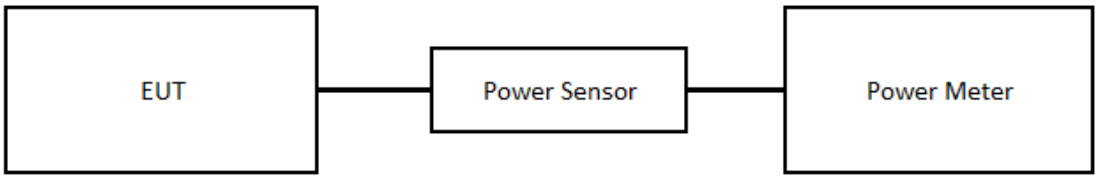
6.2 TEST PROCEDURE

a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
b. The maximum peak conducted output power was performed in accordance with FCC KDB 558074 D01 15.247 Meas Guidance.
c. Subclause 11.9.1.1 of ANSI C63.10 is applied. The maximum peak conducted output power may be measured using a broadband peak RF power meter.
The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast-responding diode detector.

6.3 DEVIATION FROM TEST STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6 TEST RESULT

Please refer to the APPENDIX E.

7 POWER SPECTRAL DENSITY

7.1 LIMIT

Section	Test Item	Limit
15.247(e)	Power Spectral Density	8 dBm (in any 3 kHz)

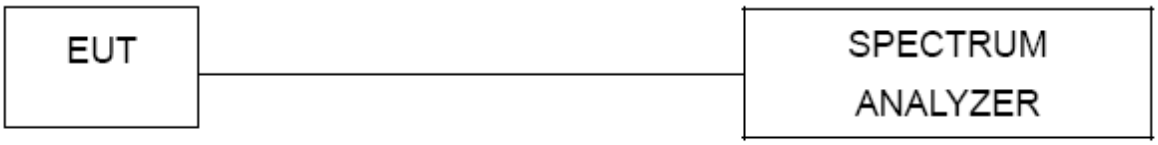
7.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
b. Spectrum Setting: RBW = 3 kHz, VBW = 10 kHz, Sweep time = Auto.

7.3 DEVIATION FROM TEST STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.6 TEST RESULT

Please refer to the APPENDIX F.

8 ANTENNA CONDUCTED SPURIOUS EMISSIONS TEST

8.1 LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits.

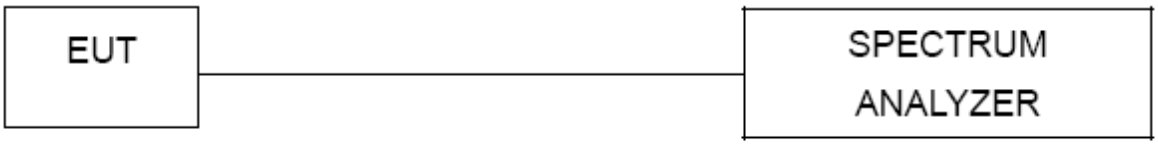
8.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
b. Spectrum Setting: RBW = 100 kHz, VBW=300 kHz, Sweep time = Auto.
c. Offset = antenna gain + cable loss.

8.3 DEVIATION FROM TEST STANDARD

No deviation.

8.4 TEST SETUP



8.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

8.6 TEST RESULT

Please refer to the APPENDIX G.

9 LIST OF MEASURING EQUIPMENTS

AC Power Line Conducted Emissions						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	TWO-LINE V-NETWORK	R&S	ENV216	101521	2022/9/28	2023/9/27
2	Test Cable	EMCI	EMCCFD300-BM-BMR-5000	220331	2022/3/31	2023/3/30
3	EMI Test Receiver	R&S	ESR 7	101433	2022/11/16	2023/11/15
4	Measurement Software	EZ	EZ_EMC (Version NB-03A1-01)	N/A	N/A	N/A

Radiated Emissions						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Preamplifier	EMCI	EMC330N	980850	2022/9/19	2023/9/18
2	Preamplifier	EMCI	EMC118A45SE	980819	2023/3/7	2024/3/6
3	Pre-Amplifier	EMCI	EMC184045SE	980907	2022/9/28	2023/9/27
4	Preamplifier	EMCI	EMC001340	980579	2022/9/30	2023/9/29
5	Test Cable	EMCI	EMC104-SM-SM-1000	220319	2023/3/14	2024/3/13
6	Test Cable	EMCI	EMC104-SM-SM-3000	220322	2023/3/14	2024/3/13
7	Test Cable	EMCI	EMC104-SM-SM-7000	220324	2023/3/14	2024/3/13
8	EXA Signal Analyzer	keysight	N9020B	MY57120120	2023/2/24	2024/2/23
9	Loop Ant	Electro-Metrics	EMCI-LPA600	291	2022/9/19	2023/9/18
10	Horn Antenna	RFSPIN	DRH18-E	211202A18EN	2022/5/18	2023/5/17
11	Horn Ant	Schwarzbeck	BBHA 9170D	1136	2022/5/18	2023/5/17
12	Log-bicon Antenna	Schwarzbeck	VULB9168	1369	2022/5/20	2023/5/19
13	6dB Attenuator	EMCI	EMCI-N-6-06	AT-06001	2022/5/20	2023/5/19
14	Test Cable	EMCI	EMC101G-KM-KM-3000	220329	2023/3/14	2024/3/13
15	Test Cable	EMCI	EMC102-KM-KM-1000	220327	2023/3/14	2024/3/13
16	Measurement Software	EZ	EZ_EMC (Version NB-03A1-01)	N/A	N/A	N/A

Bandwidth						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSP 40	100129	2023/3/27	2024/3/26

Output Power						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Power Meter	Anritsu	ML2495A	1128008	2022/6/1	2023/5/31
2	Power Sensor	Anritsu	MA2411B	1126001	2022/6/1	2023/5/31

Power Spectral Density						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSP 40	100129	2023/3/27	2024/3/26

Antenna conducted Spurious Emission						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSP 40	100129	2023/3/27	2024/3/26

Remark: “N/A” denotes no model name, no serial no. or no calibration specified.
All calibration period of equipment list is one year.

10 EUT TEST PHOTO

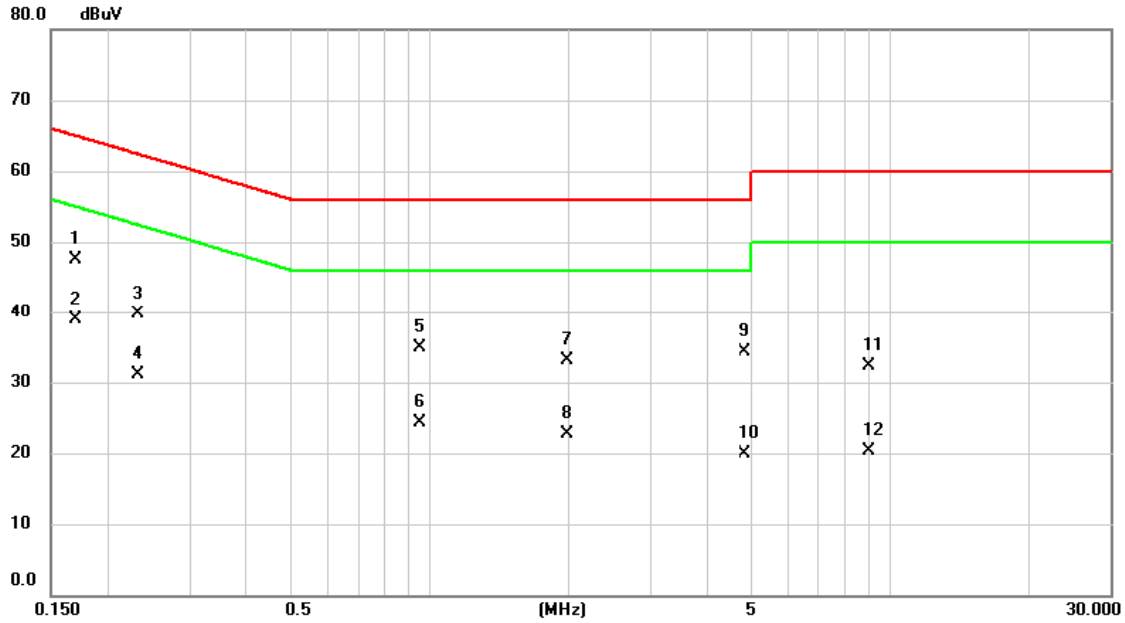
Please refer to document Appendix No.: TP-2212T004-FCCP-1 (APPENDIX-TEST PHOTOS).

11 EUT PHOTOS

Please refer to document Appendix No.: EP-2212T004-1 (APPENDIX-EUT PHOTOS).

APPENDIX A AC POWER LINE CONDUCTED EMISSIONS

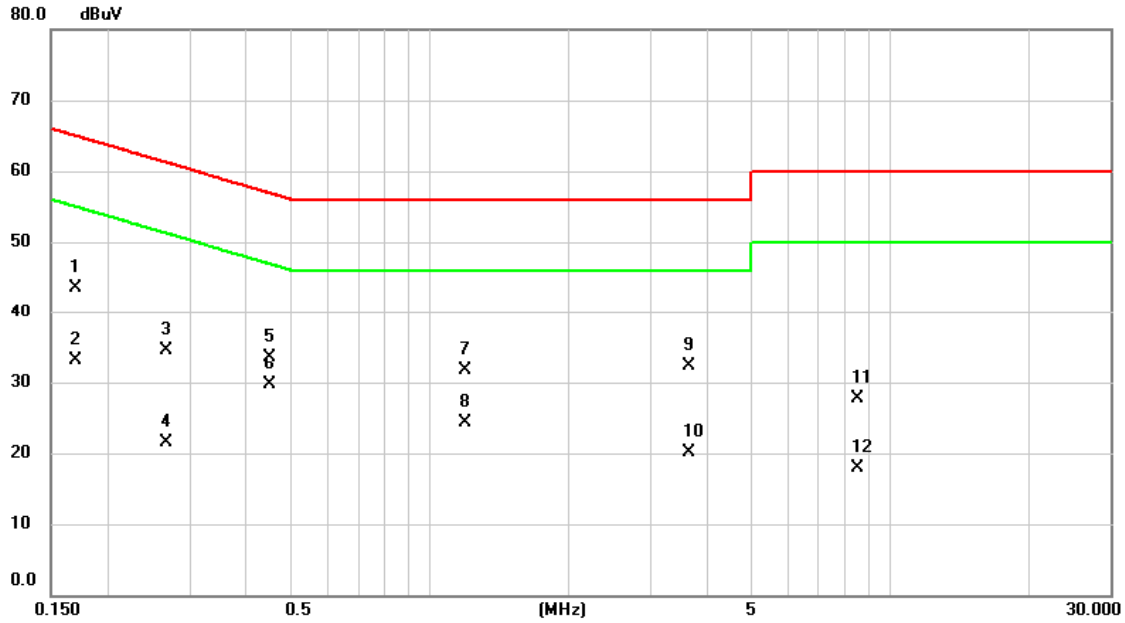
Test Mode	Normal	Tested Date	2023/2/1
Test Frequency	-	Phase	Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1702	37.89	9.64	47.53	64.95	-17.42	QP	
2	*	0.1702	29.20	9.64	38.84	54.95	-16.11	AVG	
3		0.2310	30.14	9.63	39.77	62.41	-22.64	QP	
4		0.2310	21.55	9.63	31.18	52.41	-21.23	AVG	
5		0.9487	25.17	9.67	34.84	56.00	-21.16	QP	
6		0.9487	14.73	9.67	24.40	46.00	-21.60	AVG	
7		1.9792	23.43	9.70	33.13	56.00	-22.87	QP	
8		1.9792	12.97	9.70	22.67	46.00	-23.33	AVG	
9		4.8457	24.63	9.77	34.40	56.00	-21.60	QP	
10		4.8457	10.20	9.77	19.97	46.00	-26.03	AVG	
11		9.0105	22.51	9.86	32.37	60.00	-27.63	QP	
12		9.0105	10.51	9.86	20.37	50.00	-29.63	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

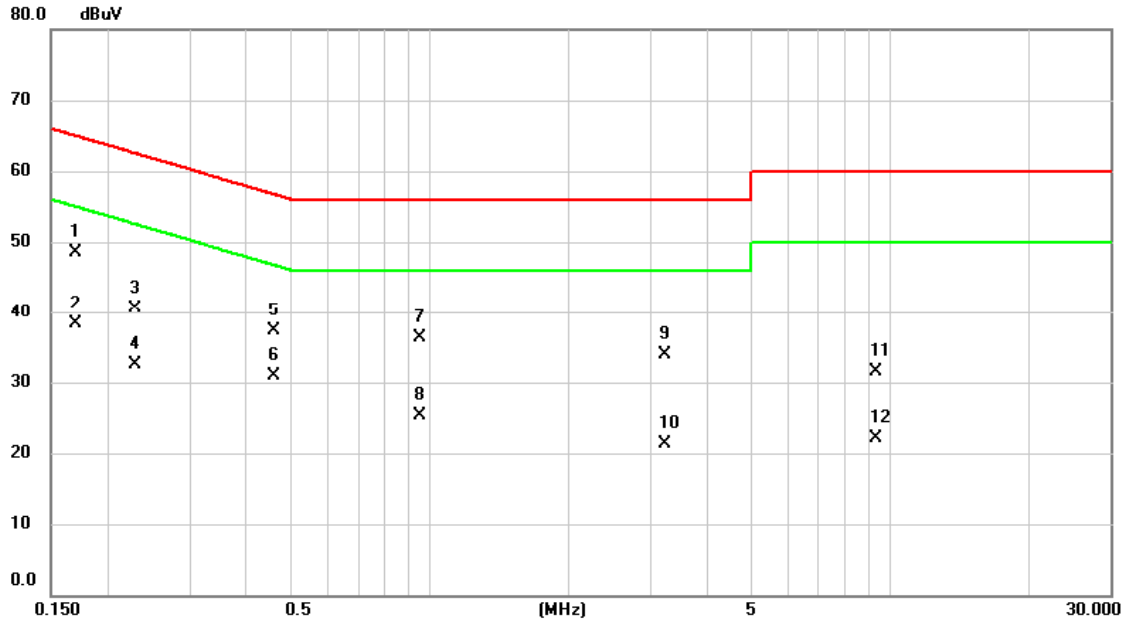
Test Mode	Normal	Tested Date	2023/2/1
Test Frequency	-	Phase	Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1703	33.80	9.65	43.45	64.95	-21.50	QP	
2		0.1703	23.41	9.65	33.06	54.95	-21.89	AVG	
3		0.2670	24.86	9.64	34.50	61.21	-26.71	QP	
4		0.2670	11.81	9.64	21.45	51.21	-29.76	AVG	
5		0.4515	23.86	9.64	33.50	56.85	-23.35	QP	
6	*	0.4515	20.06	9.64	29.70	46.85	-17.15	AVG	
7		1.1940	22.11	9.68	31.79	56.00	-24.21	QP	
8		1.1940	14.65	9.68	24.33	46.00	-21.67	AVG	
9		3.6533	22.52	9.76	32.28	56.00	-23.72	QP	
10		3.6533	10.35	9.76	20.11	46.00	-25.89	AVG	
11		8.4908	17.92	9.87	27.79	60.00	-32.21	QP	
12		8.4908	8.09	9.87	17.96	50.00	-32.04	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

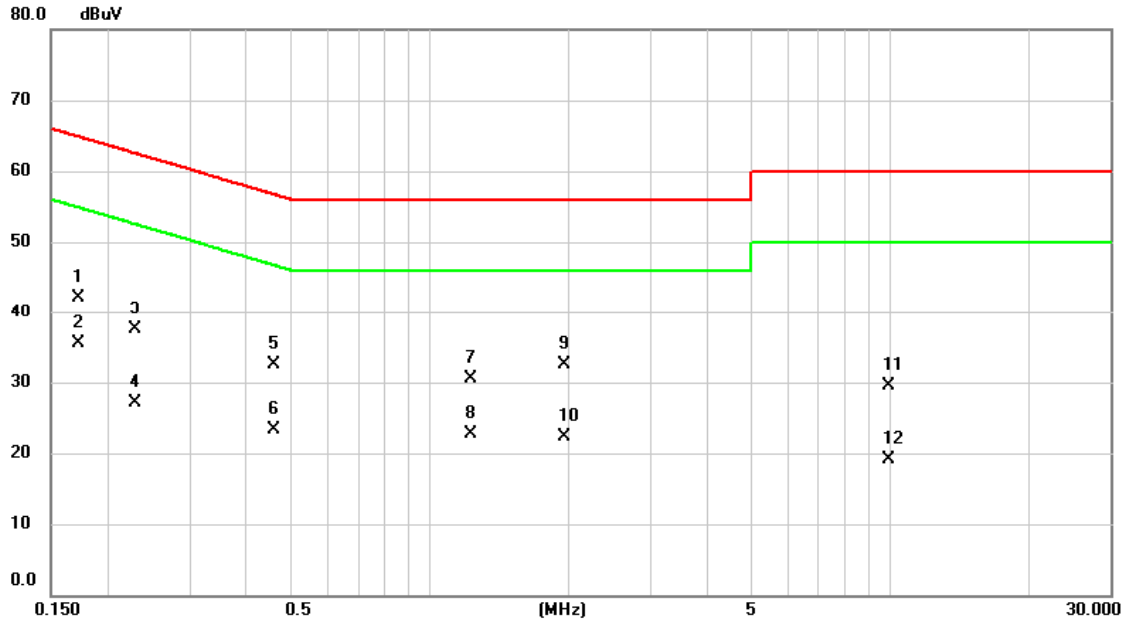
Test Mode	Idle	Tested Date	2023/2/1
Test Frequency	-	Phase	Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1703	38.92	9.64	48.56	64.95	-16.39	QP	
2		0.1703	28.65	9.64	38.29	54.95	-16.66	AVG	
3		0.2288	30.92	9.63	40.55	62.49	-21.94	QP	
4		0.2288	22.79	9.63	32.42	52.49	-20.07	AVG	
5		0.4582	27.67	9.63	37.30	56.73	-19.43	QP	
6	*	0.4582	21.32	9.63	30.95	46.73	-15.78	AVG	
7		0.9532	26.69	9.67	36.36	56.00	-19.64	QP	
8		0.9532	15.56	9.67	25.23	46.00	-20.77	AVG	
9		3.2348	24.26	9.74	34.00	56.00	-22.00	QP	
10		3.2348	11.59	9.74	21.33	46.00	-24.67	AVG	
11		9.3255	21.64	9.86	31.50	60.00	-28.50	QP	
12		9.3255	12.15	9.86	22.01	50.00	-27.99	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode	Idle	Tested Date	2023/2/1
Test Frequency	-	Phase	Neutral

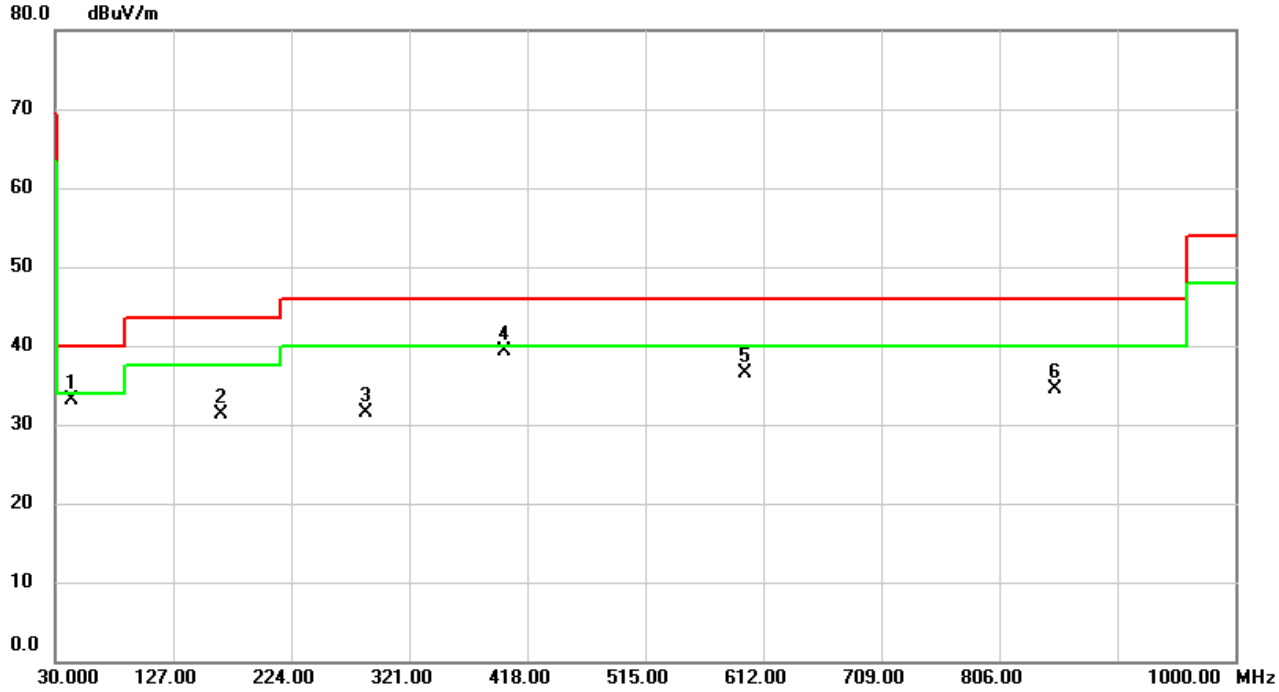


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1725	32.52	9.65	42.17	64.84	-22.67	QP	
2	*	0.1725	25.89	9.65	35.54	54.84	-19.30	AVG	
3		0.2287	27.82	9.64	37.46	62.50	-25.04	QP	
4		0.2287	17.43	9.64	27.07	52.50	-25.43	AVG	
5		0.4604	22.93	9.64	32.57	56.69	-24.12	QP	
6		0.4604	13.62	9.64	23.26	46.69	-23.43	AVG	
7		1.2255	20.92	9.68	30.60	56.00	-25.40	QP	
8		1.2255	13.02	9.68	22.70	46.00	-23.30	AVG	
9		1.9590	22.82	9.71	32.53	56.00	-23.47	QP	
10		1.9590	12.65	9.71	22.36	46.00	-23.64	AVG	
11		9.8970	19.64	9.91	29.55	60.00	-30.45	QP	
12		9.8970	9.12	9.91	19.03	50.00	-30.97	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX B RADIATED EMISSIONS - 30 MHZ TO 1 GHZ

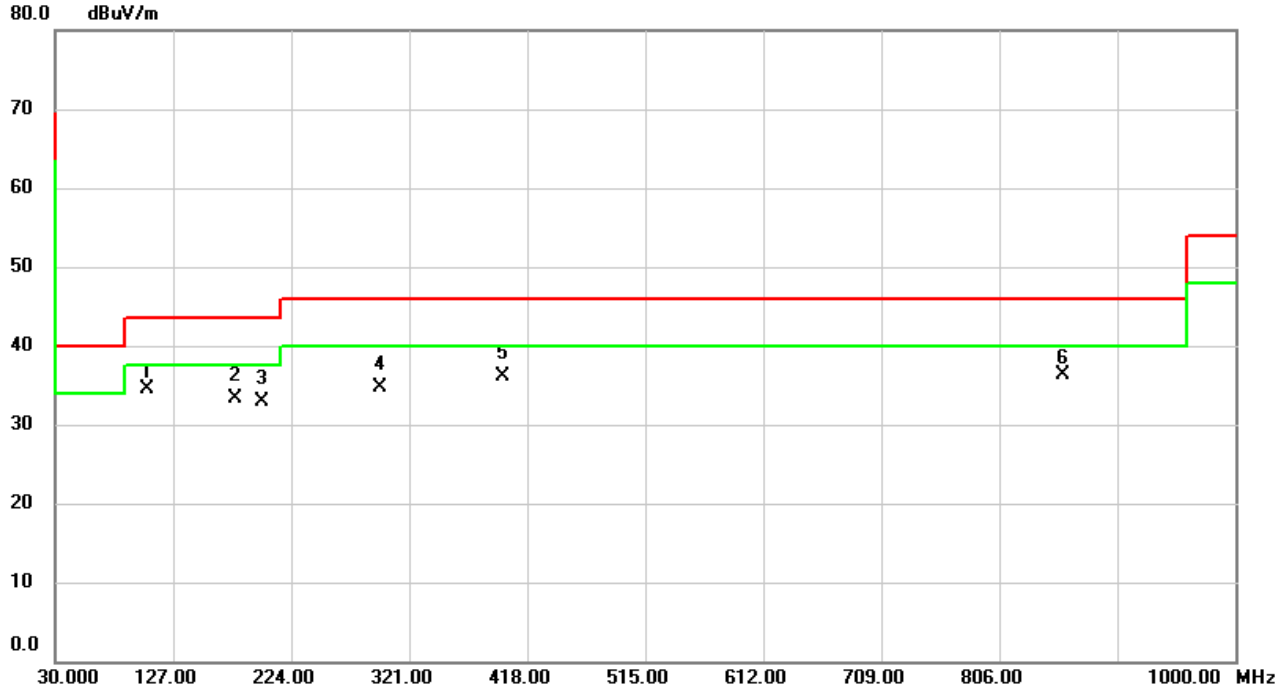
Test Mode	IEEE 802.11b	Test Date	2023/3/17
Test Frequency	2442MHz	Polarization	Vertical
Temp	25°C	Hum.	64%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		43.3860	45.26	-12.08	33.18	40.00	-6.82	peak	
2		165.8970	43.55	-12.30	31.25	43.50	-12.25	peak	
3		285.3362	43.18	-11.65	31.53	46.00	-14.47	peak	
4	*	399.8610	47.98	-8.70	39.28	46.00	-6.72	peak	
5		597.4500	40.37	-3.95	36.42	46.00	-9.58	peak	
6		852.5277	34.54	-0.13	34.41	46.00	-11.59	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE 802.11b	Test Date	2023/3/17
Test Frequency	2442MHz	Polarization	Horizontal
Temp	25°C	Hum.	64%

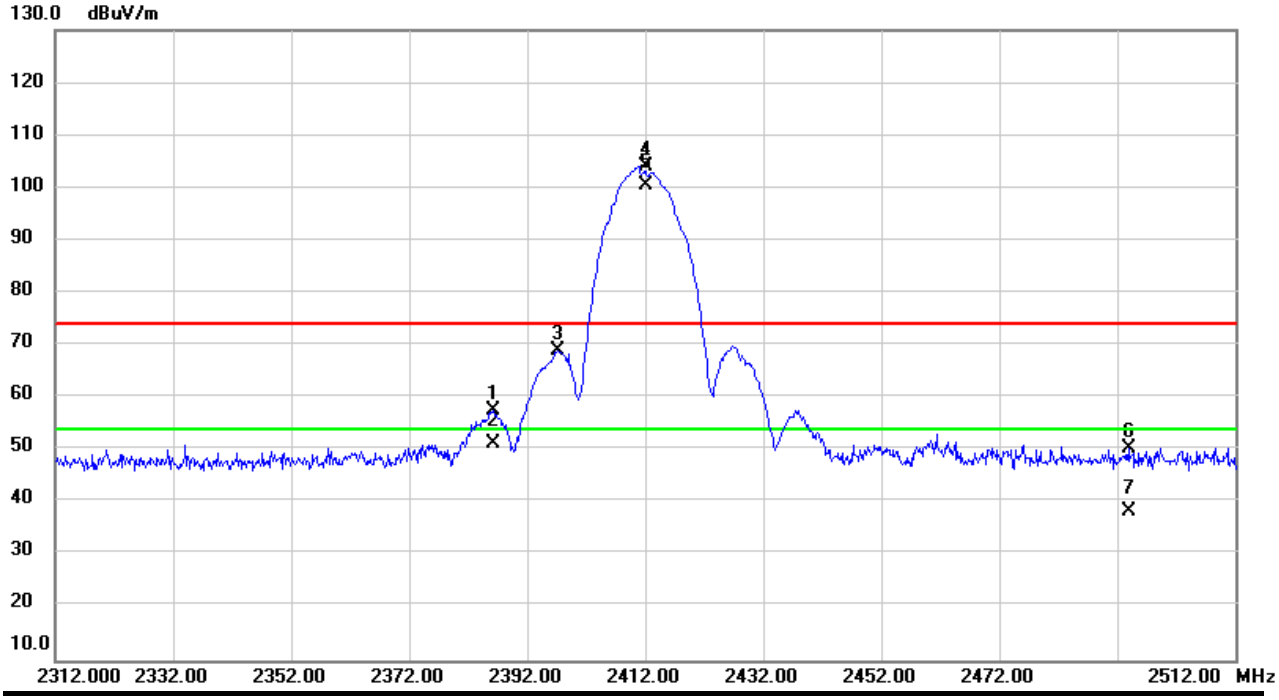


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	105.9510	50.42	-15.91	34.51	43.50	-8.99	peak	
2		177.5370	46.55	-13.30	33.25	43.50	-10.25	QP	
3		200.0087	48.14	-15.23	32.91	43.50	-10.59	QP	
4		297.2350	46.06	-11.37	34.69	46.00	-11.31	QP	
5		398.3413	44.93	-8.75	36.18	46.00	-9.82	QP	
6		858.1213	36.42	-0.07	36.35	46.00	-9.65	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX C RADIATED EMISSIONS - ABOVE 1 GHZ

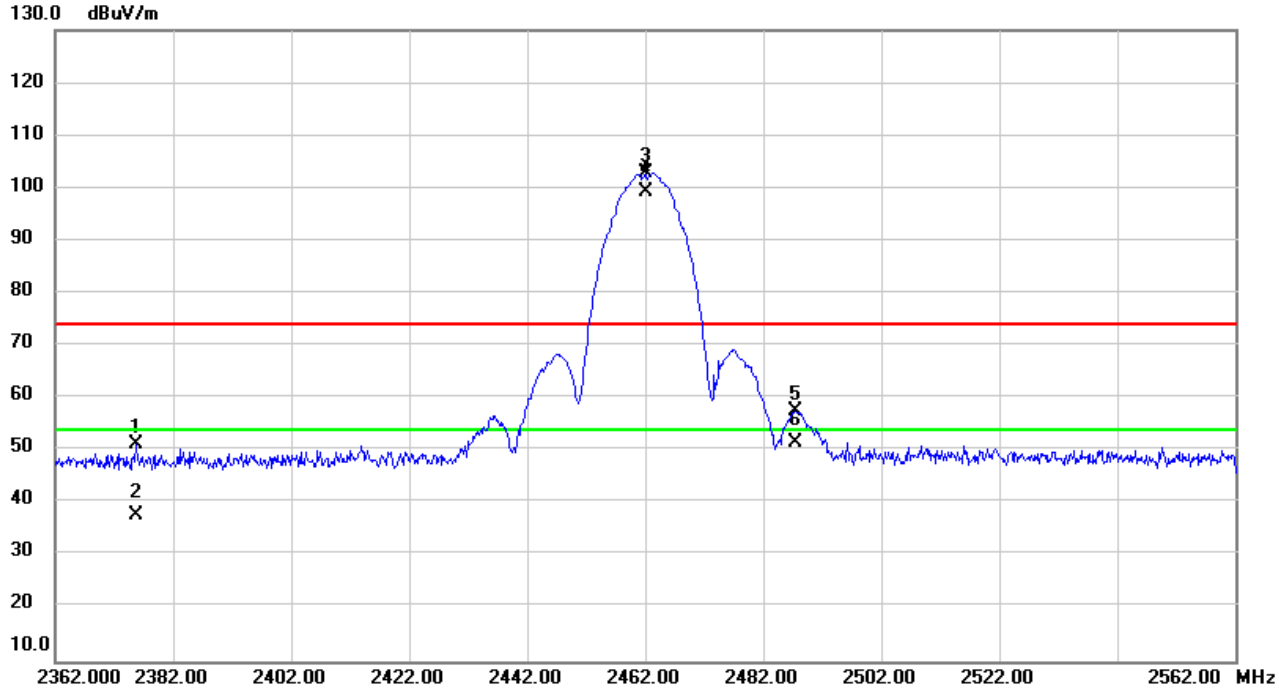
Test Mode	IEEE 802.11b	Test Date	2023/3/15
Test Frequency	2412MHz	Polarization	Horizontal
Temp	24°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2386.187	62.92	-5.42	57.50	74.00	-16.50	peak	
2		2386.187	56.74	-5.42	51.32	54.00	-2.68	AVG	
3		2397.127	74.36	-5.41	68.95	74.00	-5.05	peak	NoLimit
4	X	2412.000	109.47	-5.39	104.08	74.00	30.08	peak	NoLimit
5	*	2412.000	105.90	-5.39	100.51	54.00	46.51	AVG	NoLimit
6		2493.960	55.79	-5.31	50.48	74.00	-23.52	peak	
7		2493.960	43.74	-5.31	38.43	54.00	-15.57	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

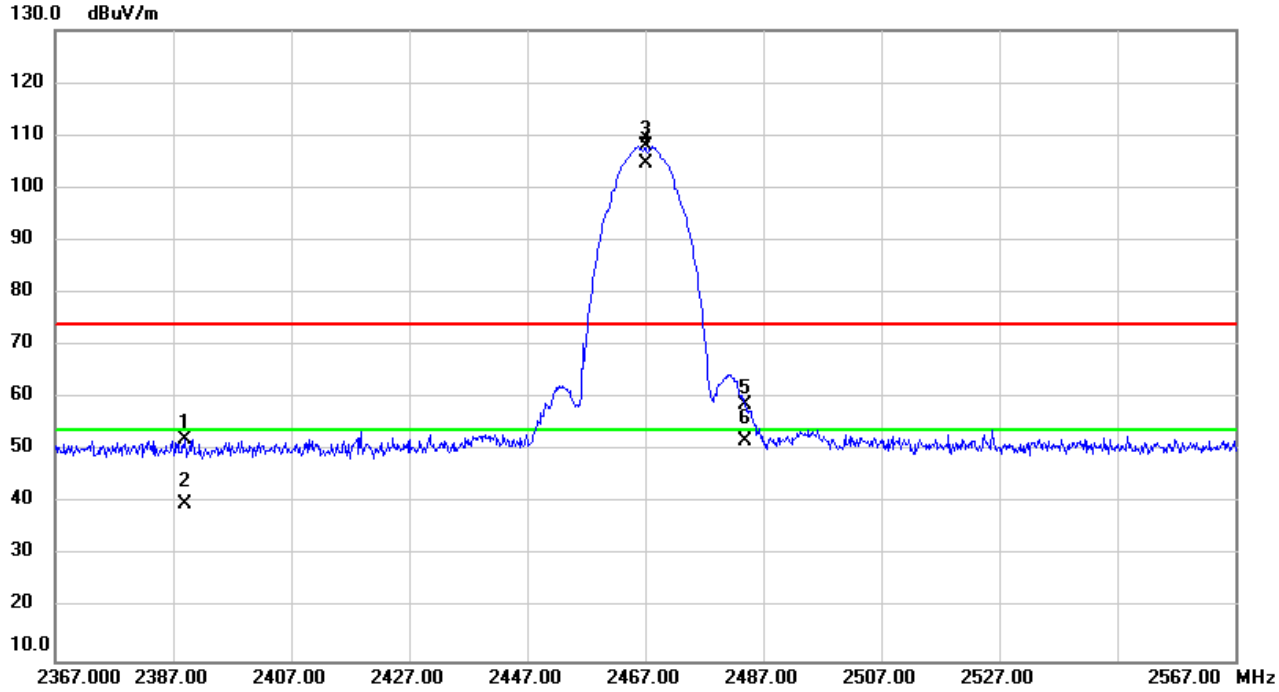
Test Mode	IEEE 802.11b	Test Date	2023/3/15
Test Frequency	2462MHz	Polarization	Horizontal
Temp	24°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2375.780	56.75	-5.43	51.32	74.00	-22.68	peak	
2		2375.780	43.27	-5.43	37.84	54.00	-16.16	AVG	
3	X	2462.000	108.21	-5.34	102.87	74.00	28.87	peak	NoLimit
4	*	2462.000	104.61	-5.34	99.27	54.00	45.27	AVG	NoLimit
5		2487.393	62.94	-5.30	57.64	74.00	-16.36	peak	
6		2487.393	56.84	-5.30	51.54	54.00	-2.46	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

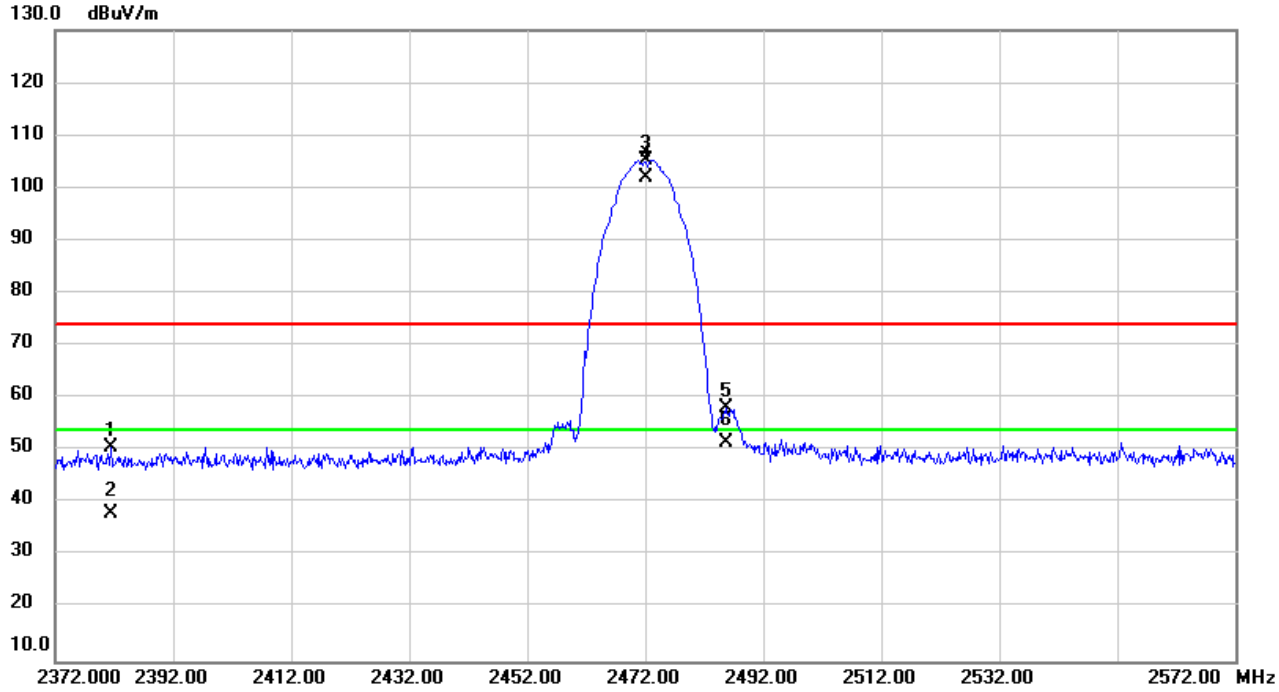
Test Mode	IEEE 802.11b	Test Date	2023/3/20
Test Frequency	2467MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2389.133	57.45	-5.42	52.03	74.00	-21.97	peak	
2		2389.133	45.33	-5.42	39.91	54.00	-14.09	AVG	
3	X	2467.000	113.13	-5.32	107.81	74.00	33.81	peak	NoLimit
4	*	2467.000	110.02	-5.32	104.70	54.00	50.70	AVG	NoLimit
5		2483.840	64.02	-5.32	58.70	74.00	-15.30	peak	
6		2483.840	57.14	-5.32	51.82	54.00	-2.18	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

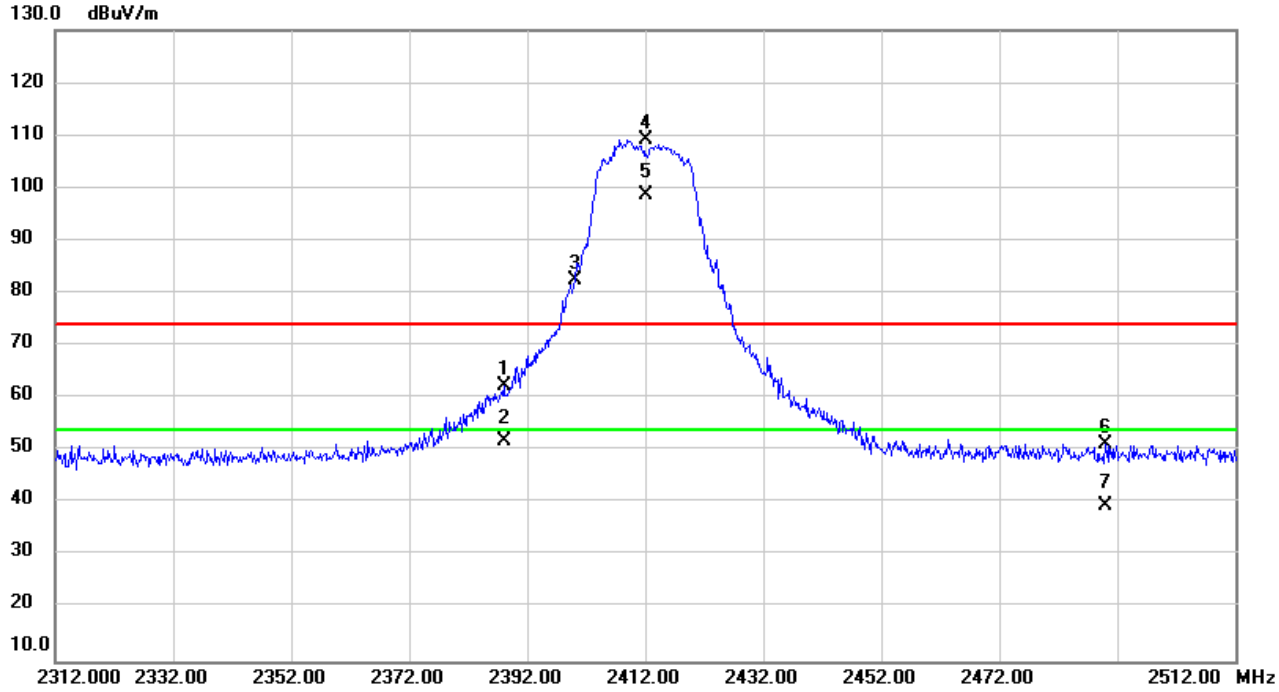
Test Mode	IEEE 802.11b	Test Date	2023/3/20
Test Frequency	2472MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2381.387	56.00	-5.42	50.58	74.00	-23.42	peak	
2		2381.387	43.37	-5.42	37.95	54.00	-16.05	AVG	
3	X	2472.000	110.57	-5.33	105.24	74.00	31.24	peak	NoLimit
4	*	2472.000	107.38	-5.33	102.05	54.00	48.05	AVG	NoLimit
5		2485.707	63.52	-5.30	58.22	74.00	-15.78	peak	
6		2485.707	56.81	-5.30	51.51	54.00	-2.49	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

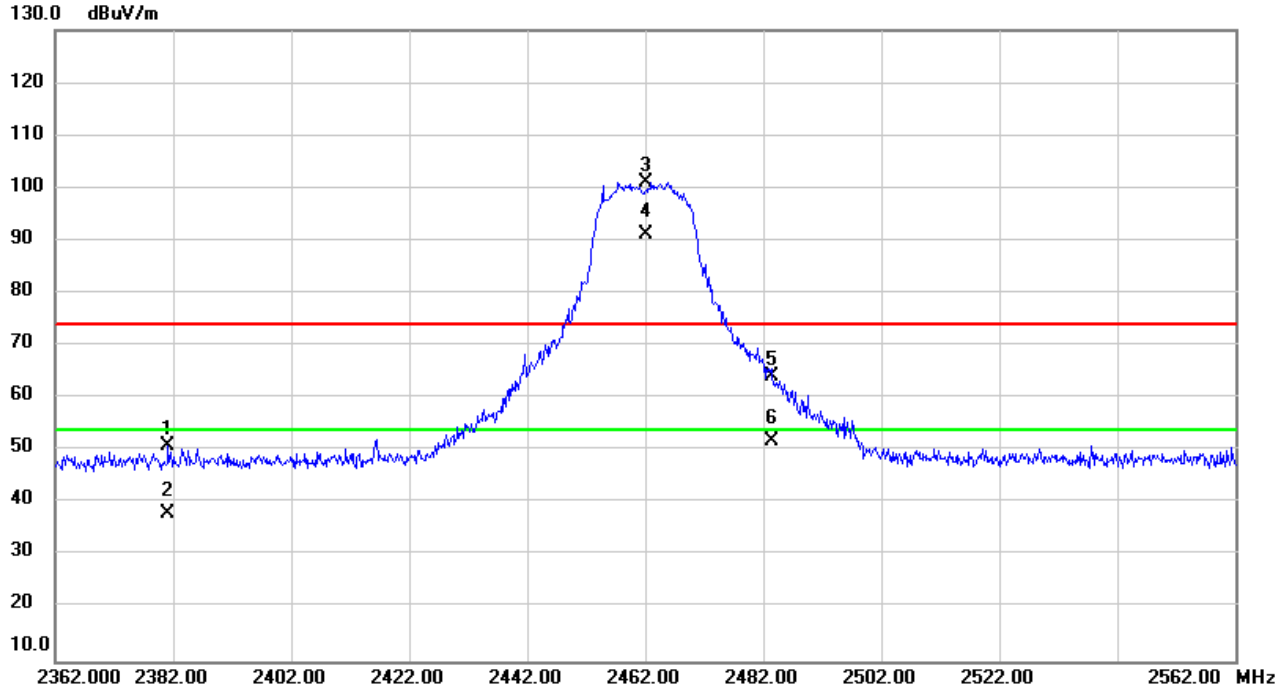
Test Mode	IEEE 802.11g	Test Date	2023/3/15
Test Frequency	2412MHz	Polarization	Horizontal
Temp	24°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2388.027	67.88	-5.42	62.46	74.00	-11.54	peak	
2		2388.027	57.16	-5.42	51.74	54.00	-2.26	AVG	
3	X	2400.000	87.77	-5.41	82.36	74.00	8.36	peak	NoLimit
4	X	2412.000	114.68	-5.39	109.29	74.00	35.29	peak	NoLimit
5	*	2412.000	103.91	-5.39	98.52	54.00	44.52	AVG	NoLimit
6		2489.933	56.69	-5.30	51.39	74.00	-22.61	peak	
7		2489.933	44.93	-5.30	39.63	54.00	-14.37	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

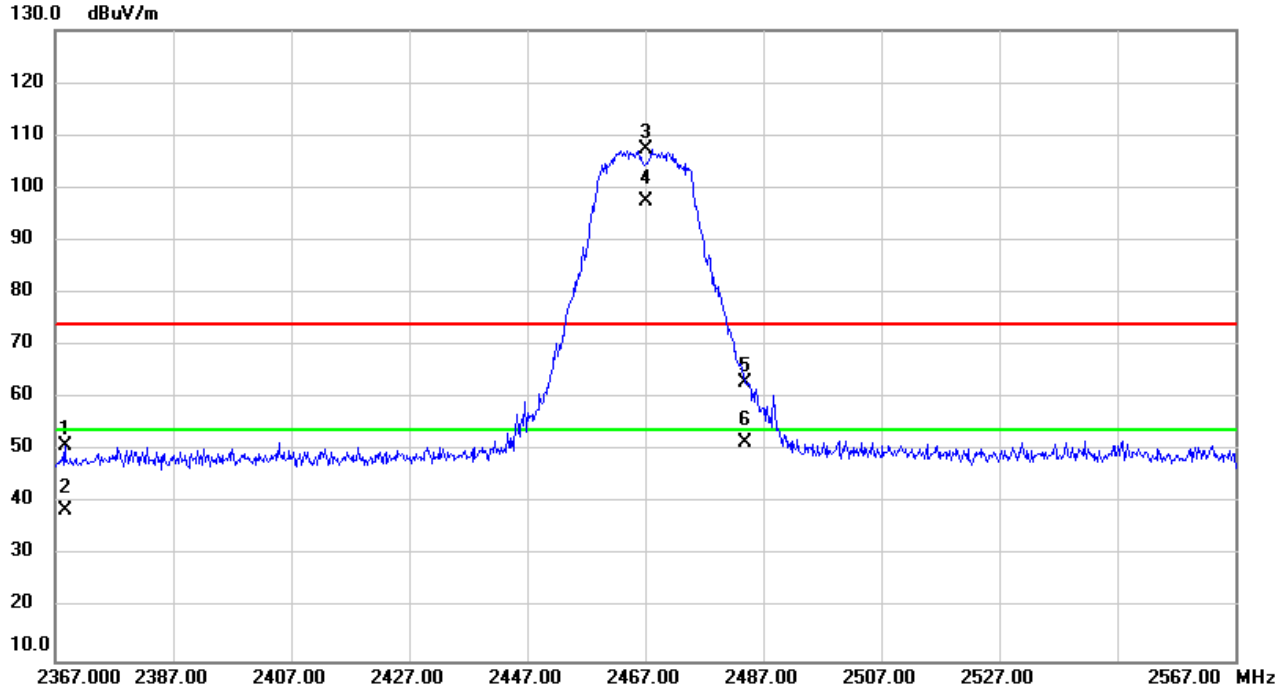
Test Mode	IEEE 802.11g	Test Date	2023/3/15
Test Frequency	2462MHz	Polarization	Horizontal
Temp	24°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2381.127	56.38	-5.42	50.96	74.00	-23.04	peak	
2		2381.127	43.44	-5.42	38.02	54.00	-15.98	AVG	
3	X	2462.000	106.29	-5.34	100.95	74.00	26.95	peak	NoLimit
4	*	2462.000	96.40	-5.34	91.06	54.00	37.06	AVG	NoLimit
5		2483.600	69.57	-5.32	64.25	74.00	-9.75	peak	
6		2483.600	57.19	-5.32	51.87	54.00	-2.13	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

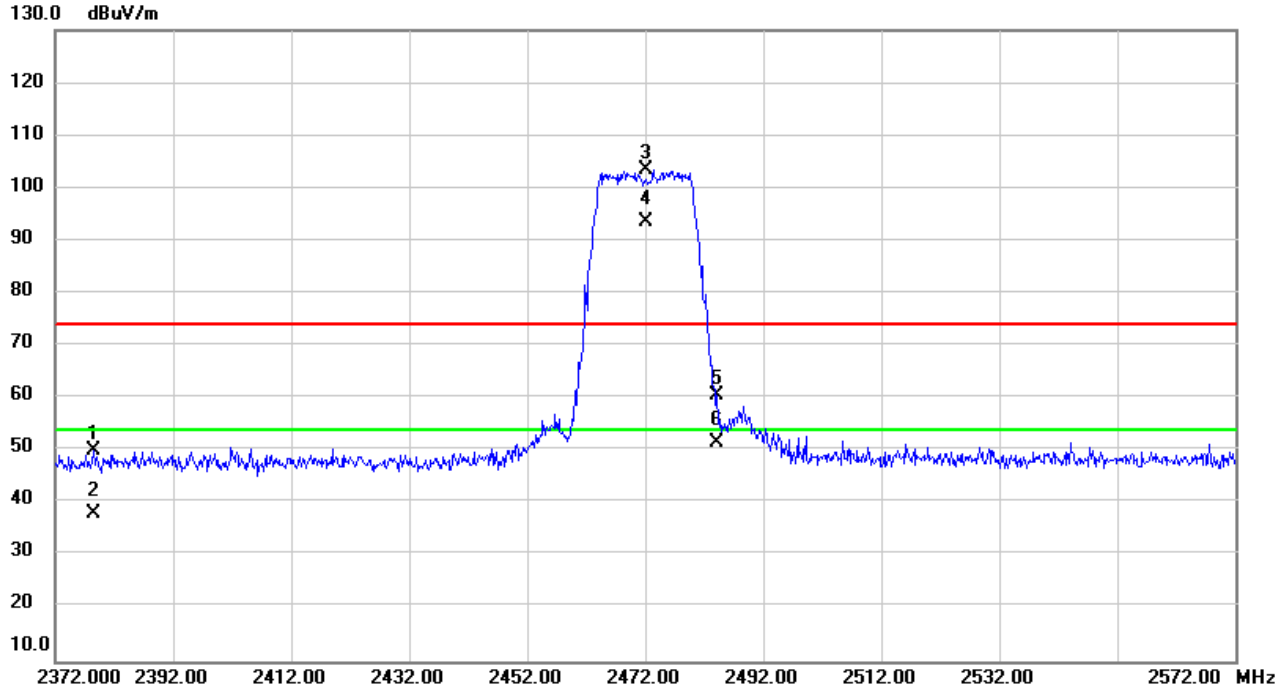
Test Mode	IEEE 802.11g	Test Date	2023/3/20
Test Frequency	2467MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2368.653	56.38	-5.44	50.94	74.00	-23.06	peak	
2		2368.653	44.03	-5.44	38.59	54.00	-15.41	AVG	
3	X	2467.000	112.72	-5.32	107.40	74.00	33.40	peak	NoLimit
4	*	2467.000	102.76	-5.32	97.44	54.00	43.44	AVG	NoLimit
5		2483.847	68.24	-5.32	62.92	74.00	-11.08	peak	
6		2483.847	56.95	-5.32	51.63	54.00	-2.37	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

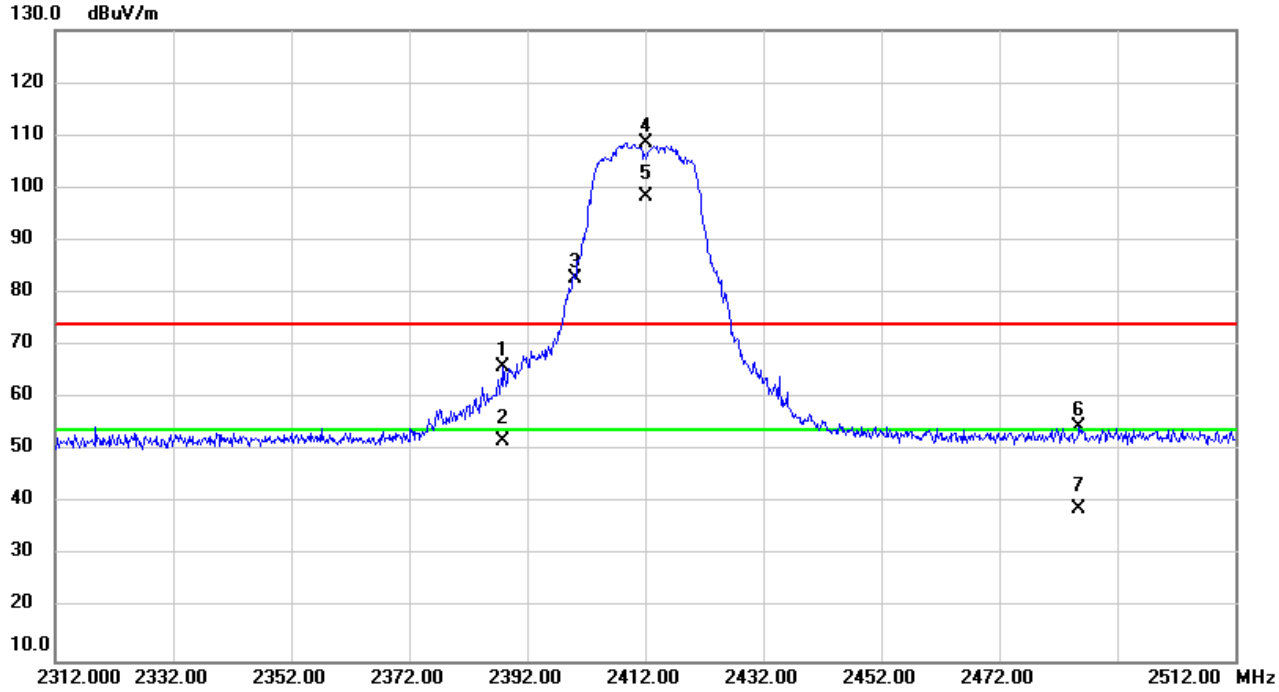
Test Mode	IEEE 802.11g	Test Date	2023/3/20
Test Frequency	2472MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2378.607	55.45	-5.43	50.02	74.00	-23.98	peak	
2		2378.607	43.51	-5.43	38.08	54.00	-15.92	AVG	
3	X	2472.000	108.75	-5.33	103.42	74.00	29.42	peak	NoLimit
4	*	2472.000	98.89	-5.33	93.56	54.00	39.56	AVG	NoLimit
5		2484.167	65.95	-5.32	60.63	74.00	-13.37	peak	
6		2484.167	56.75	-5.32	51.43	54.00	-2.57	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

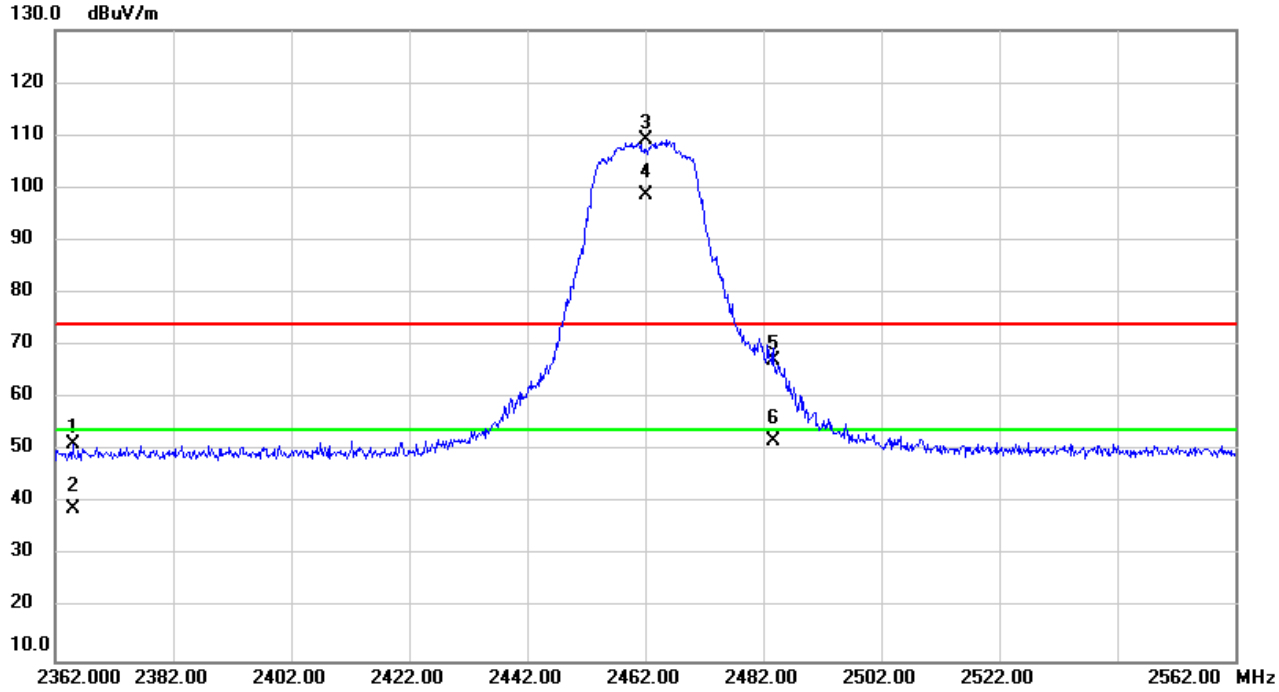
Test Mode	IEEE 802.11n (HT20)	Test Date	2023/3/20
Test Frequency	2412MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2387.880	71.23	-5.42	65.81	74.00	-8.19	peak	
2		2387.880	57.29	-5.42	51.87	54.00	-2.13	AVG	
3	X	2400.000	88.25	-5.41	82.84	74.00	8.84	peak	
4	X	2412.000	113.96	-5.39	108.57	74.00	34.57	peak	NoLimit
5	*	2412.000	103.83	-5.39	98.44	54.00	44.44	AVG	NoLimit
6		2485.593	59.76	-5.30	54.46	74.00	-19.54	peak	
7		2485.593	44.34	-5.30	39.04	54.00	-14.96	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

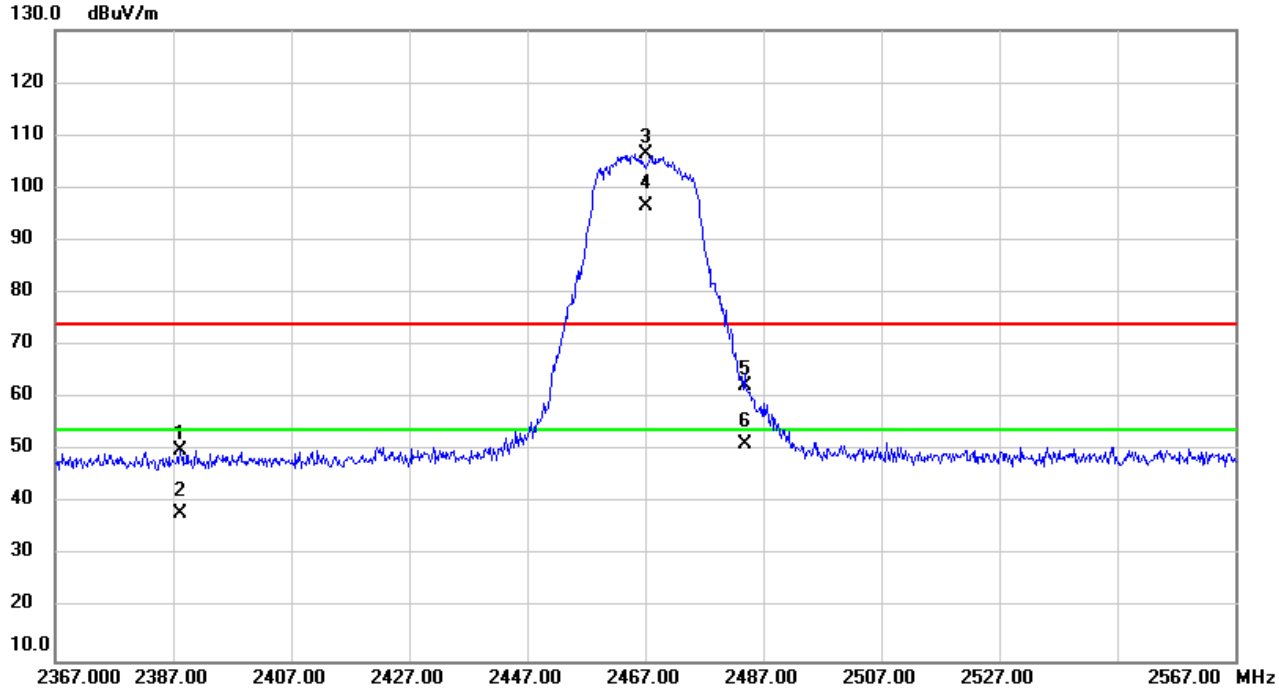
Test Mode	IEEE 802.11n (HT20)	Test Date	2023/3/20
Test Frequency	2462MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2364.960	56.83	-5.45	51.38	74.00	-22.62	peak	
2		2364.960	44.30	-5.45	38.85	54.00	-15.15	AVG	
3	X	2462.000	114.53	-5.34	109.19	74.00	35.19	peak	NoLimit
4	*	2462.000	103.89	-5.34	98.55	54.00	44.55	AVG	NoLimit
5		2483.800	72.55	-5.32	67.23	74.00	-6.77	peak	
6		2483.800	57.06	-5.32	51.74	54.00	-2.26	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

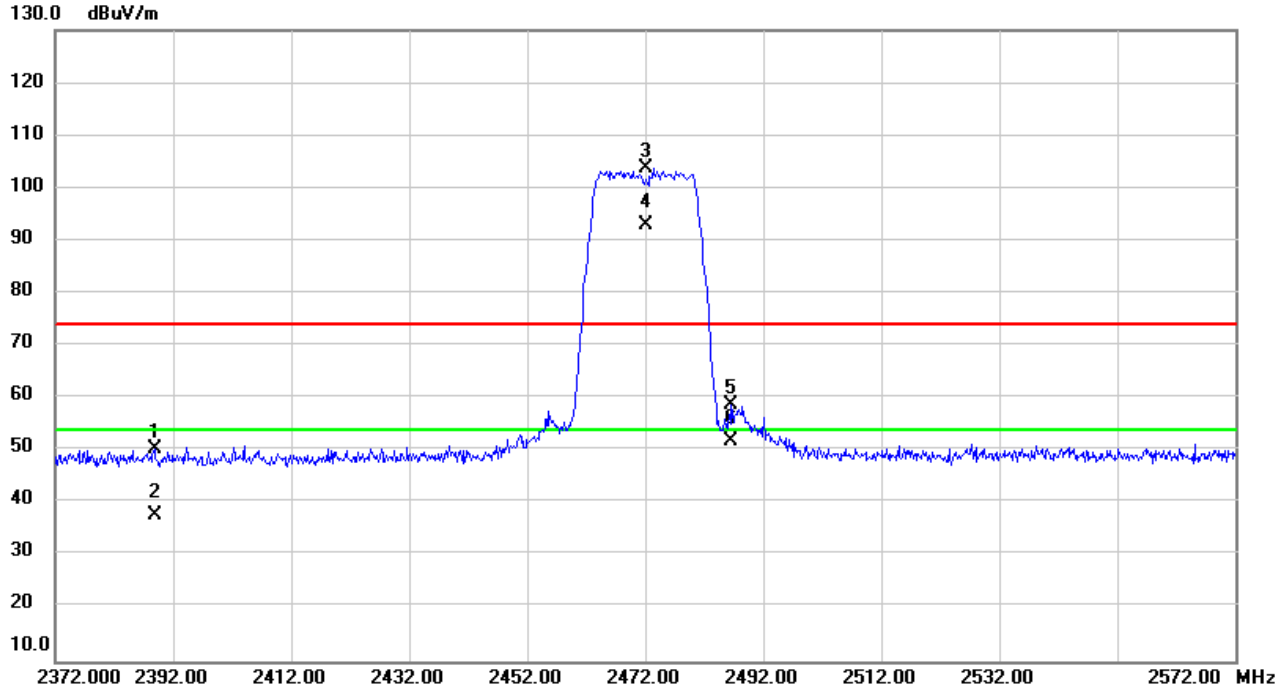
Test Mode	IEEE 802.11n (HT20)	Test Date	2023/3/20
Test Frequency	2467MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2388.120	55.50	-5.42	50.08	74.00	-23.92	peak	
2		2388.120	43.41	-5.42	37.99	54.00	-16.01	AVG	
3	X	2467.000	111.79	-5.32	106.47	74.00	32.47	peak	NoLimit
4	*	2467.000	101.88	-5.32	96.56	54.00	42.56	AVG	NoLimit
5		2484.013	67.58	-5.32	62.26	74.00	-11.74	peak	
6		2484.013	56.51	-5.32	51.19	54.00	-2.81	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

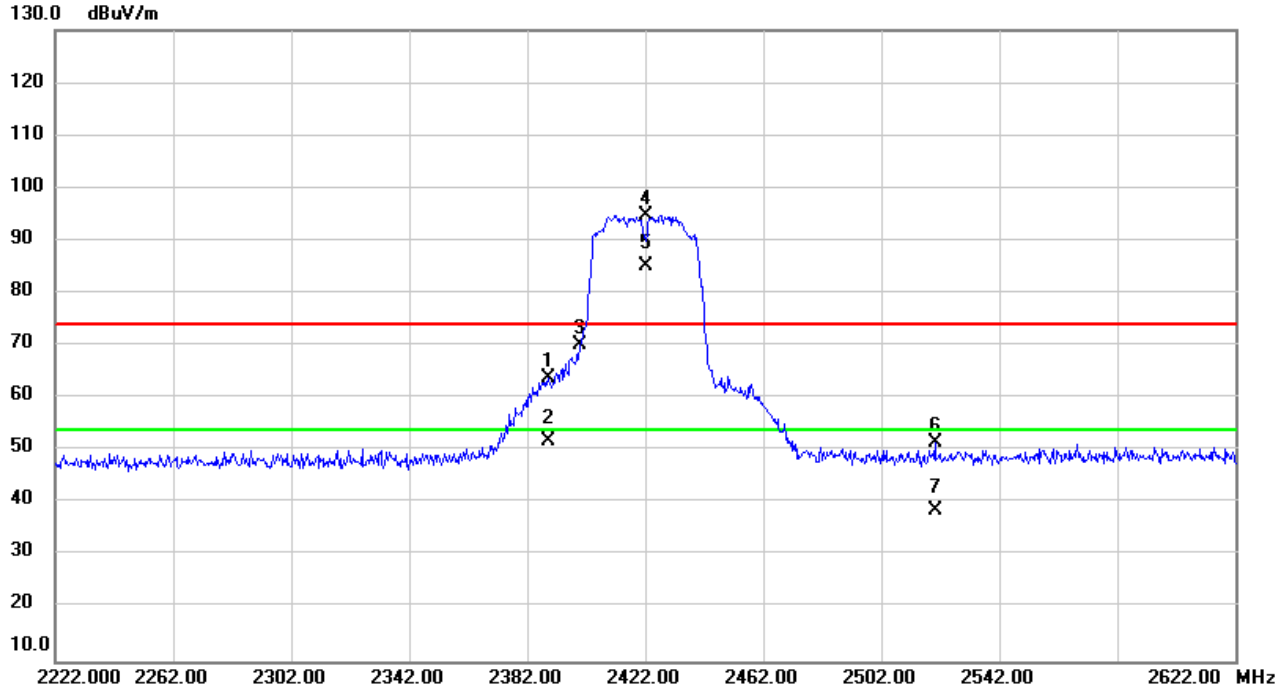
Test Mode	IEEE 802.11n (HT20)	Test Date	2023/3/20
Test Frequency	2472MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2388.820	55.66	-5.42	50.24	74.00	-23.76	peak	
2		2388.820	43.29	-5.42	37.87	54.00	-16.13	AVG	
3	X	2472.000	109.12	-5.33	103.79	74.00	29.79	peak	NoLimit
4	*	2472.000	98.40	-5.33	93.07	54.00	39.07	AVG	NoLimit
5		2486.660	64.01	-5.30	58.71	74.00	-15.29	peak	
6		2486.660	57.08	-5.30	51.78	54.00	-2.22	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

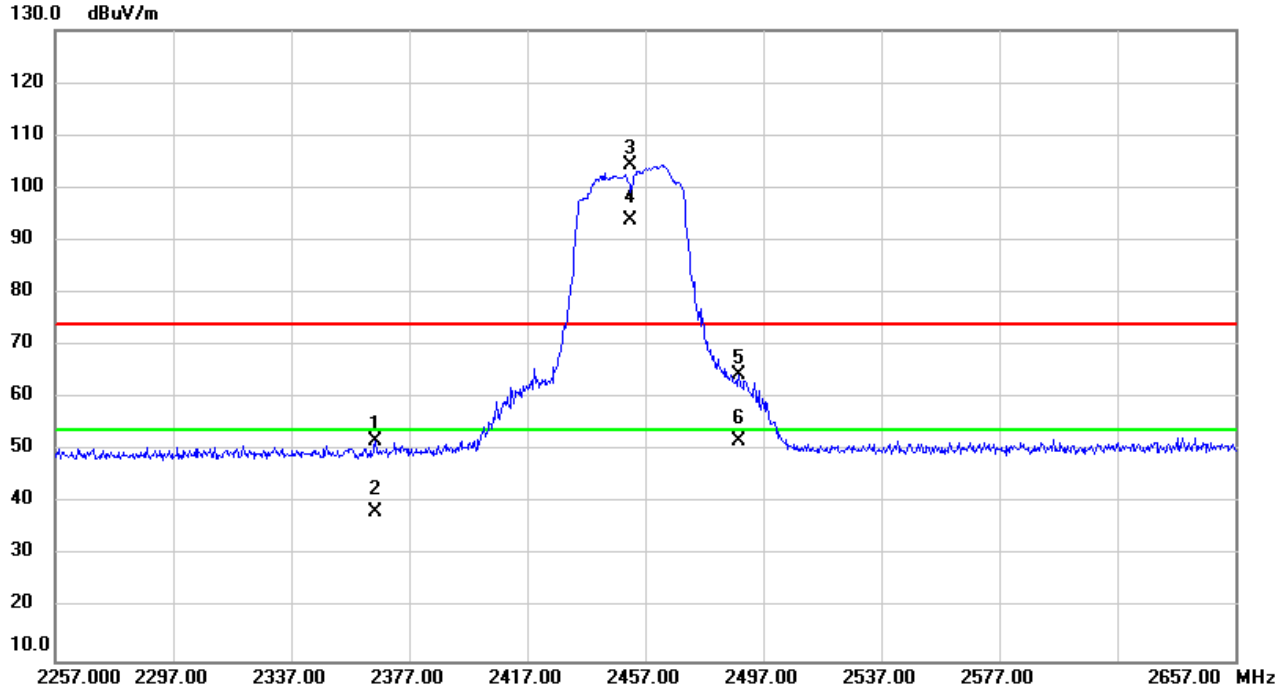
Test Mode	IEEE 802.11n (HT40)	Test Date	2023/3/20
Test Frequency	2422MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2389.027	69.20	-5.42	63.78	74.00	-10.22	peak	
2		2389.027	57.28	-5.42	51.86	54.00	-2.14	AVG	
3		2400.000	75.66	-5.41	70.25	74.00	-3.75	peak	NoLimit
4	X	2422.000	100.11	-5.38	94.73	74.00	20.73	peak	NoLimit
5	*	2422.000	90.40	-5.38	85.02	54.00	31.02	AVG	NoLimit
6		2520.213	56.61	-5.20	51.41	74.00	-22.59	peak	
7		2520.213	43.97	-5.20	38.77	54.00	-15.23	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

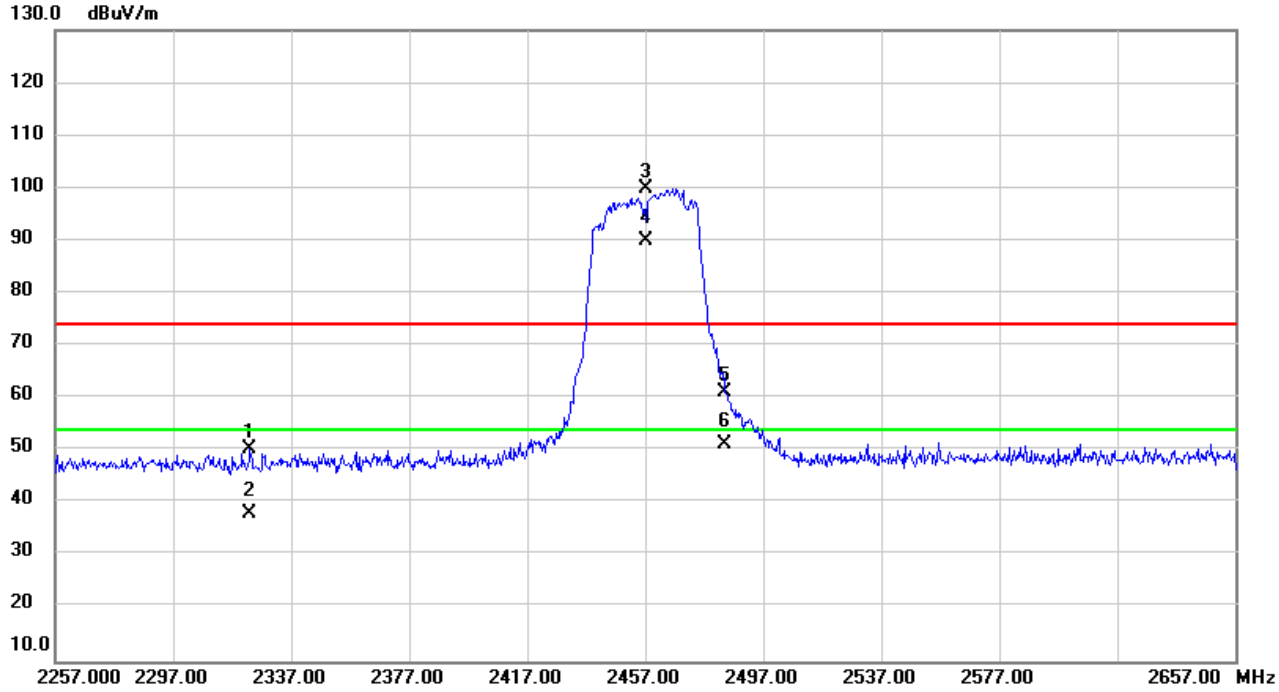
Test Mode	IEEE 802.11n (HT40)	Test Date	2023/3/20
Test Frequency	2452MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2365.560	57.41	-5.44	51.97	74.00	-22.03	peak	
2		2365.560	43.84	-5.44	38.40	54.00	-15.60	AVG	
3	X	2452.000	109.71	-5.35	104.36	74.00	30.36	peak	NoLimit
4	*	2452.000	99.28	-5.35	93.93	54.00	39.93	AVG	NoLimit
5		2488.627	69.73	-5.30	64.43	74.00	-9.57	peak	
6		2488.627	57.05	-5.30	51.75	54.00	-2.25	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

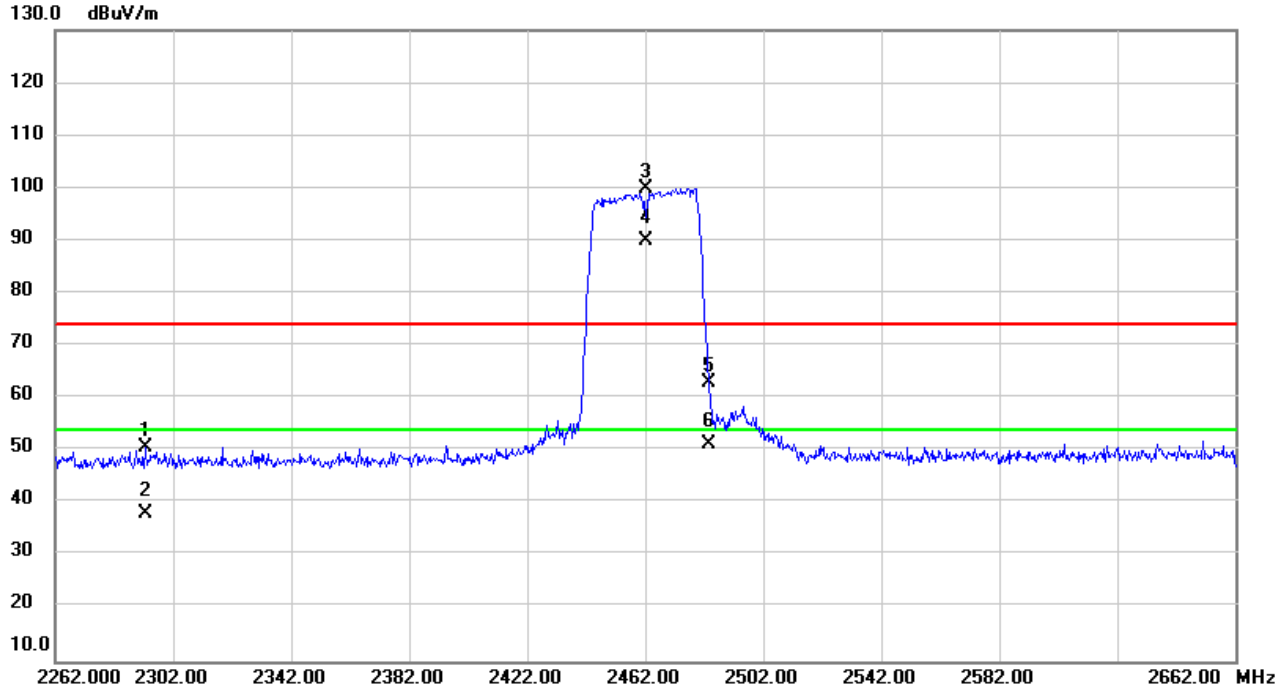
Test Mode	IEEE 802.11n (HT40)	Test Date	2023/3/20
Test Frequency	2457MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2323.067	55.76	-5.49	50.27	74.00	-23.73	peak	
2		2323.067	43.44	-5.49	37.95	54.00	-16.05	AVG	
3	X	2457.000	105.26	-5.33	99.93	74.00	25.93	peak	NoLimit
4	*	2457.000	95.37	-5.33	90.04	54.00	36.04	AVG	NoLimit
5		2484.200	66.55	-5.32	61.23	74.00	-12.77	peak	
6		2484.200	56.64	-5.32	51.32	54.00	-2.68	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

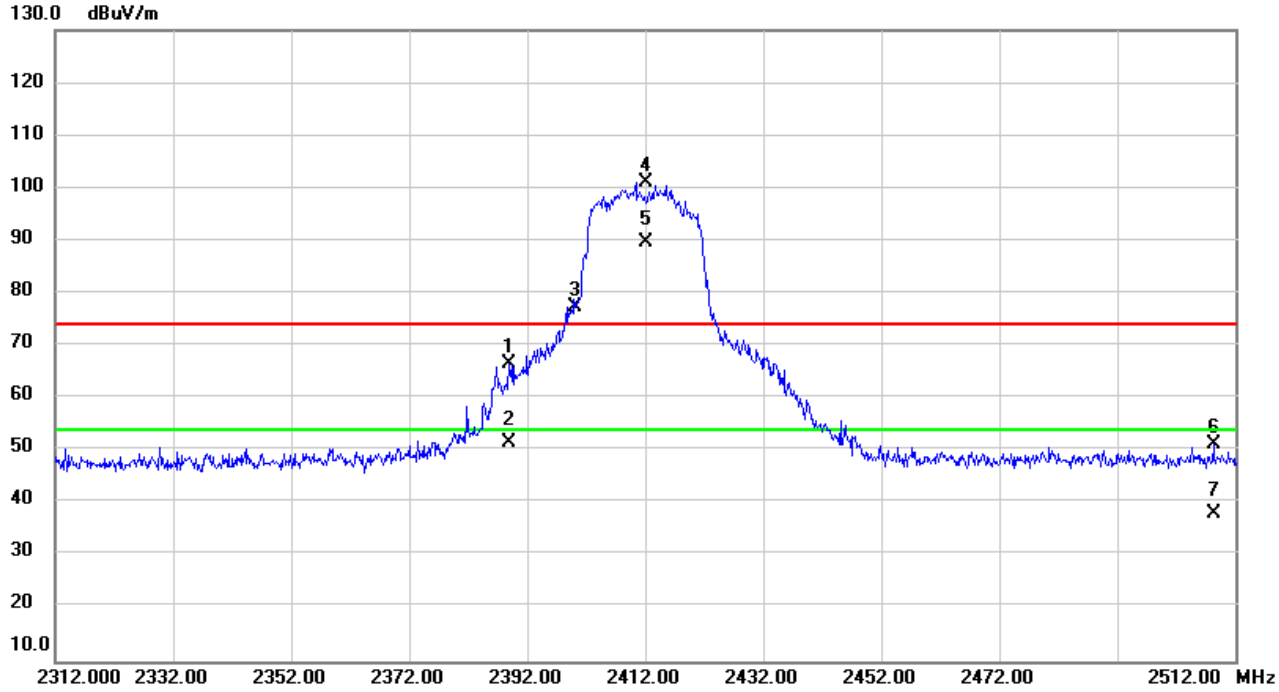
Test Mode	IEEE 802.11n (HT40)	Test Date	2023/3/20
Test Frequency	2462MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2292.760	56.12	-5.53	50.59	74.00	-23.41	peak	
2		2292.760	43.47	-5.53	37.94	54.00	-16.06	AVG	
3	X	2462.000	105.29	-5.34	99.95	74.00	25.95	peak	NoLimit
4	*	2462.000	95.43	-5.34	90.09	54.00	36.09	AVG	NoLimit
5		2483.627	68.13	-5.32	62.81	74.00	-11.19	peak	
6		2483.627	56.67	-5.32	51.35	54.00	-2.65	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

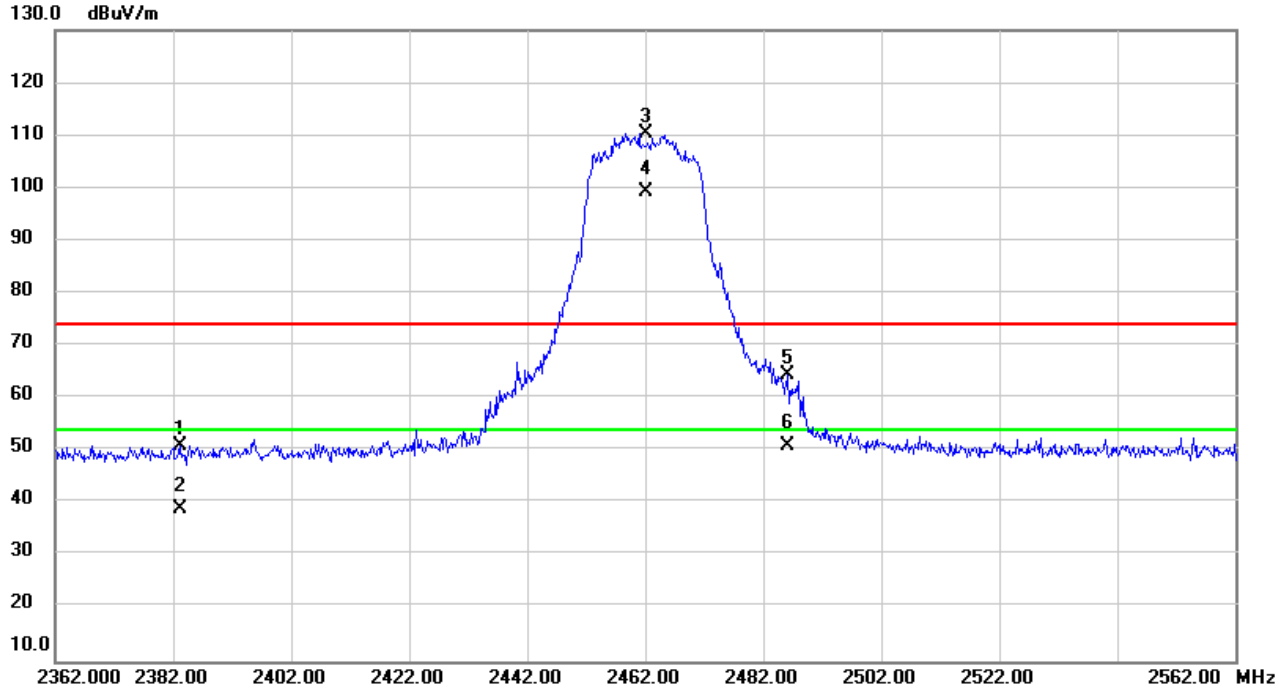
Test Mode	IEEE 802.11ax (HE20)	Test Date	2023/3/20
Test Frequency	2412MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2388.933	71.96	-5.42	66.54	74.00	-7.46	peak	
2		2388.933	56.88	-5.42	51.46	54.00	-2.54	AVG	
3	X	2400.000	82.83	-5.41	77.42	74.00	3.42	peak	NoLimit
4	X	2412.000	106.44	-5.39	101.05	74.00	27.05	peak	NoLimit
5	*	2412.000	95.10	-5.39	89.71	54.00	35.71	AVG	NoLimit
6		2508.293	56.40	-5.25	51.15	74.00	-22.85	peak	
7		2508.293	43.37	-5.25	38.12	54.00	-15.88	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

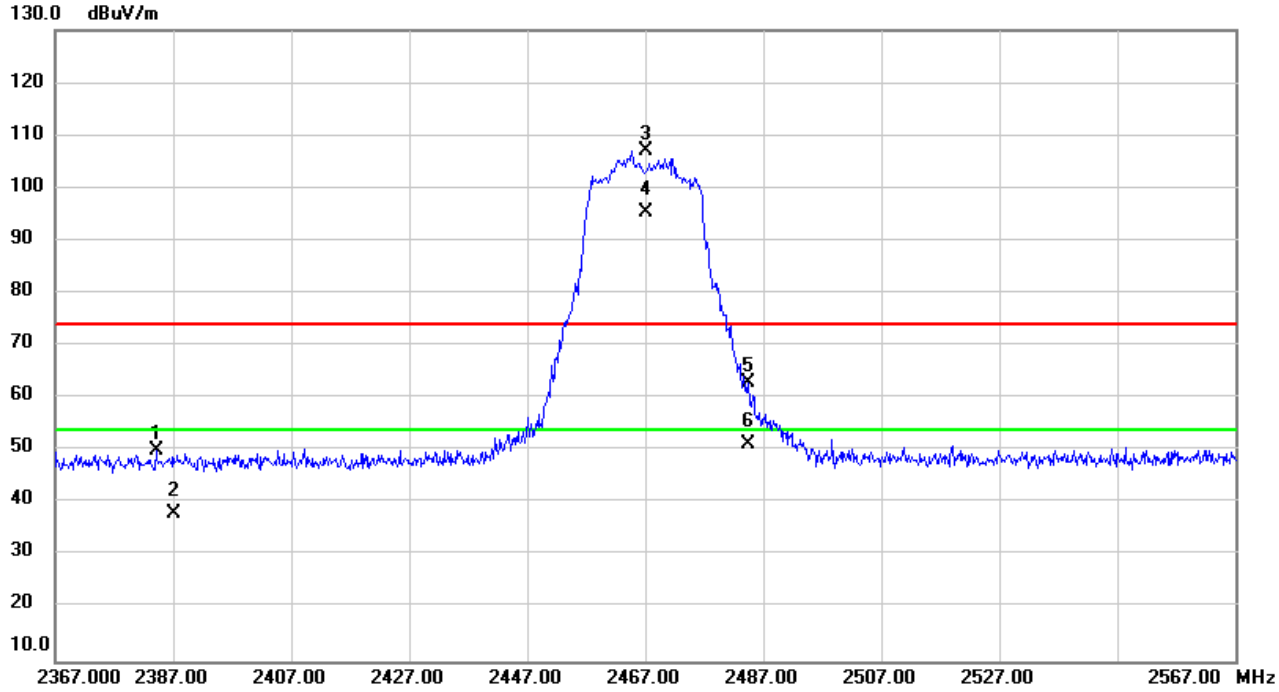
Test Mode	IEEE 802.11ax (HE20)	Test Date	2023/3/20
Test Frequency	2462MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2383.113	56.35	-5.42	50.93	74.00	-23.07	peak	
2		2383.113	44.35	-5.42	38.93	54.00	-15.07	AVG	
3	X	2462.000	115.82	-5.34	110.48	74.00	36.48	peak	NoLimit
4	*	2462.000	104.52	-5.34	99.18	54.00	45.18	AVG	NoLimit
5		2486.053	69.65	-5.30	64.35	74.00	-9.65	peak	
6		2486.053	56.38	-5.30	51.08	54.00	-2.92	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

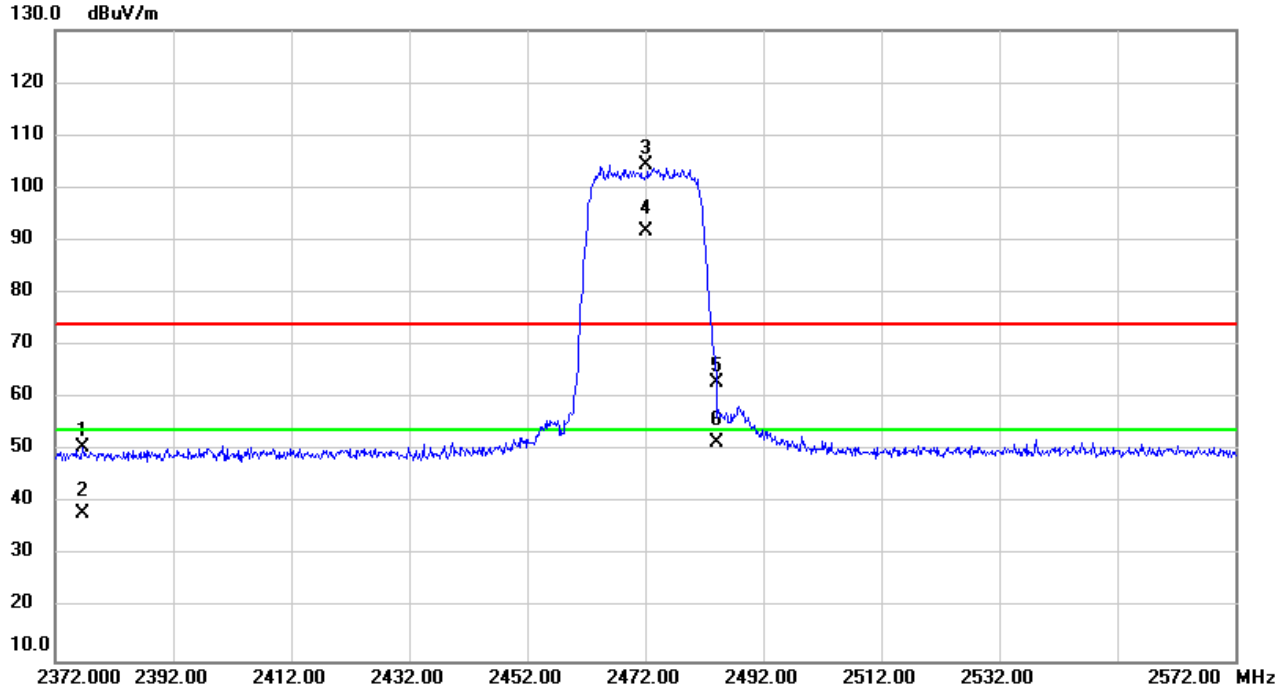
Test Mode	IEEE 802.11ax (HE20)	Test Date	2023/3/20
Test Frequency	2467MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2384.107	55.44	-5.42	50.02	74.00	-23.98	peak	
2		2387.107	43.41	-5.42	37.99	54.00	-16.01	AVG	
3	X	2467.000	112.35	-5.32	107.03	74.00	33.03	peak	NoLimit
4	*	2467.000	100.66	-5.32	95.34	54.00	41.34	AVG	NoLimit
5		2484.400	68.31	-5.31	63.00	74.00	-11.00	peak	
6		2484.400	56.46	-5.31	51.15	54.00	-2.85	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

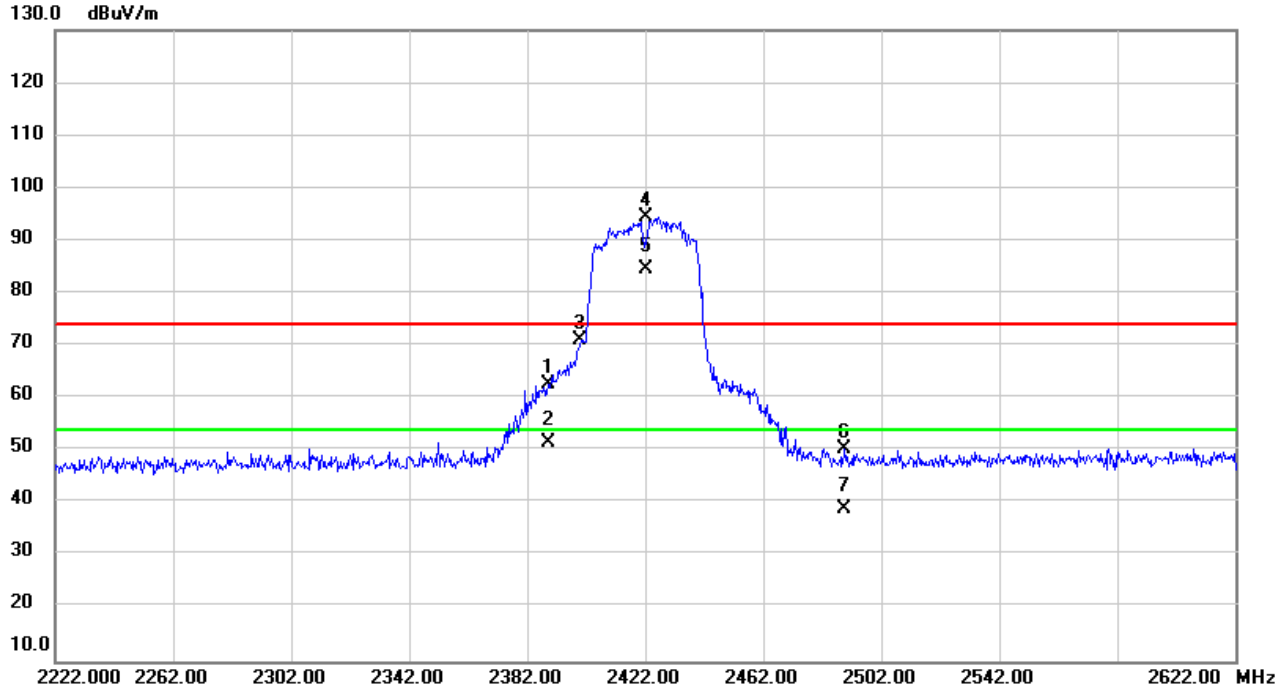
Test Mode	IEEE 802.11ax (HE20)	Test Date	2023/3/20
Test Frequency	2472MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2376.720	56.12	-5.43	50.69	74.00	-23.31	peak	
2		2376.720	43.46	-5.43	38.03	54.00	-15.97	AVG	
3	X	2472.000	109.78	-5.33	104.45	74.00	30.45	peak	NoLimit
4	*	2472.000	96.98	-5.33	91.65	54.00	37.65	AVG	NoLimit
5		2484.113	68.37	-5.32	63.05	74.00	-10.95	peak	
6		2484.113	56.75	-5.32	51.43	54.00	-2.57	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

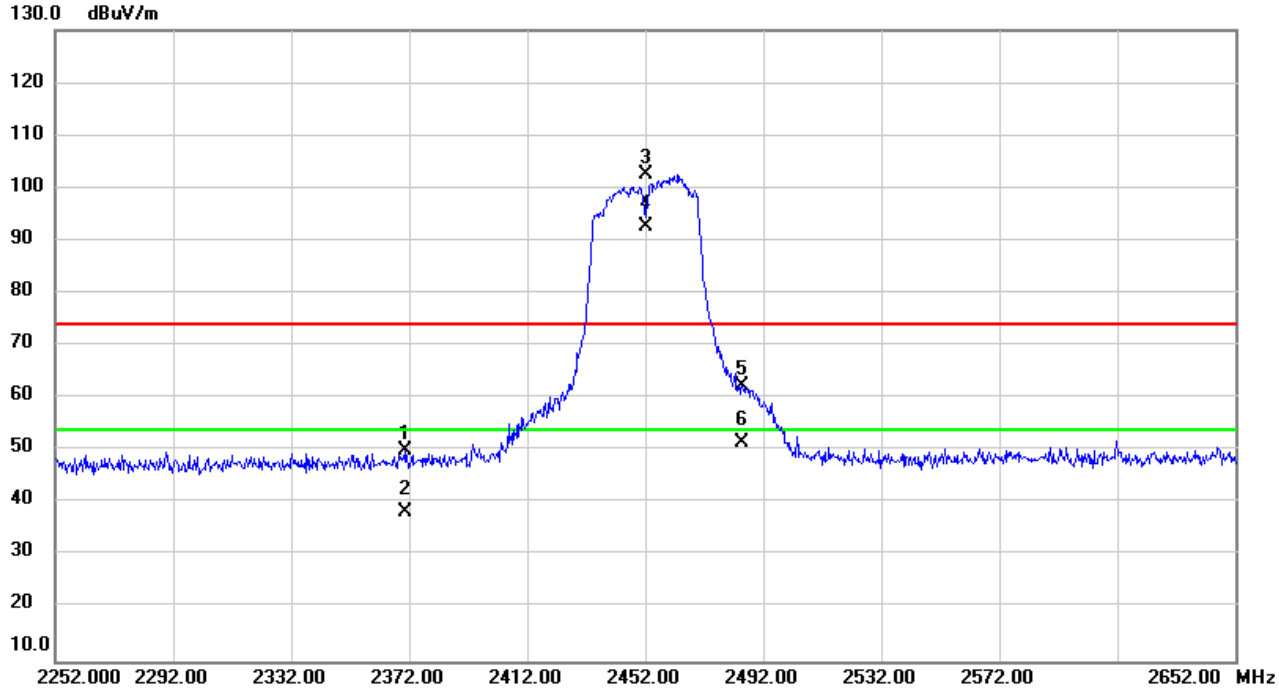
Test Mode	IEEE 802.11ax (HE40)	Test Date	2023/3/20
Test Frequency	2422MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2389.453	68.05	-5.42	62.63	74.00	-11.37	peak	
2		2389.453	57.08	-5.42	51.66	54.00	-2.34	AVG	
3		2400.000	76.48	-5.41	71.07	74.00	-2.93	peak	NoLimit
4	X	2422.000	99.85	-5.38	94.47	74.00	20.47	peak	NoLimit
5	*	2422.000	89.86	-5.38	84.48	54.00	30.48	AVG	NoLimit
6		2489.627	55.67	-5.30	50.37	74.00	-23.63	peak	
7		2489.627	44.19	-5.30	38.89	54.00	-15.11	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

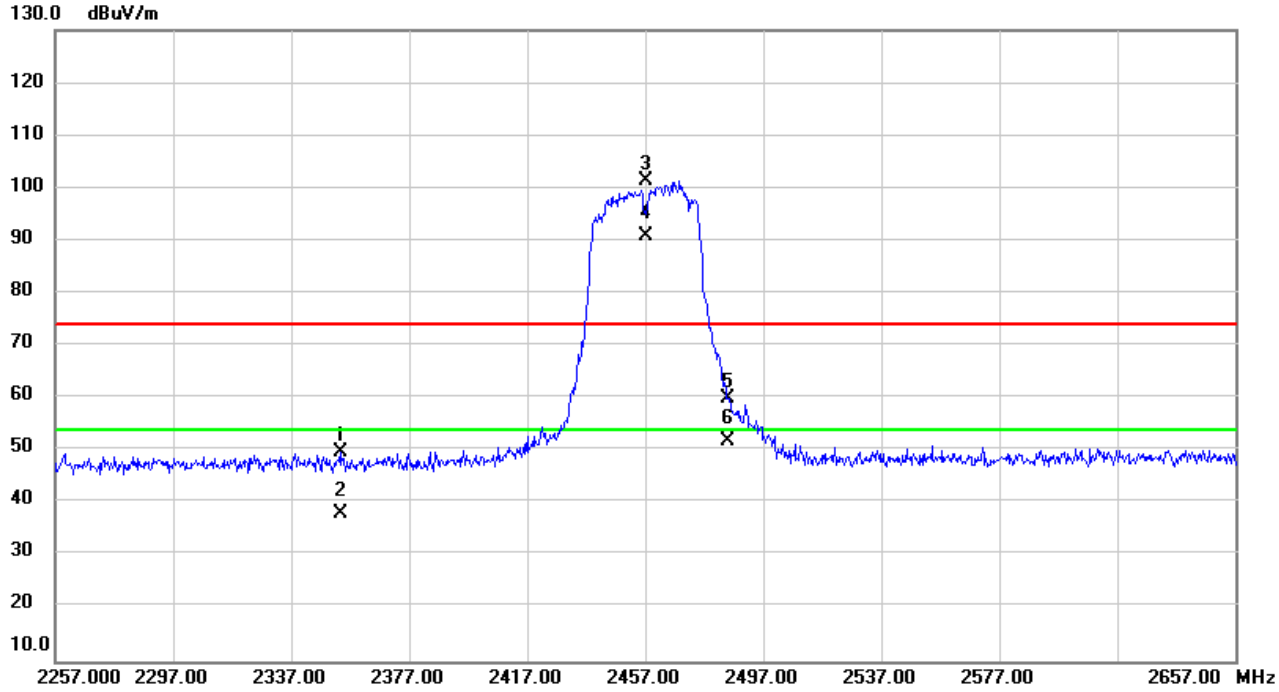
Test Mode	IEEE 802.11ax (HE40)	Test Date	2023/3/20
Test Frequency	2452MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2370.907	55.48	-5.43	50.05	74.00	-23.95	peak	
2		2370.907	43.75	-5.43	38.32	54.00	-15.68	AVG	
3	X	2452.000	107.93	-5.35	102.58	74.00	28.58	peak	NoLimit
4	*	2452.000	98.01	-5.35	92.66	54.00	38.66	AVG	NoLimit
5		2484.827	67.81	-5.31	62.50	74.00	-11.50	peak	
6		2484.827	56.80	-5.31	51.49	54.00	-2.51	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

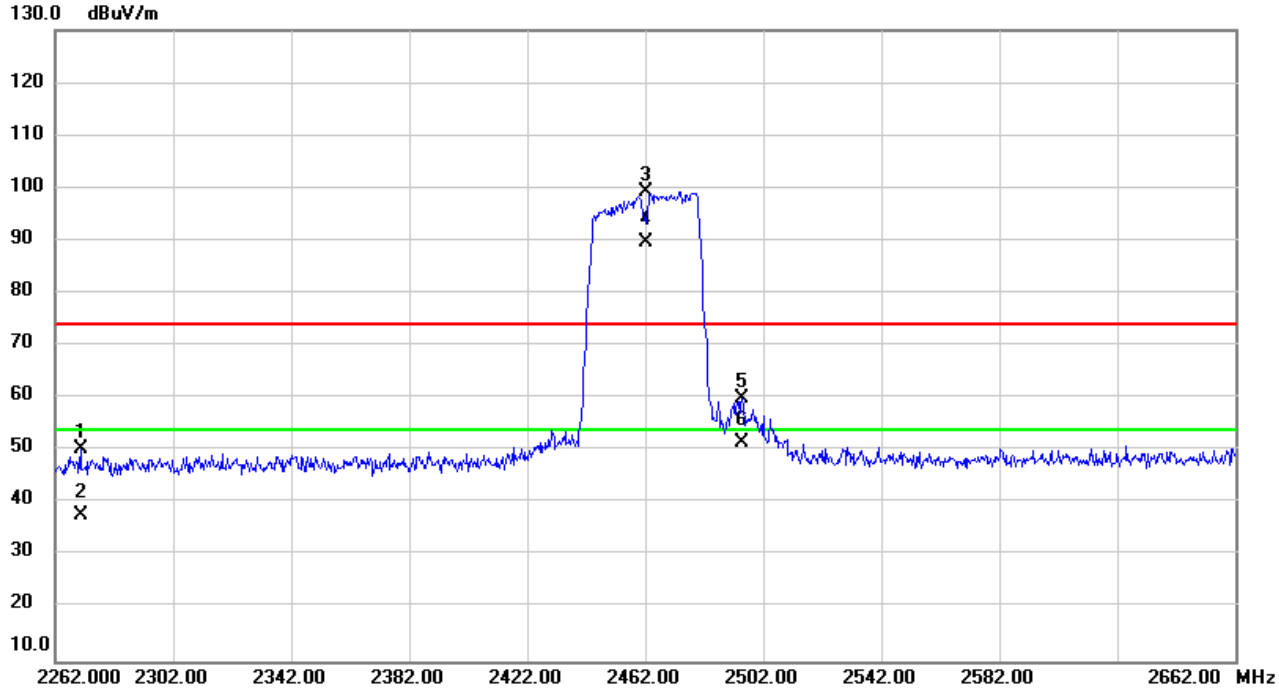
Test Mode	IEEE 802.11ax (HE40)	Test Date	2023/3/20
Test Frequency	2457MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2353.573	55.33	-5.46	49.87	74.00	-24.13	peak	
2		2353.573	43.51	-5.46	38.05	54.00	-15.95	AVG	
3	X	2457.000	106.62	-5.33	101.29	74.00	27.29	peak	NoLimit
4	*	2457.000	96.24	-5.33	90.91	54.00	36.91	AVG	NoLimit
5		2485.253	65.28	-5.30	59.98	74.00	-14.02	peak	
6		2485.253	57.04	-5.30	51.74	54.00	-2.26	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

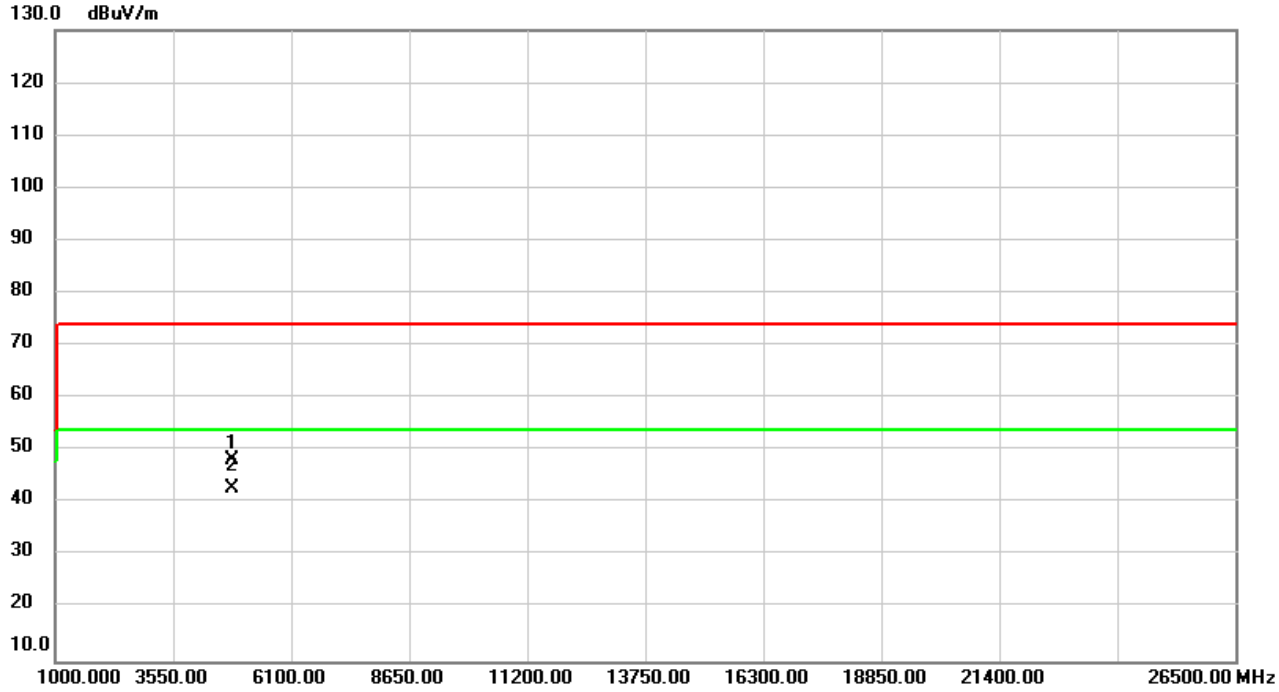
Test Mode	IEEE 802.11ax (HE40)	Test Date	2023/3/20
Test Frequency	2462MHz	Polarization	Horizontal
Temp	24°C	Hum.	68%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2270.573	55.94	-5.55	50.39	74.00	-23.61	peak	
2		2270.573	43.40	-5.55	37.85	54.00	-16.15	AVG	
3	X	2462.000	104.65	-5.34	99.31	74.00	25.31	peak	NoLimit
4	*	2462.000	94.96	-5.34	89.62	54.00	35.62	AVG	NoLimit
5		2495.000	65.30	-5.29	60.01	74.00	-13.99	peak	
6		2495.000	56.93	-5.29	51.64	54.00	-2.36	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

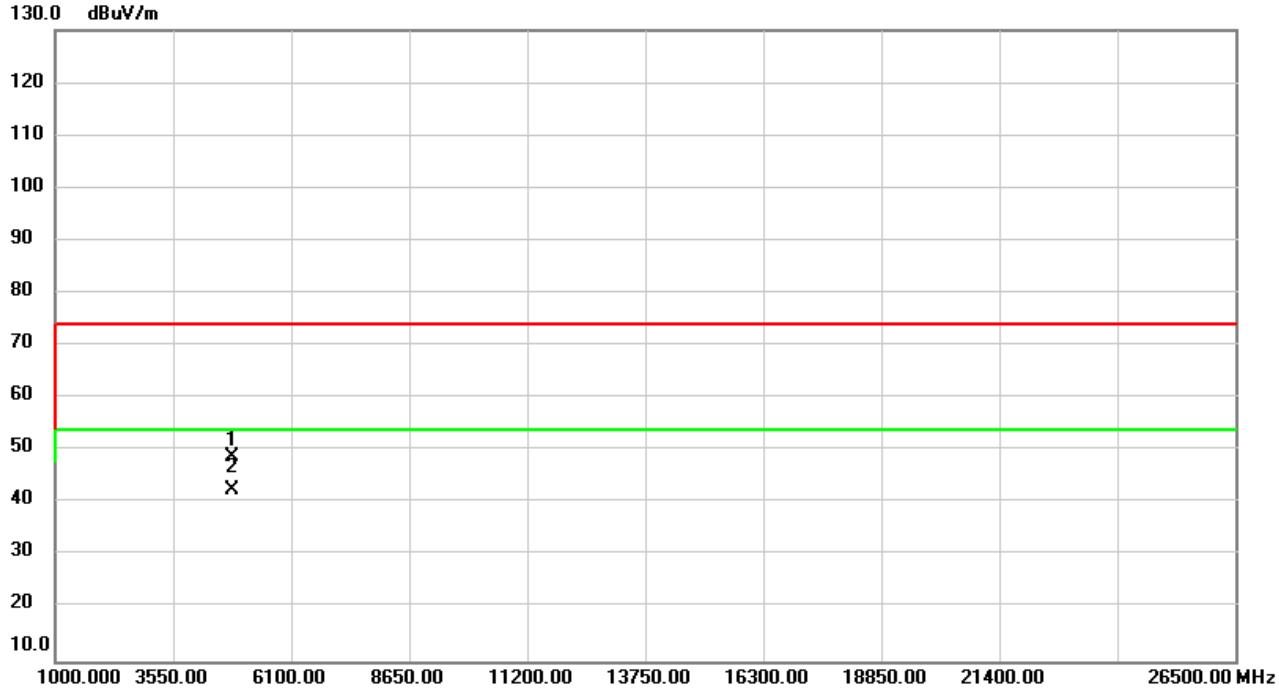
Test Mode	IEEE 802.11b	Test Date	2023/3/21
Test Frequency	2412MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	47.57	0.82	48.39	74.00	-25.61	peak	
2	*	4824.000	41.97	0.82	42.79	54.00	-11.21	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

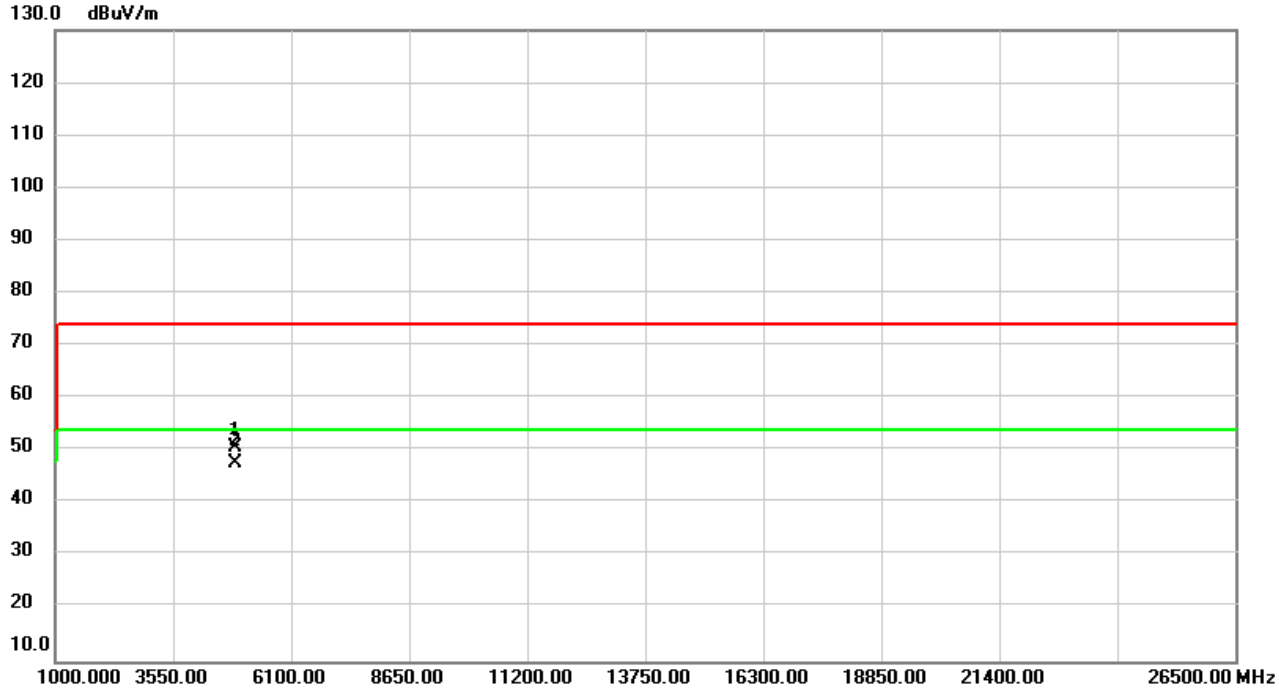
Test Mode	IEEE 802.11b	Test Date	2023/3/21
Test Frequency	2412MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	47.97	0.82	48.79	74.00	-25.21	peak	
2	*	4824.000	41.77	0.82	42.59	54.00	-11.41	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

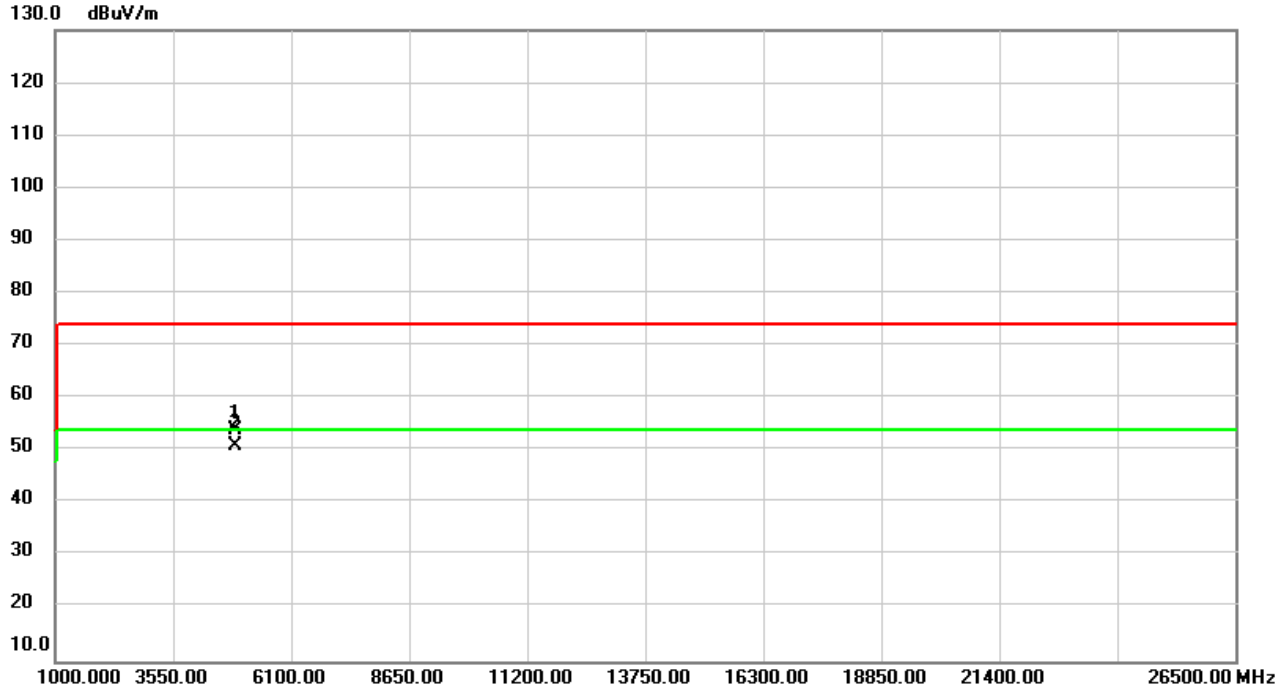
Test Mode	IEEE 802.11b	Test Date	2023/3/21
Test Frequency	2442MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4884.000	49.60	1.02	50.62	74.00	-23.38	peak	
2	*	4884.000	46.66	1.02	47.68	54.00	-6.32	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

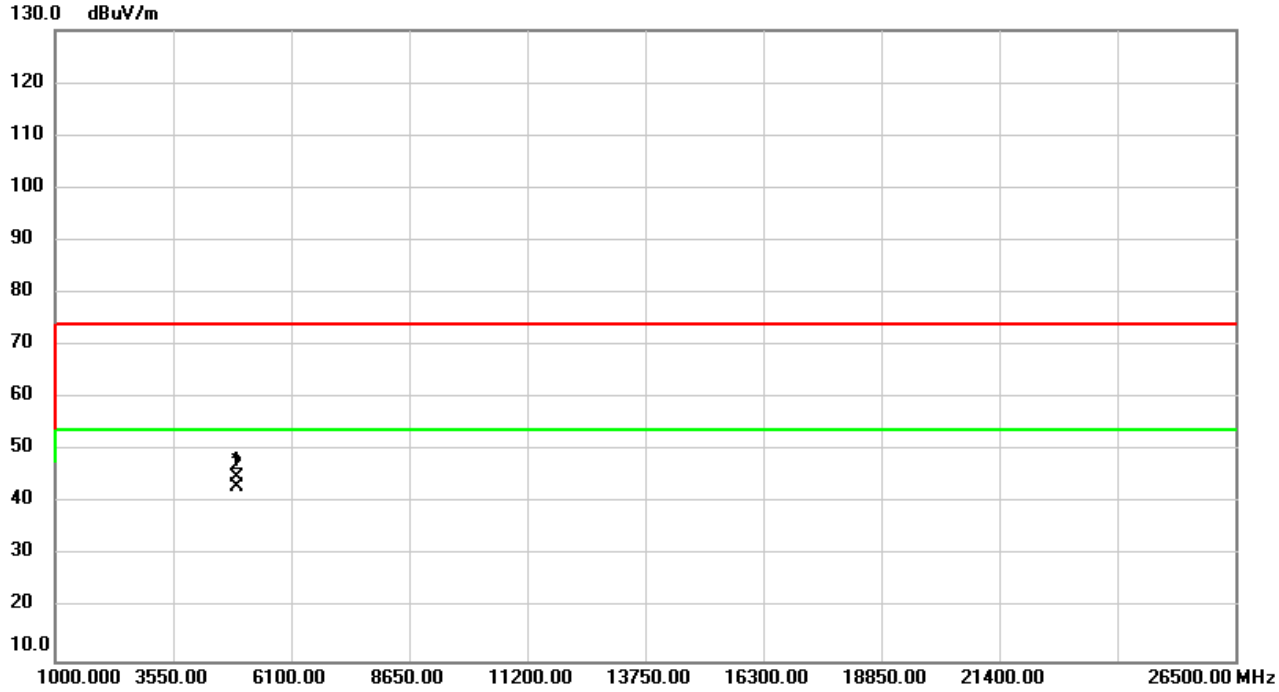
Test Mode	IEEE 802.11b	Test Date	2023/3/21
Test Frequency	2442MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4884.000	52.99	1.02	54.01	74.00	-19.99	peak	
2	*	4884.000	50.06	1.02	51.08	54.00	-2.92	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

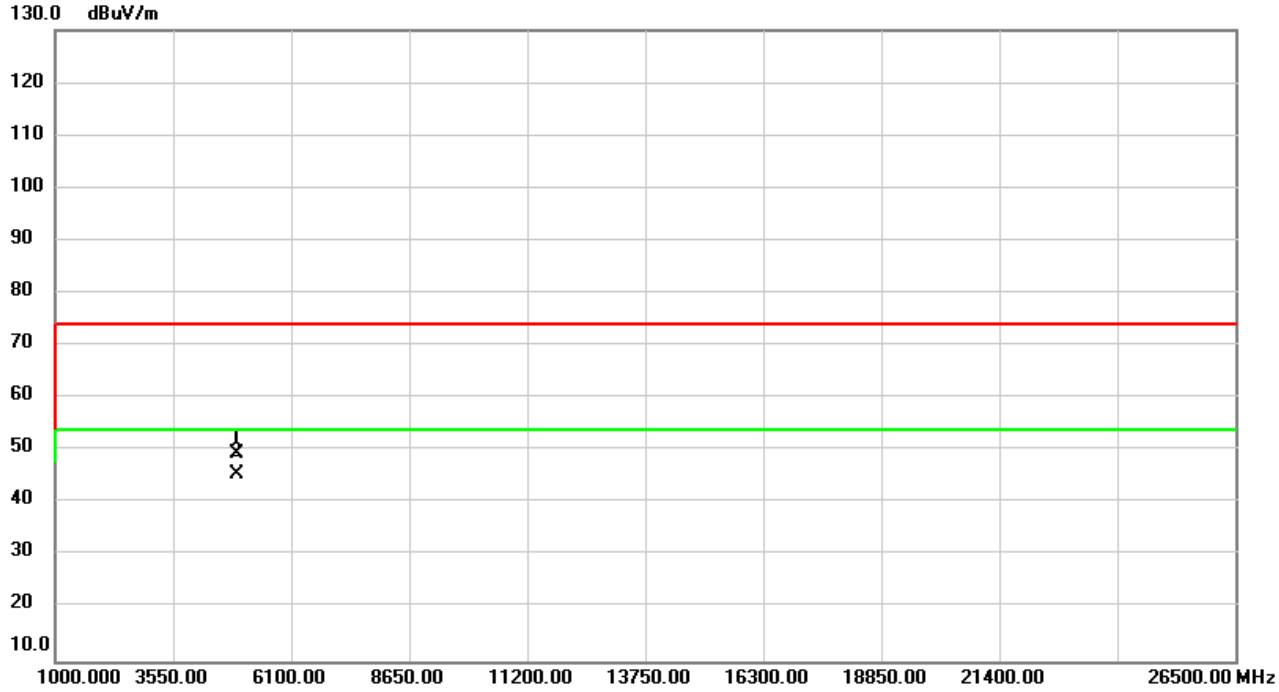
Test Mode	IEEE 802.11b	Test Date	2023/3/21
Test Frequency	2462MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	43.80	1.16	44.96	74.00	-29.04	peak	
2	*	4924.000	41.93	1.16	43.09	54.00	-10.91	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

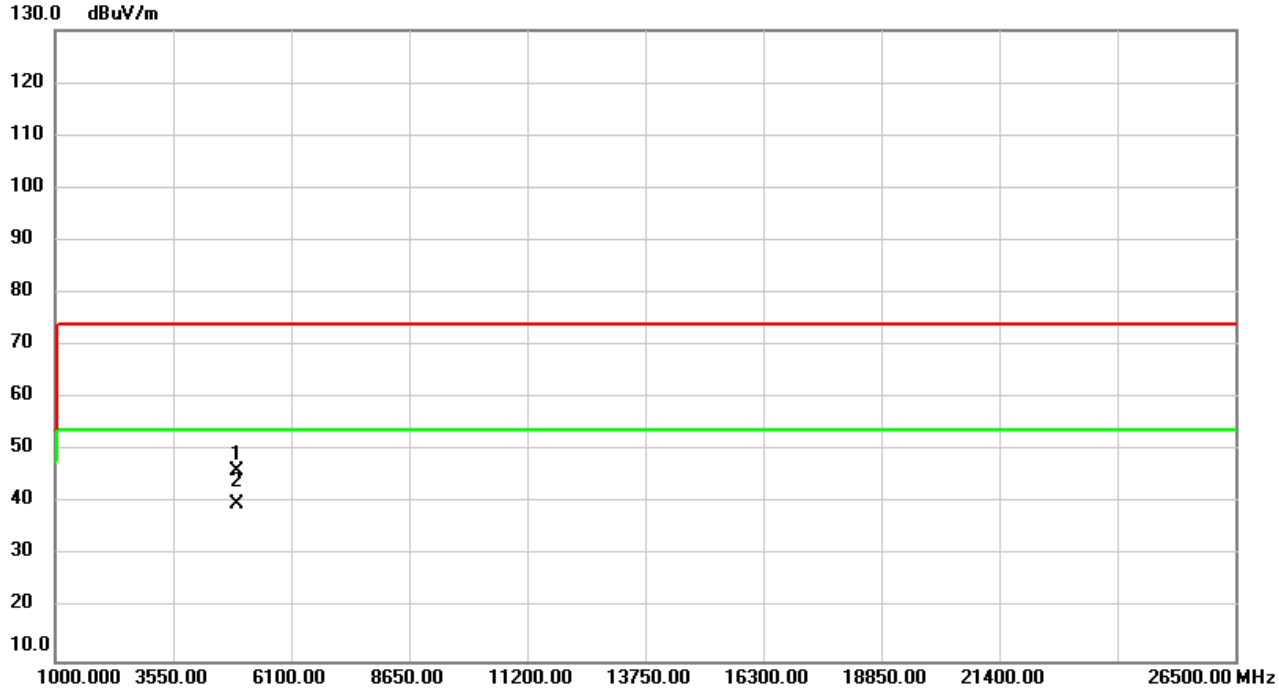
Test Mode	IEEE 802.11b	Test Date	2023/3/21
Test Frequency	2462MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	48.44	1.16	49.60	74.00	-24.40	peak	
2	*	4924.000	44.25	1.16	45.41	54.00	-8.59	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

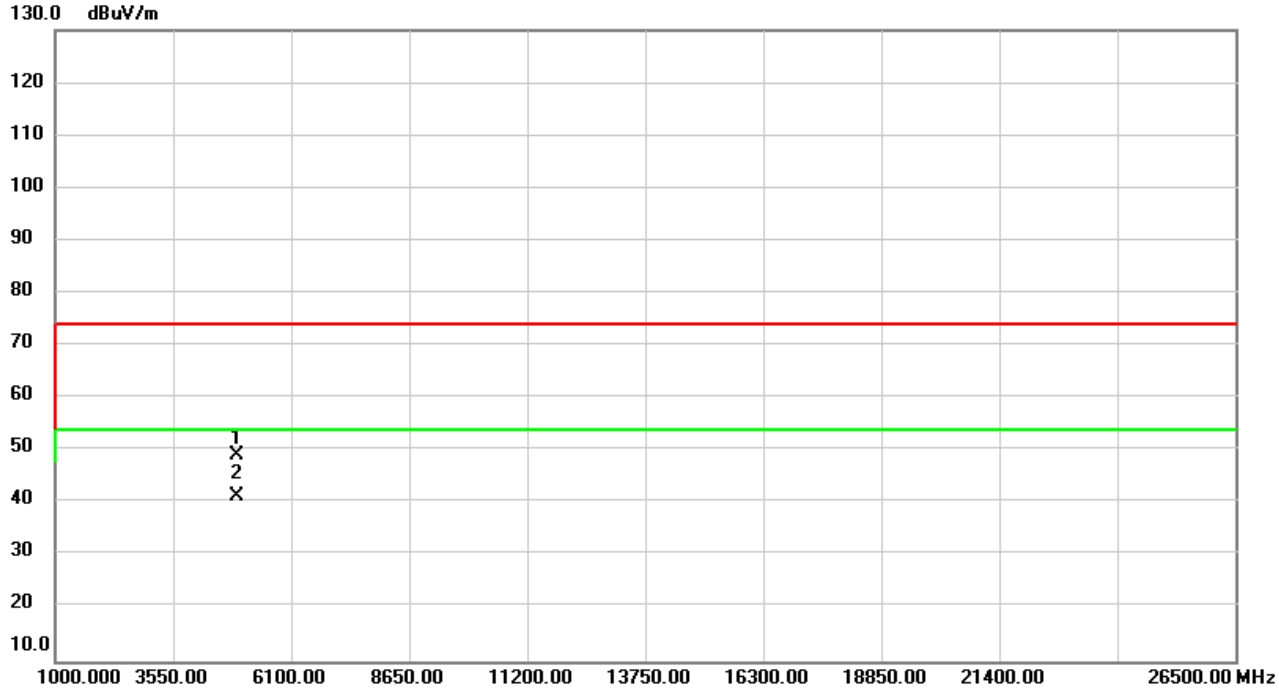
Test Mode	IEEE 802.11b	Test Date	2023/3/21
Test Frequency	2467MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4934.000	44.81	1.20	46.01	74.00	-27.99	peak	
2	*	4934.000	38.65	1.20	39.85	54.00	-14.15	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

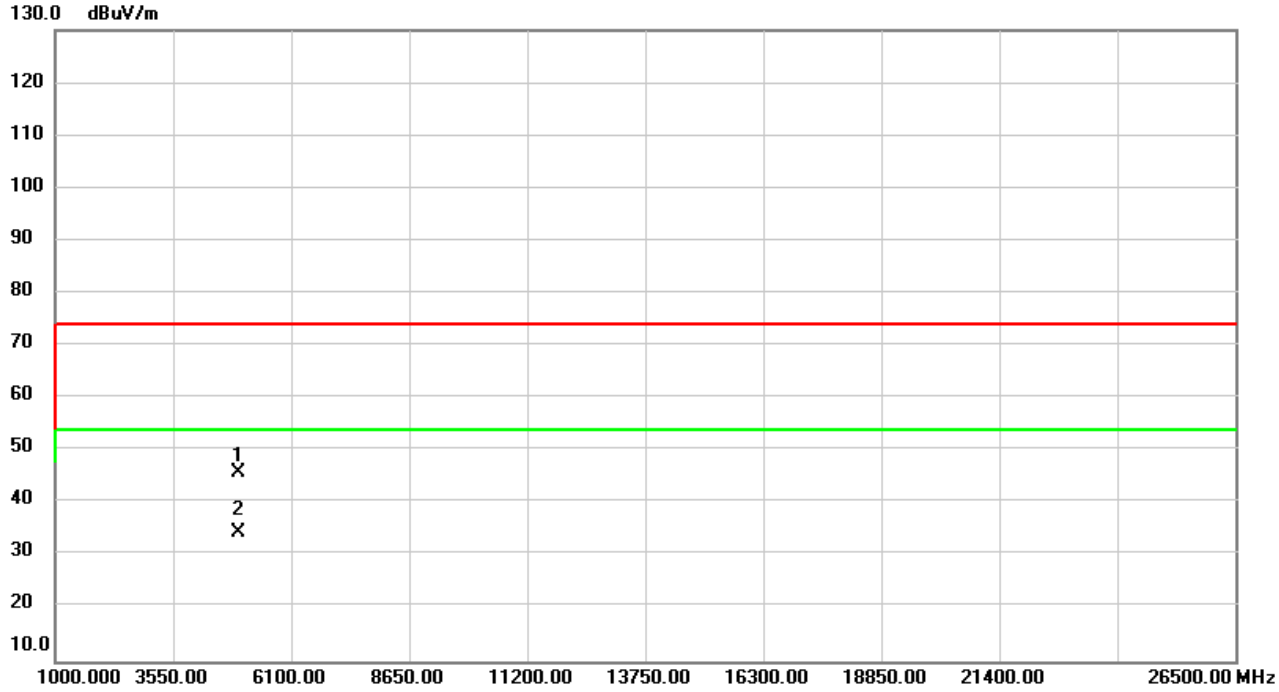
Test Mode	IEEE 802.11b	Test Date	2023/3/21
Test Frequency	2467MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4934.000	47.82	1.20	49.02	74.00	-24.98	peak	
2	*	4934.000	40.10	1.20	41.30	54.00	-12.70	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

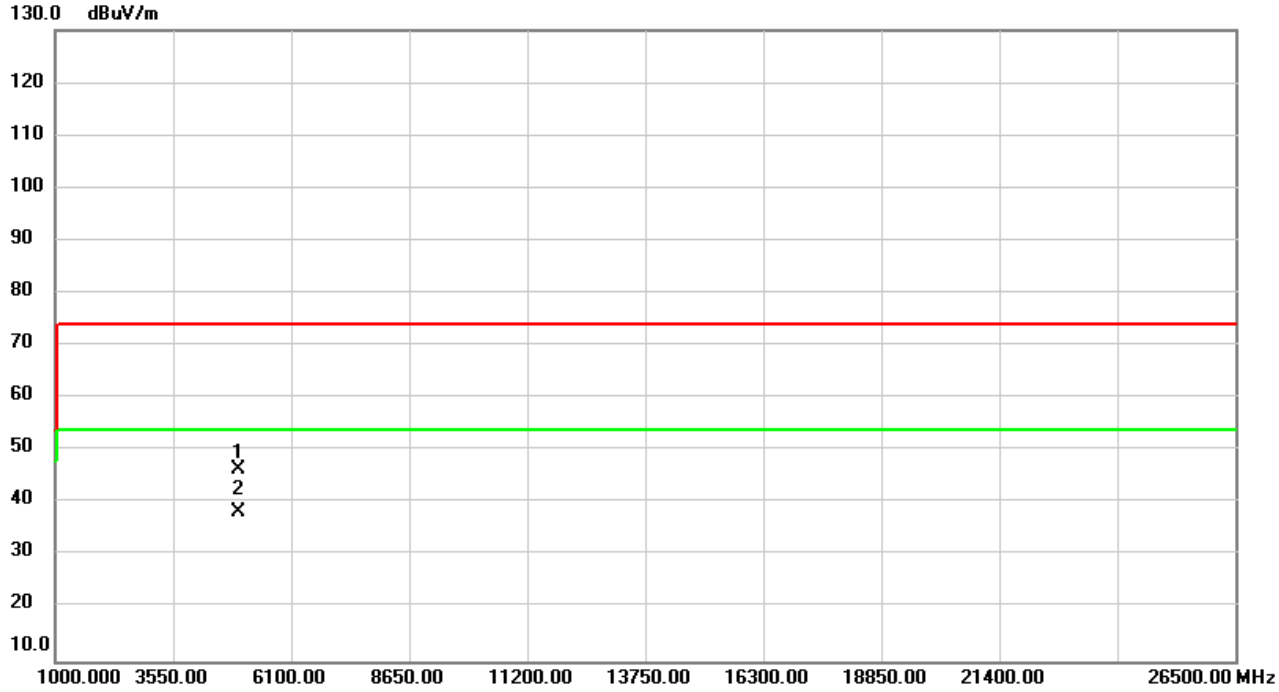
Test Mode	IEEE 802.11b	Test Date	2023/3/21
Test Frequency	2472MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4944.000	44.69	1.22	45.91	74.00	-28.09	peak	
2	*	4944.000	33.10	1.22	34.32	54.00	-19.68	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

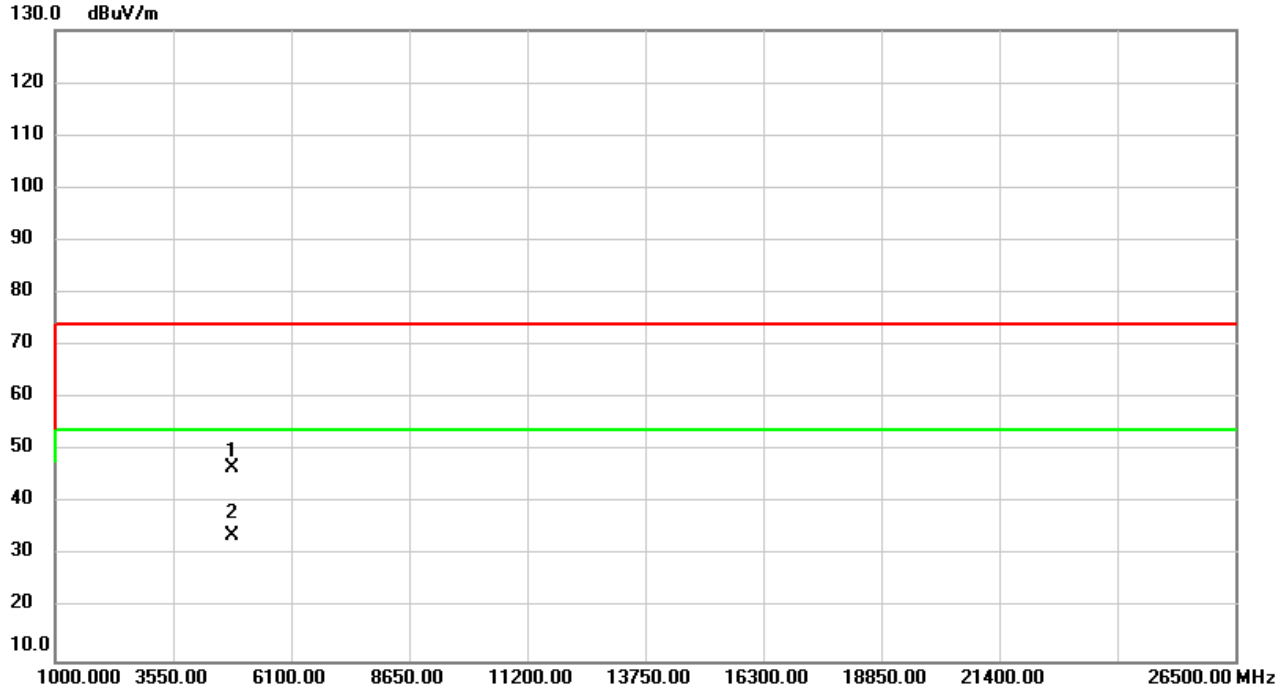
Test Mode	IEEE 802.11b	Test Date	2023/3/21
Test Frequency	2472MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4944.000	45.17	1.22	46.39	74.00	-27.61	peak	
2	*	4944.000	37.21	1.22	38.43	54.00	-15.57	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

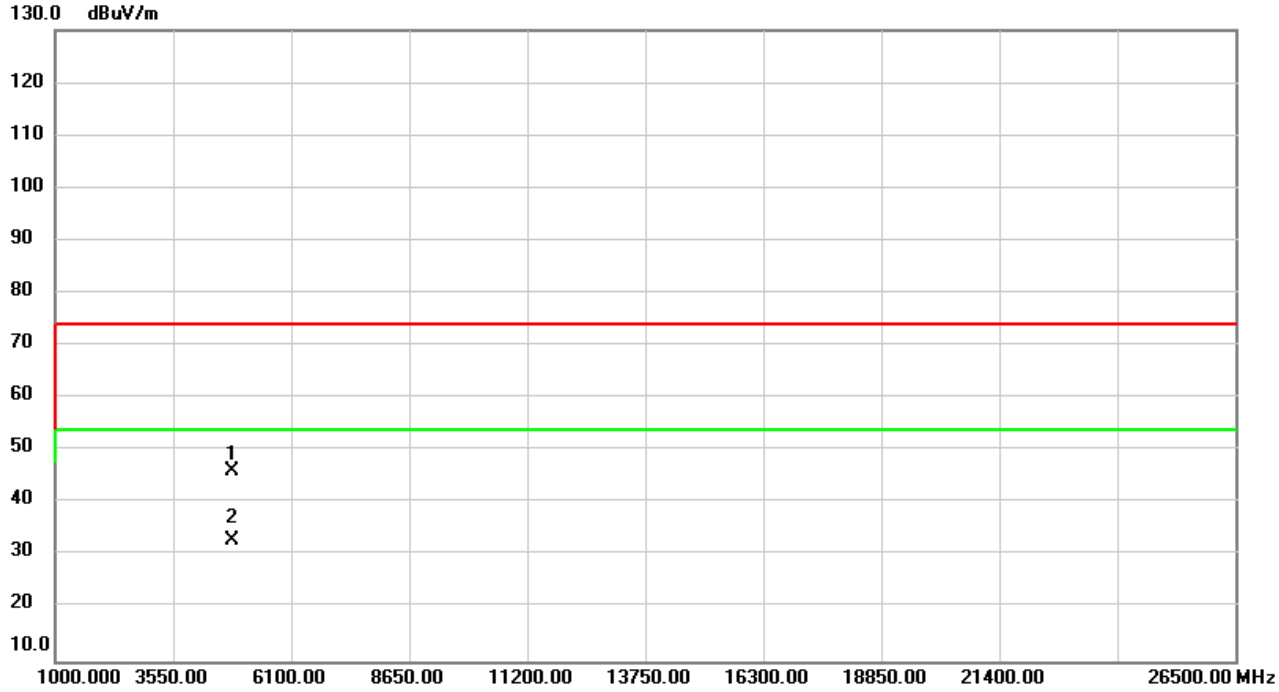
Test Mode	IEEE 802.11g	Test Date	2023/3/21
Test Frequency	2412MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	45.85	0.82	46.67	74.00	-27.33	peak	
2	*	4824.000	33.09	0.82	33.91	54.00	-20.09	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

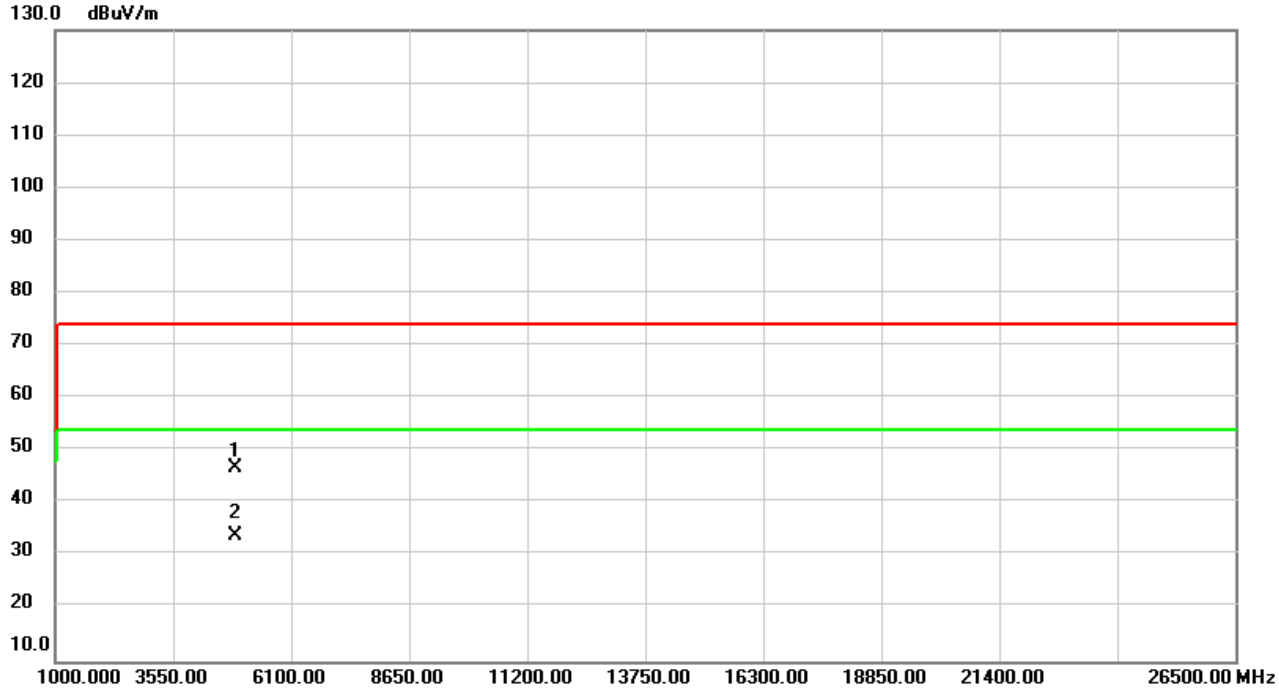
Test Mode	IEEE 802.11g	Test Date	2023/3/21
Test Frequency	2412MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	45.41	0.82	46.23	74.00	-27.77	peak	
2	*	4824.000	32.22	0.82	33.04	54.00	-20.96	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

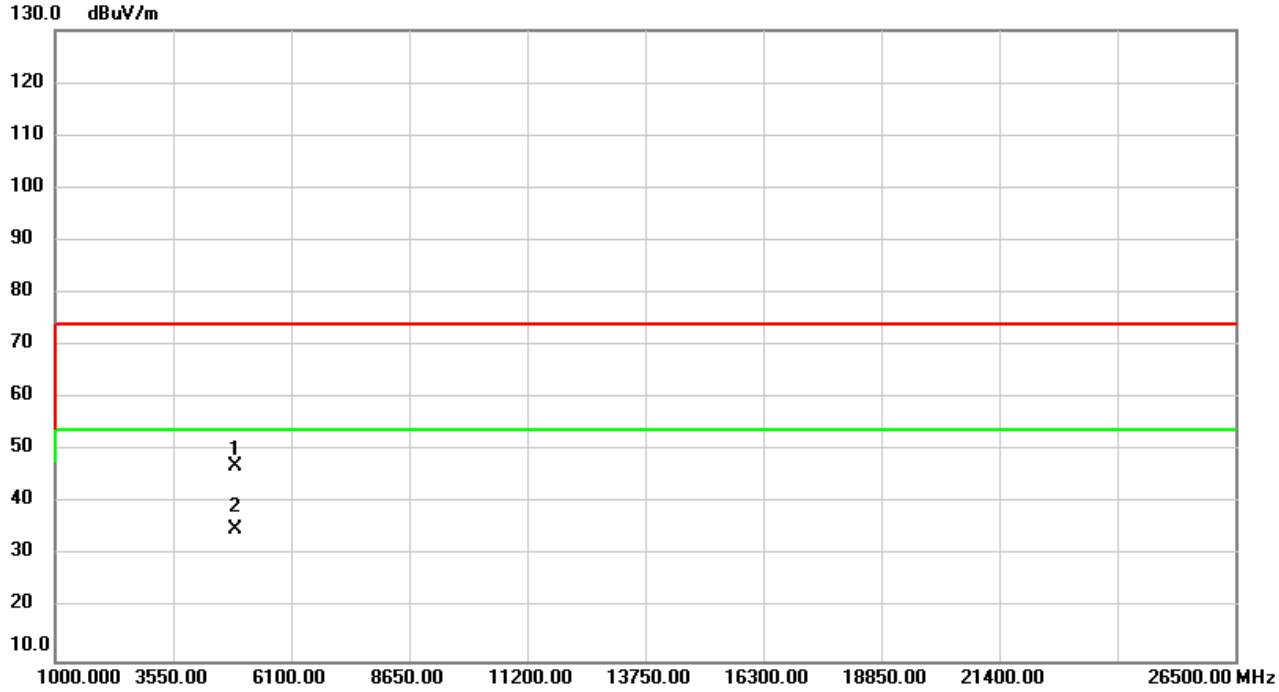
Test Mode	IEEE 802.11g	Test Date	2023/3/21
Test Frequency	2442MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4884.000	45.86	1.02	46.88	74.00	-27.12	peak	
2	*	4884.000	32.97	1.02	33.99	54.00	-20.01	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

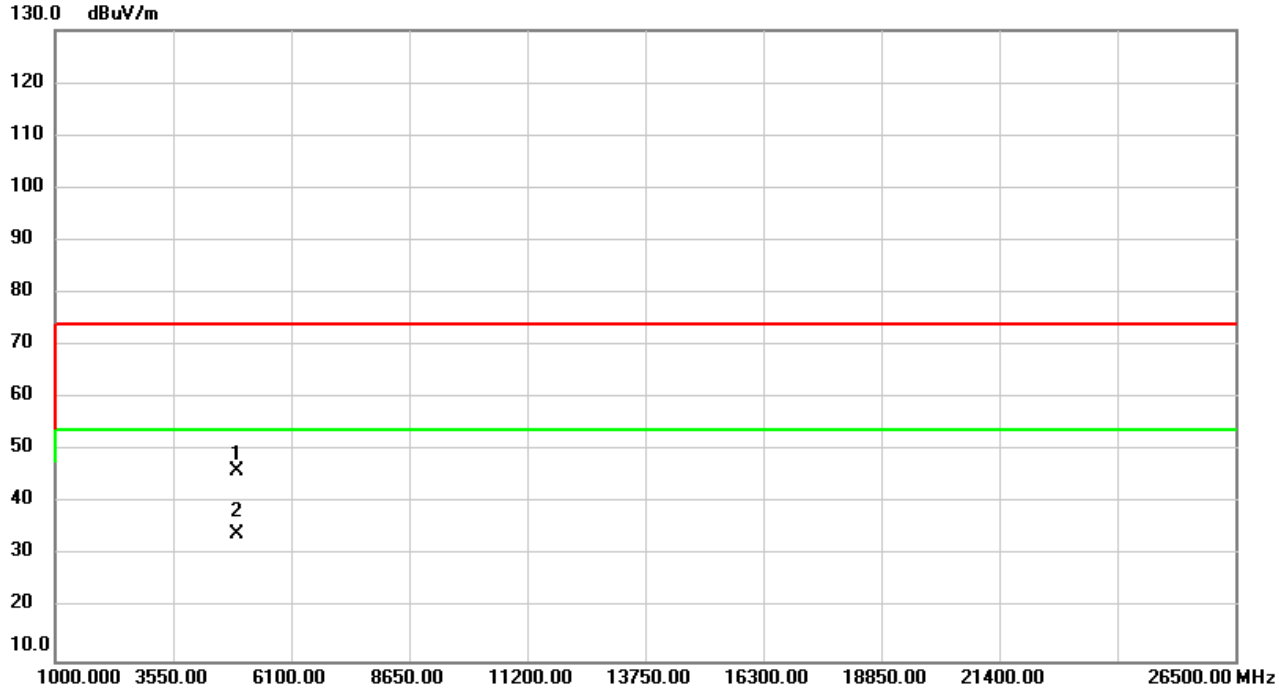
Test Mode	IEEE 802.11g	Test Date	2023/3/21
Test Frequency	2442MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4884.000	46.02	1.02	47.04	74.00	-26.96	peak	
2	*	4884.000	33.92	1.02	34.94	54.00	-19.06	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

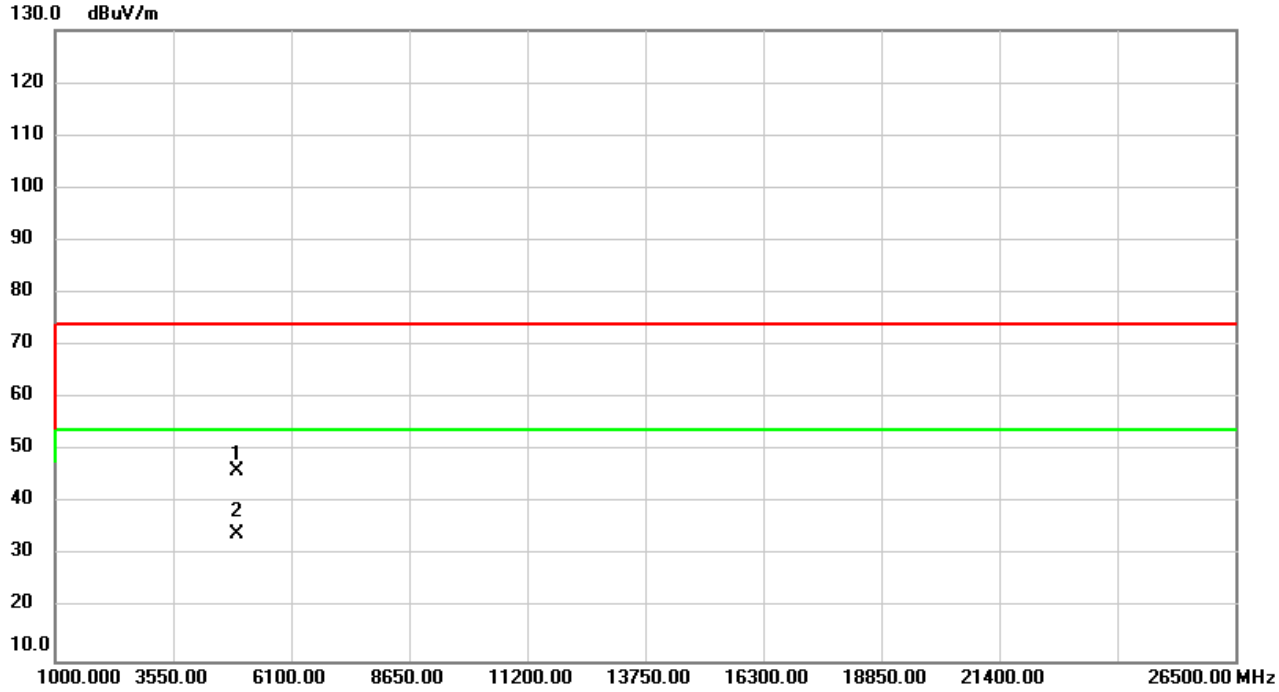
Test Mode	IEEE 802.11g	Test Date	2023/3/21
Test Frequency	2462MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	44.94	1.16	46.10	74.00	-27.90	peak	
2	*	4924.000	33.07	1.16	34.23	54.00	-19.77	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

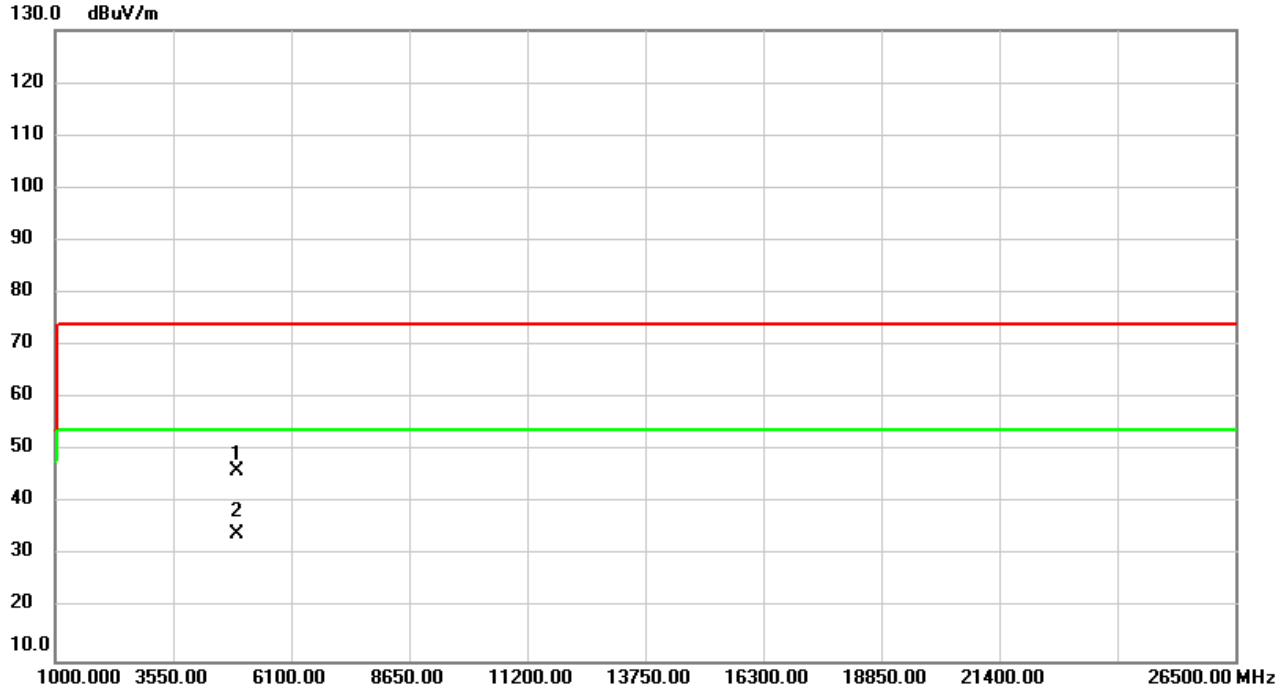
Test Mode	IEEE 802.11g	Test Date	2023/3/21
Test Frequency	2462MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	45.04	1.16	46.20	74.00	-27.80	peak	
2	*	4924.000	32.94	1.16	34.10	54.00	-19.90	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

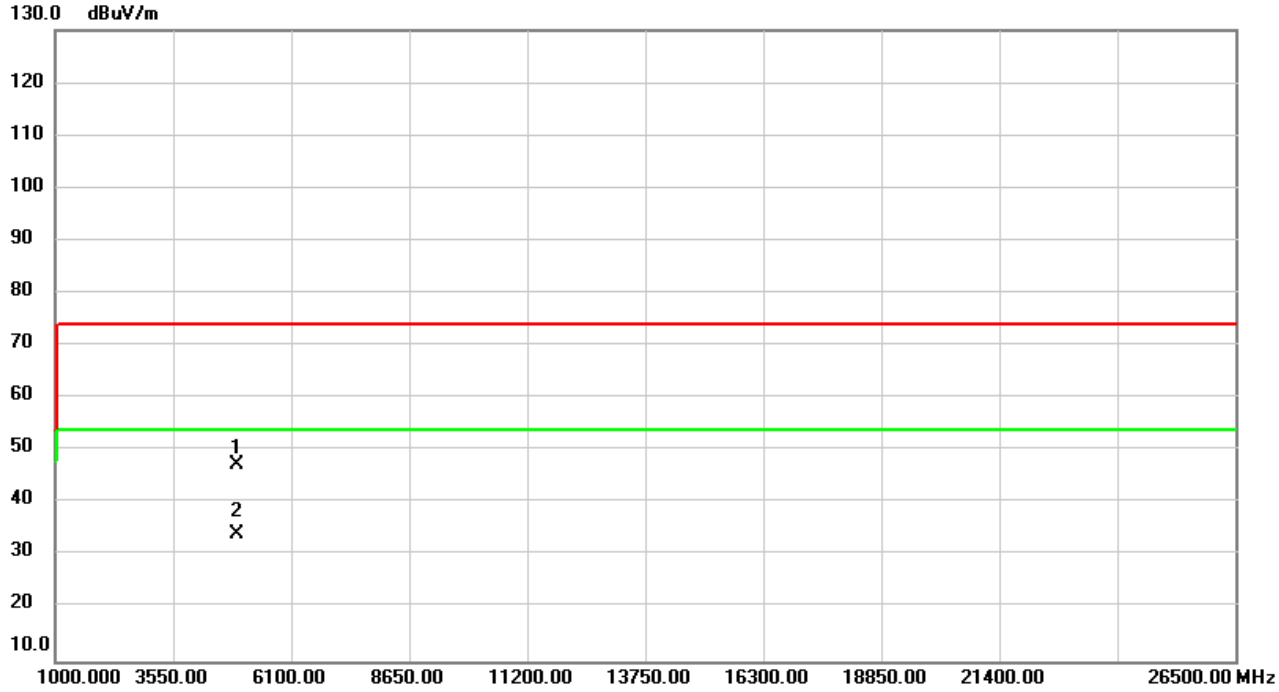
Test Mode	IEEE 802.11g	Test Date	2023/3/21
Test Frequency	2467MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4934.000	45.05	1.20	46.25	74.00	-27.75	peak	
2	*	4934.000	33.02	1.20	34.22	54.00	-19.78	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

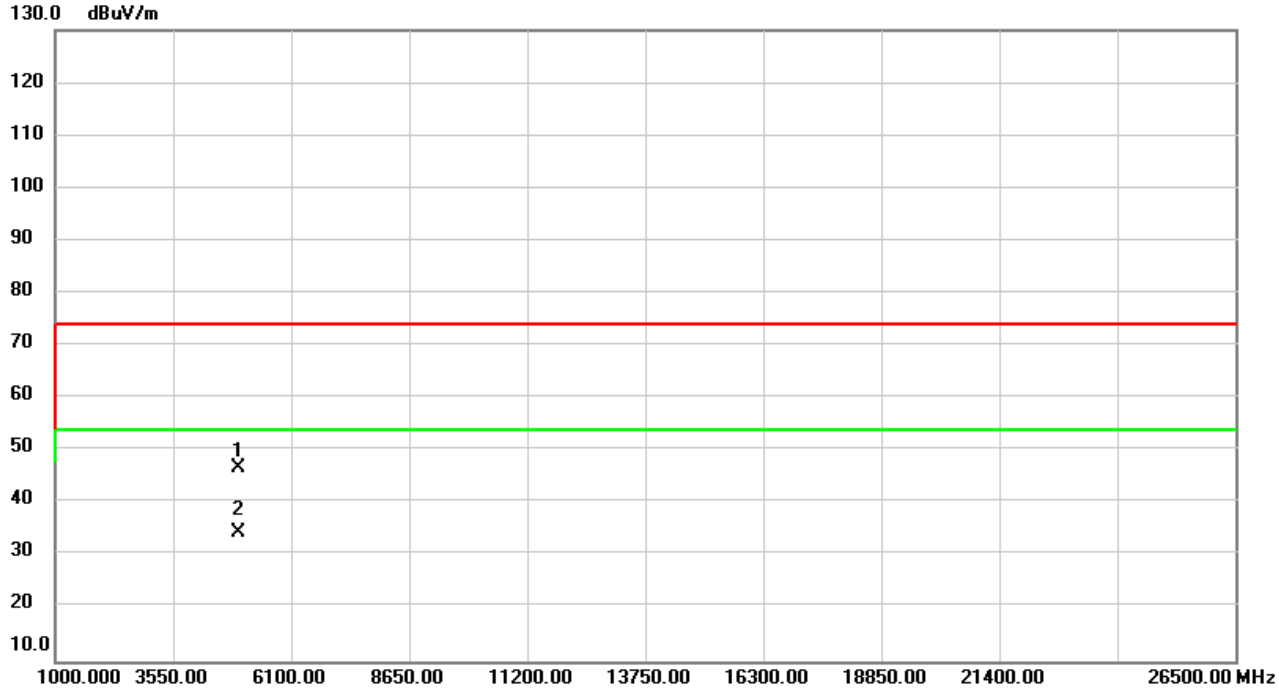
Test Mode	IEEE 802.11g	Test Date	2023/3/21
Test Frequency	2467MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4934.000	46.01	1.20	47.21	74.00	-26.79	peak	
2	*	4934.000	32.95	1.20	34.15	54.00	-19.85	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

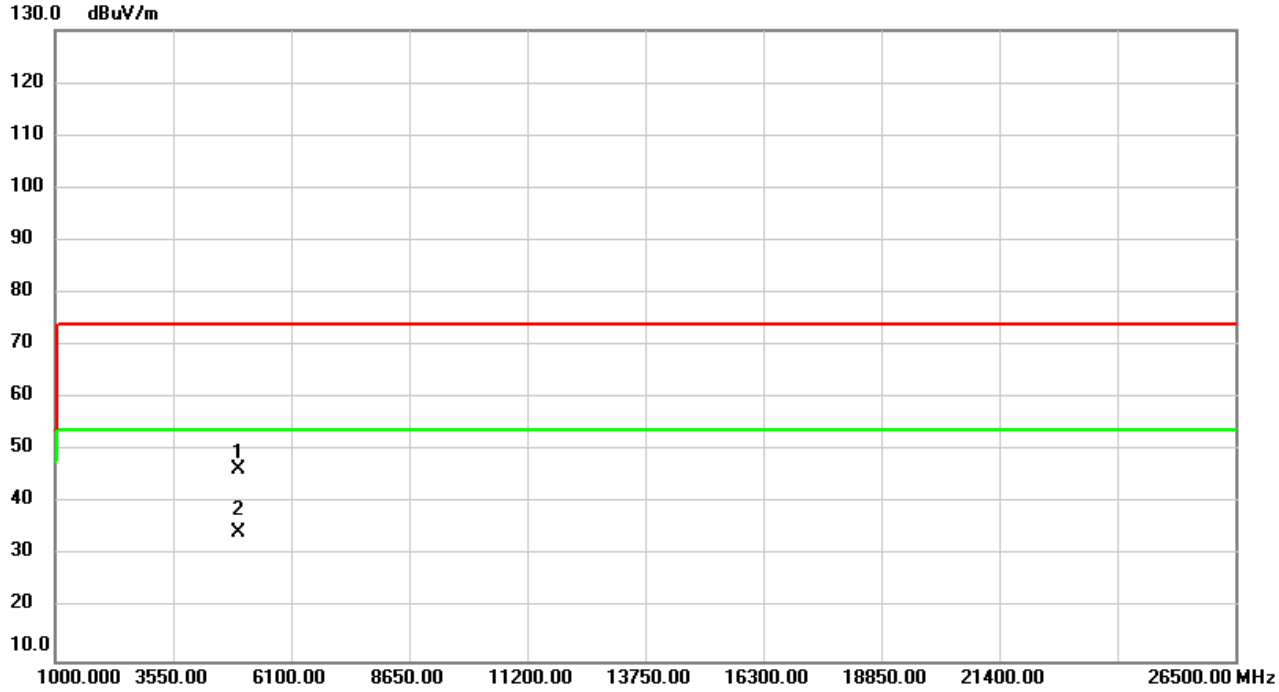
Test Mode	IEEE 802.11g	Test Date	2023/3/21
Test Frequency	2472MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4944.000	45.44	1.22	46.66	74.00	-27.34	peak	
2	*	4944.000	33.10	1.22	34.32	54.00	-19.68	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

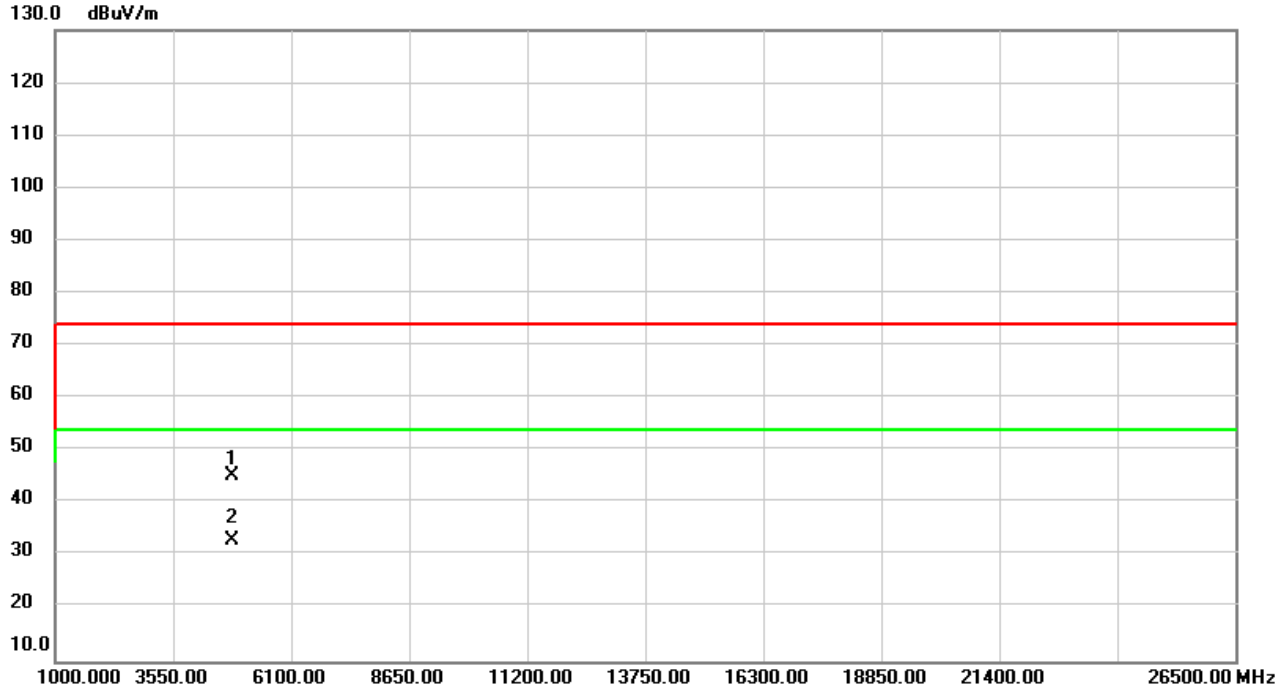
Test Mode	IEEE 802.11g	Test Date	2023/3/21
Test Frequency	2472MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4944.000	45.28	1.22	46.50	74.00	-27.50	peak	
2	*	4944.000	33.13	1.22	34.35	54.00	-19.65	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

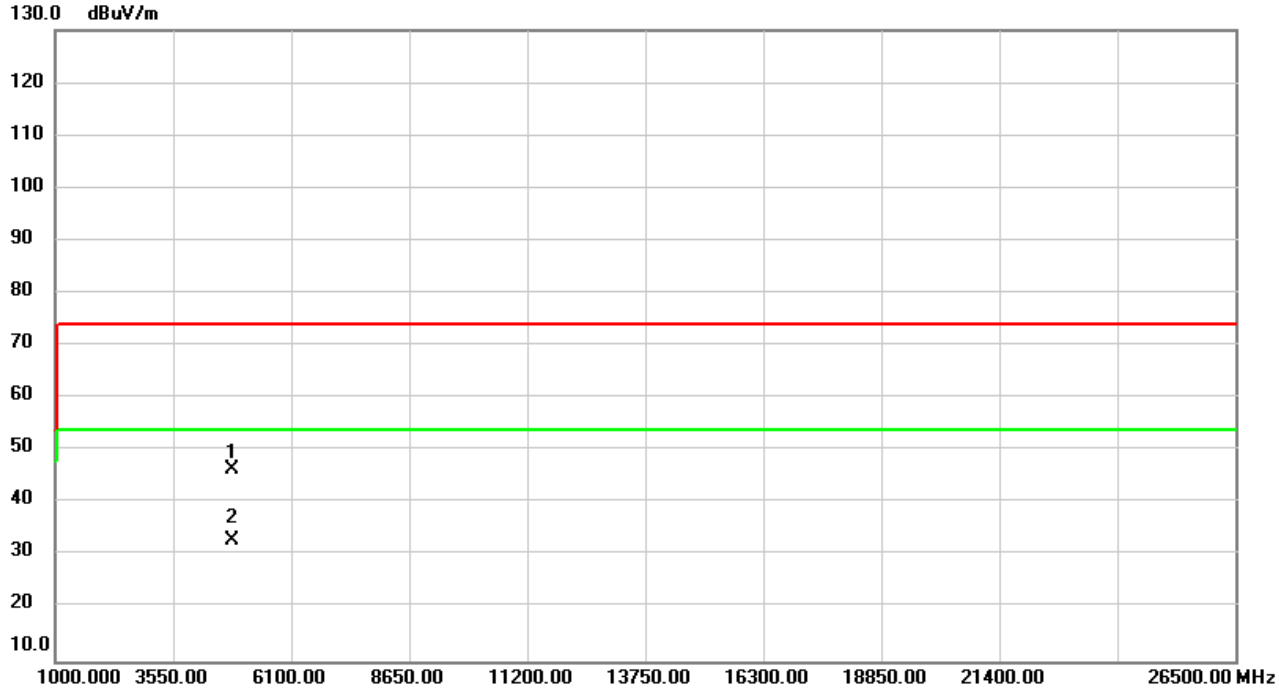
Test Mode	IEEE 802.11n (HT20)	Test Date	2023/3/21
Test Frequency	2412MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	44.58	0.82	45.40	74.00	-28.60	peak	
2	*	4824.000	32.24	0.82	33.06	54.00	-20.94	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

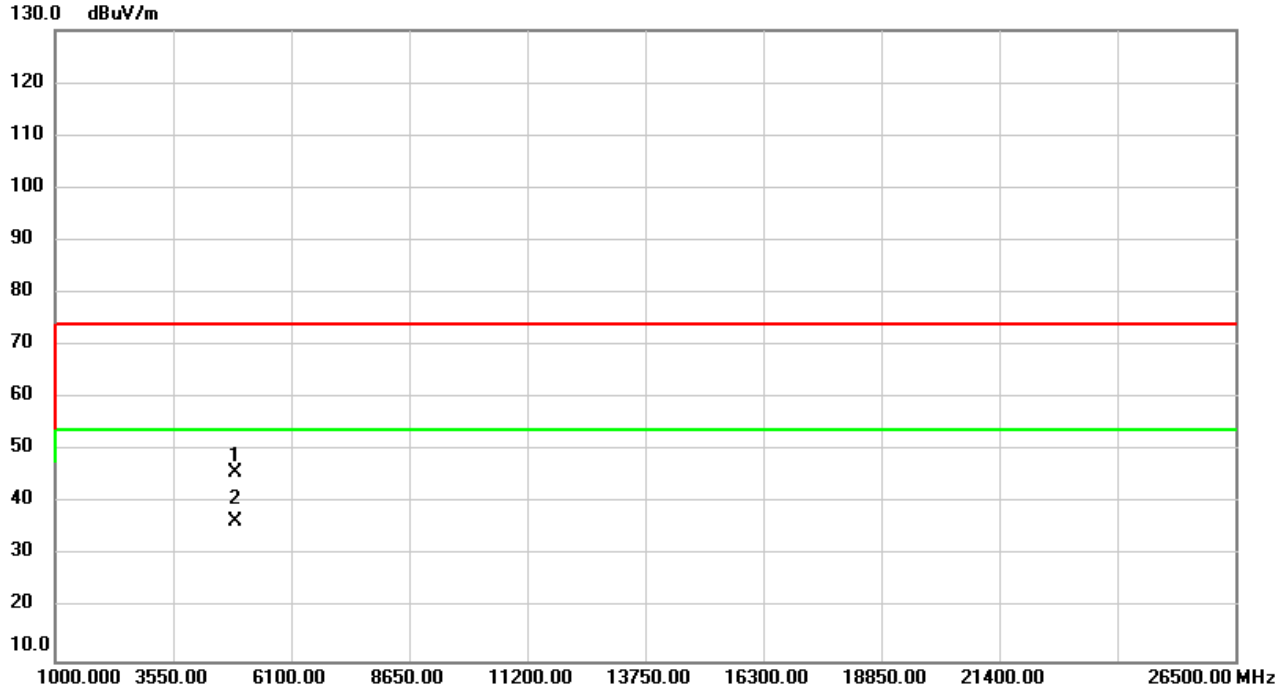
Test Mode	IEEE 802.11n (HT20)	Test Date	2023/3/21
Test Frequency	2412MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	45.49	0.82	46.31	74.00	-27.69	peak	
2	*	4824.000	32.21	0.82	33.03	54.00	-20.97	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

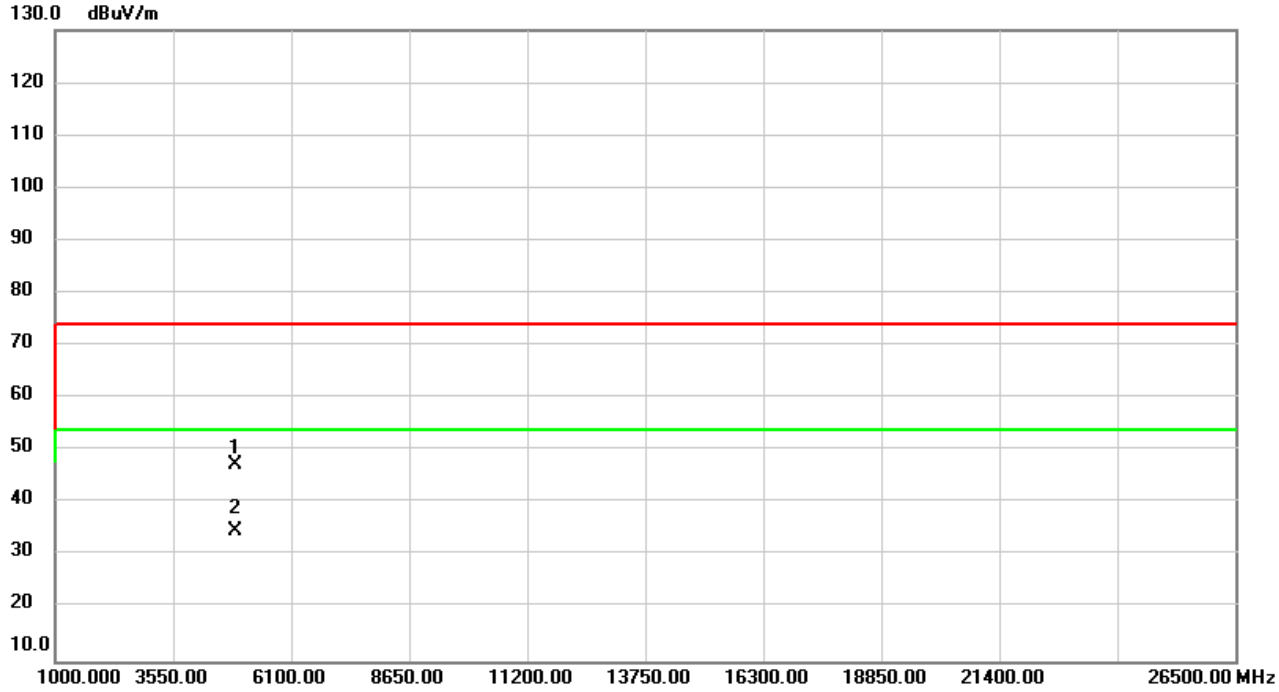
Test Mode	IEEE 802.11n (HT20)	Test Date	2023/3/21
Test Frequency	2442MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4884.000	44.86	1.02	45.88	74.00	-28.12	peak	
2	*	4884.000	35.47	1.02	36.49	54.00	-17.51	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

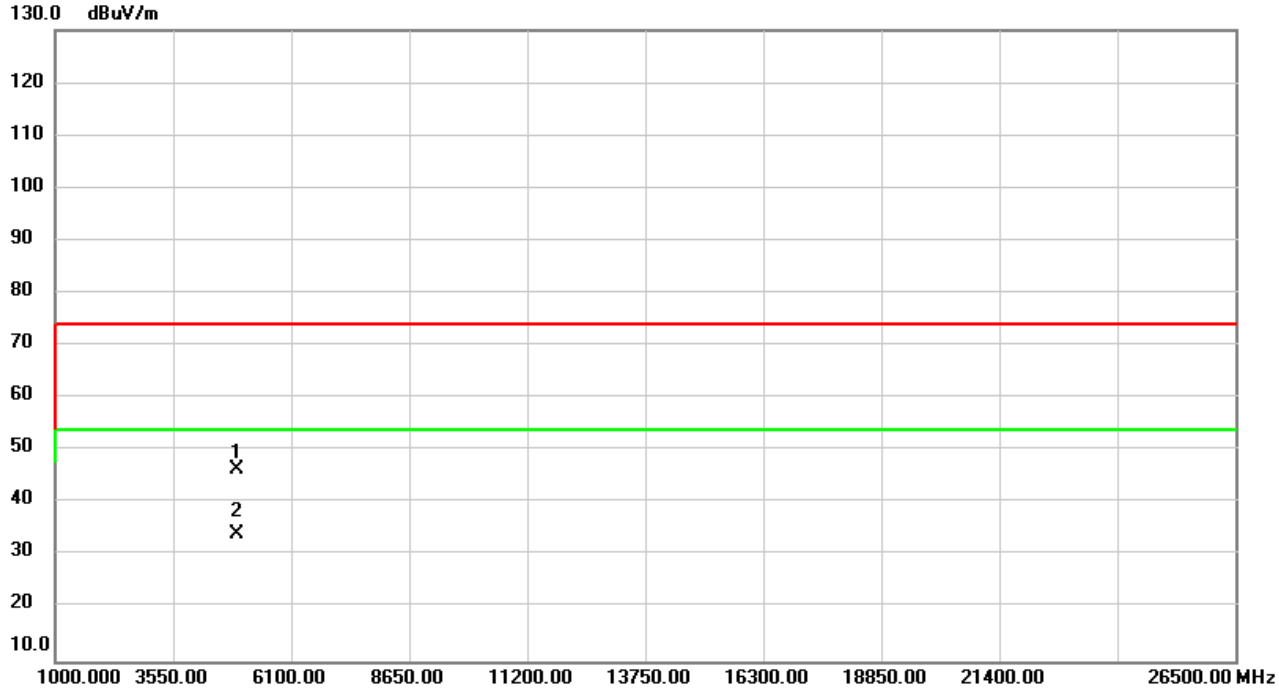
Test Mode	IEEE 802.11n (HT20)	Test Date	2023/3/21
Test Frequency	2442MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4884.000	46.30	1.02	47.32	74.00	-26.68	peak	
2	*	4884.000	33.72	1.02	34.74	54.00	-19.26	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

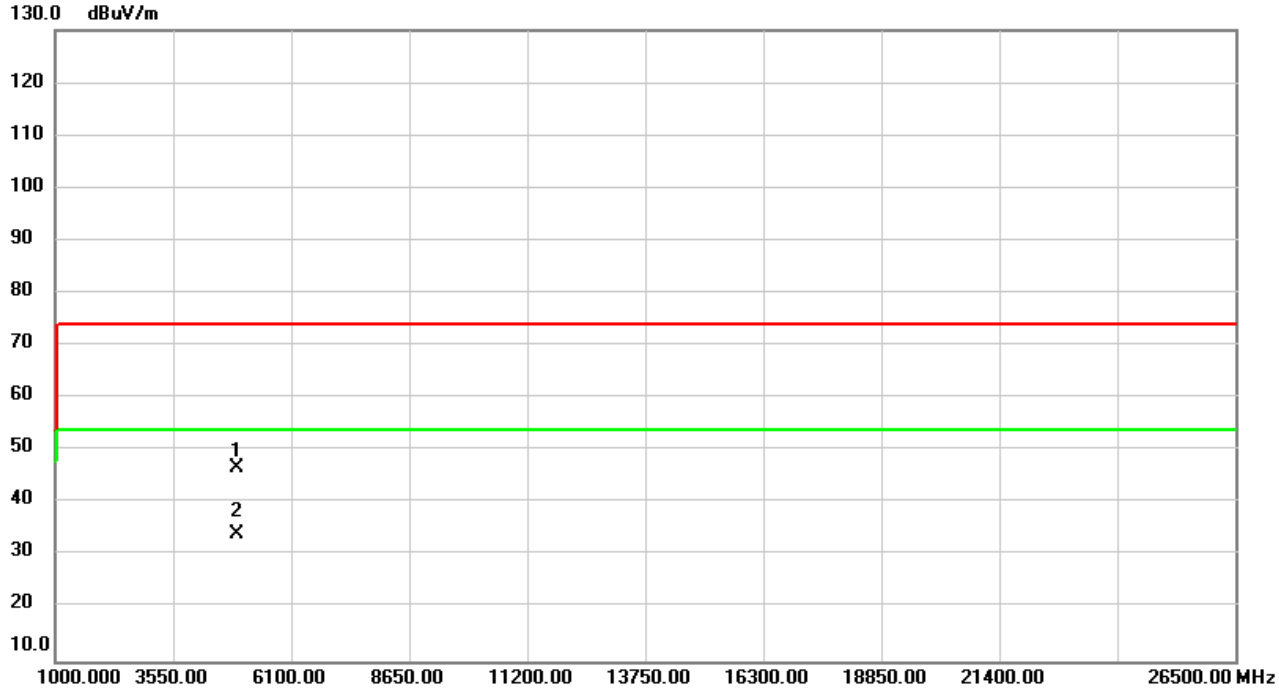
Test Mode	IEEE 802.11n (HT20)	Test Date	2023/3/21
Test Frequency	2462MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	45.38	1.16	46.54	74.00	-27.46	peak	
2	*	4924.000	32.89	1.16	34.05	54.00	-19.95	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

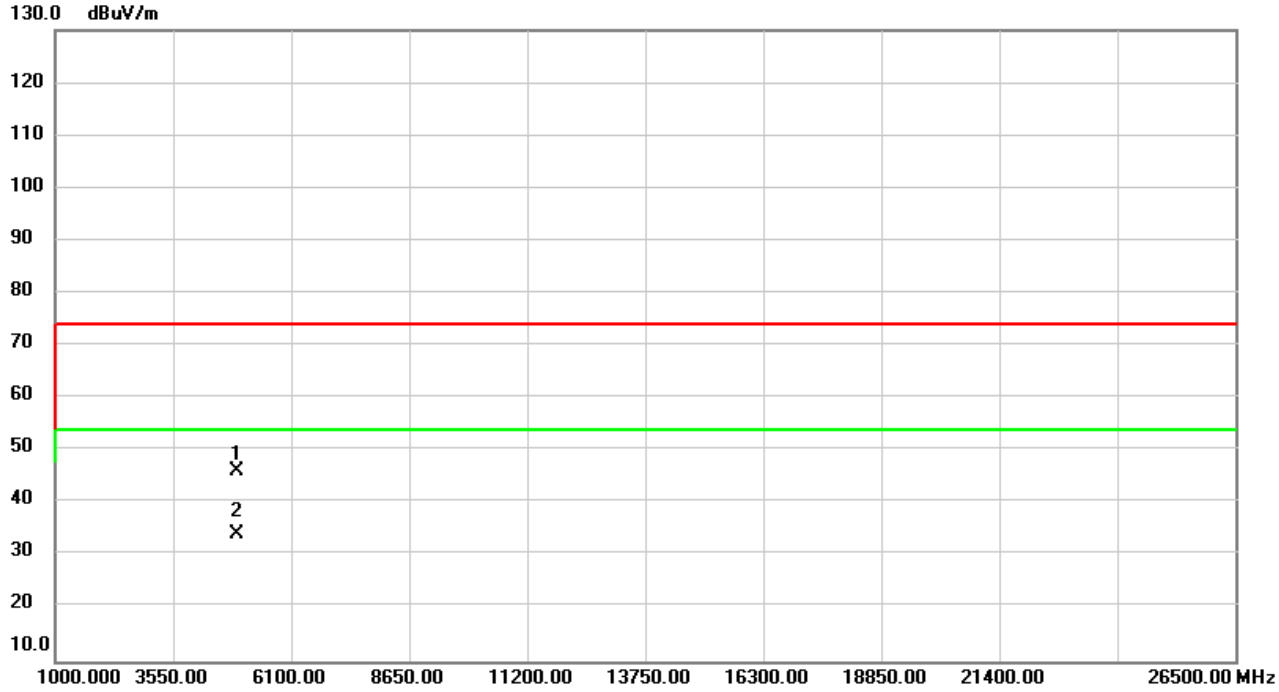
Test Mode	IEEE 802.11n (HT20)	Test Date	2023/3/21
Test Frequency	2462MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	45.48	1.16	46.64	74.00	-27.36	peak	
2	*	4924.000	32.89	1.16	34.05	54.00	-19.95	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

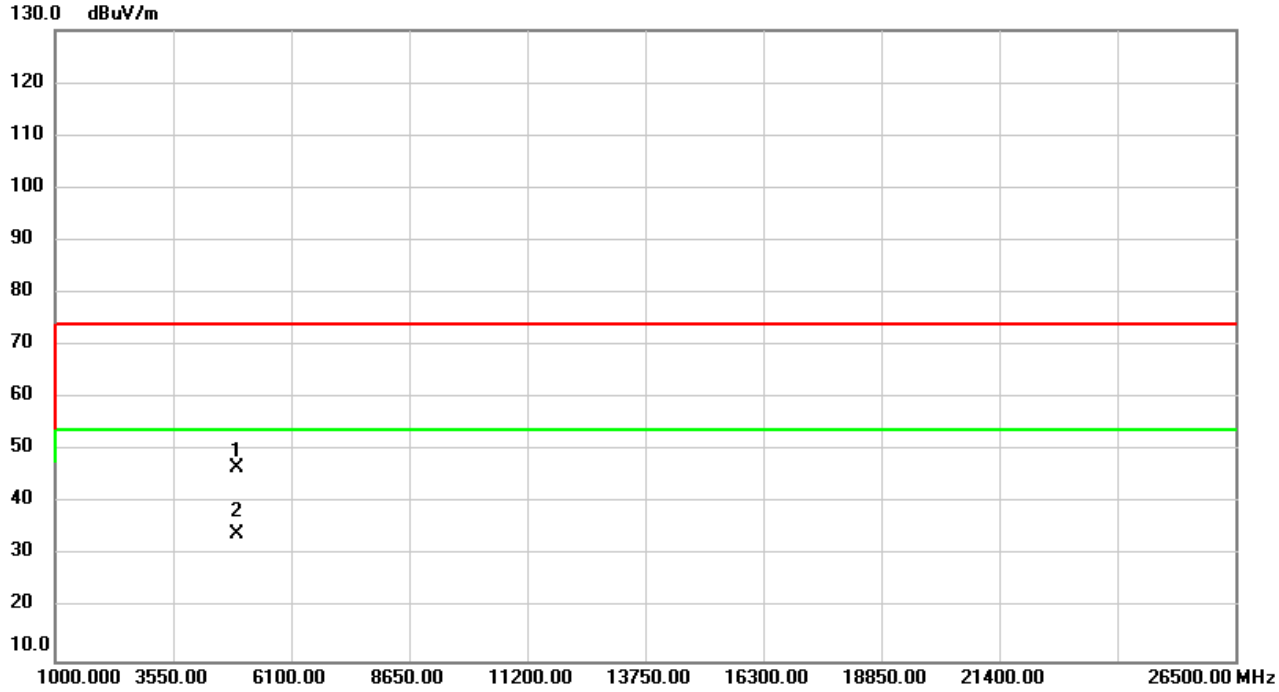
Test Mode	IEEE 802.11n (HT20)	Test Date	2023/3/21
Test Frequency	2467MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4934.000	45.08	1.20	46.28	74.00	-27.72	peak	
2	*	4934.000	32.92	1.20	34.12	54.00	-19.88	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

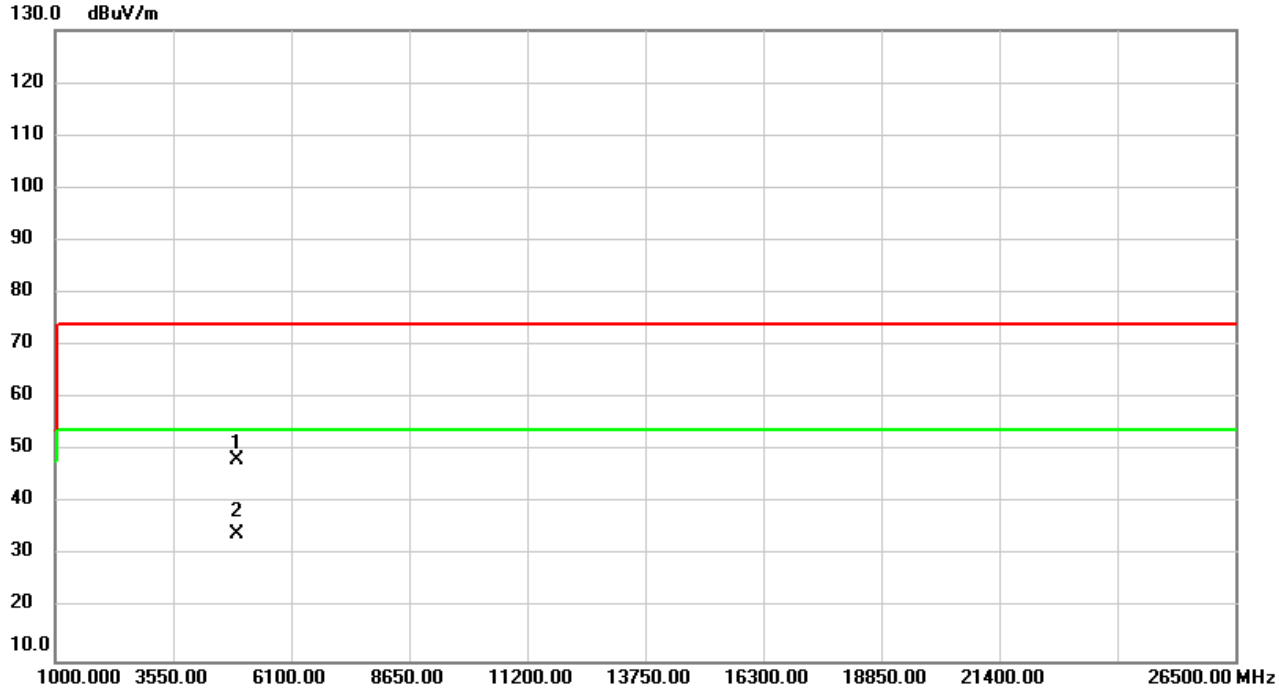
Test Mode	IEEE 802.11n (HT20)	Test Date	2023/3/21
Test Frequency	2467MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4934.000	45.62	1.20	46.82	74.00	-27.18	peak	
2	*	4934.000	32.91	1.20	34.11	54.00	-19.89	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

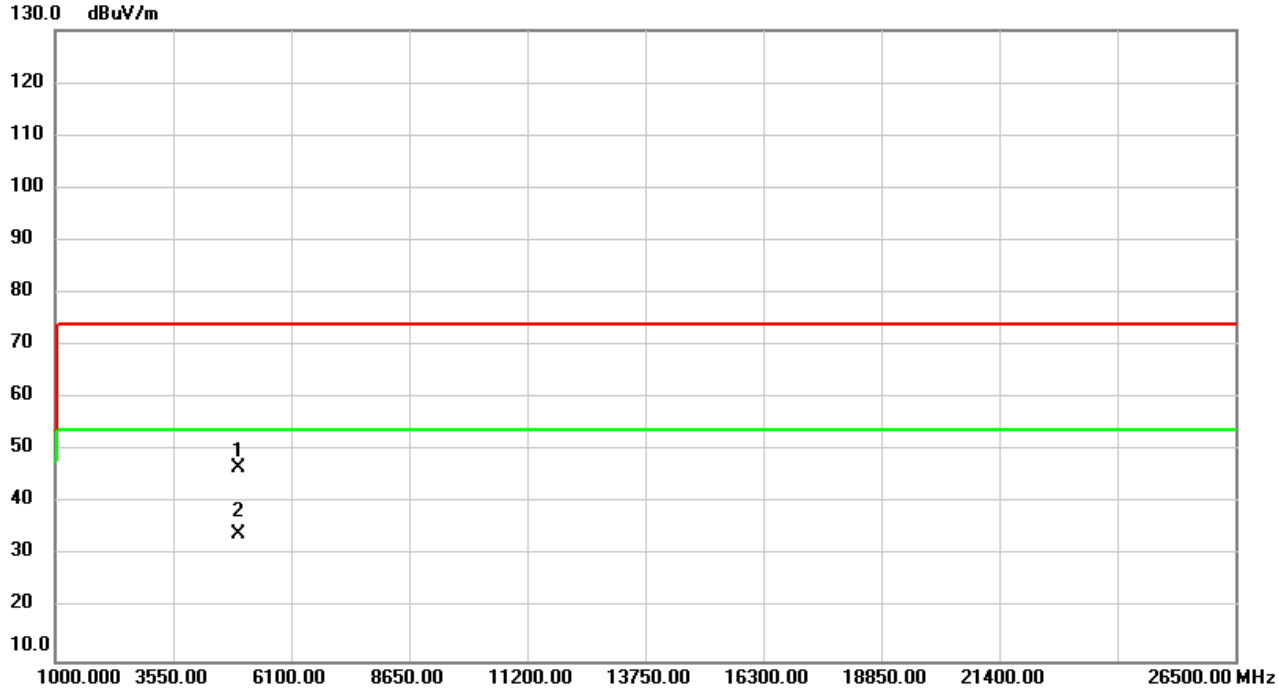
Test Mode	IEEE 802.11n (HT20)	Test Date	2023/3/21
Test Frequency	2472MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4934.000	47.00	1.20	48.20	74.00	-25.80	peak	
2	*	4934.000	33.10	1.20	34.30	54.00	-19.70	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

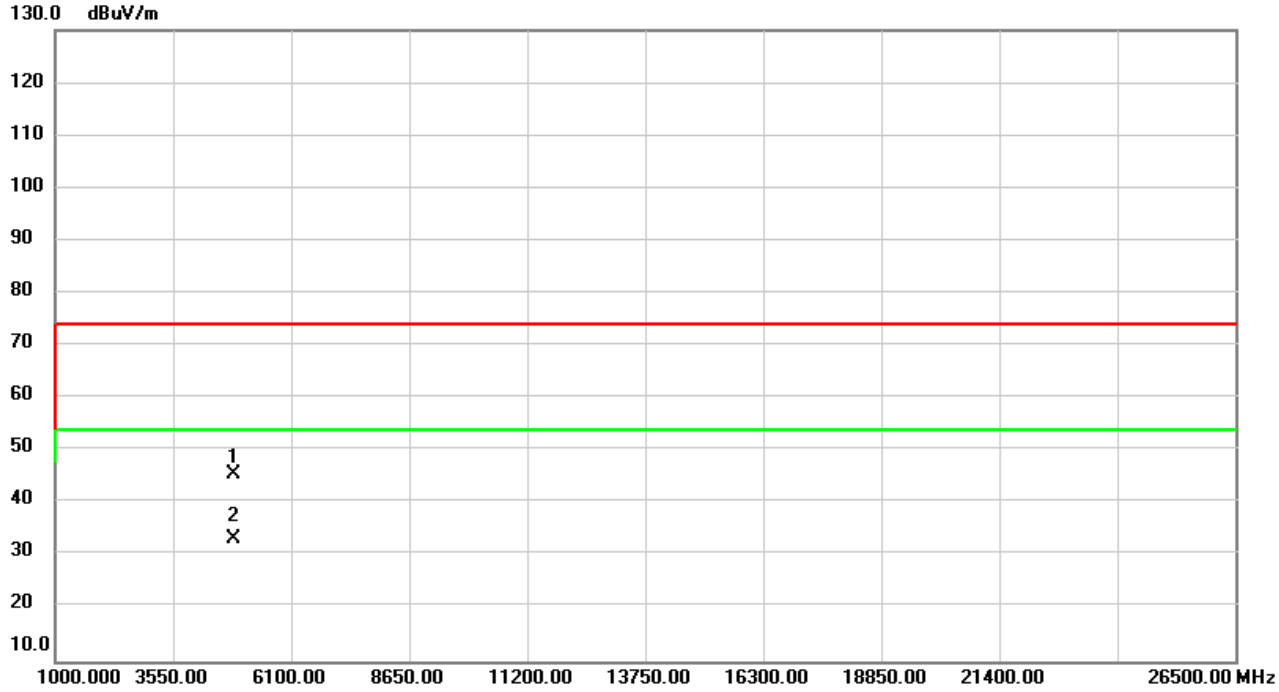
Test Mode	IEEE 802.11n (HT20)	Test Date	2023/3/21
Test Frequency	2472MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4944.000	45.63	1.22	46.85	74.00	-27.15	peak	
2	*	4944.000	32.97	1.22	34.19	54.00	-19.81	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

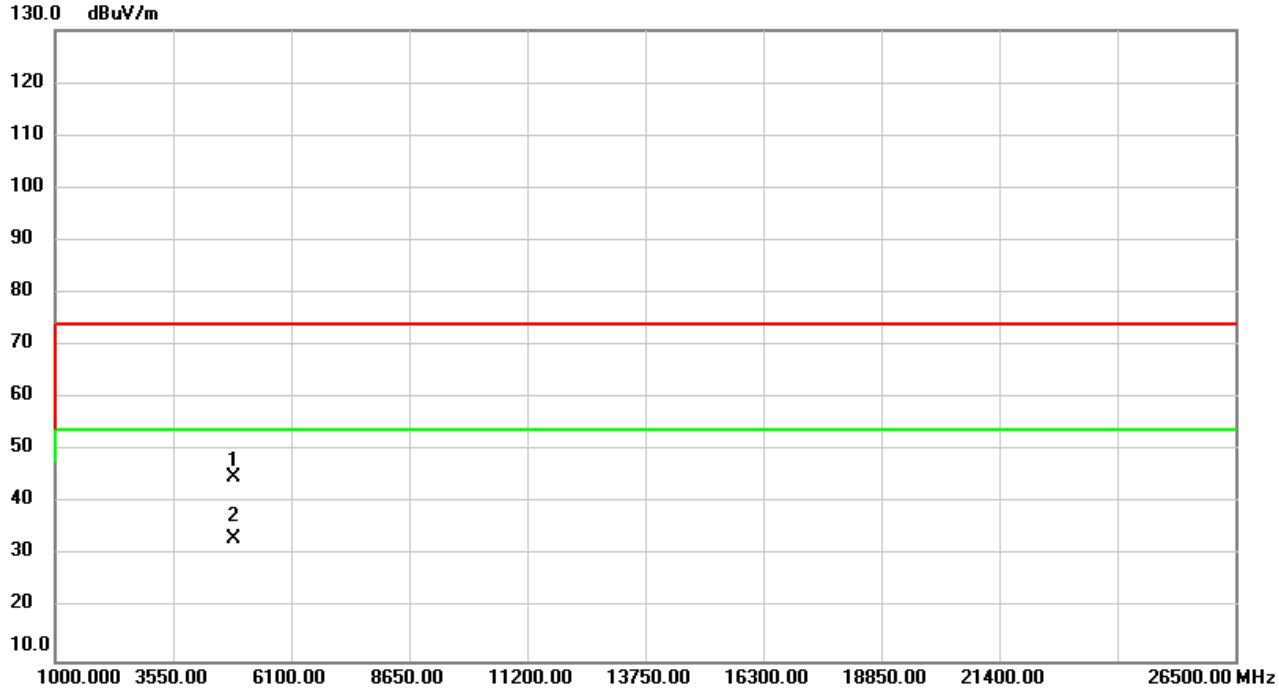
Test Mode	IEEE 802.11n (HT40)	Test Date	2023/3/21
Test Frequency	2422MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4844.000	44.64	0.88	45.52	74.00	-28.48	peak	
2	*	4844.000	32.32	0.88	33.20	54.00	-20.80	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

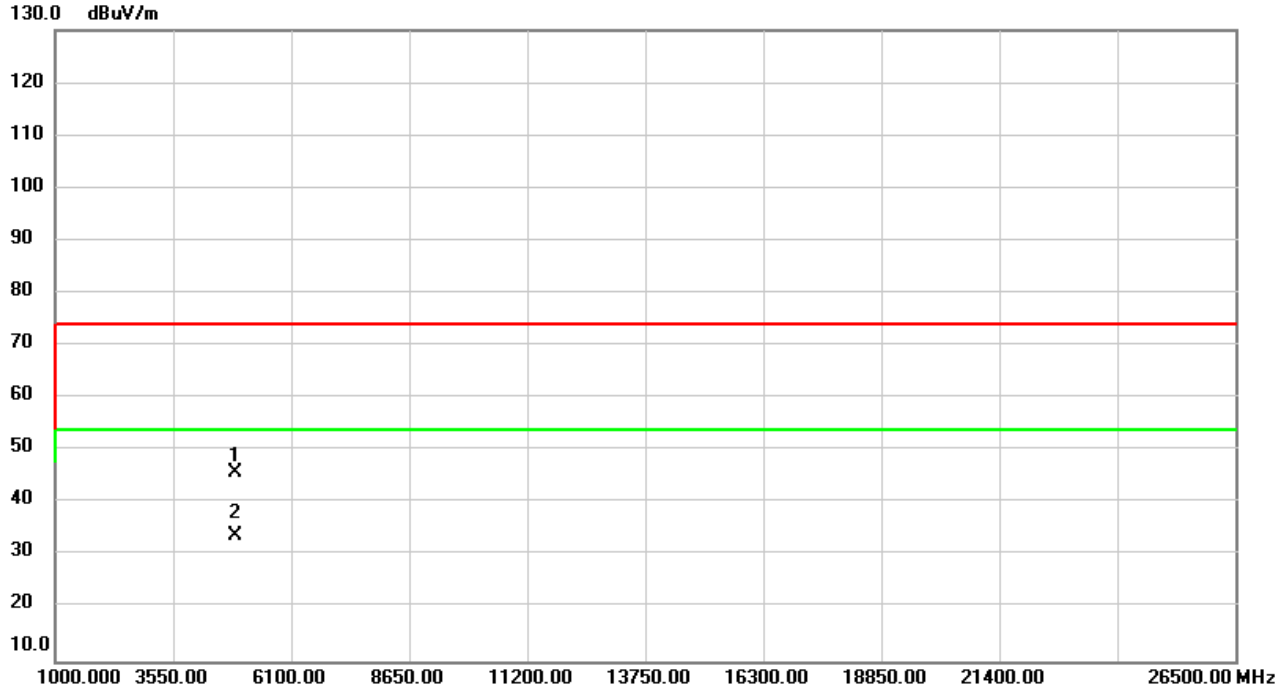
Test Mode	IEEE 802.11n (HT40)	Test Date	2023/3/21
Test Frequency	2422MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4844.000	44.19	0.88	45.07	74.00	-28.93	peak	
2	*	4844.000	32.35	0.88	33.23	54.00	-20.77	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

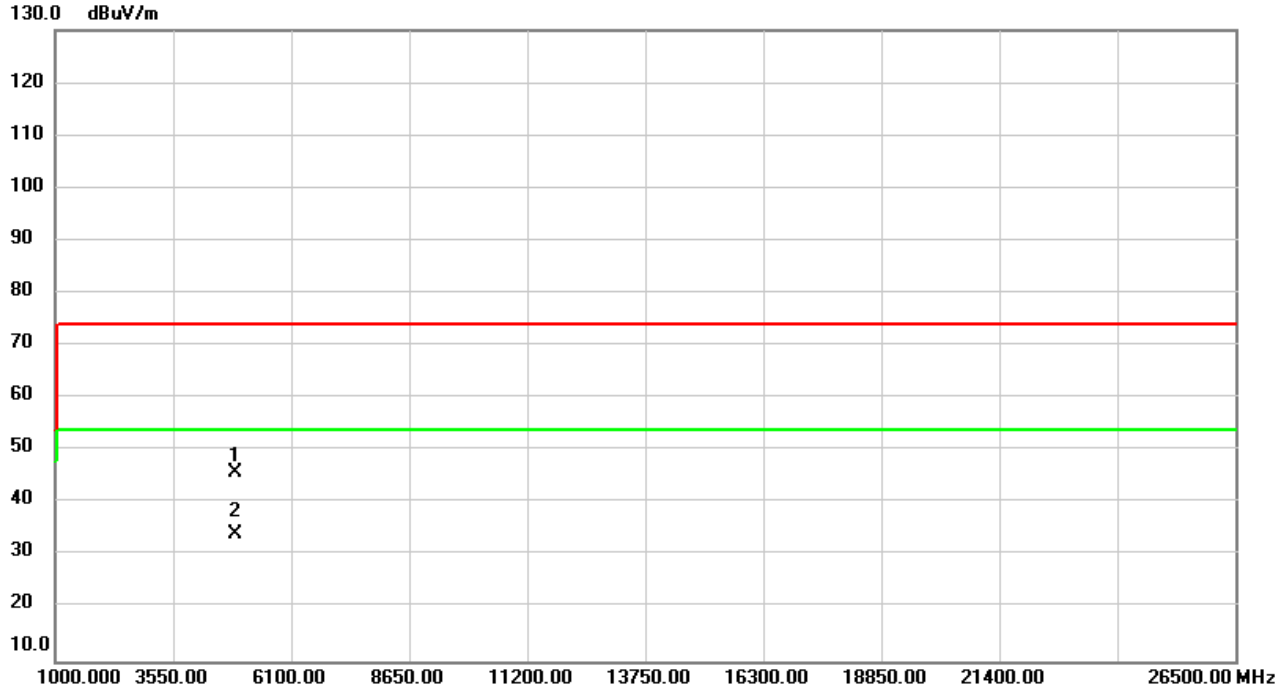
Test Mode	IEEE 802.11n (HT40)	Test Date	2023/3/21
Test Frequency	2442MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4884.000	44.83	1.02	45.85	74.00	-28.15	peak	
2	*	4884.000	32.74	1.02	33.76	54.00	-20.24	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

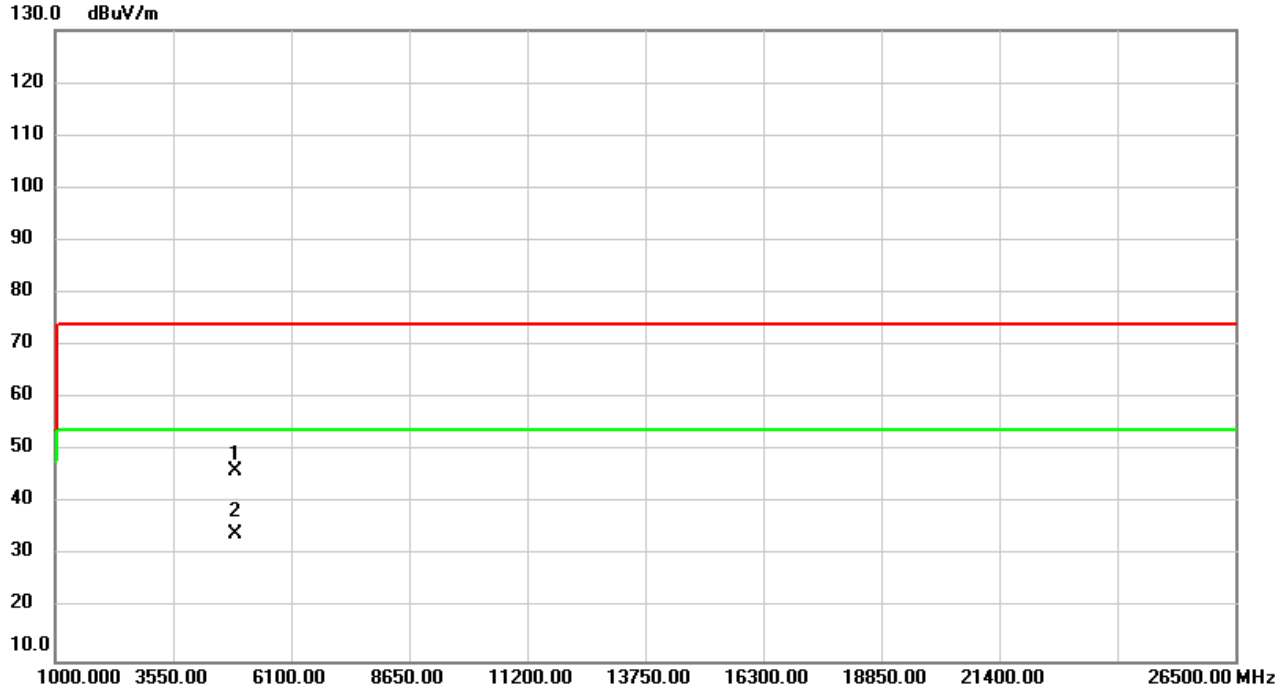
Test Mode	IEEE 802.11n (HT40)	Test Date	2023/3/21
Test Frequency	2442MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4884.000	44.79	1.02	45.81	74.00	-28.19	peak	
2	*	4884.000	33.07	1.02	34.09	54.00	-19.91	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

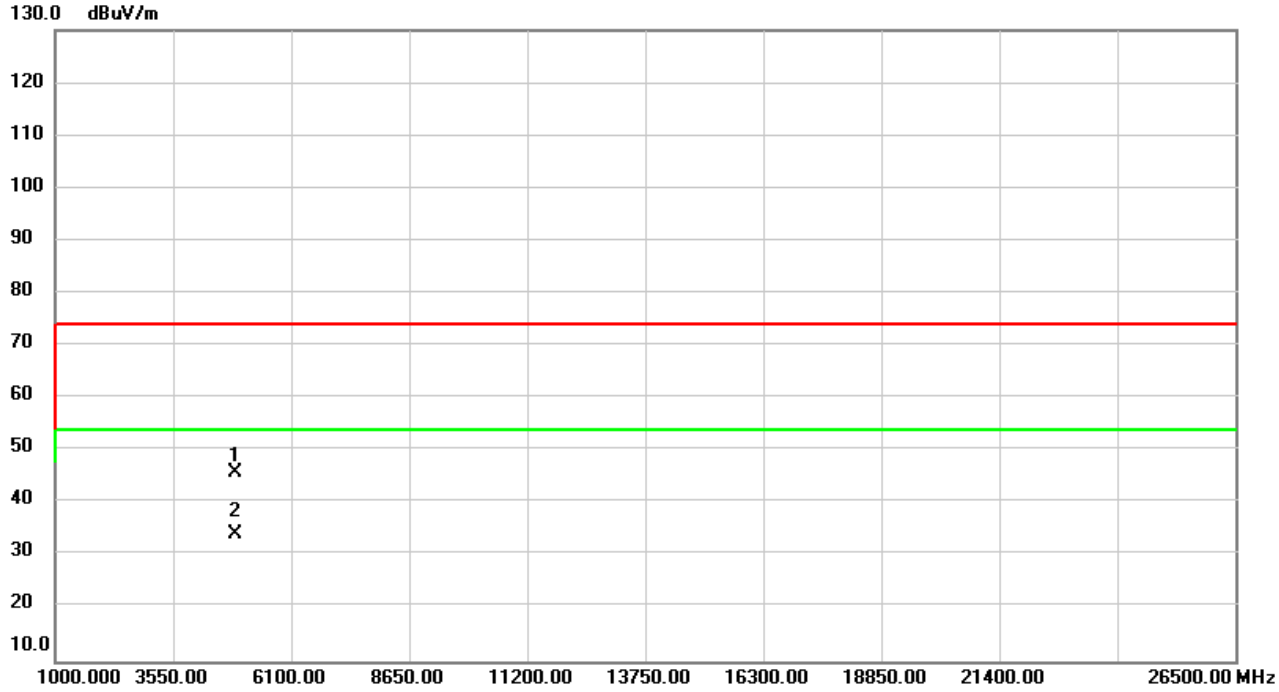
Test Mode	IEEE 802.11n (HT40)	Test Date	2023/3/21
Test Frequency	2452MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4904.000	45.18	1.08	46.26	74.00	-27.74	peak	
2	*	4904.000	33.21	1.08	34.29	54.00	-19.71	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

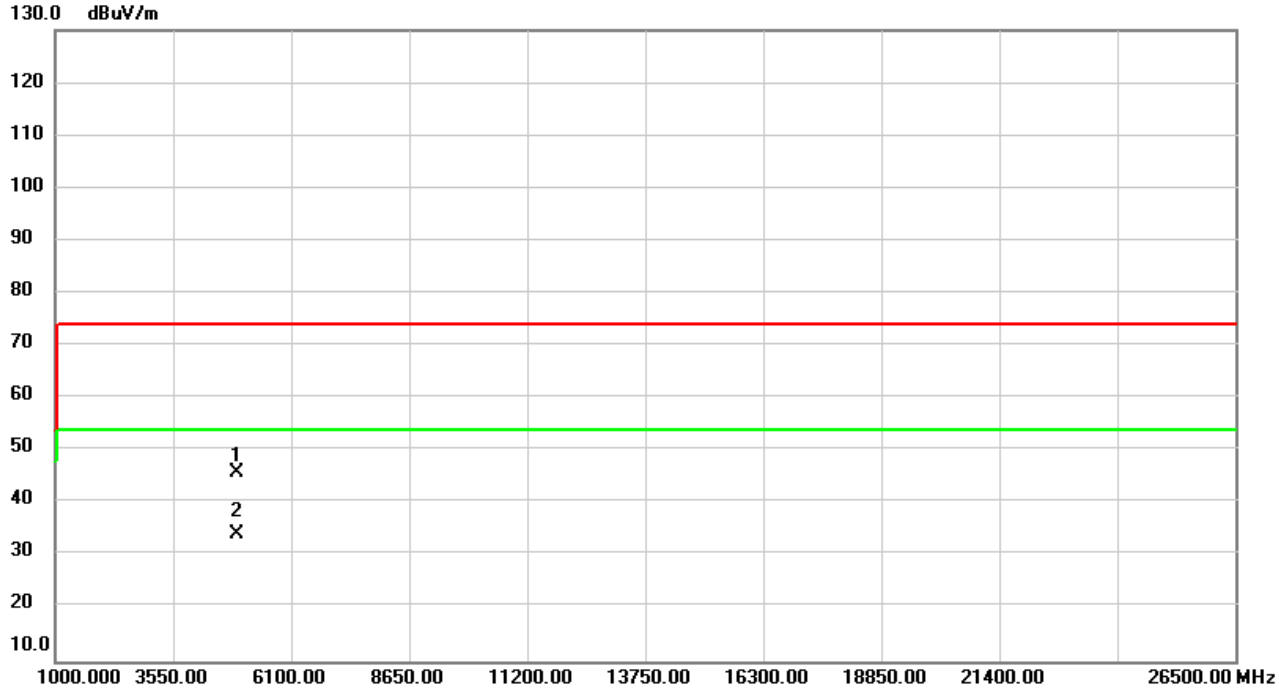
Test Mode	IEEE 802.11n (HT40)	Test Date	2023/3/21
Test Frequency	2452MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4904.000	44.77	1.08	45.85	74.00	-28.15	peak	
2	*	4904.000	33.02	1.08	34.10	54.00	-19.90	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

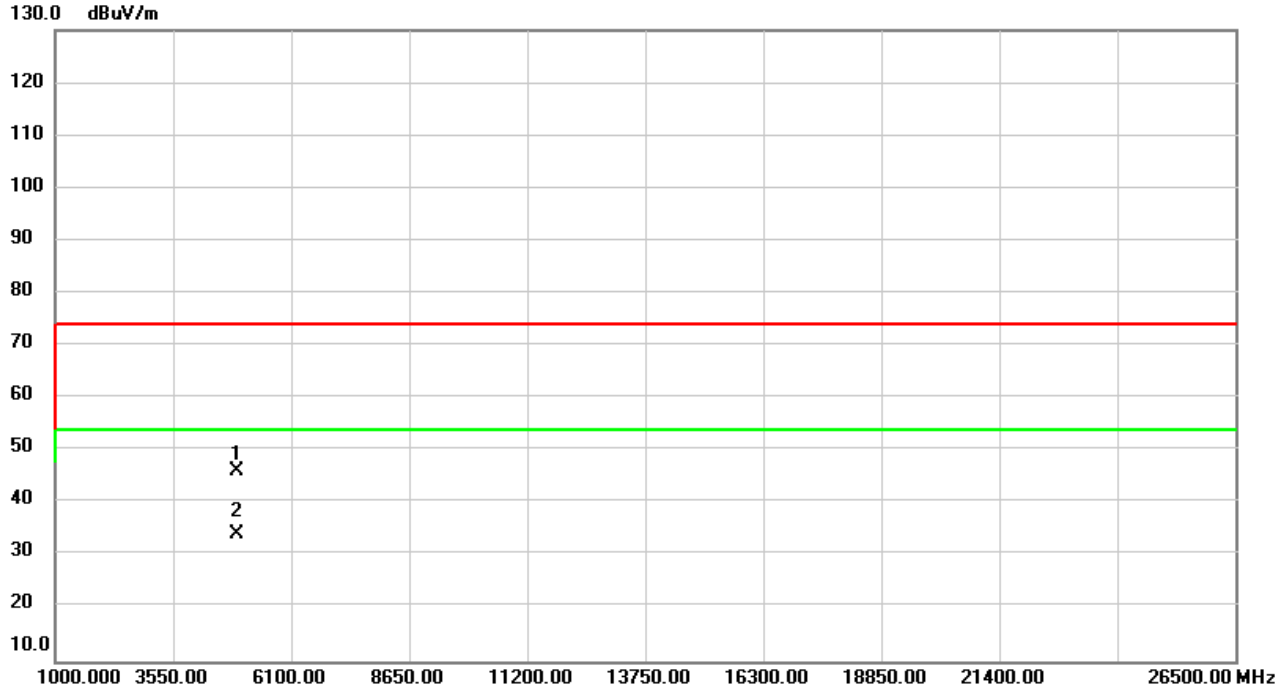
Test Mode	IEEE 802.11n (HT40)	Test Date	2023/3/21
Test Frequency	2457MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4914.000	44.83	1.12	45.95	74.00	-28.05	peak	
2	*	4914.000	33.01	1.12	34.13	54.00	-19.87	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

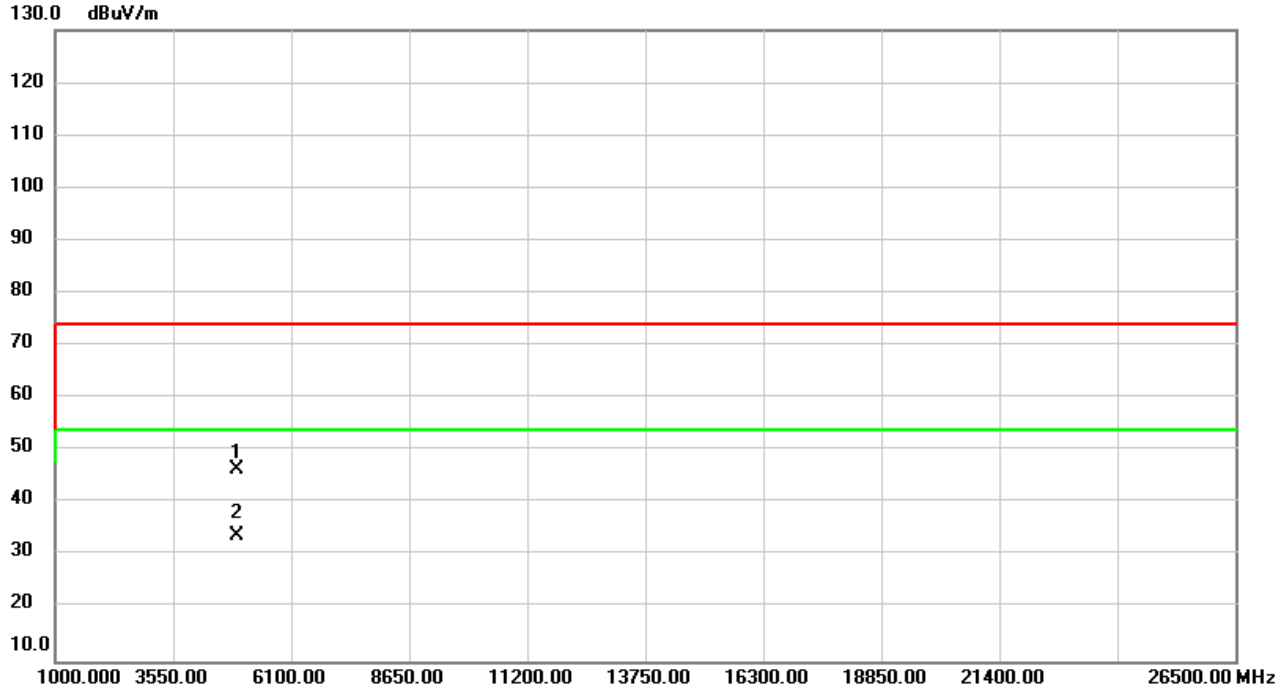
Test Mode	IEEE 802.11n (HT40)	Test Date	2023/3/21
Test Frequency	2457MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4914.000	45.14	1.12	46.26	74.00	-27.74	peak	
2	*	4914.000	33.09	1.12	34.21	54.00	-19.79	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

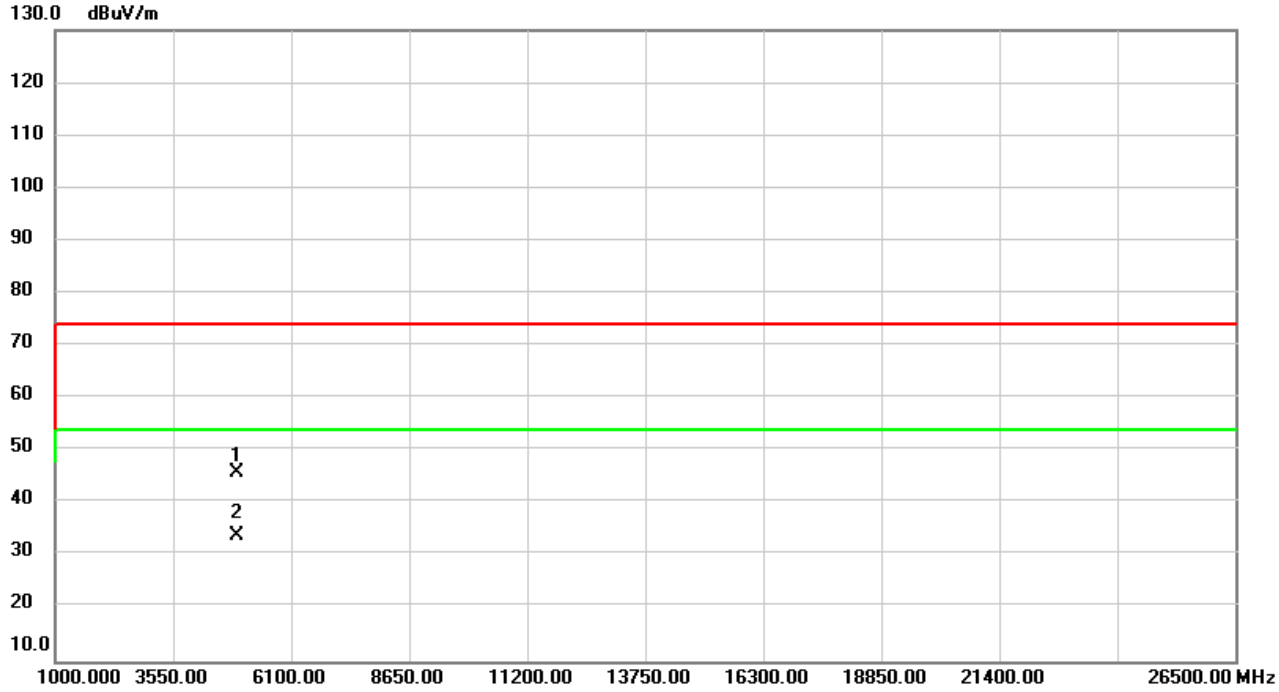
Test Mode	IEEE 802.11n (HT40)	Test Date	2023/3/21
Test Frequency	2462MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	45.25	1.16	46.41	74.00	-27.59	peak	
2	*	4924.000	32.84	1.16	34.00	54.00	-20.00	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

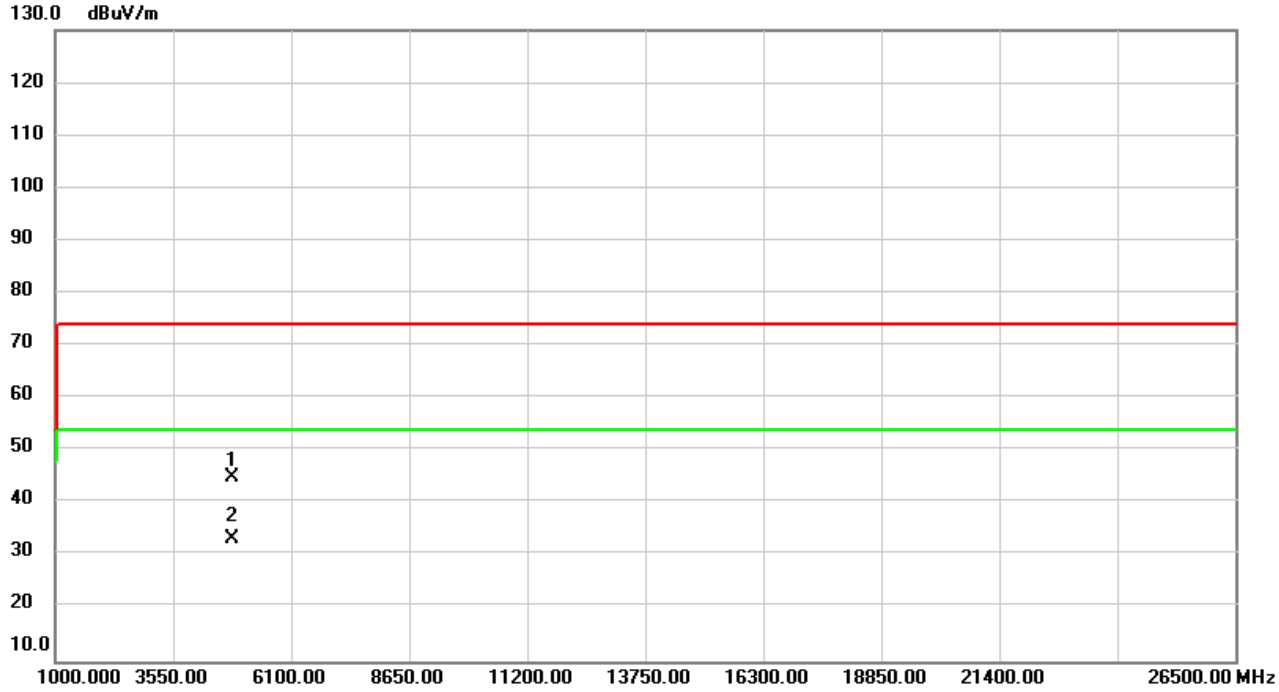
Test Mode	IEEE 802.11n (HT40)	Test Date	2023/3/21
Test Frequency	2462MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	44.75	1.16	45.91	74.00	-28.09	peak	
2	*	4924.000	32.76	1.16	33.92	54.00	-20.08	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

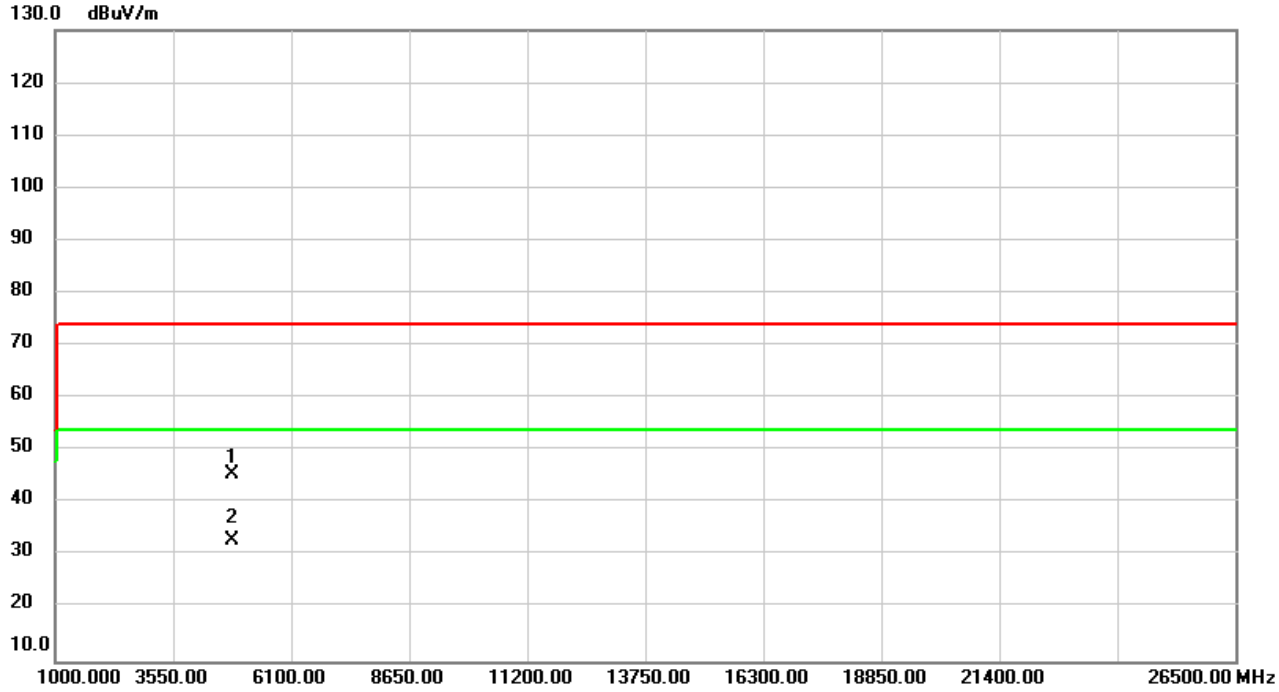
Test Mode	IEEE 802.11ax (HE20)	Test Date	2023/3/21
Test Frequency	2412MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	44.11	0.82	44.93	74.00	-29.07	peak	
2	*	4824.000	32.44	0.82	33.26	54.00	-20.74	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

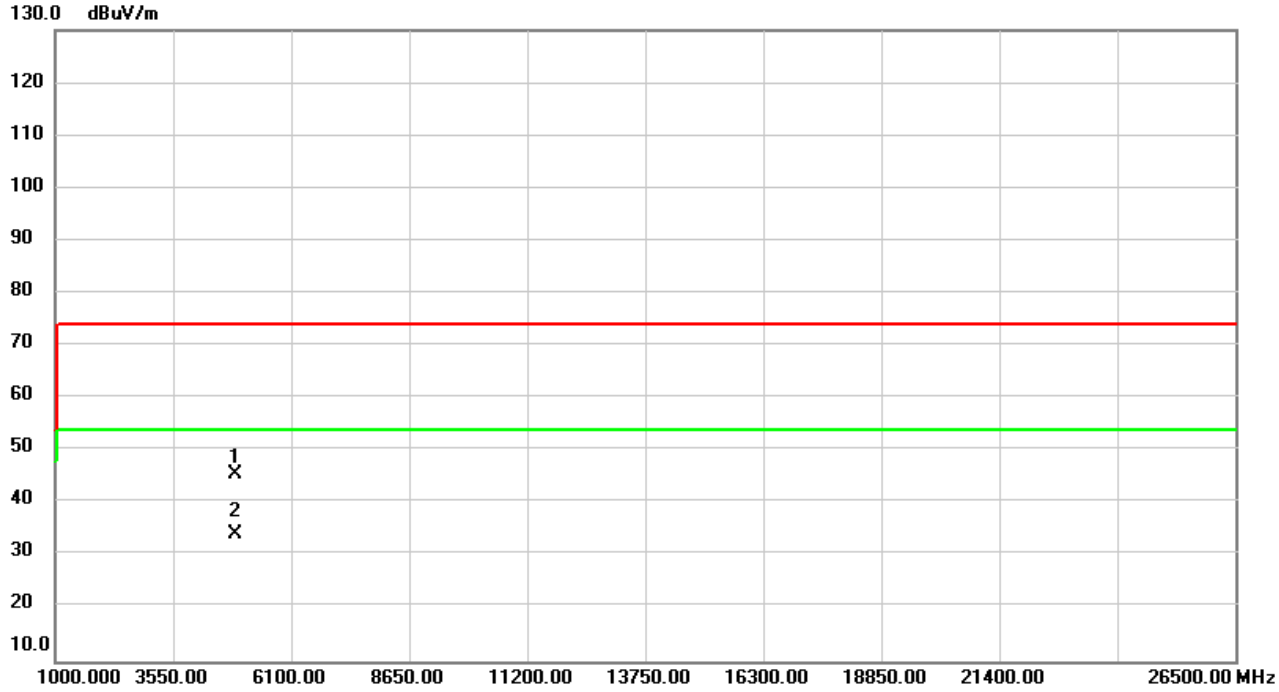
Test Mode	IEEE 802.11ax (HE20)	Test Date	2023/3/21
Test Frequency	2412MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	44.70	0.82	45.52	74.00	-28.48	peak	
2	*	4824.000	32.14	0.82	32.96	54.00	-21.04	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

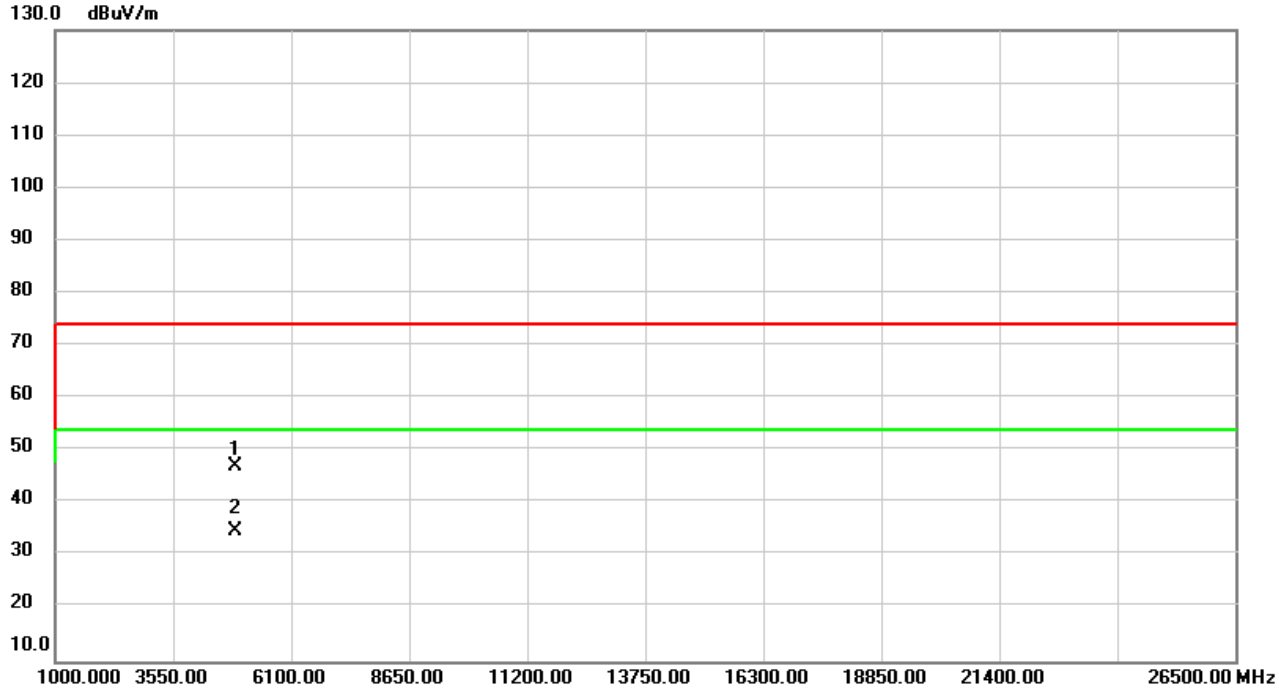
Test Mode	IEEE 802.11ax (HE20)	Test Date	2023/3/21
Test Frequency	2442MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4884.000	44.41	1.02	45.43	74.00	-28.57	peak	
2	*	4884.000	33.01	1.02	34.03	54.00	-19.97	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

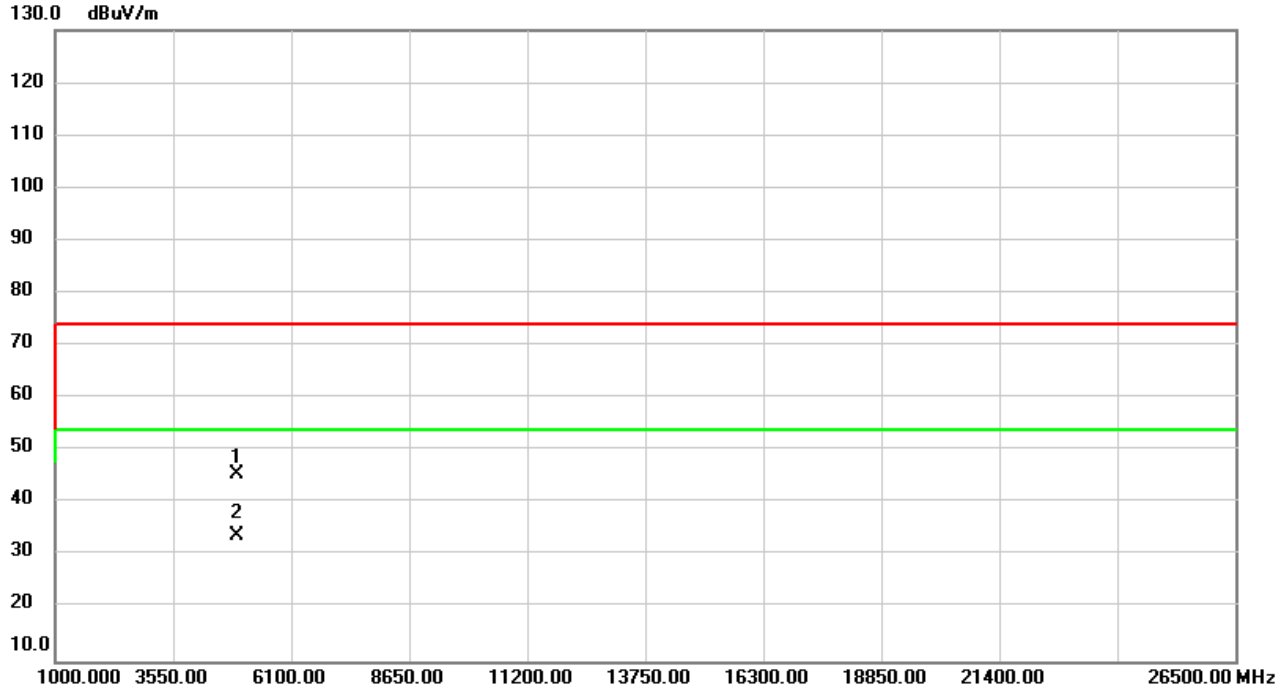
Test Mode	IEEE 802.11ax (HE20)	Test Date	2023/3/21
Test Frequency	2442MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4884.000	45.93	1.02	46.95	74.00	-27.05	peak	
2	*	4884.000	33.70	1.02	34.72	54.00	-19.28	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

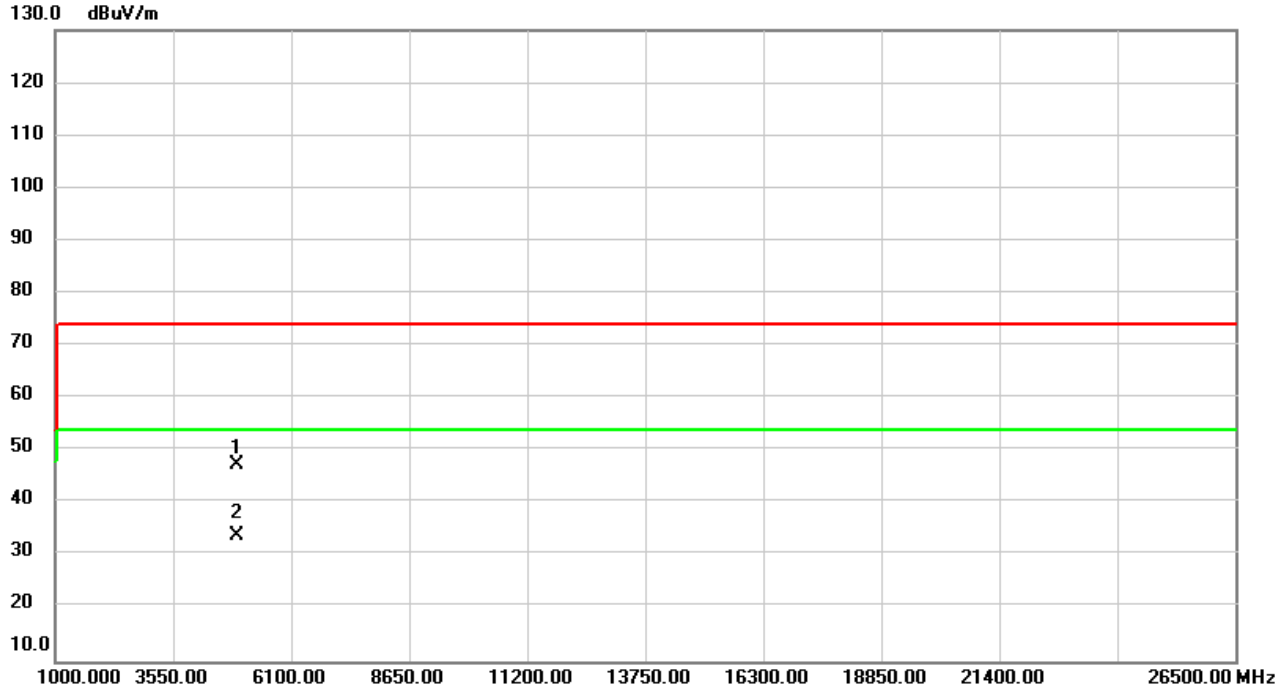
Test Mode	IEEE 802.11ax (HE20)	Test Date	2023/3/21
Test Frequency	2462MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	44.33	1.16	45.49	74.00	-28.51	peak	
2	*	4924.000	32.72	1.16	33.88	54.00	-20.12	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

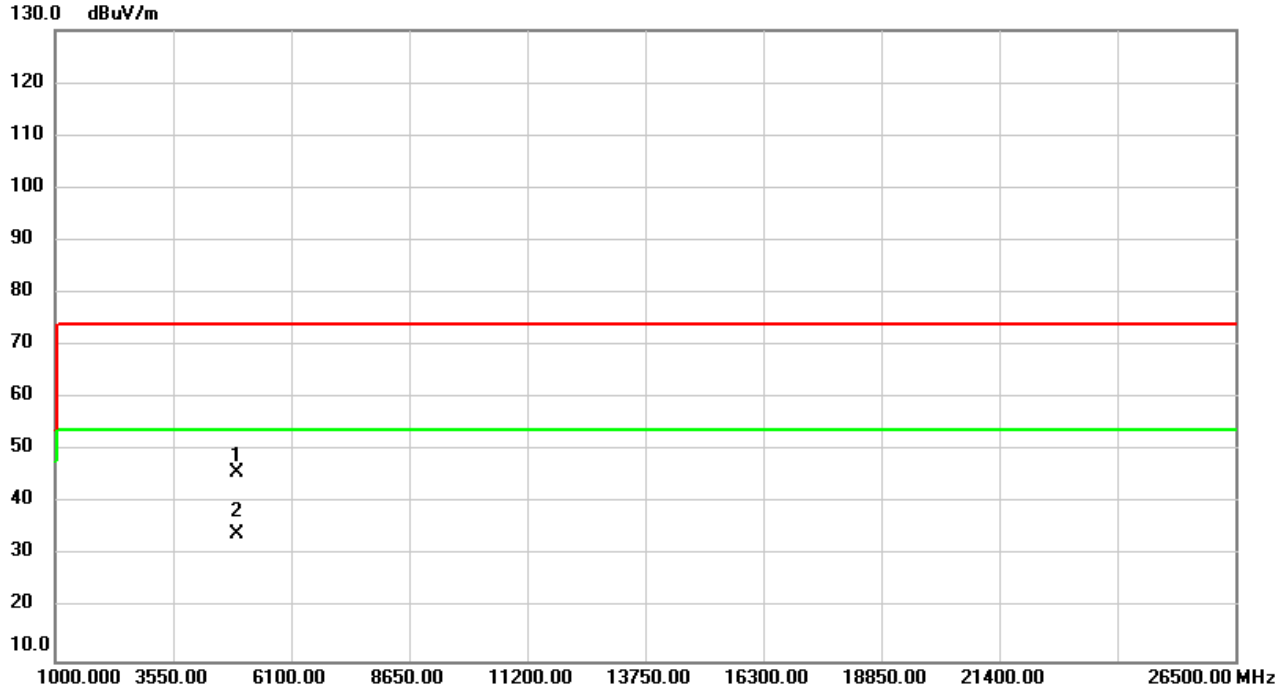
Test Mode	IEEE 802.11ax (HE20)	Test Date	2023/3/21
Test Frequency	2462MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	46.07	1.16	47.23	74.00	-26.77	peak	
2	*	4924.000	32.71	1.16	33.87	54.00	-20.13	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

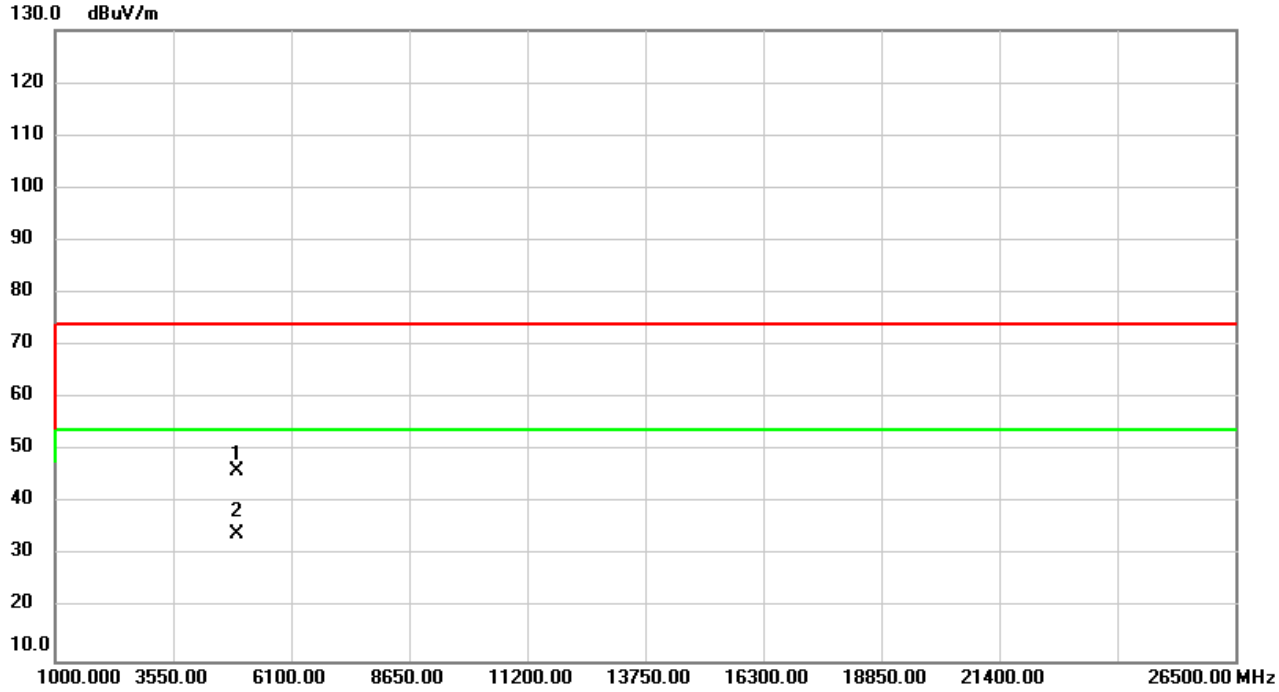
Test Mode	IEEE 802.11ax (HE20)	Test Date	2023/3/21
Test Frequency	2467MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4934.000	44.73	1.20	45.93	74.00	-28.07	peak	
2	*	4934.000	32.87	1.20	34.07	54.00	-19.93	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

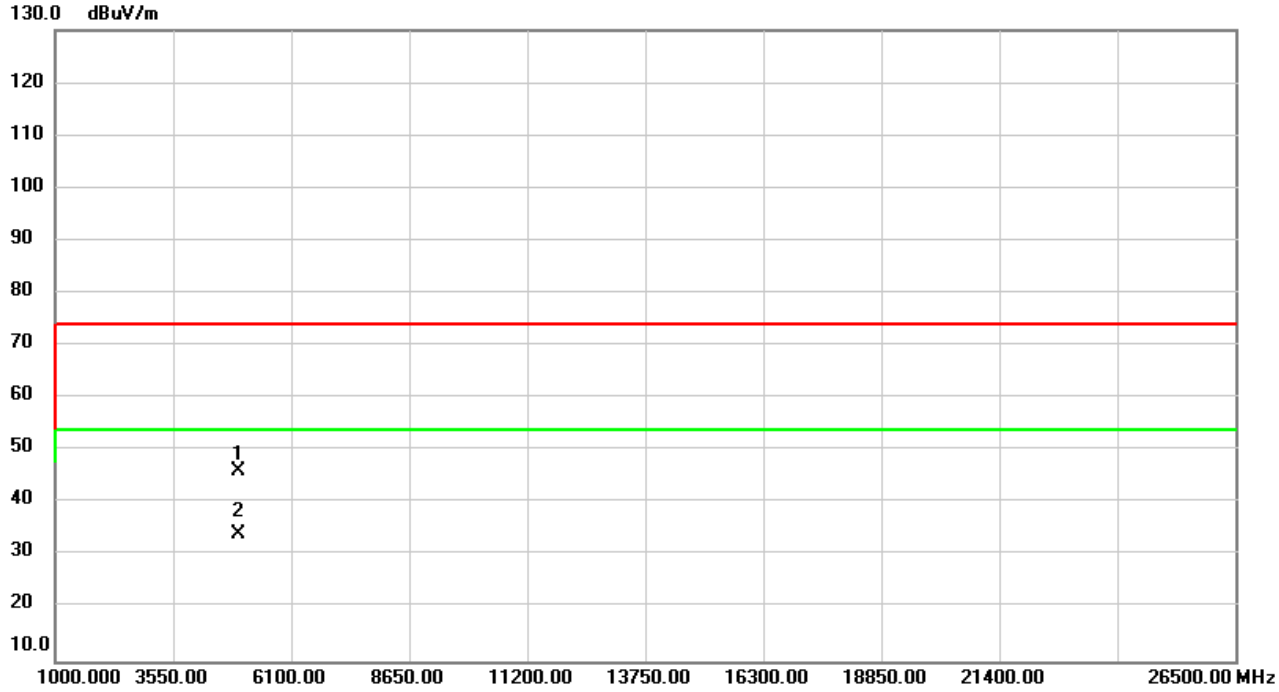
Test Mode	IEEE 802.11ax (HE20)	Test Date	2023/3/21
Test Frequency	2467MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4934.000	45.02	1.20	46.22	74.00	-27.78	peak	
2	*	4934.000	32.86	1.20	34.06	54.00	-19.94	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

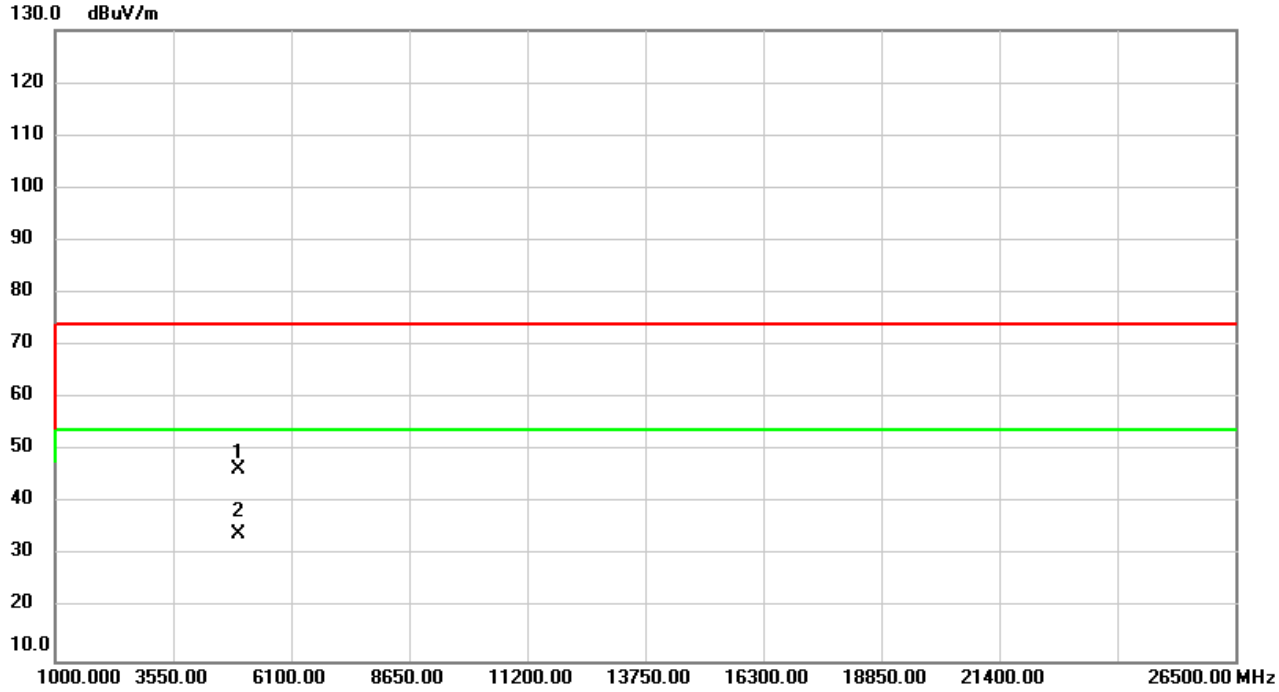
Test Mode	IEEE 802.11ax (HE20)	Test Date	2023/3/21
Test Frequency	2472MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4944.000	45.08	1.22	46.30	74.00	-27.70	peak	
2	*	4944.000	33.06	1.22	34.28	54.00	-19.72	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

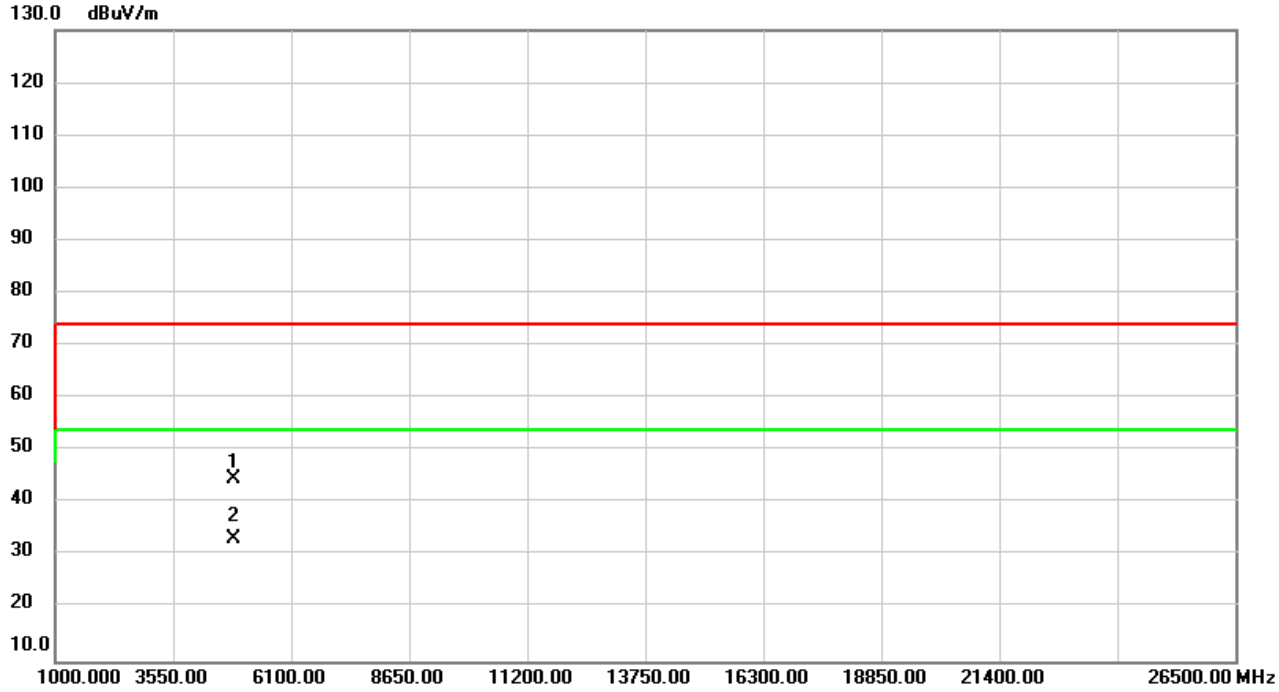
Test Mode	IEEE 802.11ax (HE20)	Test Date	2023/3/21
Test Frequency	2472MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4944.000	45.29	1.22	46.51	74.00	-27.49	peak	
2	*	4944.000	32.98	1.22	34.20	54.00	-19.80	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

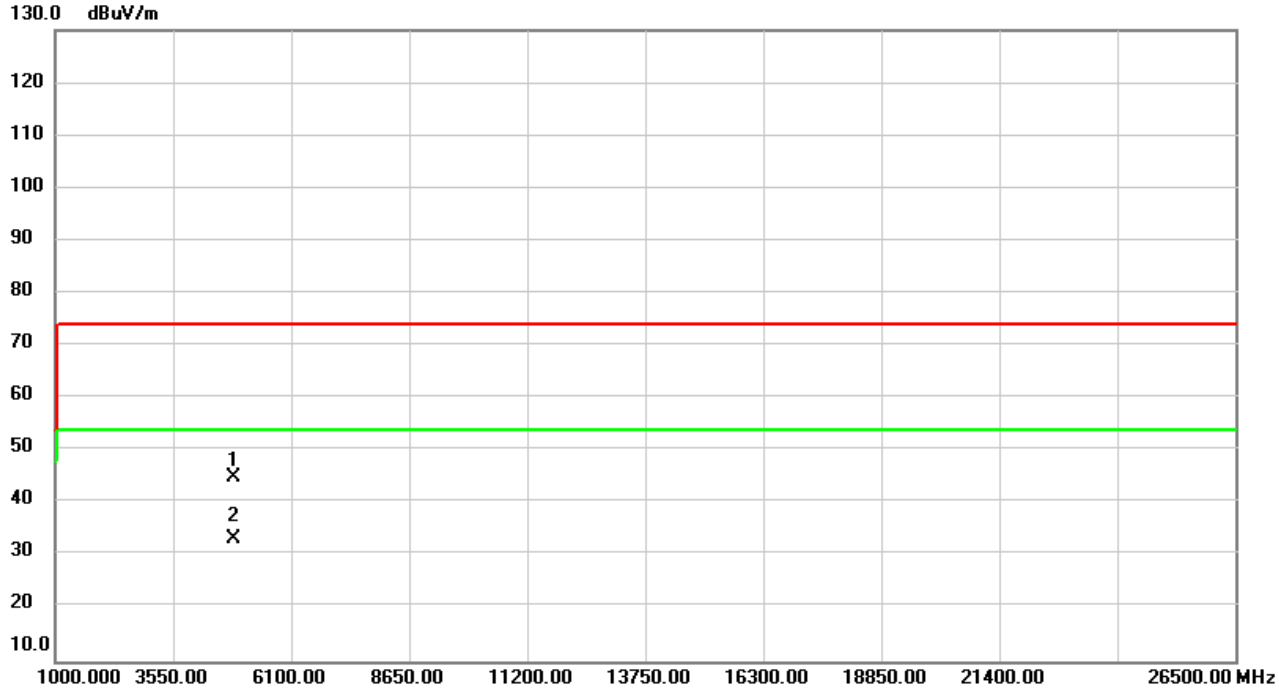
Test Mode	IEEE 802.11ax (HE40)	Test Date	2023/3/21
Test Frequency	2422MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4844.000	43.87	0.88	44.75	74.00	-29.25	peak	
2	*	4844.000	32.32	0.88	33.20	54.00	-20.80	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

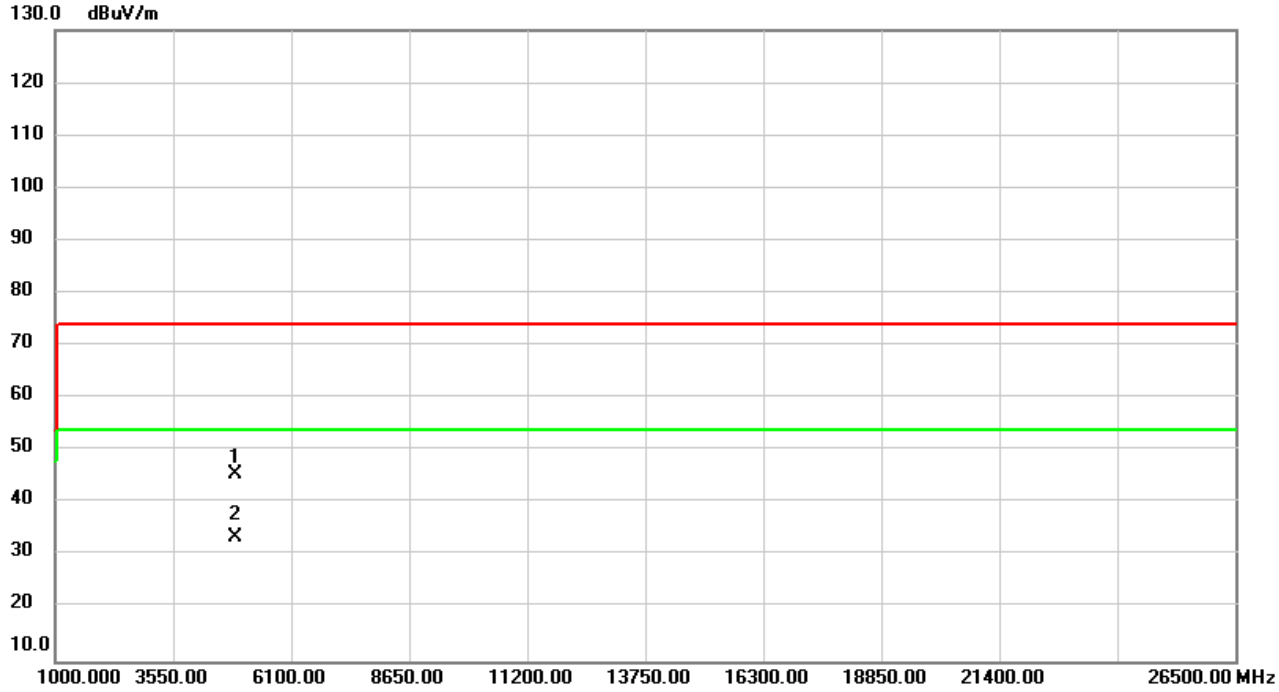
Test Mode	IEEE 802.11ax (HE40)	Test Date	2023/3/21
Test Frequency	2422MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4844.000	43.97	0.88	44.85	74.00	-29.15	peak	
2	*	4844.000	32.33	0.88	33.21	54.00	-20.79	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

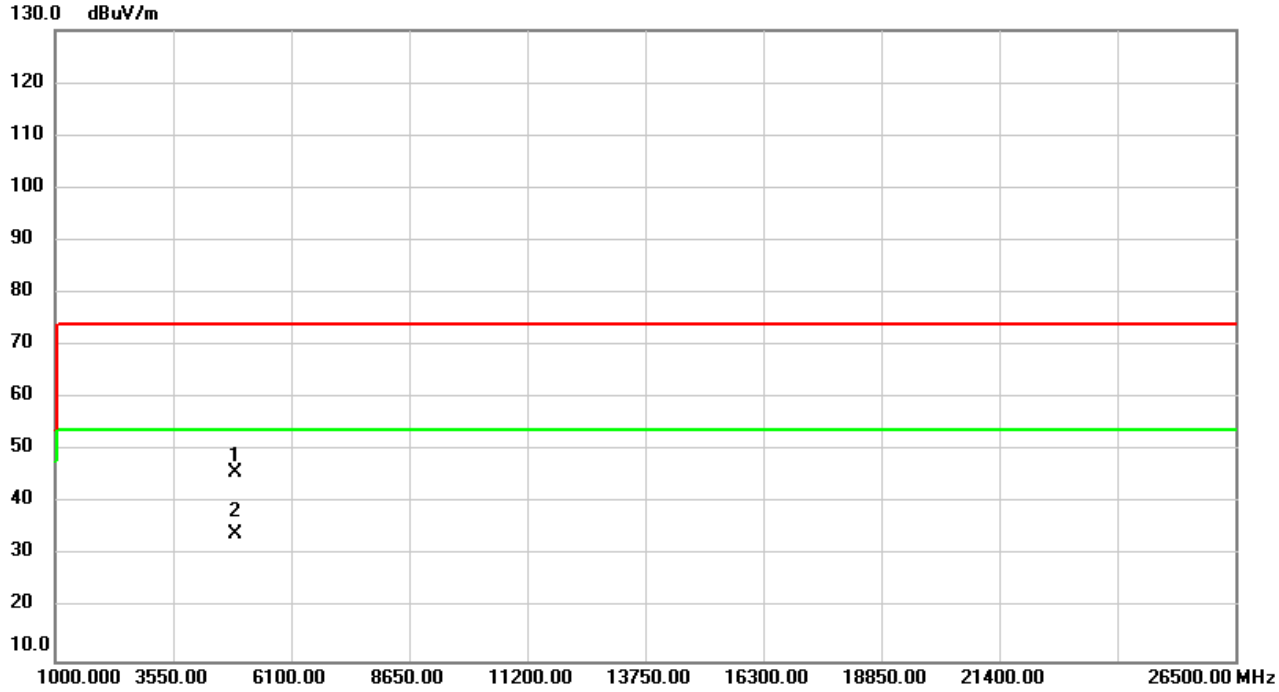
Test Mode	IEEE 802.11ax (HE40)	Test Date	2023/3/21
Test Frequency	2442MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4884.000	44.39	1.02	45.41	74.00	-28.59	peak	
2	*	4884.000	32.63	1.02	33.65	54.00	-20.35	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

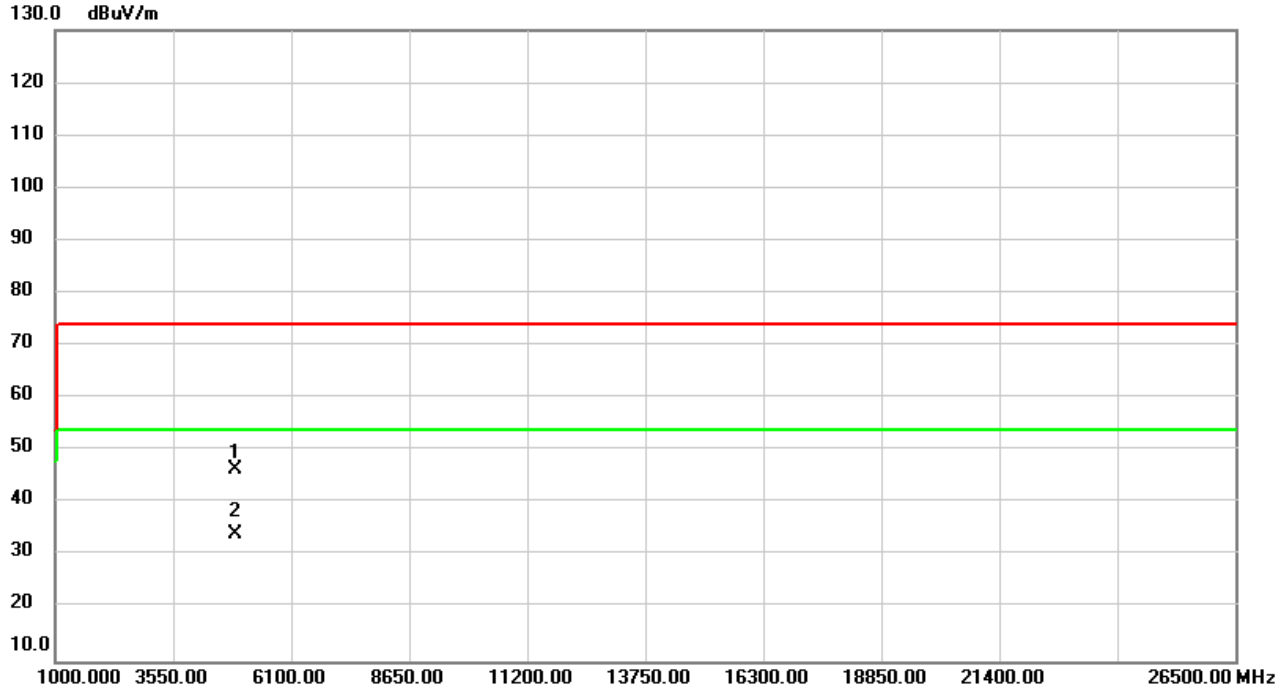
Test Mode	IEEE 802.11ax (HE40)	Test Date	2023/3/21
Test Frequency	2442MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4884.000	44.91	1.02	45.93	74.00	-28.07	peak	
2	*	4884.000	33.12	1.02	34.14	54.00	-19.86	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

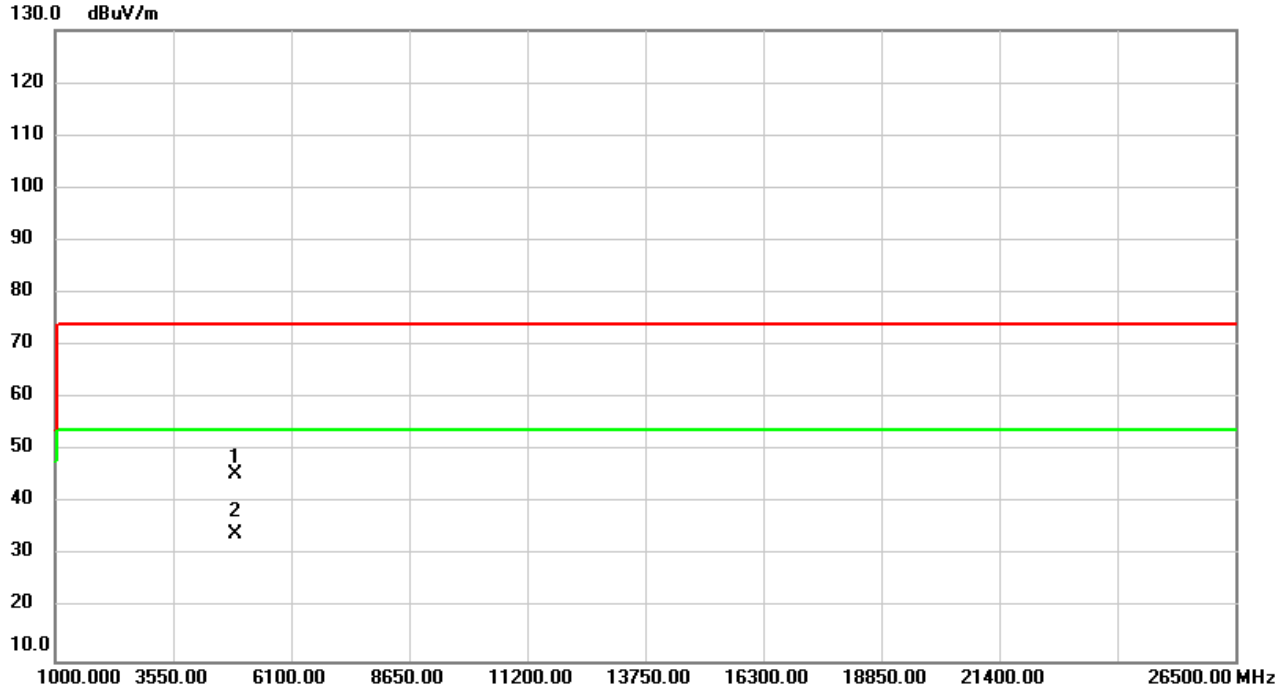
Test Mode	IEEE 802.11ax (HE40)	Test Date	2023/3/21
Test Frequency	2452MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4904.000	45.23	1.08	46.31	74.00	-27.69	peak	
2	*	4904.000	33.12	1.08	34.20	54.00	-19.80	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

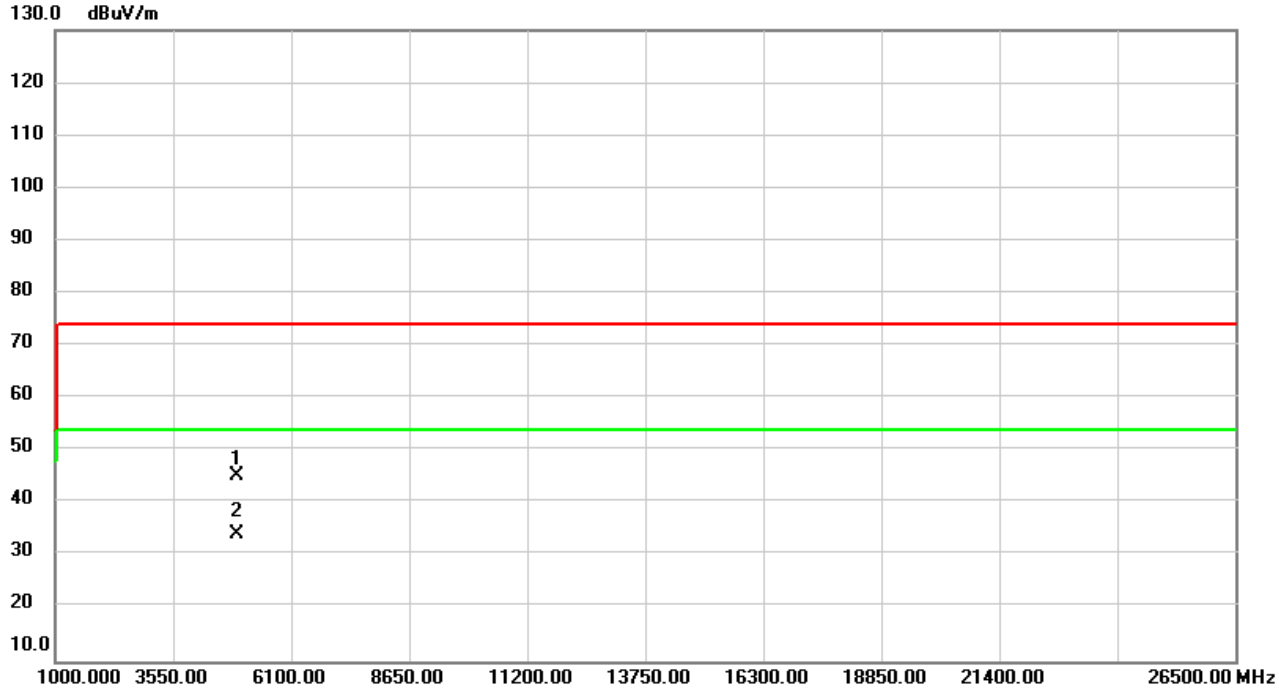
Test Mode	IEEE 802.11ax (HE40)	Test Date	2023/3/21
Test Frequency	2452MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4904.000	44.48	1.08	45.56	74.00	-28.44	peak	
2	*	4904.000	32.98	1.08	34.06	54.00	-19.94	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

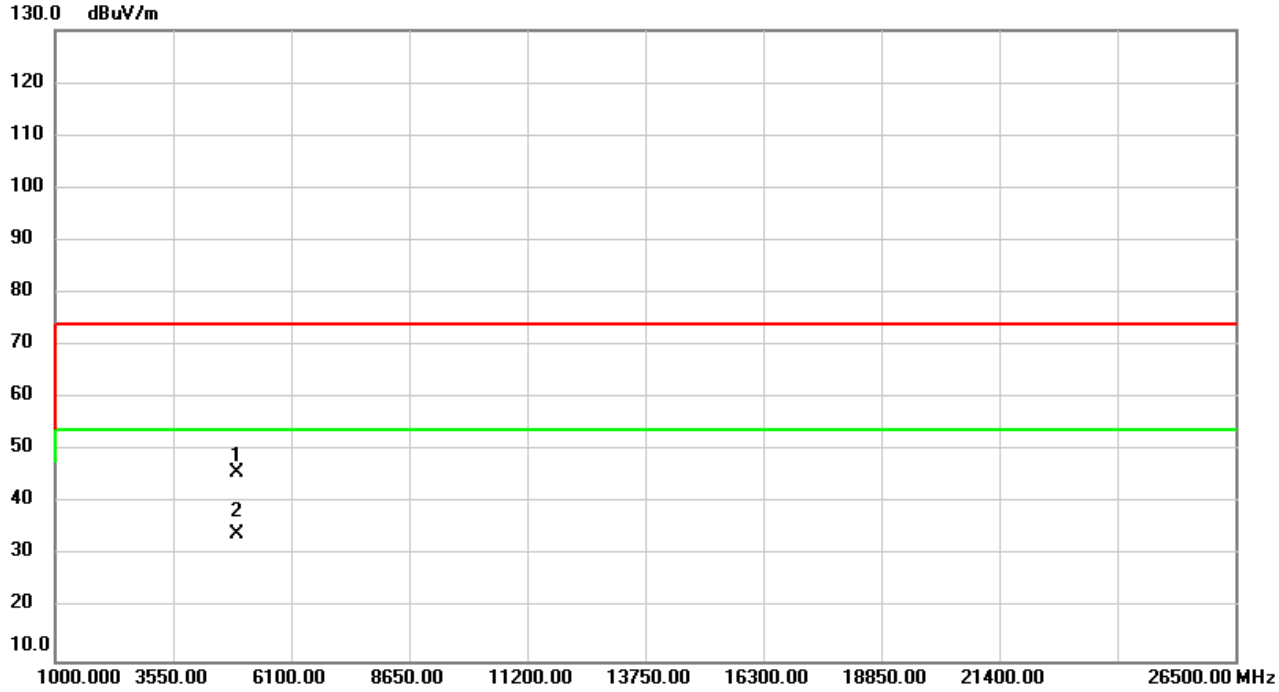
Test Mode	IEEE 802.11ax (HE40)	Test Date	2023/3/21
Test Frequency	2457MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4914.000	44.25	1.12	45.37	74.00	-28.63	peak	
2	*	4914.000	33.02	1.12	34.14	54.00	-19.86	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

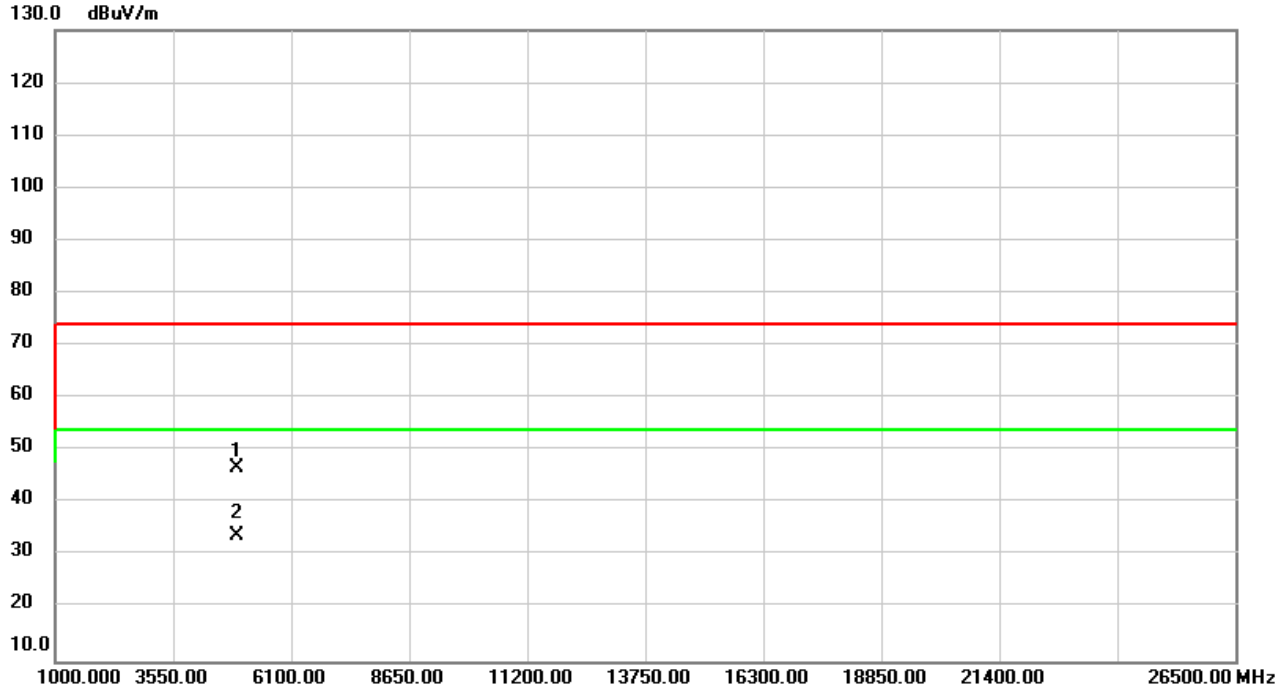
Test Mode	IEEE 802.11ax (HE40)	Test Date	2023/3/21
Test Frequency	2457MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4914.000	44.82	1.12	45.94	74.00	-28.06	peak	
2	*	4914.000	32.94	1.12	34.06	54.00	-19.94	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

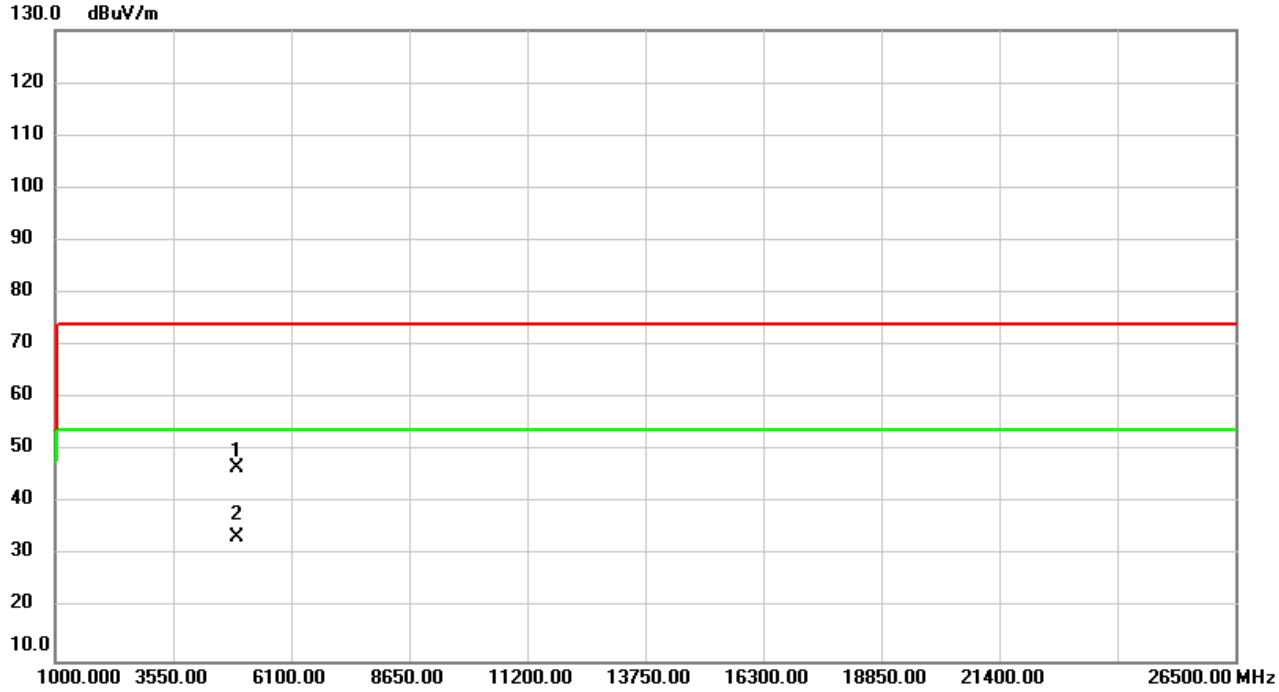
Test Mode	IEEE 802.11ax (HE40)	Test Date	2023/3/21
Test Frequency	2462MHz	Polarization	Vertical
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	45.52	1.16	46.68	74.00	-27.32	peak	
2	*	4924.000	32.69	1.16	33.85	54.00	-20.15	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE 802.11ax (HE40)	Test Date	2023/3/21
Test Frequency	2462MHz	Polarization	Horizontal
Temp	25°C	Hum.	65%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	45.46	1.16	46.62	74.00	-27.38	peak	
2	*	4924.000	32.49	1.16	33.65	54.00	-20.35	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

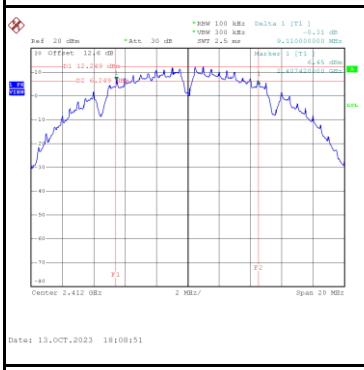
APPENDIX D BANDWIDTH

Test Mode	IEEE 802.11b_Antenna 1

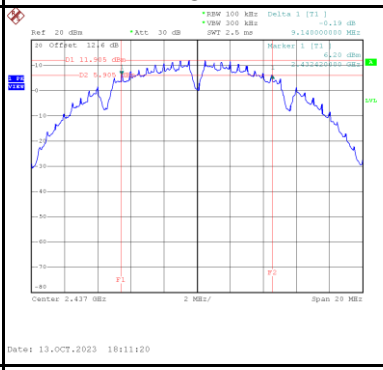
Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2412	9.11	13.68	≥ 500	Pass
2437	9.14	13.60	≥ 500	Pass
2462	9.07	13.68	≥ 500	Pass
2467	9.51	15.12	≥ 500	Pass
2472	9.59	15.28	≥ 500	Pass

6dB Bandwidth

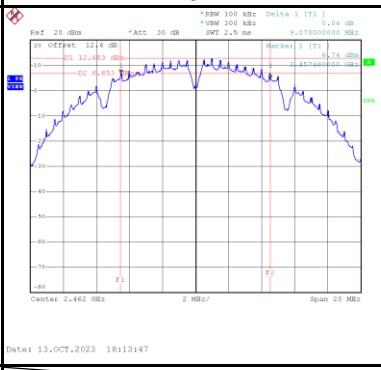
2412 MHz



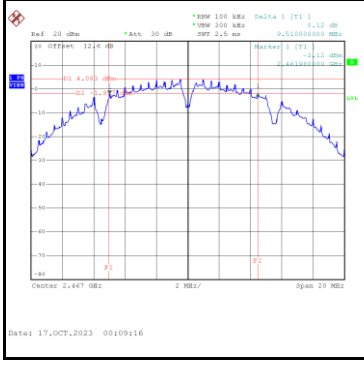
2437 MHz



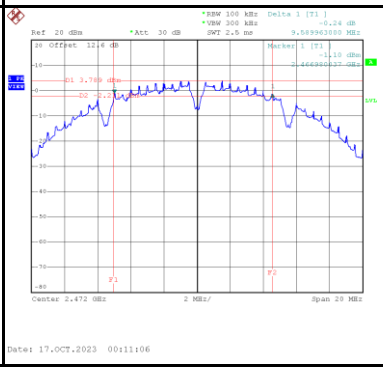
2462 MHz

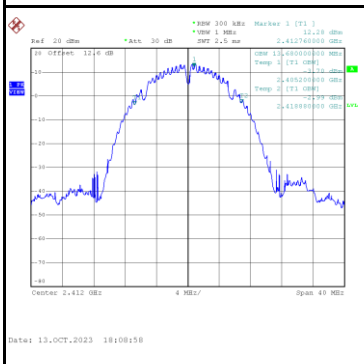
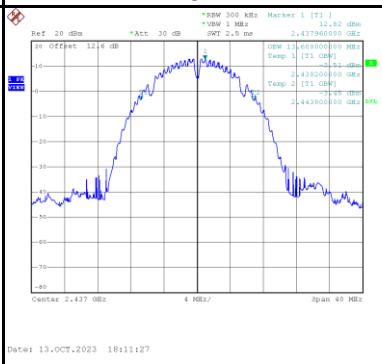
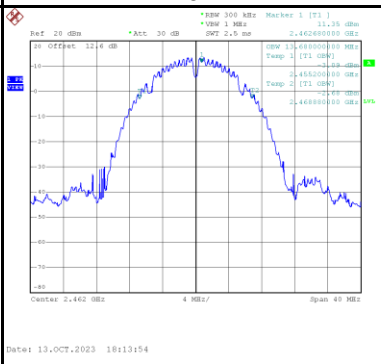
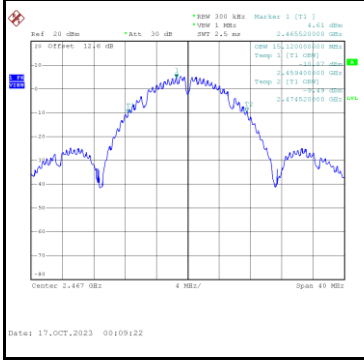
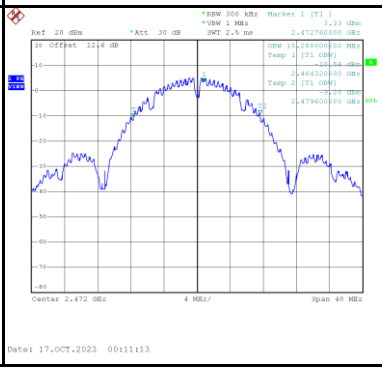


2467 MHz



2472 MHz



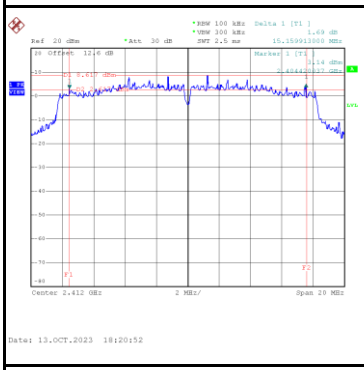
99% Occupied BW		
2412 MHz	2437 MHz	2462 MHz
		
2467 MHz	2472 MHz	
		

Test Mode	IEEE 802.11g_Antenna 1

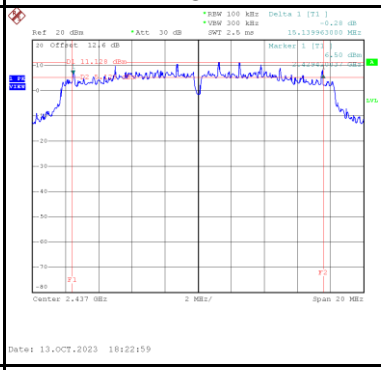
Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2412	15.16	16.88	≥ 500	Pass
2437	15.14	17.20	≥ 500	Pass
2462	15.07	16.96	≥ 500	Pass
2467	15.14	17.12	≥ 500	Pass
2472	16.38	16.64	≥ 500	Pass

6dB Bandwidth

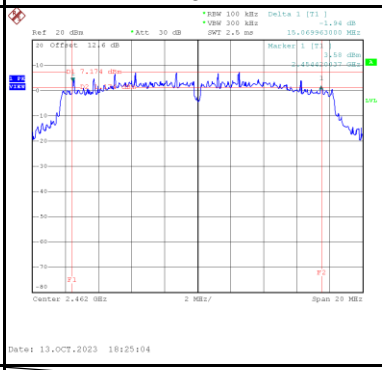
2412 MHz



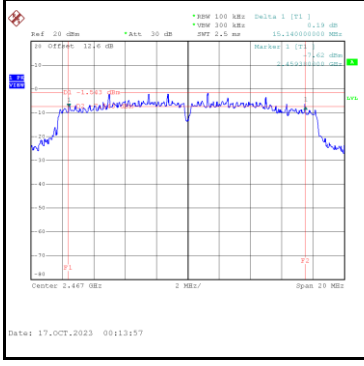
2437 MHz



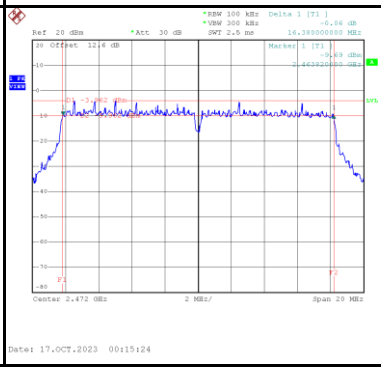
2462 MHz

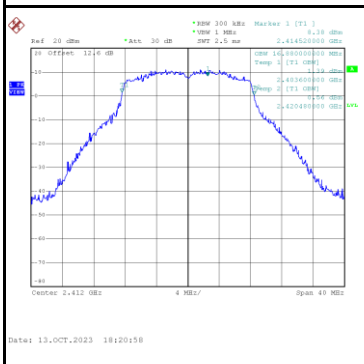
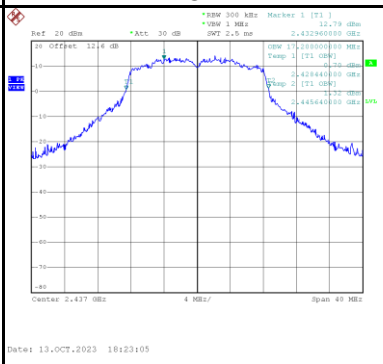
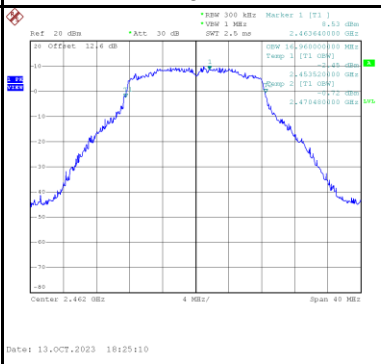
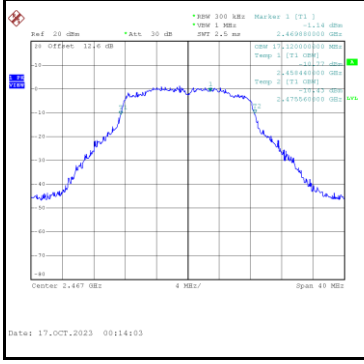
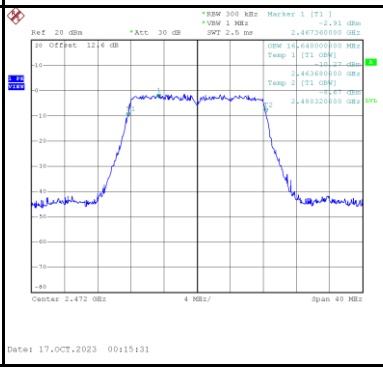


2467 MHz



2472 MHz



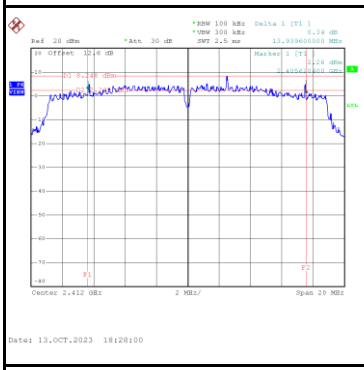
99% Occupied BW		
2412 MHz	2437 MHz	2462 MHz
		
2467 MHz	2472 MHz	
		

Test Mode	IEEE 802.11n (HT20)_Antenna 1

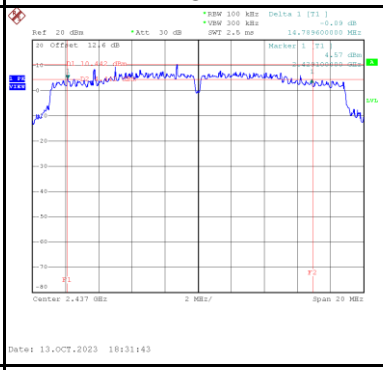
Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2412	13.94	18.00	≥ 500	Pass
2437	14.79	18.24	≥ 500	Pass
2462	15.31	18.00	≥ 500	Pass
2467	15.75	18.00	≥ 500	Pass
2472	17.60	17.76	≥ 500	Pass

6dB Bandwidth

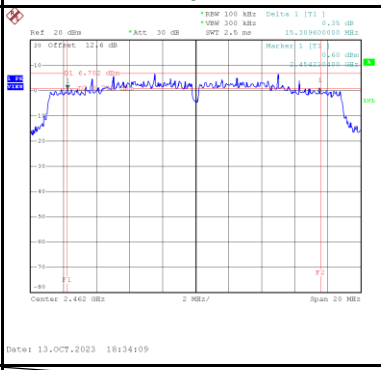
2412 MHz



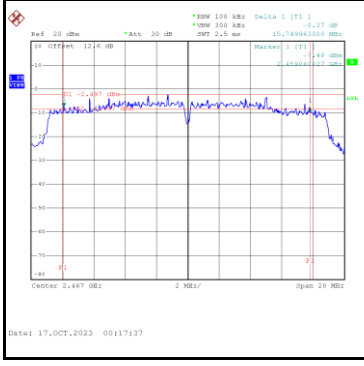
2437 MHz



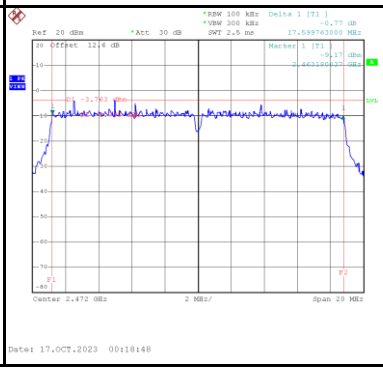
2462 MHz

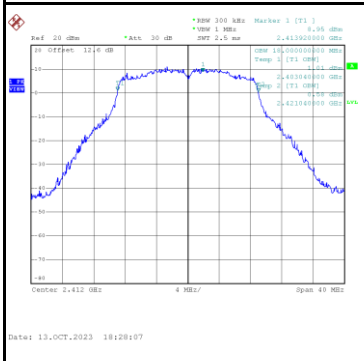
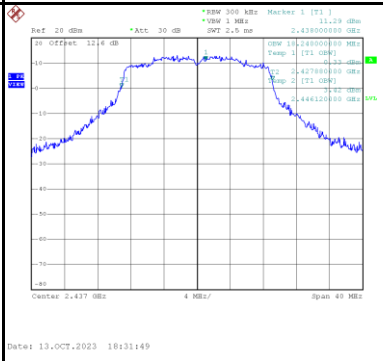
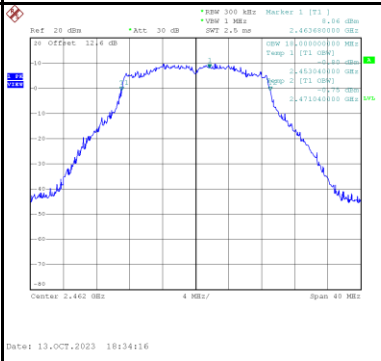
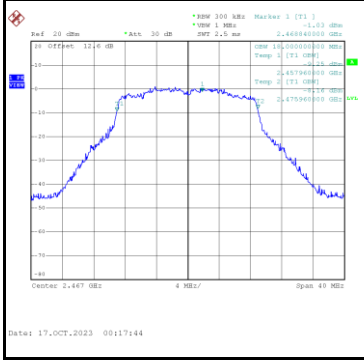
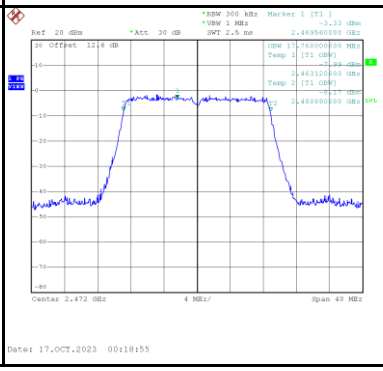


2467 MHz



2472 MHz



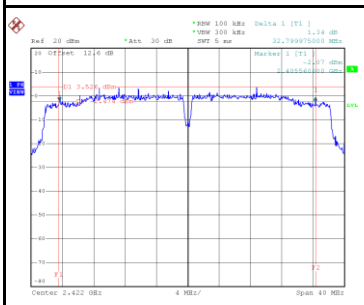
99% Occupied BW		
2412 MHz	2437 MHz	2462 MHz
		
2467 MHz	2472 MHz	
		

Test Mode	IEEE 802.11n (HT40)_Antenna 1

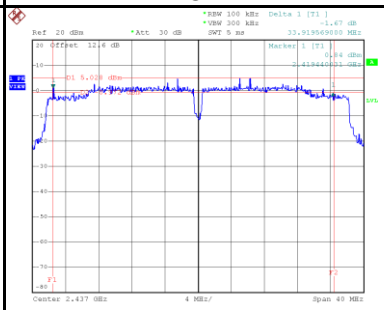
Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2422	32.80	36.32	≥ 500	Pass
2437	33.92	36.48	≥ 500	Pass
2452	32.60	36.32	≥ 500	Pass
2457	33.60	36.32	≥ 500	Pass
2462	36.44	36.48	≥ 500	Pass

6dB Bandwidth

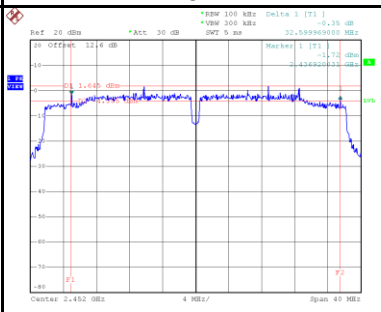
2422 MHz



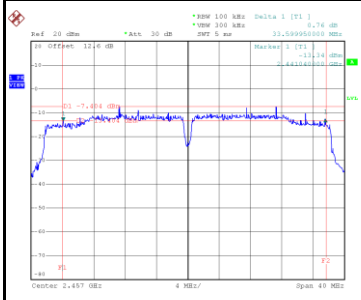
2437 MHz



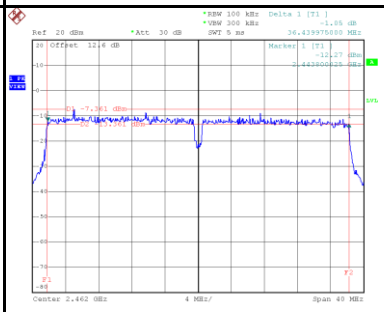
2452 MHz

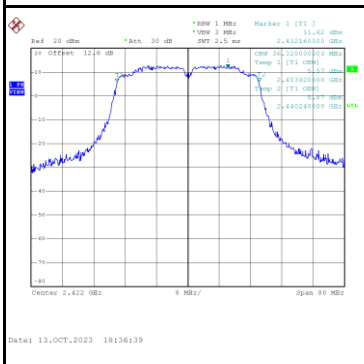
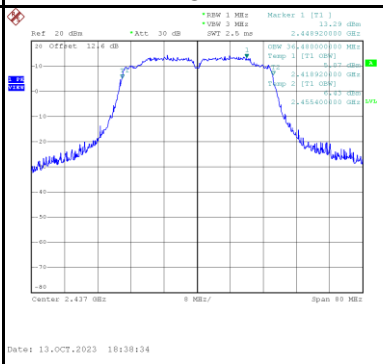
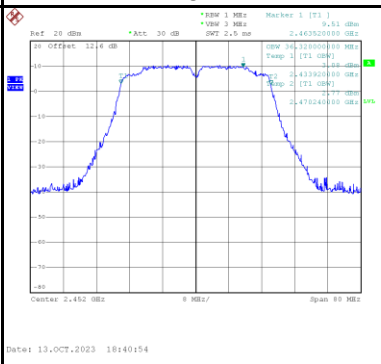
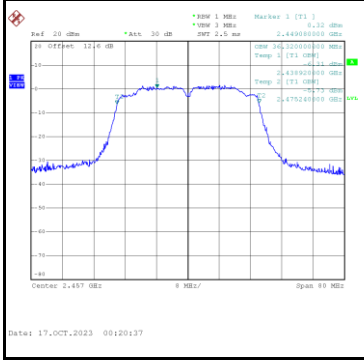
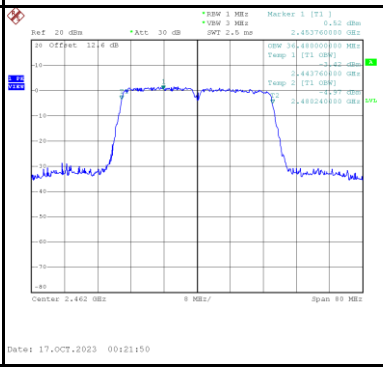


2457 MHz



2462 MHz



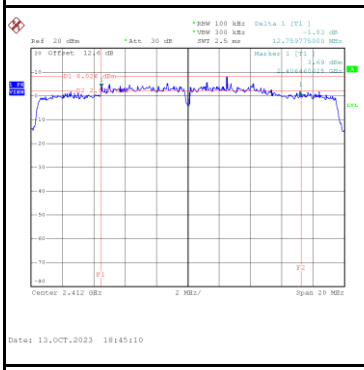
99% Occupied BW		
2422 MHz	2437 MHz	2452 MHz
		
2457 MHz	2462 MHz	
		

Test Mode	IEEE 802.11ax (HE20)_Antenna 1

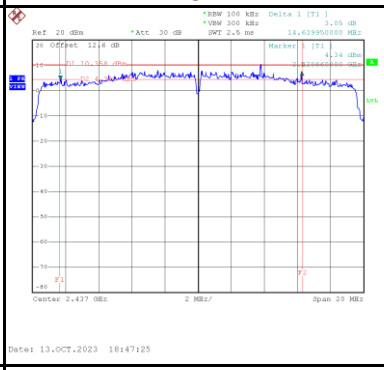
Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2412	12.76	19.04	≥ 500	Pass
2437	14.64	19.20	≥ 500	Pass
2462	12.87	18.96	≥ 500	Pass
2467	16.68	19.04	≥ 500	Pass
2472	17.60	18.88	≥ 500	Pass

6dB Bandwidth

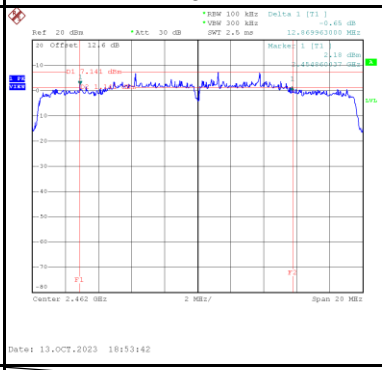
2412 MHz



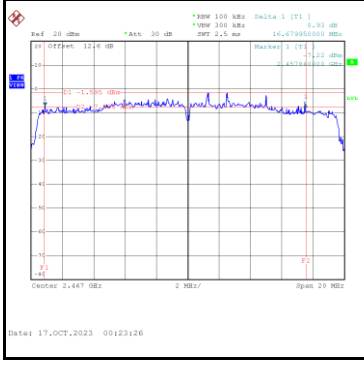
2437 MHz



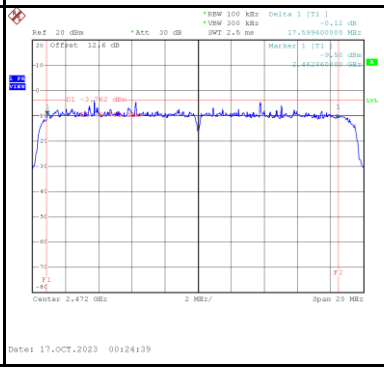
2462 MHz

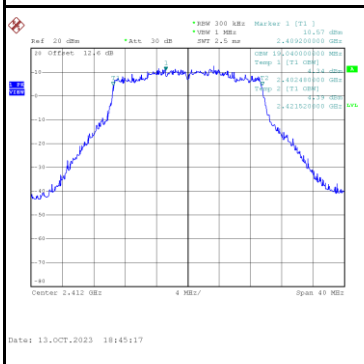
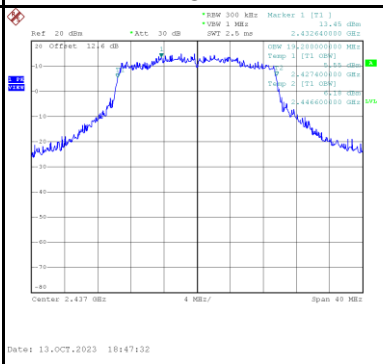
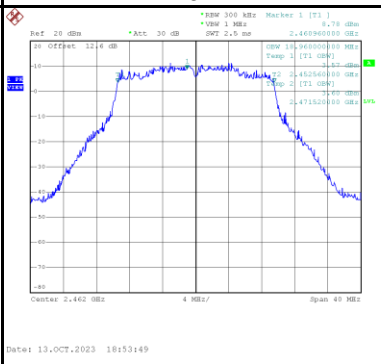
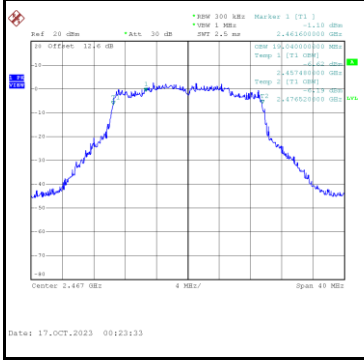
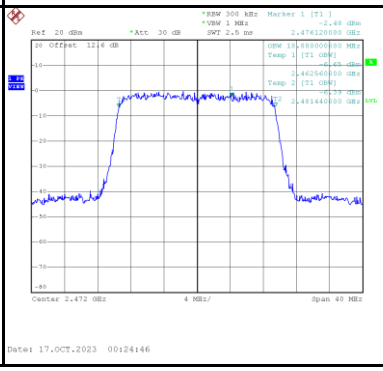


2467 MHz



2472 MHz



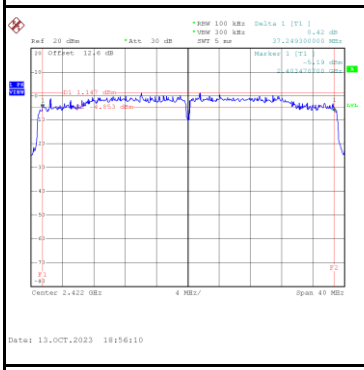
99% Occupied BW		
2412 MHz	2437 MHz	2462 MHz
		
2467 MHz	2472 MHz	
		

Test Mode	IEEE 802.11ax (HE40)_Antenna 1

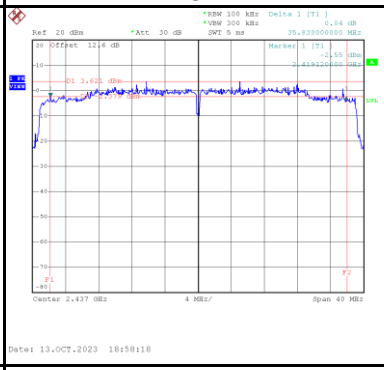
Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2422	37.25	37.76	≥ 500	Pass
2437	35.83	37.76	≥ 500	Pass
2452	33.51	37.92	≥ 500	Pass
2457	35.96	36.16	≥ 500	Pass
2462	36.52	36.48	≥ 500	Pass

6dB Bandwidth

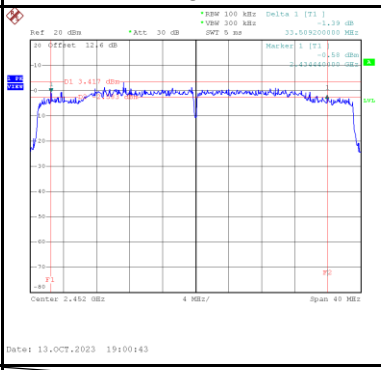
2422 MHz



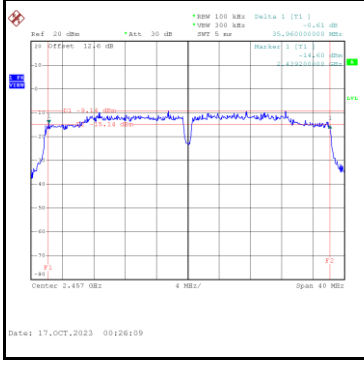
2437 MHz



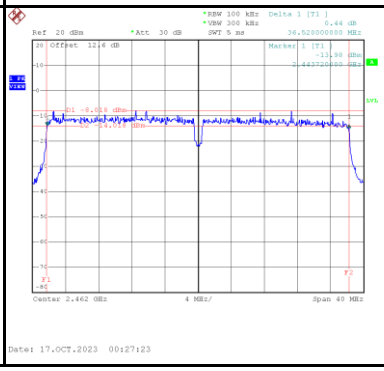
2452 MHz

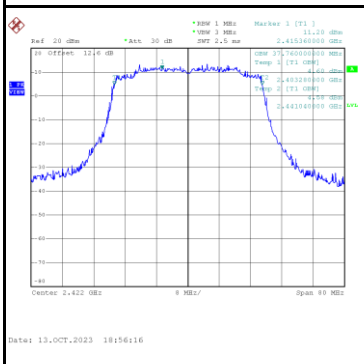
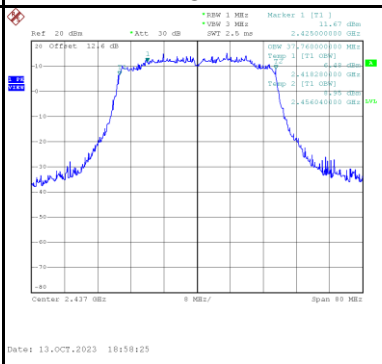
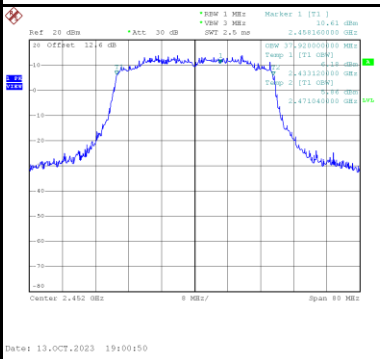
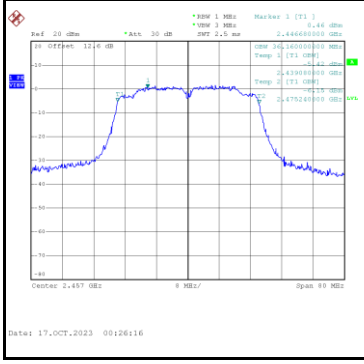
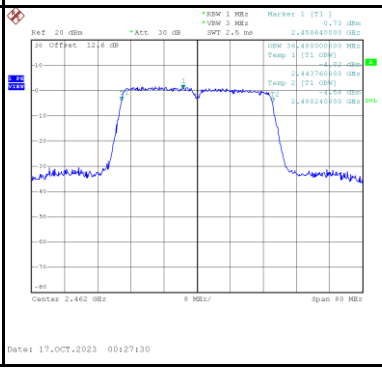


2457 MHz



2462 MHz



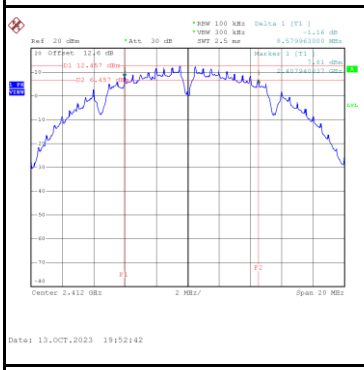
99% Occupied BW		
2422 MHz	2437 MHz	2452 MHz
		
2457 MHz	2462 MHz	
		

Test Mode	IEEE 802.11b_Antenna 2

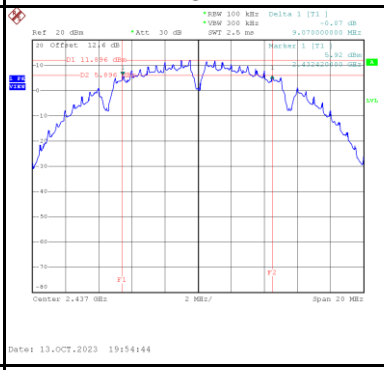
Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2412	8.58	13.76	≥ 500	Pass
2437	9.07	13.68	≥ 500	Pass
2462	9.08	13.76	≥ 500	Pass
2467	9.07	13.44	≥ 500	Pass
2472	8.60	13.76	≥ 500	Pass

6dB Bandwidth

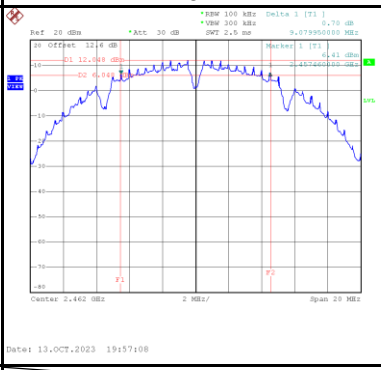
2412 MHz



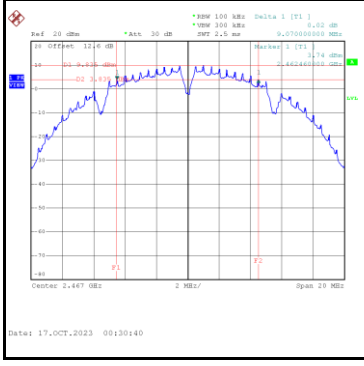
2437 MHz



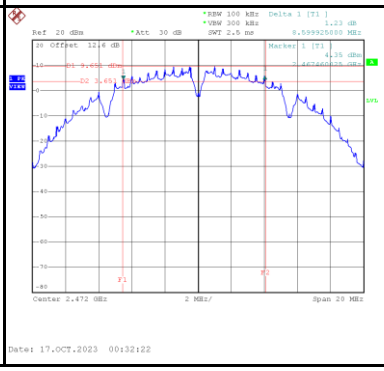
2462 MHz

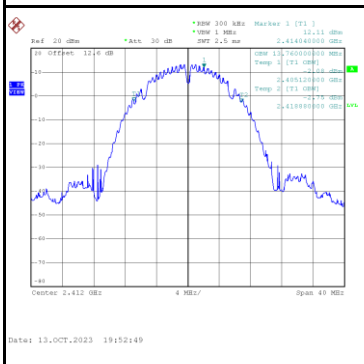
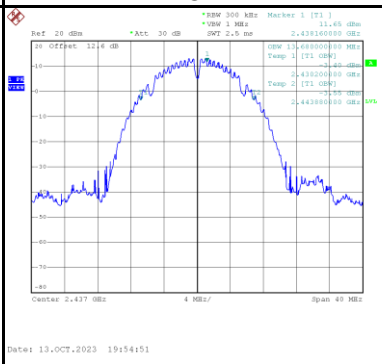
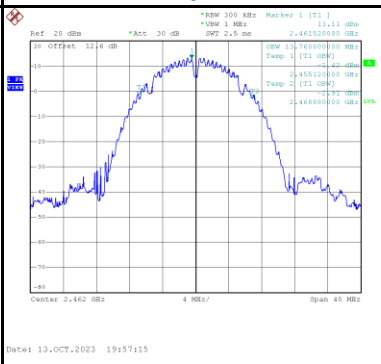
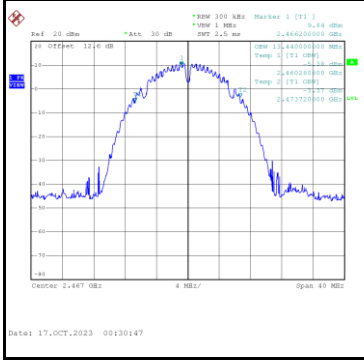
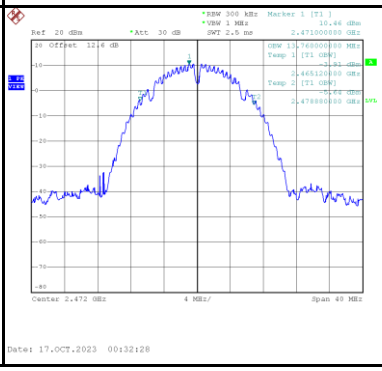


2467 MHz



2472 MHz



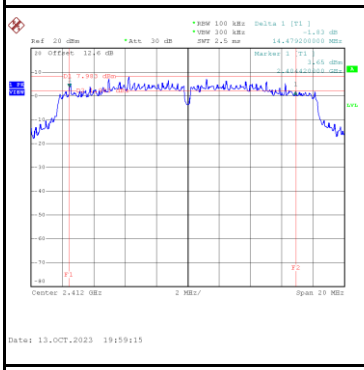
99% Occupied BW		
2412 MHz	2437 MHz	2462 MHz
		
2467 MHz	2472 MHz	
		

Test Mode	IEEE 802.11g_Antenna 2

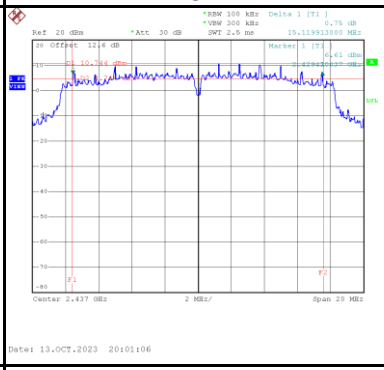
Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2412	14.48	16.88	≥ 500	Pass
2437	15.12	17.12	≥ 500	Pass
2462	15.52	16.96	≥ 500	Pass
2467	15.10	16.96	≥ 500	Pass
2472	16.38	16.64	≥ 500	Pass

6dB Bandwidth

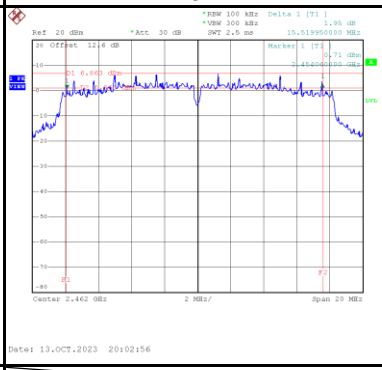
2412 MHz



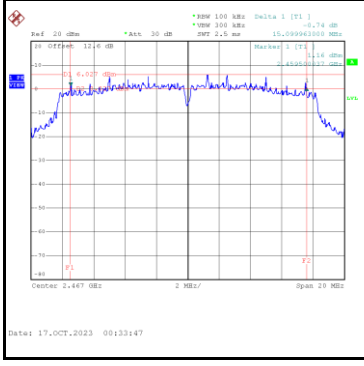
2437 MHz



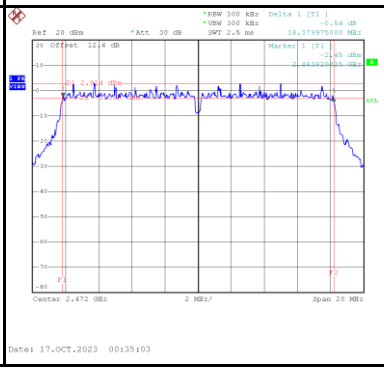
2462 MHz

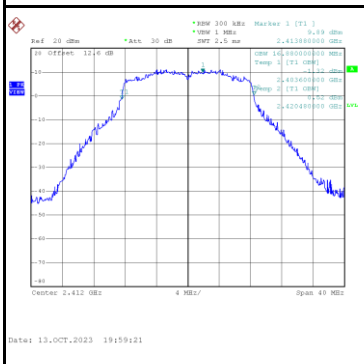
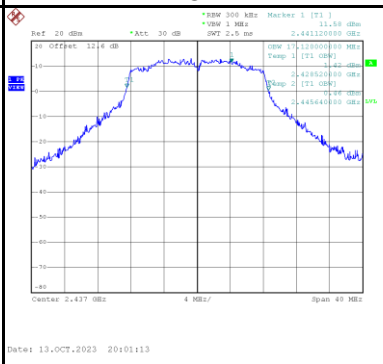
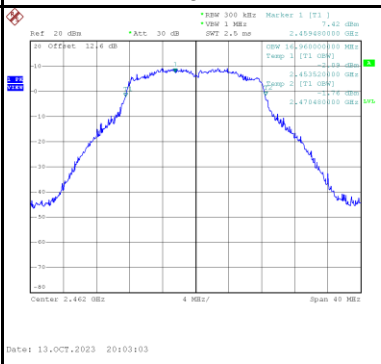
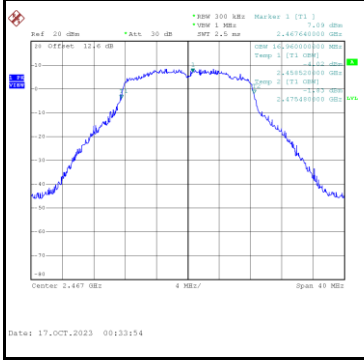
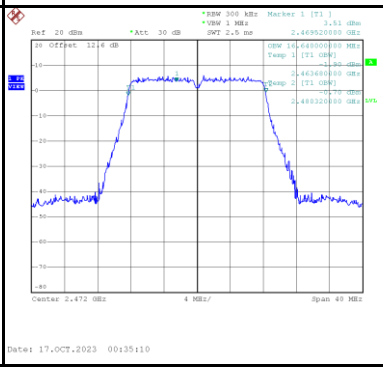


2467 MHz



2472 MHz



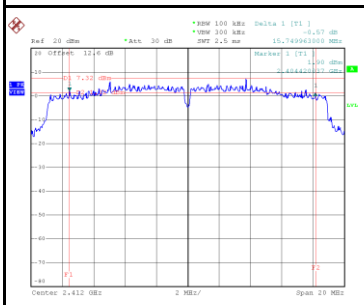
99% Occupied BW		
2412 MHz	2437 MHz	2462 MHz
		
2467 MHz	2472 MHz	
		

Test Mode	IEEE 802.11n (HT20)_Antenna 2

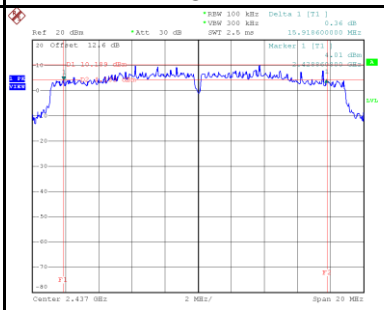
Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2412	15.75	17.92	≥ 500	Pass
2437	15.92	18.24	≥ 500	Pass
2462	11.99	17.92	≥ 500	Pass
2467	17.59	18.00	≥ 500	Pass
2472	17.62	17.76	≥ 500	Pass

6dB Bandwidth

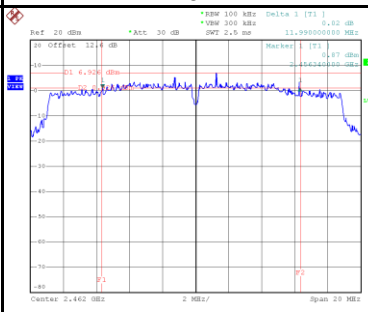
2412 MHz



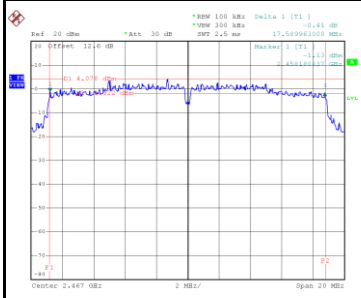
2437 MHz



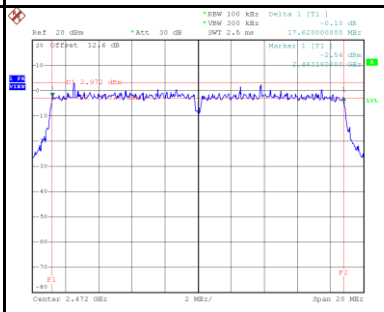
2462 MHz

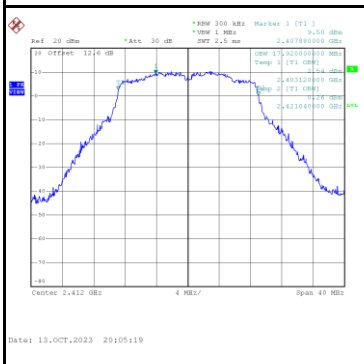
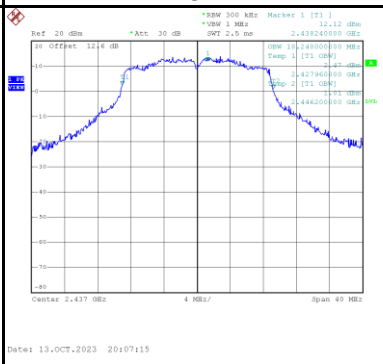
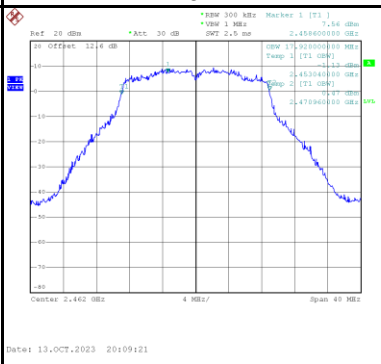
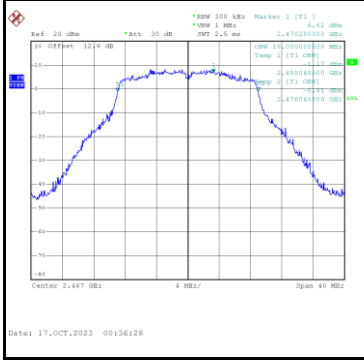
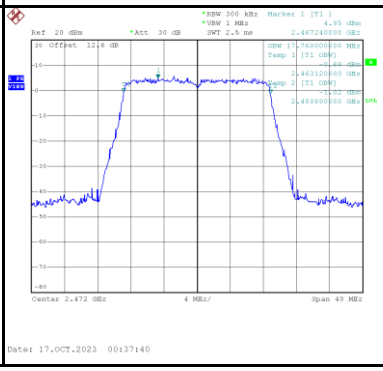


2467 MHz



2472 MHz



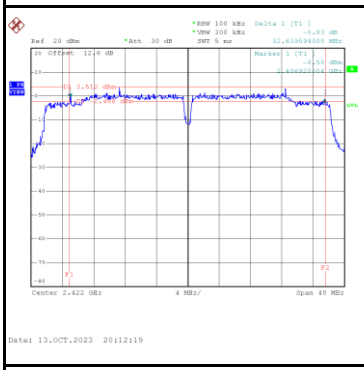
99% Occupied BW		
2412 MHz	2437 MHz	2462 MHz
		
2467 MHz	2472 MHz	
		

Test Mode	IEEE 802.11n (HT40)_Antenna 2

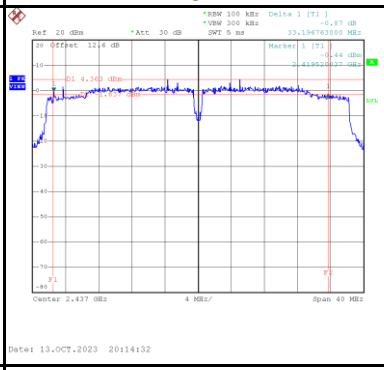
Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2422	32.64	36.48	≥ 500	Pass
2437	33.20	36.32	≥ 500	Pass
2452	30.79	36.32	≥ 500	Pass
2457	35.76	36.32	≥ 500	Pass
2462	36.44	36.48	≥ 500	Pass

6dB Bandwidth

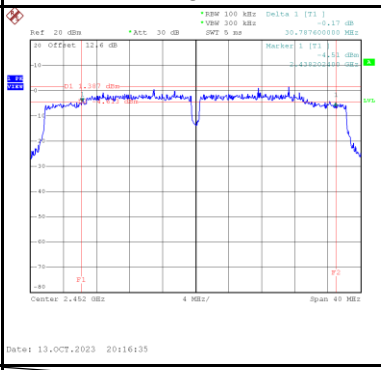
2422 MHz



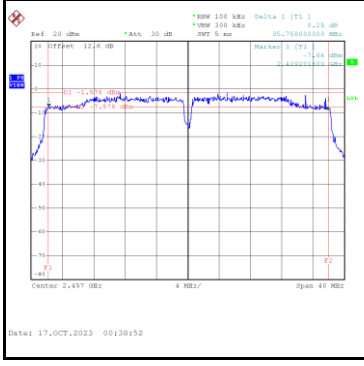
2437 MHz



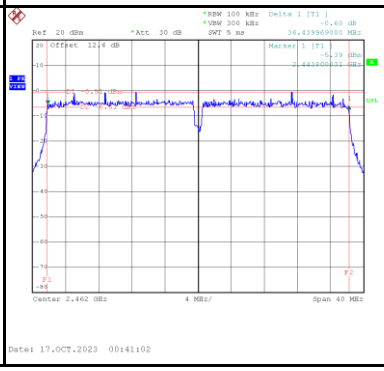
2452 MHz

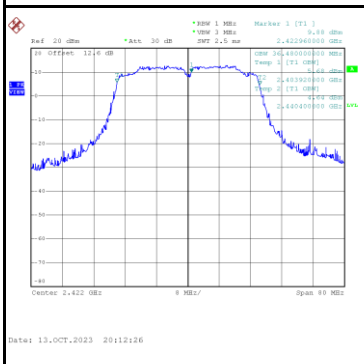
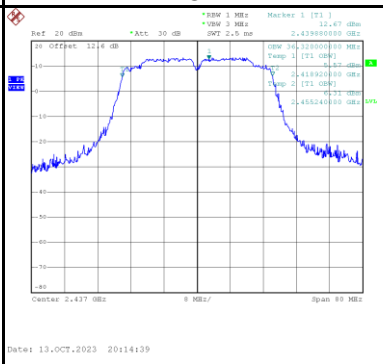
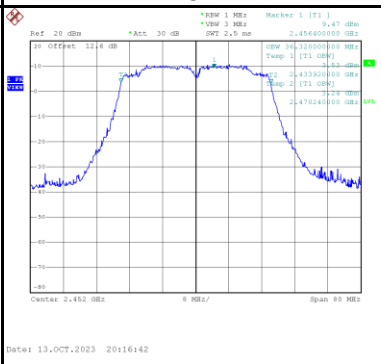
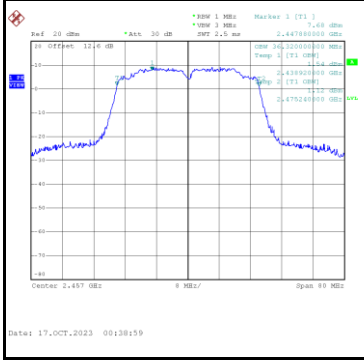
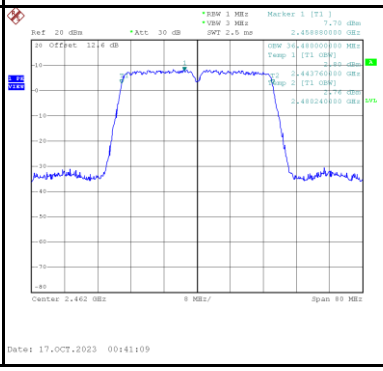


2457 MHz



2462 MHz



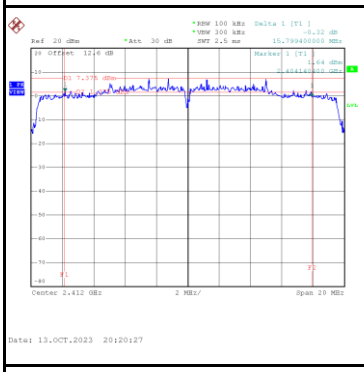
99% Occupied BW		
2422 MHz	2437 MHz	2452 MHz
		
2457 MHz	2462 MHz	
		

Test Mode	IEEE 802.11ax (HE20)_Antenna 2

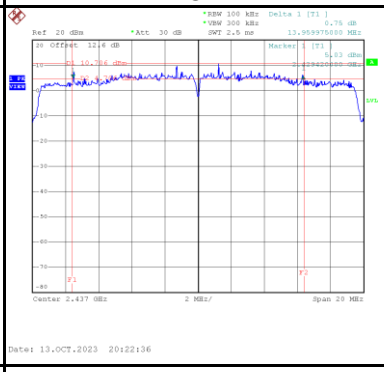
Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2412	15.80	19.04	≥ 500	Pass
2437	13.96	19.04	≥ 500	Pass
2462	15.08	18.96	≥ 500	Pass
2467	17.96	19.04	≥ 500	Pass
2472	17.82	18.80	≥ 500	Pass

6dB Bandwidth

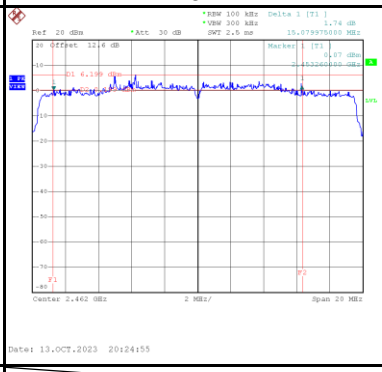
2412 MHz



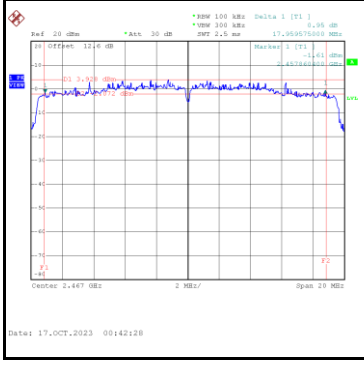
2437 MHz



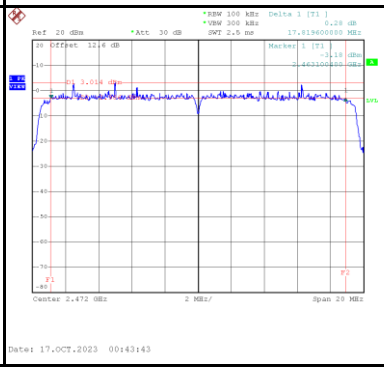
2462 MHz

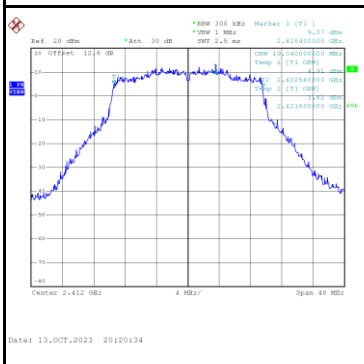
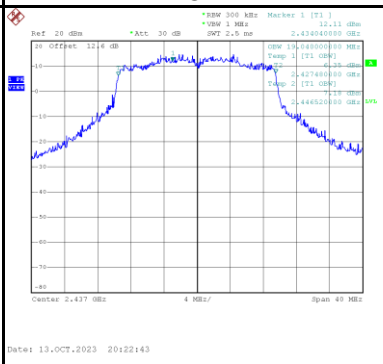
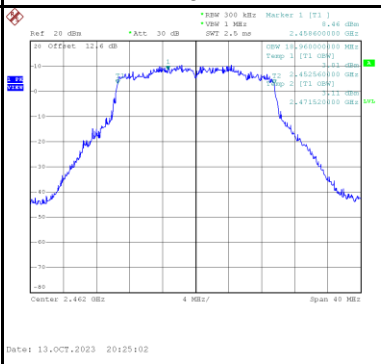
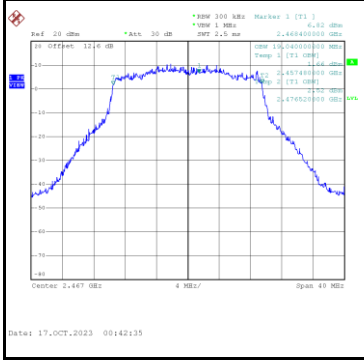
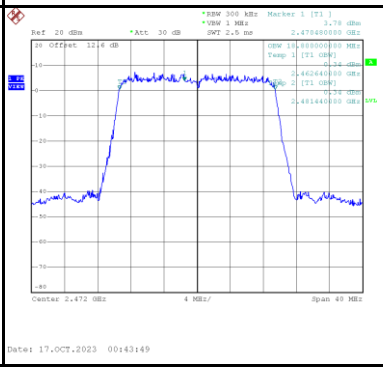


2467 MHz



2472 MHz



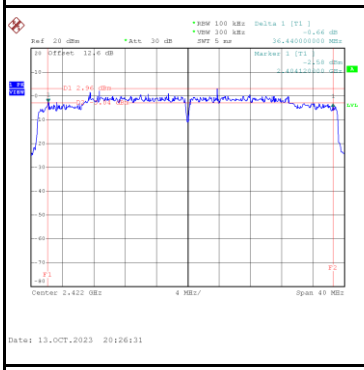
99% Occupied BW		
2412 MHz	2437 MHz	2462 MHz
		
2467 MHz	2472 MHz	
		

Test Mode	IEEE 802.11ax (HE40)_Antenna 2

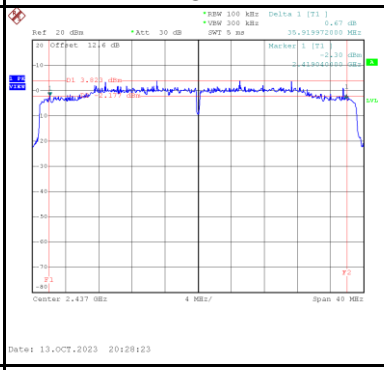
Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2422	36.44	37.76	≥ 500	Pass
2437	35.92	37.76	≥ 500	Pass
2452	30.95	37.60	≥ 500	Pass
2457	35.52	37.76	≥ 500	Pass
2462	37.28	37.76	≥ 500	Pass

6dB Bandwidth

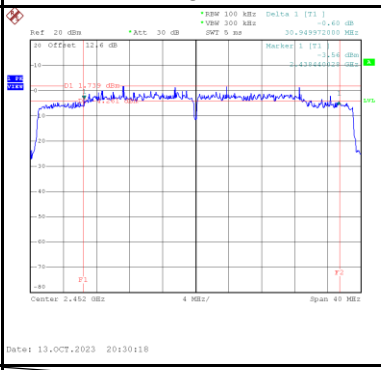
2422 MHz



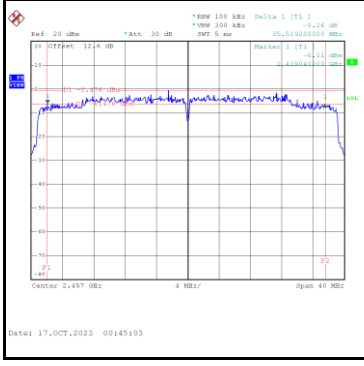
2437 MHz



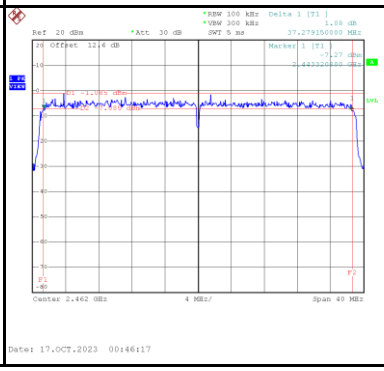
2452 MHz

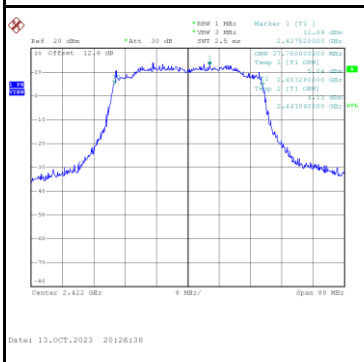
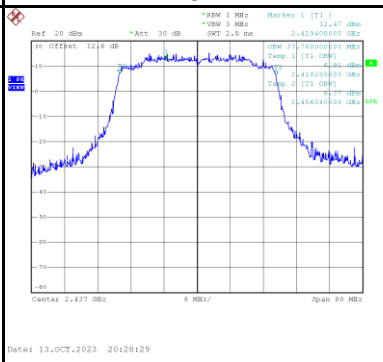
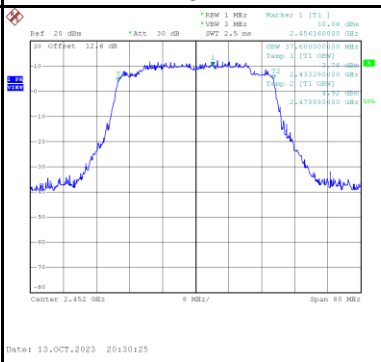
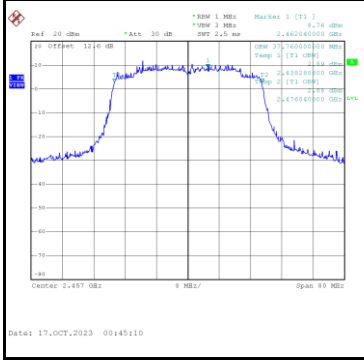
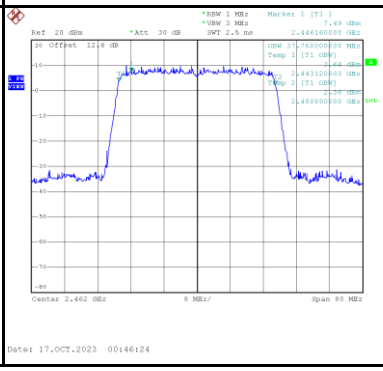


2457 MHz



2462 MHz



99% Occupied BW		
2422 MHz	2437 MHz	2452 MHz
		
2457 MHz	2462 MHz	
		

APPENDIX E OUTPUT POWER

Test Mode	IEEE 802.11b_ Antenna 1	Tested Date	2023/3/30

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Limit (dBm)	Limit (W)	Test Result
2412	19.97	0.0993	30.00	1.0000	Pass
2437	23.37	0.2173	30.00	1.0000	Pass
2462	17.58	0.0573	30.00	1.0000	Pass
2467	14.81	0.0303	30.00	1.0000	Pass
2472	12.27	0.0169	30.00	1.0000	Pass

Test Mode	IEEE 802.11g_ Antenna 1	Tested Date	2023/3/30

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Limit (dBm)	Limit (W)	Test Result
2412	20.75	0.1189	30.00	1.0000	Pass
2437	24.37	0.2735	30.00	1.0000	Pass
2462	18.63	0.0729	30.00	1.0000	Pass
2467	14.34	0.0272	30.00	1.0000	Pass
2472	12.21	0.0166	30.00	1.0000	Pass

Test Mode	IEEE 802.11n (HT20)_ Antenna 1	Tested Date	2023/3/30

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Limit (dBm)	Limit (W)	Test Result
2412	16.90	0.0490	30.00	1.0000	Pass
2437	24.31	0.2698	30.00	1.0000	Pass
2462	17.07	0.0509	30.00	1.0000	Pass
2467	14.19	0.0262	30.00	1.0000	Pass
2472	12.12	0.0163	30.00	1.0000	Pass

Test Mode	IEEE 802.11n (HT40)_ Antenna 1	Tested Date	2023/3/30

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Limit (dBm)	Limit (W)	Test Result
2422	16.63	0.0460	30.00	1.0000	Pass
2437	23.57	0.2275	30.00	1.0000	Pass
2452	16.07	0.0405	30.00	1.0000	Pass
2457	12.81	0.0191	30.00	1.0000	Pass
2462	12.41	0.0174	30.00	1.0000	Pass

Test Mode	IEEE 802.11ax (HE20)_ Antenna 1	Tested Date	2023/3/30

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Limit (dBm)	Limit (W)	Test Result
2412	17.56	0.0570	30.00	1.0000	Pass
2437	24.36	0.2729	30.00	1.0000	Pass
2462	16.25	0.0422	30.00	1.0000	Pass
2467	12.80	0.0191	30.00	1.0000	Pass
2472	11.94	0.0156	30.00	1.0000	Pass

Test Mode	IEEE 802.11ax (HE 40)_ Antenna 1	Tested Date	2023/3/30

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Limit (dBm)	Limit (W)	Test Result
2422	16.43	0.0440	30.00	1.0000	Pass
2437	22.75	0.1884	30.00	1.0000	Pass
2452	15.56	0.0360	30.00	1.0000	Pass
2457	12.72	0.0187	30.00	1.0000	Pass
2462	12.85	0.0193	30.00	1.0000	Pass

Test Mode	IEEE 802.11b_ Antenna 2	Tested Date	2023/3/30

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Limit (dBm)	Limit (W)	Test Result
2412	19.62	0.0916	30.00	1.0000	Pass
2437	23.20	0.2089	30.00	1.0000	Pass
2462	17.21	0.0526	30.00	1.0000	Pass
2467	14.18	0.0262	30.00	1.0000	Pass
2472	11.80	0.0151	30.00	1.0000	Pass

Test Mode	IEEE 802.11g_ Antenna 2	Tested Date	2023/3/30

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Limit (dBm)	Limit (W)	Test Result
2412	20.87	0.1222	30.00	1.0000	Pass
2437	24.27	0.2673	30.00	1.0000	Pass
2462	18.34	0.0682	30.00	1.0000	Pass
2467	14.45	0.0279	30.00	1.0000	Pass
2472	12.49	0.0177	30.00	1.0000	Pass

Test Mode	IEEE 802.11n (HT20)_ Antenna 2	Tested Date	2023/3/30

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Limit (dBm)	Limit (W)	Test Result
2412	17.04	0.0506	30.00	1.0000	Pass
2437	24.20	0.2630	30.00	1.0000	Pass
2462	17.22	0.0527	30.00	1.0000	Pass
2467	14.55	0.0285	30.00	1.0000	Pass
2472	12.31	0.0170	30.00	1.0000	Pass

Test Mode	IEEE 802.11n (HT40)_ Antenna 2	Tested Date	2023/3/30

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Limit (dBm)	Limit (W)	Test Result
2422	16.88	0.0488	30.00	1.0000	Pass
2437	22.73	0.1875	30.00	1.0000	Pass
2452	15.63	0.0366	30.00	1.0000	Pass
2457	13.42	0.0220	30.00	1.0000	Pass
2462	13.17	0.0207	30.00	1.0000	Pass

Test Mode	IEEE 802.11ax (HE 20)_ Antenna 2	Tested Date	2023/3/30

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Limit (dBm)	Limit (W)	Test Result
2412	17.89	0.0615	30.00	1.0000	Pass
2437	24.13	0.2588	30.00	1.0000	Pass
2462	16.58	0.0455	30.00	1.0000	Pass
2467	13.87	0.0244	30.00	1.0000	Pass
2472	11.50	0.0141	30.00	1.0000	Pass

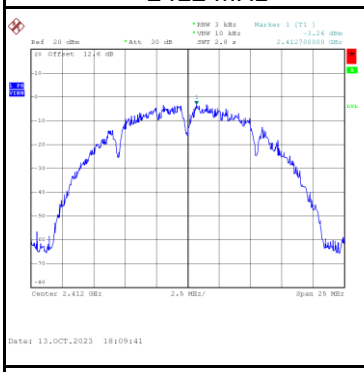
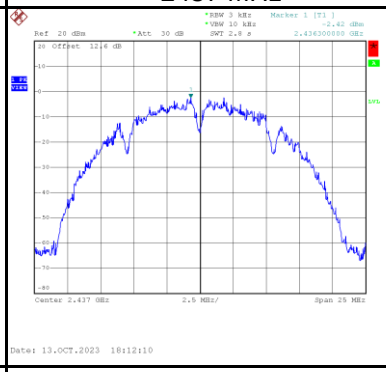
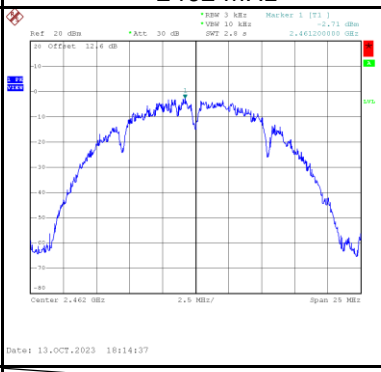
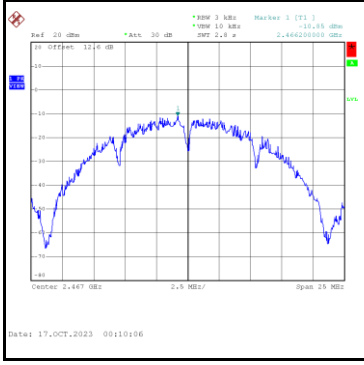
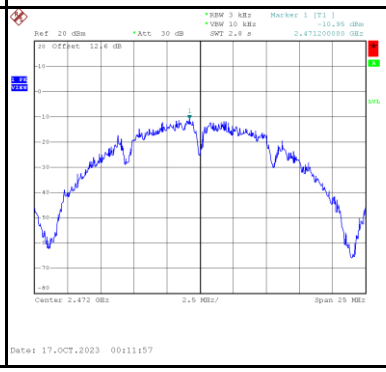
Test Mode	IEEE 802.11ax (HE 40)_ Antenna 2	Tested Date	2023/3/30

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Limit (dBm)	Limit (W)	Test Result
2422	16.46	0.0443	30.00	1.0000	Pass
2437	22.71	0.1866	30.00	1.0000	Pass
2452	15.71	0.0372	30.00	1.0000	Pass
2457	13.10	0.0204	30.00	1.0000	Pass
2462	13.25	0.0211	30.00	1.0000	Pass

APPENDIX F POWER SPECTRAL DENSITY

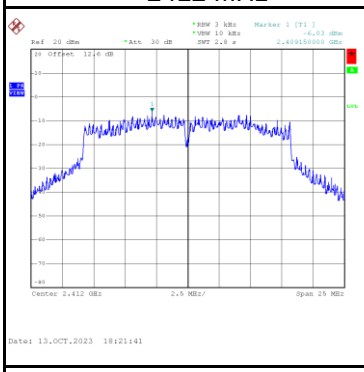
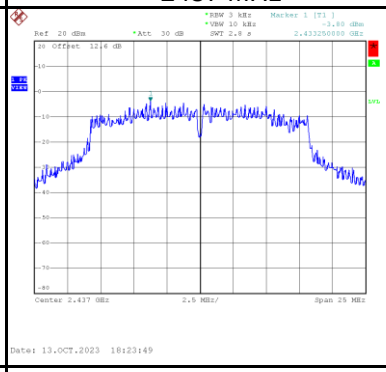
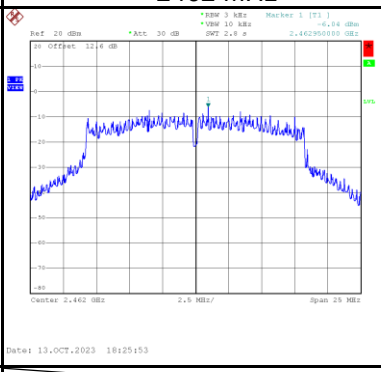
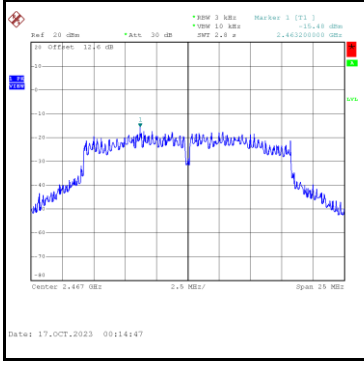
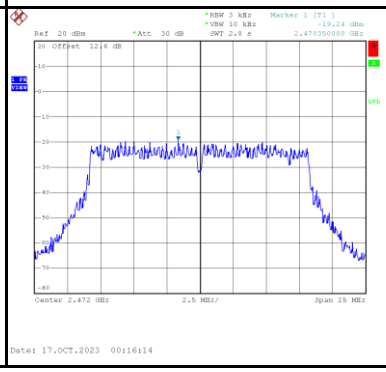
Test Mode	IEEE 802.11b_Antenna 1

Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2412	-3.26	8.00	Pass
2437	-2.42	8.00	Pass
2462	-2.71	8.00	Pass
2467	-10.85	8.00	Pass
2472	-10.95	8.00	Pass

2412 MHz	2437 MHz	2462 MHz
		
2467 MHz	**2472 MHz**	
		

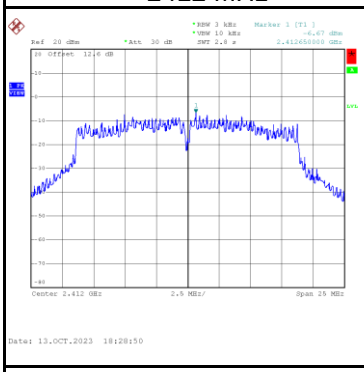
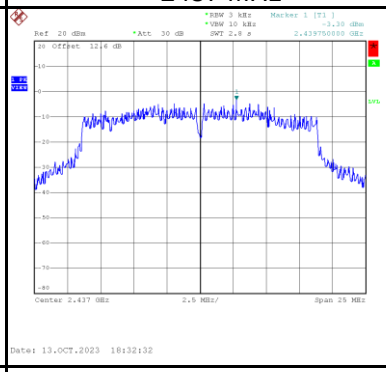
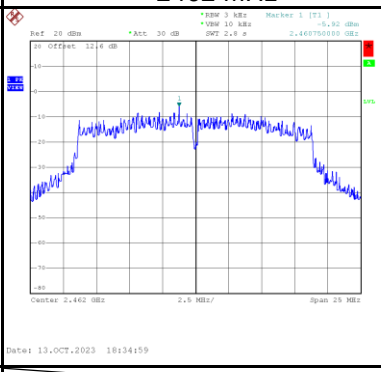
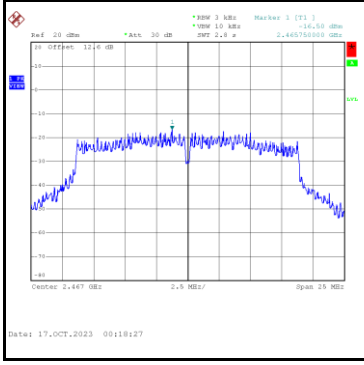
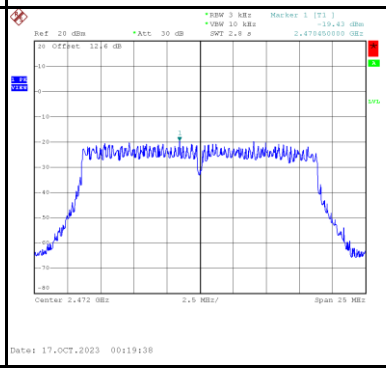
Test Mode	IEEE 802.11g_Antenna 1

Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2412	-6.03	8.00	Pass
2437	-3.80	8.00	Pass
2462	-6.04	8.00	Pass
2467	-15.48	8.00	Pass
2472	-19.24	8.00	Pass

2412 MHz	2437 MHz	2462 MHz
		
2467 MHz	**2472 MHz**	
		

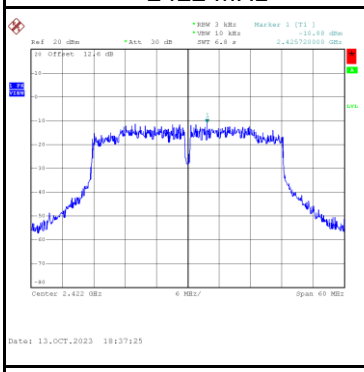
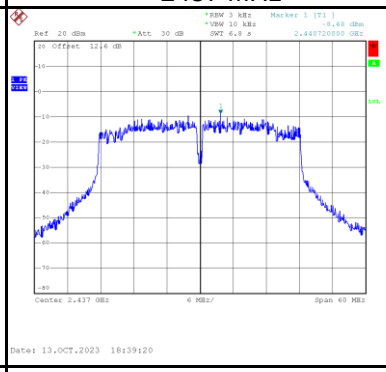
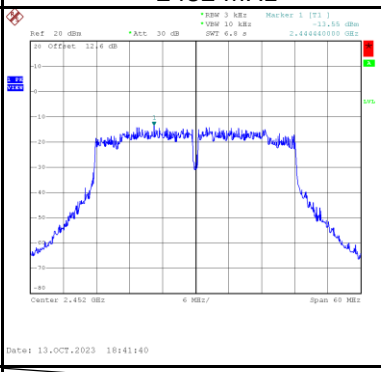
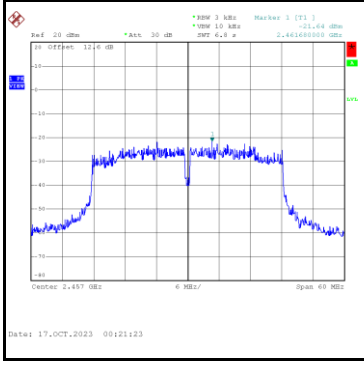
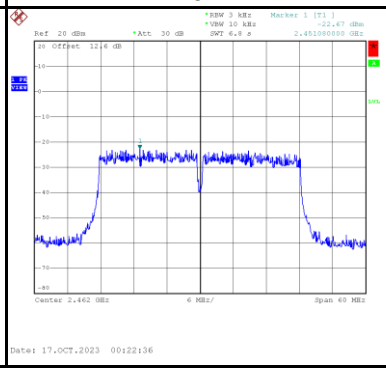
Test Mode	IEEE 802.11n (HT20)_Antenna 1

Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2412	-6.67	8.00	Pass
2437	-3.30	8.00	Pass
2462	-5.92	8.00	Pass
2467	-16.50	8.00	Pass
2472	-19.43	8.00	Pass

2412 MHz	2437 MHz	2462 MHz
		
2467 MHz	**2472 MHz**	
		

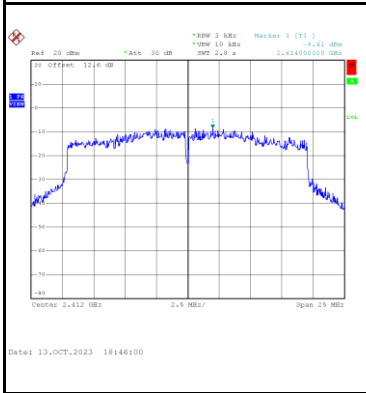
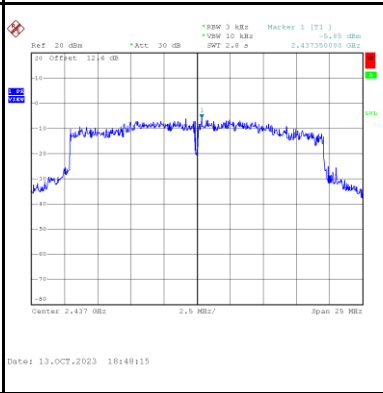
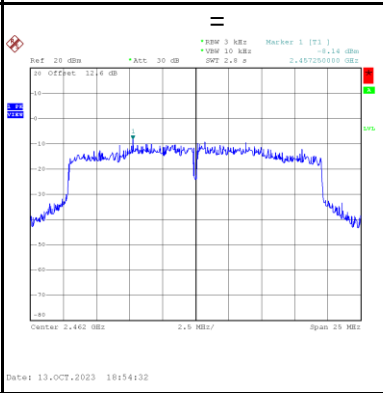
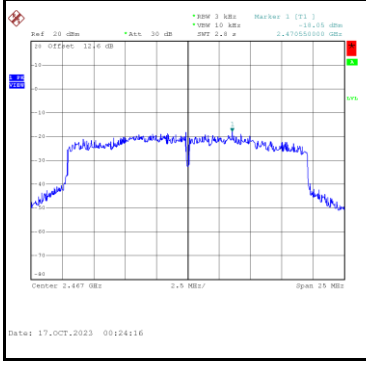
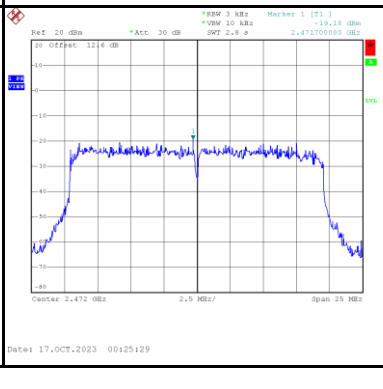
Test Mode	IEEE 802.11n (HT40)_Antenna 1

Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2422	-10.88	8.00	Pass
2437	-8.68	8.00	Pass
2452	-13.55	8.00	Pass
2457	-21.64	8.00	Pass
2462	-22.67	8.00	Pass

2422 MHz	2437 MHz	2452 MHz
		
2457 MHz	**2462 MHz**	
		

Test Mode	IEEE 802.11ax (HE20)_Antenna 1

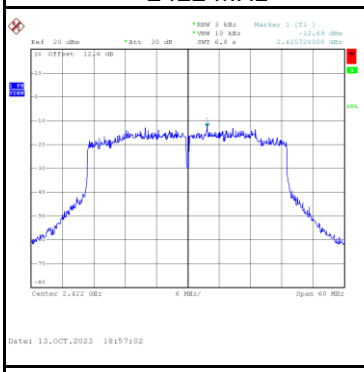
Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2412	-8.41	8.00	Pass
2437	-5.85	8.00	Pass
2462	-8.14	8.00	Pass
2467	-18.05	8.00	Pass
2472	-19.18	8.00	Pass

2412 MHz	2437 MHz	2462 MHz
		= 
2467 MHz	**2472 MHz**	
		

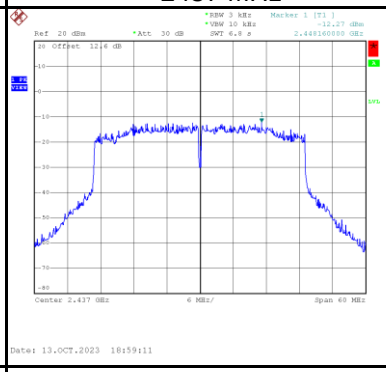
Test Mode	IEEE 802.11ax (HE40)_Antenna 1

Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2422	-12.69	8.00	Pass
2437	-12.27	8.00	Pass
2452	-12.30	8.00	Pass
2457	-21.99	8.00	Pass
2462	-22.23	8.00	Pass

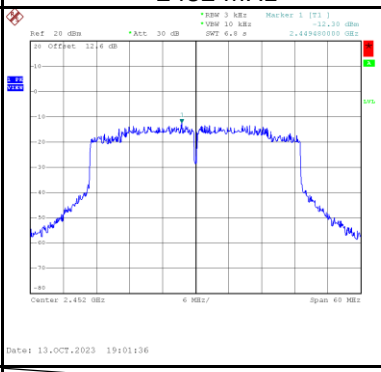
2422 MHz



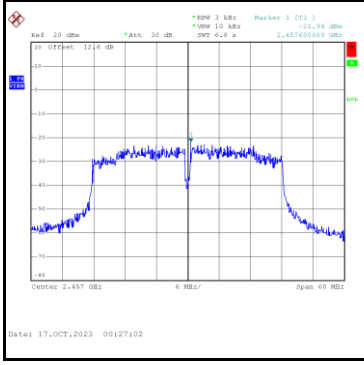
2437 MHz



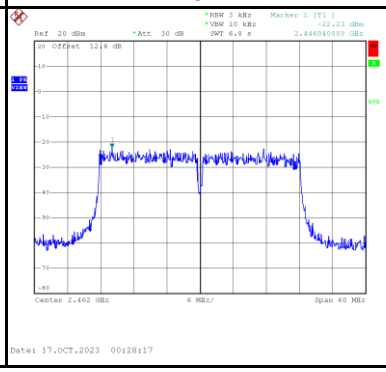
2452 MHz



2457 MHz



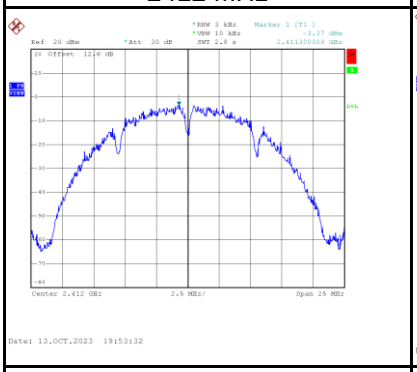
2462 MHz



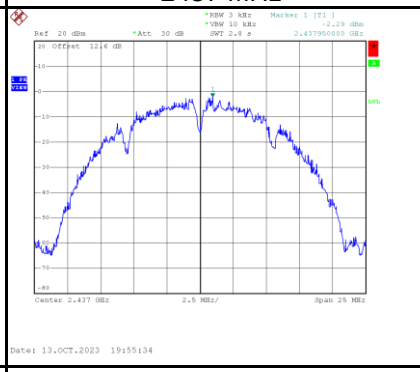
Test Mode	IEEE 802.11b_Antenna 2

Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2412	-3.37	8.00	Pass
2437	-2.29	8.00	Pass
2462	-2.59	8.00	Pass
2467	-5.04	8.00	Pass
2472	-3.83	8.00	Pass

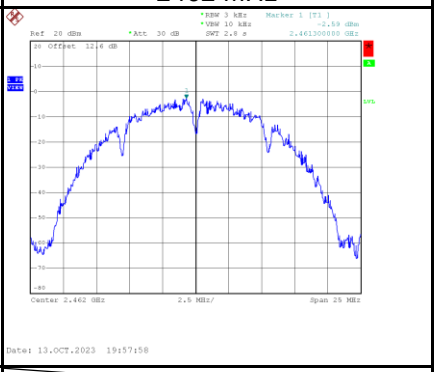
2412 MHz



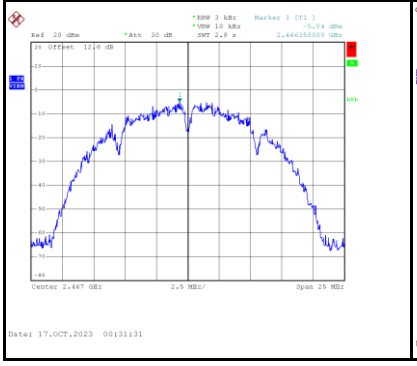
2437 MHz



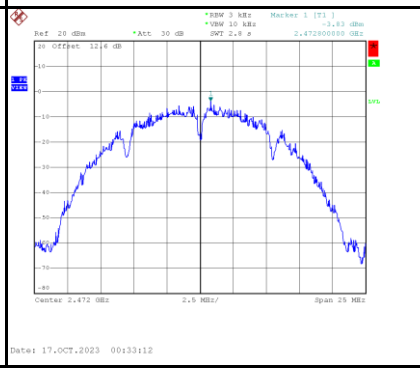
2462 MHz



2467 MHz

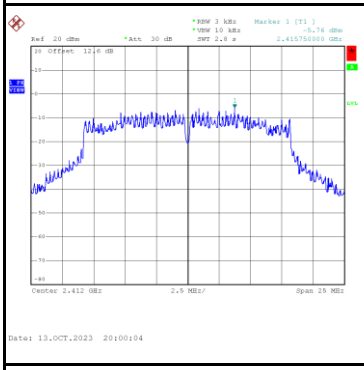
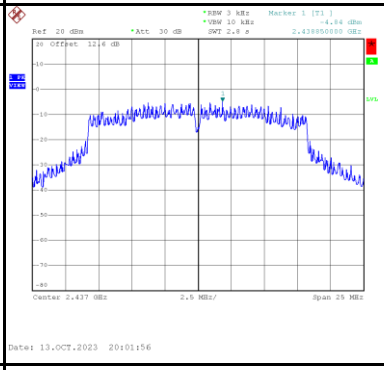
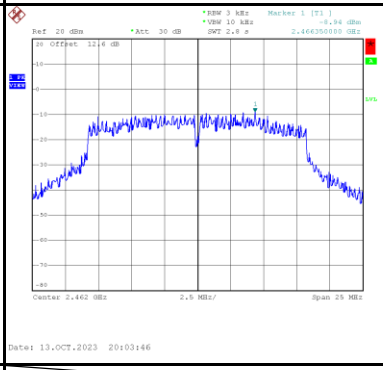
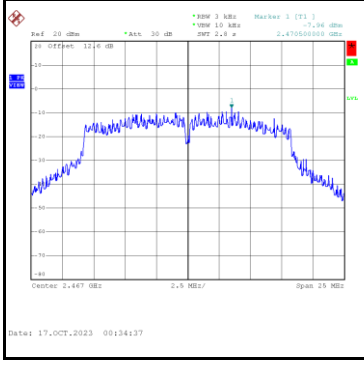
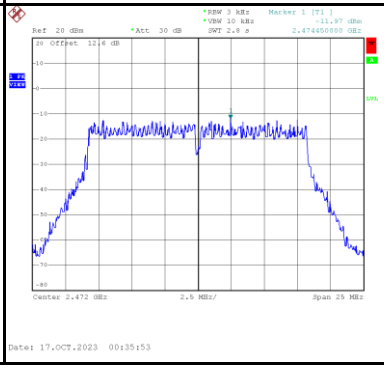


2472 MHz



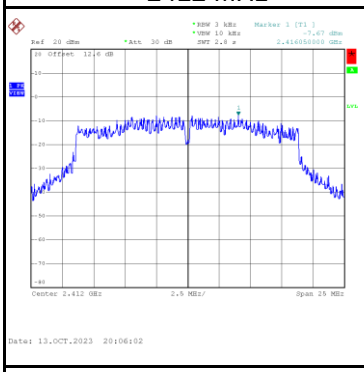
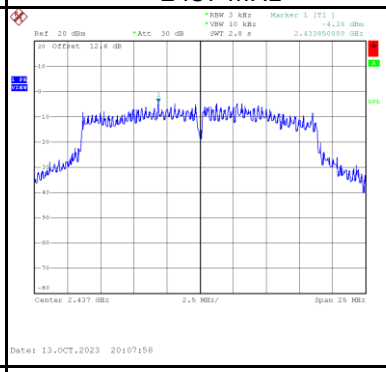
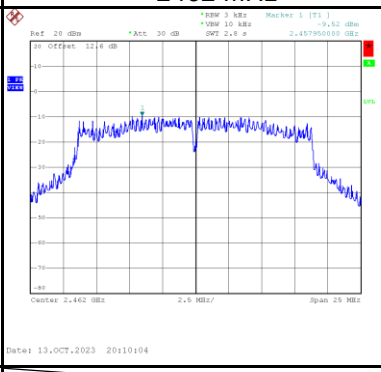
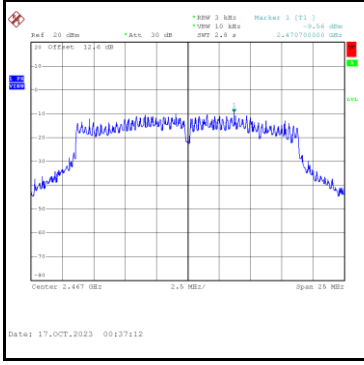
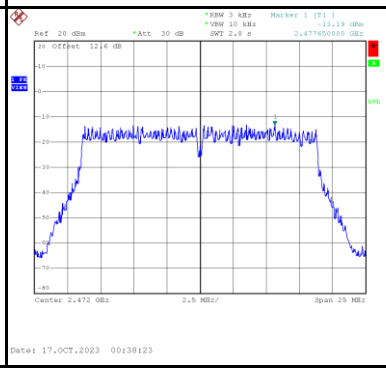
Test Mode	IEEE 802.11g_Antenna 2

Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2412	-5.76	8.00	Pass
2437	-4.84	8.00	Pass
2462	-8.94	8.00	Pass
2467	-7.96	8.00	Pass
2472	-11.97	8.00	Pass

2412 MHz	2437 MHz	2462 MHz
		
2467 MHz	**2472 MHz**	
		

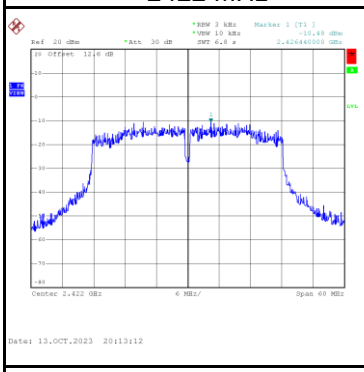
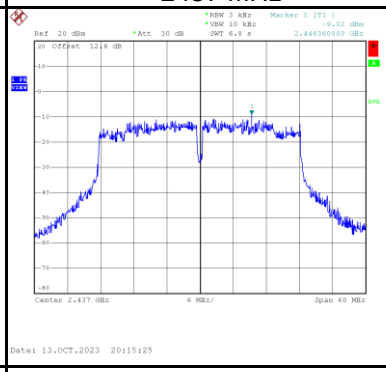
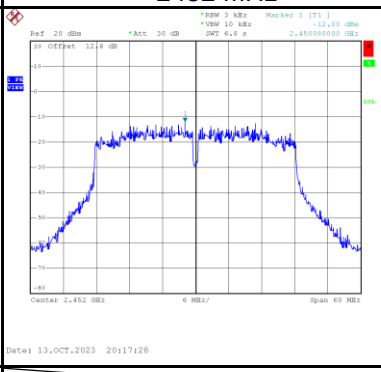
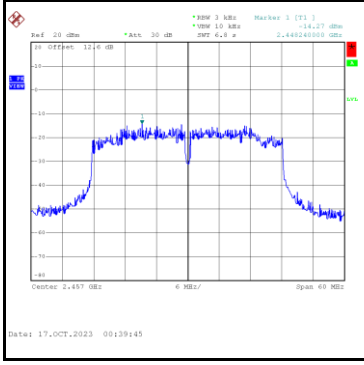
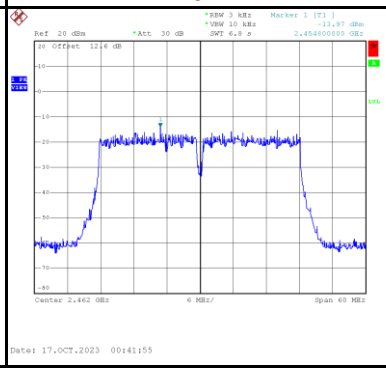
Test Mode	IEEE 802.11n (HT20)_Antenna 2

Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2412	-7.67	8.00	Pass
2437	-4.38	8.00	Pass
2462	-9.52	8.00	Pass
2467	-9.56	8.00	Pass
2472	-13.19	8.00	Pass

2412 MHz	2437 MHz	2462 MHz
		
2467 MHz	**2472 MHz**	
		

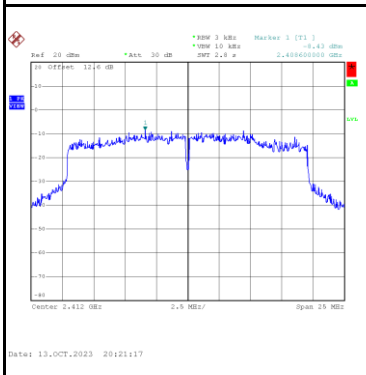
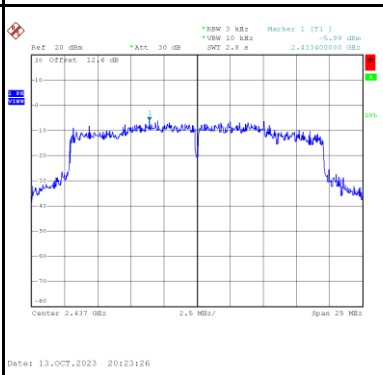
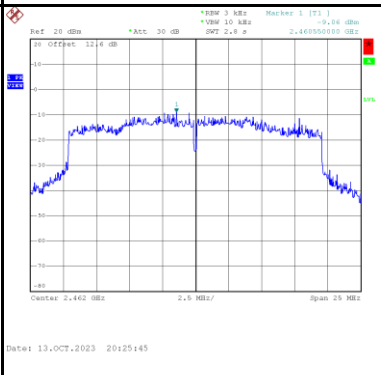
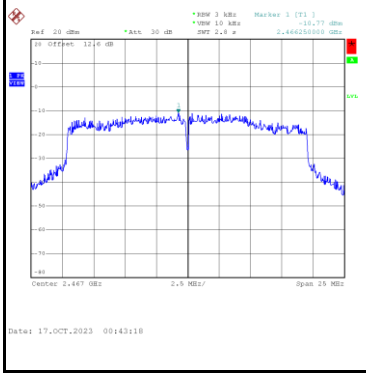
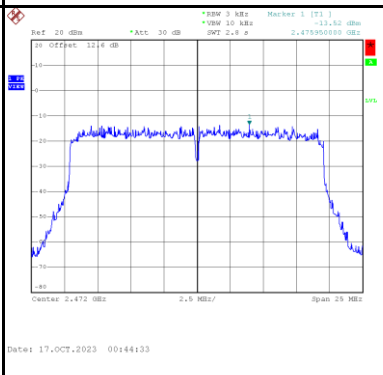
Test Mode	IEEE 802.11n (HT40)_Antenna 2

Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2422	-10.48	8.00	Pass
2437	-9.02	8.00	Pass
2452	-12.00	8.00	Pass
2457	-14.27	8.00	Pass
2462	-13.97	8.00	Pass

2422 MHz	2437 MHz	2452 MHz
		
2457 MHz	**2462 MHz**	
		

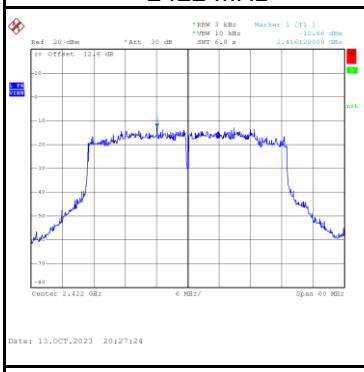
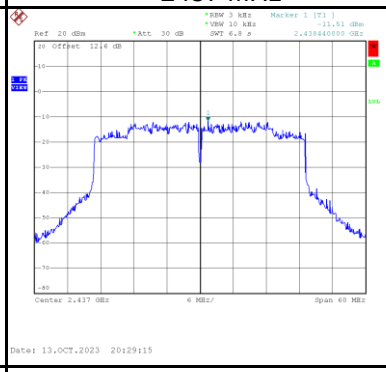
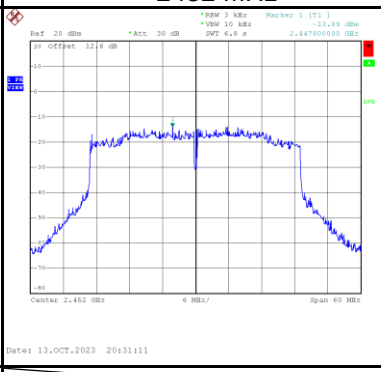
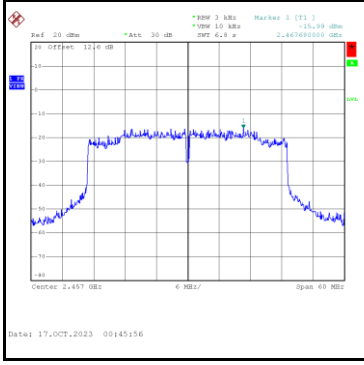
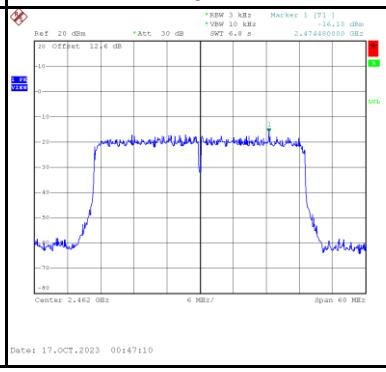
Test Mode	IEEE 802.11ax (HE20)_Antenna 2

Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2412	-8.43	8.00	Pass
2437	-5.99	8.00	Pass
2462	-9.06	8.00	Pass
2467	-10.77	8.00	Pass
2472	-13.52	8.00	Pass

2412 MHz	2437 MHz	2462 MHz
		
2467 MHz	2472 MHz	
		

Test Mode	IEEE 802.11ax (HE40)_Antenna 2

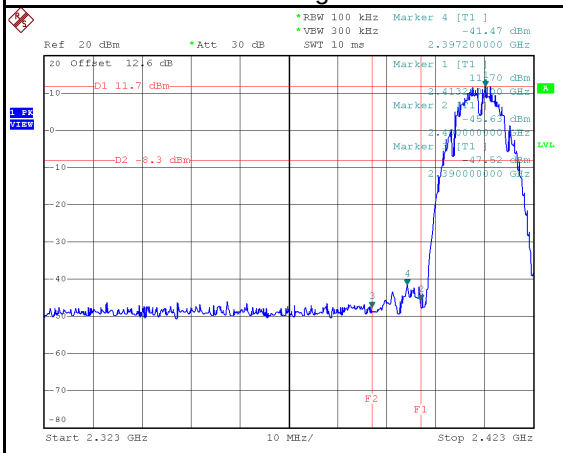
Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2422	-12.66	8.00	Pass
2437	-11.51	8.00	Pass
2452	-13.89	8.00	Pass
2457	-15.99	8.00	Pass
2462	-16.10	8.00	Pass

2422 MHz	2437 MHz	2452 MHz
		
2457 MHz	**2462 MHz**	
		

APPENDIX G ANTENNA CONDUCTED SPURIOUS EMISSIONS

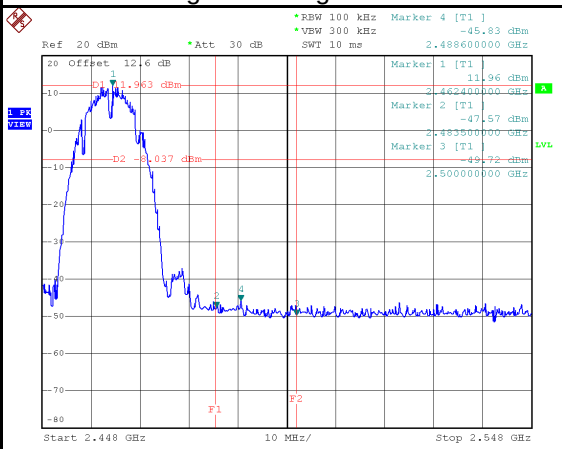
Test Mode	IEEE 802.11b_Antenna 1

Low Bandedge-2412 MHz



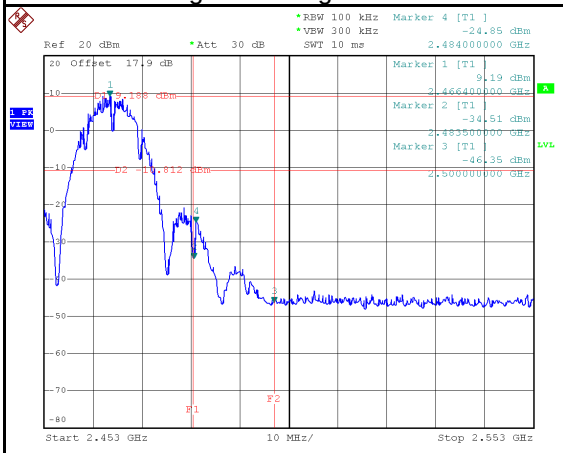
Date: 13.OCT.2023 18:09:05

High Bandedge-2462 MHz



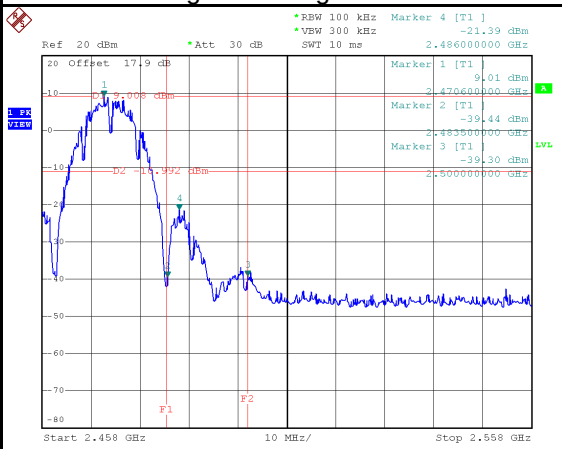
Date: 13.OCT.2023 18:14:01

High Bandedge-2467 MHz



Date: 17.OCT.2023 00:09:30

High Bandedge-2472 MHz



Date: 17.OCT.2023 00:11:20

2412 MHz-10th Harmonics