



中认信通

CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



TEST REPORT

Applicant: Unitree

Address: 3rd Floor, Building 1, Fengda Creative Park No.88 Dongliu Road, Binjiang District Hangzhou, Zhejiang China

FCC ID: 2A5PE-YUSHU004

Product Name: Quadruped Robot

**Standard(s): 47 CFR Part 15, Subpart E(15.407)
ANSI C63.10-2013
KDB 789033 D02 General U-NII Test Procedures New
Rules v02r01**

The above device has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

Report Number: CR231168373-RF-00D

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Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 442868, the FCC Designation No. : CN1314.

Declarations

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR231168373-RF-00D	Original Report	2024/3/11

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

1.1.1 General:

EUT Name:	Quadruped Robot
EUT Model:	Go2
Operation Frequency:	5180-5240 MHz (802.11a/n ht20/ac vht20/ax hew20) 5190-5230 MHz(802.11n ht40/ac vht40/ax hew40) 5210 MHz(802.11ac vht80/ax hew80) 5745-5825 MHz (802.11a/n ht20/ac vht20/ax hew20) 5755-5795 MHz(802.11n ht40/ac vht40/ax hew40) 5775 MHz(802.11ac vht80/ax hew80)
Maximum Average Output Power (Conducted):	14.84dBm(5150-5250 MHz) 15.46dBm(5725-5850MHz)
Modulation Type:	802.11a/n/ac: OFDM-BPSK, QPSK, 16QAM, 64QAM,256QAM 802.11ax: OFDMA- BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Rated Input Voltage:	26.9V from battery
Serial Number:	2DX0-2 (for Radiated Spurious Emission Test) 2DX0-7 (for Conducted Emission Test)
EUT Received Date:	2023/11/23
EUT Received Status:	Good

1.1.2 Operation Frequency Detail:

For 802.11a/n ht20/ac vht20/ax hew20:

5150-5250MHz Band		5725-5850MHz Band	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	149	5745
40	5200	153	5765
44	5220	157	5785
48	5240	161	5805
/	/	165	5825
Per section 15.31(m), the below frequencies were performed the test as below:			
36	5180	149	5745
40	5200	157	5785
48	5240	165	5825

For 802.11n ht40/ac vht40/ax hew40:

5150-5250MHz Band		5725-5850MHz Band	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	151	5755
46	5230	159	5795
Per section 15.31(m), the below frequencies were performed the test as below:			
38	5190	151	5755
46	5230	159	5795

For 802.11ac vht80/ax hew80:

5150-5250MHz Band		5725-5850MHz Band	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
42	5210	155	5775
Per section 15.31(m), the below frequencies were performed the test as below:			
42	5210	155	5775

1.1.3 Antenna Information Detail▲:

Antenna Chain	Antenna Type	input impedance (Ohm)	Frequency Range	Antenna Gain (dBi)
Chain 0	Monopole	50	5.15~5.25 GHz	2.72 dBi
			5.745~5.85 GHz	3.11 dBi
Chain 1	Monopole	50	5.15~5.25 GHz	2.72 dBi
			5.745~5.85 GHz	3.11 dBi

The Method of §15.203 Compliance:

- ☒ Antenna was permanently attached to the unit.
☐ Antenna use a unique type of connector to attach to the EUT.
☐ Unit was professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

1.1.4 Accessory Information:

Accessory Description	Manufacturer	Model
Adapter	Fuyuang	FY3403500

1.2 Description of Test Configuration

1.2.1 EUT Operation Condition:

EUT Operation Mode:			The system was configured for testing in Engineering Mode, which was provided by the manufacturer.		
Equipment Modifications:			No		
EUT Exercise Software:			RTL8852A MP Toolkit.exe		
The software was provided by manufacturer. The maximum power was configured as below, that was provided by the manufacturer▲：					
5150-5250 MHz Band:					
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting	
				Chain 0	Chain 1
802.11a	Lowest	5180	6Mbps	13	13
	Middle	5200	6Mbps	13	13
	Highest	5240	6Mbps	13	13
802.11n ht20	Lowest	5180	MCS8	13	13
	Middle	5200	MCS8	13	13
	Highest	5240	MCS8	13	13
802.11n ht40	Lowest	5190	MCS8	13	13
	Highest	5230	MCS8	13	13
802.11ac vht80	Middle	5210	MCS8	13	13
802.11ax hew20	Lowest	5180	MCS8	13	13
	Middle	5200	MCS8	13	13
	Highest	5240	MCS8	13	13
802.11ax hew40	Lowest	5190	MCS8	13	13
	Highest	5230	MCS8	13	13
802.11ax hew80	Middle	5210	MCS8	13	13
5725-5850 MHz Band:					
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting	
				Chain 0	Chain 1
802.11a	Lowest	5745	6Mbps	11	11
	Middle	5785	6Mbps	11	11
	Highest	5825	6Mbps	11	11
802.11n ht20	Lowest	5745	MCS8	11	11
	Middle	5785	MCS8	11	11
	Highest	5825	MCS8	11	11
802.11n ht40	Lowest	5755	MCS8	11	11
	Highest	5795	MCS8	11	11
802.11ac vht80	Middle	5775	MCS8	11	11
802.11ax hew20	Lowest	5745	MCS8	11	11
	Middle	5785	MCS8	11	11
	Highest	5825	MCS8	11	11
802.11ax hew40	Lowest	5755	MCS8	11	11
	Highest	5795	MCS8	11	11
802.11ax hew80	Middle	5775	MCS8	11	11

Note1: The system support 802.11a/n ht20/n ht40/ac vht20/vht40/vht80/ax hew20/ax hew40/ax hew80, the 802.11ac vht20 and vht40 were reduced since the identical parameters with 802.11n ht20/ht40.

Note2: The above are the worst-case data rates, which are determined for each mode based upon investigations by measuring the average power and PSD across all data rates, bandwidths, and modulations.

Note3: According to the manufacturer, for 802.11 a mode, the device only support SISO mode.

Note4: According to the manufacturer, for 802.11 n/ac/ax mode, the device supports SISO and MIMO in all modes, per pretest, the MIMO mode was the worst mode for all the modes.

Note5: According to the manufacturer, for 802.11ax mode only support full RU configuration.

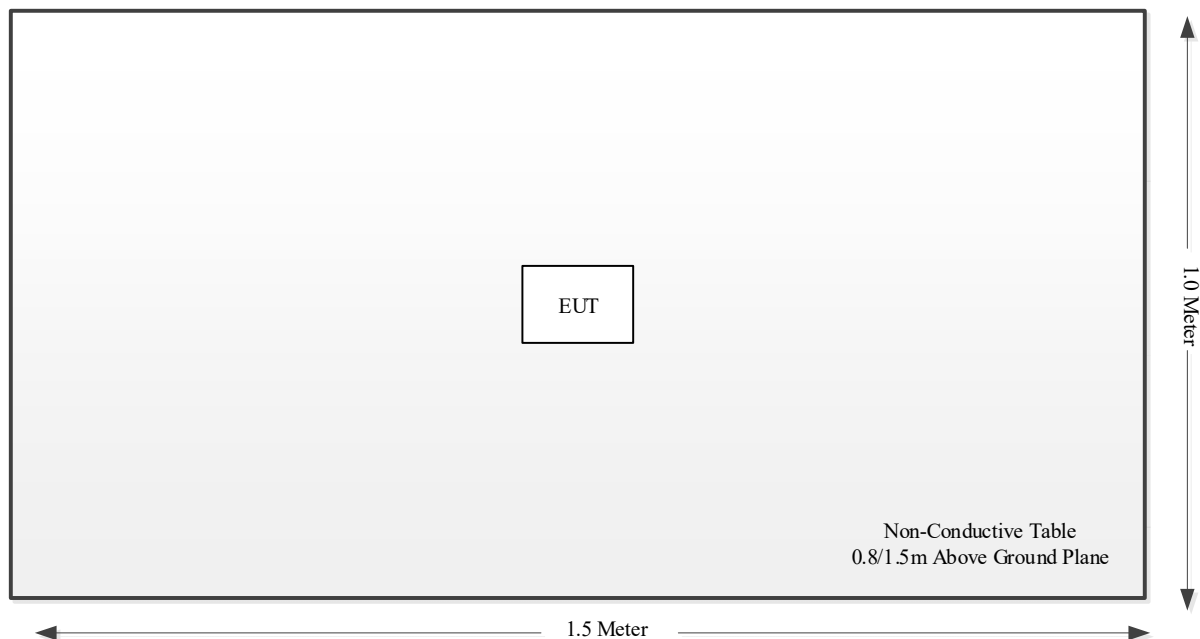
1.2.2 Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
/	/	/	/

1.2.3 Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
/	/	/	/	/	/

1.2.4 Block Diagram of Test Setup



1.3 Measurement Uncertainty

Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

Parameter	Measurement Uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±0.61dB
Power Spectral Density, conducted	±0.61 dB
Unwanted Emissions, radiated	9k~30MHz:4.12dB 30M~200MHz: 4.15 dB,200M~1GHz: 5.61 dB,1G~6GHz: 5.14 dB, 6G~18GHz: 5.93 dB,18G~26.5G:5.47 dB,26.5G~40G:5.63 dB
Unwanted Emissions, conducted	±1.26 dB
Temperature	±1℃
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)

2. SUMMARY OF TEST RESULTS

Standard(s) Section	Test Items	Result
§15.207(a)	AC line conducted emissions	Not Applicable
FCC§15.205& §15.209 &§15.407(b)	Radiated Spurious Emissions	Compliant
FCC§15.407(a) (e)	Emission Bandwidth	Compliant
FCC§15.407(a)	Maximum Conducted Output Power	Compliant
FCC§15.407 (a)	Power Spectral Density	Compliant
§15.203	Antenna Requirement	Compliant

3. REQUIREMENTS AND TEST PROCEDURES

3.1 AC Line Conducted Emissions

3.1.1 Applicable Standard

FCC§15.207(a).

(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

(b) The limit shown in paragraph (a) of this section shall not apply to carrier current systems operating as intentional radiators on frequencies below 30 MHz. In lieu thereof, these carrier current systems shall be subject to the following standards:

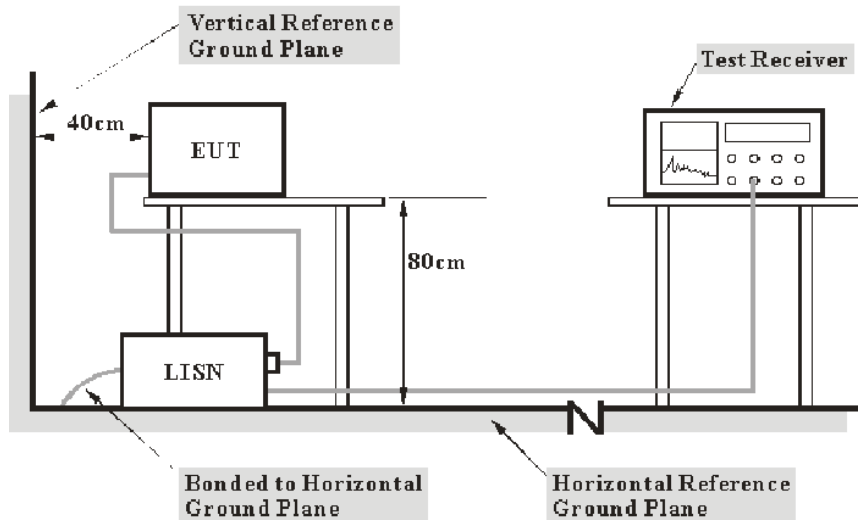
(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(2) For all other carrier current systems: 1000 μ V within the frequency band 535-1705 kHz, as measured using a 50 μ H/50 ohms LISN.

(3) Carrier current systems operating below 30 MHz are also subject to the radiated emission limits in §15.205, §15.209, §15.221, §15.223, or §15.227, as appropriate.

(c) Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power lines indirectly, obtaining their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.

3.1.2 EUT Setup



Note: 1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

The adapter or EUT was connected to the main LISN with a 120 V/60 Hz AC power source.

3.1.3 EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

3.1.4 Test Procedure

The frequency and amplitude of the six highest ac power-line conducted emissions relative to the limit, measured over all the current-carrying conductors of the EUT power cords, and the operating frequency or frequency to which the EUT is tuned (if appropriate), should be reported, unless such emissions are more than 20 dB below the limit. AC power-line conducted emissions measurements are to be separately carried out only on each of the phase (“hot”) line(s) and (if used) on the neutral line(s), but not on the ground [protective earth] line(s). If less than six emission frequencies are within 20 dB of the limit, then the noise level of the measuring instrument at representative frequencies should be reported. The specific conductor of the power-line cord for each of the reported emissions should be identified. Measure the six highest emissions with respect to the limit on each current-carrying conductor of each power cord associated with the EUT (but not the power cords of associated or peripheral equipment that are part of the test configuration). Then, report the six highest emissions with respect to the limit from among all the measurements identifying the frequency and specific current-carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductors, or the six highest emissions may be reported over all the current-carrying conductors.

3.1.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

Factor = attenuation caused by cable loss + voltage division factor of AMN

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

3.2 Radiation Spurious Emissions

3.2.1 Applicable Standard

FCC §15.407 (b);

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of - 27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of - 27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of - 27 dBm/MHz.

(4) For transmitters operating solely in the 5.725-5.850 GHz band:

(i) All emissions shall be limited to a level of - 27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in § 15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in § 15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.

(8) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

(9) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in § 15.207.

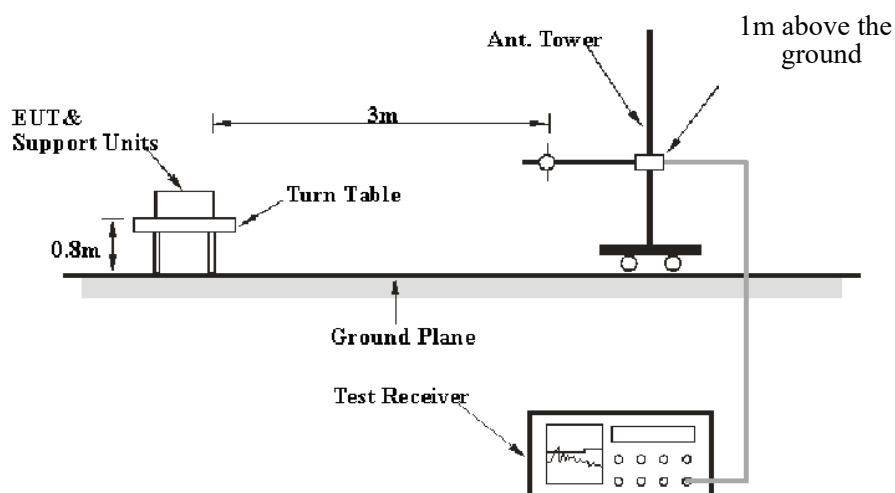
(10) The provisions of § 15.205 apply to intentional radiators operating under this section.

(11) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

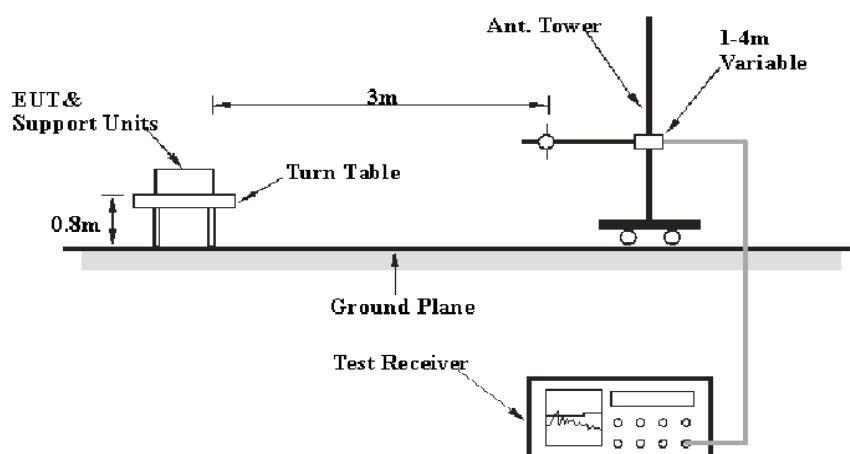
(c) The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

3.2.2 EUT Setup

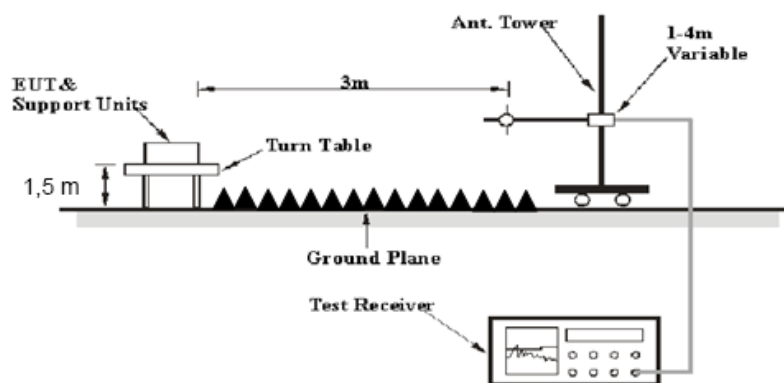
9kHz - 30MHz:

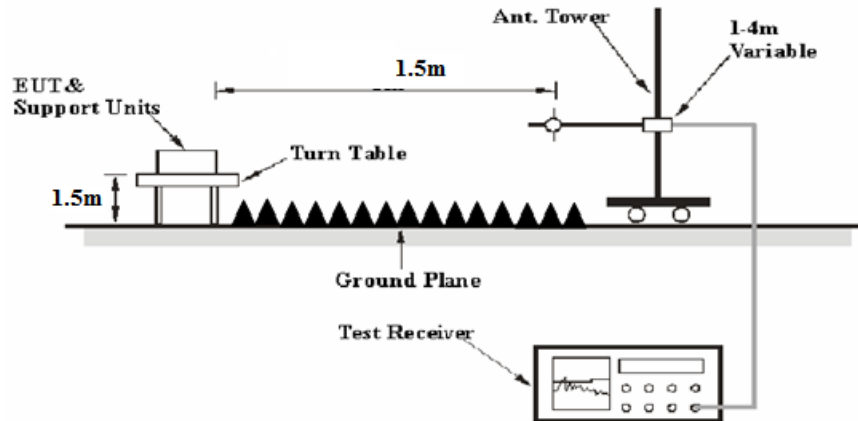


30MHz - 1GHz:



1GHz - 26.5GHz:



26.5GHz - 40 GHz:

The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was FCC 15.209, FCC 15.407 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

For 9kHz-30MHz test, the lowest height of the magnetic antenna shall be 1 m above the ground and three antenna orientations (parallel, perpendicular, and ground-parallel) shall be measured.

3.2.3 EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9 kHz to 40 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

9 kHz -1000 MHz:

Frequency Range	RBW	Video B/W	IF B/W	Measurement
9 kHz – 150 kHz	/	/	200 Hz	QP/AV
	300 Hz	1 kHz	/	PK
150 kHz – 30 MHz	/	/	9 kHz	QP/AV
	10 kHz	30 kHz	/	PK
30 MHz – 1000 MHz	/	/	120 kHz	QP
	100 kHz	300 kHz	/	PK

1GHz- 40GHz:

Measurement	Duty cycle	RBW	Video B/W
PK	Any	1MHz	3 MHz
AV	>98%	1MHz	10 Hz
	<98%	1MHz	1/T

Note: T is minimum transmission duration

If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

3.2.4 Test Procedure

During the radiated emission test, the adapter was connected to the first AC floor outlet.

Data was recorded in Quasi-peak detection mode for frequency range of 9 kHz-1 GHz except 9–90 kHz, 110–490 kHz, employing an average detector, peak and Average detection modes for frequencies above 1 GHz.

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, emission shall be computed as: $E [dB\mu V/m] = EIRP[dBm] + 95.2$, for $d = 3$ meters.

According to C63.10, the above 1G test result shall be extrapolated to the specified distance using an extrapolation Factor of 20dB/decade from 3m to 1.5m

Distance extrapolation Factor = $20 \log (\text{specific distance } [3m] / \text{test distance } [1.5m])$ dB = 6.02 dB

All emissions under the average limit and under the noise floor have not recorded in the report.

3.2.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

For 9kHz-26.5GHz:

Factor = Antenna Factor + Cable Loss- Amplifier Gain

For 26.5GHz-40GHz

Factor = Antenna Factor + Cable Loss- Amplifier Gain -Distance extrapolation Factor

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

3.3 Emission Bandwidth

3.3.1 Applicable Standard

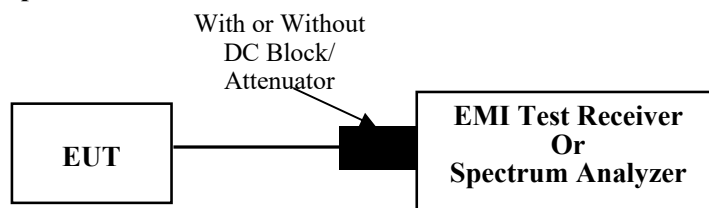
FCC §15.407 (a),(h)

(h)(2) Radar Detection Function of Dynamic Frequency Selection (DFS). U-NII devices operating with any part of its 26 dB emission bandwidth in the 5.25-5.35 GHz and 5.47-5.725 GHz bands shall employ a DFS radar detection mechanism to detect the presence of radar systems and to avoid co-channel operation with radar systems.

FCC §15.407 (e)

Within the 5.725-5.850 GHz and 5.850-5.895 GHz bands, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

3.3.2 EUT Setup



3.3.3 Test Procedure

26dB Emission Bandwidth:

According to ANSI C63.10-2013 Section 12.4.1

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = peak.
- d) Trace mode = max hold
- e) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

6 dB emission bandwidth:

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01

- a) Set RBW = 100 kHz.
 - b) Set the video bandwidth (VBW) ≥ 3 RBW.
 - c) Detector = Peak.
 - d) Trace mode = max hold.
 - e) Sweep = auto couple.
 - f) Allow the trace to stabilize.
 - g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.
- Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described in this section. For devices that use channel aggregation refer to III.A and III.C for determining emission bandwidth.

99% Occupied Bandwidth:

According to ANSI C63.10-2013 Section 12.4.2&6.9.3

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

3.4 Maximum Conducted Output Power

3.4.1 Applicable Standard

FCC §15.407(a) (1)(iv)

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

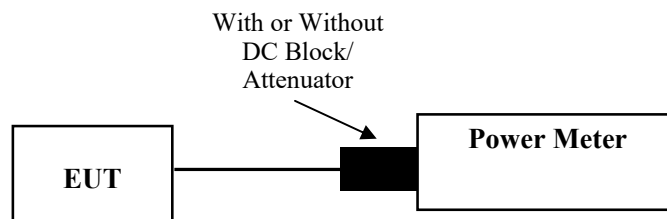
FCC §15.407(a) (2)

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

FCC §15.407(a) (3)(i)

For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

3.4.2 EUT Setup



3.4.3 Test Procedure

According to ANSI C63.10-2013 Section 12.3.3.1

Method PM-G is measurement using a gated RF average power meter. Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Because the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

3.5 Maximum Power Spectral Density

3.5.1 Applicable Standard

FCC §15.407(a) (1)(iv)

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

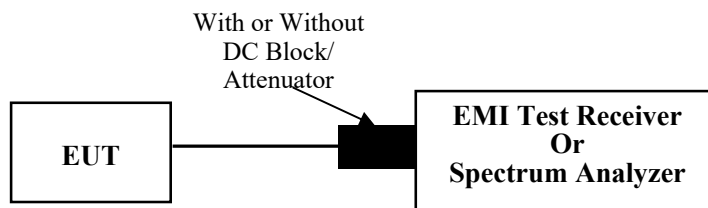
FCC §15.407(a) (2)

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

FCC §15.407(a) (3)(i)

For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

3.5.2 EUT Setup



3.5.3 Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01

Duty cycle $\geq 98\%$

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-1 should be applied.

Duty cycle $< 98\%$, duty cycle variations are less than $\pm 2\%$

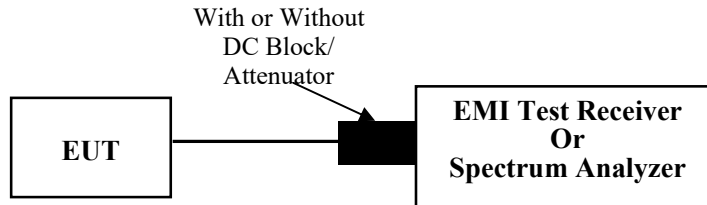
KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-2 should be applied.

Duty cycle $< 98\%$, duty cycle variations exceed $\pm 2\%$

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-3 should be applied.

3.6 Duty Cycle

3.6.1 EUT Setup



3.6.2 Test Procedure

According to ANSI C63.10-2013 Section 12.2

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the ON and OFF times of the transmitted signal:

- 1) Set the center frequency of the instrument to the center frequency of the transmission.
- 2) Set $RBW \geq OBW$ if possible; otherwise, set RBW to the largest available value.
- 3) Set $VBW \geq RBW$. Set detector = peak or average.
- 4) The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$ and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring the duty cycle shall not be used if $T \leq 16.7 \mu s$.)

3.7 Antenna Requirement

3.7.1 Applicable Standard

FCC §15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§15.211, 15.213, 15.217, 15.219, 15.221, or §15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

3.7.2 Judgment

Result: Compliant. Please refer to the Antenna Information detail in Section 1.

4. Test DATA AND RESULTS

4.1 AC Line Conducted Emissions

Not Applicable, the device was powered by battery when operating.

4.2 Radiation Spurious Emissions

Serial Number:	2DX0-2	Test Date:	2023/12/29 ~2024/1/18
Test Site:	966-1, 966-2	Test Mode:	Transmitting
Tester:	Vic Du, Tao Zhu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.3~25.8	Relative Humidity: (%)	43~58	ATM Pressure: (kPa)	101.4~101.8
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-6	2023/9/18	2026/9/17
BACL	Loop Antenna	1313-1P	3092721	2023/10/20	2026/10/19
R&S	EMI Test Receiver	ESR3	102724	2023/3/31	2024/3/30
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2023/7/16	2024/7/15
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2023/7/16	2024/7/15
Sonoma	Amplifier	310N	186165	2023/7/16	2024/7/15
Audix	Test Software	E3	201021 (V9)	N/A	N/A
AH	Double Ridge Guide Horn Antenna	SAS-571	1394	2023/2/22	2026/2/21
R&S	Spectrum Analyzer	FSV40	101591	2023/3/31	2024/3/30
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2023/8/6	2024/8/5
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2023/8/6	2024/8/5
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2023/11/8	2024/11/7
Audix	Test Software	E3	201021 (V9)	N/A	N/A
PASTERNAK	Horn Antenna	PE9852/2F-20	112002	2021/2/5	2024/2/4
Quinstar	Preamplifier	QLW-18405536-JO	15964001005	2023/9/15	2024/9/14
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2023/8/6	2024/8/5
E-Microwave	Band Rejection Filter	5150-5850MHz	OE01902423	2023/8/6	2024/8/5
Mini Circuits	High Pass Filter	VHF-6010+	31119	2023/8/6	2024/8/5
PASTERNAK	Horn Antenna	PE9850/2F-20	072001	2021/2/5	2024/2/4

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

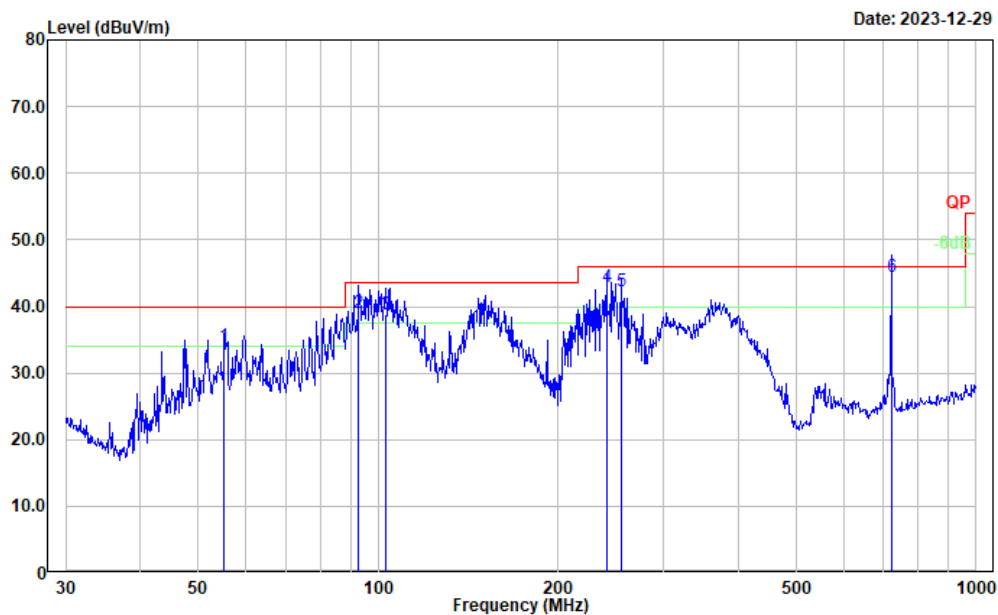
Test Data:

Please refer to the below table and plots.

For 9kHz-30MHz, The amplitude of spurious emissions attenuated more than 20 dB below the limit was not be recorded.

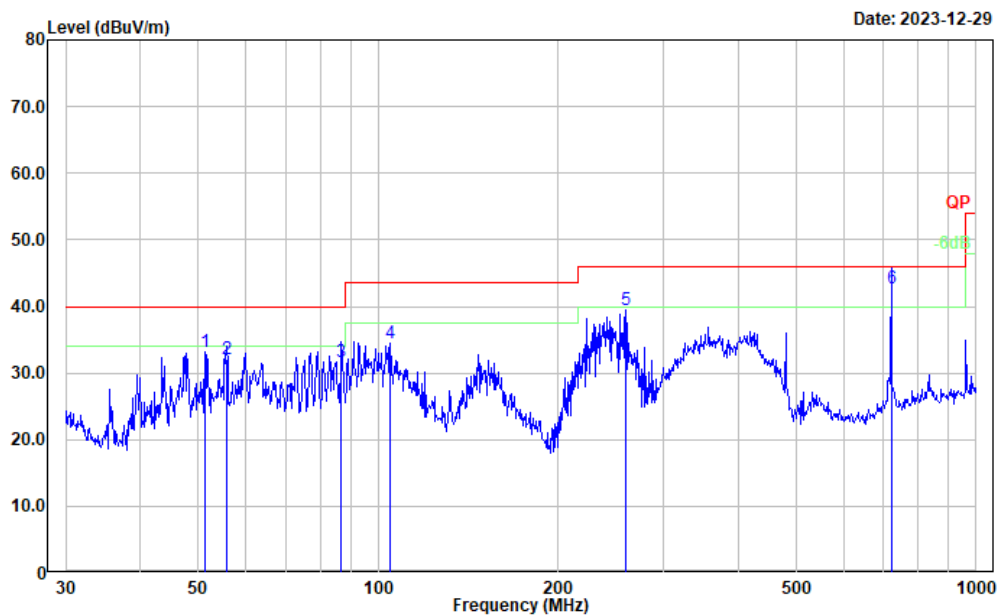
1)30MHz-1GHz(maximum output power mode, 5725-5850MHz Band 802.11ax hew40)**Low channel:**

Project No.: CR231168373-RF
Tester: Vic Du
Polarization: horizontal
Note: Transmitting 5G WiFi



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	55.221	51.59	-17.53	34.06	40.00	5.94	QP
2	92.787	55.57	-16.52	39.05	43.50	4.45	QP
3	103.080	52.73	-13.99	38.74	43.50	4.76	QP
4	240.830	56.42	-13.48	42.94	46.00	3.06	QP
5	254.728	55.70	-13.37	42.33	46.00	3.67	QP
6	721.726	48.03	-3.63	44.40	46.00	1.60	QP

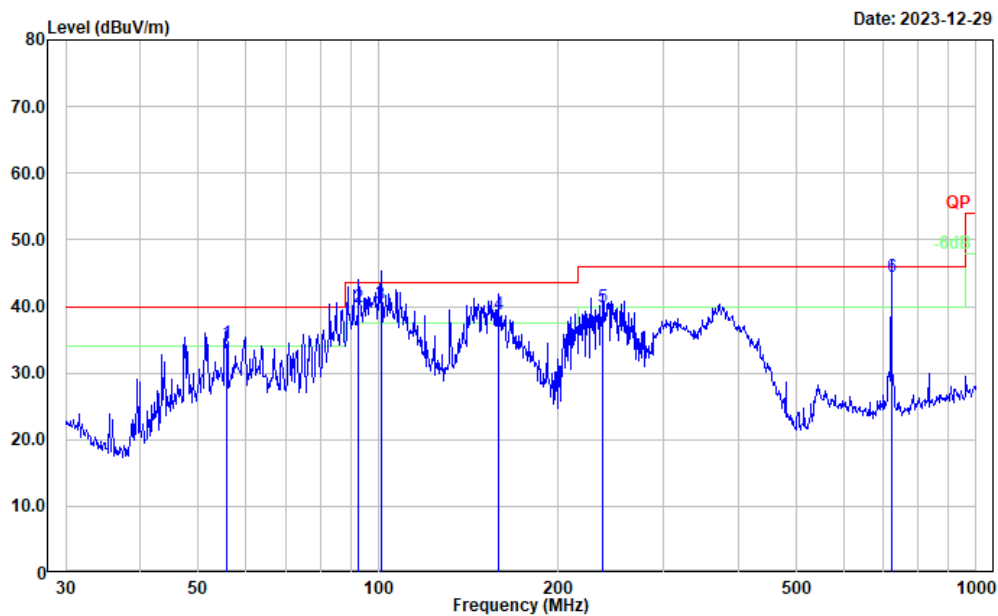
Project No.: CR231168373-RF
Tester: Vic Du
Polarization: vertical
Note: Transmitting 5G WiFi



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	51.301	50.52	-17.44	33.08	40.00	6.92	Peak
2	55.805	49.63	-17.53	32.10	40.00	7.90	QP
3	86.807	49.01	-17.43	31.58	40.00	8.42	QP
4	104.903	48.11	-13.67	34.44	43.50	9.06	Peak
5	259.234	52.42	-13.00	39.42	46.00	6.58	Peak
6	721.726	46.42	-3.63	42.79	46.00	3.21	QP

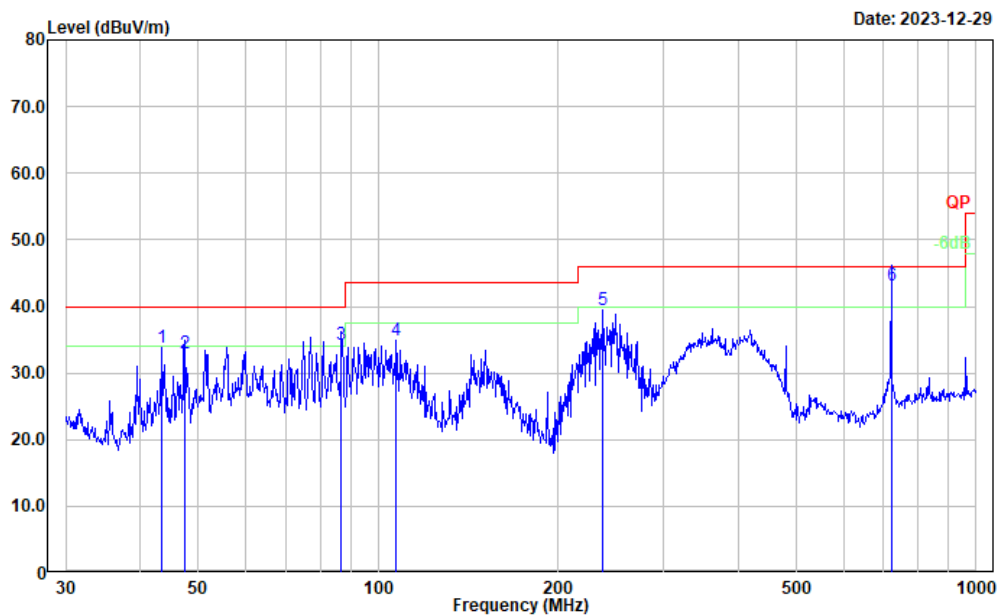
High channel:

Project No.: CR231168373-RF
Tester: Vic Du
Polarization: horizontal
Note: Transmitting 5G WiFi



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	55.805	51.96	-17.53	34.43	40.00	5.57	QP
2	92.787	56.47	-16.52	39.95	43.50	3.55	QP
3	100.934	54.74	-14.40	40.34	43.50	3.16	QP
4	158.668	51.26	-12.35	38.91	43.50	4.59	QP
5	237.476	53.31	-13.46	39.85	46.00	6.15	QP
6	721.726	48.14	-3.63	44.51	46.00	1.49	QP

Project No.: CR231168373-RF
Tester: Vic Du
Polarization: vertical
Note: Transmitting 5G WiFi



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	43.506	47.63	-13.73	33.90	40.00	6.10	Peak
2	47.492	48.85	-15.99	32.86	40.00	7.14	QP
3	86.807	51.67	-17.43	34.24	40.00	5.76	QP
4	107.134	48.13	-13.20	34.93	43.50	8.57	Peak
5	237.476	52.86	-13.46	39.40	46.00	6.60	Peak
6	721.726	46.78	-3.63	43.15	46.00	2.85	QP

5150-5250MHz:**802.11a Mode Chain 0:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5180 MHz							
10360.000	33.69	PK	H	20.47	54.16	68.20	14.04
10360.000	33.82	PK	V	20.47	54.29	68.20	13.91
15540.000	33.40	PK	H	24.62	58.02	74.00	15.98
15540.000	20.47	AV	H	24.62	45.09	54.00	8.91
15540.000	33.52	PK	V	24.62	58.14	74.00	15.86
15540.000	20.55	AV	V	24.62	45.17	54.00	8.83
Middle Channel: 5200 MHz							
10400.000	33.44	PK	H	20.54	53.98	68.20	14.22
10400.000	33.62	PK	V	20.54	54.16	68.20	14.04
15600.000	33.36	PK	H	24.71	58.07	74.00	15.93
15600.000	20.56	AV	H	24.71	45.27	54.00	8.73
15600.000	33.70	PK	V	24.71	58.41	74.00	15.59
15600.000	20.68	AV	V	24.71	45.39	54.00	8.61
High Channel: 5240 MHz							
10480.000	33.57	PK	H	20.42	53.99	68.20	14.21
10480.000	33.66	PK	V	20.42	54.08	68.20	14.12
15720.000	33.36	PK	H	24.82	58.18	74.00	15.82
15720.000	20.47	AV	H	24.82	45.29	54.00	8.71
15720.000	33.68	PK	V	24.82	58.50	74.00	15.50
15720.000	20.56	AV	V	24.82	45.38	54.00	8.62

802.11a Mode Chain 1:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel:				5180	MHz		
10360.000	33.53	PK	H	20.47	54.00	68.20	14.20
10360.000	33.69	PK	V	20.47	54.16	68.20	14.04
15540.000	33.12	PK	H	24.62	57.74	74.00	16.26
15540.000	20.63	AV	H	24.62	45.25	54.00	8.75
15540.000	33.23	PK	V	24.62	57.85	74.00	16.15
15540.000	20.66	AV	V	24.62	45.28	54.00	8.72
Middle Channel:				5200	MHz		
10400.000	33.63	PK	H	14.52	48.15	68.20	20.05
10400.000	33.65	PK	V	20.54	54.19	68.20	14.01
15600.000	33.20	PK	H	24.71	57.91	74.00	16.09
15600.000	20.51	AV	H	24.71	45.22	54.00	8.78
15600.000	33.39	PK	V	24.71	58.10	74.00	15.90
15600.000	20.55	AV	V	24.71	45.26	54.00	8.74
High Channel:				5240	MHz		
10480.000	33.62	PK	H	20.42	54.04	68.20	14.16
10480.000	33.65	PK	V	20.42	54.07	68.20	14.13
15720.000	33.63	PK	H	24.82	58.45	74.00	15.55
15720.000	20.52	AV	H	24.82	45.34	54.00	8.66
15720.000	33.68	PK	V	24.82	58.50	74.00	15.50
15720.000	20.64	AV	V	24.82	45.46	54.00	8.54

802.11n ht20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel:				5180	MHz		
10360.000	33.52	PK	H	20.47	53.99	68.20	14.21
10360.000	33.65	PK	V	20.47	54.12	68.20	14.08
15540.000	33.64	PK	H	24.62	58.26	74.00	15.74
15540.000	20.23	AV	H	24.62	44.85	54.00	9.15
15540.000	33.68	PK	V	24.62	58.30	74.00	15.70
15540.000	20.61	AV	V	24.62	45.23	54.00	8.77
Middle Channel:				5200	MHz		
10400.000	33.46	PK	H	20.54	54.00	68.20	14.20
10400.000	33.48	PK	V	20.54	54.02	68.20	14.18
15600.000	30.56	PK	H	24.71	55.27	74.00	18.73
15600.000	20.22	AV	H	24.71	44.93	54.00	9.07
15600.000	30.63	PK	V	24.71	55.34	74.00	18.66
15600.000	20.35	AV	V	24.71	45.06	54.00	8.94
High Channel:				5240	MHz		
10480.000	33.60	PK	H	20.42	54.02	68.20	14.18
10480.000	33.65	PK	V	20.42	54.07	68.20	14.13
15720.000	33.70	PK	H	24.82	58.52	74.00	15.48
15720.000	20.55	AV	H	24.82	45.37	54.00	8.63
15720.000	33.75	PK	V	24.82	58.57	74.00	15.43
15720.000	20.64	AV	V	24.82	45.46	54.00	8.54

802.11n ht40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5190 MHz							
10380.000	33.23	PK	H	20.51	53.74	68.20	14.46
10380.000	33.27	PK	V	20.51	53.78	68.20	14.42
15570.000	33.50	PK	H	24.67	58.17	74.00	15.83
15570.000	20.41	AV	H	24.67	45.08	54.00	8.92
15570.000	33.53	PK	V	24.67	58.20	74.00	15.80
15570.000	20.48	AV	V	24.67	45.15	54.00	8.85
High Channel: 5230 MHz							
10460.000	33.23	PK	H	20.45	53.68	68.20	14.52
10460.000	33.62	PK	V	20.45	54.07	68.20	14.13
15690.000	33.57	PK	H	24.77	58.34	74.00	15.66
15690.000	20.39	AV	H	24.77	45.16	54.00	8.84
15690.000	33.65	PK	V	24.77	58.42	74.00	15.58
15690.000	20.65	AV	V	24.77	45.42	54.00	8.58

802.11ax20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel:				5180	MHz		
10360.000	33.70	PK	H	20.47	54.17	68.20	14.03
10360.000	33.76	PK	V	20.47	54.23	68.20	13.97
15540.000	33.68	PK	H	24.62	58.30	74.00	15.70
15540.000	20.64	AV	H	24.62	45.26	54.00	8.74
15540.000	33.71	PK	V	24.62	58.33	74.00	15.67
15540.000	20.69	AV	V	24.62	45.31	54.00	8.69
Middle Channel:				5200	MHz		
10400.000	33.32	PK	H	20.54	53.86	68.20	14.34
10400.000	33.69	PK	V	20.54	54.23	68.20	13.97
15600.000	33.58	PK	H	24.71	58.29	74.00	15.71
15600.000	20.53	AV	H	24.71	45.24	54.00	8.76
15600.000	34.10	PK	V	24.71	58.81	74.00	15.19
15600.000	20.55	AV	V	24.71	45.26	54.00	8.74
High Channel:				5240	MHz		
10480.000	33.76	PK	H	20.42	54.18	68.20	14.02
10480.000	33.84	PK	V	20.42	54.26	68.20	13.94
15720.000	33.72	PK	H	24.82	58.54	74.00	15.46
15720.000	20.61	AV	H	24.82	45.43	54.00	8.57
15720.000	33.75	PK	V	24.82	58.57	74.00	15.43
15720.000	20.79	AV	V	24.82	45.61	54.00	8.39

802.11ax40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel:				5190	MHz		
10380.000	32.98	PK	H	20.51	53.49	68.20	14.71
10380.000	33.62	PK	V	20.51	54.13	68.20	14.07
15570.000	33.74	PK	H	24.67	58.41	74.00	15.59
15570.000	20.54	AV	H	24.67	45.21	54.00	8.79
15570.000	33.76	PK	V	24.67	58.43	74.00	15.57
15570.000	20.63	AV	V	24.67	45.30	54.00	8.70
High Channel:				5230	MHz		
10460.000	33.28	PK	H	20.45	53.73	68.20	14.47
10460.000	33.37	PK	V	20.45	53.82	68.20	14.38
15690.000	33.54	PK	H	24.77	58.31	74.00	15.69
15690.000	20.46	AV	H	24.77	45.23	54.00	8.77
15690.000	33.58	PK	V	24.77	58.35	74.00	15.65
15690.000	20.58	AV	V	24.77	45.35	54.00	8.65

802.11ac80 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel:				5210	MHz		
10420.000	32.96	PK	H	20.51	53.47	68.20	14.73
10420.000	33.23	PK	V	20.51	53.74	68.20	14.46
15630.000	33.52	PK	H	24.73	58.25	74.00	15.75
15630.000	20.41	AV	H	24.73	45.14	54.00	8.86
15630.000	33.68	PK	V	24.73	58.41	74.00	15.59
15630.000	20.55	AV	V	24.73	45.28	54.00	8.72

802.11ax80 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel:				5210	MHz		
10420.000	32.51	PK	H	20.51	53.02	68.20	15.18
10420.000	33.28	PK	V	20.51	53.79	68.20	14.41
15630.000	33.41	PK	H	24.73	58.14	74.00	15.86
15630.000	20.47	AV	H	24.73	45.20	54.00	8.80
15630.000	33.21	PK	V	24.73	57.94	74.00	16.06
15630.000	21.54	AV	V	24.73	46.27	54.00	7.73

5725-5850MHz**802.11a Mode Chain 0:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel:				5745	MHz		
11490.000	33.25	PK	H	21.49	54.74	74.00	19.26
11490.000	20.17	AV	H	21.49	41.66	54.00	12.34
11490.000	33.52	PK	V	21.49	55.01	74.00	18.99
11490.000	20.39	AV	V	21.49	41.88	54.00	12.12
17235.000	33.68	PK	H	28.71	62.39	68.20	5.81
17235.000	33.74	PK	V	28.71	62.45	68.20	5.75
Middle Channel:				5785	MHz		
11570.000	32.89	PK	H	21.71	54.60	74.00	19.40
11570.000	20.36	AV	H	21.71	42.07	54.00	11.93
11570.000	33.63	PK	V	21.71	55.34	74.00	18.66
11570.000	20.68	AV	V	21.71	42.39	54.00	11.61
17355.000	32.97	PK	H	29.35	62.32	68.20	5.88
17355.000	33.36	PK	V	29.35	62.71	68.20	5.49
High Channel:				5825	MHz		
11650.000	33.36	PK	H	22.04	55.40	74.00	18.60
11650.000	20.25	AV	H	22.04	42.29	54.00	11.71
11650.000	33.64	PK	V	22.04	55.68	74.00	18.32
11650.000	20.65	AV	V	22.04	42.69	54.00	11.31
17475.000	33.65	PK	H	29.89	63.54	68.20	4.66
17475.000	33.68	PK	V	29.89	63.57	68.20	4.63

802.11a Mode Chain 1:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel:				5745	MHz		
11490.000	32.52	PK	H	21.49	54.01	74.00	19.99
11490.000	20.11	AV	H	21.49	41.60	54.00	12.40
11490.000	32.99	PK	V	21.49	54.48	74.00	19.52
11490.000	20.32	AV	V	21.49	41.81	54.00	12.19
17235.000	32.94	PK	H	28.71	61.65	68.20	6.55
17235.000	33.23	PK	V	28.71	61.94	68.20	6.26
Middle Channel:				5785	MHz		
11570.000	33.65	PK	H	21.71	55.36	74.00	18.64
11570.000	20.42	AV	H	21.71	42.13	54.00	11.87
11570.000	33.69	PK	V	21.71	55.40	74.00	18.60
11570.000	20.38	AV	V	21.71	42.09	54.00	11.91
17355.000	33.30	PK	H	29.35	62.65	68.20	5.55
17355.000	33.57	PK	V	29.35	62.92	68.20	5.28
High Channel:				5825	MHz		
11650.000	32.85	PK	H	22.04	54.89	74.00	19.11
11650.000	19.98	AV	H	22.04	42.02	54.00	11.98
11650.000	32.96	PK	V	22.04	55.00	74.00	19.00
11650.000	20.56	AV	V	22.04	42.60	54.00	11.40
17475.000	33.20	PK	H	29.89	63.09	68.20	5.11
17475.000	33.73	PK	V	29.89	63.62	68.20	4.58

802.11n ht20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel:				5745	MHz		
11490.000	33.50	PK	H	21.49	54.99	74.00	19.01
11490.000	20.25	AV	H	21.49	41.74	54.00	12.26
11490.000	33.63	PK	V	21.49	55.12	74.00	18.88
11490.000	20.47	AV	V	21.49	41.96	54.00	12.04
17235.000	33.20	PK	H	28.71	61.91	68.20	6.29
17235.000	33.25	PK	V	28.71	61.96	68.20	6.24
Middle Channel:				5785	MHz		
11570.000	32.89	PK	H	21.71	54.60	74.00	19.40
11570.000	20.10	AV	H	21.71	41.81	54.00	12.19
11570.000	33.10	PK	V	21.71	54.81	74.00	19.19
11570.000	20.15	AV	V	21.71	41.86	54.00	12.14
17355.000	33.26	PK	H	29.35	62.61	68.20	5.59
17355.000	33.68	PK	V	29.35	63.03	68.20	5.17
High Channel:				5825	MHz		
11650.000	33.15	PK	H	22.04	55.19	74.00	18.81
11650.000	20.54	AV	H	22.04	42.58	54.00	11.42
11650.000	33.29	PK	V	22.04	55.33	74.00	18.67
11650.000	20.68	AV	V	22.04	42.72	54.00	11.28
17475.000	32.87	PK	H	29.89	62.76	68.20	5.44
17475.000	33.18	PK	V	29.89	63.07	68.20	5.13

802.11n ht40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5755 MHz							
11510.000	32.55	PK	H	21.48	54.03	74.00	19.97
11510.000	20.18	AV	H	21.48	41.66	54.00	12.34
11510.000	32.39	PK	V	21.48	53.87	74.00	20.13
11510.000	20.32	AV	V	21.48	41.80	54.00	12.20
17265.000	33.64	PK	H	28.79	62.43	68.20	5.77
17265.000	33.68	PK	V	28.79	62.47	68.20	5.73
High Channel: 5795 MHz							
11590.000	32.92	PK	H	21.78	54.70	74.00	19.30
11590.000	19.98	AV	H	21.78	41.76	54.00	12.24
11590.000	32.98	PK	V	21.78	54.76	74.00	19.24
11590.000	20.21	AV	V	21.78	41.99	54.00	12.01
17385.000	33.21	PK	H	29.59	62.80	68.20	5.40
17385.000	33.36	PK	V	29.59	62.95	68.20	5.25

802.11ax20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel:				5745	MHz		
11490.000	33.20	PK	H	21.49	54.69	74.00	19.31
11490.000	20.43	AV	H	21.49	41.92	54.00	12.08
11490.000	33.65	PK	V	21.49	55.14	74.00	18.86
11490.000	20.46	AV	V	21.49	41.95	54.00	12.05
17235.000	33.65	PK	H	28.71	62.36	68.20	5.84
17235.000	33.68	PK	V	28.71	62.39	68.20	5.81
Middle Channel:				5785	MHz		
11570.000	33.12	PK	H	21.71	54.83	74.00	19.17
11570.000	20.52	AV	H	21.71	42.23	54.00	11.77
11570.000	33.32	PK	V	21.71	55.03	74.00	18.97
11570.000	20.56	AV	V	21.71	42.27	54.00	11.73
17355.000	32.89	PK	H	29.35	62.24	68.20	5.96
17355.000	32.96	PK	V	29.35	62.31	68.20	5.89
High Channel:				5825	MHz		
11650.000	32.47	PK	H	22.04	54.51	74.00	19.49
11650.000	19.96	AV	H	22.04	42.00	54.00	12.00
11650.000	32.98	PK	V	22.04	55.02	74.00	18.98
11650.000	20.09	AV	V	22.04	42.13	54.00	11.87
17475.000	33.28	PK	H	29.89	63.17	68.20	5.03
17475.000	33.68	PK	V	29.89	63.57	68.20	4.63

802.11ax40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel:				5755	MHz		
11510.000	32.77	PK	H	21.48	54.25	74.00	19.75
11510.000	19.94	AV	H	21.48	41.42	54.00	12.58
11510.000	32.98	PK	V	21.48	54.46	74.00	19.54
11510.000	20.06	AV	V	21.48	41.54	54.00	12.46
17265.000	32.20	PK	H	28.79	60.99	68.20	7.21
17265.000	32.43	PK	V	28.79	61.22	68.20	6.98
High Channel:				5795	MHz		
11590.000	32.98	PK	H	21.78	54.76	74.00	19.24
11590.000	20.45	AV	H	21.78	42.23	54.00	11.77
11590.000	33.13	PK	V	21.78	54.91	74.00	19.09
11590.000	20.52	AV	V	21.78	42.30	54.00	11.70
17385.000	33.12	PK	H	29.59	62.71	68.20	5.49
17385.000	33.23	PK	V	29.59	62.82	68.20	5.38

802.11ac80 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel:				5775	MHz		
11550.000	33.39	PK	H	21.63	55.02	74.00	18.98
11550.000	20.28	AV	H	21.63	41.91	54.00	12.09
11550.000	33.41	PK	V	21.63	55.04	74.00	18.96
11550.000	20.35	AV	V	21.63	41.98	54.00	12.02
17325.000	33.45	PK	H	29.11	62.56	68.20	5.64
17325.000	33.50	PK	V	29.11	62.61	68.20	5.59

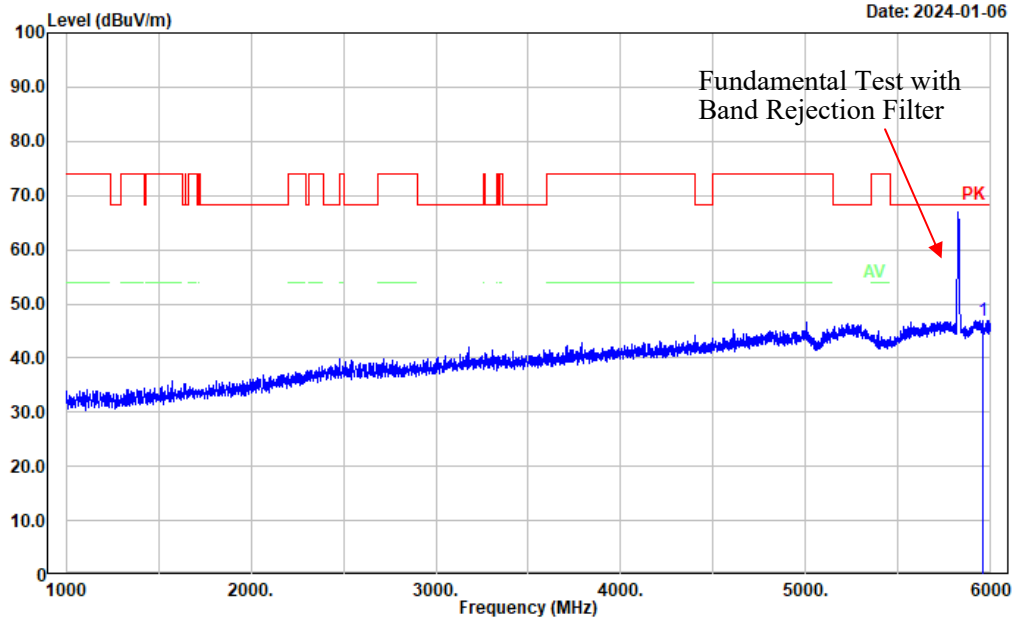
802.11ax80 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel:				5775	MHz		
11550.000	33.52	PK	H	21.63	55.15	74.00	18.85
11550.000	20.17	AV	H	21.63	41.80	54.00	12.20
11550.000	33.24	PK	V	21.63	54.87	74.00	19.13
11550.000	20.51	AV	V	21.63	42.14	54.00	11.86
17325.000	33.62	PK	H	29.11	62.73	68.20	5.47
17325.000	33.17	PK	V	29.11	62.28	68.20	5.92

Worst radiation spurious emissions margin test plots (802.11a Chain 1 5825MHz)

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: horizontal
Note:

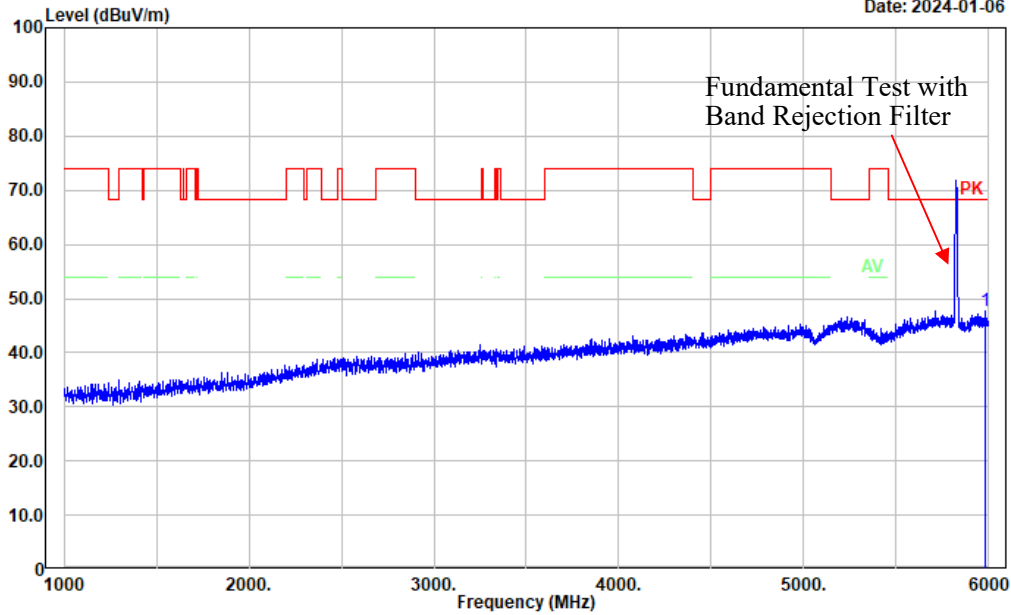
Date: 2024-01-06



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5957.000	33.89	13.06	46.95	68.20	21.25	Peak

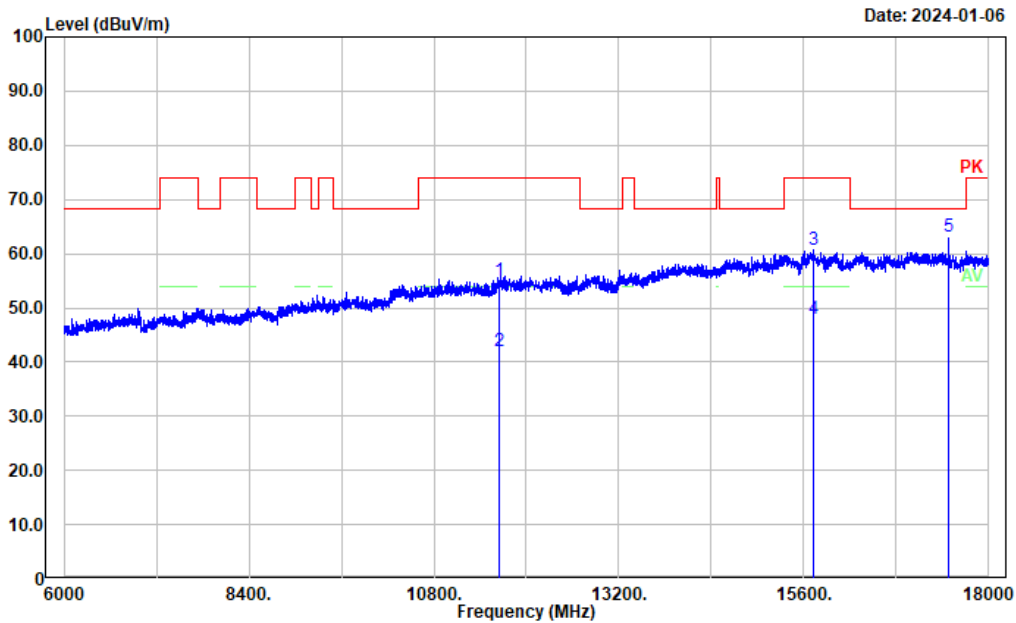
Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: vertical
Note:

Date: 2024-01-06



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5979.000	34.47	13.16	47.63	68.20	20.57	Peak

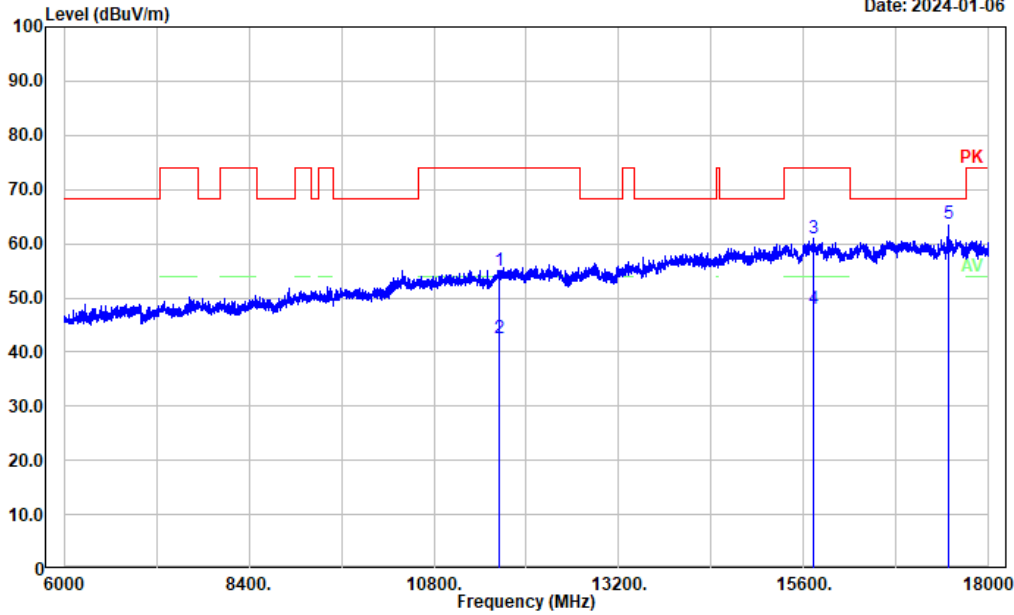
Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	11650.000	32.85	22.04	54.89	74.00	19.11	Peak
2	11650.000	19.98	22.04	42.02	54.00	11.98	Average
3	15727.200	35.74	24.84	60.58	74.00	13.42	Peak
4	15727.200	23.03	24.84	47.87	54.00	6.13	Average
5	17475.000	33.20	29.89	63.09	68.20	5.11	Peak

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: vertical
Note:

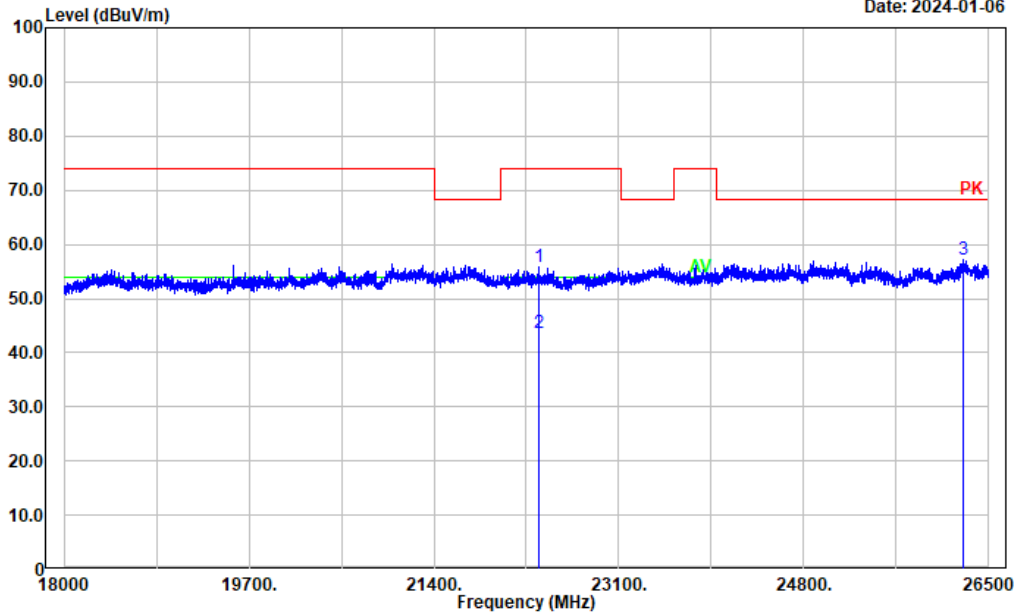
Date: 2024-01-06



No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	11650.000	32.96	22.04	55.00	74.00	19.00	Peak
2	11650.000	20.56	22.04	42.60	54.00	11.40	Average
3	15734.400	36.10	24.83	60.93	74.00	13.07	Peak
4	15734.400	23.01	24.83	47.84	54.00	6.16	Average
5	17475.000	33.73	29.89	63.62	68.20	4.58	Peak

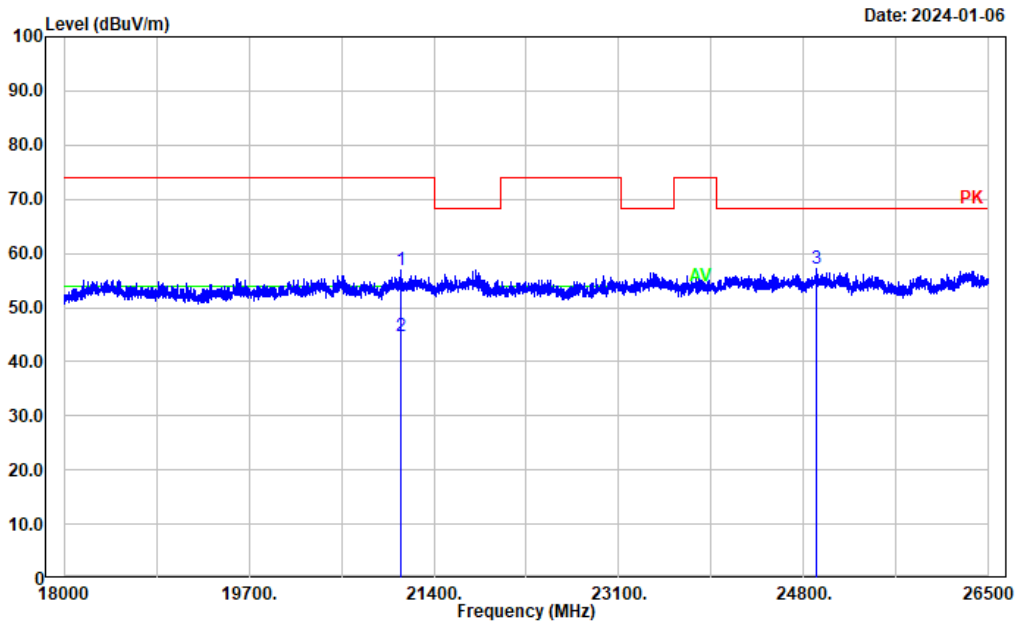
Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

Date: 2024-01-06



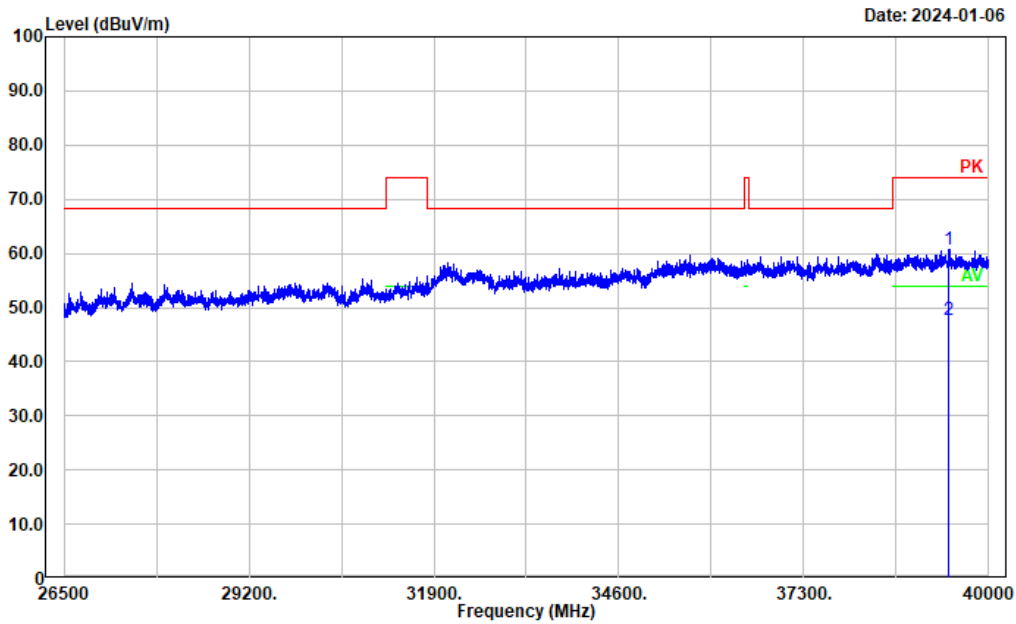
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	22370.700	50.34	5.47	55.81	74.00	18.19	Peak
2	22370.700	38.11	5.47	43.58	54.00	10.42	Average
3	26265.400	50.21	7.00	57.21	68.20	10.99	Peak

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: vertical
Note:



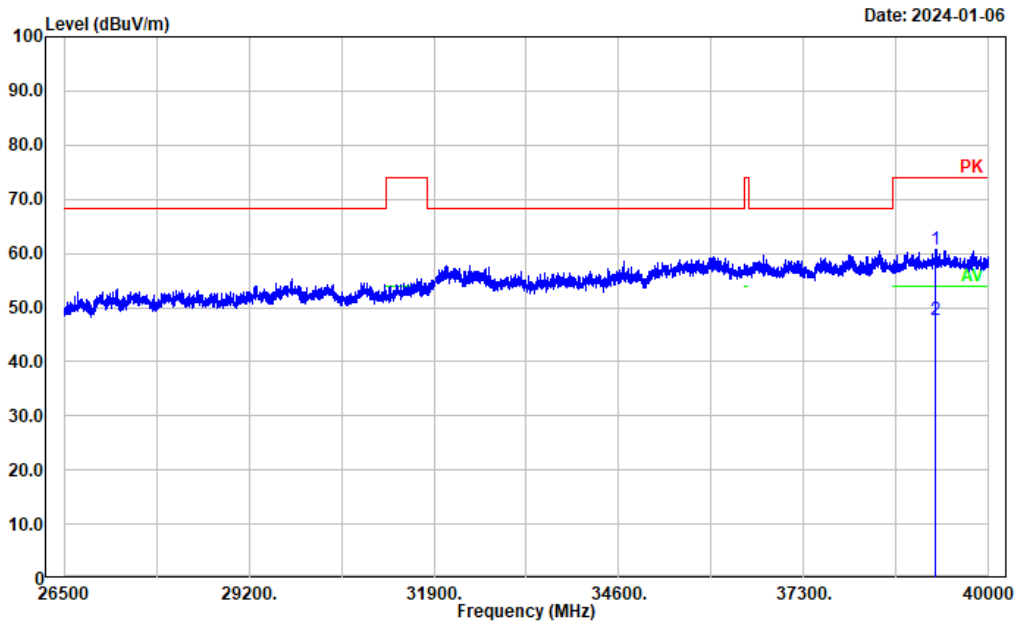
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	21092.300	52.29	4.69	56.98	74.00	17.02	Peak
2	21092.300	40.09	4.69	44.78	54.00	9.22	Average
3	24912.200	50.73	6.33	57.06	68.20	11.14	Peak

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



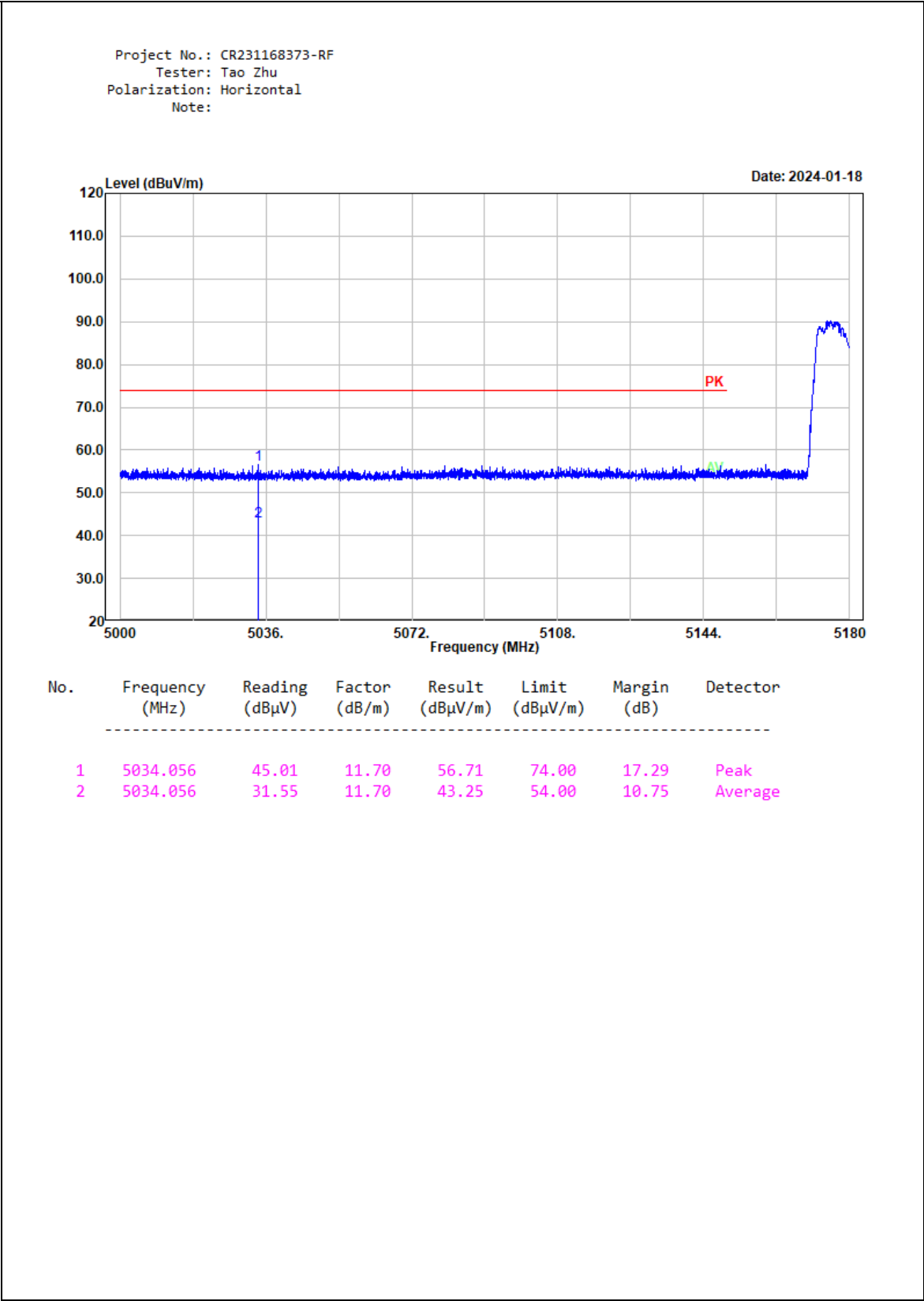
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	39416.800	50.58	10.17	60.75	74.00	13.25	Peak
2	39416.800	37.48	10.17	47.65	54.00	6.35	Average

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:



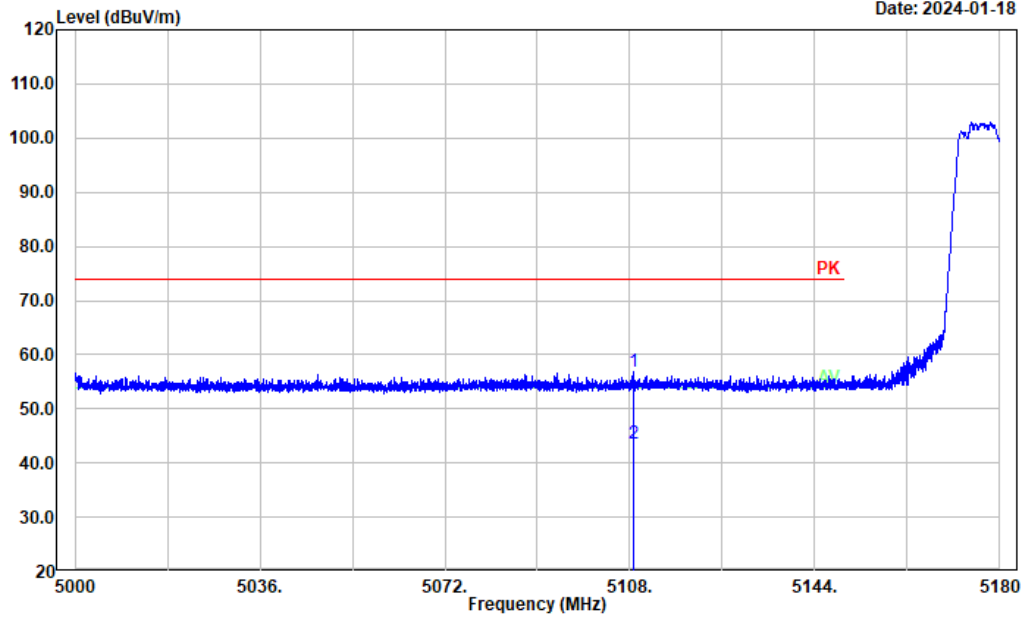
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	39222.400	50.60	10.21	60.81	74.00	13.19	Peak
2	39222.400	37.43	10.21	47.64	54.00	6.36	Average

5150-5250 MHz Band Edge Test Plots:
Chain 0 802.11a Low Channel:



Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-18

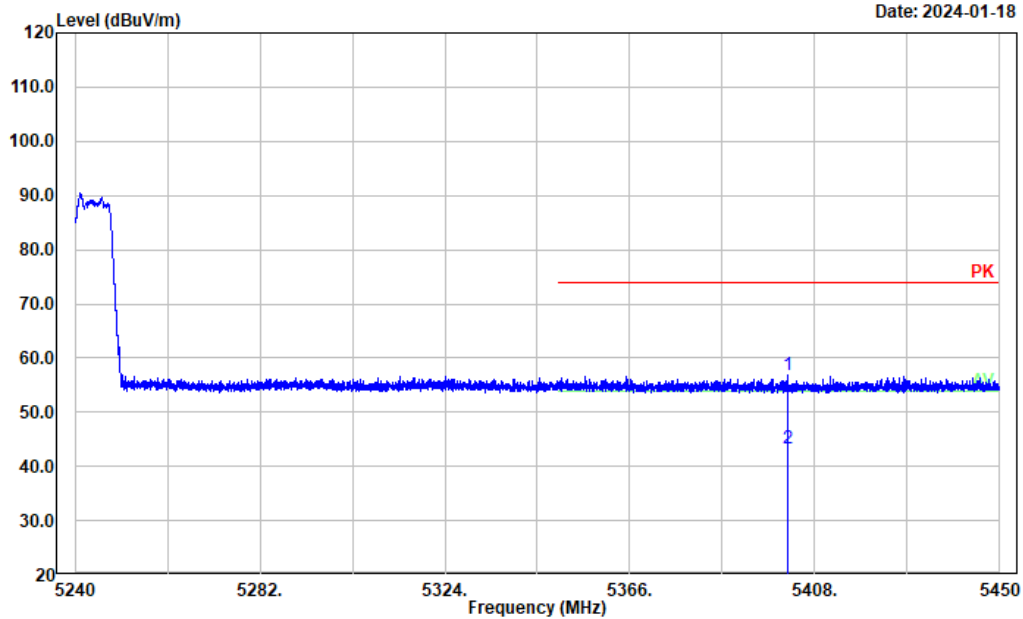


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5108.612	45.05	11.77	56.82	74.00	17.18	Peak
2	5108.612	31.78	11.77	43.55	54.00	10.45	Average

Chain 0 802.11a High Channel:

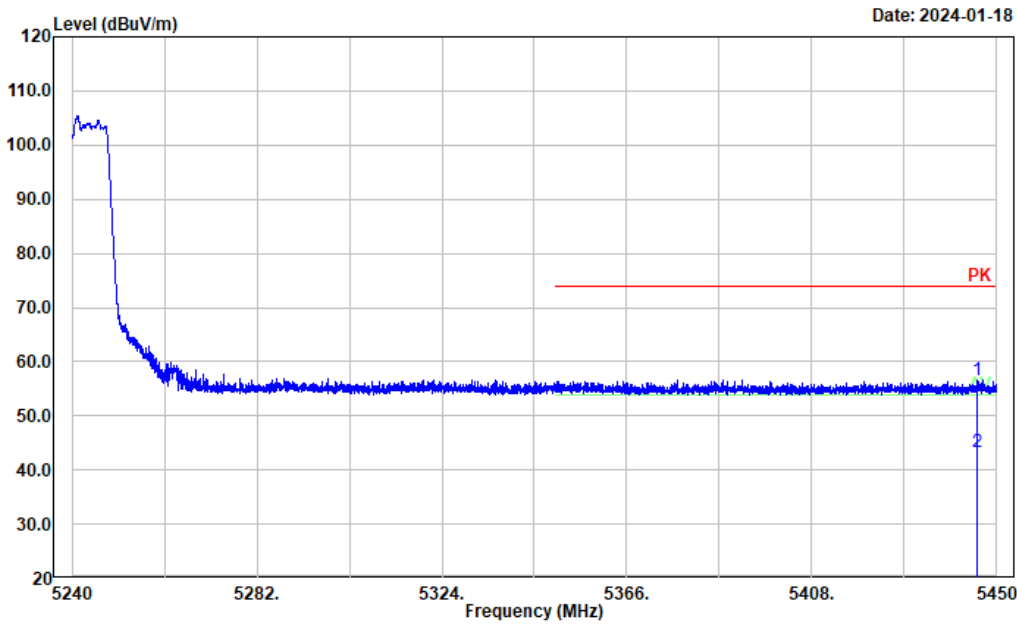
Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

Date: 2024-01-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5401.700	45.01	11.86	56.87	74.00	17.13	Peak
2	5401.700	31.46	11.86	43.32	54.00	10.68	Average

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

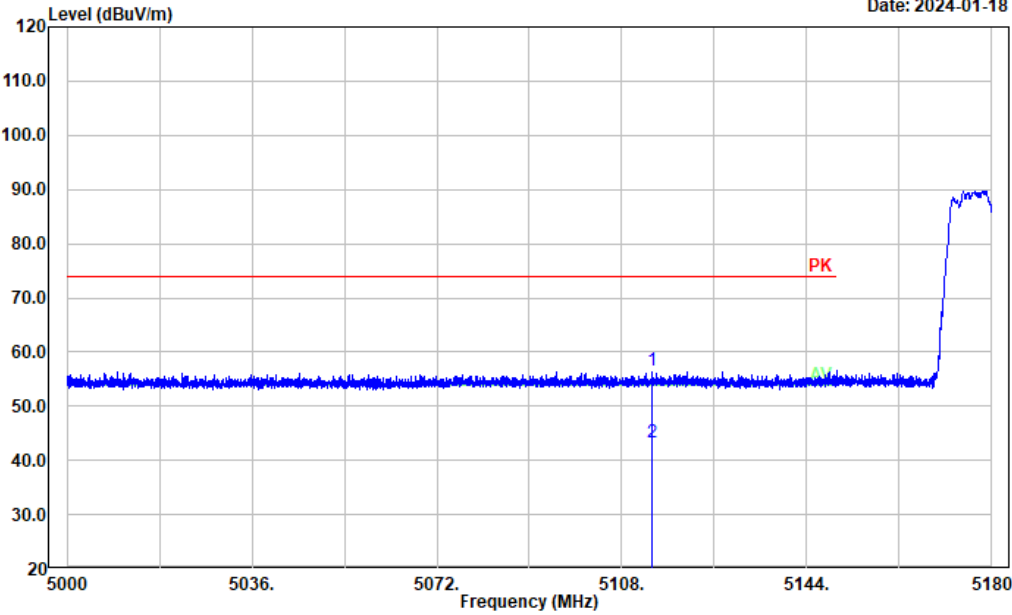


No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	5445.506	44.84	11.87	56.71	74.00	17.29	Peak
2	5445.506	31.48	11.87	43.35	54.00	10.65	Average

Chain 1 802.11a Low Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

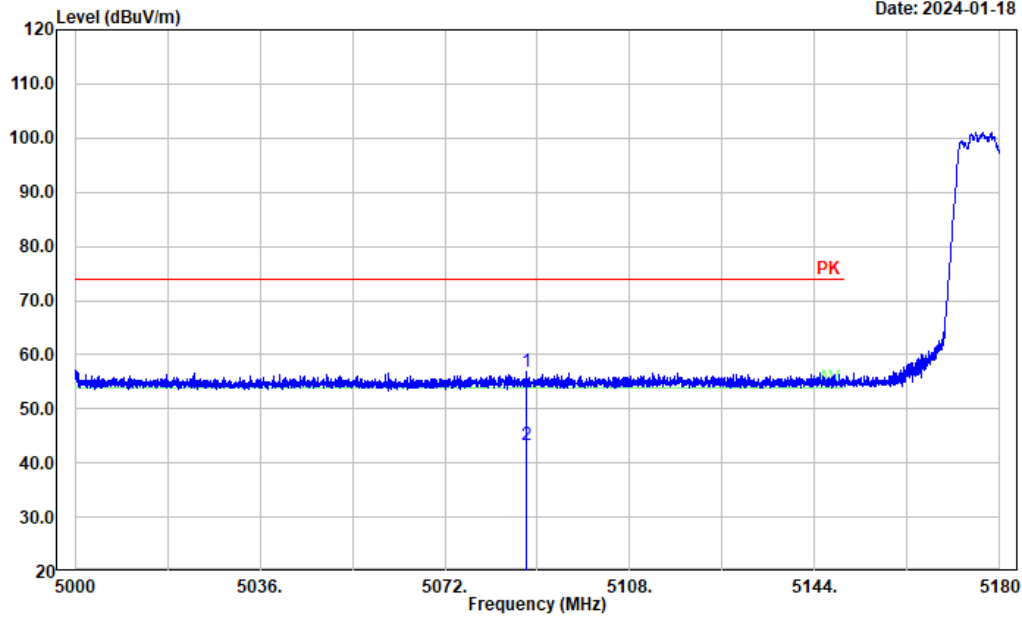
Date: 2024-01-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5113.976	44.69	11.76	56.45	74.00	17.55	Peak
2	5113.976	31.59	11.76	43.35	54.00	10.65	Average

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-18

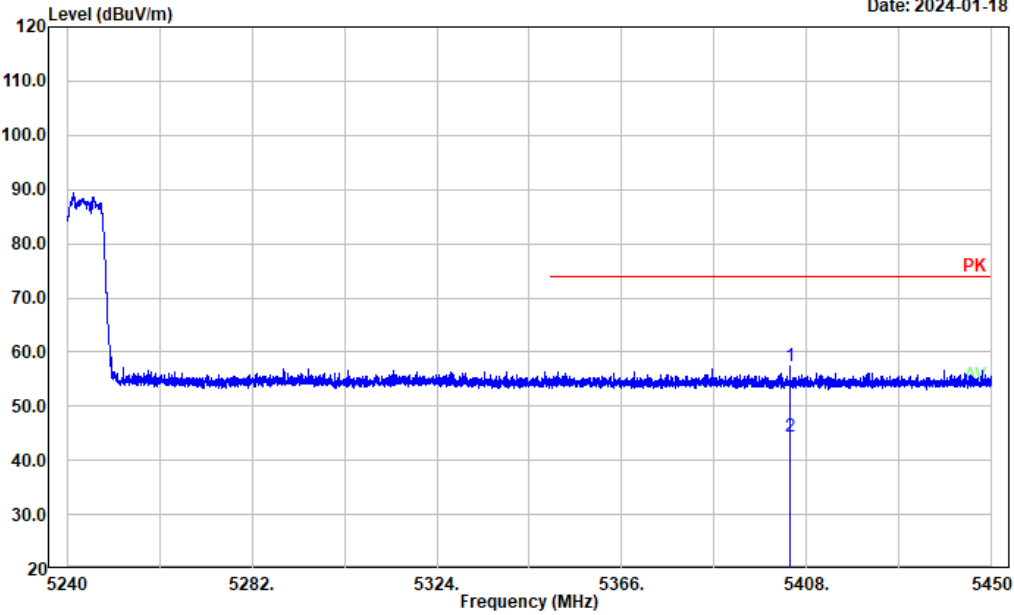


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5087.732	44.97	11.76	56.73	74.00	17.27	Peak
2	5087.732	31.59	11.76	43.35	54.00	10.65	Average

Chain 1 802.11a High Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

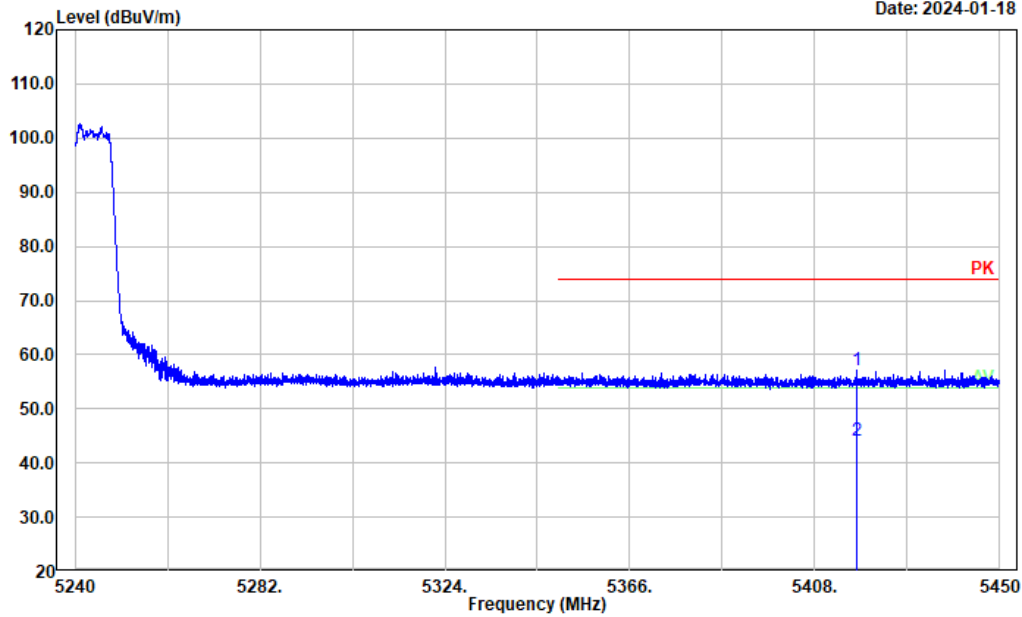
Date: 2024-01-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5404.136	45.55	11.87	57.42	74.00	16.58	Peak
2	5404.136	32.39	11.87	44.26	54.00	9.74	Average

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

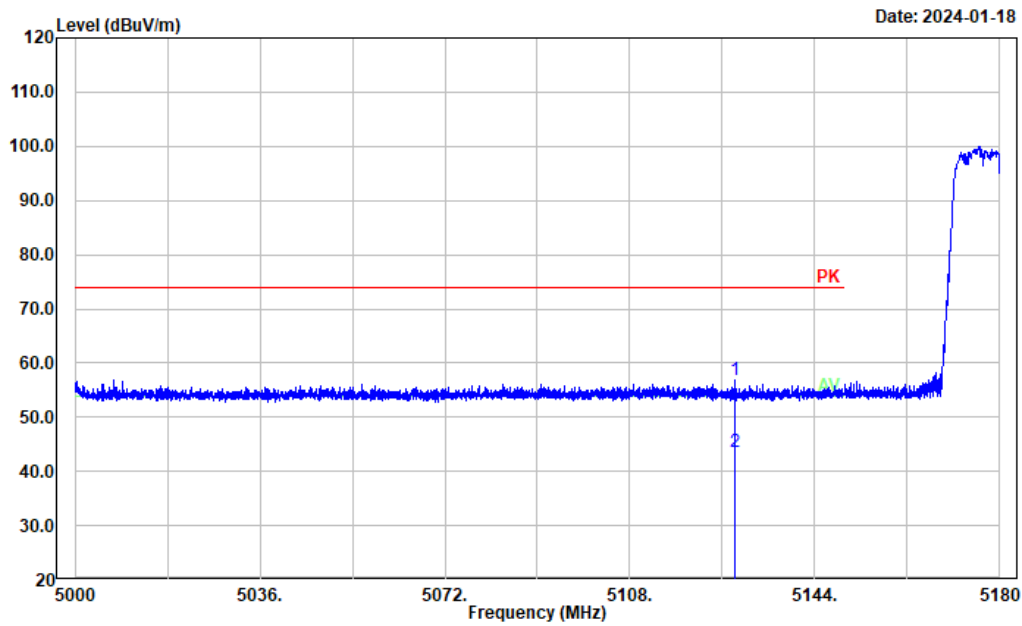
Date: 2024-01-18



No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	5417.408	45.30	11.86	57.16	74.00	16.84	Peak
2	5417.408	32.39	11.86	44.25	54.00	9.75	Average

802.11n20 Low Channel:

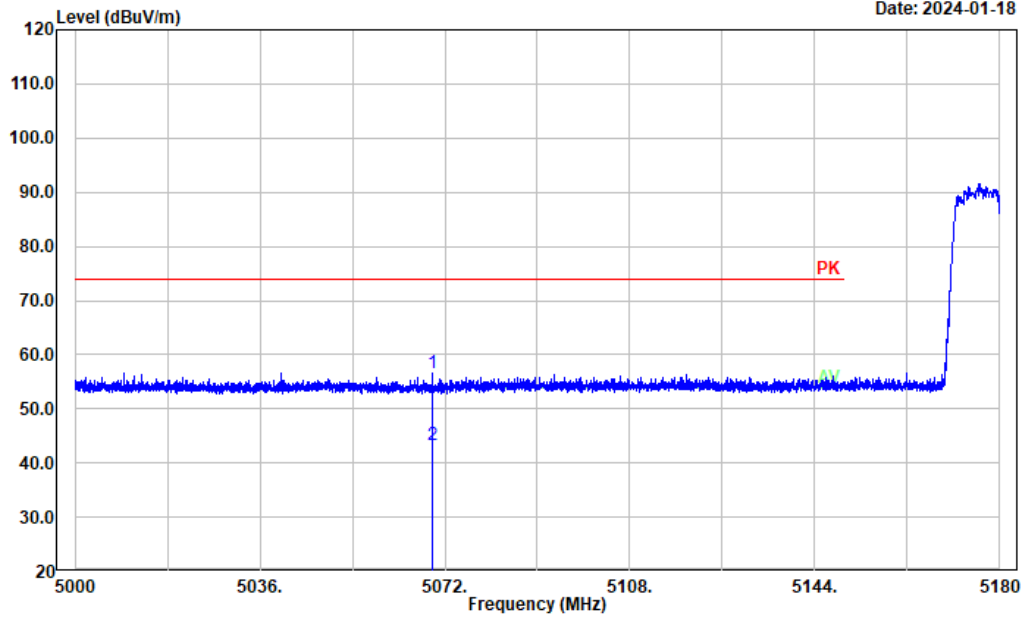
Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5128.340	45.12	11.72	56.84	74.00	17.16	Peak
2	5128.340	31.83	11.72	43.55	54.00	10.45	Average

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

Date: 2024-01-18

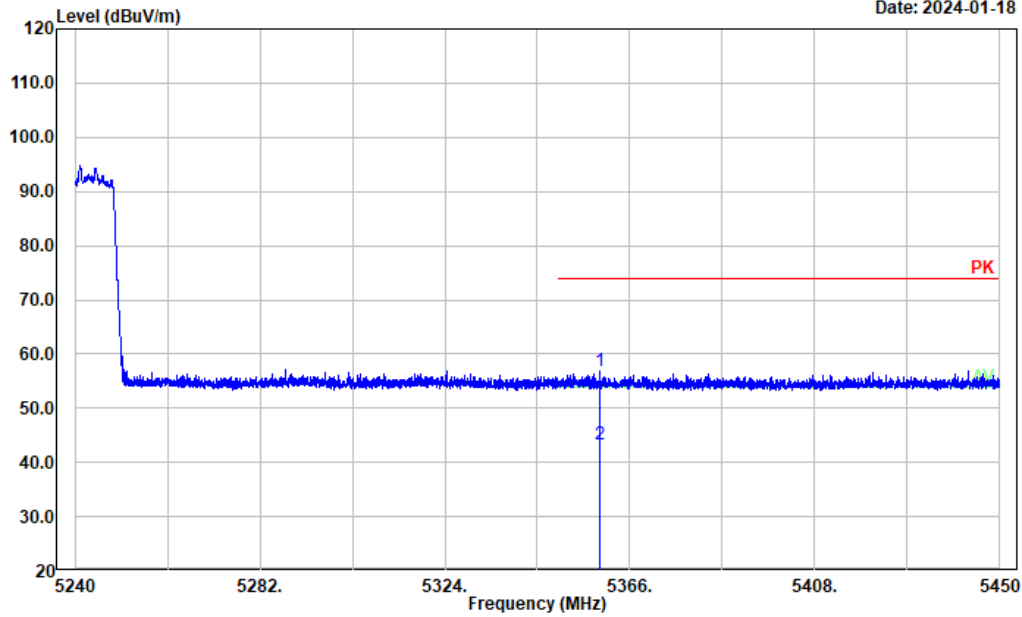


No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	5069.552	44.81	11.70	56.51	74.00	17.49	Peak
2	5069.552	31.68	11.70	43.38	54.00	10.62	Average

802.11n20 High Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

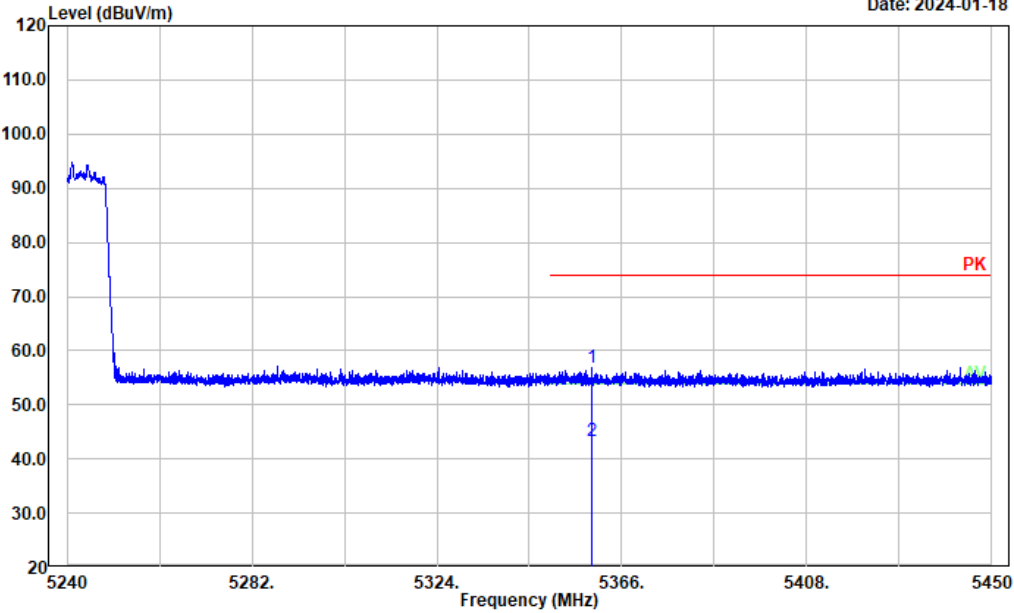
Date: 2024-01-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5359.238	44.93	11.93	56.86	74.00	17.14	Peak
2	5359.238	31.41	11.93	43.34	54.00	10.66	Average

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-18

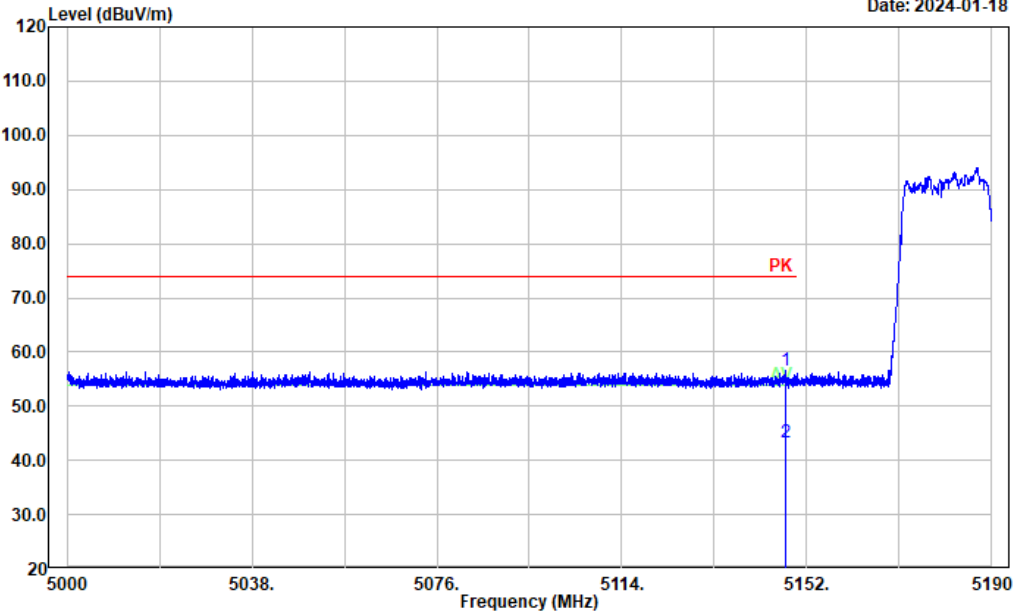


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5359.238	44.93	11.93	56.86	74.00	17.14	Peak
2	5359.238	31.41	11.93	43.34	54.00	10.66	Average

802.11n40 Low Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

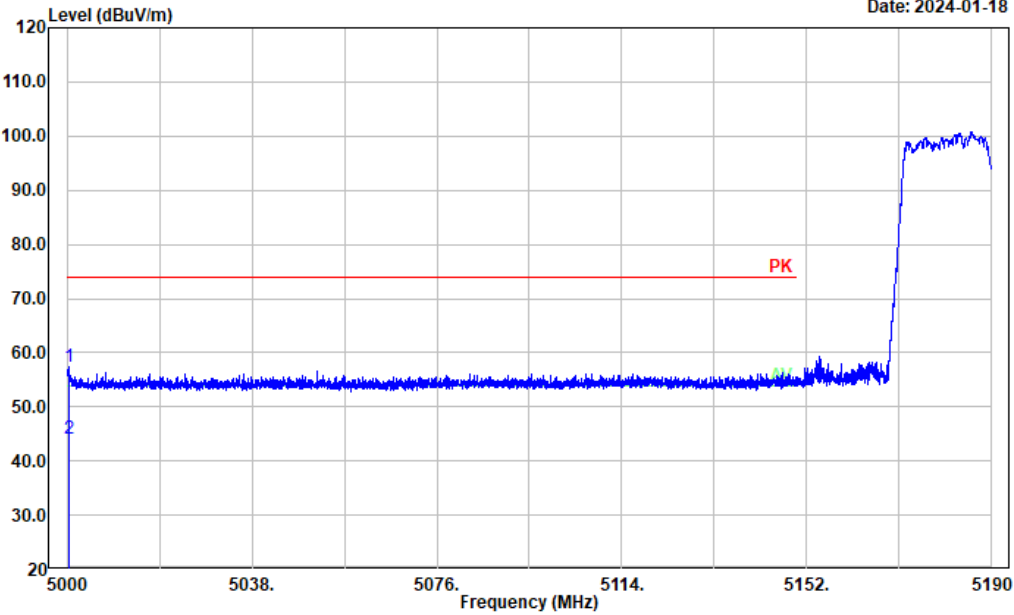
Date: 2024-01-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5147.592	45.02	11.68	56.70	74.00	17.30	Peak
2	5147.592	31.67	11.68	43.35	54.00	10.65	Average

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-18

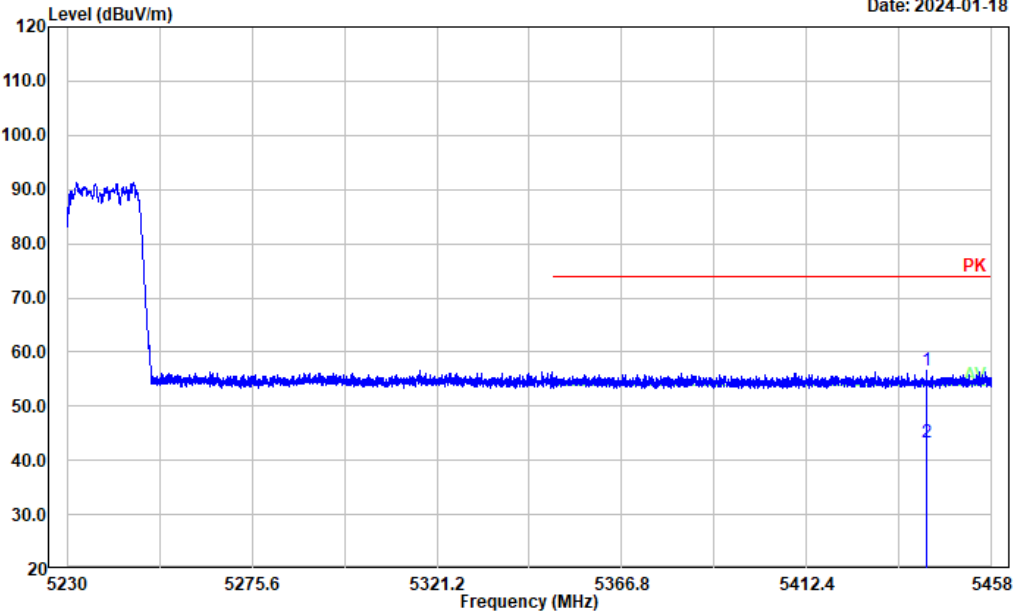


No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	5000.304	45.57	11.79	57.36	74.00	16.64	Peak
2	5000.304	32.29	11.79	44.08	54.00	9.92	Average

802.11n40 High Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

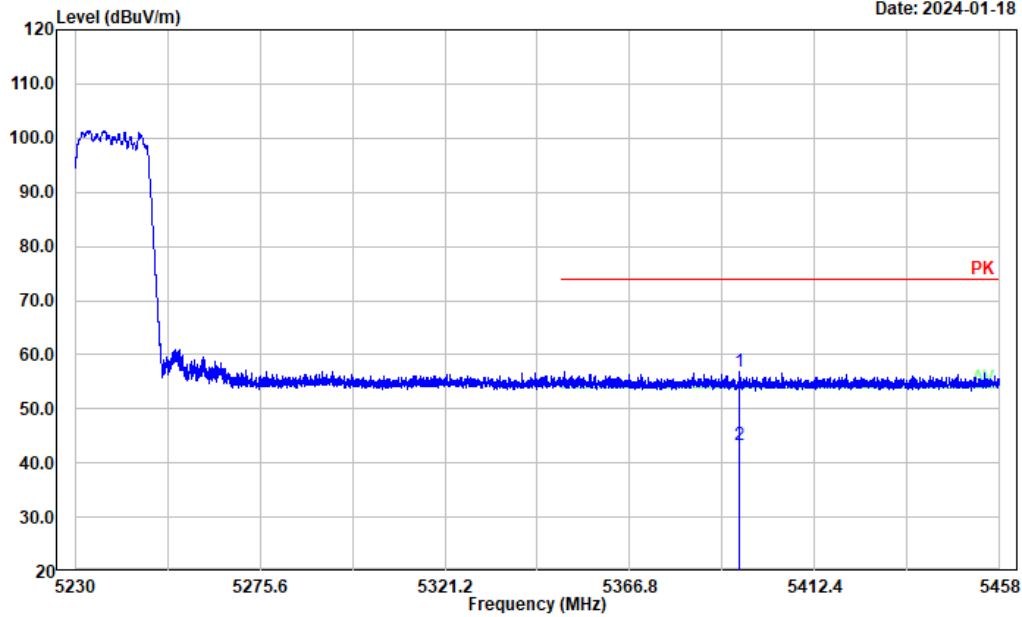
Date: 2024-01-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5441.995	44.71	11.87	56.58	74.00	17.42	Peak
2	5441.995	31.36	11.87	43.23	54.00	10.77	Average

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-18

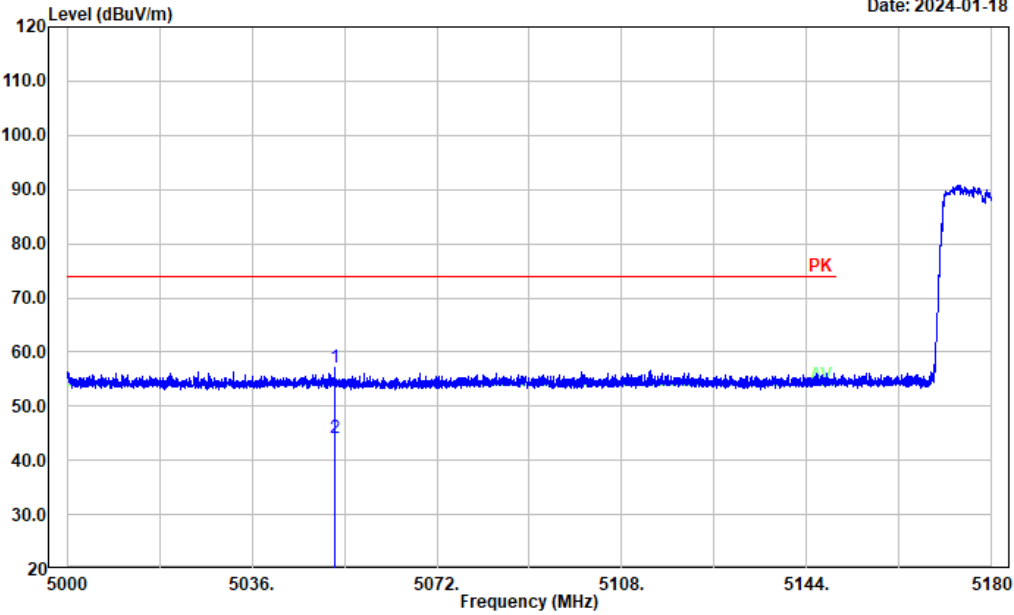


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5393.932	44.86	11.87	56.73	74.00	17.27	Peak
2	5393.932	31.34	11.87	43.21	54.00	10.79	Average

802.11ax20 Low Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

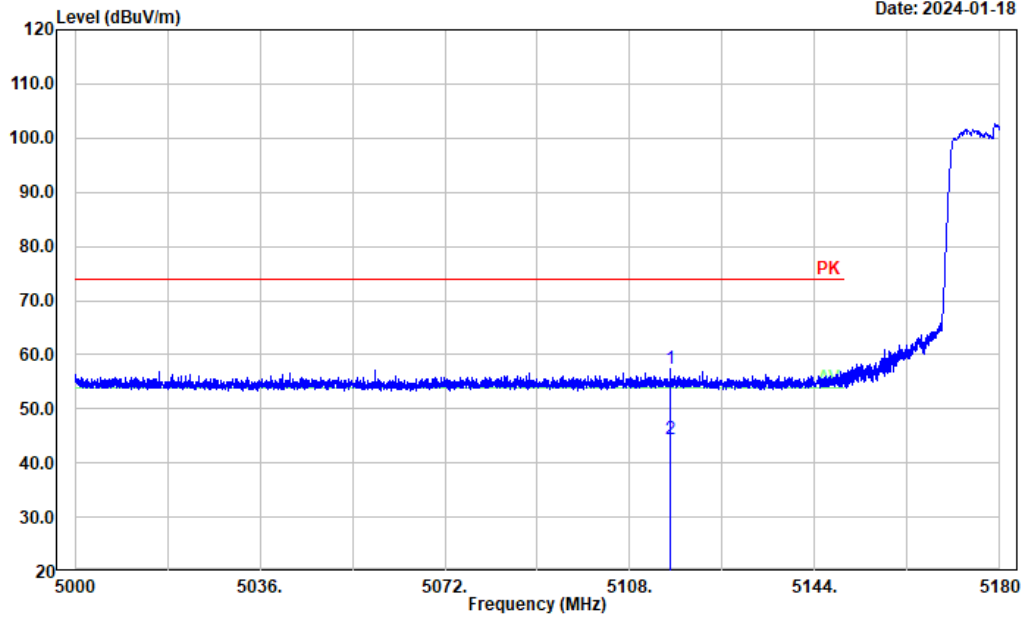
Date: 2024-01-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5052.200	45.34	11.67	57.01	74.00	16.99	Peak
2	5052.200	32.54	11.67	44.21	54.00	9.79	Average

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-18

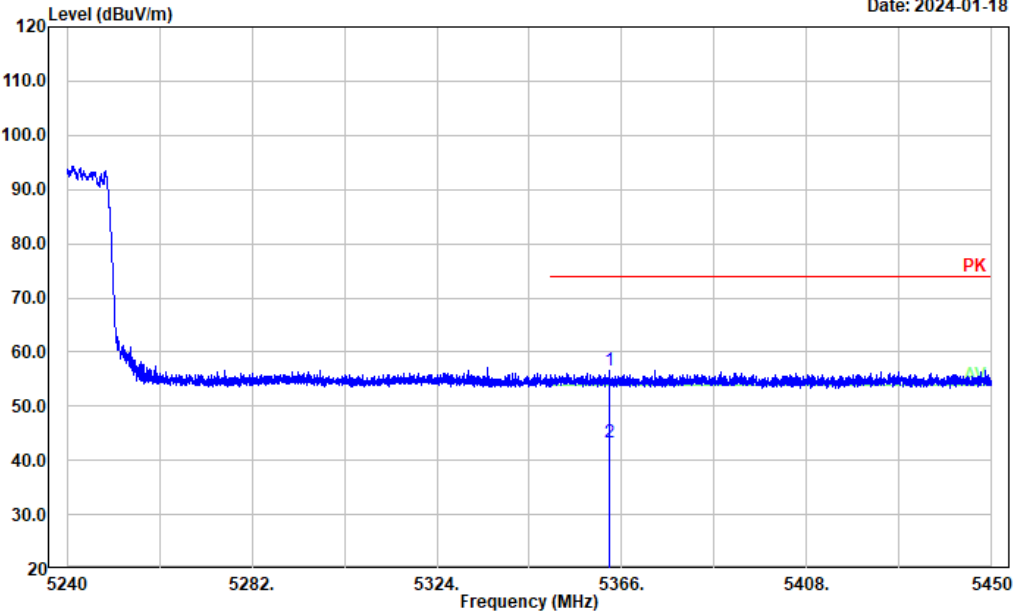


No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	5115.884	45.63	11.76	57.39	74.00	16.61	Peak
2	5115.884	32.55	11.76	44.31	54.00	9.69	Average

802.11ax20 High Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

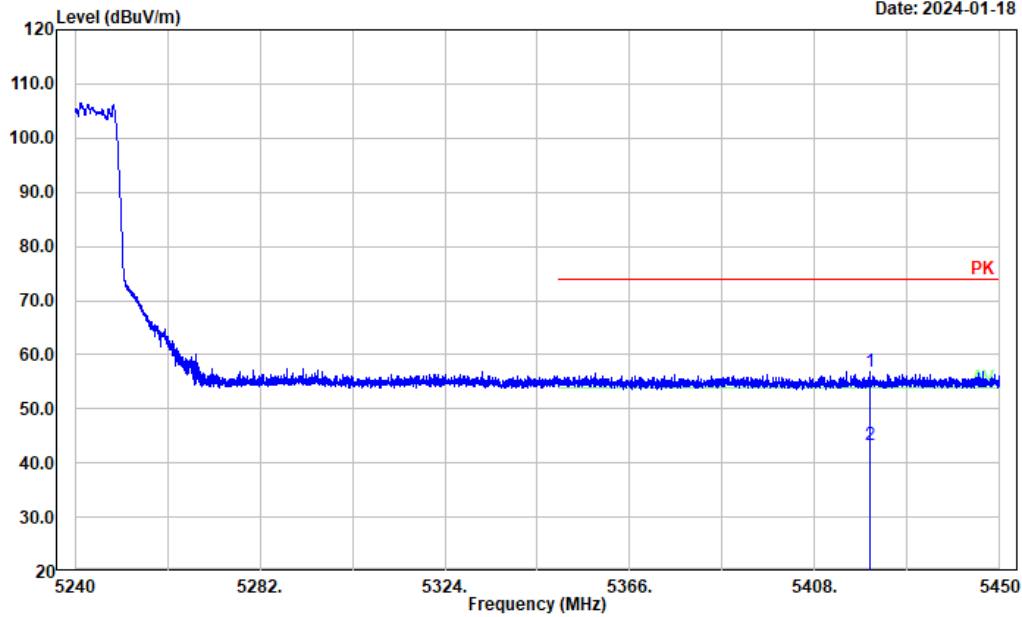
Date: 2024-01-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5363.312	44.55	11.92	56.47	74.00	17.53	Peak
2	5363.312	31.44	11.92	43.36	54.00	10.64	Average

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-18

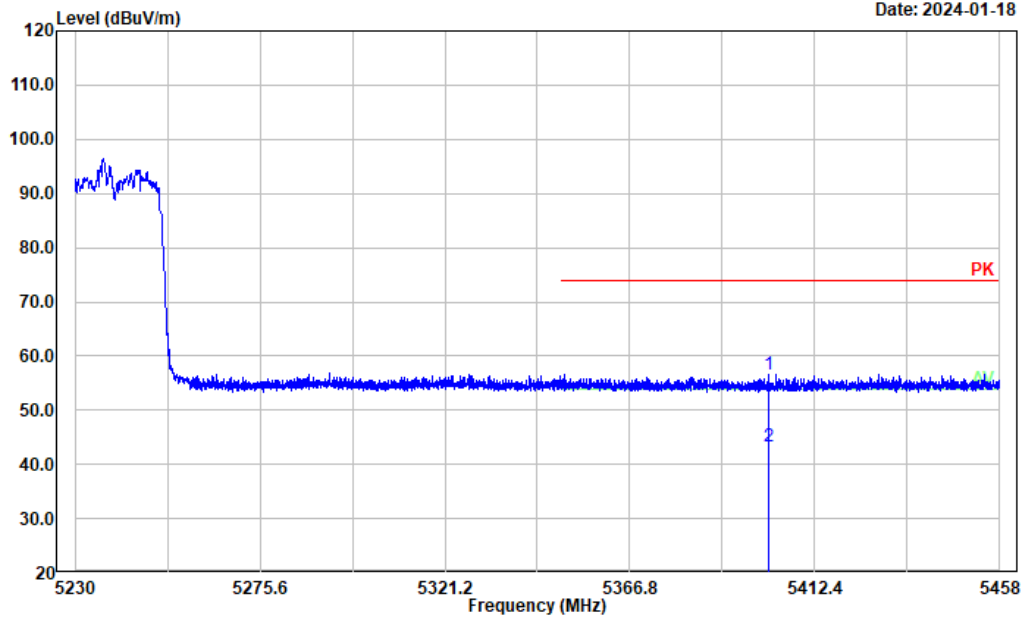


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5420.432	45.11	11.86	56.97	74.00	17.03	Peak
2	5420.432	31.49	11.86	43.35	54.00	10.65	Average

802.11ax40 Low Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

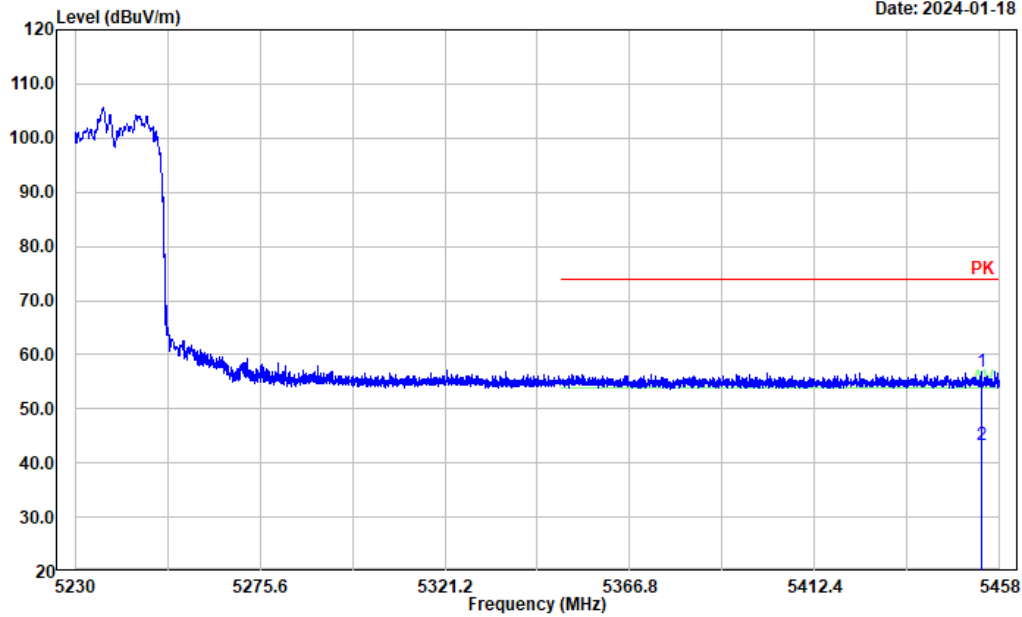
Date: 2024-01-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5401.091	44.80	11.86	56.66	74.00	17.34	Peak
2	5401.091	31.49	11.86	43.35	54.00	10.65	Average

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-18

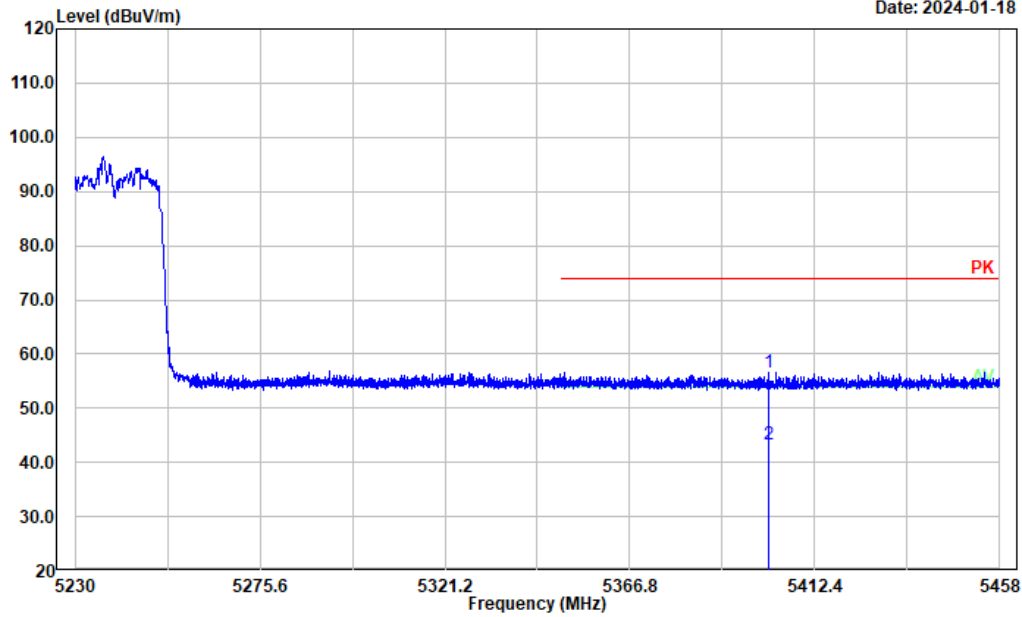


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5453.440	45.08	11.87	56.95	74.00	17.05	Peak
2	5453.440	31.48	11.87	43.35	54.00	10.65	Average

802.11ax40 High Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

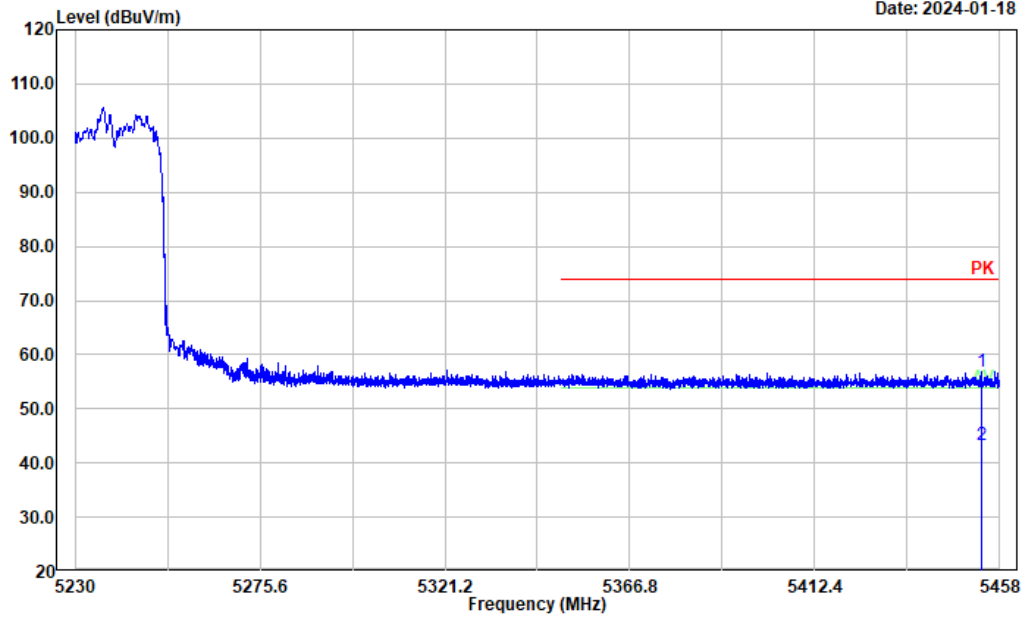
Date: 2024-01-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5401.091	44.80	11.86	56.66	74.00	17.34	Peak
2	5401.091	31.49	11.86	43.35	54.00	10.65	Average

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-18

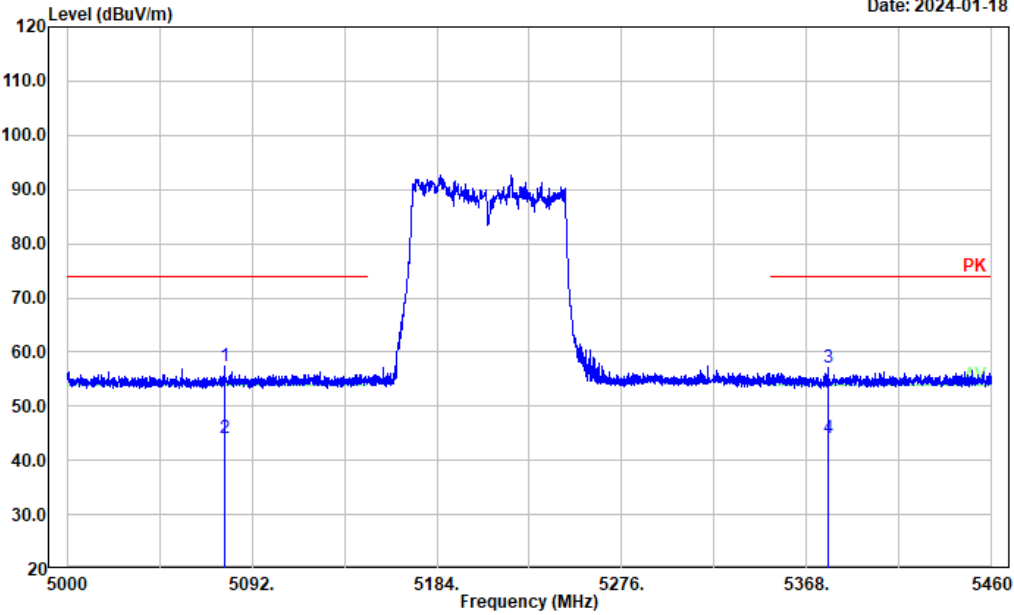


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5453.440	45.08	11.87	56.95	74.00	17.05	Peak
2	5453.440	31.48	11.87	43.35	54.00	10.65	Average

802.11ac80 Middle Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

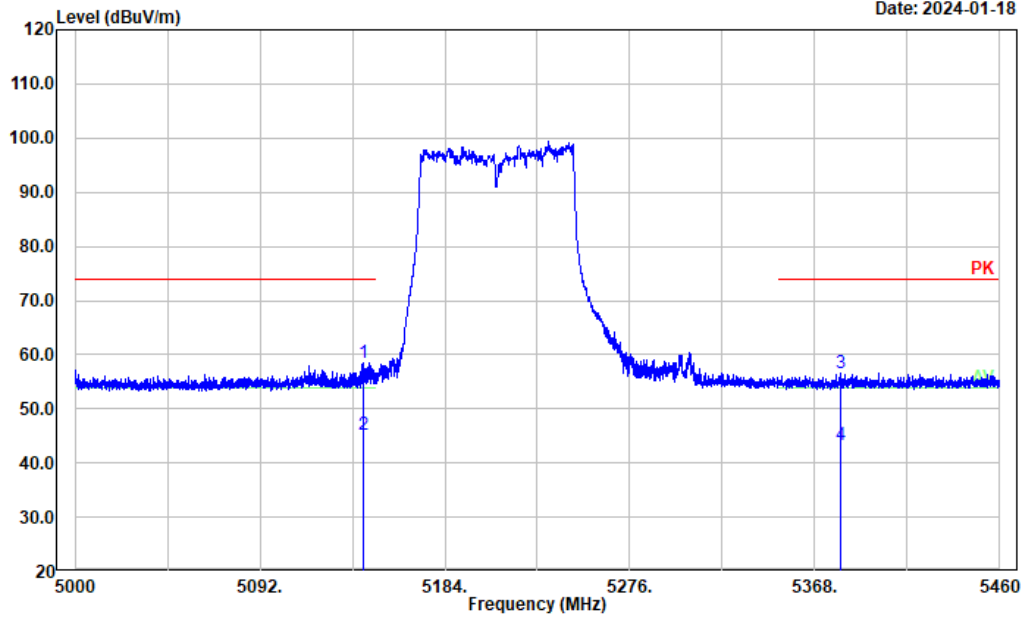
Date: 2024-01-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5078.476	45.56	11.74	57.30	74.00	16.70	Peak
2	5078.476	32.41	11.74	44.15	54.00	9.85	Average
3	5378.488	45.25	11.89	57.14	74.00	16.86	Peak
4	5378.488	32.32	11.89	44.21	54.00	9.79	Average

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-18

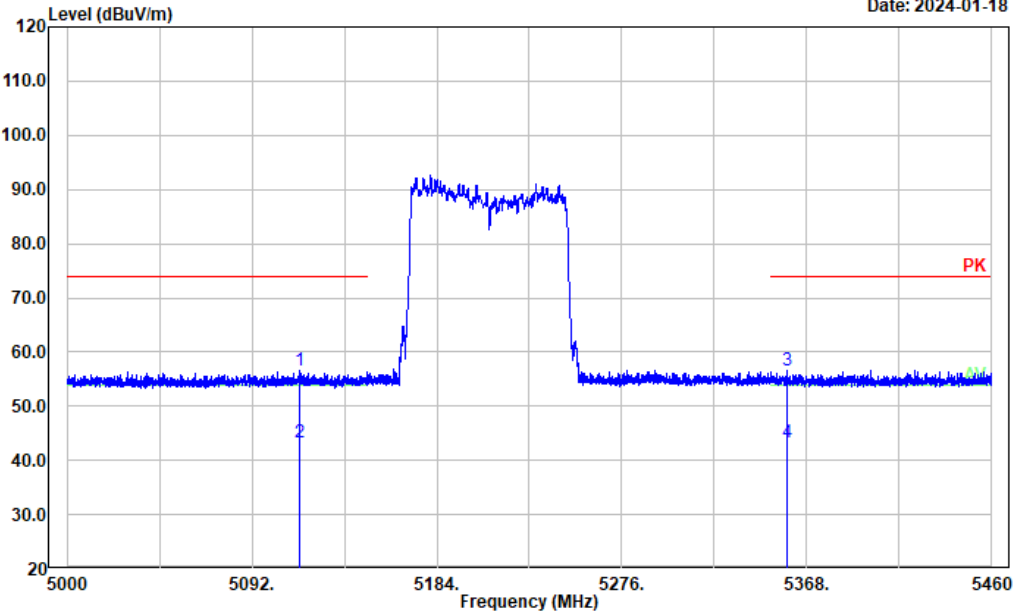


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5143.520	46.90	11.69	58.59	74.00	15.41	Peak
2	5143.520	33.43	11.69	45.12	54.00	8.88	Average
3	5380.512	44.74	11.90	56.64	74.00	17.36	Peak
4	5380.512	31.42	11.90	43.32	54.00	10.68	Average

802.11ax80 Middle Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

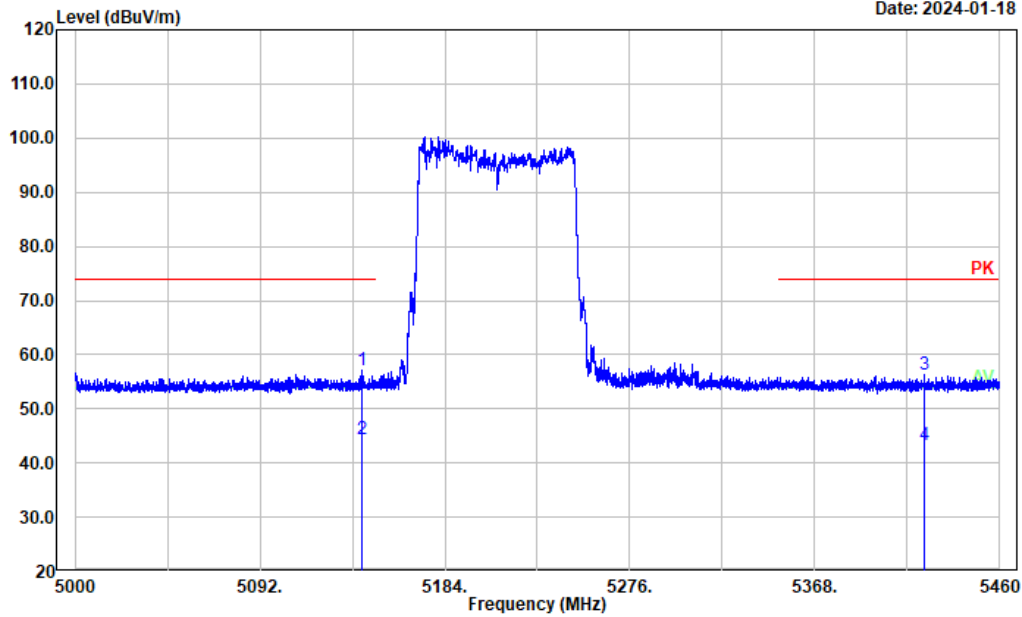
Date: 2024-01-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5115.644	44.87	11.76	56.63	74.00	17.37	Peak
2	5115.644	31.56	11.76	43.32	54.00	10.68	Average
3	5358.432	44.76	11.93	56.69	74.00	17.31	Peak
4	5358.432	31.39	11.93	43.32	54.00	10.68	Average

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-18

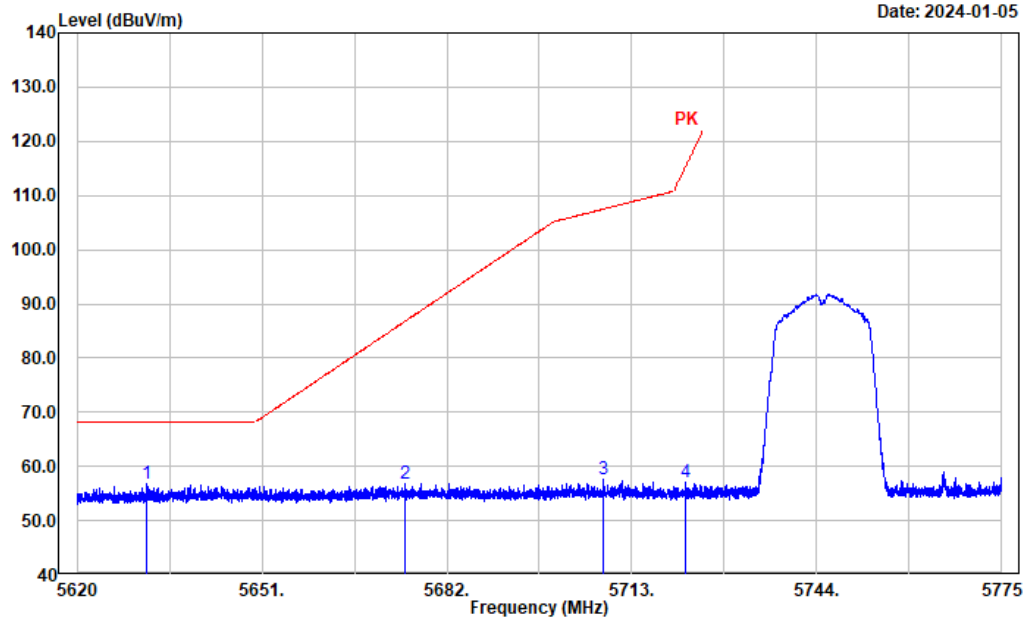


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5142.600	45.57	11.69	57.26	74.00	16.74	Peak
2	5142.600	32.62	11.69	44.31	54.00	9.69	Average
3	5422.188	44.57	11.86	56.43	74.00	17.57	Peak
4	5422.188	31.51	11.86	43.37	54.00	10.63	Average

5725-5850 MHz Band Edge Test Plots:
Chain 0 802.11a Low Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

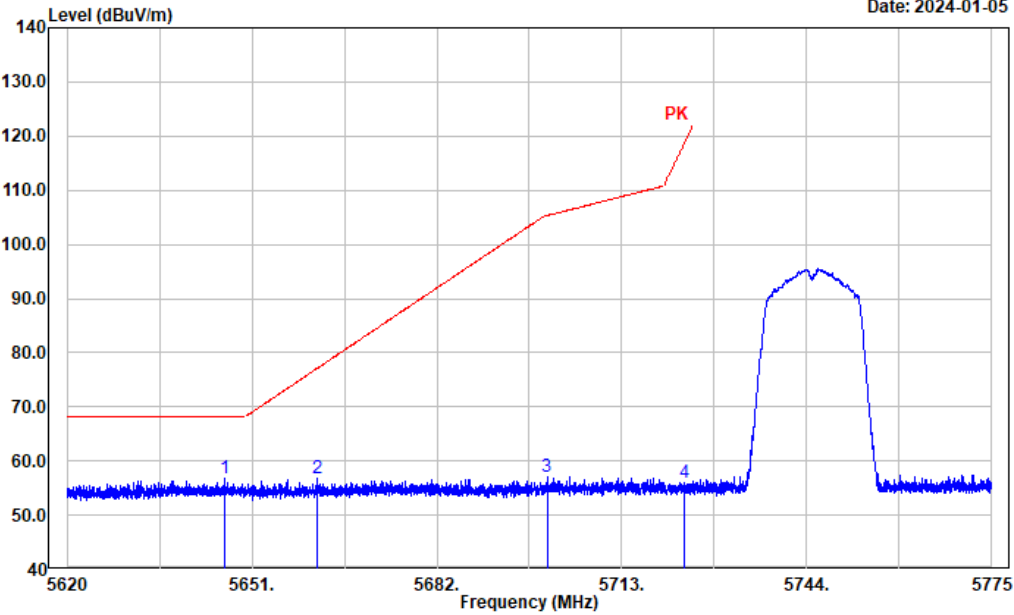
Date: 2024-01-05



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5631.751	44.64	12.22	56.86	68.20	11.34	Peak
2	5675.098	44.46	12.44	56.90	86.81	29.91	Peak
3	5708.306	45.00	12.56	57.56	107.53	49.97	Peak
4	5722.072	44.51	12.57	57.08	115.53	58.45	Peak

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-05

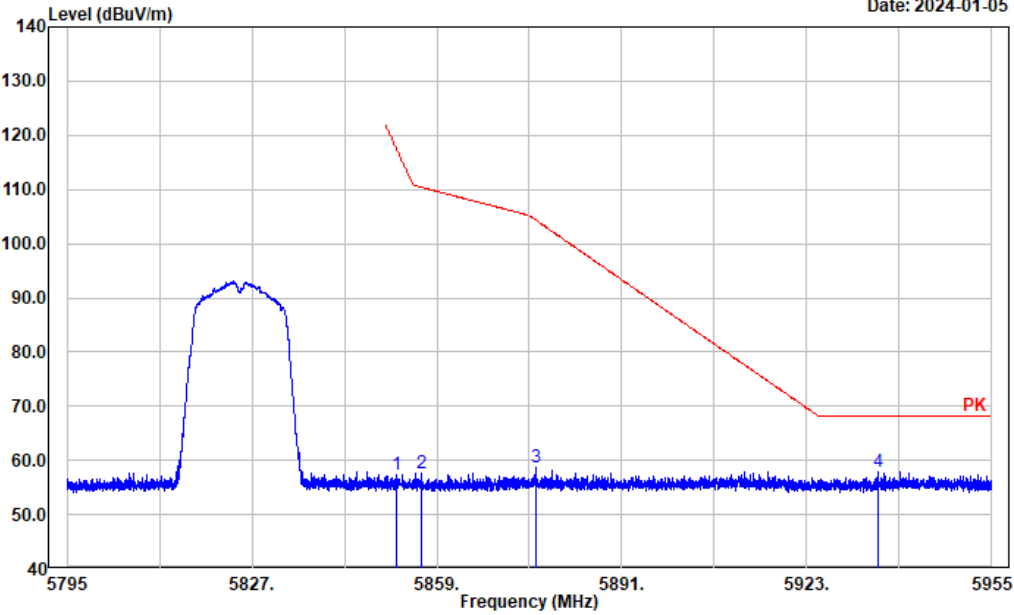


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5646.355	44.55	12.30	56.85	68.20	11.35	Peak
2	5661.827	44.37	12.38	56.75	76.98	20.23	Peak
3	5700.461	44.43	12.55	56.98	105.33	48.35	Peak
4	5723.437	43.50	12.57	56.07	118.64	62.57	Peak

Chain 0 802.11a High Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

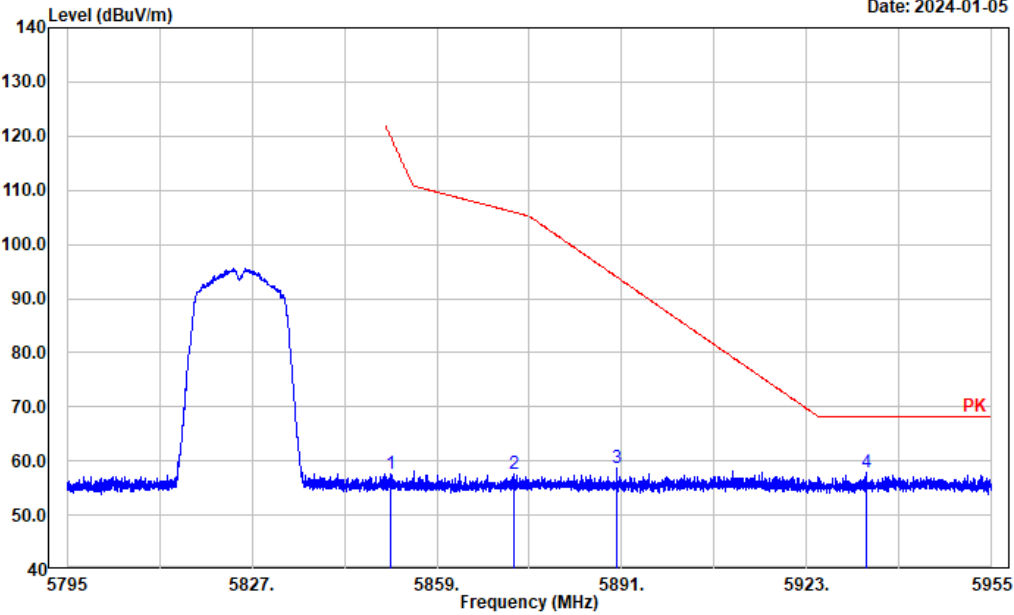
Date: 2024-01-05



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5851.971	44.69	12.78	57.47	117.70	60.23	Peak
2	5856.228	44.91	12.80	57.71	110.46	52.75	Peak
3	5876.168	45.80	12.89	58.69	104.33	45.64	Peak
4	5935.284	44.73	13.04	57.77	68.20	10.43	Peak

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-05

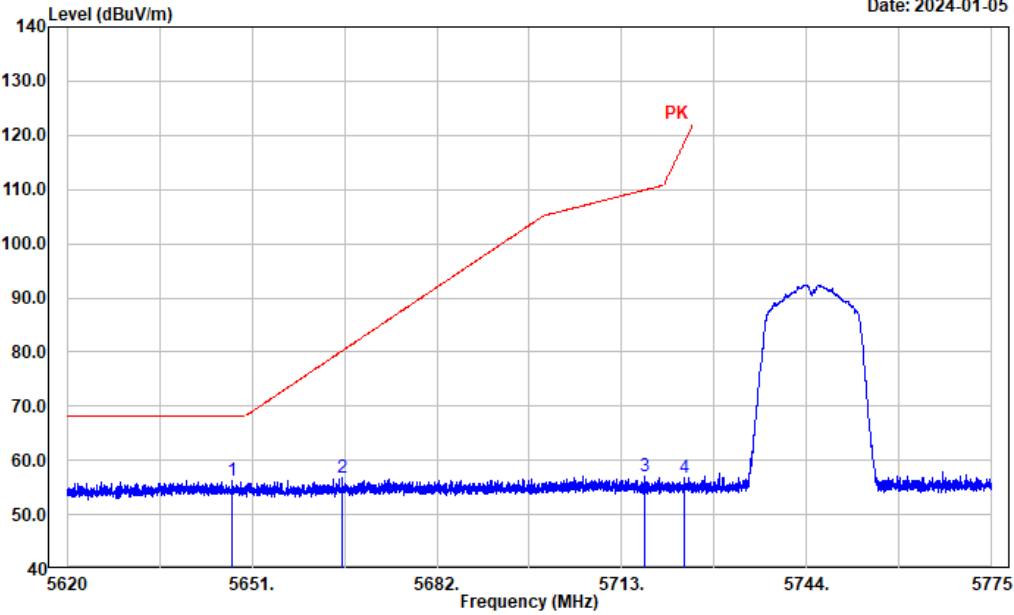


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5851.107	44.71	12.77	57.48	119.67	62.19	Peak
2	5872.328	44.74	12.89	57.63	105.95	48.32	Peak
3	5890.091	45.86	12.97	58.83	94.00	35.17	Peak
4	5933.204	44.84	13.03	57.87	68.20	10.33	Peak

Chain 1 802.11a Low Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

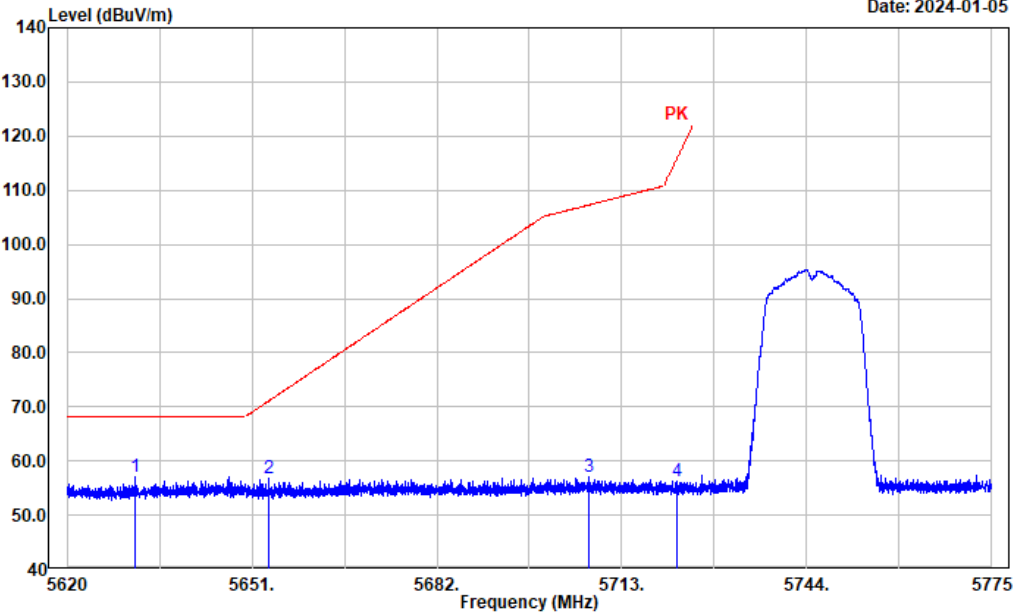
Date: 2024-01-05



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5647.626	44.00	12.32	56.32	68.20	11.88	Peak
2	5666.075	44.51	12.40	56.91	80.13	23.22	Peak
3	5716.801	44.40	12.57	56.97	109.91	52.94	Peak
4	5723.499	44.28	12.57	56.85	118.78	61.93	Peak

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-05

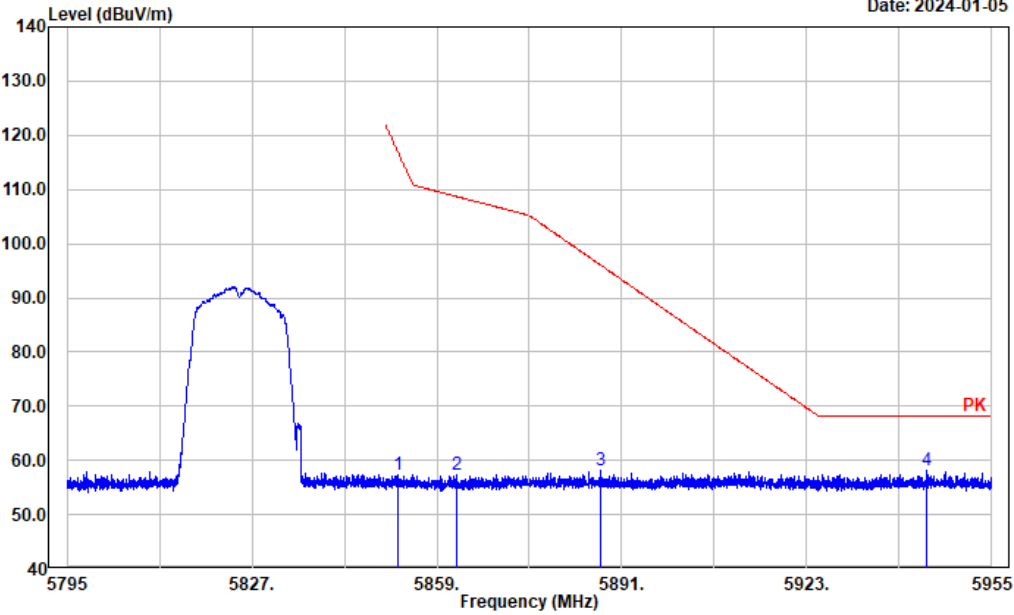


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5631.379	44.94	12.22	57.16	68.20	11.04	Peak
2	5653.735	44.48	12.35	56.83	70.98	14.15	Peak
3	5707.500	44.43	12.56	56.99	107.30	50.31	Peak
4	5722.290	43.76	12.57	56.33	116.02	59.69	Peak

Chain 1 802.11a High Channel:

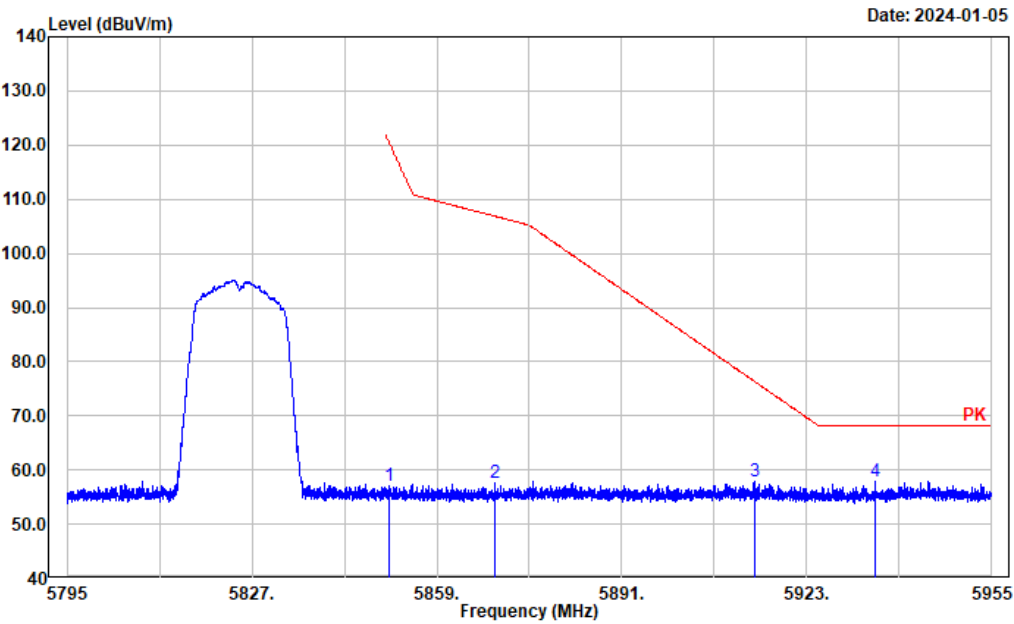
Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

Date: 2024-01-05



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5852.228	44.56	12.78	57.34	117.12	59.78	Peak
2	5862.341	44.61	12.83	57.44	108.74	51.30	Peak
3	5887.435	45.08	12.96	58.04	95.97	37.93	Peak
4	5943.734	45.14	13.03	58.17	68.20	10.03	Peak

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

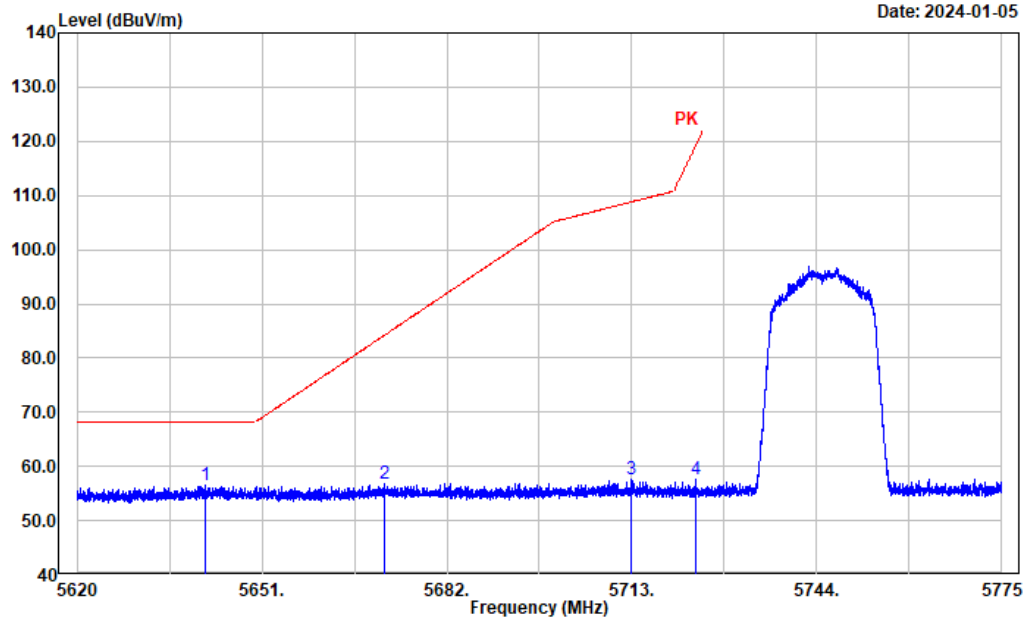


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5850.691	44.22	12.77	56.99	120.62	63.63	Peak
2	5868.999	44.67	12.87	57.54	106.88	49.34	Peak
3	5914.064	44.83	13.02	57.85	76.27	18.42	Peak
4	5934.836	44.82	13.04	57.86	68.20	10.34	Peak

802.11n20 Low Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

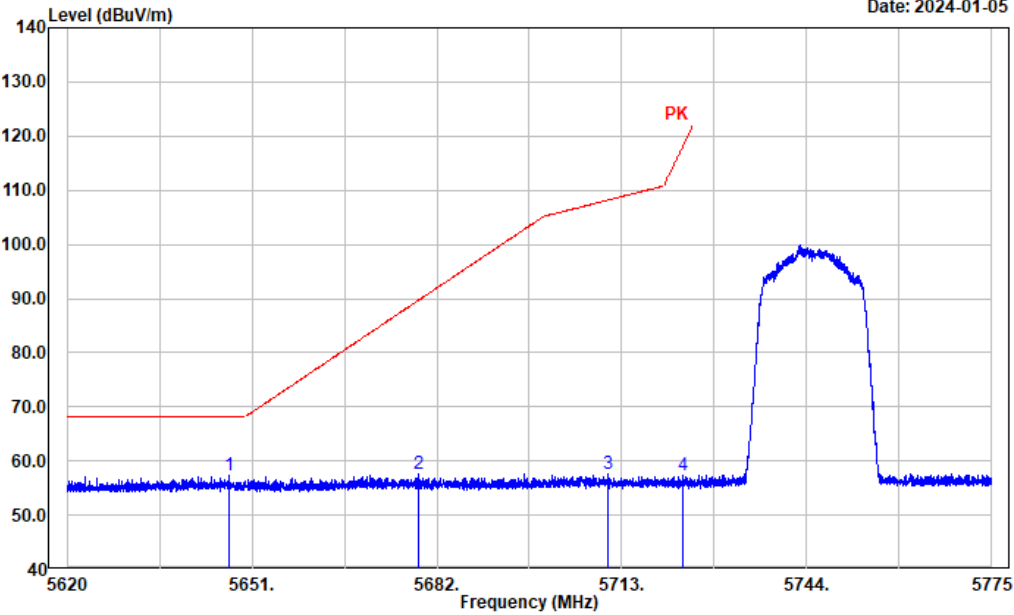
Date: 2024-01-05



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5641.487	44.17	12.28	56.45	68.20	11.75	Peak
2	5671.625	44.50	12.42	56.92	84.24	27.32	Peak
3	5712.895	44.96	12.56	57.52	108.81	51.29	Peak
4	5723.623	44.98	12.57	57.55	119.06	61.51	Peak

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-05

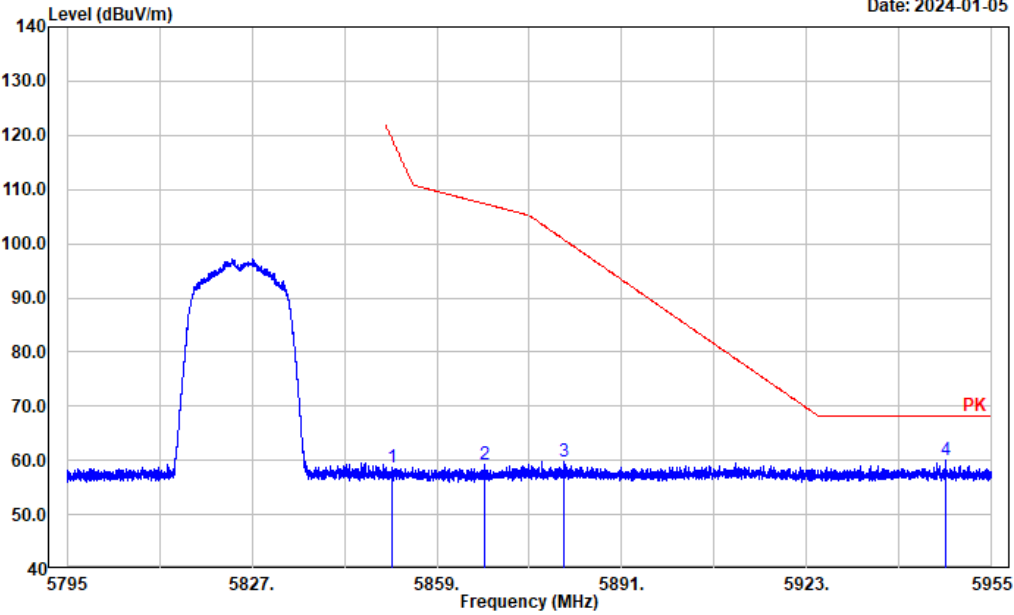


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5647.224	44.92	12.32	57.24	68.20	10.96	Peak
2	5678.943	45.04	12.46	57.50	89.66	32.16	Peak
3	5710.631	44.93	12.56	57.49	108.18	50.69	Peak
4	5723.126	44.78	12.57	57.35	117.93	60.58	Peak

802.11n20 High Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

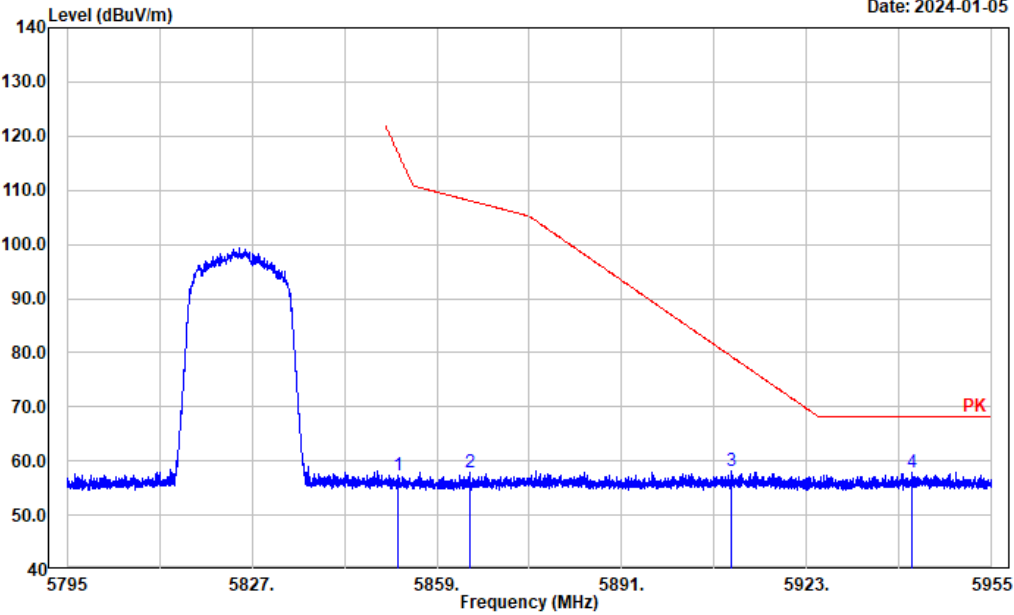
Date: 2024-01-05



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5851.224	46.04	12.77	58.81	119.41	60.60	Peak
2	5867.256	46.50	12.86	59.36	107.37	48.01	Peak
3	5881.080	46.96	12.92	59.88	100.68	40.80	Peak
4	5946.968	47.05	13.04	60.09	68.20	8.11	Peak

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-05

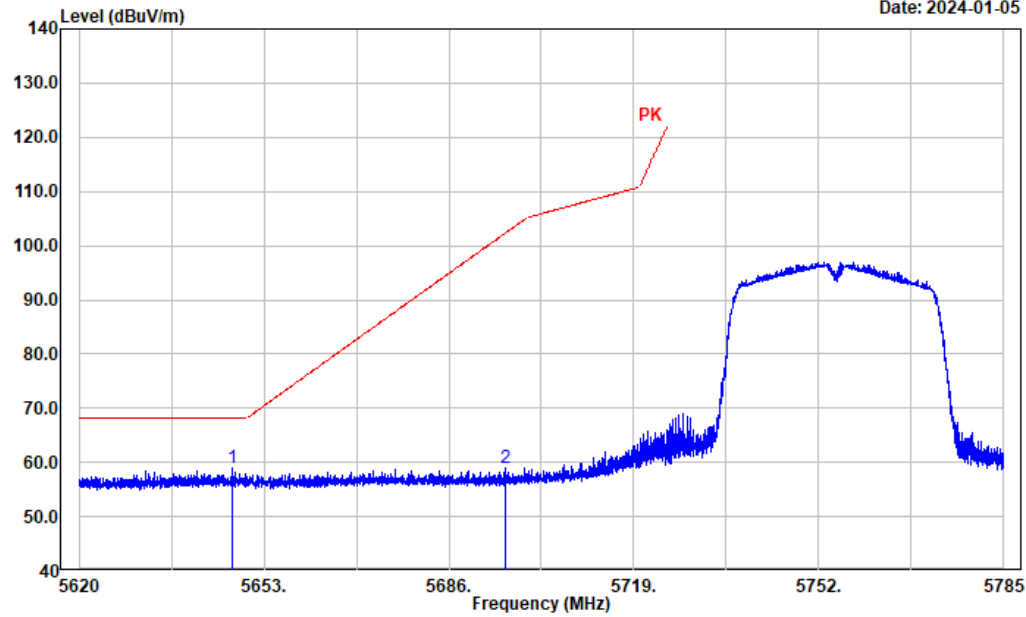


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5852.164	44.51	12.78	57.29	117.27	59.98	Peak
2	5864.614	45.09	12.84	57.93	108.11	50.18	Peak
3	5909.967	45.14	13.02	58.16	79.29	21.13	Peak
4	5941.269	44.89	13.04	57.93	68.20	10.27	Peak

802.11n40 Low Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

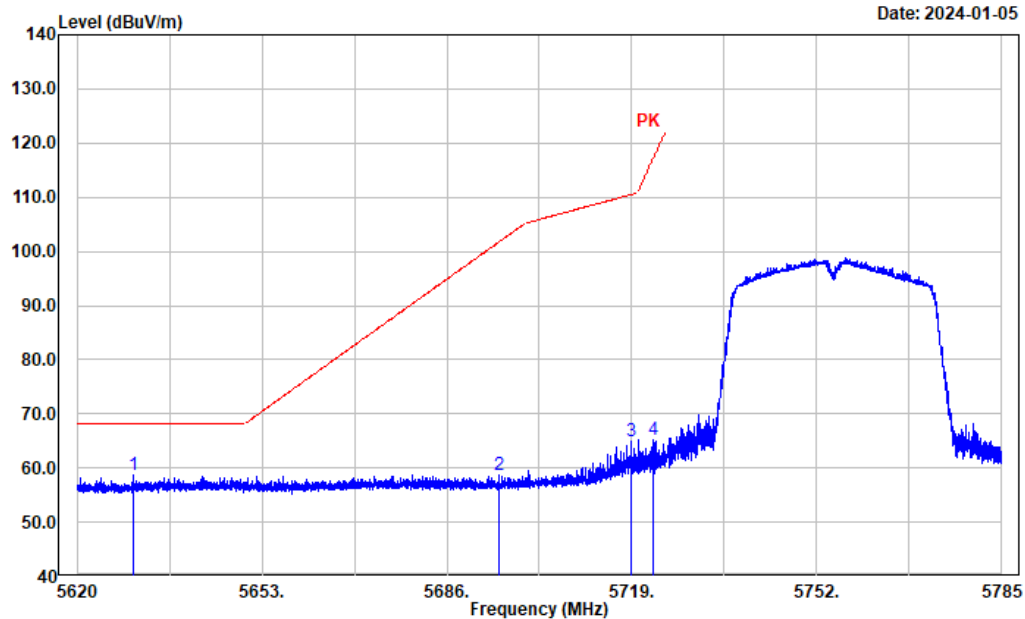
Date: 2024-01-05



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5647.291	46.67	12.32	58.99	68.20	9.21	Peak
2	5695.966	46.43	12.53	58.96	102.23	43.27	Peak

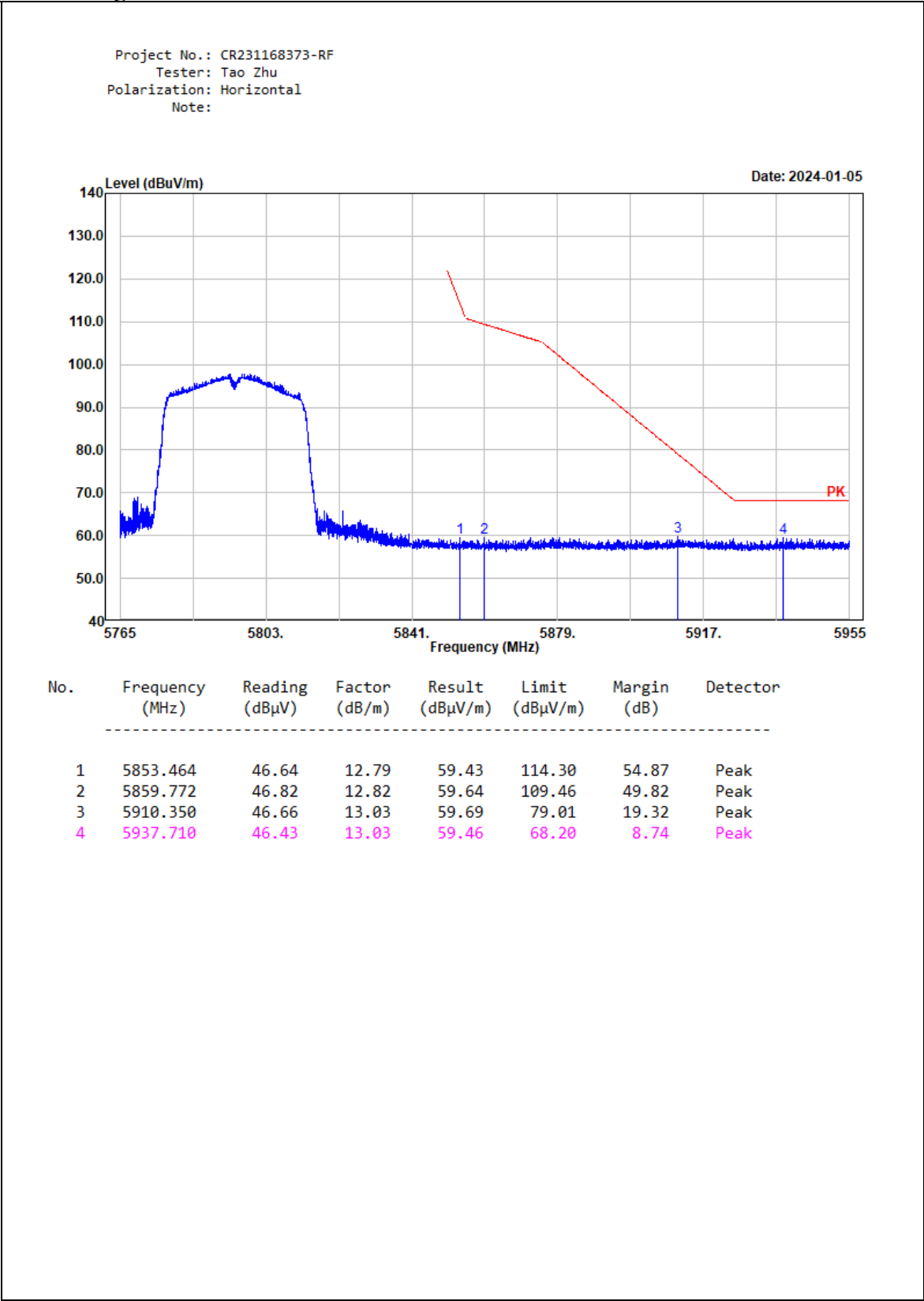
Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-05



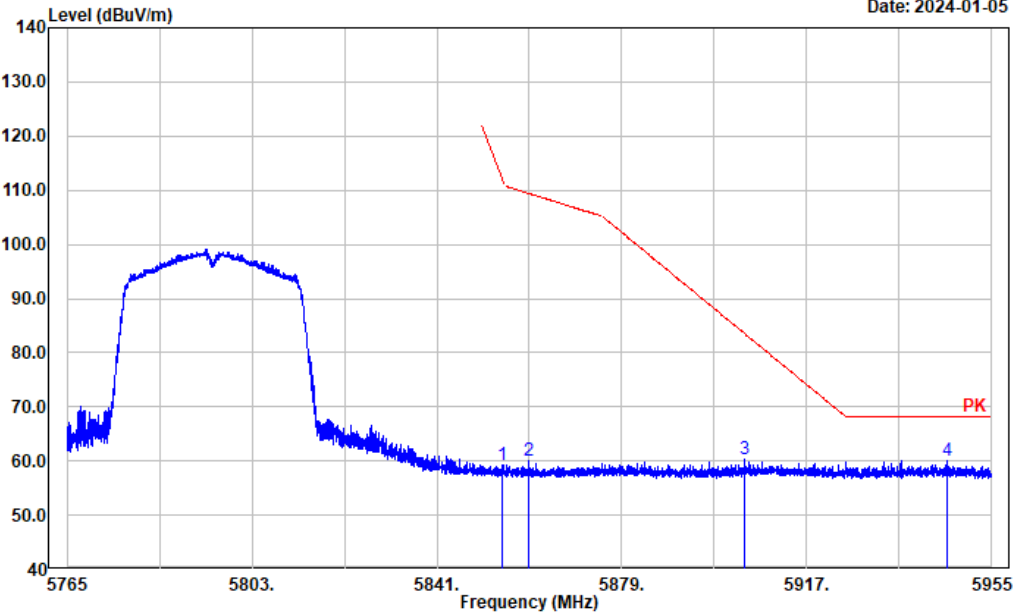
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5629.999	46.39	12.22	58.61	68.20	9.59	Peak
2	5695.306	46.12	12.53	58.65	101.74	43.09	Peak
3	5718.901	52.46	12.57	65.03	110.49	45.46	Peak
4	5722.729	52.52	12.57	65.09	117.02	51.93	Peak

802.11n40 High Channel:



Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-05

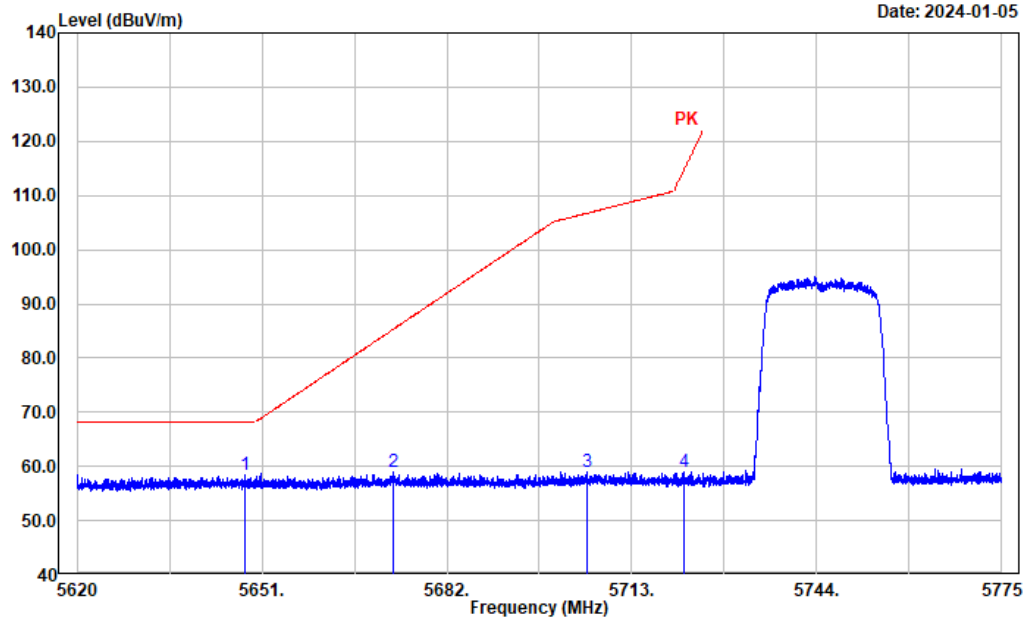


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5854.300	46.55	12.80	59.35	112.40	53.05	Peak
2	5860.000	47.12	12.82	59.94	109.40	49.46	Peak
3	5904.346	47.22	13.02	60.24	83.45	23.21	Peak
4	5945.728	47.01	13.03	60.04	68.20	8.16	Peak

802.11ax20 Low Channel:

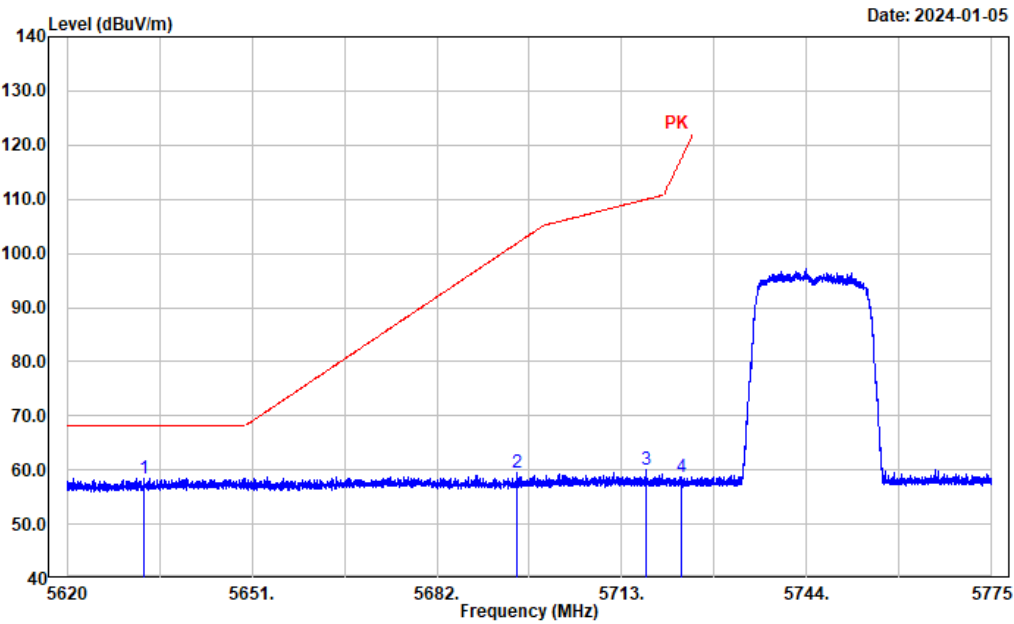
Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

Date: 2024-01-05



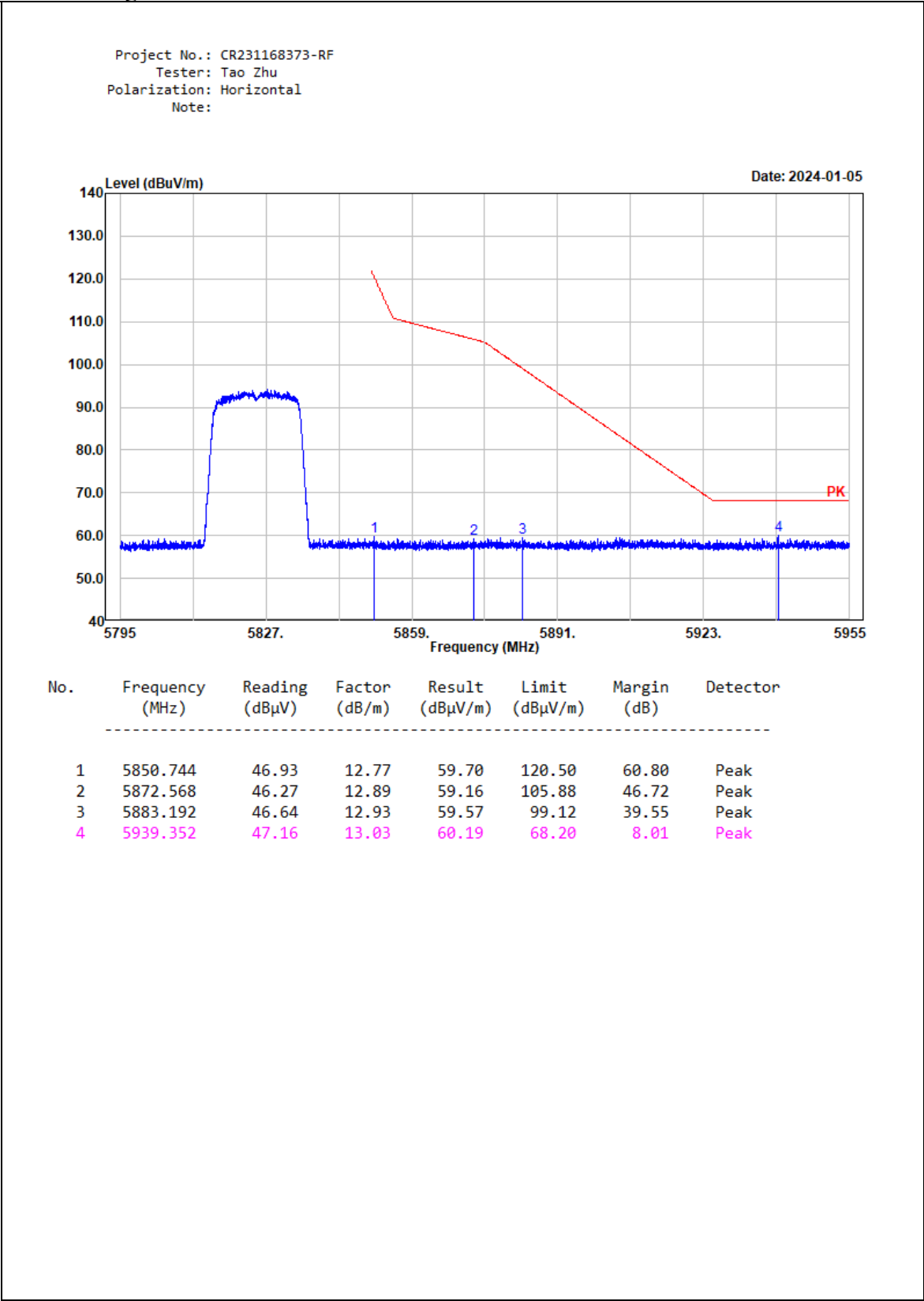
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5648.241	46.22	12.32	58.54	68.20	9.66	Peak
2	5672.948	46.47	12.43	58.90	85.22	26.32	Peak
3	5705.529	46.50	12.55	59.05	106.75	47.70	Peak
4	5721.804	46.50	12.57	59.07	114.91	55.84	Peak

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:



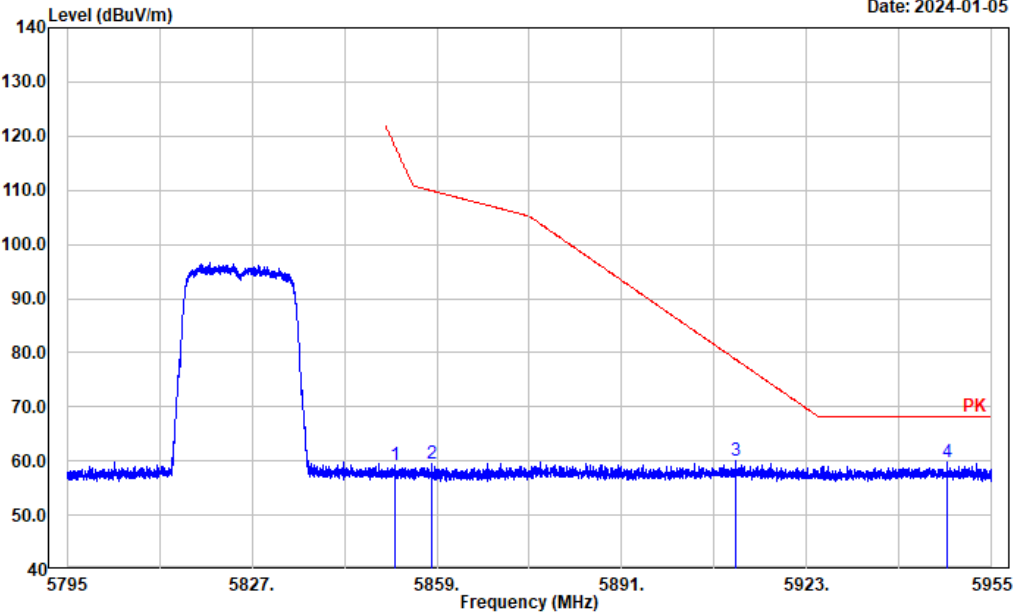
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5632.896	46.31	12.23	58.54	68.20	9.66	Peak
2	5695.423	47.00	12.53	59.53	101.83	42.30	Peak
3	5716.968	47.45	12.57	60.02	109.95	49.93	Peak
4	5723.013	46.06	12.57	58.63	117.67	59.04	Peak

802.11ax20 High Channel:



Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-05

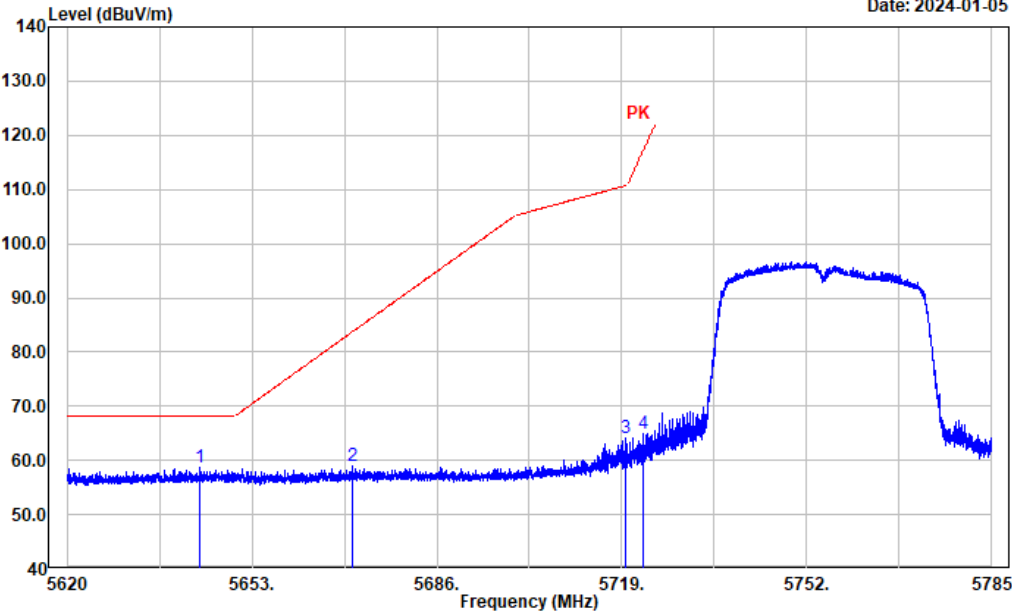


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5851.704	46.41	12.78	59.19	118.31	59.12	Peak
2	5858.040	46.78	12.81	59.59	109.95	50.36	Peak
3	5910.776	46.98	13.03	60.01	78.69	18.68	Peak
4	5947.192	46.68	13.04	59.72	68.20	8.48	Peak

802.11ax40 Low Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

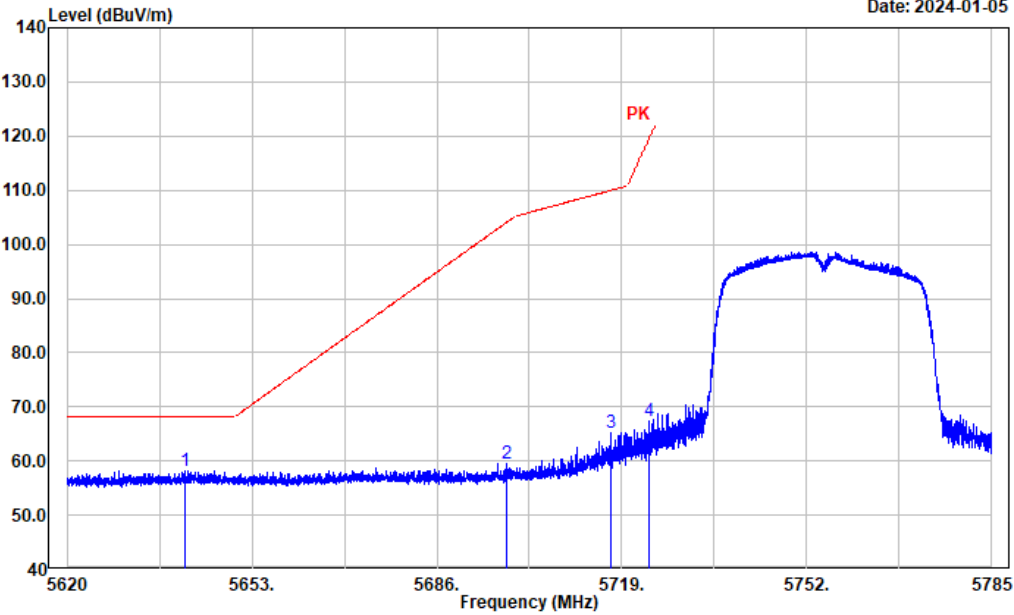
Date: 2024-01-05



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5643.694	46.44	12.29	58.73	68.20	9.47	Peak
2	5670.853	46.64	12.42	59.06	83.67	24.61	Peak
3	5719.759	51.44	12.57	64.01	110.73	46.72	Peak
4	5722.729	52.39	12.57	64.96	117.02	52.06	Peak

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-05

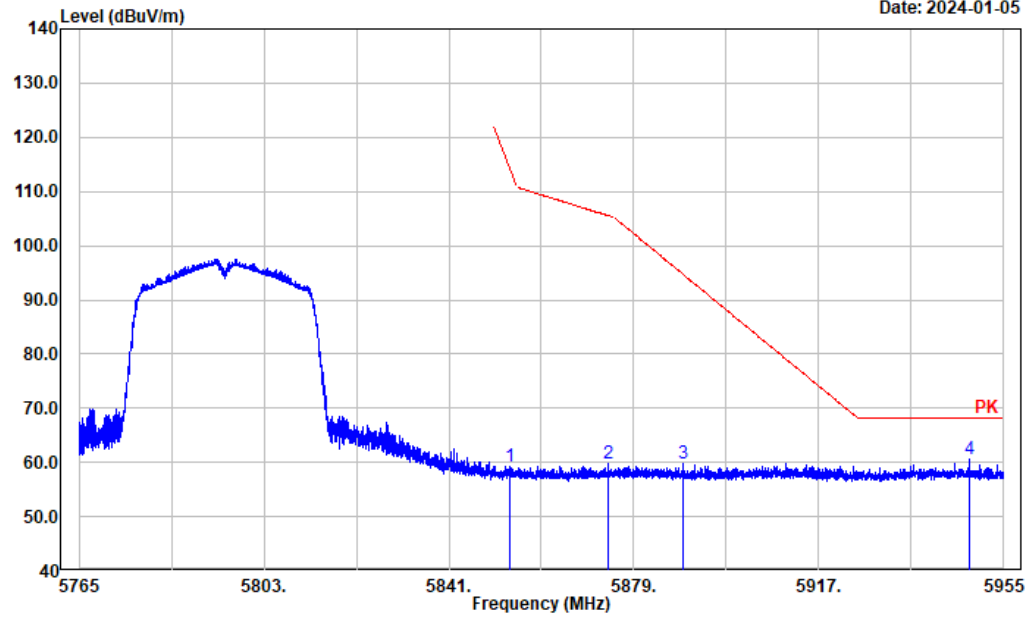


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5640.955	45.95	12.28	58.23	68.20	9.97	Peak
2	5698.342	46.90	12.55	59.45	103.98	44.53	Peak
3	5716.921	52.66	12.57	65.23	109.94	44.71	Peak
4	5723.752	54.93	12.57	67.50	119.36	51.86	Peak

802.11ax40 High Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

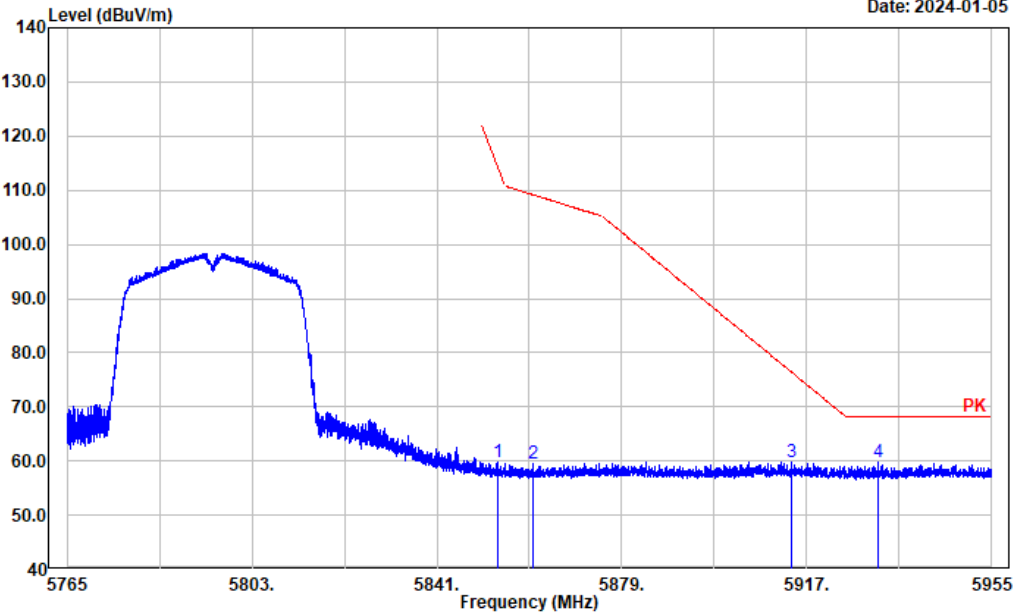
Date: 2024-01-05



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5853.388	46.54	12.79	59.33	114.47	55.14	Peak
2	5873.870	46.88	12.90	59.78	105.52	45.74	Peak
3	5889.260	46.94	12.97	59.91	94.62	34.71	Peak
4	5947.818	47.66	13.03	60.69	68.20	7.51	Peak

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-05

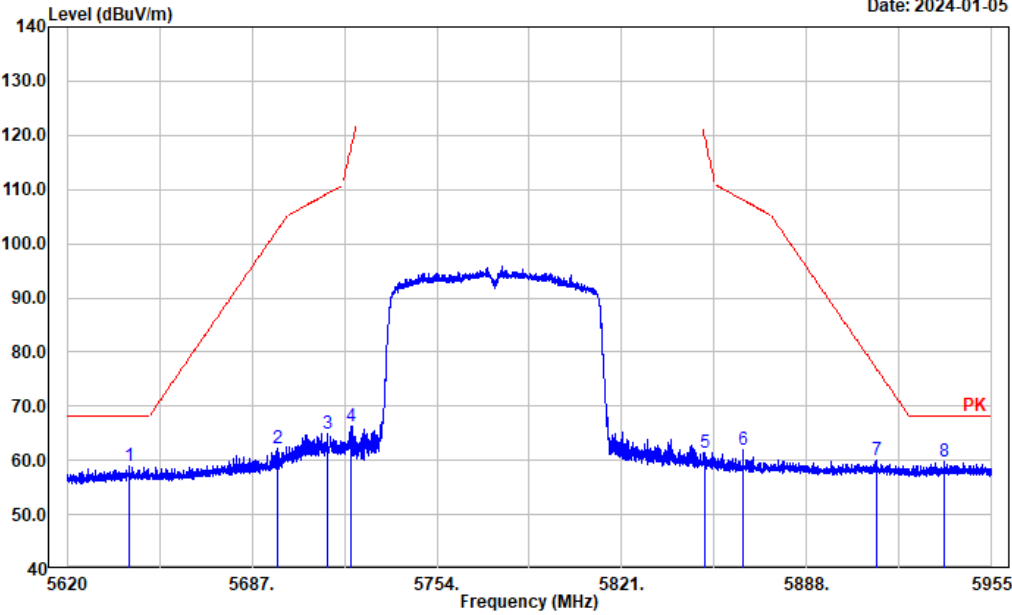


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5853.654	46.87	12.79	59.66	113.87	54.21	Peak
2	5860.798	46.79	12.82	59.61	109.17	49.56	Peak
3	5913.770	46.76	13.03	59.79	76.48	16.69	Peak
4	5931.668	46.84	13.03	59.87	68.20	8.33	Peak

802.11ac80 Middle Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

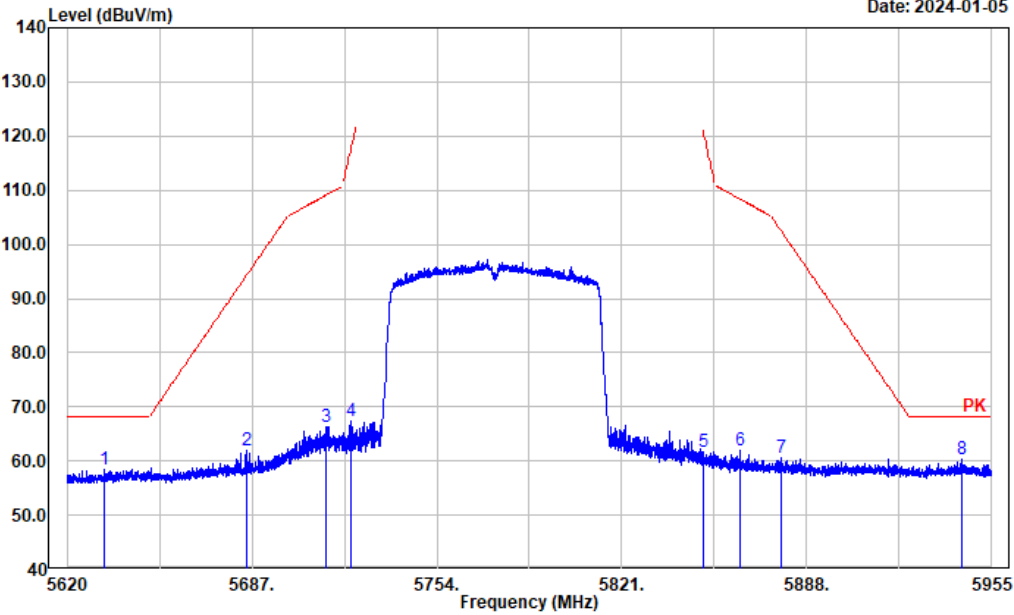
Date: 2024-01-05



No.	Frequency (MHz)	Reading (dBUV)	Factor (dB/m)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	5642.713	46.56	12.28	58.84	68.20	9.36	Peak
2	5696.380	49.69	12.53	62.22	102.53	40.31	Peak
3	5714.403	52.32	12.56	64.88	109.23	44.35	Peak
4	5722.845	53.84	12.57	66.41	117.29	50.88	Peak
5	5850.882	48.70	12.77	61.47	120.19	58.72	Peak
6	5864.818	49.19	12.84	62.03	108.05	46.02	Peak
7	5913.326	47.12	13.03	60.15	76.81	16.66	Peak
8	5937.647	46.71	13.03	59.74	68.20	8.46	Peak

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-05

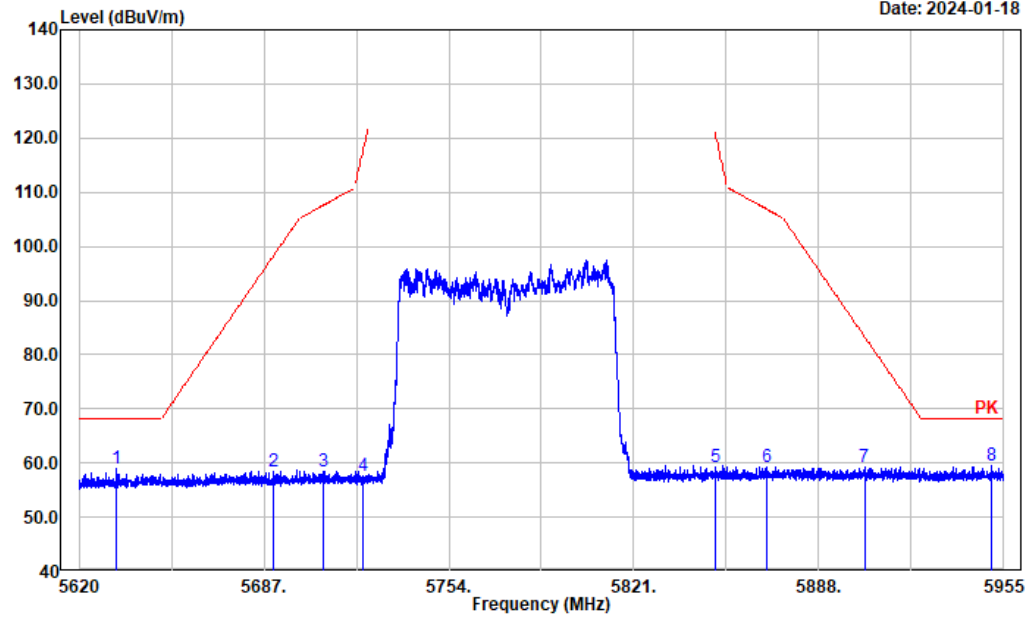


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5633.601	46.31	12.23	58.54	68.20	9.66	Peak
2	5685.258	49.48	12.49	61.97	94.32	32.35	Peak
3	5713.733	53.83	12.56	66.39	109.05	42.66	Peak
4	5722.711	54.88	12.57	67.45	116.98	49.53	Peak
5	5850.547	49.02	12.77	61.79	120.95	59.16	Peak
6	5863.612	49.23	12.83	62.06	108.39	46.33	Peak
7	5878.486	47.63	12.91	60.54	102.61	42.07	Peak
8	5944.347	47.41	13.03	60.44	68.20	7.76	Peak

802.11ax80 Middle Channel:

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

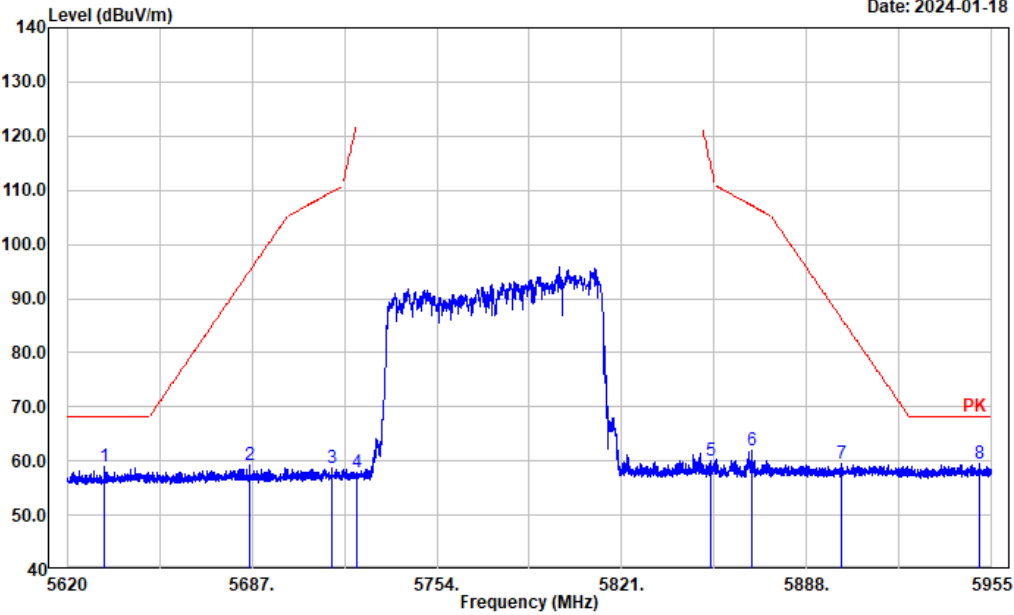
Date: 2024-01-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5633.738	46.72	12.23	58.95	68.20	9.25	Peak
2	5690.364	45.93	12.50	58.43	98.09	39.66	Peak
3	5708.324	45.97	12.56	58.53	107.53	49.00	Peak
4	5722.866	45.17	12.57	57.74	117.34	59.60	Peak
5	5850.459	46.53	12.77	59.30	121.15	61.85	Peak
6	5869.357	46.47	12.87	59.34	106.78	47.44	Peak
7	5904.539	46.17	13.02	59.19	83.30	24.11	Peak
8	5950.778	46.55	13.04	59.59	68.20	8.61	Peak

Project No.: CR231168373-RF
Tester: Tao Zhu
Polarization: Vertical
Note:

Date: 2024-01-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5633.738	46.72	12.23	58.95	68.20	9.25	Peak
2	5686.209	46.62	12.49	59.11	95.03	35.92	Peak
3	5715.963	46.26	12.56	58.82	109.67	50.85	Peak
4	5724.876	45.45	12.57	58.02	121.92	63.90	Peak
5	5853.207	47.40	12.79	60.19	114.89	54.70	Peak
6	5867.950	49.11	12.86	61.97	107.17	45.20	Peak
7	5900.384	46.52	13.02	59.54	86.38	26.84	Peak
8	5950.778	46.55	13.04	59.59	68.20	8.61	Peak

4.3 RF Conducted data:

Please refer to Annex "Appendix 00D" for detail test data.

5. EUT PHOTOGRAPHS

Please refer to the attachment CR231168373-EXP EUT EXTERNAL PHOTOGRAPHS and
CR231168373-INP EUT INTERNAL PHOTOGRAPHS

6. TEST SETUP PHOTOGRAPHS

Please refer to the attachment CR231168373-RF-00D-TSP TEST SETUP PHOTOGRAPHS.

===== END OF REPORT =====