



FCC Radio Test Report

FCC ID: 2BCGWD210

Report No. Equipment Brand Name Test Model Series Model Applicant Address	:	eLab-FCCP-1-2402G031 Tapo Video Doorbell Camera tp-link, Tapo Tapo D210 TD21 TP-LINK CORPORATION PTE. LTD. 7 Temasek Boulevard #29-03 Suntec Tower One, Singapore 038987
Radio Function	:	WLAN 2.4 GHz
FCC Rule Part(s) Measurement Procedure(s)		FCC CFR Title 47, Part 15, Subpart C (15.247) ANSI C63.10-2013
Date of Receipt Date of Test Issued Date	:	2024/4/17 2024/4/19 ~ 2024/4/30 2024/5/23

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

Volen AUC Poken Huang Prepared by Approved by Sam Chuang

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Declaration

eLab 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).

eLab'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. **eLab** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **eLab** issued reports.

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eLab'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.

eLab 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.



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REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
eLab-FCCP-1-2402G031	R00	Original Report.	2024/5/23	Valid





1 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

FCC CFR Title 47, Part 15, Subpart C						
Standard(s) Section	Test Item	Test Result	Judgment	Remark		
15.207	AC Power Line Conducted Emissions	APPENDIX A	PASS			
15.247(d) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C	PASS			
15.247(a)(2)	Bandwidth	APPENDIX D	PASS			
15.247(b)(3)	Maximum Output Power	APPENDIX E	PASS			
15.247(d)	Power Spectral Density	APPENDIX F	PASS			
15.247(e)	Antenna conducted Spurious Emission	APPENDIX G	PASS			
15.203	Antenna Requirement		PASS	Note(2)		

NOTE:

- (1)
- "N/A" denotes test is not applicable in this Test Report. The device what use a permanently attached antenna were considered sufficient to comply with the (2) provisions of 15.203.
- (3) The report format version is FR15CWL2.4_V1.0





1.1 TEST FACILITY

The test facilities used to collect the test data in this report:

No.64, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, TaiwanThe test sites and facilities are covered under FCC RN: 681248 and DN: TW4045.⊠C01⊠CB01⊠TR01

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $\mathbf{y} \pm \mathbf{U}$, where expanded uncertainty \mathbf{U} is based on a standard uncertainty multiplied by a coverage factor of $\mathbf{k} = 2$, providing a level of confidence of approximately **95** %. The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2. The eLab 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	3.44

B. Radiated emissions test:

Test Site	Measurement Frequency Range	U,(dB)
	0.03 GHz ~ 0.2 GHz	4.01
	0.2 GHz ~ 1 GHz	4.64
CB01	1 GHz ~ 6 GHz	5.91
CBUT	6 GHz ~ 18 GHz	6.24
	18 GHz ~ 26 GHz	3.93
	26 GHz ~ 40 GHz	4.06

C. Conducted test:

Test Item	U,(dB)
Occupied Bandwidth	1.0502
Maximum Output Power	1.0406
Power Spectral Density	1.0502
Conducted Spurious emissions	1.1484
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	23°C, 49%	AC 120V	Nero Hsieh
Radiated emissions below 1 GHz	25°C, 65%	AC 120V	Ken Lu
Radiated emissions above 1 GHz	25°C, 65%	AC 120V	Barry Tsui
Bandwidth	25°C, 48%	DC 5V	Cai Hu
Maximum Output Power	24°C, 50%	DC 5V	Cai Hu
Power Spectral Density	25°C, 48%	DC 5V	Cai Hu
Antenna conducted Spurious Emission	25°C, 48%	DC 5V	Cai Hu



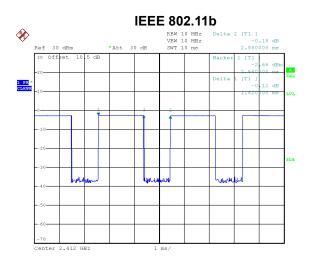


1.4 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

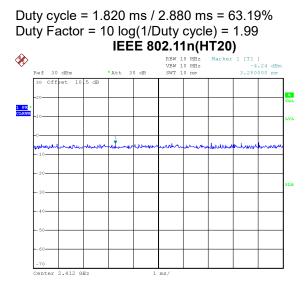
Test Software		IPOP	V4.1	
Mode	2412 MHz	2437 MHz	2462 MHz	Data Rate
IEEE 802.11b	80	115	127	1 Mbps
IEEE 802.11g	30	100	100	6 Mbps
IEEE 802.11n(HT20)	30	100	100	MCS 0

1.5 DUTY CYCLE

If duty cycle is \geq 98 %, duty factor is not required. If duty cycle is < 98 %, duty factor shall be considered. The output power = measured power + duty factor.

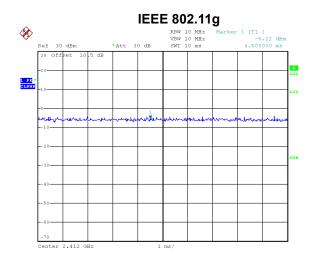


Date: 30.APR.2024 11:52:33



Date: 30.APR.2024 12:15:47

Duty cycle = 1.820 ms / 1.820 ms = 100%Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.00$



Date: 30.APR.2024 12:05:16

Duty cycle = 1.820 ms / 1.820 ms = 100%Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.00$

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2 GENERAL INFORMATION

2.1 DESCRIPTION OF EUT

Equipment	Tapo Video Doorbell Camera
Brand Name	tp-link, Tapo
Test Model	Tapo D210
Series Model	TD21
Model Difference(s)	Only differ in the model name.
Software Version	1.X
Hardware Version	1.0
Power Source	1# DC Voltage supplied from AC adapter. (support unit) 2# Battery supplied. Model: INR18650/33V
Power Rating	1# 5V 1A 2# DC DC 2.8V-4.2V
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 65 Mbps
Maximum Output Power	IEEE 802.11b: 21.95 dBm (0.1567 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)		
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:

Ant	Manufacturer	P/N	Antenna Type	Connector	Gain (dBi)
1	BIG FIELD GLOBAL PTE. LTD	2051501458	Loop	N/A	0.0
2	BIG FIELD GLOBAL PTE. LTD	6035500221	PIFA	N/A	0.0

Note:

1) Ant.1 refers to Main Antenna, Ant.2 refers to Aux Antenna. Both Main and Aux Antenna were evaluated for test power, and it was found that the outp power of Aux Antenna was less than that of Main Antenna, so only test Main Antenna was evaluated and recorded in the report.

2) The antenna gain is provided by the manufacturer.





2.2 TEST MODES

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

NOTE:

- (1) All the bit rate of transmitter have been tested and found the lowest rate is found to be the worst case and recorded.
- (2) For AC power line conducted emissions and radiated emission below 1 GHz test, the TX B Mode Channel 11 is found to be the worst case and recorded.
- (3) For radiated emission above 1 GHz test, the spurious points of 1GHz~26.5GHz have been pre-tested and in this report only recorded the worst case. The remaining spurious points are all below the limit value of 20dB.
- (4) For radiated emission Harmonic 18-26.5GHz test, only tested the worst case and recorded.
- (5) For radiated emission band edge test, both Vertical and Horizontal are evaluated, but only the worst case (Vertical) is recorded.

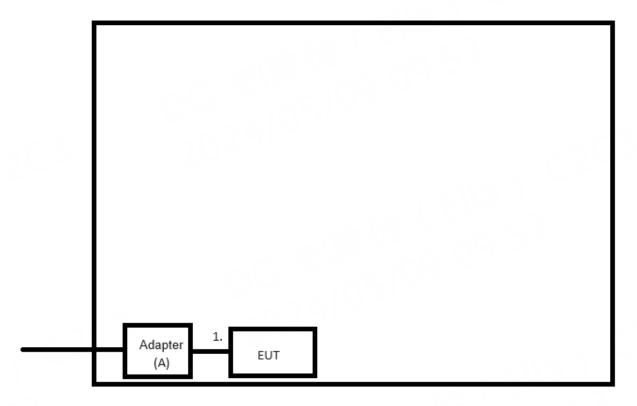




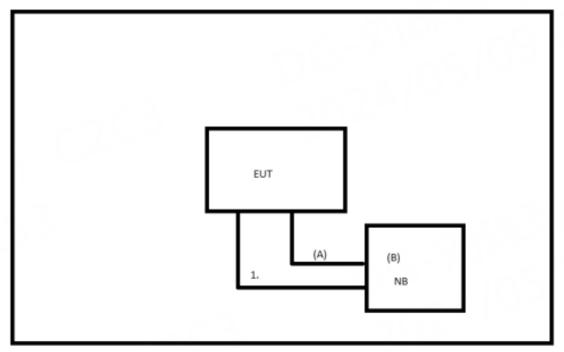
2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

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

For AC power line conducted emissions

Item	Equipment	Brand	Mod	el No.	Remarks
А	Adapter	N/A	N/A S		Supplied by test requester
Item	Cable Type	Ferrite Core	Length	Shielded	Remarks
1	USB to Type-c	NO	1m	YES	Furnished by test lab

For Radiated Emissions

	Item	Equipment	Brand	Model No.	Remarks
ſ	А	Fixture	TTL	FT232RL	Furnished by test lab
	В	Notebook	Lenovo	ThinkBook 14 G4 IAP	Furnished by test lab

Item	Cable Type	Ferrite Core	Length	Shielded	Remarks
1	USB to Type-c	NO	1m	YES	Furnished by test lab





3 AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

Frequency	Limit (dBµV)		
(MHz)	Quasi-peak	Average	
0.15 - 0.5	66 - 56 *	56 - 46 *	
0.5 - 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		Correct Factor		Measurement Value
38.22	+	3.45	Ш	41.67

Measurement Value		Limit Value		Margin Level
41.67	I	60	Ш	-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.

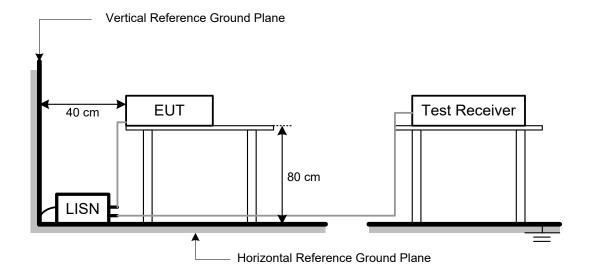
NOTE:

- (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 TEST SETUP



3.4 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)		Emissions V/m)	Measurement Distance (meters)
	Peak	Average	(meters)
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		Correct Factor		Measurement Value
19.11	+	2.11	Ш	21.22

Measurement Value		Limit Value		Margin Level
21.22	-	54	Ш	-32.78

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

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





4.2 TEST PROCEDURE

- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5 m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- i. For the actual test configuration, please refer to the related Item EUT TEST PHOTO.

RX Antenna EUT 3m 4 50cm 4 3m 4 5pectrum Analyzer /Receiver

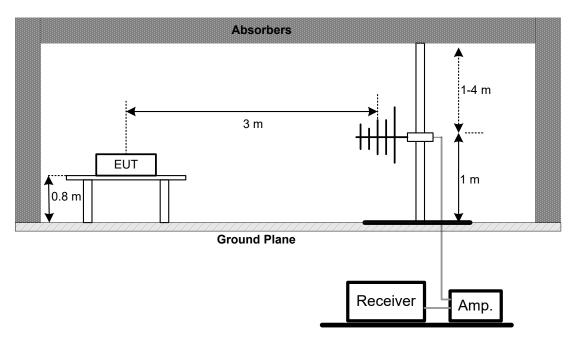
4.3 TEST SETUP

9 kHz to 30 MHz

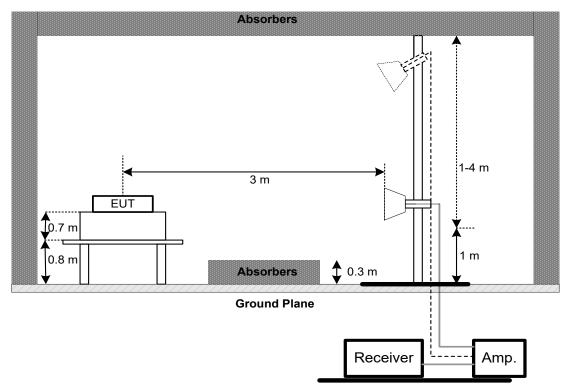




30 MHz to 1 GHz



Above 1 GHz



4.4 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

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4.5 TEST RESULT - BELOW 30 MHZ

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

4.6 TEST RESULT - 30 MHZ TO 1 GHZ

Please refer to the APPENDIX B.

4.7 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

FCC Part15, Subpart C (15.247)					
Section	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 TEST SETUP



5.4 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.5 TEST RESULT

Please refer to the APPENDIX D.





6 MAXIMUM OUTPUT POWER TEST

6.1 LIMIT

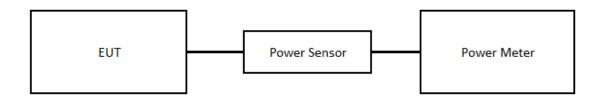
FCC Part15, Subpart C (15.247)					
Section Test Item Limit					
15.247(b)	Maximum Output Power	1 Watt or 30dBm			

6.2 TEST PROCEDURE

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

 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 TEST SETUP



6.4 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.5 TEST RESULT

Please refer to the APPENDIX E.





7 POWER SPECTRAL DENSITY

7.1 LIMIT

FCC Part15, Subpart C (15.247)						
Section	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 TEST SETUP



7.4 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.5 TEST RESULT

Please refer to the APPENDIX F.





8 ANTENNA CONDUCTED SPURIOUS EMISSIONS TEST

8.1 LIMIT

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

8.2 TEST PROCEDURE

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

8.3 TEST SETUP



8.4 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

8.5 TEST RESULT

Please refer to the APPENDIX G.





9 LIST OF MEASURING EQUIPMENTS

	AC Power Line Conducted Emissions								
Item	Item Kind of Manufacturer Type No. Ser		Serial No.	Calibrated Date	Calibrated Until				
1	Two-Line V-Network	R&S	ENV216	101051	2023/7/21	2024/7/20			
2	Test Cable	EMCI	EMCRG58-BM-B M-9000	210501	2023/12/11	2024/12/10			
3	EXA Spectrum Analyzer	keysight	N9038A	MY54130009	2023/6/26	2024/6/25			
4	Measurement Software	Farad	EZ_EMC (Ver. NB-03A1-01)	N/A	N/A	N/A			

	Radiated Emissions_ Below 1G							
Item	Item Kind of Equipment Manufacturer		Type No.	Serial No.	Calibrated Date	Calibrated Until		
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	01207	2023/12/18	2024/12/17		
2	EMI Test Receiver	Keysight	N9038A	MY54130009	2023/6/26	2024/6/25		
3	Pre-Amplifier EMCI EMC		EMC001330-202 01222	980807	2023/12/11	2024/12/10		
4	Test Cable	EMCI	EMC-8D-NM-NM -5000	150106	2023/12/11	2024/12/10		
5	Test Cable	EMCI	EMC-CFD-400-N M-NM-8000	200348	2023/12/11	2024/12/10		
6	Measurement E7 EMC (\/er		N/A	N/A	N/A			

	Radiated Emissions_ Above 1G								
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until			
1	Broad-Band Horn Antenna	RFSPIN	DRH18-E	210109A18E	2024/1/10	2025/1/9			
2	Pre-Amplifier	EMCI	EMC051845SE	980779	2023/12/11	2024/12/10			
3	Test Cable	EMCI	EMC105-SM-SM- 1000	210119	2023/12/11	2024/12/10			
4	Test Cable	EMCI	EMC105-SM-SM- 3000	210118	2023/12/11	2024/12/10			
5	Test Cable	EMCI	EMC105-SM-SM- 7000	210117	2023/12/11	2024/12/10			
6	EXA Spectrum Analyzer	keysight	N9010A	MY56480554	2023/9/12	2024/9/11			
7	Measurement Software	Farad	EZ_EMC (Ver. NB-03A1-01)	N/A	N/A	N/A			





	Bandwidth & Maximum Output Power & Power Spectral Density & Antenna conducted Spurious Emission							
Item	Kind of Equipment	Manufacturer	Serial No.	Calibrated Date	Calibrated Until			
Spectrum R&S FSP 30 100854 2023/6/26 2024/								
2	BTL-ConducredT est	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 APPENDIX-TEST PHOTOS.

11 EUT PHOTOS

Please refer to APPENDIX-EUT PHOTOS.



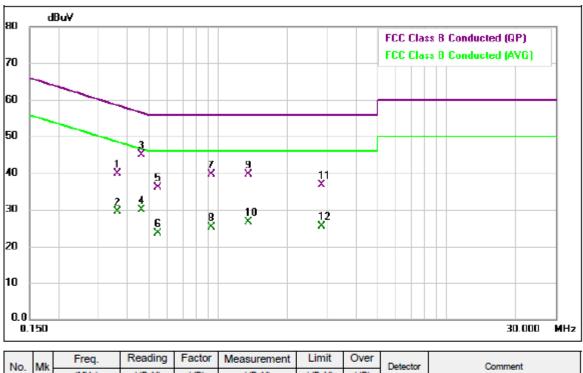


APPENDIX A AC POWER LINE CONDUCTED EMISSIONS





Test Mode	TX B Mode Channel 11	Tested Date	2024/4/19
Test Frequency	2462MHz	Phase	Line



No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Comment
NO.	IVIN	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)		continent
1		0.363750	30.20	9.64	39.84	58.64	-18.80	QP	
2		0.363750	19.80	9.64	29.44	48.64	-19.20	AVG	
3	*	0.462750	35.50	9.64	45.14	56.64	-11.50	QP	
4		0.462750	20.30	9.64	29.94	46.64	-16.70	AVG	
5		0.543750	26.50	9.64	36.14	56.00	-19.86	QP	
6		0.543750	14.00	9.64	23.64	46.00	-22.36	AVG	
7		0.933000	30.00	9.67	39.67	56.00	-16.33	QP	
8		0.933000	15.70	9.67	25.37	46.00	-20.63	AVG	
9		1.351500	29.90	9.68	39.58	56.00	-16.42	QP	
10		1.351500	17.00	9.68	26.68	46.00	-19.32	AVG	
11		2.843250	27.10	9.72	36.82	56.00	-19.18	QP	
12		2.843250	15.90	9.72	25.62	46.00	-20.38	AVG	

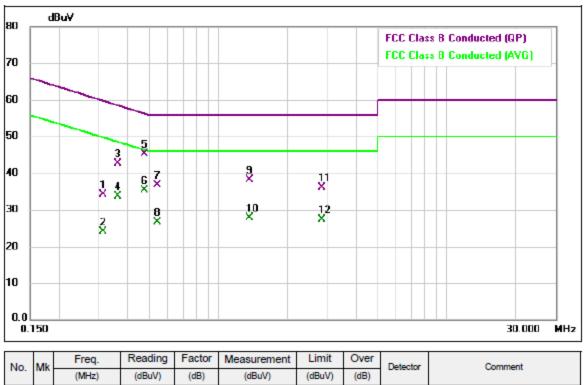
REMARKS:

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





Test Mode	TX B Mode Channel 11	Tested Date	2024/4/19
Test Frequency	2462MHz	Phase	Neutral



No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Comment
NO.	IVIN	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	Deletion	Comment
1		0.312000	24.70	9.64	34.34	59.92	-25.58	QP	
2		0.312000	14.40	9.64	24.04	49.92	-25.88	AVG	
3		0.361500	33.00	9.64	42.64	58.69	-16.05	QP	
4		0.361500	24.10	9.64	33.74	48.69	-14.95	AVG	
5		0.474000	35.60	9.64	45.24	56.44	-11.20	QP	
6	*	0.474000	25.70	9.64	35.34	46.44	-11.10	AVG	
7		0.541500	27.30	9.64	36.94	56.00	-19.06	QP	
8		0.541500	17.10	9.64	26.74	46.00	-19.26	AVG	
9		1.371750	28.50	9.68	38.18	56.00	-17.82	QP	
10		1.371750	18.20	9.68	27.88	46.00	-18.12	AVG	
11		2.827500	26.30	9.72	36.02	56.00	-19.98	QP	
12		2.827500	17.60	9.72	27.32	46.00	-18.68	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

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Test Mode			EE 802.11b		Test Date				2024/4/29		
Test Fre	equency	2	2462MHz		Р	olarizat	ion		Vertica		
80.0	dBuV <i>I</i> m									1	
70											
60											
50											
40 —											
30	 * _2	ž	4 5 ×								
20	^										
10											
0.0	0 127.00	224.00 321	.00 418.00	515.0	00 612.	00 70)9.00 E	06.00	1000.00	MHz	
No. Mk.	Rea Freq. Lev			Limit	Margin		Antenna Height	Table Degree			
	MHz dB		dBuV/m	dBuV/m		Detector	cm	degree	Comment		
1 104	.6900 42.	03 -15.56	26.47	43.50	-17.03	peak	200	84		_	
2 142	.5200 36.	33 -11.75	24.58	43.50	-18.92	peak	100	35			
3 241	.4600 41.	10 -12.23	28.87	46.00	-17.13	peak	172	0			
4 384	.0500 37.	43 -7.93	29.50	46.00	-16.50	peak	200	130			
5 408	.3000 38.	19 -7.23	30.96	46.00	-15.04	peak	100	132			
6 * 432	.5500 38.	38 -6.51	31.87	46.00	-14.13	peak	100	49			

REMARKS:

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





Test Mode Test Frequency					E 802.11b			Test Dat			2024/4/29		
			су	24	62MHz		Р	olarizati		Horizontal			
8	0.0 Г	dBuV/m	1									1	
7	0 -												
6	0												
5	0												
4	0		ž										
3	0	X	^	З Х	4 5 9 × ×	Į							
2	0												
1	0												
0.	.0 30.	000 127.	.00 224.0	0 321.0	0 418.00) 515.	00 612	2.00 70)9.00 (106.00	1000.00	MHz	
No. M	k.	Freq.	Reading Level	Correct Factor	Measure- ment	- Limit	Margin		Antenna Height	Table Degree			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment		
1	1(04.6900	48.79	-15.56	33.23	43.50	-10.27	QP	200	355			
	1/	54.1600	46.33	-11.10	35.23	43.50	-8.27	peak	200	195			
2 *	13	1.1000											

46.00 -15.77

46.00 -14.99

46.00 -14.70

107

100

200

peak

peak

peak

360

198

124

REMARKS:

4

5

6

335.5500

384.0500

431.5800

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

-9.30

-7.93

-6.54

30.23

31.01

31.30

39.53

38.94

37.84





APPENDIX C RADIATED EMISSIONS - ABOVE 1 GHZ

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Т	est Mode			E 802.11I	b	-	Test Dat	е		2024/4/2	
Tes	t Frequenc	су	24	112MHz		Р	olarizati	on		Vertica	
12	0.0 dBuV/m						1				7
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10	0										
90											-
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70											
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10											
0.0) 2312.000 233	2.00 235	52.00 2372	.00 2392	.00 2412	.00 243	2.00 24	52.00	2472.00	2512.00	MHz
No. MI		Reading Level		Measure ment		Margin		Antenna Height			
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1	2386.200	58.35	-6.13	52.22	74.00	-21.78	peak				
2	2386.200	53.49	-6.13	47.36	54.00	-6.64	AVG				
	2413.600	87.88	-6.06	81.82	74.00	7.82	peak				
4 *	2413.600	84.50	-6.06	78.44	54.00	24.44	AVG				
5	2508.200	38.73	-5.84	32.89	74.00	-41.11	peak				
6	2508.200	24.78	-5.84	18.94	54.00	-35.06	AVG				

REMARKS:

Measurement Value = Reading Level + Correct Factor.
 Margin Level = Measurement Value - Limit Value.





Т	est Mode		IEE	E 802.11k	o I	-	Test Dat	e		2024/4/2	25
Test	Frequenc	;y	24	462MHz		Р	olarizati	on		Vertica	
120	.0 dBuV/m										-
110	ı										
100	ı — — —										
90						•					
80					~	*					-
70											
60				<u>Λ</u>	\wedge	V	5				
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20		2 X									1
10											-
0.0	2362.000 2382	2.00 2402	2.00 2422	.00 2442.	00 2462	00 340	2.00 25	02.00 2	2522.00	2562.00	
	2362.000 2362	Reading		Measure		.00 240		Antenna		2362.00	MNZ
No. Mk	Freq.	Level	Factor	ment	Limit	Margin		Height	Degree		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1	2385.800	38.55	-6.13	32.42	74.00	-41.58	peak				
2	2385.800	24.64	-6.13	18.51	54.00	-35.49	AVG				
3 X	2463.600	88.93	-5.95	82.98	74.00	8.98	peak				
4 *	2463.600	85.49	-5.95	79.54	54.00	25.54	AVG				
5	2487.800	63.50	-5.90	57.60	74.00	-16.40	peak				

54.00 -1.16

AVG

REMARKS:

6

2487.800

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

-5.90

52.84

58.74





Test Mode					E 802.11	g		Test Da			2024/4/25		
Т	est	Frequenc	;y	24	412MHz		P	olarizat	ion		Vertica		
	120	.0 dBuV/m										,	
	110												
	100												
	90					3							
	80						<u> </u>					{	
	70						www.						
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	20									6 ×		1	
	10 0.0											1	
		2312.000 2332	2.00 23	52.00 2372	2.00 2392	2.00 2412	2.00 243	2.00 2	452.00 2	2472.00	2512.00	」 MHz	
No.	Mk.	Freq.	Readin Level	g Correct Factor	Measur ment	e- Limit	Margin		Antenna Height	Table Degree			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment		
1		2387.200	67.78	-6.13	61.65	74.00	-12.35	peak					
2		2387.200	51.65	-6.13	45.52	54.00	-8.48	AVG					
		2410.400	90.86	-6.08	84.78	74.00	10.78	peak					
4		2410.400	82.23	-6.08	76.15	54.00	22.15	AVG					
5		2484.400	42.66	-5.91	36.75	74.00	-37.25	peak					
6		2484.400	24.49	-5.91	18.58	54.00	-35.42	AVG					

REMARKS:

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





Test Mode			IEEE		Test Date				2024/4/25		
Test	Frequency		24	62MHz		Po	olarizatio	on		Vertical	
120	.0 dBuV/m										,
110											
100											
90						3					-
80					- for the second	<u>-</u>					1
70				المليباه	e de la compañía de l	Martin Martin	5				
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30	Warm HAMMONT IN I	2							1 1	n i Mal Wilhall Monnessing	
		2 X									
10 0.0											1
	362.000 2382.00	0 2402	.00 2422.	.00 2442.0	0 2462	.00 248	2.00 25	02.00 2	2522.00	2562.00	」 MHz
No. Mk.		Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1	2388.200	47.57	-6.12	41.45	74.00	-32.55	peak				
2	2388.200	24.61	-6.12	18.49	54.00	-35.51	AVG				
3 X	2467.400	92.01	-5.95	86.06	74.00	12.06	peak				
4 *	2467.400	83.21	-5.95	77.26	54.00	23.26	AVG				
5	2483.800	70.39	-5.92	64.47	74.00	-9.53	peak				
6	2483.800	53.50	-5.92	47.58	54.00	-6.42	AVG				

REMARKS:

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





Te	st Mode)2.11n(HT	20)		Test Dat			2024/4/2	5
Test	Frequenc	;y	24	12MHz		P	olarizati	on		Vertical	
120.	.0 dBuV/m										1
110											
100											
90						3					
80						4 X					
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60				L. Could Vinter			M				
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10											
0.0											
2	312.000 233					.00 243			472.00	2512.00	MHz
No. Mk.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		Antenna Height	Table Degree		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
	2388.600	68.93	-6.12	62.81	74.00	-11.19	peak				
	2388.600	52.30	-6.12	46.18	54.00	-7.82	AVG				
	2415.400	90.62	-6.06	84.56	74.00	10.56	peak				
	2415.400	81.83	-6.06	75.77	54.00	21.77	AVG				
	2484.600	40.58	-5.91	34.67	74.00	-39.33	peak				
6	2484.600	24.45	-5.91	18.54	54.00	-35.46	AVG				

Measurement Value = Reading Level + Correct Factor.
 Margin Level = Measurement Value - Limit Value.





Test Mode	IEEE 802.11n(HT20)	Test Date	2024/4/25
Test Frequency	2462MHz	Polarization	Vertical
120.0 dBu∀/m			· · · · · · · · · · · · · · · · · · ·
110			
100			
90		3	
80		4 ×	
70		5	
60	A A A A A A A A A A A A A A A A A A A	This would be	
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40 30 mhyll Marker Marker M	Welf well all and the second and the	× (Martin Martin Martin
20 2			
10			
0.0			
			2.00 2562.00 MHz
Readir No. Mk. Freq. Level			Table Degree
MHz dBuV	dB dBuV/m dBuV/r	n dB Detector cm d	degree Comment
1 2389.400 48.49		•	
2 2389.400 24.89	-6.12 18.77 54.00	-35.23 AVG	
3 X 2464.400 92.05	-5.95 86.10 74.00) 12.10 peak	
4 * 2464.400 83.19	-5.95 77.24 54.00) 23.24 AVG	
5 2484.600 70.96	-5.91 65.05 74.00) -8.95 peak	
6 2484.600 54.70	-5.91 48.79 54.00) -5.21 AVG	

Measurement Value = Reading Level + Correct Factor.
 Margin Level = Measurement Value - Limit Value.



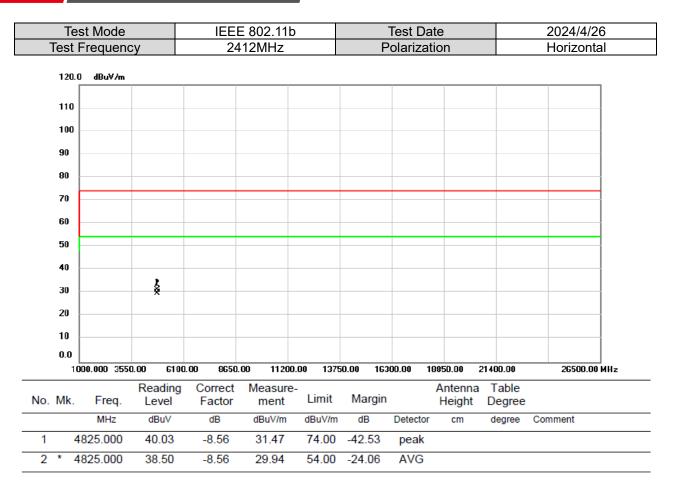


		est Mode			802.11b			Test Da			2024/4/26	
T	est	Frequenc	;y	24	12MHz		P	Polarizat	ion		Vertical	
	120	.0 dBuV/m										
	110											
	100											
	90											
	80											
	70											
	60											
	50											
	40		•									
	30		ž									
	20											
	10											
	0.0	000.000 355	0.00 610	0.00 8650.0	00 11200	00 1035	0.00 10	200.00 1	8850.00	21400.00	26500.00 MH	
	1	000.000 355					0.00 163	300.00 1			26500.00 MH	HZ
0.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin	1	Antenna Height	a Table Degree		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1		4825.000	41.52	-8.56	32.96	74.00	-41.04	peak				
2	*	4825.000	40.17	-8.56	31.61	54.00	-22.39	AVG				

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







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



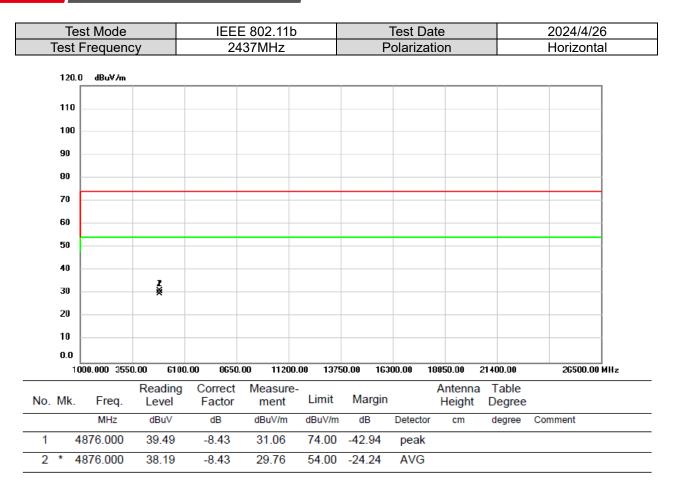


	est Mode			802.11b			Test Da			2024/4/26
Test	Frequence	су	243	37MHz		F	Polarizat	ion		Vertical
120).0 dBuV/m	, , , , , , , , , , , , , , , , , , , ,	· · ·	1						
110)									
100)									
90										
80										
70										
60										
50										
40		2								
30		2								
20										
10										
0.0	1000.000 355	0.00 6100.	.00 8650.0	10 11200.	00 1375	0.00 163	300.00 1	8850.00	21400.00	26500.00 MHz
o. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	a Table Degree	
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	4876.000	41.41	-8.43	32.98	74.00	-41.02	peak			
2 *	4876.000	39.99	-8.43	31.56	54.00	-22.44	AVG			

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



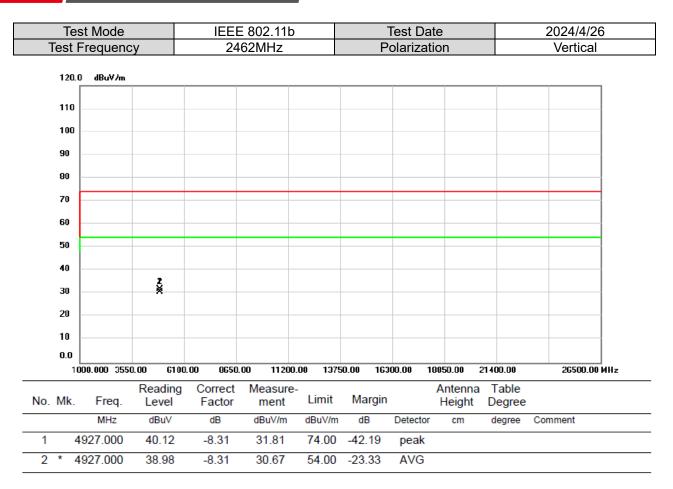




- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.







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



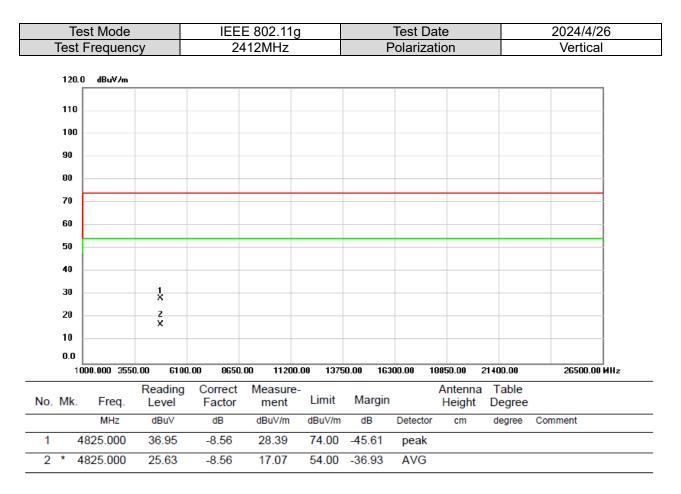


	est Mode			802.11b			Test Da			2024/4/26
Test	Frequence	су	246	62MHz		F	Polarizat	ion		Horizontal
120).0 dBuV/m									
110	1									
100	ı									
90										
80										
70										
60										
50										
40										
30		*								
20										
10 0.0										
	1000.000 355	0.00 6100	.00 8650.0	0 11200.0	DO 1375	0.00 163	300.00 1	8850.00	21400.00	26500.00 MHz
o. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	a Table Degree	
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	4927.000	37.30	-8.31	28.99	74.00	-45.01	peak			
2 *	4927.000	35.53	-8.31	27.22	54.00	-26.78	AVG			

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







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





		Mode			802.11g			Test Da			2024/4/26
Te	est Fi	requenc	у	24	12MHz		P	olarizat	tion		Horizontal
	120.0	dBuV/m									
	110										
	100										
	90										
	80										
	70										
	60 -										
	50										
	40										
	30 -		1 X								
	20 -		2 X								
	10										
	0.0	0.000 3550). 00 61 00). 00 8650.	00 11200	.00 1375	0.00 163	300.00	8850.00	21400.00	26500.00 MHz
lo.	Mk.	Freq.	Reading Level	Correct Factor	Measure ment	- Limit	Margin		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	48	325.000	36.90	-8.56	28.34	74.00	-45.66	peak			
2	* 48	325.000	24.91	-8.56	16.35	54.00	-37.65	AVG			

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





		Mode			802.11g			Test Da			2024/4/2	
Т	est Fi	requenc	у	243	37MHz		F	Polarizat	ion		Vertica	l
	120.0	dBuV/m										
	120.0	abu v /m										٦
	110											
	100											
	90											
	80											-
	70											1
	60 -											-
	50											
	40											-
	30 -		1 X									-
	20		z X									-
	10		^									-
	0.0											
	100	0.000 3550		.00 8650.0	00 11200	.00 1375	0.00 163	300.00 1	8850.00	21400.00	26500.0	DMHz
lo.	Mk.	Freq.	Reading Level	Correct Factor	Measure ment	- Limit	Margin		Antenna Height			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1	48	376.000	36.82	-8.43	28.39	74.00	-45.61	peak				
2	* 48	376.000	25.51	-8.43	17.08	54.00	-36.92	AVG				

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





		t Mode			802.11g			Test Da			2024/4/26
Te	est F	requenc	y	243	37MHz		F	Polariza	tion		Horizontal
	120.0) dBuV/m									
	110										
	100										
	90										
	80										
	70										
	60										
	50										
	40										
	30		ł								
	20		2								
	10		×								
	0.0										
	10	00.000 355	0.00 6100.	00 8650.	00 11200.0	00 1375	0.00 16	300.00 1	8850.00	21400.00	26500.00 MHz
lo.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin	I	Antenna Height		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	4	874.000	34.41	-8.44	25.97	74.00	-48.03	peak			
2	* 4	874.000	23.20	-8.44	14.76	54.00	-39.24	AVG			

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





	t Mode			802.11g			Test Da			2024/4/26
Test F	requenc	;y	246	62MHz		F	Polariza	tion		Vertical
120.0	dBuV/m									
110										
100										
90										
80										
70										
60										
50										
40										
30		×								
20		2 X								
10										
0.0										
10	D0.00D 3550	. OO 6100.	00 8650.0	0 11200.	.00 1375	0.00 163	300.00 1	8850.00	21400.00	26500.00 MHz
o. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1 4	927.000	36.10	-8.31	27.79	74.00	-46.21	peak			
2 * 4	927.000	25.89	-8.31	17.58	54.00	-36.42	AVG			

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



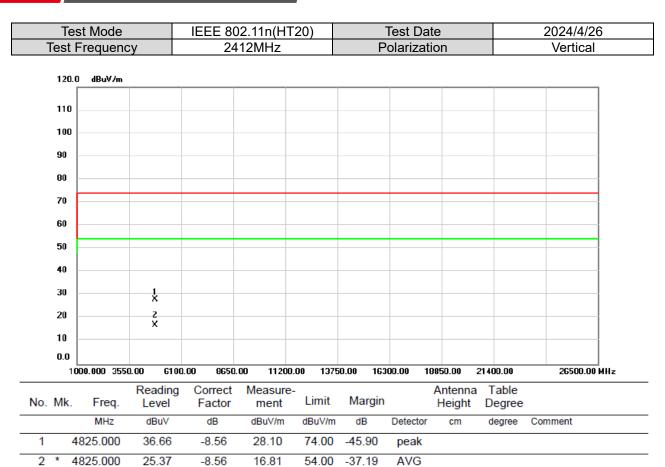


	st Mode			802.11g			Test Da			2024/4/26
Test F	requenc	;y	24	62MHz		F	Polariza	tion		Horizontal
100.0) dBuV/m									
120.0) aBuv/m									
110										
100										
90										
80										
70										
60										
50										
40										
30		1 X								
20										
10		2 X								
0.0										
10	00.000 3550	0.00 6100.	00 8650.0	0 11200.	.00 1375	0.00 163	00.00 1	8850.00	21400.00	26500.00 MHz
o. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1 4	924.000	34.26	-8.33	25.93	74.00	-48.07	peak			
2 * 4	924.000	23.15	-8.33	14.82	54.00	-39.18	AVG			

- Measurement Value = Reading Level + Correct Factor.
 Margin Level = Measurement Value Limit Value.







(1) Measurement Value = Reading Level + Correct Factor.

-8.56

16.81

(2) Margin Level = Measurement Value - Limit Value.





		t Mode)2.11n(HT	20)		Test Da			2024/4/26
Te	est F	requenc	у	24	12MHz		F	Polariza	tion		Horizontal
	120.0	dBuV/m									
	Γ										
	110										
	100										
	90 -										
	80										
	70										
	60										
	50										
	40										
	30 -		1 X								
	20										
	10		2 X								
	0.0										
		0.000 3550). 00 61 (0.00 8650	.00 11200.	DO 1375	0.00 16	300.00 1	18850.00	21400.00	26500.00 MHz
o. I	Mk.	Freq.	Reading Level) Correct Factor	Measure- ment	Limit	Margin	1	Antenn Height		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	48	325.000	35.32	-8.56	26.76	74.00	-47.24	peak			
2	* 48	325.000	22.91	-8.56	14.35	54.00	-39.65	AVG			

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





		Mode		IEEE 802		20)		Test Da			2024/4/26
Te	est F	requenc	у	243	7MHz		F	Polariza	tion		Vertical
	100.0	dBu∀/m									
	120.0	dBu¥/m									
	110										
	100										
	90										
	80										
	70										
	60										
	50										
	40										
	30		1 X								
	20		2 X								
	10		^								
	0.0										
	100	0.000 3550	0.00 610	0.00 8650.00	D 11200.0	10 1375	0.00 16	300.00 1	8850.00	21400.00	26500.00 MHz
<mark>ا</mark> ٥.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin	I	Antenna Height	a Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	48	376.000	36.83	-8.43	28.40	74.00	-45.60	peak			
2	* 48	376.000	25.63	-8.43	17.20	54.00	-36.80	AVG			

Measurement Value = Reading Level + Correct Factor.
 Margin Level = Measurement Value - Limit Value.





	Fest Mo)2.11n(HT)	20)		Test Da			2024/4/26	
Tes	st Frequ	ency	24	37MHz		F	Polariza	tion		Horizontal	
	20.0 dBu\	,,									
1.	20.0 dBu	//m									
11	10										
10	00										
90	0										
8	D										
70	0										
6	0										
50	0										
4(D										
30	0	1 X									
20											
1(n	2 X									
0.											
	1000.000	3550.00 6	100.00 8650	.00 11200.	00 1375	50.00 163	300.00 1	8850.00	21400.00	26500.00 MI	Hz
lo. M	k. Fre	Readir q. Level		Measure- ment	Limit	Margin	1	Antenna Height	a Table Degree		
	MH	z dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1	4876.0	00 34.04	-8.43	25.61	74.00	-48.39	peak				
2 *	4876.0	00 23.06	3 -8.43	14.63	54.00	-39.37	AVG				

- Measurement Value = Reading Level + Correct Factor.
 Margin Level = Measurement Value Limit Value.





Tes	t Mode			2.11n(HT	20)		Test Da			2024/4/26
Test F	requenc	;y	24	62MHz		F	Polariza	tion		Vertical
120.0 Г	dBu∀/m									
110										
100										
90										
80										
70										
60										
50										
40										
30		1 X								
20		2 X								
10										
0.0										
10	00.00D 3550		0.00 8650.0			0.00 163	800.00 1		21400.00	26500.00 MHz
lo. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	- Limit	Margin		Antenna Height		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1 4	927.000	37.25	-8.31	28.94	74.00	-45.06	peak			
2 * 4	927.000	27.41	-8.31	19.10	54.00	-34.90	AVG			

Measurement Value = Reading Level + Correct Factor.
 Margin Level = Measurement Value - Limit Value.





		Mode			2.11n(HT	20)		Test Da			2024/4/26	
Test	t Fre	equenc	у	24	62MHz		F	Polarizat	ion		Horizontal	
12	20.0	dBuV/m										
11	0											
10												
90												
80												
70												
60												
50												
40												
30	-		× 1									
20	- -		2 X									
10			^									
0.0		.000 3550). OO 61 0	0.00 8650.	.00 11200	.00 1375	0.00 16	300.00 1	8850.00	21400.00	26500.00 MH:	z
lo. Mi	۲.	Freq.	Reading Level	Correct Factor	Measure ment	- Limit	Margin	1	Antenna Height			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1	492	27.000	35.57	-8.31	27.26	74.00	-46.74	peak				
2 *	492	27.000	22.84	-8.31	14.53	54.00	-39.47	AVG				

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





APPENDIX D BANDWIDTH

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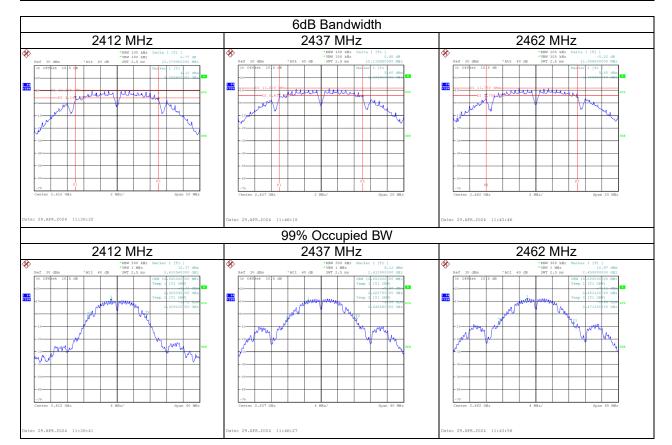




Ant.	1
/	

Test Mode IEEE 802.11b

Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2412	10.080	14.080	≥ 500	Pass
2437	10.120	16.800	≥ 500	Pass
2462	11.060	18.080	≥ 500	Pass

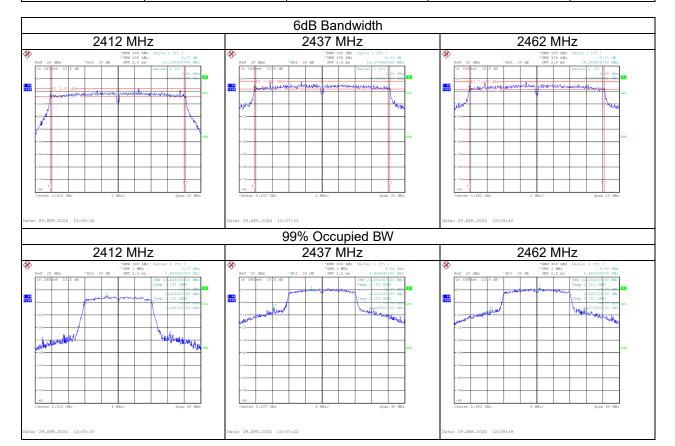






Test Mode IEEE 802.11g

Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2412	16.340	16.640	≥ 500	Pass
2437	16.380	23.600	≥ 500	Pass
2462	16.350	22.880	≥ 500	Pass



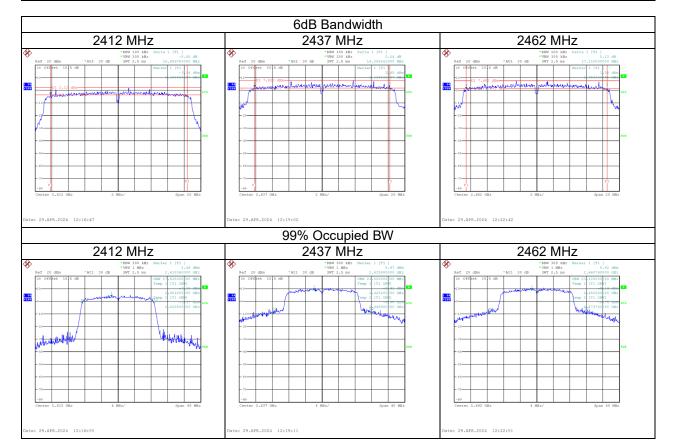
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Test Mode IEEE 802.11n (HT20)

Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
2412	16.560	17.520	≥ 500	Pass
2437	16.399	23.520	≥ 500	Pass
2462	17.110	23.120	≥ 500	Pass







APPENDIX E MAXIMUM OUTPUT POWER

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Test Mode	IEEE 802	2.11b_Ant. 1		Tested Date	2024/4	1/25	
				-			
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	19.60	1.99	21.59	30.00	1.0000	Complies
06	2437	19.69	1.99	21.68	30.00	1.0000	Complies
11	2462	19.96	1.99	21.95	30.00	1.0000	Complies

Test Mode	IEEE 802.11g_Ar	t. 1	Tested Date	2024/4/25

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	14.45	0.00	14.45	30.00	1.0000	Complies
06	2437	19.67	0.00	19.67	30.00	1.0000	Complies
11	2462	19.68	0.00	19.68	30.00	1.0000	Complies

Test Mode	IEEE 802	2.11n (HT20) _ A	Tested Date	2024/4	4/25		
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	14.52	0.00	14.52	30.00	1.0000	Complies
06	2437	19.78	0.00	19.78	30.00	1.0000	Complies
11	2462	19.68	0.00	19.68	30.00	1.0000	Complies





APPENDIX F POWER SPECTRAL DENSITY

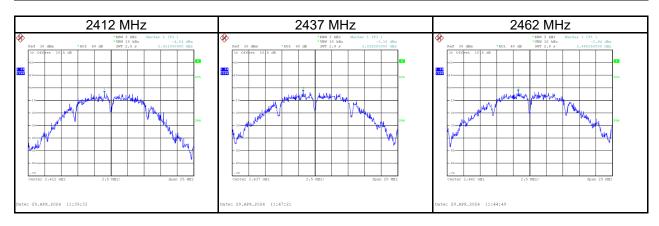
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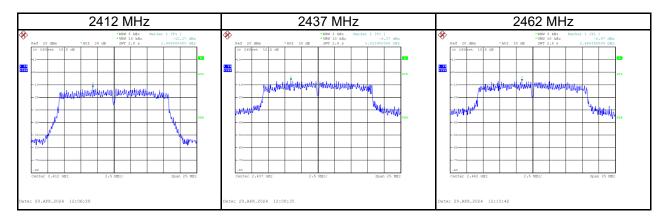
Test Mode IEEE 802.11b_Ant. 1

Test Frequenc (MHz)	y Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2412	-4.04	8.00	Pass
2437	-3.10	8.00	Pass
2462	-2.94	8.00	Pass



Test Mode IEEE 802.11g_Ant. 1

Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2412	-12.17	8.00	Pass
2437	-6.37	8.00	Pass
2462	-6.97	8.00	Pass

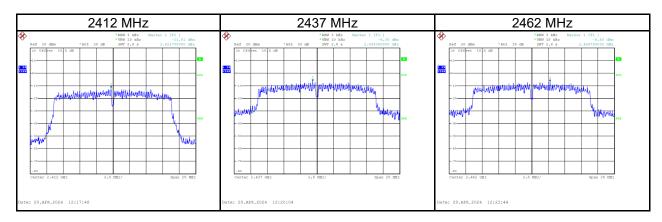






Test Mode IEEE 802.11n (HT20)_Ant. 1

Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2412	-11.81	8.00	Pass
2437	-6.35	8.00	Pass
2462	-6.60	8.00	Pass





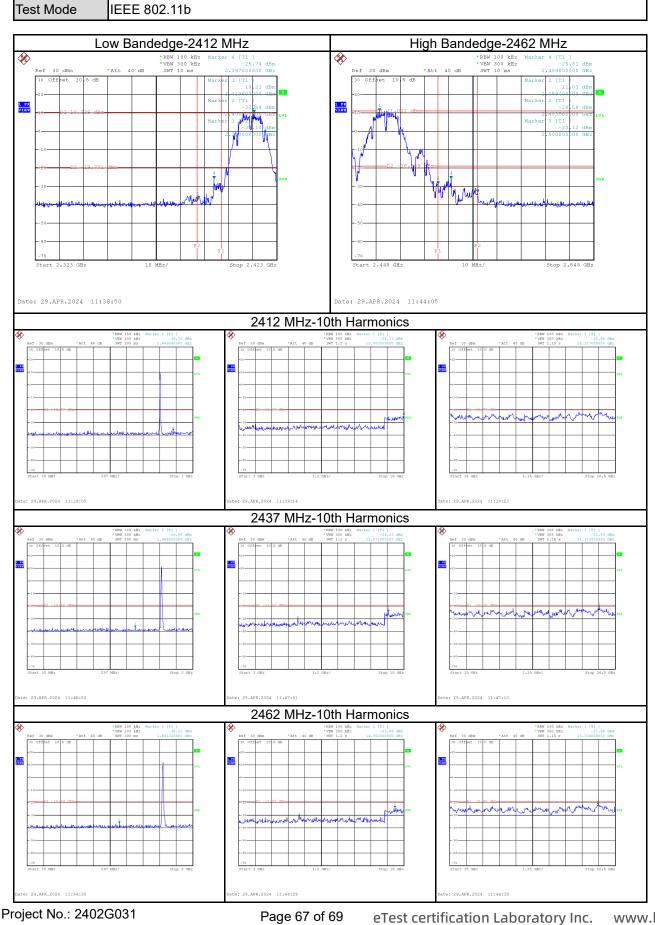


APPENDIX G ANTENNA CONDUCTED SPURIOUS EMISSIONS









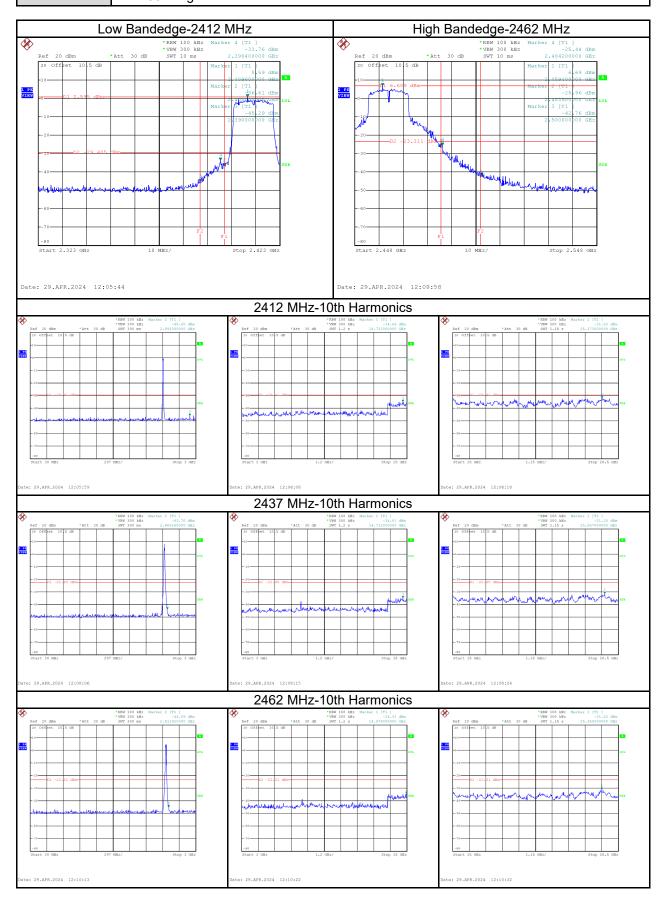
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Test Mode IEEE 802.11g

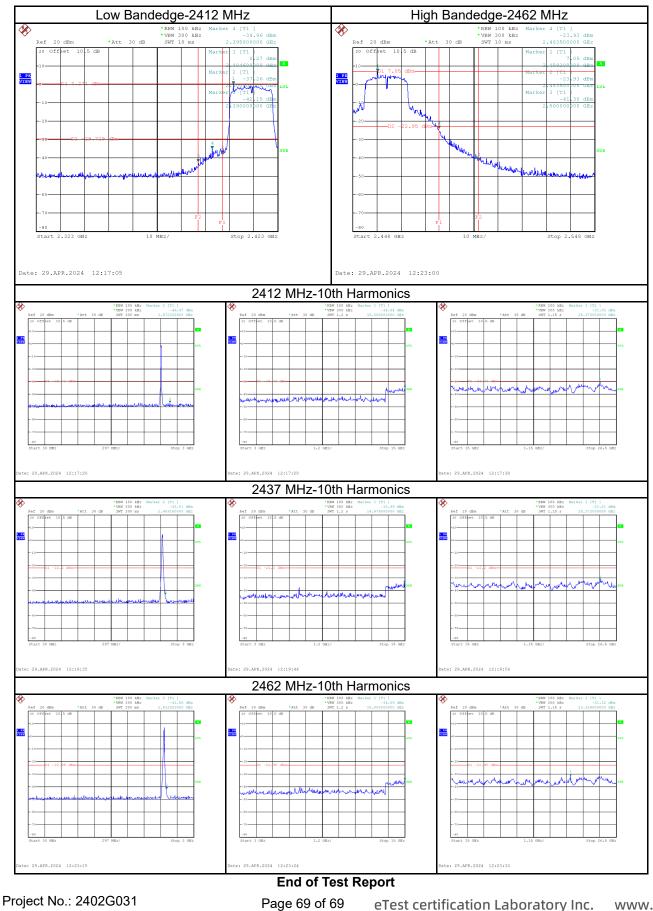


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