



中认信通
CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



TEST REPORT

Applicant: LAVA International Limited

Address: A-56, Sector-64, Gautam Buddha Nagar, Noida Uttar Pradesh 201301, India

FCC ID: 2ARTX-LEX401

Product Name: Mobile Phone

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)

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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	CR231059186-00D	Original Report	2024/01/19

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

1.1.1 General:

EUT Name:	Mobile Phone
Trade Name:	LAVA
EUT Model:	LEX401
Multiple Model(s):	Z34
Operation Frequency:	Band1: 5180-5240 MHz (802.11a/n ht20/ac vht20) 5190-5230 MHz(802.11n ht40/ac vht40) 5210 MHz(802.11ac vht80) Band2: 5260-5320 MHz (802.11a/n ht20/ac vht20) 5270-5310 MHz(802.11n ht40/ac vht40) 5290 MHz(802.11ac vht80) Band3: 5500-5720 MHz (802.11a/n ht20/ac vht20) 5510-5710 MHz(802.11n ht40/ac vht40) 5530-5690MHz(802.11ac vht80)
Maximum Average Output Power (Conducted):	12.77 dBm in 5150-5250 MHz Band 13.57 dBm in 5250-5350 MHz Band 13.47 dBm in 5470-5725 MHz Band
Modulation Type:	802.11a/n/ac:OFDM-BPSK, QPSK, 16QAM, 64QAM,256QAM
Rated Input Voltage:	DC 3.85V from battery or 5V from adapter
Serial Number:	RF:2C4U-1 RE 2C4U-2 CE: 2C4U-5
EUT Received Date:	2023/10/20
EUT Received Status:	Good
Note: The Multiple models are electrically identical with the test model. Please refer to the declaration letter for more detail, which was provided by manufacturer.	

1.1.2 Operation Frequency Detail:

For 802.11a/n ht20/ac vht20:

5150-5250MHz Band		5250-5350MHz Band		5470-5725MHz	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	52	5260	100	5500
40	5200	56	5280	104	5520
44	5220	60	5300	108	5540
48	5240	64	5320	112	5560
/	/	/	/	116	5580
/	/	/	/	120	5600
/	/	/	/	124	5620
/	/	/	/	128	5640
/	/	/	/	132	5660
/	/	/	/	136	5680
/	/	/	/	140	5700
/	/	/	/	144	5720

Per section 15.31(m), the below frequencies were performed the test as below:

36	5180	52	5260	100	5500
40	5200	56	5280	116	5580
48	5240	64	5320	140	5700
/	/	/	/	144	5720

For 802.11n ht40/ac vht40:

5150-5250MHz Band		5250-5350MHz Band		5470-5725MHz	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	54	5270	102	5510
46	5230	62	5310	110	5550
/	/	/	/	118	5590
/	/	/	/	126	5630
/	/	/	/	134	5670
/	/	/	/	142	5710
Per section 15.31(m), the below frequencies were performed the test as below:					
38	5190	54	5270	102	5510
46	5230	62	5310	110	5550
/	/	/	/	134	5670
/	/	/	/	142	5710

For 802.11ac vht80:

5150-5250MHz Band		5250-5350MHz Band		5470-5725MHz	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
42	5210	58	5290	106	5530
/	/	/	/	122	5610
/	/	/	/	138	5690
Per section 15.31(m), the below frequencies were performed the test as below:					
42	5210	58	5290	106	5530
/	/	/	/	122	5610
/	/	/	/	138	5690
Note: the channel in bold was straddle channels selected to test.					

1.1.3 Antenna Information Detail▲:

Antenna Type	input impedance (Ohm)	Frequency Range	Antenna Gain
FPC	50	5150-5250MHz	-0.75 dBi
		5250-5350 MHz	-0.75 dBi
		5470-5725 MHz	-0.75 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	Parameters
Adapter	Shenzhen Top power technology Co., LTD	TOP-804-050200	Input: AC 100-240V~50/60Hz, 0.3A Output: DC 5.0V, 2000mA

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:			Engineer Mode	
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
802.11a	Lowest	5180	6Mbps	16
	Middle	5200	6Mbps	16
	Highest	5240	6Mbps	16
802.11n ht20	Lowest	5180	MCS0	16
	Middle	5200	MCS0	16
	Highest	5240	MCS0	16
802.11n ht40	Lowest	5190	MCS0	16
	Highest	5230	MCS0	16
802.11ac vht80	Middle	5210	MCS0	16
5250-5350 MHz Band:				
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting
802.11a	Lowest	5260	6Mbps	16
	Middle	5280	6Mbps	16
	Highest	5320	6Mbps	16
802.11n ht20	Lowest	5260	MCS0	16
	Middle	5280	MCS0	16
	Highest	5320	MCS0	16
802.11n ht40	Lowest	5270	MCS0	16
	Highest	5310	MCS0	16
802.11ac vht80	Middle	5290	MCS0	16

5470-5725 MHz Band:				
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting
802.11a	Lowest	5500	6Mbps	15
	Middle	5580	6Mbps	15
	Highest	5700	6Mbps	15
802.11n ht20	Lowest	5500	MCS0	15
	Middle	5580	MCS0	15
	Highest	5700	MCS0	15
802.11n ht40	Lowest	5510	MCS0	14
	Highest	5550	MCS0	14
	Lowest	5670	MCS0	14
802.11ac vht80	Lowest	5530	MCS0	14
	Highest	5610	MCS0	14
Note: The system support 802.11a/n ht20/n ht40/ac vht20/vht40/vht80, the vht20/vht40 were reduced since the identical parameters with 802.11n ht20 and ht40. 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.				

1.2.2 Support Equipment List and Details

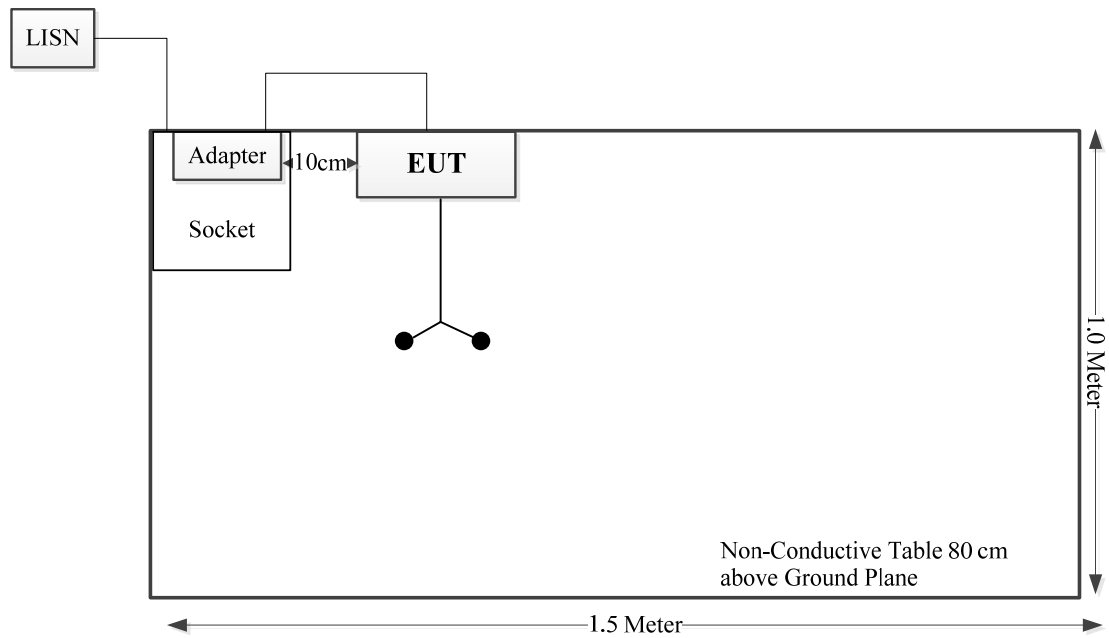
Manufacturer	Description	Model	Serial Number
/	/	/	/

1.2.3 Support Cable List and Details

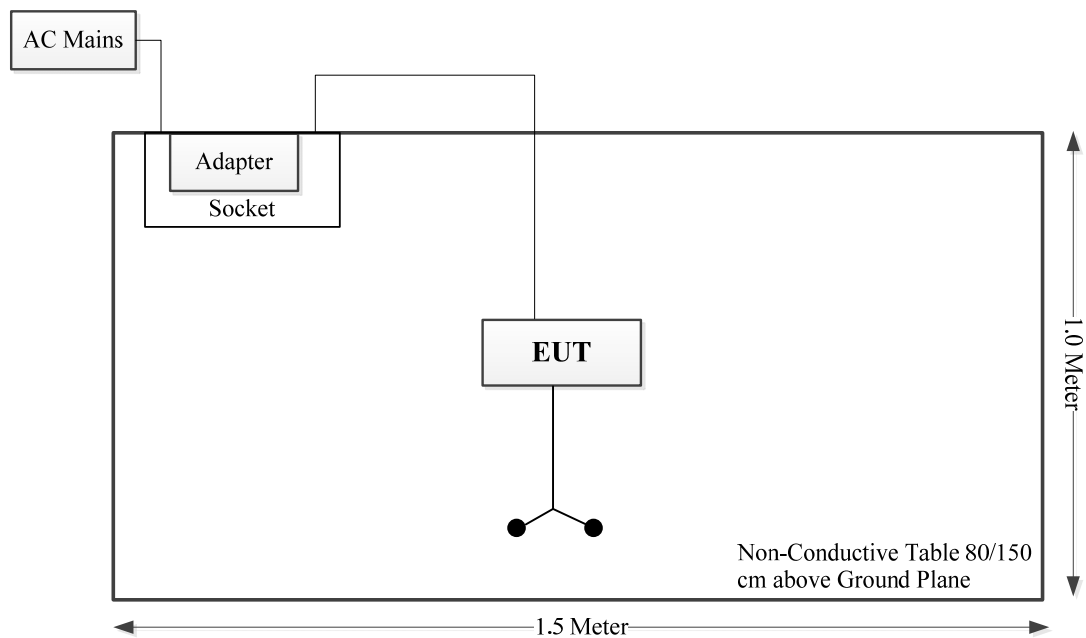
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
/	/	/	/	/	/

1.2.4 Block Diagram of Test Setup

AC Line Conducted Emissions:



Spurious emissions:



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	9kHz-30 MHz: 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	Compliant
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:

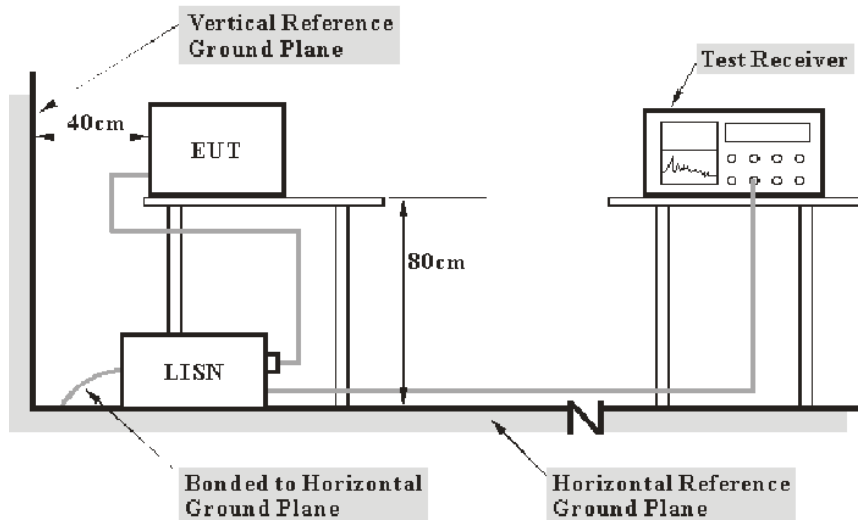
(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(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

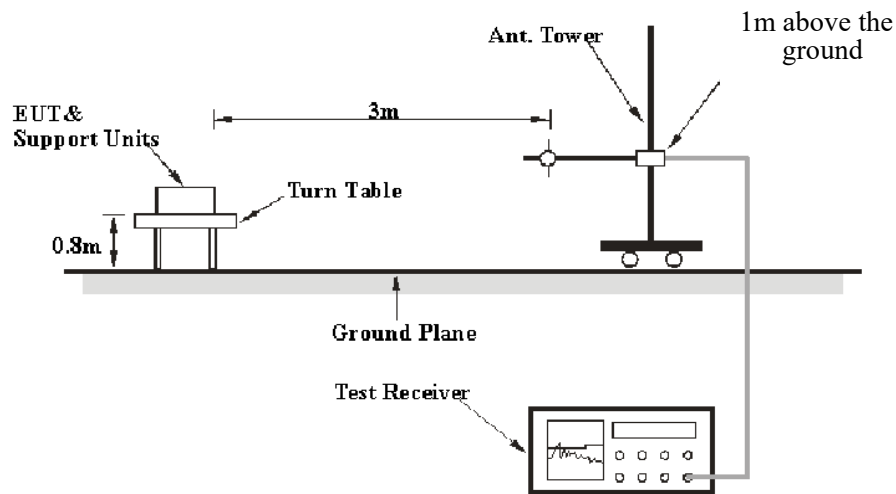
FCC §15.407 (b);

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:

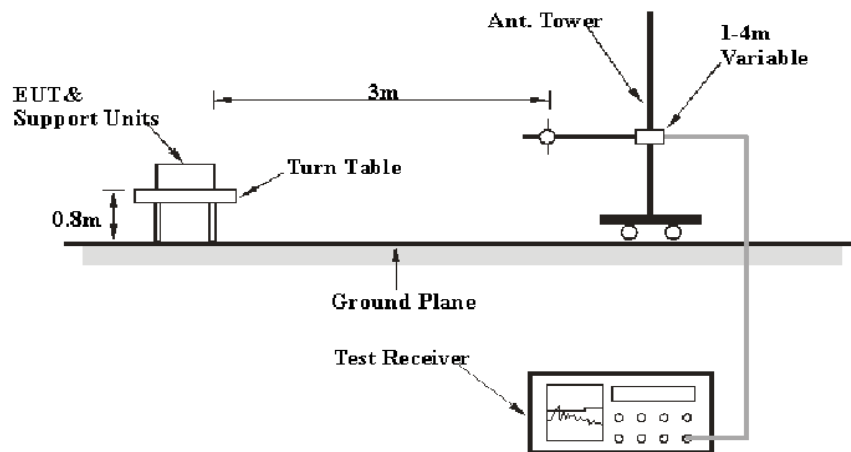
- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of - 27 dBm/MHz.
 - (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of - 27 dBm/MHz.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

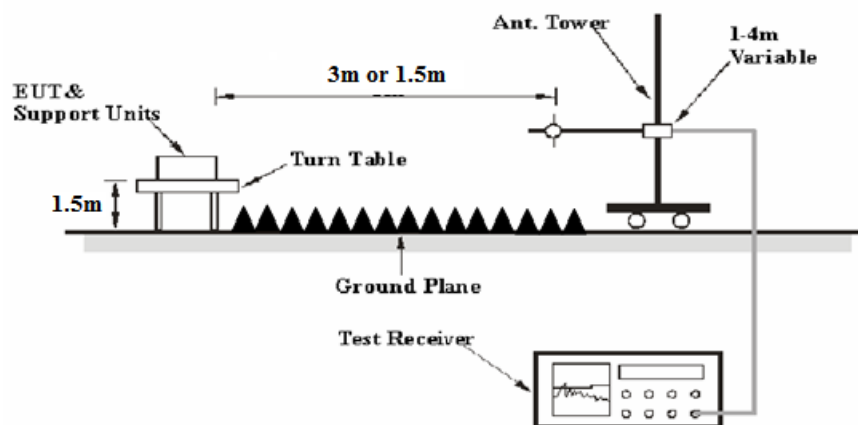
9 kHz-30MHz:



30MHz-1GHz:



1-40 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.

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-30MHz:

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

30MHz-1000MHz:

Measurement	RBW	Video B/W	IF B/W
QP	100 kHz	300 kHz	120kHz

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 -1GHz, peak and Average detection modes for frequencies above 1GHz.

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:

Factor = Antenna Factor + Cable Loss- Amplifier Gain

For 30MHz-1GHz:

Result = Reading + Factor

For 1GHz-40GHz

Result = Reading + Factor-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

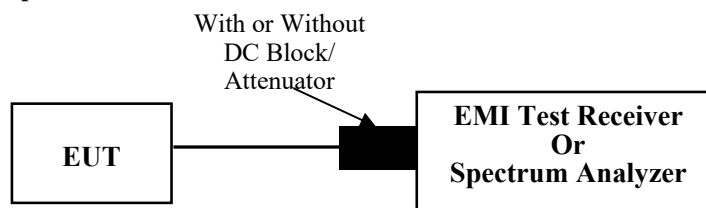
FCC §15.407 (a),(h)

(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

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = peak.
- Trace mode = max hold
- 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

- Set RBW = 100 kHz.
 - Set the video bandwidth (VBW) ≥ 3 RBW.
 - Detector = Peak.
 - Trace mode = max hold.
 - Sweep = auto couple.
 - Allow the trace to stabilize.
 - 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.

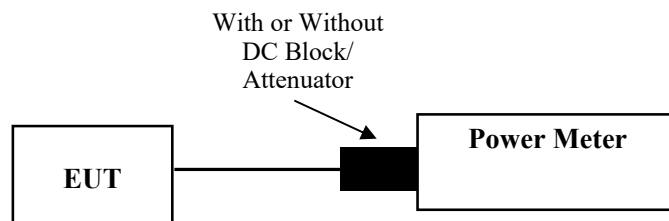
FCC §15.407(a) (2)

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 12.3.3.2

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.

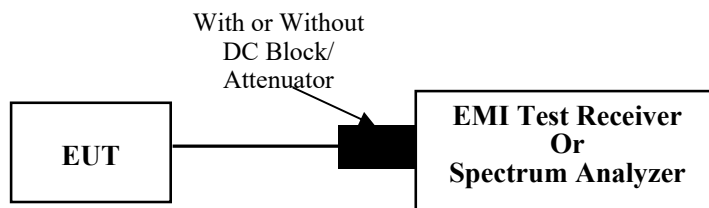
FCC §15.407(a) (2)

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 $\pm 2\%$

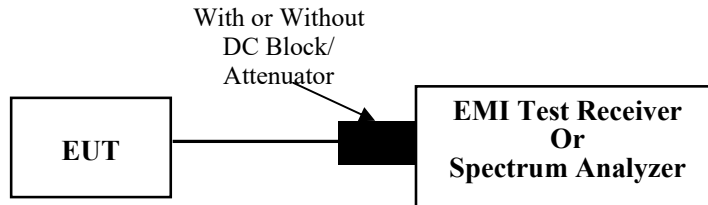
KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-2 should be applied.

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.

3.7 Duty Cycle

3.7.1 EUT Setup



3.7.2 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 $T \leq 16.7 \mu s$.)

3.8 Antenna Requirement

3.8.1 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.

3.8.2 Judgment

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

4. Test DATA AND RESULTS

4.1 AC Line Conducted Emissions

Serial Number:	2C4U-5	Test Date:	2023/11/21
Test Site:	CE	Test Mode:	Transmitting(maximum output power mode)
Tester:	David Huang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.8	Relative Humidity: (%)	47	ATM Pressure: (kPa)	101.3
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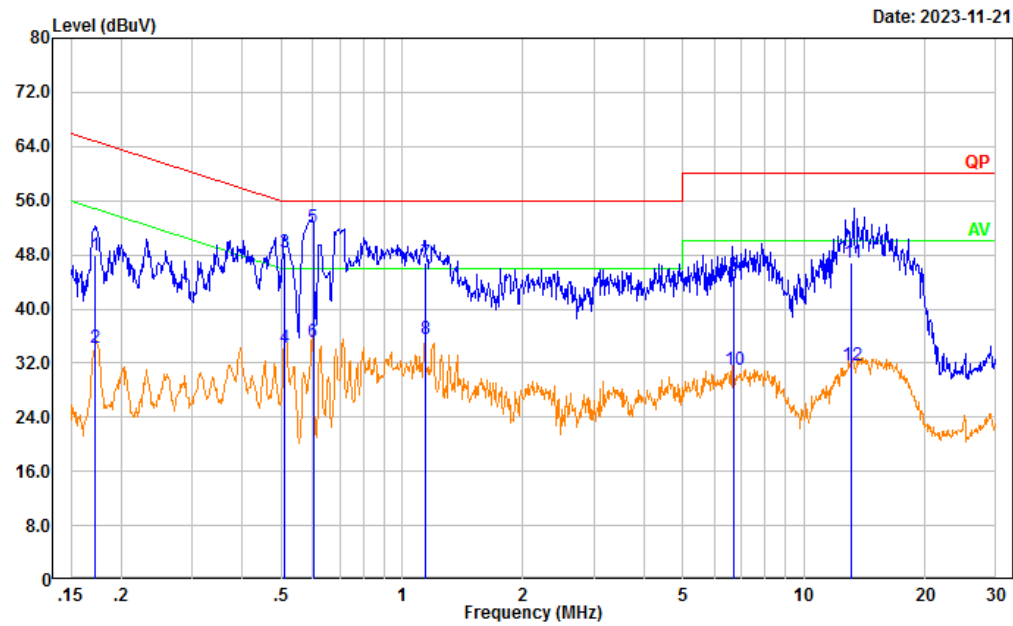
Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101132	2023/3/31	2024/3/30
R&S	EMI Test Receiver	ESR3	102726	2023/3/31	2024/3/30
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2023/8/6	2024/8/5
Audix	Test Software	E3	190306 (V9)	N/A	N/A

* 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).

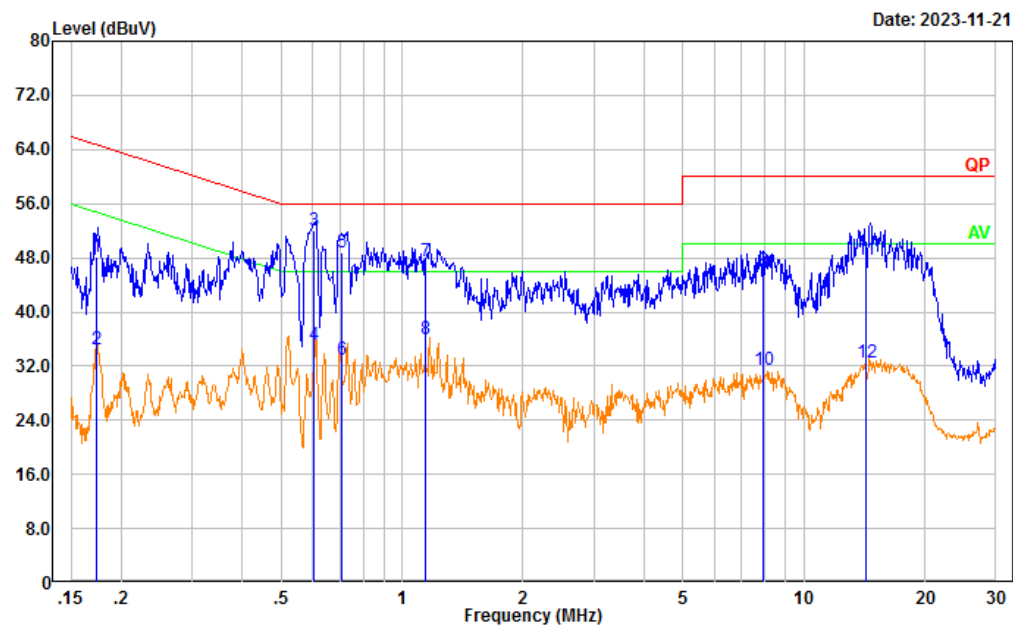
Test Data:

Project No.: CR231059186-RF
 Tester: David Huang
 Port: Line
 Note: Transmitting(5G WIFI)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.172	38.39	9.61	48.00	64.86	16.86	QP
2	0.172	24.57	9.61	34.18	54.86	20.68	Average
3	0.508	38.80	9.61	48.41	56.00	7.59	QP
4	0.508	24.62	9.61	34.23	46.00	11.77	Average
5	0.601	42.35	9.62	51.97	56.00	4.03	QP
6	0.601	25.46	9.62	35.08	46.00	10.92	Average
7	1.140	37.16	9.62	46.78	56.00	9.22	QP
8	1.140	25.84	9.62	35.46	46.00	10.54	Average
9	6.668	35.12	9.66	44.78	60.00	15.22	QP
10	6.668	21.32	9.66	30.98	50.00	19.02	Average
11	13.138	37.11	9.68	46.79	60.00	13.21	QP
12	13.138	22.08	9.68	31.76	50.00	18.24	Average

Project No.: CR231059186-RF
 Tester: David Huang
 Port: neutral
 Note: Transmitting(5G WIFI)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.174	38.58	9.61	48.19	64.78	16.59	QP
2	0.174	24.85	9.61	34.46	54.78	20.32	Average
3	0.601	42.38	9.62	52.00	56.00	4.00	QP
4	0.601	25.44	9.62	35.06	46.00	10.94	Average
5	0.710	39.07	9.62	48.69	56.00	7.31	QP
6	0.710	23.43	9.62	33.05	46.00	12.95	Average
7	1.142	37.81	9.62	47.43	56.00	8.57	QP
8	1.142	26.29	9.62	35.91	46.00	10.09	Average
9	7.933	36.44	9.67	46.11	60.00	13.89	QP
10	7.933	21.68	9.67	31.35	50.00	18.65	Average
11	14.223	37.91	9.68	47.59	60.00	12.41	QP
12	14.223	22.90	9.68	32.58	50.00	17.42	Average

4.2 Radiation Spurious Emissions

Serial Number:	2C4U-2	Test Date:	2023/11/10~2023/12/25
Test Site:	966-2,966-1	Test Mode:	Transmitting
Tester:	Jeff Luo, Tao Zhu	Test Result:	Pass

Environmental Conditions:					
Temperature: (°C)	26.5-28.3	Relative Humidity: (%)	55-58	ATM Pressure: (kPa)	100.8-101

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:

After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

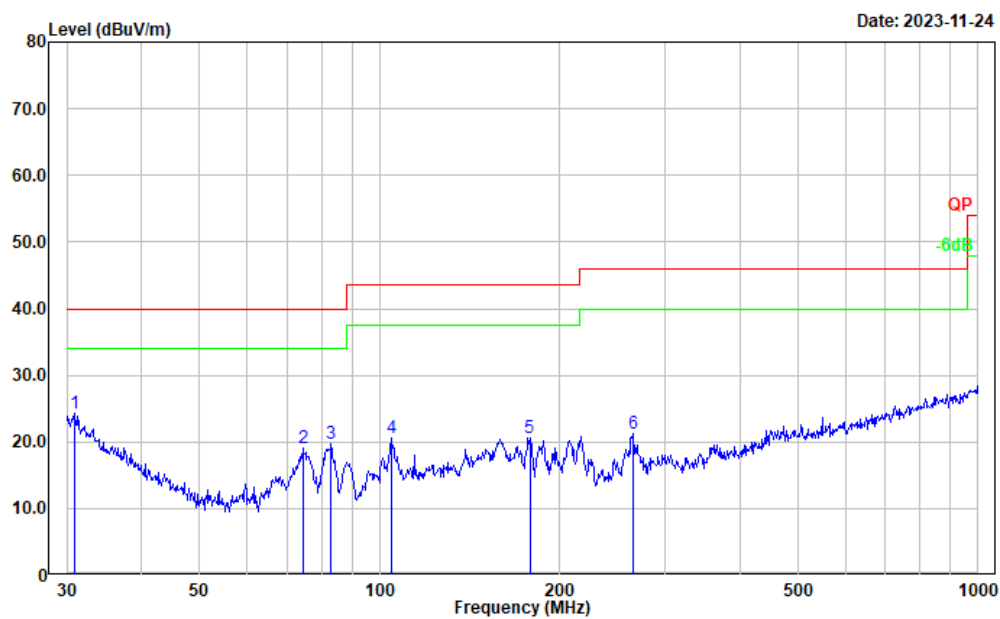
For 9kHz-30MHz, the amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

1) 30MHz-1GHz:

5150-5250 MHz: (Maximum Conducted Output Power 802.11a Mode)

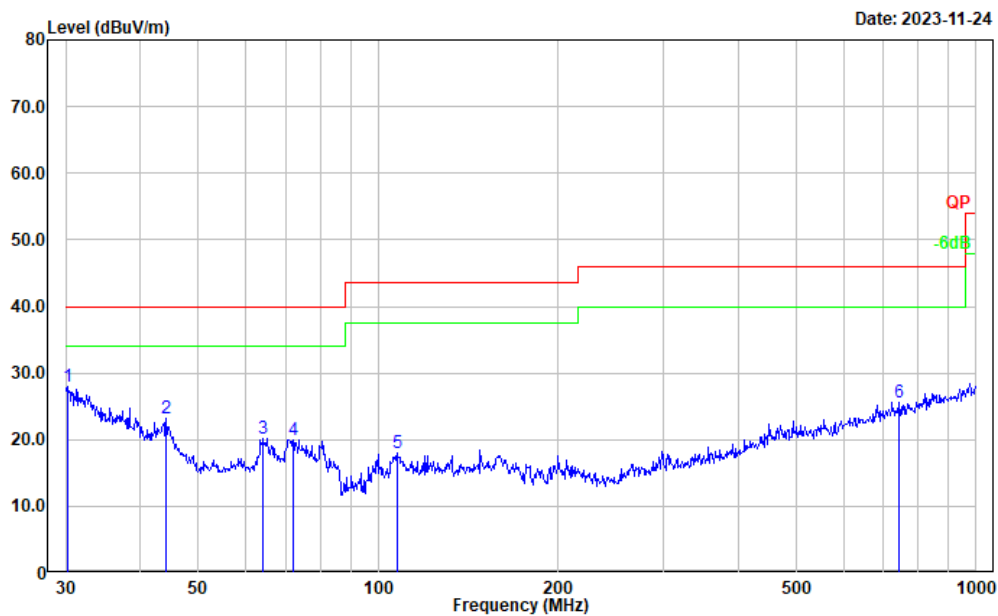
Low Channel

Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: horizontal
Note: 5G WIFI(5150-5250 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.962	28.89	-4.53	24.36	40.00	15.64	Peak
2	74.396	36.11	-16.98	19.13	40.00	20.87	Peak
3	82.938	36.92	-17.23	19.69	40.00	20.31	Peak
4	104.536	34.09	-13.44	20.65	43.50	22.85	Peak
5	178.133	33.96	-13.40	20.56	43.50	22.94	Peak
6	265.676	33.51	-12.33	21.18	46.00	24.82	Peak

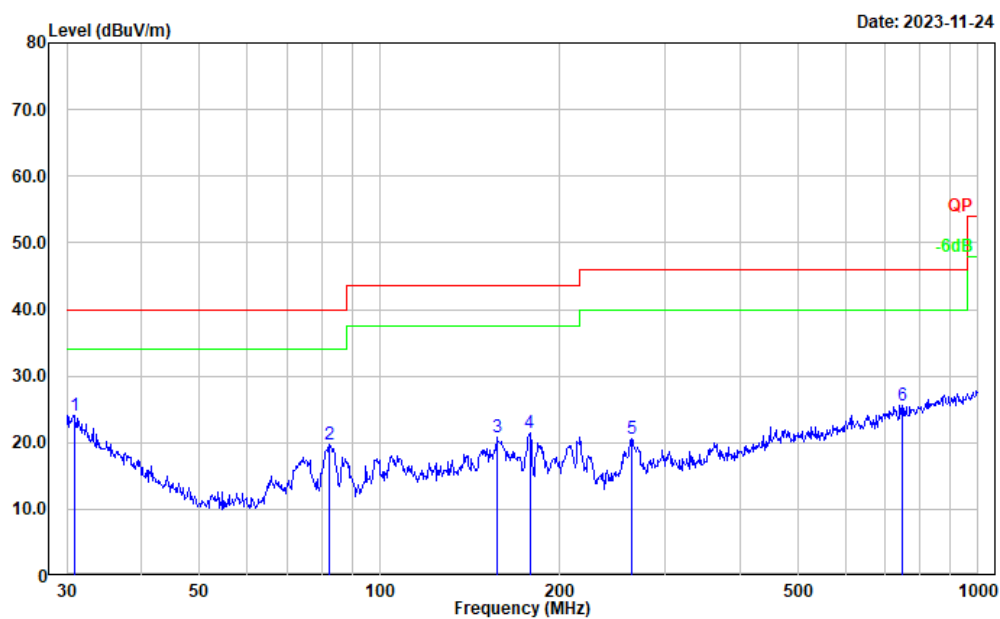
Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: vertical
Note: 5G WIFI(5150-5250 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.317	31.93	-4.04	27.89	40.00	12.11	Peak
2	44.120	36.89	-13.75	23.14	40.00	16.86	Peak
3	64.208	37.20	-17.01	20.19	40.00	19.81	Peak
4	72.084	36.82	-16.77	20.05	40.00	19.95	Peak
5	107.510	30.70	-12.80	17.90	43.50	25.60	Peak
6	744.866	28.63	-3.01	25.62	46.00	20.38	Peak

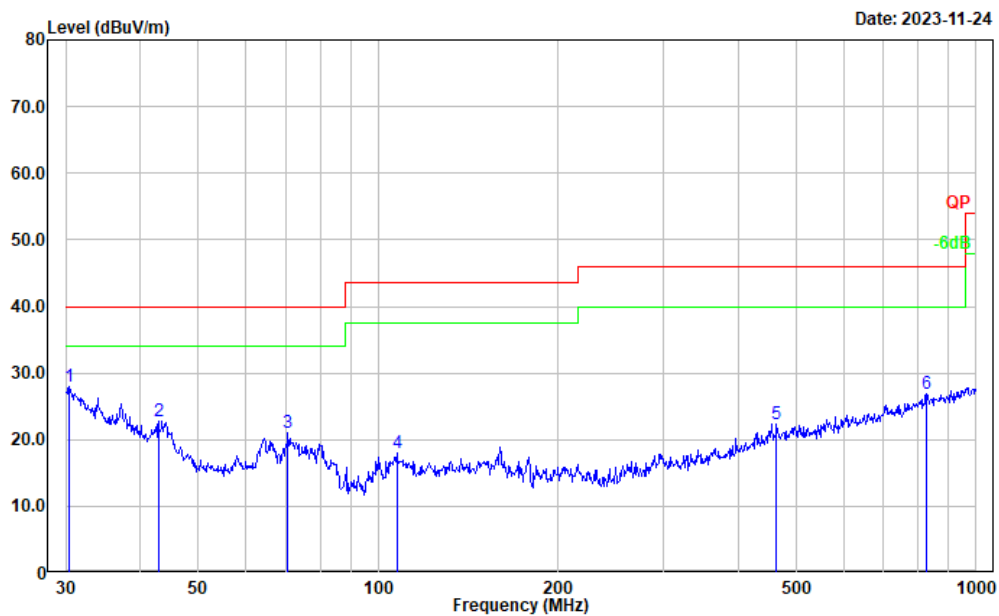
Middle Channel

Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: horizontal
Note: 5G WIFI(5150-5250 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.853	28.52	-4.45	24.07	40.00	15.93	Peak
2	82.359	37.00	-17.31	19.69	40.00	20.31	Peak
3	157.007	32.84	-11.94	20.90	43.50	22.60	Peak
4	178.133	34.87	-13.40	21.47	43.50	22.03	Peak
5	263.819	32.91	-12.38	20.53	46.00	25.47	Peak
6	747.483	28.57	-3.04	25.53	46.00	20.47	Peak

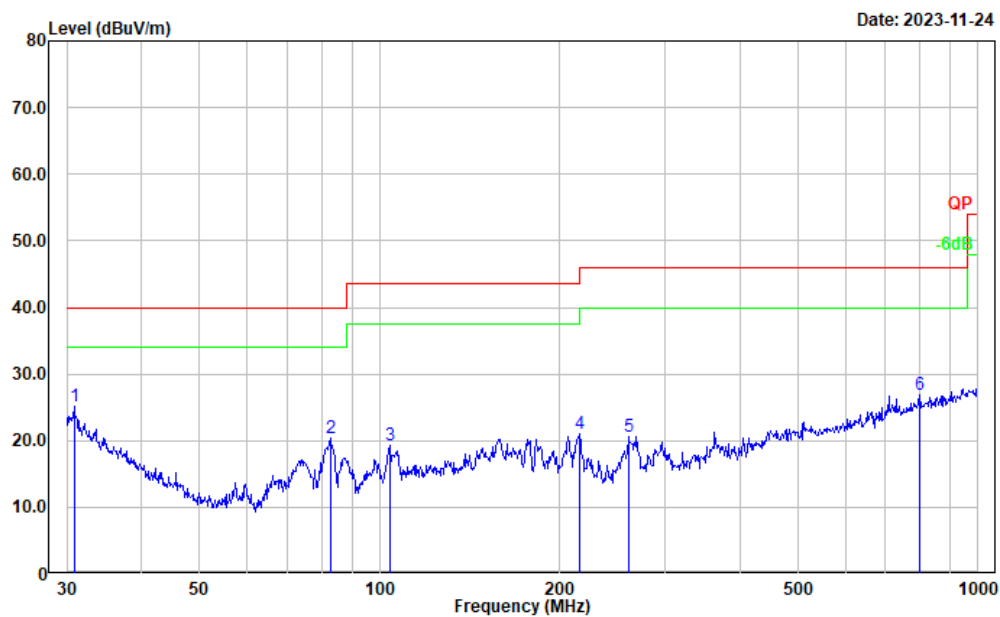
Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: vertical
Note: 5G WIFI(5150-5250 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.424	32.17	-4.13	28.04	40.00	11.96	Peak
2	42.900	35.83	-13.05	22.78	40.00	17.22	Peak
3	70.584	37.71	-16.62	21.09	40.00	18.91	Peak
4	107.510	30.72	-12.80	17.92	43.50	25.58	Peak
5	463.970	28.79	-6.51	22.28	46.00	23.72	Peak
6	824.597	28.63	-1.65	26.98	46.00	19.02	Peak

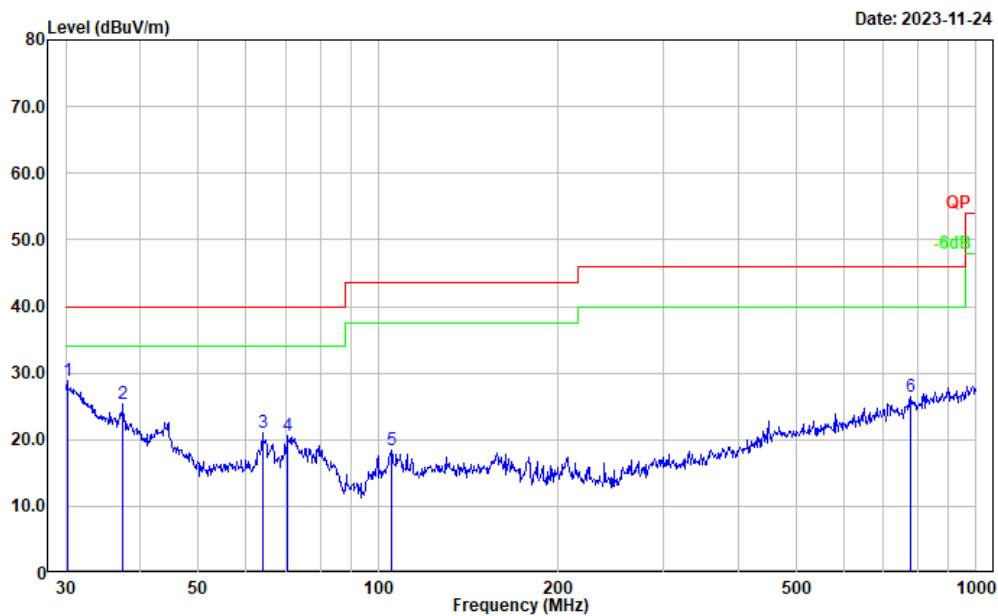
High Channel

Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: horizontal
Note: 5G WIFI(5150-5250 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.853	29.63	-4.45	25.18	40.00	14.82	Peak
2	82.648	37.59	-17.28	20.31	40.00	19.69	Peak
3	103.806	32.90	-13.58	19.32	43.50	24.18	Peak
4	215.268	33.60	-12.65	20.95	43.50	22.55	Peak
5	260.144	33.15	-12.50	20.65	46.00	25.35	Peak
6	798.980	29.00	-2.16	26.84	46.00	19.16	Peak

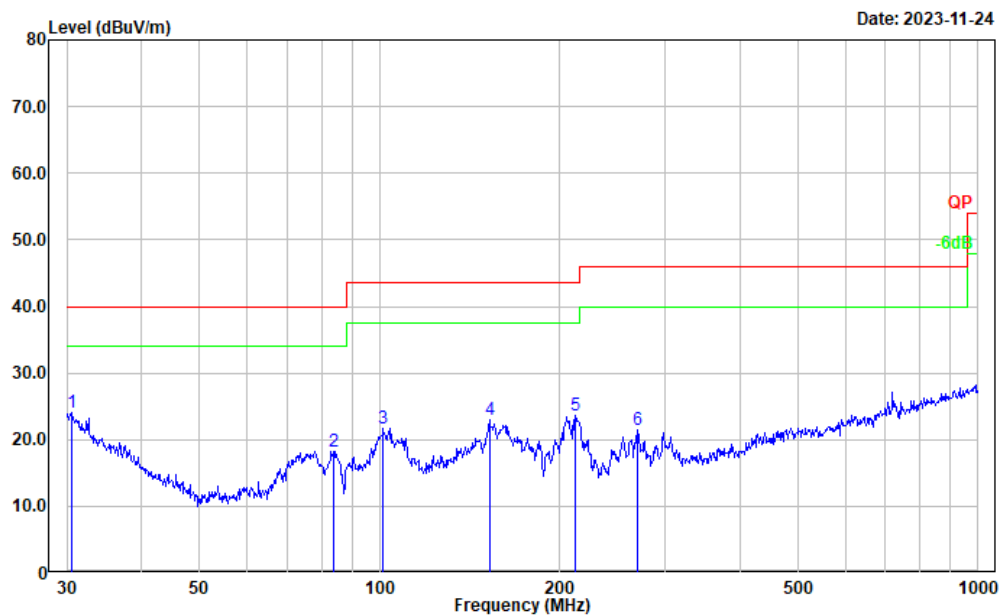
Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: vertical
Note: 5G WIFI(5150-5250 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.211	32.70	-3.96	28.74	40.00	11.26	Peak
2	37.416	34.82	-9.44	25.38	40.00	14.62	Peak
3	63.983	38.05	-17.02	21.03	40.00	18.97	Peak
4	70.584	37.28	-16.62	20.66	40.00	19.34	Peak
5	105.272	31.73	-13.31	18.42	43.50	25.08	Peak
6	776.878	28.92	-2.42	26.50	46.00	19.50	Peak

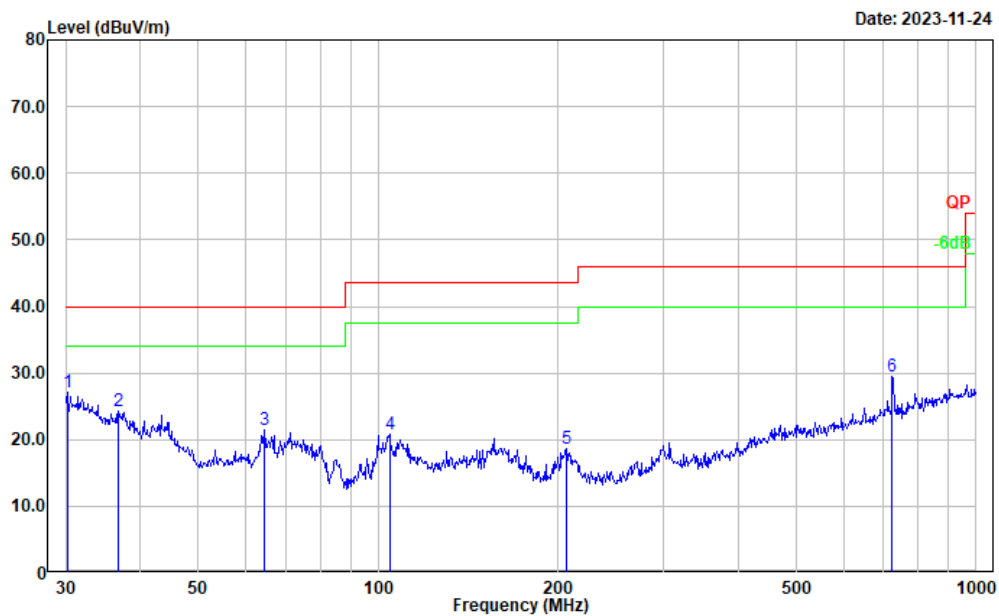
5470-5725 MHz: (Maximum Conducted Output Power 802.11a Mode)
Low Channel

Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: horizontal
Note: 5G WIFI(5470-5725 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.531	28.36	-4.20	24.16	40.00	15.84	Peak
2	83.816	35.55	-17.24	18.31	40.00	21.69	Peak
3	101.289	35.66	-14.06	21.60	43.50	21.90	Peak
4	152.664	34.98	-11.92	23.06	43.50	20.44	Peak
5	212.270	36.22	-12.57	23.65	43.50	19.85	Peak
6	270.375	33.62	-12.13	21.49	46.00	24.51	Peak

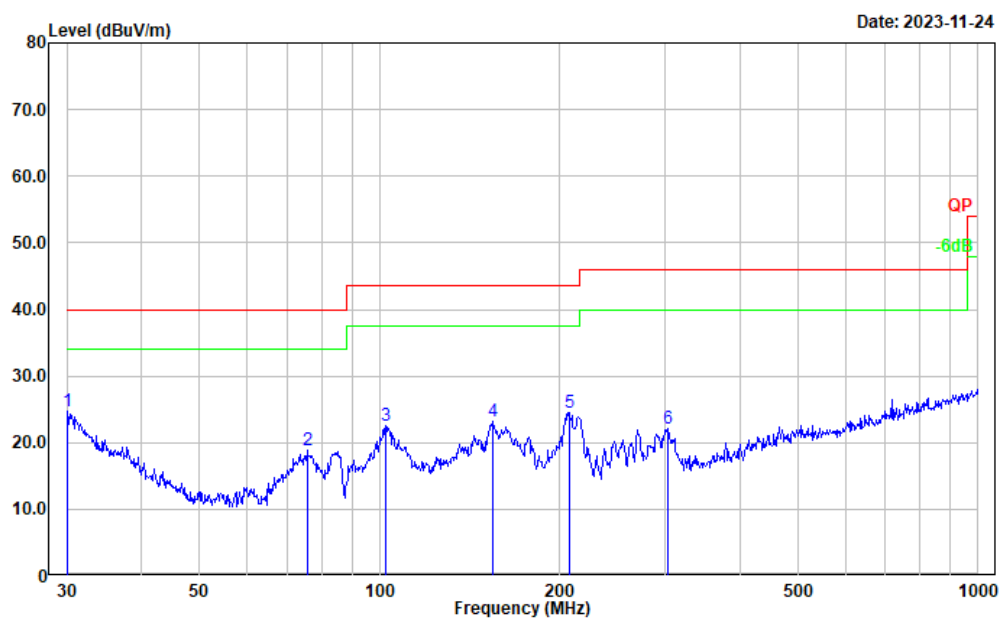
Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: vertical
Note: 5G WIFI(5470-5725 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.211	31.00	-3.96	27.04	40.00	12.96	Peak
2	36.766	33.30	-8.97	24.33	40.00	15.67	Peak
3	64.433	38.37	-16.99	21.38	40.00	18.62	Peak
4	104.536	34.28	-13.44	20.84	43.50	22.66	Peak
5	206.398	31.15	-12.40	18.75	43.50	24.75	Peak
6	724.261	32.75	-3.20	29.55	46.00	16.45	Peak

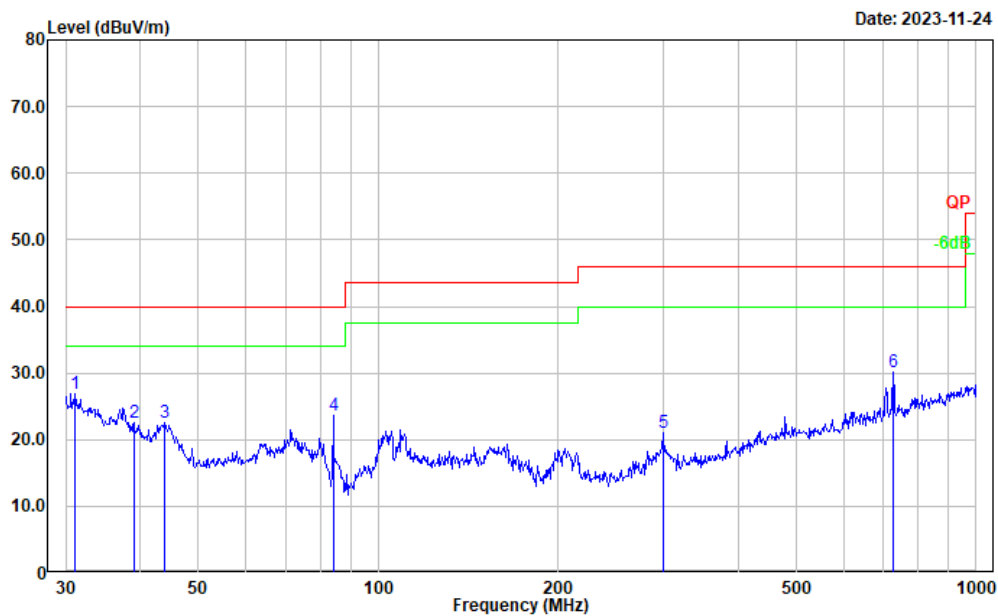
Middle Channel

Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: horizontal
Note: 5G WIFI(5470-5725 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.000	28.55	-3.80	24.75	40.00	15.25	Peak
2	75.711	35.78	-17.03	18.75	40.00	21.25	Peak
3	102.360	36.40	-13.88	22.52	43.50	20.98	Peak
4	154.821	35.09	-11.95	23.14	43.50	20.36	Peak
5	207.123	36.99	-12.41	24.58	43.50	18.92	Peak
6	303.544	32.76	-10.59	22.17	46.00	23.83	Peak

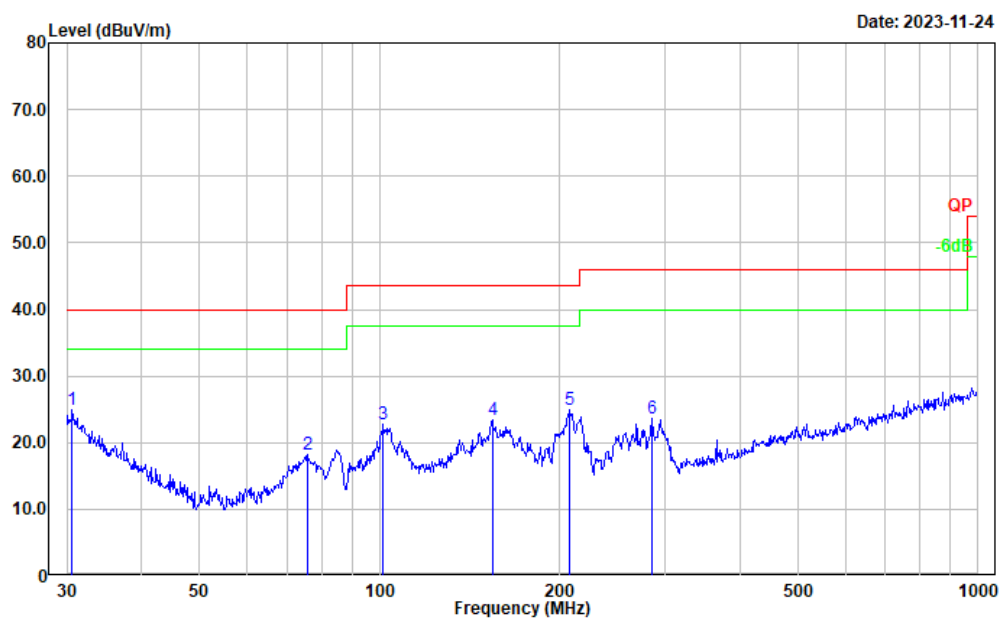
Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: vertical
Note: 5G WIFI(5470-5725 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	31.071	31.46	-4.61	26.85	40.00	13.15	Peak
2	39.024	33.16	-10.65	22.51	40.00	17.49	Peak
3	43.966	36.13	-13.67	22.46	40.00	17.54	Peak
4	84.110	40.94	-17.23	23.71	40.00	16.29	Peak
5	299.316	31.66	-10.65	21.01	46.00	24.99	Peak
6	726.805	33.24	-3.13	30.11	46.00	15.89	Peak

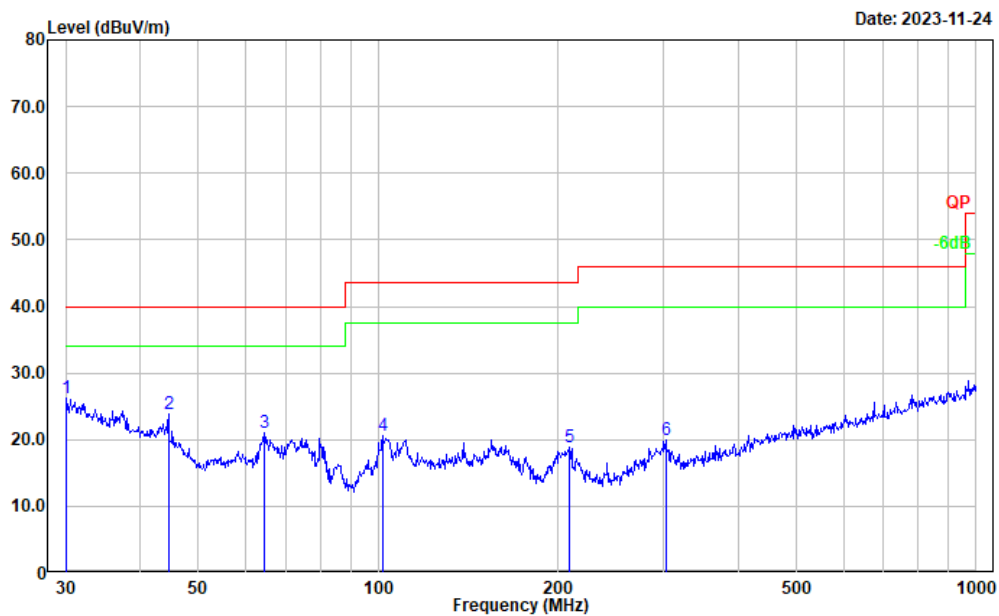
High Channel

Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: horizontal
Note: 5G WIFI(5470-5725 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.638	29.14	-4.28	24.86	40.00	15.14	Peak
2	75.711	35.18	-17.03	18.15	40.00	21.85	Peak
3	101.289	36.91	-14.06	22.85	43.50	20.65	Peak
4	154.279	35.24	-11.93	23.31	43.50	20.19	Peak
5	207.850	37.31	-12.45	24.86	43.50	18.64	Peak
6	284.977	34.98	-11.37	23.61	46.00	22.39	Peak

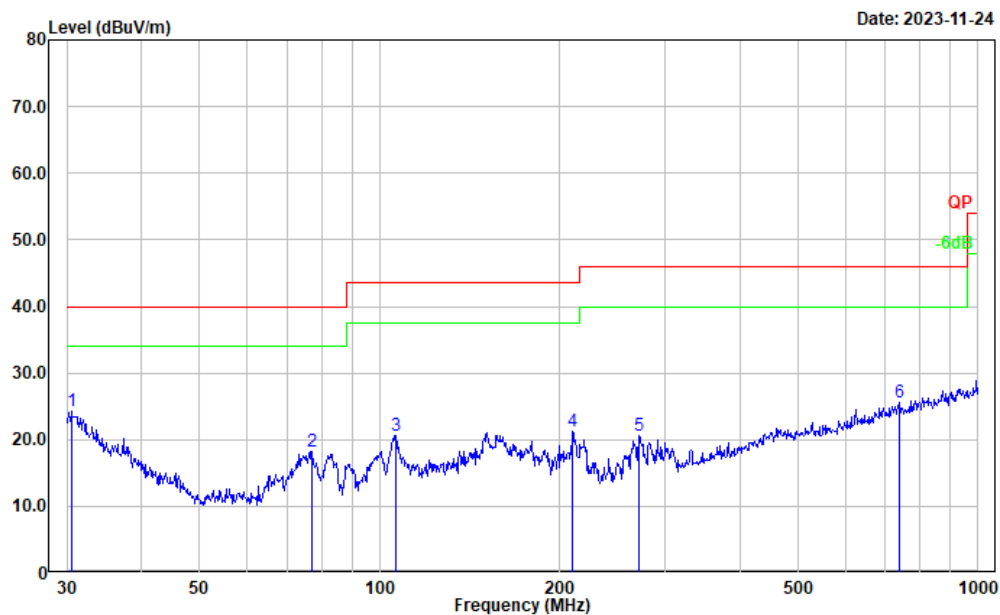
Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: vertical
Note: 5G WIFI(5470-5725 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.105	30.12	-3.88	26.24	40.00	13.76	Peak
2	44.587	37.91	-14.00	23.91	40.00	16.09	Peak
3	64.433	38.04	-16.99	21.05	40.00	18.95	Peak
4	101.644	34.63	-14.02	20.61	43.50	22.89	Peak
5	208.580	31.35	-12.46	18.89	43.50	24.61	Peak
6	302.481	30.59	-10.61	19.98	46.00	26.02	Peak

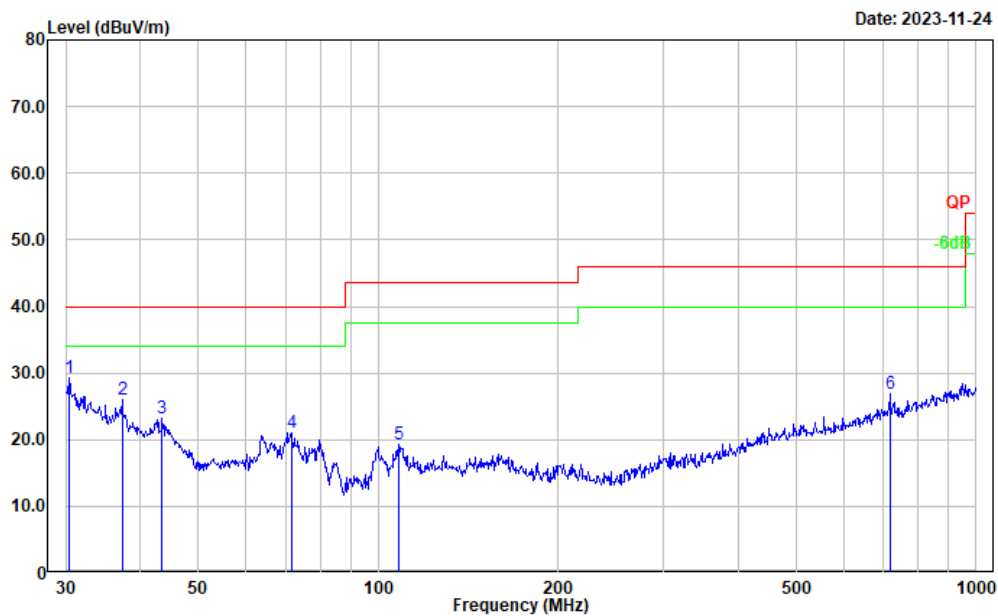
5250-5350 MHz: (Maximum Conducted Output Power 802.11ac vht80 Mode)
Low Channel

Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: horizontal
Note: 5G WIFI(5250-5350 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.531	28.45	-4.20	24.25	40.00	15.75	Peak
2	77.051	35.45	-17.17	18.28	40.00	21.72	Peak
3	106.385	33.76	-13.07	20.69	43.50	22.81	Peak
4	210.048	33.80	-12.49	21.31	43.50	22.19	Peak
5	271.325	32.75	-12.10	20.65	46.00	25.35	Peak
6	737.071	28.61	-3.01	25.60	46.00	20.40	Peak

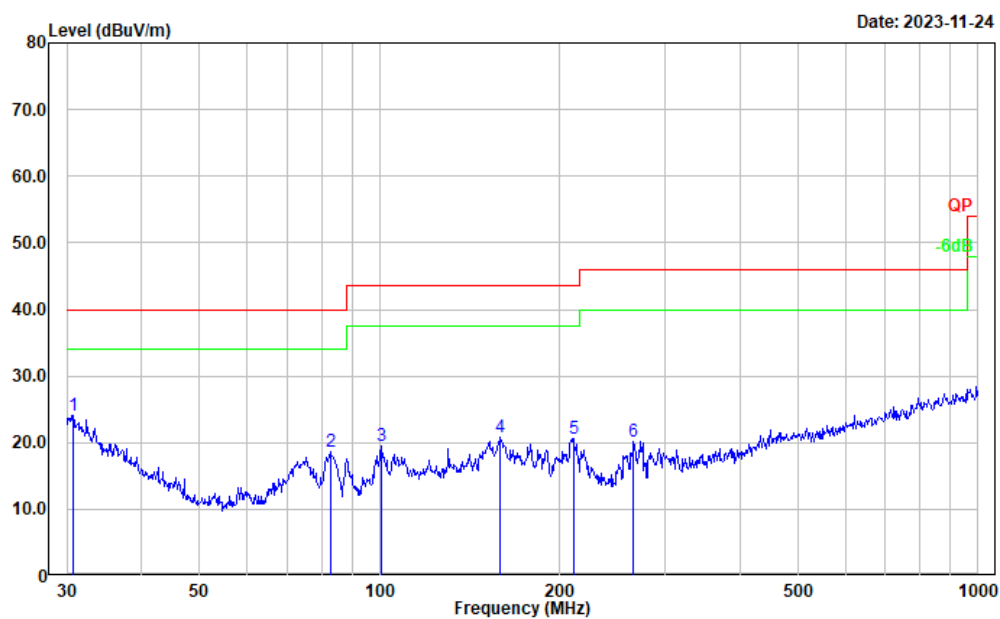
Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: vertical
Note: 5G WIFI(5250-5350 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.424	33.46	-4.13	29.33	40.00	10.67	Peak
2	37.285	35.47	-9.35	26.12	40.00	13.88	Peak
3	43.506	36.55	-13.40	23.15	40.00	16.85	Peak
4	71.581	37.72	-16.72	21.00	40.00	19.00	Peak
5	108.267	32.04	-12.64	19.40	43.50	24.10	Peak
6	716.682	30.38	-3.45	26.93	46.00	19.07	Peak

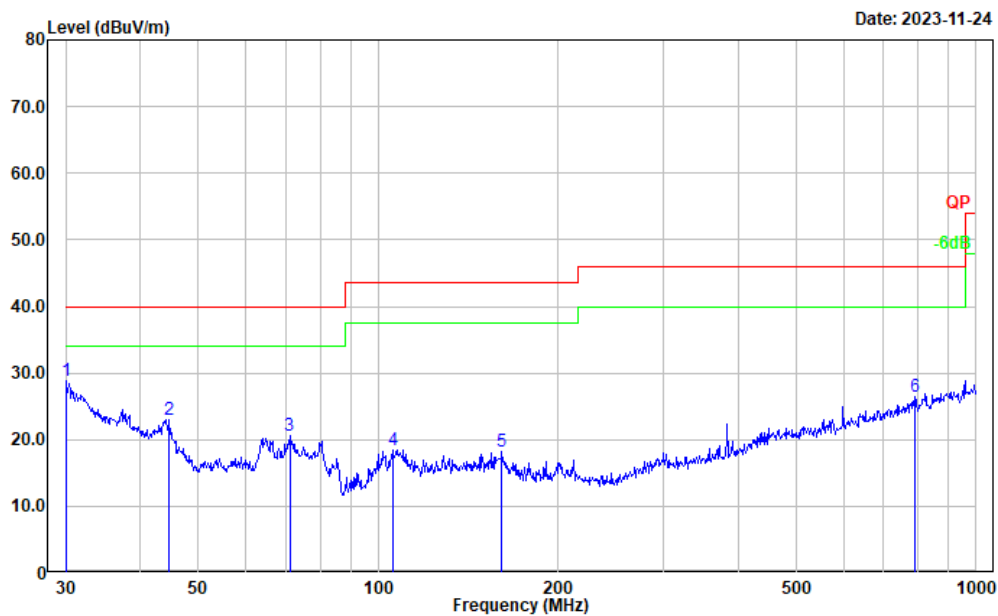
Middle Channel

Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: horizontal
Note: 5G WIFI(5250-5350 MHz)



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.745	28.49	-4.36	24.13	40.00	15.87	Peak
2	82.648	35.91	-17.28	18.63	40.00	21.37	Peak
3	100.581	33.63	-14.19	19.44	43.50	24.06	Peak
4	159.225	32.78	-11.96	20.82	43.50	22.68	Peak
5	210.786	33.16	-12.52	20.64	43.50	22.86	Peak
6	265.676	32.45	-12.33	20.12	46.00	25.88	Peak

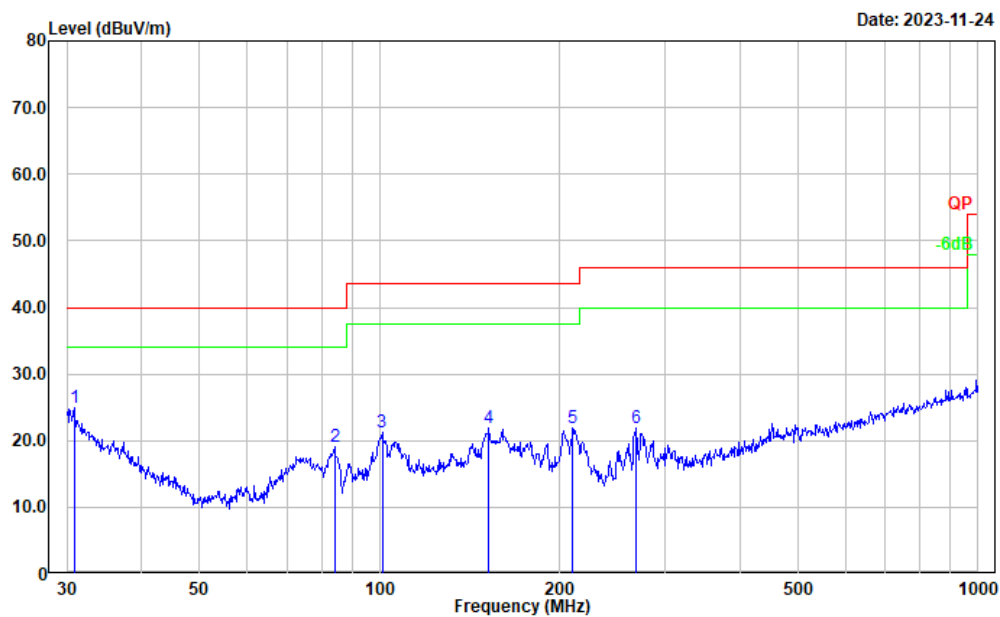
Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: vertical
Note: 5G WIFI(5250-5350 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.000	32.53	-3.80	28.73	40.00	11.27	Peak
2	44.743	37.09	-14.08	23.01	40.00	16.99	Peak
3	71.080	37.35	-16.68	20.67	40.00	19.33	Peak
4	105.642	31.71	-13.23	18.48	43.50	25.02	Peak
5	160.909	30.17	-12.05	18.12	43.50	25.38	Peak
6	787.851	28.77	-2.33	26.44	46.00	19.56	Peak

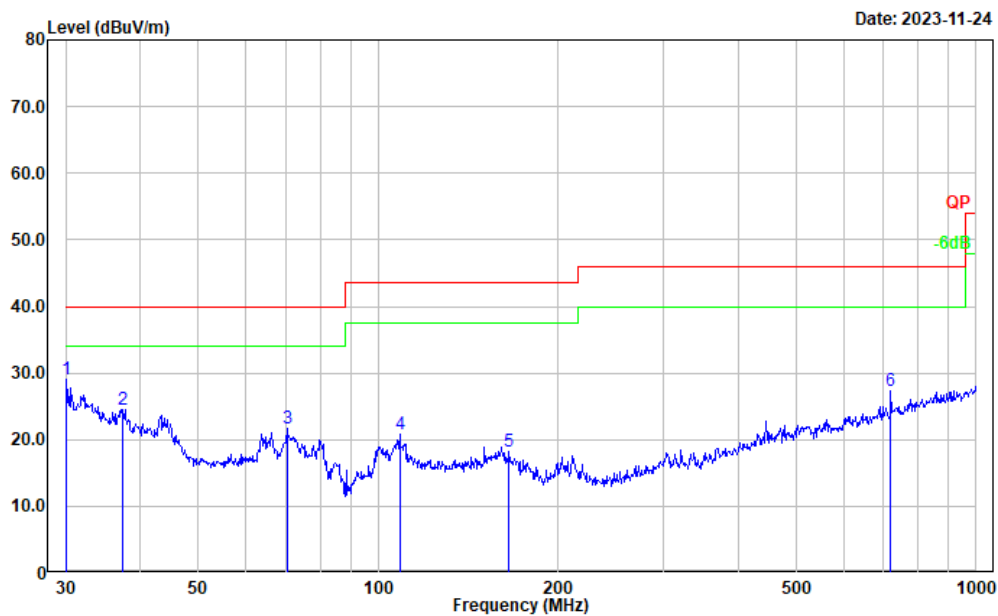
High Channel

Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: horizontal
Note: 5G WIFI(5250-5350 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.853	29.29	-4.45	24.84	40.00	15.16	Peak
2	84.110	36.24	-17.23	19.01	40.00	20.99	Peak
3	100.934	35.39	-14.10	21.29	43.50	22.21	Peak
4	152.130	33.75	-11.92	21.83	43.50	21.67	Peak
5	210.048	34.43	-12.49	21.94	43.50	21.56	Peak
6	268.485	34.19	-12.22	21.97	46.00	24.03	Peak

Project No.: CR231059186-RF
Tester: Jeff Luo
Polarization: vertical
Note: 5G WIFI(5250-5350 MHz)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.105	32.97	-3.88	29.09	40.00	10.91	Peak
2	37.416	33.95	-9.44	24.51	40.00	15.49	Peak
3	70.337	38.19	-16.60	21.59	40.00	18.41	Peak
4	108.647	33.44	-12.54	20.90	43.50	22.60	Peak
5	165.487	30.65	-12.41	18.24	43.50	25.26	Peak
6	719.200	30.80	-3.40	27.40	46.00	18.60	Peak

2) 1GHz-40GHz:**5150-5250MHz:****802.11a 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	35.25	PK	H	20.47	55.72	68.20	12.48
10360.000	35.03	PK	V	20.47	55.50	68.20	12.70
Middle Channel:				5200	MHz		
10400.000	35.64	PK	H	20.54	56.18	68.20	12.02
10400.000	35.43	PK	V	20.54	55.97	68.20	12.23
High Channel:				5240	MHz		
10480.000	35.09	PK	H	20.42	49.49	68.20	18.71
10480.000	35.87	PK	V	20.42	56.29	68.20	11.91

802.11 ac20 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	35.28	PK	H	20.47	55.75	68.20	12.45
10360.000	35.05	PK	V	20.47	55.52	68.20	12.68
Middle Channel: 5200 MHz							
10400.000	35.76	PK	H	20.54	56.30	68.20	11.90
10400.000	35.55	PK	V	20.54	56.09	68.20	12.11
High Channel: 5240 MHz							
10480.000	36.24	PK	H	20.42	56.66	68.20	11.54
10480.000	36.09	PK	V	20.42	56.51	68.20	11.69

802.11 ac40 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	34.91	PK	H	20.51	55.42	68.20	12.78
10380.000	34.68	PK	V	20.51	55.19	68.20	13.01
High Channel:				5230	MHz		
10460.000	35.64	PK	H	20.45	56.09	68.20	12.11
10460.000	35.40	PK	V	20.45	55.85	68.20	12.35

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	34.61	PK	H	20.51	55.12	68.20	13.08
10420.000	34.39	PK	V	20.51	54.90	68.20	13.30

5250-5350MHz:**802.11a Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5260 MHz							
10520.000	35.61	PK	H	20.53	56.14	68.20	12.06
10520.000	35.38	PK	V	20.53	55.91	68.20	12.29
Middle Channel: 5280 MHz							
10560.000	36.06	PK	H	20.81	56.87	68.20	11.33
10560.000	35.83	PK	V	20.81	56.64	68.20	11.56
High Channel: 5320 MHz							
10640.000	36.32	PK	H	21.13	57.45	74.00	16.55
10640.000	22.51	AV	H	21.13	43.64	54.00	10.36
10640.000	36.08	PK	V	21.13	57.21	74.00	16.79
10640.000	22.26	AV	V	21.13	43.39	54.00	10.61

802.11 ac20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5260 MHz							
10520.000	35.70	PK	H	20.53	56.23	68.20	11.97
10520.000	35.47	PK	V	20.53	56.00	68.20	12.20
Middle Channel: 5280 MHz							
10560.000	35.94	PK	H	20.81	56.75	68.20	11.45
10560.000	35.71	PK	V	20.81	56.52	68.20	11.68
High Channel: 5320 MHz							
10640.000	36.14	PK	H	21.13	57.27	74.00	16.73
10640.000	22.32	AV	H	21.13	43.45	54.00	10.55
10640.000	35.91	PK	V	21.13	57.04	74.00	16.96
10640.000	22.10	AV	V	21.13	43.23	54.00	10.77

802.11 ac40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel:				5270	MHz		
10540.000	35.29	PK	H	20.68	55.97	68.20	12.23
10540.000	35.07	PK	V	20.68	55.75	68.20	12.45
High Channel:				5310	MHz		
10620.000	35.67	PK	H	21.11	56.78	74.00	17.22
10620.000	22.54	AV	H	21.11	43.65	54.00	10.35
10620.000	35.43	PK	V	21.11	56.54	74.00	17.46
10620.000	22.31	AV	V	21.11	43.42	54.00	10.58

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:				5290	MHz		
10580.000	35.12	PK	H	20.96	56.08	68.20	12.12
10580.000	34.89	PK	V	20.96	55.85	68.20	12.35

5470-5725MHz**802.11a Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel:				5500	MHz		
11000.000	34.66	PK	H	21.53	56.19	74.00	17.81
11000.000	21.89	AV	H	21.53	43.42	54.00	10.58
11000.000	34.42	PK	V	21.53	55.95	74.00	18.05
11000.000	21.55	AV	V	21.53	43.08	54.00	10.92
Middle Channel:				5580	MHz		
11160.000	35.46	PK	H	21.38	56.84	74.00	17.16
11160.000	22.65	AV	H	21.38	44.03	54.00	9.97
11160.000	35.23	PK	V	21.38	56.61	74.00	17.39
11160.000	22.37	AV	V	21.38	43.75	54.00	10.25
High Channel:				5700	MHz		
11400.000	34.88	PK	H	21.91	56.79	74.00	17.21
11400.000	22.05	AV	H	21.91	43.96	54.00	10.04
11400.000	34.63	PK	V	21.91	56.54	74.00	17.46
11400.000	21.74	AV	V	21.91	43.65	54.00	10.35
Cross band				5720	MHz		
11440.000	34.80	PK	H	21.73	56.53	74.00	17.47
11440.000	22.93	AV	H	21.73	44.66	54.00	9.34
11440.000	34.77	PK	V	21.73	56.5	74.00	17.50
11440.000	22.95	AV	V	21.73	44.68	54.00	9.32

802.11 ac20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5500 MHz							
11000.000	34.54	PK	H	21.53	56.07	74.00	17.93
11000.000	21.80	AV	H	21.53	43.33	54.00	10.67
11000.000	34.31	PK	V	21.53	55.84	74.00	18.16
11000.000	21.58	AV	V	21.53	43.11	54.00	10.89
Middle Channel: 5580 MHz							
11160.000	35.32	PK	H	21.38	56.70	74.00	17.30
11160.000	22.53	AV	H	21.38	43.91	54.00	10.09
11160.000	35.09	PK	V	21.38	56.47	74.00	17.53
11160.000	22.26	AV	V	21.38	43.64	54.00	10.36
High Channel: 5700 MHz							
11400.000	34.76	PK	H	21.91	56.67	74.00	17.33
11400.000	21.94	AV	H	21.91	43.85	54.00	10.15
11400.000	34.53	PK	V	21.91	56.44	74.00	17.56
11400.000	21.71	AV	V	21.91	43.62	54.00	10.38
Cross band 5720 MHz							
11440.000	34.70	PK	H	21.73	56.43	74.00	17.57
11440.000	22.88	AV	H	21.73	44.61	54.00	9.39
11440.000	34.61	PK	V	21.73	56.34	74.00	17.66
11440.000	23.31	AV	V	21.73	45.04	54.00	8.96

802.11 ac40 Mode:

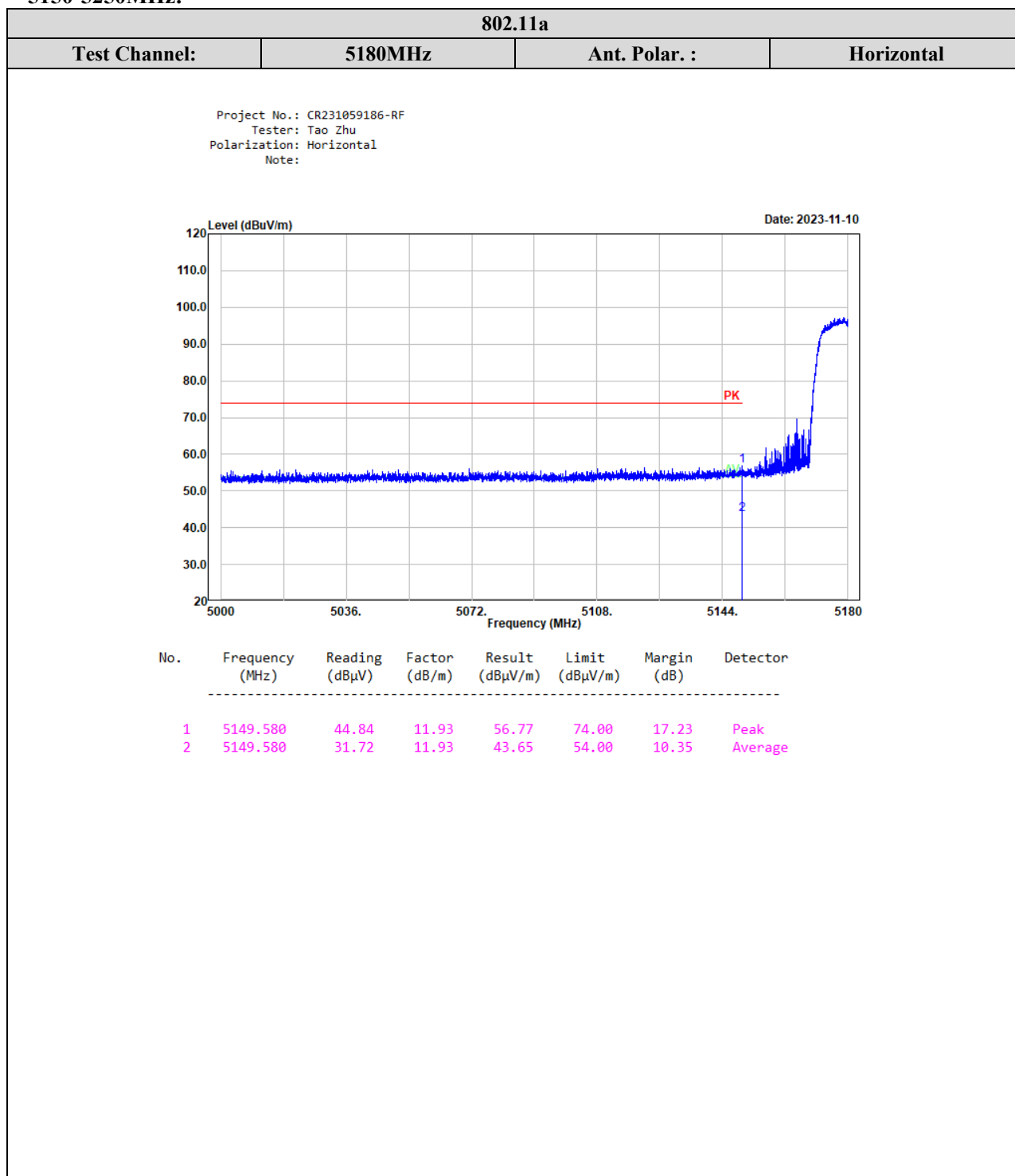
Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5510 MHz							
11020.000	34.13	PK	H	21.52	55.65	74.00	18.35
11020.000	20.92	AV	H	21.52	42.44	54.00	11.56
11020.000	33.87	PK	V	21.52	55.39	74.00	18.61
11020.000	20.70	AV	V	21.52	42.22	54.00	11.78
Middle Channel: 5550 MHz							
11100.000	34.31	PK	H	21.47	55.78	74.00	18.22
11100.000	21.13	AV	H	21.47	42.60	54.00	11.40
11100.000	34.05	PK	V	21.47	55.52	74.00	18.48
11100.000	20.90	AV	V	21.47	42.37	54.00	11.63
High Channel: 5670 MHz							
11340.000	34.61	PK	H	21.86	56.47	74.00	17.53
11340.000	21.39	AV	H	21.86	43.25	54.00	10.75
11340.000	34.38	PK	V	21.86	56.24	74.00	17.76
11340.000	21.17	AV	V	21.86	43.03	54.00	10.97
Cross band 5710 MHz							
11420.000	34.52	PK	H	21.81	56.33	74.00	17.67
11420.000	22.73	AV	H	21.81	44.54	54.00	9.46
11420.000	34.55	PK	V	21.81	56.36	74.00	17.64
11420.000	22.91	AV	V	21.81	44.72	54.00	9.28

802.11ac80 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel:				5530	MHz		
11060.000	34.12	PK	H	21.49	55.61	74.00	18.39
11060.000	21.81	AV	H	21.49	43.30	54.00	10.70
11060.000	33.89	PK	V	21.49	55.38	74.00	18.62
11060.000	21.58	AV	V	21.49	43.07	54.00	10.93
High Channel:				5610	MHz		
11220.000	35.09	PK	H	21.43	56.52	74.00	17.48
11220.000	22.97	AV	H	21.43	44.40	54.00	9.60
11220.000	35.20	PK	V	21.43	56.63	74.00	17.37
11220.000	23.32	AV	V	21.43	44.75	54.00	9.25
Cross band				5690	MHz		
11380.000	34.52	PK	H	21.89	56.41	74.00	17.59
11380.000	22.54	AV	H	21.89	44.43	54.00	9.57
11380.000	34.82	PK	V	21.89	56.71	74.00	17.29
11380.000	23.06	AV	V	21.89	44.95	54.00	9.05

Test plots for Band Edge Measurements (Radiated)

5150-5250MHz:



802.11a

Test Channel:

5180MHz

Ant. Polar. :

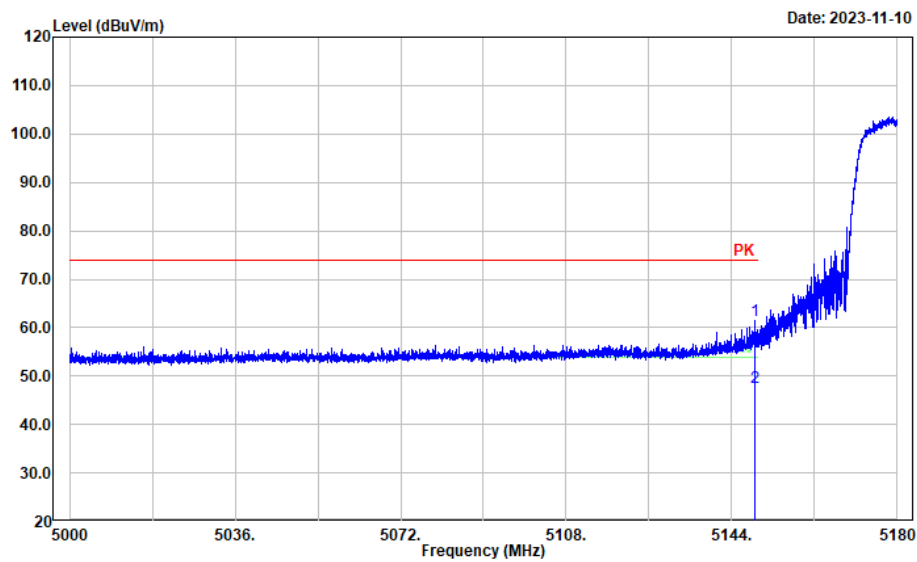
Vertical

Project No.: CR231059186-RF

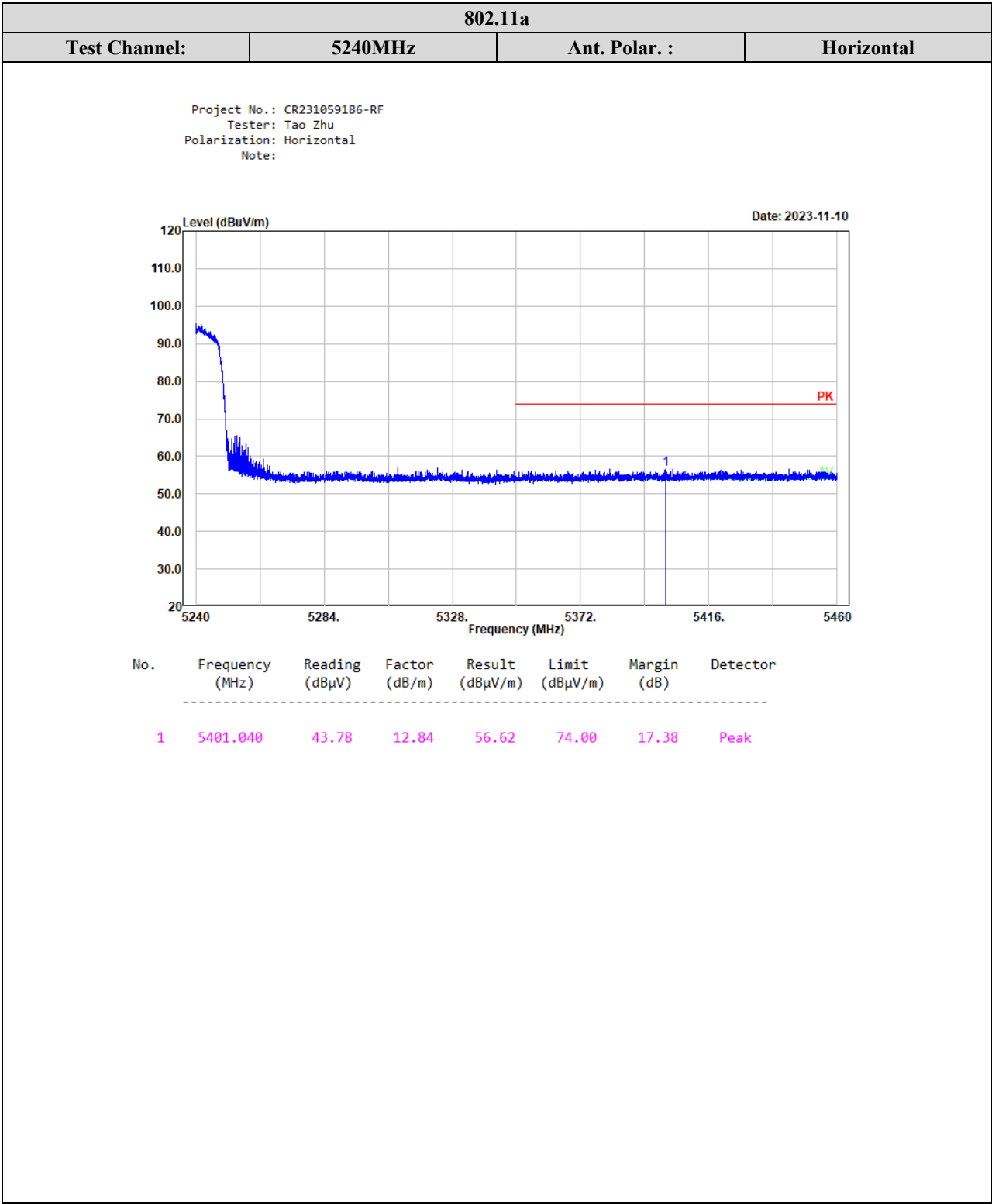
Tester: Tao Zhu

Polarization: Vertical

Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5148.968	49.41	11.93	61.34	74.00	12.66	Peak
2	5148.968	35.75	11.93	47.68	54.00	6.32	Average



802.11a

Test Channel:

5240MHz

Ant. Polar. :

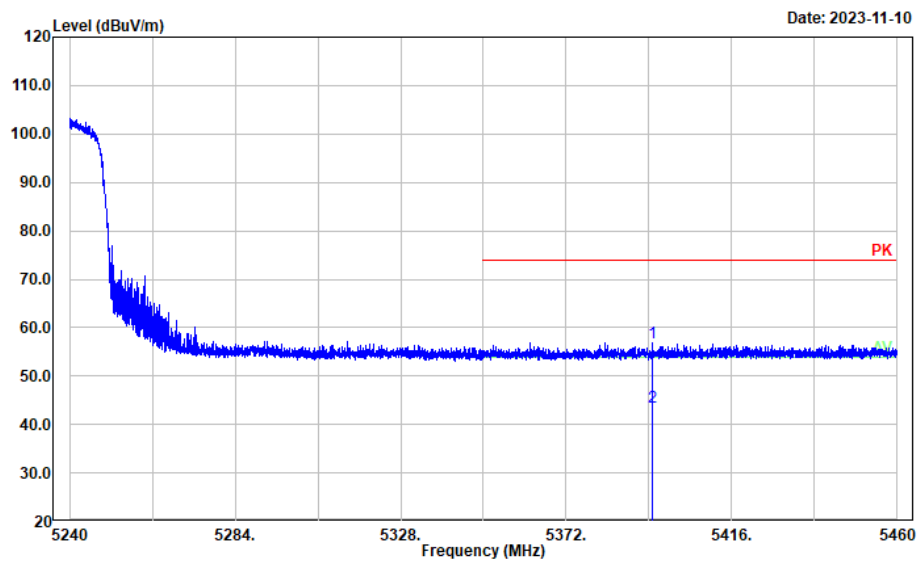
Vertical

Project No.: CR231059186-RF

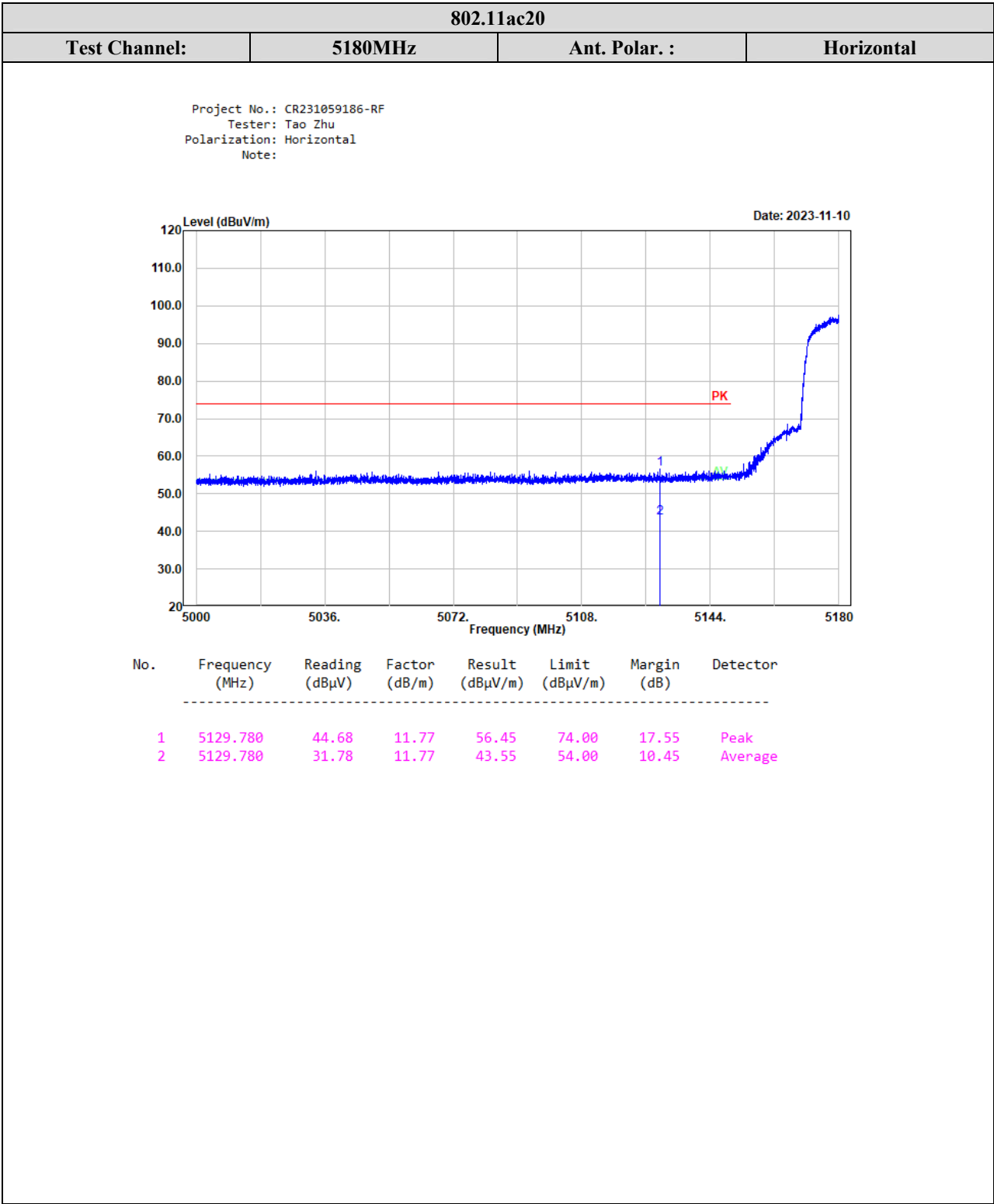
Tester: Tao Zhu

Polarization: Vertical

Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5394.792	44.02	12.80	56.82	74.00	17.18	Peak
2	5394.792	30.85	12.80	43.65	54.00	10.35	Average



802.11ac20

Test Channel:

5180MHz

Ant. Polar. :

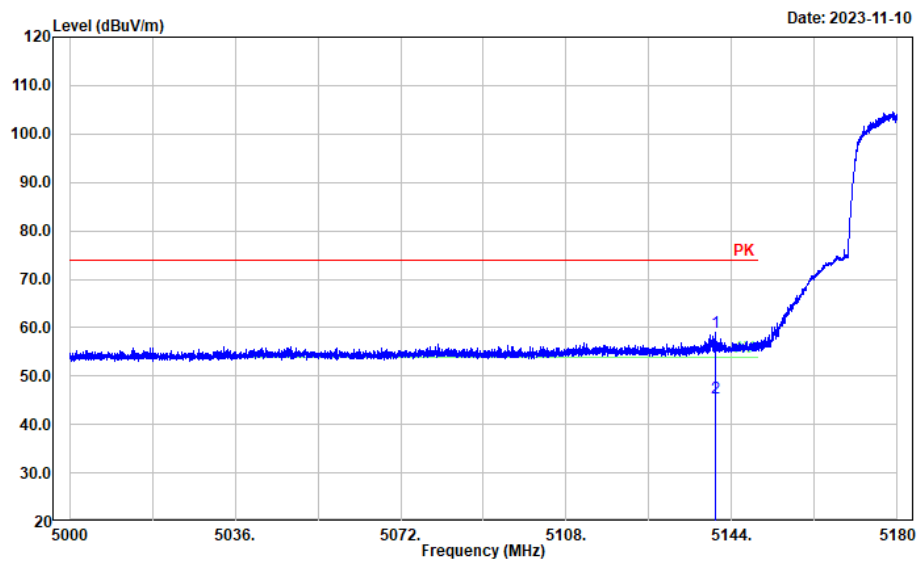
Vertical

Project No.: CR231059186-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	5140.436	47.14	11.85	58.99	74.00	15.01	Peak
2	5140.436	33.53	11.85	45.38	54.00	8.62	Average

802.11ac20

Test Channel:

5240MHz

Ant. Polar. :

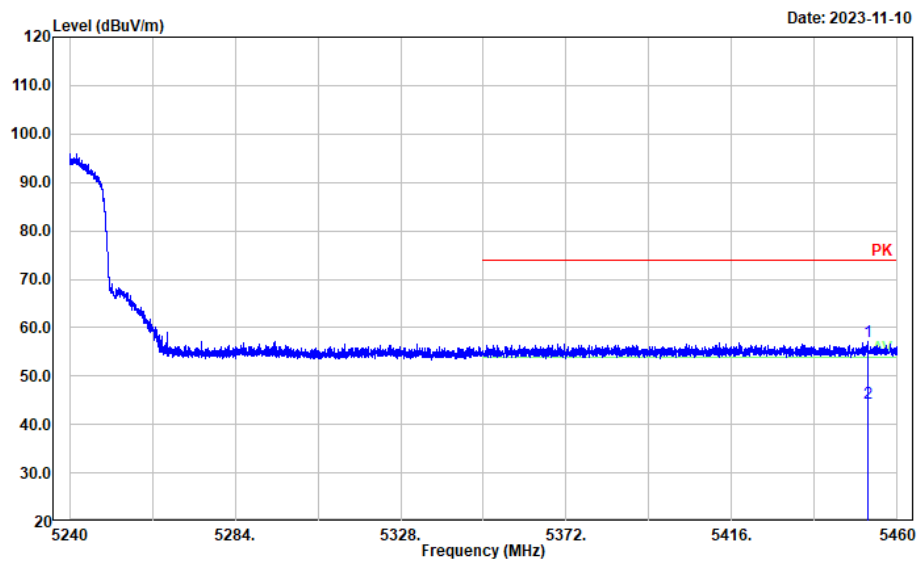
Horizontal

Project No.: CR231059186-RF

Tester: Tao Zhu

Polarization: Horizontal

Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5452.036	44.18	12.82	57.00	74.00	17.00	Peak
2	5452.036	31.70	12.82	44.52	54.00	9.48	Average

802.11ac20

Test Channel:

5240MHz

Ant. Polar. :

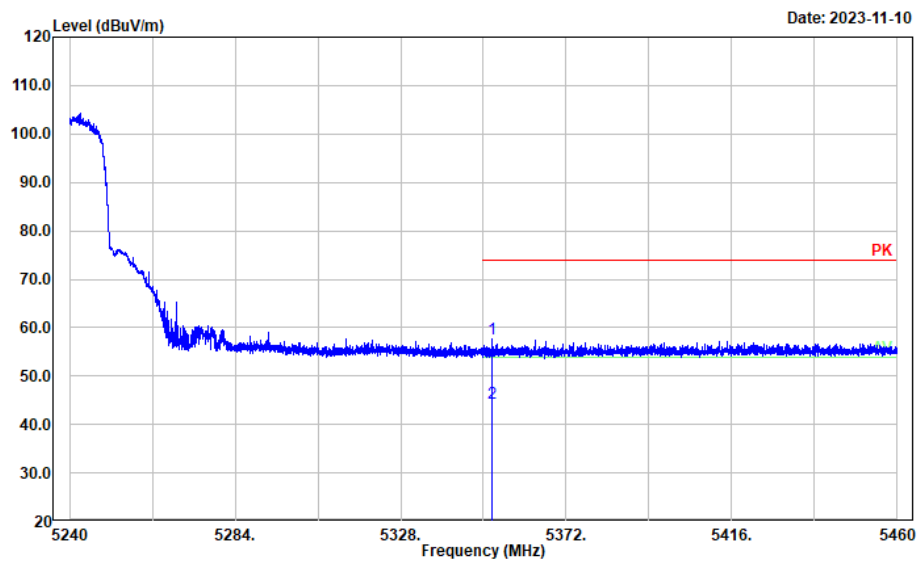
Vertical

Project No.: CR231059186-RF

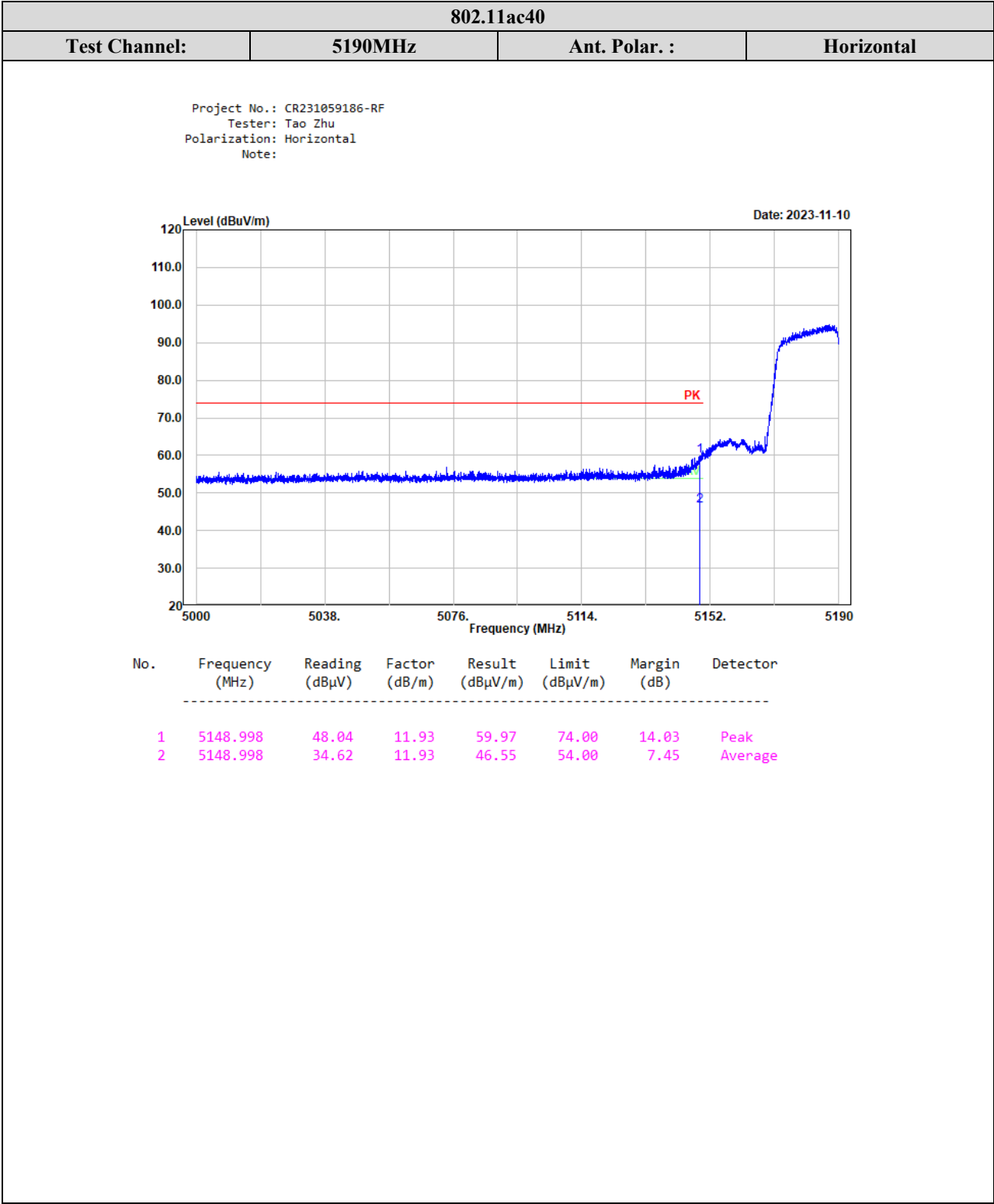
Tester: Tao Zhu

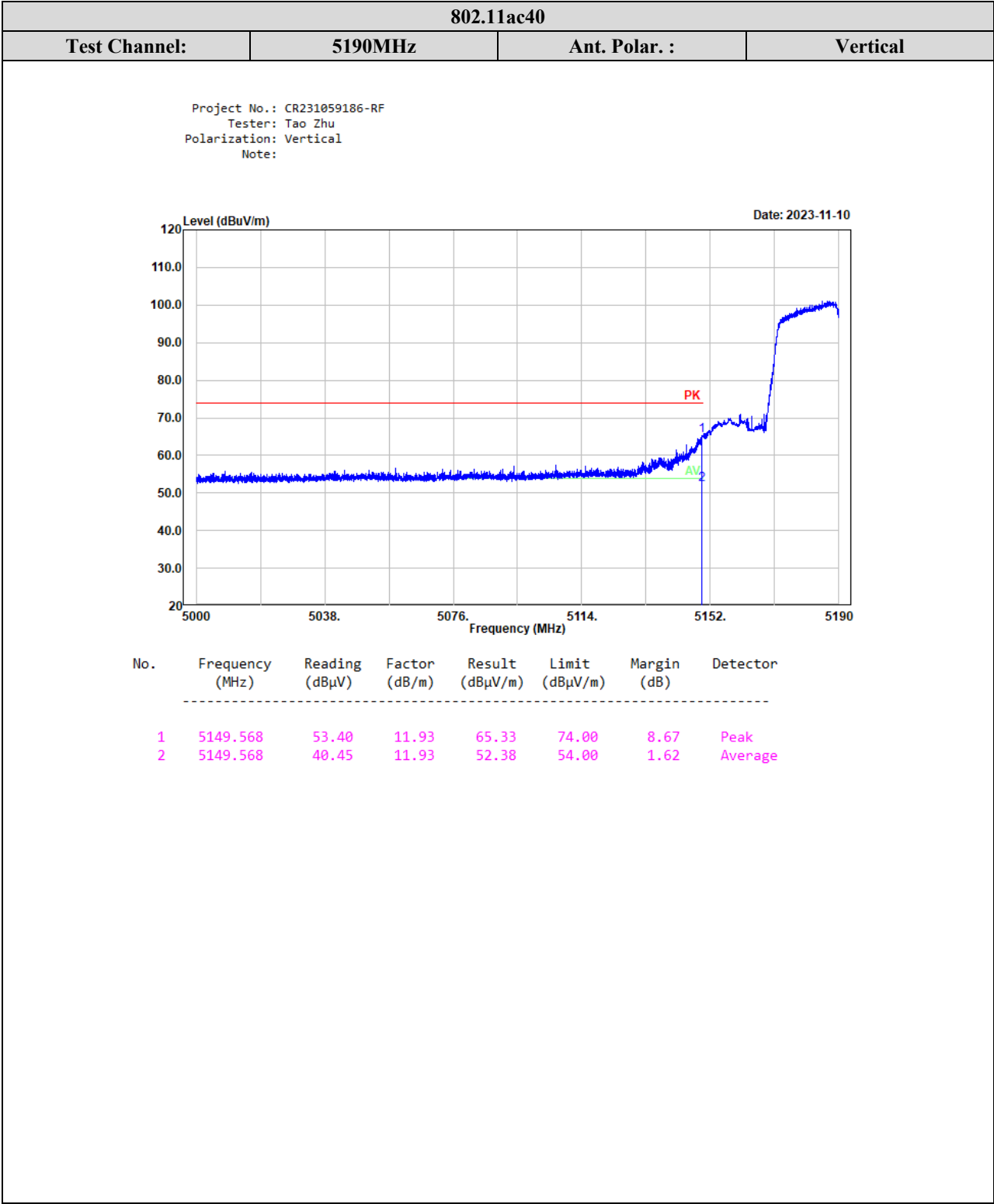
Polarization: Vertical

Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5352.244	45.09	12.46	57.55	74.00	16.45	Peak
2	5352.244	31.89	12.46	44.35	54.00	9.65	Average





802.11ac40

Test Channel:

5230MHz

Ant. Polar. :

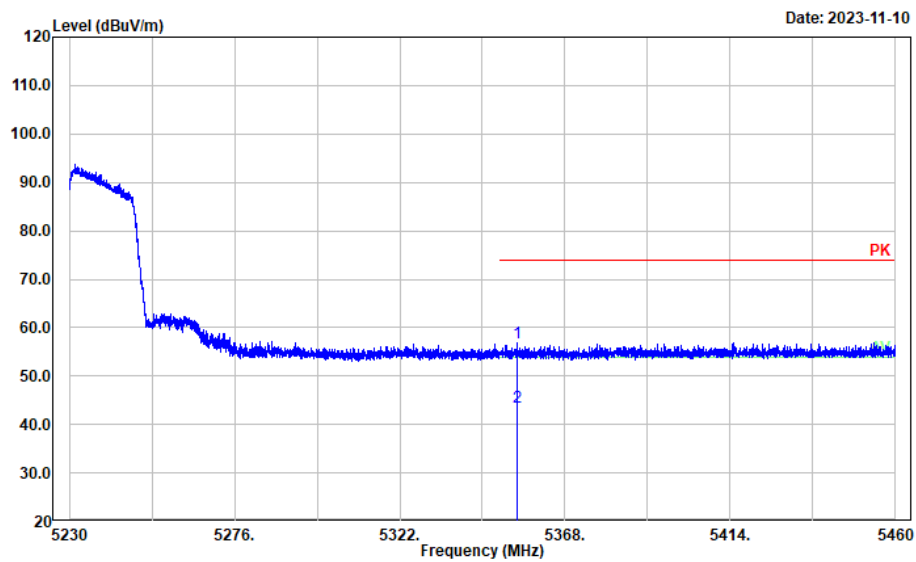
Horizontal

Project No.: CR231059186-RF

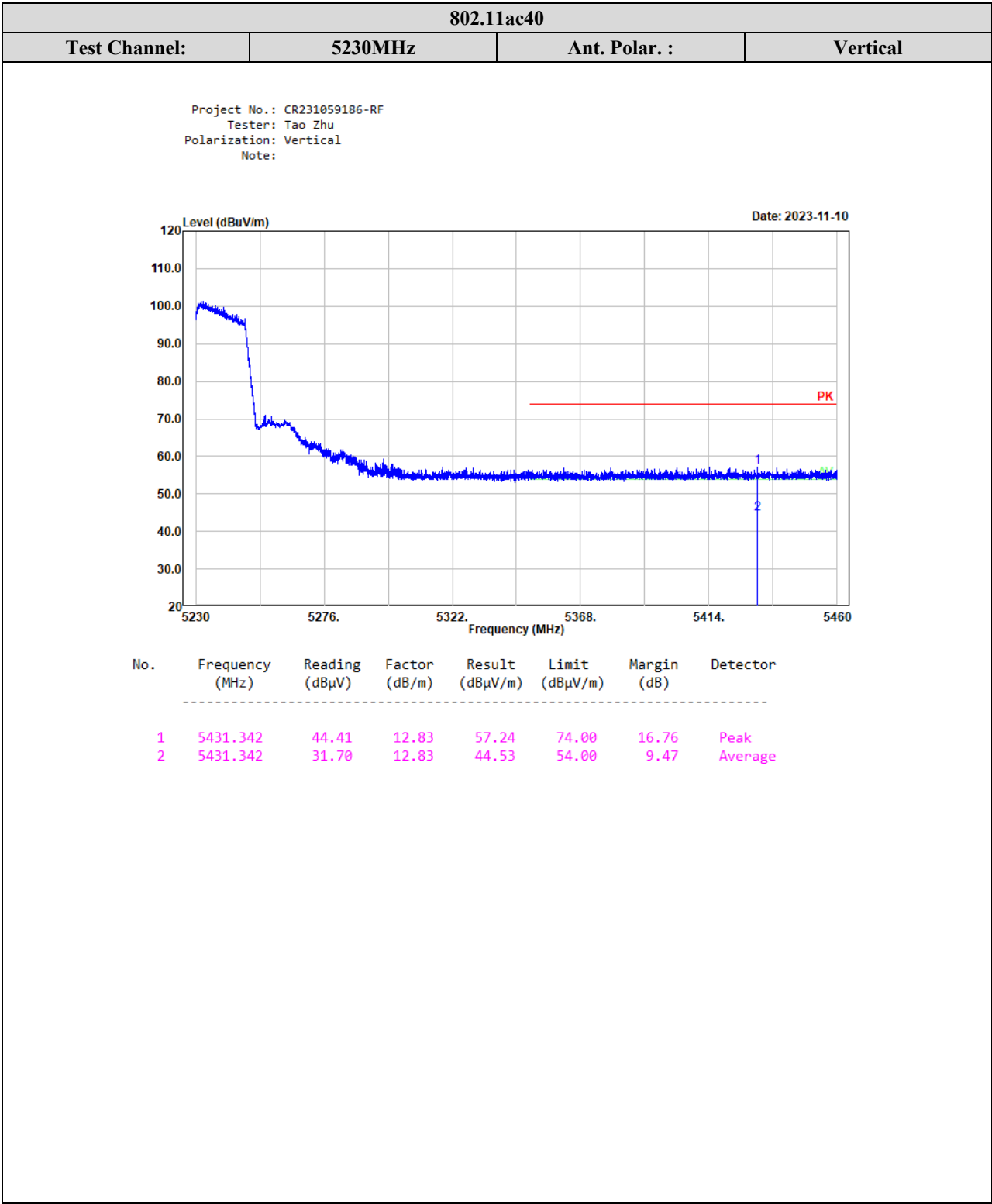
Tester: Tao Zhu

Polarization: Horizontal

Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5354.568	44.49	12.48	56.97	74.00	17.03	Peak
2	5354.568	31.10	12.48	43.58	54.00	10.42	Average



802.11ac80

Test Channel:

5210MHz

Ant. Polar. :

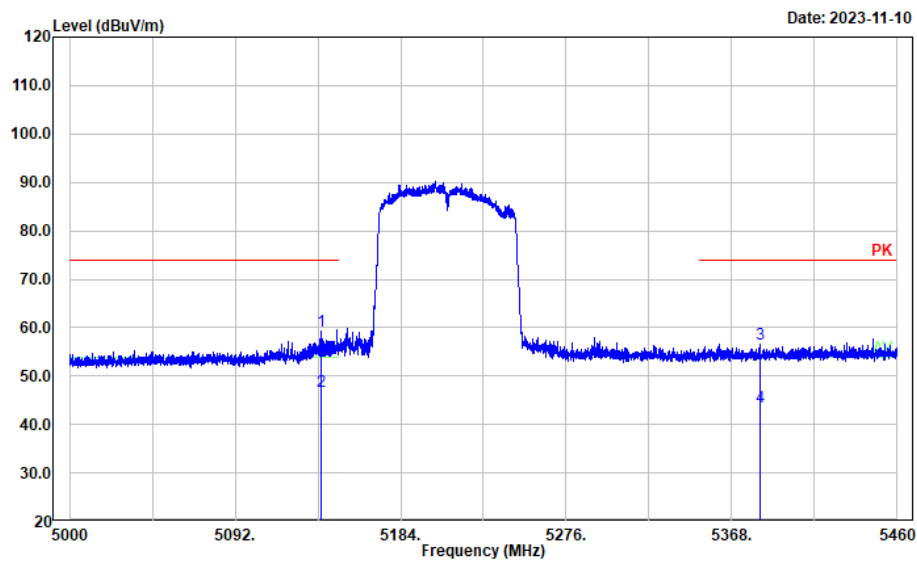
Horizontal

Project No.: CR231059186-RF

Tester: Tao Zhu

Polarization: Horizontal

Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5140.116	47.41	11.85	59.26	74.00	14.74	Peak
2	5140.116	34.91	11.85	46.76	54.00	7.24	Average
3	5383.732	43.93	12.72	56.65	74.00	17.35	Peak
4	5383.732	30.86	12.72	43.58	54.00	10.42	Average

802.11ac80

Test Channel:

5210MHz

Ant. Polar. :

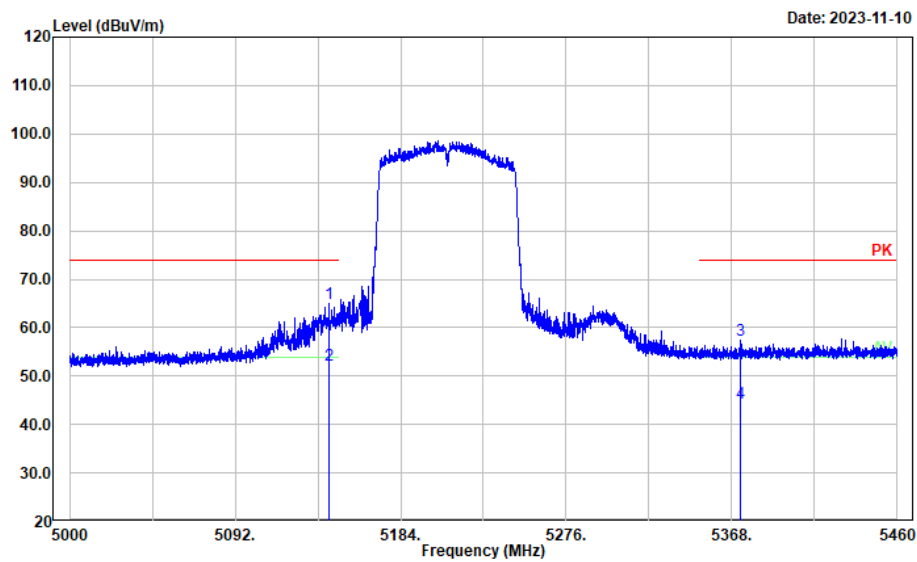
Vertical

Project No.: CR231059186-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	5144.072	53.17	11.88	65.05	74.00	8.95	Peak
2	5144.072	40.49	11.88	52.37	54.00	1.63	Average
3	5373.060	44.68	12.63	57.31	74.00	16.69	Peak
4	5373.060	31.72	12.63	44.35	54.00	9.65	Average

5250-5350MHz:

802.11a

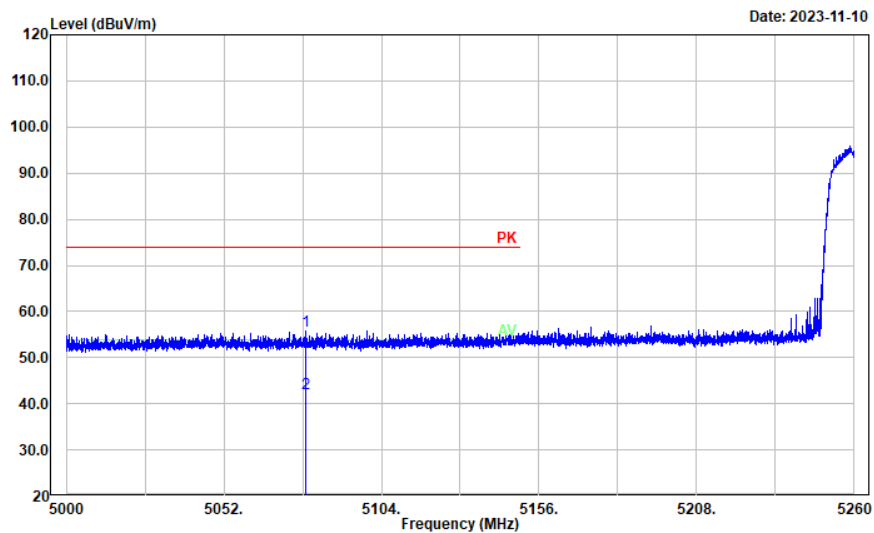
Test Channel:

5260MHz

Ant. Polar. :

Horizontal

Project No.: CR231059186-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5079.092	44.34	11.56	55.90	74.00	18.10	Peak
2	5079.092	30.79	11.56	42.35	54.00	11.65	Average

802.11a

Test Channel:

5260MHz

Ant. Polar. :

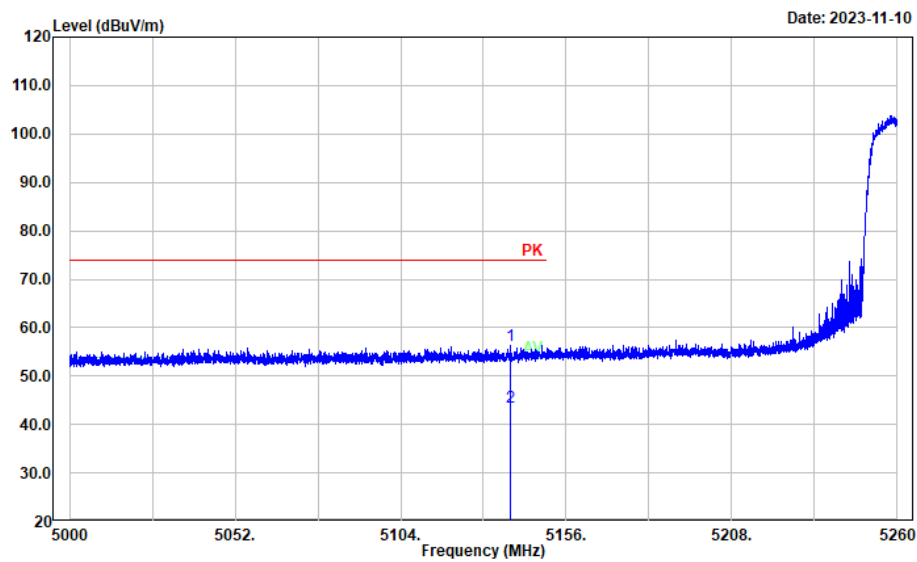
Vertical

Project No.: CR231059186-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	5138.528	44.44	11.84	56.28	74.00	17.72	Peak
2	5138.528	31.73	11.84	43.57	54.00	10.43	Average

802.11a

Test Channel:

5320MHz

Ant. Polar. :

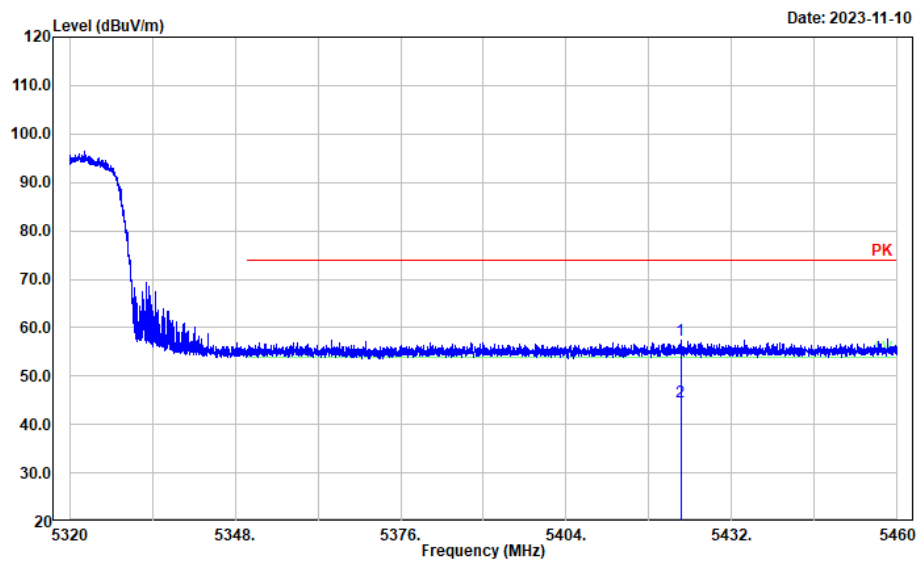
Horizontal

Project No.: CR231059186-RF

Tester: Tao Zhu

Polarization: Horizontal

Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5423.348	44.49	12.83	57.32	74.00	16.68	Peak
2	5423.348	31.78	12.83	44.61	54.00	9.39	Average

802.11a

Test Channel:

5320MHz

Ant. Polar. :

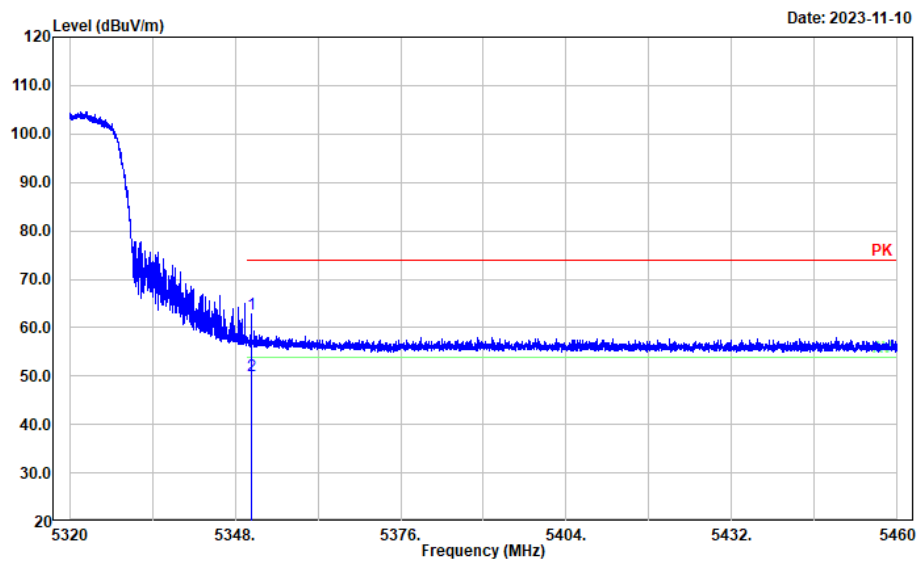
Vertical

Project No.: CR231059186-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	5350.800	50.30	12.45	62.75	74.00	11.25	Peak
2	5350.800	37.56	12.45	50.01	54.00	3.99	Average

802.11ac20

Test Channel:

5260MHz

Ant. Polar. :

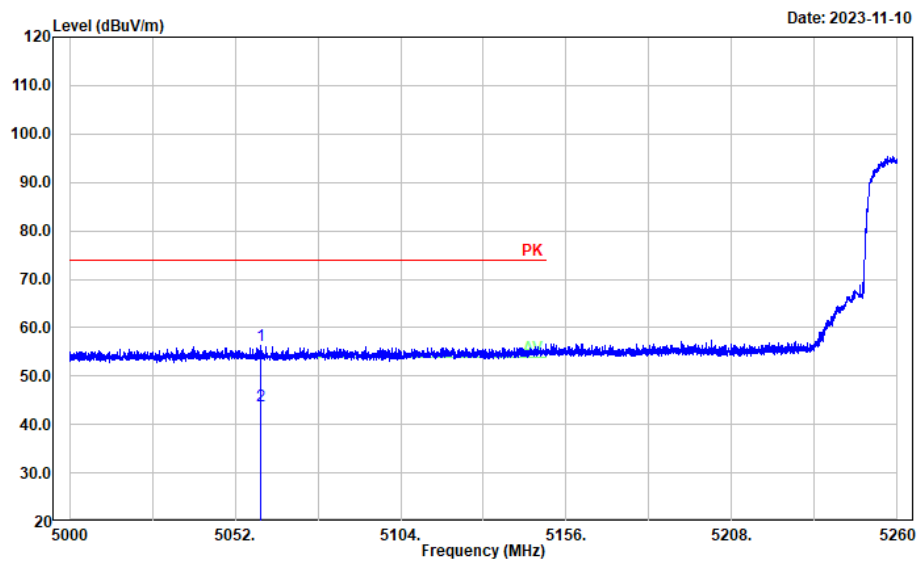
Horizontal

Project No.: CR231059186-RF

Tester: Tao Zhu

Polarization: Horizontal

Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5059.852	44.65	11.59	56.24	74.00	17.76	Peak
2	5059.852	32.17	11.59	43.76	54.00	10.24	Average

802.11ac20

Test Channel:

5260MHz

Ant. Polar. :

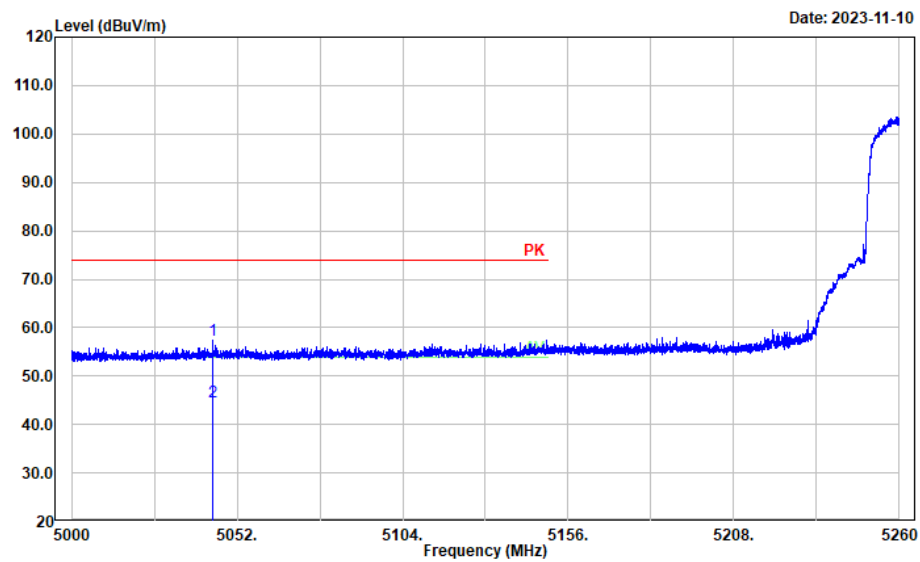
Vertical

Project No.: CR231059186-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	5044.460	45.71	11.56	57.27	74.00	16.73	Peak
2	5044.460	32.97	11.56	44.53	54.00	9.47	Average

802.11ac20

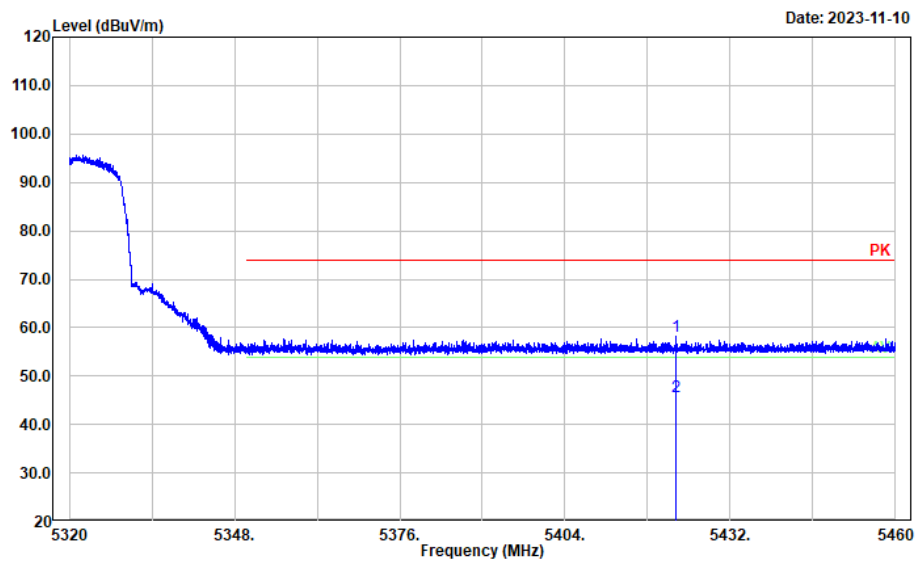
Test Channel:

5320MHz

Ant. Polar. :

Horizontal

Project No.: CR231059186-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5422.732	45.29	12.83	58.12	74.00	15.88	Peak
2	5422.732	32.90	12.83	45.73	54.00	8.27	Average

802.11ac20

Test Channel:

5320MHz

Ant. Polar. :

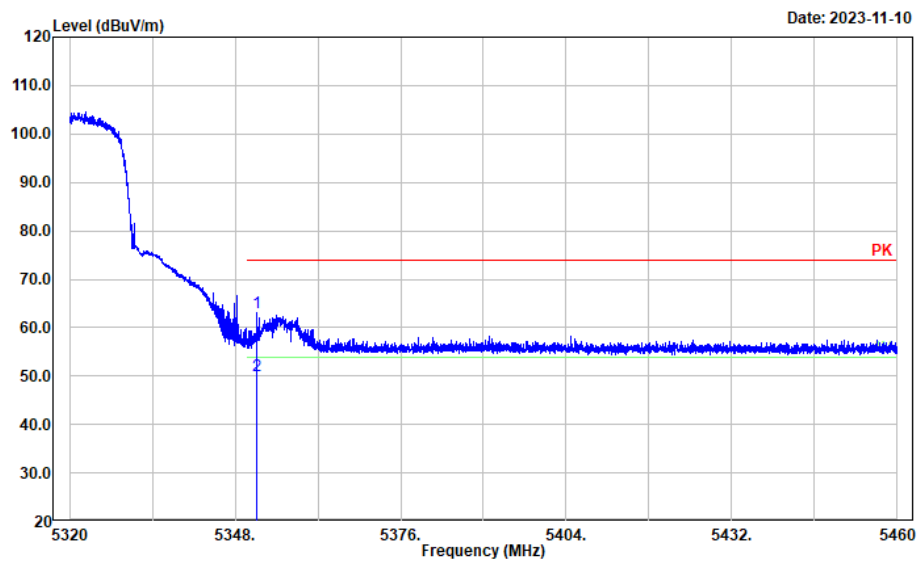
Vertical

Project No.: CR231059186-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	5351.640	50.53	12.46	62.99	74.00	11.01	Peak
2	5351.640	37.75	12.46	50.21	54.00	3.79	Average

802.11ac40

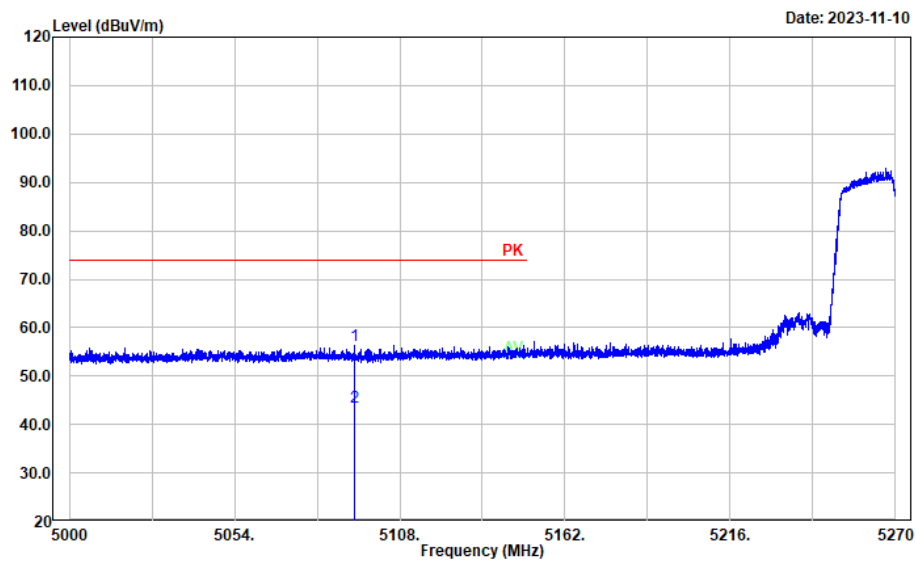
Test Channel:

5270MHz

Ant. Polar. :

Horizontal

Project No.: CR231059186-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5093.312	44.83	11.54	56.37	74.00	17.63	Peak
2	5093.312	32.01	11.54	43.55	54.00	10.45	Average

802.11ac40

Test Channel:

5270MHz

Ant. Polar. :

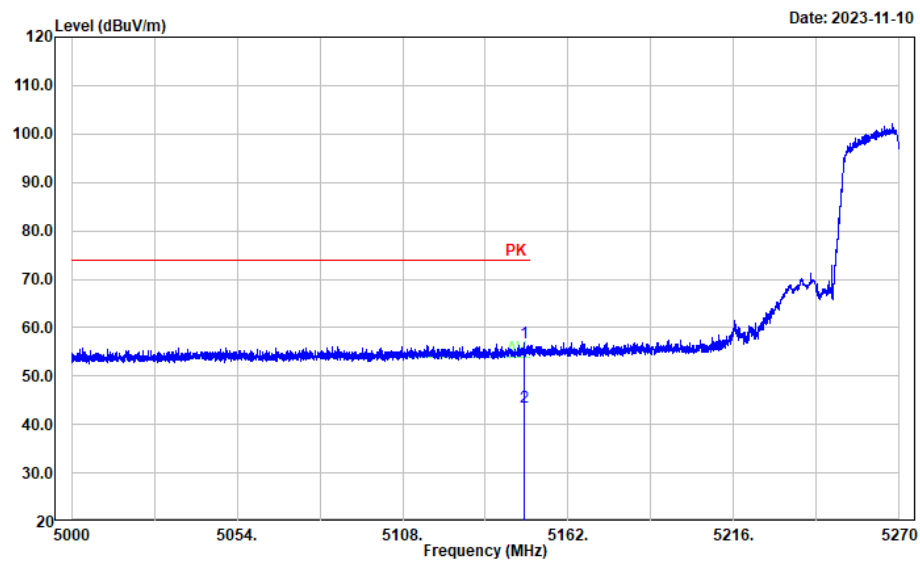
Vertical

Project No.: CR231059186-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	5147.690	44.86	11.91	56.77	74.00	17.23	Peak
2	5147.690	31.74	11.91	43.65	54.00	10.35	Average

802.11ac40

Test Channel:

5310MHz

Ant. Polar. :

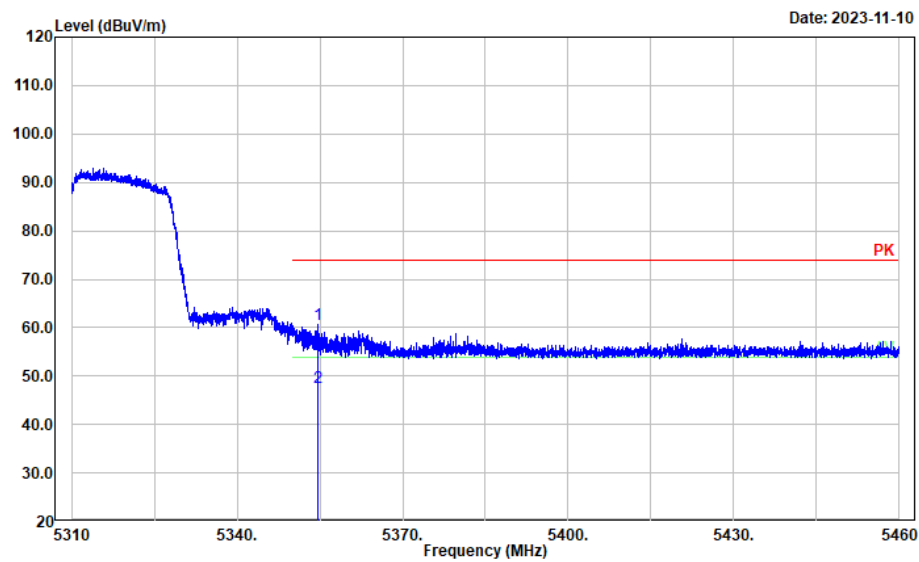
Horizontal

Project No.: CR231059186-RF

Tester: Tao Zhu

Polarization: Horizontal

Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5354.730	48.18	12.48	60.66	74.00	13.34	Peak
2	5354.730	35.17	12.48	47.65	54.00	6.35	Average

802.11ac40

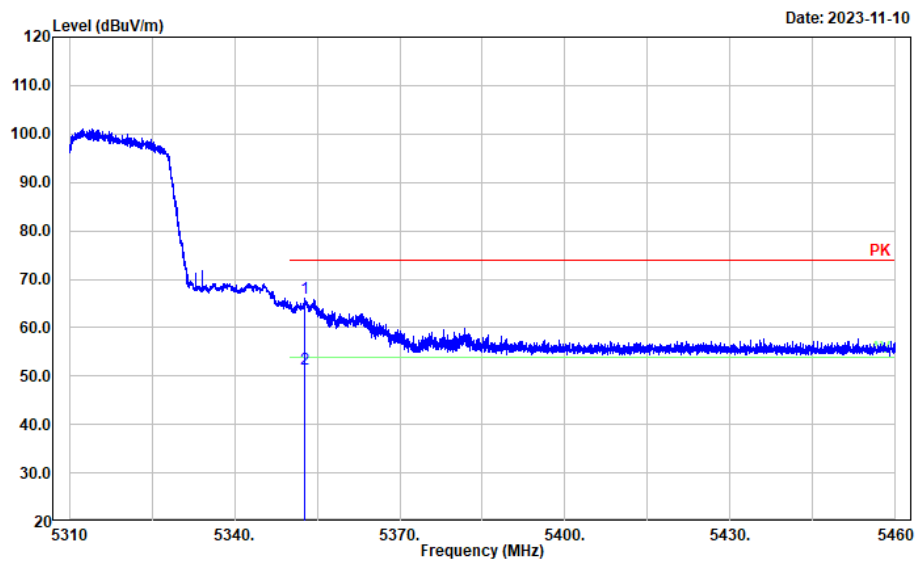
Test Channel:

5310MHz

Ant. Polar. :

Vertical

Project No.: CR231059186-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	5352.810	53.52	12.47	65.99	74.00	8.01	Peak
2	5352.810	39.01	12.47	51.48	54.00	2.52	Average

802.11ac80

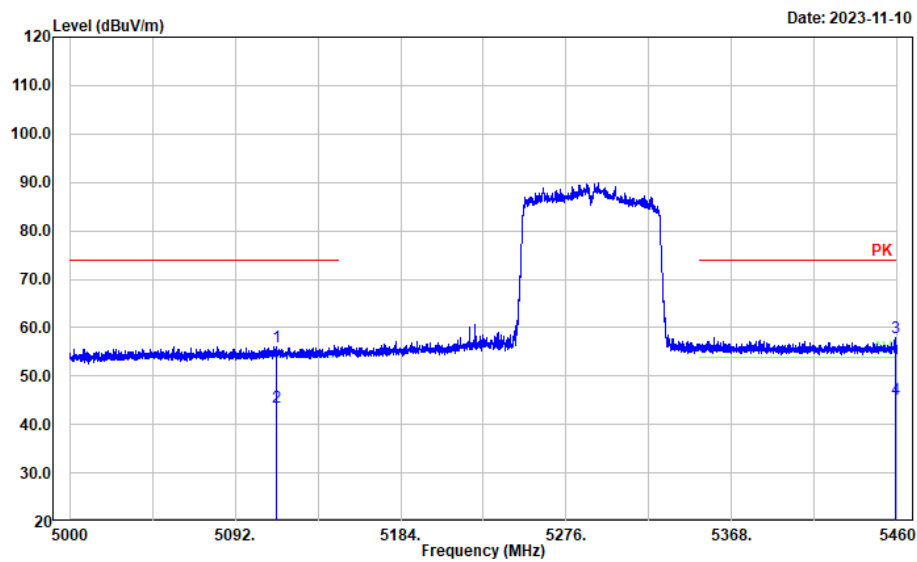
Test Channel:

5290MHz

Ant. Polar. :

Horizontal

Project No.: CR231059186-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5114.908	44.48	11.65	56.13	74.00	17.87	Peak
2	5114.908	31.97	11.65	43.62	54.00	10.38	Average
3	5459.080	45.22	12.81	58.03	74.00	15.97	Peak
4	5459.080	32.44	12.81	45.25	54.00	8.75	Average

802.11ac80

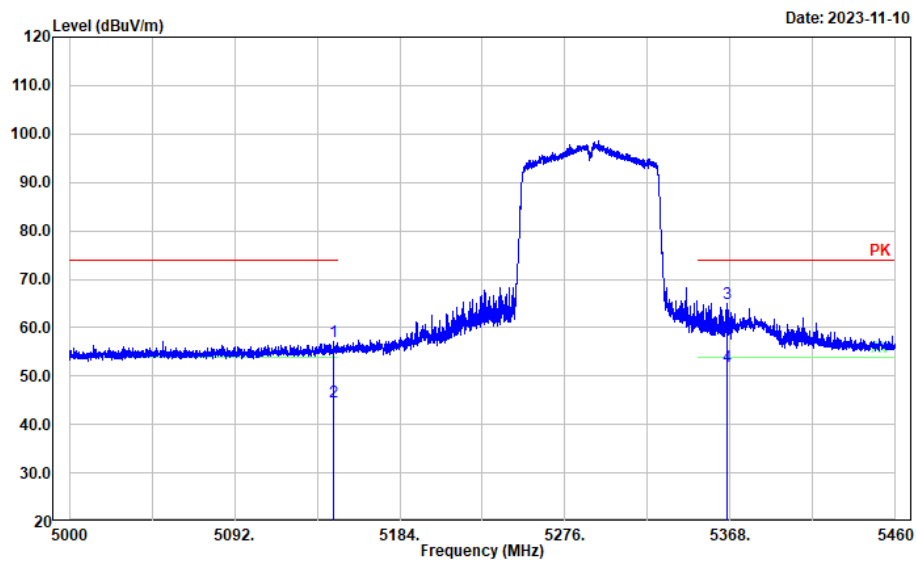
Test Channel:

5290MHz

Ant. Polar. :

Vertical

Project No.: CR231059186-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	5146.832	45.11	11.91	57.02	74.00	16.98	Peak
2	5146.832	32.84	11.91	44.75	54.00	9.25	Average
3	5366.160	52.40	12.57	64.97	74.00	9.03	Peak
4	5366.160	39.32	12.57	51.89	54.00	2.11	Average

5470-5725MHz:

802.11a

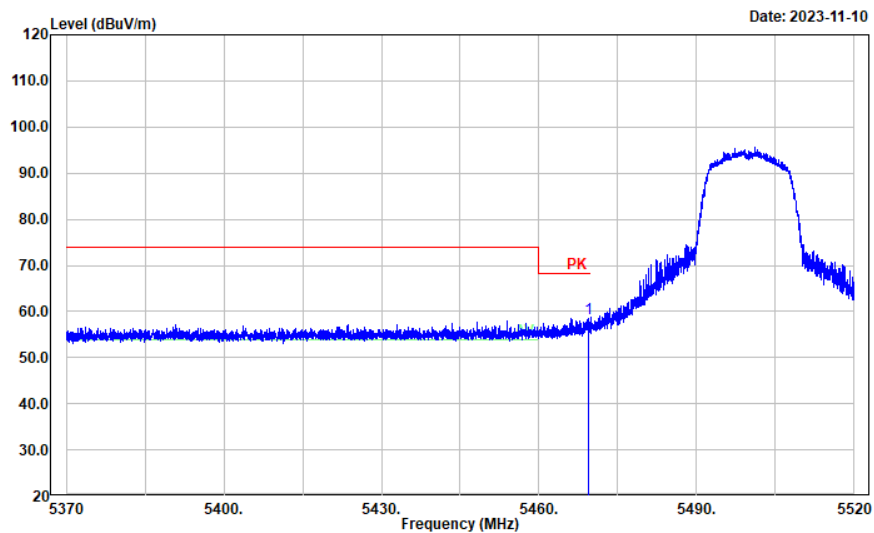
Test Channel:

5500MHz

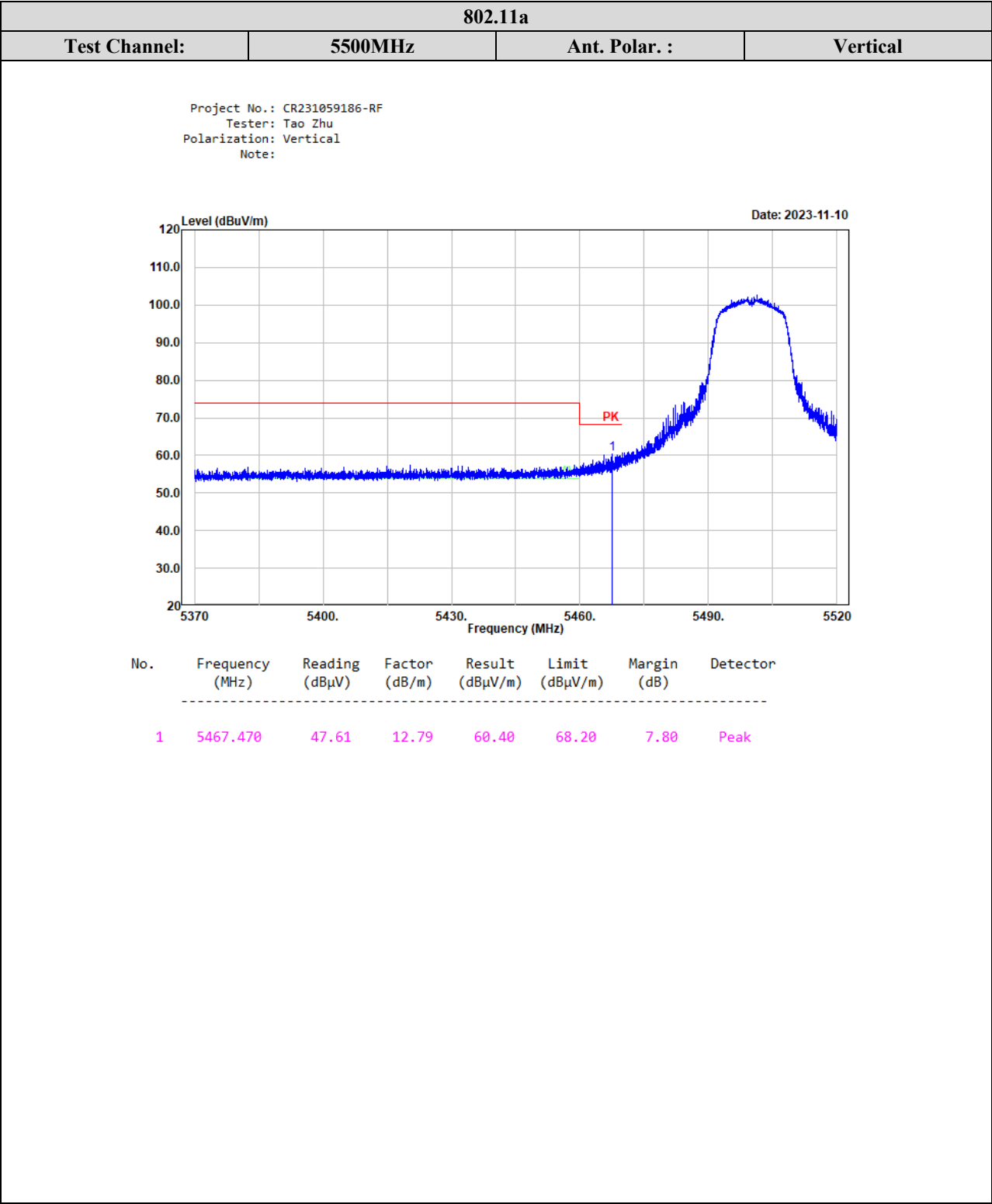
Ant. Polar. :

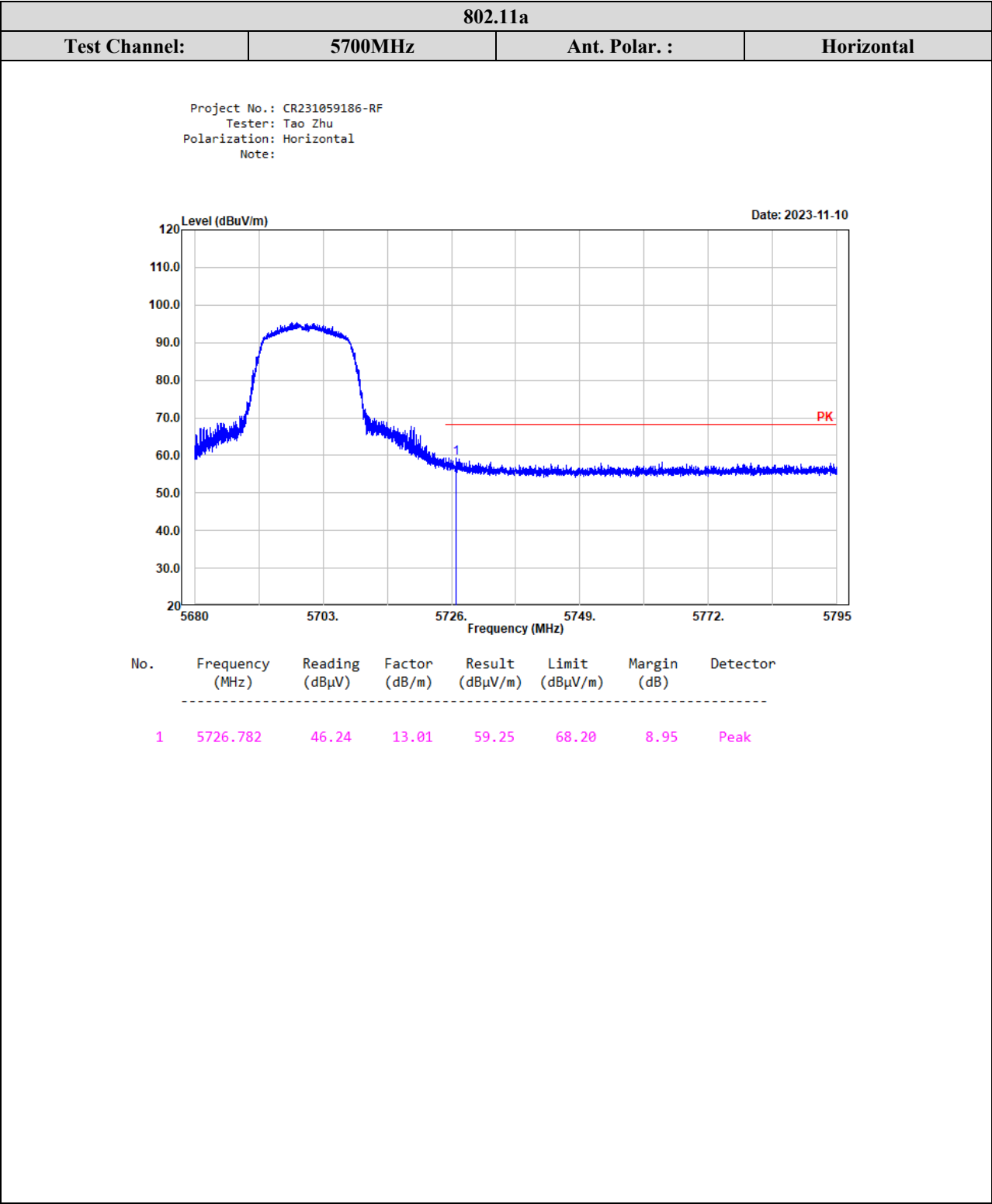
Horizontal

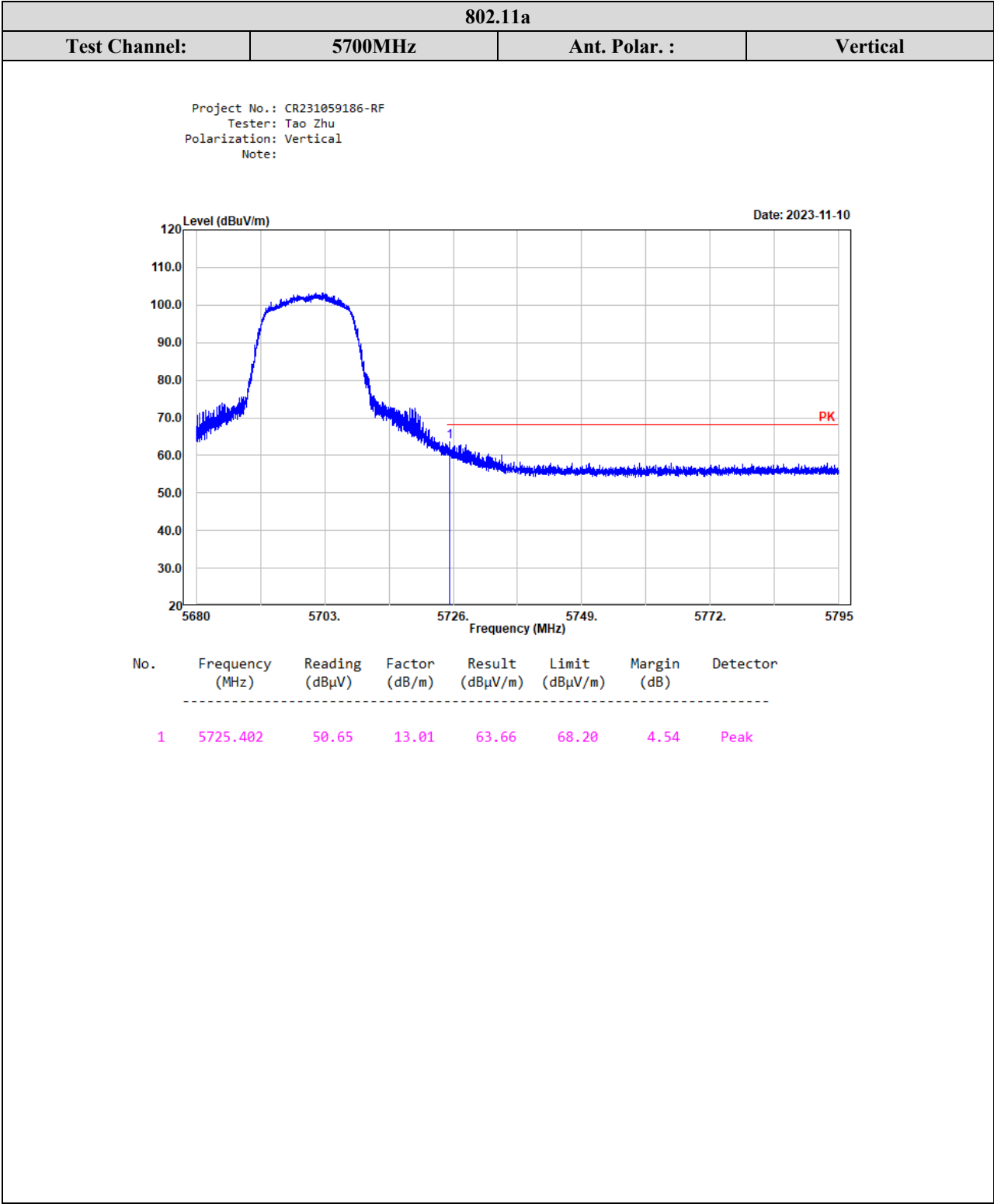
Project No.: CR231059186-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5469.420	45.73	12.79	58.52	68.20	9.68	Peak







802.11ac20

Test Channel:

5500MHz

Ant. Polar. :

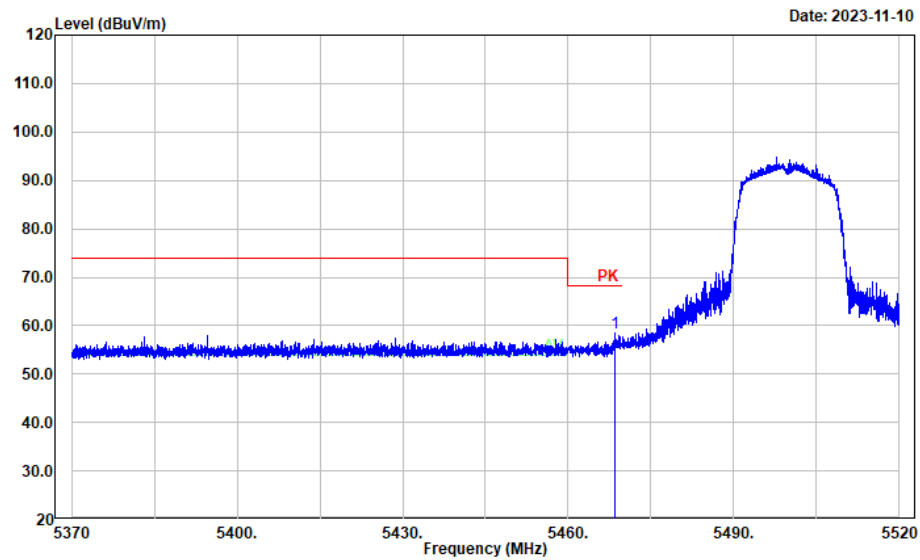
Horizontal

Project No.: CR231059186-RF

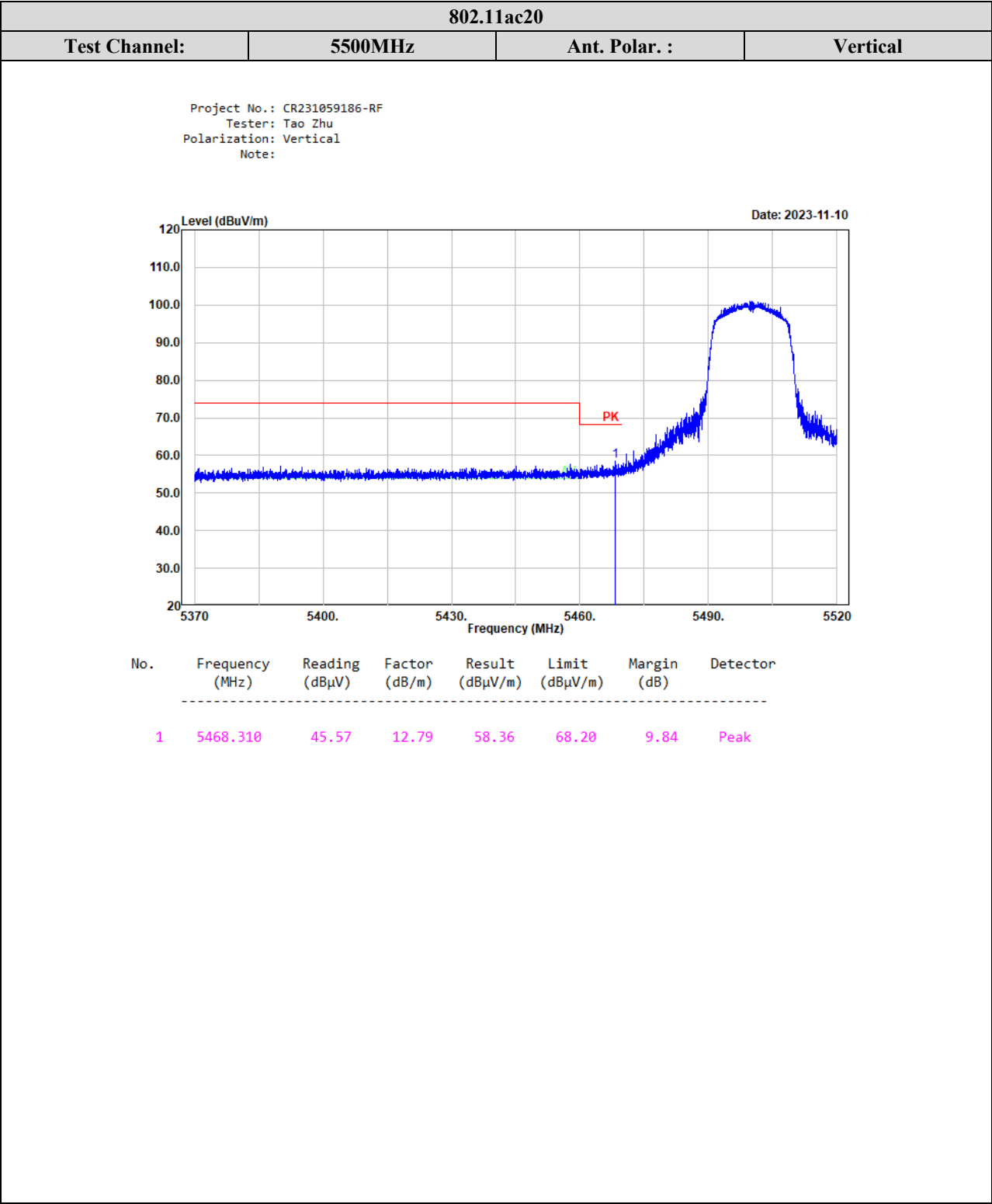
Tester: Tao Zhu

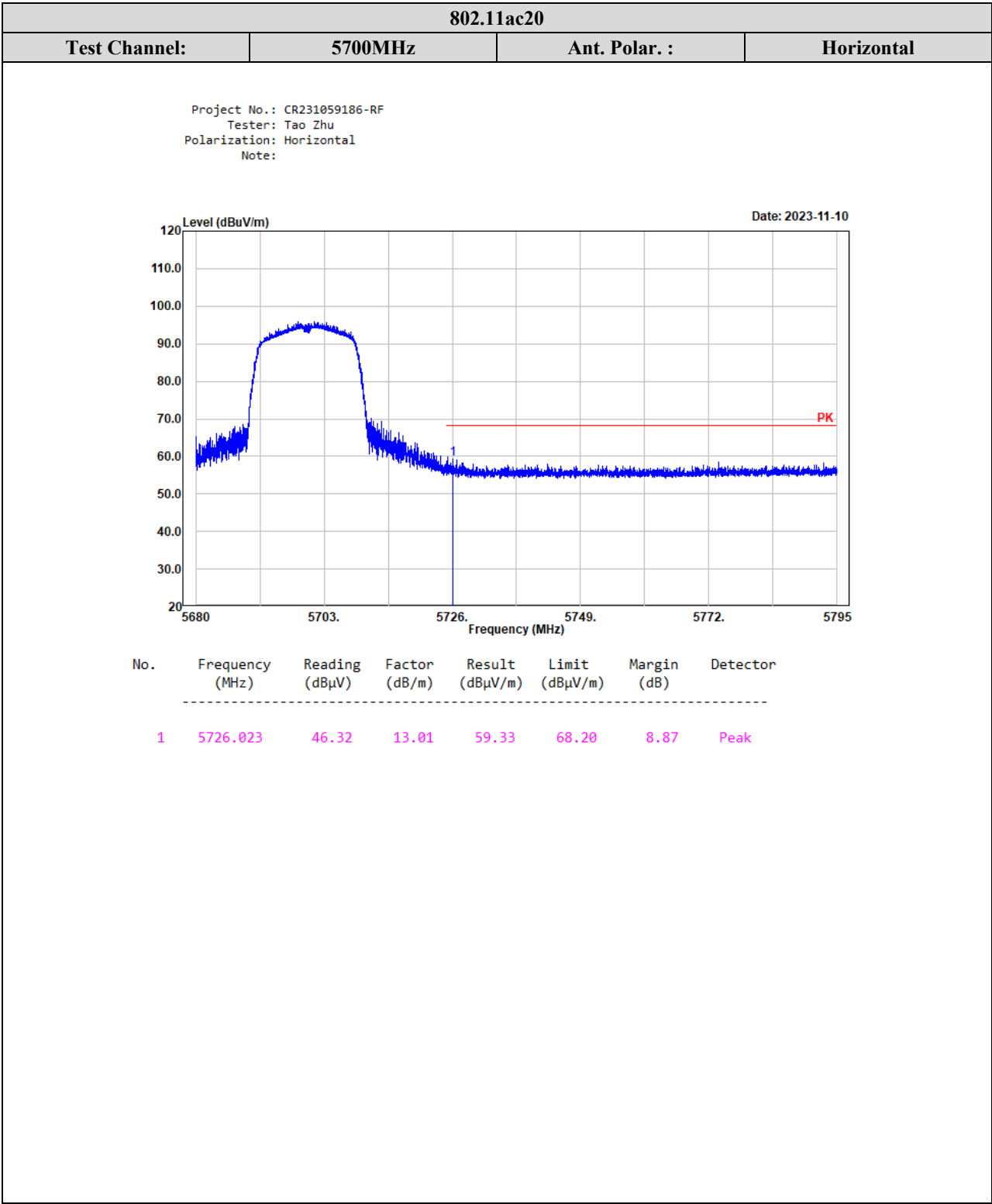
Polarization: Horizontal

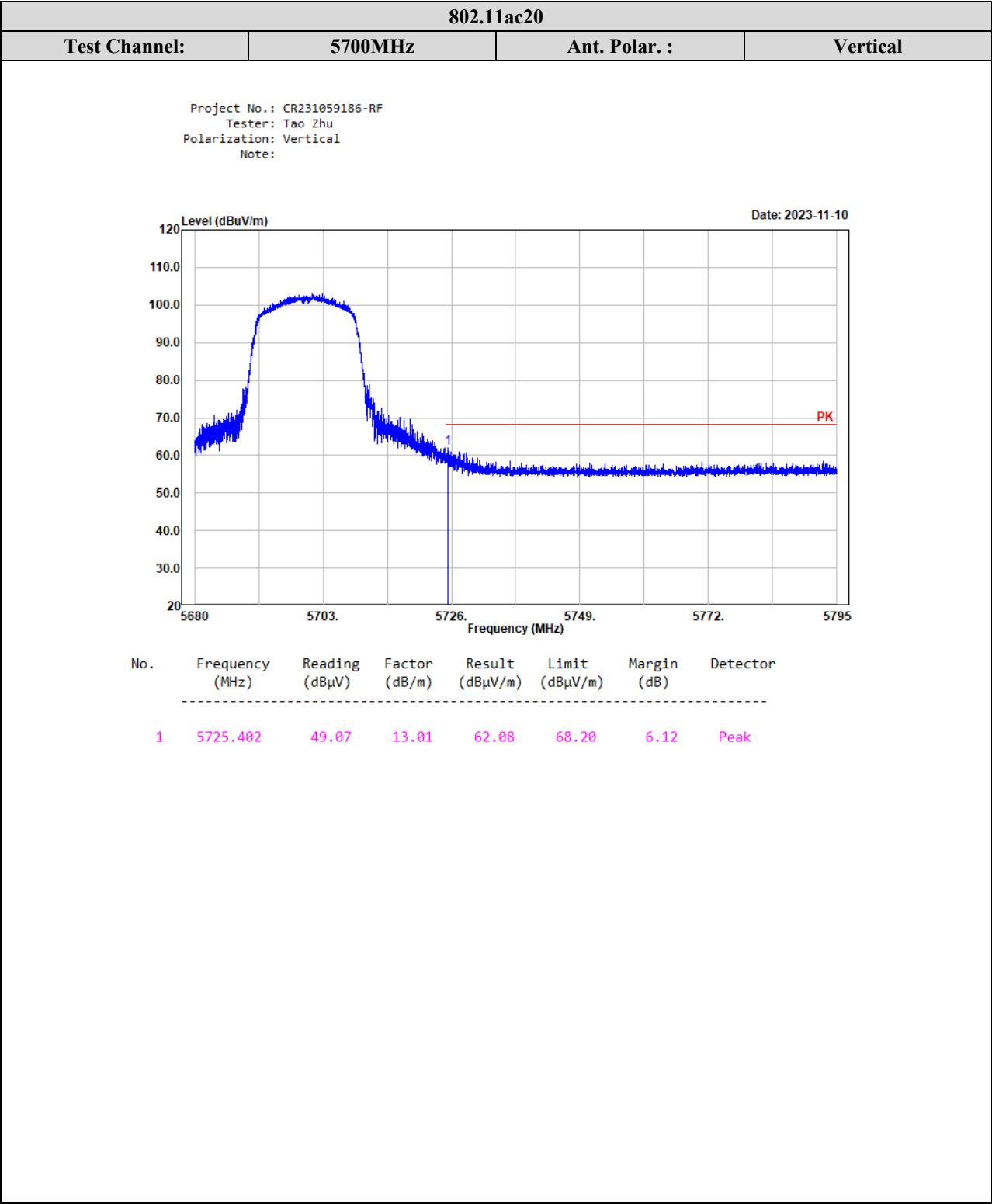
Note:

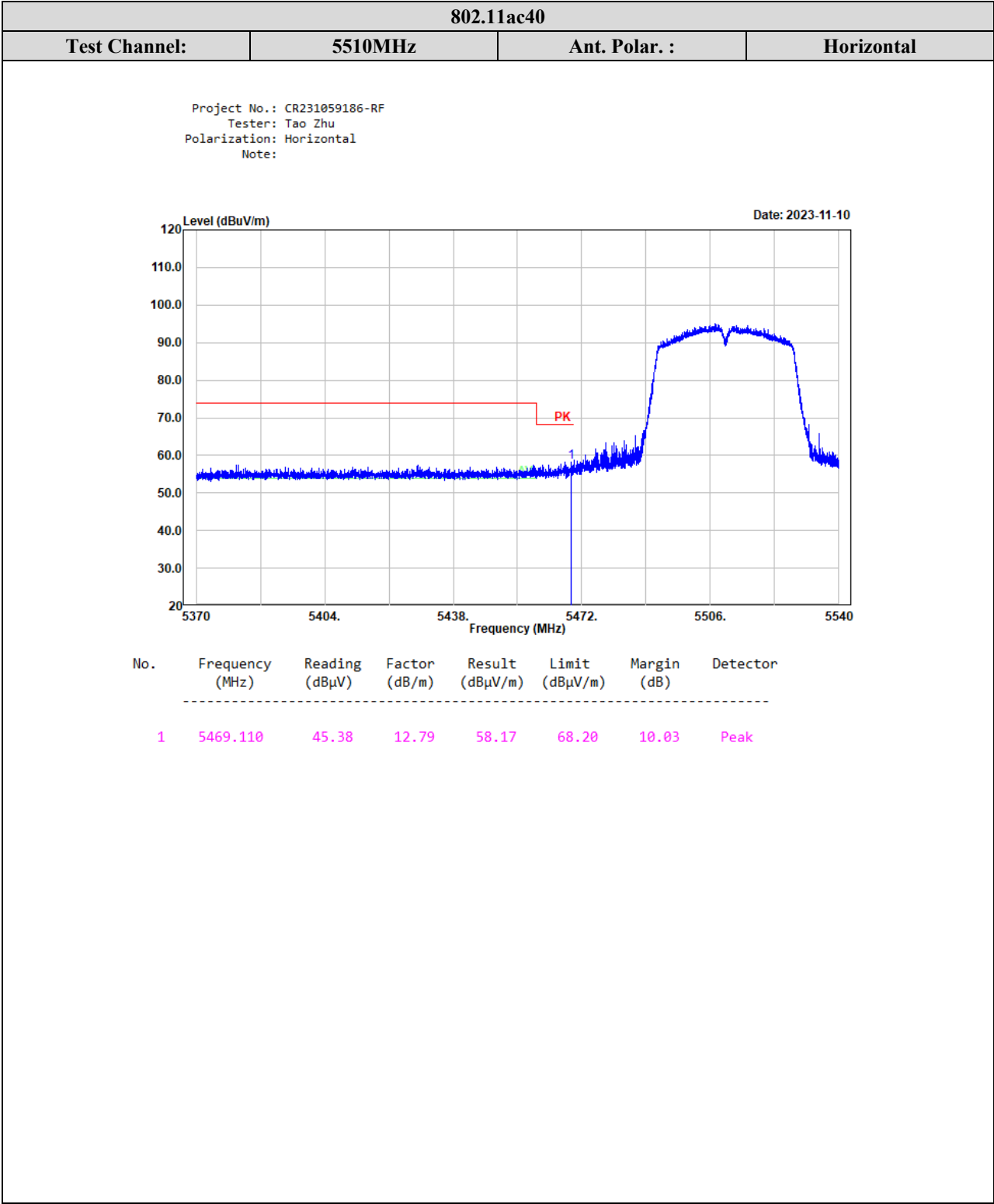


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5468.550	45.70	12.79	58.49	68.20	9.71	Peak









802.11ac40

Test Channel:

5510MHz

Ant. Polar. :

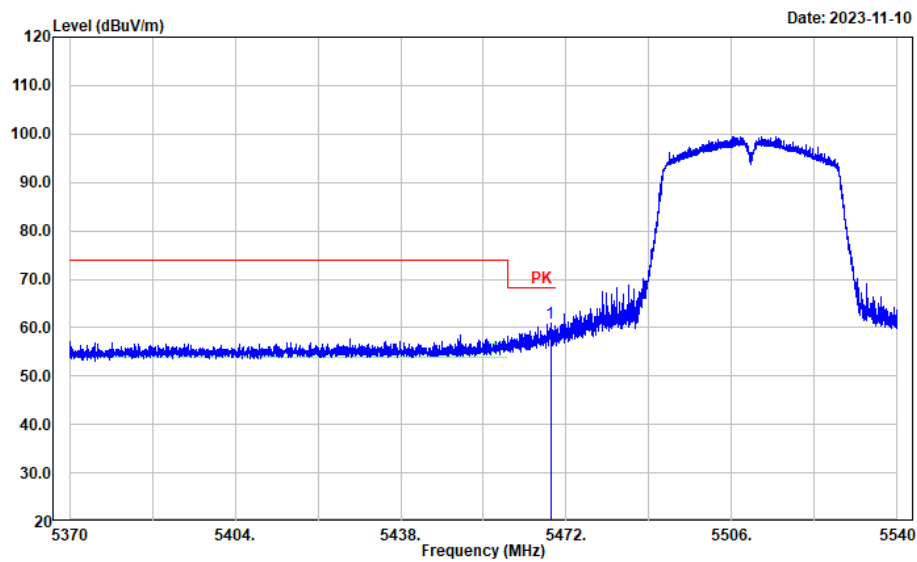
Vertical

Project No.: CR231059186-RF

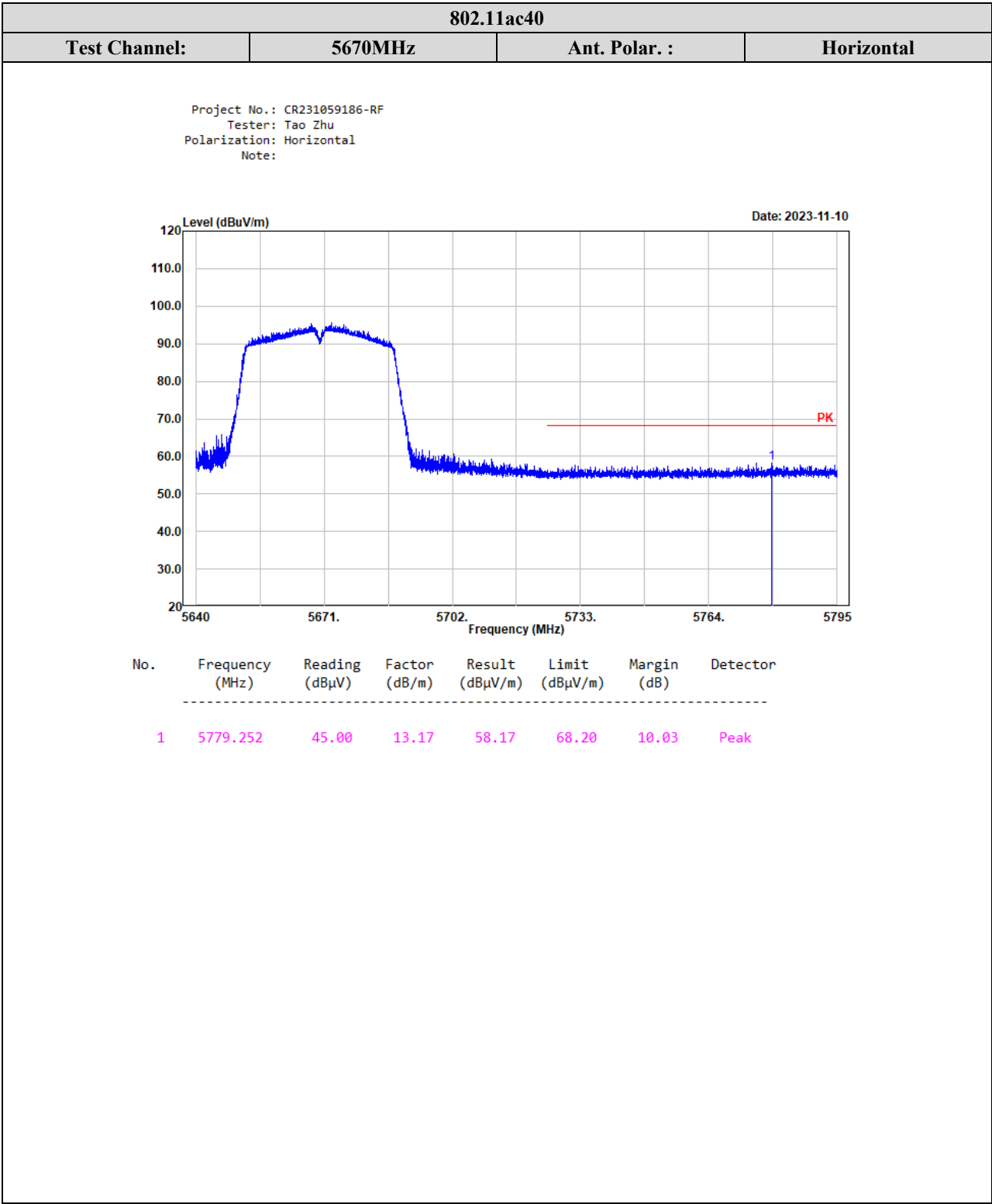
Tester: Tao Zhu

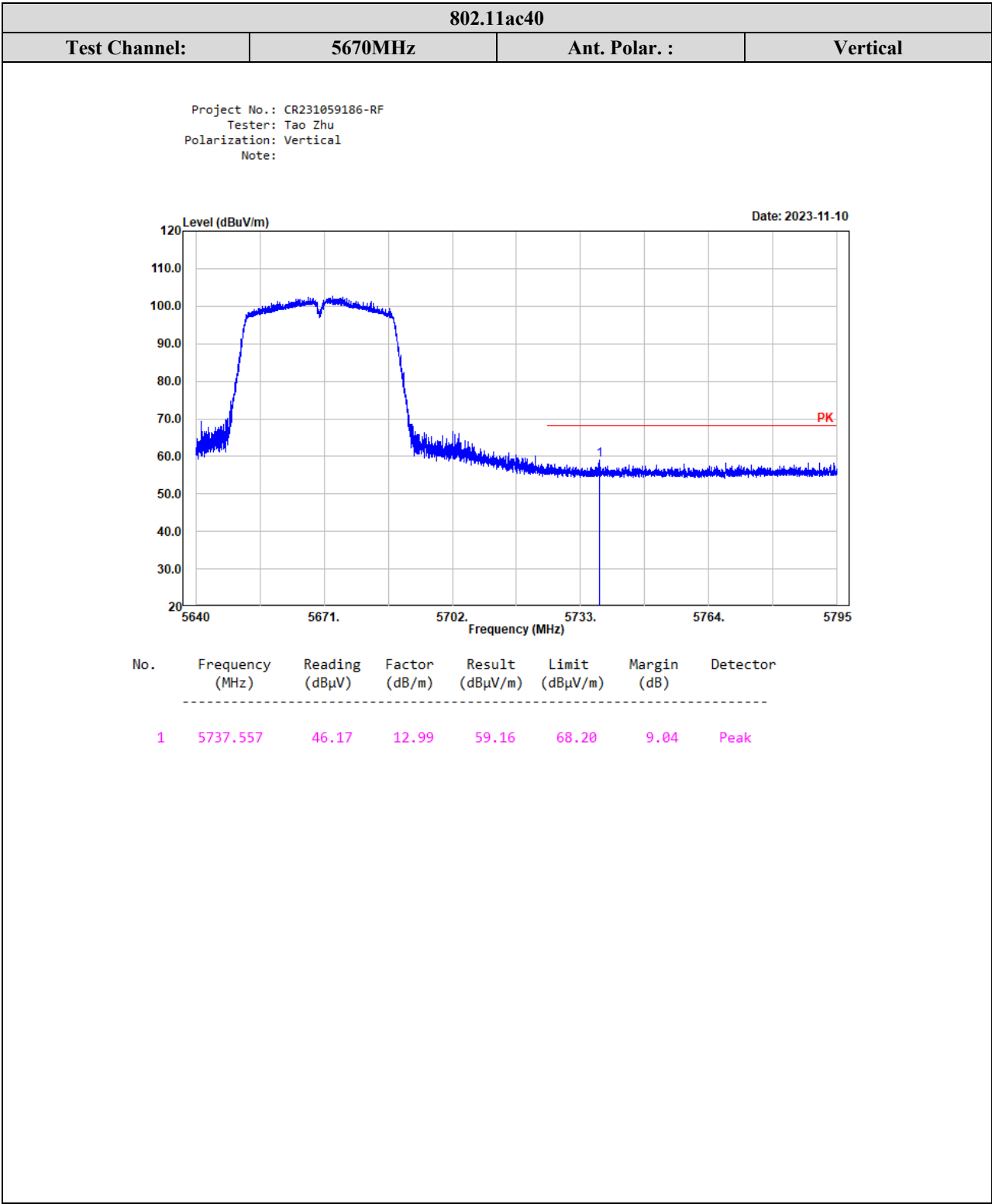
Polarization: Vertical

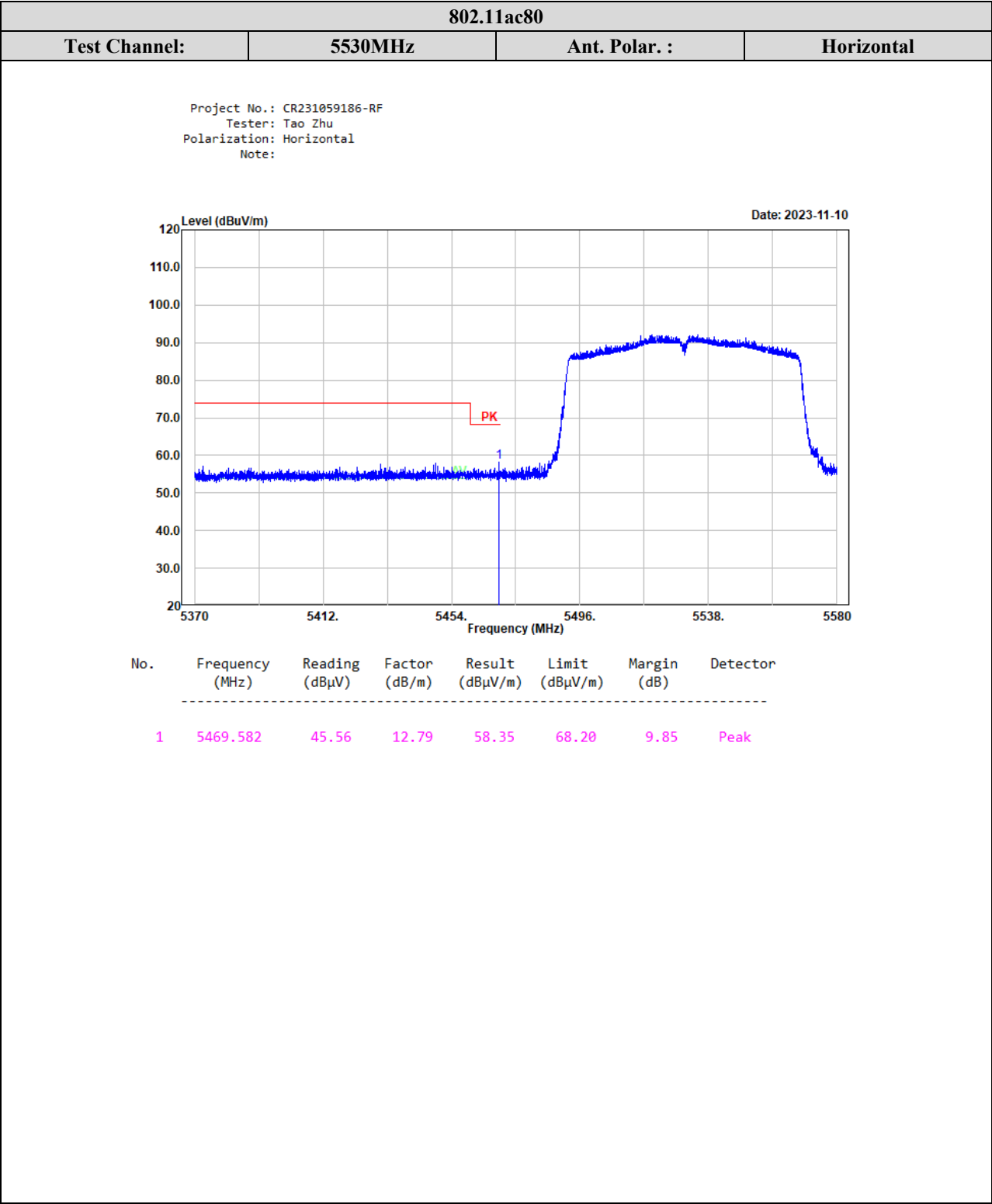
Note:

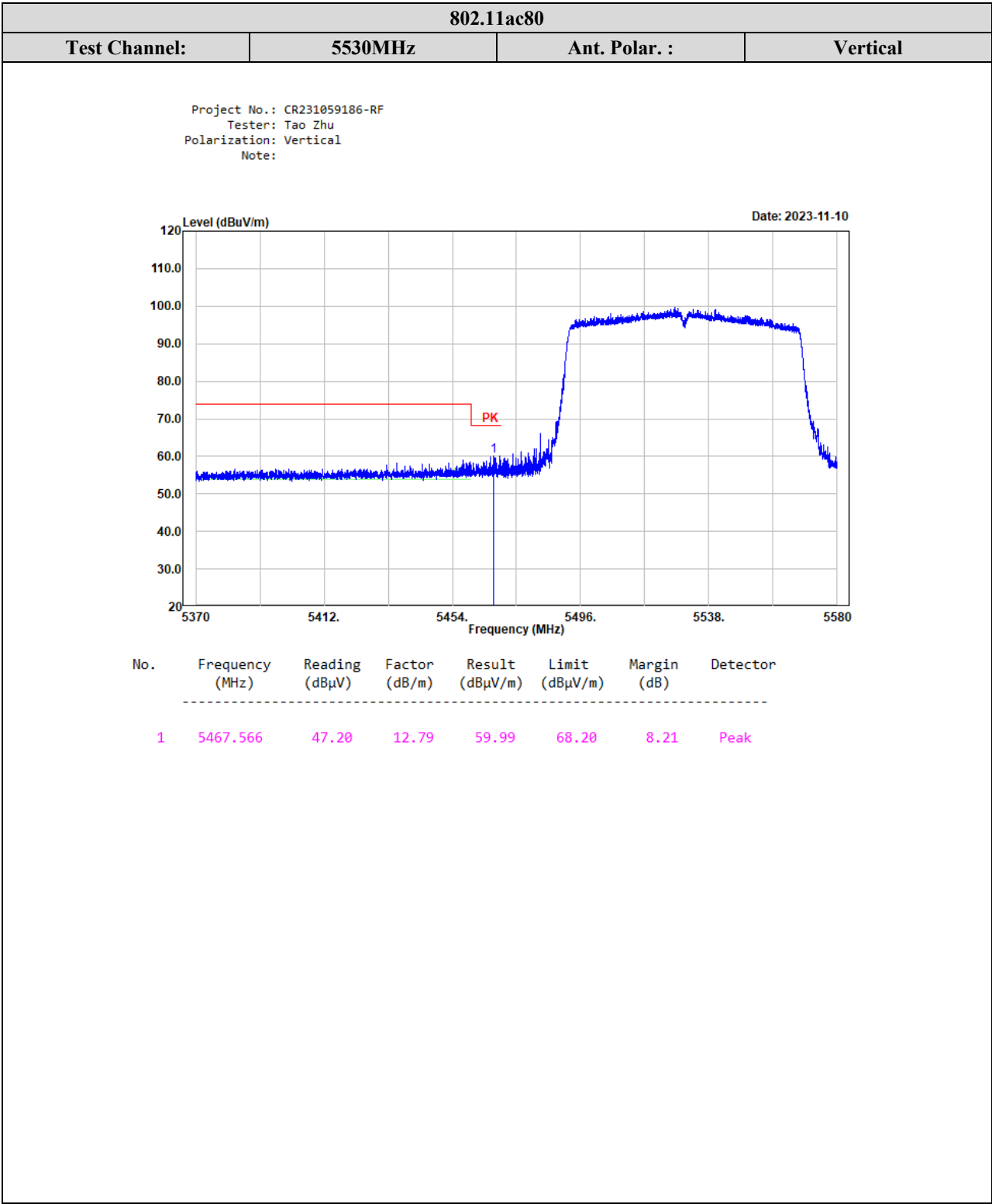


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5468.770	48.04	12.79	60.83	68.20	7.37	Peak









802.11ac80

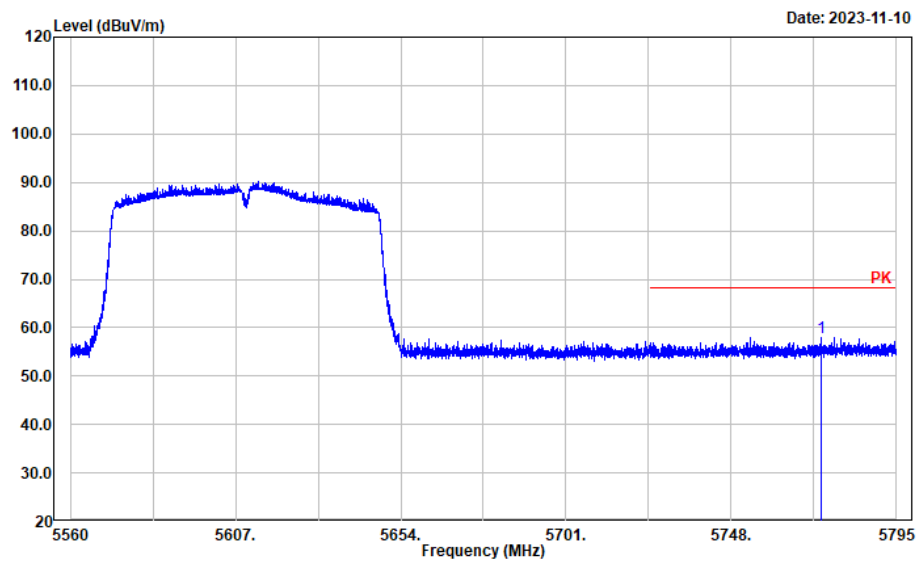
Test Channel:

5610MHz

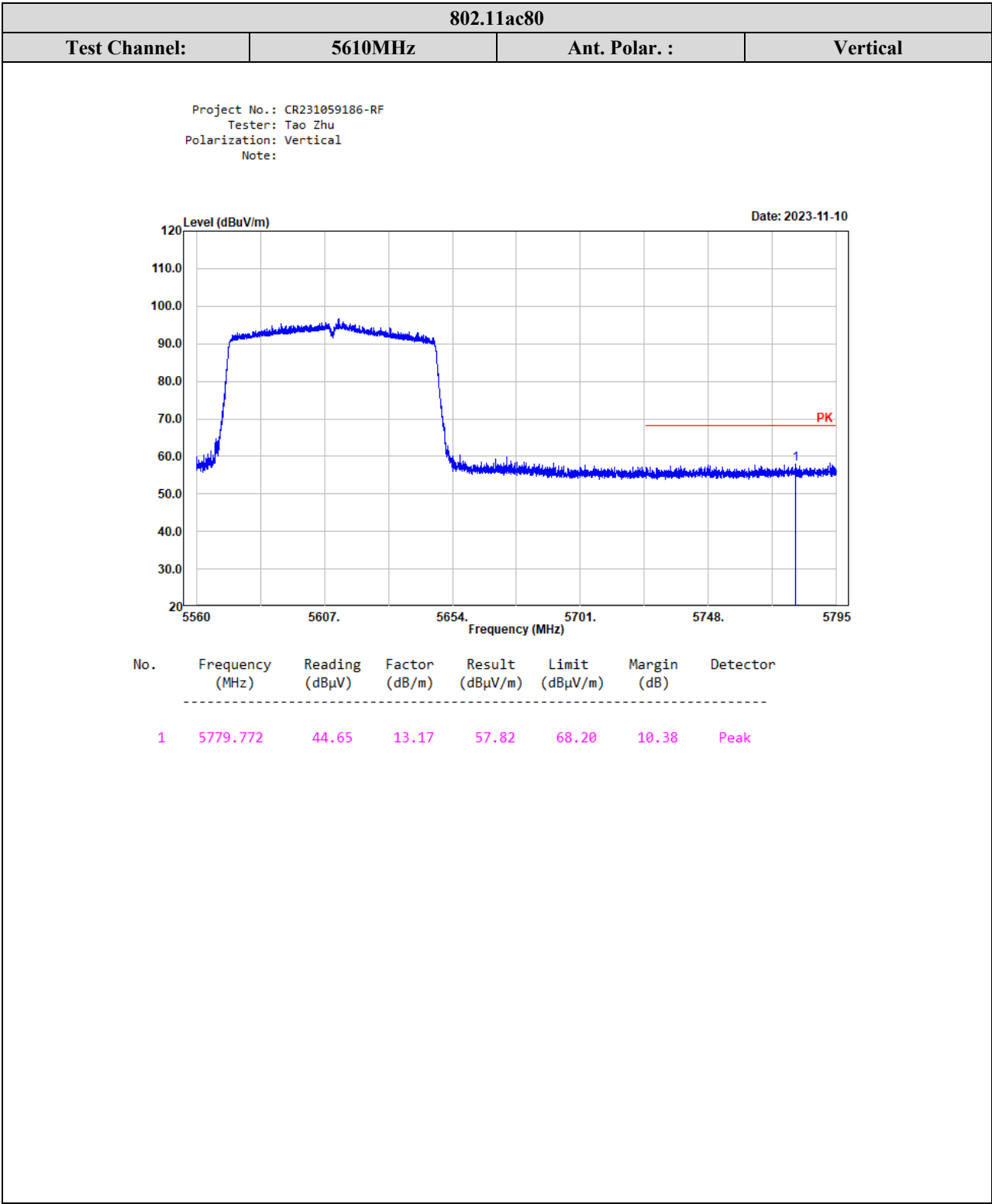
Ant. Polar. :

Horizontal

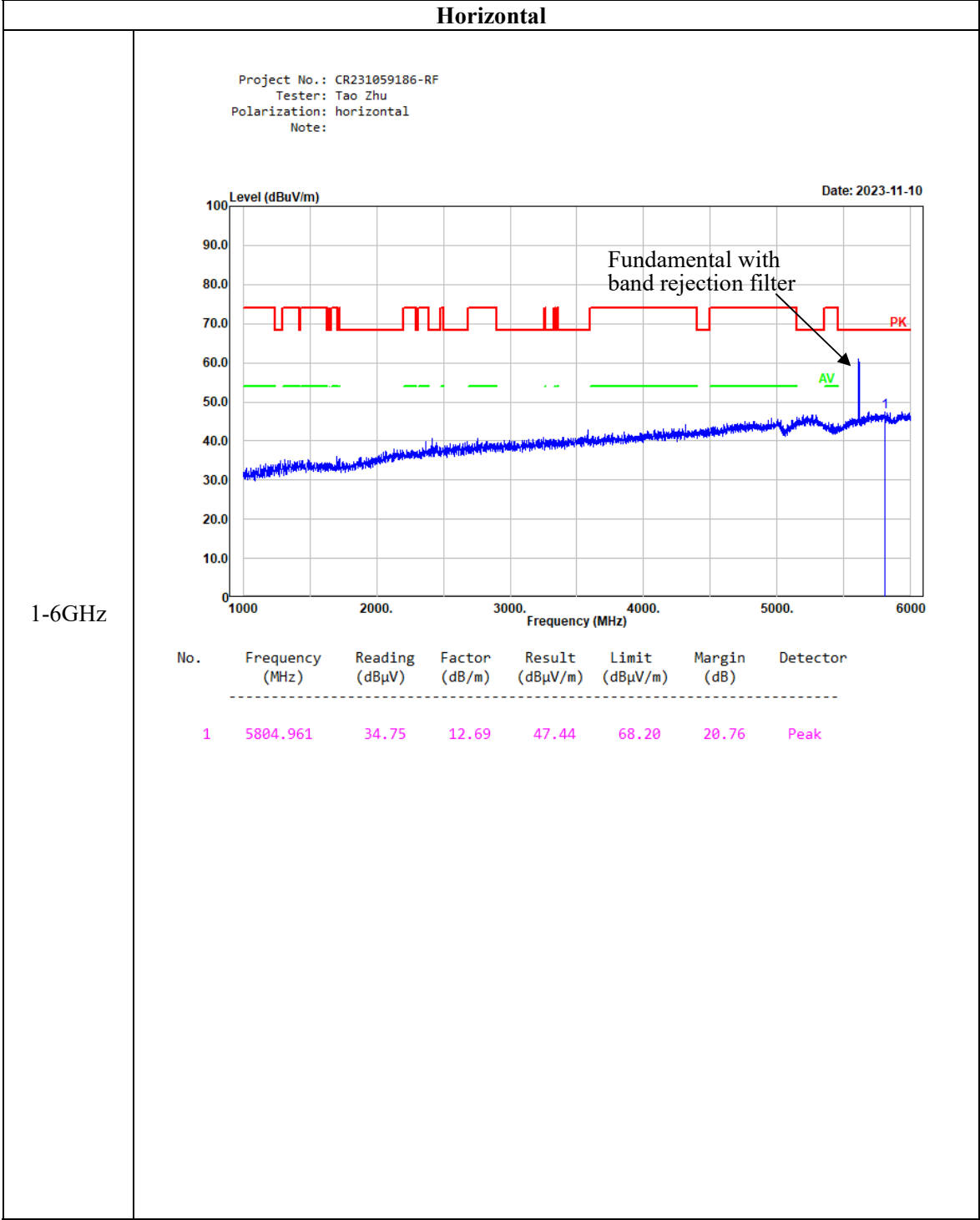
Project No.: CR231059186-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5773.427	44.87	13.14	58.01	68.20	10.19	Peak



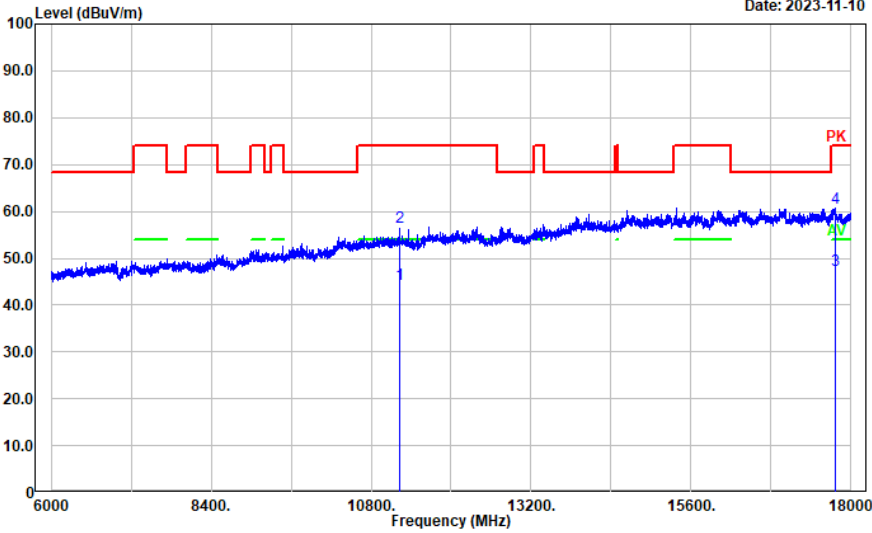
Listed with the worst harmonic margin test plot (802.11ac80 5610MHz)



Horizontal

Project No.: CR231059186-RF
Tester: Tao Zhu
Polarization: horizontal
Note:

Date: 2023-11-10

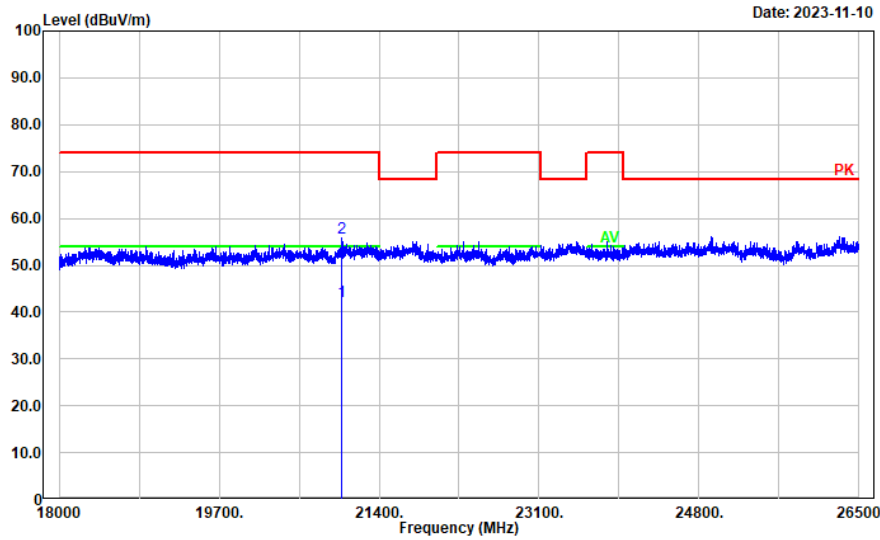


6-18GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	11220.000	22.97	21.43	44.40	54.00	9.60	Average
2	11220.000	35.09	21.43	56.52	74.00	17.48	Peak
3	17762.350	16.05	31.48	47.53	54.00	6.47	Average
4	17762.350	29.13	31.48	60.61	74.00	13.39	Peak

Horizontal

Project No.: CR231059186-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:

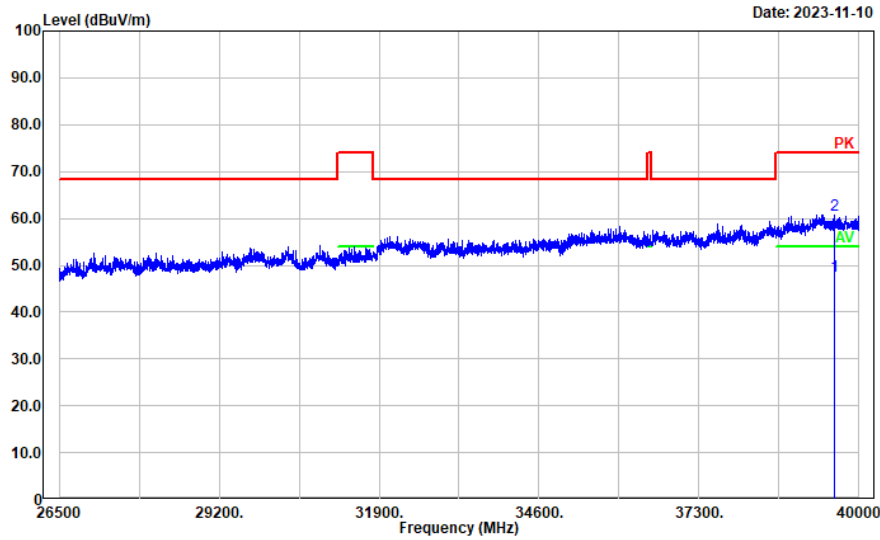


18-26.5GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	21002.800	37.77	4.58	42.35	54.00	11.65	Average
2	21002.800	51.34	4.58	55.92	74.00	18.08	Peak

Horizontal

Project No.: CR231059186-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



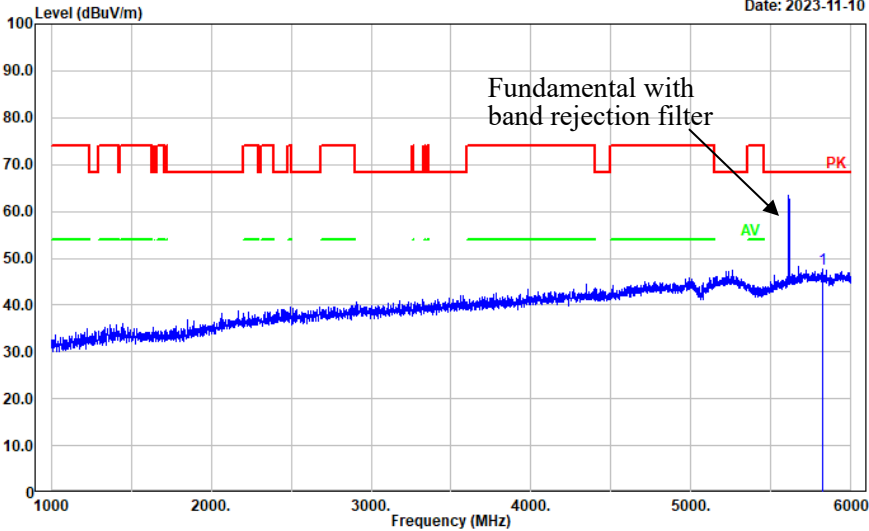
26.5-40GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	39592.220	37.89	9.79	47.68	54.00	6.32	Average
2	39592.220	50.99	9.79	60.78	74.00	13.22	Peak

Vertical

Project No.: CR231059186-RF
Tester: Tao Zhu
Polarization: vertical
Note:

Date: 2023-11-10



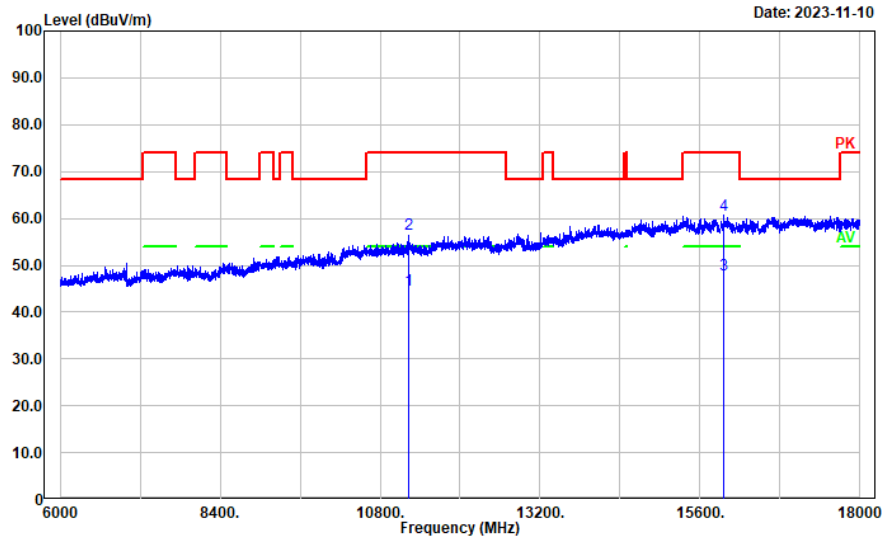
1-18GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5819.964	34.97	12.72	47.69	68.20	20.51	Peak

Vertical

Project No.: CR231059186-RF
Tester: Tao Zhu
Polarization: vertical
Note:

Date: 2023-11-10



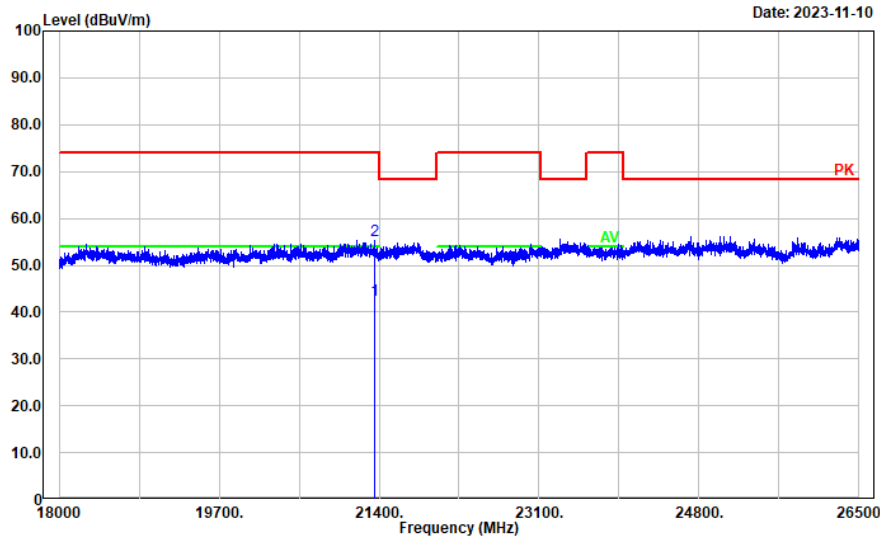
6-18GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	11220.000	23.32	21.43	44.75	54.00	9.25	Average
2	11220.000	35.20	21.43	56.63	74.00	17.37	Peak
3	15959.590	22.62	25.24	47.86	54.00	6.14	Average
4	15959.590	35.33	25.24	60.57	74.00	13.43	Peak

Vertical

18-26.5GHz

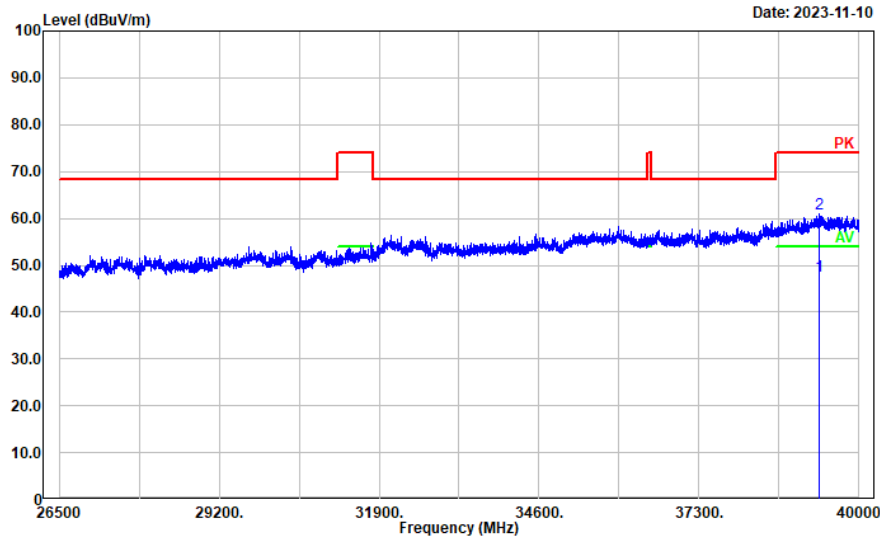
Project No.: CR231059186-RF
Tester: Tao Zhu
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	21354.770	37.86	4.67	42.53	54.00	11.47	Average
2	21354.770	50.59	4.67	55.26	74.00	18.74	Peak

Vertical

Project No.: CR231059186-RF
Tester: Tao Zhu
Polarization: vertical
Note:



26.5-40GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	39332.960	37.58	10.18	47.76	54.00	6.24	Average
2	39332.960	50.77	10.18	60.95	74.00	13.05	Peak

4.3 Emission Bandwidth:

Serial Number:	2C4U-1	Test Date:	2023/11/2~2024/1/19
Test Site:	RF	Test Mode:	Transmitting
Tester:	Rod Luo	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.9~26.3	Relative Humidity: (%)	50~60	ATM Pressure: (kPa)	101
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200120	2023/4/18	2024/4/17
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A

* 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:

5150-5250 MHz:

Test Modes	Test Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5180	20.48	16.92
	5200	20.36	16.88
	5240	20.4	16.92
802.11ac vht20	5180	20.48	16.84
	5200	20.72	17.88
	5240	20.68	17.92
802.11ac vht40	5190	41.12	36.32
	5230	41.2	36.4
802.11ac vht80	5210	82.08	75.36

5250-5350 MHz:

Test Modes	Test Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260	20.52	16.84
	5280	20.6	17.08
	5320	20.48	16.88
802.11ac vht20	5260	20.4	16.84
	5280	20.6	16.96
	5320	20.84	17.96
802.11ac vt40	5270	41.52	36.32
	5310	41.76	36.48
802.11ac vht80	5290	81.76	75.52

5470-5725 MHz:

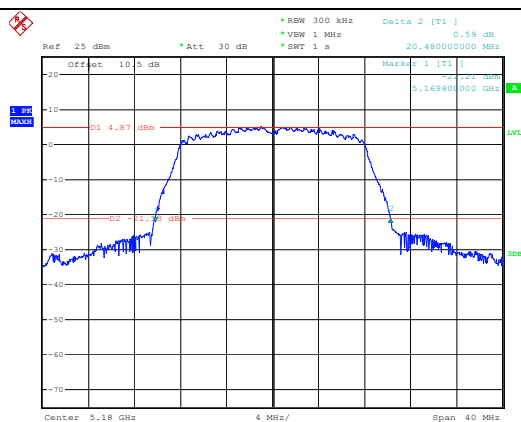
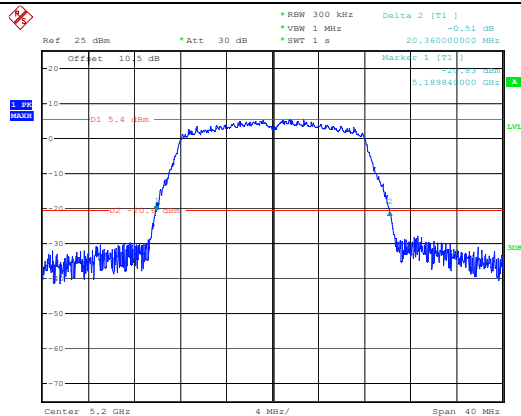
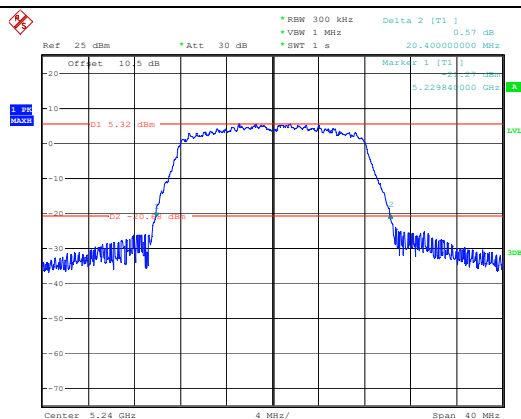
Test Modes	Test Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5500	20.68	17.08
	5580	20.52	16.88
	5700	20.6	17.08
	5720	20.48	16.88
802.11ac vht20	5500	20.76	17.88
	5580	20.8	17.88
	5700	20.8	17.88
	5720	20.8	17.92
802.11ac vht40	5510	41.28	36.24
	5550	41.28	36.24
	5670	41.28	36.32
	5710	41.2	36.24
802.11ac vht80	5530	81.76	75.36
	5610	81.76	75.2
	5690	81.76	75.36

Straddle channels:

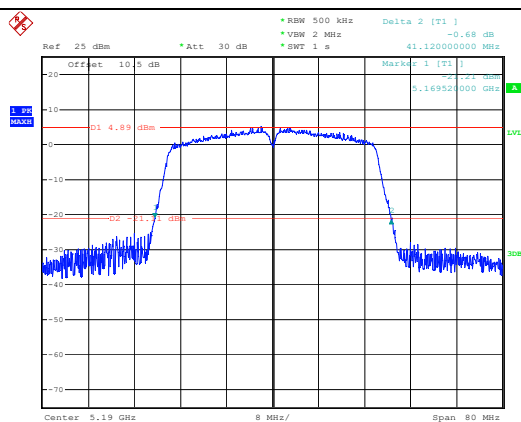
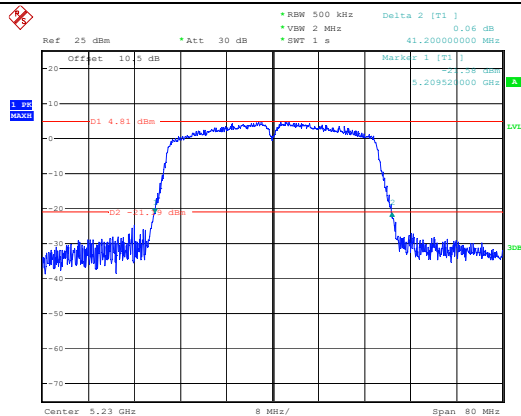
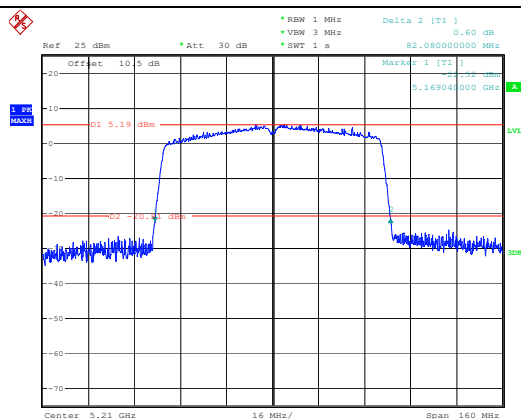
Test Modes	Test Frequency (MHz)	6 dB Bandwidth above 5725MHz (MHz)
802.11a	5720	2.56
802.11ac vht20	5720	2.59
802.11ac vht40	5710	2.59
802.11ac vht80	5690	2.59
Note: 6dB Emission Bandwidth Limit: ≥ 0.5 MHz		

5150-5250MHz:

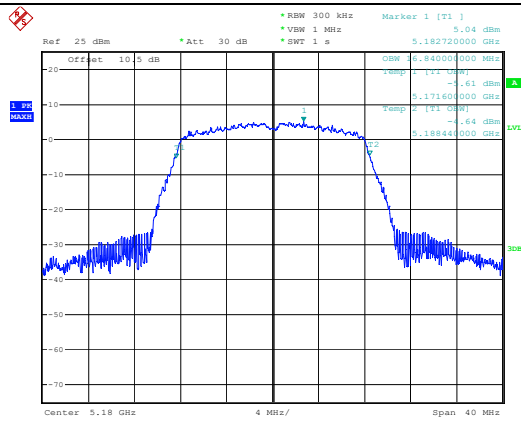
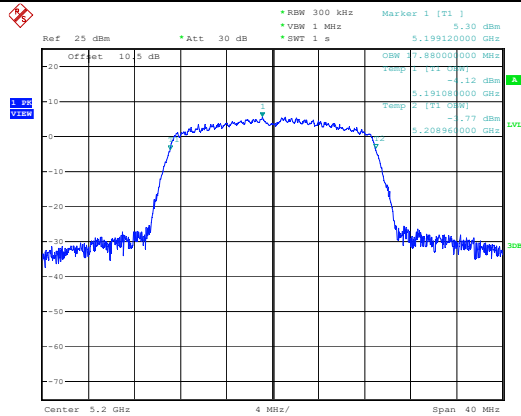
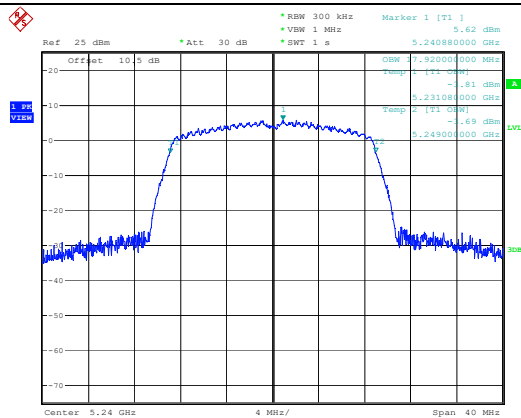
26dB Emission Bandwidth

802.11a
Lowest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 10:40:04802.11a
Middle ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 10:44:38802.11a
Highest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 10:48:34

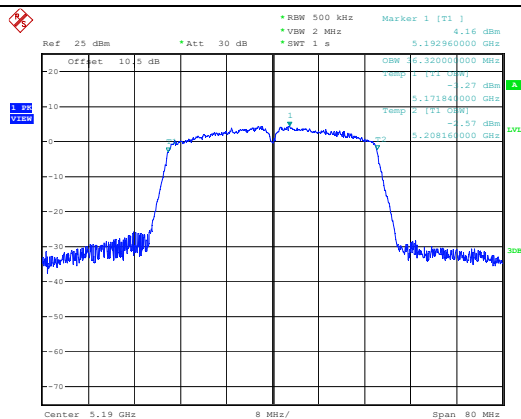
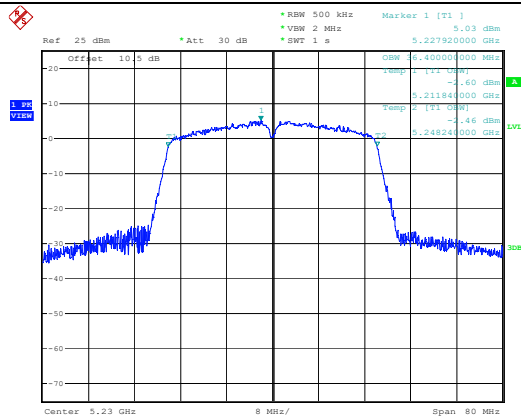
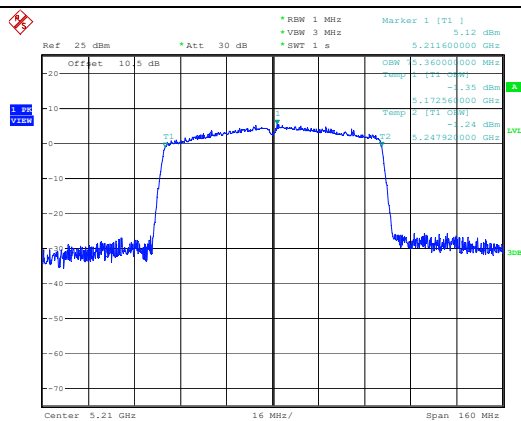
26dB Emission Bandwidth

802.11ac vht40
Lowest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 16:44:28802.11ac vht40
Highest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 16:45:18802.11ac vht80
Middle ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 16:46:43

99% Emission Bandwidth

802.11ac vht20
Lowest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:42:48802.11ac vht20
Middle ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 10:58:24802.11ac vht20
Highest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:02:10

99% Emission Bandwidth

802.11ac vht40
Lowest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:08:52802.11ac vht40
Highest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:14:19802.11ac vht80
Middle ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:19:20

6dB Emission Bandwidth

802.11a
Lowest Channel

Ref: 25 dBm
Offset: 10.5 dB
RBW: 300 kHz
VBW: 1 MHz
SWT: 1 s
Delta 2 [T1]: 1.21 dB
20.520000000 MHz
Marker 1 [T1]: 5.249760000 GHz
D1: 5.58 dBm
D2: -20.00 dBm
LVL: 30dB

Center: 5.26 GHz
Span: 40 MHz

ProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 16:35:54

802.11a
Middle Channel

Ref: 25 dBm
Offset: 10.5 dB
RBW: 300 kHz
VBW: 1 MHz
SWT: 1 s
Delta 2 [T1]: -0.06 dB
20.600000000 MHz
Marker 1 [T1]: 5.269720000 GHz
D1: 5.85 dBm
D2: -20.00 dBm
LVL: 30dB

Center: 5.28 GHz
Span: 40 MHz

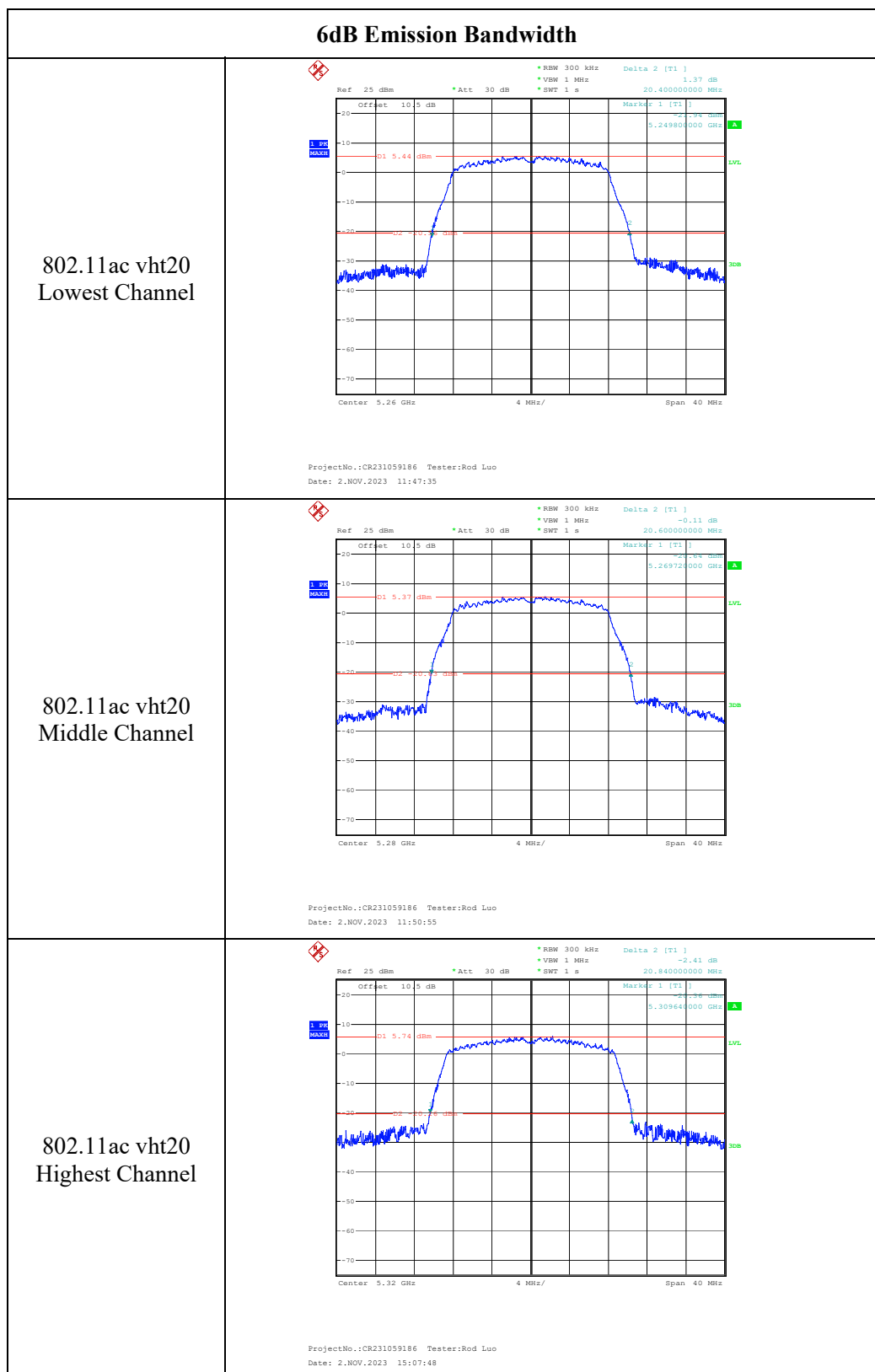
ProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 16:37:23

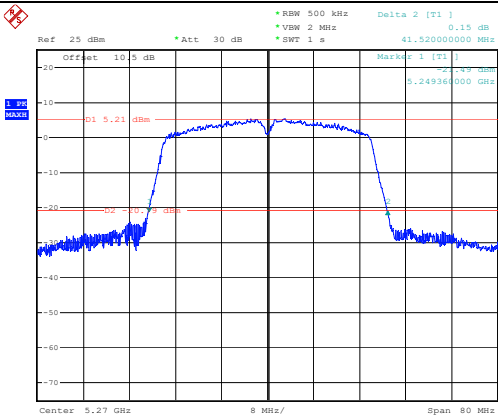
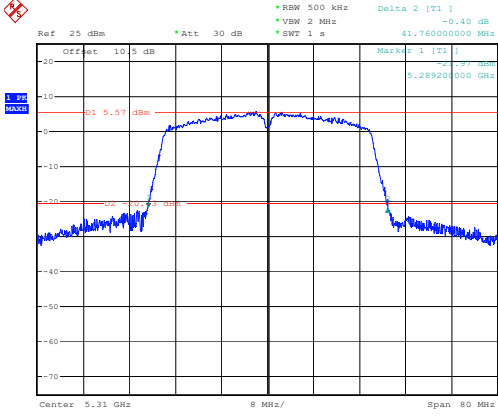
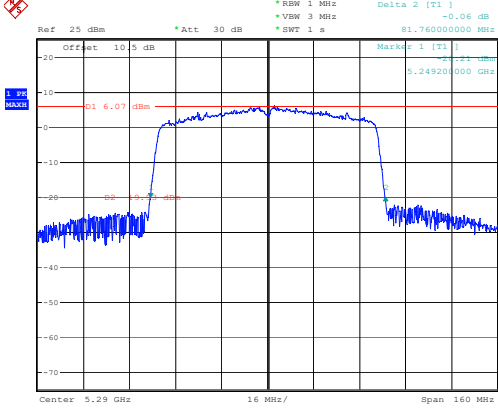
802.11a
Highest Channel

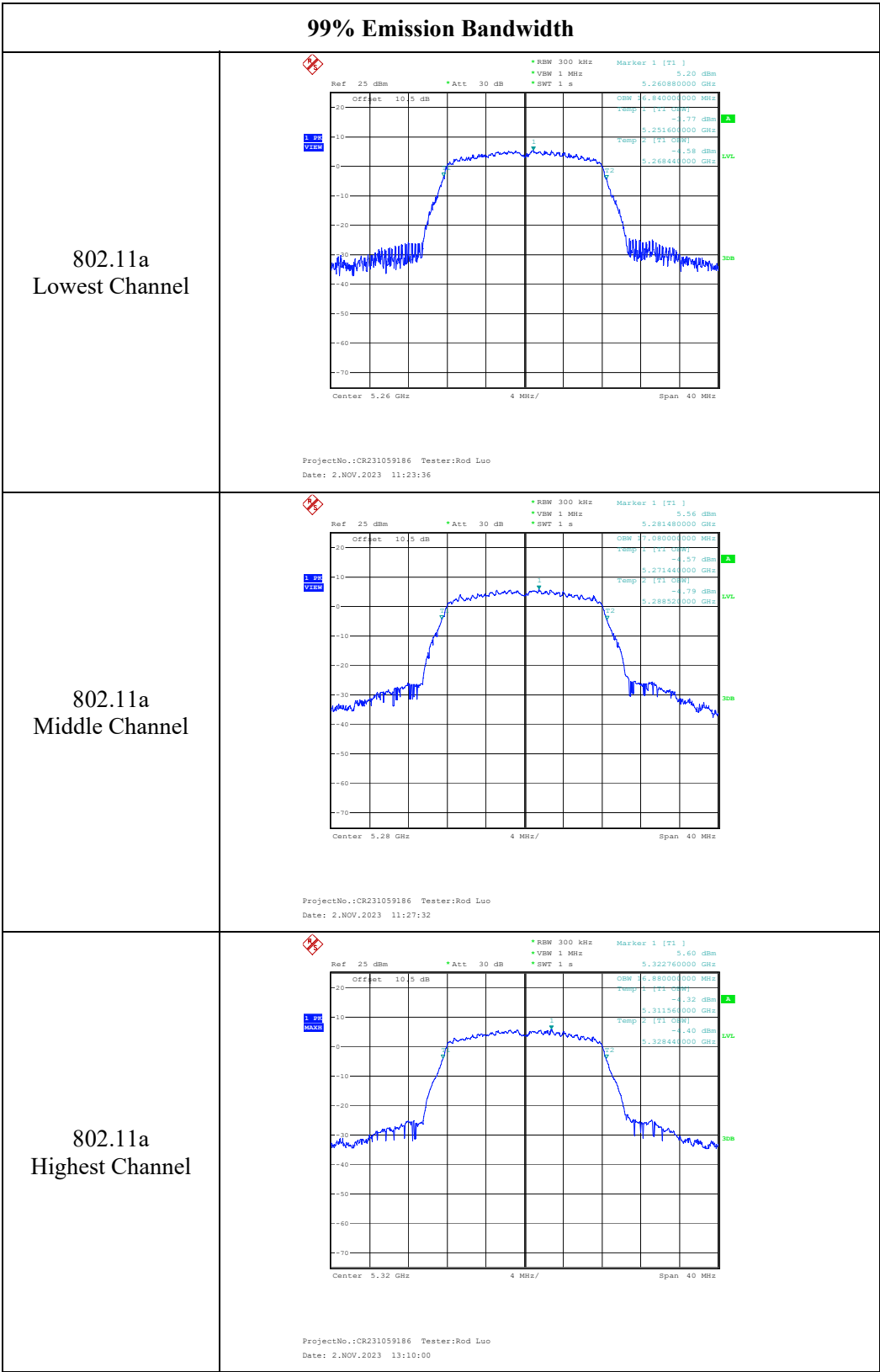
Ref: 25 dBm
Offset: 10.5 dB
RBW: 300 kHz
VBW: 1 MHz
SWT: 1 s
Delta 2 [T1]: 0.03 dB
20.480000000 MHz
Marker 1 [T1]: 5.309760000 GHz
D1: 5.61 dBm
D2: -20.00 dBm
LVL: 30dB

Center: 5.32 GHz
Span: 40 MHz

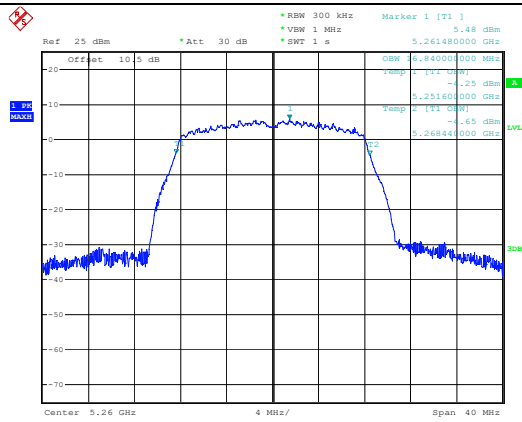
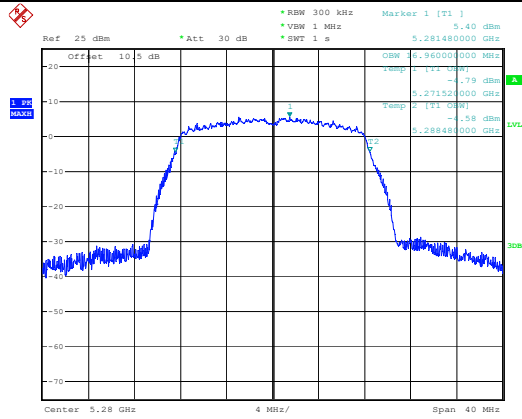
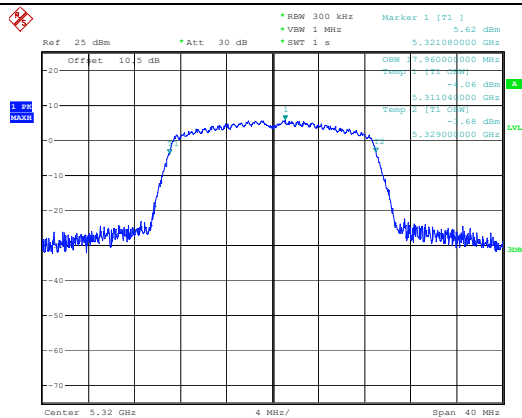
ProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 13:11:37



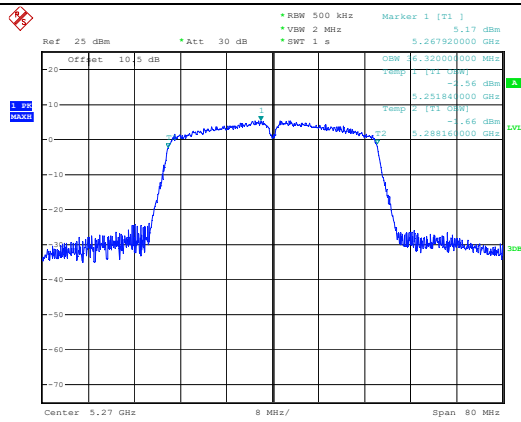
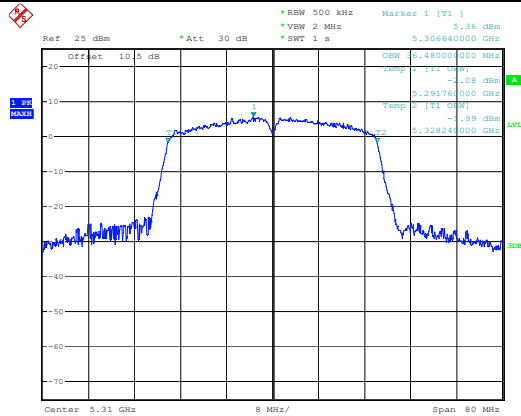
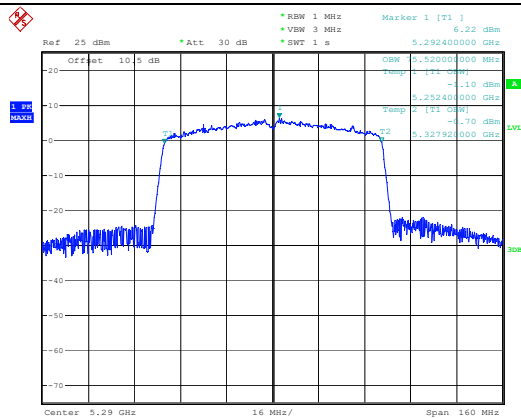
6dB Emission Bandwidth	
802.11ac vht40 Lowest Channel	 ProjectNo.:CR231059186 Tester:Rod Luo Date: 2.NOV.2023 15:13:09
802.11ac vht40 Highest Channel	 ProjectNo.:CR231059186 Tester:Rod Luo Date: 2.NOV.2023 15:18:08
802.11ac vht80 Middle Channel	 ProjectNo.:CR231059186 Tester:Rod Luo Date: 2.NOV.2023 15:26:55



99% Emission Bandwidth

802.11ac vht20
Lowest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:46:47802.11ac vht20
Middle ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:49:55802.11ac vht20
Highest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 15:06:48

99% Emission Bandwidth

802.11ac vht40
Lowest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 15:11:20802.11ac vht40
Highest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 15:16:31802.11ac vht80
Middle ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 15:23:42

26dB Emission Bandwidth

100%

Ref 25 dBm Att 30 dB

*RSM 300 KHz Delta 2 (T1) 0.23 dB

*VMN 1 MHz 0.23 dB

*SWT 1 s 20.680000000 MHz

Offset 10.5 dB

Marker 1 (T1) 22.72 dBm

5.489640000 GHz

D1 3.68 dBm

D2 -22.72 dBm

Center 5.5 GHz 4 MHz/

Span 40 MHz

Ref 25 dBm Att 30 dBm

RBW 300 kHz Delta 2 [T1] 0.05 dB

VBN 1 MHz

SWT 1 s 20.520000000 MHz

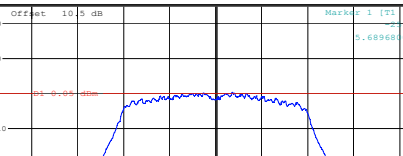
Offset 10.5 dB

Marker 1 [T1] 02 -68 dBm 5.56972000 GHz

D1 2.33 dBm

D2 -33.77 dBm

Center 5.50 GHz 4 MHz/ Span 40 MHz



Ref 25 dBm Att 30 dB RSM 300 KHz Delta 2 [T2 1] -0.62 dB
VSW 1 MHz 20.600000000 MHz
SWT 1 s

Offset 10.5 dB Markers 1 [T1 1] -25.75 dBm
5.68968000 GHz

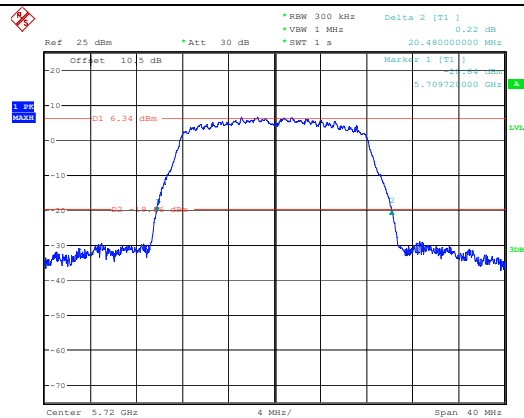
1.98 MAXdB

D1 -0.62 dBm
D2 -25.75 dBm

Center 5.7 GHz 4 MHz/ Span 40 MHz

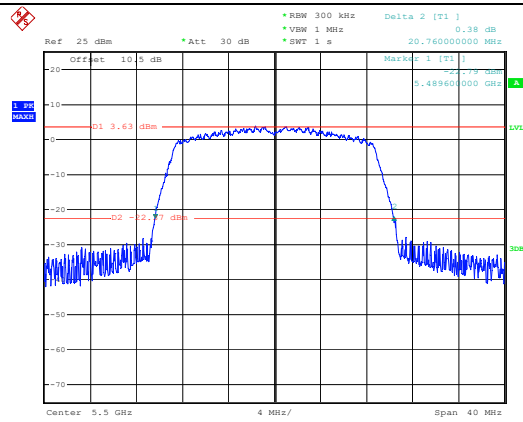
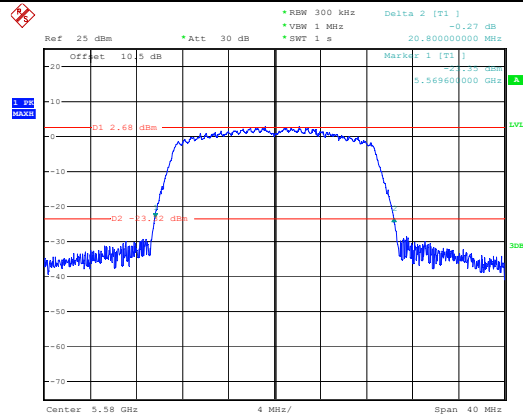
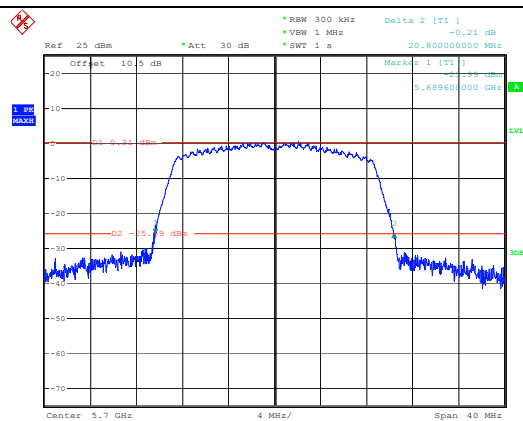
Page 124 of 161

802.11a
5720MHz

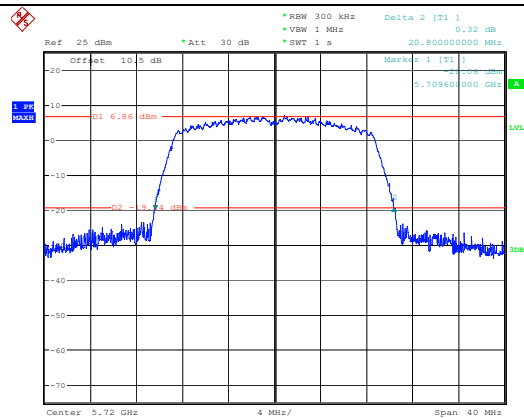


ProjectNo.:CR231059186 Tester:Rod Luo
Date: 13.DEC.2023 21:20:48

26dB Emission Bandwidth

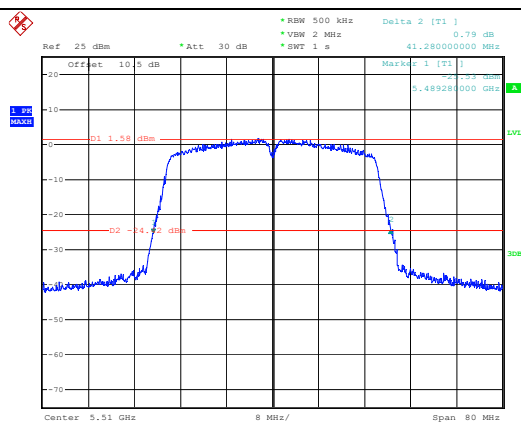
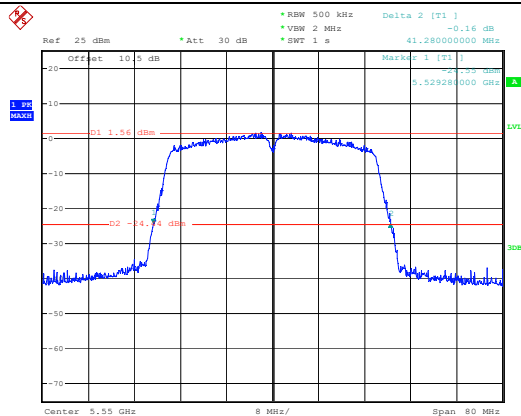
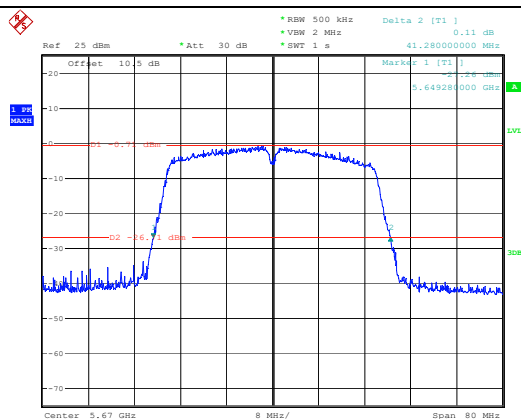
802.11ac vht20
5500MHzProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 15:01:49802.11ac vht20
5580 MHzProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 15:08:05802.11ac vht20
5700 MHzProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 15:18:32

802.11ac vht20
5720 MHz

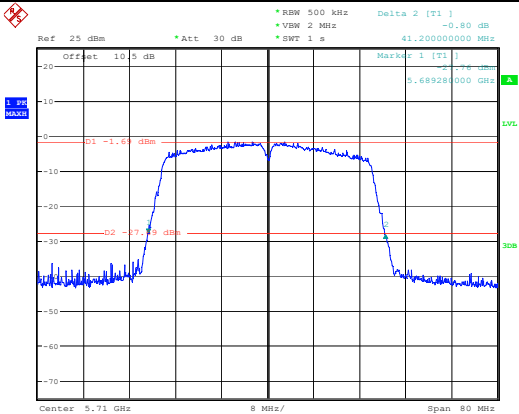


ProjectNo.: CR231059186 Tester: Rod Luo
Date: 13 DEC 2023 21:25:52

26dB Emission Bandwidth

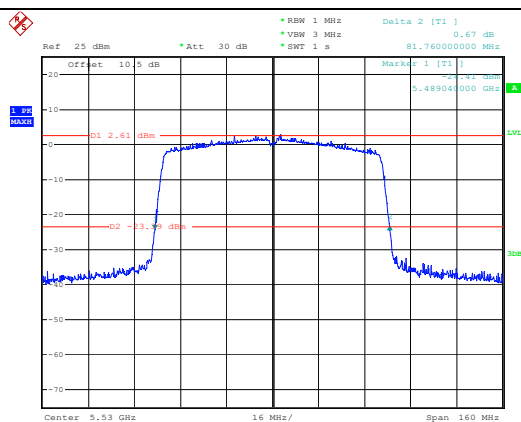
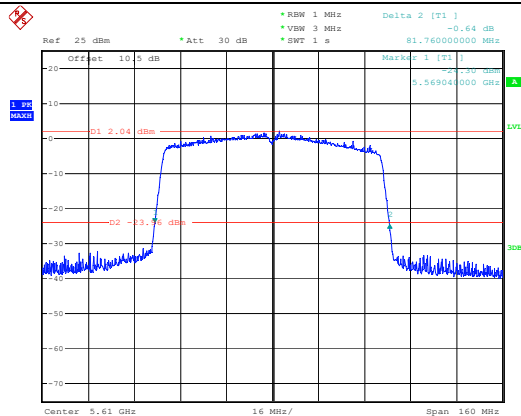
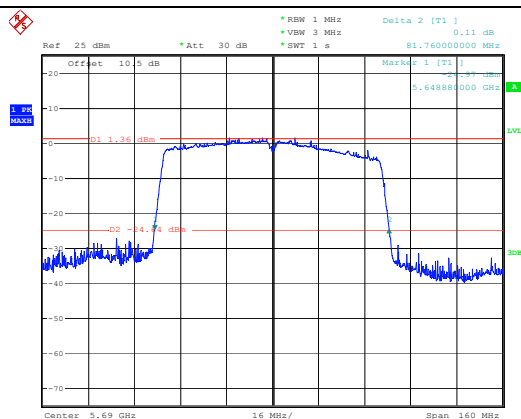
802.11ac vht40
5510 MHzProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 15:24:04802.11ac vht40
5550 MHzProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 15:28:03802.11ac vht40
5670 MHzProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 15:34:32

802.11ac vht40
5710 MHz

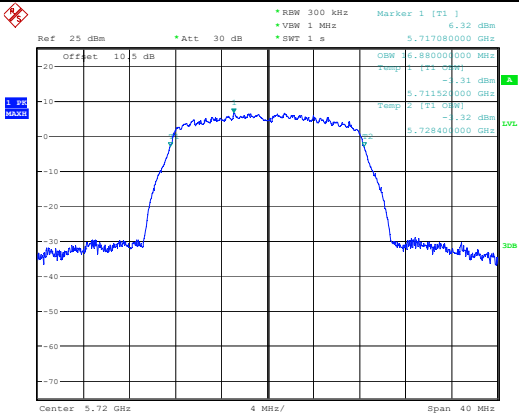


ProjectNo.:CR231059186-RF Tester:Rod Luo
Date: 14.DEC.2023 09:51:48

26dB Emission Bandwidth

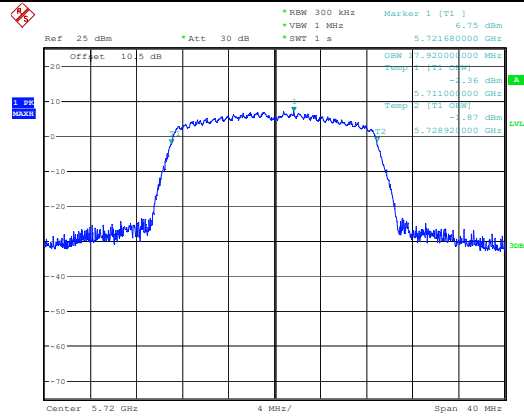
802.11ac vht80
Lowest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 15:37:40802.11ac vht80
Middle ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 15:42:12802.11ac vht80
Highest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 14.DEC.2023 10:50:06

802.11a
5720MHz



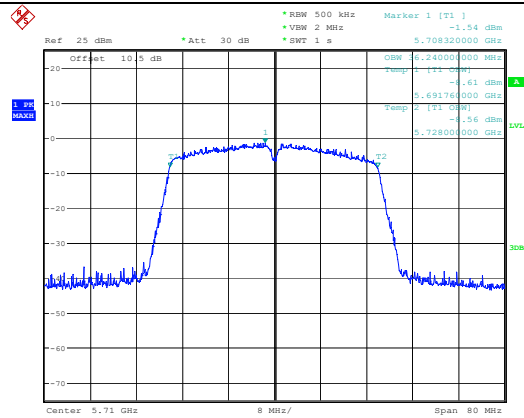
ProjectNo.:CR231059186 Tester:Rod Luo
Date: 13.DEC.2023 21:20:15

802.11ac vht20
5720 MHz



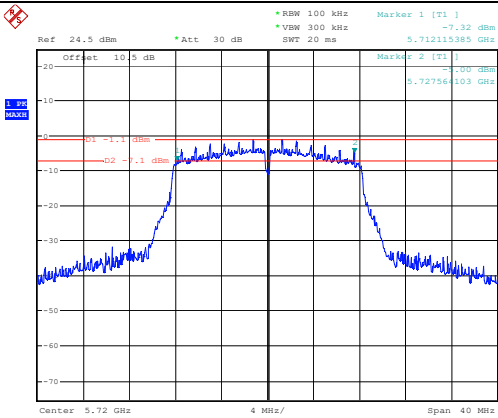
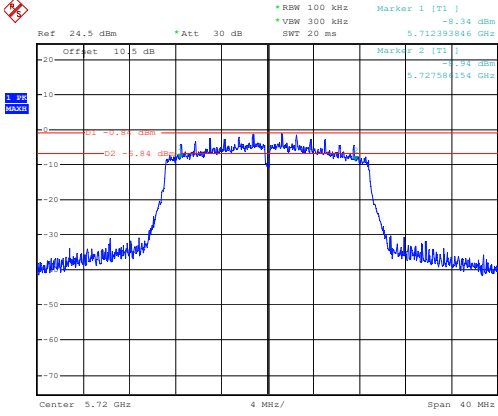
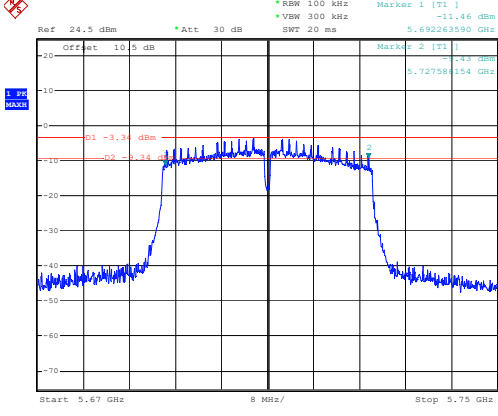
ProjectNo.:CR231059186 Tester:Rod Luo
Date: 13.DEC.2023 21:24:17

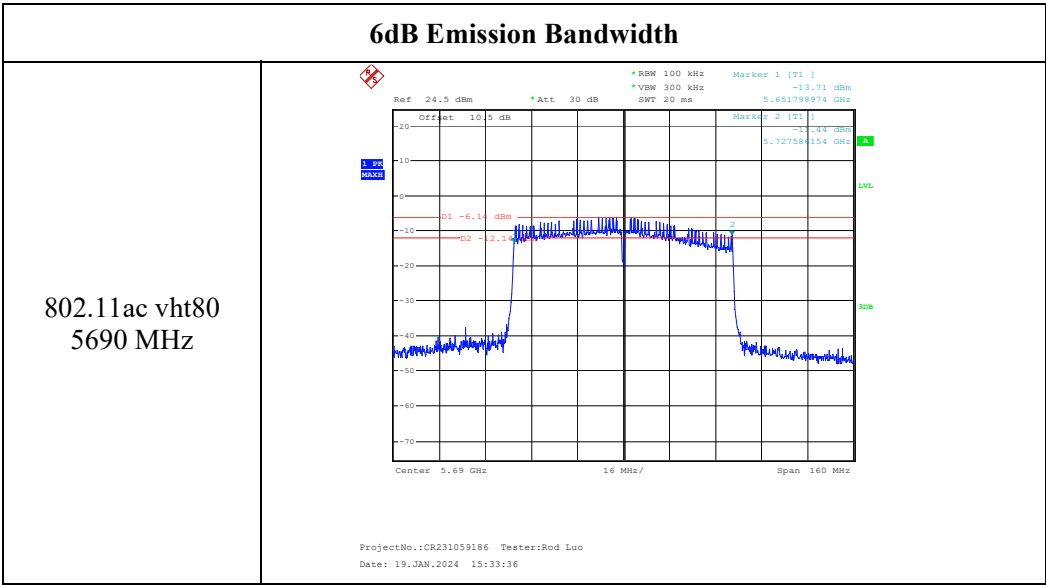
802.11ac vht40
5710 MHz



ProjectNo.:CR231059186-RF Tester:Rod Luo
Date: 14.DEC.2023 09:51:29

Straddle channels:

6dB Emission Bandwidth	
802.11a 5720 MHz	 Ref: 24.5 dBm, Att: 30 dB, RBW: 100 kHz, VSW: 300 kHz, SWT: 20 ms. Marker 1 [T1]: 5.712319383 GHz, -7.32 dBm. Marker 2 [T1]: 5.72756103 GHz, -7.32 dBm. Offset: 10.5 dB. Span: 40 MHz. Center: 5.72 GHz. 4 MHz/. LVL: -1.1 dBm, -7.1 dBm. 3dB: -10 dBm. ProjectNo.:CR231059186 Tester:Rod Luo Date: 19.JAN.2024 19:20:35
802.11ac vht20 5720 MHz	 Ref: 24.5 dBm, Att: 30 dB, RBW: 100 kHz, VSW: 300 kHz, SWT: 20 ms. Marker 1 [T1]: 5.712393846 GHz, -8.34 dBm. Marker 2 [T1]: 5.72758154 GHz, -8.34 dBm. Offset: 10.5 dB. Span: 40 MHz. Center: 5.72 GHz. 4 MHz/. LVL: -0.8 dBm, -5.84 dBm. 3dB: -10 dBm. ProjectNo.:CR231059186 Tester:Rod Luo Date: 19.JAN.2024 15:27:42
802.11ac vht40 5710 MHz	 Ref: 24.5 dBm, Att: 30 dB, RBW: 100 kHz, VSW: 300 kHz, SWT: 20 ms. Marker 1 [T1]: 5.692263590 GHz, -11.46 dBm. Marker 2 [T1]: 5.72758154 GHz, -11.46 dBm. Offset: 10.5 dB. Span: 40 MHz. Start: 5.67 GHz. Stop: 5.75 GHz. LVL: -3.34 dBm, -8.34 dBm. 3dB: -10 dBm. ProjectNo.:CR231059186 Tester:Rod Luo Date: 19.JAN.2024 15:31:58



4.4 Maximum Conducted Output Power:

Serial Number:	2C4U-1	Test Date:	2023/11/2~2023/12/14
Test Site:	RF	Test Mode:	Transmitting
Tester:	Rod Luo	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.9~26.3	Relative Humidity: (%)	50~60	ATM Pressure: (kPa)	101
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
Anritsu	Power Meter	ML2495A	1106009	2023/8/4	2024/8/3
Anritsu	Pulse Power Sensor	MA2411A	10780	2023/8/4	2024/8/3

* 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:

5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power(dBm)	
		Result	Limit
802.11a	5180	12.06	24
	5200	12.15	24
	5240	12.32	24
802.11ac vht20	5180	12.77	24
	5200	11.91	24
	5240	12.07	24
802.11ac vht40	5190	11.57	24
	5230	12.16	24
802.11ac vht80	5210	11.78	24
Antenna Gain:	-0.75	dBi	/
Note: The device is a client device.			

5250-5350 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power(dBm)	
		Result	Limit
802.11a	5260	12.3	24
	5280	12.34	24
	5320	13.3	24
802.11ac vht20	5260	13.22	24
	5280	12.27	24
	5320	13.42	24
802.11ac vht40	5270	13.57	24
	5310	12.76	24
802.11ac vht80	5290	12.11	24
Antenna Gain:	-0.75	dB	/

5470-5725 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power(dBm)	
		Result	Limit
802.11a	5500	11.49	24
	5580	10.35	24
	5700	7.99	24
	5720	13.33	24
802.11ac vht20	5500	11.41	24
	5580	10.27	24
	5700	7.88	24
	5720	13.47	24
802.11ac vht40	5510	10.23	24
	5550	9.77	24
	5670	7.59	24
	5710	8.98	24
802.11ac vht80	5530	10.01	24
	5610	8.89	24
	5690	7.8	24
Antenna Gain:	-0.75	dB	/

4.5 Maximum power spectral density:

Serial Number:	2C4U-1	Test Date:	2023/11/2~2023/12/14
Test Site:	RF	Test Mode:	Transmitting
Tester:	Rod Luo	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25~26	Relative Humidity: (%)	46~47	ATM Pressure: (kPa)	101
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200120	2023-04-18	2024-04-17
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A

* 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:

5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Reading (dBm/MHz)	Duty Cycle Factor (dB)	Maximum Power Spectral Density (dBm/MHz)	
				Result	Limit
802.11a	5180	1.73	/	1.73	11
	5200	1.91	/	1.91	11
	5240	2.04	/	2.04	11
802.11ac vht20	5180	1.52	/	1.52	11
	5200	1.51	/	1.51	11
	5240	1.68	/	1.68	11
802.11ac vht40	5190	-1.7	/	-1.70	11
	5230	-1.08	/	-1.08	11
802.11ac vht80	5210	-4.68	/	-4.68	11
Antenna Gain:	-0.75	dBi			

Note:

The device is a client device.

Duty cycle $\geq 98\%$, method ANSI C63.10-2013 Section 12.3.2.2 was used.

5250-5350 MHz:

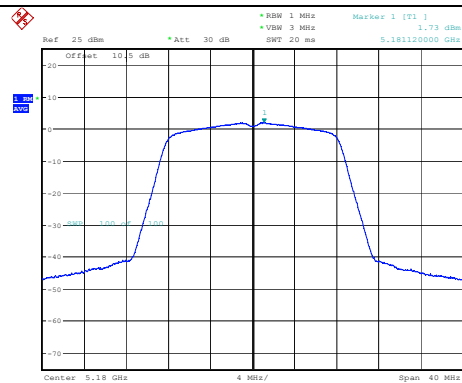
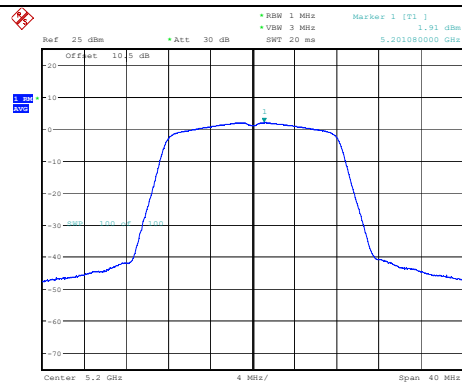
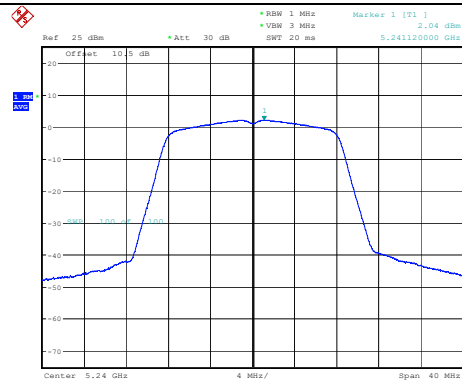
Test Modes	Test Frequency(MHz)	Reading(dBm/MHz)	Duty Cycle Factor(dB)	Maximum Power Spectral Density(dBm/MHz)	
				Result	Limit
802.11a	5260	2.03	/	2.03	11
	5280	2.08	/	2.08	11
	5320	2.1	/	2.10	11
802.11ac vht20	5260	1.98	/	1.98	11
	5280	2.07	/	2.07	11
	5320	1.82	/	1.82	11
802.11ac vht40	5270	-0.7	/	-0.70	11
	5310	-0.48	/	-0.48	11
802.11ac vht80	5290	-4.32	/	-4.32	11
Antenna Gain:	-0.75	dBi			
Note: Duty cycle $\geq 98\%$, method ANSI C63.10-2013 Section 12.3.2.2 was used.					

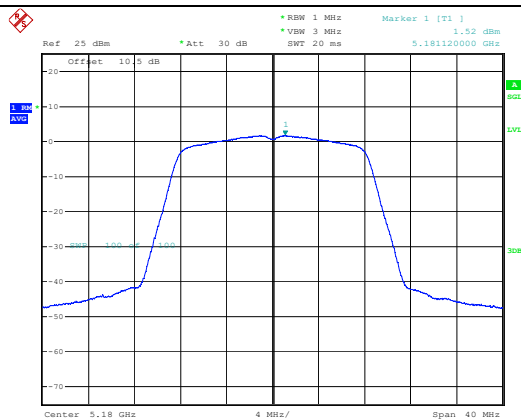
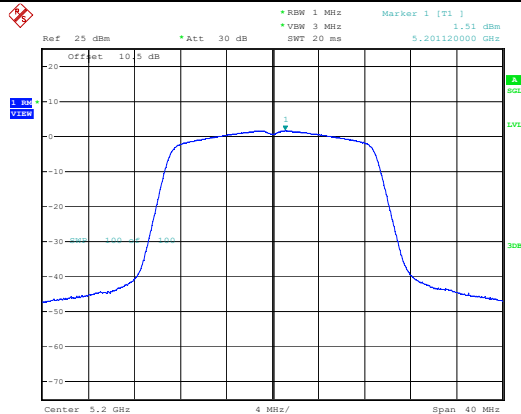
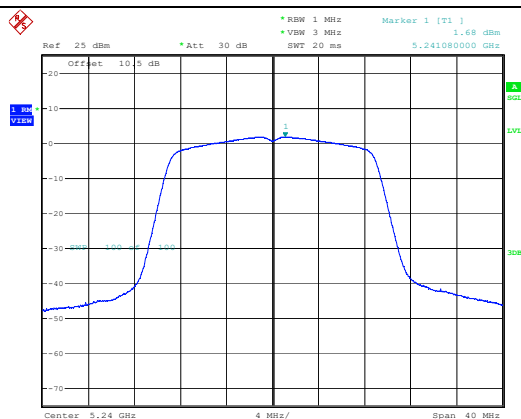
5470-525 MHz:

Test Modes	Test Frequency (MHz)	Reading (dBm/MHz)	Duty Cycle Factor (dB)	Maximum Power Spectral Density (dBm/MHz)	
				Result	Limit
802.11a	5500	0.30	/	0.30	11
	5580	-0.83	/	-0.83	11
	5700	-3.22	/	-3.22	11
	5720	3.10	/	3.10	11
802.11ac vht20	5500	0.03	/	0.03	11
	5580	-1.14	/	-1.14	11
	5700	-3.61	/	-3.61	11
	5720	3.00	/	3.00	11
802.11ac vht40	5510	-3.99	/	-3.99	11
	5550	-4.42	/	-4.42	11
	5670	-6.56	/	-6.56	11
	5710	-7.11	/	-7.11	11
802.11ac vht80	5530	-7.48	/	-7.48	11
	5610	-8.49	/	-8.49	11
	5690	-8.73	/	-8.73	11
Antenna Gain:	-0.75	dBi			
Note: Duty cycle $\geq$ 98%, method ANSI C63.10-2013 Section 12.3.2.2 was used.					

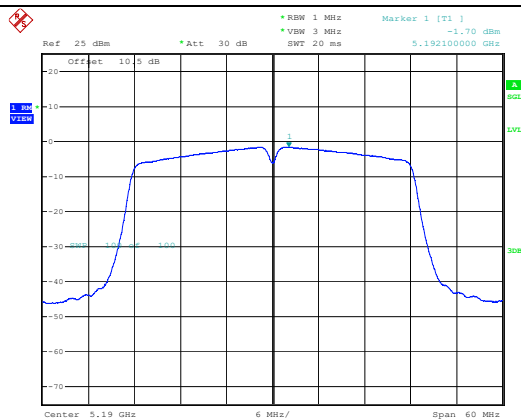
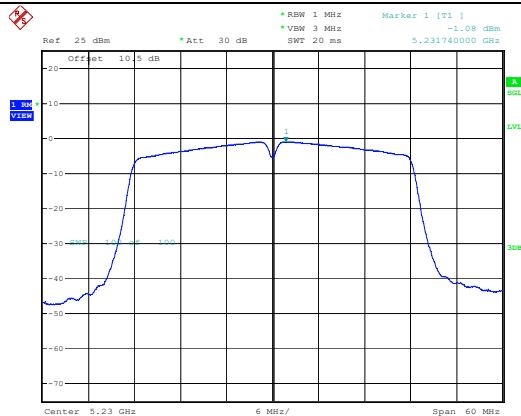
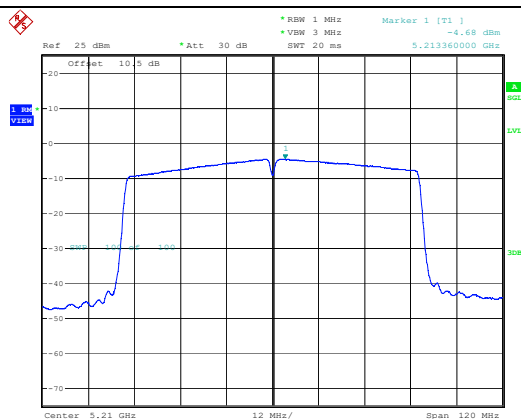
5150-5250MHz:

Maximum power spectral density

802.11a
Lowest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 10:40:19802.11a
Middle ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 10:44:54802.11a
Highest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 10:48:49

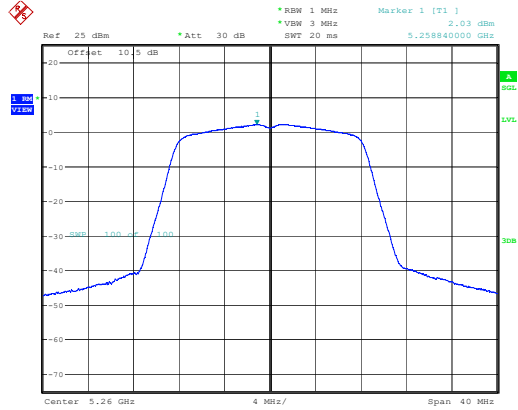
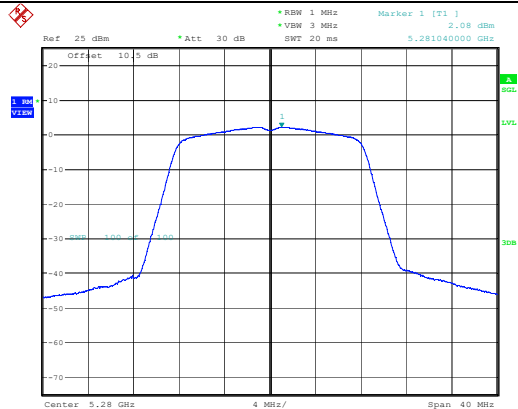
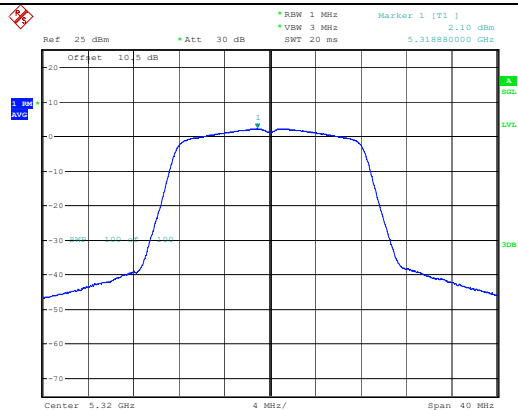
Maximum power spectral density802.11ac vht20
Lowest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:44:16802.11ac vht20
Middle ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 10:59:27802.11ac vht20
Highest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:03:50

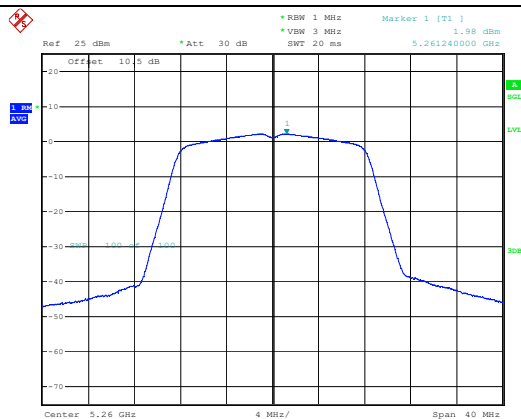
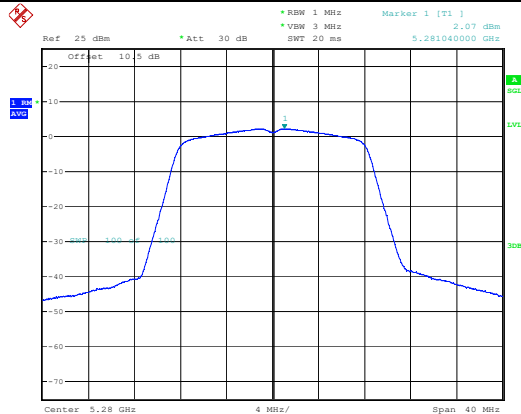
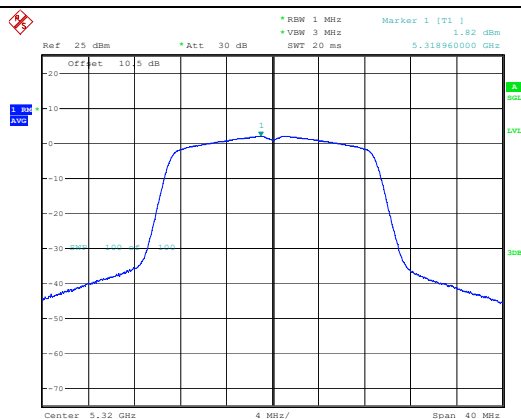
Maximum power spectral density

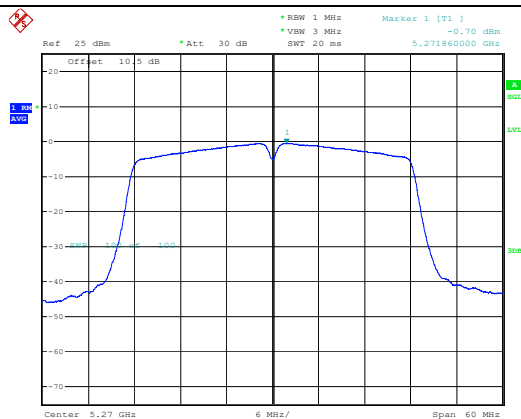
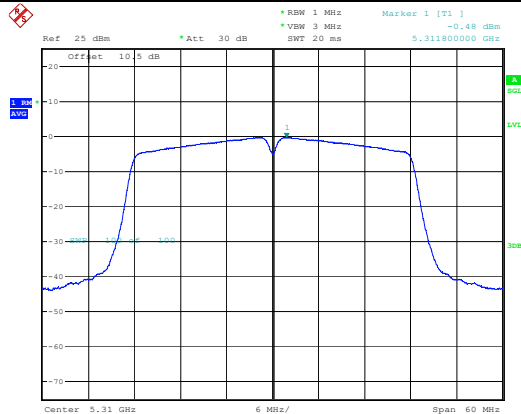
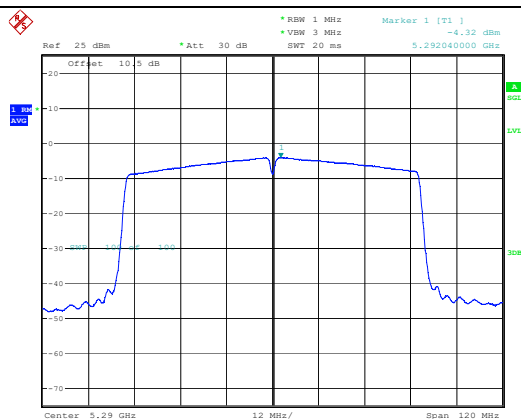
802.11ac vht40
Lowest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:10:56802.11ac vht40
Highest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:16:23802.11ac vht80
Middle ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:20:51

5250-5350 MHz:

Maximum power spectral density

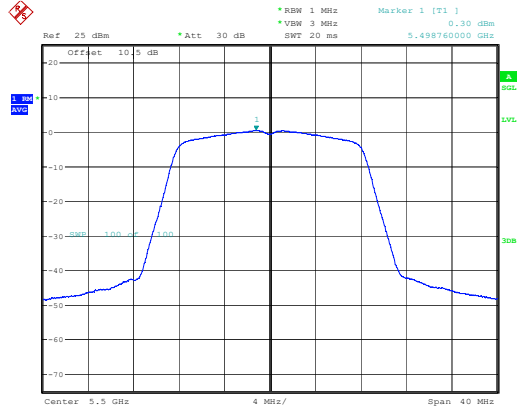
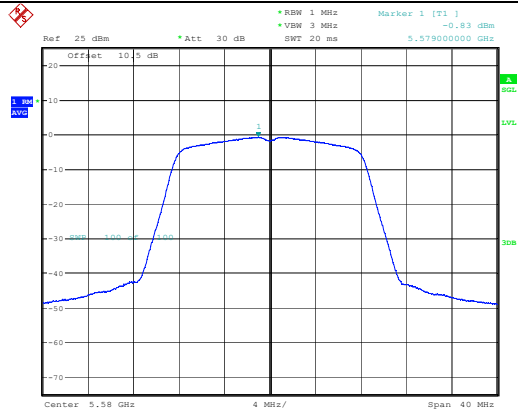
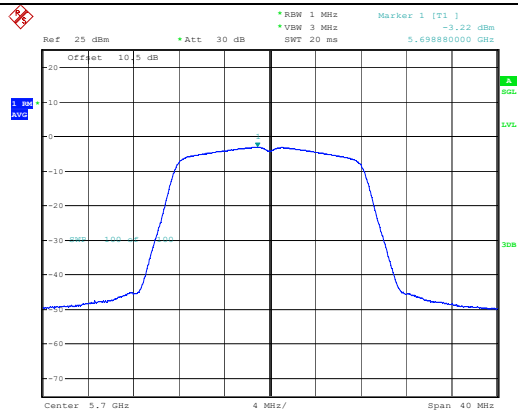
802.11a
Lowest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:24:51802.11a
Middle ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:28:48802.11a
Highest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 13:11:54

Maximum power spectral density802.11ac vht20
Lowest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:47:50802.11ac vht20
Middle ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:51:11802.11ac vht20
Highest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 15:08:03

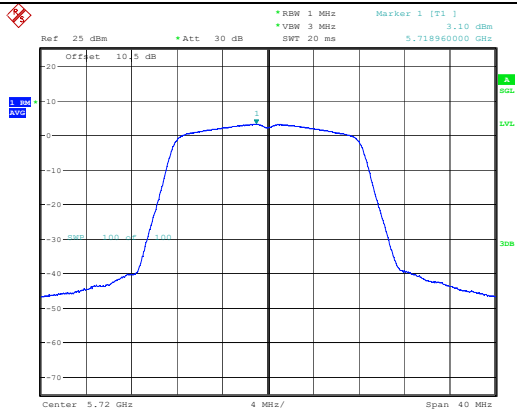
Maximum power spectral density802.11ac vht40
Lowest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 15:13:24802.11ac vht40
Highest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 15:18:23802.11ac vht80
Middle ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 15:27:14

5470-5725 MHz:

Maximum power spectral density

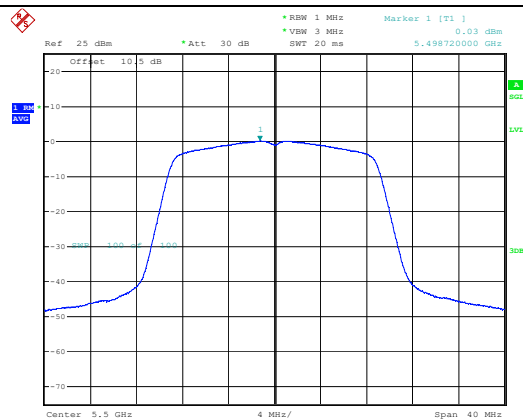
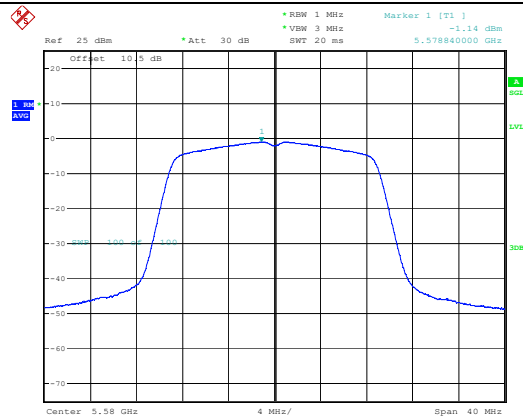
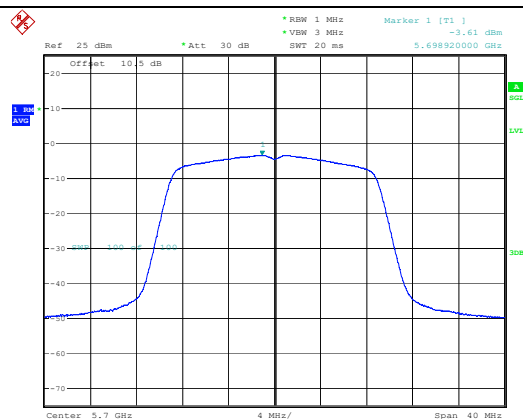
802.11a
5500MHzProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 14:42:51802.11a
5580 MHzProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 14:51:40802.11a
5700 MHzProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 14:56:39

802.11a
5720 MHz

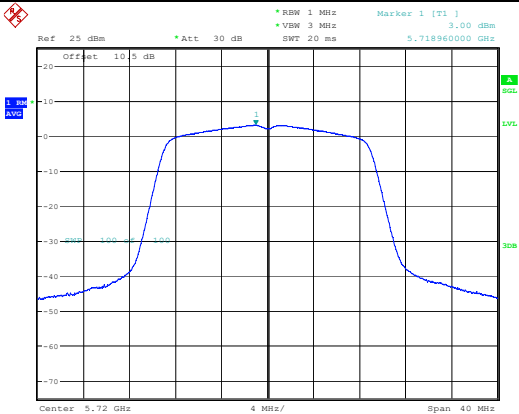


ProjectNo.:CR231059186 Tester:Rod Luo
Date: 13.Oct.2023 21:21:03

Maximum power spectral density

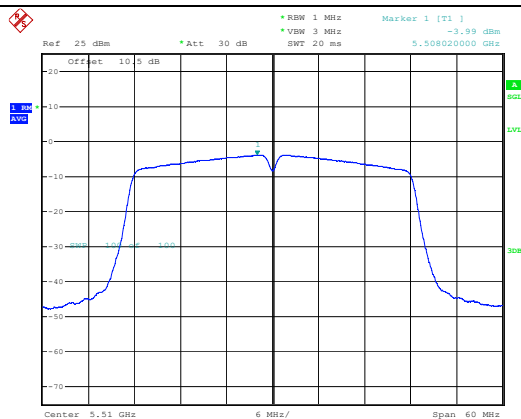
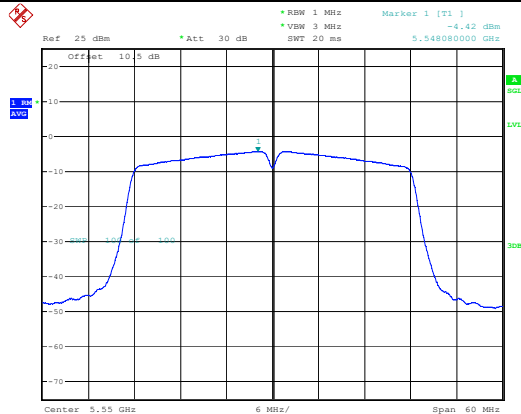
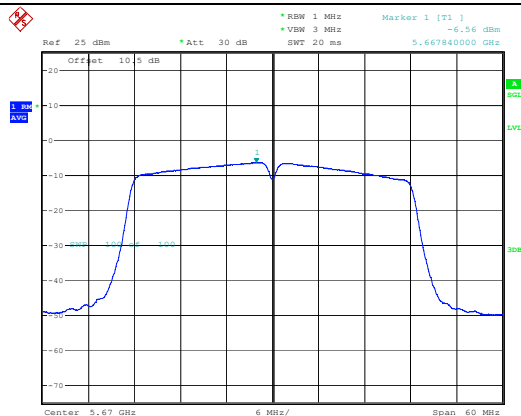
802.11ac vht20
5500 MHzProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 15:02:05802.11ac vht20
5580 MHzProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 15:08:19802.11ac vht20
5700 MHzProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 15:18:47

802.11ac vht20
5720 MHz

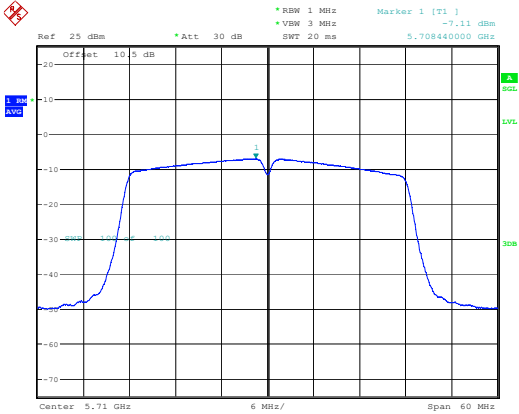


ProjectNo.:CR231059186 Tester:Rod Luo
Date: 13.DEC.2023 21:26:06

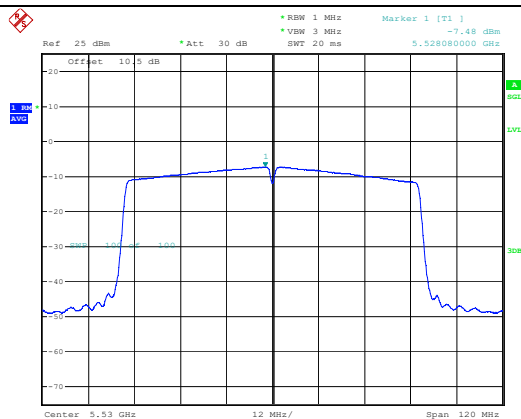
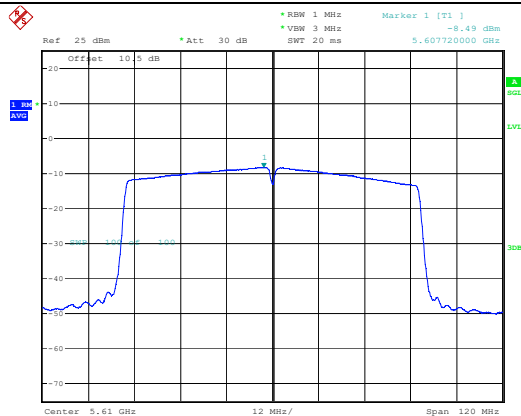
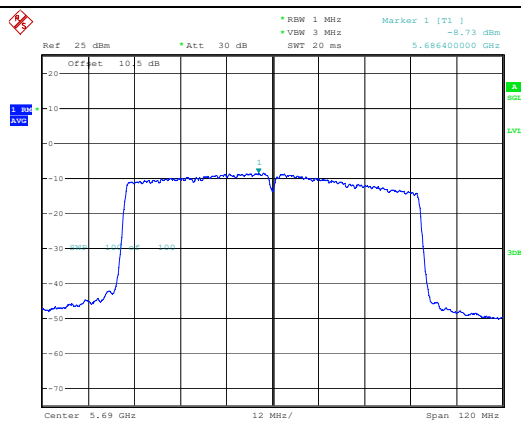
Maximum power spectral density

802.11ac vht40
5510 MHzProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 15:24:19802.11ac vht40
5550 MHzProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 15:28:19802.11ac vht40
5670 MHzProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 15:34:48

802.11ac vht40
5710 MHz



ProjectNo.:CR231059186-RF Tester:Rod Luo
Date: 14.DEC.2023 09:52:03

Maximum power spectral density802.11ac vht80
Lowest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 15:37:59802.11ac vht80
MiddleProjectNo.:CR231059186 Tester:Rod Luo
Date: 10.NOV.2023 15:42:31802.11ac vht80
Highest ChannelProjectNo.:CR231059186 Tester:Rod Luo
Date: 14.DEC.2023 10:50:24

4.6 Duty Cycle:

Serial Number:	2C4U-1	Test Date:	2023/11/2
Test Site:	RF	Test Mode:	Transmitting
Tester:	Rod Luo	Test Result:	N/A

Environmental Conditions:

Temperature: (°C)	25~26	Relative Humidity: (%)	46~47	ATM Pressure: (kPa)	101
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200120	2023-04-18	2024-04-17
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A

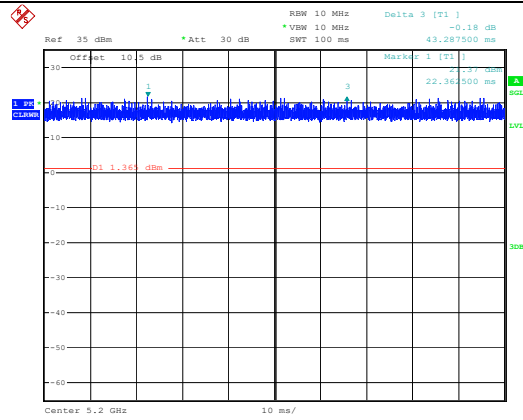
** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

Test Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)	1/T (Hz)	VBW Setting (Hz)
802.11a	100	100	100.00	/	10
802.11ac vt20	100	100	100.00	/	10
802.11ac vt40	100	100	100.00	/	10
802.11ac vht80	100	100	100.00	/	10

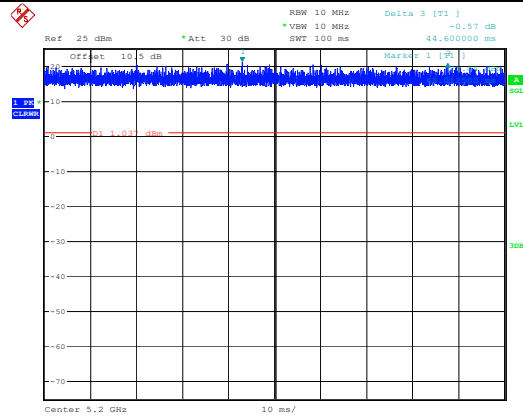
Duty Cycle

802.11a



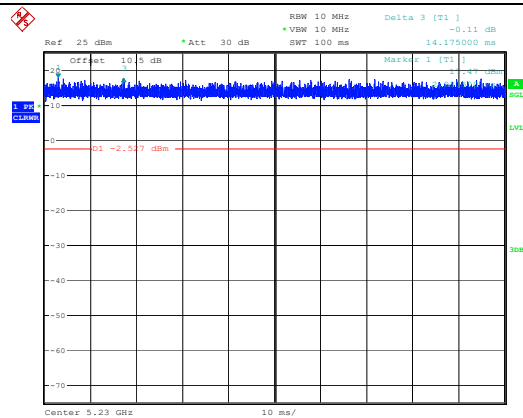
ProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 10:42:50

802.11ac vht20



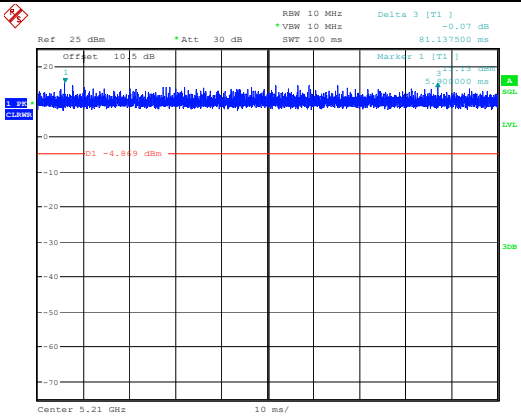
ProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 10:56:46

802.11ac vht40



ProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:12:17

802.11ac vht80



ProjectNo.:CR231059186 Tester:Rod Luo
Date: 2.NOV.2023 11:17:42

5. EUT PHOTOGRAPHS

Please refer to the attachment CR231059186-EXP EUT EXTERNAL PHOTOGRAPHS and
CR231059186-INP EUT INTERNAL PHOTOGRAPHS

6. TEST SETUP PHOTOGRAPHS

Please refer to the attachment CR231059186-00D-TSP TEST SETUP PHOTOGRAPHS.

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