



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



TEST REPORT

Applicant: Fibocom Wireless Inc.

Address: 1101, Tower A, Building 6, Shenzhen International Innovation Valley, Dashi
1st Rd, Nanshan, ShenZhen, China

FCC ID: ZMOSQ808NA

Product Name: LTE Module

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: CR231167139-00E

Date Of Issue: 2024/3/16

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.

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.

This report cannot be reproduced except in full, without prior written approval of the Company.

This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

This report may contain data that are not covered by the accreditation scope and shall be marked with an asterisk “★”.

CONTENTS

DOCUMENT REVISION HISTORY	5
1. GENERAL INFORMATION	6
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	6
1.1.2 Operation Frequency Detail:	7
1.1.3 Antenna Information Detail▲:	8
1.1.4 Host Configuration Detail:	8
1.1.5 Accessory Information:	8
1.2 DESCRIPTION OF TEST CONFIGURATION.....	9
1.2.1 EUT Operation Condition:	9
1.2.2 Support Equipment List and Details	11
1.2.3 Support Cable List and Details	11
1.2.4 Block Diagram of Test Setup	11
1.3 MEASUREMENT UNCERTAINTY	13
2. SUMMARY OF TEST RESULTS	14
3. REQUIREMENTS AND TEST PROCEDURES	15
3.1 AC LINE CONDUCTED EMISSIONS.....	15
3.1.1 Applicable Standard.....	15
3.1.2 EUT Setup.....	16
3.1.3 EMI Test Receiver Setup	16
3.1.4 Test Procedure	17
3.1.5 Corrected Amplitude & Margin Calculation.....	17
3.2 RADIATION SPURIOUS EMISSIONS.....	18
3.2.1 Applicable Standard.....	18
3.2.2 EUT Setup.....	19
3.2.3 EMI Test Receiver & Spectrum Analyzer Setup	20
3.2.4 Test Procedure	20
3.2.5 Corrected Amplitude & Margin Calculation.....	21
3.3 EMISSION BANDWIDTH.....	22
3.3.1 Applicable Standard.....	22
3.3.2 EUT Setup.....	22
3.3.3 Test Procedure	22
3.4 MAXIMUM CONDUCTED OUTPUT POWER.....	24
3.4.1 Applicable Standard.....	24
3.4.2 EUT Setup.....	24
3.4.3 Test Procedure	24
3.5 MAXIMUM POWER SPECTRAL DENSITY	25
3.5.1 Applicable Standard.....	25
3.5.2 EUT Setup.....	25
3.5.3 Test Procedure	26
3.6 DUTY CYCLE	27
3.6.1 EUT Setup.....	27
3.6.2 Test Procedure	27

3.7 ANTENNA REQUIREMENT.....	27
3.7.1 Applicable Standard.....	27
3.7.2 Judgment.....	27
4. Test DATA AND RESULTS.....	28
4.1 AC LINE CONDUCTED EMISSIONS.....	28
4.2 RADIATION SPURIOUS EMISSIONS	31
4.3 SPOT CHECK FOR MAXIMUM CONDUCTED OUTPUT POWER:	108
4.4 DUTY CYCLE:.....	112
5. EUT PHOTOGRAPHS	115
6. TEST SETUP PHOTOGRAPHS	116

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR231167139-00E	Class II Permissive Change Report	2024/3/16

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

1.1.1 General:

EUT Name:	LTE Module
EUT Model:	SQ808-NA
Operation Frequency:	5180-5240 MHz (802.11a/n ht20/ac vht20) 5190-5230 MHz(802.11n ht40/ac vht40) 5210MHz(802.11ac vht80) 5260-5320 MHz (802.11a/n ht20/ac vht20) 5270-5310 MHz(802.11n ht40/ac vht40) 5290 MHz(802.11ac vht80) 5500-5720 MHz (802.11a/n ht20/ac vht20) 5510-5670 MHz(802.11n ht40/ac vht40) 5530-5690 MHz(802.11ac vht80) 5745-5825 MHz (802.11a/n ht20/ac vht20) 5755-5795 MHz(802.11n ht40/ac vht40) 5775MHz(802.11ac vht80)
Maximum Average Output Power (Conducted):	16.95dBm (5150-5250 MHz) 16.01dBm (5250-5350 MHz) 16.88dBm (5470-5725 MHz) 17.52dBm (5725-5850 MHz)
Modulation Type:	OFDM-BPSK, QPSK, 16QAM, 64QAM,256QAM
Rated Input Voltage:	5Vdc from Adapter or 7.4Vdc from battery
Serial Number:	2DS1-1 (For RF Conducted Test&Screen 1#) 2DS1-6 (For RE/CE Test&Screen 1#)
EUT Received Date:	2023/11/17
EUT Received Status:	Good
Test Purpose:	
This is Class II permissive Change application for FCC ID: ZMOSQ808NA ,certified on 08/04/2020. The change was below, which was provided by manufacturer ▲:	
1. Build the module into the certified host, host FCC ID: XKB-DX4CL4GWBT.	
Per Spot check with the RF output power, the change not affect the RF parameters, so AC line conducted emission and radiated spurious emission were tested in this report.	

1.1.2 Operation Frequency Detail:
For 802.11a/n ht20/ac vht20:

5150-5250MHz Band		5250-5350 MHz Band		5470-5725 MHz Band		5725-5850MHz Band	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	52	5260	100	5500	149	5745
40	5200	56	5280	104	5520	153	5765
44	5220	60	5300	108	5540	157	5785
48	5240	64	5320	112	5560	161	5805
/	/	/	/	116	5580	165	5825
/	/	/	/	120	5600	/	/
/	/	/	/	124	5620	/	/
/	/	/	/	128	5640	/	/
/	/	/	/	132	5660	/	/
/	/	/	/	136	5680	/	/
/	/	/	/	140	5700	/	/
/	/	/	/	144	5720	/	/

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

Test Channel	Test Frequency (MHz)			
	5150-5250MHz Band	5250-5350 MHz Band	5470-5725 MHz Band	5725-5850MHz Band
Lowest	5180	5260	5500	5745
Middle	5200	5280	5580	5785
Highest	5240	5320	5700	5825
Cross	/	/	5720	/

For 802.11n ht40/ac vht40:

5150-5250MHz Band		5250-5350 MHz Band		5470-5725 MHz Band		5725-5850MHz Band	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	54	5270	102	5510	151	5755
46	5230	62	5310	110	5550	159	5795
/	/	/	/	118	5590	/	/
/	/	/	/	126	5630	/	/
/	/	/	/	134	5670	/	/

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

Test Channel	Test Frequency (MHz)			
	5150-5250MHz Band	5250-5350 MHz Band	5470-5725 MHz Band	5725-5850MHz Band
Lowest	5190	5270	5510	5755
Middle	/	/	5550	/
Highest	5230	5310	5670	5795

For 802.11ac vht80:

5150-5250MHz Band		5250-5350 MHz Band		5470-5725 MHz Band		5725-5850MHz Band	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
42	5210	58	5290	106	5530	155	5775
/	/	/	/	122	5610	/	/

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

Test Channel	Test Frequency (MHz)			
	5150-5250MHz Band	5250-5350 MHz Band	5470-5725 MHz Band	5725-5850MHz Band
Lowest	/	/	5530	/
Middle	5210	5290	/	5775
Highest	/	/	5610	/
Cross	/	/	5690	//

Note: Cross channels cross the band 5470-5725MHz and 5725-5850 MHz, Conducted output power/ Power Spectral Density/bandwidth test with the additional channel to compliance with stricter limit of the two bands(5470-5725MHz more stricter).

1.1.3 Antenna Information Detail▲:

TABLE 1: Antenna Information Detail 2:				
Antenna Manufacturer	Antenna Type	input impedance (Ohm)	Frequency Range	Antenna Gain
Fuzhou ZHONGTIANXUN communication technology Co., Ltd	IFA	50	5.15~5.25GHz	-0.94 dBi
			5.25~5.35GHz	-1.46 dBi
			5.47~5.725GHz	-2.24 dBi
			5.725~5.85GHz	-2.12 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 Host Configuration Detail:

Configuration	Item	Manufacturer	Model
1#	Screen	GuangDonghongbosheng Optoelectronic Technology Co.,Ltd.	MDT0500L
2#	Screen	GuangDonghongbosheng Optoelectronic Technology Co.,Ltd.	MDT0500M
3#	Screen	Shenzhen Great Prospect Optoelectronics Co.,Ltd.	MDT0500N

1.1.5 Accessory Information:

Accessory Description	Manufacturer	Model	Parameters
Adapter 1#	Xiamen Keli Electronics Co.,Ltd.	SW-0983	Input: 100-240V~50/60Hz, 0.5A Output: 5.0V, 2.0A
Adapter 2#	Jiangxi Jian Aohai Technology Co.,Ltd.	A319-050200U-US2	Input: 100-240V~50/60Hz,0.3A Output: 5.0V, 2.0A
Adapter 3#	SHENZHEN KEYU POWER SUPPLY TECHNOLOGY CO.,LTD.	KA12C-0502000US	Input: 100-240V~50/60Hz, 0.35A Output: 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. Tests was performed with the Screen 1#+Adapter 1# , because it was the worst which was base on Host test report:CR231167140-00B.		
Equipment Modifications:		No		
EUT Exercise Software:		QRCT3		
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	7
	Middle	5200	6Mbps	7
	Highest	5240	6Mbps	7
802.11n ht20	Lowest	5180	MCS0	7
	Middle	5200	MCS0	7
	Highest	5240	MCS0	7
802.11n ht40	Lowest	5190	MCS0	7
	Highest	5230	MCS0	7
802.11ac vht20	Lowest	5180	MCS0	7
	Middle	5200	MCS0	7
	Highest	5240	MCS0	7
802.11 ac vht40	Lowest	5190	MCS0	7
	Highest	5230	MCS0	7
802.11ac vht80	Middle	5210	MCS0	7
5250-5350 MHz Band:				
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting
802.11a	Lowest	5260	6Mbps	7
	Middle	5280	6Mbps	7
	Highest	5320	6Mbps	7
802.11n ht20	Lowest	5260	MCS0	7
	Middle	5280	MCS0	7
	Highest	5320	MCS0	7
802.11n ht40	Lowest	5270	MCS0	7
	Highest	5310	MCS0	7
802.11ac vht20	Lowest	5260	MCS0	7
	Middle	5280	MCS0	7
	Highest	5320	MCS0	7
802.11 ac vht40	Lowest	5270	MCS0	7
	Highest	5310	MCS0	7
802.11ac vht80	Middle	5290	MCS0	7

5470-5725 MHz Band:				
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting
802.11a	Lowest	5500	6Mbps	7
	Middle	5580	6Mbps	7
	Highest	5700	6Mbps	7
	Cross	5720	MCS0	7
802.11n ht20	Lowest	5500	MCS0	7
	Middle	5580	MCS0	7
	Highest	5700	MCS0	7
	Cross	5720	MCS0	7
802.11n ht40	Lowest	5510	MCS0	7
	Middle	5550	MCS0	7
	Highest	5670	MCS0	7
802.11ac vht20	Lowest	5500	MCS0	7
	Middle	5580	MCS0	7
	Highest	5700	MCS0	7
	Cross	5720	MCS0	7
802.11 ac vht40	Lowest	5510	MCS0	7
	Middle	5550	MCS0	7
	Highest	5670	MCS0	7
802.11ac vht80	Lowest	5530	MCS0	7
	Highest	5610	MCS0	7
	Cross	5690	MCS0	7
5725-5850 MHz Band:				
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting
802.11a	Lowest	5745	6Mbps	7
	Middle	5785	6Mbps	7
	Highest	5825	6Mbps	7
802.11n ht20	Lowest	5745	MCS0	7
	Middle	5785	MCS0	7
	Highest	5825	MCS0	7
802.11n ht40	Lowest	5755	MCS0	7
	Highest	5795	MCS0	7
802.11ac vht20	Lowest	5745	MCS0	7
	Middle	5785	MCS0	7
	Highest	5825	MCS0	7
802.11 ac vht40	Lowest	5755	MCS0	7
	Highest	5795	MCS0	7
802.11ac vht80	Middle	5775	MCS0	7

Note:

1. 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

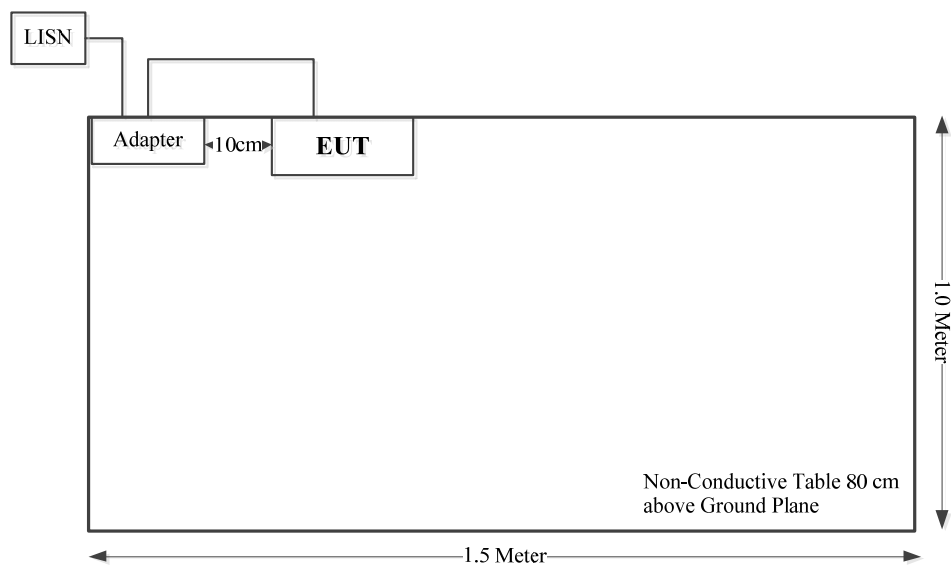
Manufacturer	Description	Model	Serial Number
/	/	/	/

1.2.3 Support Cable List and Details

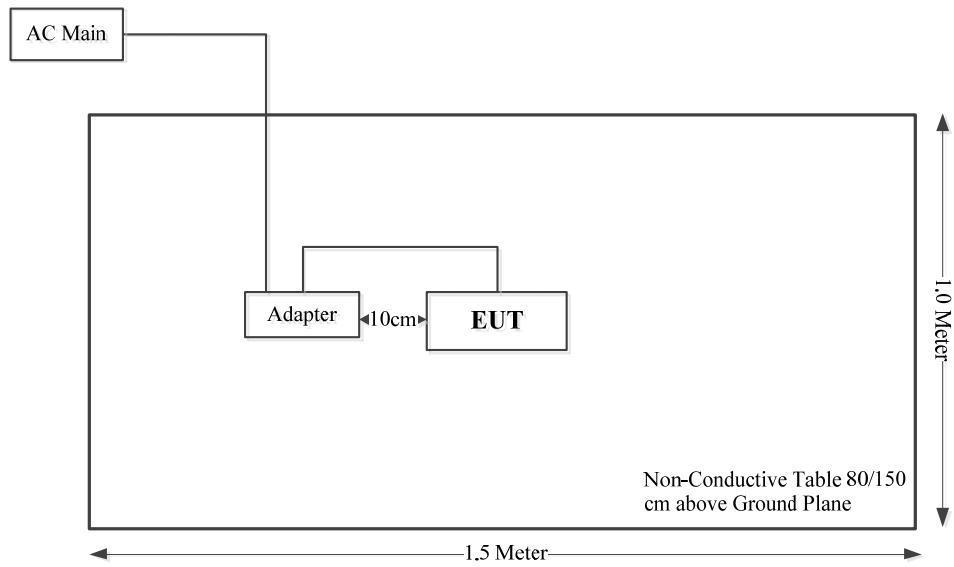
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
USB Cable	No	No	1.2	Adapter 1#	EUT

1.2.4 Block Diagram of Test Setup

AC line conducted emissions:



Radiated 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	Note
§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	Note*	Original report page 24~146
FCC§15.407(a)	Maximum Conducted Output Power	Compliant	Reporting
FCC§15.407 (a)	Power Spectral Density	Note*	Original report page 148-207
FCC §15.407(h)	Dynamic Frequency Selection (DFS)	Note**	Original report page 428-432
§15.203	Antenna Requirement	Compliant	/

Note*: per spot check with the output power, the RF parameters identical with the original module, the result please refer to the original report: ZR/2020/6002805, certified on, which was released by SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch.

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided in the original report.

3. REQUIREMENTS AND TEST PROCEDURES

3.1 AC Line Conducted Emissions

3.1.1 Applicable Standard

FCC§15.207(a).

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

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

*Decreases with the logarithm of the frequency.

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

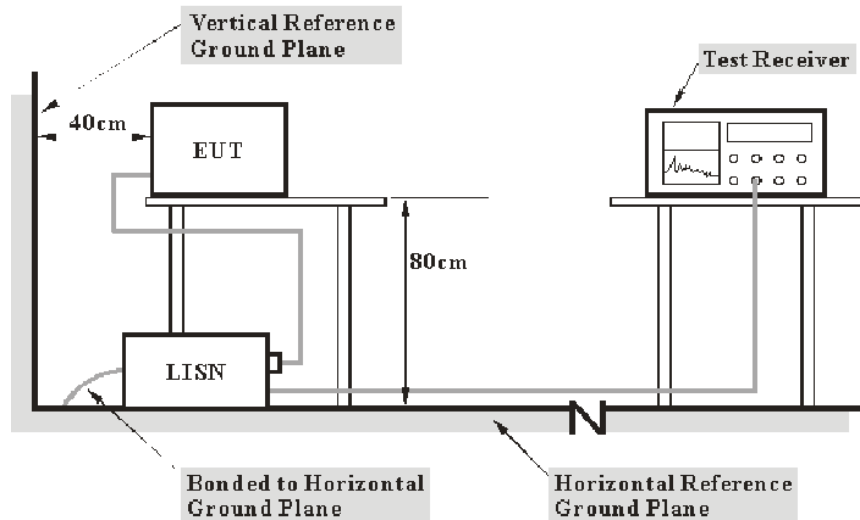
(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

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

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

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

3.1.2 EUT Setup



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

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

The spacing between the peripherals was 10 cm.

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

3.1.3 EMI Test Receiver Setup

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

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

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

3.1.4 Test Procedure

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

3.1.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

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

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

Margin = Limit – Result

3.2 Radiation Spurious Emissions

3.2.1 Applicable Standard

FCC §15.407 (b);

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

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

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

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

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

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

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

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

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

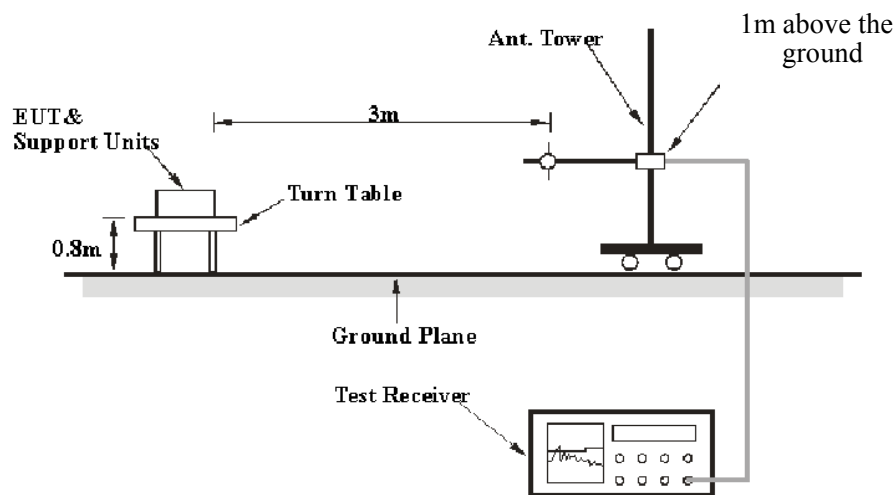
(10) The provisions of § 15.205 apply to intentional radiators operating under this section.

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

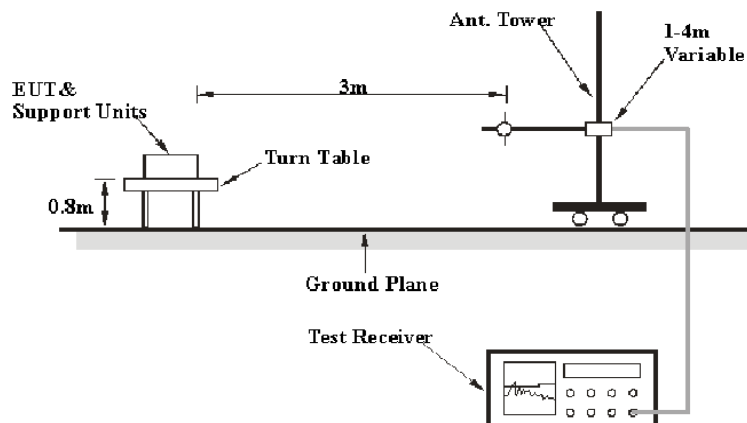
(c) The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies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

3.2.2 EUT Setup

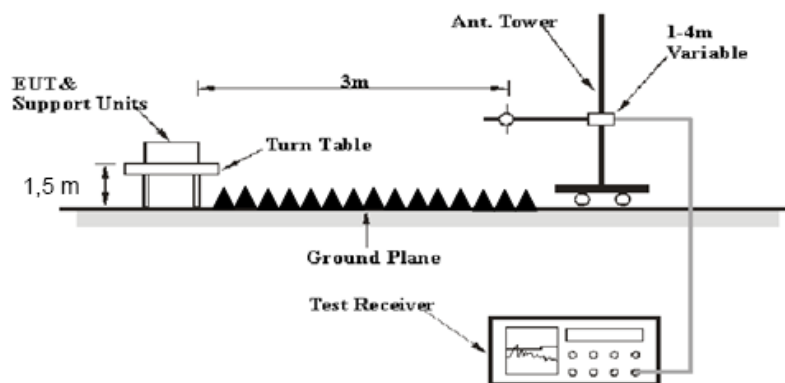
9kHz~30MHz:



30MHz-1GHz:



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.

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

3.2.3 EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9 kHz to 40 GHz.

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

9kHz- 1000MHz:

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

1GHz- 40GHz:

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

Note: T is minimum transmission duration

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

3.2.4 Test Procedure

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

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

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

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

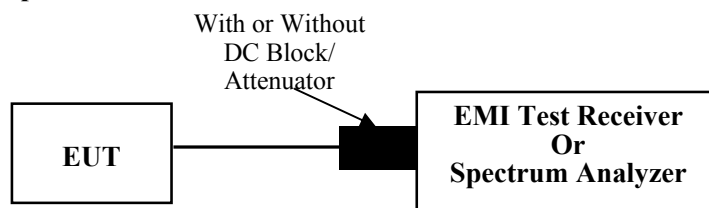
FCC §15.407 (a),(h)

(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.

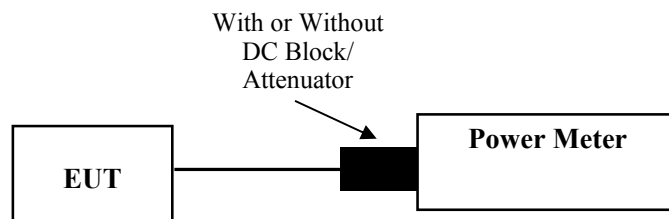
FCC §15.407(a) (2)

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.

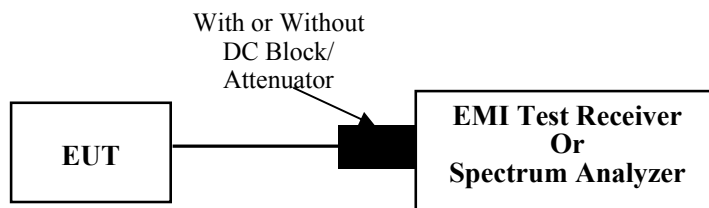
FCC §15.407(a) (2)

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 $\pm 2\%$

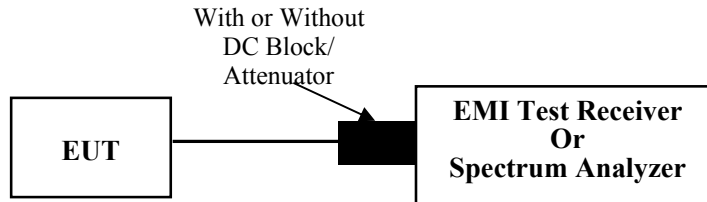
KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-2 should be applied.

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.

3.6 Duty Cycle

3.6.1 EUT Setup



3.6.2 Test Procedure

According to ANSI C63.10-2013 Section 12.2

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

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

3.7 Antenna Requirement

3.7.1 Applicable Standard

FCC §15.203

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

3.7.2 Judgment

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

4. Test DATA AND RESULTS

4.1 AC Line Conducted Emissions

Serial Number:	2DS1-6	Test Date:	2023/12/11
Test Site:	CE	Test Mode:	Transmitting (maximum output power mode(802.11a mode 5825MHz) was tested)
Tester:	David Huang	Test Result:	Pass

Environmental Conditions:

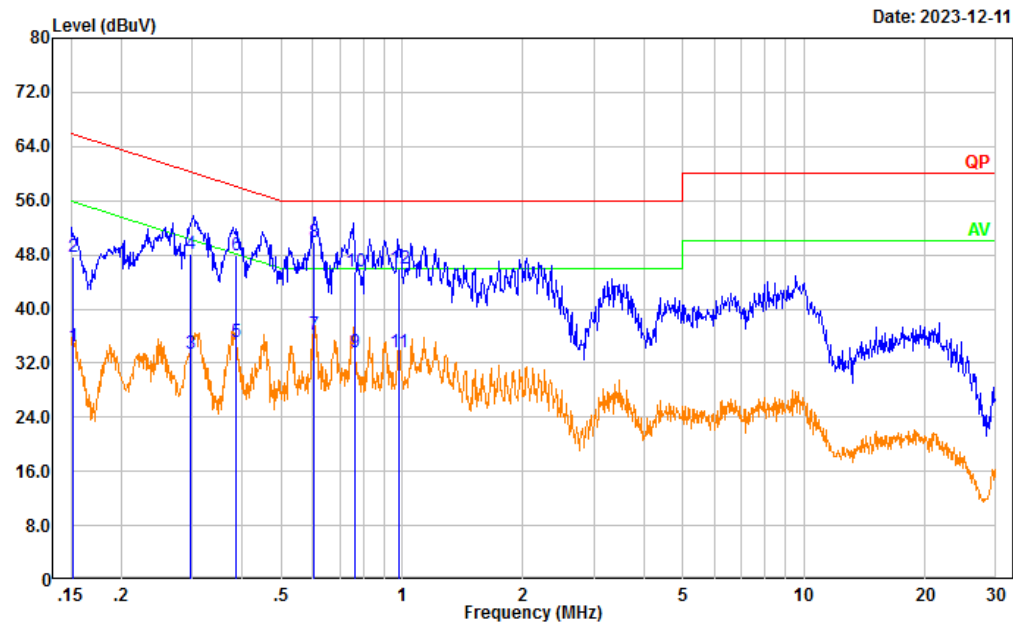
Temperature: (°C)	27.1	Relative Humidity: (%)	52	ATM Pressure: (kPa)	100.9
----------------------	------	------------------------------	----	------------------------	-------

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

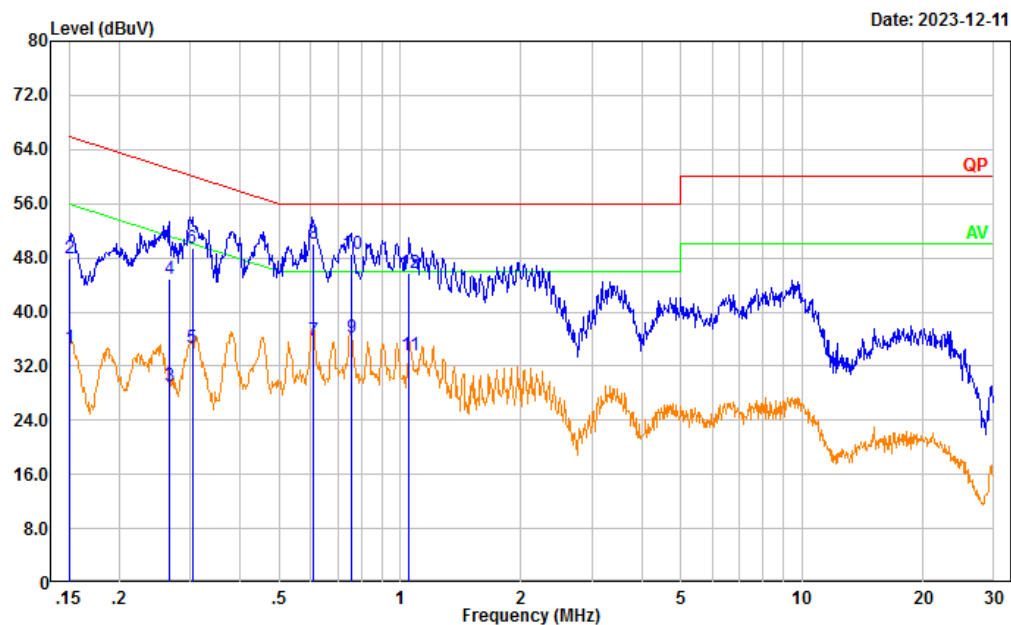
* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Project No.: CR231167139-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	0.152	24.89	9.61	34.50	55.90	21.40	Average
2	0.152	38.07	9.61	47.68	65.90	18.22	QP
3	0.298	23.86	9.61	33.47	50.29	16.82	Average
4	0.298	38.62	9.61	48.23	60.29	12.06	QP
5	0.385	25.61	9.61	35.22	48.16	12.94	Average
6	0.385	38.31	9.61	47.92	58.16	10.24	QP
7	0.604	26.58	9.62	36.20	46.00	9.80	Average
8	0.604	40.30	9.62	49.92	56.00	6.08	QP
9	0.766	23.88	9.62	33.50	46.00	12.50	Average
10	0.766	35.81	9.62	45.43	56.00	10.57	QP
11	0.980	23.90	9.62	33.52	46.00	12.48	Average
12	0.980	36.32	9.62	45.94	56.00	10.06	QP

Project No.: CR231167139-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	0.150	25.02	9.61	34.63	55.97	21.34	Average
2	0.150	38.23	9.61	47.84	65.97	18.13	QP
3	0.267	19.46	9.61	29.07	51.22	22.15	Average
4	0.267	35.29	9.61	44.90	61.22	16.32	QP
5	0.304	24.98	9.61	34.59	50.13	15.54	Average
6	0.304	39.93	9.61	49.54	60.13	10.59	QP
7	0.608	26.24	9.62	35.86	46.00	10.14	Average
8	0.608	40.51	9.62	50.13	56.00	5.87	QP
9	0.754	26.50	9.62	36.12	46.00	9.88	Average
10	0.754	38.88	9.62	48.50	56.00	7.50	QP
11	1.054	24.05	9.62	33.67	46.00	12.33	Average
12	1.054	36.07	9.62	45.69	56.00	10.31	QP

4.2 Radiation Spurious Emissions

Serial Number:	2DS1-6	Test Date:	2024/1/4~2024/1/6
Test Site:	966-1/966-2	Test Mode:	Transmitting
Tester:	Jeff Luo, Mack Huang	Test Result:	Pass

Environmental Conditions:					
Temperature: (°C)	24.2~25.3	Relative Humidity: (%)	43~58	ATM Pressure: (kPa)	101.4~101.5

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-5	2023/12/1	2026/11/30
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
PASTERNAK	Horn Antenna	PE9852/2F-20	112002	2021/2/5	2024/2/4
Quinstar	Preamplifier	QLW-18405536-JO	15964001005	2023/9/15	2024/9/14
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2023/8/6	2024/8/5
E-Microwave	Band Rejection Filter	5150-5850MHz	OE01902423	2023/8/6	2024/8/5
Mini Circuits	High Pass Filter	VHF-6010+	31119	2023/8/6	2024/8/5
PASTERNAK	Horn Antenna	PE9850/2F-20	072001	2021/2/5	2024/2/4

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

Test Data:

Please refer to the below table and plots.

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

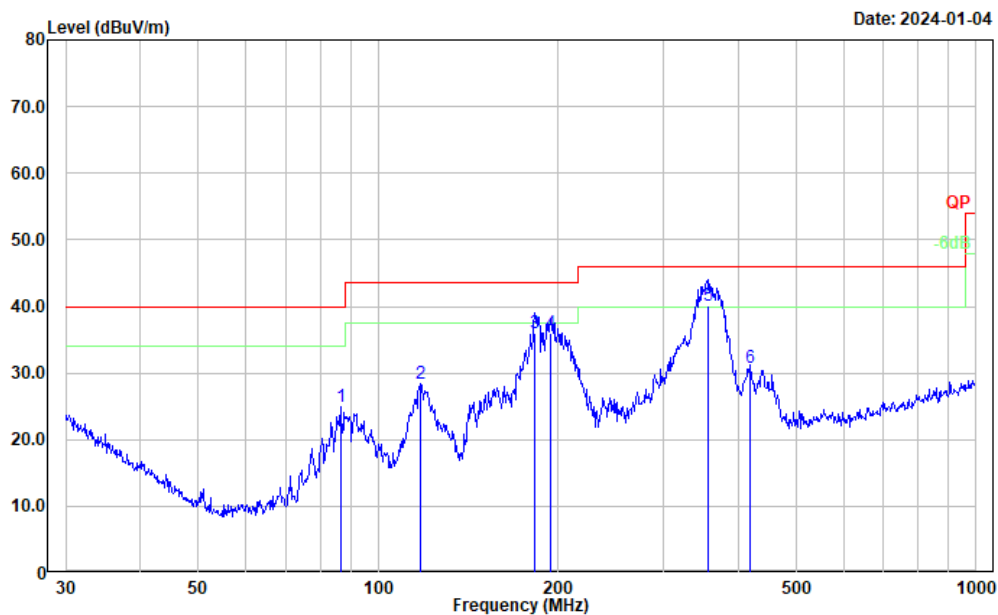
1) 9kHz~30MHz

The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

2) 30MHz-1GHz(maximum output power mode was tested)

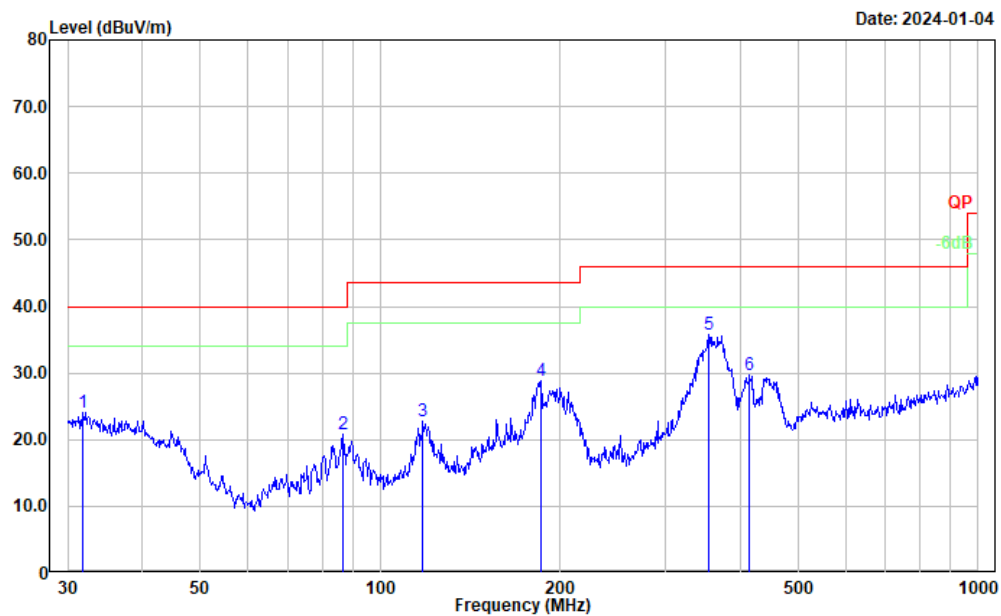
5150-5250MHz: (802.11a mode) Low Channel:

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: horizontal
Note: Transmitting(5G WIFI(5150-5250 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	86.503	42.10	-17.24	24.86	40.00	15.14	Peak
2	117.773	39.94	-11.51	28.43	43.50	15.07	Peak
3	182.559	49.69	-13.64	36.05	43.50	7.45	QP
4	193.773	49.51	-13.45	36.06	43.50	7.44	QP
5	355.427	49.52	-9.44	40.08	46.00	5.92	QP
6	419.108	38.62	-7.74	30.88	46.00	15.12	Peak

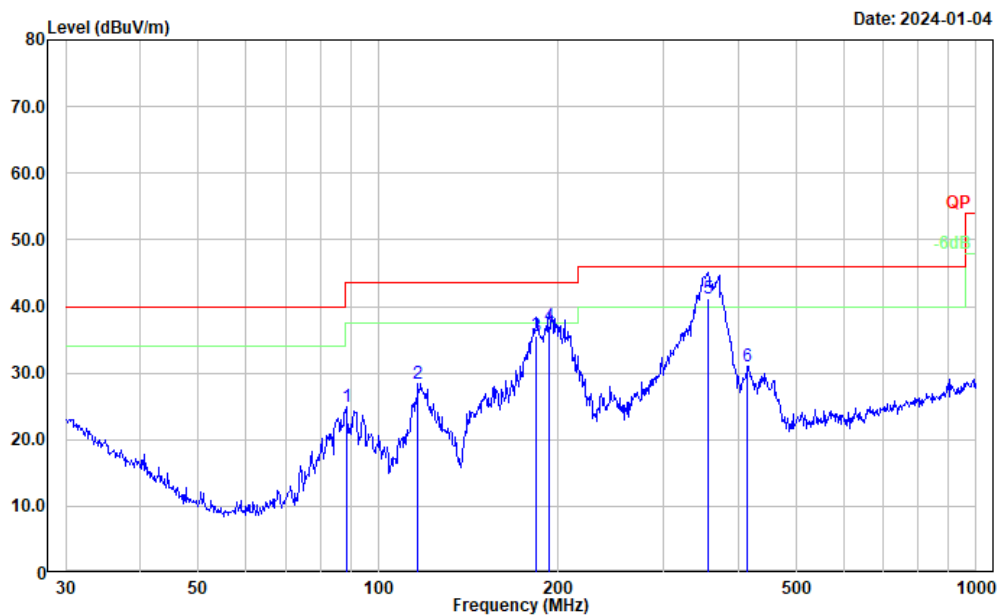
Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting(5G WIFI(5150-5250 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	31.731	29.18	-5.05	24.13	40.00	15.87	Peak
2	86.503	38.04	-17.24	20.80	40.00	19.20	Peak
3	117.773	34.19	-11.51	22.68	43.50	20.82	Peak
4	185.788	42.59	-13.78	28.81	43.50	14.69	Peak
5	354.183	45.30	-9.47	35.83	46.00	10.17	Peak
6	414.722	37.61	-7.85	29.76	46.00	16.24	Peak

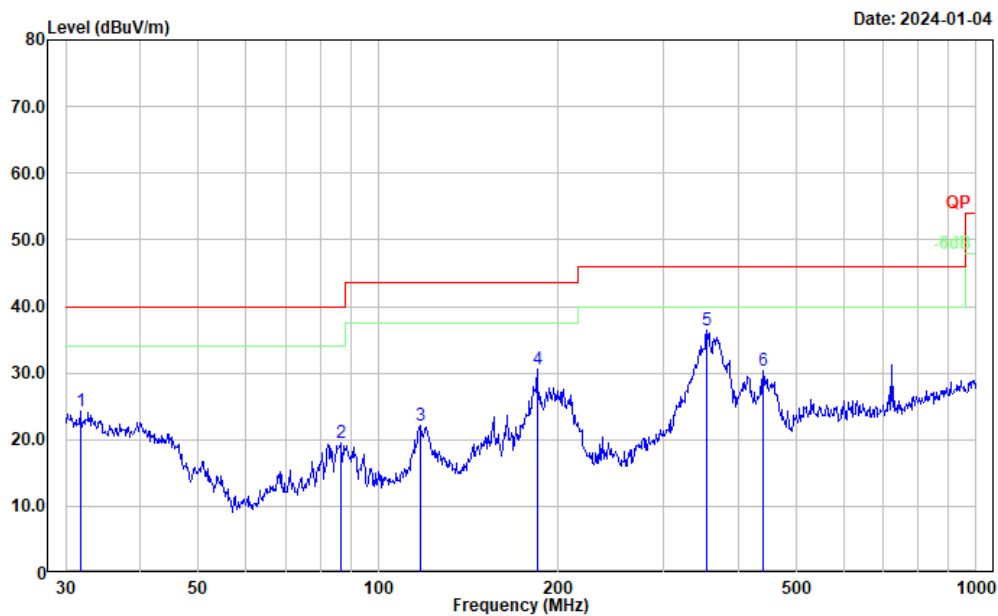
5150-5250MHz: (802.11a mode) Middle Channel:

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: horizontal
Note: Transmitting(5G WIFI(5150-5250 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	88.342	42.13	-17.13	25.00	43.50	18.50	Peak
2	116.540	39.96	-11.52	28.44	43.50	15.06	Peak
3	183.844	49.21	-13.76	35.45	43.50	8.05	QP
4	193.095	50.48	-13.44	37.04	43.50	6.46	QP
5	355.427	50.60	-9.44	41.16	46.00	4.84	QP
6	414.722	38.83	-7.85	30.98	46.00	15.02	Peak

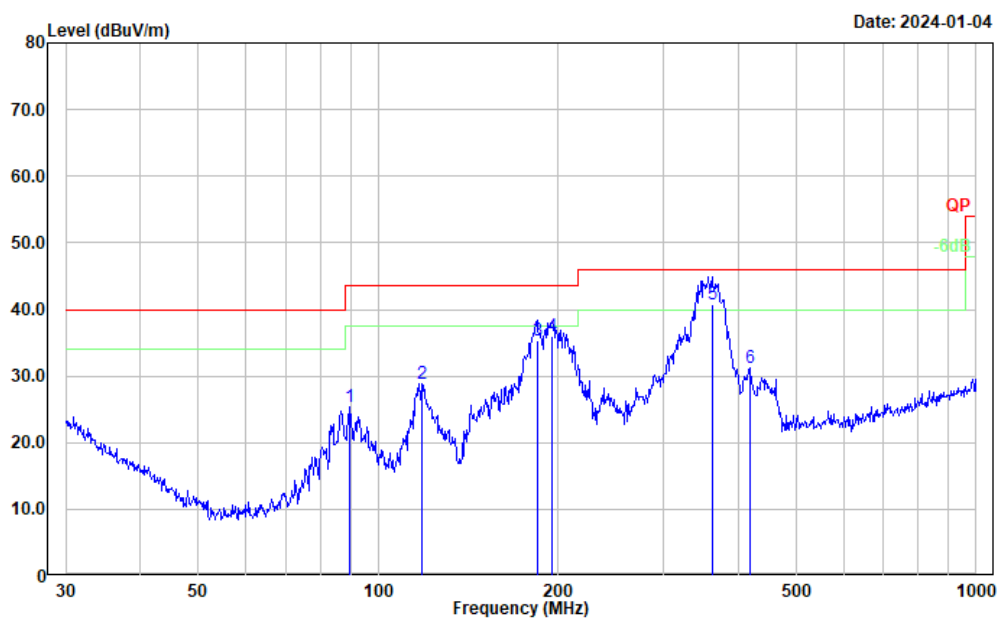
Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting(5G WIFI(5150-5250 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	31.731	29.39	-5.05	24.34	40.00	15.66	Peak
2	86.807	36.73	-17.24	19.49	40.00	20.51	Peak
3	117.773	33.61	-11.51	22.10	43.50	21.40	Peak
4	184.490	44.27	-13.78	30.49	43.50	13.01	Peak
5	354.183	45.82	-9.47	36.35	46.00	9.65	Peak
6	440.196	37.14	-6.88	30.26	46.00	15.74	Peak

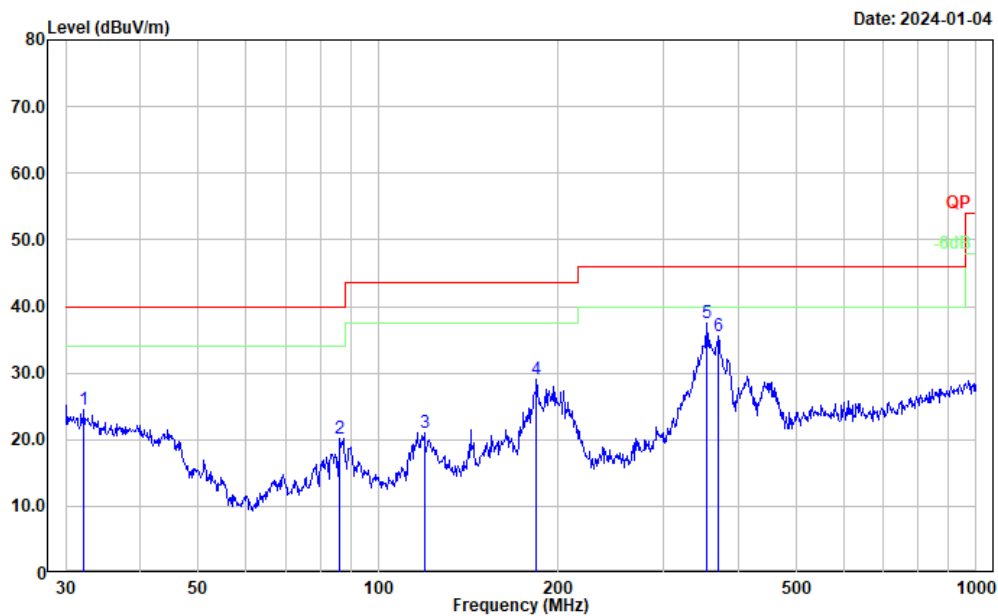
5150-5250MHz: (802.11a mode) High Channel:

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: horizontal
Note: Transmitting(5G WIFI(5150-5250 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	89.590	42.51	-17.06	25.45	43.50	18.05	Peak
2	118.186	40.37	-11.49	28.88	43.50	14.62	Peak
3	184.490	49.07	-13.78	35.29	43.50	8.21	QP
4	195.137	49.40	-13.33	36.07	43.50	7.43	QP
5	361.714	50.13	-9.30	40.83	46.00	5.17	QP
6	417.641	38.98	-7.77	31.21	46.00	14.79	Peak

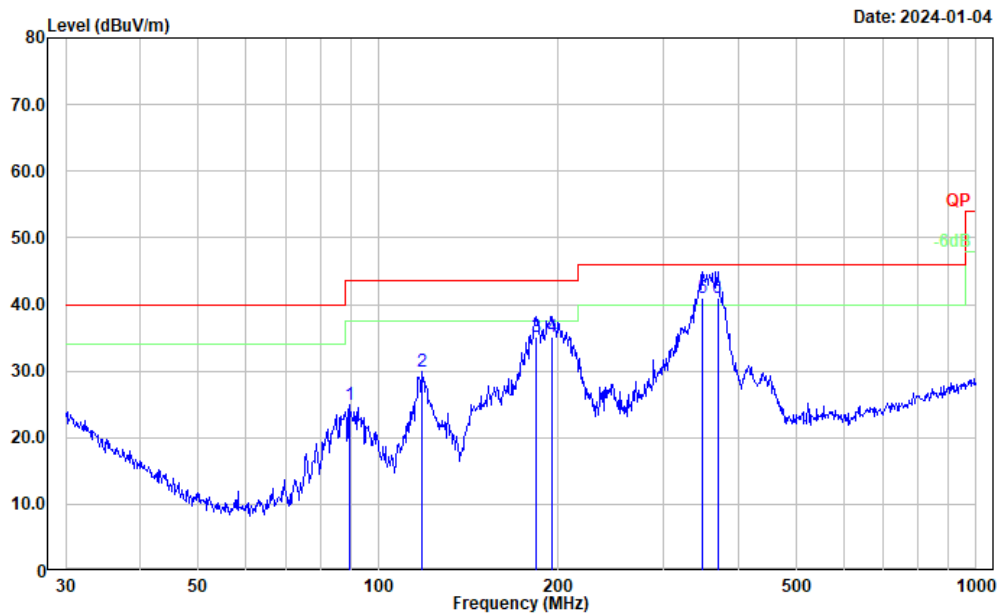
Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting(5G WIFI(5150-5250 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	32.179	29.89	-5.40	24.49	40.00	15.51	Peak
2	86.200	37.34	-17.24	20.10	40.00	19.90	Peak
3	119.436	32.42	-11.32	21.10	43.50	22.40	Peak
4	183.844	42.87	-13.76	29.11	43.50	14.39	Peak
5	354.183	47.03	-9.47	37.56	46.00	8.44	Peak
6	370.702	44.62	-9.13	35.49	46.00	10.51	Peak

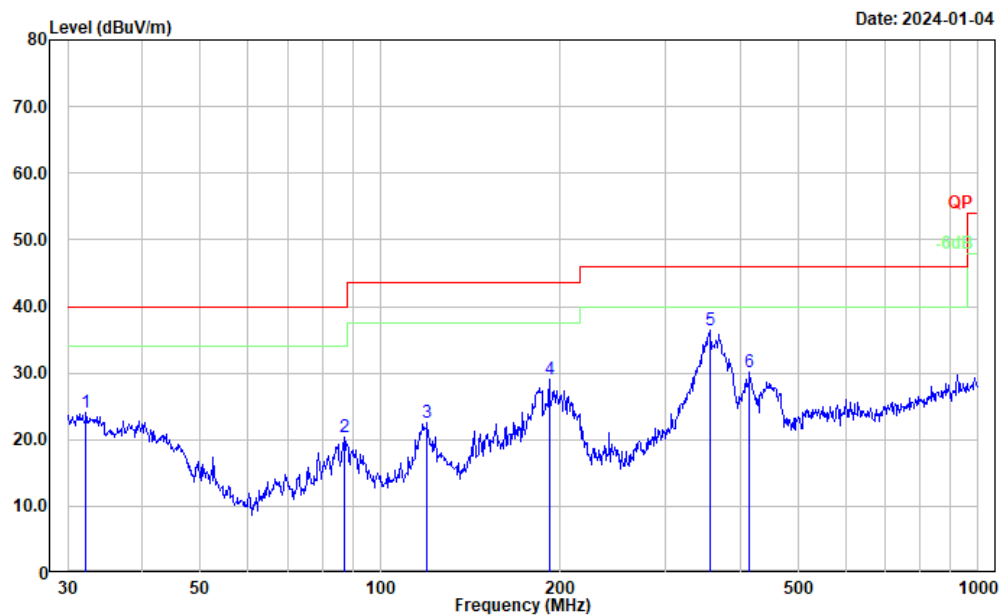
5250-5350MHz: (802.11a mode) Low Channel:

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: horizontal
Note: Transmitting(5G WIFI(5250-5350 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	89.590	41.97	-17.06	24.91	43.50	18.59	Peak
2	118.601	41.30	-11.45	29.85	43.50	13.65	Peak
3	183.201	48.86	-13.70	35.16	43.50	8.34	QP
4	195.137	48.50	-13.33	35.17	43.50	8.33	QP
5	348.027	50.54	-9.62	40.92	46.00	5.08	QP
6	369.405	50.04	-9.15	40.89	46.00	5.11	QP

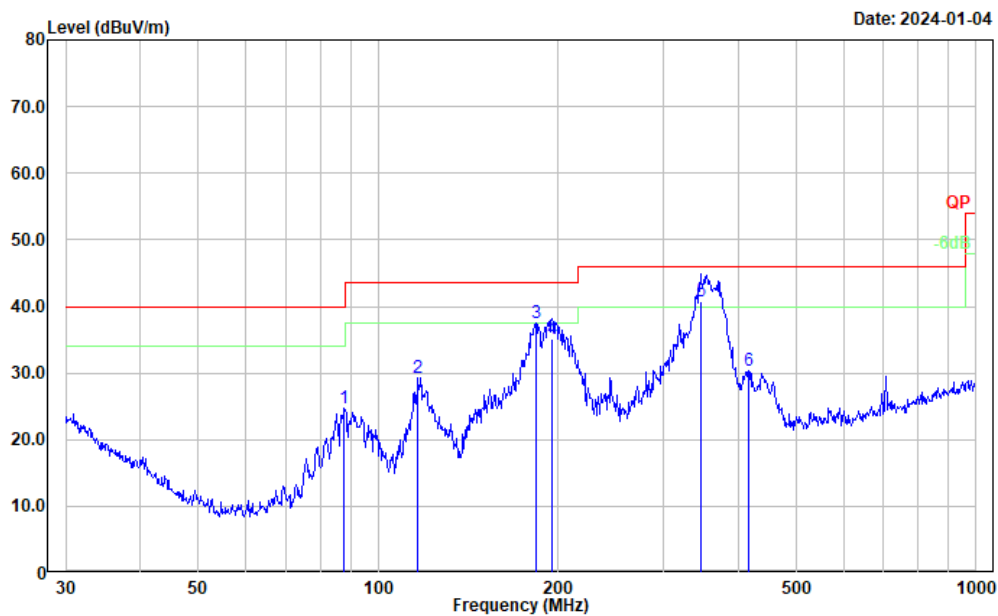
Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting(5G WIFI(5250-5350 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	32.179	29.38	-5.40	23.98	40.00	16.02	Peak
2	87.112	37.52	-17.23	20.29	40.00	19.71	Peak
3	119.856	33.81	-11.24	22.57	43.50	20.93	Peak
4	191.745	42.57	-13.55	29.02	43.50	14.48	Peak
5	355.427	45.87	-9.44	36.43	46.00	9.57	Peak
6	414.722	37.95	-7.85	30.10	46.00	15.90	Peak

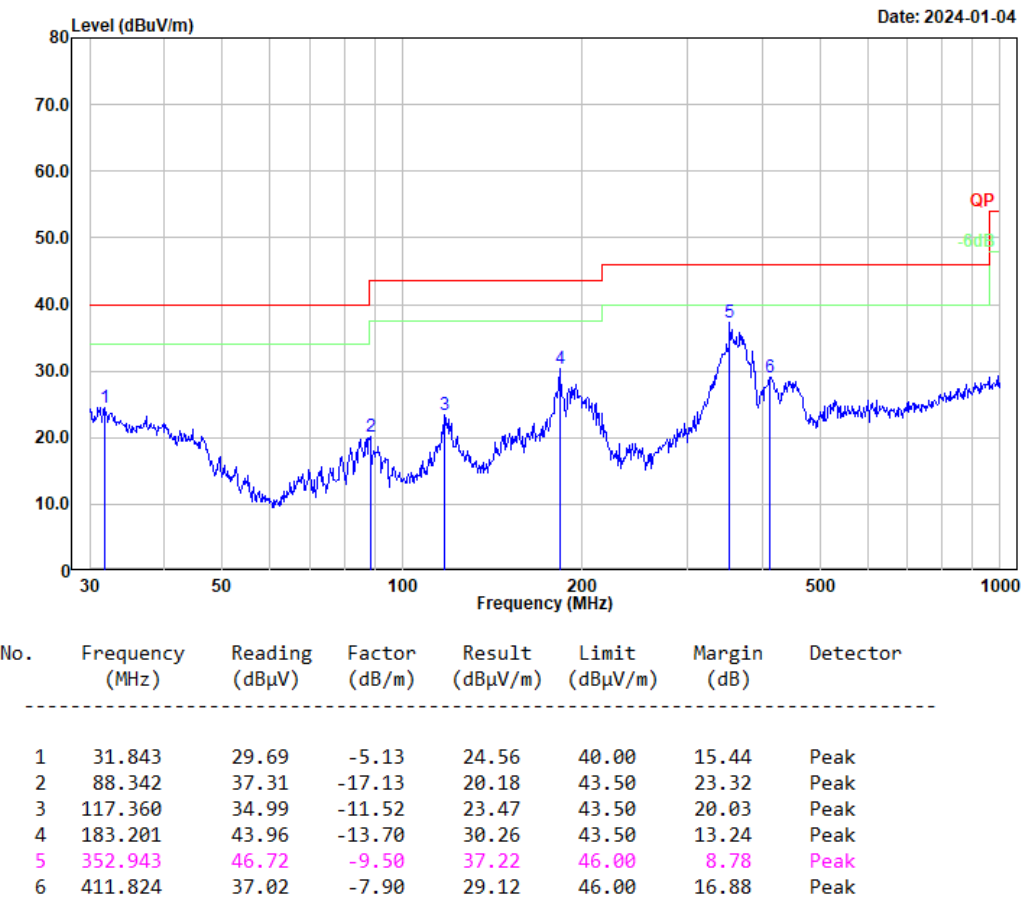
5250-5350MHz: (802.11a mode) Middle Channel:

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: horizontal
Note: Transmitting(5G WIFI(5250-5350 MHz) 802.11a Mode)



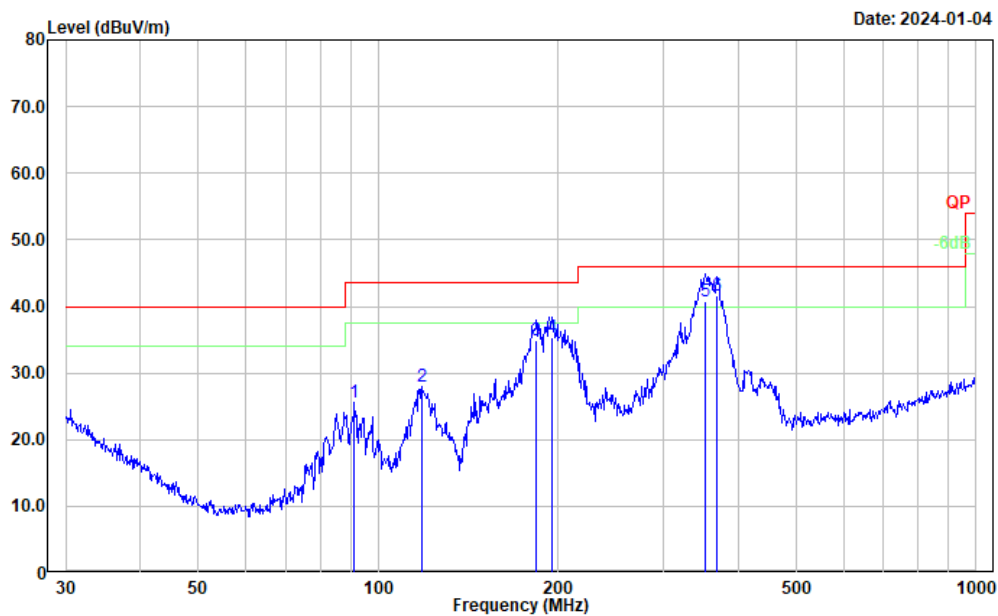
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	87.725	41.86	-17.16	24.70	40.00	15.30	Peak
2	116.540	40.70	-11.52	29.18	43.50	14.32	Peak
3	183.201	51.13	-13.70	37.43	43.50	6.07	Peak
4	195.137	48.40	-13.33	35.07	43.50	8.43	QP
5	345.595	50.41	-9.69	40.72	46.00	5.28	QP
6	416.179	38.18	-7.81	30.37	46.00	15.63	Peak

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting(5G WIFI(5250-5350 MHz) 802.11a Mode)



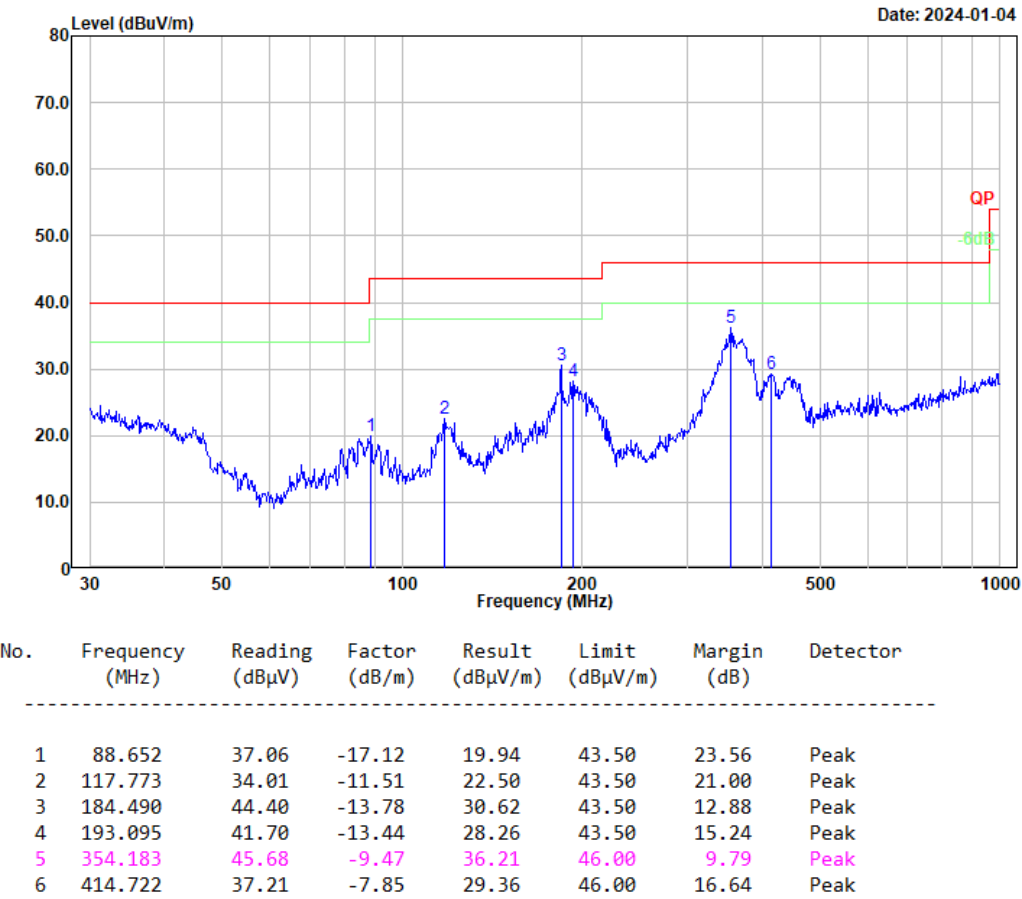
5250-5350MHz: (802.11a mode) High Channel:

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: horizontal
Note: Transmitting(5G WIFI(5250-5350 MHz) 802.11a Mode)



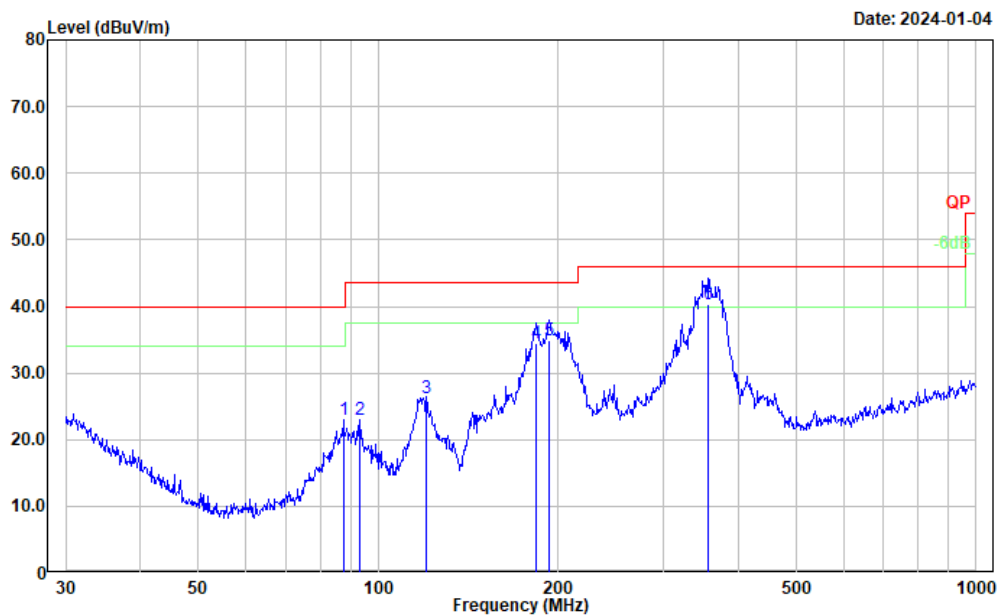
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	91.175	42.45	-16.87	25.58	43.50	17.92	Peak
2	118.601	39.51	-11.45	28.06	43.50	15.44	Peak
3	183.844	48.61	-13.76	34.85	43.50	8.65	QP
4	195.137	48.65	-13.33	35.32	43.50	8.18	QP
5	352.943	50.36	-9.50	40.86	46.00	5.14	QP
6	368.112	50.73	-9.18	41.55	46.00	4.45	QP

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting(5G WIFI(5250-5350 MHz) 802.11a Mode)



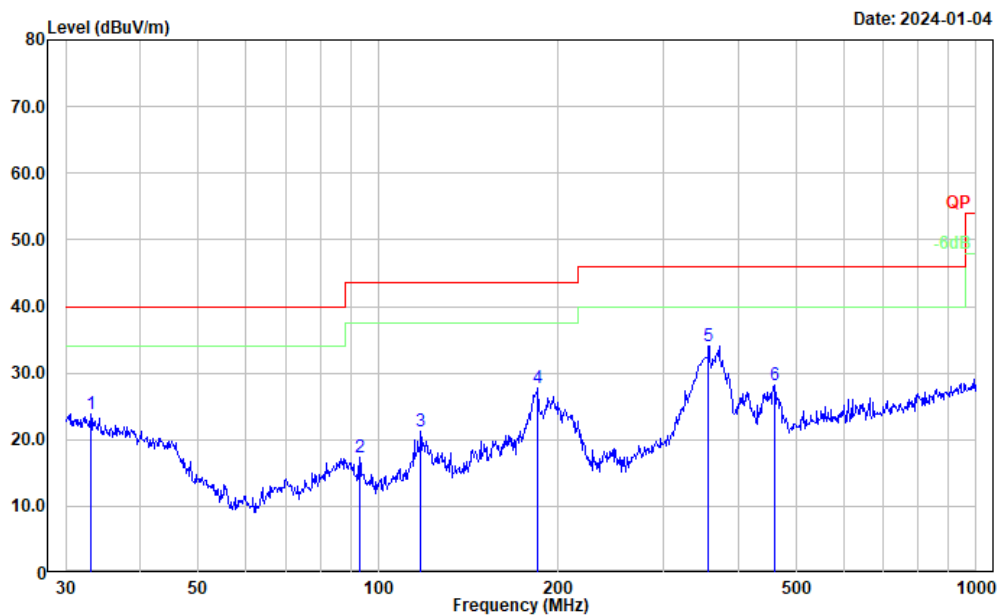
5470-5725MHz: (802.11a mode) Low channel:

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: horizontal
Note: Transmitting(5G WIFI(5470-5725 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	87.418	40.11	-17.20	22.91	40.00	17.09	Peak
2	93.113	39.43	-16.39	23.04	43.50	20.46	Peak
3	120.277	37.52	-11.18	26.34	43.50	17.16	Peak
4	183.201	48.24	-13.70	34.54	43.50	8.96	QP
5	193.095	48.30	-13.44	34.86	43.50	8.64	QP
6	356.676	49.72	-9.41	40.31	46.00	5.69	QP

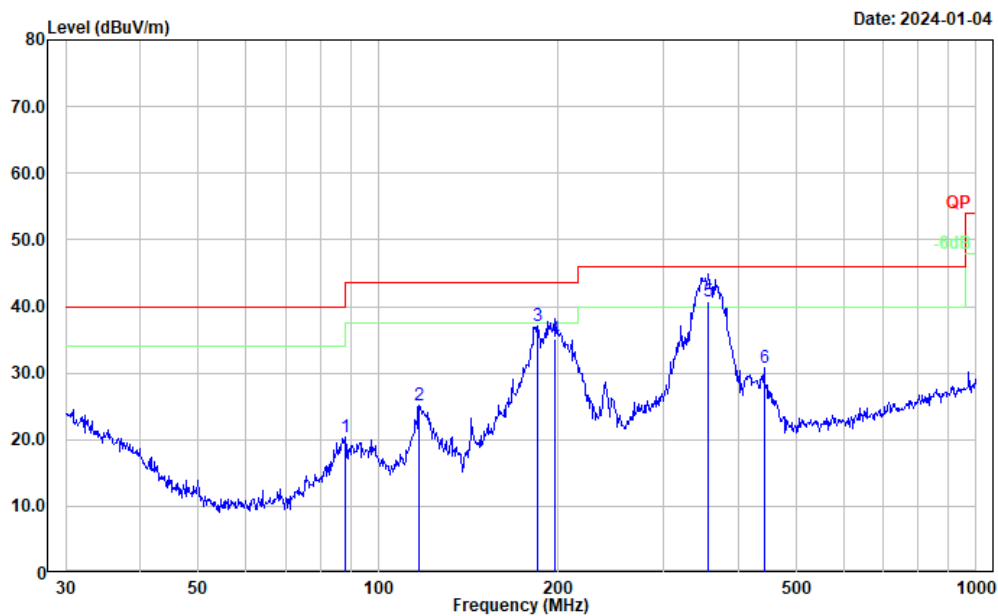
Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting(5G WIFI(5470-5725 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	32.979	29.84	-6.04	23.80	40.00	16.20	Peak
2	93.113	33.68	-16.39	17.29	43.50	26.21	Peak
3	117.773	32.74	-11.51	21.23	43.50	22.27	Peak
4	185.138	41.53	-13.78	27.75	43.50	15.75	Peak
5	356.676	43.47	-9.41	34.06	46.00	11.94	Peak
6	460.727	34.76	-6.63	28.13	46.00	17.87	Peak

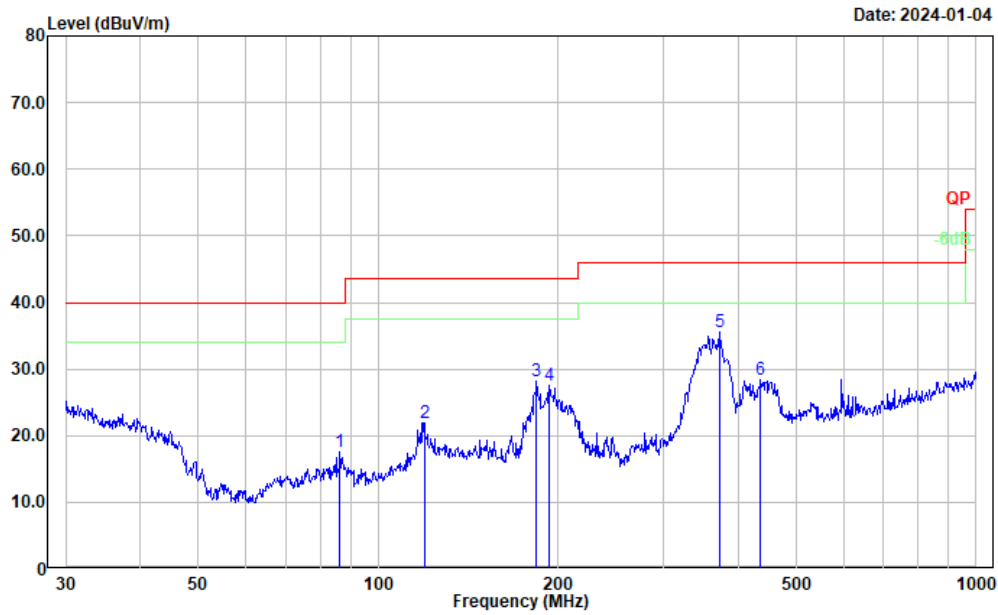
5470-5725MHz: (802.11a mode) Middle channel:

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: horizontal
Note: Transmitting(5G WIFI(5470-5725 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	88.033	37.46	-17.13	20.33	43.50	23.17	Peak
2	116.950	36.74	-11.52	25.22	43.50	18.28	Peak
3	185.138	50.87	-13.78	37.09	43.50	6.41	Peak
4	197.893	47.90	-12.76	35.14	43.50	8.36	QP
5	356.676	50.22	-9.41	40.81	46.00	5.19	QP
6	441.743	37.65	-6.89	30.76	46.00	15.24	Peak

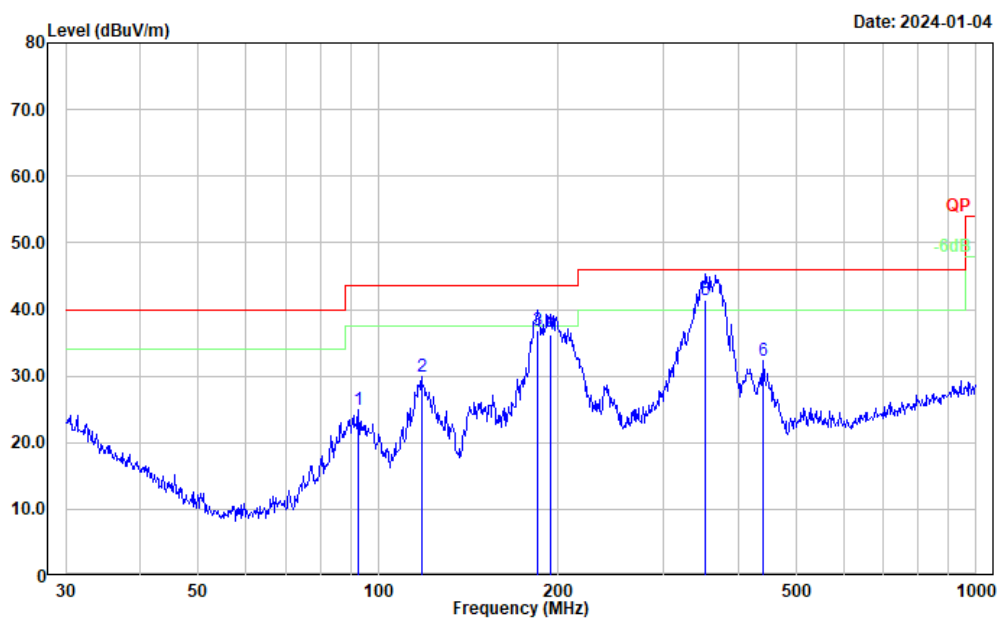
Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting(5G WIFI(5470-5725 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	86.200	34.73	-17.24	17.49	40.00	22.51	Peak
2	119.436	33.20	-11.32	21.88	43.50	21.62	Peak
3	183.844	41.99	-13.76	28.23	43.50	15.27	Peak
4	193.095	41.07	-13.44	27.63	43.50	15.87	Peak
5	372.005	44.64	-9.10	35.54	46.00	10.46	Peak
6	435.590	35.50	-7.00	28.50	46.00	17.50	Peak

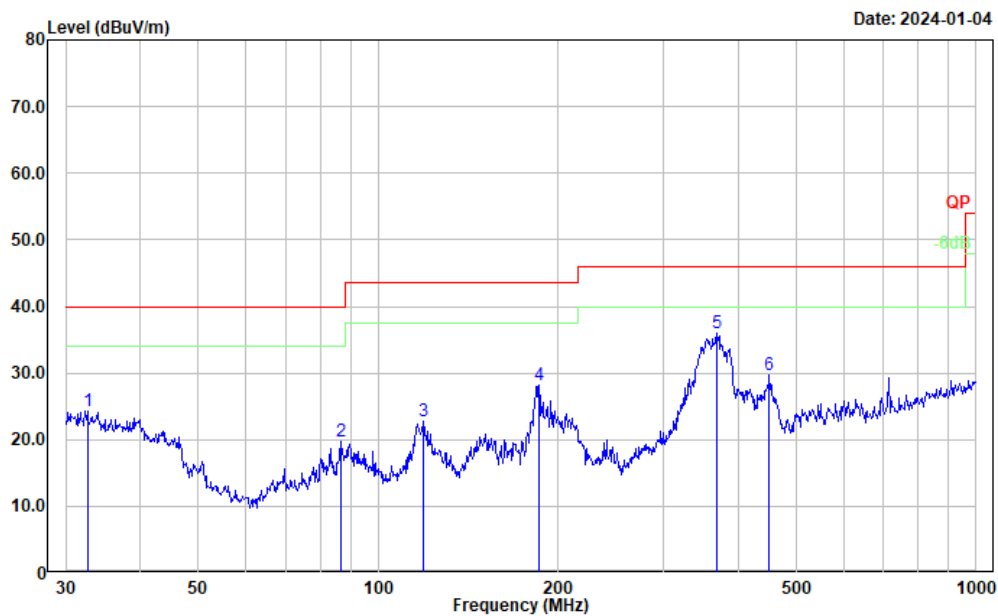
5470-5725MHz: (802.11a mode) High channel:

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: horizontal
Note: Transmitting(5G WIFI(5470-5725 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	92.787	41.32	-16.45	24.87	43.50	18.63	Peak
2	118.186	41.37	-11.49	29.88	43.50	13.62	Peak
3	184.490	50.68	-13.78	36.90	43.50	6.60	QP
4	193.773	49.65	-13.45	36.20	43.50	7.30	QP
5	352.943	50.89	-9.50	41.39	46.00	4.61	QP
6	440.196	39.23	-6.88	32.35	46.00	13.65	Peak

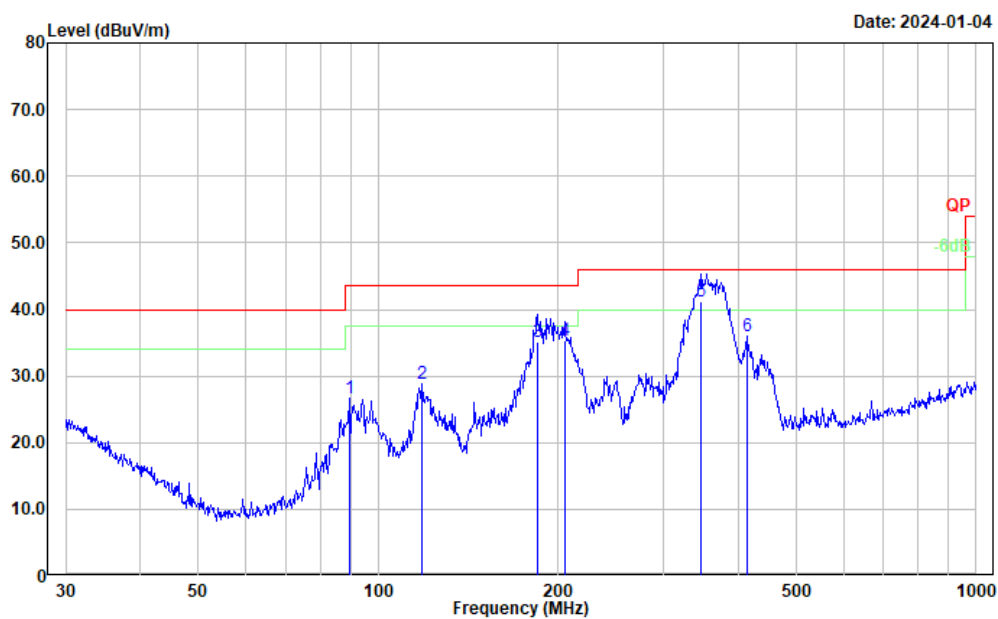
Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting(5G WIFI(5470-5725 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	32.634	30.06	-5.77	24.29	40.00	15.71	Peak
2	86.807	36.93	-17.24	19.69	40.00	20.31	Peak
3	119.018	34.27	-11.41	22.86	43.50	20.64	Peak
4	185.788	42.00	-13.78	28.22	43.50	15.28	Peak
5	368.112	45.24	-9.18	36.06	46.00	9.94	Peak
6	451.135	36.48	-6.87	29.61	46.00	16.39	Peak

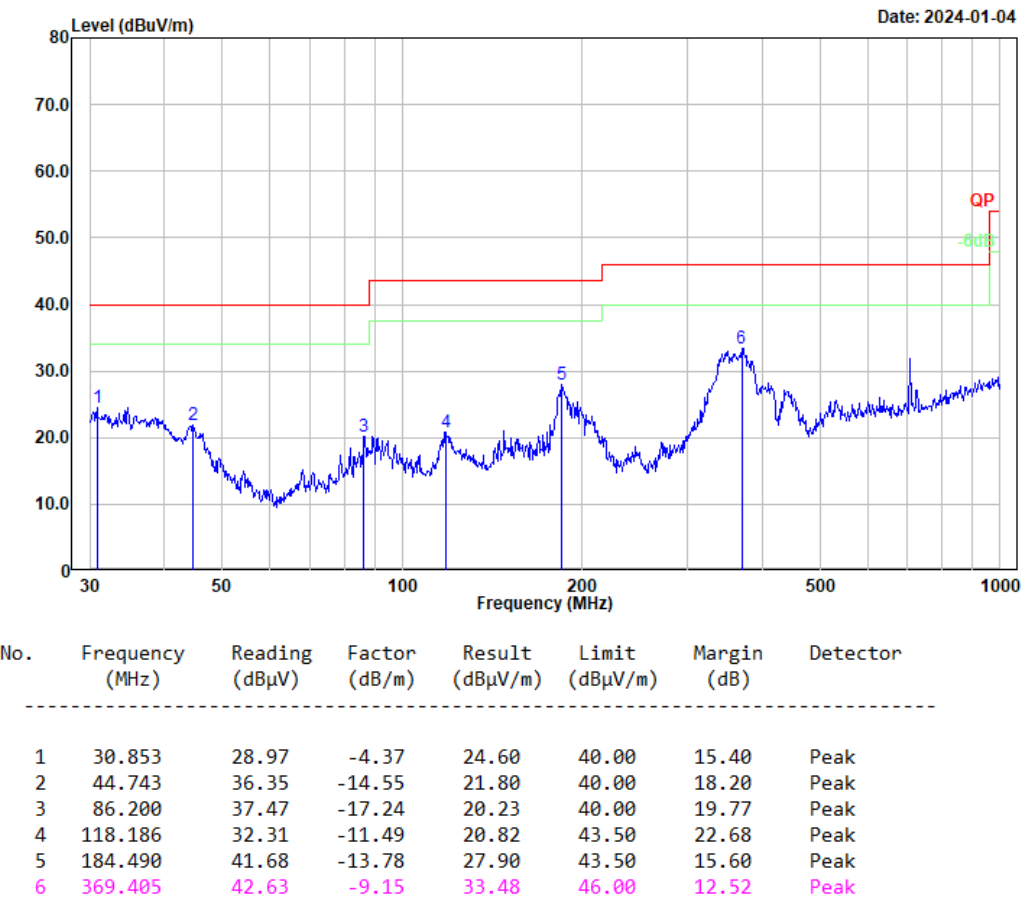
5470-5725MHz: (802.11a mode) Cross channel:

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: horizontal
Note: Transmitting(5G WIFI(5470-5725 MHz) 802.11a Mode)



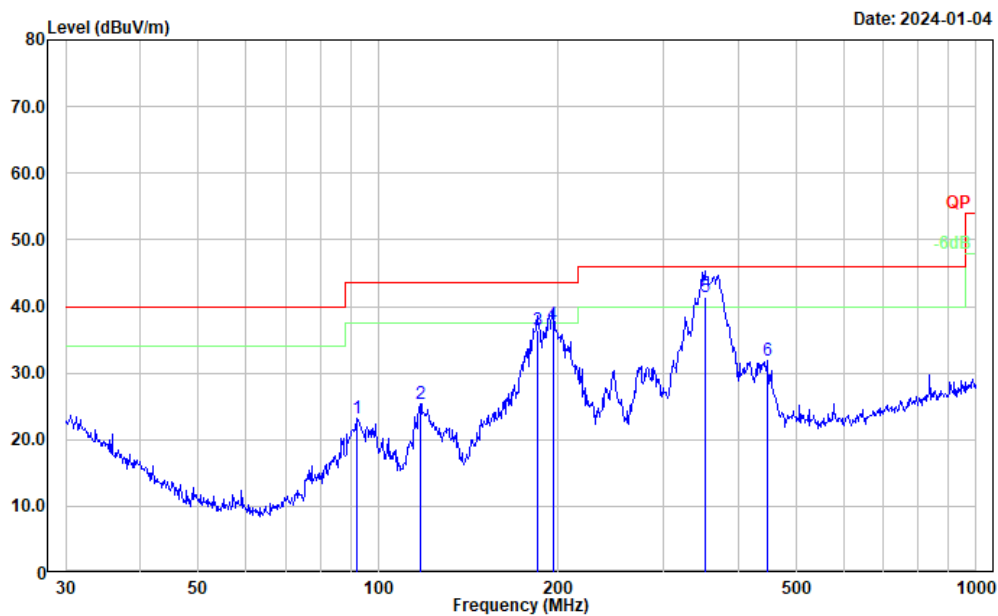
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	89.590	43.78	-17.06	26.72	43.50	16.78	Peak
2	118.601	40.24	-11.45	28.79	43.50	14.71	Peak
3	184.490	49.00	-13.78	35.22	43.50	8.28	QP
4	204.955	48.54	-13.30	35.24	43.50	8.26	QP
5	345.595	50.93	-9.69	41.24	46.00	4.76	QP
6	414.722	43.83	-7.85	35.98	46.00	10.02	Peak

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting(5G WIFI(5470-5725 MHz) 802.11a Mode)



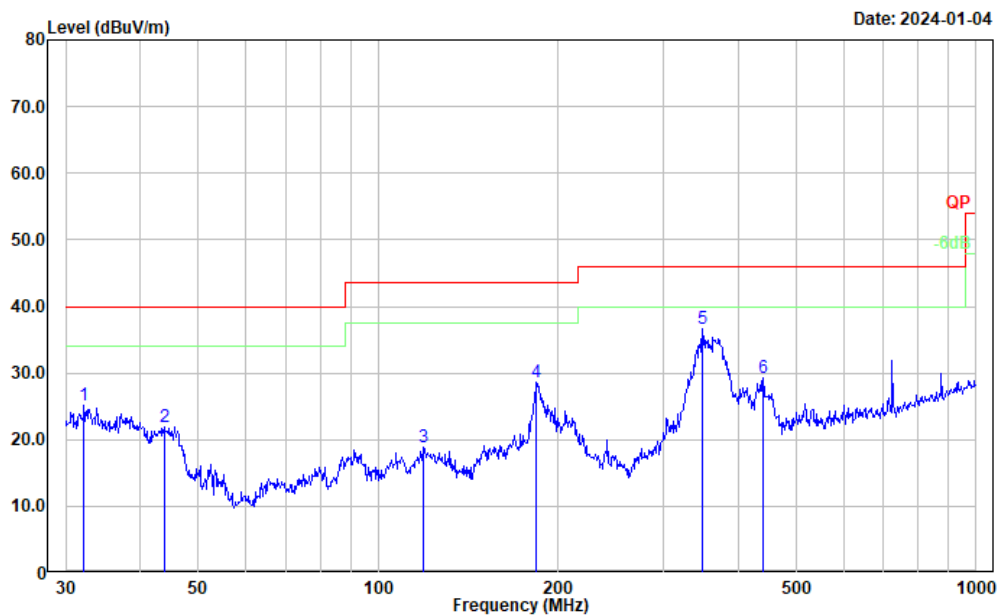
5725-5850MHz: (802.11a mode) Low channel:

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: horizontal
Note: Transmitting(5G WIFI(5725-5850 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	92.139	39.81	-16.58	23.23	43.50	20.27	Peak
2	117.360	36.88	-11.52	25.36	43.50	18.14	Peak
3	185.138	50.29	-13.78	36.51	43.50	6.99	QP
4	195.822	50.64	-13.26	37.38	43.50	6.12	QP
5	351.708	50.95	-9.54	41.41	46.00	4.59	QP
6	446.414	38.81	-6.90	31.91	46.00	14.09	Peak

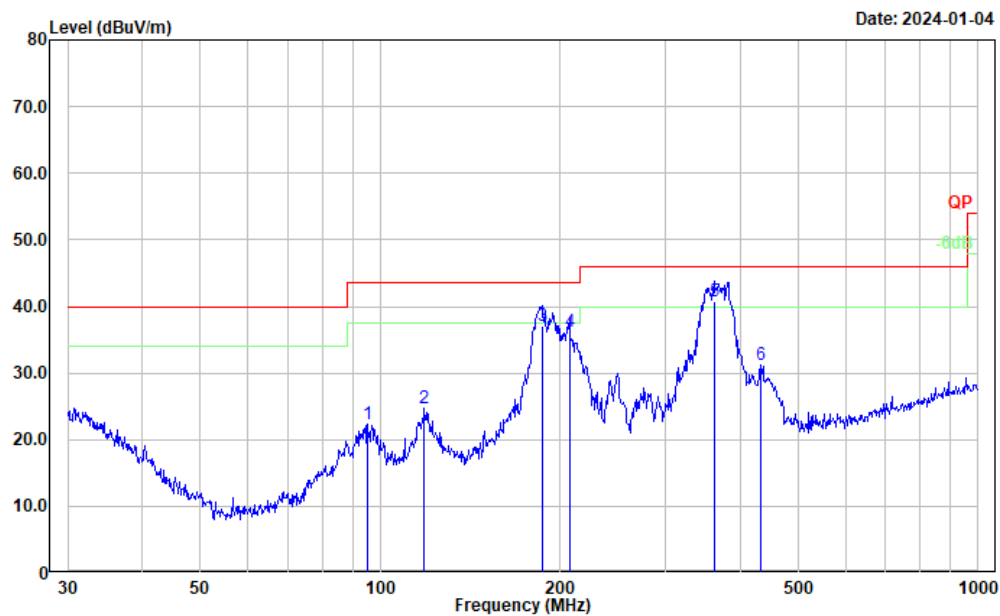
Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting(5G WIFI(5725-5850 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	32.179	30.46	-5.40	25.06	40.00	14.94	Peak
2	43.812	35.84	-13.99	21.85	40.00	18.15	Peak
3	119.018	30.24	-11.41	18.83	43.50	24.67	Peak
4	183.201	42.22	-13.70	28.52	43.50	14.98	Peak
5	349.250	46.29	-9.60	36.69	46.00	9.31	Peak
6	440.196	36.21	-6.88	29.33	46.00	16.67	Peak

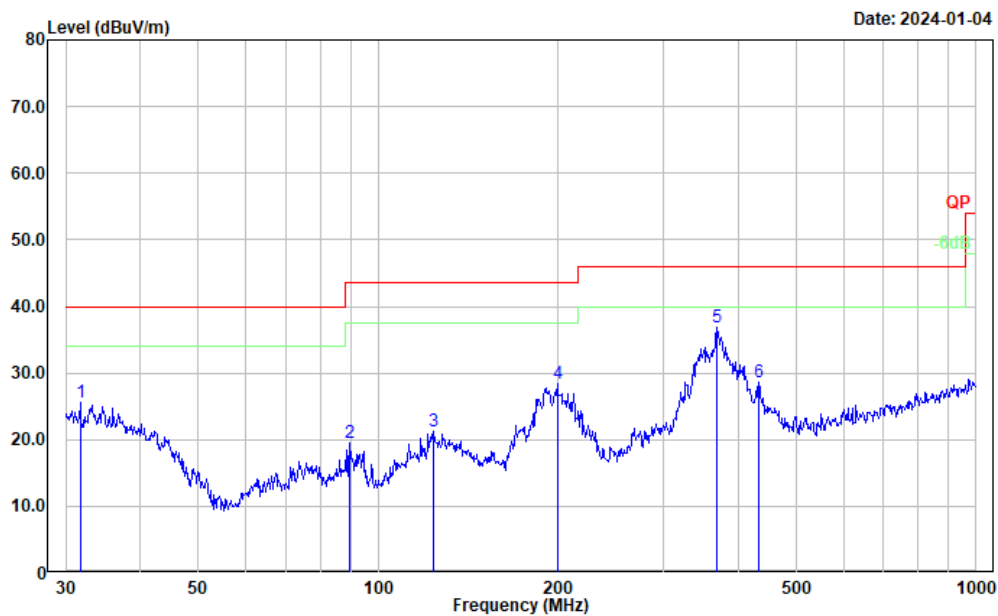
5725-5850MHz: (802.11a mode) Middle channel:

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: horizontal
Note: Transmitting(5G WIFI(5725-5850 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	95.093	38.21	-15.98	22.23	43.50	21.27	Peak
2	118.601	36.15	-11.45	24.70	43.50	18.80	Peak
3	186.441	50.80	-13.78	37.02	43.50	6.48	QP
4	207.123	49.90	-13.60	36.30	43.50	7.20	QP
5	361.714	50.00	-9.30	40.70	46.00	5.30	QP
6	432.546	38.48	-7.16	31.32	46.00	14.68	Peak

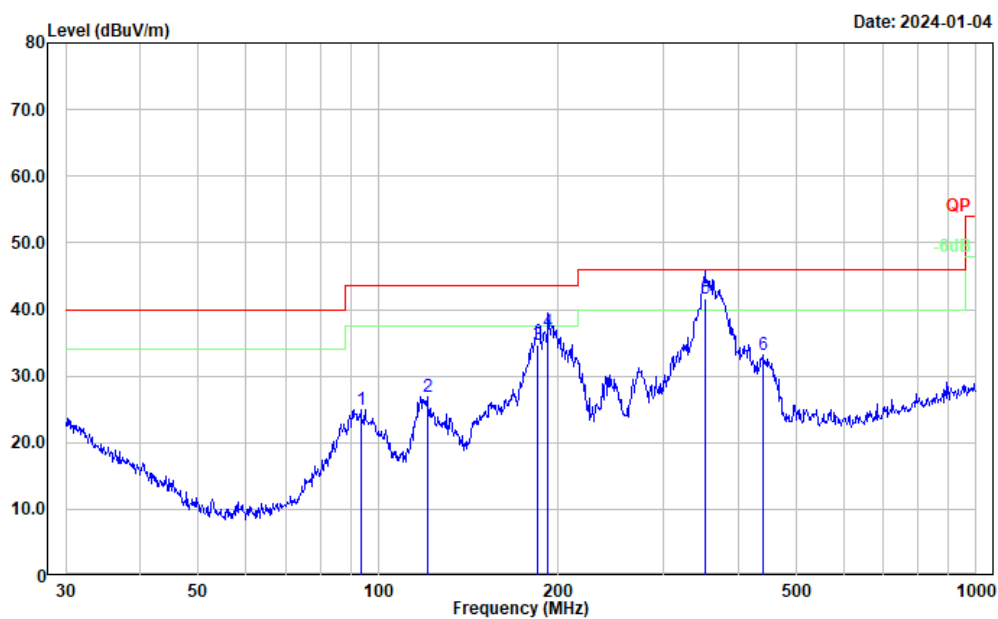
Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting(5G WIFI(5725-5850 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	31.731	30.61	-5.05	25.56	40.00	14.44	Peak
2	89.590	36.54	-17.06	19.48	43.50	24.02	Peak
3	123.699	32.16	-10.89	21.27	43.50	22.23	Peak
4	199.286	40.82	-12.47	28.35	43.50	15.15	Peak
5	368.112	46.05	-9.18	36.87	46.00	9.13	Peak
6	432.546	35.77	-7.16	28.61	46.00	17.39	Peak

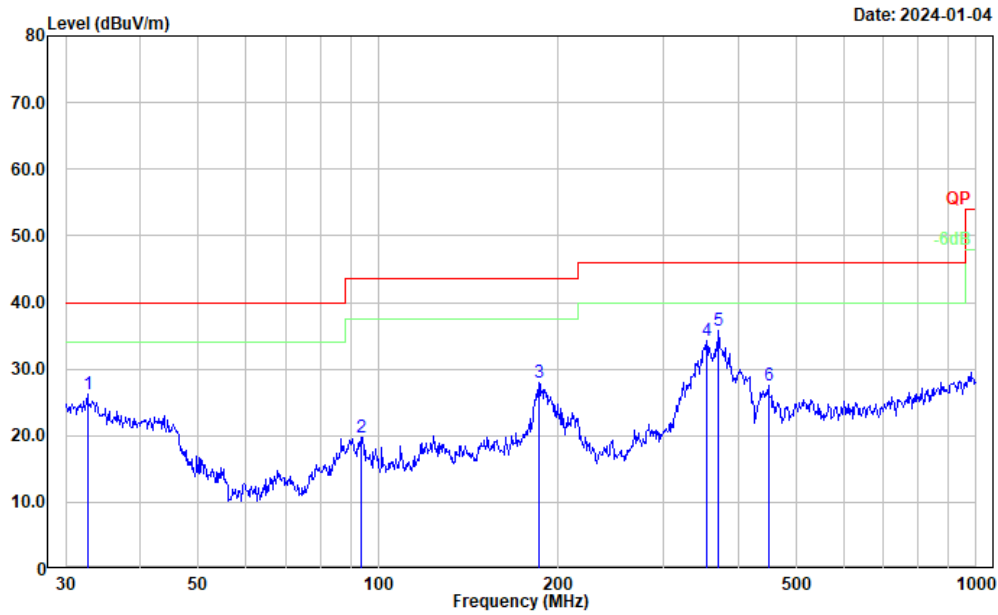
5725-5850MHz: (802.11a mode) High channel:

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: horizontal
Note: Transmitting(5G WIFI(5725-5850 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	93.440	41.28	-16.32	24.96	43.50	18.54	Peak
2	120.699	37.97	-11.13	26.84	43.50	16.66	Peak
3	184.490	48.50	-13.78	34.72	43.50	8.78	QP
4	192.419	50.08	-13.51	36.57	43.50	6.93	QP
5	351.708	51.22	-9.54	41.68	46.00	4.32	QP
6	440.196	40.04	-6.88	33.16	46.00	12.84	Peak

Project No.: CR231167139-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting(5G WIFI(5725-5850 MHz) 802.11a Mode)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	32.634	31.90	-5.77	26.13	40.00	13.87	Peak
2	93.440	36.09	-16.32	19.77	43.50	23.73	Peak
3	185.788	41.84	-13.78	28.06	43.50	15.44	Peak
4	354.183	43.76	-9.47	34.29	46.00	11.71	Peak
5	370.702	44.99	-9.13	35.86	46.00	10.14	Peak
6	449.556	34.51	-6.89	27.62	46.00	18.38	Peak

3) 1GHz-40GHz:**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: 5180MHz							
5150.000	53.03	PK	H	11.67	64.70	74.00	9.30
5150.000	38.78	AV	H	11.67	50.45	54.00	3.55
5150.000	53.93	PK	V	11.67	65.60	74.00	8.40
5150.000	39.31	AV	V	11.67	50.98	54.00	3.02
10360.000	35.12	PK	H	20.47	55.59	68.20	12.61
10360.000	36.90	PK	V	20.47	57.37	68.20	10.83
15540.000	34.56	PK	H	24.62	59.18	74.00	14.82
15540.000	22.04	AV	H	24.62	46.66	54.00	7.34
15540.000	33.13	PK	V	24.62	57.75	74.00	16.25
15540.000	21.90	AV	V	24.62	46.52	54.00	7.48
Middle Channel: 5200 MHz							
10400.000	34.50	PK	H	20.54	55.04	68.20	13.16
10400.000	35.04	PK	V	20.54	55.58	68.20	12.62
15600.000	36.99	PK	H	24.71	61.70	74.00	12.30
15600.000	24.28	AV	H	24.71	48.99	54.00	5.01
15600.000	36.12	PK	V	24.71	60.83	74.00	13.17
15600.000	24.98	AV	V	24.71	49.69	54.00	4.31
High Channel: 5240 MHz							
5350.000	49.68	PK	H	11.94	61.62	74.00	12.38
5350.000	37.78	AV	H	11.94	49.72	54.00	4.28
5350.000	50.77	PK	V	11.94	62.71	74.00	11.29
5350.000	38.62	AV	V	11.94	50.56	54.00	3.44
10480.000	34.11	PK	H	20.42	54.53	68.20	13.67
10480.000	34.75	PK	V	20.42	55.17	68.20	13.03
15720.000	37.42	PK	H	24.82	62.24	74.00	11.76
15720.000	25.63	AV	H	24.82	50.45	54.00	3.55
15720.000	38.19	PK	V	24.82	63.01	74.00	10.99
15720.000	26.04	AV	V	24.82	50.86	54.00	3.14

802.11n ht20:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5180MHz							
5150.000	51.67	PK	H	11.67	63.34	74.00	10.66
5150.000	38.64	AV	H	11.67	50.31	54.00	3.69
5150.000	52.82	PK	V	11.67	64.49	74.00	9.51
5150.000	39.17	AV	V	11.67	50.84	54.00	3.16
10360.000	33.11	PK	H	20.47	53.58	68.20	14.62
10360.000	34.00	PK	V	20.47	54.47	68.20	13.73
15540.000	33.78	PK	H	24.62	58.40	74.00	15.60
15540.000	21.45	AV	H	24.62	46.07	54.00	7.93
15540.000	34.20	PK	V	24.62	58.82	74.00	15.18
15540.000	22.03	AV	V	24.62	46.65	54.00	7.35
Middle Channel: 5200 MHz							
10400.000	33.65	PK	H	20.54	54.19	68.20	14.01
10400.000	34.18	PK	V	20.54	54.72	68.20	13.48
15600.000	36.27	PK	H	24.71	60.98	74.00	13.02
15600.000	24.31	AV	H	24.71	49.02	54.00	4.98
15600.000	36.46	PK	V	24.71	61.17	74.00	12.83
15600.000	24.69	AV	V	24.71	49.40	54.00	4.60
High Channel: 5240 MHz							
5350.000	50.06	PK	H	11.94	62.00	74.00	12.00
5350.000	37.47	AV	H	11.94	49.41	54.00	4.59
5350.000	52.27	PK	V	11.94	64.21	74.00	9.79
5350.000	38.77	AV	V	11.94	50.71	54.00	3.29
10480.000	33.78	PK	H	20.42	54.20	68.20	14.00
10480.000	34.95	PK	V	20.42	55.37	68.20	12.83
15720.000	36.85	PK	H	24.82	61.67	74.00	12.33
15720.000	24.97	AV	H	24.82	49.79	54.00	4.21
15720.000	37.96	PK	V	24.82	62.78	74.00	11.22
15720.000	25.34	AV	V	24.82	50.16	54.00	3.84

802.11ac vht20:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5180MHz							
5150.000	52.56	PK	H	11.67	64.23	74.00	9.77
5150.000	39.06	AV	H	11.67	50.73	54.00	3.27
5150.000	52.62	PK	V	11.67	64.29	74.00	9.71
5150.000	39.42	AV	V	11.67	51.09	54.00	2.91
10360.000	33.74	PK	H	20.47	54.21	68.20	13.99
10360.000	34.45	PK	V	20.47	54.92	68.20	13.28
15540.000	34.10	PK	H	24.62	58.72	74.00	15.28
15540.000	22.84	AV	H	24.62	47.46	54.00	6.54
15540.000	34.18	PK	V	24.62	58.80	74.00	15.20
15540.000	22.16	AV	V	24.62	46.78	54.00	7.22
Middle Channel: 5200 MHz							
10400.000	33.69	PK	H	20.54	54.23	68.20	13.97
10400.000	34.74	PK	V	20.54	55.28	68.20	12.92
15600.000	35.40	PK	H	24.71	60.11	74.00	13.89
15600.000	23.25	AV	H	24.71	47.96	54.00	6.04
15600.000	34.47	PK	V	24.71	59.18	74.00	14.82
15600.000	22.87	AV	V	24.71	47.58	54.00	6.42
High Channel: 5240 MHz							
5350.000	50.78	PK	H	11.94	62.72	74.00	11.28
5350.000	38.63	AV	H	11.94	50.57	54.00	3.43
5350.000	52.47	PK	V	11.94	64.41	74.00	9.59
5350.000	39.16	AV	V	11.94	51.10	54.00	2.90
10480.000	34.56	PK	H	20.42	54.98	68.20	13.22
10480.000	35.67	PK	V	20.42	56.09	68.20	12.11
15720.000	35.76	PK	H	24.82	60.58	74.00	13.42
15720.000	23.89	AV	H	24.82	48.71	54.00	5.29
15720.000	34.13	PK	V	24.82	58.95	74.00	15.05
15720.000	22.91	AV	V	24.82	47.73	54.00	6.27

802.11n ht40:

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	50.19	PK	H	11.67	61.86	74.00	12.14
5150.000	37.90	AV	H	11.67	49.57	54.00	4.43
5150.000	52.26	PK	V	11.67	63.93	74.00	10.07
5150.000	39.32	AV	V	11.67	50.99	54.00	3.01
10380.000	34.95	PK	H	20.51	55.46	68.20	12.74
10380.000	36.70	PK	V	20.51	57.21	68.20	10.99
15570.000	35.55	PK	H	24.67	60.22	74.00	13.78
15570.000	23.36	AV	H	24.67	48.03	54.00	5.97
15570.000	36.21	PK	V	24.67	60.88	74.00	13.12
15570.000	24.29	AV	V	24.67	48.96	54.00	5.04
High Channel: 5230 MHz							
5350.000	50.11	PK	H	11.94	62.05	74.00	11.95
5350.000	37.66	AV	H	11.94	49.60	54.00	4.40
5350.000	53.43	PK	V	11.94	65.37	74.00	8.63
5350.000	38.91	AV	V	11.94	50.85	54.00	3.15
10460.000	33.71	PK	H	20.45	54.16	68.20	14.04
10460.000	35.49	PK	V	20.45	55.94	68.20	12.26
15690.000	36.96	PK	H	24.77	61.73	74.00	12.27
15690.000	24.53	AV	H	24.77	49.30	54.00	4.70
15690.000	36.47	PK	V	24.77	61.24	74.00	12.76
15690.000	24.26	AV	V	24.77	49.03	54.00	4.97

802.11ac vht40:

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	50.06	PK	H	11.67	61.73	74.00	12.27
5150.000	37.76	AV	H	11.67	49.43	54.00	4.57
5150.000	51.77	PK	V	11.67	63.44	74.00	10.56
5150.000	39.28	AV	V	11.67	50.95	54.00	3.05
10380.000	33.96	PK	H	20.51	54.47	68.20	13.73
10380.000	34.16	PK	V	20.51	54.67	68.20	13.53
15570.000	34.54	PK	H	24.67	59.21	74.00	14.79
15570.000	22.31	AV	H	24.67	46.98	54.00	7.02
15570.000	35.31	PK	V	24.67	59.98	74.00	14.02
15570.000	23.71	AV	V	24.67	48.38	54.00	5.62
High Channel: 5230 MHz							
5350.000	50.39	PK	H	11.94	62.33	74.00	11.67
5350.000	37.57	AV	H	11.94	49.51	54.00	4.49
5350.000	53.29	PK	V	11.94	65.23	74.00	8.77
5350.000	38.88	AV	V	11.94	50.82	54.00	3.18
10460.000	34.45	PK	H	20.45	54.90	68.20	13.30
10460.000	34.61	PK	V	20.45	55.06	68.20	13.14
15690.000	33.60	PK	H	24.77	58.37	74.00	15.63
15690.000	21.28	AV	H	24.77	46.05	54.00	7.95
15690.000	34.39	PK	V	24.77	59.16	74.00	14.84
15690.000	22.63	AV	V	24.77	47.40	54.00	6.60

802.11ac vht80:

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	51.67	PK	H	11.67	63.34	74.00	10.66
5150.000	38.15	AV	H	11.67	49.82	54.00	4.18
5150.000	52.86	PK	V	11.67	64.53	74.00	9.47
5150.000	39.25	AV	V	11.67	50.92	54.00	3.08
5350.000	51.68	PK	H	11.94	63.62	74.00	10.38
5350.000	37.68	AV	H	11.94	49.62	54.00	4.38
5350.000	50.78	PK	V	11.94	62.72	74.00	11.28
5350.000	38.61	AV	V	11.94	50.55	54.00	3.45
10420.000	34.29	PK	H	20.51	54.80	68.20	13.40
10420.000	35.66	PK	V	20.51	56.17	68.20	12.03
15630.000	37.53	PK	H	24.73	62.26	74.00	11.74
15630.000	25.32	AV	H	24.73	50.05	54.00	3.95
15630.000	38.94	PK	V	24.73	63.67	74.00	10.33
15630.000	25.77	AV	V	24.73	50.50	54.00	3.50

5250-5350MHz**802.11a:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector					
Low Channel: 5260MHz							
5150.000	49.87	PK	H	11.67	61.54	74.00	12.46
5150.000	37.80	AV	H	11.67	49.47	54.00	4.53
5150.000	52.34	PK	V	11.67	64.01	74.00	9.99
5150.000	39.20	AV	V	11.67	50.87	54.00	3.13
10520.000	34.05	PK	H	20.53	54.58	68.20	13.62
10520.000	36.71	PK	V	20.53	57.24	68.20	10.96
15780.000	36.91	PK	H	24.92	61.83	74.00	12.17
15780.000	24.99	AV	H	24.92	49.91	54.00	4.09
15780.000	37.44	PK	V	24.92	62.36	74.00	11.64
15780.000	25.68	AV	V	24.92	50.60	54.00	3.40
Middle Channel: 5280 MHz							
10560.000	35.48	PK	H	20.81	56.29	68.20	11.91
10560.000	36.29	PK	V	20.81	57.10	68.20	11.10
15840.000	37.00	PK	H	25.12	62.12	74.00	11.88
15840.000	25.48	AV	H	25.12	50.60	54.00	3.40
15840.000	38.10	PK	V	25.12	63.22	74.00	10.78
15840.000	26.03	AV	V	25.12	51.15	54.00	2.85
High Channel: 5320 MHz							
5350.000	50.30	PK	H	11.94	62.24	74.00	11.76
5350.000	37.64	AV	H	11.94	49.58	54.00	4.42
5350.000	54.27	PK	V	11.94	66.21	74.00	7.79
5350.000	39.96	AV	V	11.94	51.90	54.00	2.10
10640.000	34.09	PK	H	21.13	55.22	74.00	18.78
10640.000	22.45	AV	H	21.13	43.58	54.00	10.42
10640.000	35.66	PK	V	21.13	56.79	74.00	17.21
10640.000	22.09	AV	V	21.13	43.22	54.00	10.78
15960.000	36.42	PK	H	25.24	61.66	74.00	12.34
15960.000	24.31	AV	H	25.24	49.55	54.00	4.45
15960.000	37.81	PK	V	25.24	63.05	74.00	10.95
15960.000	25.77	AV	V	25.24	51.01	54.00	2.99

802.11n ht20:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5260MHz							
5150.000	49.62	PK	H	11.67	61.29	74.00	12.71
5150.000	37.63	AV	H	11.67	49.30	54.00	4.70
5150.000	52.52	PK	V	11.67	64.19	74.00	9.81
5150.000	39.25	AV	V	11.67	50.92	54.00	3.08
10520.000	34.99	PK	H	20.53	55.52	68.20	12.68
10520.000	35.07	PK	V	20.53	55.60	68.20	12.60
15780.000	35.58	PK	H	24.92	60.50	74.00	13.50
15780.000	23.66	AV	H	24.92	48.58	54.00	5.42
15780.000	36.83	PK	V	24.92	61.75	74.00	12.25
15780.000	24.90	AV	V	24.92	49.82	54.00	4.18
Middle Channel: 5280 MHz							
10560.000	34.10	PK	H	20.81	54.91	68.20	13.29
10560.000	36.52	PK	V	20.81	57.33	68.20	10.87
15840.000	35.12	PK	H	25.12	60.24	74.00	13.76
15840.000	23.35	AV	H	25.12	48.47	54.00	5.53
15840.000	36.85	PK	V	25.12	61.97	74.00	12.03
15840.000	24.54	AV	V	25.12	49.66	54.00	4.34
High Channel: 5320 MHz							
5350.000	50.23	PK	H	11.94	62.17	74.00	11.83
5350.000	37.41	AV	H	11.94	49.35	54.00	4.65
5350.000	56.54	PK	V	11.94	68.48	74.00	5.52
5350.000	38.88	AV	V	11.94	50.82	54.00	3.18
10640.000	35.49	PK	H	21.13	56.62	74.00	17.38
10640.000	23.09	AV	H	21.13	44.22	54.00	9.78
10640.000	36.89	PK	V	21.13	58.02	74.00	15.98
10640.000	24.81	AV	V	21.13	45.94	54.00	8.06
15960.000	36.42	PK	H	25.24	61.66	74.00	12.34
15960.000	24.70	AV	H	25.24	49.94	54.00	4.06
15960.000	37.64	PK	V	25.24	62.88	74.00	11.12
15960.000	25.76	AV	V	25.24	51.00	54.00	3.00

802.11n ht40:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5270 MHz							
5150.000	50.63	PK	H	11.67	62.30	74.00	11.70
5150.000	37.46	AV	H	11.67	49.13	54.00	4.87
5150.000	52.37	PK	V	11.67	64.04	74.00	9.96
5150.000	39.16	AV	V	11.67	50.83	54.00	3.17
10540.000	34.03	PK	H	20.68	54.71	68.20	13.49
10540.000	35.78	PK	V	20.68	56.46	68.20	11.74
15810.000	36.73	PK	H	25.00	61.73	74.00	12.27
15810.000	24.37	AV	H	25.00	49.37	54.00	4.63
15810.000	37.61	PK	V	25.00	62.61	74.00	11.39
15810.000	25.69	AV	V	25.00	50.69	54.00	3.31
High Channel: 5310 MHz							
5350.000	50.54	PK	H	11.94	62.48	74.00	11.52
5350.000	37.63	AV	H	11.94	49.57	54.00	4.43
5350.000	55.31	PK	V	11.94	67.25	74.00	6.75
5350.000	38.75	AV	V	11.94	50.69	54.00	3.31
10620.000	34.29	PK	H	21.11	55.40	74.00	18.60
10620.000	22.19	AV	H	21.11	43.30	54.00	10.70
10620.000	34.13	PK	V	21.11	55.24	74.00	18.76
10620.000	22.02	AV	V	21.11	43.13	54.00	10.87
15930.000	35.38	PK	H	25.30	60.68	74.00	13.32
15930.000	23.43	AV	H	25.30	48.73	54.00	5.27
15930.000	36.96	PK	V	25.30	62.26	74.00	11.74
15930.000	24.89	AV	V	25.30	50.19	54.00	3.81

802.11ac vht20:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5260MHz							
5150.000	50.73	PK	H	11.67	62.40	74.00	11.60
5150.000	38.00	AV	H	11.67	49.67	54.00	4.33
5150.000	52.67	PK	V	11.67	64.34	74.00	9.66
5150.000	38.86	AV	V	11.67	50.53	54.00	3.47
10520.000	33.31	PK	H	20.53	53.84	68.20	14.36
10520.000	34.83	PK	V	20.53	55.36	68.20	12.84
15780.000	34.72	PK	H	24.92	59.64	74.00	14.36
15780.000	22.13	AV	H	24.92	47.05	54.00	6.95
15780.000	35.95	PK	V	24.92	60.87	74.00	13.13
15780.000	23.02	AV	V	24.92	47.94	54.00	6.06
Middle Channel: 5280 MHz							
10560.000	33.21	PK	H	20.81	54.02	68.20	14.18
10560.000	34.24	PK	V	20.81	55.05	68.20	13.15
15840.000	33.41	PK	H	25.12	58.53	74.00	15.47
15840.000	21.14	AV	H	25.12	46.26	54.00	7.74
15840.000	34.99	PK	V	25.12	60.11	74.00	13.89
15840.000	22.02	AV	V	25.12	47.14	54.00	6.86
High Channel: 5320 MHz							
5350.000	50.00	PK	H	11.94	61.94	74.00	12.06
5350.000	37.30	AV	H	11.94	49.24	54.00	4.76
5350.000	56.27	PK	V	11.94	68.21	74.00	5.79
5350.000	39.29	AV	V	11.94	51.23	54.00	2.77
10640.000	34.35	PK	H	21.13	55.48	74.00	18.52
10640.000	22.29	AV	H	21.13	43.42	54.00	10.58
10640.000	33.09	PK	V	21.13	54.22	74.00	19.78
10640.000	21.88	AV	V	21.13	43.01	54.00	10.99
15960.000	34.78	PK	H	25.24	60.02	74.00	13.98
15960.000	22.28	AV	H	25.24	47.52	54.00	6.48
15960.000	34.98	PK	V	25.24	60.22	74.00	13.78
15960.000	22.85	AV	V	25.24	48.09	54.00	5.91

802.11ac vht40:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5270 MHz							
5150.000	51.62	PK	H	11.67	63.29	74.00	10.71
5150.000	37.90	AV	H	11.67	49.57	54.00	4.43
5150.000	50.98	PK	V	11.67	62.65	74.00	11.35
5150.000	38.12	AV	V	11.67	49.79	54.00	4.21
10540.000	33.45	PK	H	20.68	54.13	68.20	14.07
10540.000	34.74	PK	V	20.68	55.42	68.20	12.78
15810.000	33.33	PK	H	25.00	58.33	74.00	15.67
15810.000	21.03	AV	H	25.00	46.03	54.00	7.97
15810.000	34.57	PK	V	25.00	59.57	74.00	14.43
15810.000	22.03	AV	V	25.00	47.03	54.00	6.97
High Channel: 5310 MHz							
5350.000	51.17	PK	H	11.94	63.11	74.00	10.89
5350.000	38.11	AV	H	11.94	50.05	54.00	3.95
5350.000	55.04	PK	V	11.94	66.98	74.00	7.02
5350.000	38.41	AV	V	11.94	50.35	54.00	3.65
10620.000	34.46	PK	H	21.11	55.57	74.00	18.43
10620.000	22.85	AV	H	21.11	43.96	54.00	10.04
10620.000	34.67	PK	V	21.11	55.78	74.00	18.22
10620.000	22.32	AV	V	21.11	43.43	54.00	10.57
15930.000	35.41	PK	H	25.30	60.71	74.00	13.29
15930.000	23.84	AV	H	25.30	49.14	54.00	4.86
15930.000	34.74	PK	V	25.30	60.04	74.00	13.96
15930.000	22.86	AV	V	25.30	48.16	54.00	5.84

802.11ac vht80:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5290 MHz							
5150.000	51.22	PK	H	11.67	62.89	74.00	11.11
5150.000	37.94	AV	H	11.67	49.61	54.00	4.39
5150.000	52.30	PK	V	11.67	63.97	74.00	10.03
5150.000	39.26	AV	V	11.67	50.93	54.00	3.07
5350.000	49.80	PK	H	11.94	61.74	74.00	12.26
5350.000	37.43	AV	H	11.94	49.37	54.00	4.63
5350.000	53.63	PK	V	11.94	65.57	74.00	8.43
5350.000	38.90	AV	V	11.94	50.84	54.00	3.16
10580.000	33.36	PK	H	20.96	54.32	68.20	13.88
10580.000	34.93	PK	V	20.96	55.89	68.20	12.31
15870.000	36.31	PK	H	25.23	61.54	74.00	12.46
15870.000	24.47	AV	H	25.23	49.70	54.00	4.30
15870.000	37.56	PK	V	25.23	62.79	74.00	11.21
15870.000	25.34	AV	V	25.23	50.57	54.00	3.43

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

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5500MHz							
5470.000	50.92	PK	H	11.84	62.76	68.20	5.44
5470.000	52.34	PK	V	11.84	64.18	68.20	4.02
11000.000	34.39	PK	H	21.53	55.92	74.00	18.08
11000.000	22.65	AV	H	21.53	44.18	54.00	9.82
11000.000	34.44	PK	V	21.53	55.97	74.00	18.03
11000.000	23.65	AV	V	21.53	45.18	54.00	8.82
16500.000	33.05	PK	H	25.93	58.98	68.20	9.22
16500.000	33.49	PK	V	25.93	59.42	68.20	8.78
Middle Channel: 5580 MHz							
11160.000	33.12	PK	H	21.38	54.50	74.00	19.50
11160.000	21.02	AV	H	21.38	42.40	54.00	11.60
11160.000	34.04	PK	V	21.38	55.42	74.00	18.58
11160.000	23.00	AV	V	21.38	44.38	54.00	9.62
16740.000	35.51	PK	H	26.59	62.10	68.20	6.10
16740.000	36.92	PK	V	26.59	63.51	68.20	4.69
High Channel: 5700 MHz							
5725.000	50.91	PK	H	12.57	63.48	68.20	4.72
5725.000	52.33	PK	V	12.57	64.90	68.20	3.30
11400.000	33.33	PK	H	21.91	55.24	74.00	18.76
11400.000	21.68	AV	H	21.91	43.59	54.00	10.41
11400.000	34.23	PK	V	21.91	56.14	74.00	17.86
11400.000	22.61	AV	V	21.91	44.52	54.00	9.48
17100.000	35.02	PK	H	28.51	63.53	68.20	4.67
17100.000	34.94	PK	V	28.51	63.45	68.20	4.75
Cross Channel: 5720 MHz							
11440.000	33.77	PK	H	21.73	55.50	74.00	18.50
11440.000	21.65	AV	H	21.73	43.38	54.00	10.62
11440.000	34.02	PK	V	21.73	55.75	74.00	18.25
11440.000	21.65	AV	V	21.73	43.38	54.00	10.62
17160.000	35.55	PK	H	28.56	64.11	68.20	4.09
17160.000	35.79	PK	V	28.56	64.35	68.20	3.85

802.11n ht20:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5500MHz							
5470.000	51.20	PK	H	11.84	63.04	68.20	5.16
5470.000	51.51	PK	V	11.84	63.35	68.20	4.85
11000.000	33.79	PK	H	21.53	55.32	74.00	18.68
11000.000	21.07	AV	H	21.53	42.60	54.00	11.40
11000.000	33.43	PK	V	21.53	54.96	74.00	19.04
11000.000	21.72	AV	V	21.53	43.25	54.00	10.75
16500.000	36.49	PK	H	25.93	62.42	68.20	5.78
16500.000	37.20	PK	V	25.93	63.13	68.20	5.07
Middle Channel: 5580 MHz							
11160.000	33.15	PK	H	21.38	54.53	74.00	19.47
11160.000	21.96	AV	H	21.38	43.34	54.00	10.66
11160.000	33.87	PK	V	21.38	55.25	74.00	18.75
11160.000	21.61	AV	V	21.38	42.99	54.00	11.01
16740.000	35.45	PK	H	26.59	62.04	68.20	6.16
16740.000	36.64	PK	V	26.59	63.23	68.20	4.97
High Channel: 5700 MHz							
5725.000	50.97	PK	H	12.57	63.54	68.20	4.66
5725.000	51.72	PK	V	12.57	64.29	68.20	3.91
11400.000	33.75	PK	H	21.91	55.66	74.00	18.34
11400.000	21.00	AV	H	21.91	42.91	54.00	11.09
11400.000	34.07	PK	V	21.91	55.98	74.00	18.02
11400.000	22.30	AV	V	21.91	44.21	54.00	9.79
17100.000	34.72	PK	H	28.51	63.23	68.20	4.97
17100.000	34.62	PK	V	28.51	63.13	68.20	5.07
Cross Channel: 5720 MHz							
11440.000	35.11	PK	H	21.73	56.84	74.00	17.16
11440.000	23.02	AV	H	21.73	44.75	54.00	9.25
11440.000	34.56	PK	V	21.73	56.29	74.00	17.71
11440.000	22.31	AV	V	21.73	44.04	54.00	9.96
17160.000	34.85	PK	H	28.56	63.41	68.20	4.79
17160.000	35.66	PK	V	28.56	64.22	68.20	3.98

802.11n ht40:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5510 MHz							
5470.000	52.27	PK	H	11.84	64.11	68.20	4.09
5470.000	52.36	PK	V	11.84	64.20	68.20	4.00
11020.000	35.60	PK	H	21.52	57.12	74.00	16.88
11020.000	23.79	AV	H	21.52	45.31	54.00	8.69
11020.000	34.42	PK	V	21.52	55.94	74.00	18.06
11020.000	22.19	AV	V	21.52	43.71	54.00	10.29
16530.000	35.03	PK	H	26.18	61.21	68.20	6.99
16530.000	36.50	PK	V	26.18	62.68	68.20	5.52
Middle Channel: 5550 MHz							
11100.000	33.56	PK	H	21.47	55.03	74.00	18.97
11100.000	21.00	AV	H	21.47	42.47	54.00	11.53
11100.000	33.84	PK	V	21.47	55.31	74.00	18.69
11100.000	21.41	AV	V	21.47	42.88	54.00	11.12
16650.000	34.56	PK	H	26.67	61.23	68.20	6.97
16650.000	35.82	PK	V	26.67	62.49	68.20	5.71
High Channel: 5670 MHz							
5725.000	51.52	PK	H	12.57	64.09	68.20	4.11
5725.000	52.38	PK	V	12.57	64.95	68.20	3.25
11340.000	34.89	PK	H	21.86	56.75	74.00	17.25
11340.000	22.59	AV	H	21.86	44.45	54.00	9.55
11340.000	34.01	PK	V	21.86	55.87	74.00	18.13
11340.000	22.49	AV	V	21.86	44.35	54.00	9.65
17010.000	34.74	PK	H	28.12	62.86	68.20	5.34
17010.000	35.39	PK	V	28.12	63.51	68.20	4.69

802.11ac vht20:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5500MHz							
5470.000	51.22	PK	H	11.84	63.06	68.20	5.14
5470.000	51.38	PK	V	11.84	63.22	68.20	4.98
11000.000	34.90	PK	H	21.53	56.43	74.00	17.57
11000.000	21.56	AV	H	21.53	43.09	54.00	10.91
11000.000	33.02	PK	V	21.53	54.55	74.00	19.45
11000.000	20.90	AV	V	21.53	42.43	54.00	11.57
16500.000	34.78	PK	H	25.93	60.71	68.20	7.49
16500.000	33.56	PK	V	25.93	59.49	68.20	8.71
Middle Channel: 5580 MHz							
11160.000	33.47	PK	H	21.38	54.85	74.00	19.15
11160.000	21.02	AV	H	21.38	42.40	54.00	11.60
11160.000	34.53	PK	V	21.38	55.91	74.00	18.09
11160.000	22.03	AV	V	21.38	43.41	54.00	10.59
16740.000	34.45	PK	H	26.59	61.04	68.20	7.16
16740.000	33.87	PK	V	26.59	60.46	68.20	7.74
High Channel: 5700 MHz							
5725.000	49.91	PK	H	12.57	62.48	68.20	5.72
5725.000	50.61	PK	V	12.57	63.18	68.20	5.02
11400.000	33.46	PK	H	21.91	55.37	74.00	18.63
11400.000	21.68	AV	H	21.91	43.59	54.00	10.41
11400.000	34.26	PK	V	21.91	56.17	74.00	17.83
11400.000	22.03	AV	V	21.91	43.94	54.00	10.06
17100.000	34.36	PK	H	28.51	62.87	68.20	5.33
17100.000	33.39	PK	V	28.51	61.90	68.20	6.30
Cross Channel: 5720 MHz							
11440.000	34.21	PK	H	21.73	55.94	74.00	18.06
11440.000	22.31	AV	H	21.73	44.04	54.00	9.96
11440.000	35.02	PK	V	21.73	56.75	74.00	17.25
11440.000	23.36	AV	V	21.73	45.09	54.00	8.91
17160.000	34.78	PK	H	28.56	63.34	68.20	4.86
17160.000	34.69	PK	V	28.56	63.25	68.20	4.95

802.11ac vht40:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5510 MHz							
5470.000	51.32	PK	H	11.84	63.16	68.20	5.04
5470.000	51.37	PK	V	11.84	63.21	68.20	4.99
11020.000	33.20	PK	H	21.52	54.72	74.00	19.28
11020.000	20.76	AV	H	21.52	42.28	54.00	11.72
11020.000	33.69	PK	V	21.52	55.21	74.00	18.79
11020.000	20.75	AV	V	21.52	42.27	54.00	11.73
16530.000	34.36	PK	H	26.18	60.54	68.20	7.66
16530.000	34.91	PK	V	26.18	61.09	68.20	7.11
Middle Channel: 5550 MHz							
11100.000	34.00	PK	H	21.47	55.47	74.00	18.53
11100.000	21.23	AV	H	21.47	42.70	54.00	11.30
11100.000	33.17	PK	V	21.47	54.64	74.00	19.36
11100.000	21.03	AV	V	21.47	42.50	54.00	11.50
16650.000	34.35	PK	H	26.67	61.02	68.20	7.18
16650.000	34.12	PK	V	26.67	60.79	68.20	7.41
High Channel: 5670 MHz							
5725.000	50.65	PK	H	12.57	63.22	68.20	4.98
5725.000	50.81	PK	V	12.57	63.38	68.20	4.82
11340.000	33.09	PK	H	21.86	54.95	74.00	19.05
11340.000	21.10	AV	H	21.86	42.96	54.00	11.04
11340.000	33.45	PK	V	21.86	55.31	74.00	18.69
11340.000	21.43	AV	V	21.86	43.29	54.00	10.71
17010.000	34.90	PK	H	28.12	63.02	68.20	5.18
17010.000	33.12	PK	V	28.12	61.24	68.20	6.96

802.11ac vht80:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel:5530 MHz							
5470.000	51.89	PK	H	11.84	63.73	68.20	4.47
5470.000	52.29	PK	V	11.84	64.13	68.20	4.07
11060.000	33.93	PK	H	21.49	55.42	74.00	18.58
11060.000	21.77	AV	H	21.49	43.26	54.00	10.74
11060.000	33.55	PK	V	21.49	55.04	74.00	18.96
11060.000	21.44	AV	V	21.49	42.93	54.00	11.07
16590.000	36.04	PK	H	26.68	62.72	68.20	5.48
16590.000	36.43	PK	V	26.68	63.11	68.20	5.09
High Channel:5610 MHz							
5725.000	52.28	PK	H	12.57	64.85	68.20	3.35
5725.000	52.46	PK	V	12.57	65.03	68.20	3.17
11220.000	33.96	PK	H	21.43	55.39	74.00	18.61
11220.000	21.76	AV	H	21.43	43.19	54.00	10.81
11220.000	33.29	PK	V	21.43	54.72	74.00	19.28
11220.000	21.04	AV	V	21.43	42.47	54.00	11.53
16830.000	34.69	PK	H	26.94	61.63	68.20	6.57
16830.000	35.09	PK	V	26.94	62.03	68.20	6.17
Cross Channel: 5690 MHz							
11380.000	34.63	PK	H	21.89	56.52	74.00	17.48
11380.000	22.12	AV	H	21.89	44.01	54.00	9.99
11380.000	35.09	PK	V	21.89	56.98	74.00	17.02
11380.000	23.30	AV	V	21.89	45.19	54.00	8.81
17070.000	33.55	PK	H	28.38	61.93	68.20	6.27
17070.000	34.71	PK	V	28.38	63.09	68.20	5.11

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: 5745MHz							
11490.000	35.96	PK	H	21.49	57.45	74.00	16.55
11490.000	23.91	AV	H	21.49	45.40	54.00	8.60
11490.000	34.87	PK	V	21.49	56.36	74.00	17.64
11490.000	22.52	AV	V	21.49	44.01	54.00	9.99
17235.000	35.11	PK	H	28.71	63.82	68.20	4.38
17235.000	35.48	PK	V	28.71	64.19	68.20	4.01
Middle Channel: 5785 MHz							
11570.000	33.27	PK	H	21.71	54.98	74.00	19.02
11570.000	21.49	AV	H	21.71	43.20	54.00	10.80
11570.000	33.00	PK	V	21.71	54.71	74.00	19.29
11570.000	21.55	AV	V	21.71	43.26	54.00	10.74
17355.000	35.26	PK	H	29.35	64.61	68.20	3.59
17355.000	35.20	PK	V	29.35	64.55	68.20	3.65
High Channel: 5825 MHz							
11650.000	34.88	PK	H	22.04	56.92	74.00	17.08
11650.000	22.13	AV	H	22.04	44.17	54.00	9.83
11650.000	35.32	PK	V	22.04	57.36	74.00	16.64
11650.000	23.27	AV	V	22.04	45.31	54.00	8.69
17475.000	34.64	PK	H	29.89	64.53	68.20	3.67
17475.000	34.40	PK	V	29.89	64.29	68.20	3.91

802.11n ht20:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5745MHz							
11490.000	35.46	PK	H	21.49	56.95	74.00	17.05
11490.000	23.25	AV	H	21.49	44.74	54.00	9.26
11490.000	34.38	PK	V	21.49	55.87	74.00	18.13
11490.000	22.94	AV	V	21.49	44.43	54.00	9.57
17235.000	34.16	PK	H	28.71	62.87	68.20	5.33
17235.000	34.71	PK	V	28.71	63.42	68.20	4.78
Middle Channel: 5785 MHz							
11570.000	33.07	PK	H	21.71	54.78	74.00	19.22
11570.000	21.96	AV	H	21.71	43.67	54.00	10.33
11570.000	33.34	PK	V	21.71	55.05	74.00	18.95
11570.000	21.42	AV	V	21.71	43.13	54.00	10.87
17355.000	34.88	PK	H	29.35	64.23	68.20	3.97
17355.000	35.38	PK	V	29.35	64.73	68.20	3.47
High Channel: 5825 MHz							
11650.000	33.96	PK	H	22.04	56.00	74.00	18.00
11650.000	21.33	AV	H	22.04	43.37	54.00	10.63
11650.000	34.36	PK	V	22.04	56.40	74.00	17.60
11650.000	22.35	AV	V	22.04	44.39	54.00	9.61
17475.000	34.66	PK	H	29.89	64.55	68.20	3.65
17475.000	34.54	PK	V	29.89	64.43	68.20	3.77

802.11n ht40:

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	35.33	PK	H	21.48	56.81	74.00	17.19
11510.000	23.63	AV	H	21.48	45.11	54.00	8.89
11510.000	34.23	PK	V	21.48	55.71	74.00	18.29
11510.000	22.72	AV	V	21.48	44.20	54.00	9.80
17265.000	34.89	PK	H	28.79	63.68	68.20	4.52
17265.000	35.16	PK	V	28.79	63.95	68.20	4.25
High Channel: 5795 MHz							
11590.000	34.91	PK	H	21.78	56.69	74.00	17.31
11590.000	22.67	AV	H	21.78	44.45	54.00	9.55
11590.000	35.33	PK	V	21.78	57.11	74.00	16.89
11590.000	23.39	AV	V	21.78	45.17	54.00	8.83
17385.000	34.42	PK	H	29.59	64.01	68.20	4.19
17385.000	34.81	PK	V	29.59	64.40	68.20	3.80

802.11ac vht20:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5745MHz							
11490.000	34.57	PK	H	21.49	56.06	74.00	17.94
11490.000	22.21	AV	H	21.49	43.70	54.00	10.30
11490.000	34.65	PK	V	21.49	56.14	74.00	17.86
11490.000	22.03	AV	V	21.49	43.52	54.00	10.48
17235.000	35.21	PK	H	28.71	63.92	68.20	4.28
17235.000	34.77	PK	V	28.71	63.48	68.20	4.72
Middle Channel: 5785 MHz							
11570.000	35.21	PK	H	21.71	56.92	74.00	17.08
11570.000	23.08	AV	H	21.71	44.79	54.00	9.21
11570.000	34.75	PK	V	21.71	56.46	74.00	17.54
11570.000	22.19	AV	V	21.71	43.90	54.00	10.10
17355.000	34.25	PK	H	29.35	63.60	68.20	4.60
17355.000	33.96	PK	V	29.35	63.31	68.20	4.89
High Channel: 5825 MHz							
11650.000	34.74	PK	H	22.04	56.78	74.00	17.22
11650.000	22.01	AV	H	22.04	44.05	54.00	9.95
11650.000	35.23	PK	V	22.04	57.27	74.00	16.73
11650.000	23.20	AV	V	22.04	45.24	54.00	8.76
17475.000	35.02	PK	H	29.89	64.91	68.20	3.29
17475.000	34.87	PK	V	29.89	64.76	68.20	3.44

802.11ac vht40:

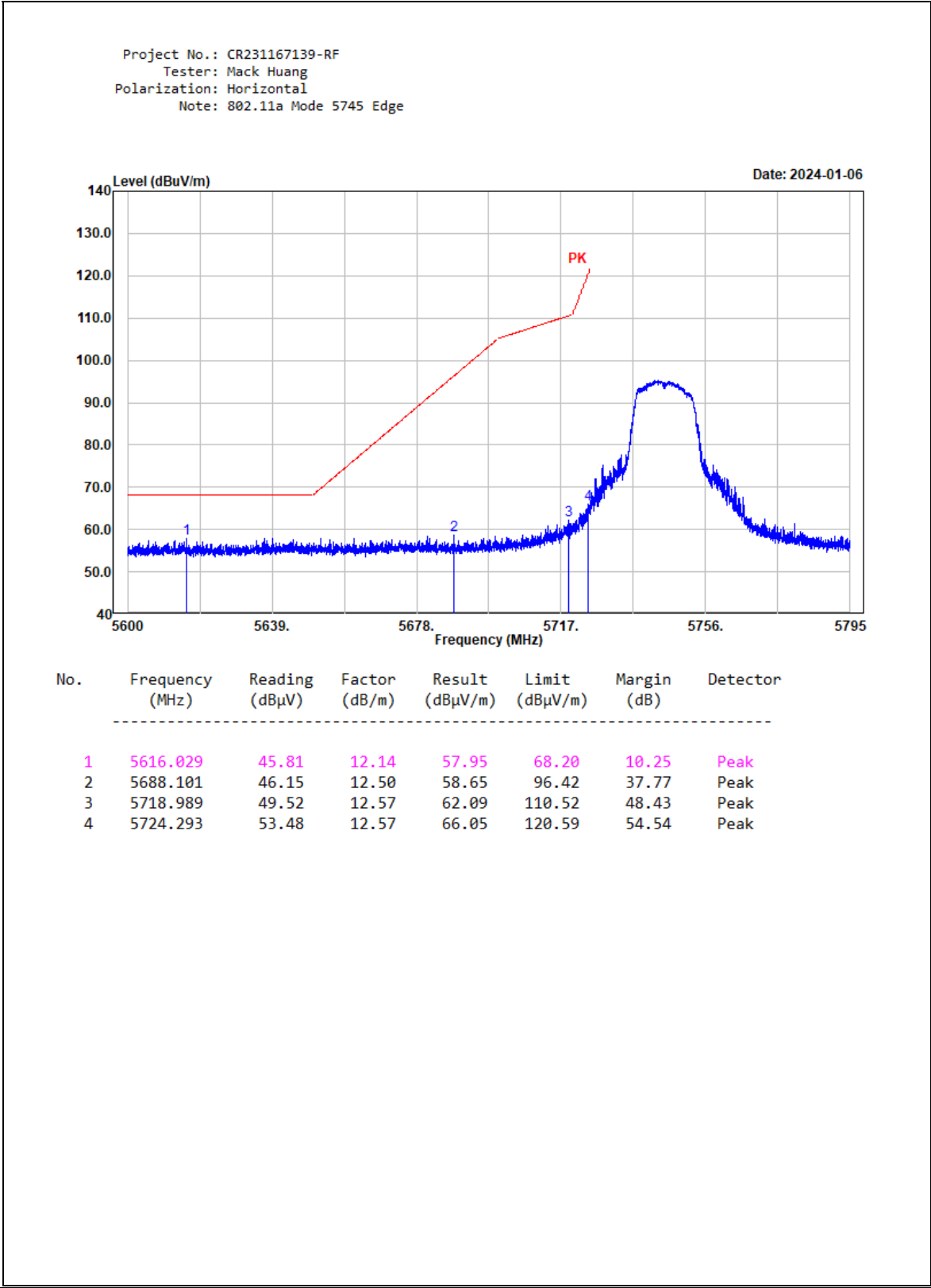
Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5755 MHz							
11510.000	35.22	PK	H	21.48	56.70	74.00	17.30
11510.000	23.01	AV	H	21.48	44.49	54.00	9.51
11510.000	34.36	PK	V	21.48	55.84	74.00	18.16
11510.000	22.41	AV	V	21.48	43.89	54.00	10.11
17265.000	34.56	PK	H	28.79	63.35	68.20	4.85
17265.000	34.33	PK	V	28.79	63.12	68.20	5.08
High Channel: 5795 MHz							
11590.000	33.04	PK	H	21.78	54.82	74.00	19.18
11590.000	21.24	AV	H	21.78	43.02	54.00	10.98
11590.000	34.50	PK	V	21.78	56.28	74.00	17.72
11590.000	22.93	AV	V	21.78	44.71	54.00	9.29
17385.000	34.72	PK	H	29.59	64.31	68.20	3.89
17385.000	34.66	PK	V	29.59	64.25	68.20	3.95

802.11ac vht80:

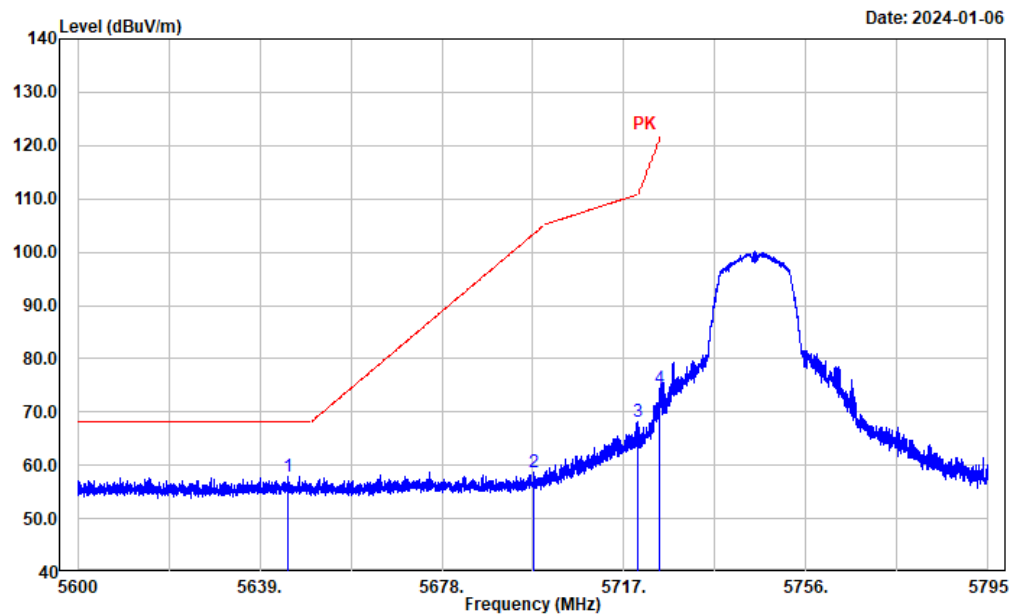
Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5775 MHz							
11550.000	33.44	PK	H	21.63	55.07	74.00	18.93
11550.000	21.01	AV	H	21.63	42.64	54.00	11.36
11550.000	34.23	PK	V	21.63	55.86	74.00	18.14
11550.000	22.40	AV	V	21.63	44.03	54.00	9.97
17325.000	35.01	PK	H	29.11	64.12	68.20	4.08
17325.000	35.58	PK	V	29.11	64.69	68.20	3.51

5725-5850MHz Band Edge Test plots

802.11a mode 5745MHz:



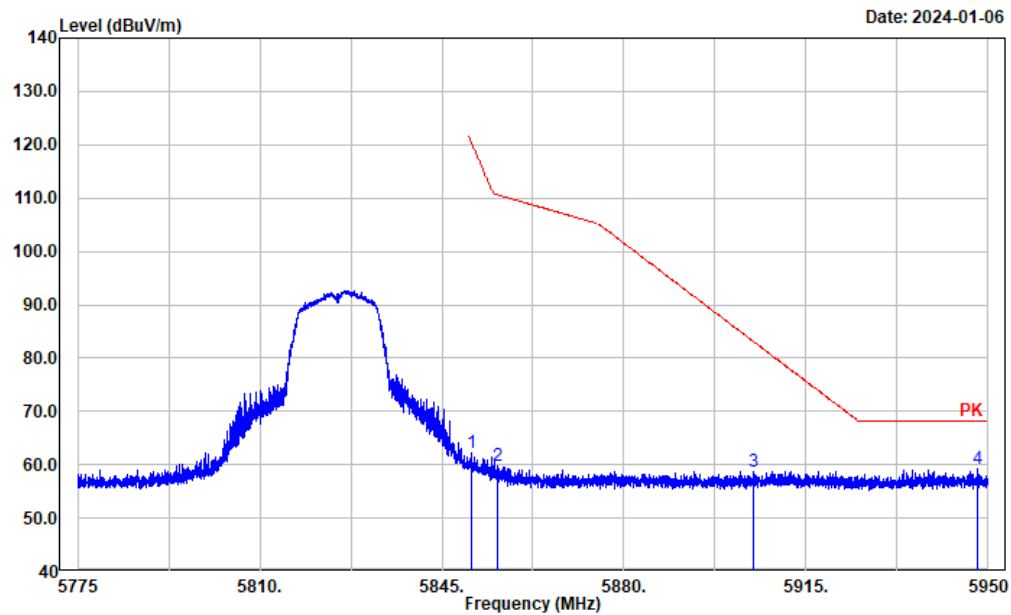
Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Vertical
Note: 802.11a Mode 5745 Edge



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5645.084	45.58	12.29	57.87	68.20	10.33	Peak
2	5697.656	46.28	12.54	58.82	103.47	44.65	Peak
3	5719.925	55.55	12.57	68.12	110.78	42.66	Peak
4	5724.527	61.72	12.57	74.29	121.12	46.83	Peak

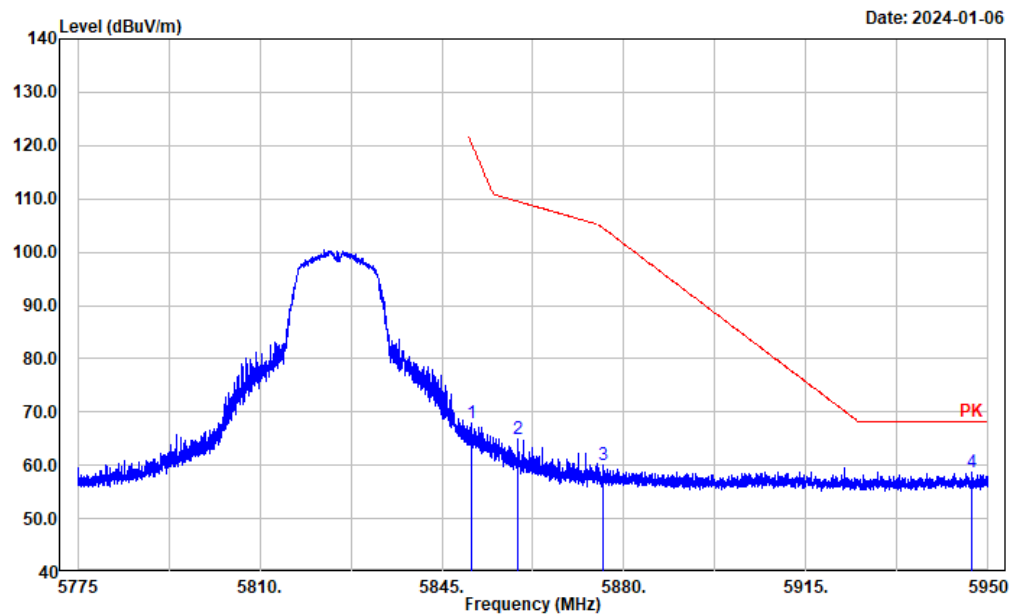
802.11a mode 5825MHz:

Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Horizontal
Note: 802.11a Mode 5825 Edge



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5850.740	49.36	12.77	62.13	120.51	58.38	Peak
2	5855.815	46.85	12.80	59.65	110.57	50.92	Peak
3	5904.990	45.78	13.02	58.80	82.97	24.17	Peak
4	5947.865	46.20	13.03	59.23	68.20	8.97	Peak

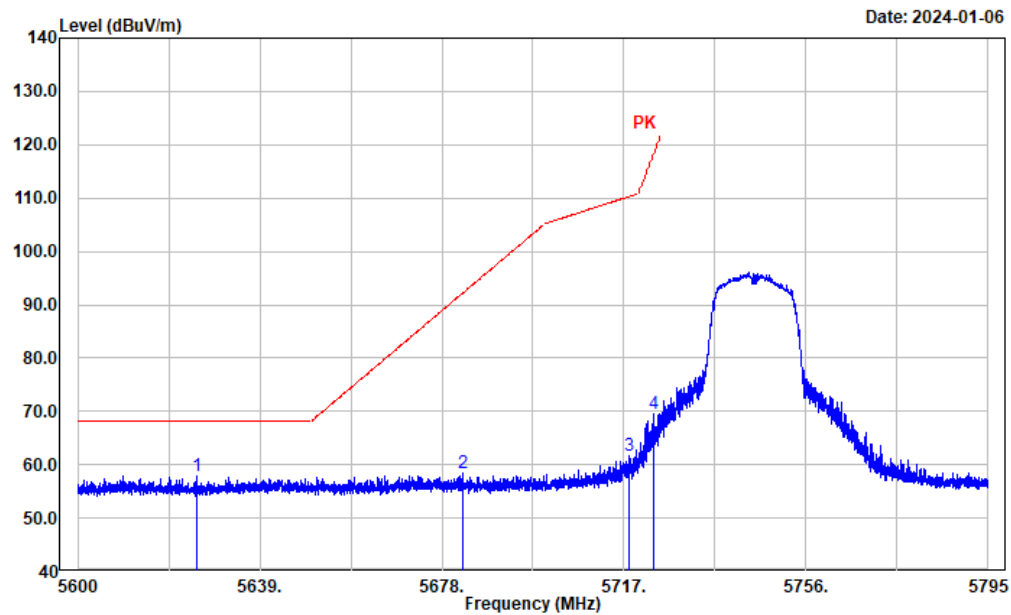
Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Vertical
Note: 802.11a Mode 5825 Edge



No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1	5850.810	55.27	12.77	68.04	120.35	52.31	Peak
2	5859.630	52.02	12.82	64.84	109.50	44.66	Peak
3	5876.080	47.20	12.89	60.09	104.40	44.31	Peak
4	5946.780	45.72	13.03	58.75	68.20	9.45	Peak

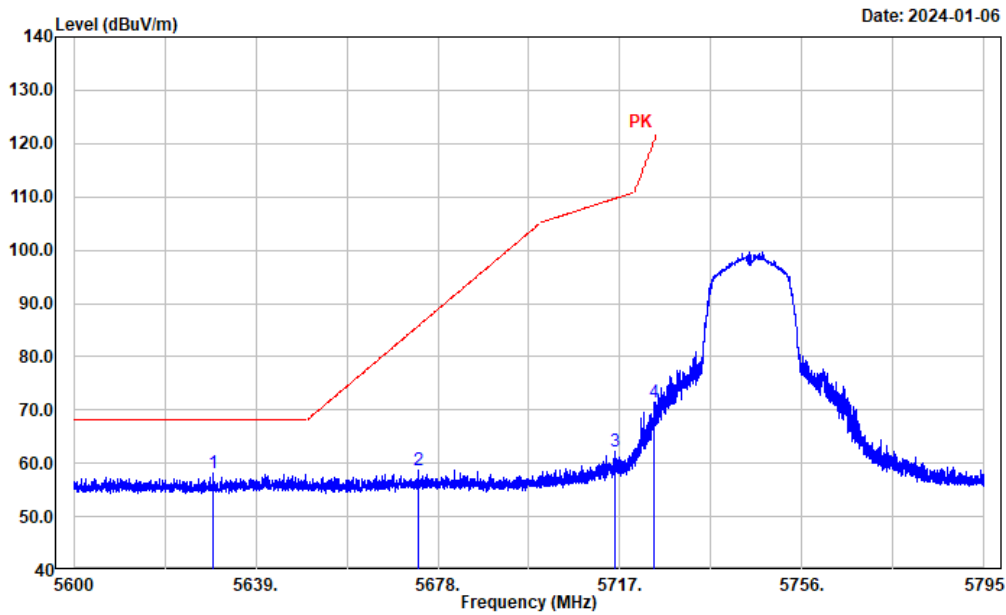
802.11n ht20 5745MHz:

Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Horizontal
Note: 802.11n ht20 Mode 5745 Edge



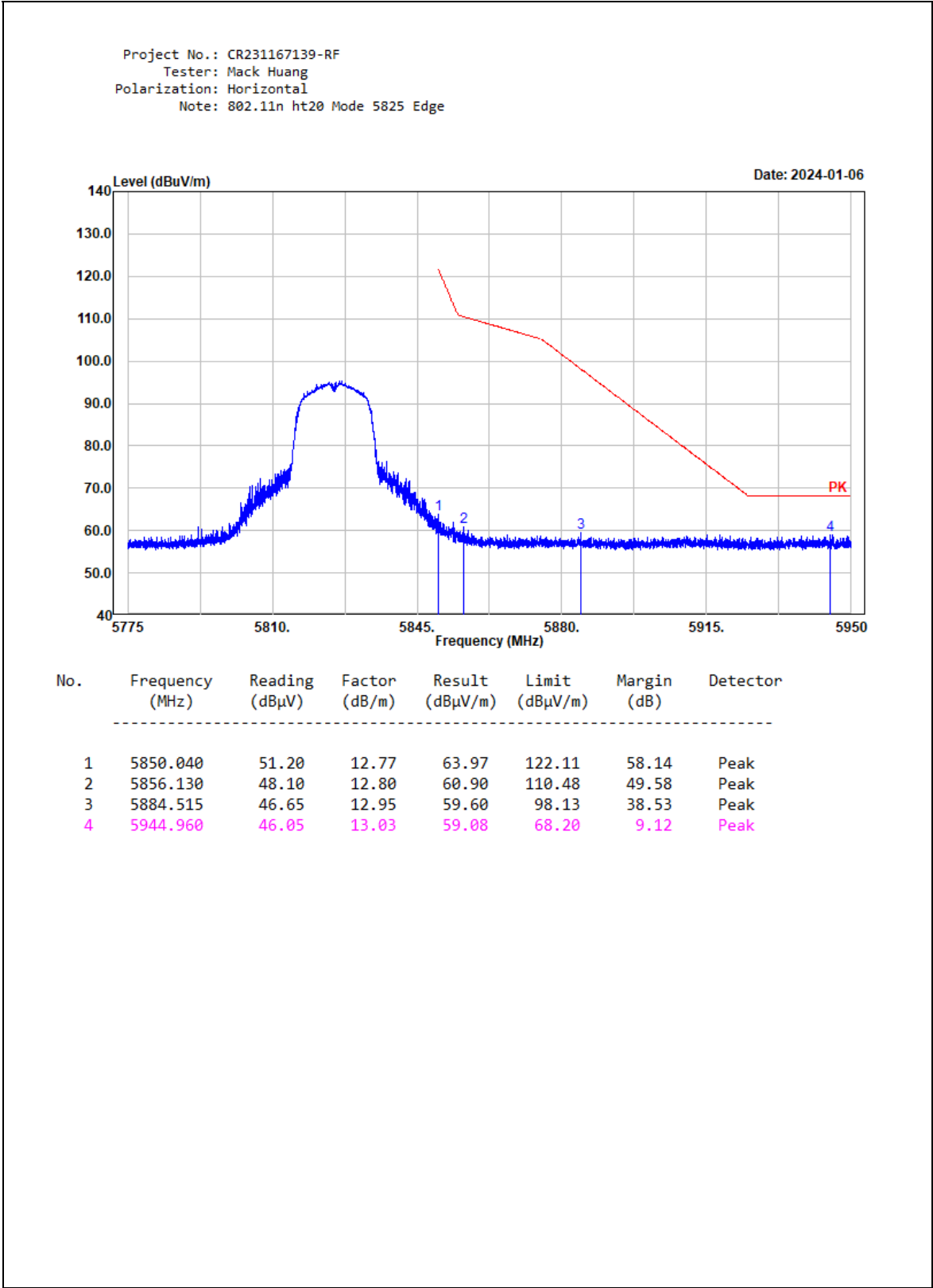
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5625.389	45.65	12.18	57.83	68.20	10.37	Peak
2	5682.407	45.93	12.47	58.40	92.22	33.82	Peak
3	5718.170	49.24	12.57	61.81	110.29	48.48	Peak
4	5723.318	56.94	12.57	69.51	118.37	48.86	Peak

Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Vertical
Note: 802.11n ht20 Mode 5745 Edge

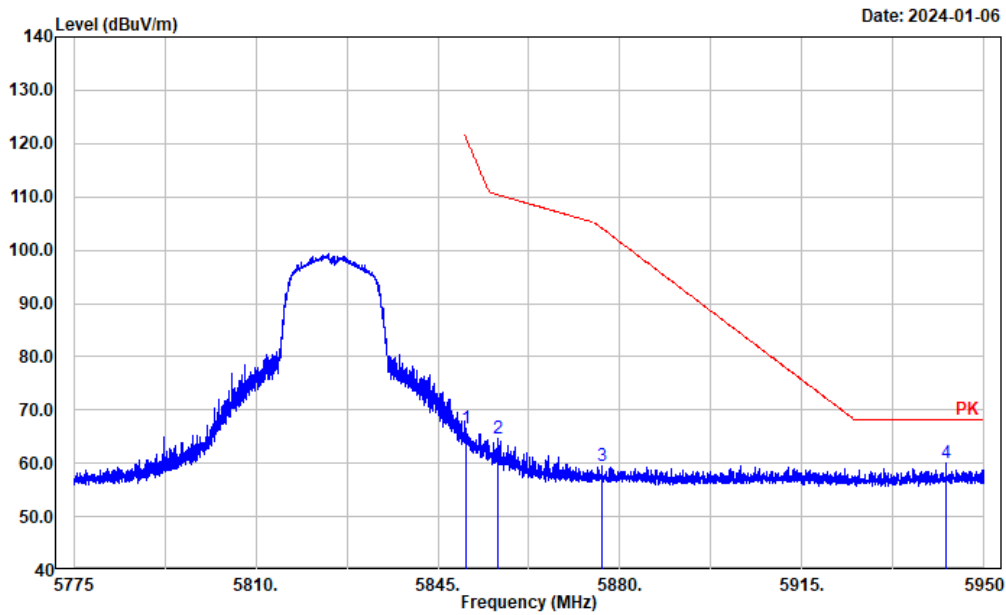


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5629.913	45.96	12.22	58.18	68.20	10.02	Peak
2	5673.788	46.23	12.43	58.66	85.84	27.18	Peak
3	5716.025	49.73	12.56	62.29	109.69	47.40	Peak
4	5724.371	58.90	12.57	71.47	120.77	49.30	Peak

802.11n ht20 5825MHz:



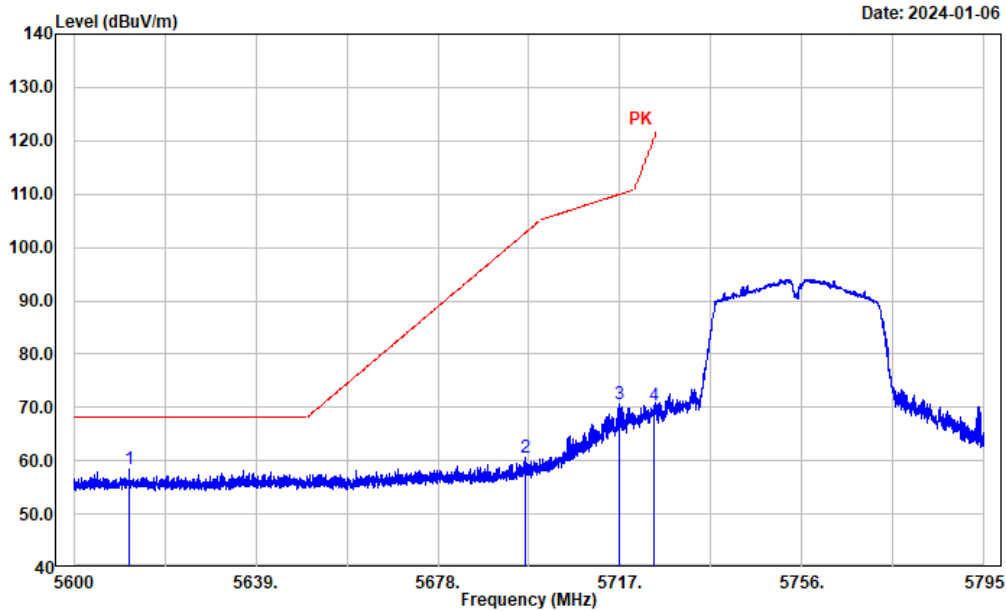
Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Vertical
Note: 802.11n ht20 Mode 5825 Edge



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5850.530	53.67	12.77	66.44	120.99	54.55	Peak
2	5856.410	51.74	12.81	64.55	110.40	45.85	Peak
3	5876.430	46.65	12.90	59.55	104.14	44.59	Peak
4	5942.720	46.91	13.03	59.94	68.20	8.26	Peak

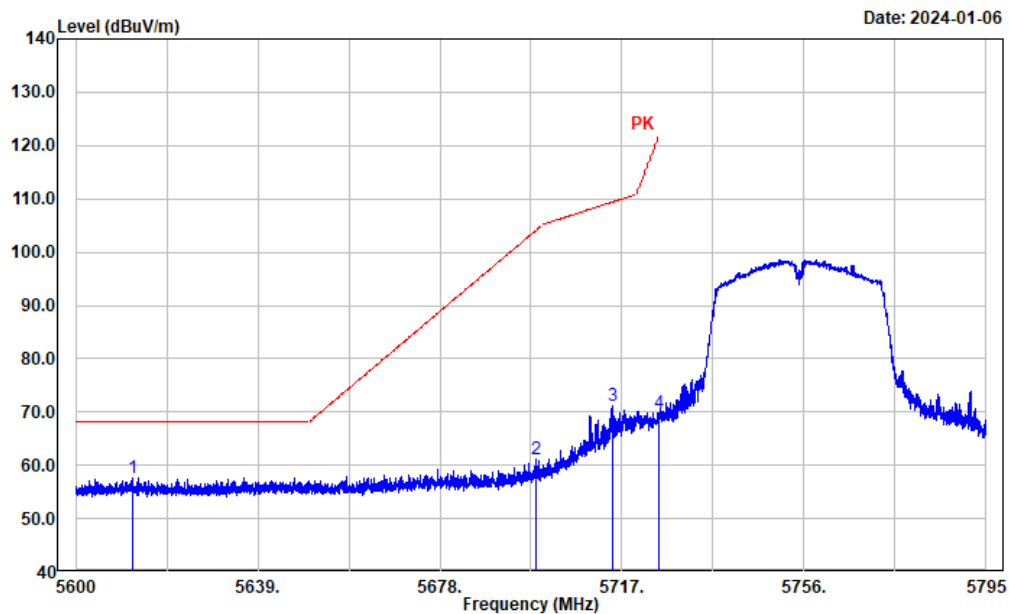
802.11n ht40 5755MHz:

Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Horizontal
Note: 802.11n ht40 Mode 5755 Edge



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5611.895	46.32	12.10	58.42	68.20	9.78	Peak
2	5696.837	48.01	12.53	60.54	102.87	42.33	Peak
3	5716.883	58.10	12.57	70.67	109.93	39.26	Peak
4	5724.176	57.82	12.57	70.39	120.32	49.93	Peak

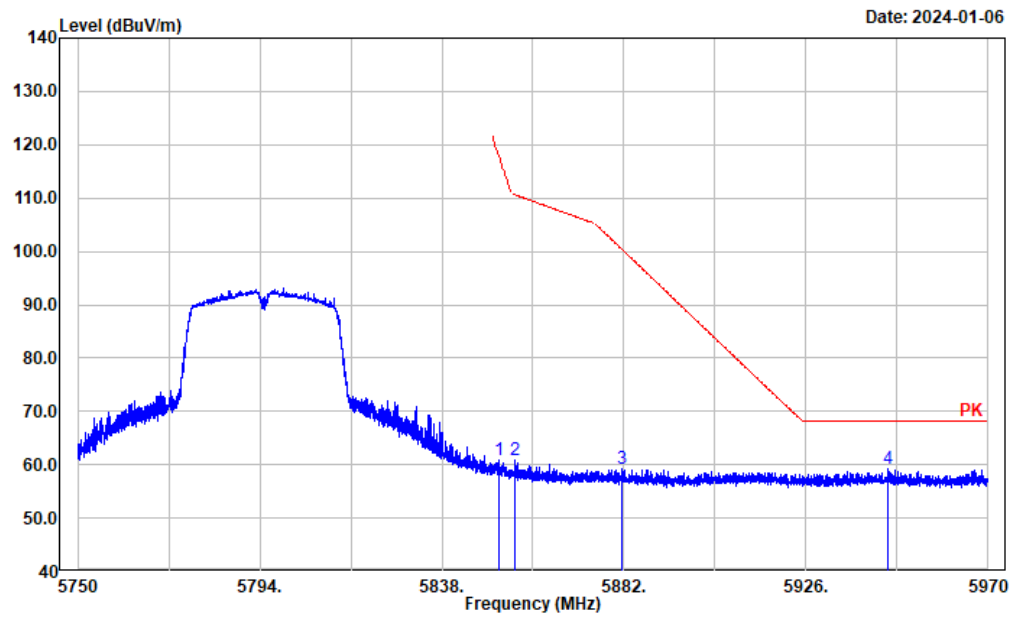
Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Vertical
Note: 802.11n ht40 Mode 5755 Edge



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5612.207	45.61	12.11	57.72	68.20	10.48	Peak
2	5698.592	48.60	12.55	61.15	104.16	43.01	Peak
3	5714.972	58.73	12.56	71.29	109.39	38.10	Peak
4	5724.839	57.35	12.57	69.92	121.83	51.91	Peak

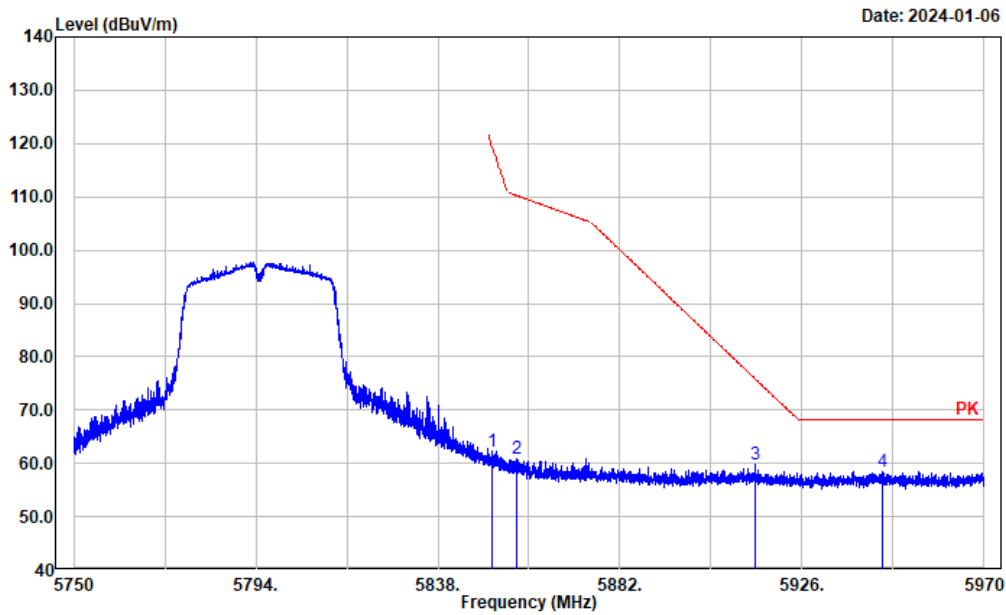
802.11n ht40 5795MHz:

Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Horizontal
Note: 802.11n ht40 Mode 5795 Edge



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5851.640	48.06	12.78	60.84	118.46	57.62	Peak
2	5855.512	48.19	12.80	60.99	110.66	49.67	Peak
3	5881.560	46.31	12.93	59.24	100.33	41.09	Peak
4	5945.712	46.28	13.03	59.31	68.20	8.89	Peak

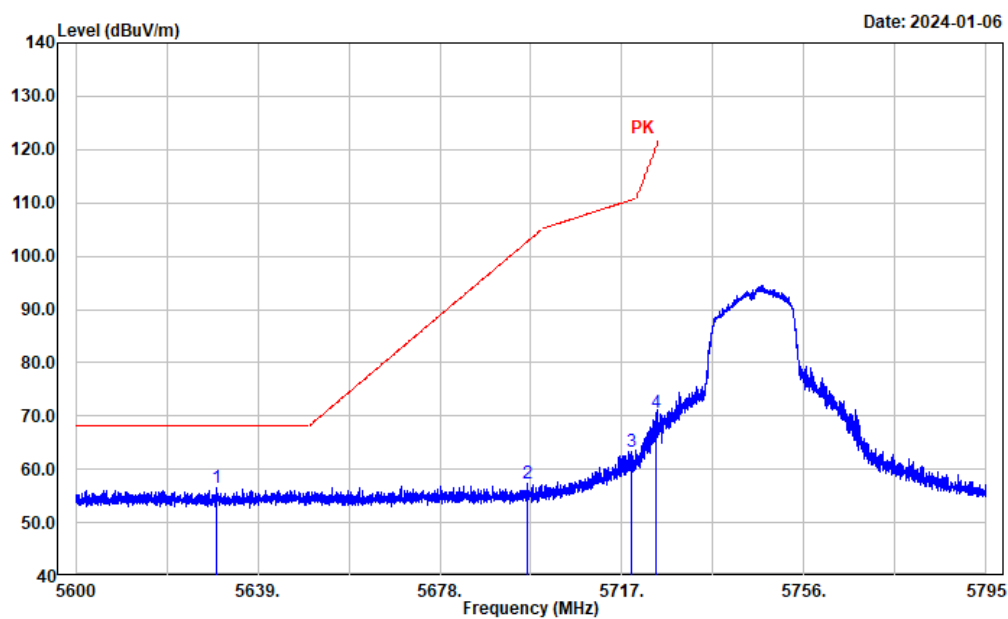
Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Vertical
Note: 802.11n ht40 Mode 5795 Edge



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5851.244	49.44	12.77	62.21	119.36	57.15	Peak
2	5856.920	48.12	12.81	60.93	110.26	49.33	Peak
3	5914.736	46.87	13.02	59.89	75.77	15.88	Peak
4	5945.316	45.46	13.03	58.49	68.20	9.71	Peak

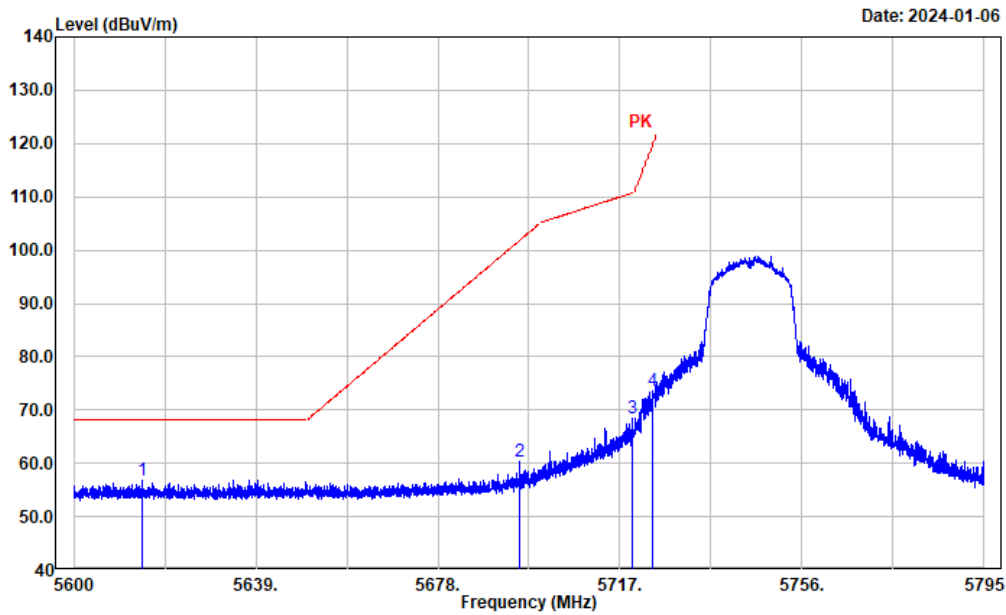
802.11ac vht20 5745MHz:

Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Horizontal
Note: 802.11ac20 Mode 5745 Edge



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5630.303	43.90	12.65	56.55	68.20	11.65	Peak
2	5696.603	44.42	12.82	57.24	102.70	45.46	Peak
3	5719.067	50.57	12.78	63.35	110.54	47.19	Peak
4	5724.410	57.91	12.76	70.67	120.86	50.19	Peak

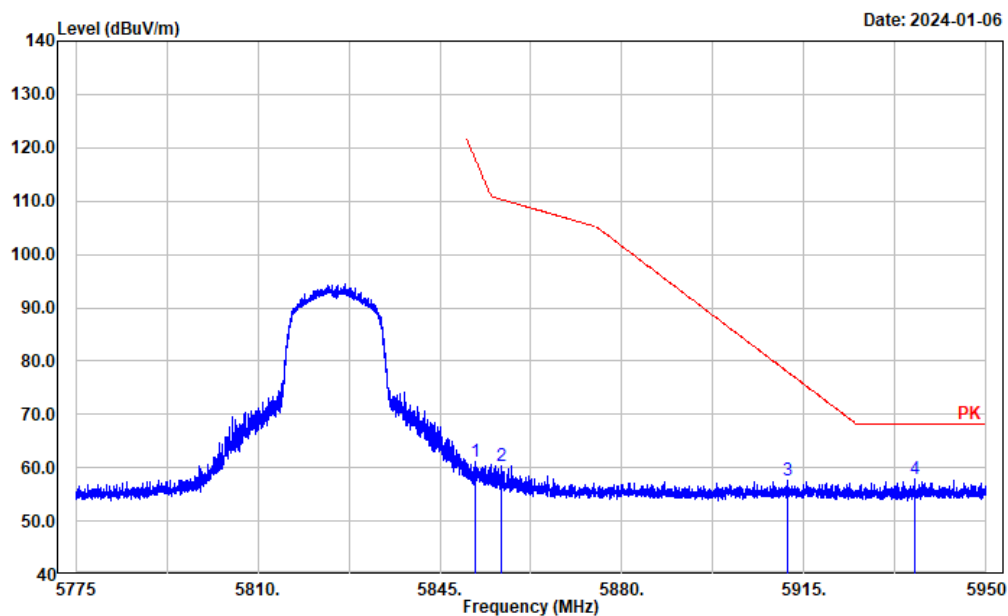
Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Vertical
Note: 802.11ac20 Mode 5745 Edge



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5614.625	44.32	12.61	56.93	68.20	11.27	Peak
2	5695.433	47.59	12.82	60.41	101.83	41.42	Peak
3	5719.691	55.60	12.78	68.38	110.71	42.33	Peak
4	5724.020	60.96	12.76	73.72	119.97	46.25	Peak

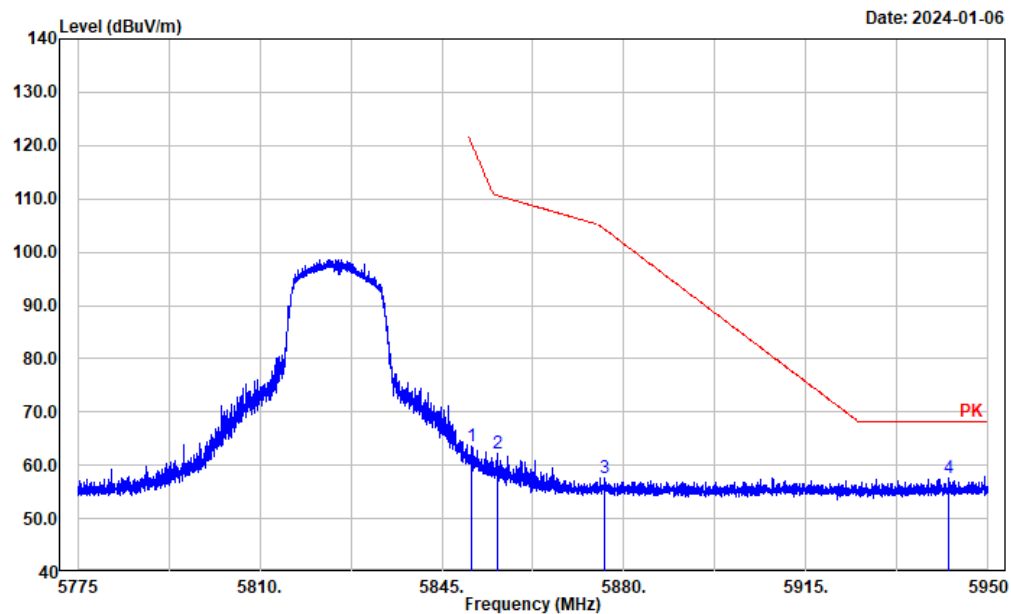
802.11ac vht20 5825MHz:

Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Horizontal
Note: 802.11ac20 Mode 5825 Edge



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5851.825	48.41	12.72	61.13	118.04	56.91	Peak
2	5856.865	47.65	12.75	60.40	110.28	49.88	Peak
3	5911.710	44.68	13.02	57.70	78.00	20.30	Peak
4	5936.315	44.74	13.08	57.82	68.20	10.38	Peak

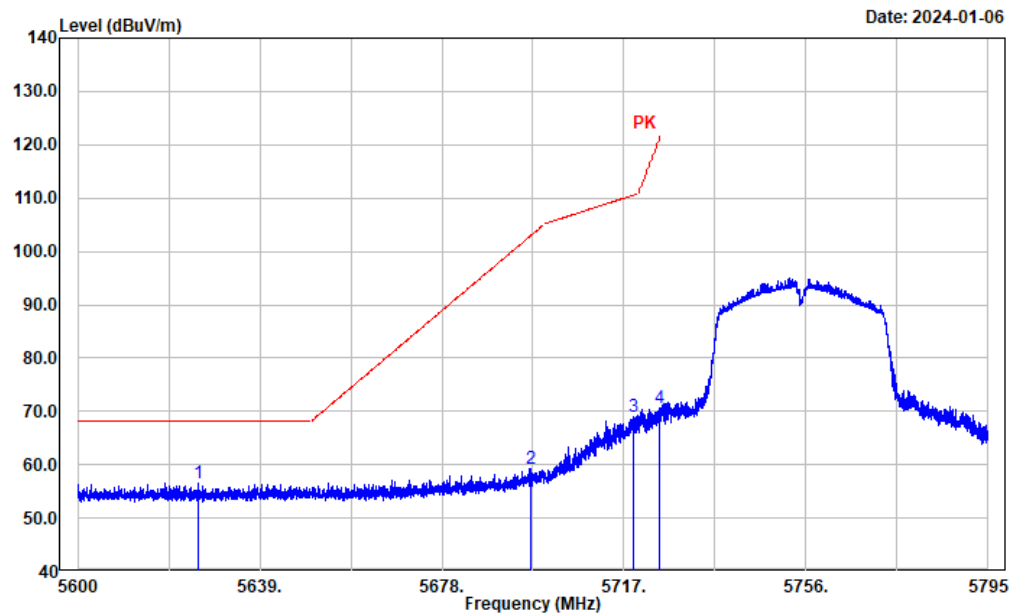
Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Vertical
Note: 802.11ac20 Mode 5825 Edge



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5850.740	50.89	12.71	63.60	120.51	56.91	Peak
2	5855.675	49.39	12.74	62.13	110.61	48.48	Peak
3	5876.255	44.79	12.85	57.64	104.27	46.63	Peak
4	5942.440	44.51	13.09	57.60	68.20	10.60	Peak

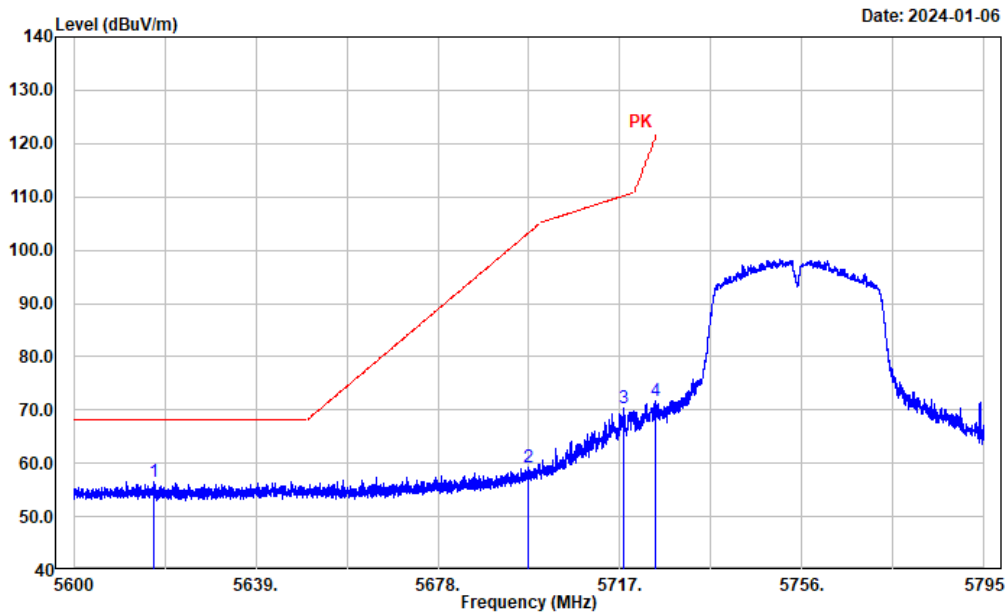
802.11ac vht40 5755MHz:

Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Horizontal
Note: 802.11ac40 Mode 5755 Edge



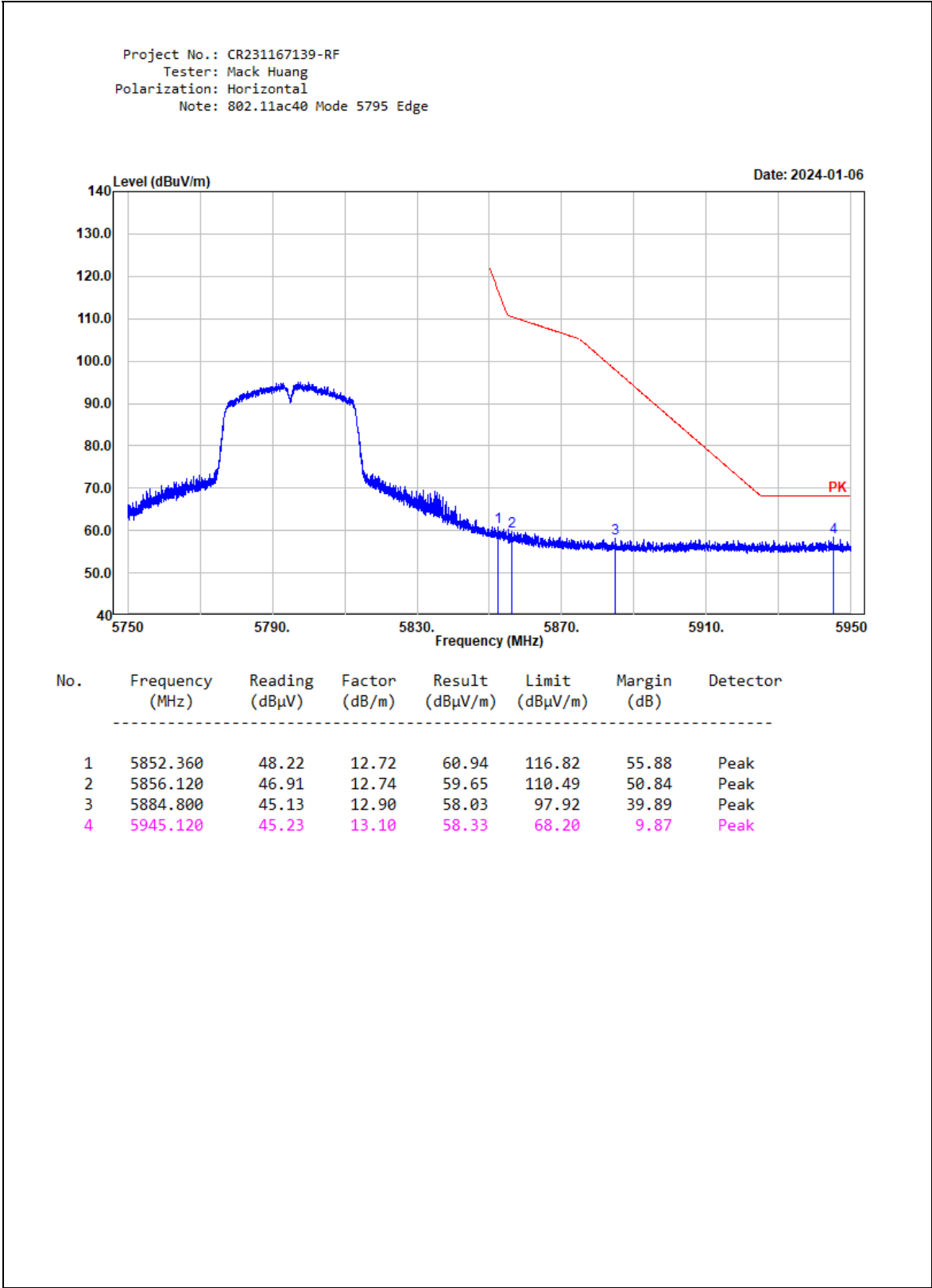
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5625.974	44.01	12.64	56.65	68.20	11.55	Peak
2	5697.149	46.37	12.82	59.19	103.10	43.91	Peak
3	5719.106	56.08	12.78	68.86	110.55	41.69	Peak
4	5724.722	57.86	12.76	70.62	121.57	50.95	Peak

Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Vertical
Note: 802.11ac40 Mode 5755 Edge

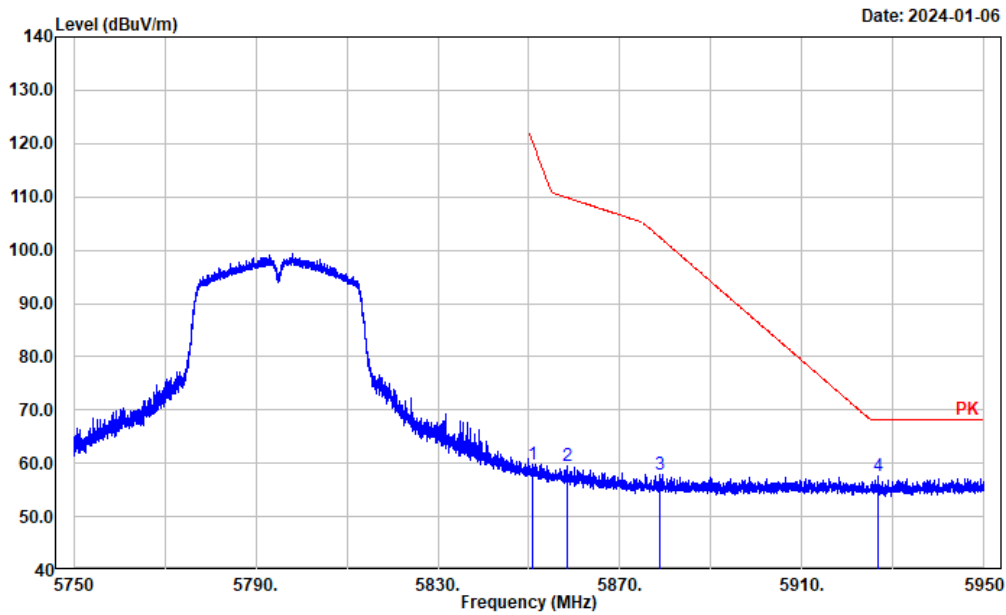


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5617.277	43.97	12.62	56.59	68.20	11.61	Peak
2	5697.500	46.49	12.82	59.31	103.36	44.05	Peak
3	5717.819	57.50	12.78	70.28	110.19	39.91	Peak
4	5724.683	58.89	12.76	71.65	121.48	49.83	Peak

802.11ac vht40 5795MHz:



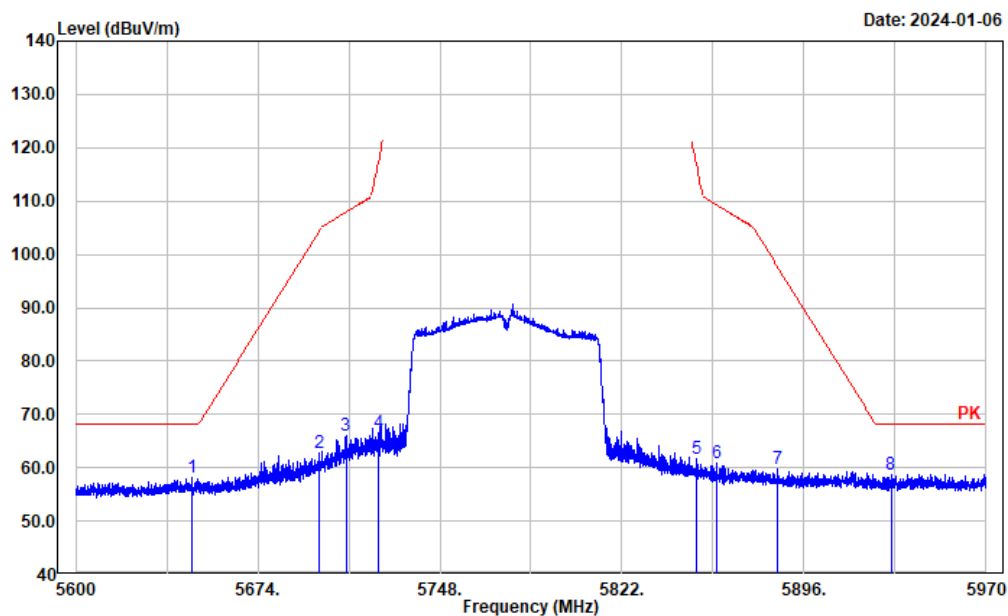
Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Vertical
Note: 802.11ac40 Mode 5795 Edge



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5850.880	47.12	12.71	59.83	120.19	60.36	Peak
2	5858.440	46.72	12.75	59.47	109.84	50.37	Peak
3	5878.760	45.12	12.87	57.99	102.41	44.42	Peak
4	5926.720	44.62	13.05	57.67	68.20	10.53	Peak

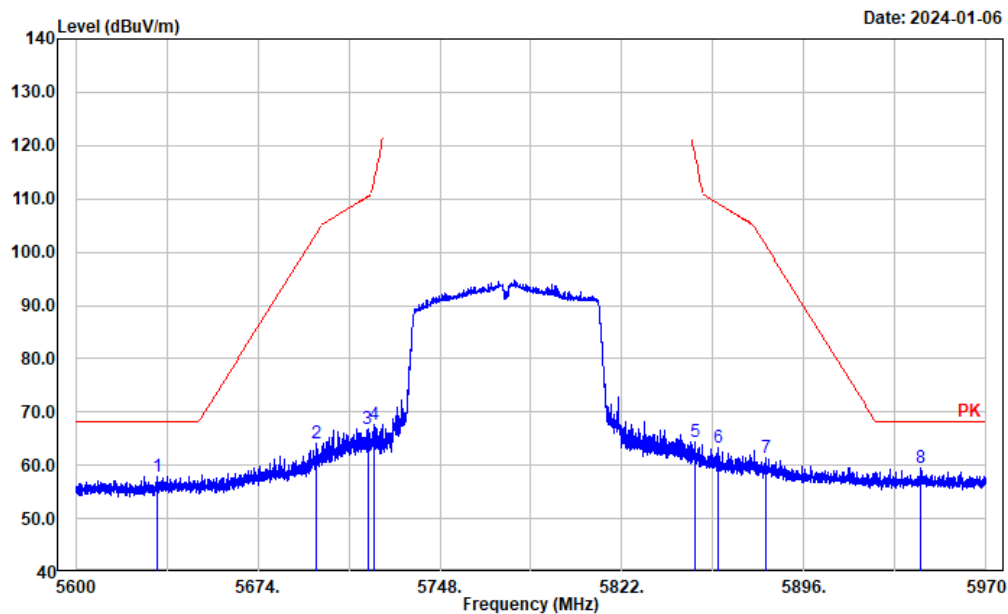
802.11ac vht80 5775MHz:

Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Horizontal
Note: 802.11ac80 Mode 5775 Edge



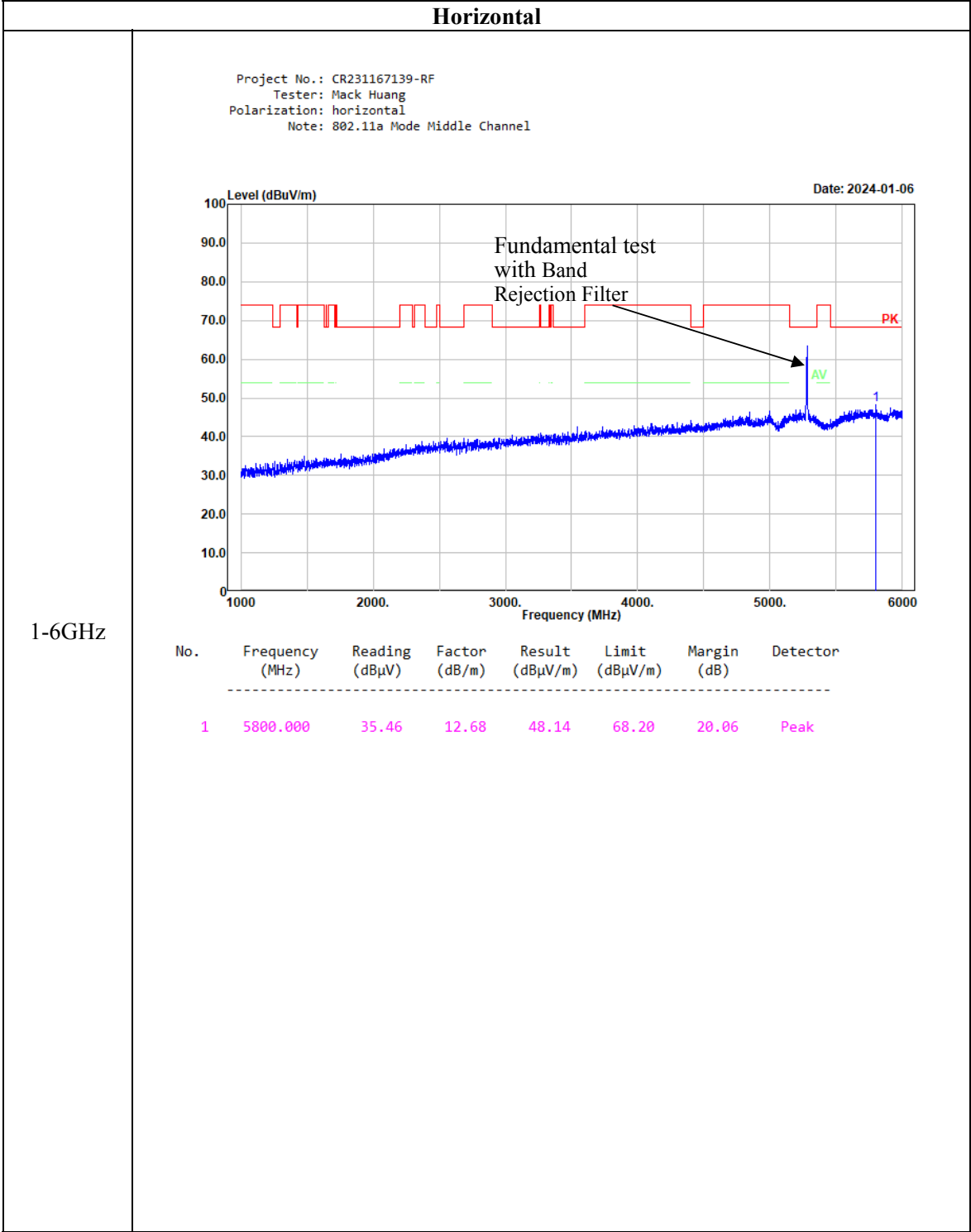
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5647.286	45.88	12.32	58.20	68.20	10.00	Peak
2	5698.790	50.31	12.55	62.86	104.31	41.45	Peak
3	5709.816	53.34	12.56	65.90	107.95	42.05	Peak
4	5722.840	54.07	12.57	66.64	117.28	50.64	Peak
5	5852.118	48.89	12.78	61.67	117.37	55.70	Peak
6	5860.702	48.09	12.82	60.91	109.20	48.29	Peak
7	5884.974	46.88	12.95	59.83	97.79	37.96	Peak
8	5931.298	45.76	13.03	58.79	68.20	9.41	Peak

Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Vertical
Note: 802.11ac80 Mode 5775 Edge



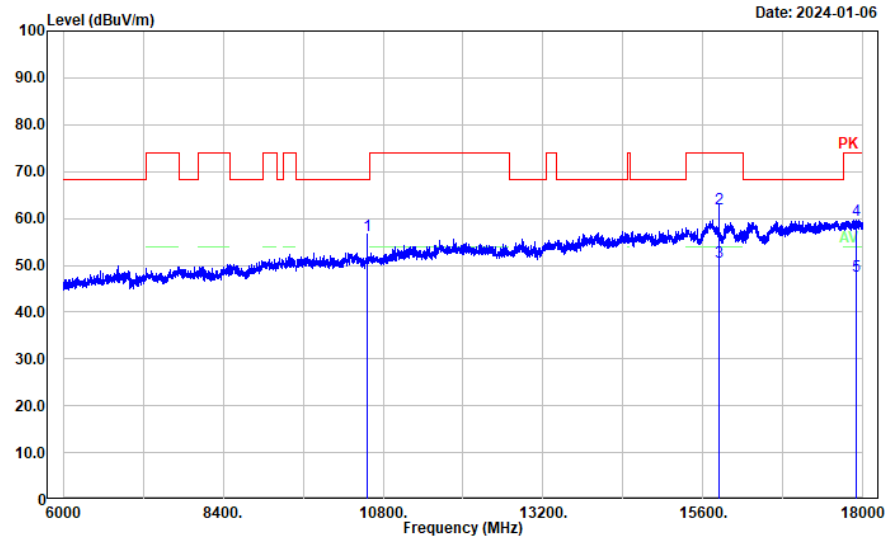
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5632.930	45.70	12.23	57.93	68.20	10.27	Peak
2	5698.050	51.49	12.54	64.03	103.76	39.73	Peak
3	5718.622	54.31	12.57	66.88	110.41	43.53	Peak
4	5721.138	55.19	12.57	67.76	113.40	45.64	Peak
5	5851.748	51.51	12.78	64.29	118.21	53.92	Peak
6	5861.220	50.52	12.82	63.34	109.06	45.72	Peak
7	5880.386	48.37	12.92	61.29	101.20	39.91	Peak
8	5943.582	46.40	13.03	59.43	68.20	8.77	Peak

Worst Test plots(802.11a mode 5280MHz was tested)



6-18GHz

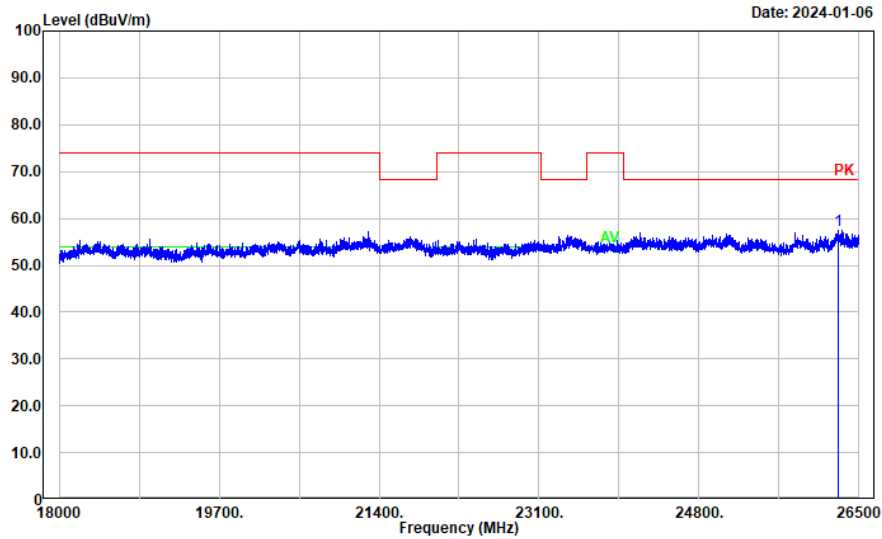
Date: 2024-01-06



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	10560.000	35.48	20.81	56.29	68.20	11.91	Peak
2	15840.000	37.00	25.12	62.12	74.00	11.88	Peak
3	15840.000	25.48	25.12	50.60	54.00	3.40	Average
4	17906.400	27.51	32.20	59.71	74.00	14.29	Peak
5	17906.400	15.45	32.20	47.65	54.00	6.35	Average

Horizontal

Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Horizontal
Note: 802.11a Mode Middle Channel

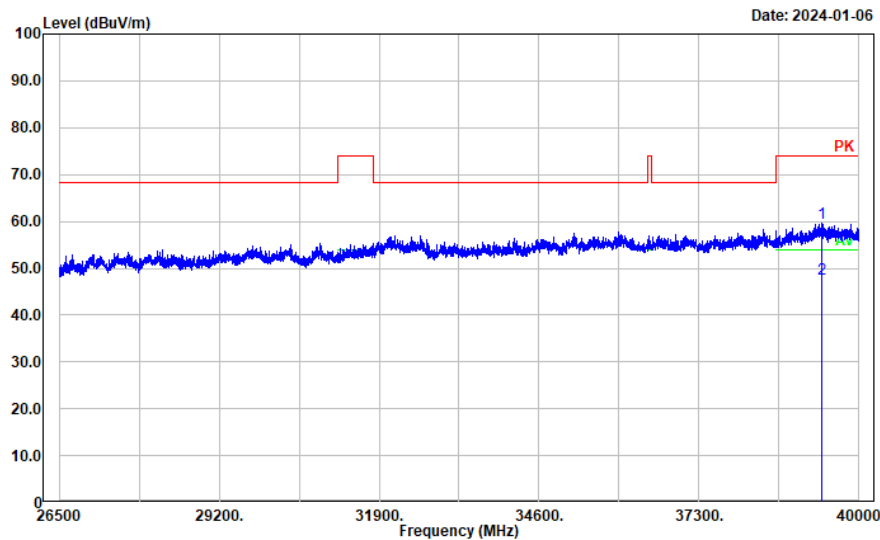


18-26.5GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	26284.100	50.56	6.96	57.52	68.20	10.68	Peak

Horizontal

Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Horizontal
Note: 802.11a Mode Middle Channel

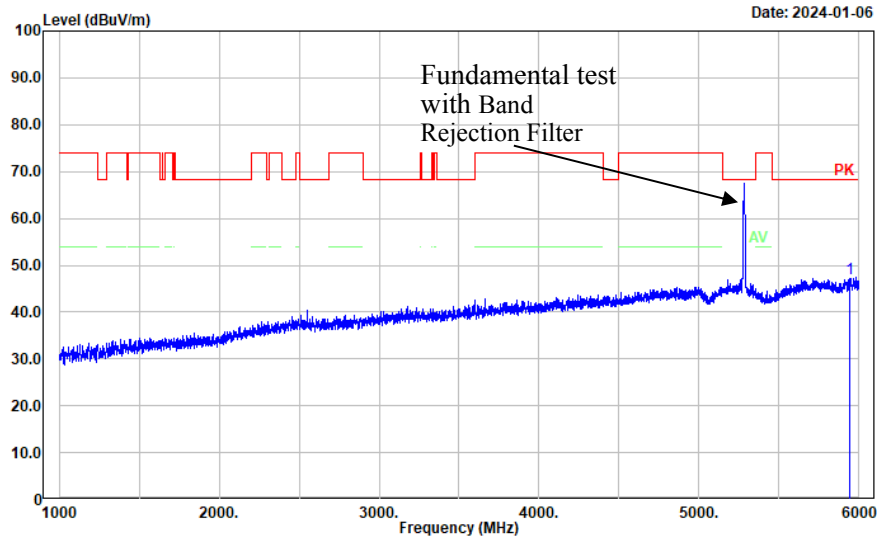


26.5-40GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	39376.300	49.52	10.17	59.69	74.00	14.31	Peak
2	39376.300	37.51	10.17	47.68	54.00	6.32	Average

Vertical

Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: vertical
Note: 802.11a Mode Middle Channel

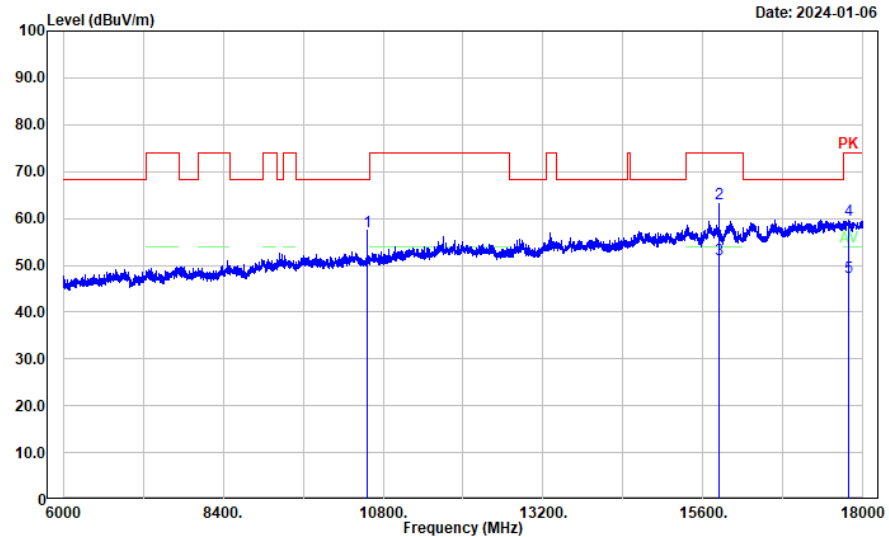


1-6GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5941.000	34.14	13.04	47.18	68.20	21.02	Peak

6-18GHz

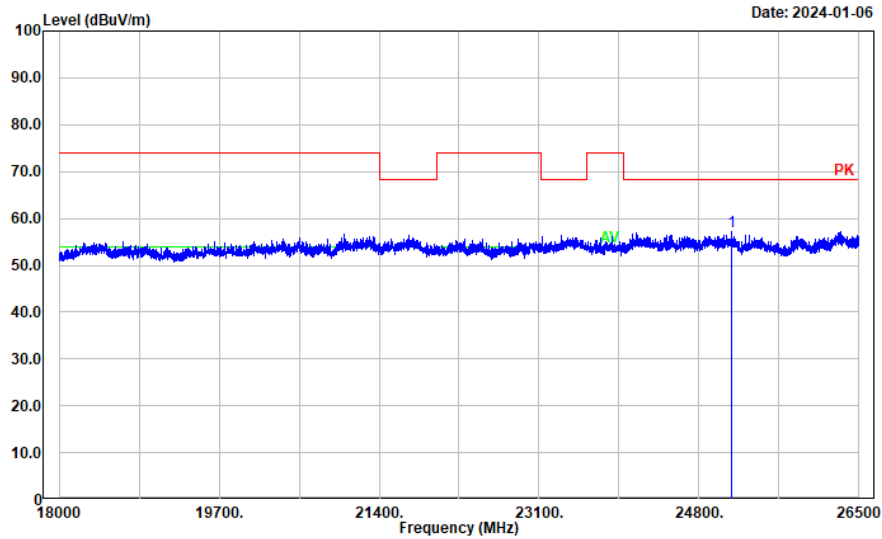
Date: 2024-01-06



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	10560.000	36.29	20.81	57.10	68.20	11.10	Peak
2	15840.000	38.10	25.12	63.22	74.00	10.78	Peak
3	15840.000	26.03	25.12	51.15	54.00	2.85	Average
4	17781.600	28.04	31.55	59.59	74.00	14.41	Peak
5	17781.600	15.96	31.55	47.51	54.00	6.49	Average

Vertical

Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: vertical
Note: 802.11a Mode Middle Channel



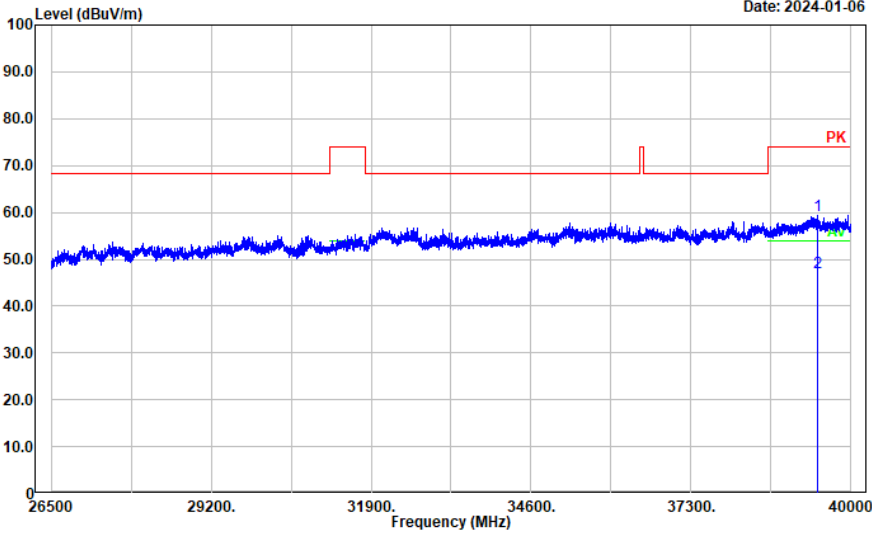
18-25GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	25141.700	50.37	6.84	57.21	68.20	10.99	Peak

Vertical

Project No.: CR231167139-RF
Tester: Mack Huang
Polarization: Vertical
Note: 802.11a Mode Middle Channel

Date: 2024-01-06



26.5-40GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	39424.900	49.23	10.17	59.40	74.00	14.60	Peak
2	39424.900	37.03	10.17	47.20	54.00	6.80	Average

4.3 Spot Check for Maximum Conducted Output Power:

Serial Number:	2DS1-1	Test Date:	2023/12/2
Test Site:	RF	Test Mode:	Transmitting
Tester:	Jou Zhou	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.5	Relative Humidity: (%)	36	ATM Pressure: (kPa)	101.7
----------------------	------	------------------------------	----	------------------------	-------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Anritsu	Power Meter	ML2495A	1106009	2023/08/04	2024/08/03
Anritsu	Pulse Power Sensor	MA2411A	10780	2023/08/04	2024/08/03
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	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)	Max. Conducted Average Output Power(dBm)	
		Result	Limit
802.11a	5180	16.93	24
	5200	16.95	24
	5240	16.83	24
802.11n ht20	5180	15.13	24
	5200	15.34	24
	5240	14.77	24
802.11n ht40	5190	14.08	24
	5230	13.76	24
802.11ac vht20	5180	15.42	24
	5200	15.16	24
	5240	15.07	24
802.11ac vht40	5190	13.89	24
	5230	13.41	24
802.11ac vht80	5210	11.93	24
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	16.01	24
	5280	15.54	24
	5320	14.33	24
802.11n ht20	5260	11.46	24
	5280	13.12	24
	5320	12.28	24
802.11n ht40	5270	12.88	24
	5310	11.43	24
802.11ac vht20	5260	14.52	24
	5280	13.41	24
	5320	12.83	24
802.11ac vht40	5270	12.53	24
	5310	11.14	24
802.11ac vht80	5290	10.27	24

5470-5725 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power(dBm)	
		Result	Limit
802.11a	5500	15.83	24
	5580	16.74	24
	5700	16.88	24
	5720	16.63	24
802.11n ht20	5500	13.82	24
	5580	14.96	24
	5700	15.03	24
	5720	14.96	24
802.11n ht40	5510	12.63	24
	5550	13.47	24
	5670	13.89	24
802.11ac vht20	5500	13.89	24
	5580	15.16	24
	5700	15.34	24
	5720	15.28	24
802.11ac vht40	5510	12.43	24
	5550	13.04	24
	5670	13.45	24
802.11ac vht80	5530	11.12	24
	5610	11.97	24
	5690	11.83	24

5725-5850 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power(dBm)	
		Result	Limit
802.11a	5745	17.03	30
	5785	17.24	30
	5825	17.52	30
802.11n ht20	5745	15.35	30
	5785	15.46	30
	5825	15.61	30
802.11n ht40	5755	14.33	30
	5795	14.47	30
802.11ac vht20	5745	15.36	30
	5785	15.57	30
	5825	15.74	30
802.11ac vht40	5755	14.07	30
	5795	14.28	30
802.11ac vht80	5775	11.79	30

4.4 Duty Cycle:

Serial Number:	2DS1-1	Test Date:	2024/3/16
Test Site:	RF	Test Mode:	Transmitting
Tester:	Jou Zhou	Test Result:	N/A

Environmental Conditions:

Temperature: (°C)	24.9	Relative Humidity: (%)	59	ATM Pressure: (kPa)	101.2
----------------------	------	---------------------------	----	---------------------------	-------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101943	2023/3/31	2024/3/30
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A

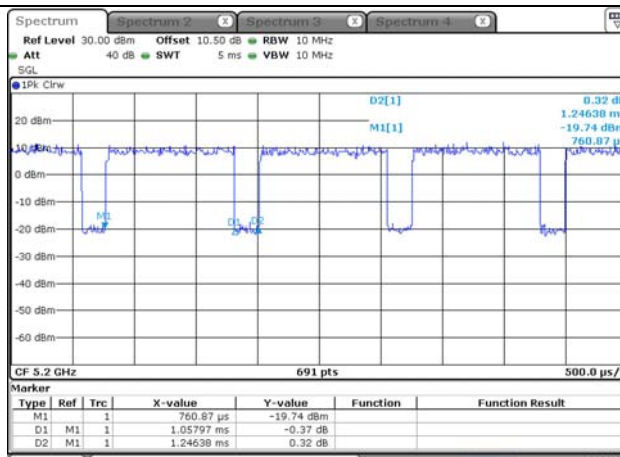
* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

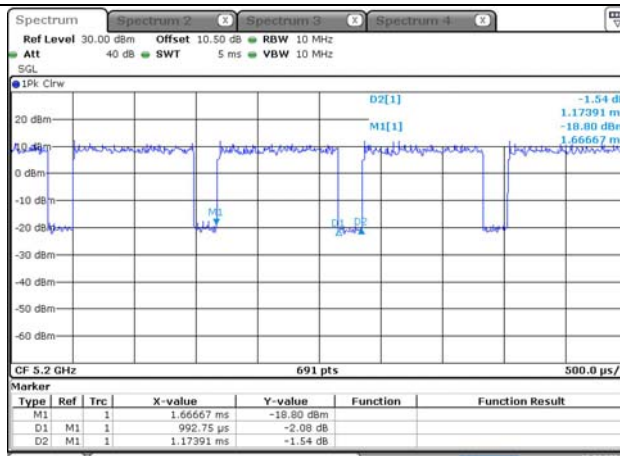
Test Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)	1/T (Hz)	Duty Factor (dB)	VBW Setting (kHz)
802.11a	1.058	1.246	84.91	945	0.71	1
802.11n ht20	0.993	1.174	84.58	1007	0.73	2
802.11n ht40	0.496	0.687	72.20	2016	1.41	3
802.11ac vht20	0.993	1.174	84.58	1007	0.73	2
802.11ac vht40	0.504	0.696	72.41	1984	1.40	2
802.11ac vht80	0.255	0.449	56.79	3922	2.46	5

Duty Cycle

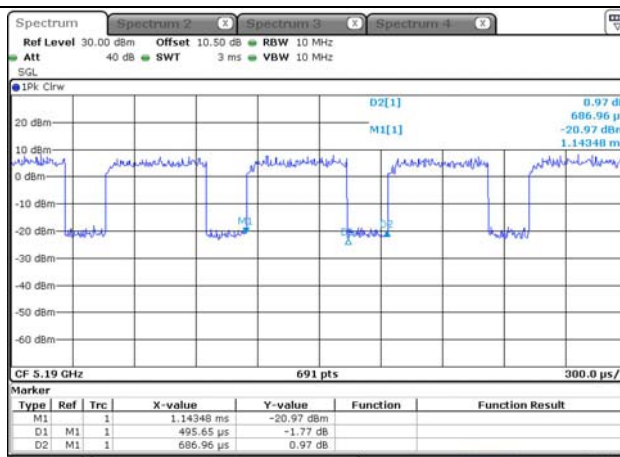
802.11a

ProjectNo.:CR231167139 Tester:Jou Zhou
Date: 16.MAR.2024 11:03:35

802.11n ht20

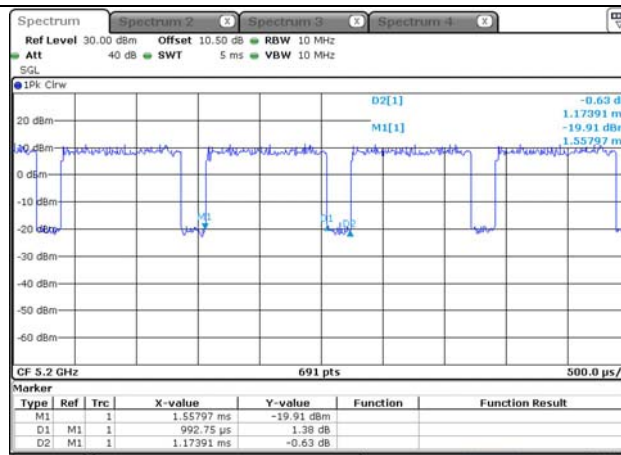
ProjectNo.:CR231167139 Tester:Jou Zhou
Date: 16.MAR.2024 11:05:13

802.11n ht40

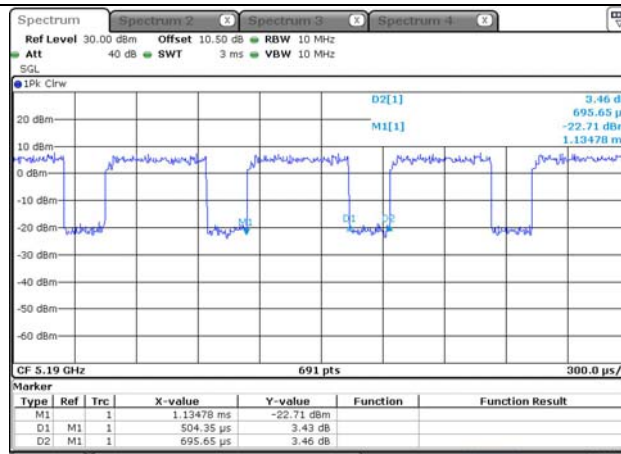
ProjectNo.:CR231167139 Tester:Jou Zhou
Date: 16.MAR.2024 10:58:43

Duty Cycle

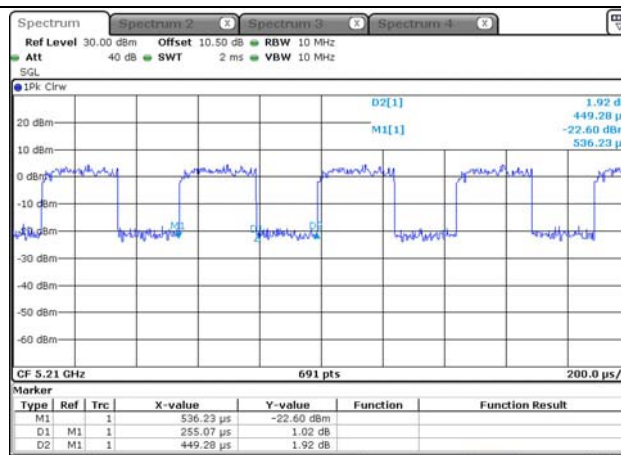
802.11 ac vht20



802.11 ac vht40



802.11ac vht80



5. EUT PHOTOGRAPHS

Please refer to the attachment CR231167139-EXP EUT EXTERNAL PHOTOGRAPHS and CR231167139-INP EUT INTERNAL PHOTOGRAPHS

6. TEST SETUP PHOTOGRAPHS

Please refer to the attachment CR231167139-00E-TSP TEST SETUP PHOTOGRAPHS.

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