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

ACCREDITED
TESTING LABORATORY
CERTIFICATE # 6356.01

TEST REPORT

Applicant: **INFINIX MOBILITY LIMITED**

Address: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT, Hong Kong

FCC ID: **2AIZN-X6853**

Product Name: **Mobile Phone**
Model Number: **X6853**
Standard(s): **47 CFR Part 15, Subpart E(15.407)**
ANSI C63.10-2013
KDB 789033 D02 General U-NII Test Procedures New Rules v02r01

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

Report Number: **CR231061506-00E**

Date Of Issue: **2023/12/24**

Reviewed By: **Calvin Chen**

Title: RF Engineer

Approved By: **Sun Zhong**

Title: Manager

Test Laboratory: **China Certification ICT Co., Ltd (Dongguan)**
No. 113, Pingkang Road, Dalang Town, Dongguan,
Guangdong, China
Tel: +86-769-82016888

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.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol "▲". Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR231061506-00E	Original Report	2023/12/24

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

1.1.1 General:

EUT Name:	Mobile Phone
EUT Model:	X6853
Operation Frequency:	5180-5240 MHz (802.11a/n ht20/ac vht20) 5190-5230 MHz(802.11n ht40/ac vht40) 5210 MHz(802.11ac vht80) 5745-5825 MHz (802.11a/n ht20/ac vht20) 5755-5795 MHz(802.11n ht40/ac vht40) 5775 MHz(802.11ac vht80)
Maximum Average Output Power (Conducted):	15.36 dBm (5150-5250 MHz) 16.20 dBm (5725-5850 MHz)
Modulation Type:	OFDM-BPSK, QPSK, 16QAM, 64QAM,256QAM
Rated Input Voltage:	DC 5V/3A or 5-10V/4.5A or 11V/4.1A from Adapter or 3.91V from Battery
Serial Number:	RE&CE:2CII-5 (Normal) RF:2CII-1
EUT Received Date:	2023/10/18
EUT Received Status:	Good
Note: the EUT has two versions, a normal version and a lighting version, the two versions were electrical identical except the NFC&WPT antennas, memory, color and lighting function. Please refer to the DOS letter for more details. Also the EUT has two adapters (Adapter 1 & Adapter 2). The worst was normal version with Adapter 1 according to the test data of AC line conducted and radiated emission below 1GHz in the DSS report. So in this report, only normal version with Adapter 1 was chosen for the full test.	

1.1.2 Operation Frequency Detail:

For 802.11a/n ht20/ac vht20:

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

For 802.11n ht40/ac vht40:

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

For 802.11ac vht80:

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

1.1.3 Antenna Information Detail▲:

Antenna Manufacturer	Antenna Type	input impedance (Ohm)	Frequency Range	Antenna Gain	
				Antenna 0 (Main Ant)	Antenna 1 (Aux Ant)
Dongguan Guangzheng Mold Plastic Co., Ltd	FPC	50	5.15~5.85GHz	-2.31 dBi	-3.19 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	S/N
Adapter 1	Infinix	U450XSB	Input: 100-240V~50/60Hz 1.8A Output: 5.0V 3.0A 15W or 5.0-10.0V 4.5A or 11.0V 4.1A 45.0W MAX	AH07019153927
Adapter 2	Infinix	U450XSB	Input: 100-240V~50/60Hz 1.8A Output: 5.0V 3.0A 15W or 5.0-10.0V 4.5A or 11.0V 4.1A 45.0W MAX	KX07019453A12

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:	Engineering 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	18.5
	Middle	5200	6Mbps	18.5
	Highest	5240	6Mbps	18.5
802.11n ht20	Lowest	5180	MCS0	18.5
	Middle	5200	MCS0	18.5
	Highest	5240	MCS0	18.5
802.11n ht40	Lowest	5190	MCS0	16.5
	Highest	5230	MCS0	16.5
802.11ac vht80	Middle	5210	MCS0	16.5

5725-5850 MHz Band:

Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting
802.11a	Lowest	5745	6Mbps	18.5
	Middle	5785	6Mbps	18.5
	Highest	5825	6Mbps	18.5
802.11n ht20	Lowest	5745	MCS0	18.5
	Middle	5785	MCS0	18.5
	Highest	5825	MCS0	18.5
802.11n ht40	Lowest	5755	MCS0	16.5
	Highest	5795	MCS0	16.5
802.11ac vht80	Middle	5775	MCS0	16.5

Note:
The system support 802.11a/n ht20/ac vht20/n ht40/ac vht40/ac vht80, the 802.11ac vht20/802.11ac vht40 were reduced since the identical parameters with 802.11n ht20/n 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.
The EUT has two antennas for 5G Wi-Fi, but only support the SISO mode.

1.2.2 Support Equipment List and Details

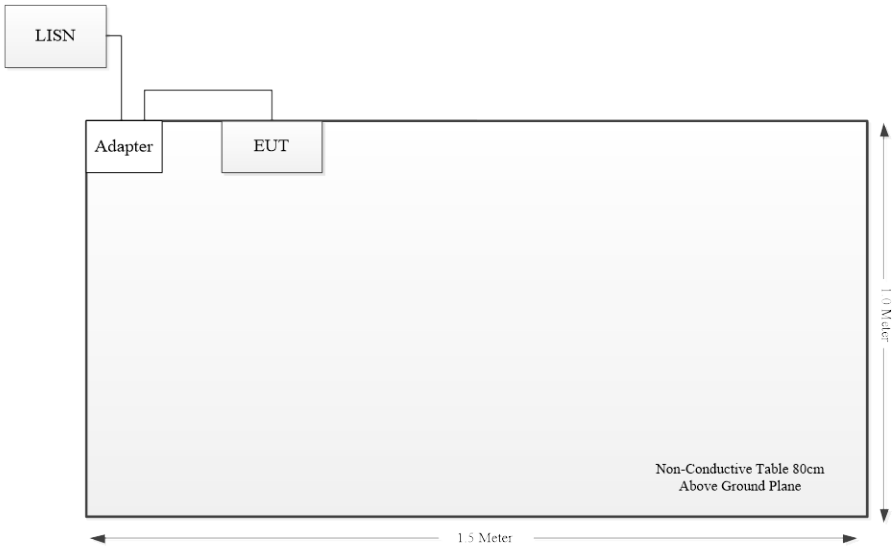
Manufacturer	Description	Model	Serial Number
Infinix	Adapter	U450XSB	AH07019153927

1.2.3 Support Cable List and Details

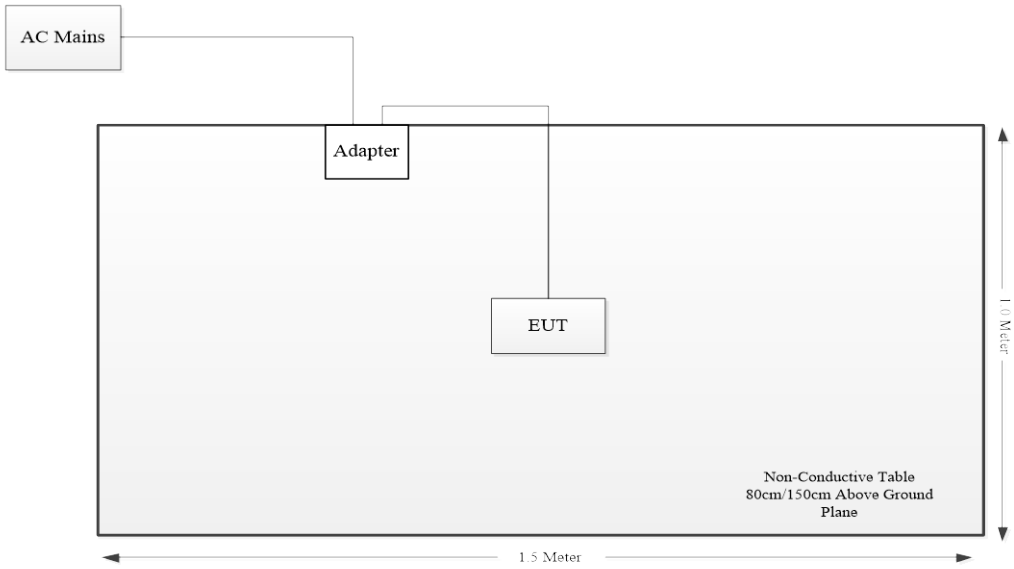
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
Power Cable	NO	NO	1	Adapter	EUT

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~30MHz: 4.12dB,30M~200MHz: 4.15 dB,200M~1GHz: 5.61 dB,1G~6GHz: 5.14 dB, 6G~18GHz: 5.93 dB,18G~26.5G:5.47 dB,26.5G~40G:5.63 dB
Unwanted Emissions, conducted	±1.26 dB
Temperature	±1℃
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)

2. SUMMARY OF TEST RESULTS

Standard(s) Section	Test Items	Result
FCC§15.207(a)	AC line conducted emissions	Compliant
FCC§15.205& §15.209 &§15.407(b)	Radiated Spurious Emissions	Compliant
FCC§15.407 (c)	Automatically Discontinue Transmission	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
FCC§15.407 (g)	Frequency Stability	Compliant**
§15.203	Antenna Requirement	Compliant

Note:
Compliant*: *During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. the EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.*
Compliant**: *Grantee ensure that the product meets e-CFR Title 47 section 15.407(g) and KDB 789033 D02v02r01 frequency stability such that the emissions are maintained within the band of operation under all conditions of normal operation as specified in the user's manual.*

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 μH/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.

	Conducted limit (dBμV)	
Frequency of emission (MHz)	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:

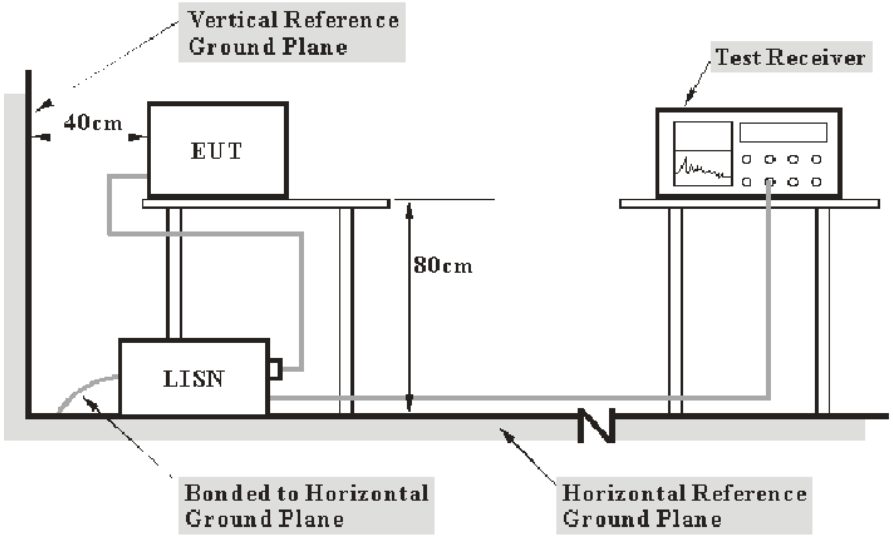
(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(2) For all other carrier current systems: 1000 μV within the frequency band 535-1705 kHz, as measured using a 50 μH/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, obtainig 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

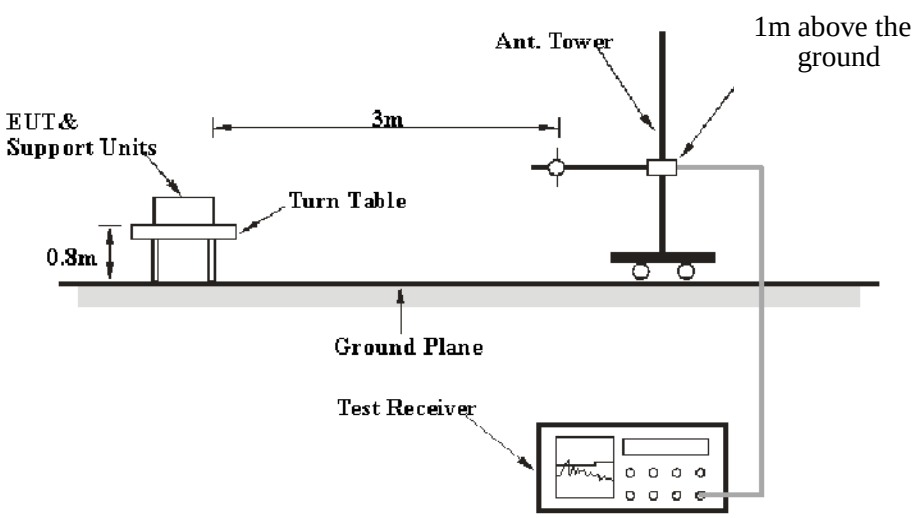
3.2.1 Applicable Standard

FCC §15.407 (b);

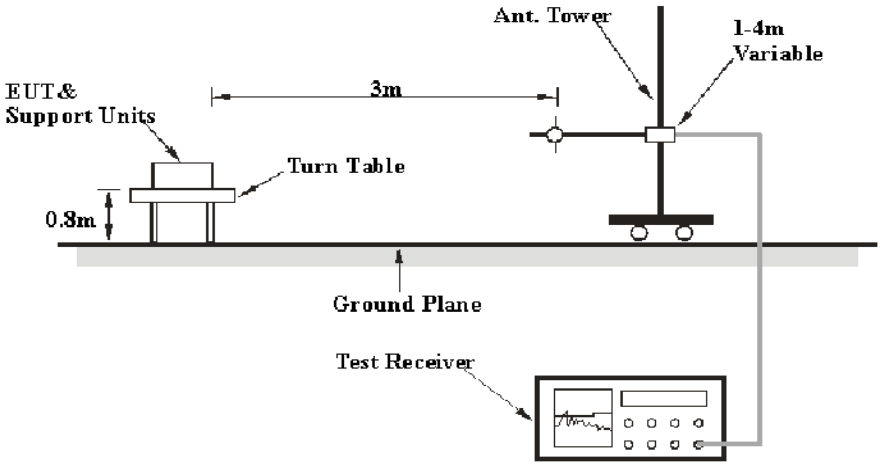
Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:
(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 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

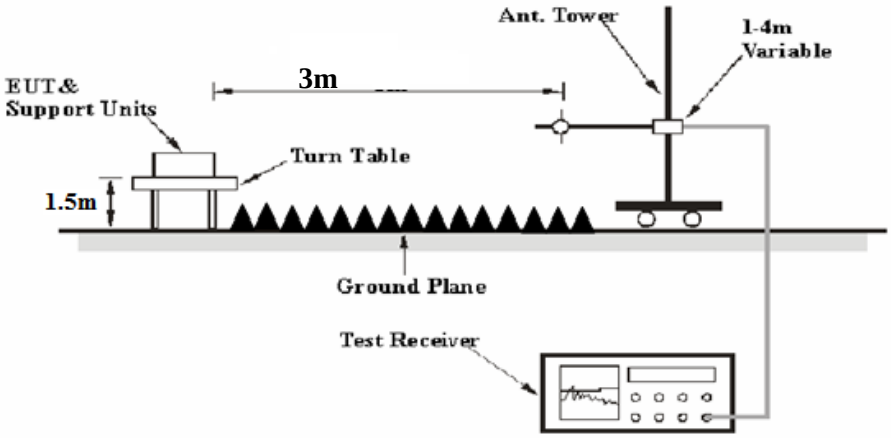
9 kHz-30MHz:



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 -1000 MHz:

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

1GHz- 40GHz:

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

Note: T is minimum transmission duration

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

3.2.4 Test Procedure

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

Data was recorded in Quasi-peak detection mode for frequency range of 9 kHz-1GHz, peak and Average detection modes for frequencies above 1GHz.

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

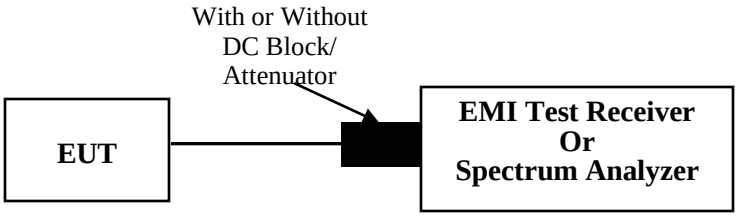
3.3 Emission Bandwidth

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

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

6 dB emission bandwidth:

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

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

99% Occupied Bandwidth:

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

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

3.4 Maximum Conducted Output Power

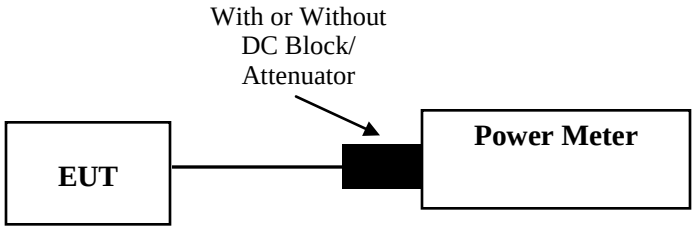
3.4.1 Applicable Standard

FCC §15.407(a) (1)(iv)
For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

FCC §15.407(a) (2)
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 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

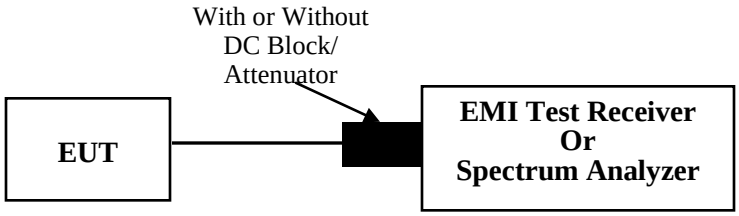
3.5.1 Applicable Standard

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 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 ⩾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 ±2%

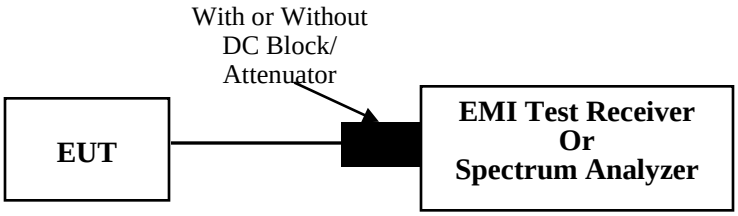
KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-2 should be applied.

Duty cycle <98%, duty cycle variations exceed ±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 ≥ OBW if possible; otherwise, set RBW to the largest available value.
3) Set VBW ≥ 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 ≤ 16.7 μs.)

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:	2CII-5	Test Date:	2023/11/9
Test Site:	CE	Test Mode:	Transmitting(Maximum output power mode: Antenna 1, 802.11n20 high channel)
Tester:	David Huang	Test Result:	Pass

Environmental Conditions:

Temperature: (℃)	26.5	Relative Humidity: (%)	58	ATM Pressure: (kPa)	100.9

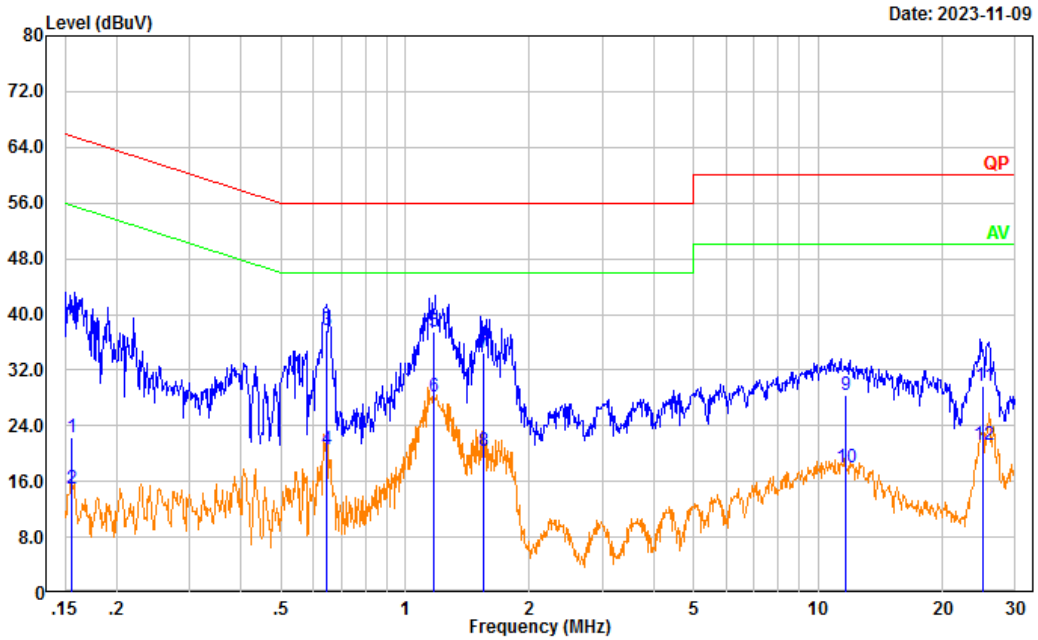
Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101134	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).*

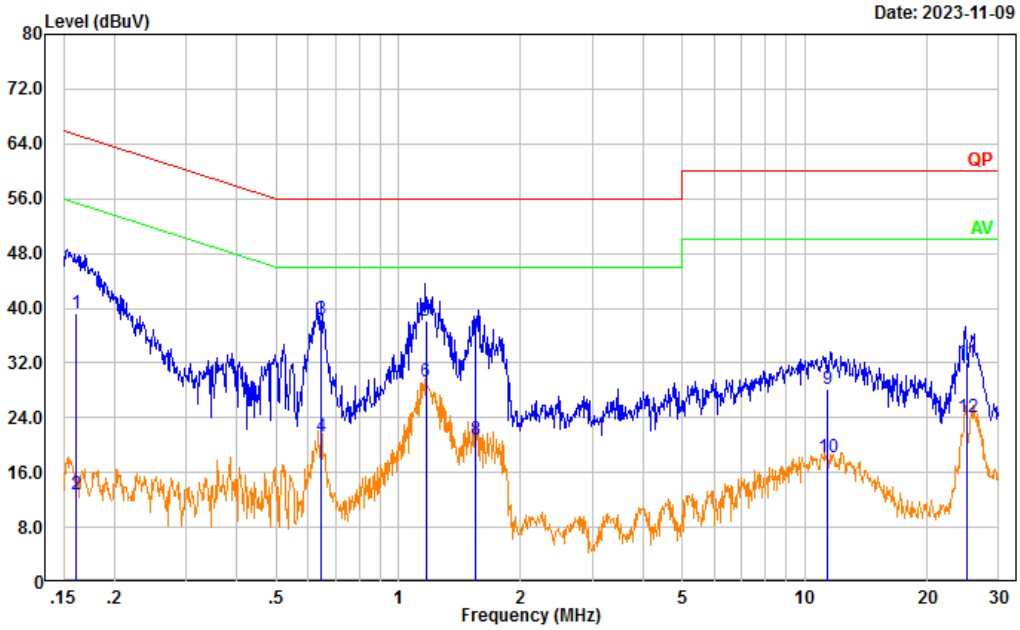
Test Data:
Please refer to the below table and plots.

Project No.: CR231061506-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	0.156	12.78	9.61	22.39	65.70	43.31	QP
2	0.156	5.25	9.61	14.86	55.70	40.84	Average
3	0.648	28.10	9.62	37.72	56.00	18.28	QP
4	0.648	10.99	9.62	20.61	46.00	25.39	Average
5	1.169	27.78	9.62	37.40	56.00	18.60	QP
6	1.169	18.53	9.62	28.15	46.00	17.85	Average
7	1.543	24.91	9.63	34.54	56.00	21.46	QP
8	1.543	10.78	9.63	20.41	46.00	25.59	Average
9	11.622	18.70	9.67	28.37	60.00	31.63	QP
10	11.622	8.36	9.67	18.03	50.00	31.97	Average
11	25.104	19.79	9.81	29.60	60.00	30.40	QP
12	25.104	11.50	9.81	21.31	50.00	28.69	Average

Project No.: CR231061506-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	0.161	29.52	9.61	39.13	65.40	26.27	QP
2	0.161	3.16	9.61	12.77	55.40	42.63	Average
3	0.647	28.74	9.62	38.36	56.00	17.64	QP
4	0.647	11.70	9.62	21.32	46.00	24.68	Average
5	1.167	28.57	9.62	38.19	56.00	17.81	QP
6	1.167	19.71	9.62	29.33	46.00	16.67	Average
7	1.553	25.67	9.63	35.30	56.00	20.70	QP
8	1.553	11.17	9.63	20.80	46.00	25.20	Average
9	11.368	18.41	9.67	28.08	60.00	31.92	QP
10	11.368	8.57	9.67	18.24	50.00	31.76	Average
11	25.034	22.32	9.76	32.08	60.00	27.92	QP
12	25.034	14.36	9.76	24.12	50.00	25.88	Average

4.2 Radiation Spurious Emissions

Serial Number:	2CII-5	Test Date:	2023/11/11~2023/11/25
Test Site:	966-2,966-1	Test Mode:	Transmitting
Tester:	Carl Xue, Tao Zhu	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.1~26.3	Relative Humidity: (%)	57	ATM Pressure: (kPa)	101.1~101.4

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	2023/11/9	2026/11/8
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
PASTERNACK	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
PASTERNACK	Horn Antenna	PE9850/2F-20	072001	2021/2/5	2024/2/4

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

Test Data:

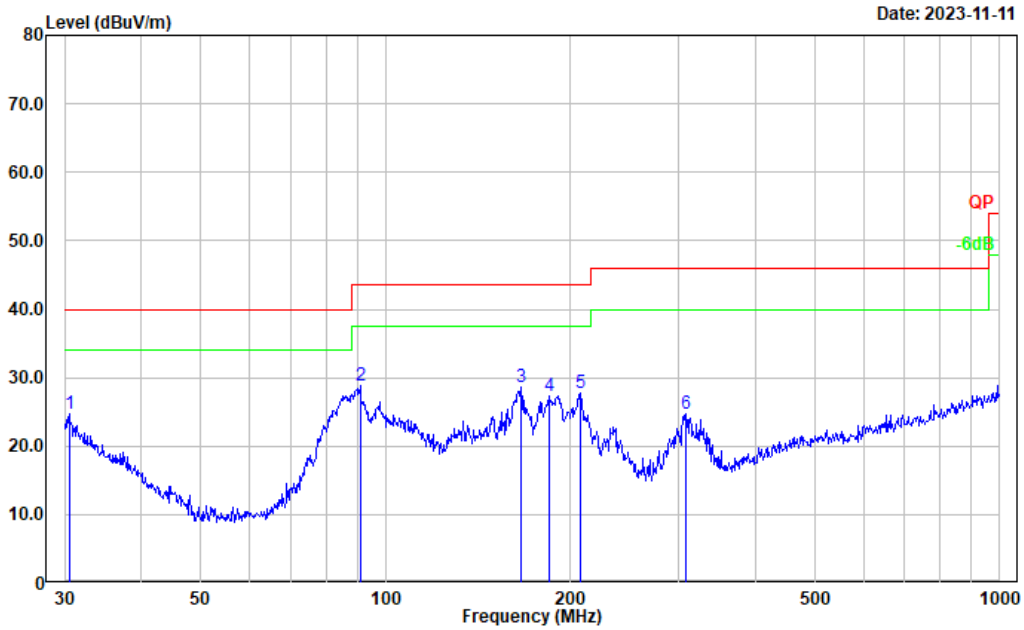
Please refer to the below table and plots.

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

For the radiated spurious emission below 30MHz, the emission was 20dB below the limit, so it is not recorded.

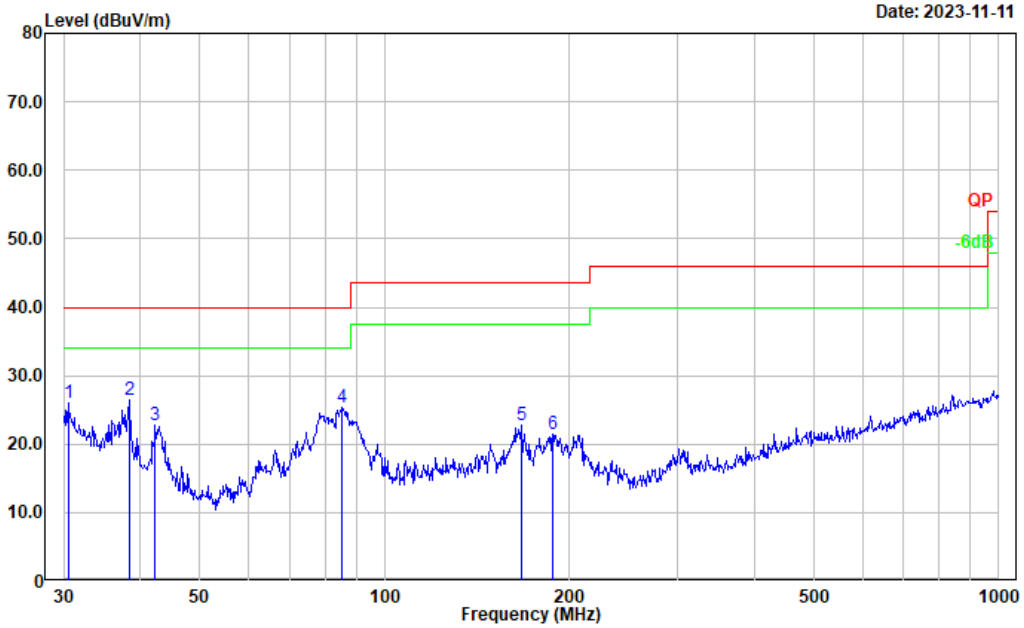
2) 30MHz-1GHz Transmitting (Maximum output power mode at antenna 1)

Project No.: CR231061506-RF
Tester: Carl Xue
Polarization: horizontal
Note: Transmitting(5150-5250MHz 802.11n ht20 Low Channel)



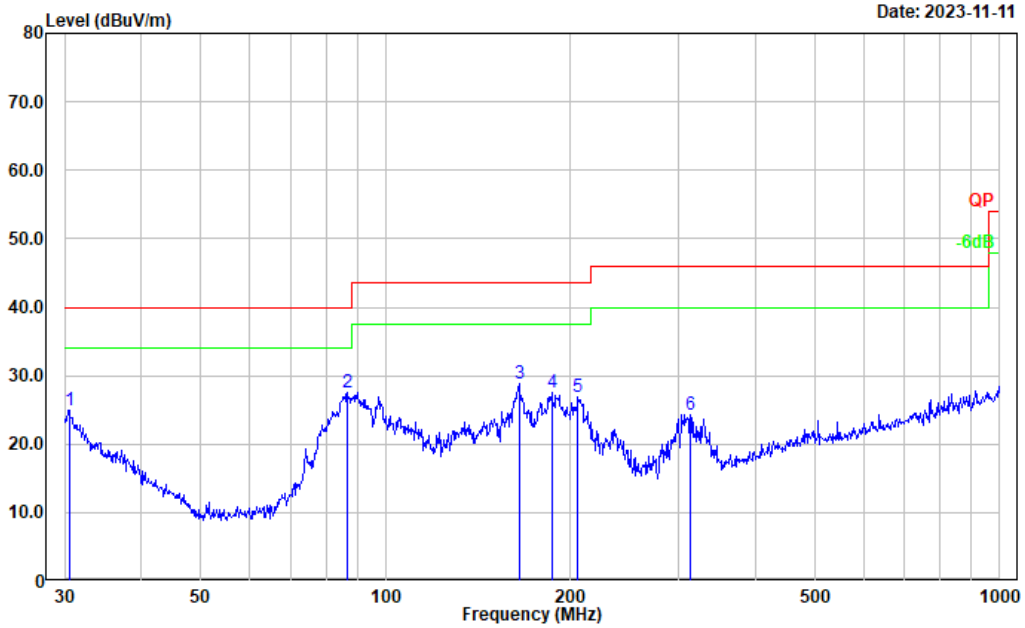
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.531	28.89	-4.20	24.69	40.00	15.31	Peak
2	90.855	45.52	-16.72	28.80	43.50	14.70	Peak
3	166.068	41.02	-12.44	28.58	43.50	14.92	Peak
4	185.138	40.85	-13.51	27.34	43.50	16.16	Peak
5	207.850	40.15	-12.45	27.70	43.50	15.80	Peak
6	307.831	35.31	-10.59	24.72	46.00	21.28	Peak

Project No.: CR231061506-RF
Tester: Carl Xue
Polarization: vertical
Note: Transmitting(5150-5250MHz 802.11n ht20 Low Channel)



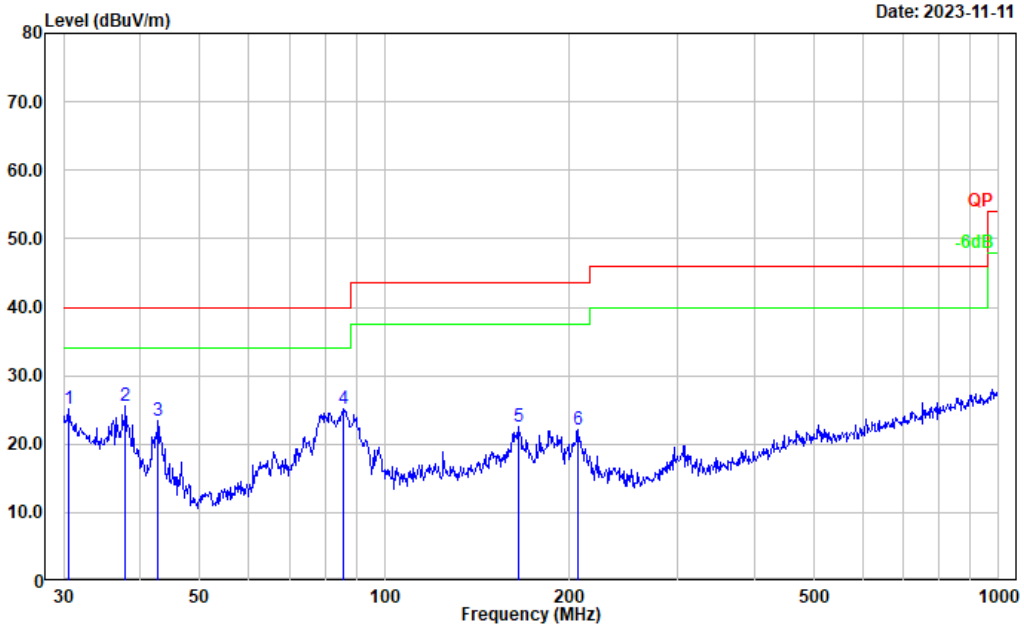
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.531	30.15	-4.20	25.95	40.00	14.05	Peak
2	38.346	36.59	-10.12	26.47	40.00	13.53	Peak
3	42.302	35.42	-12.69	22.73	40.00	17.27	Peak
4	85.298	42.53	-17.19	25.34	40.00	14.66	Peak
5	166.651	35.32	-12.53	22.79	43.50	20.71	Peak
6	187.753	35.06	-13.51	21.55	43.50	21.95	Peak

Project No.: CR231061506-RF
Tester: Carl Xue
Polarization: horizontal
Note: Transmitting(5150-5250MHz 802.11n ht20 Middle Channel)



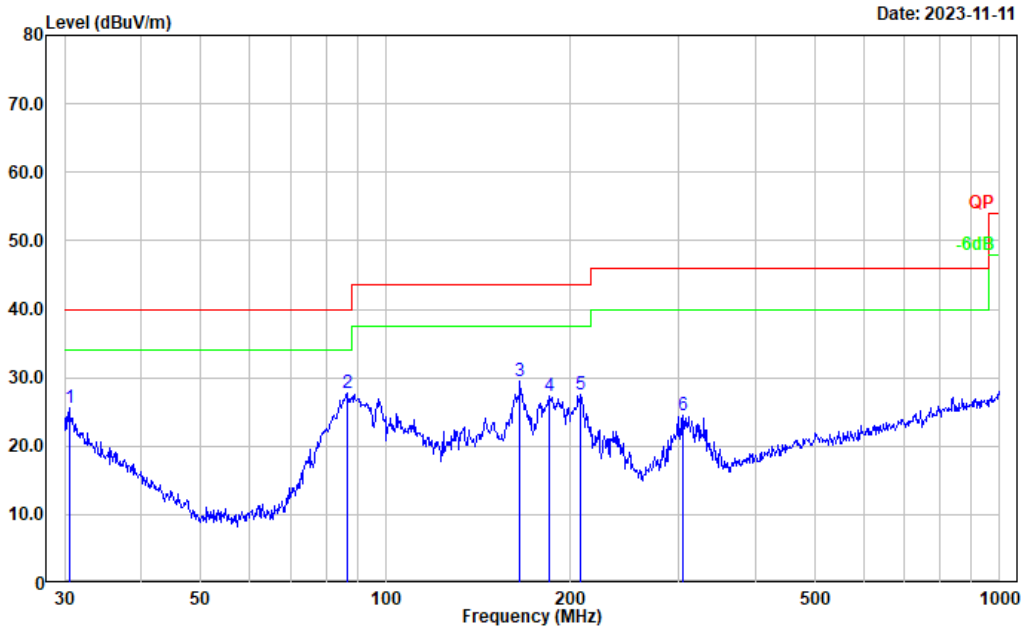
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.531	29.12	-4.20	24.92	40.00	15.08	Peak
2	86.503	44.66	-17.11	27.55	40.00	12.45	Peak
3	164.908	41.25	-12.40	28.85	43.50	14.65	Peak
4	186.441	41.00	-13.53	27.47	43.50	16.03	Peak
5	205.675	39.36	-12.38	26.98	43.50	16.52	Peak
6	313.276	34.95	-10.60	24.35	46.00	21.65	Peak

Project No.: CR231061506-RF
Tester: Carl Xue
Polarization: vertical
Note: Transmitting(5150-5250MHz 802.11n ht20 Middle Channel)



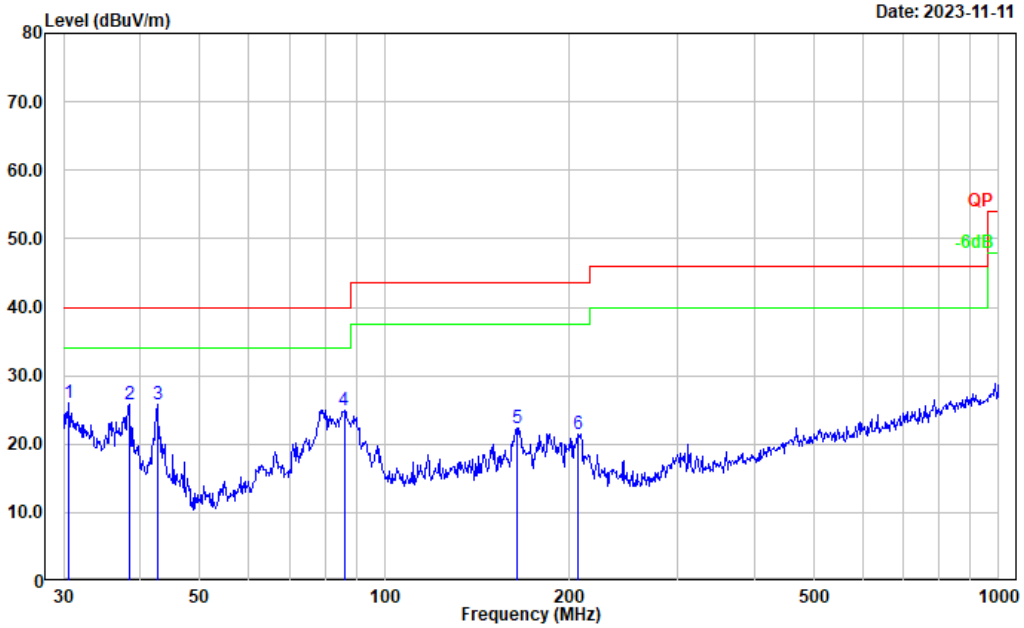
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.531	29.40	-4.20	25.20	40.00	14.80	Peak
2	37.812	35.22	-9.72	25.50	40.00	14.50	Peak
3	42.750	36.42	-12.96	23.46	40.00	16.54	Peak
4	85.598	42.29	-17.15	25.14	40.00	14.86	Peak
5	164.908	34.93	-12.40	22.53	43.50	20.97	Peak
6	206.398	34.53	-12.40	22.13	43.50	21.37	Peak

Project No.: CR231061506-RF
Tester: Carl Xue
Polarization: horizontal
Note: Transmitting(5150-5250MHz 802.11n ht20 High Channel)



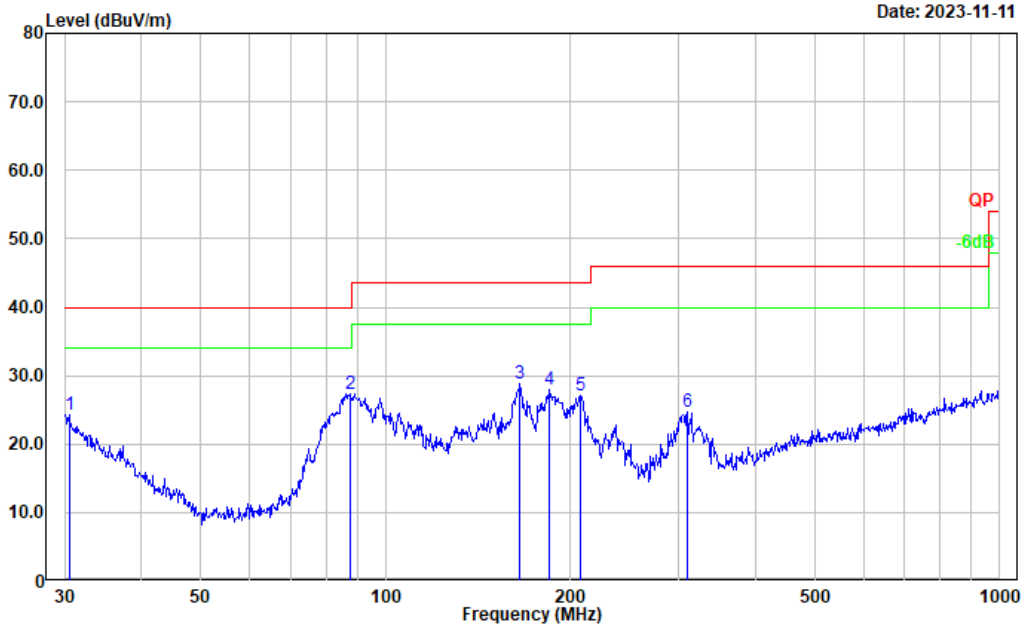
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.531	29.68	-4.20	25.48	40.00	14.52	Peak
2	86.503	44.89	-17.11	27.78	40.00	12.22	Peak
3	165.487	41.83	-12.41	29.42	43.50	14.08	Peak
4	184.490	40.80	-13.52	27.28	43.50	16.22	Peak
5	207.123	39.98	-12.41	27.57	43.50	15.93	Peak
6	304.610	35.13	-10.57	24.56	46.00	21.44	Peak

Project No.: CR231061506-RF
Tester: Carl Xue
Polarization: vertical
Note: Transmitting(5150-5250MHz 802.11n ht20 High Channel)



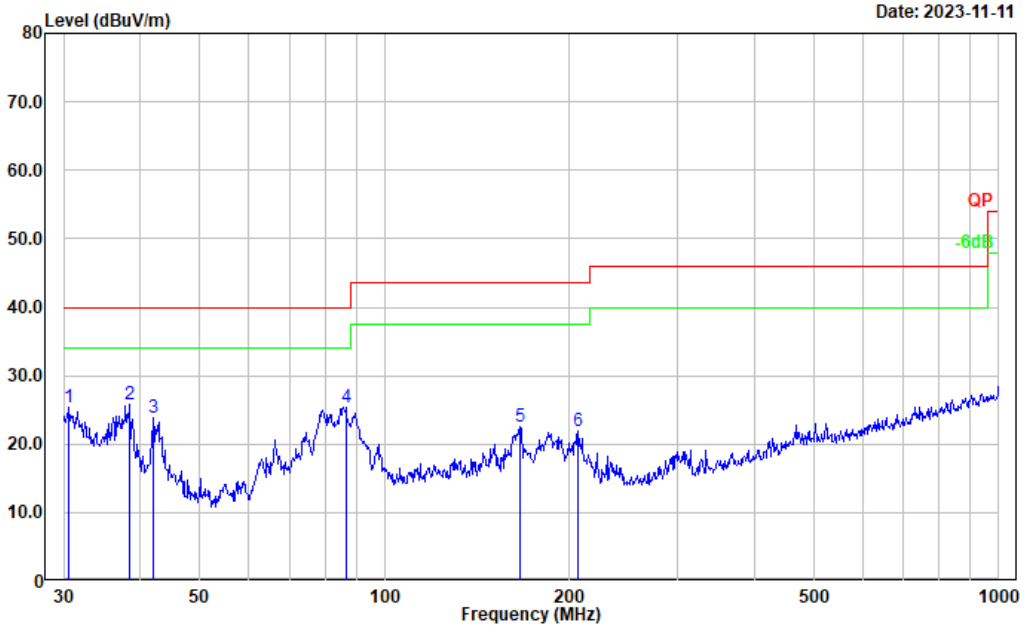
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.638	30.36	-4.28	26.08	40.00	13.92	Peak
2	38.481	36.06	-10.22	25.84	40.00	14.16	Peak
3	42.600	38.57	-12.87	25.70	40.00	14.30	Peak
4	85.898	42.16	-17.15	25.01	40.00	14.99	Peak
5	164.330	34.66	-12.34	22.32	43.50	21.18	Peak
6	206.398	33.92	-12.40	21.52	43.50	21.98	Peak

Project No.: CR231061506-RF
Tester: Carl Xue
Polarization: horizontal
Note: Transmitting(5725-5850MHz 802.11n ht20 Low Channel)



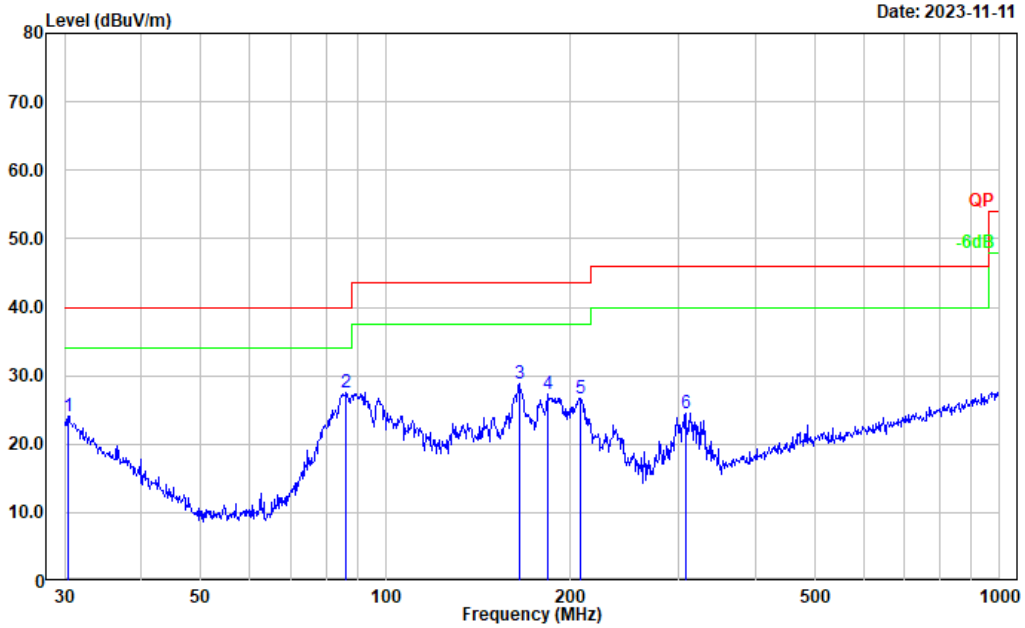
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.531	28.47	-4.20	24.27	40.00	15.73	Peak
2	87.725	44.40	-17.04	27.36	40.00	12.64	Peak
3	165.487	41.23	-12.41	28.82	43.50	14.68	Peak
4	185.138	41.58	-13.51	28.07	43.50	15.43	Peak
5	207.123	39.54	-12.41	27.13	43.50	16.37	Peak
6	309.998	35.29	-10.60	24.69	46.00	21.31	Peak

Project No.: CR231061506-RF
Tester: Carl Xue
Polarization: vertical
Note: Transmitting(5725-5850MHz 802.11n ht20 Low Channel)



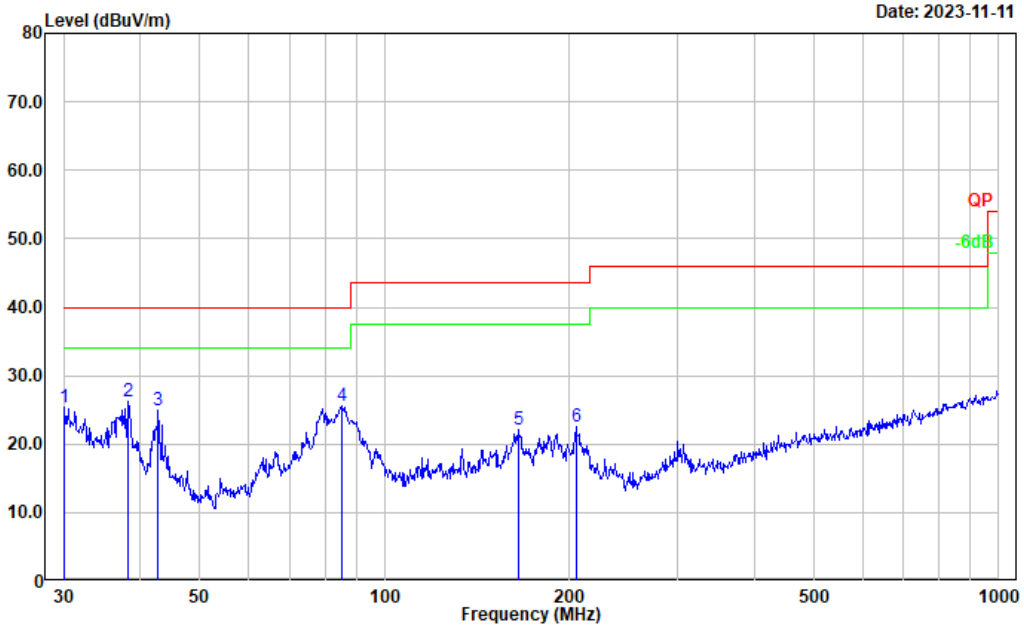
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.638	29.56	-4.28	25.28	40.00	14.72	Peak
2	38.481	36.10	-10.22	25.88	40.00	14.12	Peak
3	42.007	36.38	-12.51	23.87	40.00	16.13	Peak
4	86.503	42.56	-17.11	25.45	40.00	14.55	Peak
5	166.068	34.96	-12.44	22.52	43.50	20.98	Peak
6	206.398	34.37	-12.40	21.97	43.50	21.53	Peak

Project No.: CR231061506-RF
Tester: Carl Xue
Polarization: horizontal
Note: Transmitting(5725-5850MHz 802.11n ht20 Middle Channel)



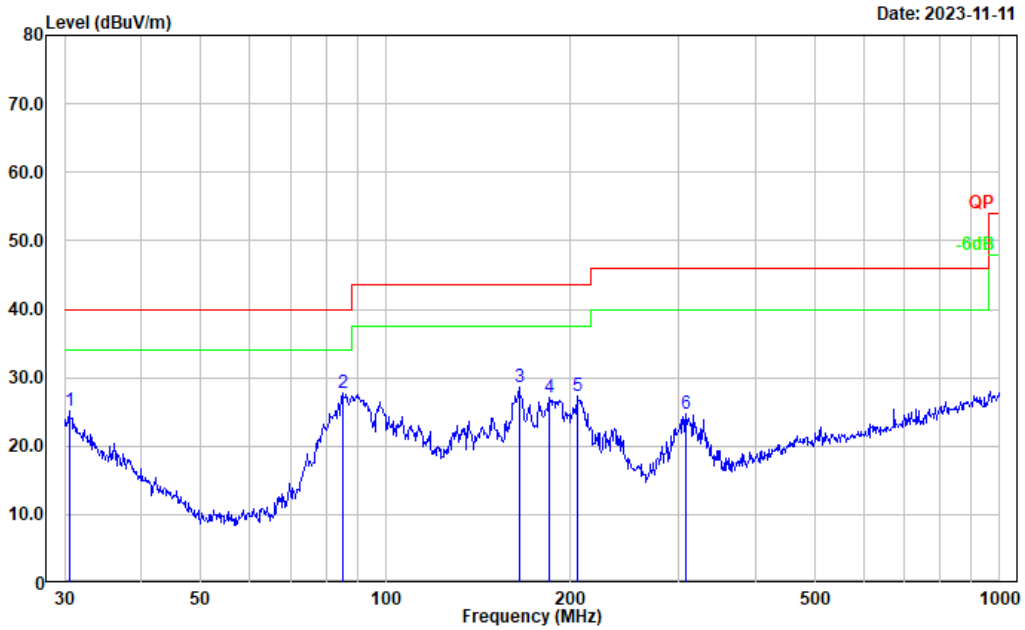
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.424	28.23	-4.13	24.10	40.00	15.90	Peak
2	86.200	44.71	-17.13	27.58	40.00	12.42	Peak
3	164.908	41.27	-12.40	28.87	43.50	14.63	Peak
4	183.201	40.81	-13.53	27.28	43.50	16.22	Peak
5	207.850	39.17	-12.45	26.72	43.50	16.78	Peak
6	307.831	35.19	-10.59	24.60	46.00	21.40	Peak

Project No.: CR231061506-RF
Tester: Carl Xue
Polarization: vertical
Note: Transmitting(5725-5850MHz 802.11n ht20 Middle Channel)



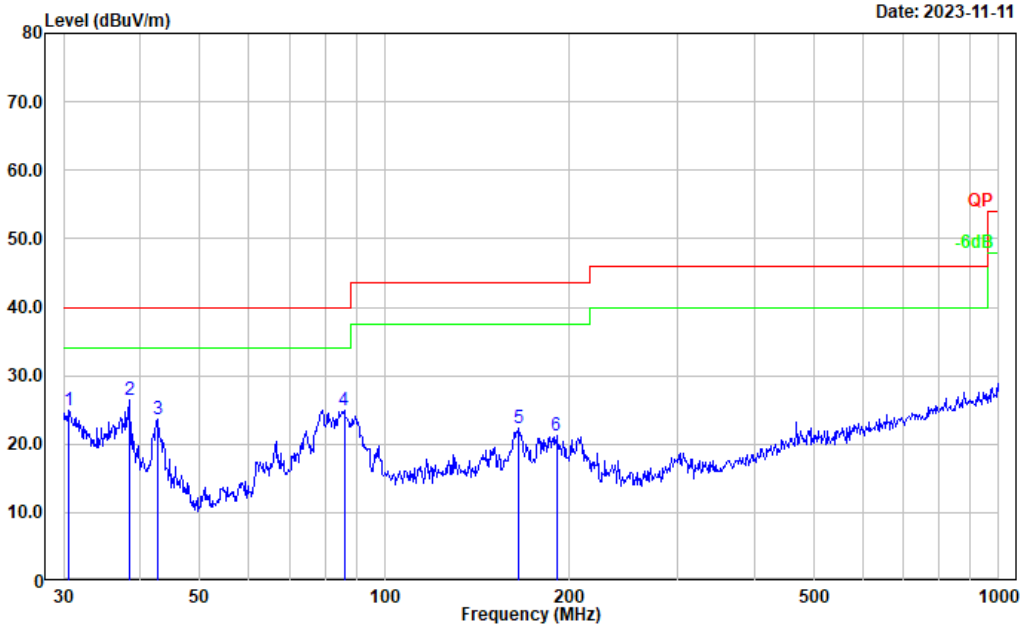
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.105	29.28	-3.88	25.40	40.00	14.60	Peak
2	38.212	36.33	-10.02	26.31	40.00	13.69	Peak
3	42.750	37.88	-12.96	24.92	40.00	15.08	Peak
4	84.999	42.68	-17.19	25.49	40.00	14.51	Peak
5	164.908	34.56	-12.40	22.16	43.50	21.34	Peak
6	204.955	34.99	-12.37	22.62	43.50	20.88	Peak

Project No.: CR231061506-RF
Tester: Carl Xue
Polarization: horizontal
Note: Transmitting(5725-5850MHz 802.11n ht20 High Channel)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.531	29.30	-4.20	25.10	40.00	14.90	Peak
2	84.999	44.85	-17.19	27.66	40.00	12.34	Peak
3	164.908	41.08	-12.40	28.68	43.50	14.82	Peak
4	185.138	40.58	-13.51	27.07	43.50	16.43	Peak
5	204.955	39.59	-12.37	27.22	43.50	16.28	Peak
6	308.913	35.25	-10.60	24.65	46.00	21.35	Peak

Project No.: CR231061506-RF
Tester: Carl Xue
Polarization: vertical
Note: Transmitting(5725-5850MHz 802.11n ht20 High Channel)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.531	29.19	-4.20	24.99	40.00	15.01	Peak
2	38.346	36.47	-10.12	26.35	40.00	13.65	Peak
3	42.600	36.57	-12.87	23.70	40.00	16.30	Peak
4	85.898	42.12	-17.15	24.97	40.00	15.03	Peak
5	165.487	34.69	-12.41	22.28	43.50	21.22	Peak
6	190.405	34.71	-13.41	21.30	43.50	22.20	Peak

3) 1GHz-40GHz:
Antenna 0:
5150-5250MHz
802.11a:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5180 MHz							
5150.000	53.46	PK	H	11.67	65.13	74.00	8.87
5150.000	30.09	AV	H	11.67	41.76	54.00	12.24
5150.000	53.24	PK	V	11.67	64.91	74.00	9.09
5150.000	31.32	AV	V	11.67	42.99	54.00	11.01
10360.000	35.11	PK	H	20.47	55.58	68.20	12.62
10360.000	35.65	PK	V	20.47	56.12	68.20	12.08
15540.000	36.71	PK	H	24.62	61.33	74.00	12.67
15540.000	22.15	AV	H	24.62	46.77	54.00	7.23
15540.000	36.34	PK	V	24.62	60.96	74.00	13.04
15540.000	22.26	AV	V	24.62	46.88	54.00	7.12
Middle Channel: 5200 MHz							
10400.000	40.07	PK	H	20.54	60.61	68.20	7.59
10400.000	39.57	PK	V	20.54	60.11	68.20	8.09
15600.000	37.85	PK	H	24.71	62.56	74.00	11.44
15600.000	23.06	AV	H	24.71	47.77	54.00	6.23
15600.000	36.84	PK	V	24.71	61.55	74.00	12.45
15600.000	23.27	AV	V	24.71	47.98	54.00	6.02
High Channel: 5240 MHz							
5350.000	52.25	PK	H	11.94	64.19	74.00	9.81
5350.000	30.20	AV	H	11.94	42.14	54.00	11.86
5350.000	52.54	PK	V	11.94	64.48	74.00	9.52
5350.000	30.24	AV	V	11.94	42.18	54.00	11.82
10480.000	37.29	PK	H	20.42	57.71	68.20	10.49
10480.000	36.73	PK	V	20.42	57.15	68.20	11.05
15720.000	36.86	PK	H	24.82	61.68	74.00	12.32
15720.000	22.62	AV	H	24.82	47.44	54.00	6.56
15720.000	37.64	PK	V	24.82	62.46	74.00	11.54
15720.000	22.90	AV	V	24.82	47.72	54.00	6.28

802.11n ht20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5180 MHz							
5150.000	56.03	PK	H	11.67	67.70	74.00	6.30
5150.000	30.63	AV	H	11.67	42.30	54.00	11.70
5150.000	57.53	PK	V	11.67	69.20	74.00	4.80
5150.000	30.89	AV	V	11.67	42.56	54.00	11.44
10360.000	38.41	PK	H	20.47	58.88	68.20	9.32
10360.000	37.90	PK	V	20.47	58.37	68.20	9.83
15540.000	37.84	PK	H	24.62	62.46	74.00	11.54
15540.000	23.56	AV	H	24.62	48.18	54.00	5.82
15540.000	37.57	PK	V	24.62	62.19	74.00	11.81
15540.000	22.76	AV	V	24.62	47.38	54.00	6.62
Middle Channel: 5200 MHz							
10400.000	34.59	PK	H	20.54	55.13	68.20	13.07
10400.000	34.79	PK	V	20.54	55.33	68.20	12.87
15600.000	37.73	PK	H	24.71	62.44	74.00	11.56
15600.000	23.47	AV	H	24.71	48.18	54.00	5.82
15600.000	37.15	PK	V	24.71	61.86	74.00	12.14
15600.000	22.57	AV	V	24.71	47.28	54.00	6.72
High Channel: 5240 MHz							
5350.000	52.38	PK	H	11.94	64.32	74.00	9.68
5350.000	31.45	AV	H	11.94	43.39	54.00	10.61
5350.000	52.07	PK	V	11.94	64.01	74.00	9.99
5350.000	32.06	AV	V	11.94	44.00	54.00	10.00
10480.000	37.31	PK	H	20.42	57.73	68.20	10.47
10480.000	36.87	PK	V	20.42	57.29	68.20	10.91
15720.000	38.26	PK	H	24.82	63.08	74.00	10.92
15720.000	22.95	AV	H	24.82	47.77	54.00	6.23
15720.000	37.21	PK	V	24.82	62.03	74.00	11.97
15720.000	22.13	AV	V	24.82	46.95	54.00	7.05

802.11n ht40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5190 MHz							
5150.000	57.39	PK	H	11.67	69.06	74.00	4.94
5150.000	30.59	AV	H	11.67	42.26	54.00	11.74

5150.000	57.17	PK	V	11.67	68.84	74.00	5.16
5150.000	30.93	AV	V	11.67	42.60	54.00	11.40
10380.000	35.33	PK	H	20.51	55.84	68.20	12.36
10380.000	34.81	PK	V	20.51	55.32	68.20	12.88
15570.000	36.37	PK	H	24.67	61.04	74.00	12.96
15570.000	22.79	AV	H	24.67	47.46	54.00	6.54
15570.000	37.11	PK	V	24.67	61.78	74.00	12.22
15570.000	22.62	AV	V	24.67	47.29	54.00	6.71
High Channel: 5230 MHz							
5350.000	52.71	PK	H	11.94	64.65	74.00	9.35
5350.000	30.67	AV	H	11.94	42.61	54.00	11.39
5350.000	52.01	PK	V	11.94	63.95	74.00	10.05
5350.000	30.18	AV	V	11.94	42.12	54.00	11.88
10460.000	34.51	PK	H	20.45	54.96	68.20	13.24
10460.000	34.50	PK	V	20.45	54.95	68.20	13.25
15690.000	37.07	PK	H	24.77	61.84	74.00	12.16
15690.000	22.89	AV	H	24.77	47.66	54.00	6.34
15690.000	35.50	PK	V	24.77	60.27	74.00	13.73
15690.000	23.83	AV	V	24.77	48.60	54.00	5.40

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							
5150.000	59.15	PK	H	11.67	70.82	74.00	3.18
5150.000	30.21	AV	H	11.67	41.88	54.00	12.12
5150.000	58.26	PK	V	11.67	69.93	74.00	4.07
5150.000	31.70	AV	V	11.67	43.37	54.00	10.63
5350.000	52.73	PK	H	11.94	64.67	74.00	9.33
5350.000	30.74	AV	H	11.94	42.68	54.00	11.32
5350.000	53.26	PK	V	11.94	65.20	74.00	8.80
5350.000	31.95	AV	V	11.94	43.89	54.00	10.11
10420.000	35.08	PK	H	20.51	55.59	68.20	12.61
10420.000	35.85	PK	V	20.51	56.36	68.20	11.84
15630.000	38.28	PK	H	24.73	63.01	74.00	10.99
15630.000	22.99	AV	H	24.73	47.72	54.00	6.28
15630.000	37.61	PK	V	24.73	62.34	74.00	11.66
15630.000	22.36	AV	V	24.73	47.09	54.00	6.91

Antenna 0:
5725-5850MHz
802.11a:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5745 MHz							
11490.000	37.79	PK	H	21.49	59.28	74.00	14.72
11490.000	23.31	AV	H	21.49	44.80	54.00	9.20
11490.000	37.57	PK	V	21.49	59.06	74.00	14.94
11490.000	23.34	AV	V	21.49	44.83	54.00	9.17
17235.000	36.66	PK	H	28.71	65.37	68.20	2.83
17235.000	36.43	PK	V	28.71	65.14	68.20	3.06
Middle Channel: 5785 MHz							
11570.000	37.70	PK	H	21.71	59.41	74.00	14.59
11570.000	23.22	AV	H	21.71	44.93	54.00	9.07
11570.000	37.43	PK	V	21.71	59.14	74.00	14.86
11570.000	23.12	AV	V	21.71	44.83	54.00	9.17
17355.000	35.12	PK	H	29.35	64.47	68.20	3.73
17355.000	35.45	PK	V	29.35	64.80	68.20	3.40
High Channel: 5825 MHz							
11650.000	36.70	PK	H	22.04	58.74	74.00	15.26
11650.000	22.50	AV	H	22.04	44.54	54.00	9.46
11650.000	36.03	PK	V	22.04	58.07	74.00	15.93
11650.000	22.14	AV	V	22.04	44.18	54.00	9.82
17475.000	36.07	PK	H	29.89	65.96	68.20	2.24
17475.000	35.63	PK	V	29.89	65.52	68.20	2.68

802.11n ht20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5745 MHz							
11490.000	39.38	PK	H	21.49	60.87	74.00	13.13
11490.000	24.67	AV	H	21.49	46.16	54.00	7.84
11490.000	38.03	PK	V	21.49	59.52	74.00	14.48
11490.000	23.31	AV	V	21.49	44.80	54.00	9.20
17235.000	36.24	PK	H	28.71	64.95	68.20	3.25
17235.000	36.07	PK	V	28.71	64.78	68.20	3.42
Middle Channel: 5785 MHz							
11570.000	37.14	PK	H	21.71	58.85	74.00	15.15
11570.000	22.57	AV	H	21.71	44.28	54.00	9.72
11570.000	37.23	PK	V	21.71	58.94	74.00	15.06
11570.000	23.23	AV	V	21.71	44.94	54.00	9.06
17355.000	34.90	PK	H	29.35	64.25	68.20	3.95
17355.000	34.98	PK	V	29.35	64.33	68.20	3.87
High Channel: 5825 MHz							
11650.000	36.63	PK	H	22.04	58.67	74.00	15.33
11650.000	22.50	AV	H	22.04	44.54	54.00	9.46
11650.000	36.72	PK	V	22.04	58.76	74.00	15.24
11650.000	22.09	AV	V	22.04	44.13	54.00	9.87
17475.000	34.07	PK	H	29.89	63.96	68.20	4.24
17475.000	34.77	PK	V	29.89	64.66	68.20	3.54

802.11n ht40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5755 MHz							
11510.000	38.55	PK	H	21.48	60.03	74.00	13.97
11510.000	24.61	AV	H	21.48	46.09	54.00	7.91
11510.000	38.40	PK	V	21.48	59.88	74.00	14.12
11510.000	23.69	AV	V	21.48	45.17	54.00	8.83
17265.000	36.09	PK	H	28.79	64.88	68.20	3.32
17265.000	35.77	PK	V	28.79	64.56	68.20	3.64
High Channel: 5795 MHz							
11590.000	37.80	PK	H	21.78	59.58	74.00	14.42
11590.000	23.17	AV	H	21.78	44.95	54.00	9.05
11590.000	37.39	PK	V	21.78	59.17	74.00	14.83
11590.000	22.77	AV	V	21.78	44.55	54.00	9.45
17385.000	35.45	PK	H	29.59	65.04	68.20	3.16
17385.000	36.10	PK	V	29.59	65.69	68.20	2.51

802.11ac80 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5775 MHz							
11550.000	34.98	PK	H	21.63	56.61	74.00	17.39
11550.000	22.49	AV	H	21.63	44.12	54.00	9.88
11550.000	35.44	PK	V	21.63	57.07	74.00	16.93
11550.000	22.02	AV	V	21.63	43.65	54.00	10.35
17325.000	34.78	PK	H	29.11	63.89	68.20	4.31
17325.000	34.80	PK	V	29.11	63.91	68.20	4.29

Antenna 1:

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							
5150.000	56.26	PK	H	11.67	67.93	74.00	6.07
5150.000	30.12	AV	H	11.67	41.79	54.00	12.21
5150.000	53.36	PK	V	11.67	65.03	74.00	8.97
5150.000	30.81	AV	V	11.67	42.48	54.00	11.52
10360.000	38.38	PK	H	20.47	58.85	68.20	9.35
10360.000	37.56	PK	V	20.47	58.03	68.20	10.17
15540.000	36.77	PK	H	24.62	61.39	74.00	12.61
15540.000	23.52	AV	H	24.62	48.14	54.00	5.86
15540.000	36.99	PK	V	24.62	61.61	74.00	12.39
15540.000	23.46	AV	V	24.62	48.08	54.00	5.92
Middle Channel: 5200 MHz							
10400.000	36.83	PK	H	20.54	57.37	68.20	10.83
10400.000	37.75	PK	V	20.54	58.29	68.20	9.91
15600.000	36.54	PK	H	24.71	61.25	74.00	12.75
15600.000	23.33	AV	H	24.71	48.04	54.00	5.96
15600.000	37.00	PK	V	24.71	61.71	74.00	12.29
15600.000	22.93	AV	V	24.71	47.64	54.00	6.36
High Channel: 5240 MHz							
5350.000	52.72	PK	H	11.94	64.66	74.00	9.34
5350.000	30.59	AV	H	11.94	42.53	54.00	11.47
5350.000	51.89	PK	V	11.94	63.83	74.00	10.17
5350.000	30.86	AV	V	11.94	42.80	54.00	11.20
10480.000	36.19	PK	H	20.42	56.61	68.20	11.59
10480.000	36.93	PK	V	20.42	57.35	68.20	10.85
15720.000	37.18	PK	H	24.82	62.00	74.00	12.00
15720.000	22.86	AV	H	24.82	47.68	54.00	6.32
15720.000	36.91	PK	V	24.82	61.73	74.00	12.27
15720.000	23.06	AV	V	24.82	47.88	54.00	6.12

802.11n ht20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5180 MHz							
5150.000	56.67	PK	H	11.67	68.34	74.00	5.66
5150.000	30.17	AV	H	11.67	41.84	54.00	12.16
5150.000	54.88	PK	V	11.67	66.55	74.00	7.45
5150.000	30.39	AV	V	11.67	42.06	54.00	11.94
10360.000	38.21	PK	H	20.47	58.68	68.20	9.52
10360.000	37.41	PK	V	20.47	57.88	68.20	10.32
15540.000	37.51	PK	H	24.62	62.13	74.00	11.87
15540.000	23.81	AV	H	24.62	48.43	54.00	5.57
15540.000	37.37	PK	V	24.62	61.99	74.00	12.01
15540.000	23.27	AV	V	24.62	47.89	54.00	6.11
Middle Channel: 5200 MHz							
10400.000	36.83	PK	H	20.54	57.37	68.20	10.83
10400.000	37.75	PK	V	20.54	58.29	68.20	9.91
15600.000	36.54	PK	H	24.71	61.25	74.00	12.75
15600.000	23.33	AV	H	24.71	48.04	54.00	5.96
15600.000	37.00	PK	V	24.71	61.71	74.00	12.29
15600.000	22.93	AV	V	24.71	47.64	54.00	6.36
High Channel: 5240 MHz							
5350.000	51.11	PK	H	11.94	63.05	74.00	10.95
5350.000	30.05	AV	H	11.94	41.99	54.00	12.01
5350.000	51.27	PK	V	11.94	63.21	74.00	10.79
5350.000	30.29	AV	V	11.94	42.23	54.00	11.77
10480.000	37.07	PK	H	20.42	57.49	68.20	10.71
10480.000	35.31	PK	V	20.42	55.73	68.20	12.47
15720.000	37.09	PK	H	24.82	61.91	74.00	12.09
15720.000	22.47	AV	H	24.82	47.29	54.00	6.71
15720.000	36.12	PK	V	24.82	60.94	74.00	13.06
15720.000	22.76	AV	V	24.82	47.58	54.00	6.42

802.11n ht40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5190 MHz							
5150.000	56.95	PK	H	11.67	68.62	74.00	5.38
5150.000	31.49	AV	H	11.67	43.16	54.00	10.84
5150.000	53.87	PK	V	11.67	65.54	74.00	8.46
5150.000	32.29	AV	V	11.67	43.96	54.00	10.04
10380.000	37.42	PK	H	20.51	57.93	68.20	10.27
10380.000	37.63	PK	V	20.51	58.14	68.20	10.06
15570.000	36.83	PK	H	24.67	61.50	74.00	12.50
15570.000	23.12	AV	H	24.67	47.79	54.00	6.21
15570.000	36.32	PK	V	24.67	60.99	74.00	13.01
15570.000	22.84	AV	V	24.67	47.51	54.00	6.49
High Channel: 5230 MHz							
5350.000	52.15	PK	H	11.94	64.09	74.00	9.91
5350.000	30.99	AV	H	11.94	42.93	54.00	11.07
5350.000	51.44	PK	V	11.94	63.38	74.00	10.62
5350.000	30.39	AV	V	11.94	42.33	54.00	11.67
10460.000	36.80	PK	H	20.45	57.25	68.20	10.95
10460.000	36.36	PK	V	20.45	56.81	68.20	11.39
15690.000	36.53	PK	H	24.77	61.30	74.00	12.70
15690.000	22.85	AV	H	24.77	47.62	54.00	6.38
15690.000	37.11	PK	V	24.77	61.88	74.00	12.12
15690.000	22.91	AV	V	24.77	47.68	54.00	6.32

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							
5150.000	56.30	PK	H	11.67	67.97	74.00	6.03
5150.000	31.66	AV	H	11.67	43.33	54.00	10.67
5150.000	54.33	PK	V	11.67	66.00	74.00	8.00
5150.000	30.78	AV	V	11.67	42.45	54.00	11.55
5350.000	55.17	PK	H	11.94	67.11	74.00	6.89
5350.000	30.57	AV	H	11.94	42.51	54.00	11.49
5350.000	52.84	PK	V	11.94	64.78	74.00	9.22
5350.000	30.29	AV	V	11.94	42.23	54.00	11.77
10420.000	34.31	PK	H	20.51	54.82	68.20	13.38
10420.000	35.59	PK	V	20.51	56.10	68.20	12.10
15630.000	36.82	PK	H	24.73	61.55	74.00	12.45
15630.000	22.18	AV	H	24.73	46.91	54.00	7.09
15630.000	36.51	PK	V	24.73	61.24	74.00	12.76
15630.000	22.15	AV	V	24.73	46.88	54.00	7.12

Antenna 1:
5725-5850MHz
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: 5745 MHz							
11490.000	35.71	PK	H	21.49	57.20	74.00	16.80
11490.000	22.45	AV	H	21.49	43.94	54.00	10.06
11490.000	35.28	PK	V	21.49	56.77	74.00	17.23
11490.000	22.06	AV	V	21.49	43.55	54.00	10.45
17235.000	34.30	PK	H	28.71	63.01	68.20	5.19
17235.000	34.67	PK	V	28.71	63.38	68.20	4.82
Middle Channel: 5785 MHz							
11570.000	35.33	PK	H	21.71	57.04	74.00	16.96
11570.000	22.67	AV	H	21.71	44.38	54.00	9.62
11570.000	36.41	PK	V	21.71	58.12	74.00	15.88
11570.000	22.74	AV	V	21.71	44.45	54.00	9.55
17355.000	34.92	PK	H	29.35	64.27	68.20	3.93
17355.000	34.83	PK	V	29.35	64.18	68.20	4.02
High Channel: 5825 MHz							
11650.000	34.57	PK	H	22.04	56.61	74.00	17.39
11650.000	21.30	AV	H	22.04	43.34	54.00	10.66
11650.000	35.00	PK	V	22.04	57.04	74.00	16.96
11650.000	22.12	AV	V	22.04	44.16	54.00	9.84
17475.000	34.68	PK	H	29.89	64.57	68.20	3.63
17475.000	34.65	PK	V	29.89	64.54	68.20	3.66

802.11n ht20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5745 MHz							
11490.000	38.18	PK	H	21.49	59.67	74.00	14.33
11490.000	24.76	AV	H	21.49	46.25	54.00	7.75
11490.000	39.05	PK	V	21.49	60.54	74.00	13.46
11490.000	25.01	AV	V	21.49	46.50	54.00	7.50
17235.000	36.44	PK	H	28.71	65.15	68.20	3.05
17235.000	36.16	PK	V	28.71	64.87	68.20	3.33
Middle Channel: 5785 MHz							
11570.000	36.89	PK	H	21.71	58.60	74.00	15.40
11570.000	24.11	AV	H	21.71	45.82	54.00	8.18
11570.000	37.63	PK	V	21.71	59.34	74.00	14.66
11570.000	24.72	AV	V	21.71	46.43	54.00	7.57
17355.000	34.67	PK	H	29.35	64.02	68.20	4.18
17355.000	34.88	PK	V	29.35	64.23	68.20	3.97
High Channel: 5825 MHz							
11650.000	36.22	PK	H	22.04	58.26	74.00	15.74
11650.000	24.61	AV	H	22.04	46.65	54.00	7.35
11650.000	37.68	PK	V	22.04	59.72	74.00	14.28
11650.000	25.49	AV	V	22.04	47.53	54.00	6.47
17475.000	34.27	PK	H	29.89	64.16	68.20	4.04
17475.000	34.45	PK	V	29.89	64.34	68.20	3.86

802.11n ht40 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5755 MHz							
11510.000	38.96	PK	H	21.48	60.44	74.00	13.56
11510.000	26.13	AV	H	21.48	47.61	54.00	6.39
11510.000	38.25	PK	V	21.48	59.73	74.00	14.27
11510.000	25.21	AV	V	21.48	46.69	54.00	7.31
17265.000	35.66	PK	H	28.79	64.45	68.20	3.75
17265.000	35.40	PK	V	28.79	64.19	68.20	4.01
High Channel: 5795 MHz							
11590.000	37.64	PK	H	21.78	59.42	74.00	14.58
11590.000	23.99	AV	H	21.78	45.77	54.00	8.23
11590.000	37.94	PK	V	21.78	59.72	74.00	14.28
11590.000	24.65	AV	V	21.78	46.43	54.00	7.57
17385.000	34.48	PK	H	29.59	64.07	68.20	4.13
17385.000	34.78	PK	V	29.59	64.37	68.20	3.83

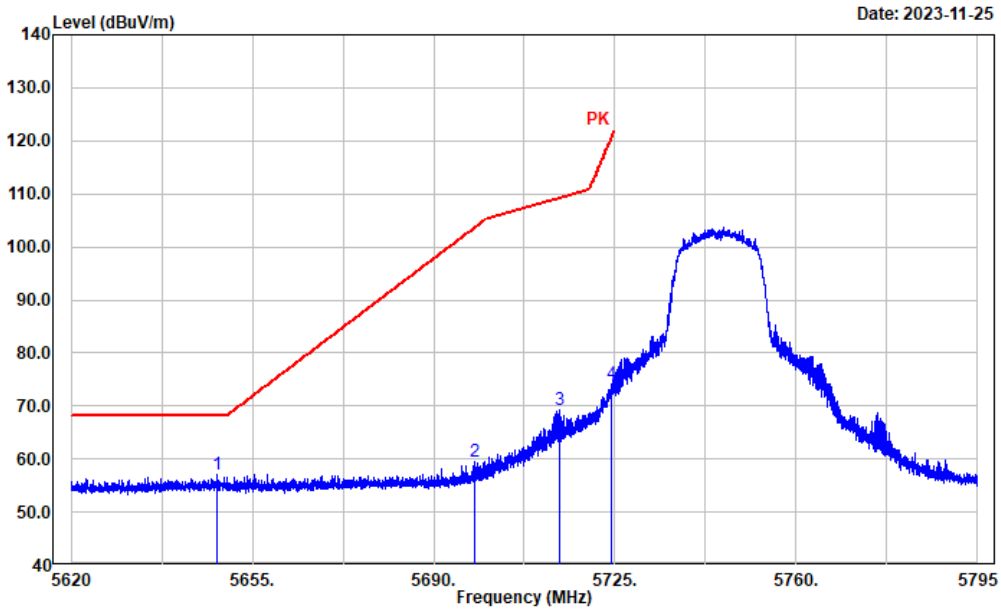
802.11ac80 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5775 MHz							
11550.000	36.07	PK	H	21.63	57.70	74.00	16.30
11550.000	22.42	AV	H	21.63	44.05	54.00	9.95
11550.000	35.40	PK	V	21.63	57.03	74.00	16.97
11550.000	22.28	AV	V	21.63	43.91	54.00	10.09
17325.000	34.29	PK	H	29.11	63.40	68.20	4.80
17325.000	35.62	PK	V	29.11	64.73	68.20	3.47

Worst Test plots for Band Edge Measurements in 5745-5825 MHz Band (Radiated)
Antenna 0:

802.11a			
Test Channel:	**5620-5795MHz**	**Ant. Polar. :**	**Horizontal**

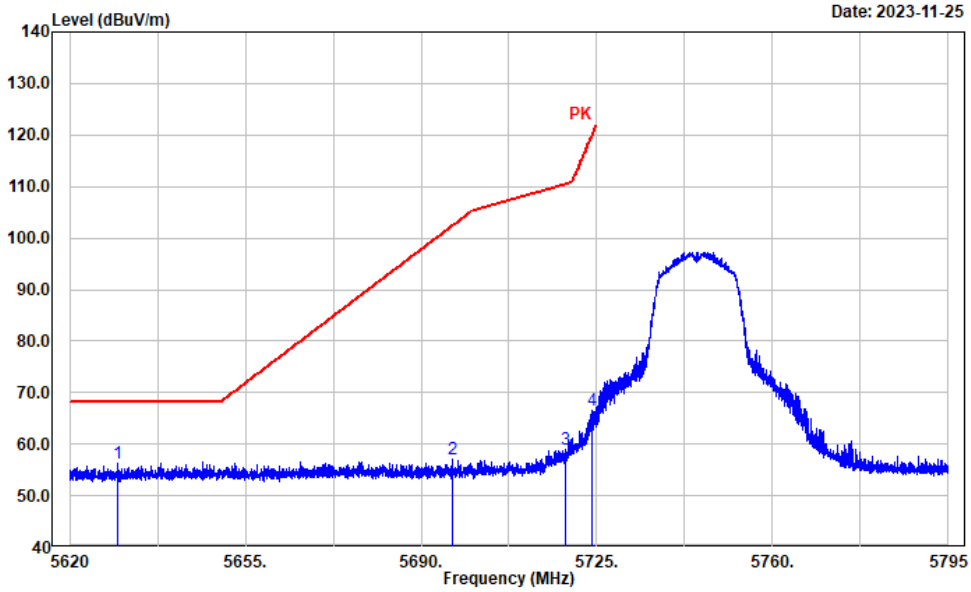
Project No.: CR231061506-RF
Tester: Tao Zhu
Polarization: Horizontal
Note: 802.11a Mode Low Channel



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5648.216	44.86	12.32	57.18	68.20	11.02	Peak
2	5698.031	46.87	12.54	59.41	103.75	44.34	Peak
3	5714.379	56.60	12.56	69.16	109.23	40.07	Peak
4	5724.321	61.64	12.57	74.21	120.65	46.44	Peak

802.11 a			
Test Channel:	**5620-5795MHz**	**Ant. Polar. :**	**Vertical**

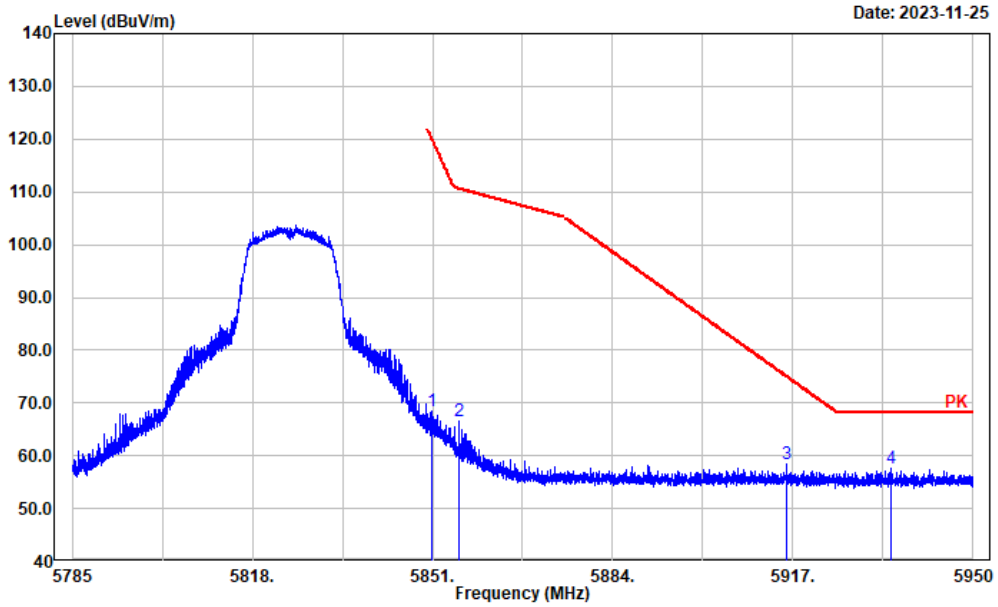
Project No.: CR231061506-RF
Tester: Tao Zhu
Polarization: vertical
Note: 802.11a Mode Low Channel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5629.592	44.13	12.22	56.35	68.20	11.85	Peak
2	5696.140	44.43	12.53	56.96	102.36	45.40	Peak
3	5718.790	46.45	12.57	59.02	110.46	51.44	Peak
4	5724.006	54.06	12.57	66.63	119.93	53.30	Peak

802.11a			
Test Channel:	**5785-5950MHz**	**Ant. Polar. :**	**Horizontal**

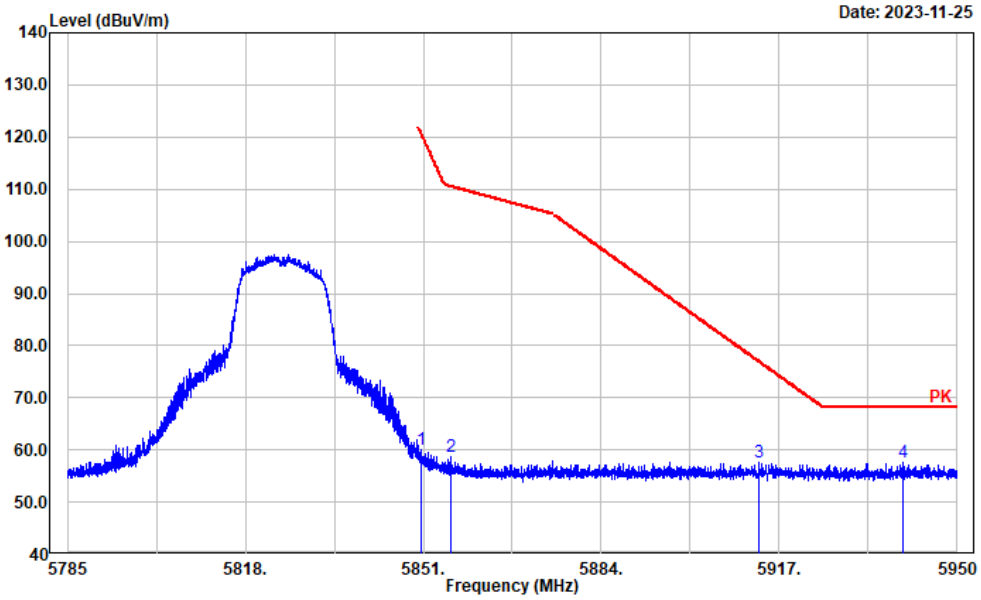
Project No.: CR231061506-RF
Tester: Tao Zhu
Polarization: Horizontal
Note: 802.11a Mode High Channel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5850.749	55.76	12.77	68.53	120.49	51.96	Peak
2	5855.931	53.74	12.80	66.54	110.54	44.00	Peak
3	5915.739	45.43	13.03	58.46	75.03	16.57	Peak
4	5934.982	44.64	13.04	57.68	68.20	10.52	Peak

802.11 a			
Test Channel:	**5785-5950MHz**	**Ant. Polar. :**	**Vertical**

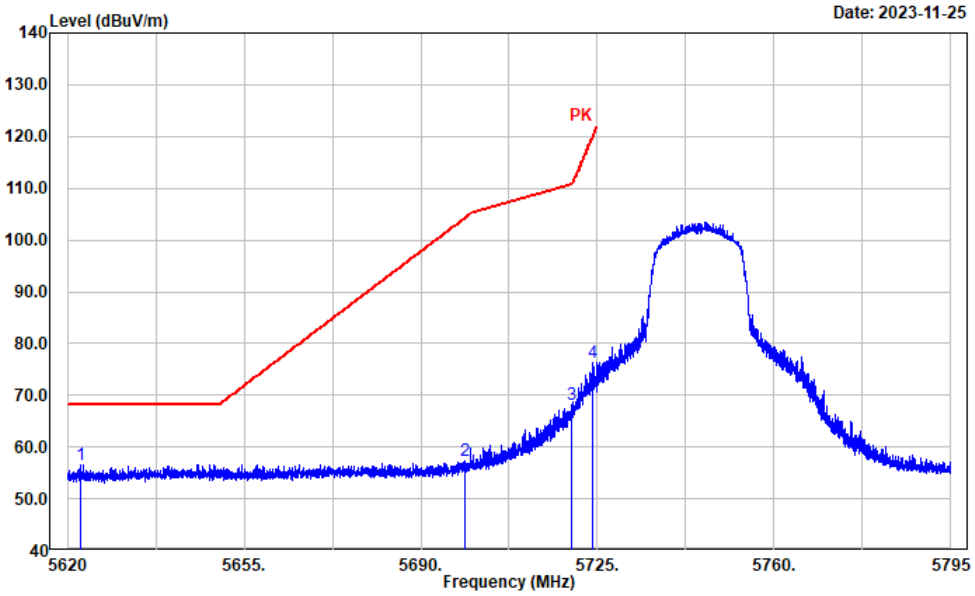
Project No.: CR231061506-RF
Tester: Tao Zhu
Polarization: Vertical
Note: 802.11a Mode High Channel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5850.617	47.22	12.77	59.99	120.79	60.80	Peak
2	5856.162	45.80	12.80	58.60	110.47	51.87	Peak
3	5913.132	44.50	13.03	57.53	76.95	19.42	Peak
4	5939.966	44.60	13.03	57.63	68.20	10.57	Peak

802.11n ht20			
Test Channel:	**5620-5795MHz**	**Ant. Polar. :**	**Horizontal**

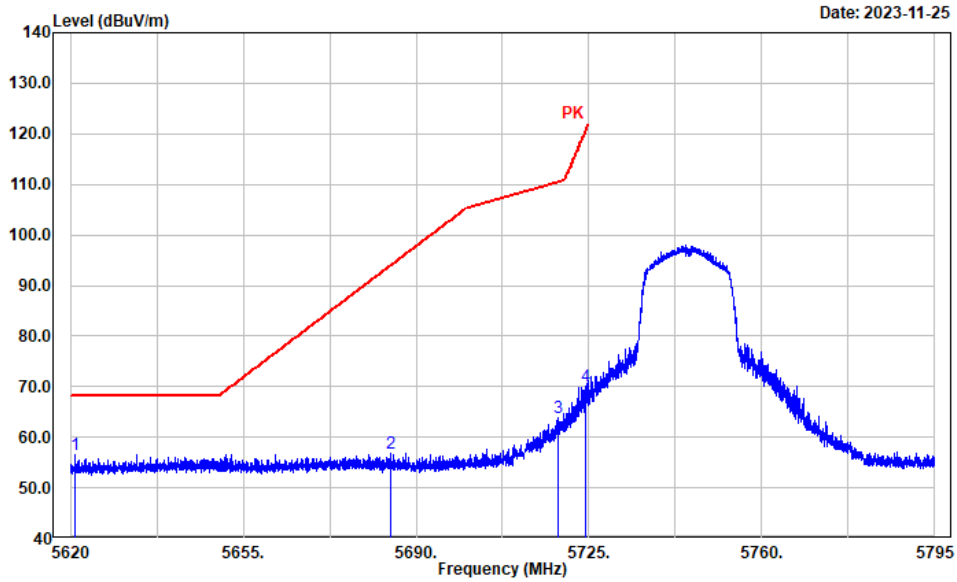
Project No.: CR231061506-RF
Tester: Tao Zhu
Polarization: Horizontal
Note: 802.11n ht20 Mode Low Channel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5622.730	44.48	12.18	56.66	68.20	11.54	Peak
2	5698.766	44.72	12.55	57.27	104.29	47.02	Peak
3	5719.945	55.54	12.57	68.11	110.78	42.67	Peak
4	5724.041	63.81	12.57	76.38	120.01	43.63	Peak

802.11n ht20			
Test Channel:	**5620-5795MHz**	**Ant. Polar. :**	**Vertical**

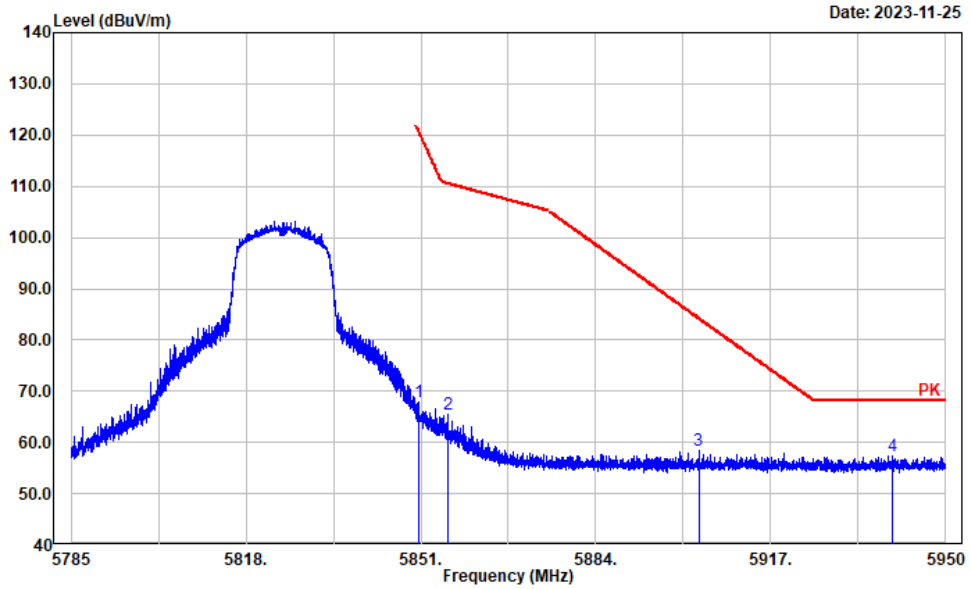
Project No.: CR231061506-RF
Tester: Tao Zhu
Polarization: Vertical
Note: 802.11n ht20 Mode Low Channel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5621.050	44.38	12.16	56.54	68.20	11.66	Peak
2	5684.728	44.35	12.49	56.84	93.93	37.09	Peak
3	5718.790	51.33	12.57	63.90	110.46	46.56	Peak
4	5724.426	57.49	12.57	70.06	120.89	50.83	Peak

802.11n ht20			
Test Channel:	**5785-5950MHz**	**Ant. Polar. :**	**Horizontal**

Project No.: CR231061506-RF
Tester: Tao Zhu
Polarization: Horizontal
Note: 802.11n ht20 Mode High Channel



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5850.650	55.21	12.77	67.98	120.72	52.74	Peak
2	5856.063	52.54	12.80	65.34	110.50	45.16	Peak
3	5903.395	45.33	13.02	58.35	84.15	25.80	Peak
4	5939.867	44.32	13.03	57.35	68.20	10.85	Peak

802.11n ht20			
Test Channel:	**5785-5950MHz**	**Ant. Polar. :**	**Vertical**

```
Project No.: CR231061506-RF
     Tester: Tao Zhu
Polarization: Vertical
       Note: 802.11n ht20 Mode High Channel
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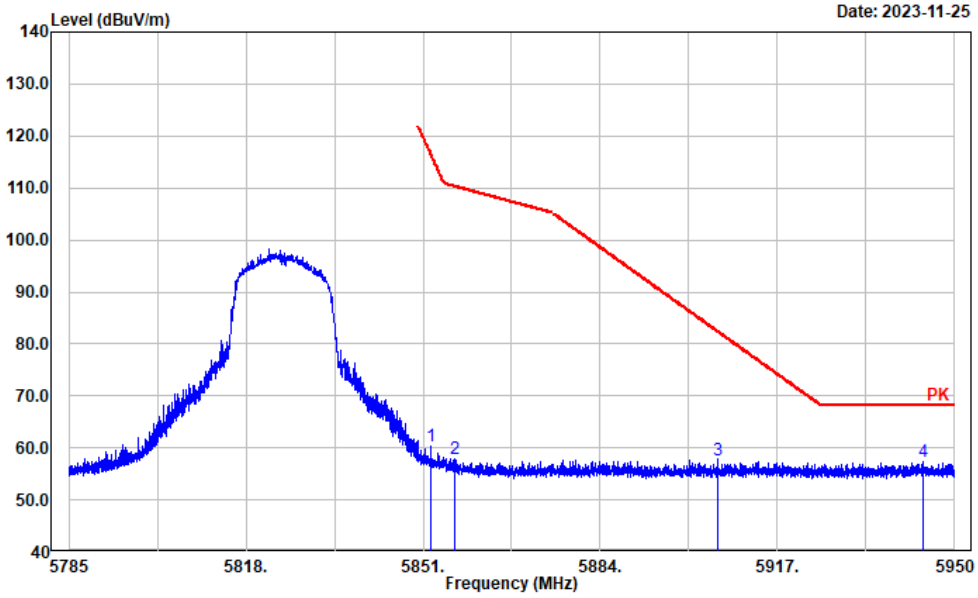
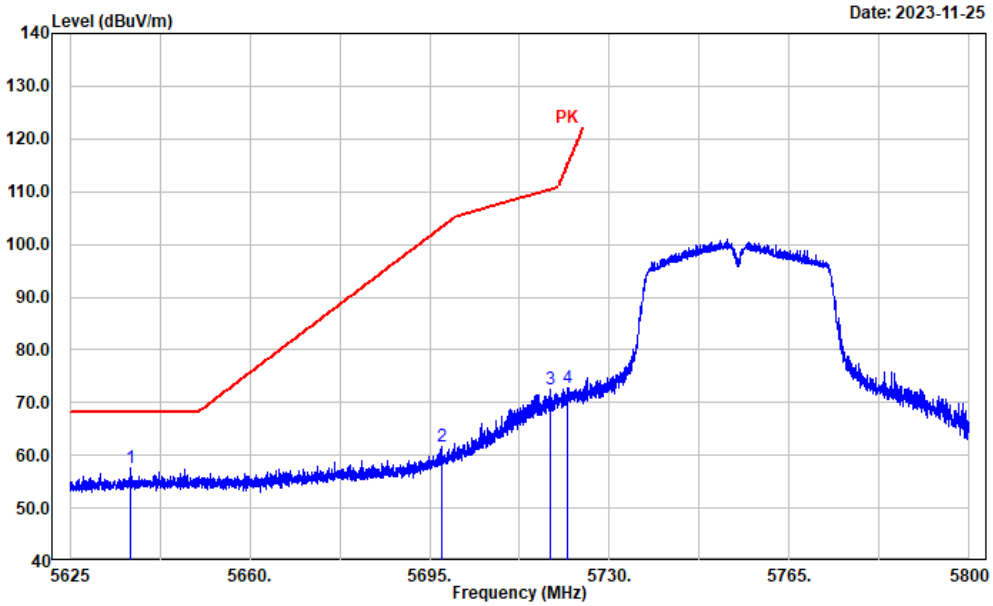


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5852.367	47.53	12.78	60.31	116.80	56.49	Peak
2	5856.987	45.09	12.81	57.90	110.24	52.34	Peak
3	5905.903	44.73	13.02	57.75	82.29	24.54	Peak
4	5944.026	44.24	13.03	57.27	68.20	10.93	Peak

802.11n ht40			
Test Channel:	**5625-5800MHz**	**Ant. Polar. :**	**Horizontal**

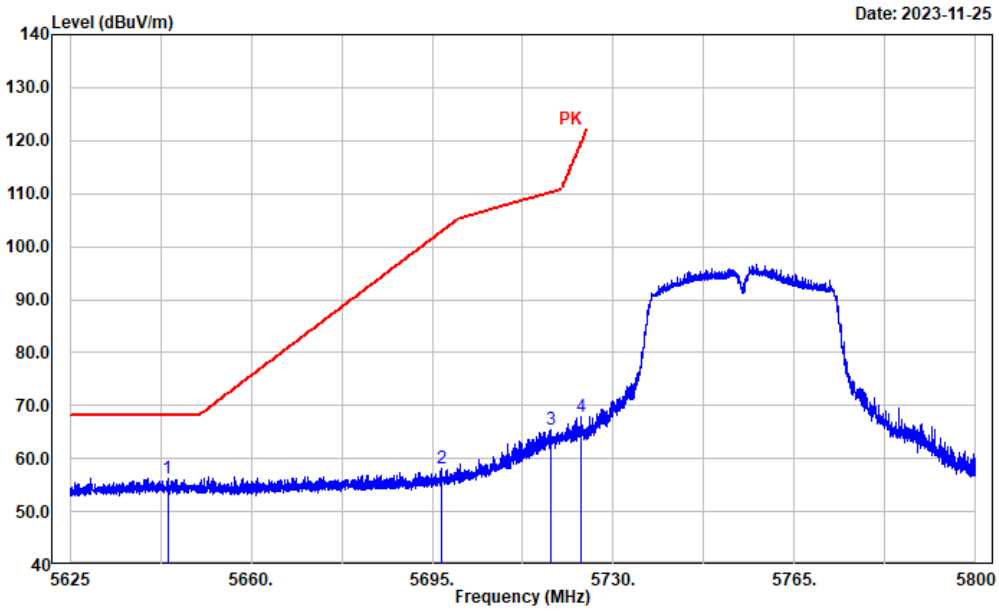
Project No.: CR231061506-RF
Tester: Tao Zhu
Polarization: Horizontal
Note: 802.11n ht40 Mode Low Channel



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5636.728	45.45	12.25	57.70	68.20	10.50	Peak
2	5697.464	49.03	12.54	61.57	103.33	41.76	Peak
3	5718.574	60.06	12.57	72.63	110.40	37.77	Peak
4	5721.759	60.19	12.57	72.76	114.81	42.05	Peak

802.11n ht40			
Test Channel:	**5625-5800MHz**	**Ant. Polar. :**	**Vertical**

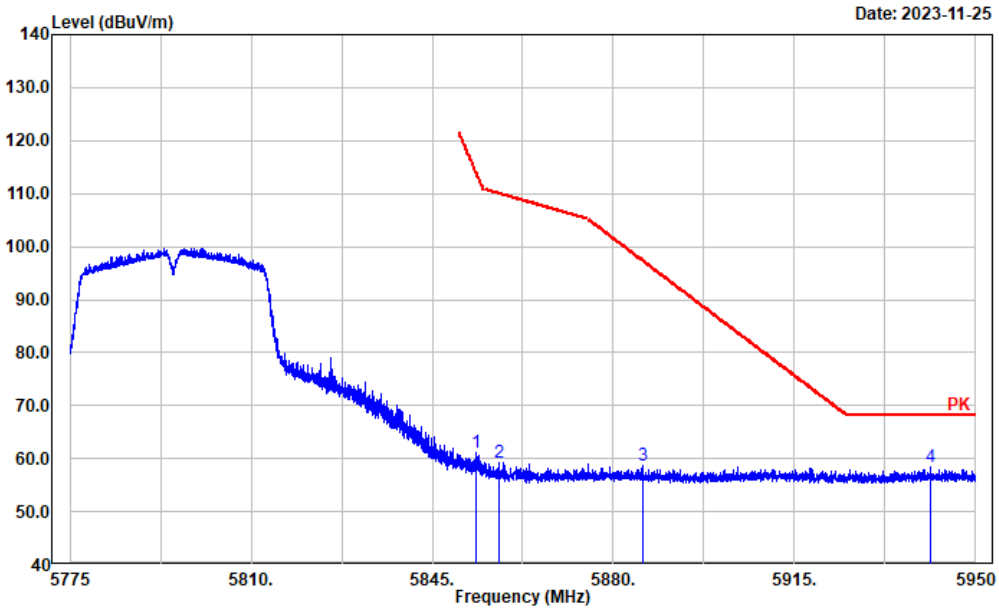
Project No.: CR231061506-RF
Tester: Tao Zhu
Polarization: Vertical
Note: 802.11n ht40 Mode Low Channel



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5643.869	44.10	12.29	56.39	68.20	11.81	Peak
2	5696.869	45.50	12.53	58.03	102.89	44.86	Peak
3	5717.838	52.88	12.57	65.45	110.20	44.75	Peak
4	5723.825	55.42	12.57	67.99	119.52	51.53	Peak

802.11n ht40			
Test Channel:	**5775-5950MHz**	**Ant. Polar. :**	**Horizontal**

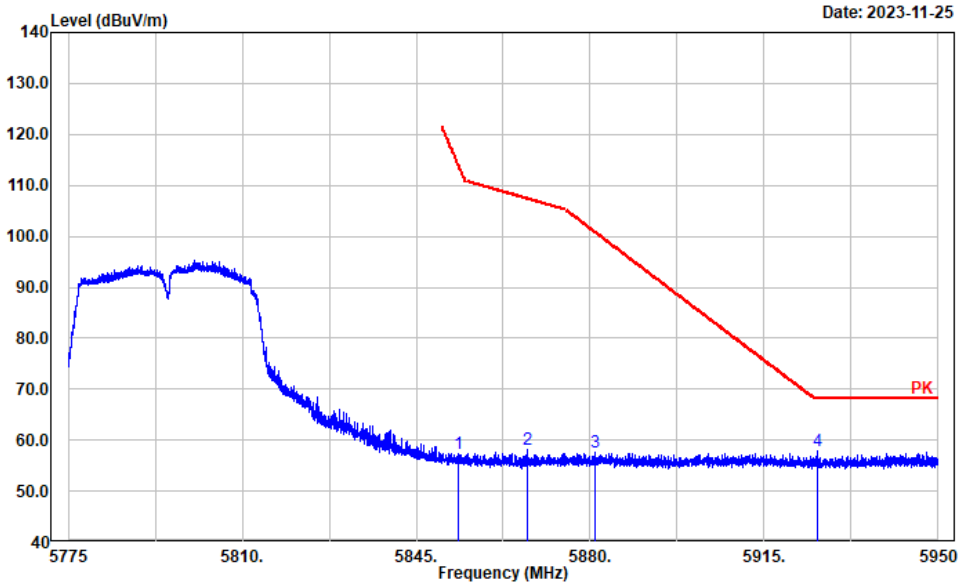
Project No.: CR231061506-RF
Tester: Tao Zhu
Polarization: Horizontal
Note: 802.11n ht40 Mode High Channel



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5853.556	48.47	12.79	61.26	114.09	52.83	Peak
2	5857.896	46.50	12.81	59.31	109.99	50.68	Peak
3	5885.692	45.76	12.95	58.71	97.26	38.55	Peak
4	5941.178	45.34	13.04	58.38	68.20	9.82	Peak

802.11n ht40			
Test Channel:	**5775-5950MHz**	**Ant. Polar. :**	**Vertical**

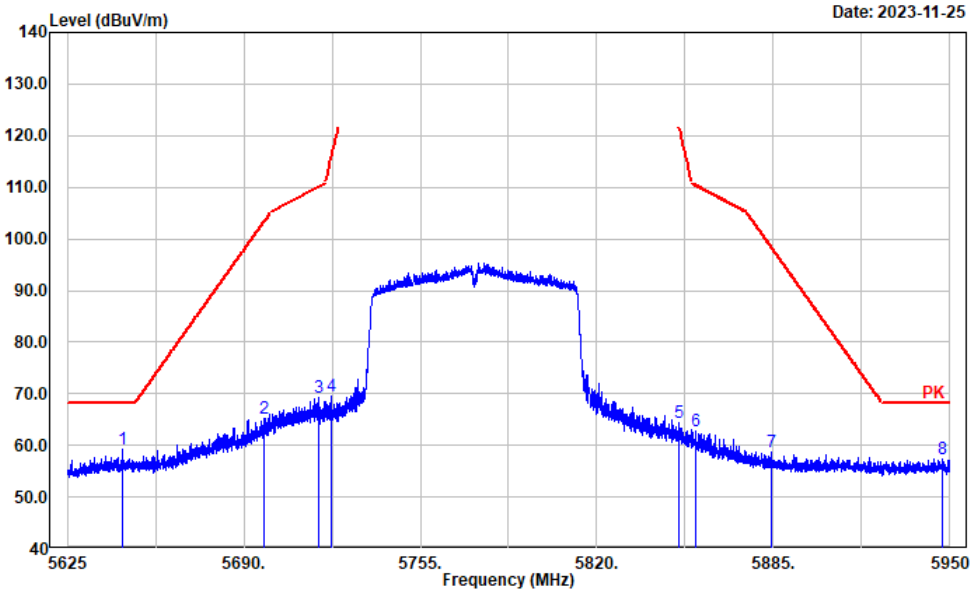
Project No.: CR231061506-RF
Tester: Tao Zhu
Polarization: Vertical
Note: 802.11n ht40 Mode High Channel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5853.556	44.61	12.79	57.40	114.09	56.69	Peak
2	5867.488	45.27	12.86	58.13	107.30	49.17	Peak
3	5881.071	44.79	12.92	57.71	100.69	42.98	Peak
4	5925.705	44.82	13.02	57.84	68.20	10.36	Peak

802.11ac vht80			
Test Channel:	**5625-5950MHz**	**Ant. Polar. :**	**Horizontal**

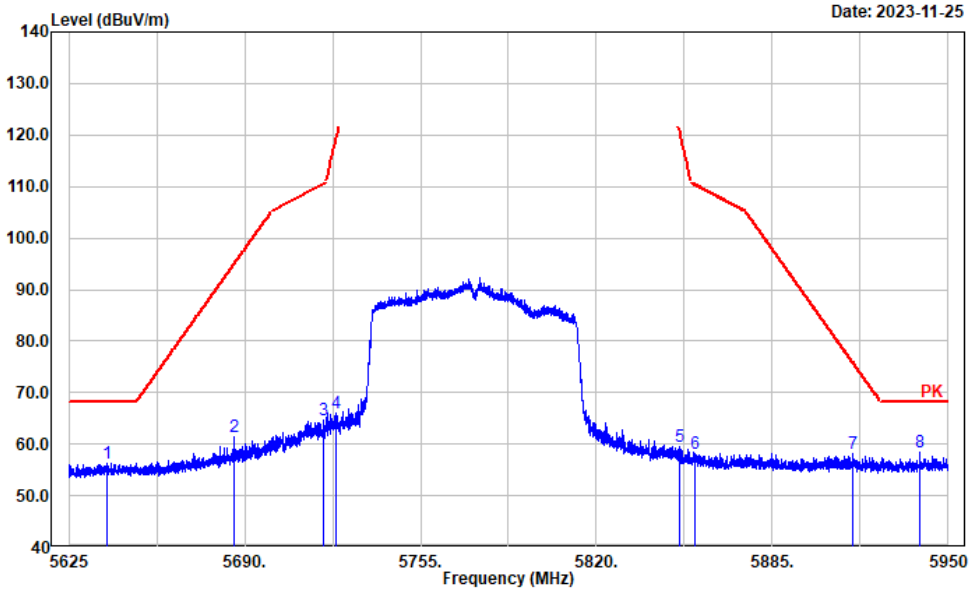
```
Project No.: CR231061506-RF
     Tester: Tao Zhu
Polarization: Horizontal
       Note: 802.11ac80 Mode Middle Channel
```



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5645.349	47.04	12.29	59.33	68.20	8.87	Peak
2	5697.229	52.68	12.54	65.22	103.16	37.94	Peak
3	5717.773	56.63	12.57	69.20	110.18	40.98	Peak
4	5722.064	57.05	12.57	69.62	115.51	45.89	Peak
5	5850.270	51.68	12.77	64.45	121.58	57.13	Peak
6	5856.446	50.08	12.81	62.89	110.39	47.50	Peak
7	5884.337	45.78	12.94	58.72	98.27	39.55	Peak
8	5947.140	44.30	13.04	57.34	68.20	10.86	Peak

802.11ac vht80			
Test Channel:	**5625-5950MHz**	**Ant. Polar. :**	**Vertical**

```
Project No.: CR231061506-RF
     Tester: Tao Zhu
Polarization: Vertical
       Note: 802.11ac80 Mode Middle Channel
```

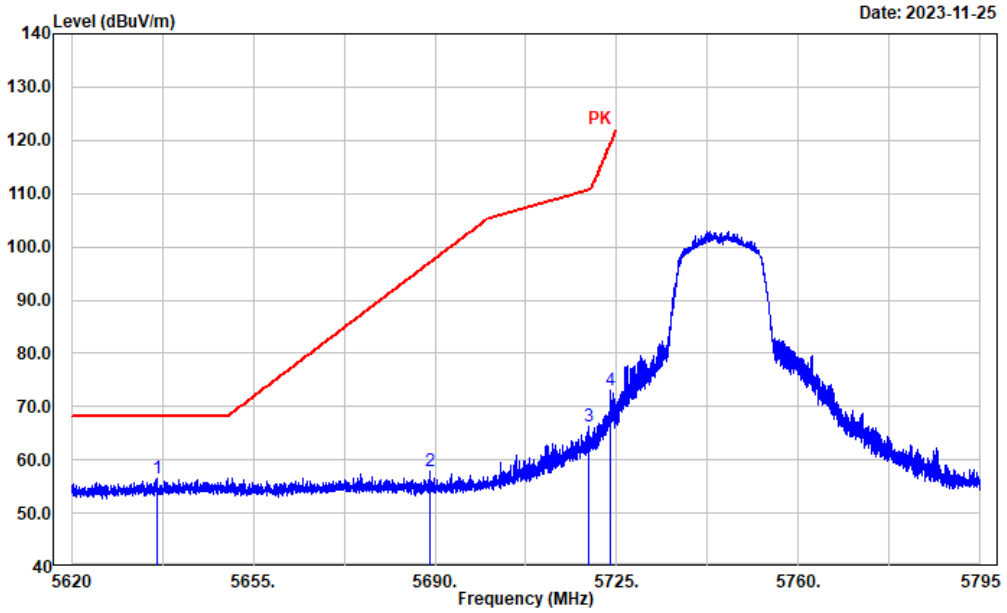


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5639.108	44.11	12.26	56.37	68.20	11.83	Peak
2	5685.917	48.84	12.49	61.33	94.81	33.48	Peak
3	5719.204	52.12	12.57	64.69	110.58	45.89	Peak
4	5723.560	53.43	12.57	66.00	118.92	52.92	Peak
5	5850.855	46.68	12.77	59.45	120.25	60.80	Peak
6	5856.576	45.37	12.81	58.18	110.36	52.18	Peak
7	5914.698	45.10	13.02	58.12	75.80	17.68	Peak
8	5939.663	45.45	13.03	58.48	68.20	9.72	Peak

Antenna 1:

802.11a			
Test Channel:	**5620-5795MHz**	**Ant. Polar. :**	**Horizontal**

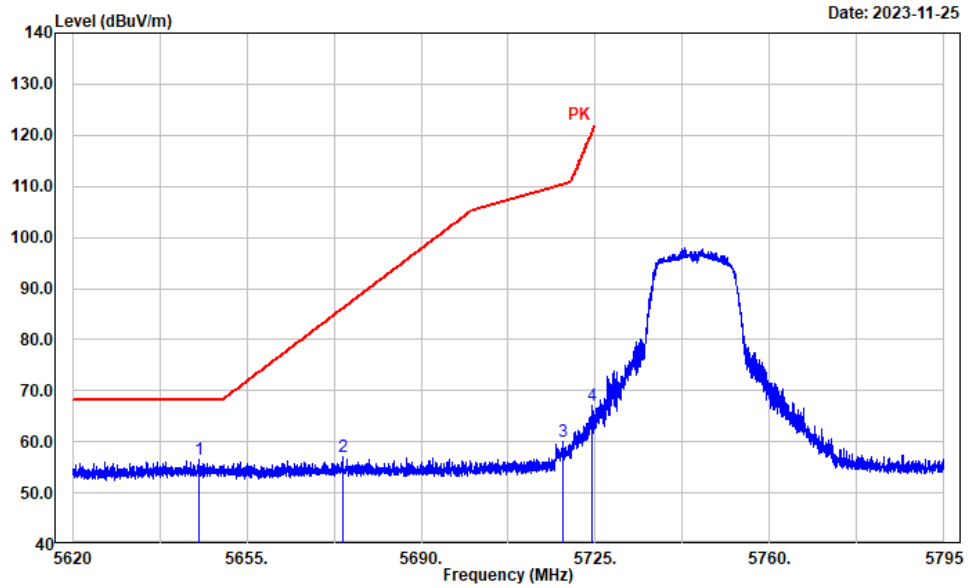
Project No.: CR231061506-RF
Tester: Tao Zhu
Polarization: Horizontal
Note: 802.11a Mode Low Channel



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5636.523	44.17	12.25	56.42	68.20	11.78	Peak
2	5689.139	45.39	12.50	57.89	97.19	39.30	Peak
3	5719.700	53.77	12.57	66.34	110.72	44.38	Peak
4	5723.726	60.50	12.57	73.07	119.30	46.23	Peak

802.11 a			
Test Channel:	**5620-5795MHz**	**Ant. Polar. :**	**Vertical**

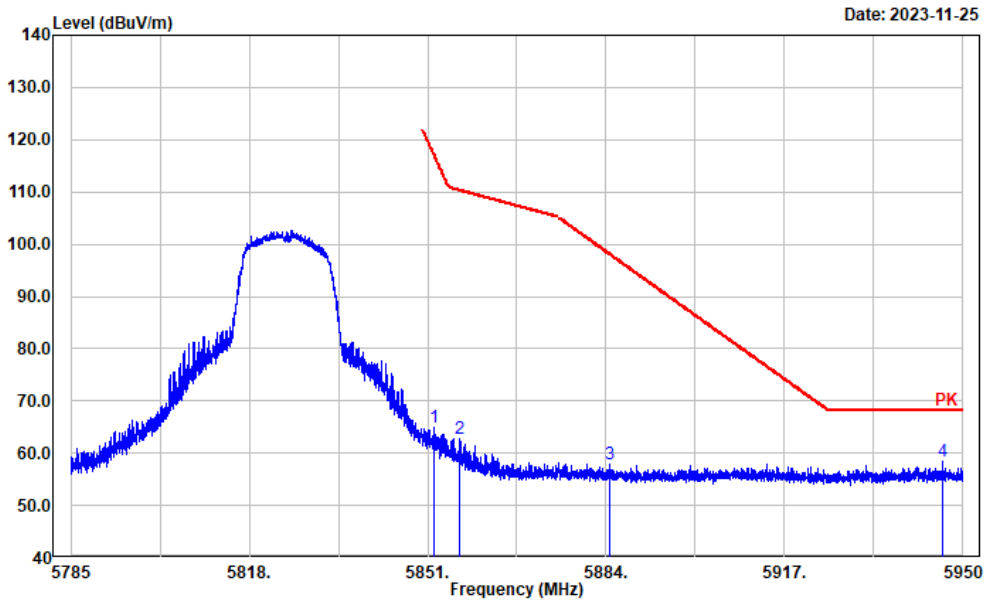
Project No.: CR231061506-RF
Tester: Tao Zhu
Polarization: Vertical
Note: 802.11a Mode Low Channel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5645.275	44.14	12.29	56.43	68.20	11.77	Peak
2	5674.366	44.67	12.44	57.11	86.27	29.16	Peak
3	5718.545	47.40	12.57	59.97	110.39	50.42	Peak
4	5724.356	54.61	12.57	67.18	120.73	53.55	Peak

802.11a			
Test Channel:	**5785-5950MHz**	**Ant. Polar. :**	**Horizontal**

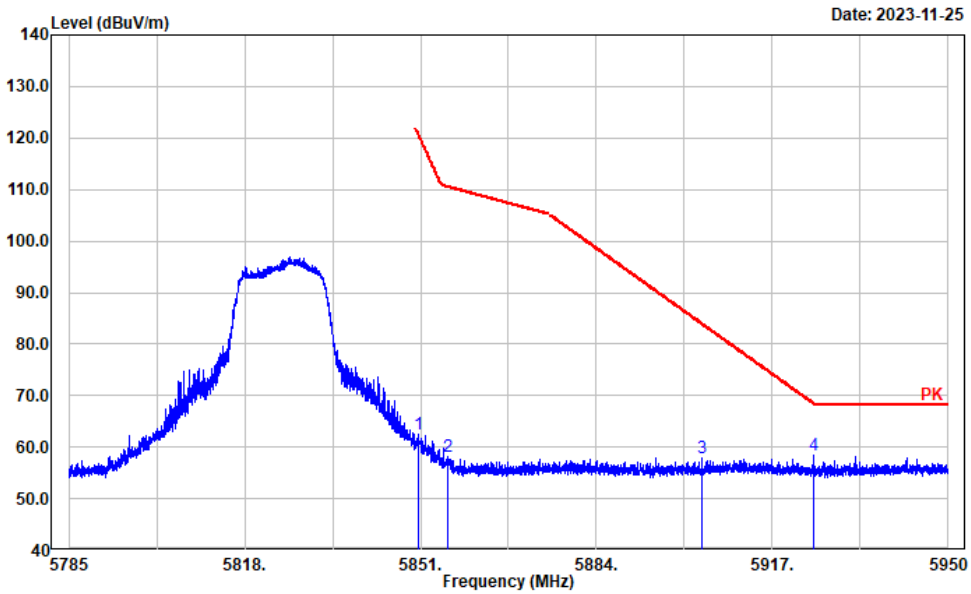
Project No.: CR231061506-RF
Tester: Tao Zhu
Polarization: Horizontal
Note: 802.11a Mode High Channel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5852.234	52.09	12.78	64.87	117.10	52.23	Peak
2	5856.822	50.06	12.81	62.87	110.29	47.42	Peak
3	5884.581	44.94	12.95	57.89	98.09	40.20	Peak
4	5946.303	45.37	13.03	58.40	68.20	9.80	Peak

802.11 a			
Test Channel:	**5785-5950MHz**	**Ant. Polar. :**	**Vertical**

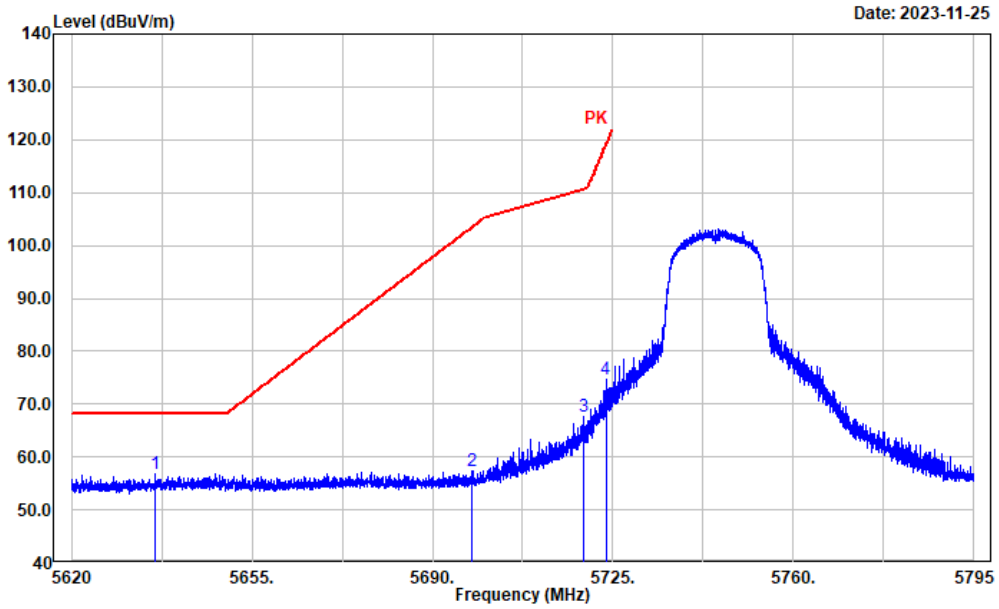
Project No.: CR231061506-RF
Tester: Tao Zhu
Polarization: Vertical
Note: 802.11a Mode High Channel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5850.518	49.59	12.77	62.36	121.02	58.66	Peak
2	5856.030	45.45	12.80	58.25	110.51	52.26	Peak
3	5903.758	44.96	13.02	57.98	83.88	25.90	Peak
4	5924.651	45.29	13.03	58.32	68.46	10.14	Peak

802.11n ht20			
Test Channel:	**5620-5795MHz**	**Ant. Polar. :**	**Horizontal**

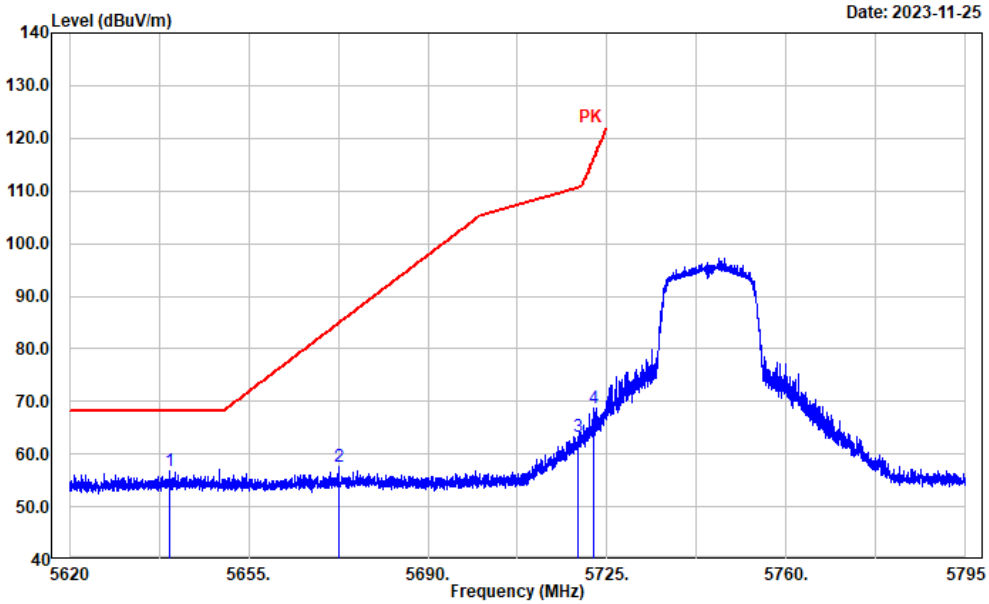
```
Project No.: CR231061506-RF
     Tester: Tao Zhu
Polarization: Horizontal
       Note: 802.11n ht20 Mode Low Channel
```



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5636.208	44.56	12.25	56.81	68.20	11.39	Peak
2	5697.681	44.79	12.54	57.33	103.49	46.16	Peak
3	5719.210	55.08	12.57	67.65	110.58	42.93	Peak
4	5723.621	62.15	12.57	74.72	119.06	44.34	Peak

802.11n ht20			
Test Channel:	**5620-5795MHz**	**Ant. Polar. :**	**Vertical**

Project No.: CR231061506-RF
Tester: Tao Zhu
Polarization: Vertical
Note: 802.11n ht20 Mode Low Channel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5639.639	44.41	12.26	56.67	68.20	11.53	Peak
2	5672.616	45.15	12.43	57.58	84.98	27.40	Peak
3	5719.315	50.82	12.57	63.39	110.61	47.22	Peak
4	5722.431	56.10	12.57	68.67	116.34	47.67	Peak