

FCC Radio Test Report

FCC ID: 2BCGWC110V2

Report No. : BTL-FCCP-1-2407G076
Equipment : Home Security Wi-Fi Camera
Model Name : Tapo C110
Series Model : Tapo C111
Brand Name : tp-link
Applicant : TP-LINK CORPORATION PTE. LTD.
Address : 7 Temasek Boulevard #29-03 Suntec Tower One, Singapore 038987

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 : 2024/9/4
Date of Test : 2024/9/5 ~ 2024/9/12
Issued Date : 2024/10/8

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

Prepared by : Poken Huang
Poken Huang, Engineer

Approved by : Peter Chen
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** 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	5
1 SUMMARY OF TEST RESULTS	6
1.1 TEST FACILITY	7
1.2 MEASUREMENT UNCERTAINTY	7
1.3 TEST ENVIRONMENT CONDITIONS	7
1.4 DUTY CYCLE	8
2 GENERAL INFORMATION	9
2.1 DESCRIPTION OF EUT	9
2.2 TEST MODES	10
2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	11
2.4 SUPPORT UNITS	12
3 AC POWER LINE CONDUCTED EMISSIONS TEST	13
3.1 LIMIT	13
3.2 TEST PROCEDURE	13
3.3 DEVIATION FROM TEST STANDARD	13
3.4 TEST SETUP	14
3.5 TEST RESULT	14
4 RADIATED EMISSIONS TEST	15
4.1 LIMIT	15
4.2 TEST PROCEDURE	16
4.3 DEVIATION FROM TEST STANDARD	16
4.4 TEST SETUP	16
4.5 EUT OPERATING CONDITIONS	17
4.6 TEST RESULT – 9KHZ TO 30 MHZ	18
4.7 TEST RESULT – 30 MHZ TO 1 GHZ	18
4.8 TEST RESULT – ABOVE 1 GHZ	18
5 BANDWIDTH TEST	19
5.1 LIMIT	19
5.2 TEST PROCEDURE	19
5.3 DEVIATION FROM TEST STANDARD	19
5.4 TEST SETUP	19
5.5 EUT OPERATING CONDITIONS	19
5.6 TEST RESULT	19
6 MAXIMUM OUTPUT POWER TEST	20
6.1 LIMIT	20
6.2 TEST PROCEDURE	20
6.3 DEVIATION FROM TEST STANDARD	20
6.4 TEST SETUP	20
6.5 EUT OPERATING CONDITIONS	20
6.6 TEST RESULT	20
7 POWER SPECTRAL DENSITY	21
7.1 LIMIT	21
7.2 TEST PROCEDURE	21
7.3 DEVIATION FROM TEST STANDARD	21
7.4 TEST SETUP	21
7.5 EUT OPERATING CONDITIONS	21
7.6 TEST RESULT	21

8	ANTENNA CONDUCTED SPURIOUS EMISSIONS TEST	22
8.1	LIMIT	22
8.2	TEST PROCEDURE	22
8.3	DEVIATION FROM TEST STANDARD	22
8.4	TEST SETUP	22
8.5	EUT OPERATING CONDITIONS	22
8.6	TEST RESULT	22
9	LIST OF MEASURING EQUIPMENTS	23
10	EUT TEST PHOTO	25
11	EUT PHOTOS	25
APPENDIX A	AC POWER LINE CONDUCTED EMISSIONS	26
APPENDIX B	RADIATED EMISSIONS - 30 MHZ TO 1 GHZ	29
APPENDIX C	RADIATED EMISSIONS - ABOVE 1 GHZ	32
APPENDIX D	BANDWIDTH	59
APPENDIX E	MAXIMUM OUTPUT POWER	63
APPENDIX F	POWER SPECTRAL DENSITY	65
APPENDIX G	ANTENNA CONDUCTED SPURIOUS EMISSIONS	68

REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-1-2407G076	R00	Original Report.	2024/10/8	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 D	Pass	-----
15.247(b)	Maximum 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 (3)

NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report.
- (2) The report format version is TP.1.1.1.
- (3) The device what use replaceable antennas with non-standard interfaces are considered sufficient to comply with the provisions of 15.203.

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:

(FCC DN: TW0659)

No. 72, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

CB20 C01

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, 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)
C01	CISPR	150 kHz ~ 30MHz	2.4498

B. Radiated emissions test:

Test Site	Measurement Frequency Range	U (dB)
CB20	0.03 GHz ~ 0.2 GHz	4.17
	0.2 GHz ~ 1 GHz	4.72
	1 GHz ~ 6 GHz	5.20
	6 GHz ~ 18 GHz	5.50
	18 GHz ~ 26 GHz	3.69

C. Conducted test:

Test Item	U (dB)
Occupied Bandwidth	1.0502
Output power	1.0406
Power Spectral Density	1.20
Conducted Spurious emissions	1.20
Conducted Band edges	1.0518

NOTE:

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

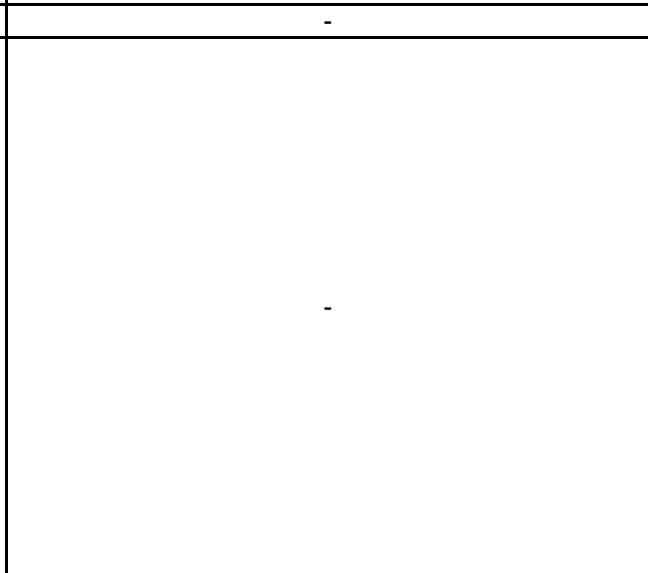
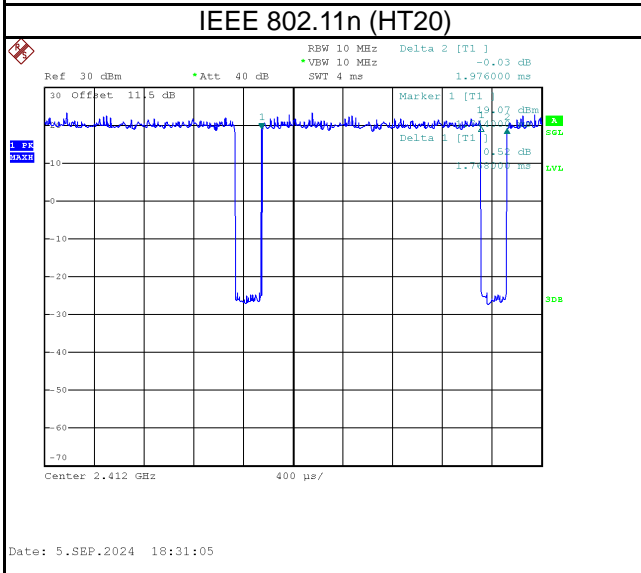
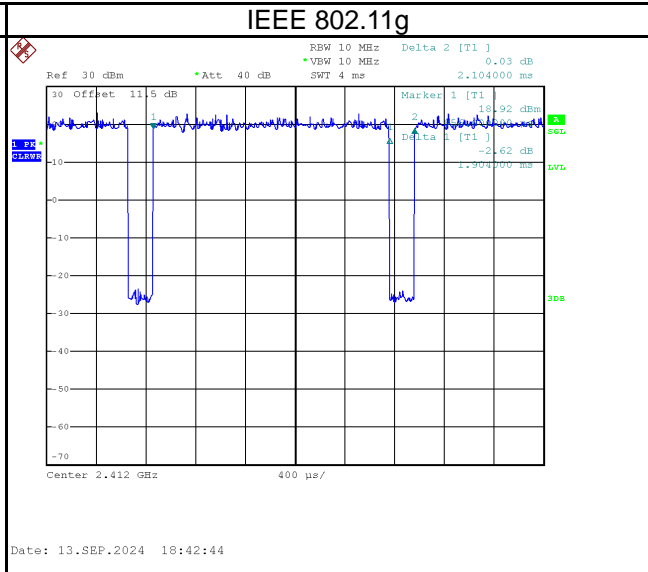
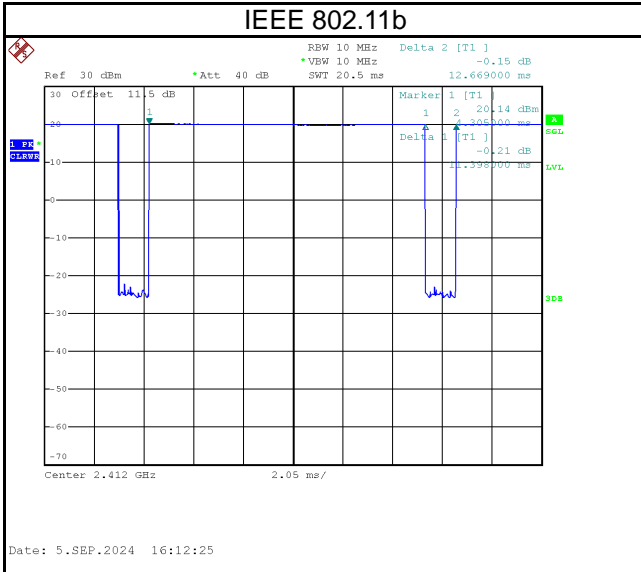
1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Environment Condition	Test Voltage	Tested by
AC Power Line Conducted Emissions	25°C, 45%	AC 120 V	Ken Lu
Radiated emissions below 1 GHz	25°C, 65%	AC 120 V	Ken Lu
Radiated emissions above 1 GHz	25°C, 65%	AC 120 V	Ken Lu
Bandwidth	25°C, 60%	AC 120 V	Cheng Tsai
Maximum Output Power	25°C, 60%	AC 120 V	Cheng Tsai
Power Spectral Density	25°C, 60%	AC 120 V	Cheng Tsai
Antenna conducted Spurious Emission	25°C, 60%	AC 120 V	Cheng Tsai

1.4 DUTY CYCLE

If duty cycle is $\geq 98\%$, 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	11.398	1	11.398	12.669	89.97%	0.46
IEEE 802.11g	1.904	1	1.904	2.104	90.49%	0.43
IEEE 802.11n (HT20)	1.768	1	1.768	1.976	89.47%	0.48



2 GENERAL INFORMATION

2.1 DESCRIPTION OF EUT

Equipment	Home Security Wi-Fi Camera
Brand Name	tp-link
Model Name	Tapo C110
Series Model	Tapo C111
Model Difference	Only differ in model name and product color, Tapo C110 is white while Tapo C111 is black.
Hardware Version	Tapo C110V2
Software Version	N/A
Power Source	DC voltage supplied from AC adapter. Model: T090060-2B1
Power Rating	I/P: 100-240V~ 50/60Hz 0.3A O/P: 9V \equiv 0.6A
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
Maximum Output Power	IEEE 802.11g: 19.69 dBm (0.0931 W)

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:

CH01 - CH11 for IEEE 802.11b, IEEE 802.11g, IEEE 802.11n(HT20)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

(3) Table for Filed Antenna:

Ant.	Manufacturer	P/N	Type	Connector	Gain (dBi)
1	TP-LINK CORPORATION PTE. LTD.	Tapo C110-Ant1	IFA	N/A	0.5

(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	-	-
Transmitter Radiated Emissions (below 1GHz)	TX Mode_IEEE 802.11g	06	-
Transmitter Radiated Emissions (above 1GHz)	TX Mode_IEEE 802.11b	01/11	Bandedge
	TX Mode_IEEE 802.11g		
	TX Mode_IEEE 802.11n (HT20)		
Transmitter Radiated Emissions (above 1GHz)	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 802.11g	06	-
Bandwidth & Maximum Output Power & 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)		

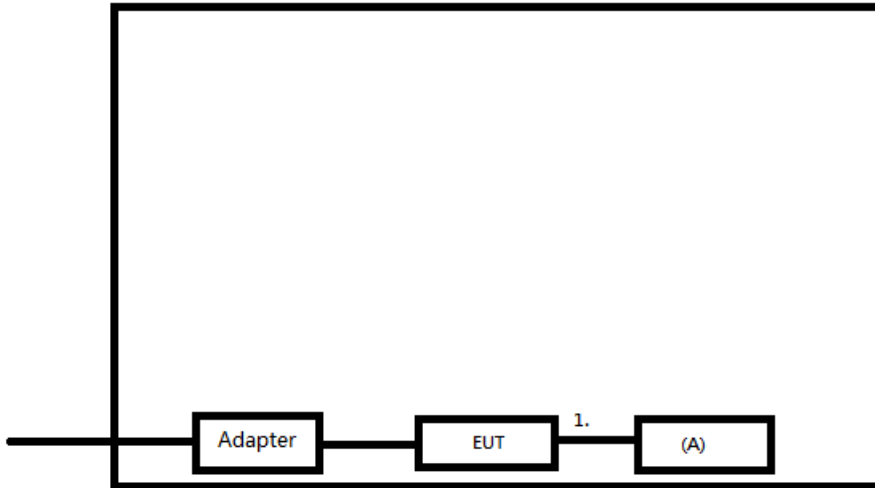
NOTE:

- (1) For radiated emission band edge test, both Vertical and Horizontal are evaluated, but only the worst case (Horizontal) is recorded.
- (2) For radiated emission below 1 GHz test, the TX Mode_IEEE 802.11g Channel 06 is found to be the worst case and recorded.
- (3) For radiated emission Harmonic 18-26.5GHz test, only tested the worst case and recorded.

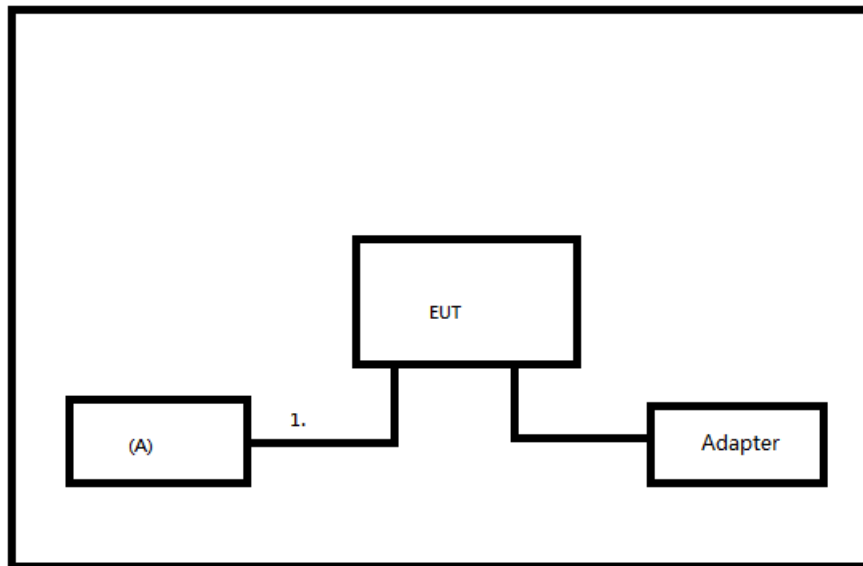
2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

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**AC power line conducted emissions**

Item	Equipment	Brand	Model No.	Series No.	Remarks
A	Notebook	Lenovo	ThinkBook 14 G4 IAP	MP28KHAH	Furnished by test lab.

Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	USB to USB Cable	Yes	No	1m	Furnished by test lab.

Radiated Emissions

Item	Equipment	Brand	Model No.	Series No.	Remarks
A	Notebook	Lenovo	ThinkBook 14 G4 IAP	MP28KHAH	Furnished by test lab.

Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	USB to USB Cable	Yes	No	1m	Furnished by test lab.

3 AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

Frequency (MHz)	Limit (dB μ V)	
	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 (dB μ V)		Correct Factor (dB)		Measurement Value (dB μ V)
38.22	+	3.45	=	41.67

Measurement Value (dB μ V)		Limit Value (dB μ V)		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.

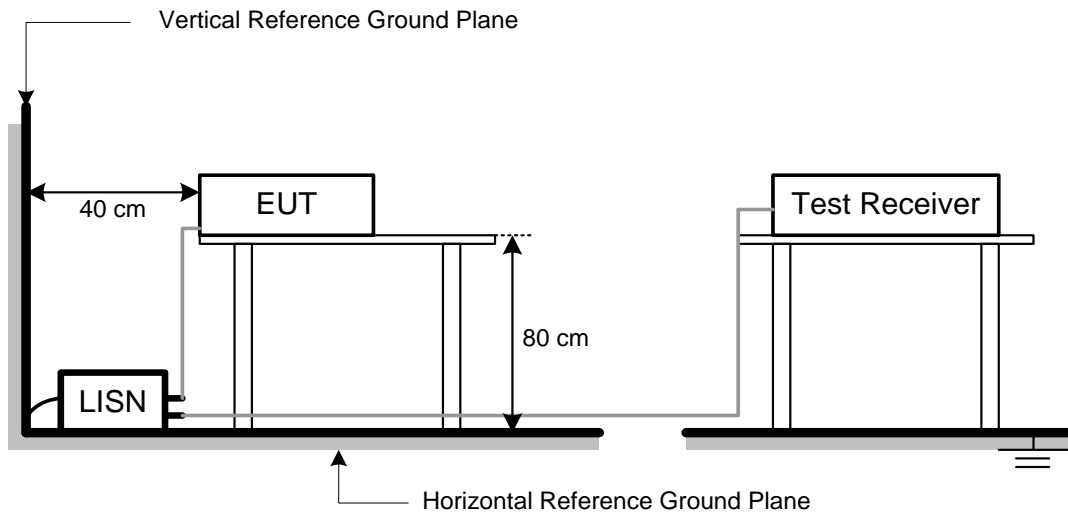
NOTE:

- (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

Mode	VBW(Hz)
IEEE 802.11b	1.8k
IEEE 802.11g	750
IEEE 802.11n (HT20)	300
IEEE 802.11ax (HE20)	300

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

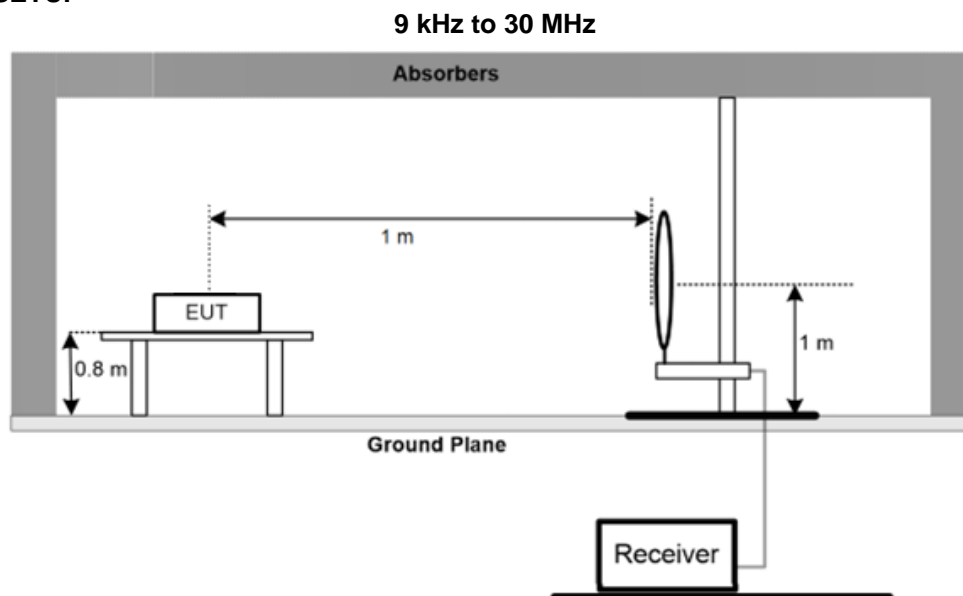
4.2 TEST PROCEDURE

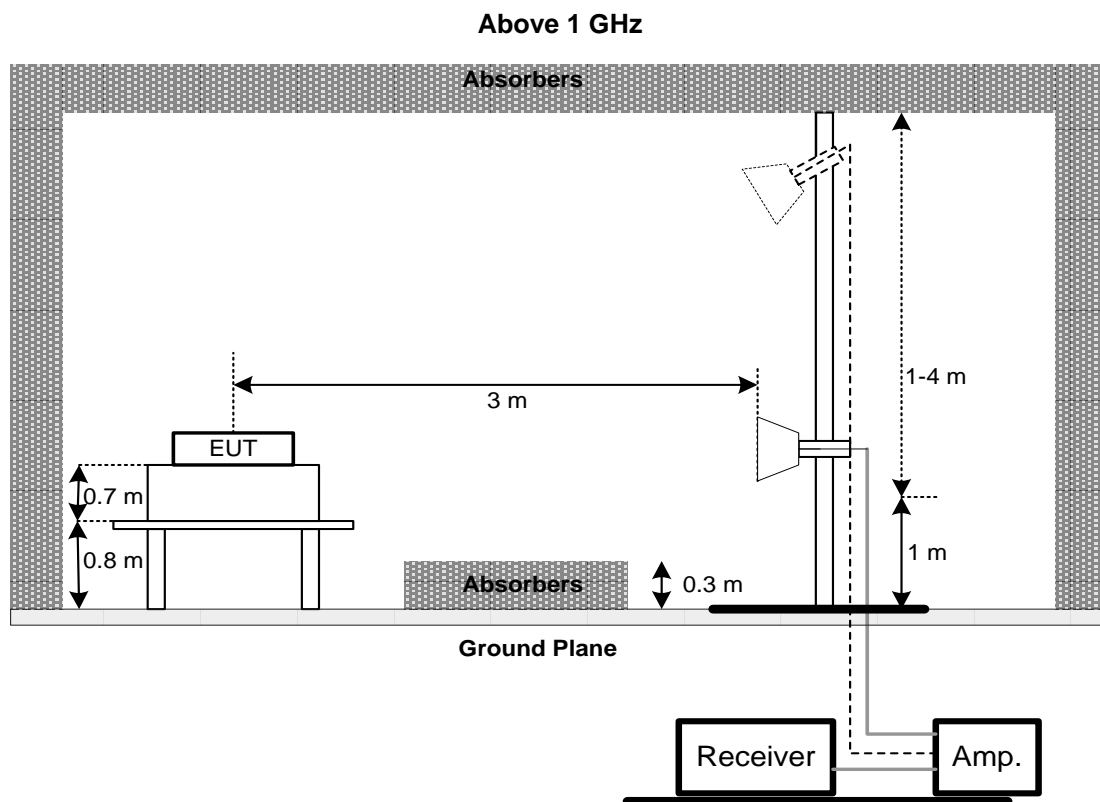
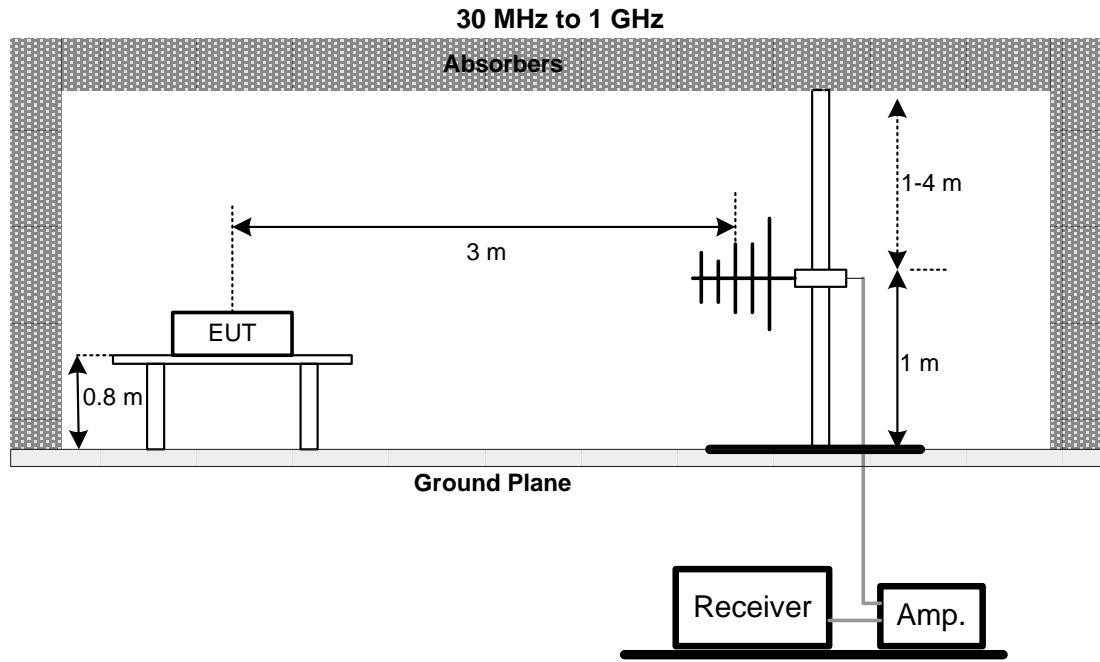
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of 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)
- 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.
- 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).
- 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.
- 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.
- 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)
- 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)
- 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





4.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULT – 9kHz TO 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 MAXIMUM OUTPUT POWER TEST

6.1 LIMIT

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

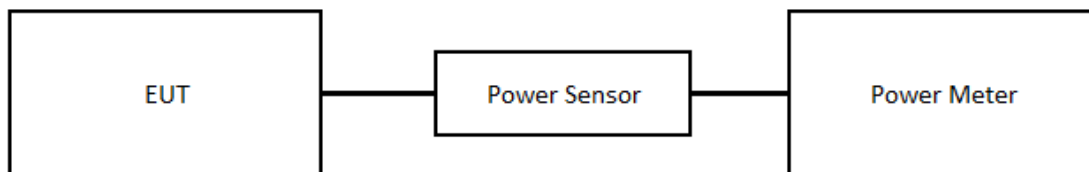
6.2 TEST PROCEDURE

- The EUT was directly connected to the Peak Power Analyzer and antenna output port as show in the block diagram below.
- The maximum peak conducted output power was performed in accordance with FCC KDB 558074 D01 15.247 Meas Guidance.
- 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)

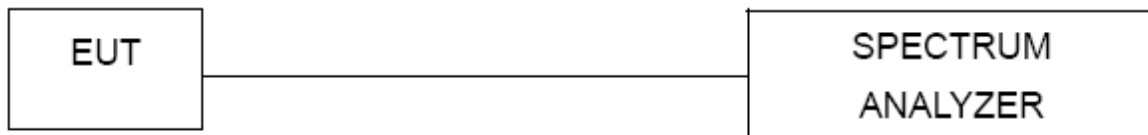
7.2 TEST PROCEDURE

- 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

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting: RBW = 100 kHz, VBW=300 kHz, Sweep time = Auto.
- 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	101051	2024/6/26	2025/6/25
2	Test Cable	EMCI	EMCRG58-BM-BM-9000	210501	2023/12/11	2024/12/10
3	EMC Receiver	Keysight	N9038A	MY54130009	2024/6/27	2025/6/26
4	Measurement Software	Farad	EZ EMC (Ver. 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	Pre-Amplifier	EMCI	EMC184045SE	980512	2023/12/11	2024/12/10
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	340	2024/6/27	2025/6/26
3	Test Cable	EMCI	EMC102-KM-KM-1000	220328	2023/12/11	2024/12/10
4	Test Cable	EMCI	EMC101G-KM-KM-3000	220330	2023/12/11	2024/12/10
5	Broad-Band Horn Antenna	RFSPIN	DRH18-E	210109A18E	2024/1/10	2025/1/9
6	Pre-Amplifier	EMCI	EMC051845SE	980779	2023/12/11	2024/12/10
7	Test Cable	EMCI	EMC105-SM-SM-1000	210119	2023/12/11	2024/12/10
8	Test Cable	EMCI	EMC105-SM-SM-3000	210118	2023/12/11	2024/12/10
9	Test Cable	EMCI	EMC105-SM-SM-7000	210117	2023/12/11	2024/12/10
10	EXA Spectrum Analyzer	keysight	N9020A	MY59050137	2023/11/24	2024/11/23
11	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	01207	2023/12/18	2024/12/17
12	EMC Receiver	Keysight	N9038A	MY54130009	2024/6/27	2025/6/26
13	Pre-Amplifier	EMCI	EMC001330-20201222	980807	2023/12/11	2024/12/10
14	Test Cable	EMCI	EMC-8D-NM-NM-5000	150106	2023/12/11	2024/12/10
15	Test Cable	EMCI	EMC-CFD-400-NM-NM-8000	200348	2023/12/11	2024/12/10
16	Measurement Software	Farad	EZ EMC (Ver. 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 30	100854	2024/6/27	2025/6/26
2	10dbAttenuator	INMET	AHC-10dB	1	N/A	N/A
3	BTL-Conducted Test	N/A	1247788684	N/A	N/A	N/A

Maximum Output Power						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	USB Peak Power Sensor	Anritsu	MA24408A	12589	2023/10/25	2024/10/24
2	20dbAttenuator	INMET	AHC-20dB	1	N/A	N/A
3	BTL-Conducred Test	N/A	1247788684	N/A	N/A	N/A

Power Spectral Density						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSP 30	100854	2024/6/27	2025/6/26
2	10dbAttenuator	INMET	AHC-10dB	1	N/A	N/A
3	BTL-Conducred Test	N/A	1247788684	N/A	N/A	N/A

Antenna conducted Spurious Emission						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSP 30	100854	2024/6/27	2025/6/26
2	10dbAttenuator	INMET	AHC-10dB	1	N/A	N/A
3	BTL-Conducred Test	N/A	1247788684	N/A	N/A	N/A

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

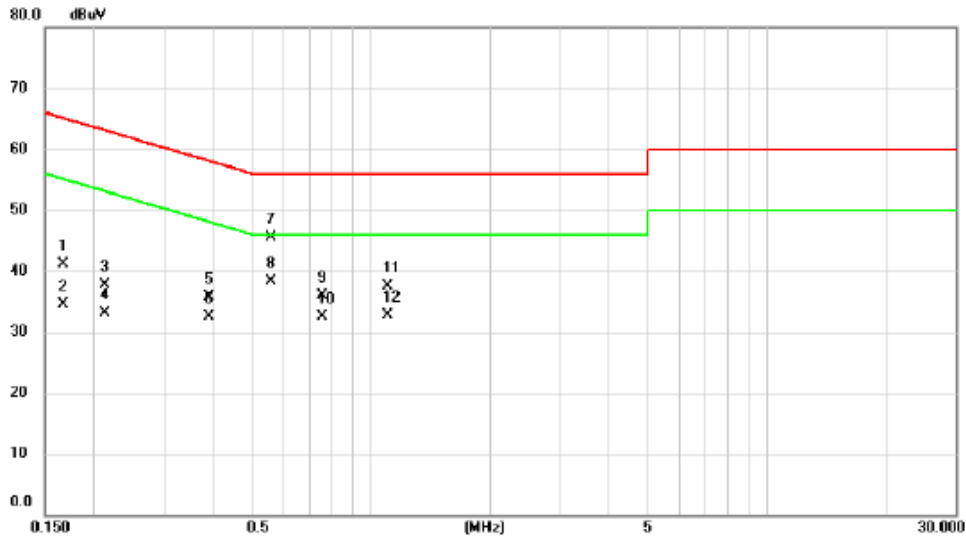
Please refer to document Appendix No.: TP-2407G076-FCCP-1 (APPENDIX-TEST PHOTOS).

11 EUT PHOTOS

Please refer to document Appendix No.: EP-2407G076-1 (APPENDIX-EUT PHOTOS).

APPENDIX A AC POWER LINE CONDUCTED EMISSIONS

Test Mode	Normal	Tested Date	2024/9/10
Test Frequency	-	Phase	Line

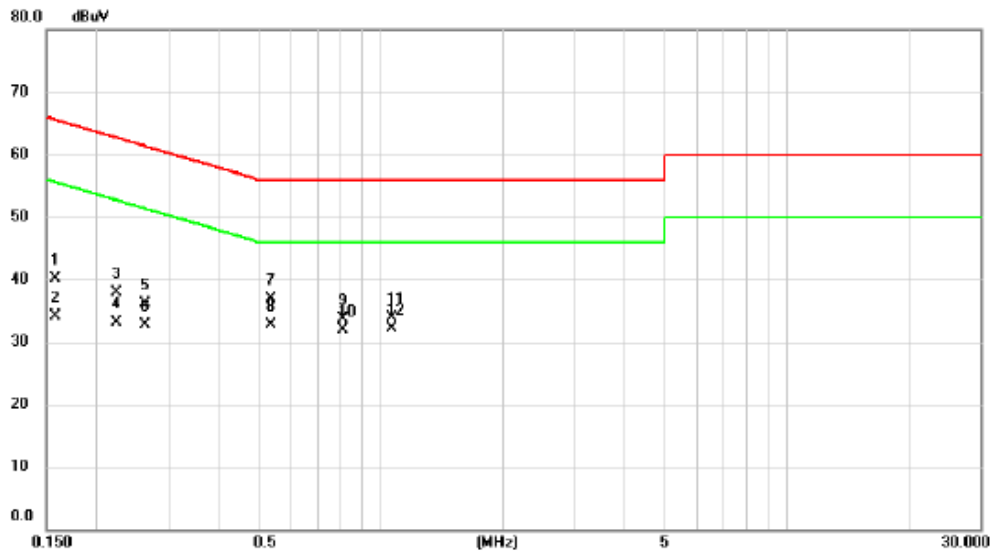


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1671	31.36	9.65	41.01	65.10	-24.09	QP	
2	0.1671	24.90	9.65	34.55	55.10	-20.55	AVG	
3	0.2126	27.99	9.64	37.63	63.10	-25.47	QP	
4	0.2126	23.40	9.64	33.04	53.10	-20.06	AVG	
5	0.3915	25.98	9.65	35.63	58.03	-22.40	QP	
6	0.3915	22.80	9.65	32.45	48.03	-15.58	AVG	
7	0.5584	35.91	9.66	45.57	56.00	-10.43	QP	
8 *	0.5584	28.62	9.66	38.28	46.00	-7.72	AVG	
9	0.7520	26.28	9.68	35.96	56.00	-20.04	QP	
10	0.7520	22.81	9.68	32.49	46.00	-13.51	AVG	
11	1.1030	27.71	9.71	37.42	56.00	-18.58	QP	
12	1.1030	23.03	9.71	32.74	46.00	-13.26	AVG	

REMARKS:

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

Test Mode	Normal	Tested Date	2024/9/10
Test Frequency	-	Phase	Neutral



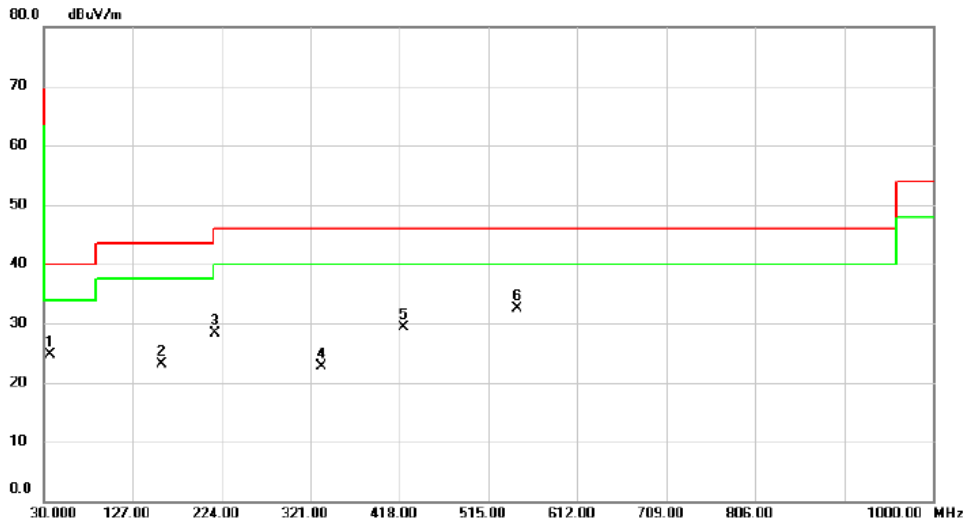
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1587	30.53	9.63	40.16	65.53	-25.37	QP	
2		0.1587	24.51	9.63	34.14	55.53	-21.39	AVG	
3		0.2238	28.22	9.63	37.85	62.68	-24.83	QP	
4		0.2238	23.50	9.63	33.13	52.68	-19.55	AVG	
5		0.2626	26.48	9.63	36.11	61.35	-25.24	QP	
6		0.2626	22.98	9.63	32.61	51.35	-18.74	AVG	
7		0.5360	27.32	9.64	36.96	56.00	-19.04	QP	
8	*	0.5360	22.99	9.64	32.63	46.00	-13.37	AVG	
9		0.8060	24.12	9.67	33.79	56.00	-22.21	QP	
10		0.8060	22.17	9.67	31.84	46.00	-14.16	AVG	
11		1.0623	24.12	9.69	33.81	56.00	-22.19	QP	
12		1.0623	22.35	9.69	32.04	46.00	-13.96	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 802.11g	Test Date	2024/8/23
Test Frequency	2437MHz	Polarization	Vertical

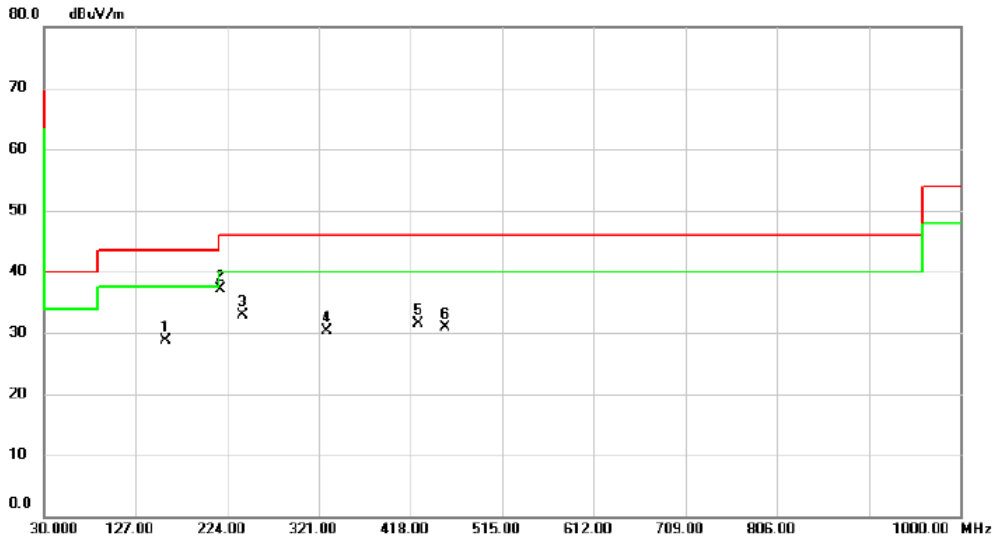


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	36.7900	37.72	-13.04	24.68	40.00	-15.32	peak	
2	158.0400	34.20	-11.07	23.13	43.50	-20.37	peak	
3	216.2400	42.36	-14.11	28.25	46.00	-17.75	peak	
4	332.6400	32.07	-9.38	22.69	46.00	-23.31	peak	
5	421.8800	36.04	-6.83	29.21	46.00	-16.79	peak	
6 *	547.0100	36.75	-4.27	32.48	46.00	-13.52	peak	

REMARKS:

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

Test Mode	IEEE 802.11g	Test Date	2024/9/11
Test Frequency	2437MHz	Polarization	Horizontal



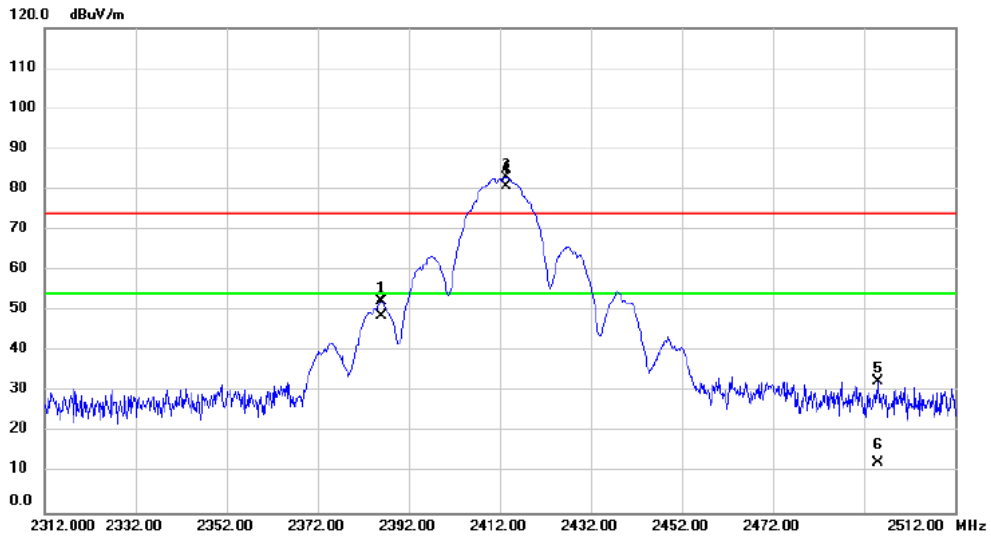
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		158.0400	39.75	-11.07	28.68	43.50	-14.82	peak	
2	*	216.2400	51.24	-14.11	37.13	46.00	-8.87	peak	
3		239.5200	45.30	-12.34	32.96	46.00	-13.04	peak	
4		329.7300	39.72	-9.46	30.26	46.00	-15.74	peak	
5		426.7300	38.24	-6.70	31.54	46.00	-14.46	peak	
6		454.8600	36.82	-5.93	30.89	46.00	-15.11	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	2024/9/11
Test Frequency	2412MHz	Polarization	Horizontal

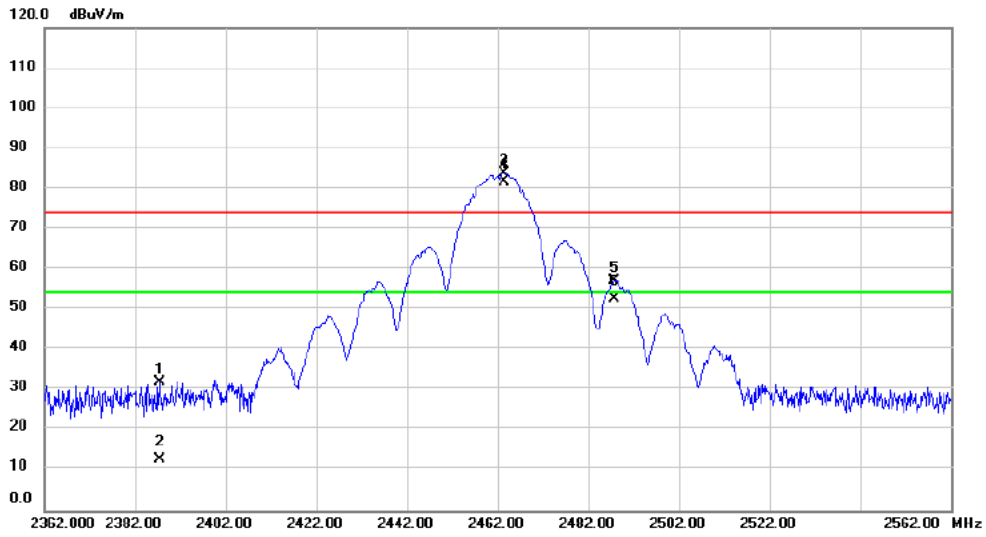


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2386.000	58.55	-6.13	52.42	74.00	-21.58	peak	
2		2386.000	54.95	-6.13	48.82	54.00	-5.18	AVG	
3	X	2413.400	89.10	-6.06	83.04	74.00	9.04	peak	No Limit
4	*	2413.400	86.90	-6.06	80.84	54.00	26.84	AVG	No Limit
5		2495.000	38.43	-5.89	32.54	74.00	-41.46	peak	
6		2495.000	18.19	-5.89	12.30	54.00	-41.70	AVG	

REMARKS:

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

Test Mode	IEEE 802.11b	Test Date	2024/9/11
Test Frequency	2462MHz	Polarization	Horizontal

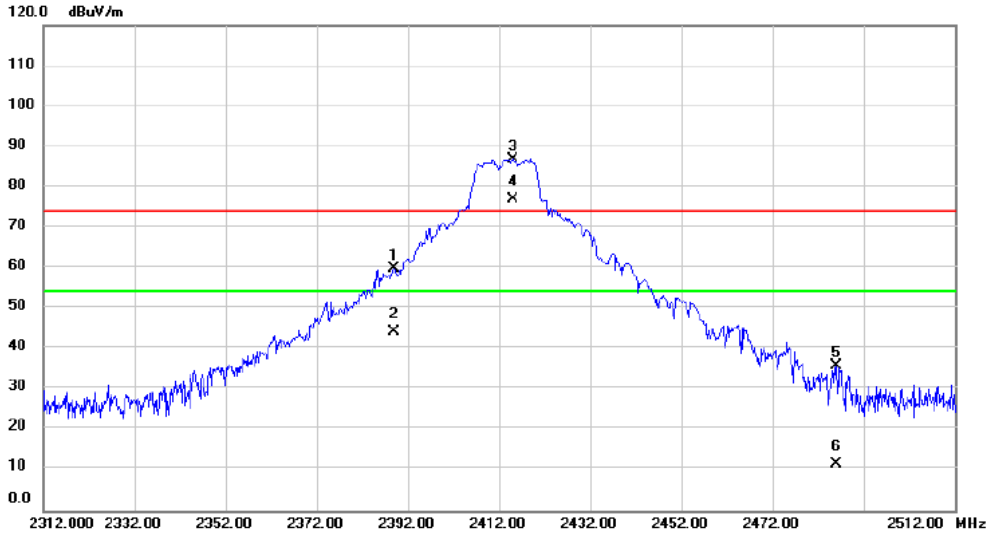


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2387.400	38.18	-6.13	32.05	74.00	-41.95	peak	
2		2387.400	18.74	-6.13	12.61	54.00	-41.39	AVG	
3	X	2463.600	89.73	-5.95	83.78	74.00	9.78	peak	No Limit
4	*	2463.600	87.78	-5.95	81.83	54.00	27.83	AVG	No Limit
5		2487.800	63.05	-5.90	57.15	74.00	-16.85	peak	
6		2487.800	58.41	-5.90	52.51	54.00	-1.49	AVG	

REMARKS:

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

Test Mode	IEEE 802.11g	Test Date	2024/9/11
Test Frequency	2412MHz	Polarization	Horizontal

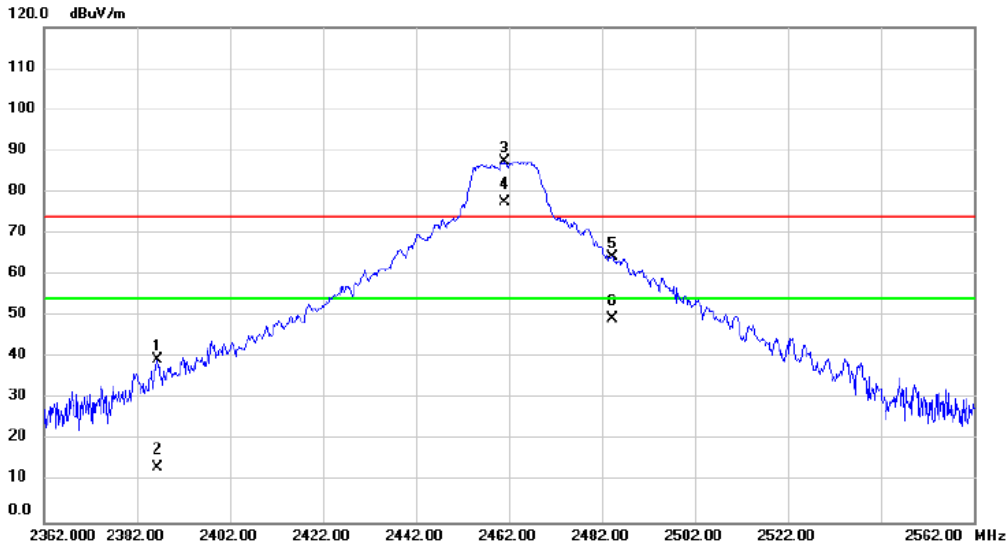


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2388.800	66.07	-6.12	59.95	74.00	-14.05	peak	
2		2388.800	50.51	-6.12	44.39	54.00	-9.61	AVG	
3	X	2415.000	92.85	-6.06	86.79	74.00	12.79	peak	No Limit
4	*	2415.000	82.92	-6.06	76.86	54.00	22.86	AVG	No Limit
5		2486.000	41.79	-5.91	35.88	74.00	-38.12	peak	
6		2486.000	17.57	-5.91	11.66	54.00	-42.34	AVG	

REMARKS:

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

Test Mode	IEEE 802.11g	Test Date	2024/9/11
Test Frequency	2462MHz	Polarization	Horizontal

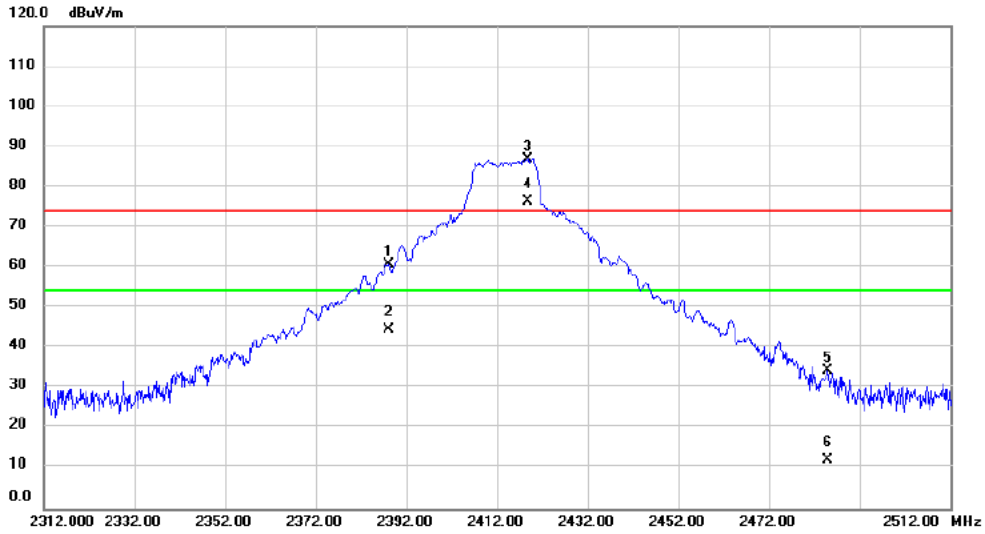


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2386.400	45.69	-6.13	39.56	74.00	-34.44	peak	
2		2386.400	19.45	-6.13	13.32	54.00	-40.68	AVG	
3	X	2461.200	93.47	-5.97	87.50	74.00	13.50	peak	No Limit
4	*	2461.200	83.43	-5.97	77.46	54.00	23.46	AVG	No Limit
5		2484.200	70.18	-5.92	64.26	74.00	-9.74	peak	
6		2484.200	55.12	-5.92	49.20	54.00	-4.80	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT 20)	Test Date	2024/9/11
Test Frequency	2412MHz	Polarization	Horizontal

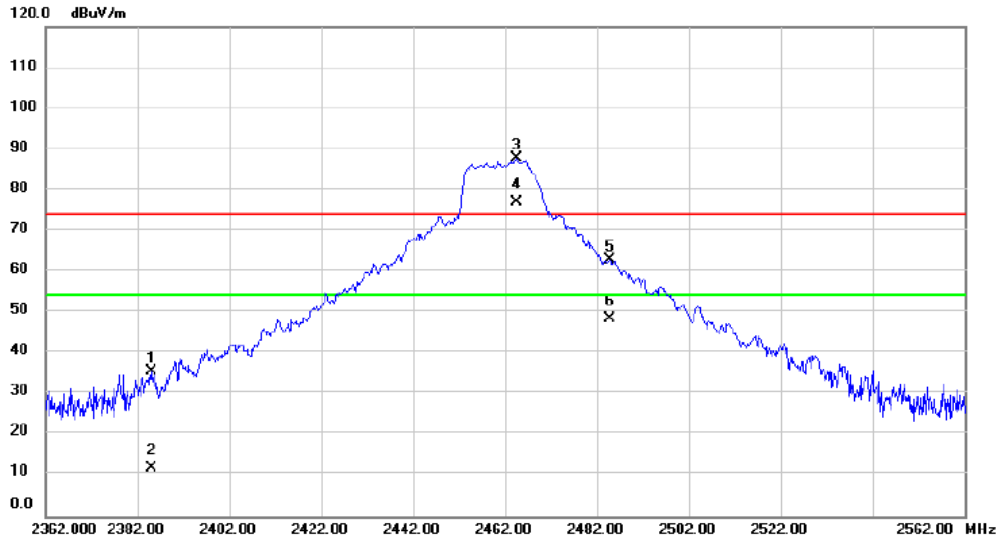


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2388.200	66.87	-6.12	60.75	74.00	-13.25	peak	
2	2388.200	50.78	-6.12	44.66	54.00	-9.34	AVG	
3 X	2418.800	92.91	-6.06	86.85	74.00	12.85	peak	No Limit
4 *	2418.800	82.31	-6.06	76.25	54.00	22.25	AVG	No Limit
5	2484.800	40.14	-5.91	34.23	74.00	-39.77	peak	
6	2484.800	18.03	-5.91	12.12	54.00	-41.88	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/9/11
Test Frequency	2462MHz	Polarization	Horizontal

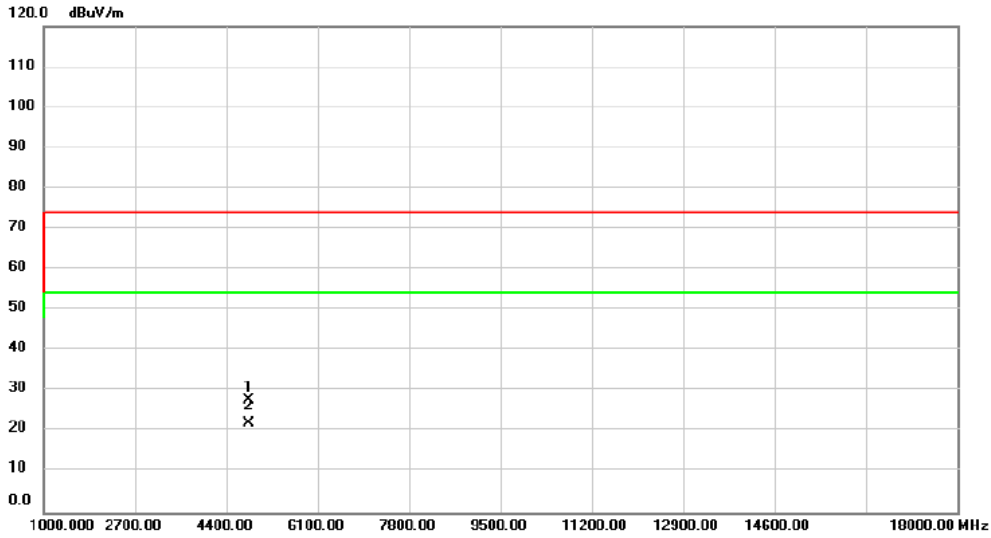


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2385.200	41.80	-6.13	35.67	74.00	-38.33	peak	
2		2385.200	18.11	-6.13	11.98	54.00	-42.02	AVG	
3	X	2464.400	93.66	-5.95	87.71	74.00	13.71	peak	No Limit
4	*	2464.400	82.98	-5.95	77.03	54.00	23.03	AVG	No Limit
5		2484.800	68.66	-5.91	62.75	74.00	-11.25	peak	
6		2484.800	54.44	-5.91	48.53	54.00	-5.47	AVG	

REMARKS:

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

Test Mode	IEEE 802.11b	Test Date	2024/9/11
Test Frequency	2412MHz	Polarization	Vertical

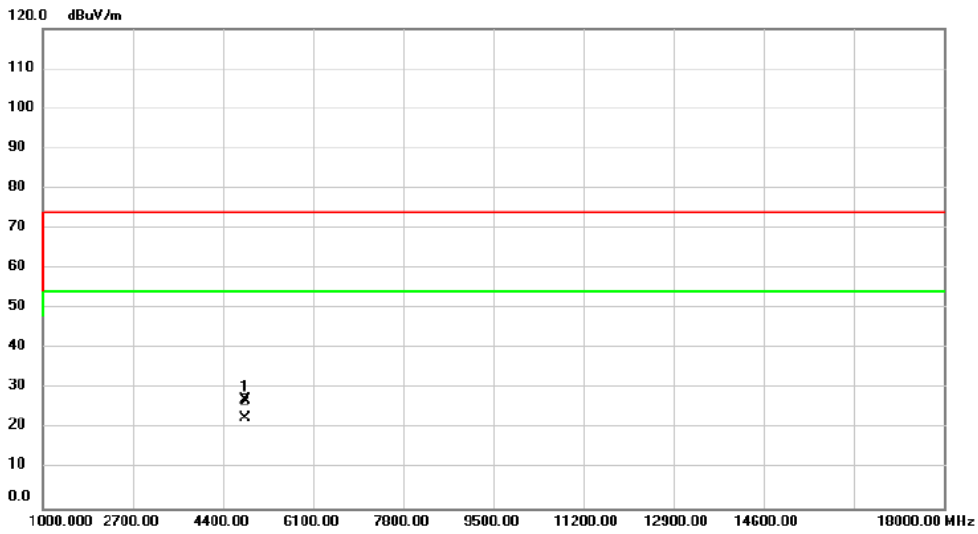


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4824.000	36.20	-8.57	27.63	74.00	-46.37	peak	
2	*	4824.000	30.58	-8.57	22.01	54.00	-31.99	AVG	

REMARKS:

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

Test Mode	IEEE 802.11b	Test Date	2024/9/11
Test Frequency	2412MHz	Polarization	Horizontal

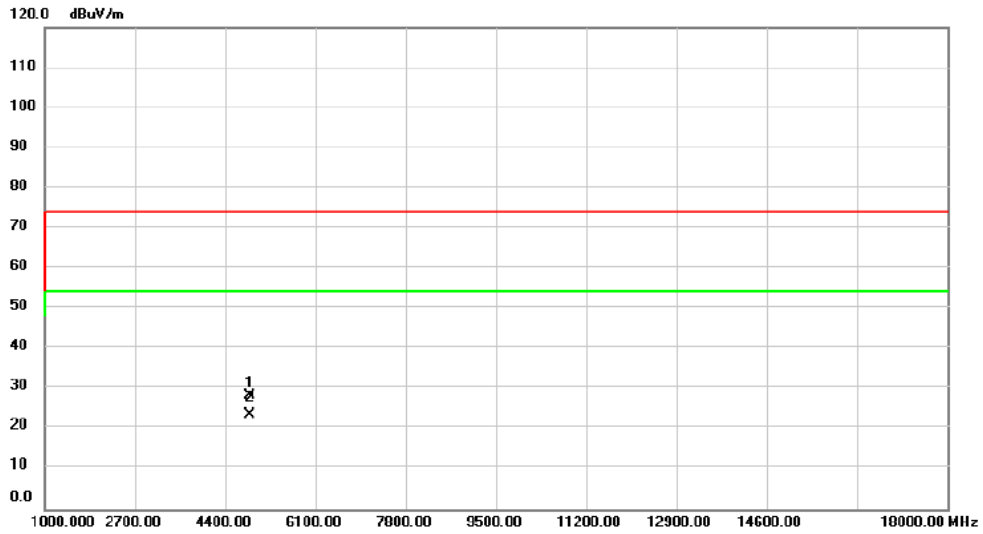


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4824.000	35.76	-8.57	27.19	74.00	-46.81	peak	
2 *	4824.000	31.16	-8.57	22.59	54.00	-31.41	AVG	

REMARKS:

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

Test Mode	IEEE 802.11b	Test Date	2024/9/11
Test Frequency	2437MHz	Polarization	Vertical

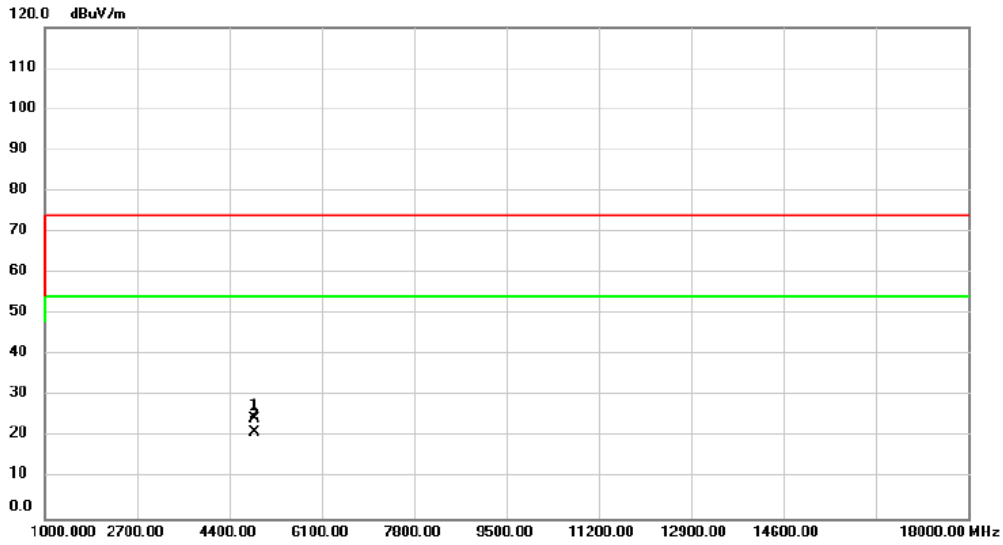


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4874.000	36.65	-8.44	28.21	74.00	-45.79	peak	
2 *	4874.000	31.96	-8.44	23.52	54.00	-30.48	AVG	

REMARKS:

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

Test Mode	IEEE 802.11b	Test Date	2024/9/11
Test Frequency	2437MHz	Polarization	Horizontal

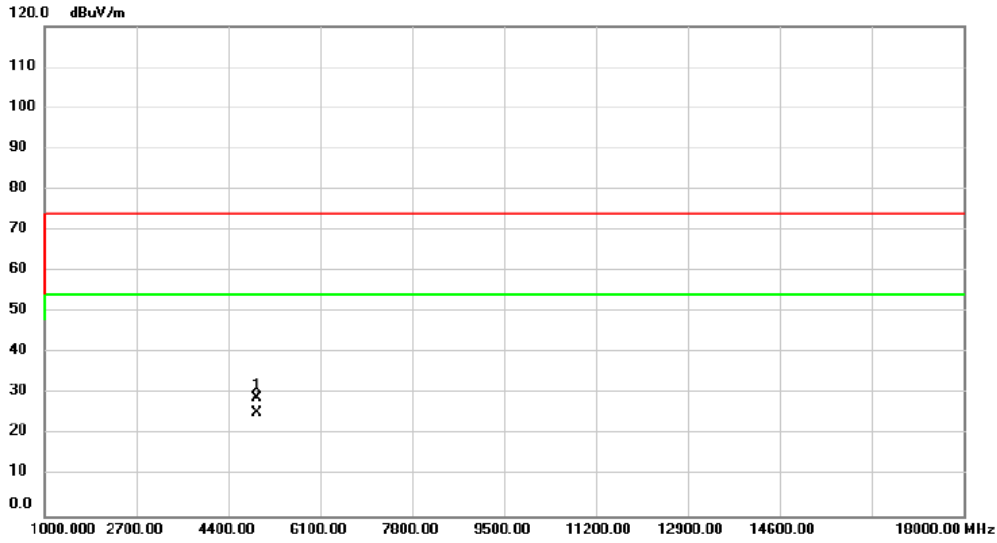


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4874.000	32.78	-8.44	24.34	74.00	-49.66	peak	
2	*	4874.000	29.55	-8.44	21.11	54.00	-32.89	AVG	

REMARKS:

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

Test Mode	IEEE 802.11b	Test Date	2024/9/11
Test Frequency	2462MHz	Polarization	Vertical

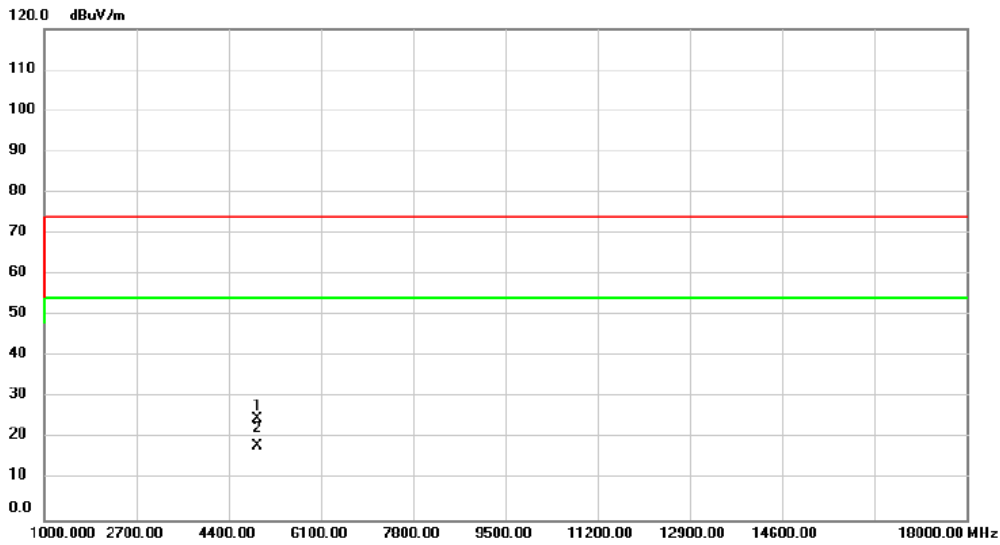


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4924.000	37.32	-8.33	28.99	74.00	-45.01	peak	
2	*	4924.000	33.56	-8.33	25.23	54.00	-28.77	AVG	

REMARKS:

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

Test Mode	IEEE 802.11b	Test Date	2024/9/11
Test Frequency	2462MHz	Polarization	Horizontal

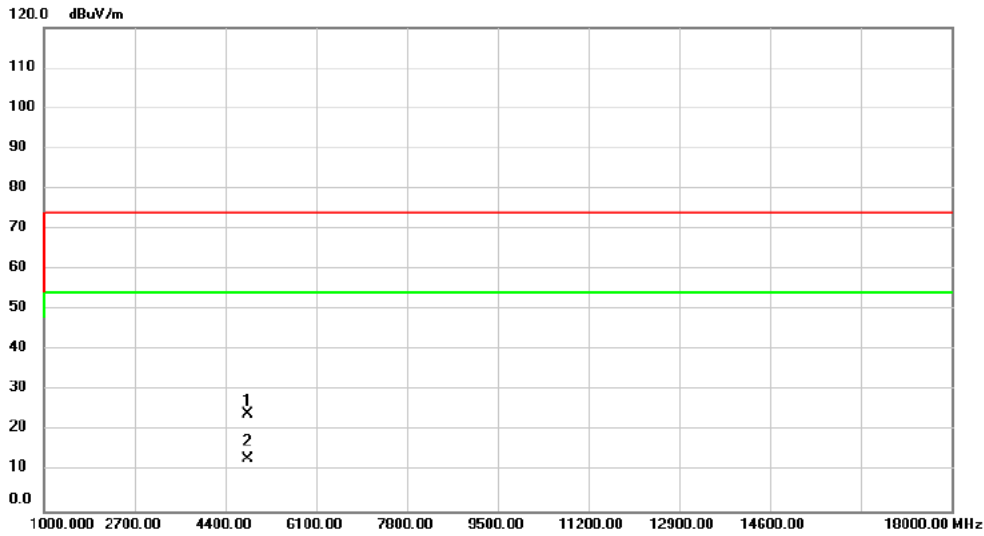


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4924.000	33.01	-8.33	24.68	74.00	-49.32	peak	
2 *	4924.000	26.51	-8.33	18.18	54.00	-35.82	AVG	

REMARKS:

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

Test Mode	IEEE 802.11g	Test Date	2024/9/11
Test Frequency	2412MHz	Polarization	Vertical

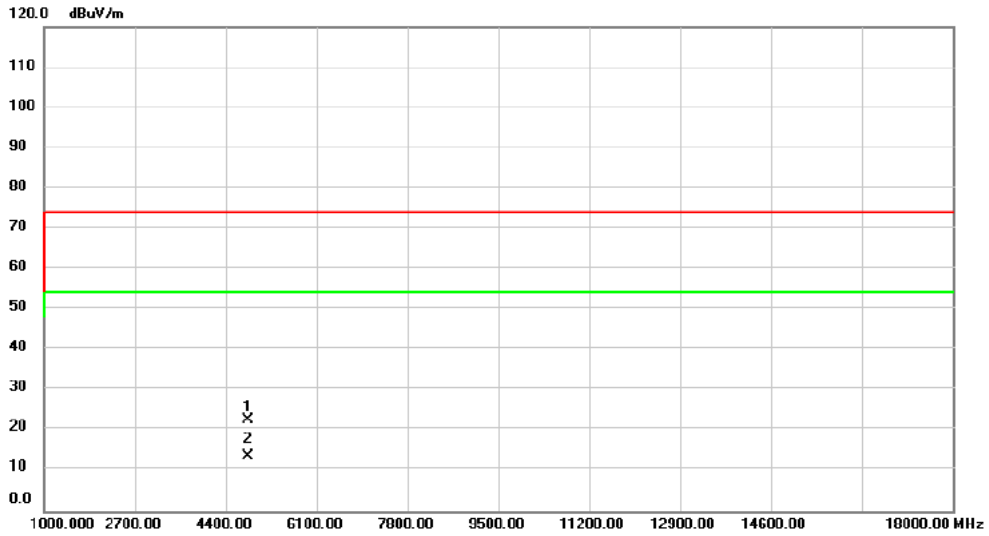


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4824.000	32.76	-8.57	24.19	74.00	-49.81	peak	
2 *	4824.000	21.65	-8.57	13.08	54.00	-40.92	AVG	

REMARKS:

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

Test Mode	IEEE 802.11g	Test Date	2024/9/11
Test Frequency	2412MHz	Polarization	Horizontal

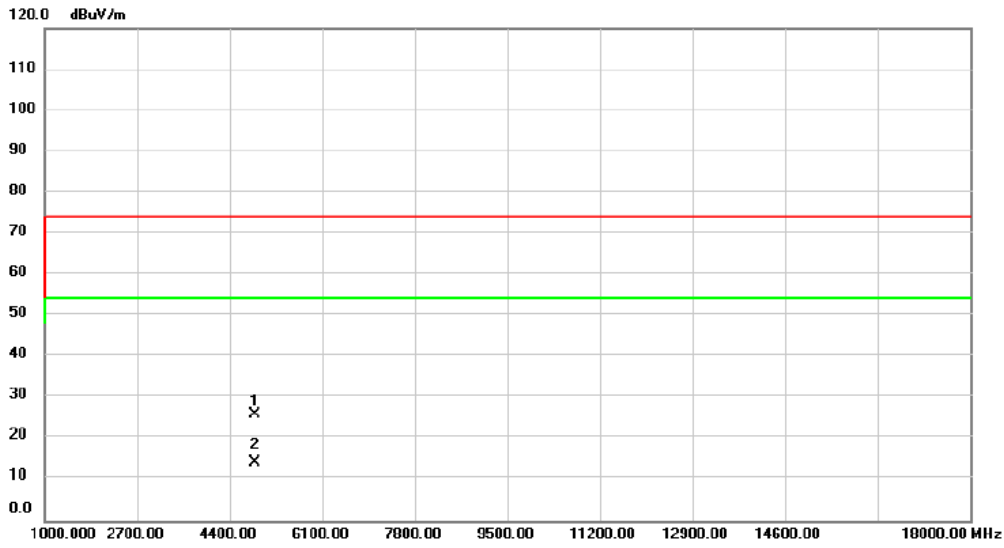


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4824.000	31.35	-8.57	22.78	74.00	-51.22	peak	
2	*	4824.000	22.35	-8.57	13.78	54.00	-40.22	AVG	

REMARKS:

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

Test Mode	IEEE 802.11g	Test Date	2024/9/11
Test Frequency	2437MHz	Polarization	Vertical

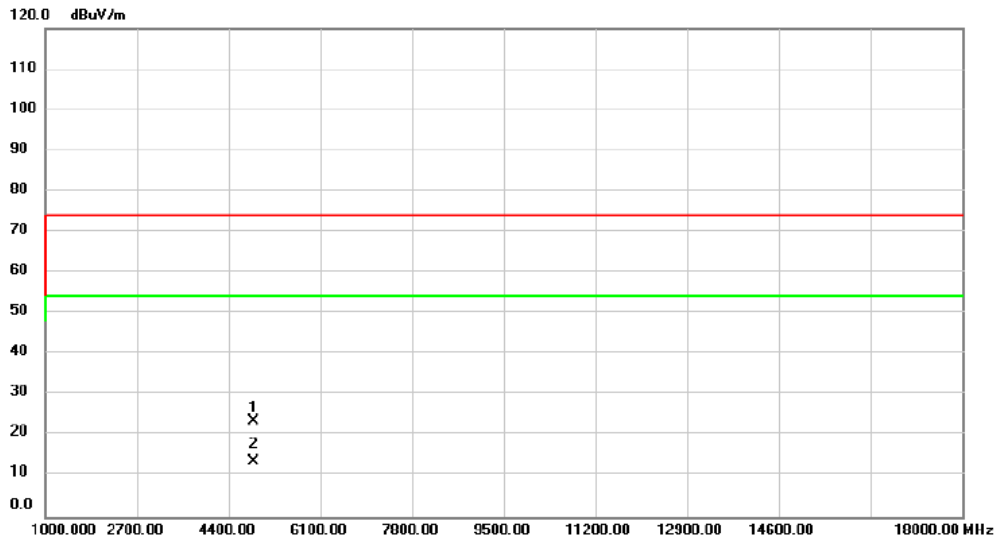


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4874.000	34.26	-8.44	25.82	74.00	-48.18	peak	
2	*	4874.000	22.76	-8.44	14.32	54.00	-39.68	AVG	

REMARKS:

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

Test Mode	IEEE 802.11g	Test Date	2024/9/11
Test Frequency	2437MHz	Polarization	Horizontal

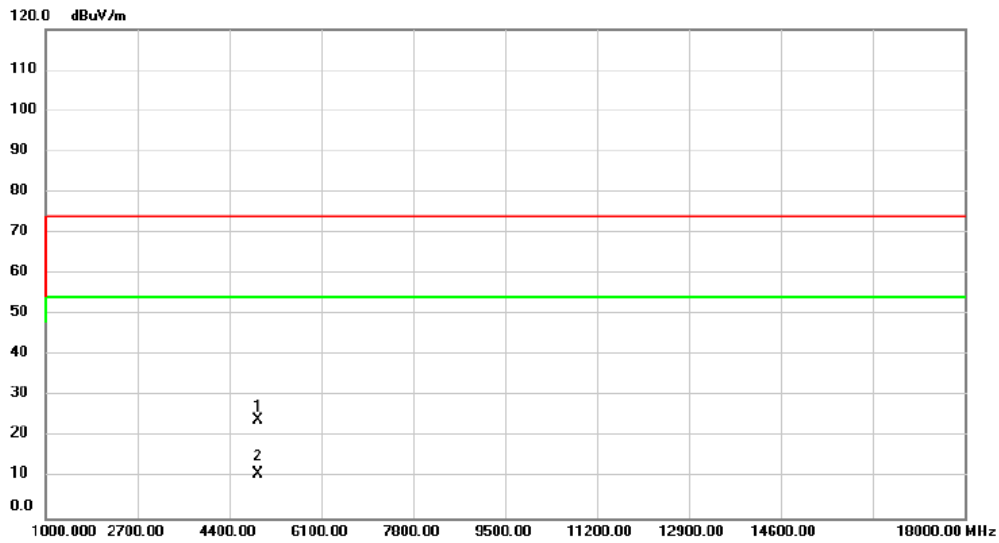


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4874.000	32.00	-8.44	23.56	74.00	-50.44	peak	
2	*	4874.000	22.22	-8.44	13.78	54.00	-40.22	AVG	

REMARKS:

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

Test Mode	IEEE 802.11g	Test Date	2024/9/11
Test Frequency	2462MHz	Polarization	Vertical

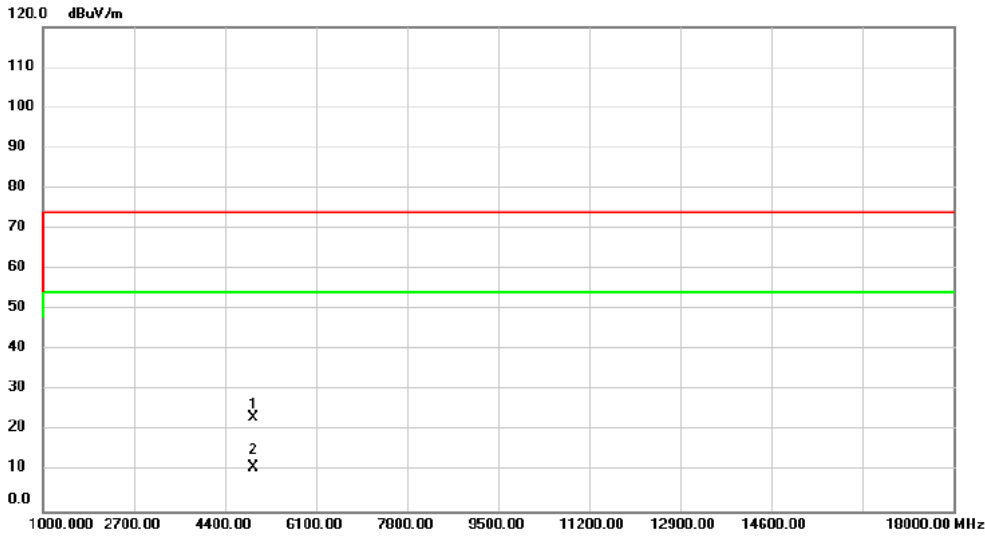


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4924.000	32.35	-8.33	24.02	74.00	-49.98	peak	
2	*	4924.000	19.25	-8.33	10.92	54.00	-43.08	AVG	

REMARKS:

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

Test Mode	IEEE 802.11g	Test Date	2024/9/11
Test Frequency	2462MHz	Polarization	Horizontal

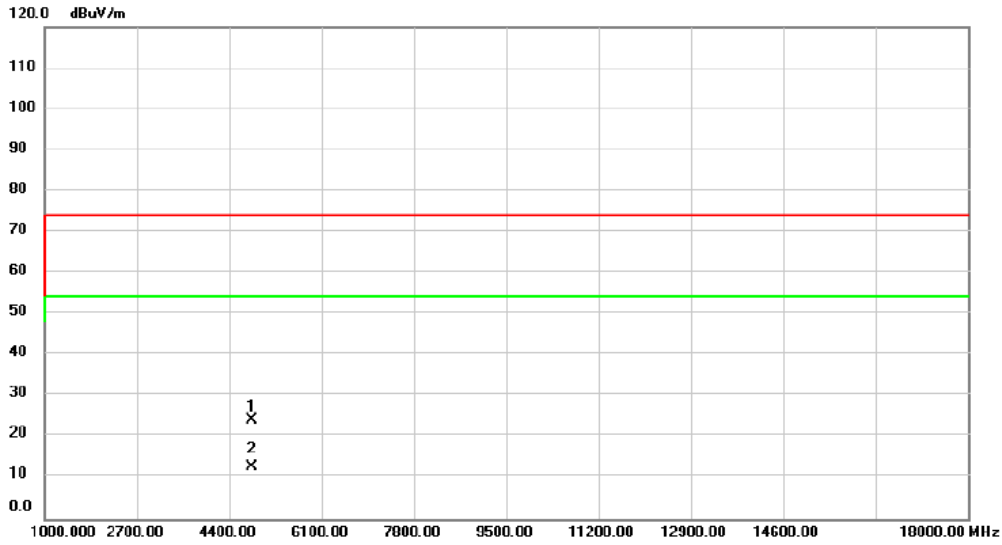


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4924.000	31.46	-8.33	23.13	74.00	-50.87	peak	
2	*	4924.000	19.28	-8.33	10.95	54.00	-43.05	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/9/11
Test Frequency	2412MHz	Polarization	Vertical

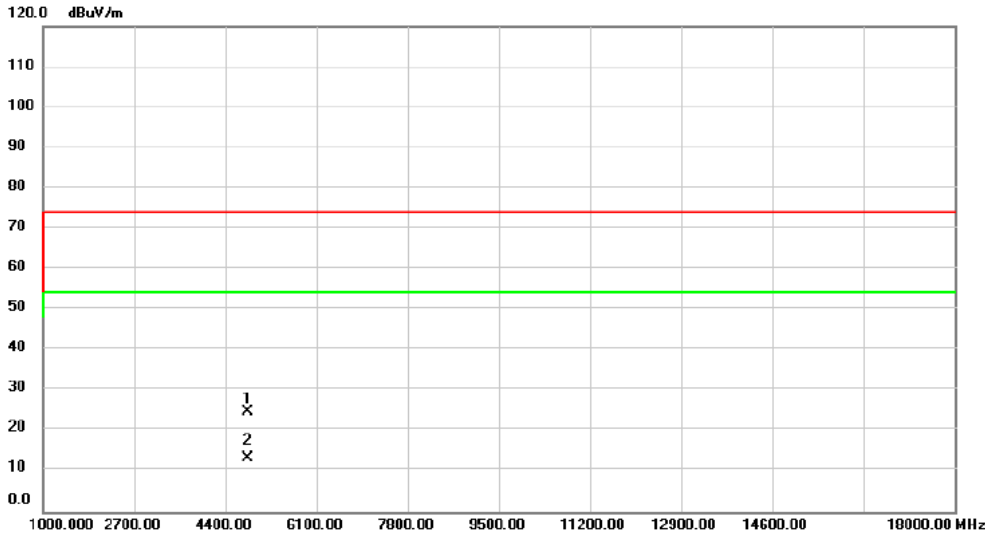


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4824.000	32.83	-8.57	24.26	74.00	-49.74	peak	
2	*	4824.000	21.25	-8.57	12.68	54.00	-41.32	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/9/11
Test Frequency	2412MHz	Polarization	Horizontal

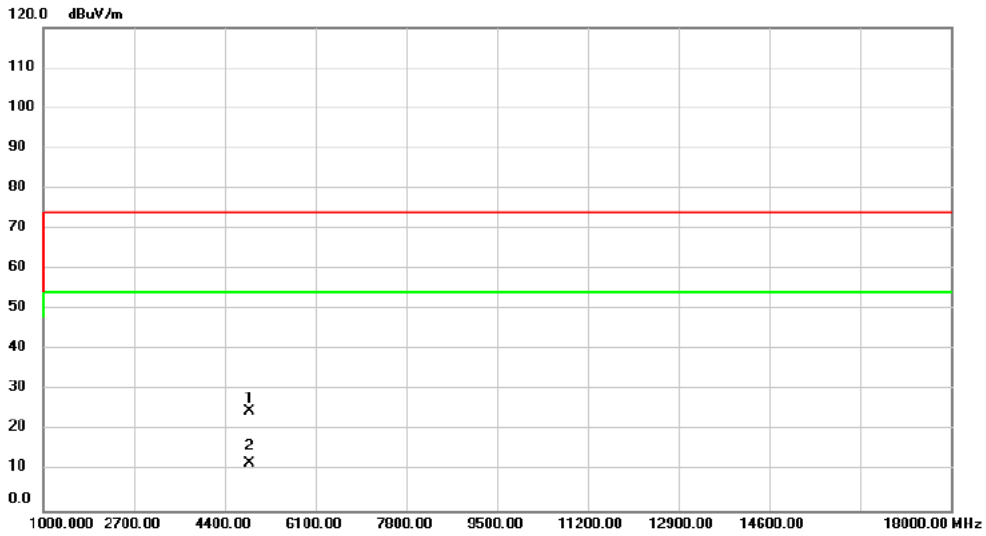


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4824.000	33.40	-8.57	24.83	74.00	-49.17	peak	
2	*	4824.000	22.07	-8.57	13.50	54.00	-40.50	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/9/11
Test Frequency	2437MHz	Polarization	Vertical

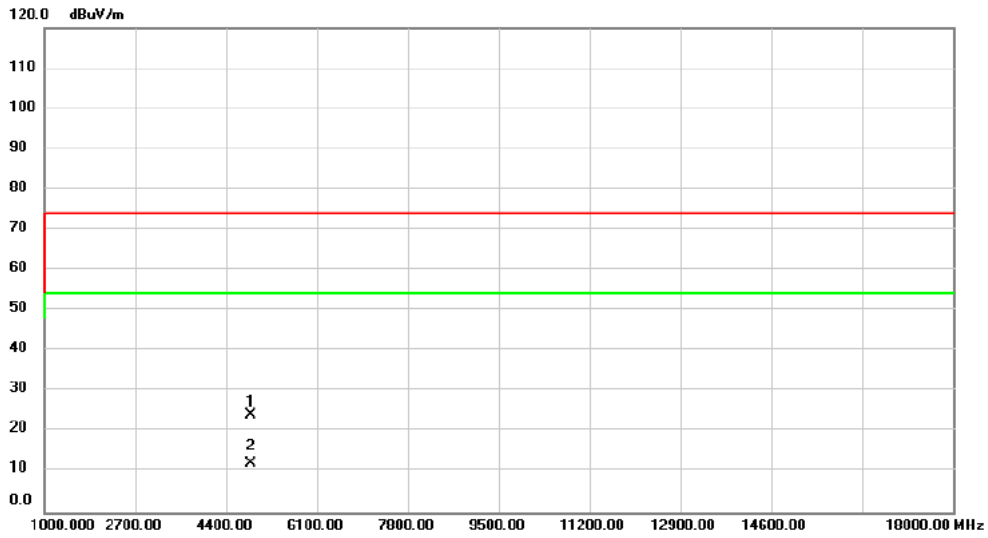


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4874.000	33.10	-8.44	24.66	74.00	-49.34	peak	
2	*	4874.000	20.38	-8.44	11.94	54.00	-42.06	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/9/11
Test Frequency	2437MHz	Polarization	Horizontal

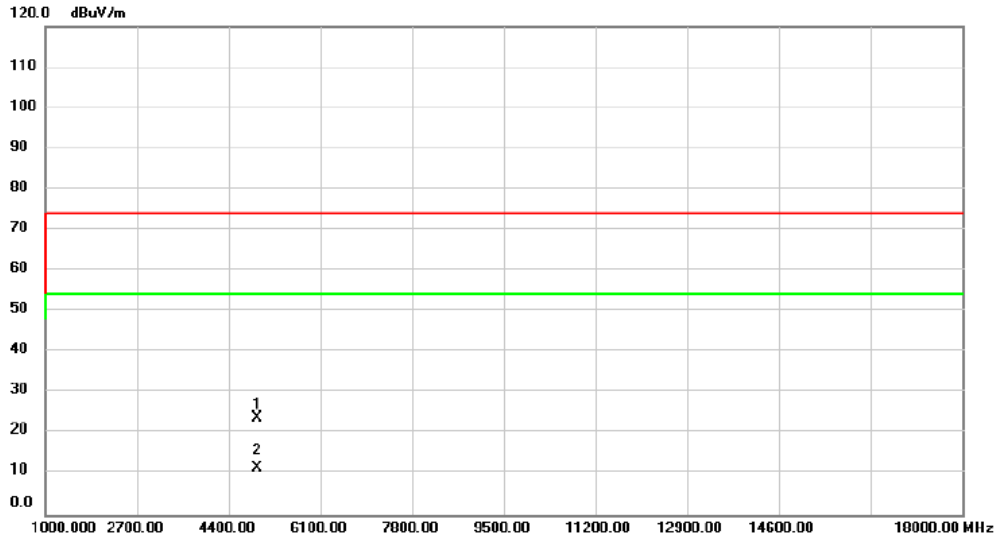


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4874.000	32.67	-8.44	24.23	74.00	-49.77	peak	
2	*	4874.000	20.68	-8.44	12.24	54.00	-41.76	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/9/11
Test Frequency	2462MHz	Polarization	Vertical

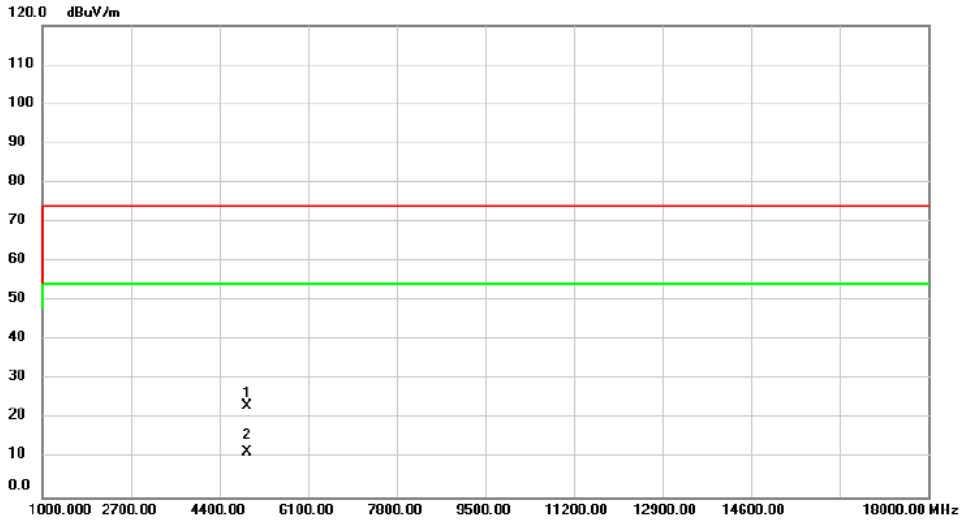


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4924.000	32.11	-8.33	23.78	74.00	-50.22	peak	
2	*	4924.000	19.87	-8.33	11.54	54.00	-42.46	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/9/11
Test Frequency	2462MHz	Polarization	Horizontal

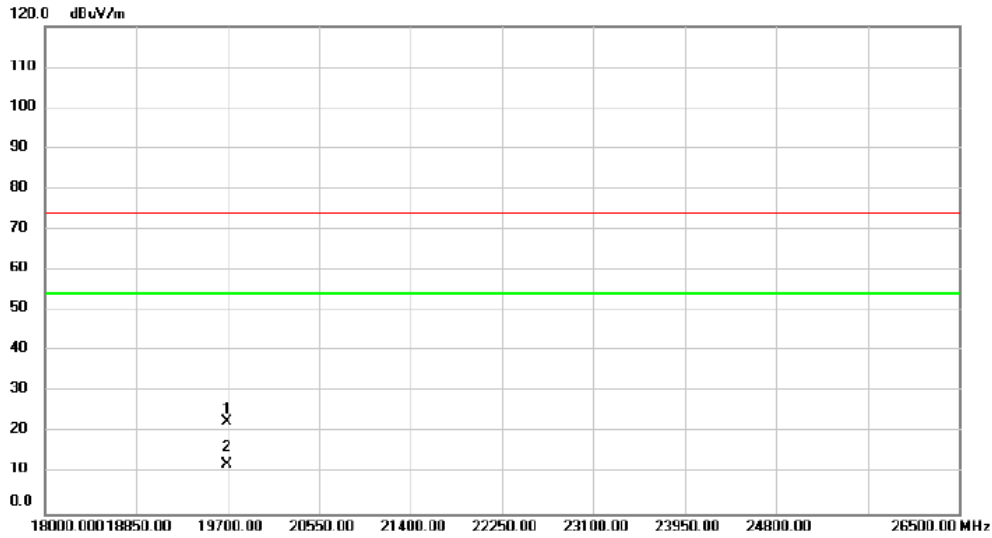


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4924.000	31.64	-8.33	23.31	74.00	-50.69	peak	
2 *	4924.000	20.01	-8.33	11.68	54.00	-42.32	AVG	

REMARKS:

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

Test Mode	IEEE 802.11g	Test Date	2024/9/11
Test Frequency	2437MHz	Polarization	Vertical

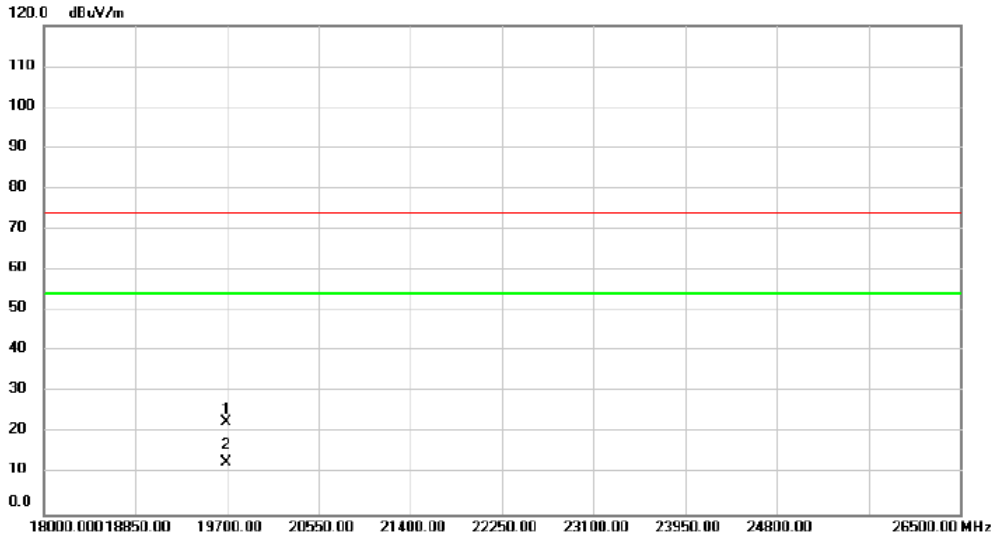


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		19696.00	32.62	-10.11	22.51	74.00	-51.49	peak	
2	*	19696.00	22.13	-10.11	12.02	54.00	-41.98	AVG	

REMARKS:

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

Test Mode	IEEE 802.11g	Test Date	2024/9/11
Test Frequency	2437MHz	Polarization	Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		19696.00	32.83	-10.11	22.72	74.00	-51.28	peak	
2	*	19696.00	22.79	-10.11	12.68	54.00	-41.32	AVG	

REMARKS:

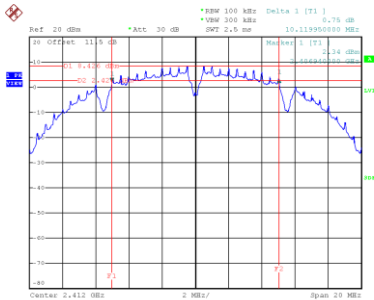
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

APPENDIX D BANDWIDTH

Test Mode | IEEE 802.11b

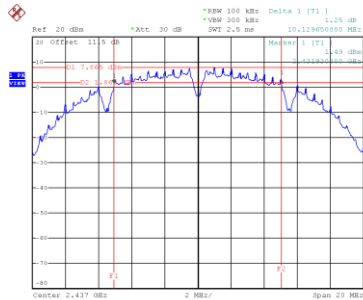
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	10.120	15.040	0.5	Complies
06	2437	10.130	14.960	0.5	Complies
11	2462	10.120	15.040	0.5	Complies

CH01



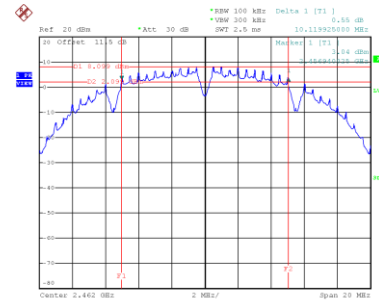
Date: 5.SEP.2024 16:13:42

CH06
6 dB Bandwidth



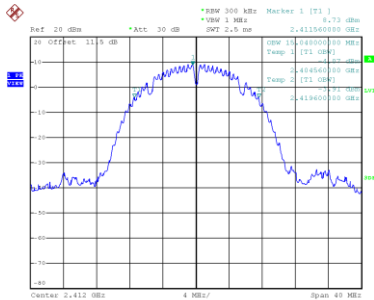
Date: 5.SEP.2024 16:16:13

CH11

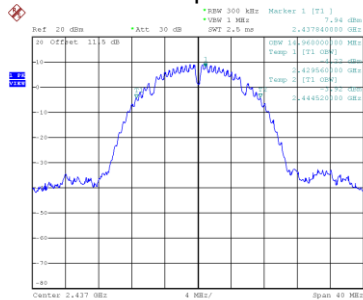


Date: 5.SEP.2024 16:19:43

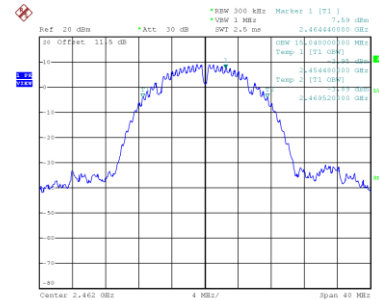
99 % Occupied Bandwidth



Date: 5.SEP.2024 16:13:51



Date: 5.SEP.2024 16:16:22

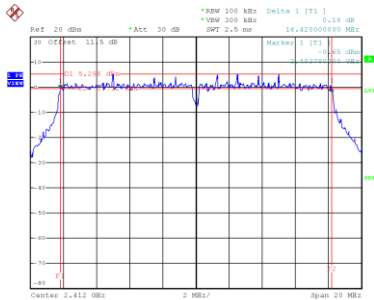


Date: 5.SEP.2024 16:19:52

Test Mode | IEEE 802.11g

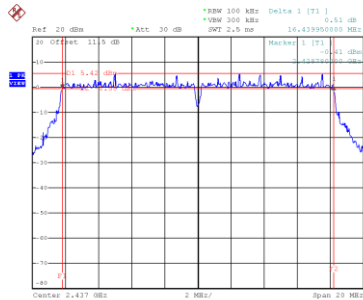
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	16.420	16.960	0.5	Complies
06	2437	16.440	16.880	0.5	Complies
11	2462	16.420	16.960	0.5	Complies

CH01



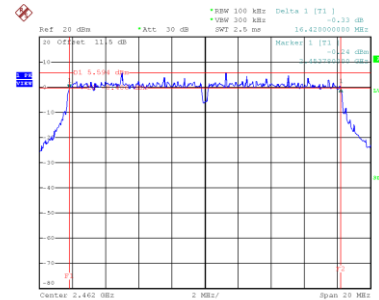
Date: 5. SEP. 2024 18:08:50

CH06
6 dB Bandwidth



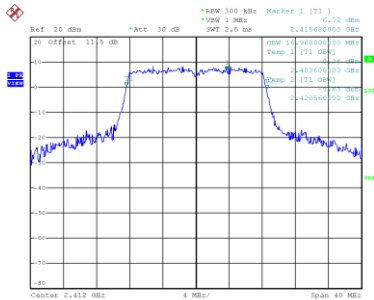
Date: 5. SEP. 2024 18:18:38

CH11

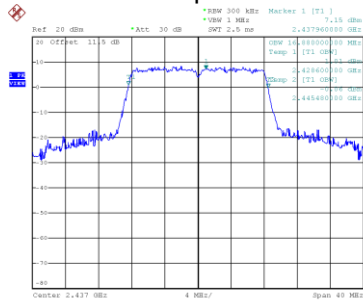


Date: 5. SEP. 2024 18:20:47

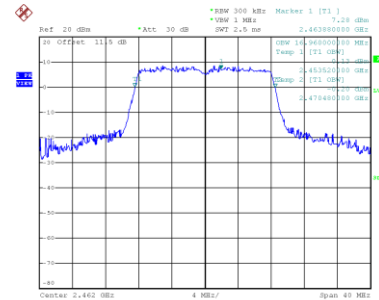
99 % Occupied Bandwidth



Date: 5. SEP. 2024 18:08:59



Date: 5. SEP. 2024 18:18:47

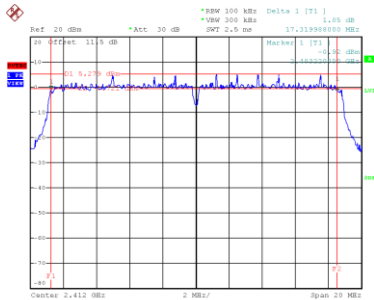


Date: 5. SEP. 2024 18:20:56

Test Mode | IEEE 802.11n (HT20)

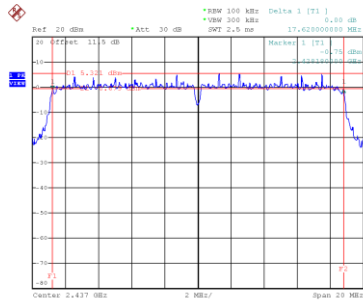
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	17.320	17.680	0.5	Complies
06	2437	17.620	17.920	0.5	Complies
11	2462	17.150	17.760	0.5	Complies

CH01



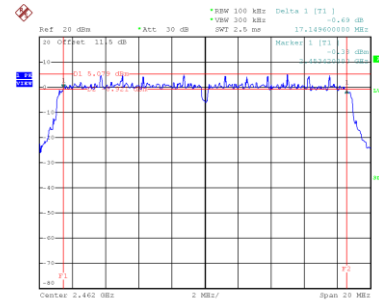
Date: 5. SEP. 2024 18:31:58

CH06
6 dB Bandwidth



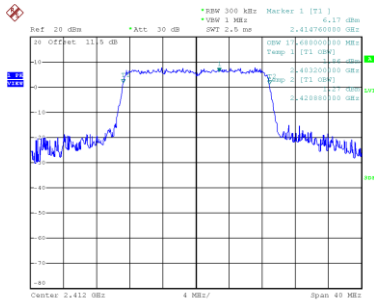
Date: 5. SEP. 2024 18:33:45

CH11

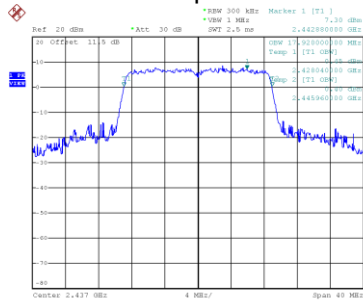


Date: 5. SEP. 2024 18:35:34

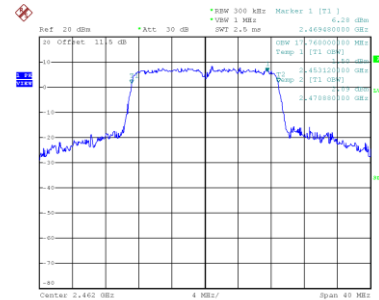
99 % Occupied Bandwidth



Date: 5. SEP. 2024 18:32:07



Date: 5. SEP. 2024 18:33:54



Date: 5. SEP. 2024 18:35:43

APPENDIX E MAXIMUM OUTPUT POWER

Test Mode	IEEE 802.11b	Tested Date	2024/9/5
-----------	--------------	-------------	----------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	19.22	0.46	19.68	30.00	1.0000	Complies
06	2437	19.14	0.46	19.60	30.00	1.0000	Complies
11	2462	19.21	0.46	19.67	30.00	1.0000	Complies

Test Mode	IEEE 802.11g	Tested Date	2024/9/5
-----------	--------------	-------------	----------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	18.93	0.43	19.36	30.00	1.0000	Complies
06	2437	19.26	0.43	19.69	30.00	1.0000	Complies
11	2462	18.88	0.43	19.31	30.00	1.0000	Complies

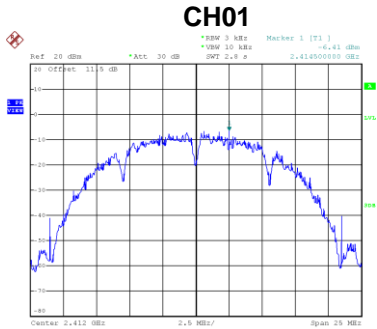
Test Mode	IEEE 802.11n (HT20)	Tested Date	2024/9/5
-----------	---------------------	-------------	----------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	19.17	0.48	19.65	30.00	1.0000	Complies
06	2437	18.84	0.48	19.32	30.00	1.0000	Complies
11	2462	19.13	0.48	19.61	30.00	1.0000	Complies

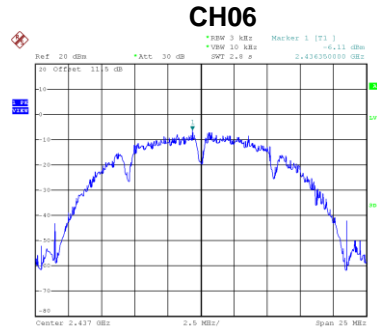
APPENDIX F POWER SPECTRAL DENSITY

Test Mode	IEEE 802.11b
-----------	--------------

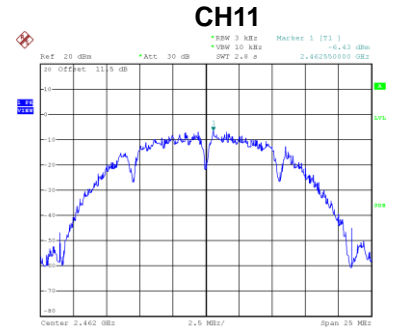
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-6.41	8.00	Complies
06	2437	-6.11	8.00	Complies
11	2462	-6.43	8.00	Complies



Date: 5.SEP.2024 16:14:44



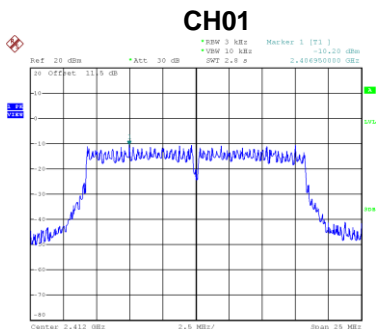
Date: 5.SEP.2024 16:17:15



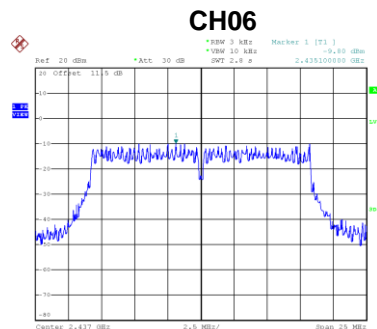
Date: 5.SEP.2024 16:20:45

Test Mode	IEEE 802.11g
-----------	--------------

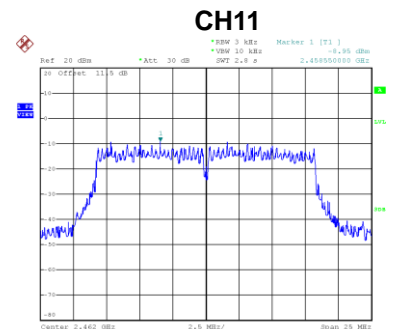
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-10.20	8.00	Complies
06	2437	-9.80	8.00	Complies
11	2462	-8.95	8.00	Complies



Date: 5.SEP.2024 18:09:52



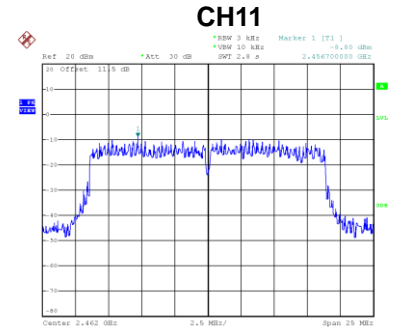
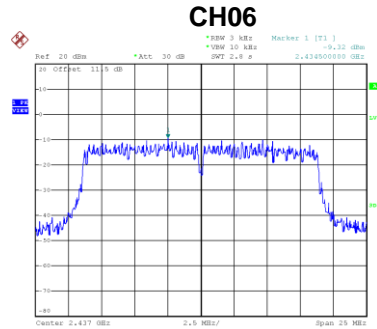
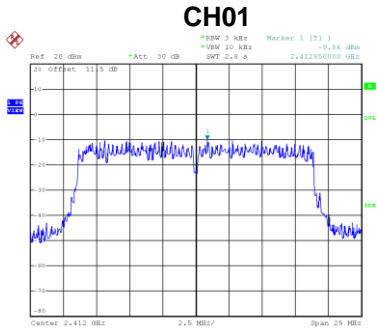
Date: 5.SEP.2024 18:19:40



Date: 5.SEP.2024 18:21:49

Test Mode | IEEE 802.11n (HT20)

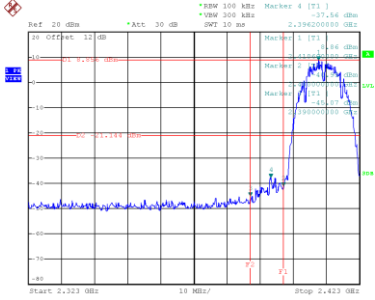
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-9.86	8.00	Complies
06	2437	-9.32	8.00	Complies
11	2462	-8.80	8.00	Complies



APPENDIX G ANTENNA CONDUCTED SPURIOUS EMISSIONS

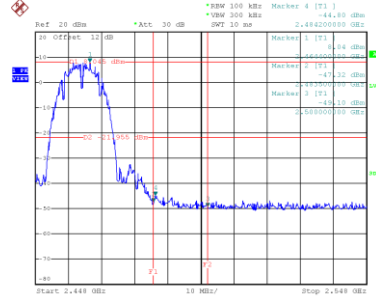
Test Mode IEEE 802.11b

Bandedge-CH01



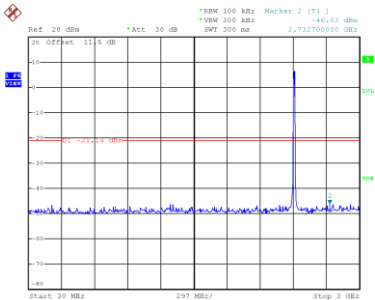
Date: 5.SEP.2024 16:14:00

Bandedge-CH11

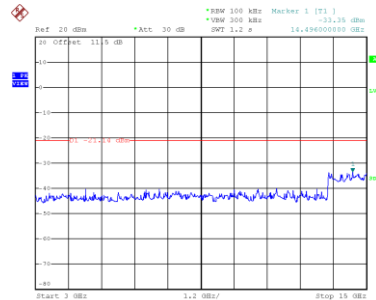


Date: 5.SEP.2024 16:20:02

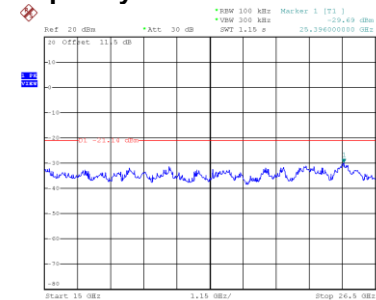
CH01 – 10th Harmonic of the fundamental frequency



Date: 5.SEP.2024 16:14:15

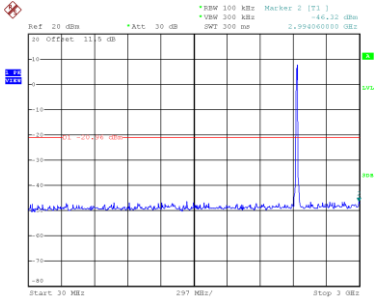


Date: 5.SEP.2024 16:14:24

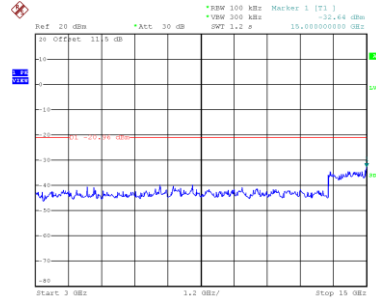


Date: 5.SEP.2024 16:14:33

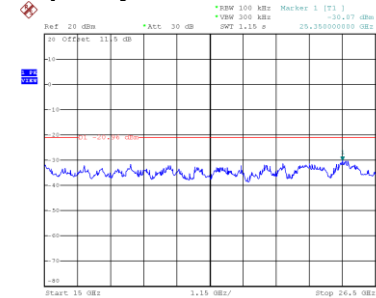
CH06 – 10th Harmonic of the fundamental frequency



Date: 5.SEP.2024 16:16:46

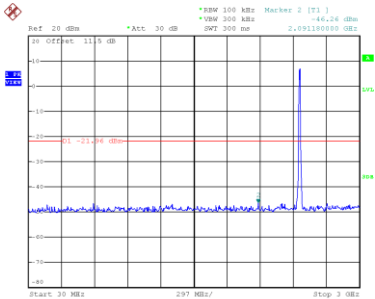


Date: 5.SEP.2024 16:16:55

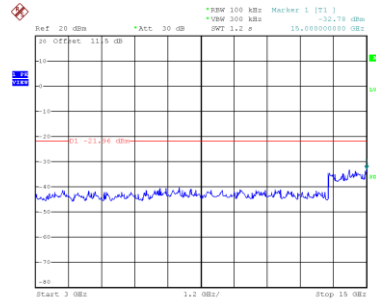


Date: 5.SEP.2024 16:17:04

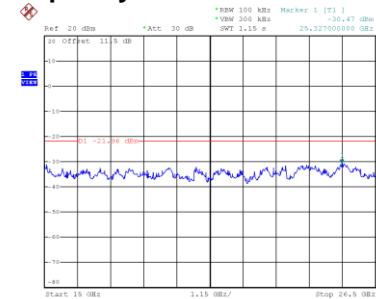
CH11 – 10th Harmonic of the fundamental frequency



Date: 5.SEP.2024 16:20:17



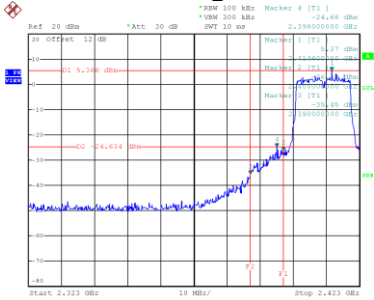
Date: 5.SEP.2024 16:20:26



Date: 5.SEP.2024 16:20:35

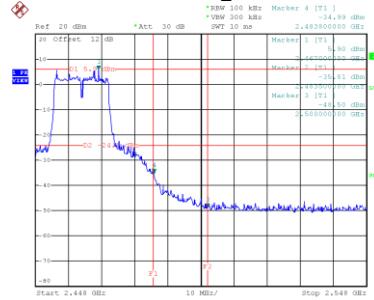
Test Mode IEEE 802.11g

Bandedge-CH01



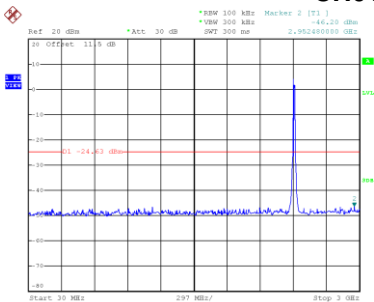
Date: 5.SEP.2024 18:09:08

Bandedge-CH11

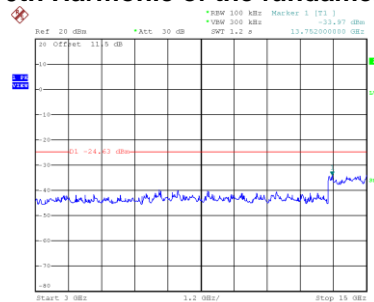


Date: 5.SEP.2024 18:21:06

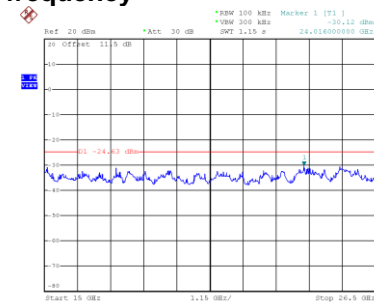
CH01 – 10th Harmonic of the fundamental frequency



Date: 5.SEP.2024 18:09:23

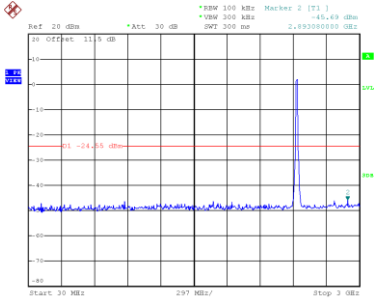


Date: 5.SEP.2024 18:09:32

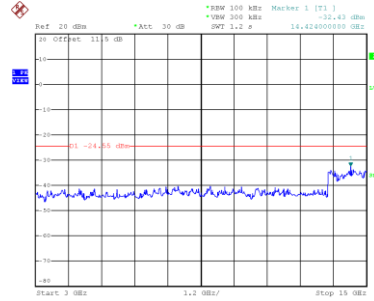


Date: 5.SEP.2024 18:09:41

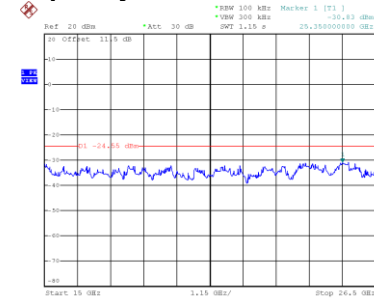
CH06 – 10th Harmonic of the fundamental frequency



Date: 5.SEP.2024 18:19:12

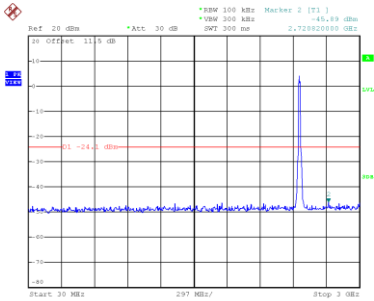


Date: 5.SEP.2024 18:19:21

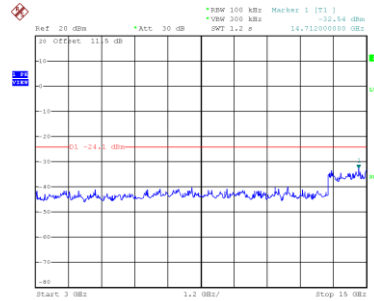


Date: 5.SEP.2024 18:19:30

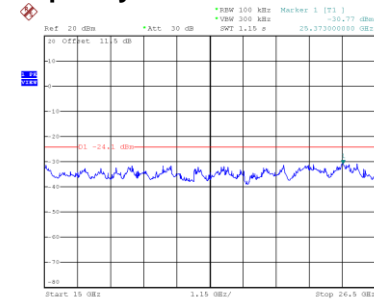
CH11 – 10th Harmonic of the fundamental frequency



Date: 5.SEP.2024 18:21:21



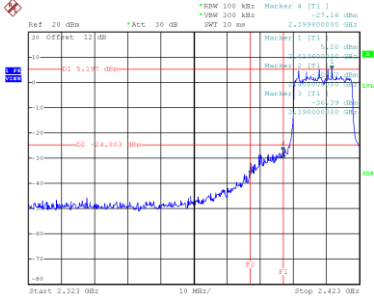
Date: 5.SEP.2024 18:21:30



Date: 5.SEP.2024 18:21:39

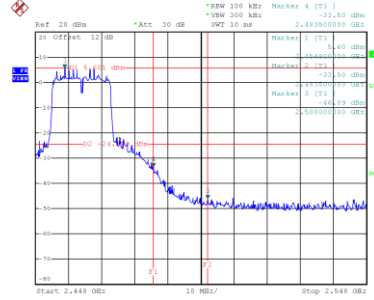
Test Mode IEEE 802.11n (HT20)

Bandedge-CH01



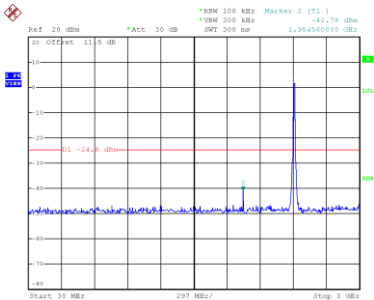
Date: 5.SEP.2024 18:32:16

Bandedge-CH11

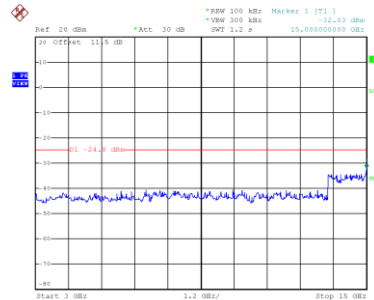


Date: 5.SEP.2024 18:35:52

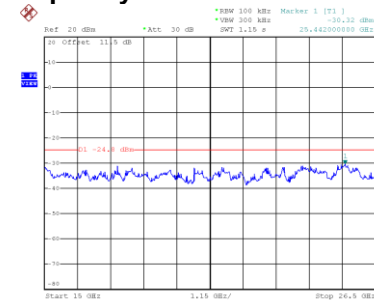
CH01 – 10th Harmonic of the fundamental frequency



Date: 5.SEP.2024 18:32:31

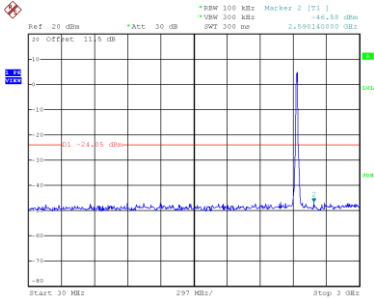


Date: 5.SEP.2024 18:32:40

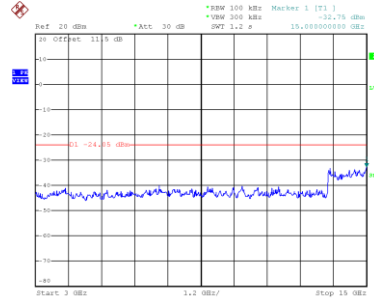


Date: 5.SEP.2024 18:32:49

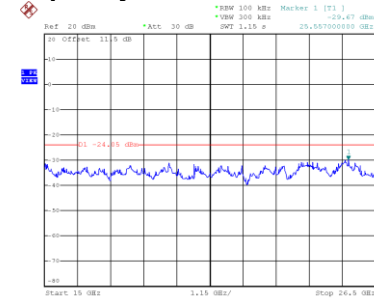
CH06 – 10th Harmonic of the fundamental frequency



Date: 5.SEP.2024 18:34:19

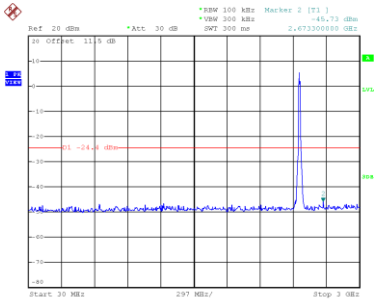


Date: 5.SEP.2024 18:34:20

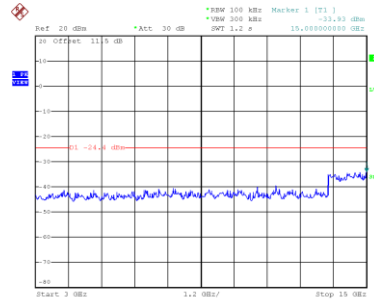


Date: 5.SEP.2024 18:34:37

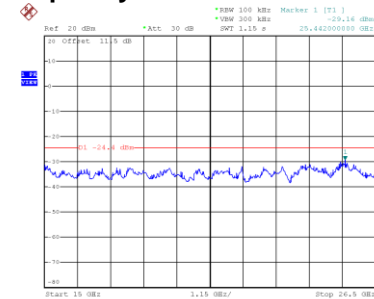
CH11 – 10th Harmonic of the fundamental frequency



Date: 5.SEP.2024 18:36:07



Date: 5.SEP.2024 18:36:16



Date: 5.SEP.2024 18:36:25

End of Test Report