Prüfbericht-Nr.: *Test report no.:*	CN22UGQZ (P15E-WiFi) 001	**Auftrags-Nr.:** *Order no.*:	238547232	Seite 1 von 22 *Page 1 of 22*
Kunden-Referenz-Nr.: *Client reference no.:*	N/A	**Auftragsdatum:** *Order date:*	2022-07-28	
Auftraggeber: *Client:*	Sony Group Corporation 1-7-1 Konan Minato-ku Tokyo Japan			
Prüfgegenstand: *Test item:*	Wireless Lan Module			
Bezeichnung / Typ-Nr.: *Identification / Type no.:*	WCBN3515A			
Auftrags-Inhalt: *Order content*:	FCC Part 15E Test report (WiFi 5GHz)			
Prüfgrundlage: *Test specification:*	FCC 47CFR Part 15: Subpart E Section 15.407			
Wareneingangsdatum: *Date of sample receipt:*	2022-08-26			
Prüfmuster-Nr.: *Test sample no:*	A003325806-002			
Prüfzeitraum: *Testing period:*	2022-09-08 - 2022-10-12			
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:*	Jack Wang	**genehmigt von:** authorized by:	Ryan Chen
Datum: *Date:* 2022-10-14		**Ausstellungsdatum:** *Issue date:* 2022-10-14	
Stellung / *Position:*	Project Manager	**Stellung** / *Position:*	Senior Project Manager

Sonstiges / *Other:* Accommodate the Pre-certificated Module (FCC ID: AK8100224111) into the Host Product Name: Sony Drone controller (Model: REMOTE-TEST). Only the conducted power and RSE tests were evaluated.

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt
Condition of the test item at delivery: *Test item complete and undamaged*

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
** Legend:*	*1 = very good*	*2 = good*	*3 = satisfactory*	*4 = sufficient*	*5 = poor*
	P(ass) = passed a.m. test specification(s)		*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

TEST SUMMARY

Report Section	FCC Clause	Test Item	Result
5.1.1	15.407(a) & 15.203	Antenna Requirement	Pass
5.1.2	15.407(a)	Maximum Conducted Output Power	Pass
5.1.3	15.407(b) & 15.205 & 15.209	Radiated Spurious Emissions and Band Edges	Pass

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

Contents

HISTORY OF THIS TEST REPORT

Report No.	Description	Date Issued
CN22UGQZ (P15E-WiFi) 001	Original Release	2022-10-14

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 E Section 15.407
FCC 47CFR Part 2: Subpart J Section 2.1049
ANSI C63.10:2013
KDB 789033 D02 General UNII Test Procedures New Rules v02r01
KDB 662911 D01 Multiple Transmitter Output v02r01

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

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 basics 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)	± 1.32 dB
Radiated Emission (200 MHz ~ 1 GHz)	± 1.31 dB
Radiated Emission (1 GHz ~ 18 GHz)	± 1.53 dB
Radiated Emission (18 GHz ~ 40 GHz)	± 2.50 dB
Mains Conducted Emission	± 1.65 dB

3. General Product Information

3.1 Product Function and Intended Use

The EUT is a Wireless Lan Module. It contains a WLAN compatible module enabling the user to communicate data through a Wireless interface.
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	Wireless Lan Module
Type Identification	WCBN3515A
FCC ID	AK8100224111

Technical Specification of EUT

Item	EUT information
Operating Frequency	Band 1: 5180 MHz ~ 5240 MHz Band 4: 5745 MHz ~ 5825 MHz
Channel Number	Band 1: 4 for 802.11a, 802.11n HT20, 802.11ac VHT20 Band 4: 5 for 802.11a, 802.11n HT20, 802.11ac VHT20
Data Rate	802.11a: 54.0 / 48.0 / 36.0 / 24.0 / 18.0 / 12.0 / 9.0 / 6.0 Mbps 802.11n: up to MCS7 802.11ac: up to MCS9
Operation Voltage	12 Vdc
Modulation	OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)
Antenna Information	Refer to 5.1.1
Accessory Device	Refer to 4.4

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

802.11a			802.11n HT20 / 802.11ac VHT20		
Channel	Power Setting		Channel	Power Setting	
	Chain 0	Chain 1		Chain 0	Chain 1
36	15	14	36	15	14
40	15	14	40	15	14
48	15	14	48	15	14
149	16	15	149	16	15
157	16	15	157	17	15
165	17	16	165	17	16

4.2 Carrier Frequency and Channel

Band	Channel	Frequency (MHz)	802.11a 802.11n HT20 802.11ac VHT20
U-NII-1 (Band 1)	36	5180	V
	38	5190	
	40	5200	V
	42	5210	
	44	5220	V
	46	5230	
	48	5240	V
U-NII-3 (Band 4)	149	5745	V
	151	5755	
	153	5765	V
	155	5775	
	157	5785	V
	159	5795	
	161	5805	V
	165	5825	V

4.3 Test Operation and Test Software

Setup for testing: Test samples are provided with a USB 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	Adb

The samples were used as follows:
A003325806-002

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

EUT Configure Mode	Applicable To			Description
	Output Power	Radiated Spurious Emissions above 1 GHz	Radiated Spurious Emissions below 1 GHz	
-	√	√	√	-

Note:
1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when position on **Y-plane**.
2. "-" means no effect.

Output Power

☒ 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	Frequency (MHz)	Available Channel	Tested Channel	Date Rate (Mbps)
-	802.11a	5180-5240	36 to 48	36, 40, 48	6.0
-		5745-5825	149 to 165	149, 157, 165	
-	802.11n HT20	5180-5240	36 to 48	36, 40, 48	MCS0
-		5745-5825	149 to 165	149, 157, 165	
-	802.11ac VHT20	5180-5240	36 to 48	36, 40, 48	MCS0
-		5745-5825	149 to 165	149, 157, 165	

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	Frequency (MHz)	Available Channel	Tested Channel	Date Rate (Mbps)
-	802.11a	5180-5240	36 to 48	36, 40, 48	6.0
-		5745-5825	149 to 165	149, 157, 165	
-	802.11ac VHT20	5180-5240	36 to 48	36, 40, 48	MCS0
-		5745-5825	149 to 165	149, 157, 165	

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	Frequency (MHz)	Available Channel	Tested Channel	Date Rate (Mbps)
Patch Antenna	802.11ac VHT20	5745-5825	149 to 165	157	MCS0
Sector Antenna	802.11ac VHT20	5745-5825	149 to 165	157	MCS0

Test Condition

Test Item	Ambient Temperature	Relative Humidity	Tested by
Conducted Measurement	22 °C	67 %	Andy Chen
Radiated Spurious Emissions above 1 GHz	22.2-24.8 °C	50-55 %	Roger Liao
Radiated Spurious Emissions below 1 GHz	22.2-24.8 °C	50-55 %	Roger Liao

4.4 Special Accessories and Auxiliary Equipment

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

Accessory of EUT

None

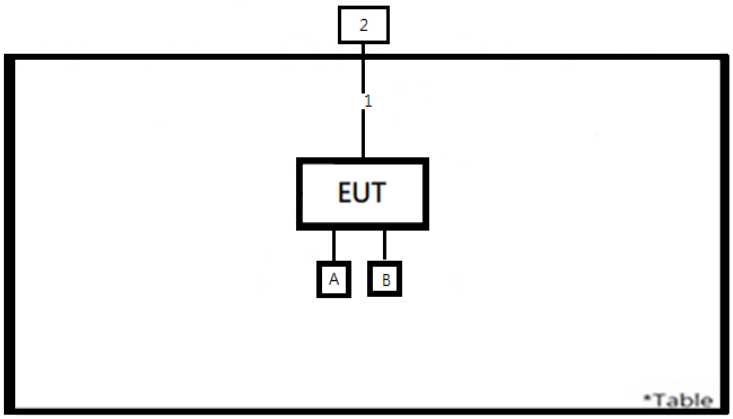
Support Unit

Support Unit								
No	Description	Brand	Model	S/N	Shielded	Ferrite Core (Qty)	Length (cm)	Remark
A	Antenna	TUV-JP	APA-M25	N/A	-	-	-	Patch Antenna
B	Antenna	TUV-JP	APA-M25	N/A	-	-	-	
1	Notebook	Lenovo	81BL	MP1DCD6Y	-	-	-	
2	USB to USB Cable	TUV	TUV-001	N/A	NO	NO	300	
A	Antenna Cable	TUV-JP	TUV-JP-1	N/A	YES	NO	200	Sector Antenna
B	Antenna Cable	TUV-JP	TUV-JP-2	N/A	YES	NO	200	
C	Antenna	TUV-JP	APA-M25	N/A	-	-	-	
D	Antenna	TUV-JP	APA-M25	N/A	-	-	-	
1	Notebook	Lenovo	81BL	MP1DCD6Y	-	-	-	
2	USB to USB Cable	TUV	TUV-001	N/A	NO	NO	300	

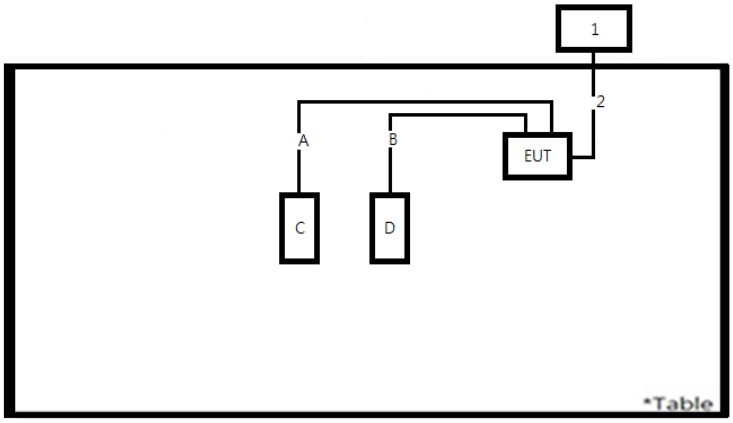
4.5 Test Setup Diagram

<Radiated Spurious Emissions mode>

Patch Antenna



Sector Antenna



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's antenna specifications are described as below. The antenna is used with no possibility of replacement with a non-approved antenna by the end-user. Therefore, the EUT is considered to comply with this provision.

ANT	Gain (dBi)	
	Band 1	Band 4
Patch Antenna	10.6	10.6
Sector Antenna	14.7	15.3

Refer to EUT photo for details.

5.1.2 Maximum Conducted Output Power

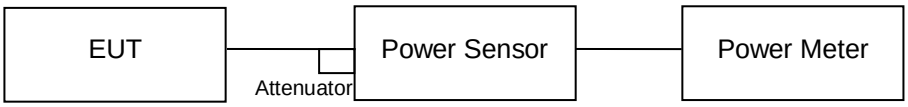
Limit

Operation Band	EUT Category	Limit
U-NII-1	Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≦ 125 mW (21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
	Fixed point-to-point Access Point	1 Watt (30 dBm)
	Indoor Access Point	1 Watt (30 dBm)
	Mobile and Portable client device	250 mW (24 dBm)
U-NII-2A	---	250 mW (24 dBm) or 11 dBm + 10 log B*
U-NII-2C	---	250 mW (24 dBm) or 11 dBm + 10 log B*
U-NII-3	---	1 Watt (30 dBm)

Note: B* is the 26 dB emission bandwidth in megahertz

Kind of Test Site Shielded room

Test Setup



Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Power Meter	Anritsu	ML2495A	1901008	2022/3/15	2023/3/14	2022/9/8	2022/10/12
Power Sensor	Anritsu	MA2411B	1725269	2022/3/15	2023/3/14	2022/9/8	2022/10/12

Test Procedures

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst and set the detector to AVERAGE. Duty factor is not added to measured value.

Test Result

<Band 1>

Mode	Channel	Frequency (MHz)	Chain 0		Chain 1		Chain 0+1	
			Peak Power (dBm)	Average Power (dBm)	Peak Power (dBm)	Average Power (dBm)	Peak Power (dBm)	Average Power (dBm)
802.11a	36	5180	18.89	13.13	18.67	12.92	21.79	16.04
	40	5200	19.06	13.23	18.32	12.86	21.72	16.06
	48	5240	19.08	13.06	18.93	12.76	22.02	15.92
802.11n HT20	36	5180	18.83	13.09	18.81	12.66	21.83	15.89
	40	5200	19.01	13.06	19.05	12.52	22.04	15.81
	48	5240	18.95	12.92	18.74	12.43	21.86	15.69
802.11ac VHT20	36	5180	19.08	13.44	18.59	12.93	21.85	16.20
	40	5200	19.28	13.13	18.41	12.55	21.88	15.86
	48	5240	18.96	12.98	18.98	12.52	21.98	15.77

<Band 4>

Mode	Channel	Frequency (MHz)	Chain 0		Chain 1		Chain 0+1	
			Peak Power (dBm)	Average Power (dBm)	Peak Power (dBm)	Average Power (dBm)	Peak Power (dBm)	Average Power (dBm)
802.11a	149	5745	20.11	14.24	19.67	14.31	22.91	17.29
	157	5785	19.61	13.88	19.97	14.08	22.80	16.99
	165	5825	20.25	14.34	20.12	14.39	23.20	17.38
802.11n HT20	149	5745	19.92	14.13	19.98	14.11	22.96	17.13
	157	5785	20.31	14.31	20.01	13.84	23.17	17.09
	165	5825	20.04	14.06	20.51	14.21	23.29	17.15
802.11ac VHT20	149	5745	20.11	14.13	20.02	14.07	23.08	17.11
	157	5785	20.08	14.31	20.11	13.96	23.11	17.15
	165	5825	20.05	13.83	20.12	14.23	23.10	17.04

5.1.3 Radiated Spurious Emissions

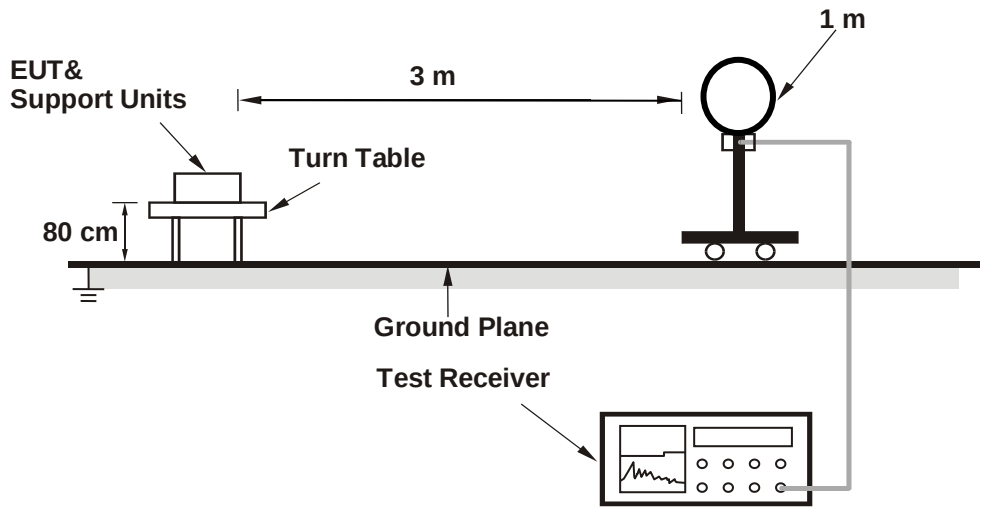
Limit

Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must comply with the radiated emission limits specified in §15.209(a).
Emissions radiated outside the restricted and authorized frequency bands must either comply with the radiated emission limits specified for the restricted bands or in §15.407(b).

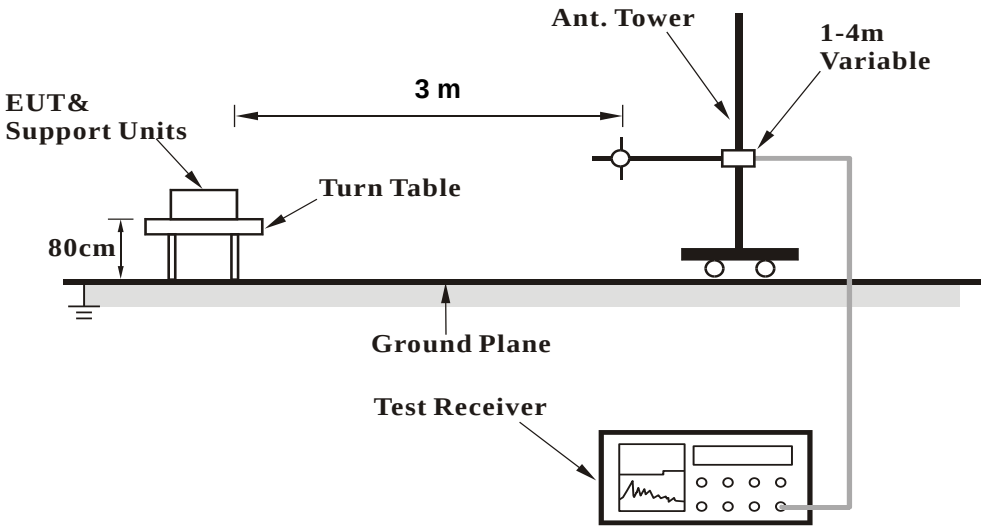
Kind of Test Site 3m Semi-Anechoic Chamber

Test Setup

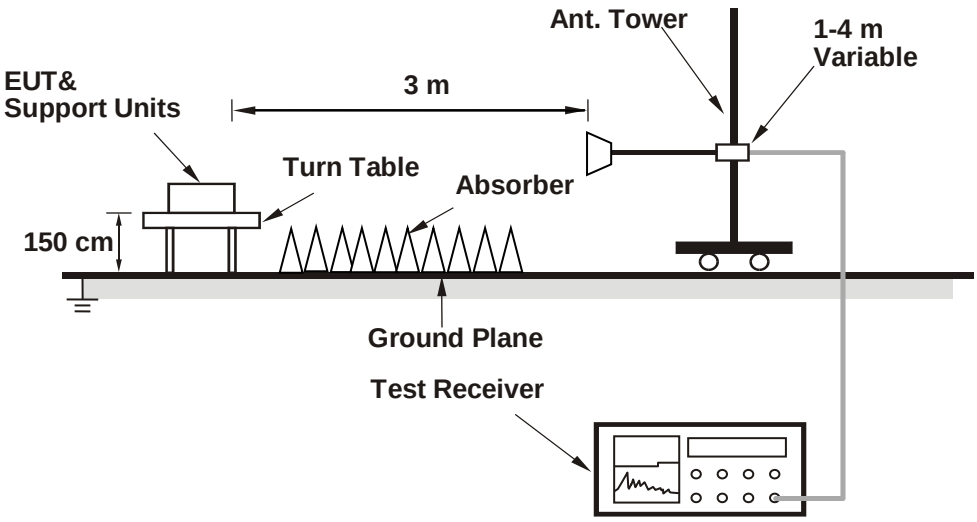
<Radiated Emissions below 30 MHz>



<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).

Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Above 1 GHz					
Signal Analyzer	R&S	FSV40	101509	2022/4/22	2023/4/21
Horn Antenna	ETS-Lindgren	3117	00218929	2021/11/25	2022/11/24
HF-AMP + AC source	EMCI	EMC051845SE	980635	2022/1/20	2023/1/19
HF-AMP + AC source	EMCI	EMC184045SE	980656	2022/1/20	2023/1/19
Horn Antenna	SCHWARZBECK	BBHA 9170	00887	2022/3/29	2023/3/28
Test Software	Audix E3	15914a_20191106 tuv	PK-001087	N/A	N/A
30 MHz ~ 1 GHz					
Receiver	R&S	ESR7	102109	2022/2/25	2023/2/24
Bilog Antenna	SCHWARZBECK	VULB-9168	00949	2022/5/29	2023/5/28
LF-AMP	Agilent	8447D	2727A05146	2022/2/16	2023/2/15
Test Software	Audix E3	15914a_20191106 tuv	PK-001087	N/A	N/A
Below 30 MHz					
Receiver	R&S	ESR7	102109	2022/2/25	2023/2/24
Microwave Cable	SUCOFLEX 104EA	800056/4EA	804680/4	2022/3/22	2023/3/21
Loop Antenna	SCHWARZBECK	FMZB 1519B	00215	2021/12/8	2022/12/7
Test Software	Audix E3	15914a_20191106 tuv	PK-001087	N/A	N/A

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 ≥ 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.
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.

Test Results

Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)
Level (dBuV/m) = Reading (dBuV) + Factor (dB/m)

Please refer to Appendix A.

Appendix A: Test Results of Radiation Spurious Emissions

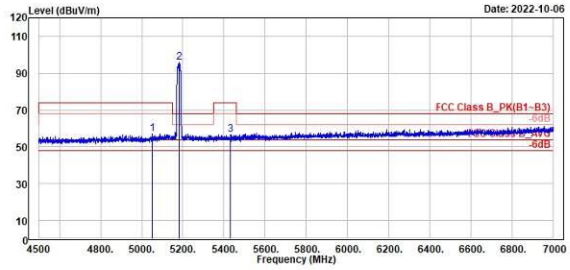
<Patch Antenna>

Band Edges, 4.5GHz ~ 5.15GHz

U-NII-1

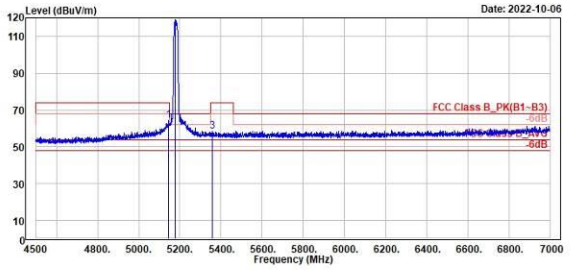
802.11a	
CH 36 (Horizontal) Peak	**CH 36 (Vertical) Peak**

TUV 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 Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5050.50	57.06	14.67	42.39	74.00	-16.94	297	360	Peak	Horizontal	
2 *	5180.00	95.88	52.92	42.96	68.20	27.68	297	360	Peak	Horizontal	
3	5431.50	56.49	13.42	43.07	74.00	-17.51	297	360	Peak	Horizontal	

TUV 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

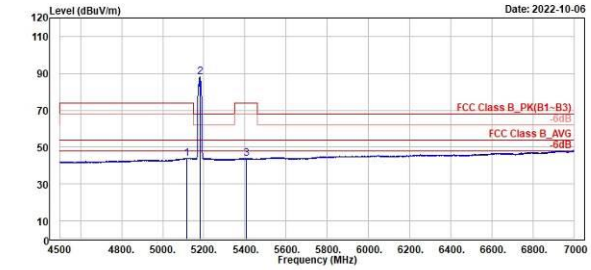


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5146.50	64.37	22.00	42.37	74.00	-9.63	254	360	Peak	Vertical	
2 *	5177.00	118.98	76.54	42.44	68.20	50.78	254	360	Peak	Vertical	
3	5357.50	58.35	15.61	42.74	74.00	-15.65	254	360	Peak	Vertical	

802.11a

CH 36 (Horizontal) Average

TUV 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 Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5118.00	44.03	1.18	42.85	54.00	-9.97	297	360	Average	Horizontal	
2 *	5180.00	87.94	44.98	42.96	54.00	33.94	297	360	Average	Horizontal	
3	5406.50	43.93	0.78	43.15	54.00	-10.07	297	360	Average	Horizontal	

CH 36 (Vertical) Average

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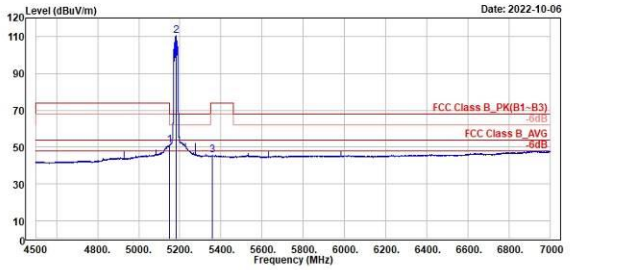

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1 !	5149.50	51.00	8.63	42.37	54.00	-3.00	254	360	Average	Vertical	
2 *	5180.00	110.40	67.94	42.46	54.00	56.40	254	360	Average	Vertical	
3	5356.00	45.47	2.73	42.74	54.00	-8.53	254	360	Average	Vertical	

802.11a

CH 48 (Horizontal) Peak

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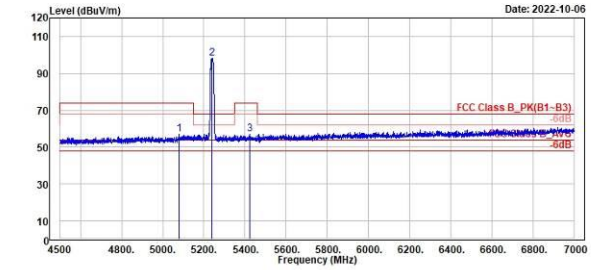

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5080.50	56.96	14.30	42.66	74.00	-17.04	352	32	Peak	Horizontal	
2 *	5240.00	98.01	55.13	42.88	68.20	29.81	352	32	Peak	Horizontal	
3	5422.50	56.85	13.75	43.10	74.00	-17.15	352	32	Peak	Horizontal	

CH 48 (Vertical) Peak

TUV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao., Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
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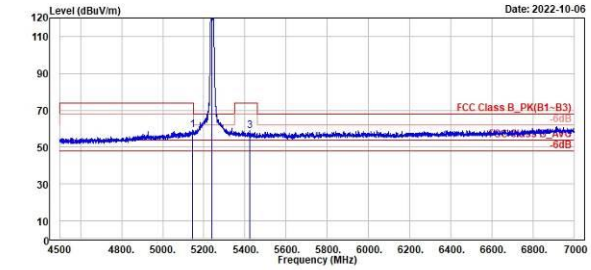

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5144.00	59.54	17.17	42.37	74.00	-14.46	264	360	Peak	Vertical	
2 *	5240.00	122.06	79.52	42.54	68.20	53.86	264	360	Peak	Vertical	
3	5423.00	58.81	15.93	42.88	74.00	-15.19	264	360	Peak	Vertical	

802.11a

CH 48 (Horizontal) Average

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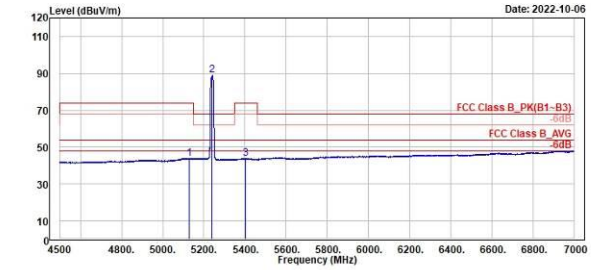

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5127.50	43.89	1.04	42.85	54.00	-10.11	352	32	Average	Horizontal	
2 *	5240.00	88.91	46.03	42.88	54.00	34.91	352	32	Average	Horizontal	
3	5403.00	43.91	0.74	43.17	54.00	-10.09	352	32	Average	Horizontal	

CH 48 (Vertical) Average

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No. 458-18, Sec 2, Fenliao., Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
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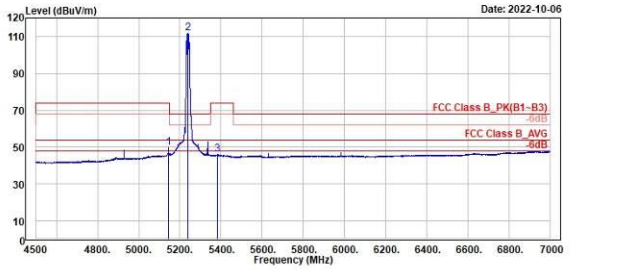

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1 !	5144.00	49.60	7.23	42.37	54.00	-4.40	264	360	Average	Vertical	
2 *	5240.00	111.60	69.06	42.54	54.00	57.60	264	360	Average	Vertical	
3	5384.00	46.29	3.53	42.76	54.00	-7.71	264	360	Average	Vertical	

802.11ac VHT20	
CH 36 (Horizontal) Peak	**CH 36 (Vertical) Peak**

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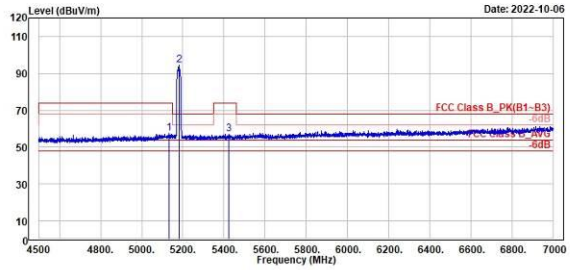

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5134.00	57.34	14.48	42.86	74.00	-16.66	296	360	Peak	Horizontal	
2 *	5180.00	94.35	51.39	42.96	68.20	26.15	296	360	Peak	Horizontal	
3	5421.50	57.19	14.09	43.10	74.00	-16.81	296	360	Peak	Horizontal	

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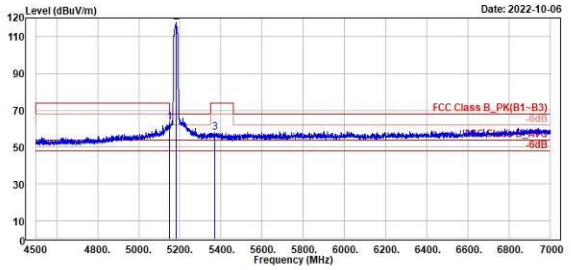

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5149.50	63.55	21.18	42.37	74.00	-10.45	265	360	Peak	Vertical	
2 *	5180.00	117.81	75.35	42.46	68.20	49.61	265	360	Peak	Vertical	
3	5369.50	57.86	15.11	42.75	74.00	-16.14	265	360	Peak	Vertical	

802.11ac VHT20

CH 36 (Horizontal) Average

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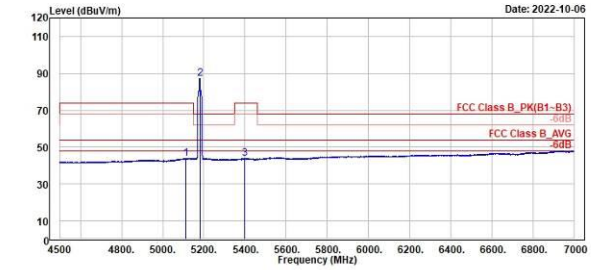

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5111.50	43.88	1.04	42.84	54.00	-10.12	296	360	Average	Horizontal	
2 *	5180.00	87.31	44.35	42.96	54.00	33.31	296	360	Average	Horizontal	
3	5399.00	43.75	0.59	43.16	54.00	-10.25	296	360	Average	Horizontal	

CH 36 (Vertical) Average

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No. 458-18, Sec 2, Fenliao., Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
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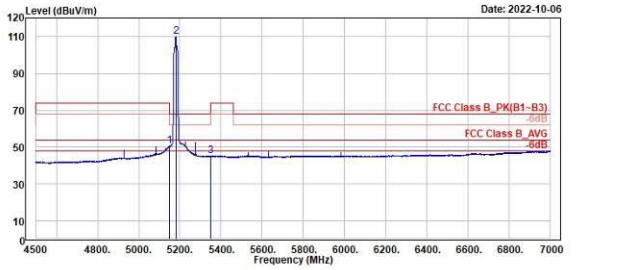

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1 !	5148.00	50.44	8.07	42.37	54.00	-3.56	265	360	Average	Vertical	
2 *	5180.00	109.87	67.41	42.46	54.00	55.87	265	360	Average	Vertical	
3	5351.00	45.39	2.66	42.73	54.00	-8.61	265	360	Average	Vertical	

802.11ac VHT20

CH 48 (Horizontal) Peak

TUV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao., Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
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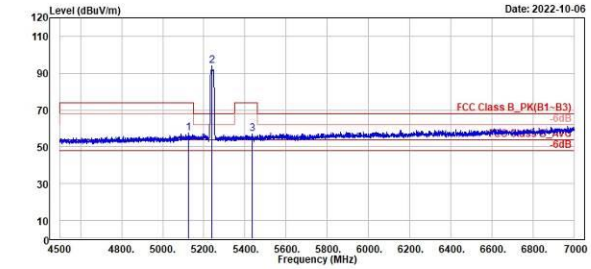
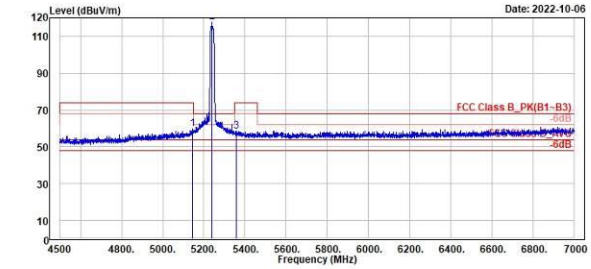


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5126.00	57.31	14.46	42.85	74.00	-16.69	279	31	Peak	Horizontal	
2 *	5240.00	94.13	51.25	42.88	68.20	25.93	279	31	Peak	Horizontal	
3	5434.50	56.92	13.86	43.06	74.00	-17.08	279	31	Peak	Horizontal	

CH 48 (Vertical) Peak

TUV 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 Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5144.50	59.86	17.49	42.37	74.00	-14.14	242	360	Peak	Vertical	
2 *	5240.00	117.50	74.96	42.54	68.20	49.30	242	360	Peak	Vertical	
3	5357.50	58.39	15.65	42.74	74.00	-15.61	242	360	Peak	Vertical	

802.11ac VHT20

CH 48 (Horizontal) Average

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No. 458-18, Sec 2, Fenliao, , Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
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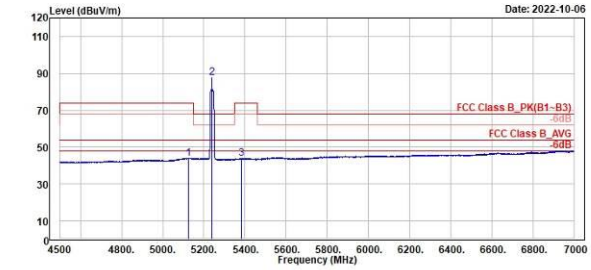

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5126.50	43.98	1.13	42.85	54.00	-10.02	279	31	Average	Horizontal	
2 *	5240.00	87.81	44.93	42.88	54.00	33.81	279	31	Average	Horizontal	
3	5382.50	43.98	0.92	43.06	54.00	-10.02	279	31	Average	Horizontal	

CH 48 (Vertical) Average

TUV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, , Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
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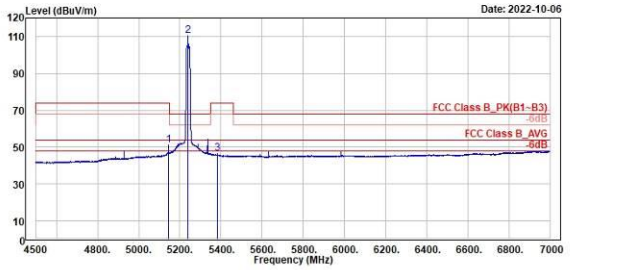
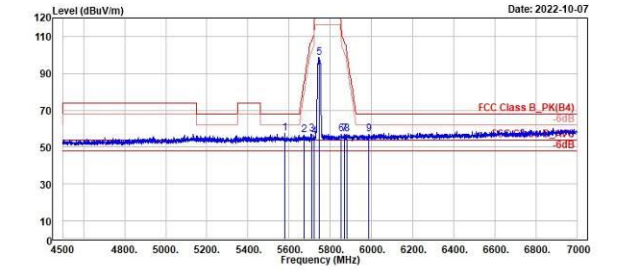


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1 !	5144.00	51.18	8.81	42.37	54.00	-2.82	242	360	Average	Vertical	
2 *	5240.00	110.42	67.88	42.54	54.00	56.42	242	360	Average	Vertical	
3	5384.00	46.35	3.59	42.76	54.00	-7.65	242	360	Average	Vertical	

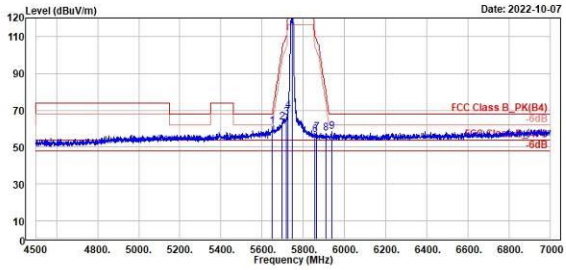
Mask, 5.725GHz ~ 5.85GHz

U-NII-3

802.11a	
CH 149 (Horizontal) Peak	CH 149 (Vertical) Peak



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5577.00	57.68	14.36	43.32	68.20	-10.52	124	328	Peak	Horizontal	
2	5670.50	56.37	13.24	43.13	83.41	-27.04	124	328	Peak	Horizontal	
3	5709.50	56.93	13.69	43.24	107.86	-50.93	124	328	Peak	Horizontal	
4	5720.50	55.84	12.57	43.27	111.94	-56.10	124	328	Peak	Horizontal	
5	5745.00	98.74	55.40	43.34	122.20	-23.46	124	328	Peak	Horizontal	
6	5852.00	56.83	13.28	43.55	117.64	-60.81	124	328	Peak	Horizontal	
7	5869.00	57.04	13.41	43.63	106.88	-49.84	124	328	Peak	Horizontal	
8	5882.00	56.96	13.27	43.69	100.00	-43.04	124	328	Peak	Horizontal	
9	5989.00	57.02	13.07	43.95	68.20	-11.18	124	328	Peak	Horizontal	



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5649.50	61.24	18.06	43.18	68.20	-6.96	214	20	Peak	Vertical	
2	5697.00	63.63	20.42	43.21	102.99	-39.36	214	20	Peak	Vertical	
3	5718.50	66.19	22.89	43.30	110.38	-44.19	214	20	Peak	Vertical	
4	5725.00	69.59	26.25	43.34	122.20	-52.61	214	20	Peak	Vertical	
5 !	5745.00	120.41	76.98	43.43	122.20	-1.79	214	20	Peak	Vertical	
6	5855.00	56.79	13.04	43.75	110.80	-54.01	214	20	Peak	Vertical	
7	5863.50	57.83	14.05	43.78	108.42	-50.59	214	20	Peak	Vertical	
8	5909.00	57.59	13.72	43.87	80.01	-22.42	214	20	Peak	Vertical	
9	5937.50	58.38	14.55	43.83	68.20	-9.82	214	20	Peak	Vertical	

802.11a

CH 165 (Horizontal) Peak

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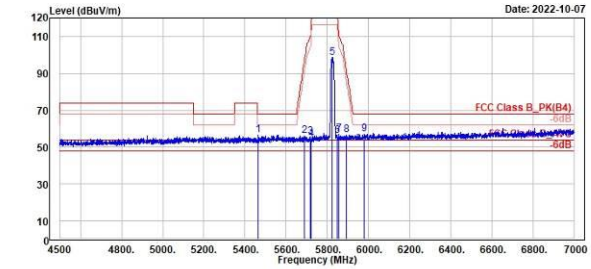

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5465.50	56.70	13.61	43.09	68.20	-11.50	121	331	Peak	Horizontal	
2	5689.50	56.32	13.13	43.19	97.46	-41.14	121	331	Peak	Horizontal	
3	5717.00	55.57	12.31	43.26	109.96	-54.39	121	331	Peak	Horizontal	
4	5720.00	54.30	11.03	43.27	110.80	-56.50	121	331	Peak	Horizontal	
5	5825.00	98.78	55.26	43.52	122.20	-23.42	121	331	Peak	Horizontal	
6	5850.00	56.14	12.60	43.54	122.20	-66.06	121	331	Peak	Horizontal	
7	5857.00	57.14	13.57	43.57	110.24	-53.10	121	331	Peak	Horizontal	
8	5892.50	56.43	12.69	43.74	92.21	-35.78	121	331	Peak	Horizontal	
9	5980.00	57.18	13.24	43.94	68.20	-11.02	121	331	Peak	Horizontal	

CH 165 (Vertical) Peak

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No. 458-18, Sec 2, Fenliao, , Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
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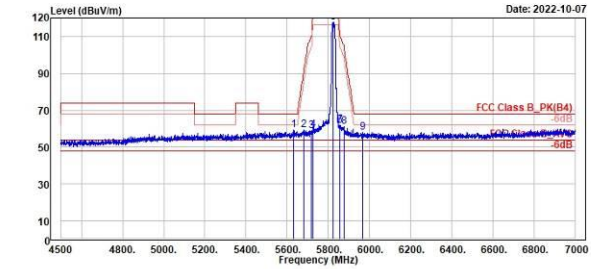

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5633.00	59.22	16.06	43.16	68.20	-8.98	222	12	Peak	Vertical	
2	5681.00	59.50	16.30	43.20	91.18	-31.68	222	12	Peak	Vertical	
3	5717.00	58.97	15.67	43.30	109.96	-50.99	222	12	Peak	Vertical	
4	5725.00	59.42	16.08	43.34	122.20	-62.78	222	12	Peak	Vertical	
5 !	5825.00	117.77	74.10	43.67	122.20	-4.43	222	12	Peak	Vertical	
6	5854.50	61.51	17.76	43.75	111.94	-50.43	222	12	Peak	Vertical	
7	5856.50	62.13	18.38	43.75	110.38	-48.25	222	12	Peak	Vertical	
8	5877.00	61.28	17.47	43.81	103.71	-42.43	222	12	Peak	Vertical	
9	5968.50	57.97	14.10	43.87	68.20	-10.23	222	12	Peak	Vertical	

802.11ac VHT20

CH 149 (Horizontal) Peak

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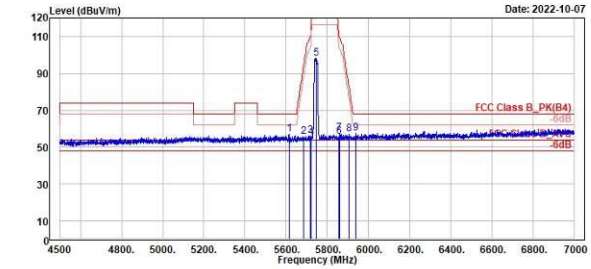
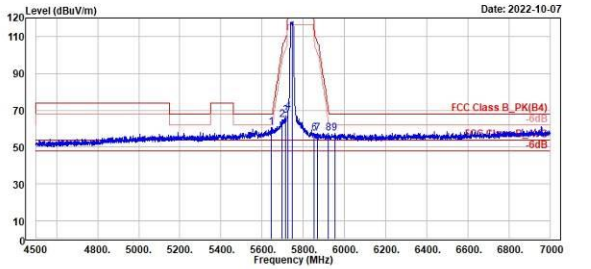


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5613.50	56.84	13.57	43.27	68.20	-11.36	132	328	Peak	Horizontal	
2	5684.50	55.87	12.70	43.17	93.76	-37.89	132	328	Peak	Horizontal	
3	5718.00	56.16	12.89	43.27	110.24	-54.08	132	328	Peak	Horizontal	
4	5722.00	55.14	11.87	43.27	115.36	-60.22	132	328	Peak	Horizontal	
5	5745.00	98.21	54.87	43.34	122.20	-23.99	132	328	Peak	Horizontal	
6	5854.50	55.51	11.95	43.56	111.94	-56.43	132	328	Peak	Horizontal	
7	5858.50	57.61	14.03	43.58	109.82	-52.21	132	328	Peak	Horizontal	
8	5906.00	57.08	13.29	43.79	82.22	-25.14	132	328	Peak	Horizontal	
9	5937.50	57.28	13.40	43.88	68.20	-10.92	132	328	Peak	Horizontal	

CH 149 (Vertical) Peak

TUV 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 Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5643.50	60.71	17.54	43.17	68.20	-7.49	227	13	Peak	Vertical	
2	5697.50	64.63	21.42	43.21	103.36	-38.73	227	13	Peak	Vertical	
3	5712.50	67.15	23.87	43.28	108.70	-41.55	227	13	Peak	Vertical	
4	5724.50	69.57	26.23	43.34	121.06	-51.49	227	13	Peak	Vertical	
5 !	5745.00	118.01	74.58	43.43	122.20	-4.19	227	13	Peak	Vertical	
6	5853.00	57.58	13.83	43.75	115.36	-57.78	227	13	Peak	Vertical	
7	5867.00	57.63	13.85	43.78	107.44	-49.81	227	13	Peak	Vertical	
8	5921.50	57.66	13.80	43.86	70.78	-13.12	227	13	Peak	Vertical	
9	5952.50	57.53	13.71	43.82	68.20	-10.67	227	13	Peak	Vertical	

802.11ac VHT20

CH 165 (Horizontal) Peak

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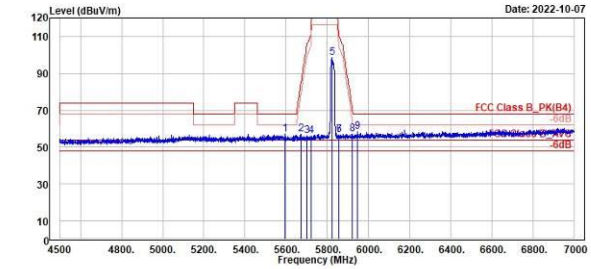
No. 458-18, Sec 2, Fenliao., Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel:+886-2172-1000 Fax:+886-2172-1322



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5594.00	57.08	13.75	43.33	68.20	-11.12	121	329	Peak	Horizontal	
2	5670.50	56.81	13.68	43.13	83.41	-26.60	121	329	Peak	Horizontal	
3	5702.00	56.15	12.93	43.22	105.76	-49.61	121	329	Peak	Horizontal	
4	5721.00	55.91	12.64	43.27	113.08	-57.17	121	329	Peak	Horizontal	
5	5825.00	98.34	54.82	43.52	122.20	-23.86	121	329	Peak	Horizontal	
6	5855.00	56.74	13.18	43.56	110.80	-54.06	121	329	Peak	Horizontal	
7	5855.00	56.74	13.18	43.56	110.80	-54.06	121	329	Peak	Horizontal	
8	5923.50	57.22	13.37	43.85	69.31	-12.09	121	329	Peak	Horizontal	
9	5945.00	58.23	14.32	43.91	68.20	-9.97	121	329	Peak	Horizontal	

CH 165 (Vertical) Peak

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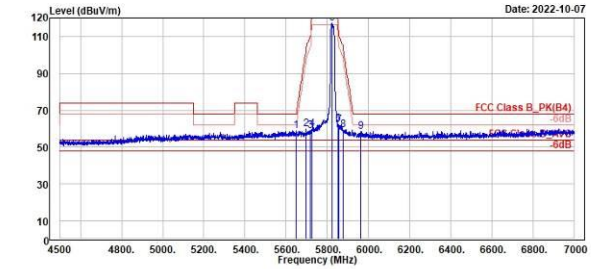
No. 458-18, Sec 2, Fenliao., Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel:+886-2172-1000 Fax:+886-2172-1322



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5649.50	58.96	15.78	43.18	68.20	-9.24	234	360	Peak	Vertical	
2	5697.50	59.78	16.57	43.21	103.36	-43.58	234	360	Peak	Vertical	
3	5715.50	59.05	15.76	43.29	109.54	-50.49	234	360	Peak	Vertical	
4	5724.50	59.59	16.25	43.34	121.06	-61.47	234	360	Peak	Vertical	
5 !	5825.00	117.31	73.64	43.67	122.20	-4.89	234	360	Peak	Vertical	
6	5854.00	62.42	18.67	43.75	113.08	-50.66	234	360	Peak	Vertical	
7	5856.50	62.04	18.29	43.75	110.38	-48.34	234	360	Peak	Vertical	
8	5876.00	59.32	15.51	43.81	104.46	-45.14	234	360	Peak	Vertical	
9	5964.50	58.54	14.68	43.86	68.20	-9.66	234	360	Peak	Vertical	

Spurious Emissions, Tx Mode, 1GHz ~ 40GHz

U-NII-1

802.11a

CH 36 (Horizontal)

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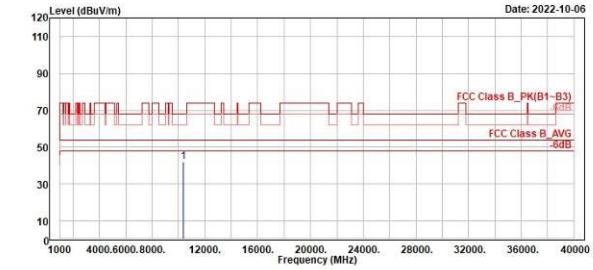
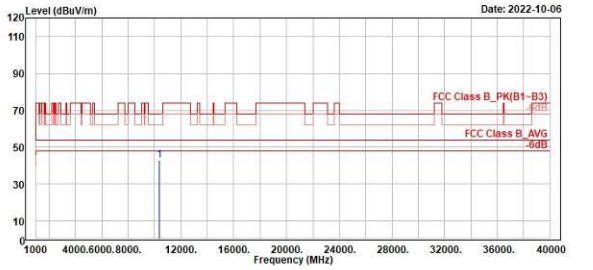


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	10360.00	42.03	44.60	-2.57	68.20	-26.17	200	212	Peak	Horizontal	

CH 36 (Vertical)

TUV 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

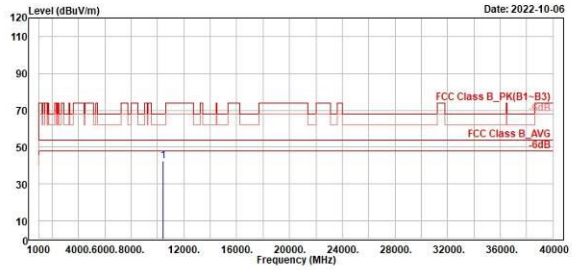


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	10360.00	42.80	45.43	-2.63	68.20	-25.40	100	267	Peak	Vertical	

802.11a

CH 40 (Horizontal)

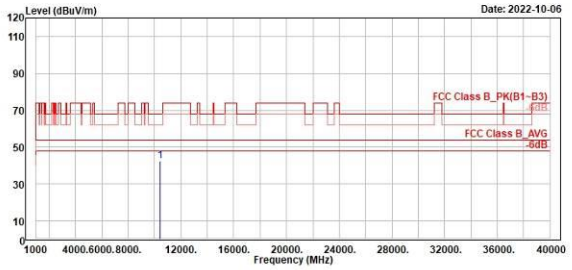
TUV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, , Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel:+886-2172-1000 Fax:+886-2172-1322



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	10400.00	42.22	44.67	-2.45	68.20	-25.98	132	3600	Peak	Horizontal	

CH 40 (Vertical)

TUV 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

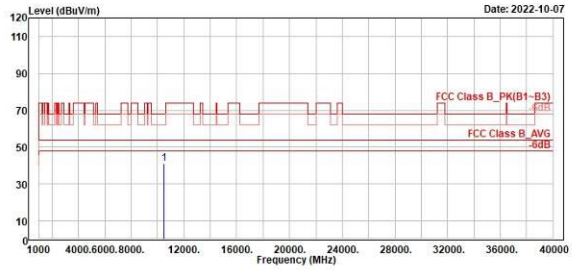


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	10400.00	42.66	45.21	-2.55	68.20	-25.54	217	360	Peak	Vertical	

802.11a

CH 48 (Horizontal)

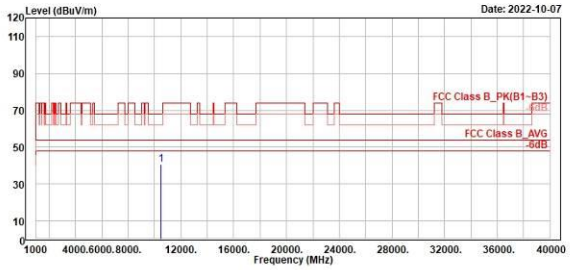
TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, , Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel:+886-2172-1000 Fax:+886-2172-1322



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	10480.00	41.07	43.45	-2.38	68.20	-27.13	164	360	Peak	Horizontal	

CH 48 (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



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	10480.00	40.69	43.09	-2.40	68.20	-27.51	200	352	Peak	Vertical	

802.11ac VHT20

CH 36 (Horizontal)

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No. 458-18, Sec 2, Fenliao, , Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
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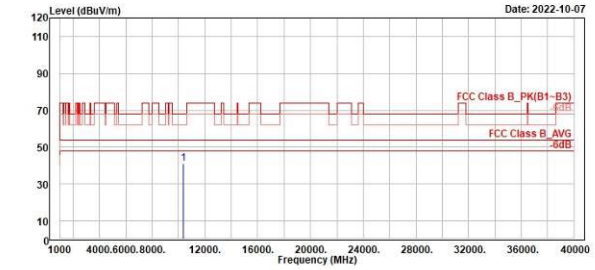

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	10360.00	41.08	43.65	-2.57	68.20	-27.12	200	235	Peak	Horizontal	

CH 36 (Vertical)

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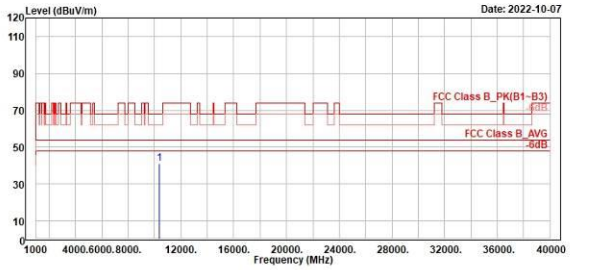

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	10360.00	41.16	43.79	-2.63	68.20	-27.04	200	254	Peak	Vertical	

802.11ac VHT20	
CH 40 (Horizontal)	**CH 40 (Vertical)**

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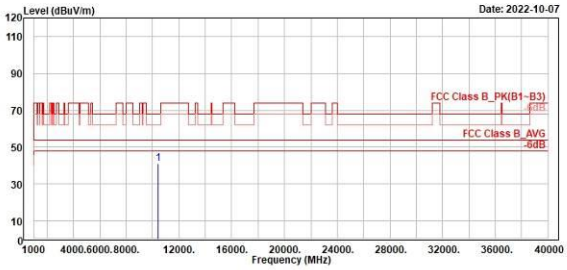

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	10400.00	41.14	43.59	-2.45	68.20	-27.06	100	249	Peak	Horizontal	

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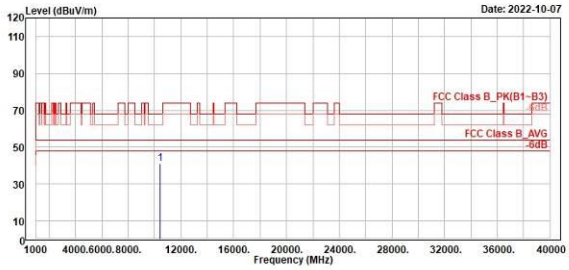

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	10400.00	41.23	43.78	-2.55	68.20	-26.97	200	316	Peak	Vertical	

802.11ac VHT20

CH 48 (Horizontal)

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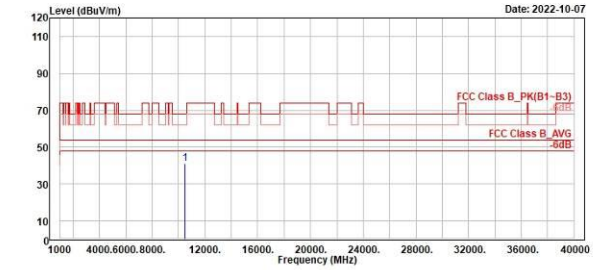

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	10480.00	41.01	43.39	-2.38	68.20	-27.19	200	312	Peak	Horizontal	

CH 48 (Vertical)

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No. 458-18, Sec 2, Fenliao, , Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
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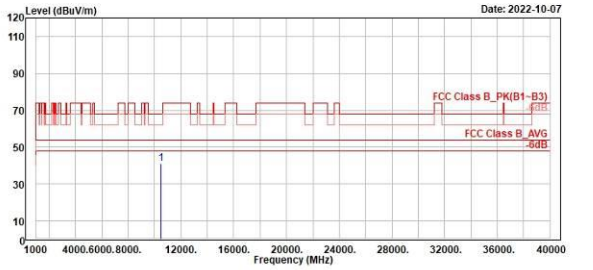
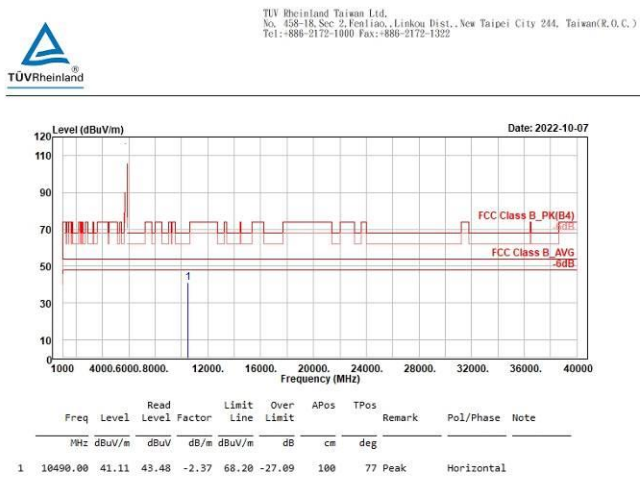


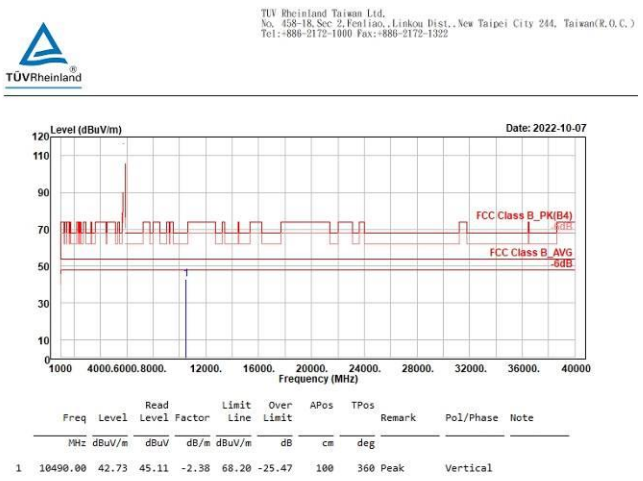
	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	10480.00	40.88	43.28	-2.40	68.20	-27.32	100	127	Peak	Vertical	

U-NII-3

802.11a	
CH 149 (Horizontal)	**CH 149 (Vertical)**



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	10490.00	41.11	43.48	-2.37	68.20	-27.09	100	77	Peak	Horizontal	



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	10490.00	42.73	45.11	-2.38	68.20	-25.47	100	360	Peak	Vertical	

802.11a

CH 157 (Horizontal)

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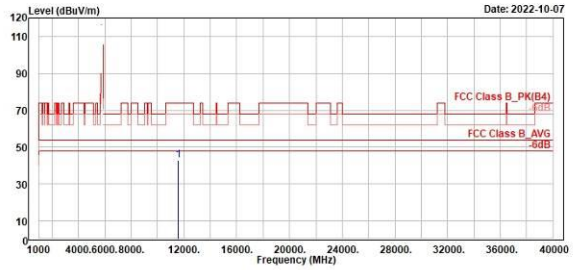
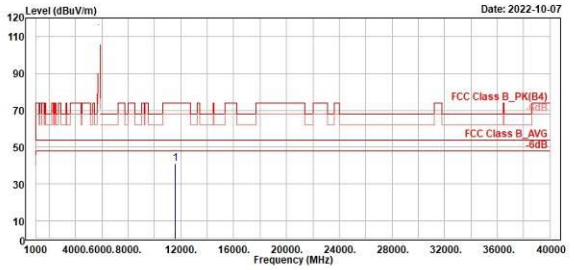
No. 458-18, Sec 2, Fenliao, , Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel:+886-2172-1000 Fax:+886-2172-1322



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	11570.00	42.73	43.04	-0.31	74.00	-31.27	100	91	Peak	Horizontal	

CH 157 (Vertical)

TUV 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 Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	11570.00	41.20	41.64	-0.44	74.00	-32.80	200	234	Peak	Vertical	

802.11a	
CH 165 (Horizontal)	**CH 165 (Vertical)**

TUV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, , Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
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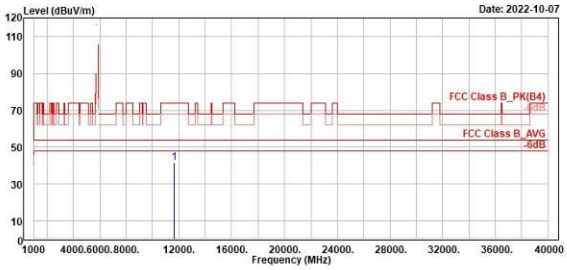

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	11650.00	41.57	41.73	-0.16	74.00	-32.43	100	244	Peak	Horizontal	

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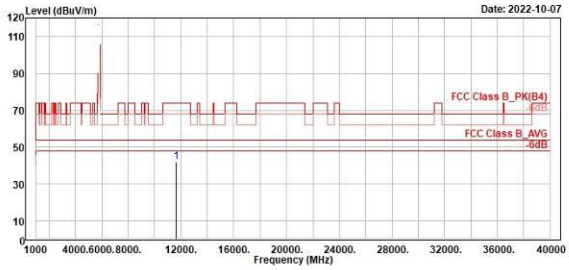

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	11650.00	41.99	42.20	-0.21	74.00	-32.01	200	36	Peak	Vertical	

802.11ac VHT20	
CH 149 (Horizontal)	**CH 149 (Vertical)**

TUV Rheinland Taiwan Ltd.
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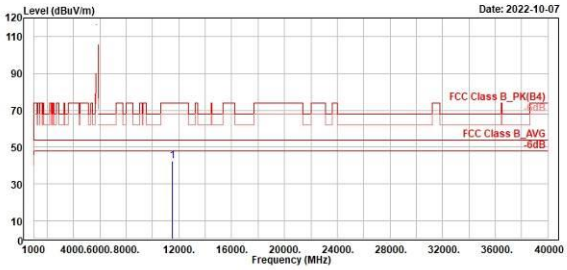

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	11490.00	42.52	42.99	-0.47	74.00	-31.48	100	224	Peak	Horizontal	

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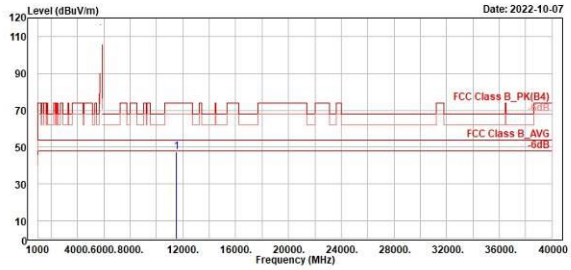

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	11490.00	47.64	48.30	-0.66	74.00	-26.36	200	58	Peak	Vertical	

802.11ac VHT20	
CH 157 (Horizontal)	**CH 157 (Vertical)**

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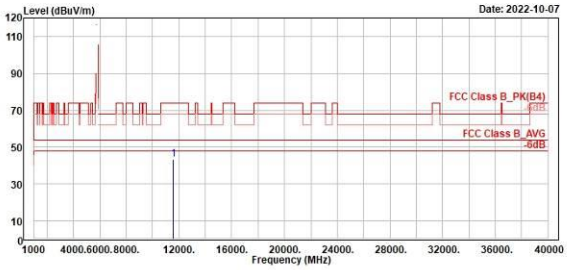

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	11570.00	43.45	43.76	-0.31	74.00	-30.55	300	276	Peak	Horizontal	

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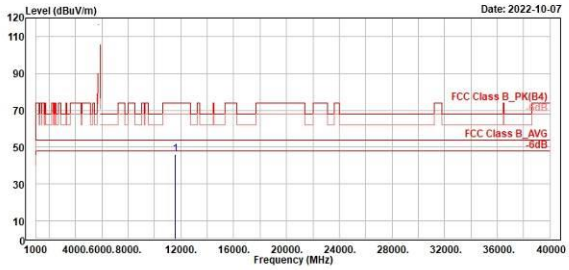

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	11570.00	46.28	46.72	-0.44	74.00	-27.72	200	50	Peak	Vertical	

802.11ac VHT20

CH 165 (Horizontal)

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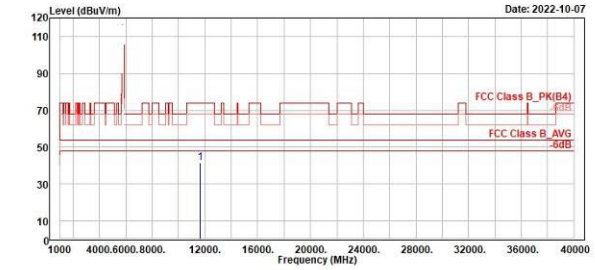

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	11650.00	41.56	41.72	-0.16	74.00	-32.44	200	300	Peak	Horizontal	

CH 165 (Vertical)

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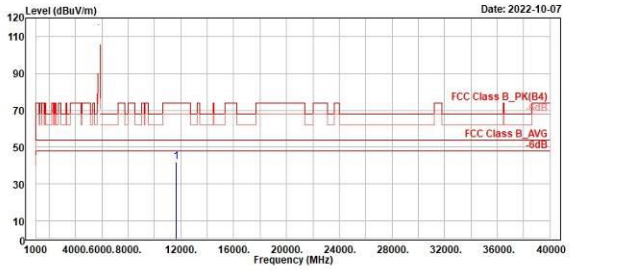


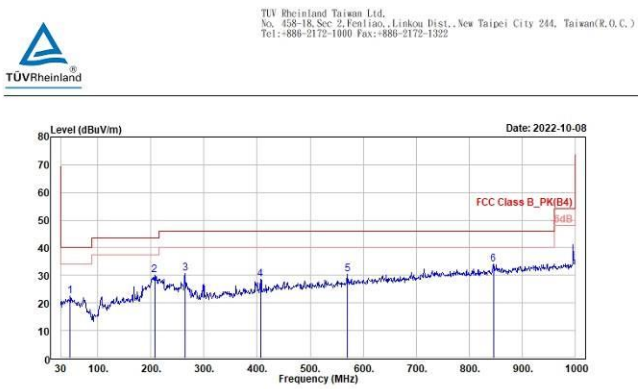
	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	11650.00	42.13	42.34	-0.21	74.00	-31.87	200	68	Peak	Vertical	

Spurious Emissions, Tx Mode, 30MHz ~ 1GHz

U-NII-3

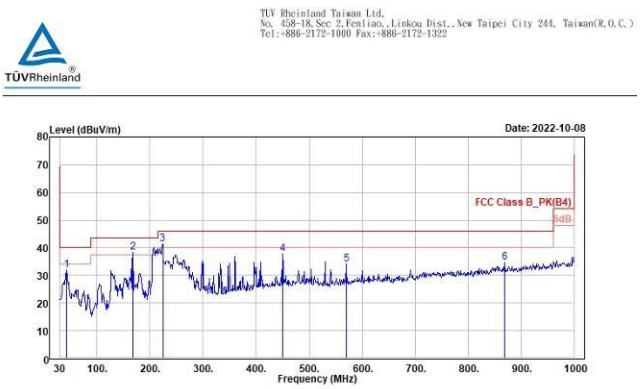
802.11ac VHT20

CH 157 (Horizontal)



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	47.46	22.51	28.27	-5.76	40.00	-17.49	200	42	QP	Horizontal	
2	206.54	30.19	38.26	-8.07	43.50	-13.31	100	322	QP	Horizontal	
3	263.77	30.76	36.82	-6.06	46.00	-15.24	200	171	QP	Horizontal	
4	406.36	28.73	31.52	-2.79	46.00	-17.27	200	231	QP	Horizontal	
5	570.29	30.55	30.92	-0.37	46.00	-15.45	100	214	QP	Horizontal	
6	845.77	33.98	29.95	4.03	46.00	-12.02	200	325	QP	Horizontal	

CH 157 (Vertical)



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	41.64	31.88	37.94	-6.06	40.00	-8.12	100	156	QP	Vertical	
2 !	167.74	38.40	44.29	-5.89	43.50	-5.10	100	210	QP	Vertical	
3 !	224.00	41.30	48.97	-7.67	46.00	-4.70	100	174	QP	Vertical	
4	450.01	37.85	39.86	-2.01	46.00	-8.15	100	16	QP	Vertical	
5	570.29	34.02	34.39	-0.37	46.00	-11.98	100	313	QP	Vertical	
6	868.08	34.62	30.41	4.21	46.00	-11.38	100	90	QP	Vertical	

Spurious Emissions, Tx Mode, 9kHz ~ 30MHz

U-NII-3

802.11ac VHT20

CH 157 (9kHz ~ 150kHz)

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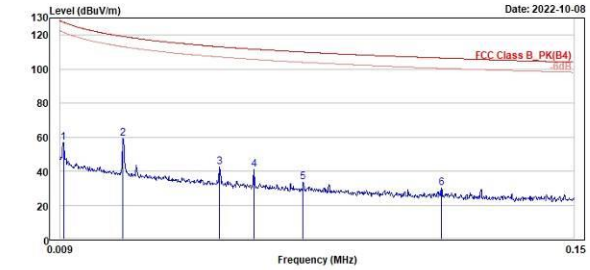

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	0.01	57.09	39.38	17.71	127.60	-70.51	100	108	QP	Open	
2	0.03	59.26	40.08	19.18	119.18	-59.92	100	196	QP	Open	
3	0.05	42.30	23.05	19.25	113.13	-70.83	100	121	QP	Open	
4	0.06	41.09	22.05	19.04	111.72	-70.63	100	105	QP	Open	
5	0.08	33.65	14.91	18.74	110.01	-76.36	100	185	QP	Open	
6	0.11	30.40	12.13	18.27	106.49	-76.09	100	190	QP	Open	

CH 157 (150kHz ~ 30MHz)

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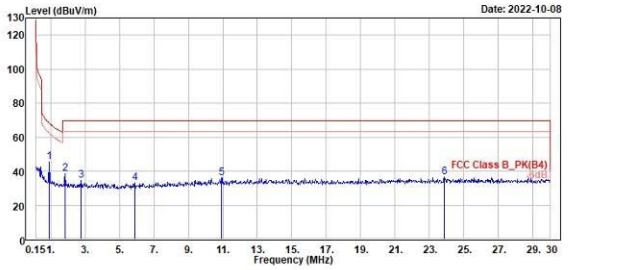

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	0.93	45.47	26.26	19.21	68.13	-22.66	100	242	QP	Open	
2	1.85	38.71	19.34	19.37	69.50	-30.79	100	147	QP	Open	
3	2.78	34.75	15.28	19.47	69.50	-34.75	100	267	QP	Open	
4	5.88	33.14	13.46	19.68	69.50	-36.36	100	118	QP	Open	
5	10.93	36.15	14.68	21.47	69.50	-33.35	100	288	QP	Open	
6	23.88	36.71	14.50	22.21	69.50	-32.79	100	188	QP	Open	

<Sector Antenna>
Band Edges, 4.5GHz ~ 5.15GHz
U-NII-1

802.11a	
CH 36 (Horizontal) Peak	**CH 36 (Vertical) Peak**

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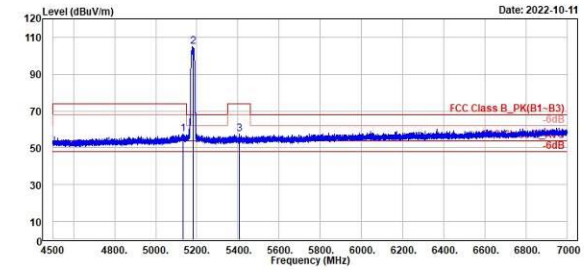

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5133.53	57.27	14.41	42.86	74.00	-16.73	100	14	Peak	Horizontal	
2 *	5180.00	104.89	61.93	42.96	68.20	36.69	100	14	Peak	Horizontal	
3	5408.09	57.26	14.11	43.15	74.00	-16.74	100	14	Peak	Horizontal	

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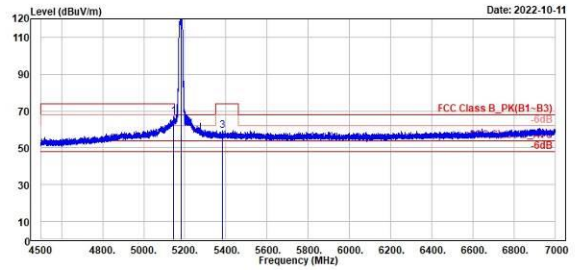

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5144.41	67.09	24.72	42.37	74.00	-6.91	190	1	Peak	Vertical	
2 *	5180.00	120.64	78.18	42.46	68.20	52.44	190	1	Peak	Vertical	
3	5382.50	59.28	16.52	42.76	74.00	-14.72	190	1	Peak	Vertical	

802.11a

CH 36 (Horizontal) Average

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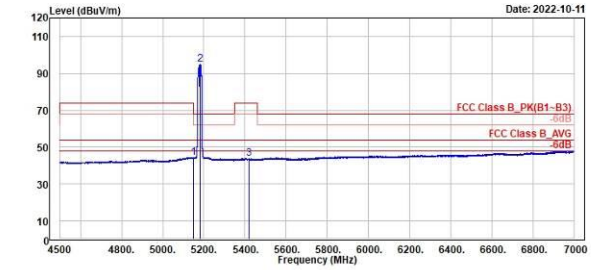

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	5149.41	44.40	1.53	42.87	54.00	-9.60	100	14	Average	Horizontal	
2 *	5180.00	95.03	52.07	42.96	54.00	41.03	100	14	Average	Horizontal	
3	5417.94	43.72	0.60	43.12	54.00	-10.28	100	14	Average	Horizontal	

CH 36 (Vertical) Average

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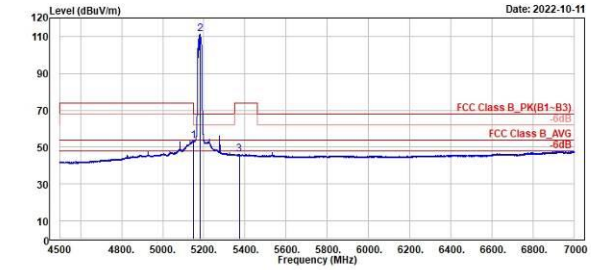

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1 !	5147.65	53.49	11.12	42.37	54.00	-0.51	190	1	Average	Vertical	
2 *	5180.00	111.37	68.91	42.46	54.00	57.37	190	1	Average	Vertical	
3	5371.91	46.24	3.49	42.75	54.00	-7.76	190	1	Average	Vertical	