FCC Radio Test Report

FCC ID: 2AVZW0PAD0018

Report No.	:	BTL-FCCP-2-2408T150
Equipment	:	ACE Herald
Model Name	:	ACE Herald
Brand Name	:	
Applicant	:	Acetk Corp LTD.
Address	:	9F., No. 116, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)
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	:	2024/9/10
Date of Test	:	2024/10/29 ~ 2024/11/12
Issued Date	:	2024/12/10

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

Prepared by : Brett Shen
Brett Shen, Engineer

Approved by : Jerry Chuang
Jerry Chuang, Supervisor

Testing Laboratory
0659

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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** assumes no responsibility for the data provided by the Customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by **BTL**.

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-2-2408T150	R00	Original Report.	2024/12/10	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 APPENDIX D	Pass	------
15.247(a)	Bandwidth	APPENDIX E	Pass	------
15.247(b)	Output Power	APPENDIX F	Pass	------
15.247(e)	Power Spectral Density	APPENDIX G	Pass	------
15.247(d)	Antenna conducted Spurious Emission	APPENDIX H	Pass	------
15.203	Antenna Requirement	------	Pass	------

Statement of Conformity
The statement of conformity is based on the binary decision rule according to IEC Guide 115 and ILAC G8 "simple acceptance" principle. Without considering measurement uncertainty, its specific risk is less than 50% PFA. (PFA: Probability of False Accept)

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 %**.

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

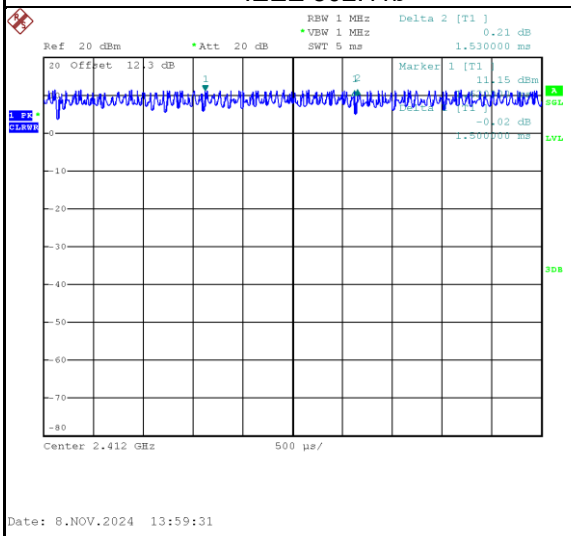
Test Item	Environment Condition	Test Voltage	Tested by
AC Power Line Conducted Emissions	22 °C, 50 %	AC 120V	Easton Tsai
Radiated emissions below 1 GHz	Refer to data	DC 5V	Mark Wang
Radiated emissions above 1 GHz	Refer to data	DC 5V	Mark Wang
Bandwidth	25.8 °C, 54 %	DC 5V	Ken Lan
Output Power	25.8 °C, 54 %	DC 5V	Ken Lan
Power Spectral Density	25.8 °C, 54 %	DC 5V	Ken Lan
Antenna conducted Spurious Emission	25.8 °C, 54 %	DC 5V	Ken Lan

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	1.50	1	1.50	1.53	98.04%	0.09
IEEE 802.11g	5.480	1	5.480	5.520	99.28%	0.03
IEEE 802.11n (HT20)	5.080	1	5.080	5.140	98.83%	0.05

IEEE 802.11b



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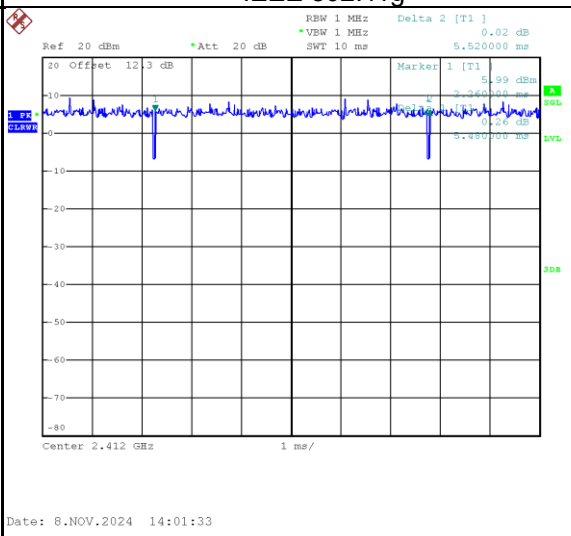
IEEE 802.11g



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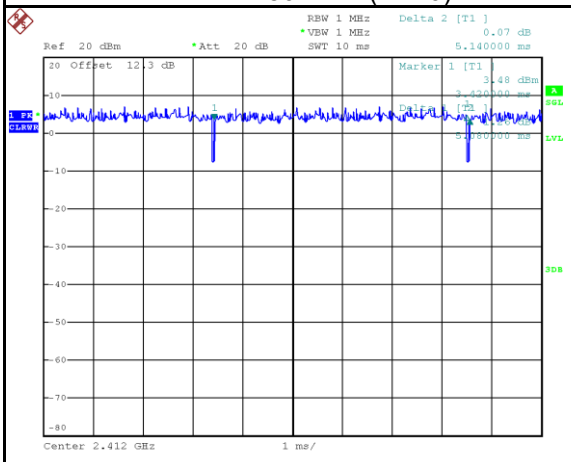
IEEE 802.11n (HT20)



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2 GENERAL INFORMATION

2.1 DESCRIPTION OF EUT

Equipment	ACE Herald
Model Name	ACE Herald
Brand Name	
Model Difference	N/A
Power Source	DC voltage supplied from USB port.
Power Rating	5V ⎓ 1A
Products Covered	N/A
Operation Band	2400 MHz ~ 2483.5 MHz
Operation Frequency	2412 MHz ~ 2462 MHz
Modulation Technology	IEEE 802.11b: DSSS IEEE 802.11g: OFDM IEEE 802.11n: OFDM
Transfer Rate	IEEE 802.11b: 11/5.5/2/1 Mbps IEEE 802.11g: 54/48/36/24/18/12/9/6 Mbps IEEE 802.11n: up to 72.2 Mbps
Output Power Max.	IEEE 802.11b: 19.65 dBm (0.0923 W) IEEE 802.11g: 23.28 dBm (0.2128W) IEEE 802.11n (HT20): 22.98 dBm (0.1986 W)
Test Software Version	EspRFTestTool_v3.6
Test Model	ACE Herald
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	05	2432	09	2452
02	2417	06	2437	10	2457
03	2422	07	2442	11	2462
04	2427	08	2447		

(3) Table for Filed Antenna:

Antenna	Brand	Model name	Type	Connector	Gain (dBi)
1	Acetech	ACE Herald_PCB	PCB	N/A	1.98

(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.

2.2 TEST MODES

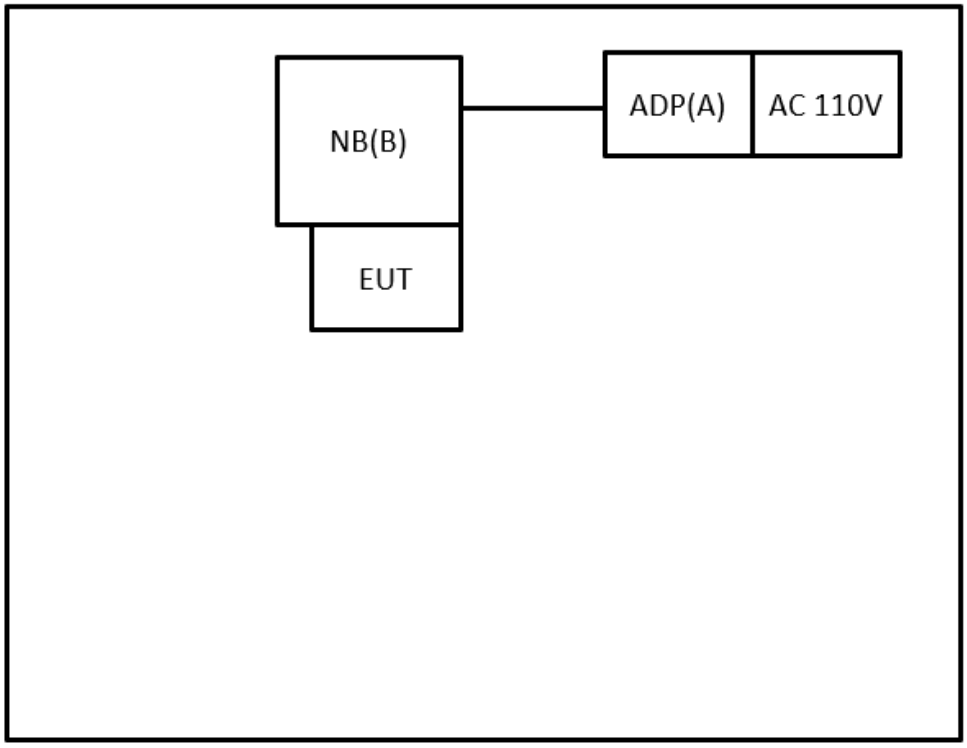
Test Items	Test mode	Channel	Note
AC power line conducted emissions	Normal/Idle	-	-
Transmitter Radiated Emissions (below 1GHz)	TX Mode_IEEE 802.11b	11	-
Transmitter Radiated Emissions (above 1GHz)	TX Mode_IEEE 802.11b	01/11	Bandedge
	TX Mode_IEEE 802.11g		
	TX Mode_IEEE 802.11n (HT20)		
	TX Mode_IEEE 802.11b	01/06/11	Harmonic
	TX Mode_IEEE 802.11g		
	TX Mode_IEEE 802.11n (HT20)		
Transmitter Radiated Emissions (above 18GHz)	TX Mode_IEEE 802.11b	11	-
Bandwidth & Power Spectral Density & Antenna conducted Spurious Emission	TX Mode_IEEE 802.11b	01/06/11	-
	TX Mode_IEEE 802.11g		
	TX Mode_IEEE 802.11n (HT20)		
Output Power	TX Mode_IEEE 802.11b	01/06/11	-
	TX Mode_IEEE 802.11g		
	TX Mode_IEEE 802.11n (HT20)		

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 (Z axis) is recorded.

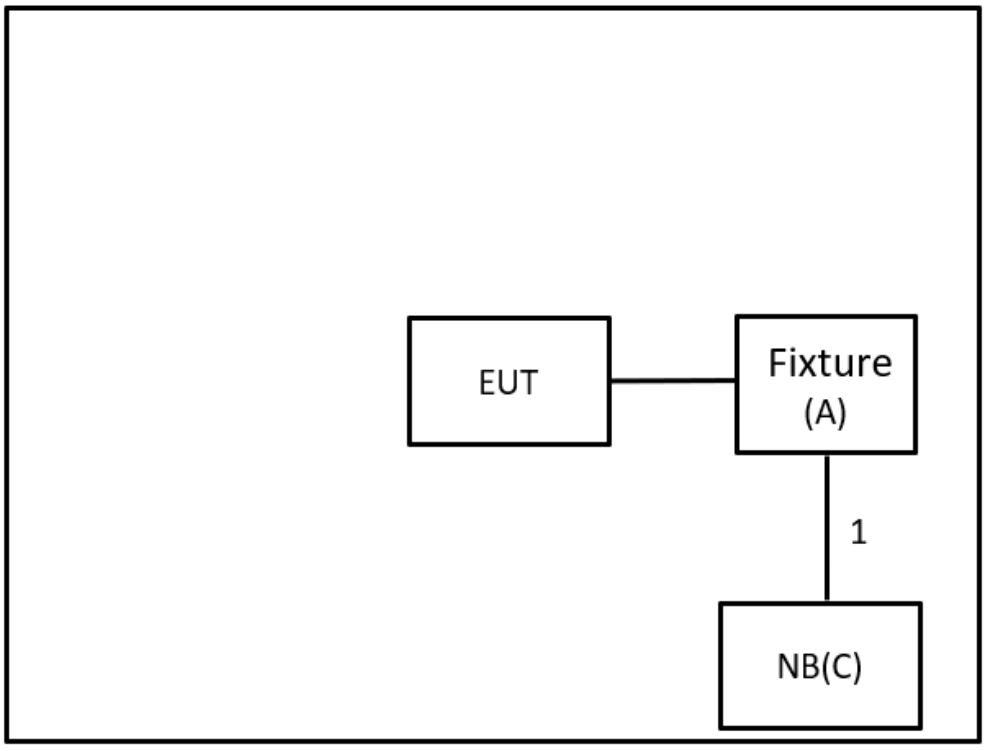
2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

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

AC power line conducted emissions



Radiated Emissions



2.4 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.	Remarks
A	ADP	N/A	N/A	N/A	Furnished by test lab.
B	NB	N/A	N/A	N/A	Furnished by test lab.
C	NB	HP	TPN-I119	N/A	Furnished by test lab.
D	Fixture	Taiwaniot	CP2102	N/A	Supplied by test requester

Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	No	No	1m	USB extension 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 (dBμV)		Correct Factor (dB)		Measurement Value (dBμV)
38.22	+	3.45	=	41.67

Measurement Value (dBμV)		Limit Value (dBμV)		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

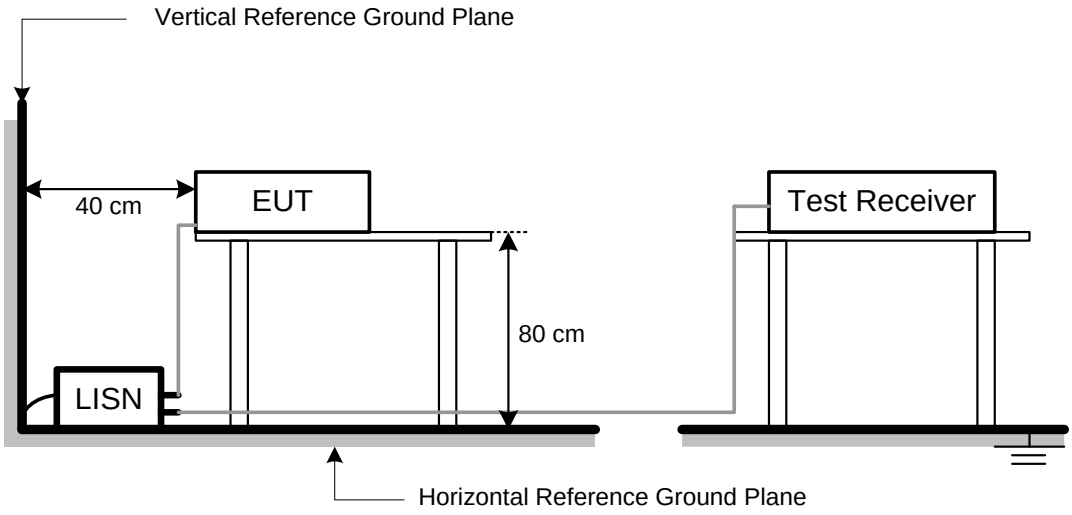
a. The EUT was placed 0.8 m above the horizontal ground plane with the EUT being connected to the power mains through a line impedance stabilization network (LISN).
All other support equipment were powered from an additional LISN(s).
The LISN provides 50 Ohm/50uH of impedance for the measuring instrument.
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 CFR Title 47, 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 (dBµV)		Correct Factor (dB/m)		Measurement Value (dBµV/m)
19.11	+	2.11	=	21.22

Measurement Value (dBµV/m)		Limit Value (dBµV/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

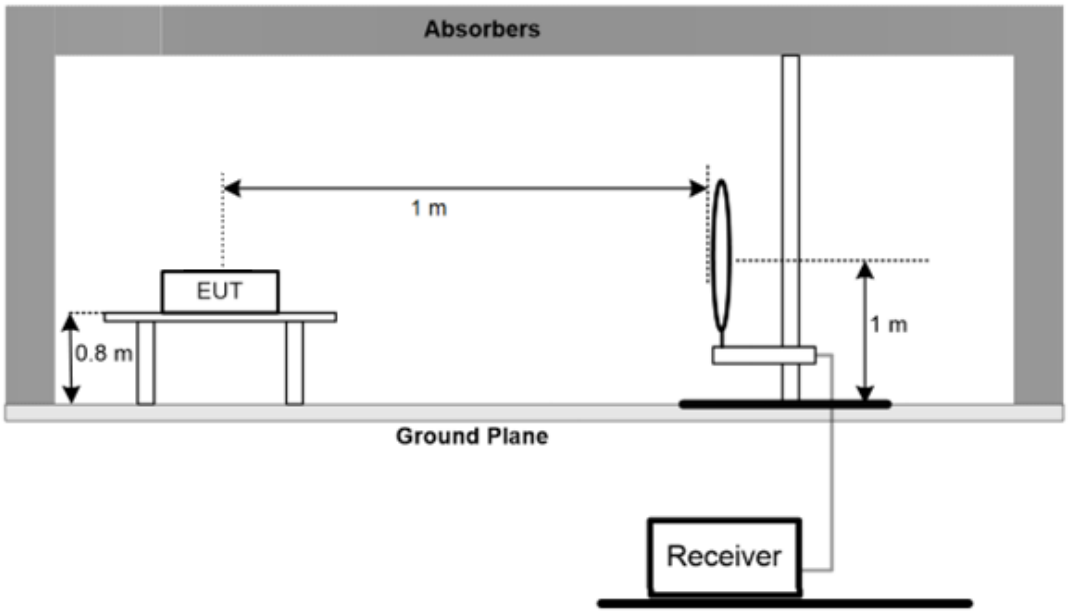
a. The measuring distance of 1 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 30MHz)
b. The measuring distance 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)
c. 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)
d. 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.
e. 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).
f. 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.
g. 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.
h. 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)
i. 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)
j. For the actual test configuration, please refer to the related Item – EUT TEST PHOTO.

4.3 DEVIATION FROM TEST STANDARD

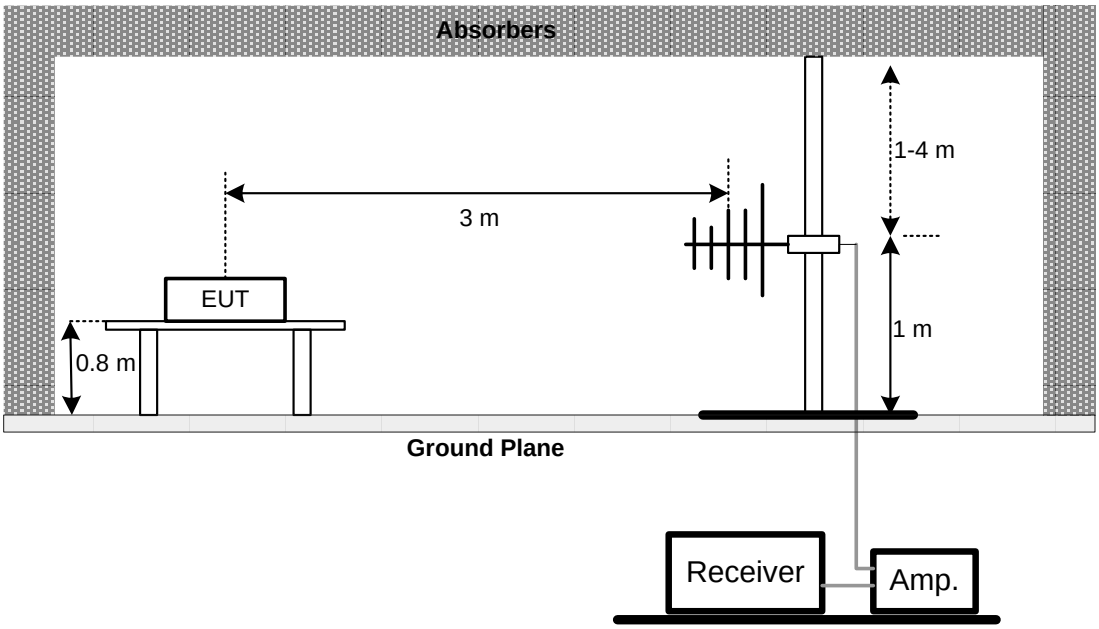
No deviation.

4.4 TEST SETUP

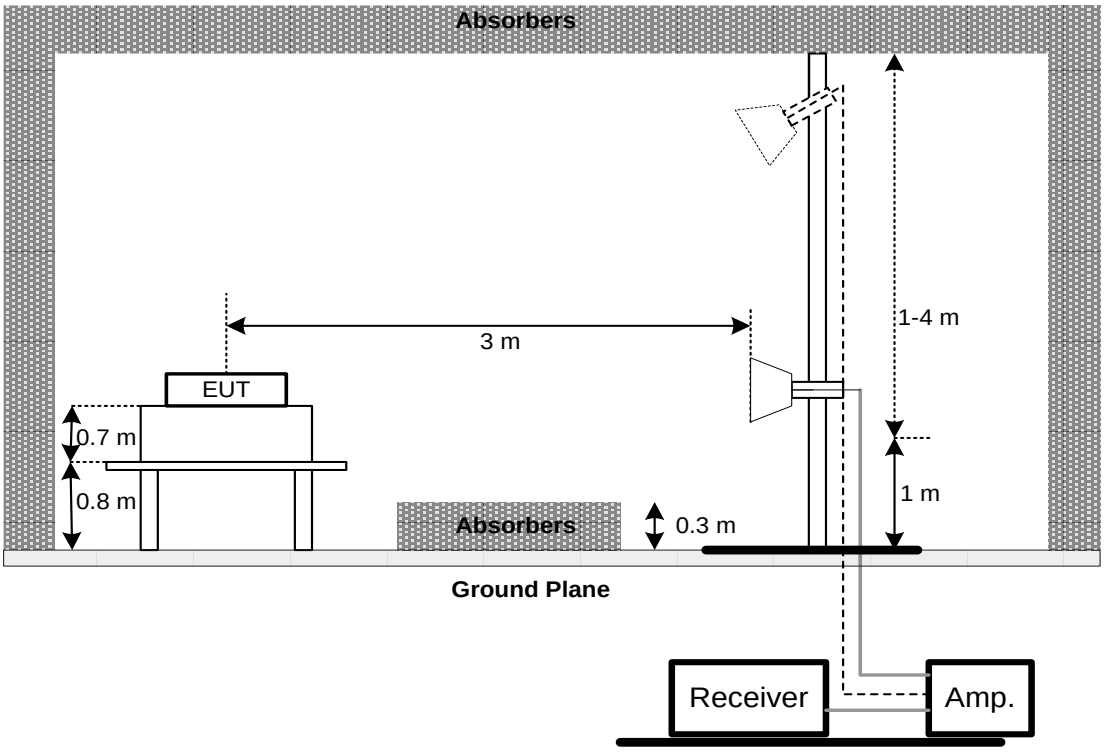
9 kHz to 30 MHz



30 MHz to 1 GHz



Above 1 GHz



4.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULT – 9 KHZ TO 30 MHZ

Please refer to the APPENDIX BAPPENDIX B.

4.7 TEST RESULT – 30 MHZ TO 1 GHZ

Please refer to the APPENDIX C.

4.8 TEST RESULT – ABOVE 1 GHZ

Please refer to the APPENDIX D.

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

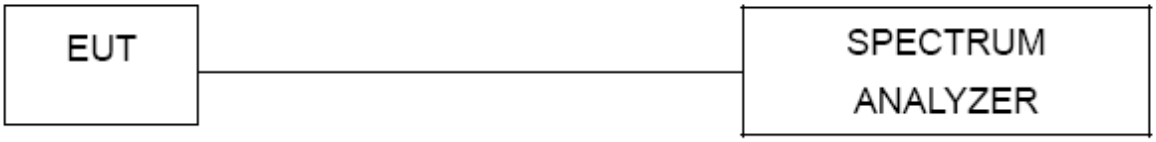
5.2 TEST PROCEDURE

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 E.

6 OUTPUT POWER TEST

6.1 LIMIT

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

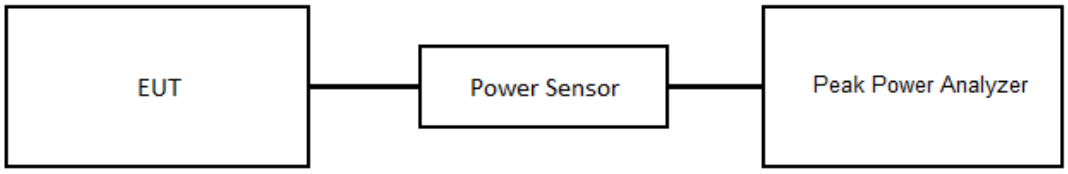
6.2 TEST PROCEDURE

a. The EUT was directly connected to the peak power analyzer 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 F.

7 POWER SPECTRAL DENSITY

7.1 LIMIT

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

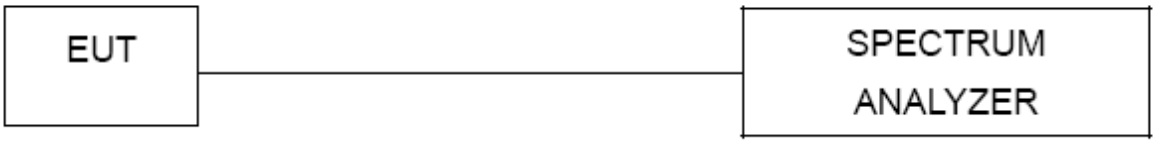
7.2 TEST PROCEDURE

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 G.

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.

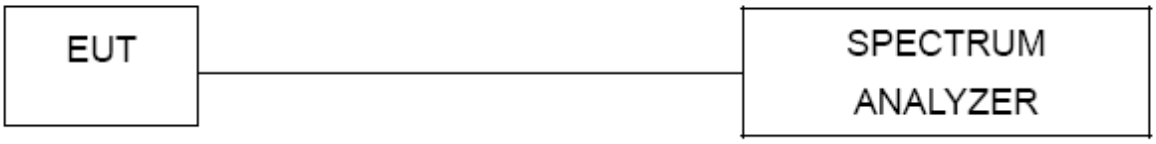
8.2 TEST PROCEDURE

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 H.

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	2024/9/5	2025/9/4
2	Test Cable	EMCI	EMCCFD300-BM-BMR-5000	220331	2024/3/30	2025/3/29
3	EMI Test Receiver	R&S	ESR 7	101433	2023/11/10	2024/11/9
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	2024/9/5	2025/9/4
2	Preamplifier	EMCI	EMC118A45SE	980819	2024/3/6	2025/3/5
3	Pre-Amplifier	EMCI	EMC184045SE	980907	2024/9/4	2025/9/3
4	Preamplifier	EMCI	EMC001340	980579	2024/9/4	2025/9/3
5	Test Cable	EMCI	EMC104-SM-1000	180809	2024/3/8	2025/3/7
6	Test Cable	EMCI	EMC104-SM-SM-3000	220322	2024/3/8	2025/3/7
7	Test Cable	EMCI	EMC104-SM-SM-7000	220324	2024/3/8	2025/3/7
8	EXA Signal Analyzer	keysight	N9020B	MY57120120	2024/2/23	2025/2/22
9	Loop Ant	Electro-Metrics	EMCI-LPA600	291	2024/9/9	2025/9/8
10	Horn Antenna	RFSPIN	DRH18-E	211202A18EN	2024/5/9	2025/5/8
11	Horn Ant	Schwarzbeck	BBHA 9170D	1136	2024/5/17	2025/5/16
12	Log-bicon Antenna	Schwarzbeck	VULB9168	1369	2024/6/14	2025/6/13
13	6dB Attenuator	EMCI	EMCI-N-6-06	AT-06001	2024/6/14	2025/6/13
14	Test Cable	EMCI	EMC101G-KM-KM-3000	220329	2024/3/13	2025/3/12
15	Test Cable	EMCI	EMC102-KM-KM-1000	220327	2024/3/13	2025/3/12
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	101139	2024/3/8	2025/3/7

Output Power						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Peak Power Analyzer	Keysight	8990B	MY51000517	2024/3/12	2025/3/11
2	Power Sensor	Keysight	N1923A	MY58310005	2024/3/12	2025/3/11

Power Spectral Density						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSP 40	101139	2024/3/8	2025/3/7

Antenna conducted Spurious Emission						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSP 40	101139	2024/3/8	2025/3/7

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

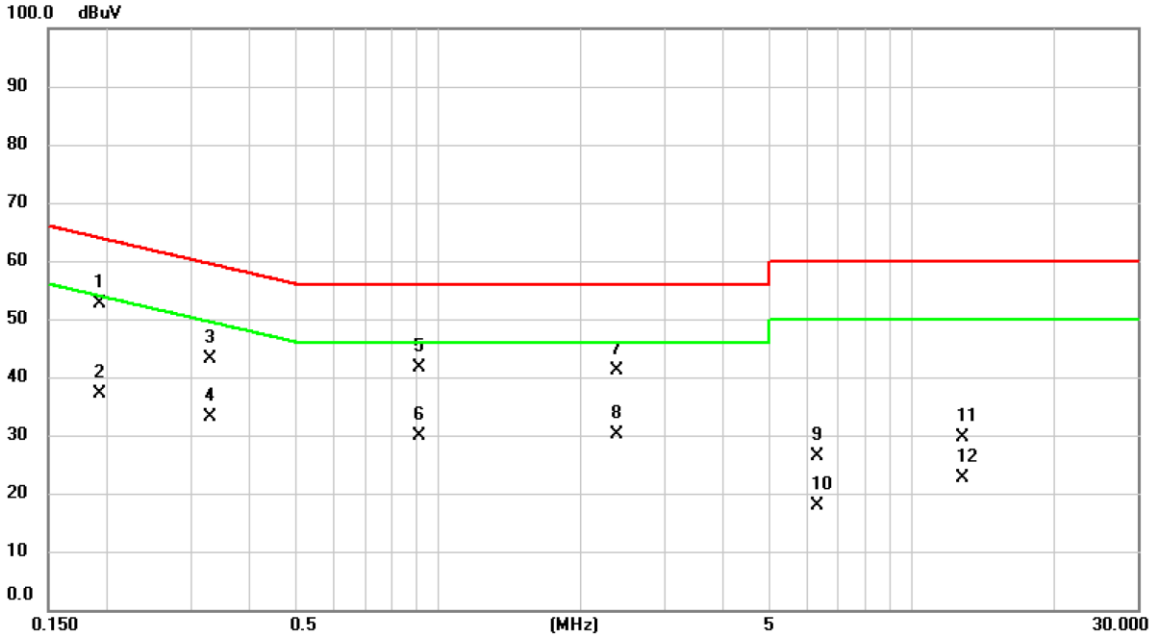
Please refer to document Appendix No.: TP-2408T150-FCCP-1 (APPENDIX-TEST PHOTOS).

11 EUT PHOTOS

Please refer to document Appendix No.: EP-2408T150-1 (APPENDIX-EUT PHOTOS).

APPENDIX A AC POWER LINE CONDUCTED EMISSIONS

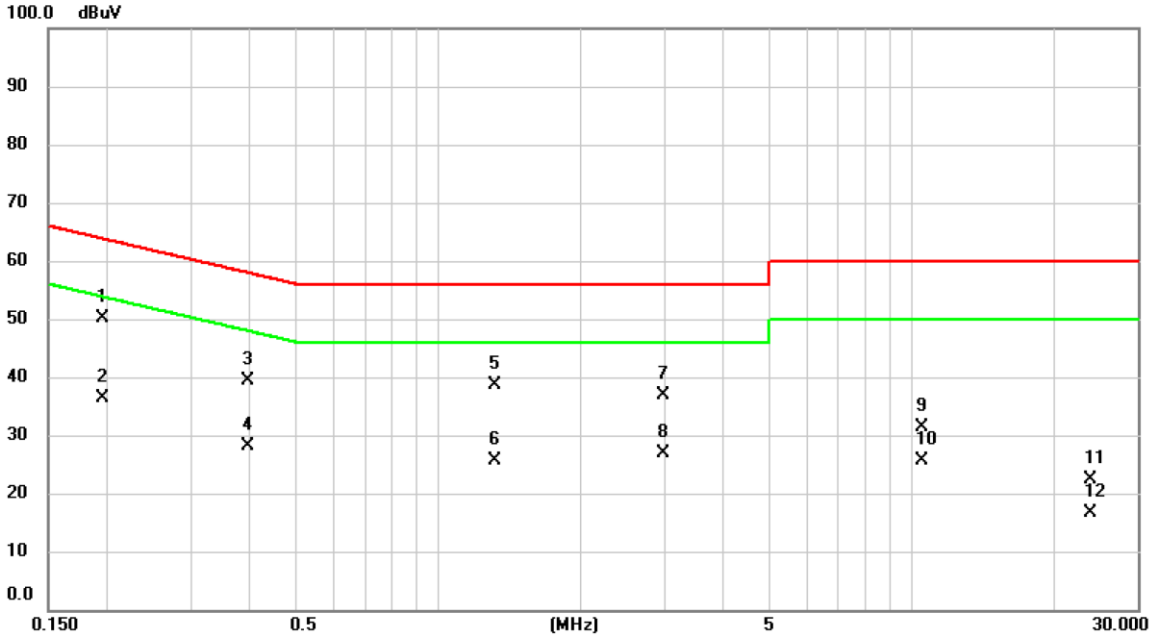
Test Mode	Normal	Tested Date	2024/10/29
Test Frequency	-	Phase	Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1928	43.06	9.65	52.71	63.92	-11.21	QP	
2		0.1928	27.59	9.65	37.24	53.92	-16.68	AVG	
3		0.3300	33.42	9.60	43.02	59.45	-16.43	QP	
4		0.3300	23.49	9.60	33.09	49.45	-16.36	AVG	
5		0.9150	32.05	9.56	41.61	56.00	-14.39	QP	
6		0.9150	20.38	9.56	29.94	46.00	-16.06	AVG	
7		2.3753	31.60	9.58	41.18	56.00	-14.82	QP	
8		2.3753	20.49	9.58	30.07	46.00	-15.93	AVG	
9		6.2970	16.68	9.72	26.40	60.00	-33.60	QP	
10		6.2970	8.12	9.72	17.84	50.00	-32.16	AVG	
11		12.7635	19.83	9.69	29.52	60.00	-30.48	QP	
12		12.7635	13.00	9.69	22.69	50.00	-27.31	AVG	

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

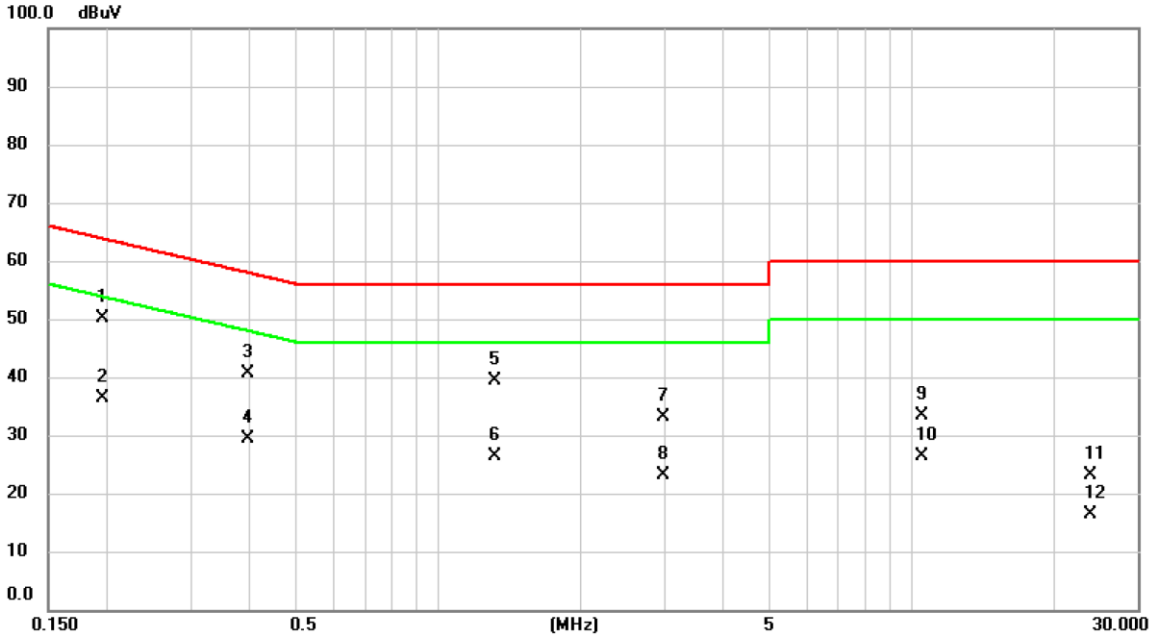
Test Mode	Normal	Tested Date	2024/10/29
Test Frequency	-	Phase	Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1950	40.39	9.64	50.03	63.82	-13.79	QP	
2		0.1950	26.69	9.64	36.33	53.82	-17.49	AVG	
3		0.3975	29.81	9.58	39.39	57.91	-18.52	QP	
4		0.3975	18.63	9.58	28.21	47.91	-19.70	AVG	
5		1.3178	28.95	9.56	38.51	56.00	-17.49	QP	
6		1.3178	16.15	9.56	25.71	46.00	-20.29	AVG	
7		2.9782	27.26	9.66	36.92	56.00	-19.08	QP	
8		2.9782	17.24	9.66	26.90	46.00	-19.10	AVG	
9		10.5428	21.60	9.71	31.31	60.00	-28.69	QP	
10		10.5428	15.84	9.71	25.55	50.00	-24.45	AVG	
11		23.7773	12.53	9.78	22.31	60.00	-37.69	QP	
12		23.7773	6.79	9.78	16.57	50.00	-33.43	AVG	

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

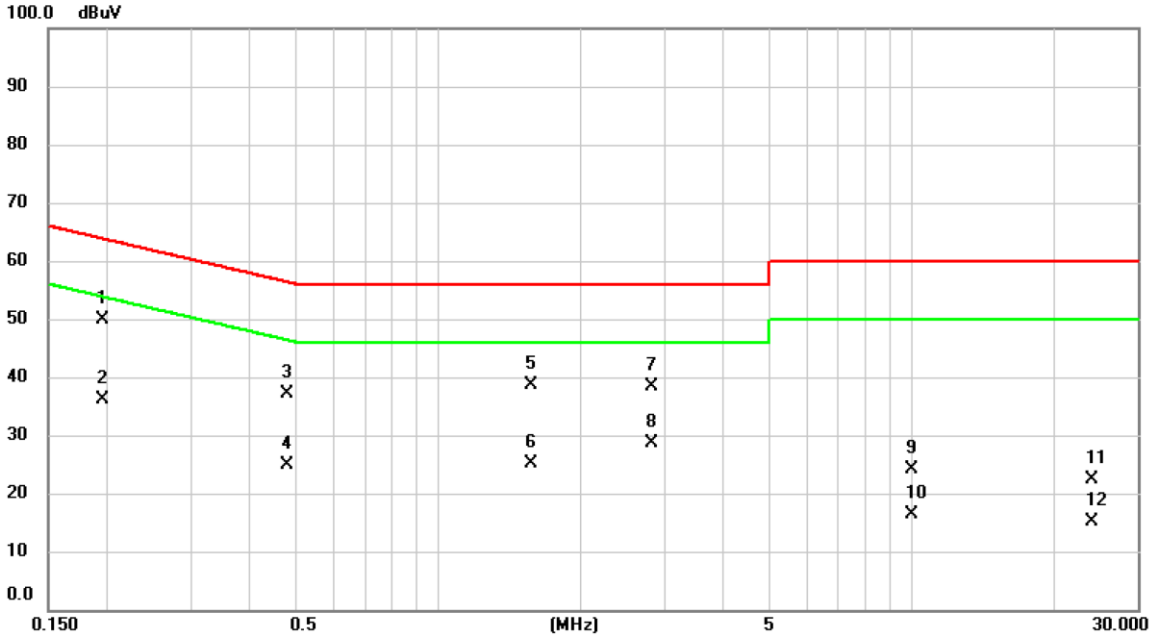
Test Mode	Idle	Tested Date	2024/10/29
Test Frequency	-	Phase	Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1950	40.57	9.65	50.22	63.82	-13.60	QP	
2		0.1950	26.66	9.65	36.31	53.82	-17.51	AVG	
3		0.3975	30.95	9.59	40.54	57.91	-17.37	QP	
4		0.3975	19.81	9.59	29.40	47.91	-18.51	AVG	
5		1.3178	29.88	9.56	39.44	56.00	-16.56	QP	
6		1.3178	16.81	9.56	26.37	46.00	-19.63	AVG	
7		2.9782	23.54	9.65	33.19	56.00	-22.81	QP	
8		2.9782	13.44	9.65	23.09	46.00	-22.91	AVG	
9		10.5428	23.68	9.67	33.35	60.00	-26.65	QP	
10		10.5428	16.66	9.67	26.33	50.00	-23.67	AVG	
11		23.7773	13.36	9.68	23.04	60.00	-36.96	QP	
12		23.7773	6.68	9.68	16.36	50.00	-33.64	AVG	

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

Test Mode	Idle	Tested Date	2024/10/29
Test Frequency	-	Phase	Neutral

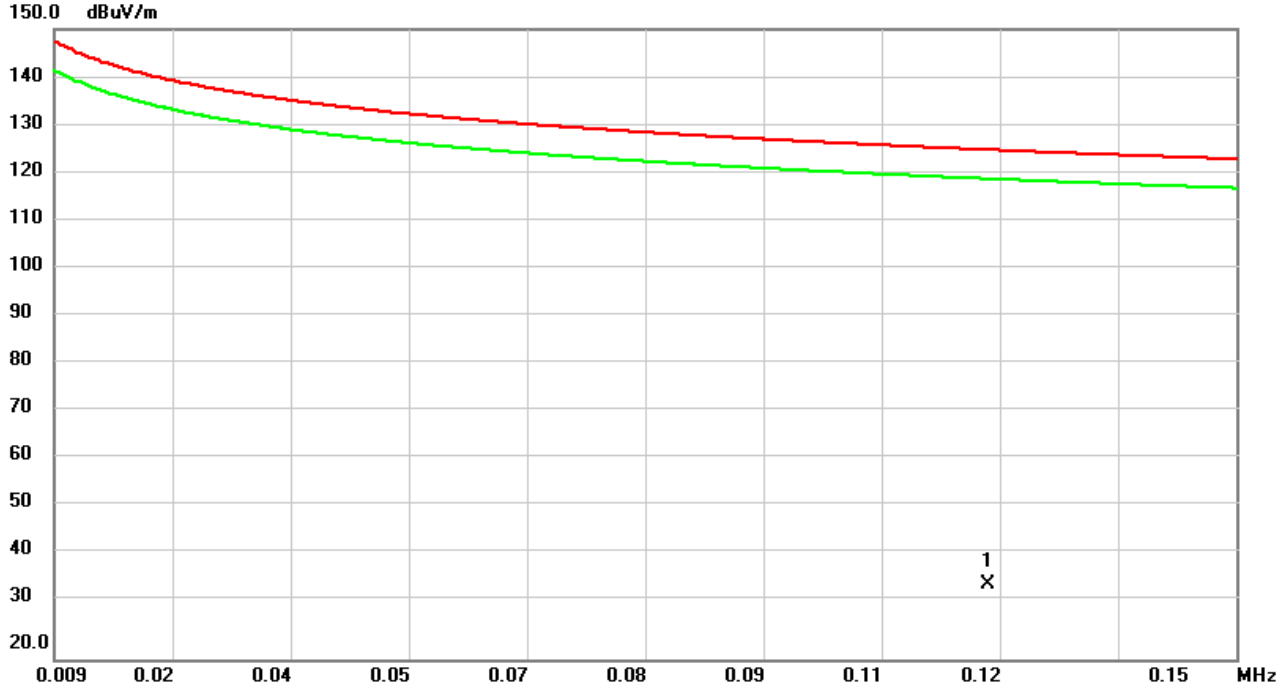


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1950	40.27	9.64	49.91	63.82	-13.91	QP	
2		0.1950	26.51	9.64	36.15	53.82	-17.67	AVG	
3		0.4785	27.61	9.56	37.17	56.37	-19.20	QP	
4		0.4785	15.24	9.56	24.80	46.37	-21.57	AVG	
5		1.5698	29.04	9.55	38.59	56.00	-17.41	QP	
6		1.5698	15.52	9.55	25.07	46.00	-20.93	AVG	
7		2.8298	28.81	9.64	38.45	56.00	-17.55	QP	
8		2.8298	18.98	9.64	28.62	46.00	-17.38	AVG	
9		10.0050	14.43	9.70	24.13	60.00	-35.87	QP	
10		10.0050	6.73	9.70	16.43	50.00	-33.57	AVG	
11		24.0090	12.57	9.78	22.35	60.00	-37.65	QP	
12		24.0090	5.38	9.78	15.16	50.00	-34.84	AVG	

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

APPENDIX B RADIATED EMISSIONS - 9 KHZ TO 30 MHZ

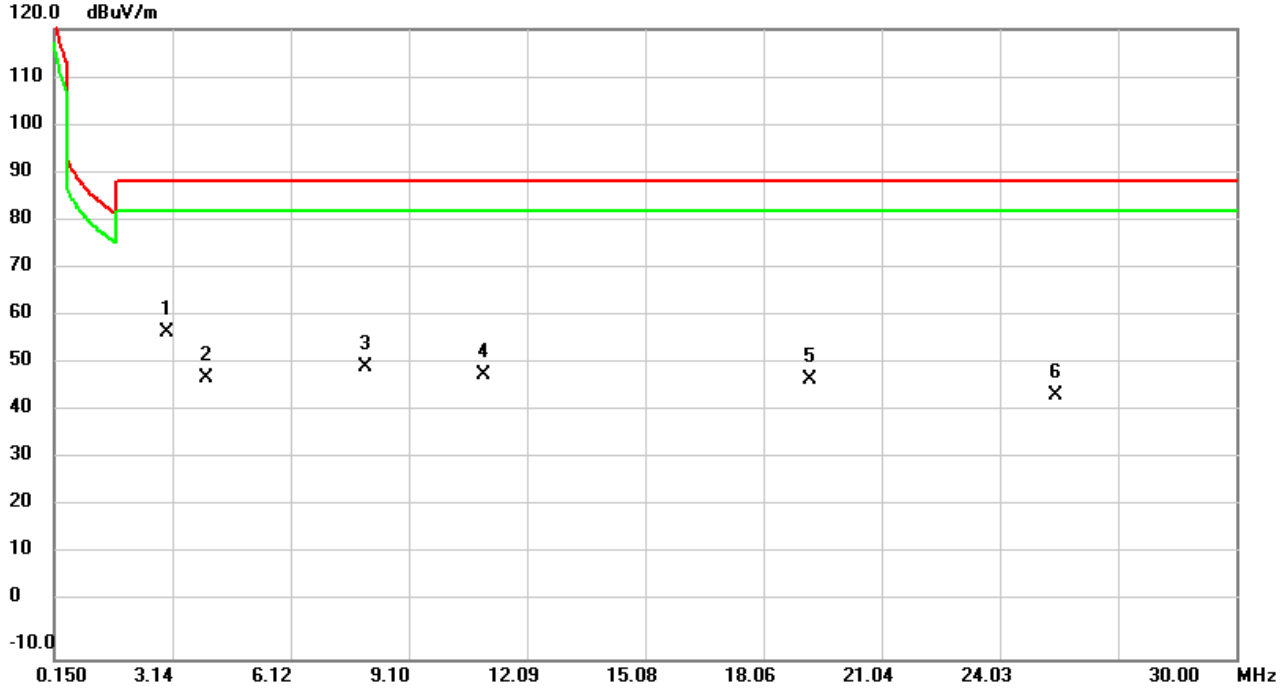
Test Mode	IEEE 802.11b	Test Date	2024/11/5
Test Frequency	2462MHz	Polarization	Vertical
Temp	21°C	Hum.	57%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.1203	20.17	15.33	35.50	125.08	-89.58	AVG	

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

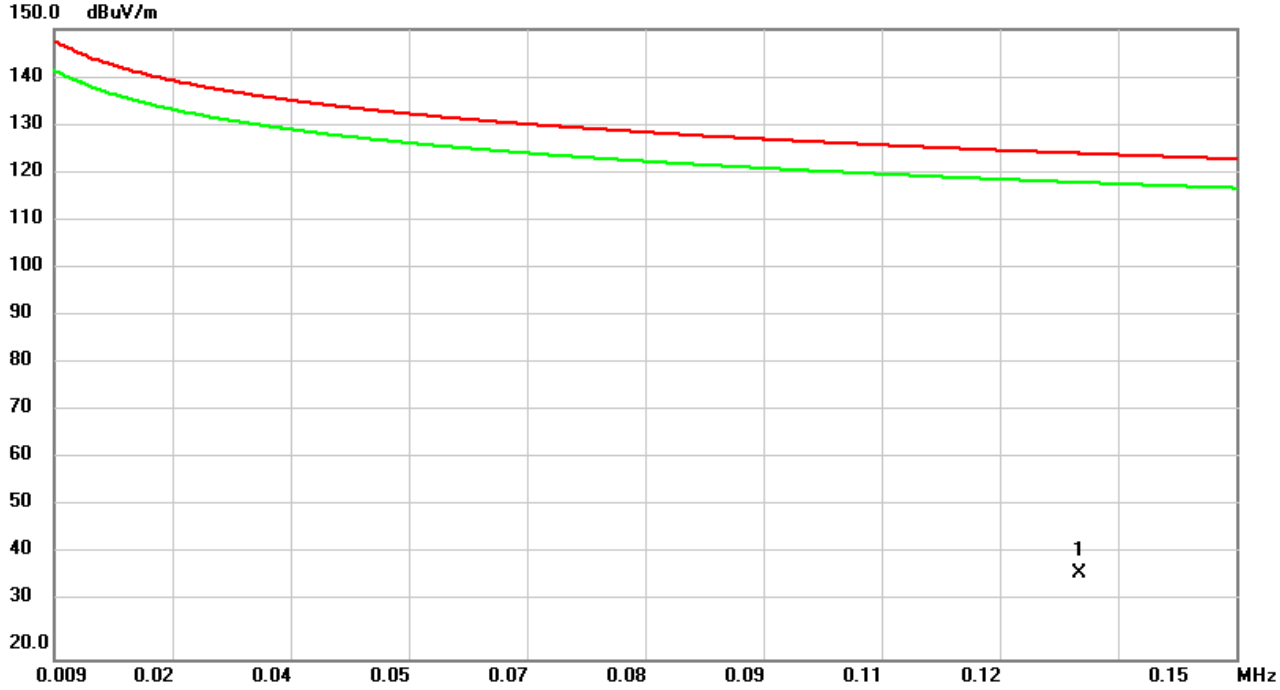
Test Mode	IEEE 802.11b	Test Date	2024/11/5
Test Frequency	2462MHz	Polarization	Vertical
Temp	21°C	Hum.	57%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	3.0006	61.13	-3.77	57.36	88.62	-31.26	QP	
2		4.0016	52.23	-4.09	48.14	88.62	-40.48	QP	
3		8.0004	53.76	-3.57	50.19	88.62	-38.43	QP	
4		11.0004	51.83	-3.11	48.72	88.62	-39.90	QP	
5		19.2530	51.49	-3.90	47.59	88.62	-41.03	QP	
6		25.4447	47.49	-2.92	44.57	88.62	-44.05	QP	

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

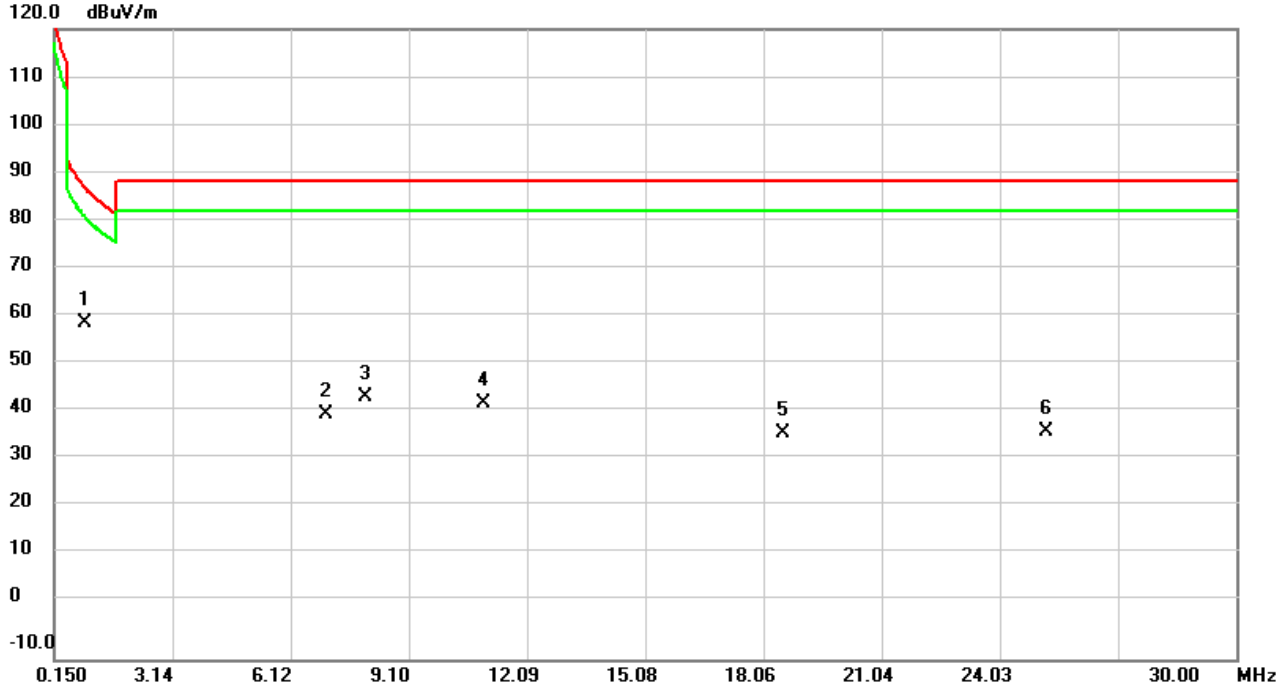
Test Mode	IEEE 802.11b	Test Date	2024/11/5
Test Frequency	2462MHz	Polarization	Horizontal
Temp	21°C	Hum.	57%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.1312	22.83	14.82	37.65	124.33	-86.68	AVG	

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

Test Mode	IEEE 802.11b	Test Date	2024/11/5
Test Frequency	2462MHz	Polarization	Horizontal
Temp	21°C	Hum.	57%

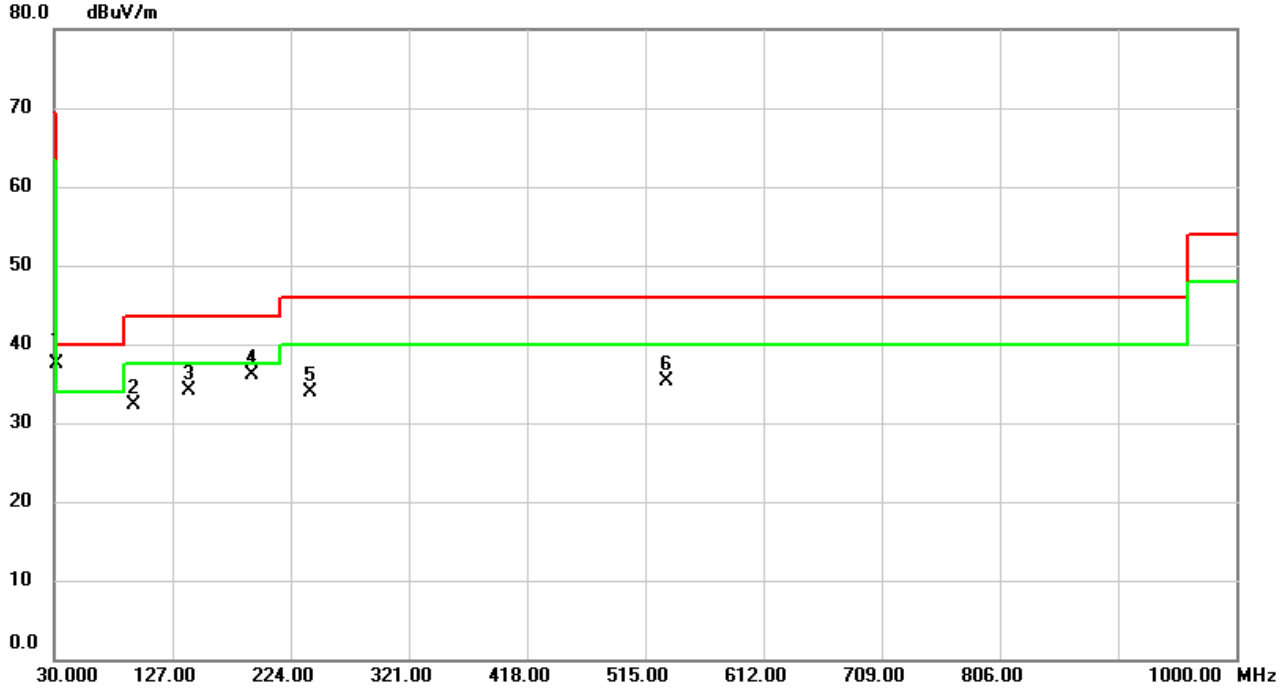


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.9270	58.66	0.78	59.44	87.34	-27.90	QP	
2		6.9995	44.34	-3.85	40.49	88.62	-48.13	QP	
3		8.0004	47.83	-3.57	44.26	88.62	-44.36	QP	
4		11.0004	45.88	-3.11	42.77	88.62	-45.85	QP	
5		18.5684	40.49	-3.84	36.65	88.62	-51.97	QP	
6		25.2080	40.08	-2.97	37.11	88.62	-51.51	QP	

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

APPENDIX C RADIATED EMISSIONS - 30 MHZ TO 1 GHZ

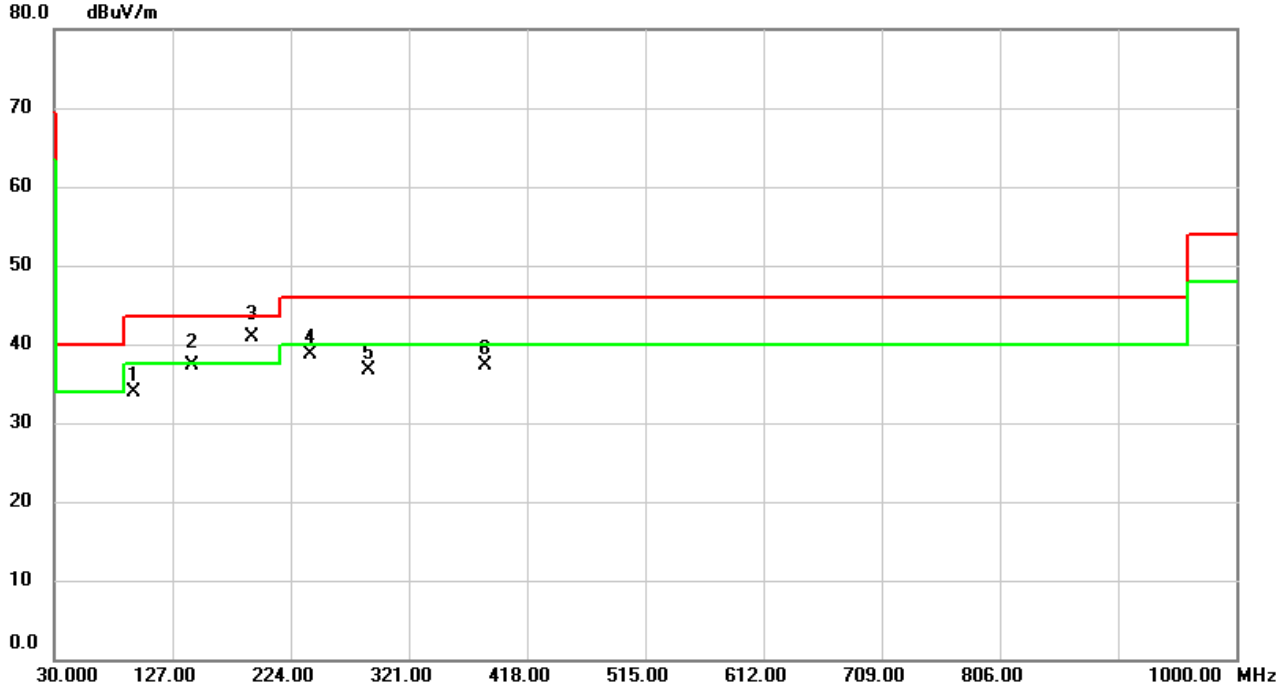
Test Mode	IEEE 802.11b	Test Date	2024/11/5
Test Frequency	2462MHz	Polarization	Vertical
Temp	21°C	Hum.	57%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	32.3927	50.56	-13.14	37.42	40.00	-2.58	QP	
2		95.6690	49.58	-17.31	32.27	43.50	-11.23	peak	
3		140.3860	46.56	-12.55	34.01	43.50	-9.49	peak	
4		192.0223	50.99	-14.84	36.15	43.50	-7.35	peak	
5		239.5200	47.60	-13.63	33.97	46.00	-12.03	peak	
6		532.1043	41.28	-6.03	35.25	46.00	-10.75	peak	

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

Test Mode	IEEE 802.11b	Test Date	2024/11/5
Test Frequency	2462MHz	Polarization	Horizontal
Temp	21°C	Hum.	57%

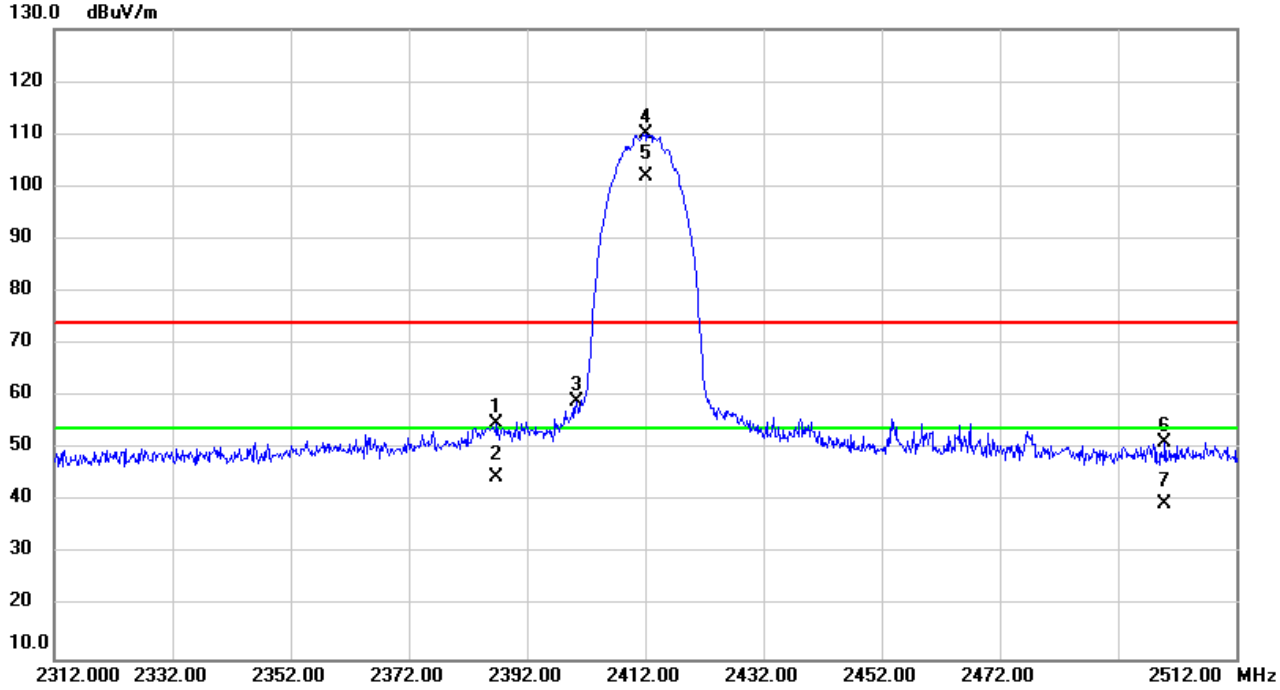


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		95.7013	51.29	-17.31	33.98	43.50	-9.52	peak	
2		143.7163	49.56	-12.31	37.25	43.50	-6.25	QP	
3	*	192.0223	55.70	-14.84	40.86	43.50	-2.64	QP	
4		240.0373	52.35	-13.57	38.78	46.00	-7.22	peak	
5		287.6320	48.48	-11.73	36.75	46.00	-9.25	peak	
6		383.2740	46.66	-9.44	37.22	46.00	-8.78	peak	

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

APPENDIX D RADIATED EMISSIONS - ABOVE 1 GHZ

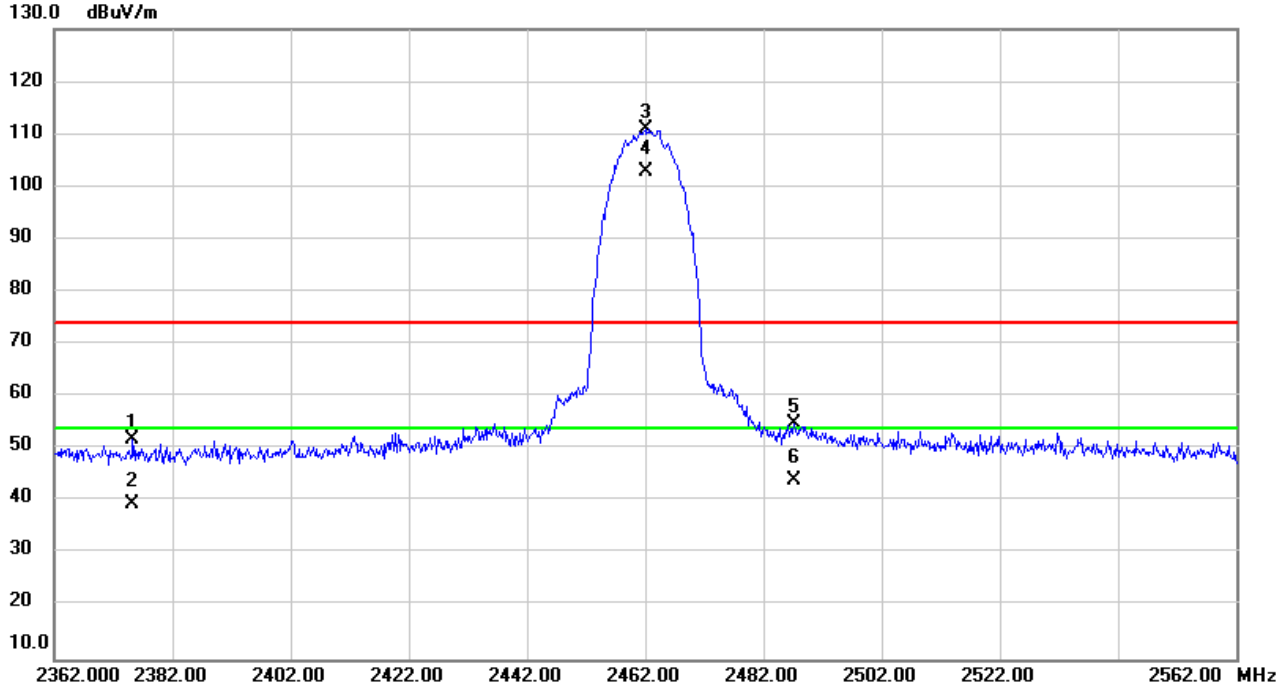
Test Mode	IEEE 802.11b	Test Date	2024/11/5
Test Frequency	2412MHz	Polarization	Horizontal
Temp	21°C	Hum.	57%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2386.933	59.97	-5.01	54.96	74.00	-19.04	peak	
2		2386.933	49.57	-5.01	44.56	54.00	-9.44	AVG	
3		2400.507	63.90	-4.99	58.91	74.00	-15.09	peak	No Limit
4	X	2412.000	115.07	-4.97	110.10	74.00	36.10	peak	No Limit
5	*	2412.000	106.96	-4.97	101.99	54.00	47.99	AVG	No Limit
6		2499.960	56.05	-4.86	51.19	74.00	-22.81	peak	
7		2499.960	44.41	-4.86	39.55	54.00	-14.45	AVG	

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

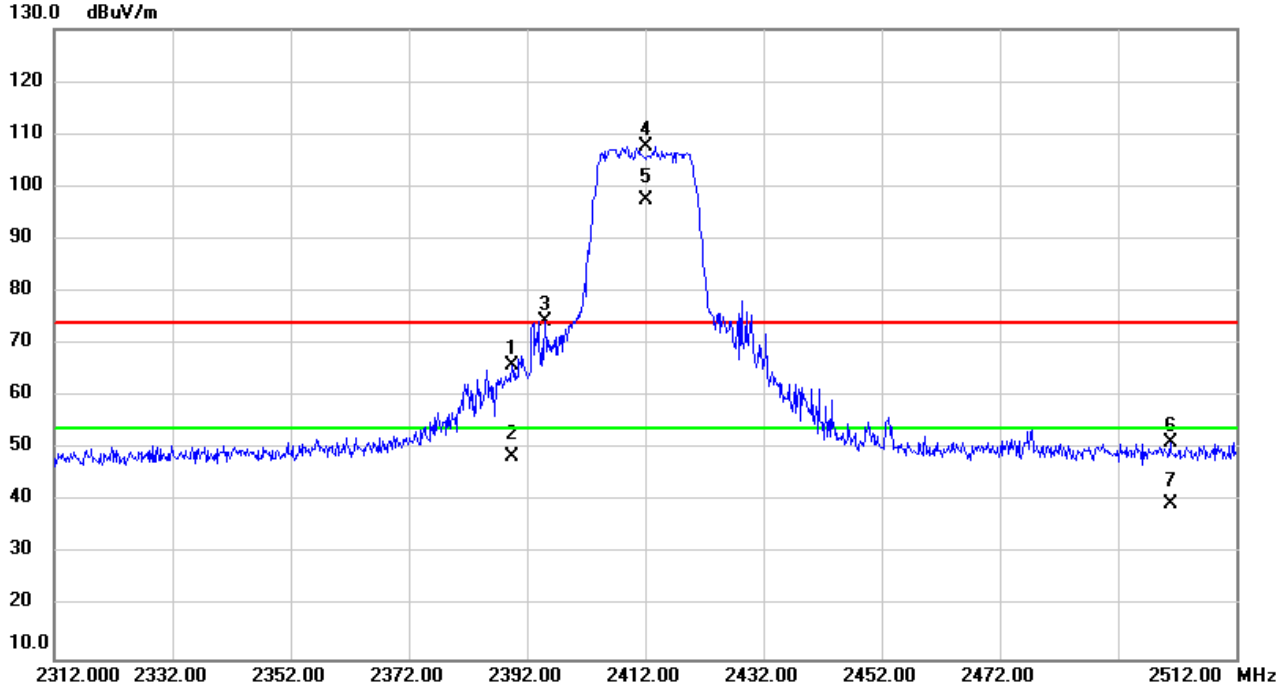
Test Mode	IEEE 802.11b	Test Date	2024/11/5
Test Frequency	2462MHz	Polarization	Horizontal
Temp	21°C	Hum.	57%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2375.293	56.99	-5.02	51.97	74.00	-22.03	peak	
2		2375.293	44.52	-5.02	39.50	54.00	-14.50	AVG	
3	X	2462.000	115.73	-4.91	110.82	74.00	36.82	peak	No Limit
4	*	2462.000	107.67	-4.91	102.76	54.00	48.76	AVG	No Limit
5		2487.267	59.63	-4.88	54.75	74.00	-19.25	peak	
6		2487.267	48.99	-4.88	44.11	54.00	-9.89	AVG	

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

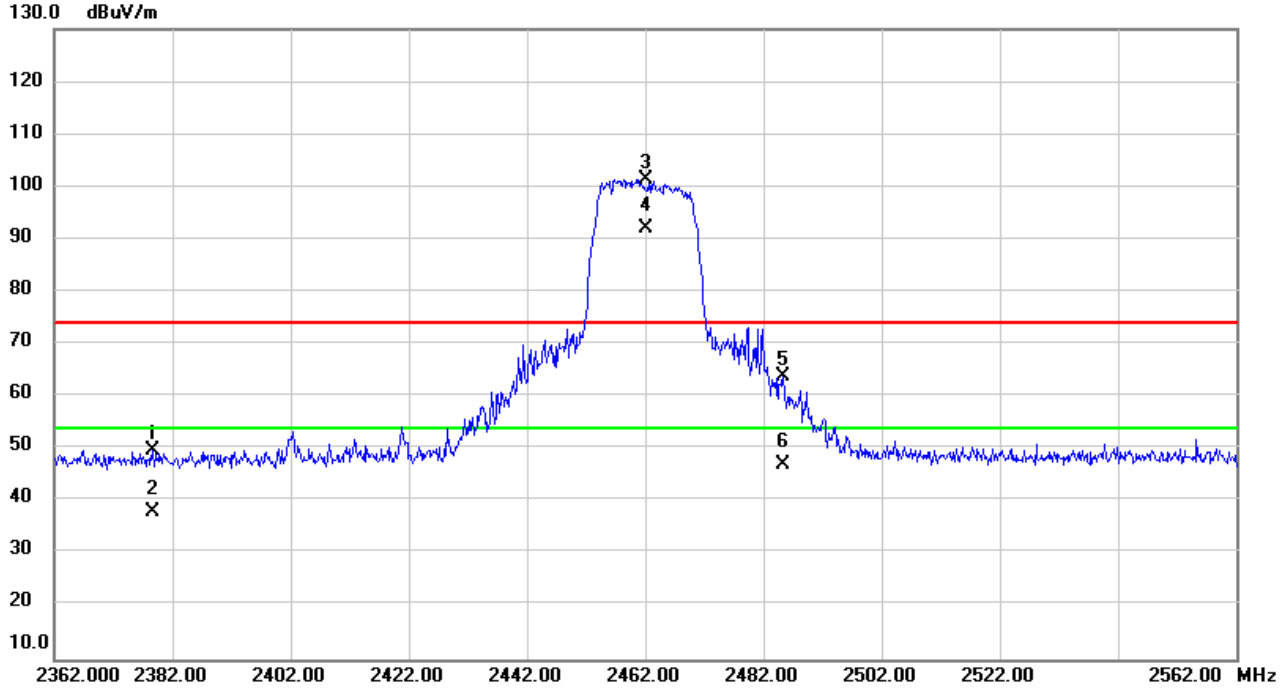
Test Mode	IEEE 802.11g	Test Date	2024/11/5
Test Frequency	2412MHz	Polarization	Horizontal
Temp	21°C	Hum.	57%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2389.513	70.86	-5.01	65.85	74.00	-8.15	peak	
2		2389.513	53.60	-5.01	48.59	54.00	-5.41	AVG	
3	X	2395.087	79.40	-5.00	74.40	74.00	0.40	peak	No Limit
4	X	2412.000	112.59	-4.97	107.62	74.00	33.62	peak	No Limit
5	*	2412.000	102.55	-4.97	97.58	54.00	43.58	AVG	No Limit
6		2500.873	56.16	-4.86	51.30	74.00	-22.70	peak	
7		2500.873	44.51	-4.86	39.65	54.00	-14.35	AVG	

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

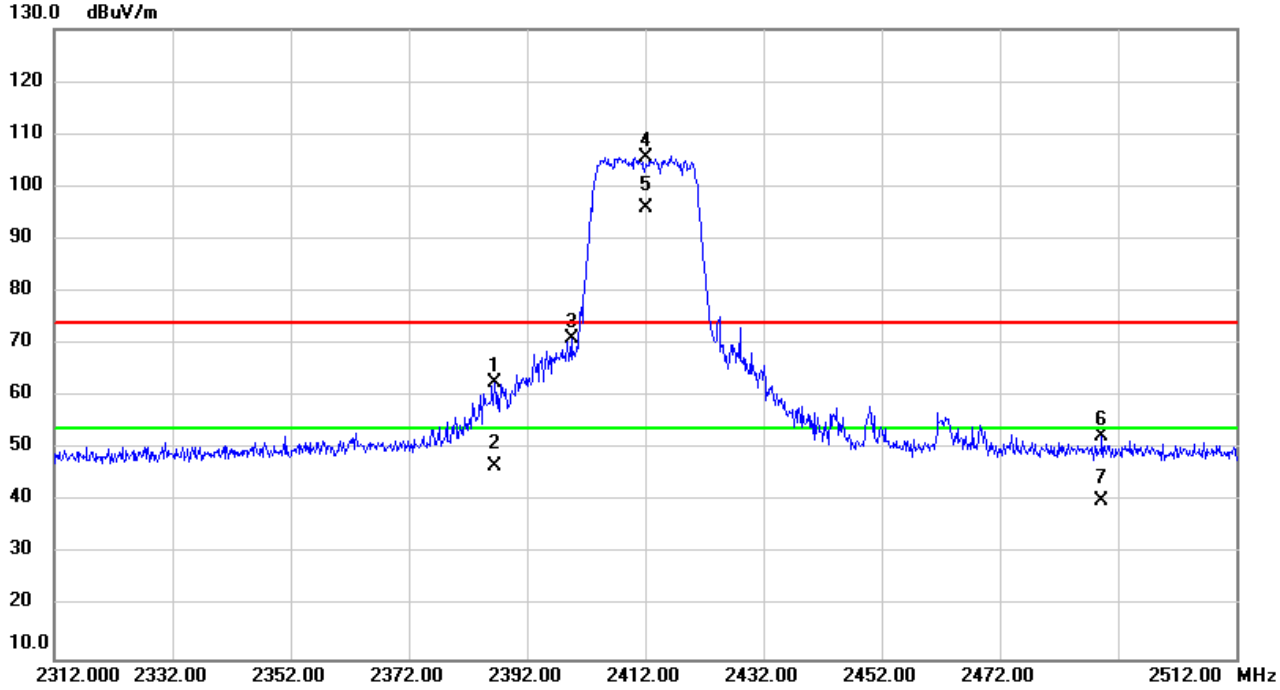
Test Mode	IEEE 802.11g	Test Date	2024/11/5
Test Frequency	2462MHz	Polarization	Horizontal
Temp	21°C	Hum.	57%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2378.587	54.87	-5.02	49.85	74.00	-24.15	peak	
2		2378.587	43.13	-5.02	38.11	54.00	-15.89	AVG	
3	X	2462.000	106.24	-4.91	101.33	74.00	27.33	peak	No Limit
4	*	2462.000	96.81	-4.91	91.90	54.00	37.90	AVG	No Limit
5		2485.427	68.76	-4.88	63.88	74.00	-10.12	peak	
6		2485.427	51.92	-4.88	47.04	54.00	-6.96	AVG	

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

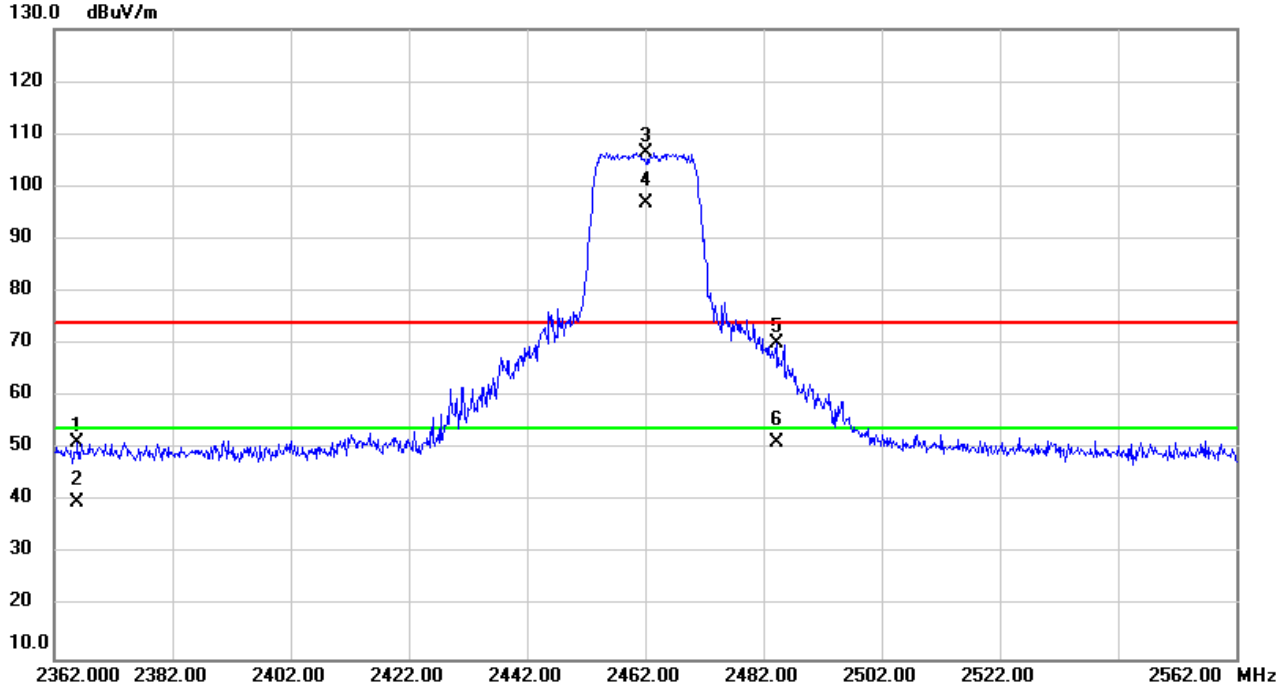
Test Mode	IEEE 802.11n (HT20)	Test Date	2024/11/5
Test Frequency	2412MHz	Polarization	Horizontal
Temp	21°C	Hum.	57%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2386.493	67.70	-5.01	62.69	74.00	-11.31	peak	
2		2386.493	51.84	-5.01	46.83	54.00	-7.17	AVG	
3		2399.500	75.90	-4.99	70.91	74.00	-3.09	peak	No Limit
4	X	2412.000	110.67	-4.97	105.70	74.00	31.70	peak	No Limit
5	*	2412.000	100.98	-4.97	96.01	54.00	42.01	AVG	No Limit
6		2489.313	57.36	-4.87	52.49	74.00	-21.51	peak	
7		2489.313	44.91	-4.87	40.04	54.00	-13.96	AVG	

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

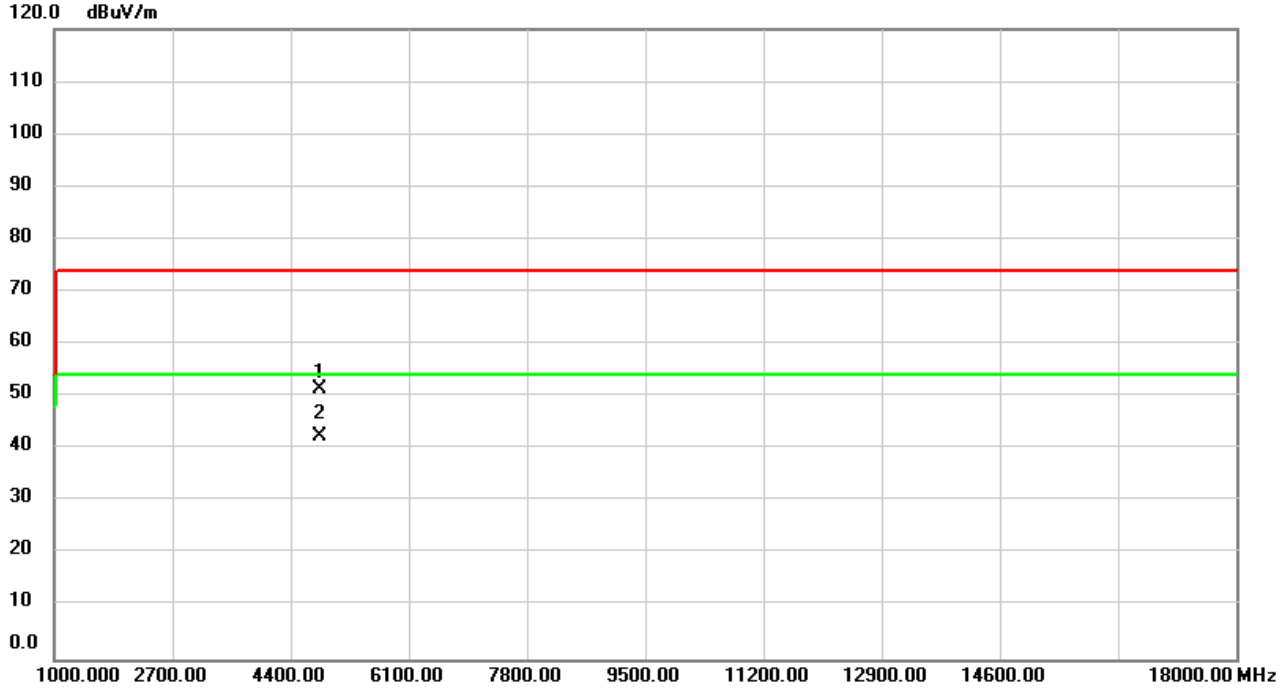
Test Mode	IEEE 802.11n (HT20)	Test Date	2024/11/5
Test Frequency	2462MHz	Polarization	Horizontal
Temp	21°C	Hum.	57%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2365.880	56.38	-5.04	51.34	74.00	-22.66	peak	
2		2365.880	44.76	-5.04	39.72	54.00	-14.28	AVG	
3	X	2462.000	111.35	-4.91	106.44	74.00	32.44	peak	No Limit
4	*	2462.000	101.80	-4.91	96.89	54.00	42.89	AVG	No Limit
5		2484.160	74.95	-4.87	70.08	74.00	-3.92	peak	
6		2484.160	56.21	-4.87	51.34	54.00	-2.66	AVG	

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

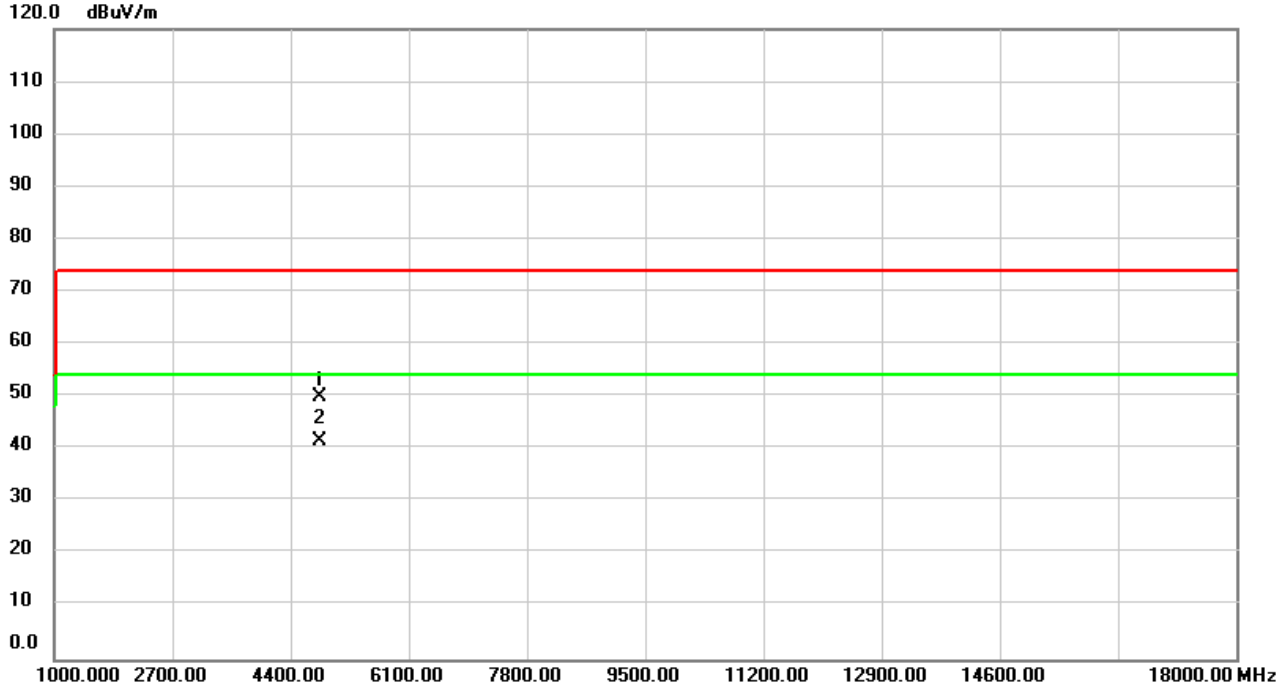
Test Mode	IEEE 802.11b	Test Date	2024/11/6
Test Frequency	2412MHz	Polarization	Vertical
Temp	22°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	50.46	0.92	51.38	74.00	-22.62	peak	
2	*	4824.000	41.46	0.92	42.38	54.00	-11.62	AVG	

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

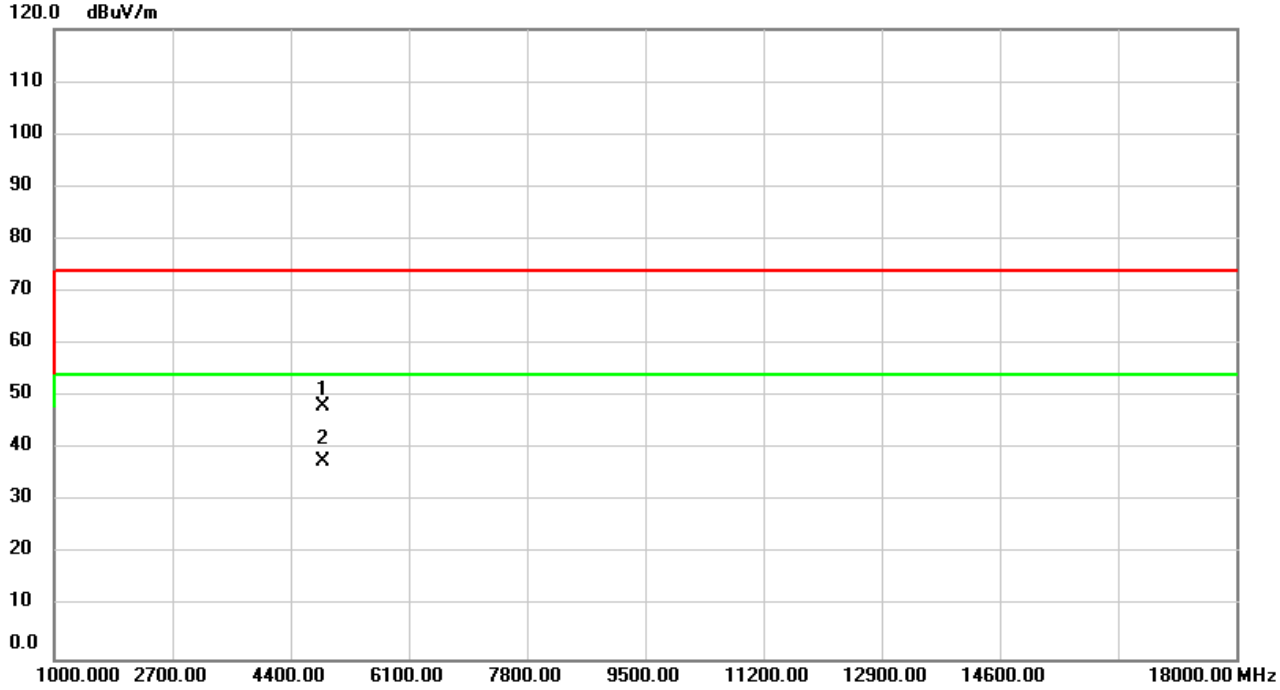
Test Mode	IEEE 802.11b	Test Date	2024/11/6
Test Frequency	2412MHz	Polarization	Horizontal
Temp	22°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	49.16	0.92	50.08	74.00	-23.92	peak	
2	*	4824.000	40.74	0.92	41.66	54.00	-12.34	AVG	

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

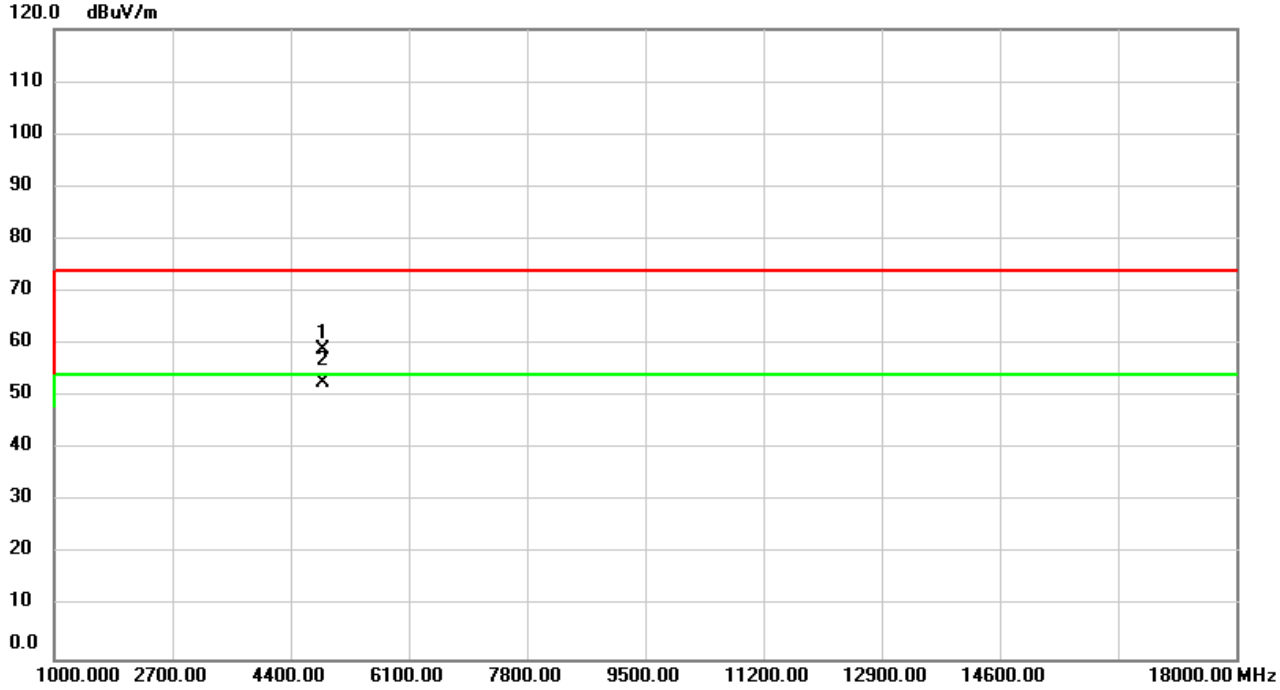
Test Mode	IEEE 802.11b	Test Date	2024/11/8
Test Frequency	2437MHz	Polarization	Vertical
Temp	20°C	Hum.	55%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.000	47.15	1.02	48.17	74.00	-25.83	peak	
2	*	4874.000	36.60	1.02	37.62	54.00	-16.38	AVG	

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

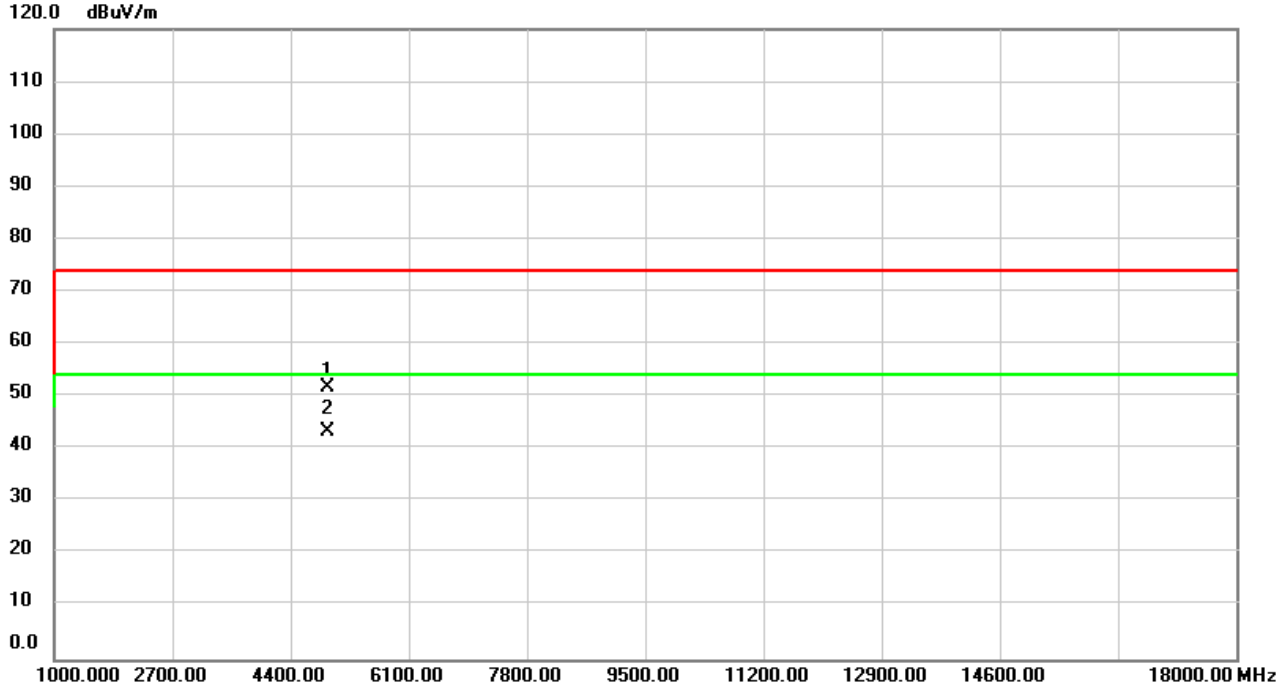
Test Mode	IEEE 802.11b	Test Date	2024/11/8
Test Frequency	2437MHz	Polarization	Horizontal
Temp	20°C	Hum.	55%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.000	58.04	1.02	59.06	74.00	-14.94	peak	
2	*	4874.000	51.62	1.02	52.64	54.00	-1.36	AVG	

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

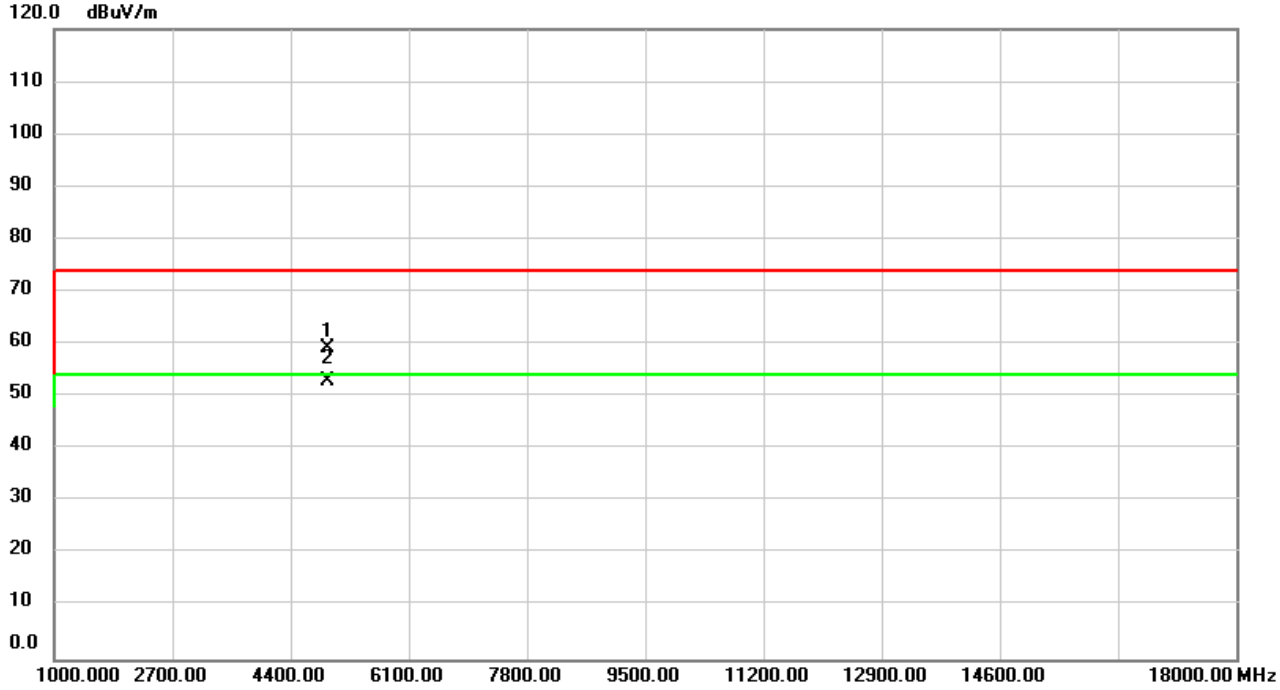
Test Mode	IEEE 802.11b	Test Date	2024/11/8
Test Frequency	2462MHz	Polarization	Vertical
Temp	20°C	Hum.	55%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	50.67	1.13	51.80	74.00	-22.20	peak	
2	*	4924.000	42.37	1.13	43.50	54.00	-10.50	AVG	

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

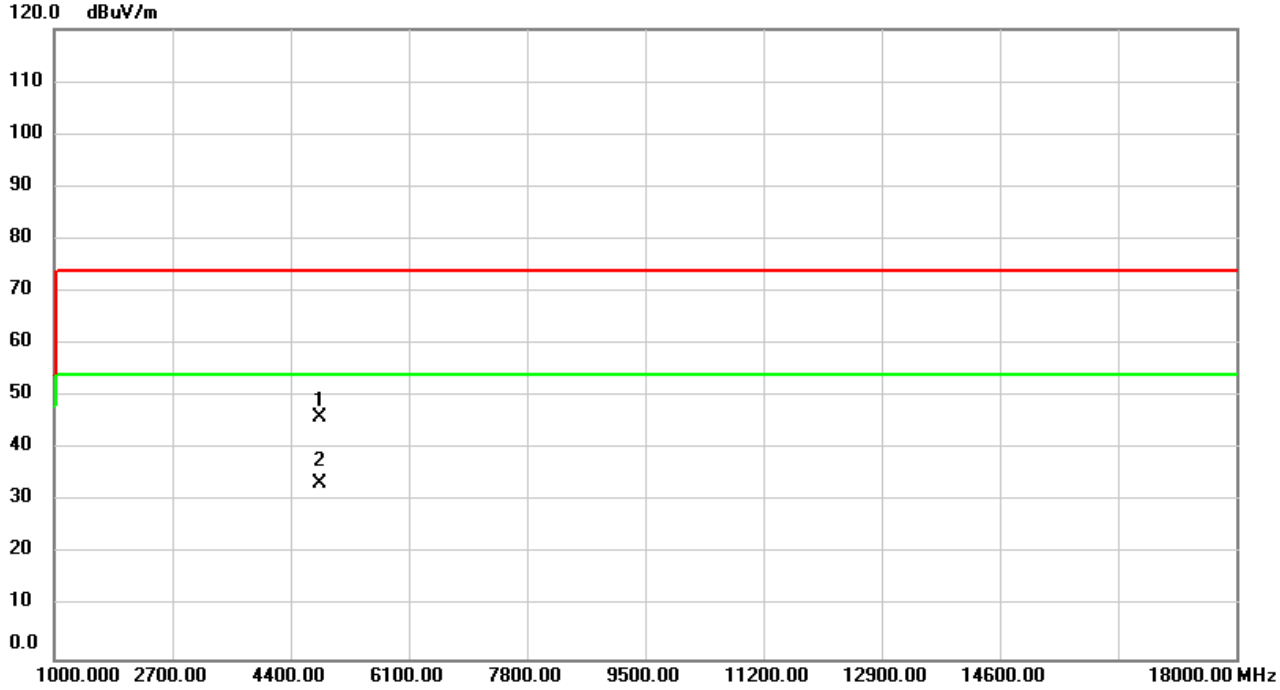
Test Mode	IEEE 802.11b	Test Date	2024/11/8
Test Frequency	2462MHz	Polarization	Horizontal
Temp	20°C	Hum.	55%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	58.27	1.13	59.40	74.00	-14.60	peak	
2	*	4924.000	51.75	1.13	52.88	54.00	-1.12	AVG	

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

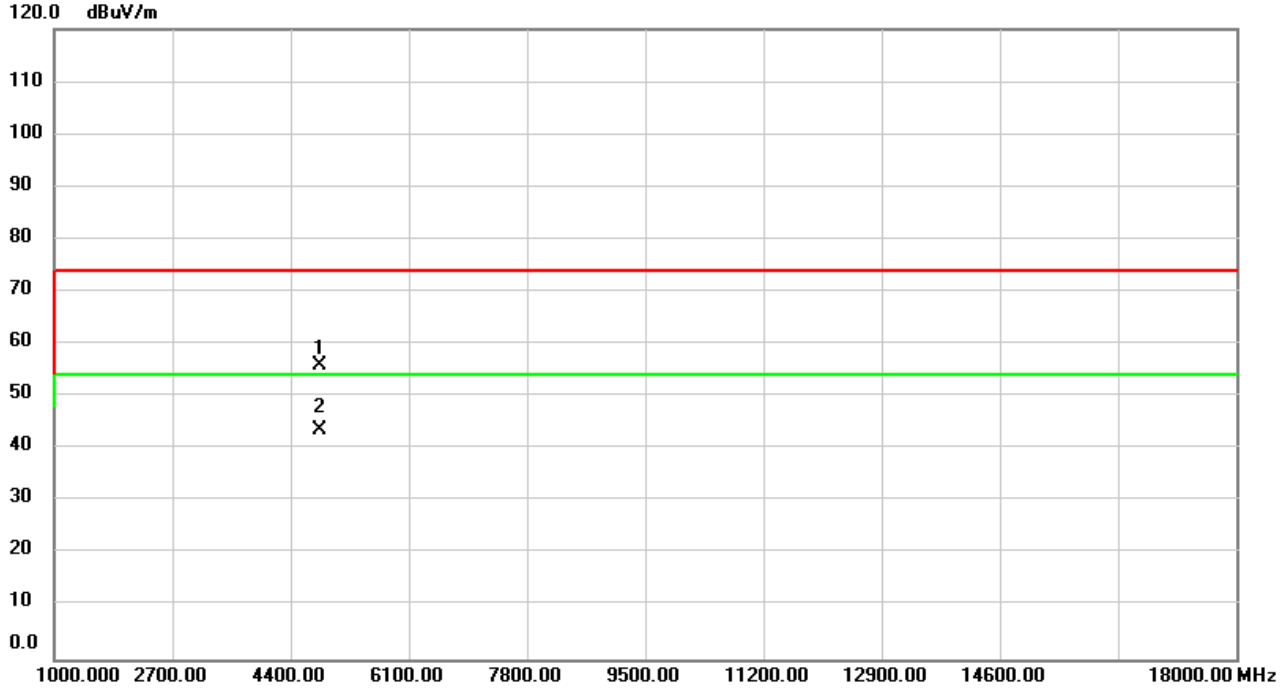
Test Mode	IEEE 802.11g	Test Date	2024/11/6
Test Frequency	2412MHz	Polarization	Vertical
Temp	22°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	45.16	0.92	46.08	74.00	-27.92	peak	
2	*	4824.000	32.63	0.92	33.55	54.00	-20.45	AVG	

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

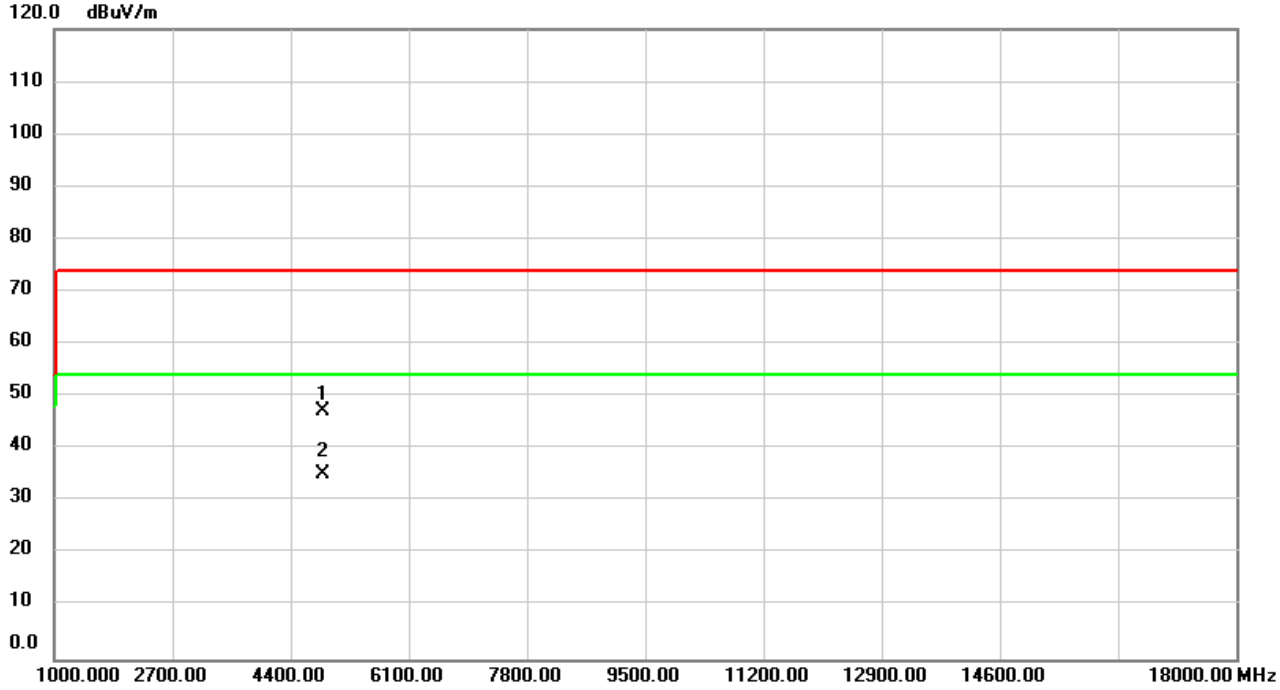
Test Mode	IEEE 802.11g	Test Date	2024/11/6
Test Frequency	2412MHz	Polarization	Horizontal
Temp	22°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	55.03	0.92	55.95	74.00	-18.05	peak	
2	*	4824.000	42.82	0.92	43.74	54.00	-10.26	AVG	

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

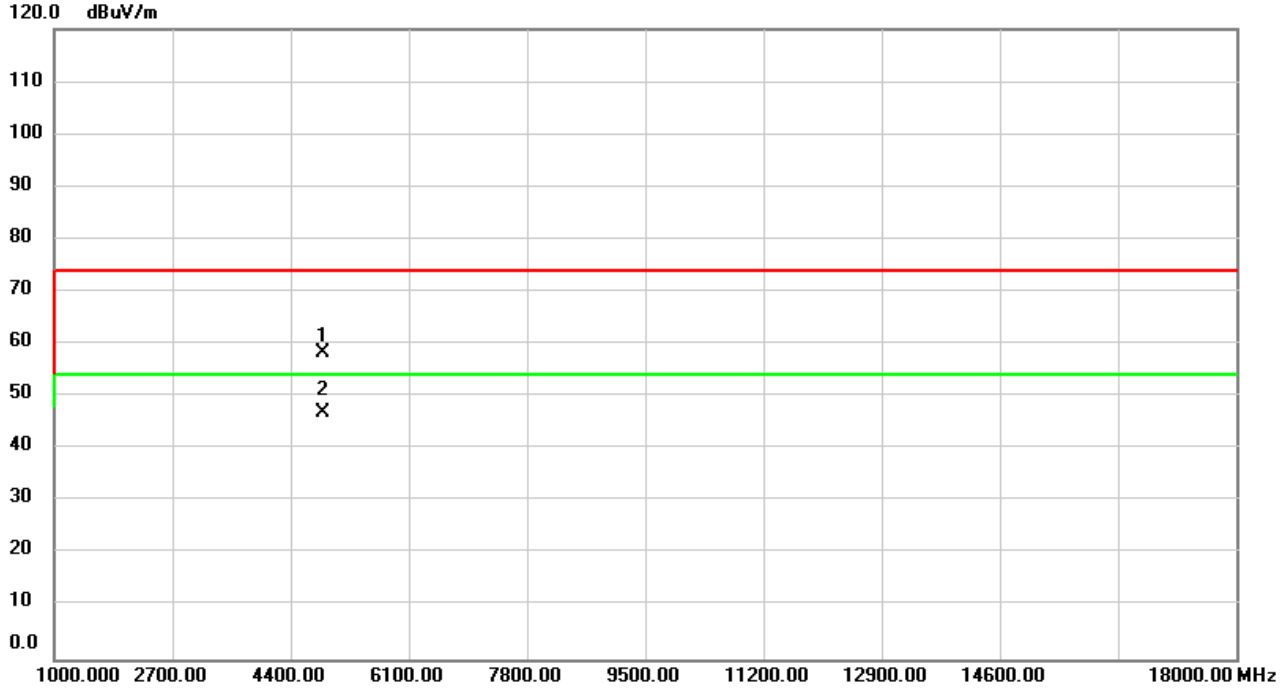
Test Mode	IEEE 802.11g	Test Date	2024/11/6
Test Frequency	2437MHz	Polarization	Vertical
Temp	22°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.000	46.22	1.02	47.24	74.00	-26.76	peak	
2	*	4874.000	34.23	1.02	35.25	54.00	-18.75	AVG	

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

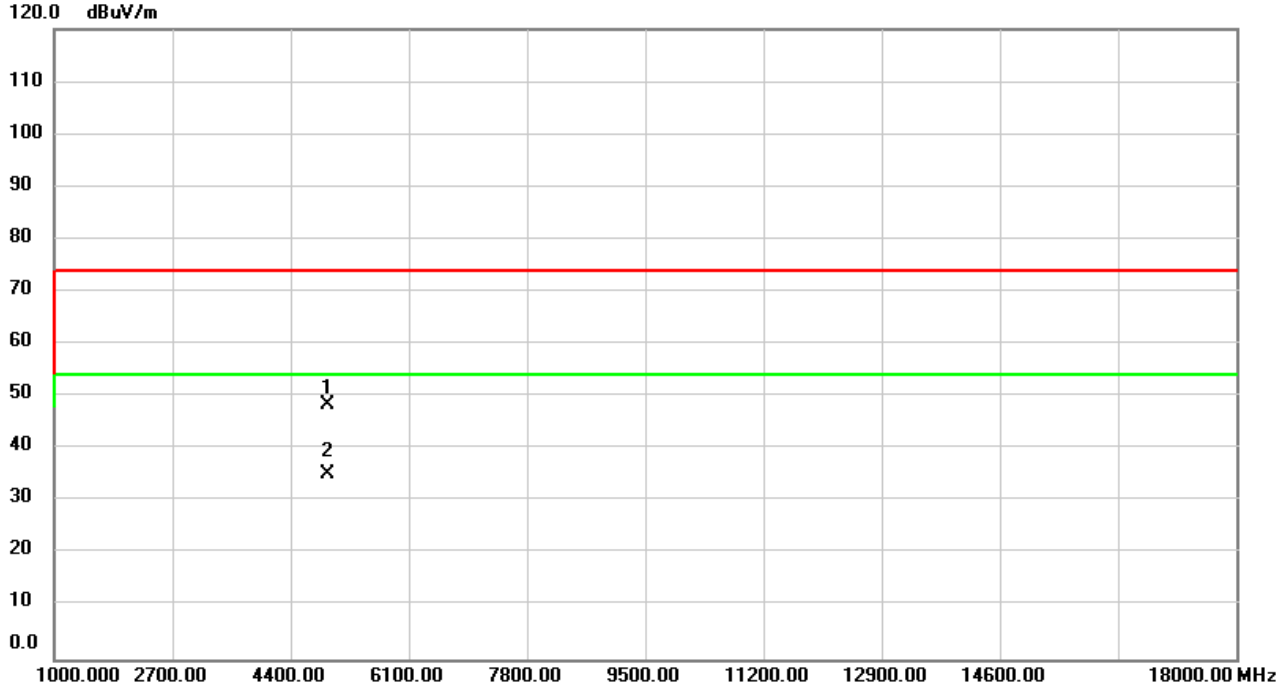
Test Mode	IEEE 802.11g	Test Date	2024/11/6
Test Frequency	2437MHz	Polarization	Horizontal
Temp	22°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.000	57.43	1.02	58.45	74.00	-15.55	peak	
2	*	4874.000	46.01	1.02	47.03	54.00	-6.97	AVG	

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

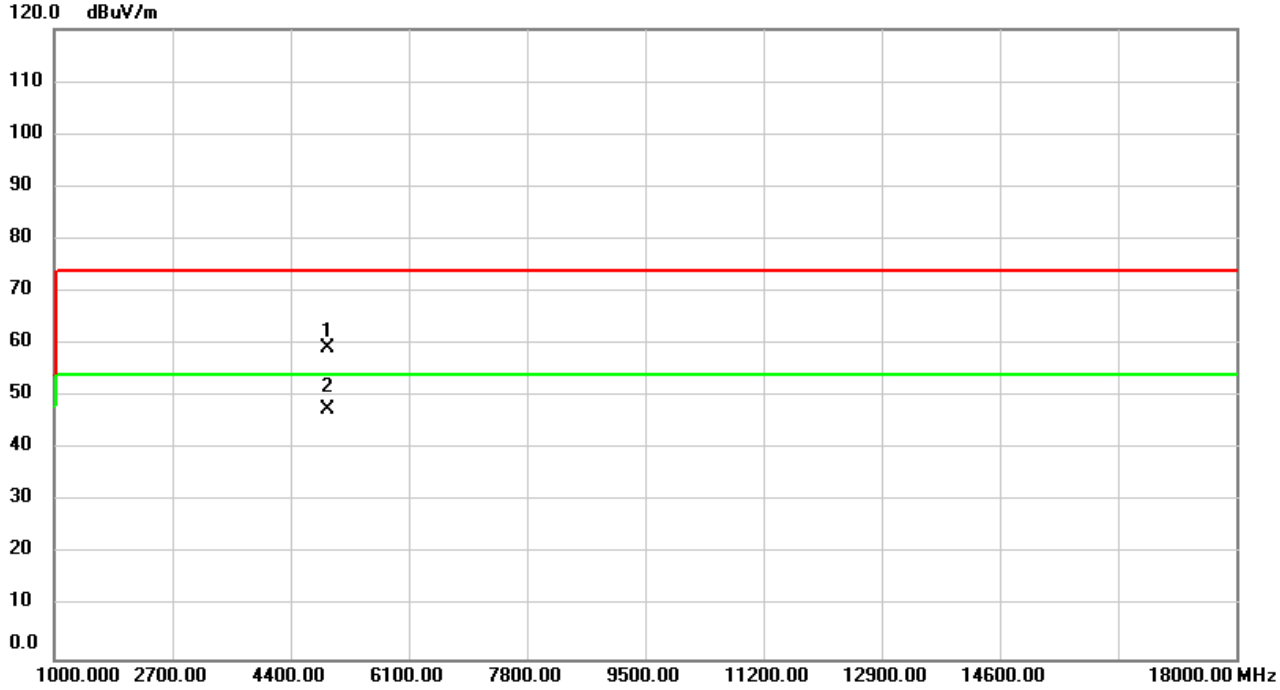
Test Mode	IEEE 802.11g	Test Date	2024/11/6
Test Frequency	2462MHz	Polarization	Vertical
Temp	22°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	47.24	1.13	48.37	74.00	-25.63	peak	
2	*	4924.000	34.10	1.13	35.23	54.00	-18.77	AVG	

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

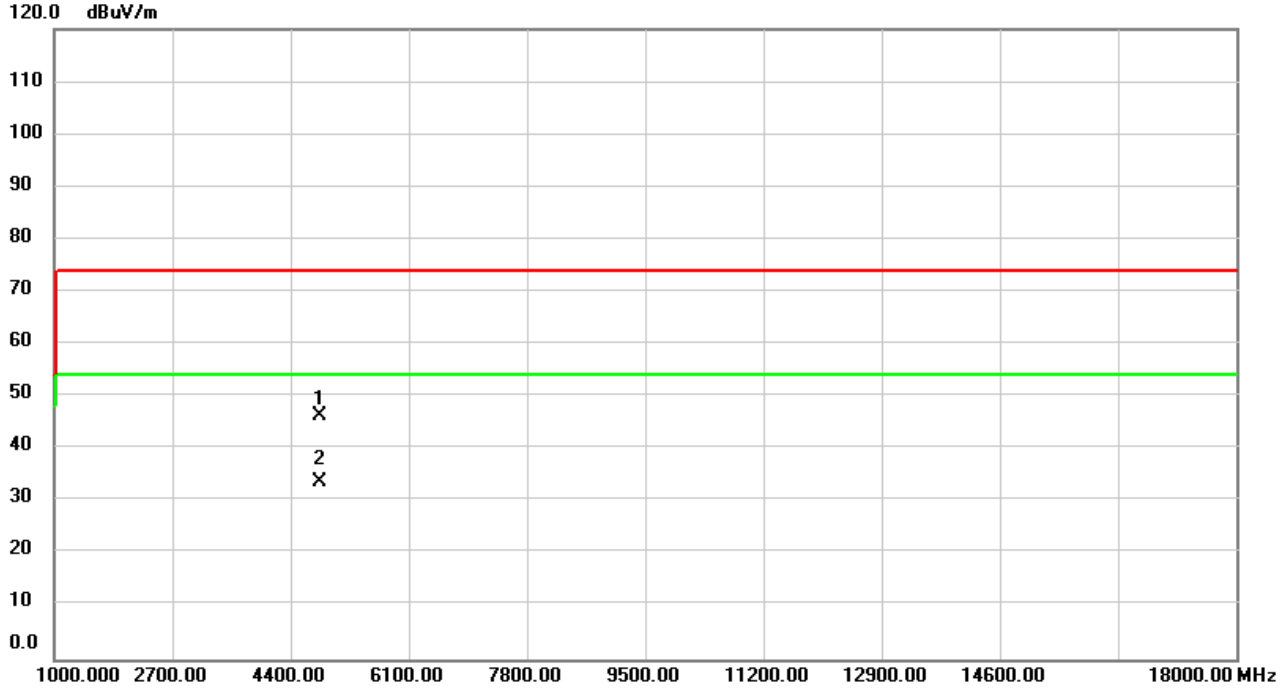
Test Mode	IEEE 802.11g	Test Date	2024/11/6
Test Frequency	2462MHz	Polarization	Horizontal
Temp	22°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	58.06	1.13	59.19	74.00	-14.81	peak	
2	*	4924.000	46.51	1.13	47.64	54.00	-6.36	AVG	

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

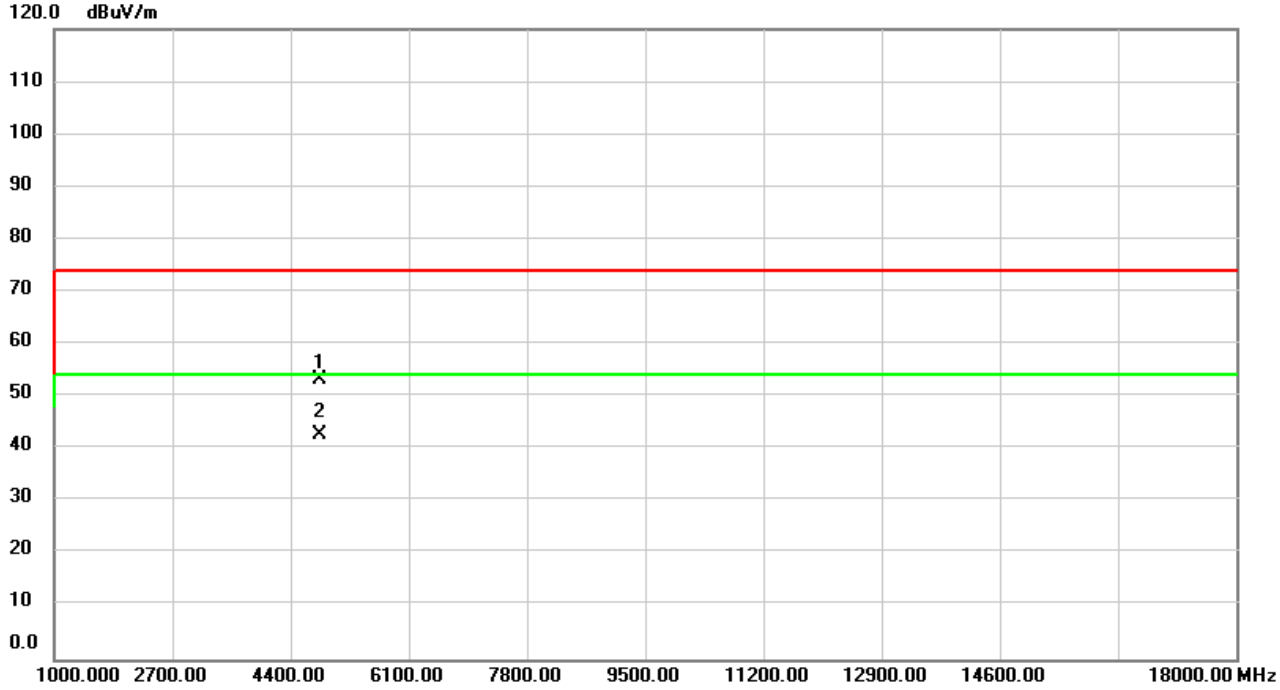
Test Mode	IEEE 802.11n (HT20)	Test Date	2024/11/6
Test Frequency	2412MHz	Polarization	Vertical
Temp	22°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	45.28	0.92	46.20	74.00	-27.80	peak	
2	*	4824.000	32.84	0.92	33.76	54.00	-20.24	AVG	

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

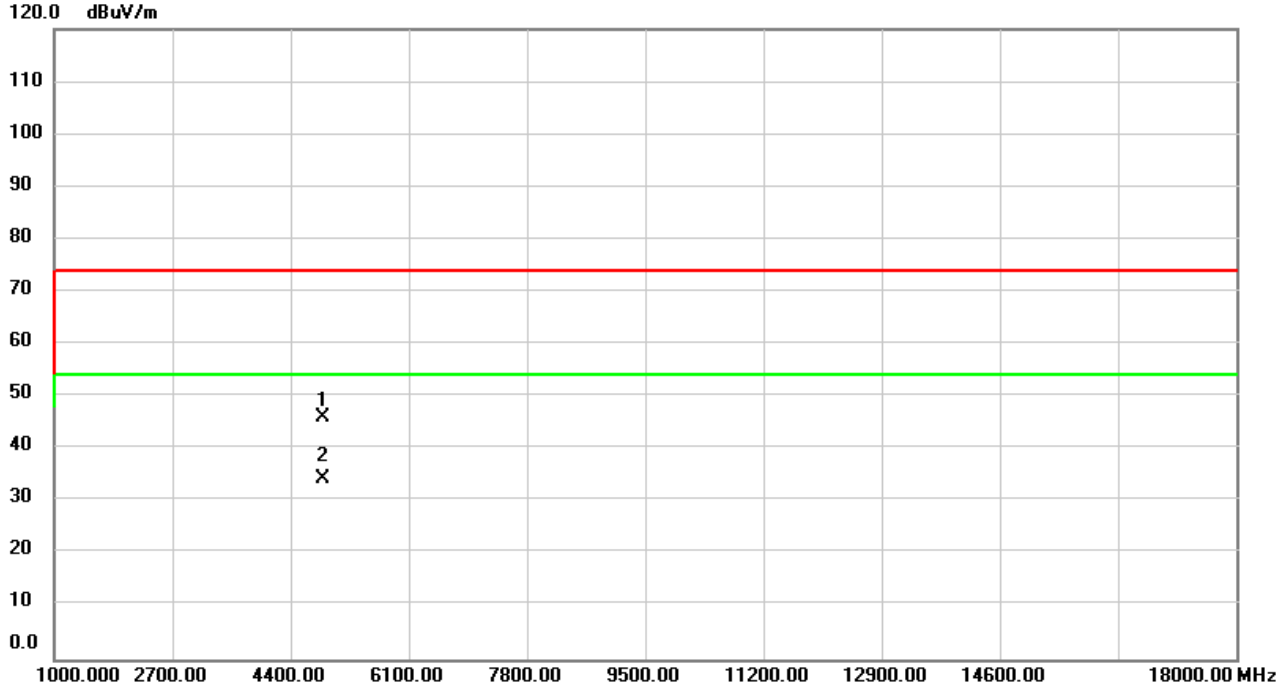
Test Mode	IEEE 802.11n (HT20)	Test Date	2024/11/6
Test Frequency	2412MHz	Polarization	Horizontal
Temp	22°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	52.20	0.92	53.12	74.00	-20.88	peak	
2	*	4824.000	41.94	0.92	42.86	54.00	-11.14	AVG	

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

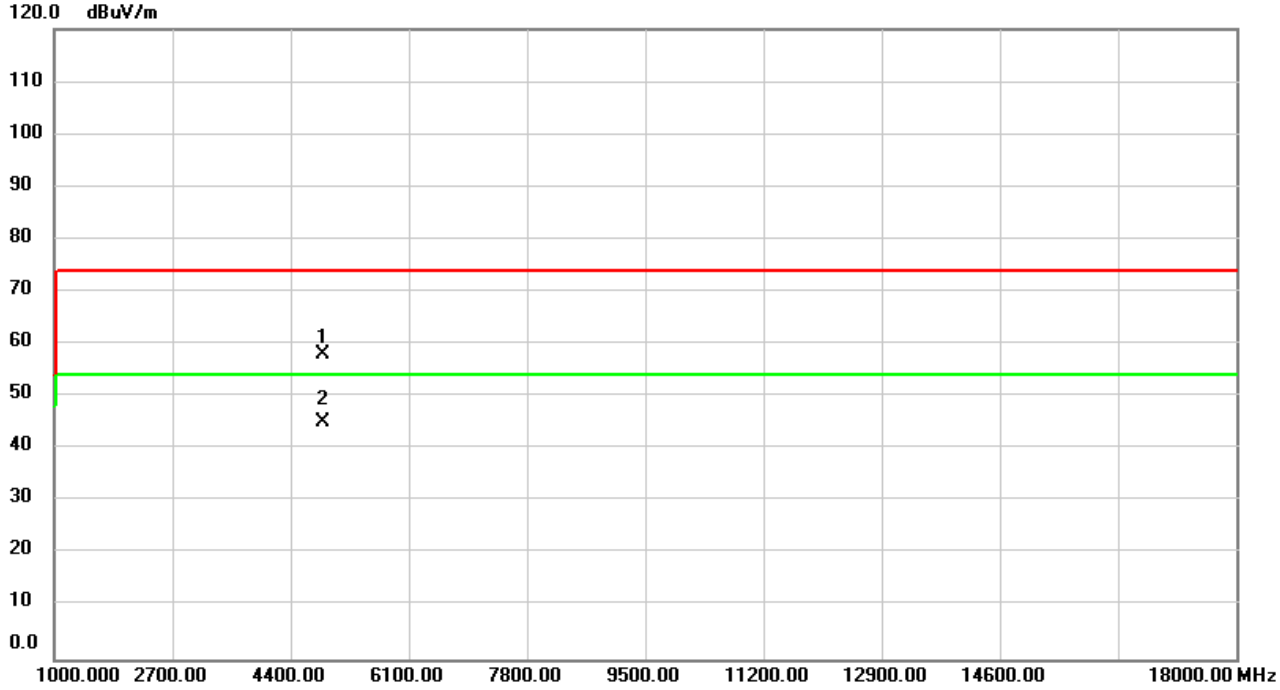
Test Mode	IEEE 802.11n (HT20)	Test Date	2024/11/6
Test Frequency	2437MHz	Polarization	Vertical
Temp	22°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.000	44.91	1.02	45.93	74.00	-28.07	peak	
2	*	4874.000	33.35	1.02	34.37	54.00	-19.63	AVG	

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

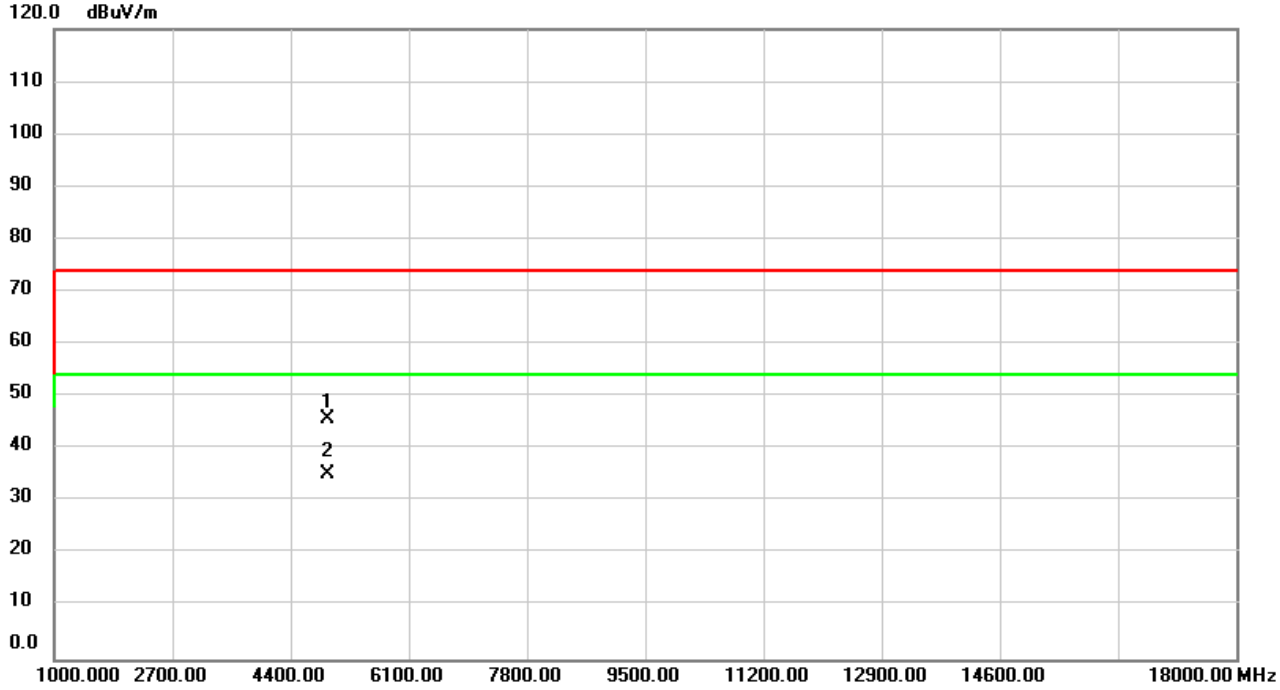
Test Mode	IEEE 802.11n (HT20)	Test Date	2024/11/6
Test Frequency	2437MHz	Polarization	Horizontal
Temp	22°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.000	56.91	1.02	57.93	74.00	-16.07	peak	
2	*	4874.000	44.16	1.02	45.18	54.00	-8.82	AVG	

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

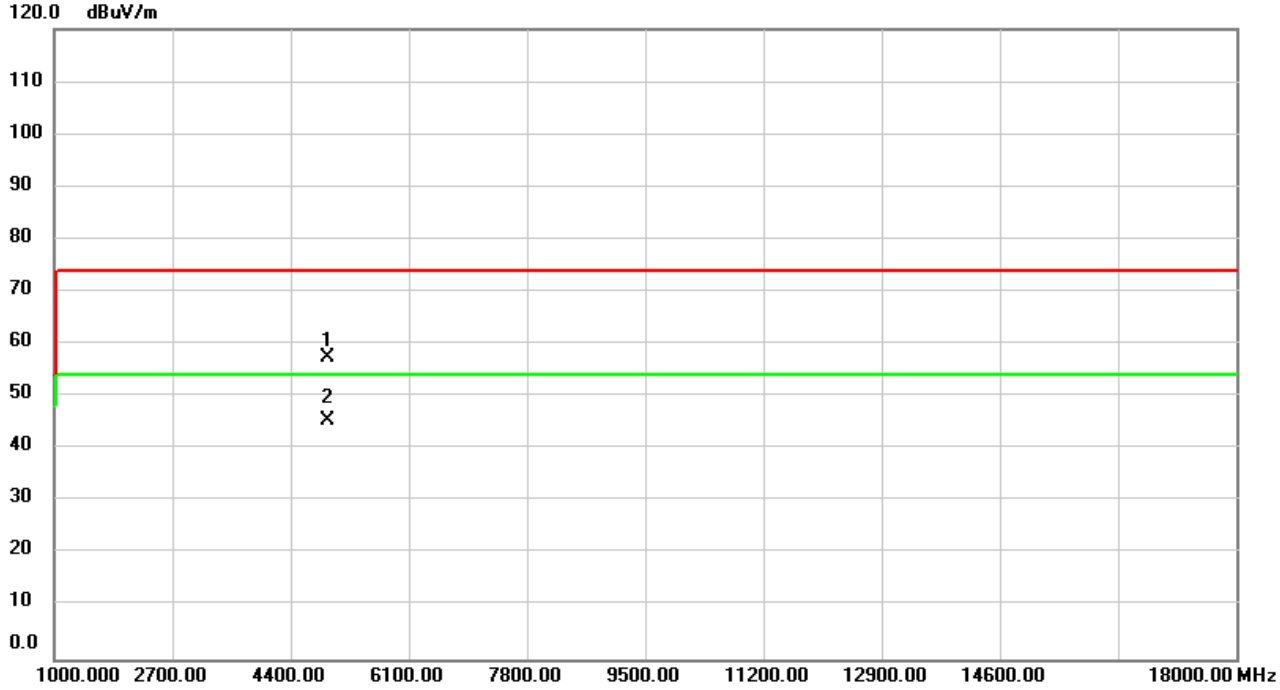
Test Mode	IEEE 802.11n (HT20)	Test Date	2024/11/6
Test Frequency	2462MHz	Polarization	Vertical
Temp	22°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	44.55	1.13	45.68	74.00	-28.32	peak	
2	*	4924.000	34.26	1.13	35.39	54.00	-18.61	AVG	

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

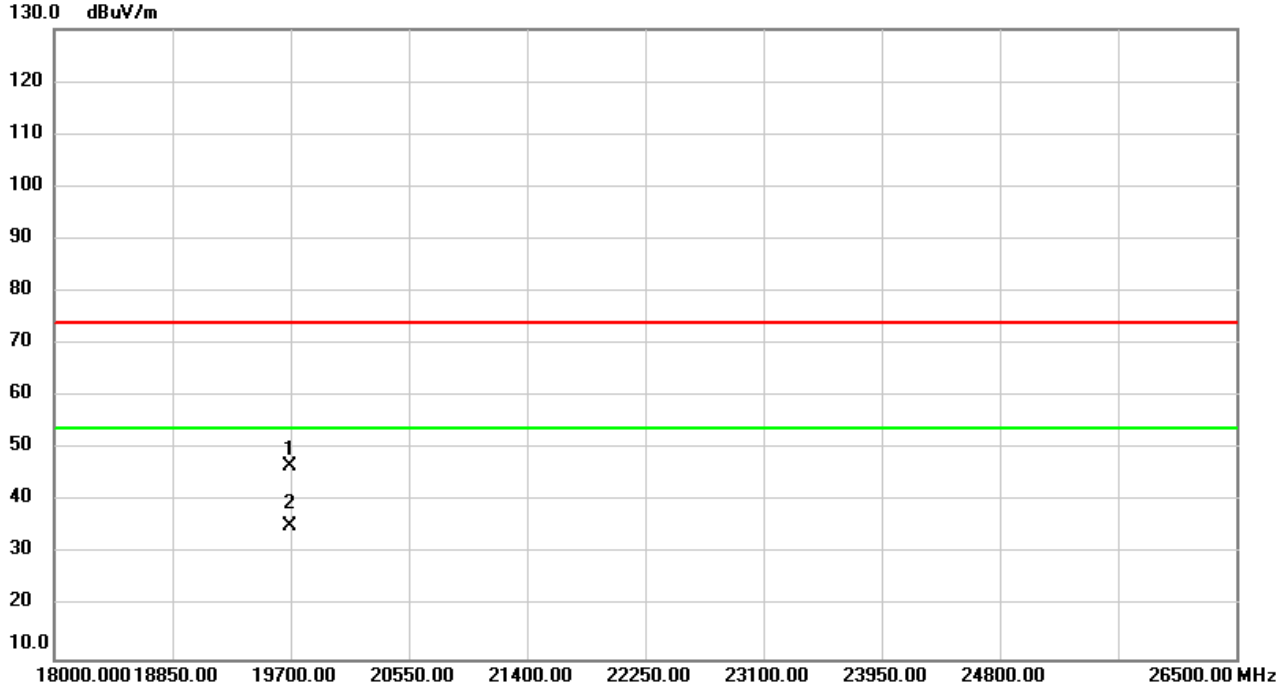
Test Mode	IEEE 802.11n (HT20)	Test Date	2024/11/6
Test Frequency	2462MHz	Polarization	Horizontal
Temp	22°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	56.32	1.13	57.45	74.00	-16.55	peak	
2	*	4924.000	44.35	1.13	45.48	54.00	-8.52	AVG	

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

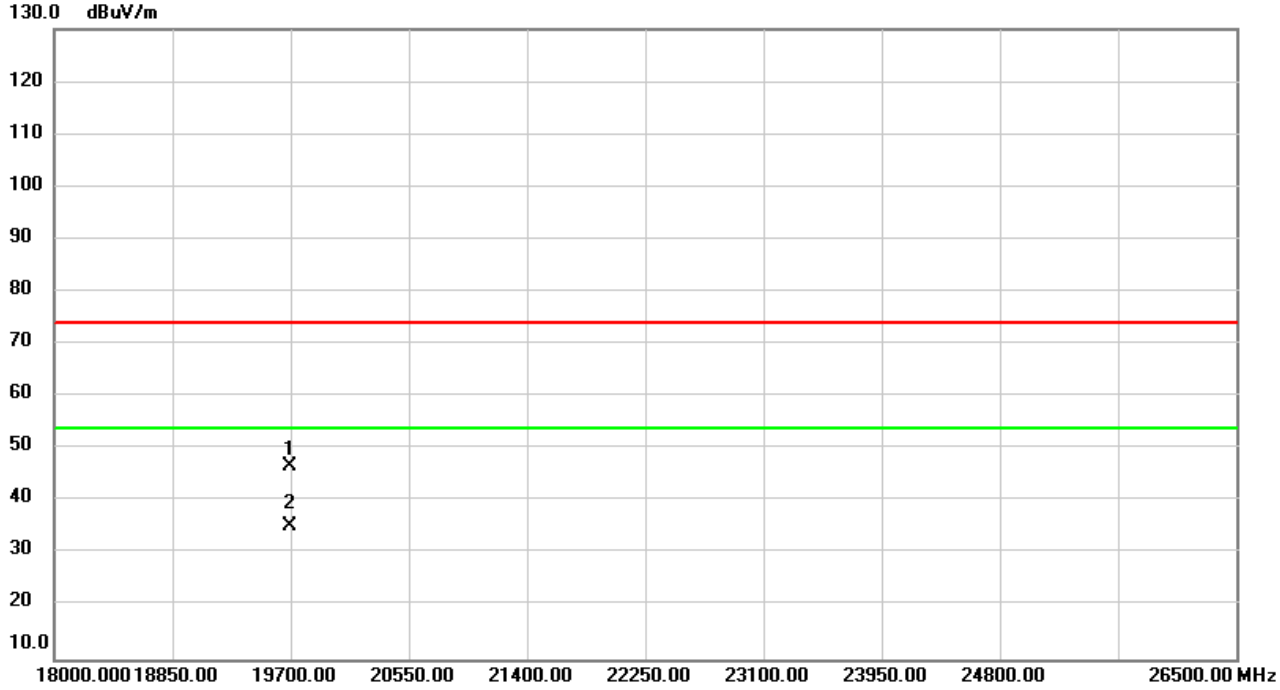
Test Mode	IEEE 802.11b	Test Date	2024/11/6
Test Frequency	2462MHz	Polarization	Vertical
Temp	22°C	Hum.	67%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		19696.00	53.57	-6.97	46.60	74.00	-27.40	peak	
2	*	19696.00	42.23	-6.97	35.26	54.00	-18.74	AVG	

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

Test Mode	IEEE 802.11b	Test Date	2024/11/6
Test Frequency	2462MHz	Polarization	Horizontal
Temp	22°C	Hum.	67%



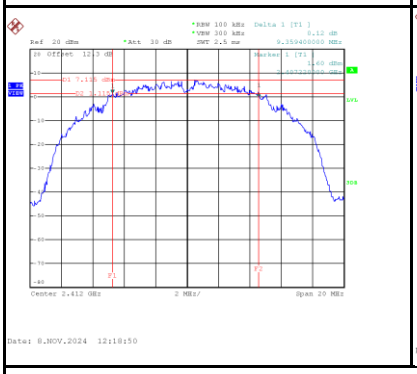
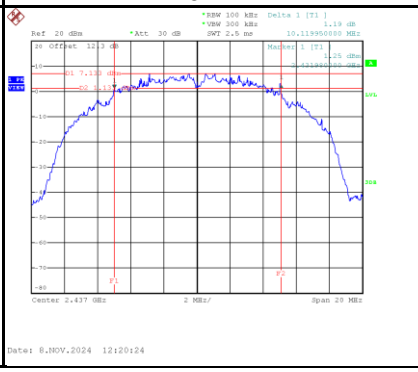
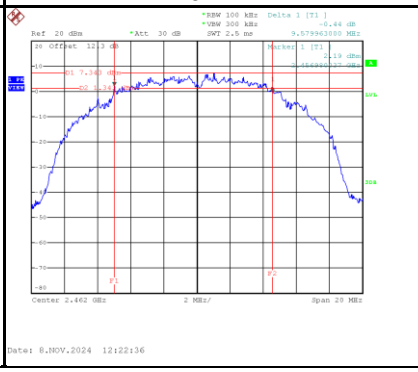
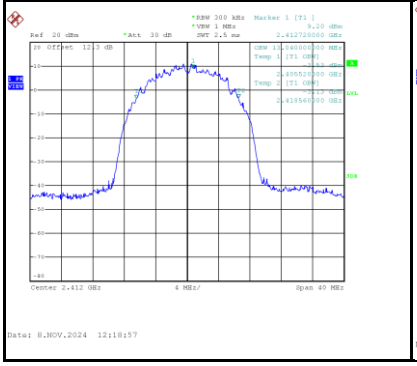
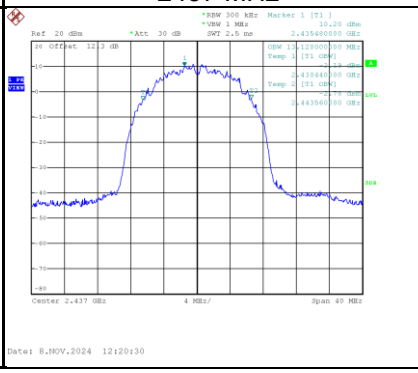
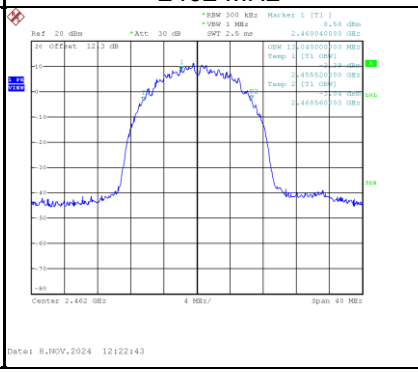
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		19696.00	53.83	-6.97	46.86	74.00	-27.14	peak	
2	*	19696.00	42.43	-6.97	35.46	54.00	-18.54	AVG	

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

APPENDIX E BANDWIDTH

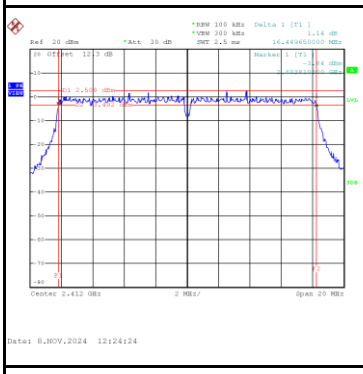
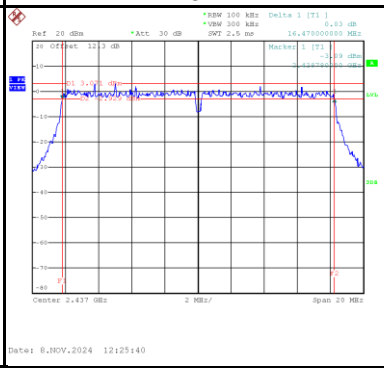
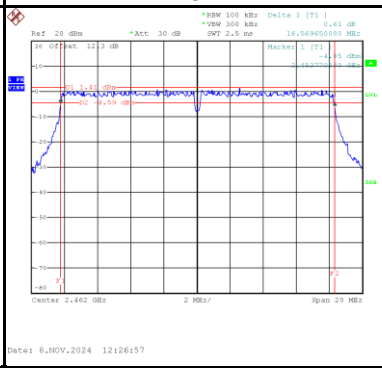
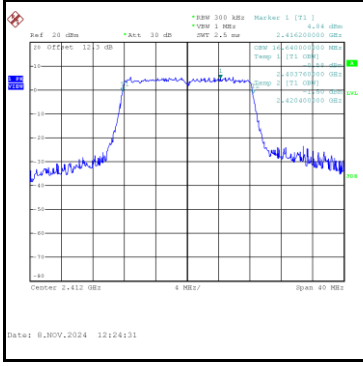
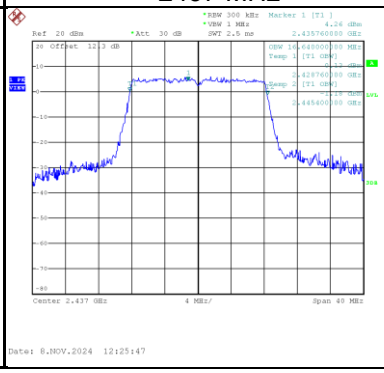
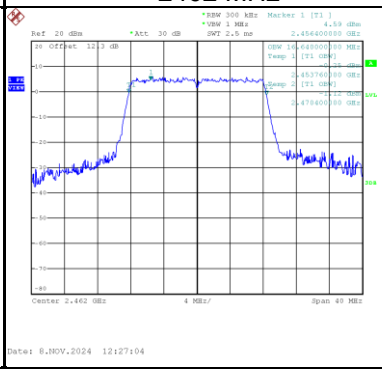
Test Mode	IEEE 802.11b

Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2412	9.36	13.04	≥ 500	Pass
2437	10.12	13.12	≥ 500	Pass
2462	9.58	13.04	≥ 500	Pass

6dB Bandwidth		
2412 MHz	2437 MHz	2462 MHz
		
99% Occupied BW		
2412 MHz	2437 MHz	2462 MHz
		

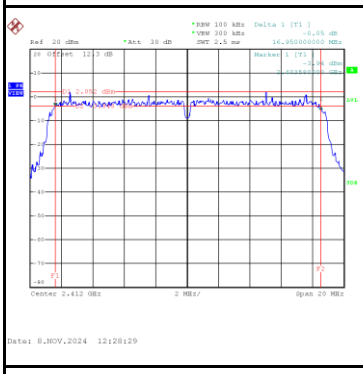
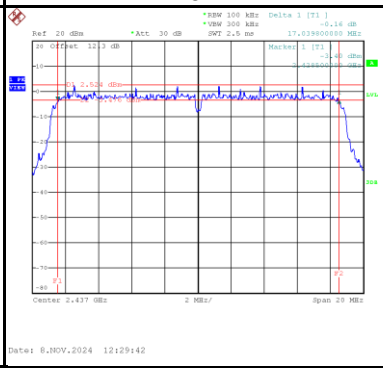
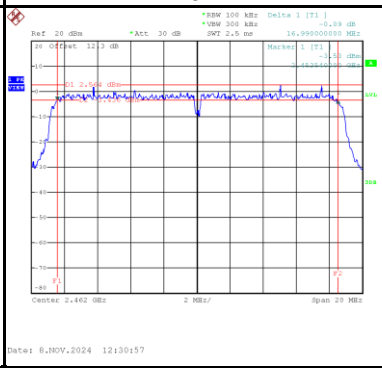
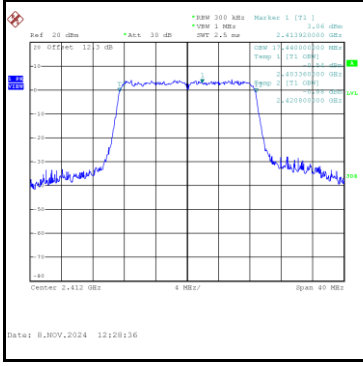
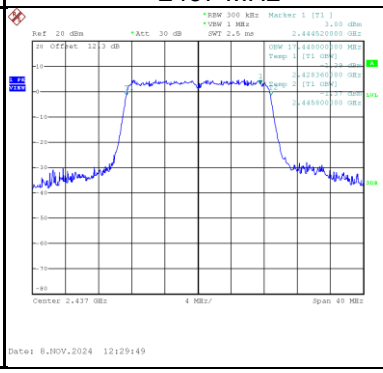
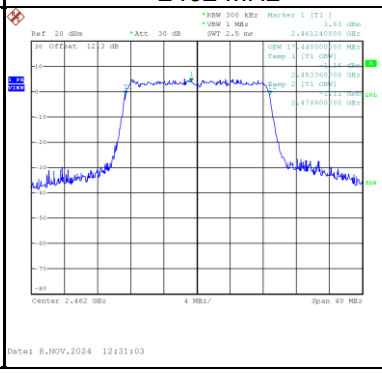
Test Mode	IEEE 802.11g

Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2412	16.45	16.64	≥ 500	Pass
2437	16.47	16.64	≥ 500	Pass
2462	16.57	16.64	≥ 500	Pass

6dB Bandwidth		
2412 MHz	2437 MHz	2462 MHz
		
99% Occupied BW		
2412 MHz	2437 MHz	2462 MHz
		

Test Mode	IEEE 802.11n (HT20)

Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2412	16.95	17.44	≥ 500	Pass
2437	17.04	17.44	≥ 500	Pass
2462	16.99	17.44	≥ 500	Pass

6dB Bandwidth		
2412 MHz	2437 MHz	2462 MHz
		
99% Occupied BW		
2412 MHz	2437 MHz	2462 MHz
		

APPENDIX F OUTPUT POWER

Test Mode	IEEE 802.11b	Tested Date	2024/11/8

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Limit (dBm)	Limit (W)	Result
2412	19.52	0.0895	30.00	1.0000	Pass
2437	19.65	0.0923	30.00	1.0000	Pass
2462	18.04	0.0637	30.00	1.0000	Pass

Test Mode	IEEE 802.11g	Tested Date	2024/11/8

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Limit (dBm)	Limit (W)	Result
2412	22.91	0.1954	30.00	1.0000	Pass
2437	23.15	0.2065	30.00	1.0000	Pass
2462	23.28	0.2128	30.00	1.0000	Pass

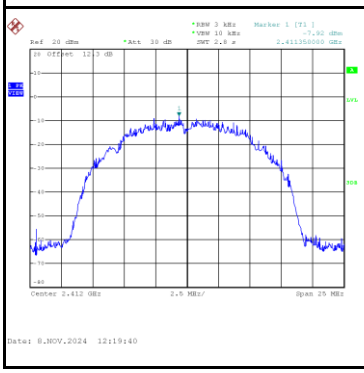
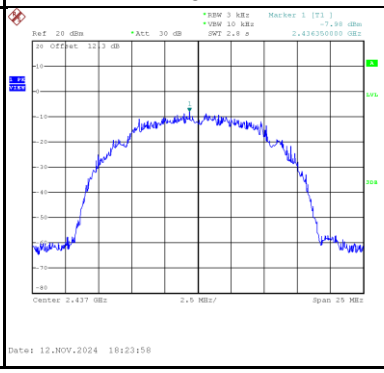
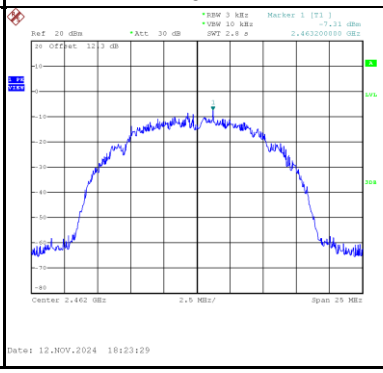
Test Mode	IEEE 802.11n (HT20)	Tested Date	2024/11/8

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Limit (dBm)	Limit (W)	Result
2412	22.72	0.1871	30.00	1.0000	Pass
2437	22.88	0.1941	30.00	1.0000	Pass
2462	22.98	0.1986	30.00	1.0000	Pass

APPENDIX G POWER SPECTRAL DENSITY

Test Mode	IEEE 802.11b

Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2412	-7.92	8.00	Pass
2437	-7.98	8.00	Pass
2462	-7.31	8.00	Pass

2412 MHz	2437 MHz	2462 MHz
		

Test Mode	IEEE 802.11g

Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2412	-11.30	8.00	Pass
2437	-11.25	8.00	Pass
2462	-11.15	8.00	Pass

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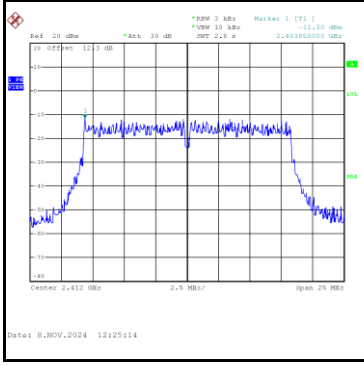
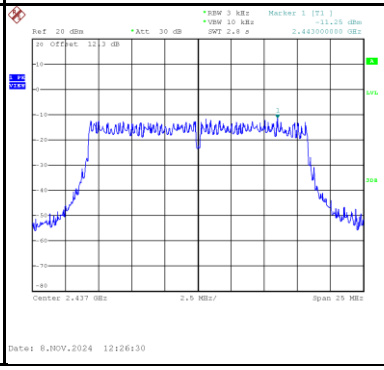
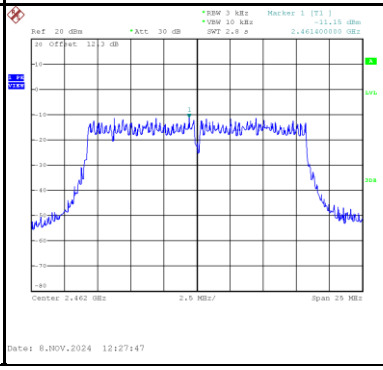
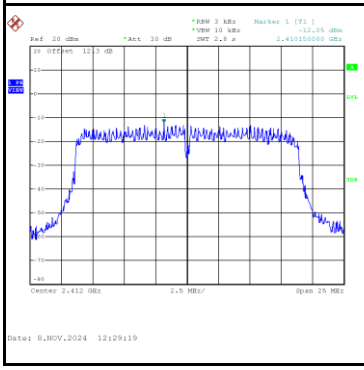
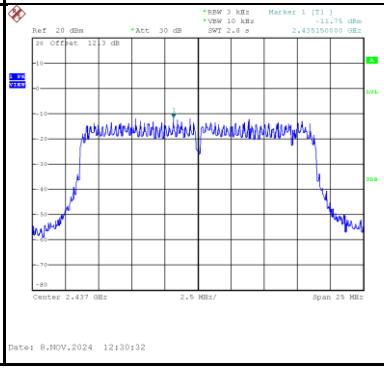
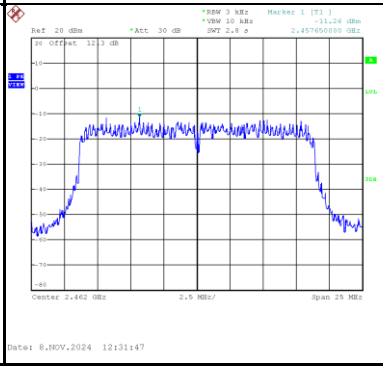
2412 MHz	2437 MHz	2462 MHz
		

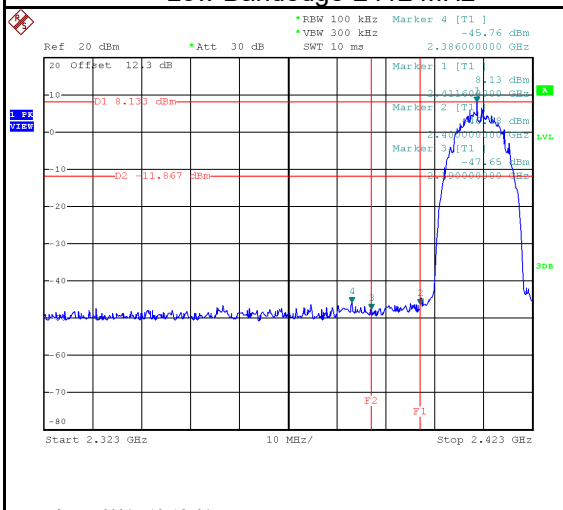
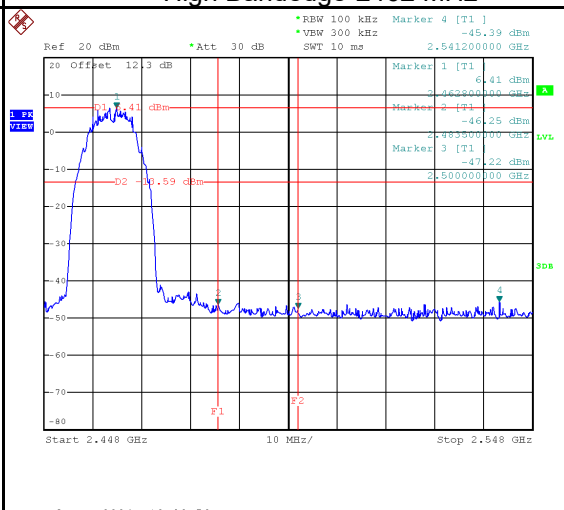
Test Mode	IEEE 802.11n (HT20)

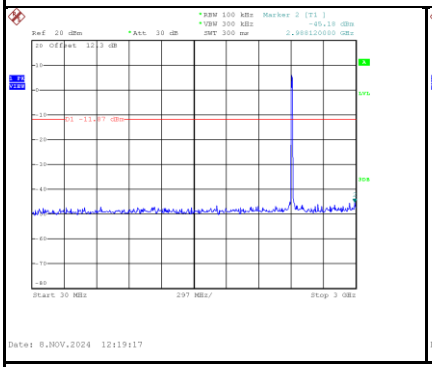
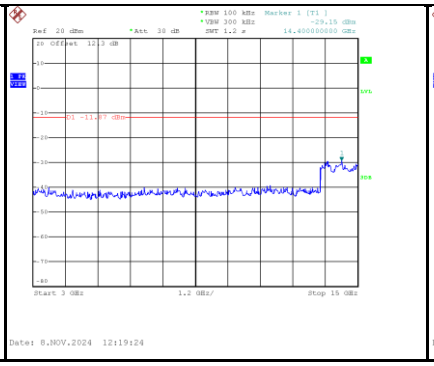
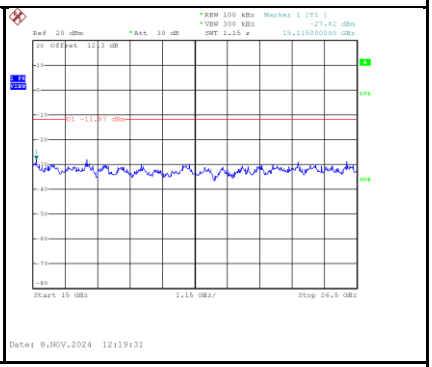
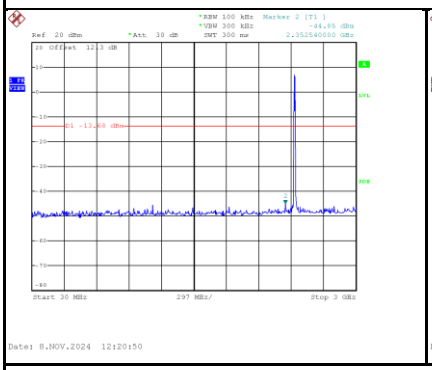
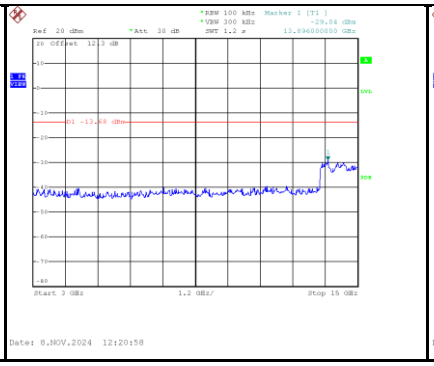
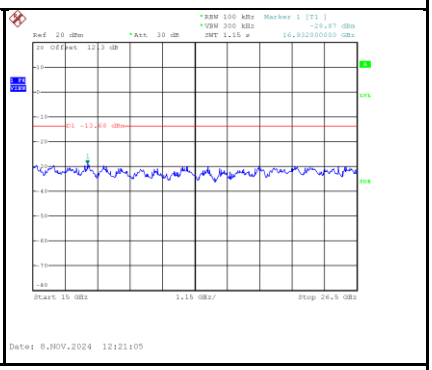
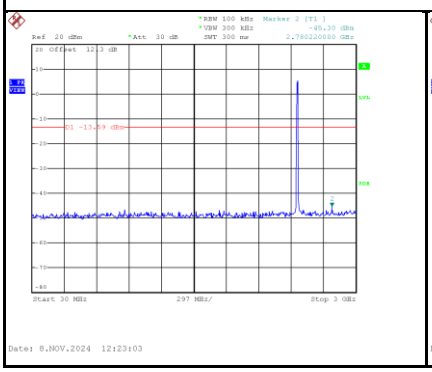
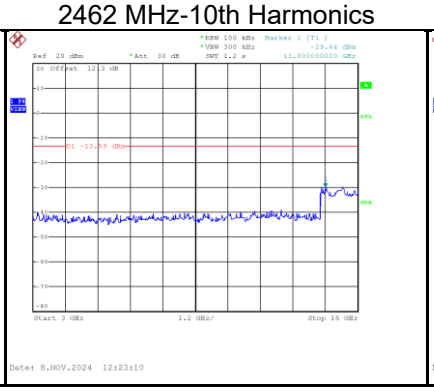
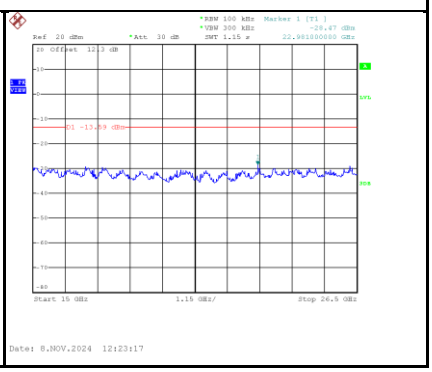
Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2412	-12.05	8.00	Pass
2437	-11.75	8.00	Pass
2462	-11.26	8.00	Pass

2412 MHz	2437 MHz	2462 MHz
		

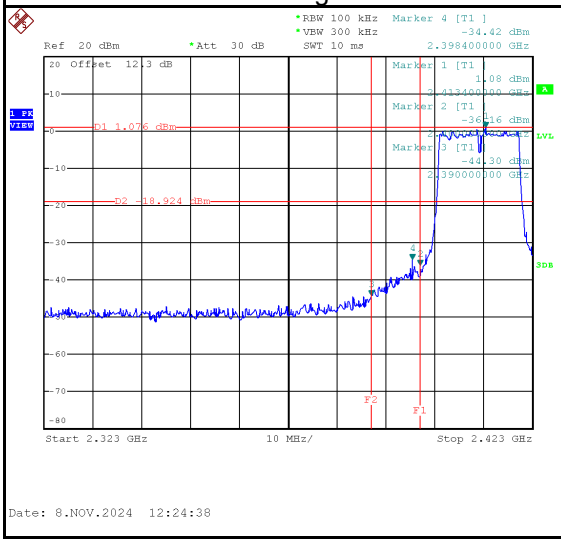
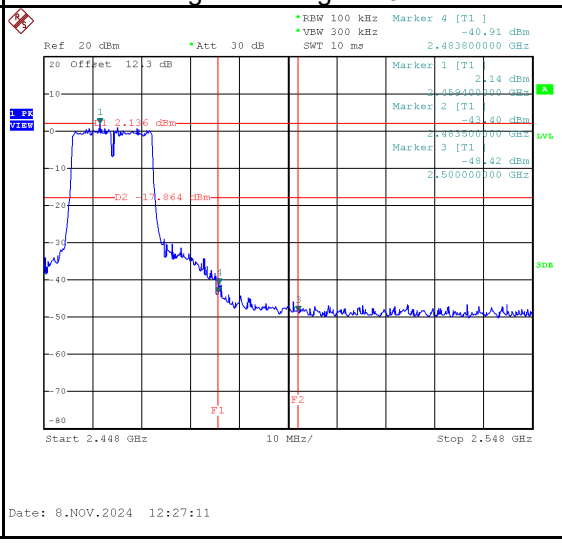
APPENDIX H ANTENNA CONDUCTED SPURIOUS EMISSIONS

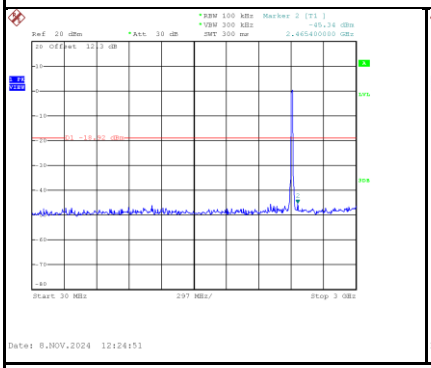
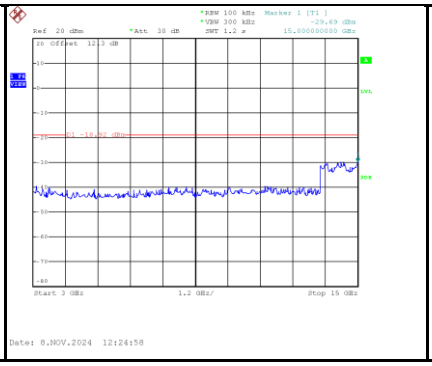
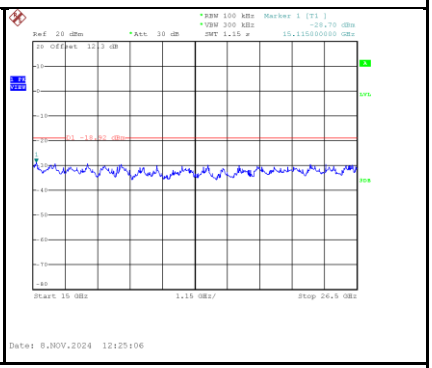
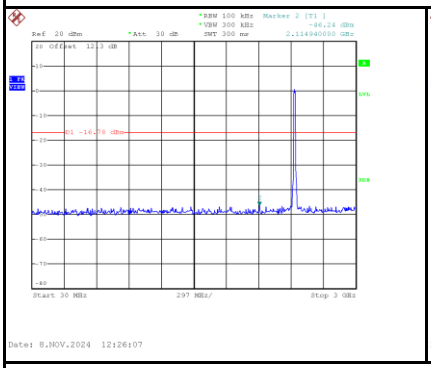
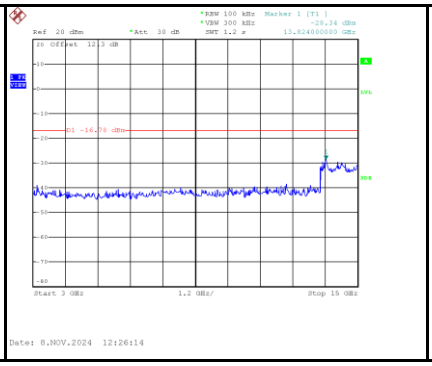
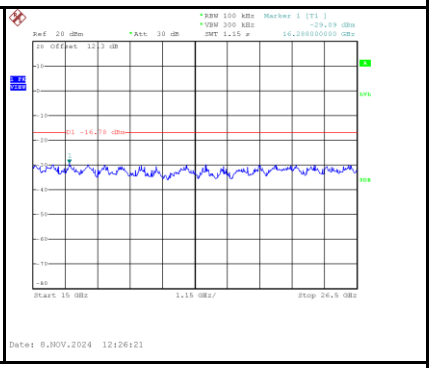
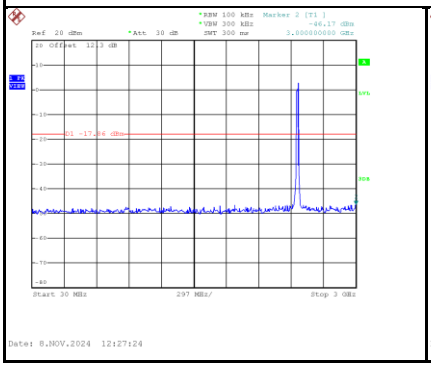
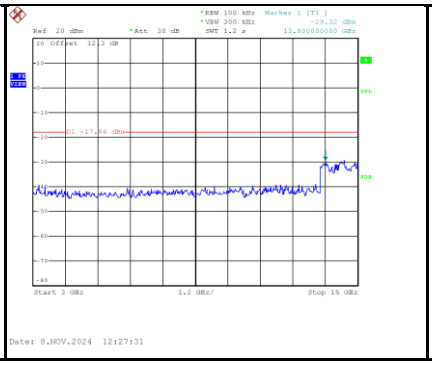
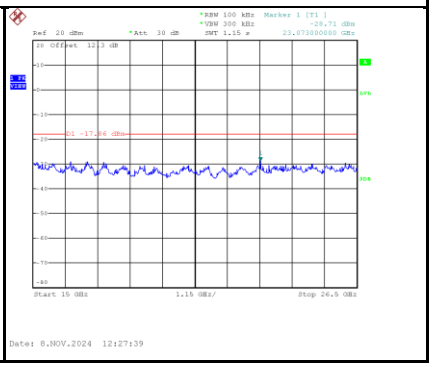
Test Mode	IEEE 802.11b

Low Bandedge-2412 MHz	High Bandedge-2462 MHz
	

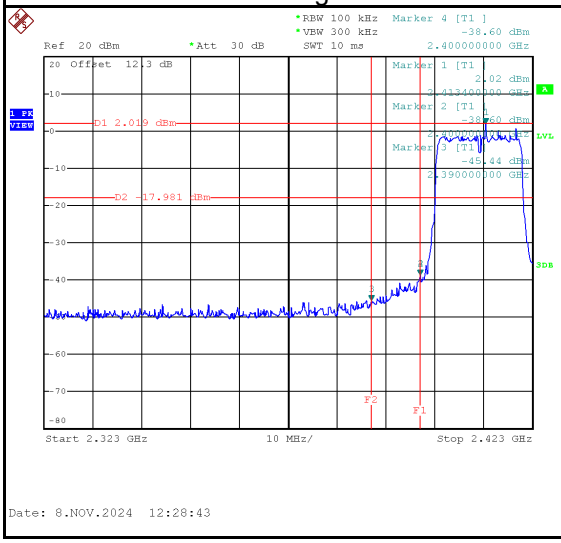
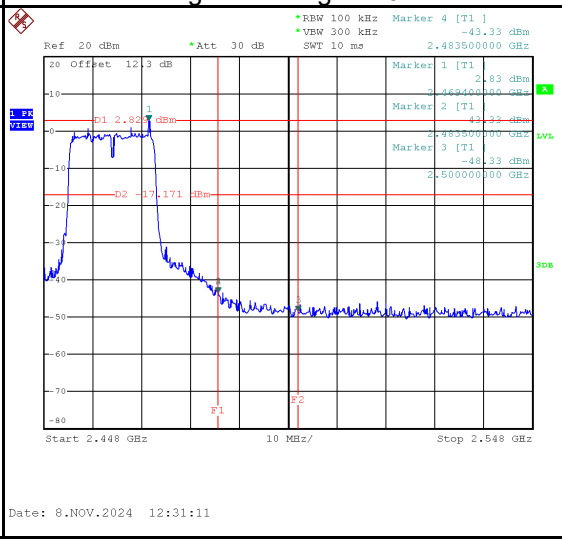
2412 MHz-10th Harmonics		
		
2437 MHz-10th Harmonics		
		
2462 MHz-10th Harmonics		
		

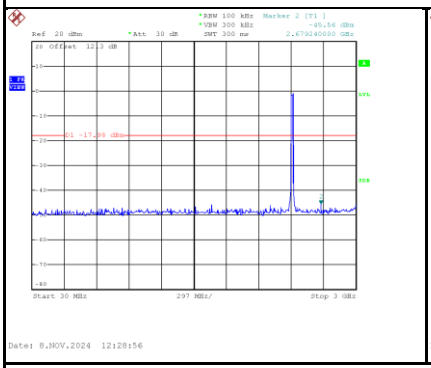
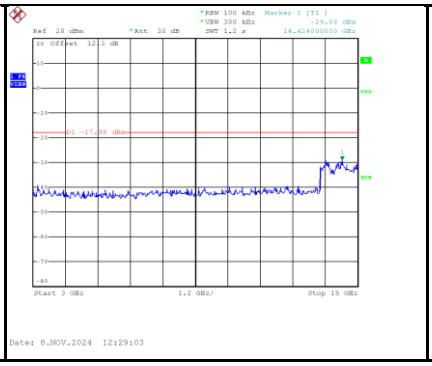
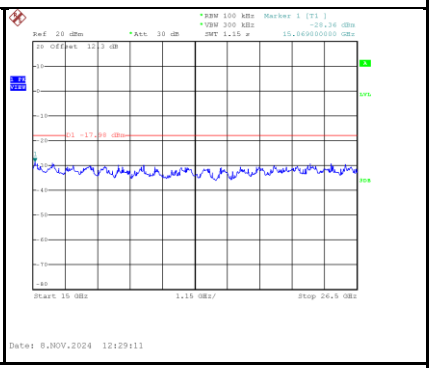
Test Mode	IEEE 802.11g

Low Bandedge-2412 MHz	High Bandedge-2462 MHz
	

2412 MHz-10th Harmonics		
		
2437 MHz-10th Harmonics		
		
2462 MHz-10th Harmonics		
		

Test Mode	IEEE 802.11n (HT20)

Low Bandedge-2412 MHz	High Bandedge-2462 MHz
	

2412 MHz-10th Harmonics		
		
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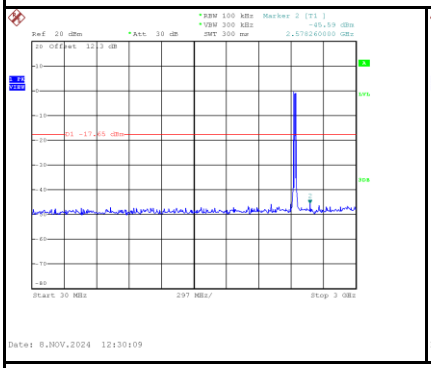
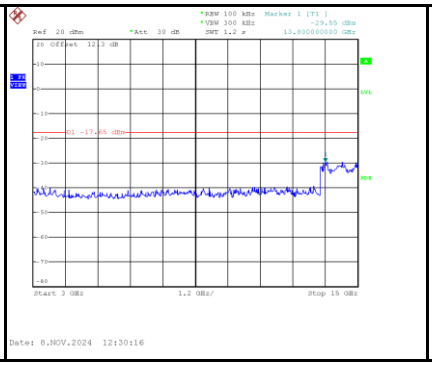
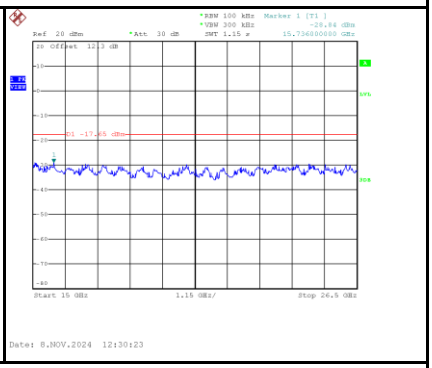
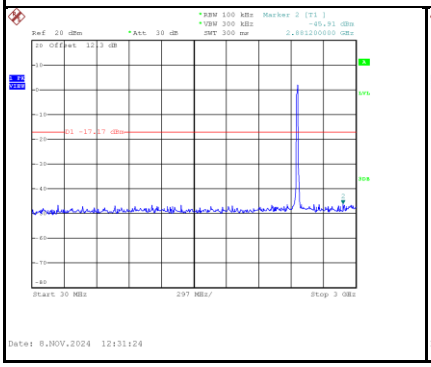
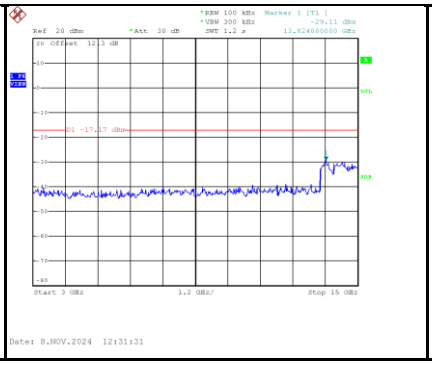
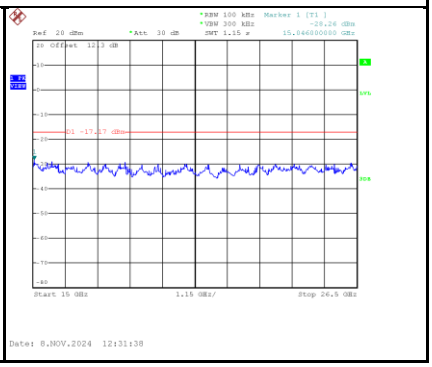
		
2462 MHz-10th Harmonics		
		

End of Test Report