



Prüfbericht-Nr.: Test report no.:	60359686 002	Auftrags-Nr.: Order no.:	238510823	Seite 1 von 19 Page 1 of 19
Kunden-Referenz-Nr.: Client reference no.:	N/A	Auftragsdatum: Order date:	2021-01-26	
Auftraggeber: Client:	Microchip Technology Inc. 2355 West Chandler Blvd. Chandler, Arizona 85224-6199, United States			
Prüfgegenstand: Test item:	2.4GHz Wi-Fi® Module			
Bezeichnung / Typ-Nr.: Identification / Type no.:	WFI32E01PE, WFI32E01UE, WFI32E01PC, WFI32E01UC			
Auftrags-Inhalt: Order content:	FCC Part 15C / ISSED RSS-247 Test report (WiFi 2.4GHz)			
Prüfgrundlage: Test specification:	FCC 47CFR Part 15: Subpart C Section 15.247 ISSED RSS-247 Issue 2 March 2017			
Wareneingangsdatum: Date of sample receipt:	2021-01-29			
Prüfmuster-Nr.: Test sample no.:	A002995941-020 & -021			
Prüfzeitraum: Testing period:	2021-05-18 - 2021-06-05			
Ort der Prüfung: Place of testing:	EMC/RF Taipei Testing Site			
Prüflaboratorium: Testing laboratory:	Taipei Testing Laboratories			
Prüfergebnis*: Test result*:	Pass			
überprüft von: compiled by:		genehmigt von: authorized by:		
Datum: Date:	2021-06-18	Ausstellungsdatum: Issue date:	2021-06-18	
Stellung / Position:	Kenji Lin Laboratory Manager	Stellung / Position:	Brenda Chen Senior Project Manager	
Sonstiges / Other:	This report (C2PC) is to cover the component changes for Power supply optimization, optimal start-up and alternate parts. Only the RSE tests (worst case) based on the original report was evaluated. The other test results are referred to the original report no.: 60359686 001.			
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:	Prüfmuster vollständig und unbeschädigt Test item complete and undamaged			
* Legende:	1 = sehr gut P(ass) = entspricht o.g. Prüfgrundlage(n)	2 = gut F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	3 = befriedigend F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	4 = ausreichend N/A = nicht anwendbar
* Legend:	1 = very good P(ass) = passed a.m. test specification(s)	2 = good F(ail) = failed a.m. test specification(s)	3 = satisfactory F(ail) = failed a.m. test specification(s)	4 = sufficient N/A = not applicable
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.				

V05

TEST SUMMARY

Report Section	FCC Clause	ISED Clause	Test Item	Result
5.1.1	15.247(b) & 15.203	RSS-Gen	Antenna Requirement	Pass
-	15.247(b)(3)	RSS-247 5.4(d)	Peak Output Power	Not Applicable (Note 1)
-	15.247(a)(2)	RSS-247 5.2(a)	6 dB Bandwidth	Not Applicable (Note 1)
-	2.1049	RSS-Gen	99% Occupied Bandwidth	Not Applicable (Note 1)
-	15.247(e)	RSS-247 5.2(b)	Power Spectral Density	Not Applicable (Note 1)
-	15.247(d)	RSS-247 5.5	Conducted Spurious Emissions and Band Edges	Not Applicable (Note 1)
5.1.2	15.247(d) & 15.205 & 15.209	RSS-247 5.5	Radiated Spurious Emissions and Band Edges	Pass
-	15.207	RSS-Gen	Mains Conducted Emission	Not Applicable (Note 1)

Note:

1. Refer to original report no.: 60359686 001.
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

Contents

HISTORY OF THIS TEST REPORT	4
1. GENERAL REMARKS	5
1.1 COMPLEMENTARY MATERIALS.....	5
1.2 DECISION RULE OF CONFORMITY	5
2. TEST SITES	6
2.1 TEST LABORATORY	6
2.2 TEST FACILITY.....	6
2.3 TRACEABILITY	7
2.4 CALIBRATION	7
2.5 MEASUREMENT UNCERTAINTY	7
3. GENERAL PRODUCT INFORMATION.....	8
3.1 PRODUCT FUNCTION AND INTENDED USE	8
3.2 SYSTEM DETAILS AND RATINGS.....	8
3.3 NOISE GENERATING AND NOISE SUPPRESSING PARTS	10
3.4 SUBMITTED DOCUMENTS.....	10
4. TEST SET-UP AND OPERATION MODES.....	11
4.1 PRINCIPLE OF CONFIGURATION SELECTION	11
4.2 CARRIER FREQUENCY AND CHANNEL.....	11
4.3 TEST OPERATION AND TEST SOFTWARE.....	12
4.4 SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT	13
4.5 TEST SETUP DIAGRAM	13
5. TEST RESULTS	14
5.1 TRANSMITTER REQUIREMENT & TEST SUITES.....	14
5.1.1 Antenna Requirement	14
5.1.2 Radiated Spurious Emissions and Band Edges	15

APPENDIX A - TEST RESULT OF RADIATED EMISSIONS

APPENDIX SP - PHOTOGRAPHS OF TEST SETUP

APPENDIX EP - PHOTOGRAPHS OF EUT

Prüfbericht - Nr.: 60359686 002
Test Report No.

Seite 4 von 19
Page 4 of 19

HISTORY OF THIS TEST REPORT

Report No.	Description	Date Issued
60359686 002	Original Release	2021-06-18

1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A - Test Result of Radiated Emissions

Appendix SP - Photographs of Test Setup

Appendix EP - Photographs of EUT

Applied Standard and Test Levels

Radio
FCC 47CFR Part 15: Subpart C Section 15.247
FCC 47CFR Part 2: Subpart J Section 2.1049
ISED RSS-247 Issue 2 March 2017
ISED RSS-Gen Issue 5, Amendment 1 + Amendment 2, February 2021
ANSI C63.10:2013
KDB 558074 D01 15.247 Meas Guidance v05r02

1.2 Decision Rule of Conformity

The decision rule of conformity of this test report is following the requirements of the requested standard in the quotation, and agreed among testing laboratory and manufacturer (applicant) to exclude the consideration of Measurement Uncertainty, unless it is required by the specific standard.

2. Test Sites

2.1 Test Laboratory

Taipei Testing Laboratories

11F. No.758, Sec. 4, Bade Rd., Songshan Dist.
Taipei City 105
Taiwan (R.O.C.)

2.2 Test Facility

Taipei Testing Laboratories

No.458-18, Sec. 2, Fenliao Rd., Linkou Dist.,
New Taipei City 244
Taiwan (R.O.C.)
FCC Registration No.: 226631
ISED Registration No.: 25563

TAF Accredited NCC Test Lab. No.: 3567
TAF ISO17025 Certification effective period: 2019-05-06 to 2022-05-05

2.3 Traceability

All measurement equipment calibrations are traceable to NML(Taiwan)/NIST(USA) or where calibration is performed outside Taiwan, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically in a suitably accredited Calibration Lab. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

All measurement uncertainty values are shown with a coverage factor of $k=2$ to indicate a 95% level of confidence.

Emission Measurement Uncertainty

Parameter	Uncertainty
Radiated Emission (9 kHz ~ 30 MHz)	± 1.15 dB
Radiated Emission (30 MHz ~ 200 MHz)	± 1.30 dB
Radiated Emission (200 MHz ~ 1 GHz)	± 1.30 dB
Radiated Emission (1 GHz ~ 18 GHz)	± 1.54 dB
Radiated Emission (18 GHz ~ 40 GHz)	± 2.52 dB
Mains Conducted Emission	± 1.65 dB

3. General Product Information

3.1 Product Function and Intended Use

The EUT is 2.4GHz Wi-Fi® Module with IEEE® 802.11 b/g/n. It contains the Wireless MCU SoC, an integrated RF Front-end Module (FEM) enabling the user to communicate data through a Wireless interface.

The module variants integrate Trust&GO option and the following antenna options:

- PCB antenna (WFI32E01PC / WFI32E01PE)
- u.FL Connector for external antenna (WFI32E01UC, WFI32E01UE)

The Trust&GO is a pre-configured and pre-provisioned secure element of Microchip's family of security focused devices.

For details refer to the User Guide, Data Sheet and Circuit Diagram.

3.2 System Details and Ratings

Basic Information of EUT

Item	EUT information
Kind of Equipment/Test Item	2.4GHz Wi-Fi® Module
Type Identification	WFI32E01PE, WFI32E01UE, WFI32E01PC, WFI32E01UC
FCC ID	2ADHKWFI32E01
IC	20266-WFI32E01
HVIN	WFI32E01PE, WFI32E01UE, WFI32E01PC, WFI32E01UC

Technical Specification of EUT

Item	EUT information
Operating Frequency	2412 MHz ~ 2462 MHz
Channel Spacing	5 MHz
Channel Number	802.11b/g/n HT20: 11
Data Rate	802.11b: 11.0 / 5.5 / 2.0 / 1.0 Mbps 802.11g: 54.0 / 48.0 / 36.0 / 24.0 / 18.0 / 12.0 / 9.0 / 6.0 Mbps 802.11n: up to MCS7
Operation Voltage	3.0Vdc to 3.6Vdc; 3.3V typical (Tested at 3.3Vdc)
Modulation	DSSS (DBPSK, DQPSK, CCK) OFDM (BPSK, QPSK, 16QAM, 64QAM)
Antenna Information	Refer to Antenna List
Accessory Device	Refer to 4.4

Note:

1. All models are listed as below.

Model No.	
WFI32E01PC	Module with PCB antenna and Trust&GO
WFI32E01PE	Module with PCB antenna
WFI32E01UC	Module with u.FL Connector for External Antenna and Trust&GO
WFI32E01UE	Module with u.FL Connector for External Antenna

Antenna List: Reference Original Report 60359686 001

Antenna #1 selected for RSE measurements for WFI32E01UC and WFI32E01UE.

Antenna #10 selected for RSE measurements for WFI32E01PC and WFI32E01PE.

Sino.	P/N	Vendor	Antenna Gain @ 2.4GHz Band	Antenna Type	Cable Length / Remarks
1	RFA-02-L2H1	Alead/Aristotle	2 dBi	Dipole	150 mm
2	RFA-02-C2H1-D034	Alead/Aristotle	2 dBi	Dipole	150 mm
3	RFA-02-D3	Alead/Aristotle	2 dBi	Dipole	150 mm
4	RFDPA870920IMLB301	WALSIN	1.84 dBi	Dipole	200 mm
5	RFDPA870920IMAB302	WALSIN	1.82 dBi	Dipole	200 mm / Black
6	RFDPA870920IMAB305	WALSIN	1.82 dBi	Dipole	200 mm / Grey
7	RFDPA870910IMAB308	WALSIN	2 dBi	Dipole	100 mm
8	RFA-02-C2M2	Alead/Aristotle	2 dBi	Dipole	RP-SMA to u.FL cable length of 100 mm (Refer to note 1 and 2)
9	RN-SMA-S-RP	Microchip	0.56 dBi	Dipole	RP-SMA to u.FL cable length of 100 mm (Refer to note 1 and 2)
10	-	Microchip	2.51 dBi	PCB (Inverted F)	-

Note:

- 1) If the end-product using the Module is designed to have an antenna port that is accessible to the end-user than a unique (non-standard) antenna connector (as permissible by FCC) must be used (e.g. RP (Reverse Polarity)-SMA socket). If an RF coaxial cable is used between the module RF output and the enclosure, then a unique antenna connector must be used in the enclosure wall for interface with antenna.
- 2) If an RF coaxial cable is used between the module RF output and the enclosure, then a unique (non-standard) antenna connector must be used in the enclosure wall for interface with antenna.

3.3 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.4 Submitted Documents

- Circuit Diagram
- Instruction Manual
- Rating Label
- Technical Description

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The test modes were adapted accordingly in reference to the instructions for use.

During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output expected by the customer and is going to be fixed on the firmware of the final end product.

Table for Parameters of Test Software Setting

802.11b		802.11g		802.11n HT20	
Channel	Power Setting	Channel	Power Setting	Channel	Power Setting
1	20.25	1	16.50	1	16.00
6	22.25	6	20.25	6	20.25
11	20.00	11	16.25	11	15.50

4.2 Carrier Frequency and Channel

802.11b, 802.11g and 802.11n HT20:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	8	2447
2	2417	9	2452
3	2422	10	2457
4	2427	11	2462
5	2432		
6	2437		
7	2442		

4.3 Test Operation and Test Software

Setup for testing: Test samples are provided with a USB/UART interface which makes it possible to control them through a test software installed on a notebook computer.

This software was running on the laptop computer connected to the EUT. It was used to enable the operation modes listed as below.

Test Software	PC GUI MCHPRT3 Tool
---------------	---------------------

The samples were used as follows:
 A002995941-020 & -021

Full test was applied on all test samples and modes, but only worst case was shown.

EUT Configure Mode	Applicable To		Description
	Radiated Spurious Emissions above 1 GHz	Radiated Spurious Emissions below 1 GHz	
A	√	√	WFI32E01PC
B	√	√	WFI32E01UC

Note:

- The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when position on **Z-plane** for WFI32E01UC and **X-plane** for WFI32E01PC.

Radiated Spurious Emissions (Above 1 GHz)

- ☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Available Channel	Tested Channel	Date Rate (Mbps)
A, B	802.11b	1 to 11	1, 6, 11	1.0
	802.11g	1 to 11	1, 6, 11	6.0
	802.11n HT20	1 to 11	1, 6, 11	MCS0

Radiated Spurious Emissions (Below 1 GHz)

- ☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Available Channel	Tested Channel	Date Rate (Mbps)
A, B	802.11g	1 to 11	1	6.0

Test Condition

Test Item	Ambient Temperature	Relative Humidity	Tested by
Radiated Spurious Emissions above 1 GHz	23.1-25.1 °C	55-60 %	Simon Tsai
Radiated Spurious Emissions below 1 GHz	23.1-25.1 °C	55-60 %	Simon Tsai

4.4 Special Accessories and Auxiliary Equipment

The product has been tested together with the following additional accessories:

Accessory of EUT

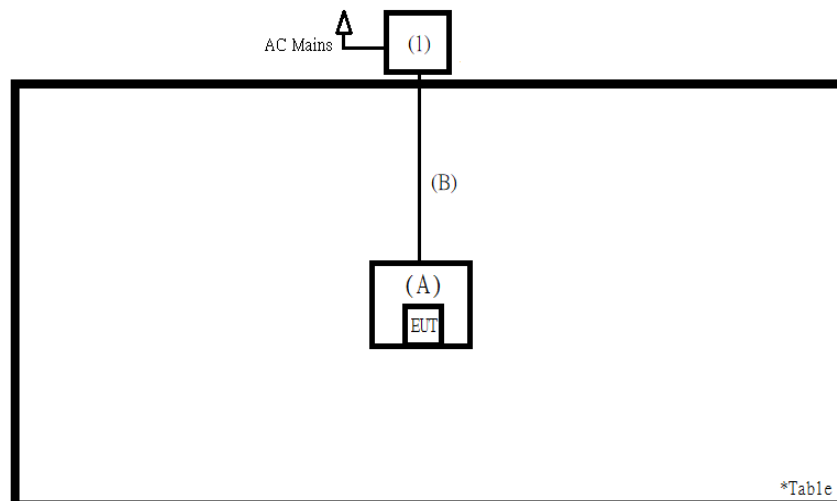
None

Support Unit

Support Unit								
No	Description	Brand	Model	S/N	Shielded	Ferrite Core (Qty)	Length (cm)	Remark
A	Fixture	Microchip	ET0K	N/A	-	-	-	--
B	Dc Power Cable	PACIFIC	R41041	N/A	NO	0	60	--
1	DC Power Supply	Gwinstek	GPS-3030	N/A	-	-	-	--
-	Fixture	Microchip	ADM00393	N/A	-	-	-	--
-	Micro USB to Type A Cable	Shenzhen Rongchun	E319028	N/A	YES	0	160	--
-	Signal Cable	WEATH	E193578	N/A	NO	0	35	--
-	Notebook	Lenovo	TP00094A	PF-1GT015	-	-	-	--

4.5 Test Setup Diagram

<Radiated Spurious Emissions mode>



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

Requirement Use of approved antennas only

According to the manufacturer declaration, the EUT (WFI32E01PC / WFI32E01PE) has an antenna with a directional gain of 2.51 dBi.

The antenna is a printed trace with no possibility of replacement with a non-approved antenna by the end-user.

The EUT (WFI32E01UC / WFI32E01UE) has an antenna with Max directional gain of 2 dBi (refer to Antenna List). The antenna is connected through a proprietary connector with no possibility of replacement with a non-approved antenna by the end-user.

Therefore, the EUT is considered to comply with this provision.

Refer to EUT photo for details.

5.1.2 Radiated Spurious Emissions and Band Edges

Limit

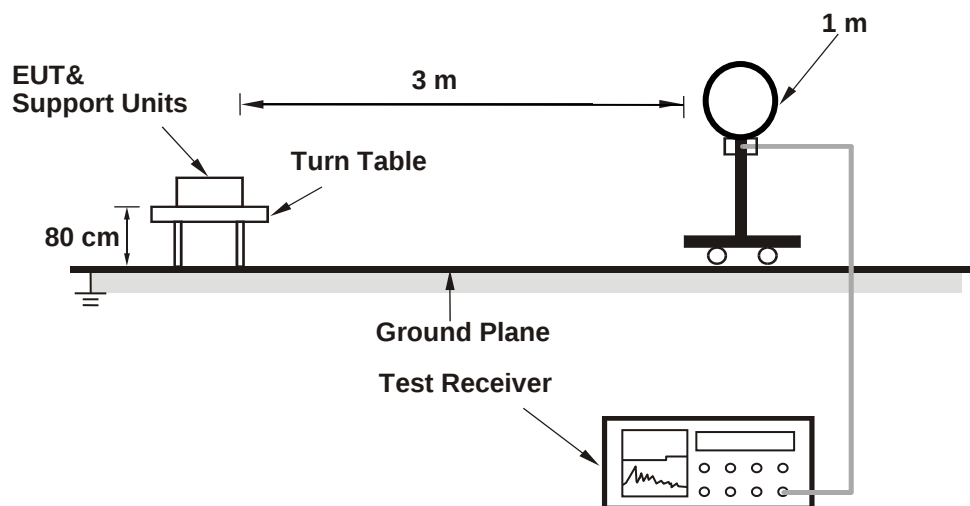
Radiated emissions which fall in the restricted bands, as defined in §15.205(a) and RSS-Gen i5, 8.10 (Table 7), must comply with the radiated emission limits specified in §15.209(a) and RSS-Gen 5, 8.9 (Table 5 and 6).

Emissions radiated outside the restricted and authorized frequency bands must either comply with the radiated emission limits specified for the restricted bands or in §15.247(d) and RSS-247 i2, 5.5.

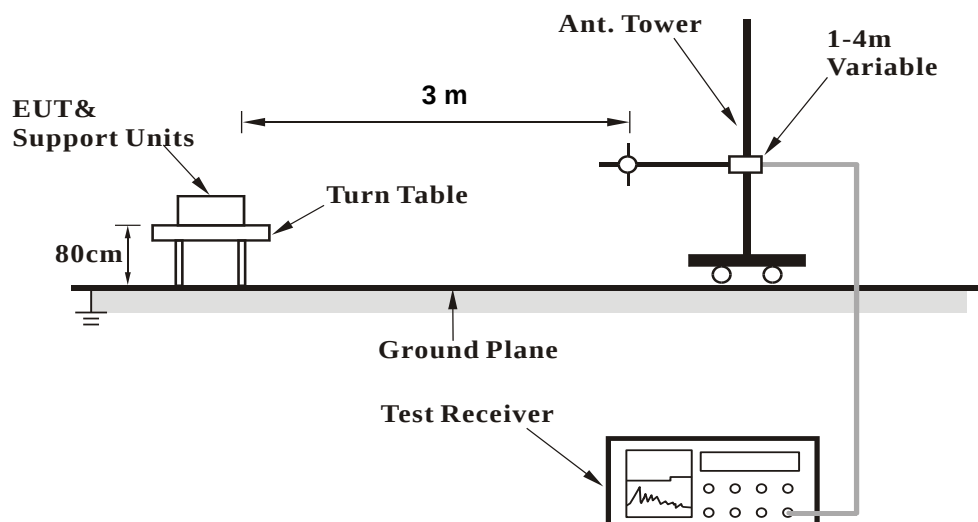
Kind of Test Site 3m Semi-Anechoic Chamber

Test Setup

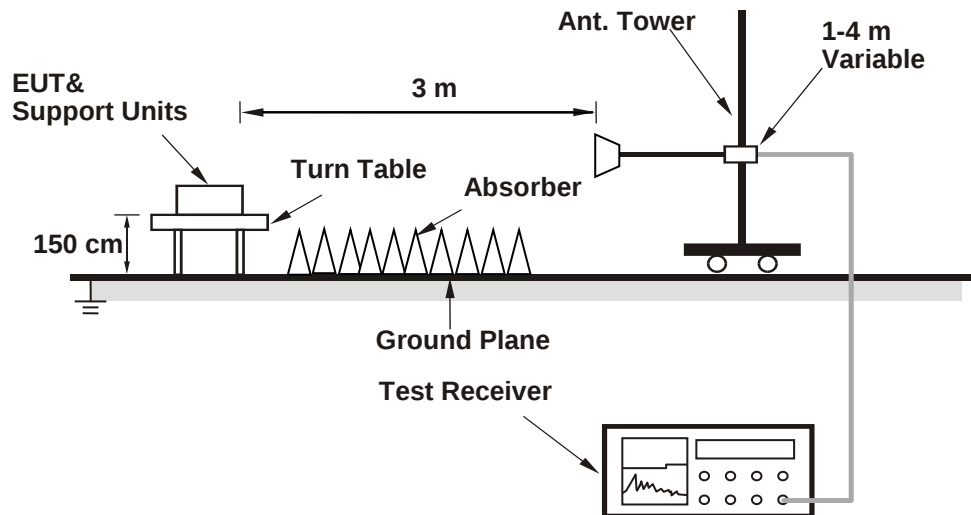
<Radiated Emissions below 30 MHz>



<Radiated Emissions 30 MHz to 1 GHz>



<Radiated Emissions above 1 GHz>



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

Prüfbericht - Nr.: 60359686 002
Test Report No.
Seite 17 von 19
Page 17 of 19
Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV40	101508	2021/3/16	2022/3/15
Receiver	R&S	ESR7	102109	2021/3/16	2022/3/15
Bilog Antenna	SCHWARZBECK	VULB-9168	00951	2021/2/18	2022/2/17
Horn Antenna	ETS-Lindgren	3117	00218930	2020/12/1	2021/11/30
LF-AMP	Agilent	8447D	2944A10772	2021/2/18	2022/2/17
HF-AMP + AC source	EMCI	EMC051845SE	980633	2021/2/9	2022/2/8
HF-AMP + AC source	EMCI	EMC184045SE	980657	2021/2/1	2022/1/31
Horn Antenna	SCHWARZBECK	BBHA 9170	00887	2021/4/8	2022/4/7
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104EA	800056/4EA	2021/3/17	2022/3/16
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	804680/4	2021/3/17	2022/3/16
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	MY37202/4	2021/3/17	2022/3/16
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	800898/2EA	2021/4/16	2022/4/15
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	800901/2EA	2021/4/16	2022/4/15
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	801027/2EA	2021/4/16	2022/4/15
Loop Antenna	Chance Most	EMCILPA600 +calibration	287	2020/6/17	2021/6/16

Test Procedures**For Radiated Emissions below 30 MHz**

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel (OPEN), perpendicular (CLOSE), and ground-parallel (GROUND) orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz at frequency below 30 MHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated Emissions above 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30 MHz ~ 1 GHz) / 1.5 meters (for above 1 GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detected function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) or Peak detection (PK) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98 %) or 10 Hz (Duty cycle ≥ 98 %) for Average detection (AV) at frequency above 1 GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

Prüfbericht - Nr.: 60359686 002
Test Report No.

Seite 19 von 19
Page 19 of 19

5. The Radiated Emissions testing was performed in the X(E1), Y(H) and Z(E2) axis orientation. The worst-case Axis orientation is recorded in this test report.
6. The calculation formula is explained as follows:
Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)
Level (dBuV/m) = Reading (dBuV) + Factor (dB/m)

Test Results

Please refer to Appendix A.

Appendix A: Test Results of Radiated Emissions

<WFI32E01PC>

Band Edges, 2.31GHz ~ 2.9GHz

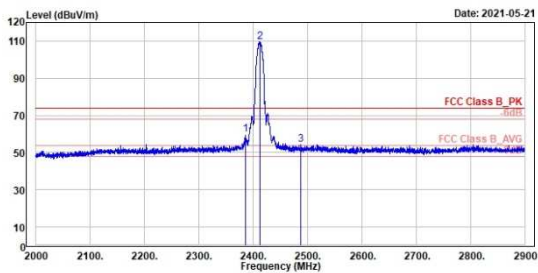
802.11b

Low Channel (Horizontal) Peak

Low Channel (Vertical) Peak



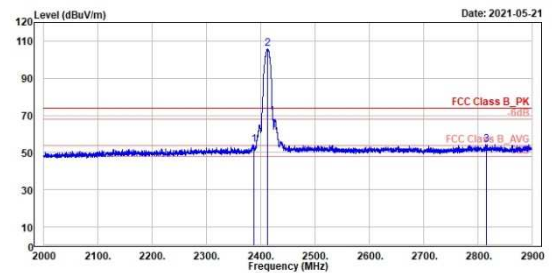
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec. 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2386.28	59.82	22.28	37.54	74.00	-14.18	163	198	Peak	Horizontal		
2 *	2412.00	109.56	71.84	37.72	74.00	35.56	163	198	Peak	Horizontal		
3	2487.08	54.30	16.12	38.18	74.00	-19.70	163	198	Peak	Horizontal		



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec. 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



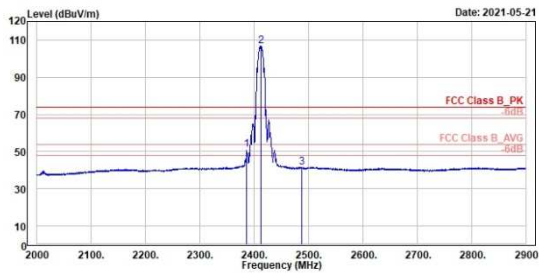
	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2387.00	54.43	16.89	37.54	74.00	-19.57	310	200	Peak	Vertical		
2 *	2412.00	109.83	68.11	37.72	74.00	31.83	310	200	Peak	Vertical		
3	2815.76	54.36	16.04	38.32	74.00	-19.64	310	200	Peak	Vertical		

802.11b

Low Channel (Horizontal) Average



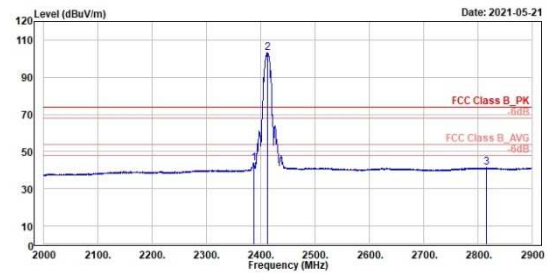
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2386.28	51.31	13.77	37.54	54.00	-2.69	163	198	Average	Horizontal	
2	2412.00	106.90	69.18	37.72	54.00	52.90	163	198	Average	Horizontal	
3	2487.08	41.48	3.30	38.18	54.00	-12.52	163	198	Average	Horizontal	



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



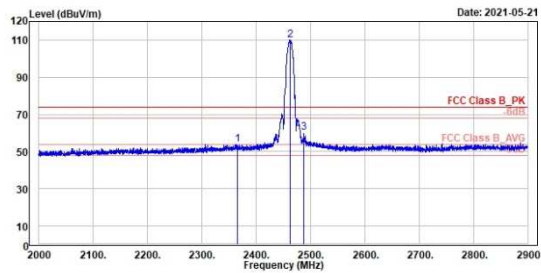
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2387.00	43.91	6.37	37.54	54.00	-10.09	310	200	Average	Vertical	
2	2412.00	103.27	65.55	37.72	54.00	49.27	310	200	Average	Vertical	
3	2815.76	41.46	3.14	38.32	54.00	-12.54	310	200	Average	Vertical	

802.11b

High Channel (Horizontal) Peak



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



		Freq	Level	Nd	Level	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
		MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1		2365.94	53.91	16.52	37.39	74.00	-20.09	360	285	Peak	Horizontal	
2	*	2462.00	110.03	71.97	38.06	74.00	36.03	360	285	Peak	Horizontal	
3		2487.80	60.15	21.96	38.19	74.00	-13.85	354	281	Peak	Horizontal	

	Freq	Level	Lead Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2333.00	40.55	3.33	37.22	54.00	-13.45	383	181	Average	Vertical	
2	2462.00	101.57	63.51	30.06	54.00	47.57	383	181	Average	Vertical	
3	2487.98	48.12	4.33	38.19	54.00	-11.48	383	181	Average	Vertical	

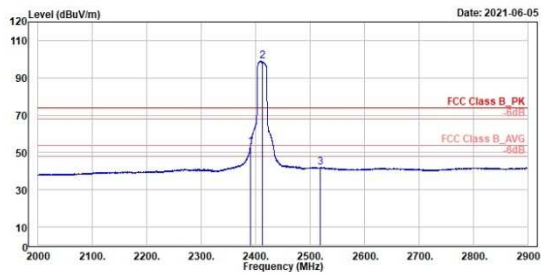
	Freq	Level	Lead	Line	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBu/m	dBu	dB/m	dBu/m	dB	cm	deg		
1	2390.00	64.24	26.68	37.56	74.00	-9.76	251	187 Peak	Vertical	
2	2412.00	106.64	68.92	37.72	74.00	32.64	251	187 Peak	Vertical	
3	2499.32	52.36	14.11	38.25	74.00	-21.64	251	187 Peak	Vertical	

802.11g

Low Channel (Horizontal) Average



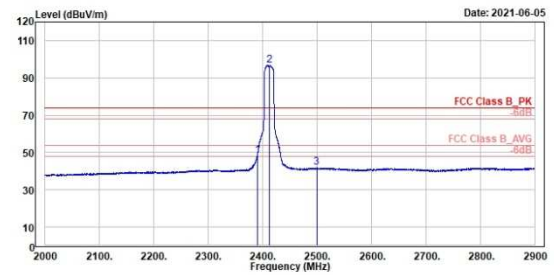
TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenhiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2390.00	52.74	15.18	37.56	54.00	-1.26	275	292	Average	Horizontal	
2	2412.00	99.02	61.30	37.72	54.00	45.02	266	250	Average	Horizontal	
3	2519.45	42.20	4.01	38.19	54.00	-11.80	266	250	Average	Horizontal	



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenhiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



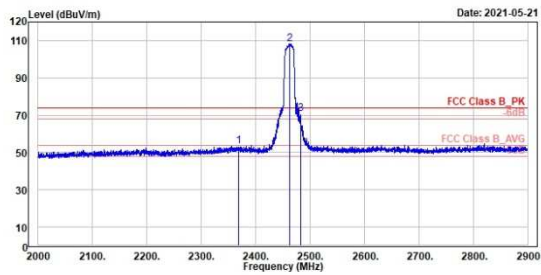
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2390.00	48.30	10.74	37.56	54.00	-5.70	251	187	Average	Vertical	
2	2412.00	96.90	59.18	37.72	54.00	42.90	251	187	Average	Vertical	
3	2499.32	41.88	3.63	38.25	54.00	-12.12	251	187	Average	Vertical	

802.11g

High Channel (Horizontal) Peak



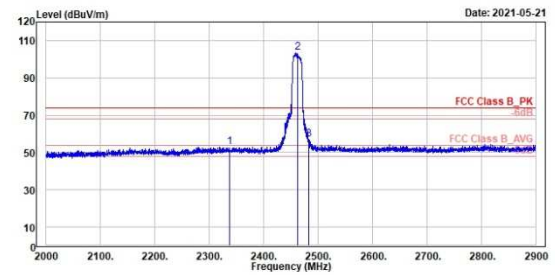
TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenhiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2368.64	53.34	15.94	37.40	74.00	-20.66	360	285	Peak	Horizontal	
2 *	2462.00	108.36	70.30	38.06	74.00	34.36	360	285	Peak	Horizontal	
3 !	2483.50	70.82	32.66	38.16	74.00	-3.18	316	285	Peak	Horizontal	



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenhiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



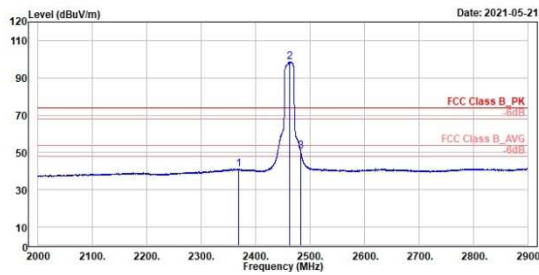
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2337.50	53.02	15.78	37.24	74.00	-20.98	383	181	Peak	Vertical	
2 *	2462.00	103.65	65.59	38.06	74.00	29.65	383	181	Peak	Vertical	
3	2483.50	56.93	18.77	38.16	74.00	-17.07	383	181	Peak	Vertical	

802.11g

High Channel (Horizontal) Average



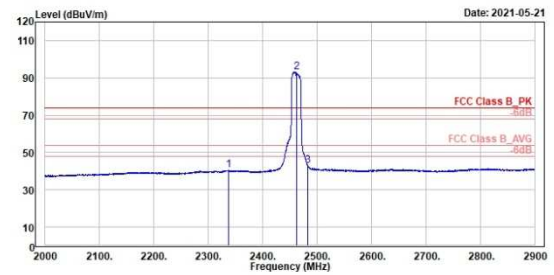
TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenhiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2368.64	41.23	3.83	37.40	54.00	-12.77	360	285	Average	Horizontal	
2 *	2462.00	98.70	60.64	38.06	54.00	44.70	360	285	Average	Horizontal	
3 †	2483.50	50.65	12.49	38.16	54.00	-3.35	316	285	Average	Horizontal	



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenhiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



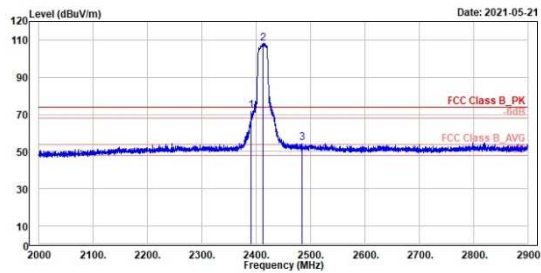
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2337.50	40.66	3.42	37.24	54.00	-13.34	383	181	Average	Vertical	
2 *	2462.00	93.04	54.98	38.06	54.00	39.04	383	181	Average	Vertical	
3	2483.50	42.86	4.70	38.16	54.00	-11.14	383	181	Average	Vertical	

802.11n HT20

Low Channel (Horizontal) Peak



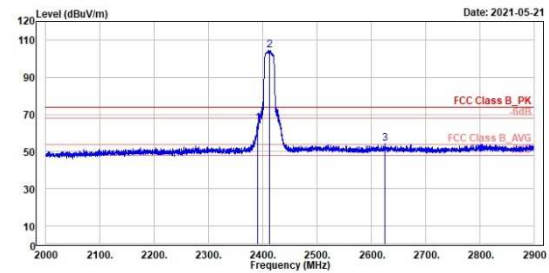
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Peak	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2398.00	71.98	34.42	37.56	74.00	-2.02	119	195	Peak	Horizontal		
2	2412.00	108.32	70.60	37.72	74.00	34.32	117	195	Peak	Horizontal		
3	2483.84	54.74	16.57	38.17	74.00	-19.26	117	195	Peak	Horizontal		



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



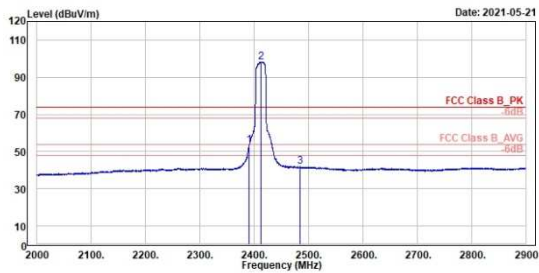
Peak	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2398.88	65.42	27.86	37.56	74.00	-8.58	369	197	Peak	Vertical		
2	2412.00	104.69	66.97	37.72	74.00	30.69	369	197	Peak	Vertical		
3	2626.04	54.16	16.11	38.05	74.00	-19.84	369	197	Peak	Vertical		

802.11n HT20

Low Channel (Horizontal) Average



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

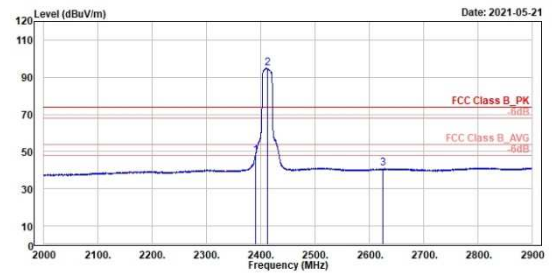


Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2390.00	53.27	15.71	37.56	54.00	-0.73	119	195	Average	Horizontal	
2	2412.00	96.29	60.57	37.72	54.00	44.29	117	195	Average	Horizontal	
3	2483.84	41.89	3.72	38.17	54.00	-12.11	117	195	Average	Horizontal	

Low Channel (Vertical) Average



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



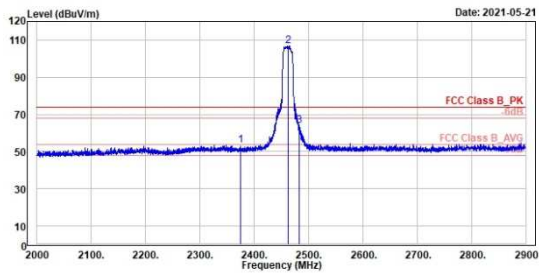
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2389.88	47.95	10.39	37.56	54.00	-6.05	360	197	Average	Vertical	
2	2412.00	94.91	57.19	37.72	54.00	40.91	360	197	Average	Vertical	
3	2626.04	41.20	3.15	38.05	54.00	-12.80	360	197	Average	Vertical	

802.11n HT20

High Channel (Horizontal) Peak



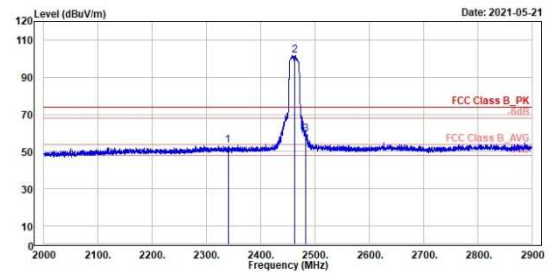
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Factor	Limit	Over	Apos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2374.94	53.36	15.91	37.45	74.00	-20.64	328	284	Peak	Horizontal	
2 *	2462.00	106.83	68.77	38.06	74.00	32.83	328	284	Peak	Horizontal	
3	2483.50	63.84	25.68	38.16	74.00	-10.16	328	284	Peak	Horizontal	



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



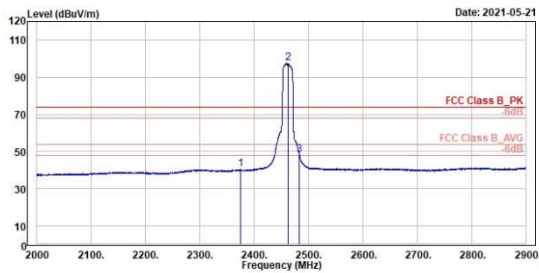
Freq	Level	Read	Level	Factor	Limit	Over	Apos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2339.66	53.45	16.21	37.24	74.00	-20.55	383	183	Peak	Vertical	
2 *	2462.00	101.72	63.66	38.06	74.00	27.72	383	183	Peak	Vertical	
3	2483.50	59.26	21.10	38.16	74.00	-14.74	383	183	Peak	Vertical	

802.11n HT20

High Channel (Horizontal) Average



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

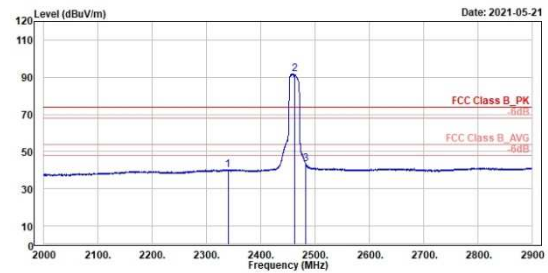


Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2374.94	40.39	2.94	37.45	54.00	-13.61	328	284	Average	Horizontal	
2 *	2462.00	97.46	59.40	38.06	54.00	43.46	328	284	Average	Horizontal	
3 †	2483.50	48.42	10.26	38.16	54.00	-5.58	328	284	Average	Horizontal	

High Channel (Vertical) Average



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2339.66	40.27	3.03	37.24	54.00	-13.73	383	183	Average	Vertical	
2 *	2462.00	91.78	53.72	38.06	54.00	37.78	383	183	Average	Vertical	
3	2483.50	43.28	5.12	38.16	54.00	-10.72	383	183	Average	Vertical	

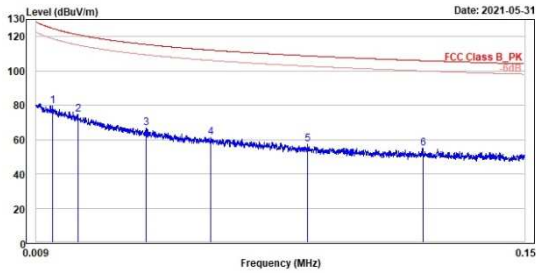
Spurious Emissions, Tx Mode, 9kHz ~ 30MHz

802.11g

Low Channel (open) 9kHz~150kHz



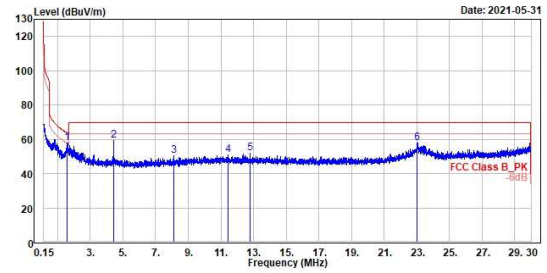
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	0.01	79.63	4.42	75.21	124.77	-45.14	100	26	QP	Open	
2	0.02	74.62	2.29	72.33	121.13	-46.51	100	130	QP	Open	
3	0.04	66.61	0.48	66.13	115.40	-48.79	100	360	QP	Open	
4	0.06	61.48	-1.13	62.61	112.12	-50.64	100	91	QP	Open	
5	0.09	57.19	-1.74	58.93	108.77	-51.58	100	309	QP	Open	
6	0.12	55.01	-1.36	56.37	105.97	-50.96	100	190	QP	Open	



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



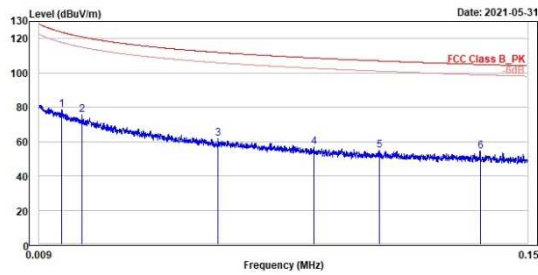
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	1.56	57.68	17.73	39.95	63.75	-6.07	100	329	QP	Open	
2	4.43	59.39	22.88	36.51	69.50	-10.11	100	132	QP	Open	
3	8.10	50.40	12.91	37.49	69.50	-19.10	100	96	QP	Open	
4	11.43	51.12	13.04	38.08	69.50	-18.38	100	75	QP	Open	
5	12.80	51.75	13.77	37.98	69.50	-17.75	100	324	QP	Open	
6	23.04	57.86	18.99	38.87	69.50	-11.64	100	53	QP	Open	

802.11g

Low Channel (Close) 9kHz~150kHz



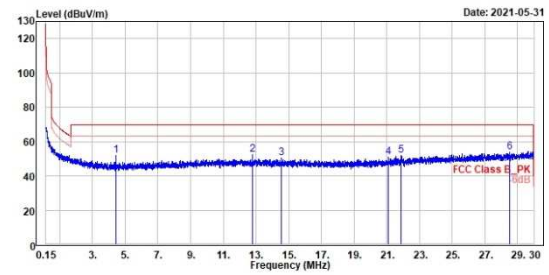
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	0.02	78.58	4.07	74.51	123.73	-45.15	100	319	QP	Close	
2	0.02	75.44	3.26	72.18	120.98	-45.54	100	124	QP	Close	
3	0.06	61.92	-0.52	62.44	111.94	-50.02	100	55	QP	Close	
4	0.09	56.99	-1.81	58.80	108.68	-51.69	100	202	QP	Close	
5	0.11	54.67	-2.28	56.95	107.00	-52.33	100	136	QP	Close	
6	0.14	54.26	-1.44	55.70	104.91	-50.65	100	156	QP	Close	



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	4.43	52.11	15.68	36.51	69.50	-17.39	100	184	QP	Close	
2	12.80	52.22	14.24	37.98	69.50	-17.28	100	94	QP	Close	
3	14.56	50.44	12.59	37.85	69.50	-19.06	100	244	QP	Close	
4	21.08	50.93	12.97	37.96	69.50	-18.57	0	0	QP	Close	
5	21.90	51.93	13.59	38.34	69.50	-17.57	100	360	QP	Close	
6	28.52	53.98	12.47	41.43	69.50	-15.60	100	80	QP	Close	

	Freq	Level	Level	Limit	Over	Apos	Time	Remark	Pol/Phase	Note
	MHz	dBm	dBuV	dBm	dBuV	dB	cm			
1	165.79	22.04	28.99	-6.95	43.50	-21.46	300	368	QP	Vertical
2	387.06	24.50	28.88	-4.38	46.00	-21.50	300	138	QP	Vertical
3	519.17	27.38	30.01	-2.63	46.00	-18.62	300	341	QP	Vertical
4	618.45	28.61	29.59	-0.98	46.00	-17.39	280	355	QP	Vertical
5	764.97	30.95	32.52	1.44	46.00	-14.05	300	120	QP	Vertical
6	897.18	33.05	29.66	3.39	46.00	-12.95	399	360	QP	Vertical

Spurious Emissions, Tx Mode, 1GHz ~ 26.5GHz

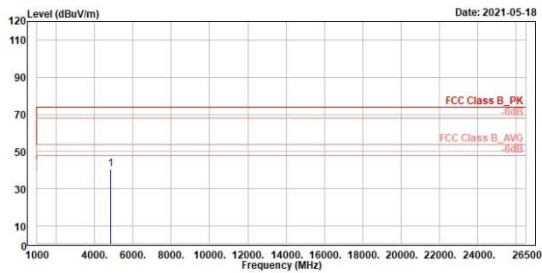
802.11b

Low Channel (Horizontal)

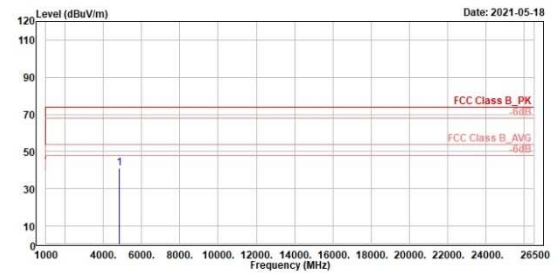
Low Channel (Vertical)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

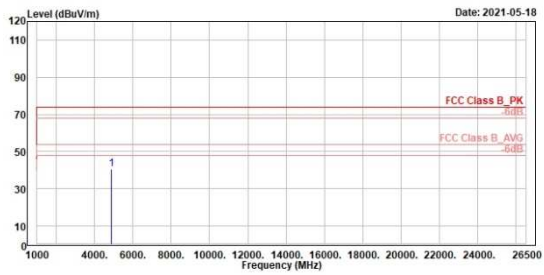


802.11b

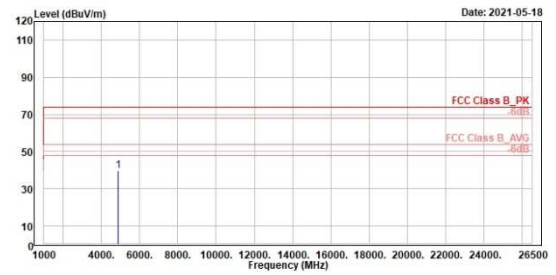
Middle Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

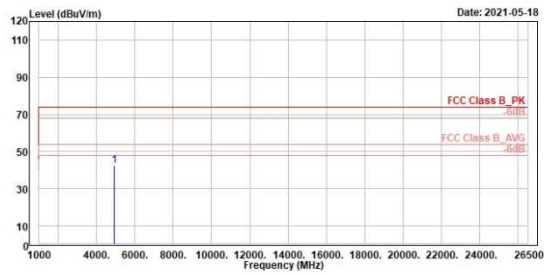


802.11b

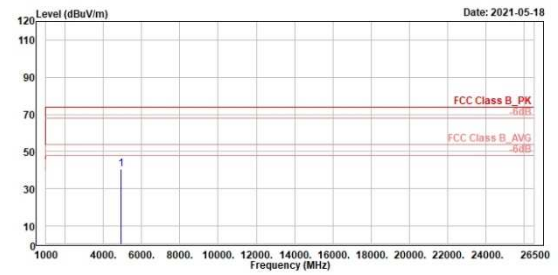
High Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

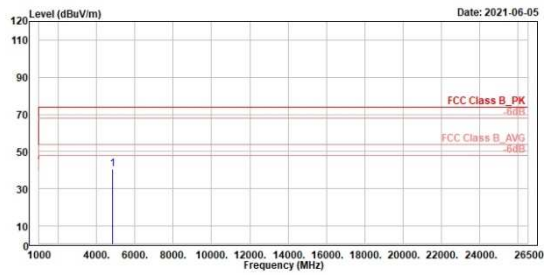


802.11g

Low Channel (Horizontal)



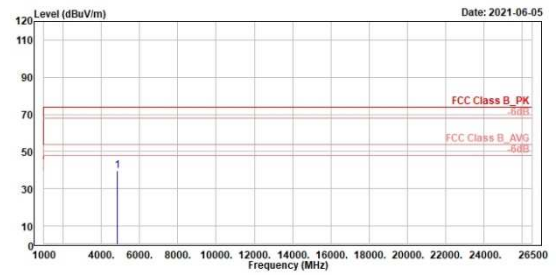
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Low Channel (Vertical)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

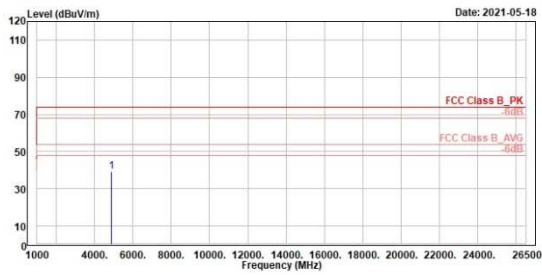


802.11g

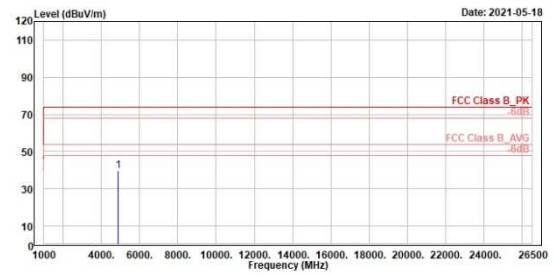
Middle Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

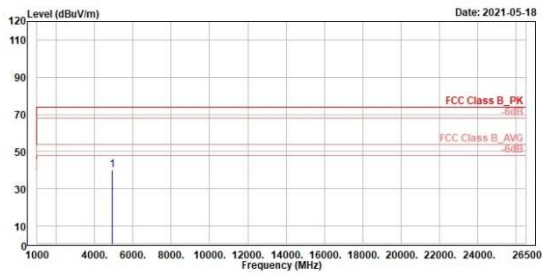


802.11g

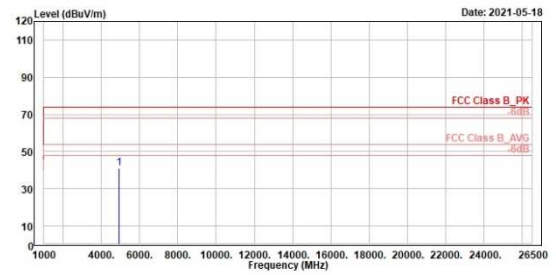
High Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

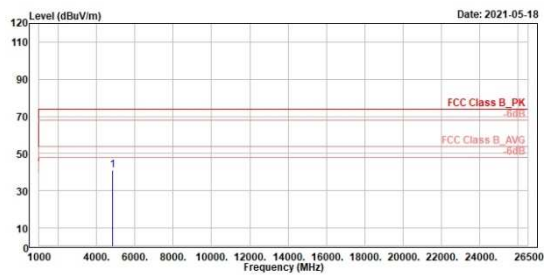


802.11n HT20

Low Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

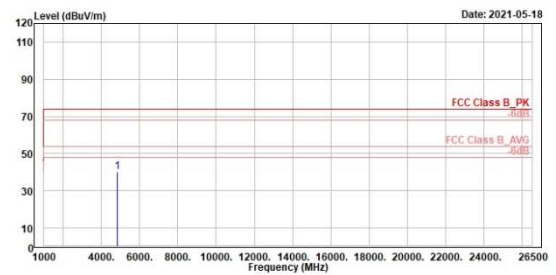


Line	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dB/m	dBuV/m	dB	cm	deg	
1	4824.00	40.96	51.60	-10.64	74.00	-33.04	357

Low Channel (Vertical)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



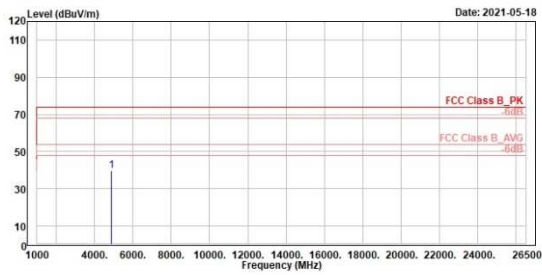
Line	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dB/m	dBuV/m	dB	cm	deg	
1	4824.00	40.23	50.87	-10.64	74.00	-33.77	400

802.11n HT20

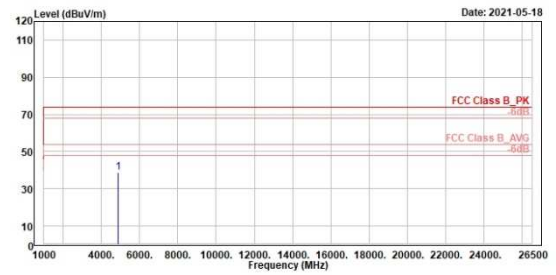
Middle Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

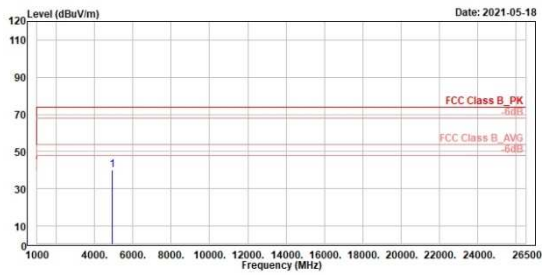


802.11n HT20

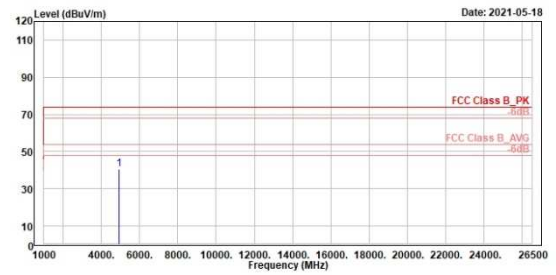
High Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



<WFI32E01UC>

Band Edges, 2.31GHz ~ 2.9GHz

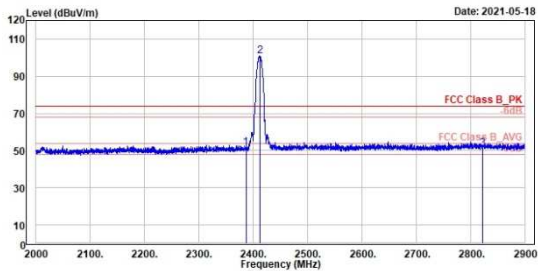
802.11b

Low Channel (Horizontal) Peak

Low Channel (Vertical) Peak



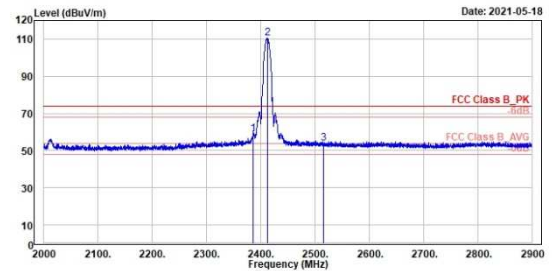
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2386.66	51.54	14.24	37.30	74.00	-22.46	184	50 Peak	Horizontal	
2 *	2412.00	101.06	63.71	37.35	74.00	27.06	184	50 Peak	Horizontal	
3	2822.20	51.19	12.99	38.20	74.00	-22.81	184	50 Peak	Horizontal	



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



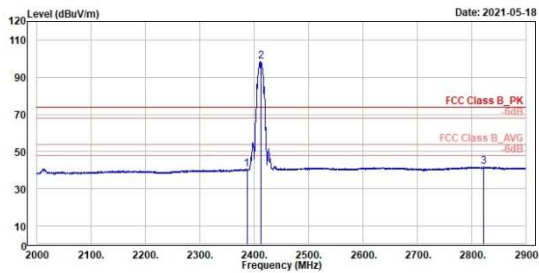
	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2386.31	50.72	21.42	37.30	74.00	-15.28	126	292 Peak	Vertical	
2 *	2412.00	110.57	73.22	37.35	74.00	36.57	100	56 Peak	Vertical	
3	2515.49	53.88	16.03	37.85	74.00	-20.12	100	56 Peak	Vertical	

802.11b

Low Channel (Horizontal) Average



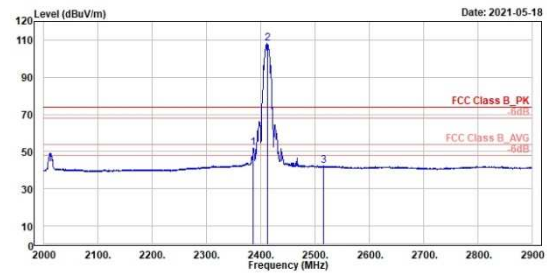
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



		Freq	Level	Nd	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
		MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1		2386.66	40.69	3.39	37.30	54.00	-13.31		184	50	Average	Horizontal	
2	*	2412.00	98.42	61.07	37.35	54.00	44.42		184	50	Average	Horizontal	
3		2822.20	91.76	3.56	38.20	54.00	-12.24		184	50	Average	Horizontal	



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



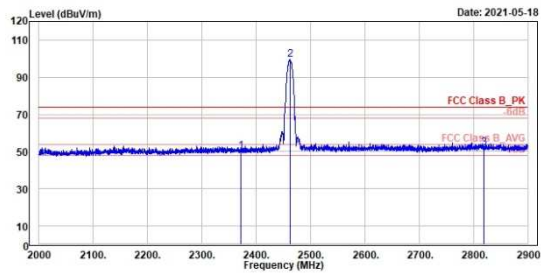
		Freq	Level	Lead	Level	Limit	Over	APOS	TPos	Remark	Pol/Phase	Note
		Hz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	1	2386.31	52.12	14.82	37.30	54.00	-1.88	126	292	Average	Vertical	
2	3	2412.00	100.01	70.66	37.35	54.00	54.01	100	56	Average	Vertical	
3	3	2515.49	42.40	4.55	37.85	54.00	-11.60	100	56	Average	Vertical	

802.11b

High Channel (Horizontal) Peak



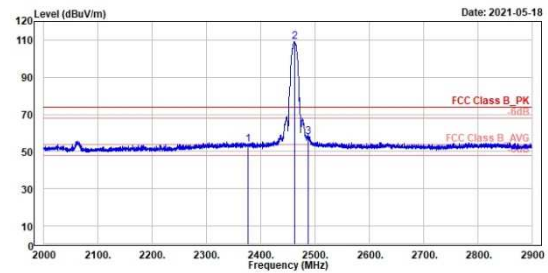
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Peak	Freq	Level	Read	Level	Factor	Limit	Over	Apos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2372.47	50.40	13.12	37.28	74.00	-23.60		310		42 Peak	Horizontal	
2 *	2462.00	99.59	62.03	37.56	74.00	25.59		310		42 Peak	Horizontal	
3	2819.86	52.06	13.86	38.20	74.00	-21.94		310		42 Peak	Horizontal	



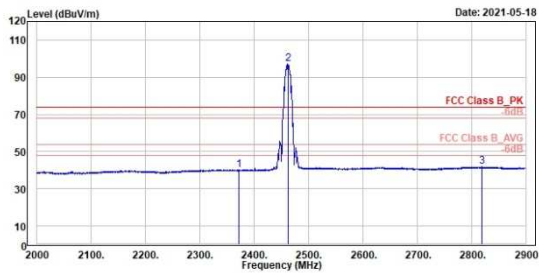
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Peak	Freq	Level	Read	Level	Factor	Limit	Over	Apos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2376.96	53.76	16.47	37.29	74.00	-20.24		100		229 Peak	Vertical	
2 *	2462.00	100.91	71.35	37.56	74.00	26.91		100		229 Peak	Vertical	
3	2487.82	58.12	20.37	37.75	74.00	-15.88		269		61 Peak	Vertical	

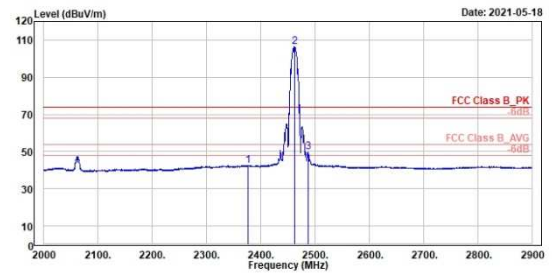
802.11b

High Channel (Horizontal) Average



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2372.47	40.23	2.95	37.28	54.00	-13.77	310	42	Average	Horizontal	
2 *	2462.00	97.00	59.44	37.56	54.00	43.00	310	42	Average	Horizontal	
3	2819.86	41.77	3.57	38.20	54.00	-12.23	310	42	Average	Horizontal	

High Channel (Vertical) Average



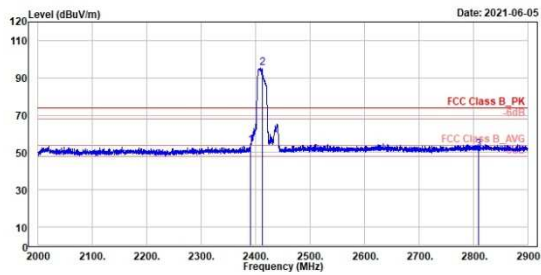
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2376.96	42.55	5.26	37.29	54.00	-11.45	100	229	Average	Vertical	
2 *	2462.00	106.38	68.82	37.56	54.00	52.38	100	229	Average	Vertical	
3 !	2487.82	49.94	12.19	37.75	54.00	-4.06	269	61	Average	Vertical	

802.11g

Low Channel (Horizontal) Peak



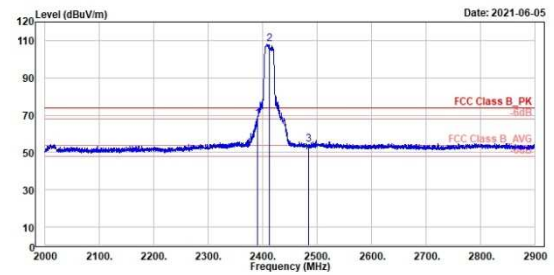
TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenhua Rd., Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1 2390.0000	54.05	16.75	37.30	74.00	-19.95	100	49	Peak	Horizontal		
2 *2412.0000	95.34	57.99	37.35	74.00	21.34	100	49	Peak	Horizontal		
3 2809.9820	51.59	13.40	38.19	74.00	-22.41	100	49	Peak	Horizontal		



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenhua Rd., Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



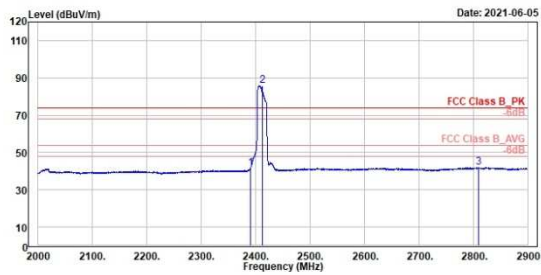
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1 2390.0000	68.11	30.81	37.30	74.00	-5.89	135	250	Peak	Vertical		
2 *2412.0000	108.10	70.75	37.35	74.00	34.10	172	179	Peak	Vertical		
3 2485.1270	54.32	16.60	37.72	74.00	-19.68	172	179	Peak	Vertical		

802.11g

Low Channel (Horizontal) Average



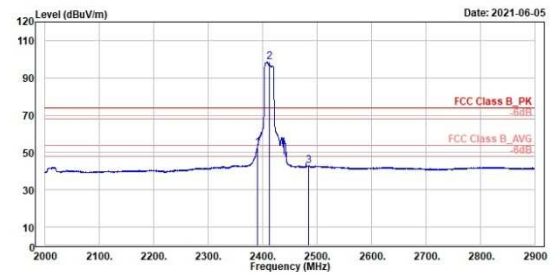
TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenhiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Low Channel (Vertical) Average



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenhiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

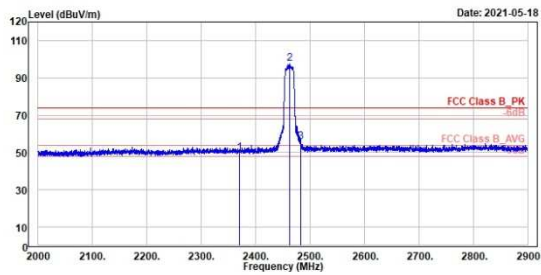


802.11g

High Channel (Horizontal) Peak



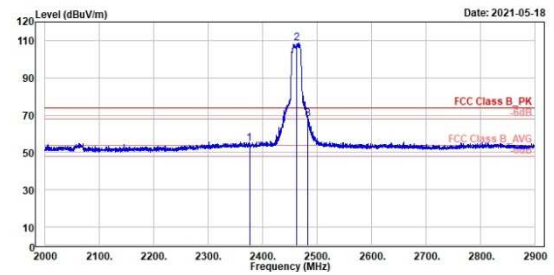
TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenhua Rd., Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2369.77	49.85	12.57	37.28	74.00	-24.15	312	42	Peak	Horizontal	
2 *	2462.00	97.45	59.89	37.56	74.00	23.45	312	42	Peak	Horizontal	
3	2483.51	55.45	17.74	37.71	74.00	-18.55	312	42	Peak	Horizontal	



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenhua Rd., Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



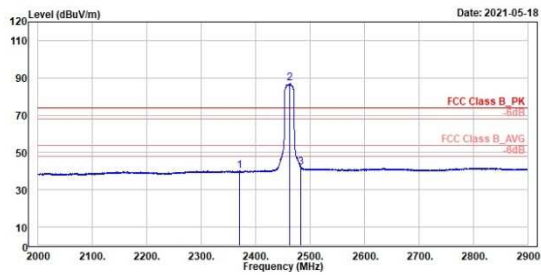
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2375.70	54.56	17.27	37.29	74.00	-19.44	100	245	Peak	Vertical	
2 *	2462.00	100.56	71.00	37.56	74.00	34.56	100	245	Peak	Vertical	
3	2483.51	67.77	30.06	37.71	74.00	-6.23	100	90	Peak	Vertical	

802.11g

High Channel (Horizontal) Average



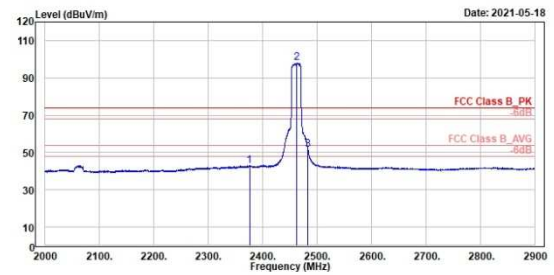
TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenhiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2369.77	40.21	2.93	37.28	54.00	-13.79	312	42	Average	Horizontal	
2 *	2462.00	86.94	49.38	37.56	54.00	32.94	312	42	Average	Horizontal	
3	2483.51	42.03	4.32	37.71	54.00	-11.97	312	42	Average	Horizontal	



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec. 2, Fenhiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



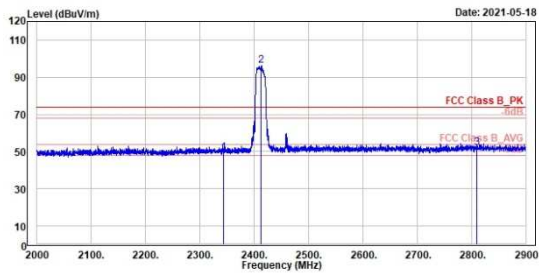
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2375.70	42.94	5.65	37.29	54.00	-11.06	100	245	Average	Vertical	
2 *	2462.00	97.94	60.38	37.56	54.00	43.94	100	244	Average	Vertical	
3 †	2483.51	51.58	13.87	37.71	54.00	-2.42	100	90	Average	Vertical	

802.11n HT20

Low Channel (Horizontal) Peak



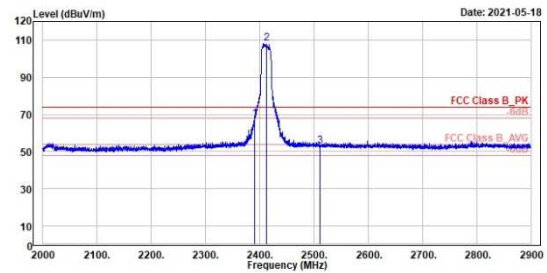
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2343.18	49.36	12.15	37.21	74.00	-24.64	182	49 Peak	Horizontal	
2 *	2412.00	96.42	59.07	37.35	74.00	22.42	182	49 Peak	Horizontal	
3	2818.34	51.91	13.72	38.19	74.00	-22.09	182	49 Peak	Horizontal	



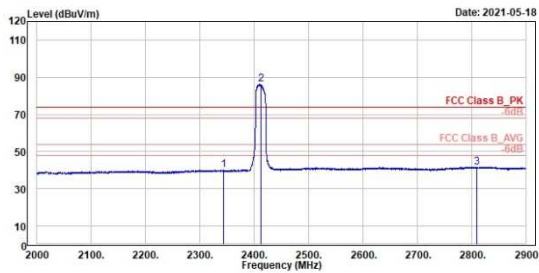
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2390.00	67.65	30.35	37.30	74.00	-6.35	100	292 Peak	Vertical	
2 *	2412.00	100.28	70.93	37.35	74.00	26.28	100	72 Peak	Vertical	
3	2511.18	52.79	14.95	37.84	74.00	-21.21	100	72 Peak	Vertical	

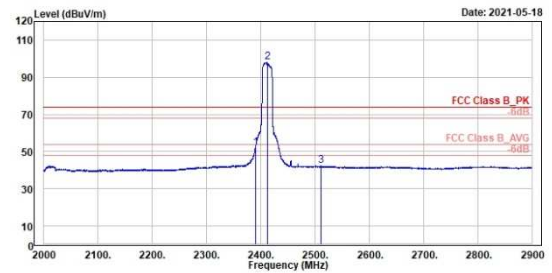
802.11n HT20

Low Channel (Horizontal) Average



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2343.18	40.12	2.91	37.21	54.00	-13.88	182	49	Average	Horizontal	
2 *	2412.00	86.45	49.19	37.35	54.00	32.45	182	49	Average	Horizontal	
3	2818.34	41.71	3.52	38.19	54.00	-12.29	182	49	Average	Horizontal	

Low Channel (Vertical) Average



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2390.00	51.92	14.62	37.30	54.00	-2.08	100	292	Average	Vertical	
2 *	2412.00	97.96	60.61	37.35	54.00	43.96	100	72	Average	Vertical	
3	2511.18	42.50	4.66	37.84	54.00	-11.50	100	72	Average	Vertical	

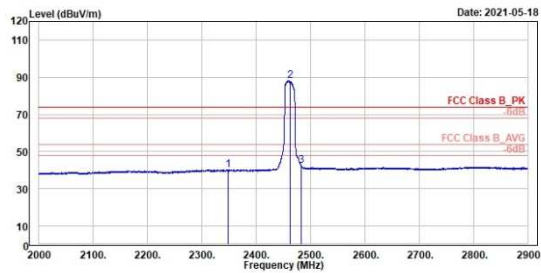
	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2366.00	53.71	16.44	37.27	74.00	-20.29	126	154 Peak	Vertical	
2 *	2462.00	106.88	69.32	37.56	74.00	32.88	126	154 Peak	Vertical	
3	2483.51	65.64	27.93	37.71	74.00	-8.36	126	154 Peak	Vertical	

802.11n HT20

High Channel (Horizontal) Average



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

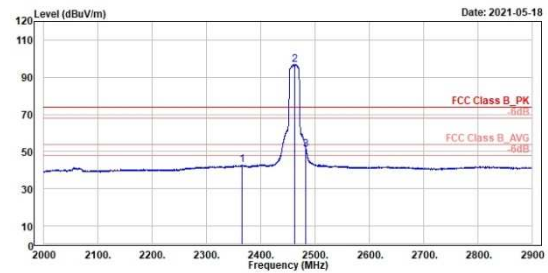


Freq	Level	Read	Level	Factor	Limit	Over	Apos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2348.21	40.22	2.98	37.24	54.00	-13.78	326	249	Average	Horizontal	
2 *	2462.00	88.10	50.54	37.56	54.00	34.10	326	249	Average	Horizontal	
3	2483.51	42.21	4.50	37.71	54.00	-11.79	326	249	Average	Horizontal	

High Channel (Vertical) Average



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Factor	Limit	Over	Apos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2366.00	42.66	5.39	37.27	54.00	-11.34	126	154	Average	Vertical	
2 *	2462.00	96.68	59.32	37.56	54.00	42.68	126	154	Average	Vertical	
3 !	2483.51	51.21	13.50	37.71	54.00	-2.79	126	71	Average	Vertical	

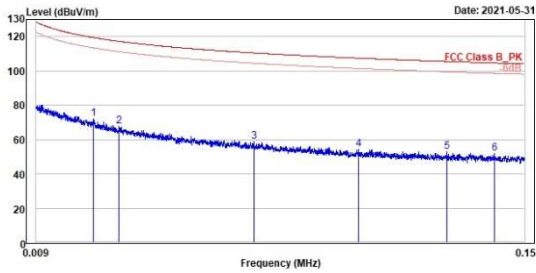
Spurious Emissions, Tx Mode, 9kHz ~ 30MHz

802.11g

Low Channel (open) 9kHz~150kHz



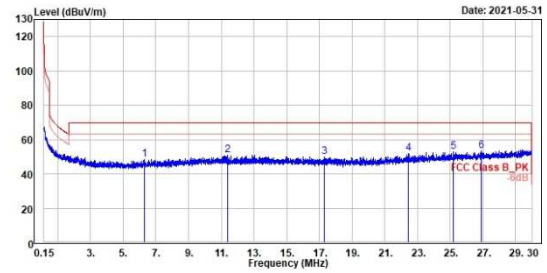
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	0.03	72.11	1.65	70.46	119.42	-47.31	100	274	QP	Open	
2	0.03	67.66	-0.33	67.99	117.24	-49.58	100	20	QP	Open	
3	0.07	58.83	-2.10	60.93	110.47	-51.64	100	162	QP	Open	
4	0.10	54.53	-2.60	57.13	107.42	-52.89	100	38	QP	Open	
5	0.13	52.78	-3.26	56.04	105.49	-52.71	100	30	QP	Open	
6	0.14	52.05	-3.39	55.44	104.60	-52.55	100	197	QP	Open	



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



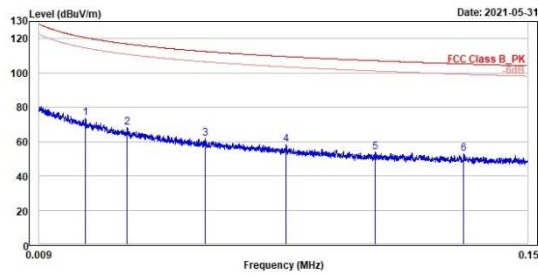
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	6.30	48.33	11.48	36.85	69.50	-21.17	100	148	QP	Open	
2	11.39	51.06	12.86	38.20	69.50	-18.44	100	90	QP	Open	
3	17.30	49.73	11.94	37.79	69.50	-19.77	100	327	QP	Open	
4	22.47	51.73	12.95	38.78	69.50	-17.77	100	359	QP	Open	
5	25.20	52.69	12.62	40.07	69.50	-16.81	100	76	QP	Open	
6	26.90	53.54	12.67	40.87	69.50	-15.96	100	223	QP	Open	

802.11g

Low Channel (Close) 9kHz~150kHz



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

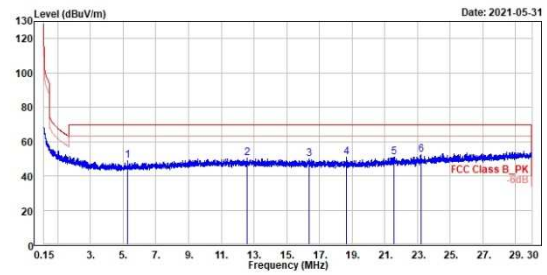


Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	0.02	73.58	1.81	71.77	120.61	-47.03	100	86	QP	Close	
2	0.03	68.14	0.52	67.62	116.84	-48.70	100	98	QP	Close	
3	0.06	61.63	-1.27	62.90	112.49	-50.86	100	249	QP	Close	
4	0.08	58.16	-1.65	59.81	109.50	-51.34	100	0	QP	Close	
5	0.11	53.83	-3.13	56.96	107.08	-53.25	100	255	QP	Close	
6	0.13	53.09	-2.77	55.86	105.21	-52.12	100	245	QP	Close	

Low Channel (Close) 150kHz~30MHz



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	5.28	49.05	12.58	36.47	69.50	-20.45	100	152	QP	Close	
2	12.59	50.37	12.25	38.12	69.50	-19.13	100	256	QP	Close	
3	16.39	49.81	11.96	37.85	69.50	-19.69	100	13	QP	Close	
4	18.67	50.70	13.00	37.70	69.50	-18.80	100	248	QP	Close	
5	21.59	50.97	12.62	38.35	69.50	-18.53	100	279	QP	Close	
6	23.22	52.28	13.15	39.13	69.50	-17.22	100	23	QP	Close	

Spurious Emissions, Tx Mode, 30MHz ~ 1GHz

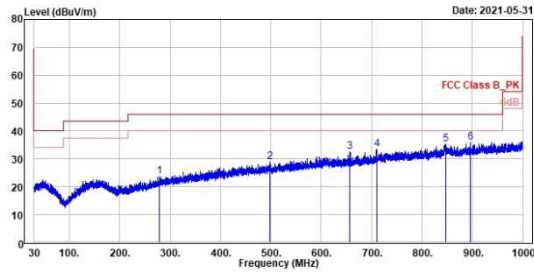
802.11g

Low Channel (Horizontal)

Low Channel (Vertical)



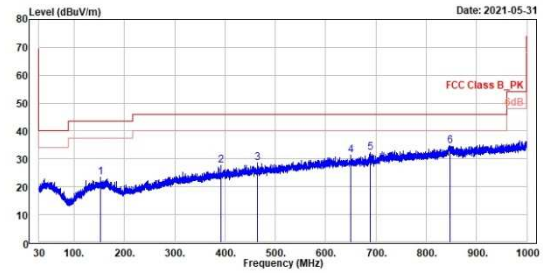
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Peak	Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	278.61	23.81	28.48	-4.59	46.00	-22.19	280	157	Peak	Horizontal	
2	498.90	28.94	29.66	-0.72	46.00	-17.06	100	126	Peak	Horizontal	
3	657.49	32.47	30.44	2.03	46.00	-13.53	100	272	Peak	Horizontal	
4	711.33	33.50	30.67	2.83	46.00	-12.50	300	261	Peak	Horizontal	
5	847.32	35.38	29.97	5.33	46.00	-10.70	100	242	Peak	Horizontal	
6	896.79	35.87	29.87	6.00	46.00	-10.13	200	35	Peak	Horizontal	



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Peak	Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	152.12	23.34	28.66	-5.32	43.50	-20.16	202	0	Peak	Vertical	
2	391.33	27.53	29.73	-2.20	46.00	-18.47	300	294	Peak	Vertical	
3	463.69	28.63	29.59	-0.96	46.00	-17.37	300	80	Peak	Vertical	
4	658.80	31.23	29.28	1.95	46.00	-14.77	141	360	Peak	Vertical	
5	688.34	32.37	29.75	2.62	46.00	-13.63	100	25	Peak	Vertical	
6	847.71	34.78	29.37	5.33	46.00	-11.38	400	174	Peak	Vertical	

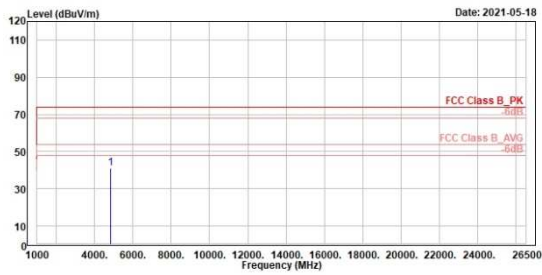
Spurious Emissions, Tx Mode, 1GHz ~ 26.5GHz

802.11b

Low Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

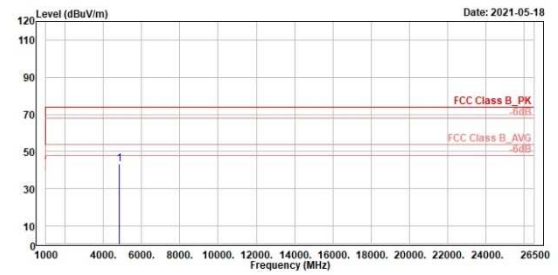


Freq	Level	Read	Level	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4824.00	48.84	50.28	-9.36	74.00	-33.16	400	181 Peak	Horizontal	

Low Channel (Vertical)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



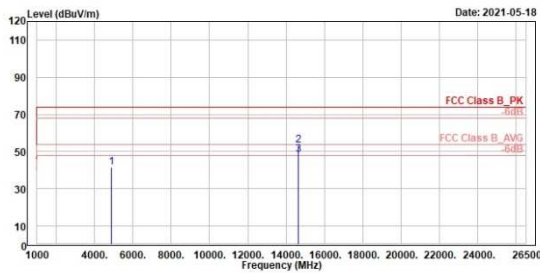
Freq	Level	Read	Level	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4824.00	43.33	52.69	-9.36	74.00	-30.67	300	303 Peak	Vertical	

802.11b

Middle Channel (Horizontal)



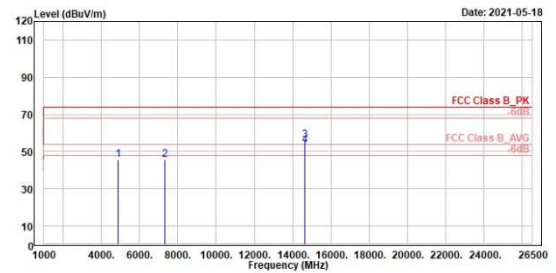
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	4874.00	41.41	50.75	-9.34	74.00	-32.59	180	159	Peak	Horizontal		
2	14622.00	53.23	49.40	3.83	82.70	-29.47	110	112	Peak	Horizontal		
3	14622.00	48.18	44.35	3.83	80.11	-31.93	110	112	Average	Horizontal		



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



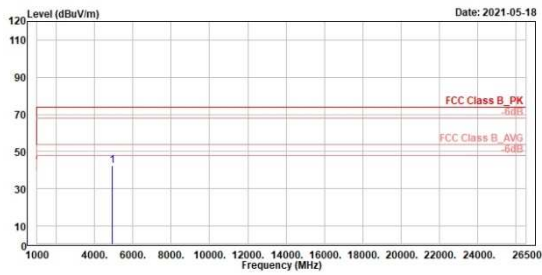
	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	4874.00	45.53	54.87	-9.34	74.00	-28.47	300	268	Peak	Vertical		
2	7311.00	45.45	52.11	-6.66	74.00	-28.55	100	360	Peak	Vertical		
3	14622.00	56.31	52.48	3.83	91.83	-35.52	399	293	Peak	Vertical		
4	14622.00	53.25	49.42	3.83	89.30	-36.05	399	293	Average	Vertical		

802.11b

High Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

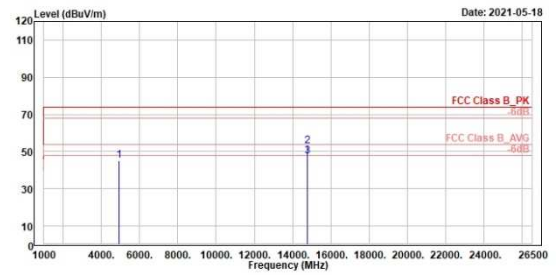


Freq	Level	Read	Level	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4924.00	42.25	51.57	-9.32	74.00	-31.75	300	305 Peak	Horizontal	

High Channel (Vertical)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4924.00	45.39	54.71	-9.32	74.00	-28.61	300	265 Peak	Vertical	
2	14772.00	52.77	48.67	4.10	68.91	-36.14	339	296 Peak	Vertical	
3	14772.00	47.66	43.56	4.10	66.38	-38.72	339	296 Average	Vertical	

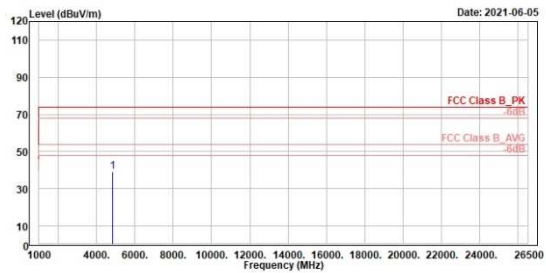
802.11g

Low Channel (Horizontal)

Low Channel (Vertical)



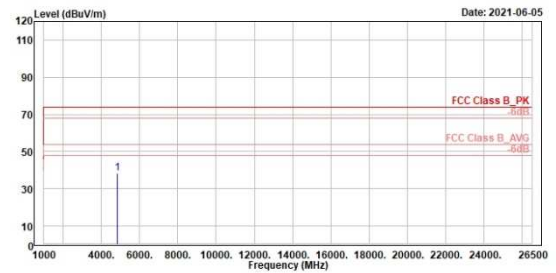
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1 4624.0000	39.17	48.53	-9.36	74.00	-34.83	400	72	Peak	Horizontal		



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



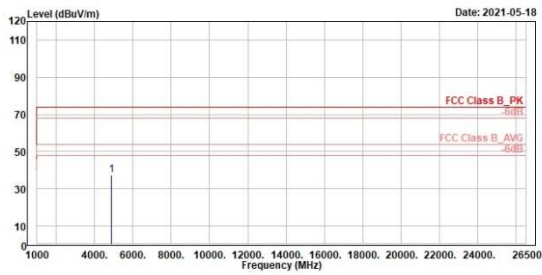
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1 4624.0000	38.44	47.80	-9.36	74.00	-35.56	135	360	Peak	Vertical		

802.11g

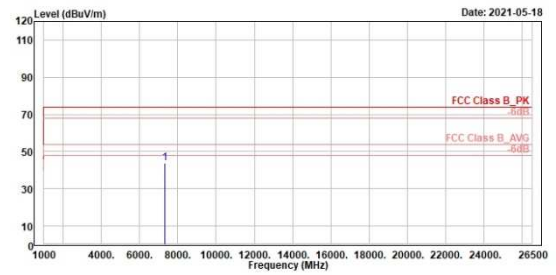
Middle Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



TÜV Rheinland Taiwan Ltd.
No. 438-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

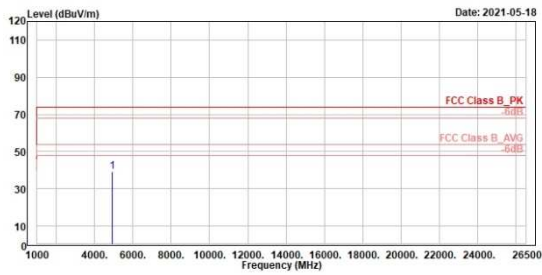


802.11g

High Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

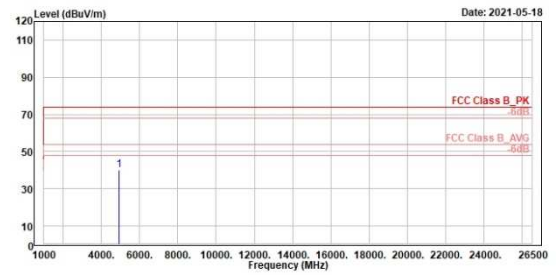


Freq	Level	Read	Level	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4924.00	39.28	48.68	-9.32	74.00	-34.72	358	360 Peak	Horizontal	

High Channel (Vertical)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



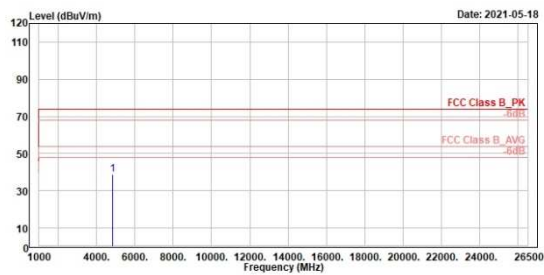
Freq	Level	Read	Level	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4924.00	40.31	49.63	-9.32	74.00	-33.69	100	186 Peak	Vertical	

802.11n HT20

Low Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

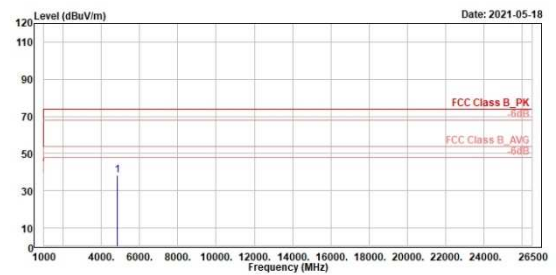


Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	4824.00	38.60	47.96	-9.36	74.00	-35.40	400	102 Peak	Horizontal

Low Channel (Vertical)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



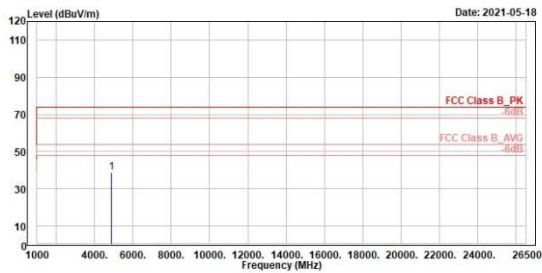
Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	4824.00	38.45	47.81	-9.36	74.00	-35.55	400	224 Peak	Vertical

802.11n HT20

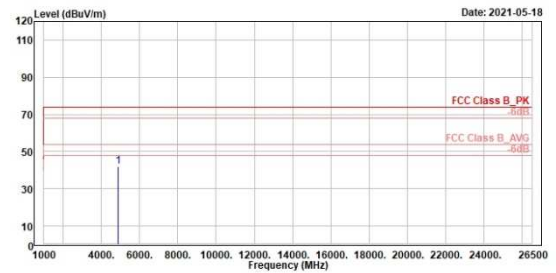
Middle Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

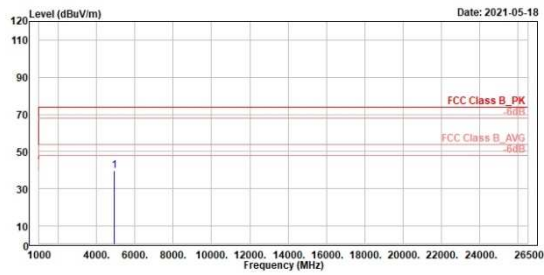


802.11n HT20

High Channel (Horizontal)



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Penliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

