NVLAP TESTING
NVLAP LAB CODE 600341-0

BACL Bay Area Compliance Labs Corp.

TEST REPORT

Applicant:	**FCC: INGENICO** **IC: Ingenico**
Address:	**FCC: 9 Avenue de la gare - Rovaltain TGV, BP25156,Valence Cedex 9,26958 ,France** **IC: 9 avenue de la gare Rovaltain TGV,Valence 26958,France**
Product Name:	**Payment Terminals**
FCC ID:	**XKB-SXXCLWIBT**
IC:	**2586D-SXXCLWIBT**
HVIN:	**AXIUM SX7000 CL/Eth/4G/WiFi/BT,** **AXIUM SX5000 CL/Eth/4G/WiFi/BT,** **AXIUM SX7000 CL/Eth/WiFi/BT, AXIUM SX5000 CL/Eth/WiFi/BT**
Standard(s):	**47 CFR Part 15, Subpart E(15.407)** **RSS-247 Issue 3, August 2023** **RSS-Gen, Issue 5, February 2021 Amendment 2** **ANSI C63.10-2013** **KDB 789033 D02 General U-NII Test Procedures New Rules v02r01** **KDB 291074 D02 EMC Measurement v01**
Report Number:	**2402W92356E-RF-00D**
Report Date:	**2025/1/15**

The above device has been tested and found compliant with the requirement of the relative standards by Bay Area Compliance Laboratories Corp. (Dongguan).

Reviewed By:	**Pedro Yun**
Title:	**Project Engineer**
Approved By:	**Ivan Cao**
Title:	**EMC Manager**

Bay Area Compliance Laboratories Corp. (Dongguan)
No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China
Tel: +86-769-86858888
Fax: +86-769-86858891
www.baclcorp.com.cn

Note: The information marked ▲ is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. 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 ★.This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government. Each test item follows the test standard(s) without deviation.

CONTENTS

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2402W92356E-RF-00D	Original Report	2025/1/15

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Name:	Payment Terminals
EUT Model:	AXIUM SX7000
Multiple Model:	AXIUM SX5000
Operation Frequency:	5150-5250MHz: 5180-5240 MHz(802.11a/n ht20/ac vht20) 5190-5230 MHz(802.11n ht40/ac vht40) 5210 MHz(802.11ac vht80) 5250-5350MHz: 5260-5320 MHz (802.11a/n ht20/ac vht20) 5270-5310 MHz(802.11n ht40/ac vht40) 5290 MHz(802.11ac vht80) 5470-5725MHz: 5500-5720 MHz (802.11a/n ht20/ac vht20) 5510-5710 MHz(802.11n ht40/vht40) 5530-5690MHz(802.11ac vht80) 5725-5850MHz: 5745-5825 MHz (802.11a/n ht20/ac vht20) 5755-5795 MHz(802.11n ht40/ac vht40) 5775 MHz(802.11ac vht80) 5850-5895: 5845-5885 MHz (802.11a/n ht20/ac vht20) 5835-5875 MHz(802.11n ht40/ac vht40) 5855 MHz(802.11ac vht80)
Maximum Average Conducted Output Power:	5150-5250MHz:16.35dBm 5250-5350MHz:17.34dBm 5470-5725MHz:17.31dBm 5725-5850MHz:19.57dBm 5850-5895MHz:17.6dBm
Maximum Average Conducted Output Power(EIRP):	5150-5250MHz:19.7dBm 5250-5350MHz:20.69dBm 5470-5725MHz:18.78dBm 5850-5895MHz:18.28dBm
Modulation Type:	802.11a/n/ac: OFDM-BPSK, QPSK, 16QAM, 64QAM,256QAM
Rated Input Voltage:	DC 9V-45V
Serial Number:	For RF Conducted Test: 2QUD-5 (Configuration 1#) 2QUD-10 (Configuration 2#) 2QUD-7 (Configuration 3#) 2QUD-9 (Configuration 4#) For AC line conducted emissions and Radiated Spurious Emissions Below 1G Tests: 2QUD-1 (Configuration 1#) 2QUD-3 (Configuration 2#) 2QUD-2 (Configuration 3#) 2QUD-4 (Configuration 4#) For Radiated Spurious Emissions Above 1G Test: 2QUD-6 (Configuration 1#) 2QUD-3 (Configuration 2#) 2QUD-8 (Configuration 3#) 2QUD-4 (Configuration 4#)
EUT Received Date:	2024/8/29
EUT Received Status:	Good
Note 1: 5600-5650 MHz was disabled by software in Canada Market. Note 2: The multiple models are electrically identical with the test model. Please refer to the declaration letter for more detail, which was provided by manufacturer.	

Configurations:

Configuration	HVIN	Configuration Description
1#	AXIUM SX7000 CL/Eth/4G/WiFi/BT	With Smartcard reader, With LTE.
2#	AXIUM SX5000 CL/Eth/4G/WiFi/BT	Without Smartcard reader, With LTE.
3#	AXIUM SX7000 CL/Eth/WiFi/BT	With Smartcard reader, Without LTE.
4#	AXIUM SX5000 CL/Eth/WiFi/BT	Without Smartcard reader, Without LTE.

1.2 Accessory Information

Accessory Description	Manufacturer	Model	Parameters
/	/	/	/

1.3 Antenna Information Detail▲

Antenna Manufacturer	Antenna Type	input impedance (Ohm)	Frequency Range	Antenna Gain
Ingenico	PIFA	50	5.15~5.25GHz	3.35 dBi
			5.25~5.35 GHz	3.35 dBi
			5.47~5.725 GHz	1.47 dBi
			5.725~5.85 GHz	0.68 dBi
			5.850-5.895GHz	0.68 dBi
The design of compliance with §15.203:				
☒ Unit uses a permanently attached antenna.				
☐ Unit uses a unique coupling to the intentional radiator.				
☐ Unit was professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.				

1.4 Equipment Modifications

No modifications are made to the EUT during all test items.

2. SUMMARY OF TEST RESULTS

Standard(s) Section	Test Items	Result
§15.207(a) RSS-Gen Clause 8.8	AC line conducted emissions	Compliant
FCC§15.205& §15.209 &§15.407(b) RSS-247 Clause 6.2	Undesirable Emission& Restricted Bands	Compliant
RSS-247 Clause 6.2.1.2	26dB attenuated below the channel power	Compliant
FCC§15.407(a) (e) RSS-247 Clause 6.2 RSS-Gen Clause 6.7	Emission Bandwidth	Compliant
FCC§15.407(a) RSS-247 Clause 6.2	Maximum Conducted Output Power	Compliant
FCC§15.407 (a) RSS-247 Clause 6.2	Power Spectral Density	Compliant
§15.203 RSS-GEN Clause 6.8	Antenna Requirement	Compliant
RSS-247 Clause 6.4	Additional requirements	Compliant
Note 1: For AC line conducted emissions, the maximum output power mode and channel was tested. Note 2: For Radiated Spurious Emissions 9kHz~ 1GHz and 18-40GHz, the maximum output power mode and channel was tested.		

3. DESCRIPTION OF TEST CONFIGURATION

3.1 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**	/	/

5850-5895MHz Band	
Channel	**Frequency (MHz)**
169	**5845**
173	**5865**
177	**5885**

For 802.11n ht40/ac vht40:

5150-5250MHz		5250-5350 MHz		5470-5725 MHz		5725-5850MHz	
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**	/	/
/	/	/	/	142*	**5710**	/	/

5850-5895MHz Band	
Channel	**Frequency (MHz)**
167	**5835**
175	**5875**

For 802.11ac vht80:

5150-5250MHz		5250-5350 MHz		5470-5725 MHz		5725-5850MHz	
Channel	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**
42	**5210**	58	**5290**	106	**5530**	155	**5775**
/	/	/	/	122**	**5610**	/	/
/	/	/	/	138*	**5690**	/	/

5850-5895MHz Band	
Channel	**Frequency (MHz)**
171	**5855**

Note:
*: Additional 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).
**: Those channels in 5600-5650 MHz are disabled by software in Canada Market.

3.2 EUT Operation Condition

The system was configured for testing in Engineering Mode, which was provided by the manufacturer.
The EUT configuration is below:

EUT Exercise Software:	CMD			
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	19
	Middle	5200	6Mbps	19
	Highest	5240	6Mbps	19
802.11n ht20	Lowest	5180	MCS0	18
	Middle	5200	MCS0	18
	Highest	5240	MCS0	18
802.11n ht40	Lowest	5190	MCS0	16
	Highest	5230	MCS0	16
802.11ac vht80	Middle	5210	MCS0	15
5250-5350 MHz Band:				
Test Modes	**Test Channels**	**Test Frequency (MHz)**	**Data rate**	**Power Level Setting**
802.11a	Lowest	5260	6Mbps	19
	Middle	5280	6Mbps	19
	Highest	5320	6Mbps	19
802.11n ht20	Lowest	5260	MCS0	17
	Middle	5280	MCS0	17
	Highest	5320	MCS0	17
802.11n ht40	Lowest	5270	MCS0	17
	Highest	5310	MCS0	17
802.11ac vht80	Middle	5290	MCS0	16

5470-5725 MHz Band:				
Test Modes	**Test Channels**	**Test Frequency (MHz)**	**Data rate**	**Power Level Setting**
802.11a	Lowest	5500	6Mbps	19
	Middle	5580	6Mbps	19
	Highest	5700	6Mbps	19
	Cross	5720	6Mbps	19
802.11n ht20	Lowest	5500	MCS0	19
	Middle	5580	MCS0	19
	Highest	5700	MCS0	19
	Cross	5720	MCS0	19
802.11n ht40	Lowest	5510	MCS0	17
	Middle	5550	MCS0	17
	Highest	5670	MCS0	17
	Cross	5710	MCS0	17
802.11ac vht80	Lowest	5530	MCS0	17
	Highest	5610	MCS0	17
	Cross	5690	MCS0	17
5725-5850 MHz Band:				
Test Modes	**Test Channels**	**Test Frequency (MHz)**	**Data rate**	**Power Level Setting**
802.11a	Lowest	5745	6Mbps	20
	Middle	5785	6Mbps	20
	Highest	5825	6Mbps	20
802.11n ht20	Lowest	5745	MCS0	20
	Middle	5785	MCS0	20
	Highest	5825	MCS0	20
802.11n ht40	Lowest	5755	MCS0	22
	Highest	5795	MCS0	22
802.11ac vht80	Middle	5775	MCS0	22
5850-5895MHz Band:				
Test Modes	**Test Channels**	**Test Frequency (MHz)**	**Data rate**	**Power Level Setting**
802.11a	Lowest	5845	6Mbps	20
	Middle	5865	6Mbps	20
	Highest	5885	6Mbps	20
802.11n ht20	Lowest	5845	MCS0	20
	Middle	5865	MCS0	20
	Highest	5885	MCS0	20
802.11n ht40	Lowest	5835	MCS0	20
	Highest	5875	MCS0	20
802.11ac vht80	Middle	5855	MCS0	18

Note:
1.The system support 802.11a/n ht20/n ht40/ac vht20/vht40/vht80, the vht20/vht40 were reduced since the identical parameters with 802.11n ht20 and ht40.
2.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.

3.3 Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
ZIONCOM	Router	MB-R210-00	R16Y06M271022
Lenovo	Laptop 1	G510	EMZBPC21103006
Lenovo	Laptop 2	E450	PF-OMRADG
DELL	Monitor	P2721Q	CN-0XJ46C-FCC00-135-A97L-A03
Adam	LTE Antenna 1	Unknown	SXANTENNA1
Adam	LTE Antenna 2	Unknown	SXANTENNA2
Unknown	I/O Load	Unknown	I/O Load-SX7000
Unknown	RJ11 Load	Unknown	RJ11 Load-SX7000
SANDisk	U-Disk	16G	BL201026115 B
Phihong	Adapter(12V)	PSM36W-120L6IN	192050627
CLC	Earphone	Blackview5.0	EMZBEP21103001W
Unknown	Antenna	Unknown	Unknown
R&S	Wideband Radio Communication Tester	CMW500	149216

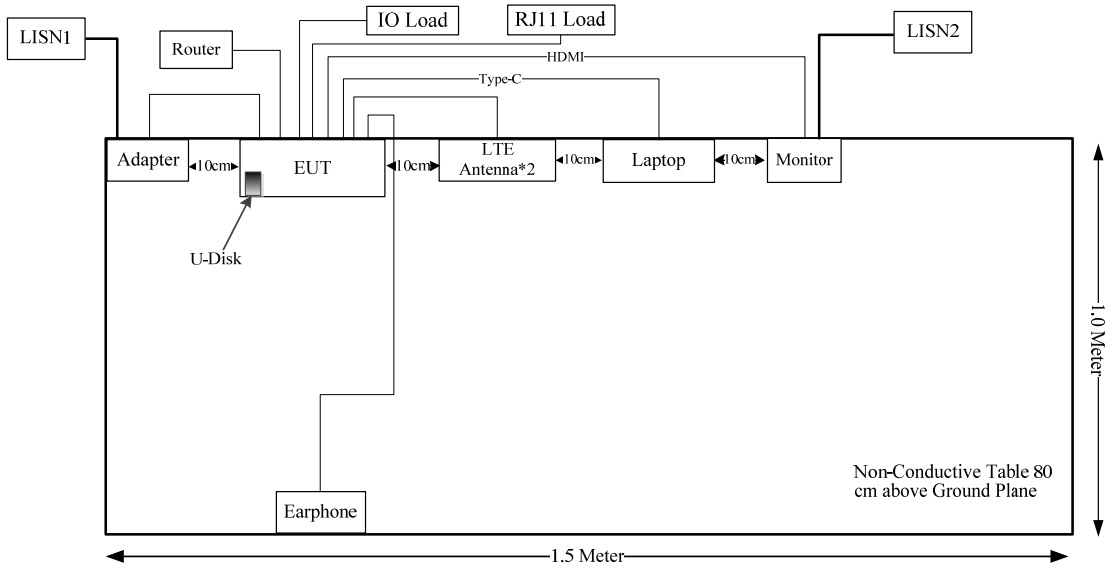
3.4 Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
DC Cable	No	No	1	Adapter(12V)	EUT
RJ45 Cable	No	No	10	Router	EUT
DC Cable	No	No	2	I/O Load	EUT
RJ11 Cable	No	No	3	RJ11 Load	EUT
USB Cable	No	No	1	Laptop 1/2	EUT
HDMI Cable	Yes	No	1.2	Monitor	EUT
Earphone	No	No	0.8	Earphone	EUT
Signal cable	No	No	1	LTE Antenna 1	EUT
Signal cable	No	No	1	LTE Antenna 2	EUT
Signal Cable	no	no	1.0	Antenna	CMW500

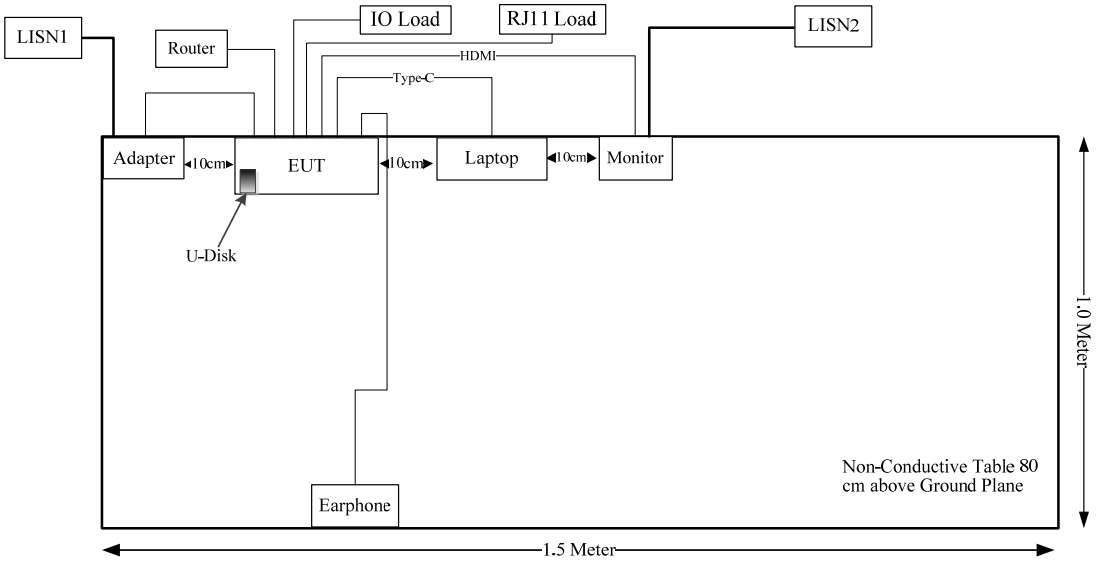
3.5 Block Diagram of Test Setup

AC line conducted emissions:

Configuration 1#& Configuration 2#:



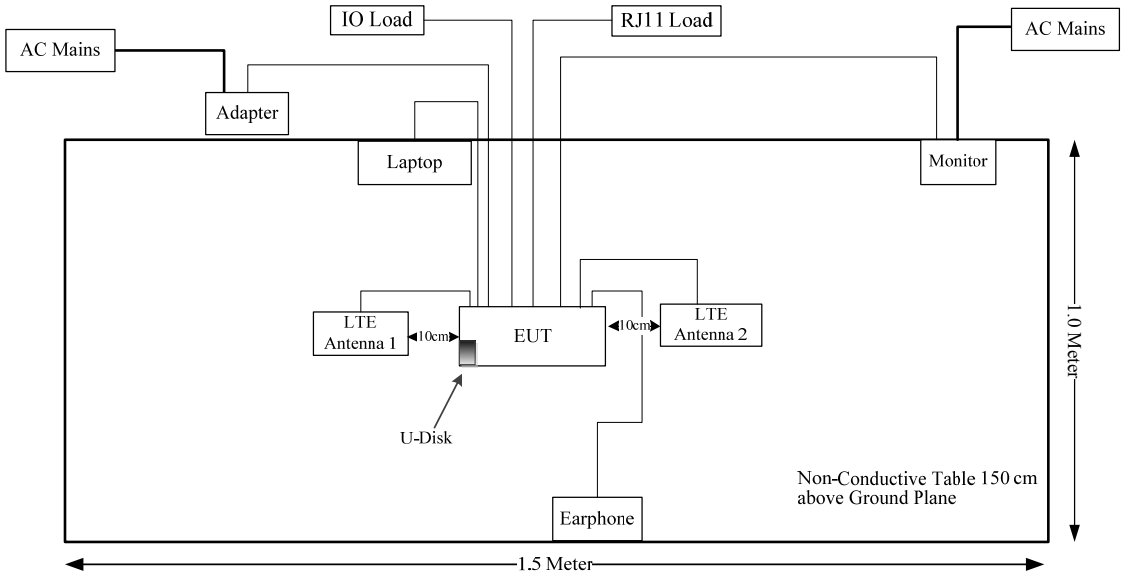
Configuration 3#& Configuration 4#:



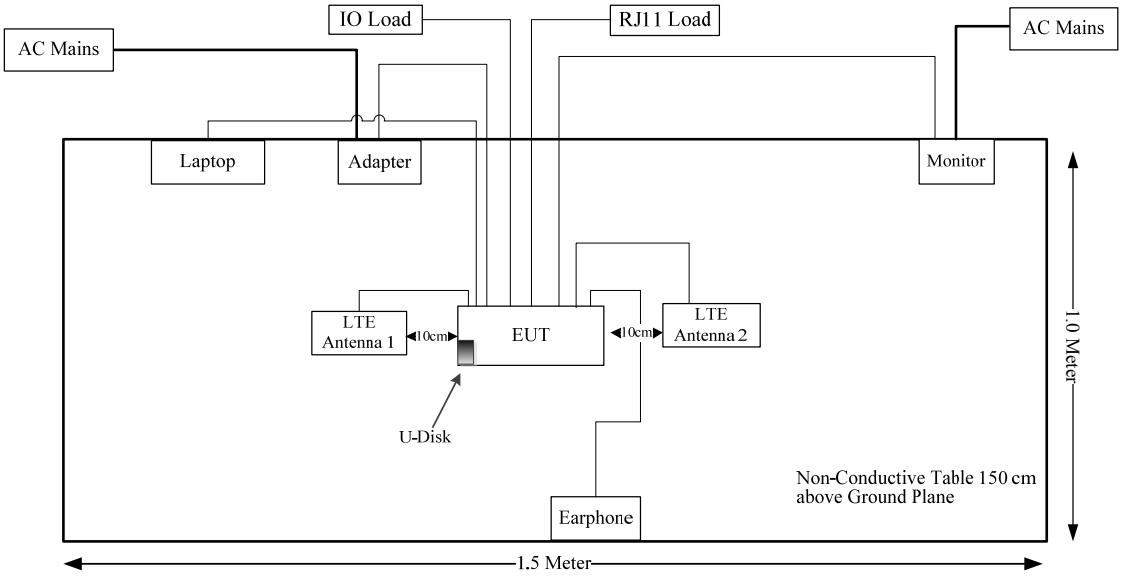
Spurious Emissions:

Below 1GHz:

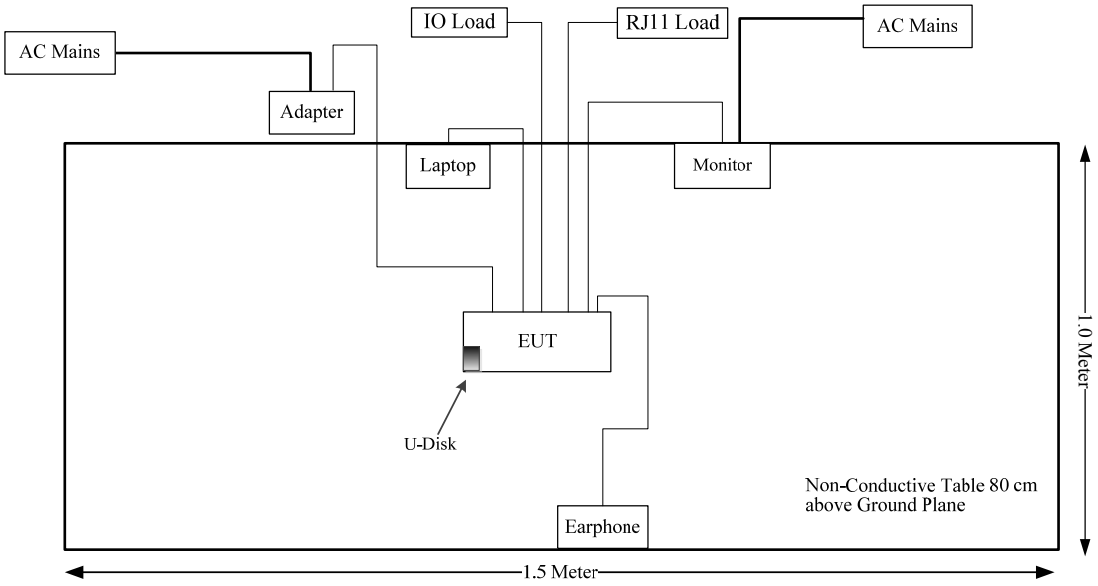
Configuration 1#:



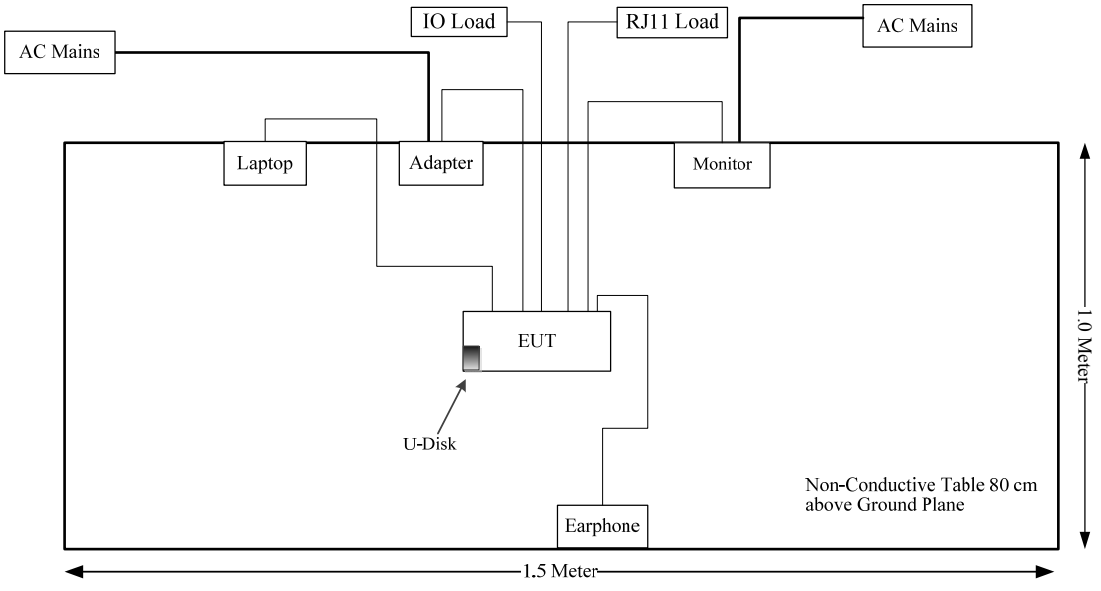
Configuration 2#:



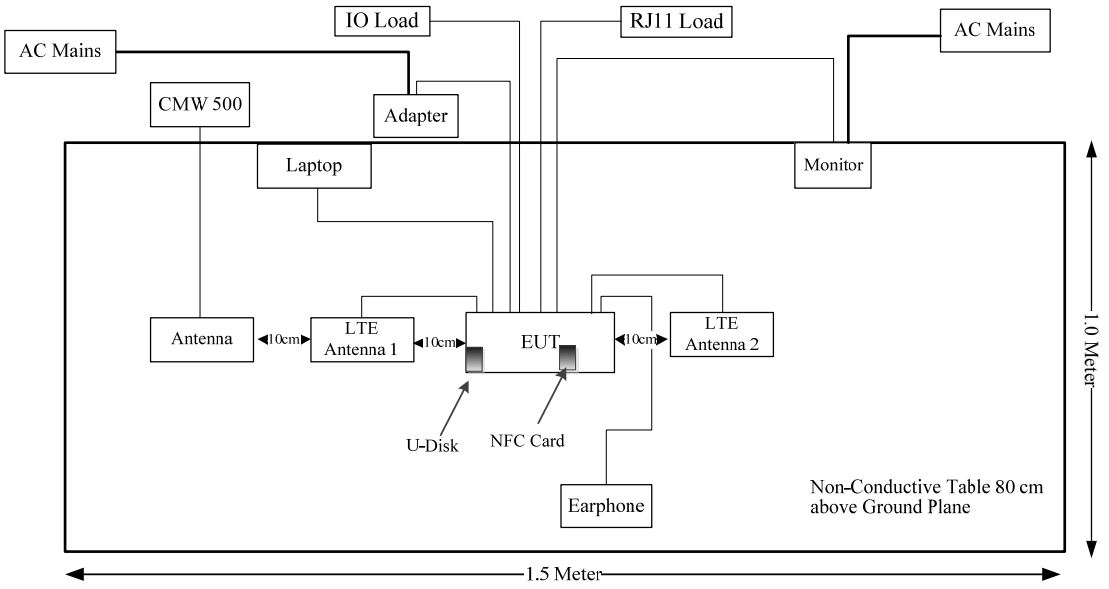
Configuration 3#:



Configuration 4#:

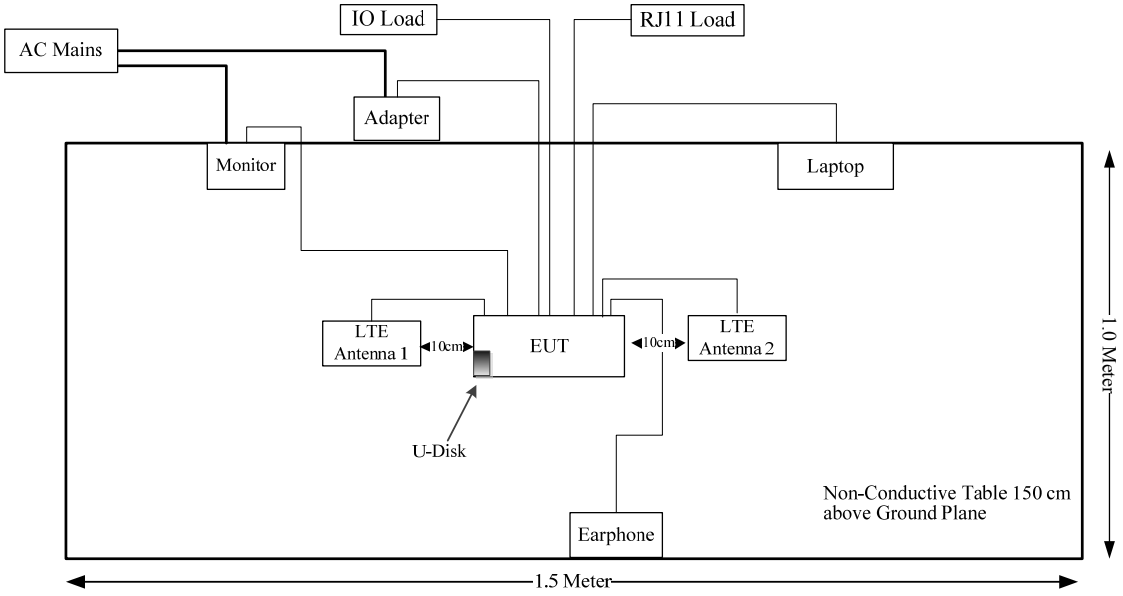


5G Wifi&WWAN&NFC transmit simultaneously:

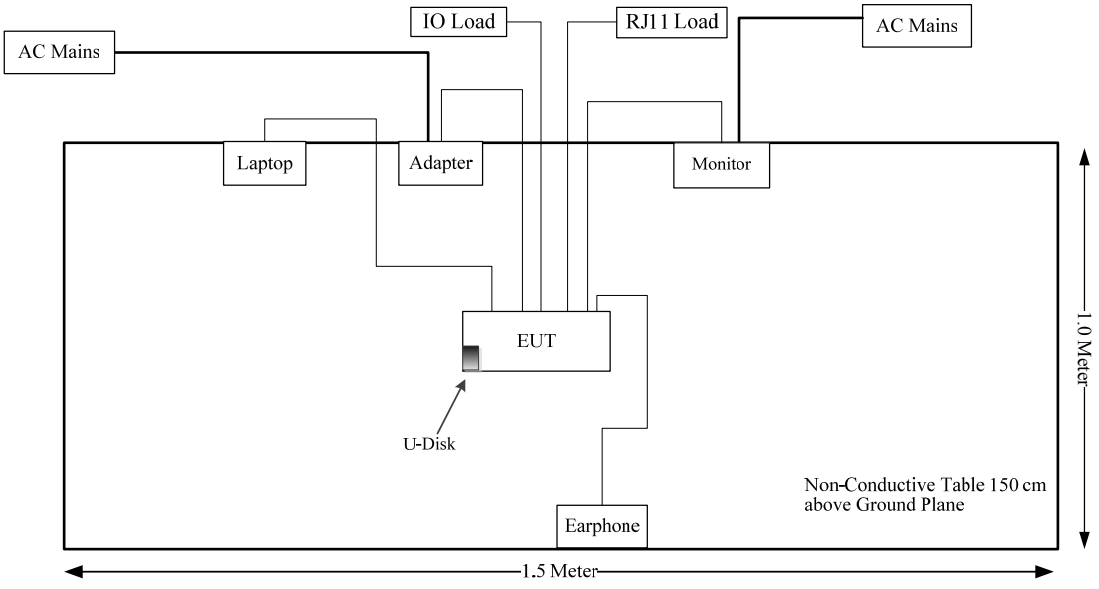


Above 1GHz:

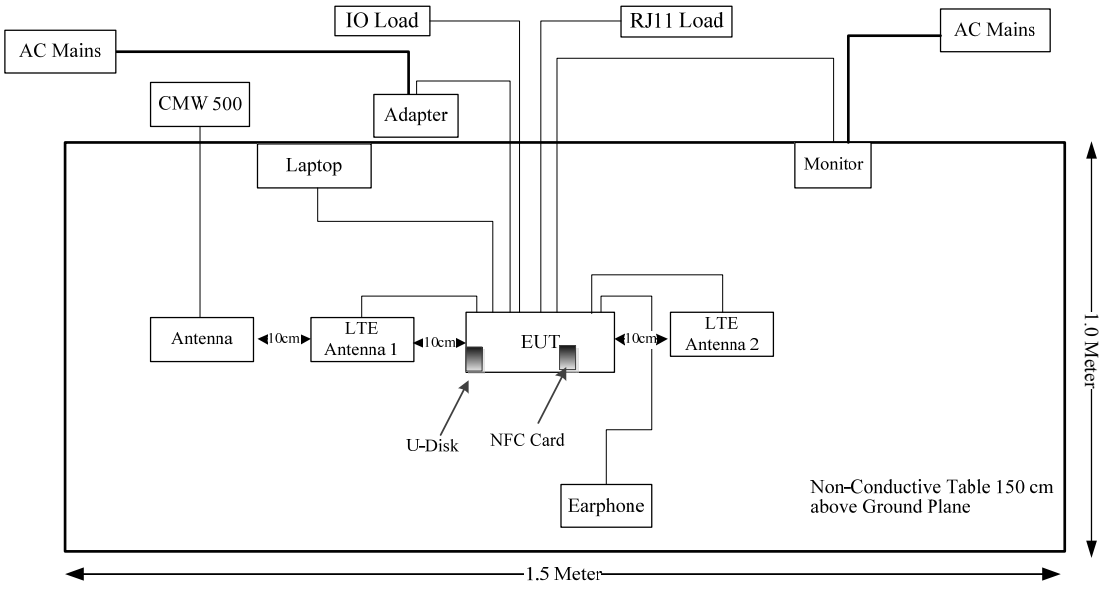
Configuration 1#& Configuration 2#:



Configuration 3#& Configuration 4#:



5G Wifi&WWAN&NFC transmit simultaneously:



3.6 Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.12, Pulong East 1st Road, Tangxia 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. : 829273, the FCC Designation No. : CN5044.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0022.

3.7 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: 3.3dB, 30MHz~200MHz: 4.55 dB, 200MHz~1GHz: 5.92 dB, 1GHz~6GHz: 4.98 dB, 6GHz~18GHz: 5.89 dB, 18GHz~26.5GHz:5.47 dB, 26.5GHz~40GHz:5.63 dB
Unwanted Emissions, conducted	±2.47 dB
Temperature	±1℃
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%
AC Power Lines Conducted Emission	3.11 dB (150 kHz to 30 MHz)

4. REQUIREMENTS AND TEST PROCEDURES

4.1 AC Line Conducted Emissions

4.1.1 Applicable Standard

FCC§15.207(a).

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

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

*Decreases with the logarithm of the frequency.

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

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

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

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

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

RSS-Gen Clause 8.8

Unless stated otherwise in the applicable RSS, for radio apparatus that are designed to be connected to the public utility AC power network, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the range 150 kHz to 30 MHz shall not exceed the limits in table 4, as measured using a 50 μH / 50 Ω line impedance stabilization network. This requirement applies for the radio frequency voltage measured between each power line and the ground terminal of each AC power-line mains cable of the EUT.
For an EUT that connects to the AC power lines indirectly, through another device, the requirement for compliance with the limits in table 4 shall apply at the terminals of the AC power-line mains cable of a representative support device, while it provides power to the EUT. The lower limit applies at the boundary between the frequency ranges. The device used to power the EUT shall be representative of typical applications.

Table 4 – AC power-line conducted emissions limits

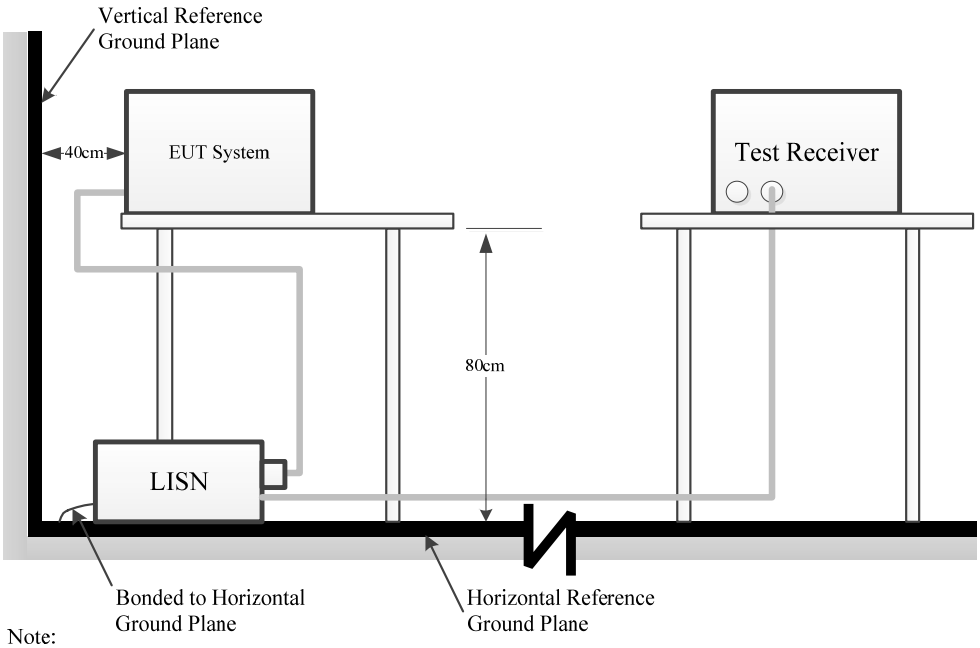
Frequency (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56[1]	56 to 46[1]
0.5 – 5	56	46
5 – 30	60	50

Note 1: The level decreases linearly with the logarithm of the frequency.

For an EUT with a permanent or detachable antenna operating between 150 kHz and 30 MHz, the AC power-line conducted emissions must be measured using the following configurations:
(a) Perform the AC power-line conducted emissions test with the antenna connected to determine compliance with the limits of table 4 outside the transmitter's fundamental emission band.

(b) Retest with a dummy load instead of the antenna to determine compliance with the limits of table 4 within the transmitter's fundamental emission band. For a detachable antenna, remove the antenna and connect a suitable dummy load to the antenna connector. For a permanent antenna, remove the antenna and terminate the RF output with a dummy load or network that simulates the antenna in the fundamental frequency band.

4.1.2 EUT Setup



Note:
1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at least 80 cm from other units and oter 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, RSS-Gen 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.

4.1.3 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

4.1.4 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.

4.1.5 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

4.1.6 Test Result

Please refer to section 5.1.

4.2 Radiation Spurious Emissions

4.2.1 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.
(5) For transmitters operating solely in the 5.850-5.895 GHz band or operating on a channel that spans across 5.725-5.895 GHz:
(i) For an indoor access point or subordinate device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of 15 dBm/MHz and shall decrease linearly to an e.i.r.p. of −7 dBm/MHz at or above 5.925 GHz.
(ii) For a client device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of −5 dBm/MHz and shall decrease linearly to an e.i.r.p. of −27 dBm/MHz at or above 5.925 GHz.
(iii) For a client device or indoor access point or subordinate device, all emissions below 5.725 GHz shall not exceed an e.i.r.p. of −27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz.
(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.

Frequency band 5150-5250 MHz:

RSS-247 Clause 6.2.1.2

For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS) and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

Frequency band 5250-5350 MHz:

RSS-247 Clause 6.2.2.2

For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS) and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

Frequency bands 5470-5600 MHz and 5650-5725 MHz:

RSS-247 Clause 6.2.3.2

Emissions outside the band 5470-5600 MHz and 5650-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, devices with bandwidth overlapping the band edge of 5725 MHz can meet the emission limit of -27 dBm/MHz e.i.r.p. at 5850 MHz instead of 5725 MHz.

Frequency band 5725-5850 MHz

RSS-247 Clause 6.2.4.3

Devices operating in the band 5725-5850 MHz with antenna gain greater than 10 dBi can have unwanted emissions that comply with either the limits in this section or in section 5.5 until six (6) months after the publication date of this standard for certification. Certified devices that do not comply with emission limits in this section shall not be manufactured, imported, distributed, leased, offered for sale or sold after April 1, 2018.
Devices operating in the band 5725-5850 MHz with antenna gain of 10 dBi or less can have unwanted emissions that comply with either the limits in this section or in section 5.5 until April 1, 2018 for certification. Certified devices that do not comply with emission limits in this section shall not be manufactured, imported, distributed, leased, offered for sale or sold after April 1, 2020.
Devices operating in the band 5725-5850 MHz shall have e.i.r.p. of unwanted emissions comply with the following:
a) 27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 dBm/MHz at 5 MHz above or below the band edges;

b) 15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;

c) 10 dBm/MHz at 25 MHz above or below the band edges decreasing linearly to -27 dBm/MHz at 75 MHz above or below the band edges; and

d) -27 dBm/MHz at frequencies more than 75 MHz above or below the band edges.

Frequency band 5850-5895 MHz

RSS-247 Clause 6.2.5.3

For the band edge 5725 MHz and below, all devices shall be measured using peak detection and shall comply with the following e.i.r.p. spectral density limits:

a) 27 dBm/MHz at frequencies from the 5725 MHz band edge decreasing linearly to15.6 dBm/MHz at 5 MHz below the 5725 MHz band edge

b) 15.6 dBm/MHz at 5 MHz below the 5725 MHz band edge decreasing linearly to 10 dBm/MHz at 25 MHz below the 5725 MHz band edge

c) 10 dBm/MHz at 25 MHz below the 5725 MHz band edge decreasing linearly to -27 dBm/MHz at 75 MHz below the 5725 MHz band edge

d) -27 dBm/MHz at frequencies more than 75 MHz below the 5725 MHz band edge

For the 5895 MHz band edge and above, all devices shall be measured using average detection and shall comply with the following e.i.r.p. spectral density limits:

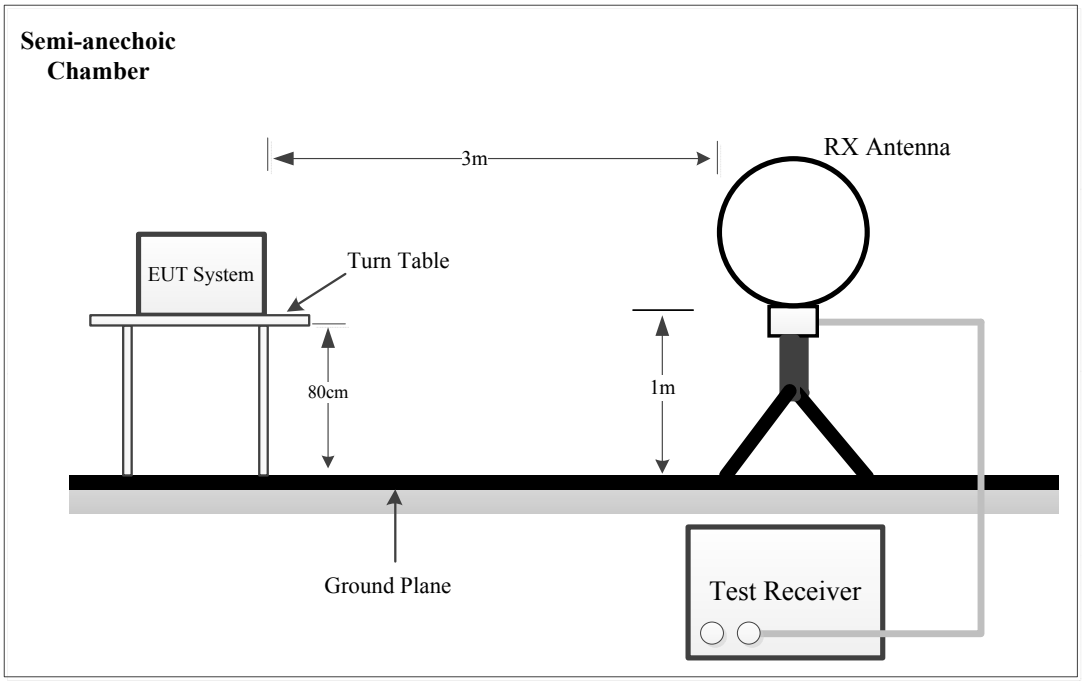
a) Fixed outdoor access points and fixed outdoor client devices shall not exceed -27 dBm/MHz e.i.r.p. spectral density at or above the 5895 MHz band edge.

b) Indoor access points or indoor subordinate devices shall not exceed 15 dBm/MHz e.i.r.p. spectral density at the 5895 MHz band edge and shall decrease linearly to not exceed -7 dBm/MHz e.i.r.p. spectral density at or above 5925 MHz.

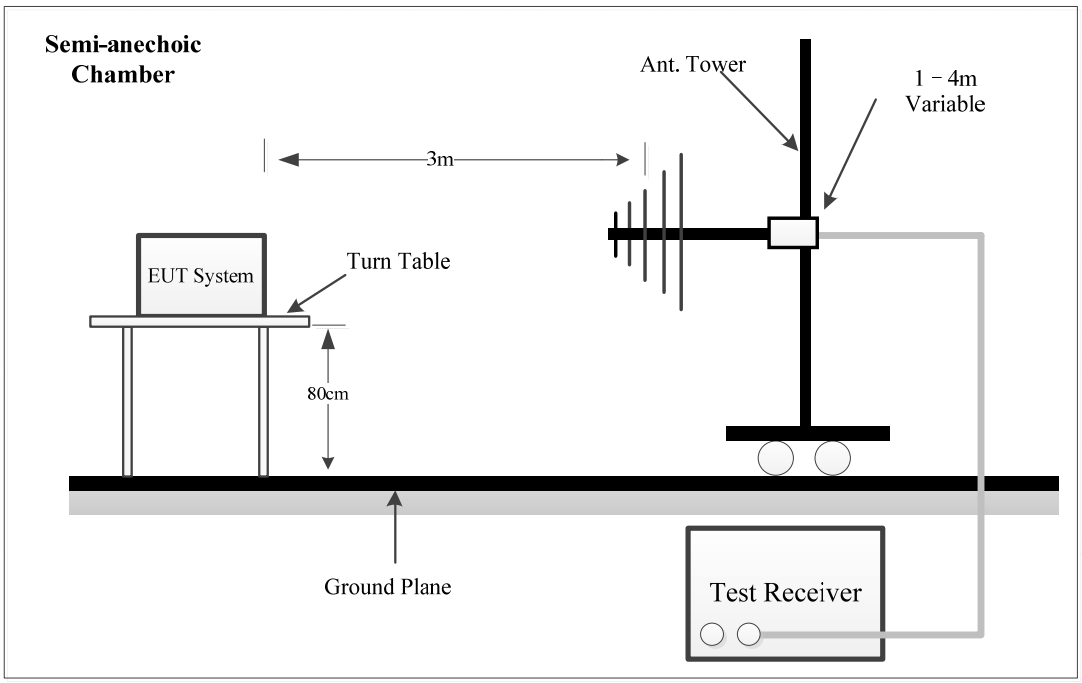
c) Client devices shall not exceed -5 dBm/MHz e.i.r.p. spectral density at the 5895 MHz band edge and shall decrease linearly to not exceed -27 dBm/MHz e.i.r.p. spectral density at or above 5925 MHz.

4.2.2 EUT Setup

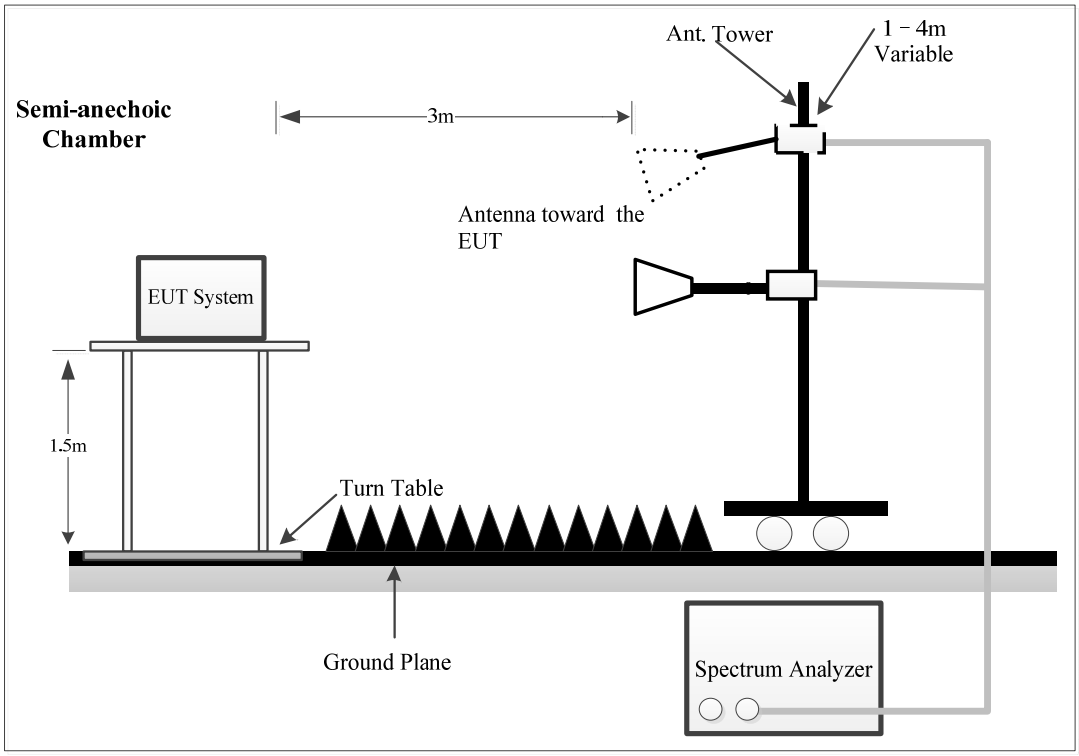
9kHz~30MHz:



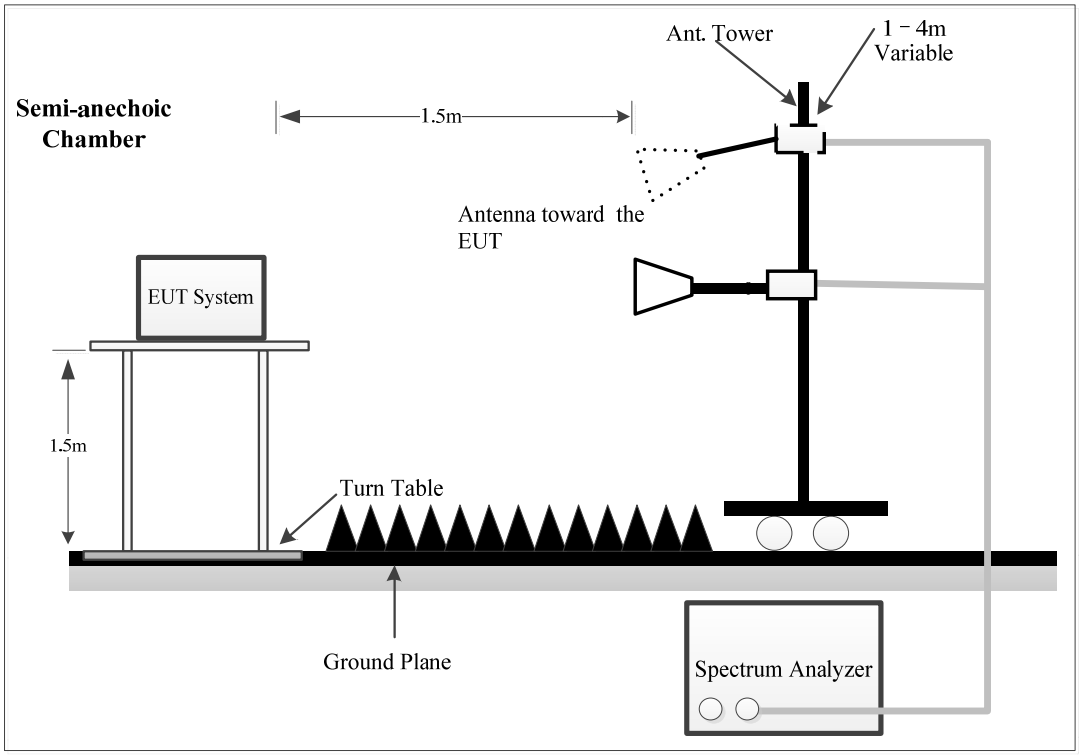
30MHz~1GHz:



1-26.5GHz:



26.5-40GHz:



The radiated emission tests were performed in the semi-anechoic chamber, using the setup accordance with the ANSI C63.10-2013. The specification used was FCC 15.209, FCC 15.407, RSS-247, RSS-Gen 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.

4.2.3 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	Detector
9 kHz – 150 kHz	QP/AV	200Hz	1 kHz	200 Hz	QP/AV
150 kHz – 30 MHz	QP/AV	9 kHz	30 kHz	9 kHz	QP/AV
30MHz – 1000 MHz	PK	100 kHz	300 kHz	/	PK
	QP	/	/	120kHz	QP

1GHz- 40GHz:
Pre-scan:

Measurement	Detector	Duty cycle	RBW	Video B/W
PK	Peak	Any	1MHz	3 MHz
Ave.	Peak	>98%	1MHz	5kHz
		<98%	1MHz	1/T, not less than 5kHz

Final measurement for emission identified during the pre-scan:

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

Note: T is minimum transmission duration

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

If the maximized peak measured value is under the average limit, then it is unnecessary to perform an QP measurement.

4.2.4 Test Procedure

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

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

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

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

For 5150-5850MHz:

For Radiated 26.5-40GHz test, which was performed at 1.5 m distance, according to C63.10, the test result shall be extrapolated to the specified distance using an extrapolation Factor of 20dB/decade from 3m to 1.5m
Distance extrapolation Factor =20 log (specific distance [3m]/test distance [1.5m]) dB= 6.0 dB

For 5850-5895MHz:
Per KDB 291074 D02 EMC Measurement v01:

Use guidance in KDB Publication 789033 for all measurements. Unwanted emissions outside of restricted bands are measured with an RMS detector. In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit. Refer to KDB 662911 D01 and D02 if conducted power measurements are combined with directional gain of the antenna system to demonstrate compliance with the radiated limit.

Unwanted band-edge emissions may be measured using the integration method as described in KDB Publication 789033 3. d) (ii). Emissions below 5.725 GHz should be measured using peak detection while emission above 5.895 GHz should be measured using average detection.

4.2.5 Corrected Result & Margin Calculation

The basic equation except 26.5-40GHz test is as follows:

For 5150-5850MHz:
Factor = Antenna Factor + Cable Loss-Amplifier Gain

For 5850-5895MHz:
Factor = Antenna Factor + Cable Loss

For Radiated 26.5-40GHz test:
Factor = Antenna Factor + Cable Loss- Distance extrapolation Factor

Result = Reading + Factor

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

Margin = Limit – Result

For the spurious emission below 30MHz, the limit was convert from dBμA/m to dBμV/m by adding 51.5 dB.

4.2.6 Test Result

Please refer to section 5.2.

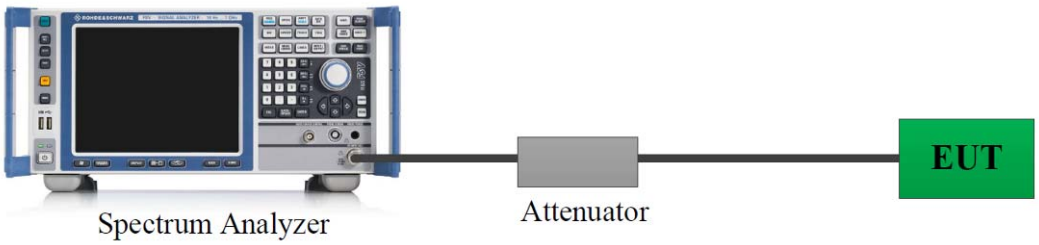
4.3 26dB Attenuated Below The Channel Power

4.3.1 Applicable Standard

RSS-247 Clause 6.2.1.2

For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS) and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

4.3.2 EUT Setup



A short RF cable with low cable loss connected to the EUT antenna port, which was provided by manufacturer. The insert loss of this RF cable/attenuator was offset into the setting of test equipment.

4.3.3 Test Procedure

a) Set RBW = 1%~5% of the emission bandwidth.
b) Set the VBW > RBW.
c) Detector = RMS.
d) Trace mode = max hold
e) Measure the emission attenuated below the channel power

4.3.4 Test Result

Please refer to section 5.3.

4.4 Emission Bandwidth

4.4.1 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.
RSS-247 Clause 6.2.1.2

For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS) and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

RSS-247 Clause 6.2.2.1

Devices, other than devices installed in vehicles, shall comply with the following:

a) The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10}B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band;

b) The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10}B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W

RSS-247 Clause 6.2.3.1

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10}B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10}B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

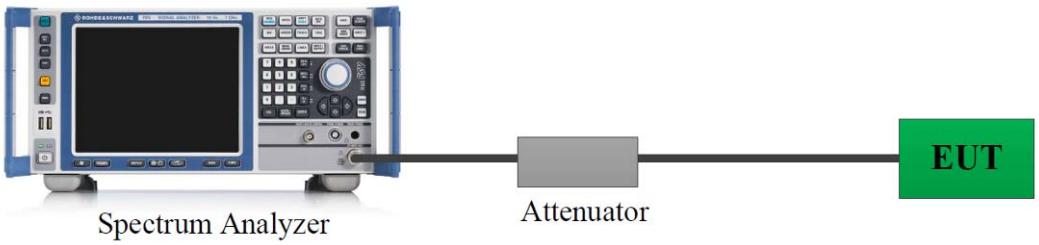
RSS-247 Clause 6.2.4.2

For equipment operating in the band 5725-5850 MHz, the minimum 6 dB bandwidth shall be at least 500 kHz.

RSS-247 Clause 6.2.5.2

For equipment operating in the band 5850-5895 MHz, the minimum 6 dB bandwidth shall be at least 500 kHz.

4.4.2 EUT Setup



A short RF cable with low cable loss connected to the EUT antenna port, which was provided by manufacturer. The insert loss of this RF cable/attenuator was offset into the setting of test equipment.

4.4.3 Test Procedure

26dB Emission Bandwidth:

According to ANSI C63.10-2013 Section 12.4.1

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

6 dB emission bandwidth:

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

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

99% Occupied Bandwidth:

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

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

4.4.4 Test Result

Please refer to section 5.4 and section 5.5.

4.5 Maximum Conducted Output Power

4.5.1 Applicable Standard

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

FCC §15.407(a) (2)
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

FCC §15.407(a) (3)(i)
For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

FCC §15.407(a) (3)(iii)
For client devices operating under the control of an indoor access point in the 5.850 - 5.895 GHz band, the maximum power spectral density must not exceed 14 dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm. Client devices operating on a channel that spans the 5.725 - 5.850 GHz and 5.850 - 5.895 GHz bands must not exceed an e.i.r.p. of 30 dBm.

RSS-247 Clause 6.2.1.1

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or 1.76 + 10 log10B, dBm, whichever is less stringent. Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For other devices, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10B, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

RSS-247 Clause 6.2.2.1

Devices, other than devices installed in vehicles, shall comply with the following:
a) The maximum conducted output power shall not exceed 250 mW or 11 + 10 log10B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band;

b) The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

RSS-247 Clause 6.2.3.1

The maximum conducted output power shall not exceed 250 mW or 11 + 10 log10B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

RSS-247 Clause 6.2.4.2

The maximum conducted output power shall not exceed 1 W. The output 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 output 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 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-multipoint3 systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

RSS-247 Clause 6.2.5.2

For fixed outdoor access points, the maximum e.i.r.p. shall not exceed 4 W (36 dBm). The maximum e.i.r.p. spectral density shall not exceed 23 dBm/MHz. The maximum e.i.r.p. measured at any elevation angle greater than 30 degrees above the horizon, shall not exceed 125 mW (21 dBm) over the 5850-5895 MHz frequency band.

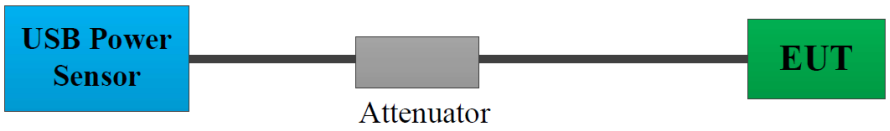
For fixed outdoor client devices, the maximum e.i.r.p. shall not exceed 1 W (30 dBm). The maximum e.i.r.p. spectral density shall not exceed 17 dBm/MHz.

For indoor access points, the maximum e.i.r.p. shall not exceed 4 W (36 dBm). The maximum e.i.r.p. spectral density shall not exceed 20 dBm/MHz.

For indoor subordinate devices, the maximum e.i.r.p. shall not exceed 4 W (36 dBm). The maximum e.i.r.p. spectral density shall not exceed 20 dBm/MHz.

For indoor client devices, the maximum e.i.r.p. shall not exceed 1 W (30 dBm). The maximum e.i.r.p. spectral density shall not exceed 14 dBm/MHz.

4.5.2 EUT Setup



A short RF cable with low cable loss connected to the EUT antenna port, which was provided by manufacturer. The insert loss of this RF cable/attenuator was offset into the setting of test equipment.

4.5.3 Test Procedure

According to ANSI C63.10-2013 Section 12.3.3.1

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

4.5.4 Test Result

Please refer to section 5.6.

4.6 Maximum Power Spectral Density

4.6.1 Applicable Standard

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

FCC §15.407(a) (2)
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

FCC §15.407(a) (3)(i)
For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

FCC §15.407(a) (3)(iii)
For client devices operating under the control of an indoor access point in the 5.850 − 5.895 GHz band, the maximum power spectral density must not exceed 14 dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm. Client devices operating on a channel that spans the 5.725 − 5.850 GHz and 5.850 − 5.895 GHz bands must not exceed an e.i.r.p. of 30 dBm.

RSS-247 Clause 6.2.1.1

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or 1.76 + 10 $\log_{10}$B, dBm, whichever is less stringent. Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For other devices, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 $\log_{10}$B, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

RSS-247 Clause 6.2.2.1

Devices, other than devices installed in vehicles, shall comply with the following:

a) The maximum conducted output power shall not exceed 250 mW or 11 + 10 $\log_{10}$B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band;

b) The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

RSS-247 Clause 6.2.3.1

The maximum conducted output power shall not exceed 250 mW or 11 + 10 $\log_{10}$B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

RSS-247 Clause 6.2.4.2

The maximum conducted output power shall not exceed 1 W. The output 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 output 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 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[3] systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

RSS-247 Clause 6.2.5.2

For fixed outdoor access points, the maximum e.i.r.p. shall not exceed 4 W (36 dBm). The maximum e.i.r.p. spectral density shall not exceed 23 dBm/MHz. The maximum e.i.r.p. measured at any elevation angle greater than 30 degrees above the horizon, shall not exceed 125 mW (21 dBm) over the 5850-5895 MHz frequency band.

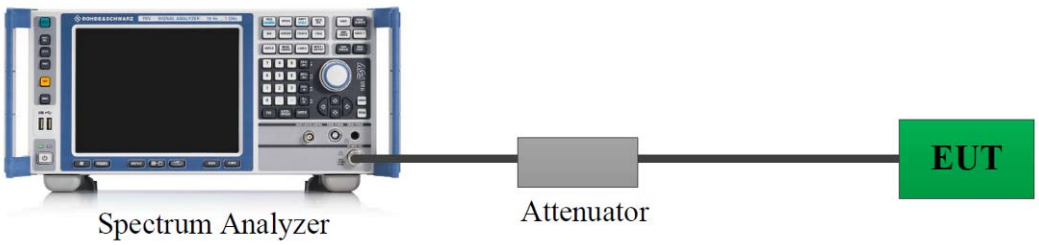
For fixed outdoor client devices, the maximum e.i.r.p. shall not exceed 1 W (30 dBm). The maximum e.i.r.p. spectral density shall not exceed 17 dBm/MHz.

For indoor access points, the maximum e.i.r.p. shall not exceed 4 W (36 dBm). The maximum e.i.r.p. spectral density shall not exceed 20 dBm/MHz.

For indoor subordinate devices, the maximum e.i.r.p. shall not exceed 4 W (36 dBm). The maximum e.i.r.p. spectral density shall not exceed 20 dBm/MHz.

For indoor client devices, the maximum e.i.r.p. shall not exceed 1 W (30 dBm). The maximum e.i.r.p. spectral density shall not exceed 14 dBm/MHz.

4.6.2 EUT Setup



A short RF cable with low cable loss connected to the EUT antenna port, which was provided by manufacturer. The insert loss of this RF cable/attenuator was offset into the setting of test equipment.

4.6.3 Test Procedure

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

Duty cycle ≥98%

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

Duty cycle <98%, duty cycle variations are less than ±2%

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

Duty cycle <98%, duty cycle variations exceed ±2%

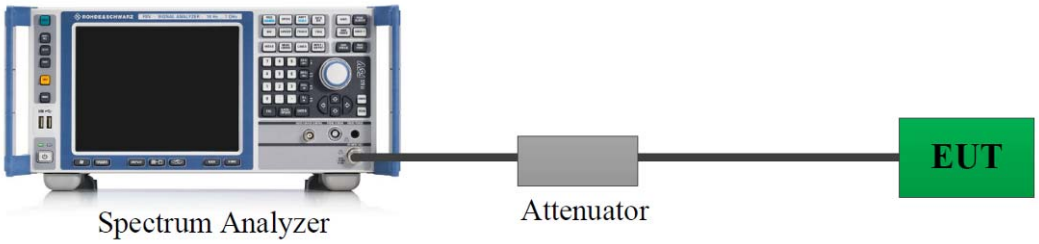
KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-3 should be applied.

4.6.4 Test Result

Please refer to section 5.7.

4.7 Duty Cycle

4.7.1 EUT Setup



A short RF cable with low cable loss connected to the EUT antenna port, which was provided by manufacturer. The insert loss of this RF cable/attenuator was offset into the setting of test equipment.

4.7.2 Test Procedure

According to ANSI C63.10-2013 Section 12.2

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the ON and OFF times of the transmitted signal:
1) Set the center frequency of the instrument to the center frequency of the transmission.
2) Set RBW ≥ OBW if possible; otherwise, set RBW to the largest available value.
3) Set VBW ≥ RBW. Set detector = peak or average.
4) The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring the duty cycle shall not be used if T ≤ 16.7 μs.)

4.7.3 Judgment

Report Only. Please refer to section 5.8.

4.8 Antenna Requirement

4.8.1 Applicable Standard

FCC §15.203

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

RSS-Gen Clause 6.8

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below). When measurements at the antenna port are used to determine the RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna's manufacturer.
The test report shall state the RF power, output power setting and spurious emission measurements with each antenna type that is used with the transmitter being tested.
For licence-exempt equipment with detachable antennas, the user manual shall also contain the following notice in a conspicuous location:
This radio transmitter [enter the device's ISED certification number] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Immediately following the above notice, the manufacturer shall provide a list of all antenna types which can be used with the transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna type.

4.8.2 Judgment

Compliant. Please refer to the Antenna Information detail in Section 1.3.

4.9 Additional requirement

4.9.1 Applicable Standard

According to RSS-247 Clause 6.4 Additional requirement

The following requirements shall apply:

a) The device shall automatically discontinue transmission in cases of absence of information to transmit, or operational failure. A description on how this is done shall accompany the application for equipment certification. Note that this is not intended to prohibit transmission of control or signalling information or the use of repetitive codes where required by the technology.

b) All LE-LAN devices must contain security features to protect against modification of software by unauthorized parties.

Manufacturers must implement security features in any digitally modulated devices capable of operating in any of the frequency ranges within the 5 GHz band, so that third parties are not able to reprogram the device to operate outside the parameters for which the device was certified. The software must prevent the user from operating the transmitter with operating frequencies, output power, modulation types or other radio frequency parameters outside those that were approved for the device. Manufacturers may use various means, including the use of a private network that allows only authenticated users to download software, electronic signatures in software or coding in hardware that is decoded by software to verify that new software can be legally loaded into a device to meet these requirements and must describe the methods in their application for equipment certification.

Manufacturers must take steps to ensure that DFS functionality cannot be disabled by the operator of the LE-LAN device.

c) The user manual for LE-LAN devices shall contain instructions related to the restrictions mentioned in the above sections, namely that:

i. the device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;[4]

ii. for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;

iii. for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate; and

iv. where applicable, antenna type(s), antenna models(s), and worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in section 6.2.2.3 shall be clearly indicated.

4.9.2 Judgment

RSS-247 Clause 6.4 a):

The device shall automatically discontinue transmission in cases of absence of information to transmit, or operational failure. Please refer to the declaration

RSS-247 Clause 6.4 b):

The devices must contain security features to protect against modification of software by unauthorized parties. Please refer to the declaration

RSS-247 Clause 6.4 c):

i). The device is only for indoor use on 5150-5250MHz and 5250-5350MHz.

ii). The device operates on5250-5350MHz/5470-5725MHz/5850-5895MHz meet the EIRP limit, please refer to the power test result.

iii). The antenna permanently attached to the unit, and all the EIPR compliance with RSS-247 requirement. Please refer to the conducted output power test result.

iv). The device EIRP less than 200mW(23 dBm).

5. Test DATA AND RESULTS

5.1 AC Line Conducted Emissions

Serial Number:	2QUD-1, 2QUD-3, 2QUD-2, 2QUD-4	Test Date:	2024/9/14~2024/10/24
Test Site:	CE	Test Mode:	Transmitting
Tester:	Yukin Qiu	Test Result:	Pass

Environmental Conditions:

Temperature: (℃)	25.3~26.6	Relative Humidity: (%)	43~69	ATM Pressure: (kPa)	99.8~101.2

Test Equipment List and Details:

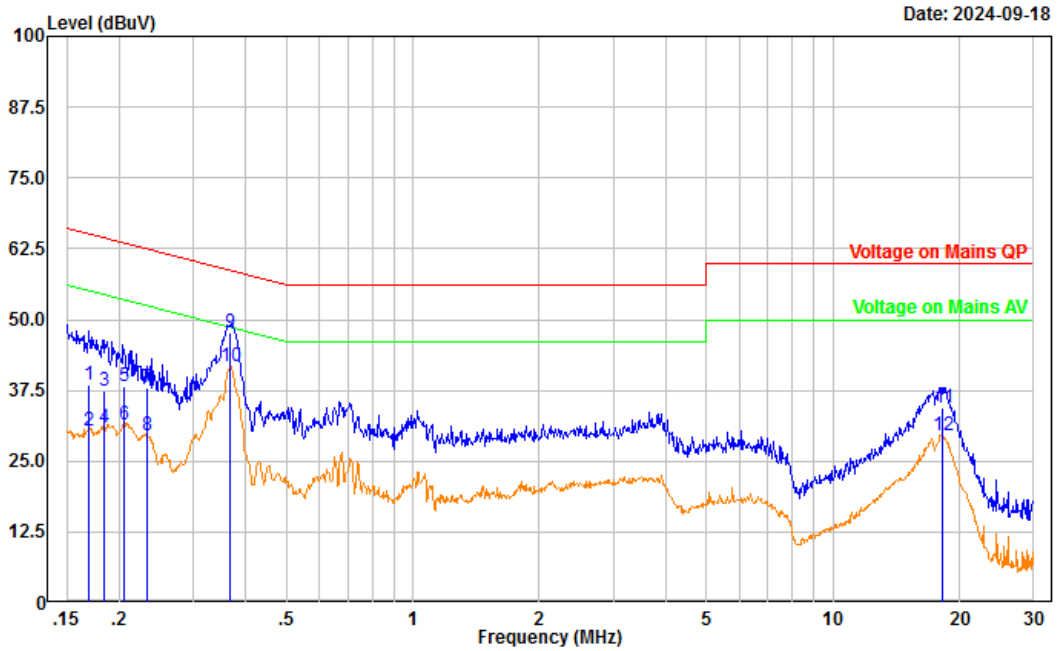
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101614	2024/9/5	2025/9/4
MICRO-COAX	Coaxial Cable	C-NJNJ-50	C-0200-01	2024/9/5	2025/9/4
R&S	EMI Test Receiver	ESCI	100035	2024/8/26	2025/8/25
Audix	Test Software	E3	191218 V9	N/A	N/A

** Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Configuration 1#:

Project No.: 2402W92356E-RF
Port: Line
Test Mode: Transmitting
Note: 802.11ac 5775MHZ

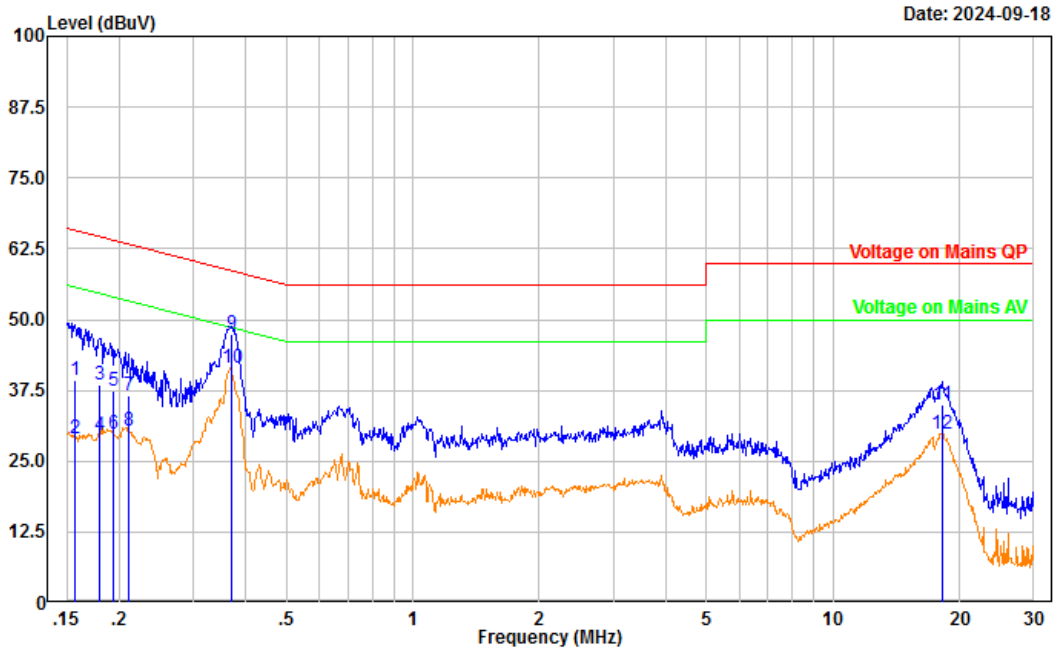
Serial No.: 2QUD-1
Tester: Yukin Qiu



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.170	27.65	10.79	38.44	64.97	26.53	QP
2	0.170	19.44	10.79	30.23	54.97	24.74	Average
3	0.185	26.52	10.82	37.34	64.28	26.94	QP
4	0.185	19.96	10.82	30.78	54.28	23.50	Average
5	0.206	27.37	10.85	38.22	63.37	25.15	QP
6	0.206	20.49	10.85	31.34	53.37	22.03	Average
7	0.234	27.12	10.84	37.96	62.32	24.36	QP
8	0.234	18.60	10.84	29.44	52.32	22.88	Average
9	0.368	36.93	10.83	47.76	58.54	10.78	QP
10	0.368	30.98	10.83	41.81	48.54	6.73	Average
11	18.262	23.67	10.86	34.53	60.00	25.47	QP
12	18.262	18.60	10.86	29.46	50.00	20.54	Average

Project No.: 2402W92356E-RF
Port: neutral
Test Mode: Transmitting
Note: 802.11ac 5775MHZ

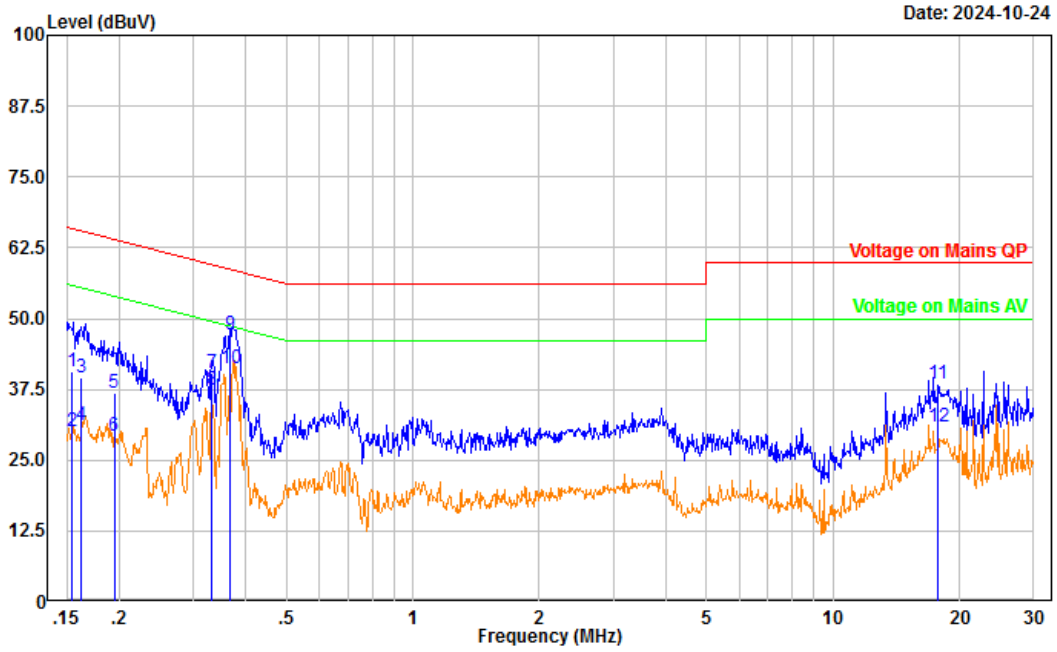
Serial No.: 2QUD-1
Tester: Yukin Qiu



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.157	28.54	10.85	39.39	65.63	26.24	QP
2	0.157	18.22	10.85	29.07	55.63	26.56	Average
3	0.179	27.59	10.85	38.44	64.51	26.07	QP
4	0.179	18.78	10.85	29.63	54.51	24.88	Average
5	0.193	26.48	10.85	37.33	63.89	26.56	QP
6	0.193	18.97	10.85	29.82	53.89	24.07	Average
7	0.210	25.69	10.85	36.54	63.20	26.66	QP
8	0.210	19.58	10.85	30.43	53.20	22.77	Average
9	0.369	36.67	10.77	47.44	58.52	11.08	QP
10	0.369	30.78	10.77	41.55	48.52	6.97	Average
11	18.130	24.10	10.86	34.96	60.00	25.04	QP
12	18.130	19.04	10.86	29.90	50.00	20.10	Average

Spot Check:
Configuration 2#:

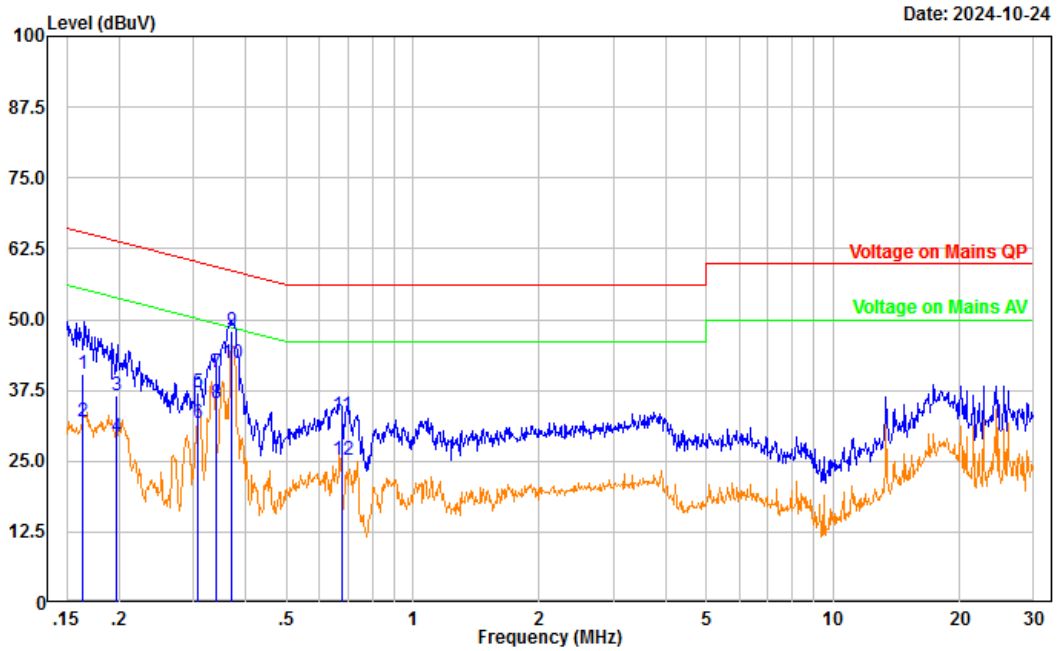
```
Project No.: 2402W92356E-RF          Serial No.: 2QUD-3
       Port: Line                        Tester: Yukin Qiu
  Test Mode: Transmitting
       Note: 802.11ac 5775MHZ
```



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.154	29.86	10.76	40.62	65.78	25.16	QP
2	0.154	19.31	10.76	30.07	55.78	25.71	Average
3	0.163	28.90	10.78	39.68	65.32	25.64	QP
4	0.163	20.33	10.78	31.11	55.32	24.21	Average
5	0.195	26.07	10.84	36.91	63.84	26.93	QP
6	0.195	18.40	10.84	29.24	53.84	24.60	Average
7	0.331	29.54	10.83	40.37	59.42	19.05	QP
8	0.331	26.66	10.83	37.49	49.42	11.93	Average
9	0.368	36.43	10.83	47.26	58.55	11.29	QP
10	0.368	30.27	10.83	41.10	48.55	7.45	Average
11	17.696	27.55	10.86	38.41	60.00	21.59	QP
12	17.696	19.91	10.86	30.77	50.00	19.23	Average

Project No.: 2402W92356E-RF
Port: neutral
Test Mode: Transmitting
Note: 802.11ac 5775MHZ

Serial No.: 2QUD-3
Tester: Yukin Qiu

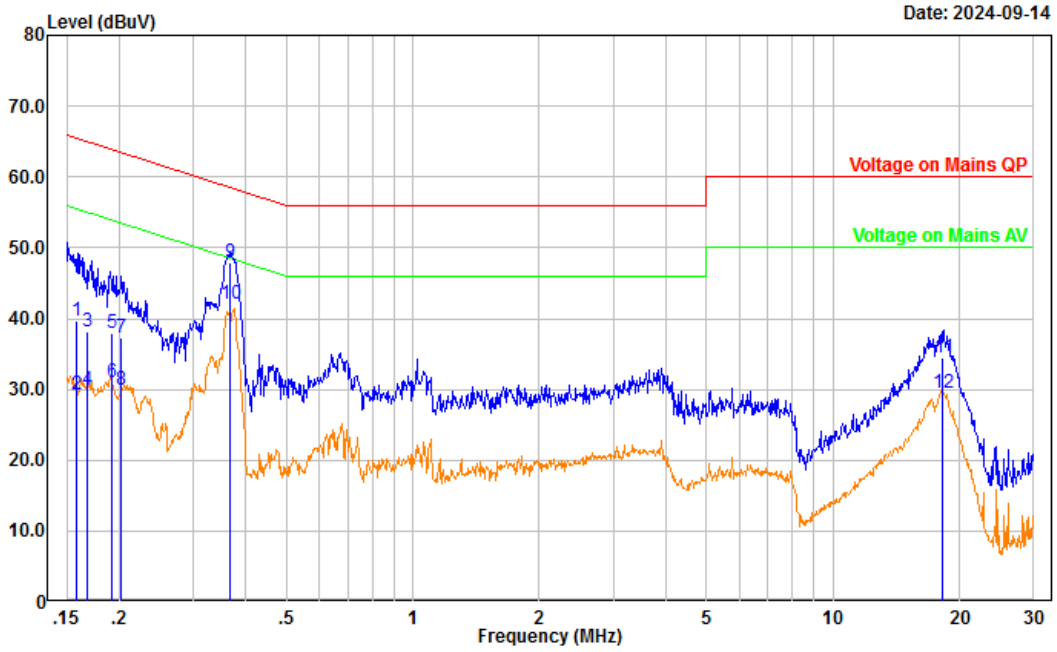


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.164	29.47	10.85	40.32	65.25	24.93	QP
2	0.164	21.10	10.85	31.95	55.25	23.30	Average
3	0.197	25.73	10.85	36.58	63.72	27.14	QP
4	0.197	18.45	10.85	29.30	53.72	24.42	Average
5	0.307	26.29	10.78	37.07	60.04	22.97	QP
6	0.307	20.98	10.78	31.76	50.04	18.28	Average
7	0.339	29.84	10.78	40.62	59.22	18.60	QP
8	0.339	24.50	10.78	35.28	49.22	13.94	Average
9	0.371	37.10	10.77	47.87	58.48	10.61	QP
10	0.371	31.61	10.77	42.38	48.48	6.10	Average
11	0.678	22.21	10.75	32.96	56.00	23.04	QP
12	0.678	14.51	10.75	25.26	46.00	20.74	Average

Configuration 3#:

Project No.: 2402W92356E-RF
Port: Line
Test Mode: Transmitting
Note: 802.11ac 5775MHZ

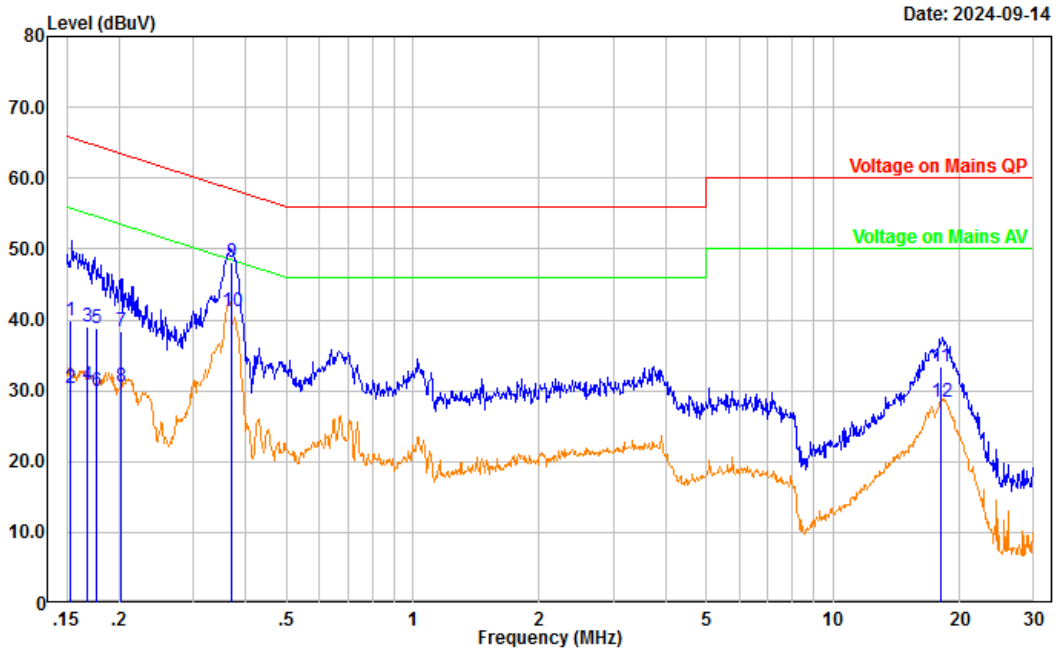
Serial No.: 2QUD-2
Tester: Yukin Qiu



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.158	28.82	10.77	39.59	65.58	25.99	QP
2	0.158	18.45	10.77	29.22	55.58	26.36	Average
3	0.168	27.45	10.79	38.24	65.07	26.83	QP
4	0.168	19.09	10.79	29.88	55.07	25.19	Average
5	0.191	27.10	10.83	37.93	63.98	26.05	QP
6	0.191	20.07	10.83	30.90	53.98	23.08	Average
7	0.202	26.54	10.85	37.39	63.51	26.12	QP
8	0.202	19.01	10.85	29.86	53.51	23.65	Average
9	0.366	37.04	10.83	47.87	58.59	10.72	QP
10	0.366	31.24	10.83	42.07	48.59	6.52	Average
11	18.228	23.70	10.86	34.56	60.00	25.44	QP
12	18.228	18.58	10.86	29.44	50.00	20.56	Average

Project No.: 2402W92356E-RF
Port: neutral
Test Mode: Transmitting
Note: 802.11ac 5775MHZ

Serial No.: 2QUD-2
Tester: Yukin Qiu

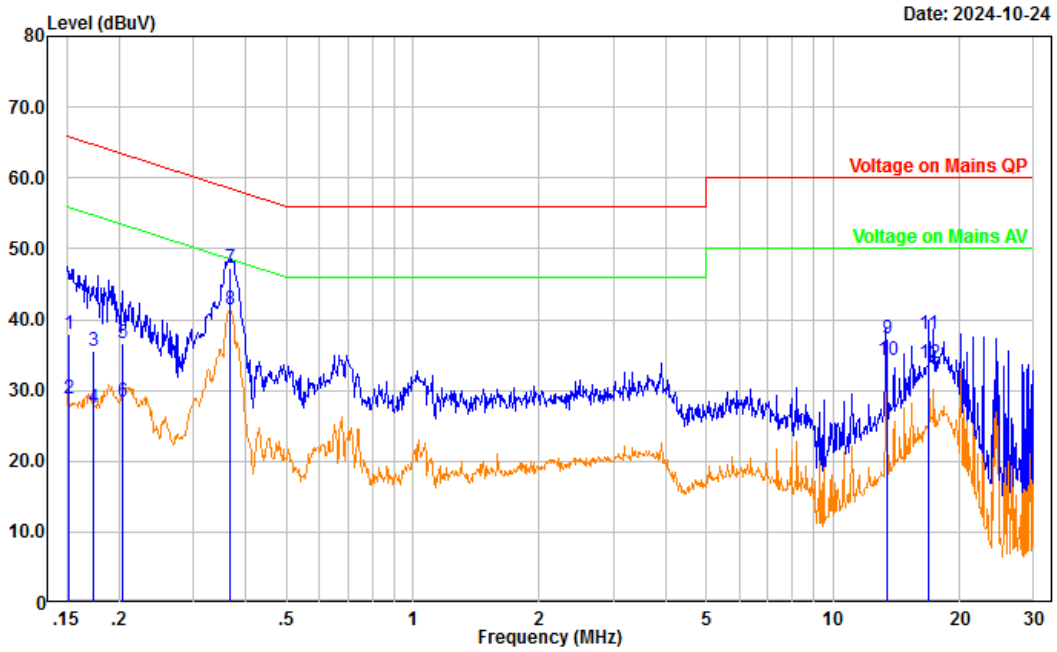


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.153	29.05	10.85	39.90	65.84	25.94	QP
2	0.153	19.59	10.85	30.44	55.84	25.40	Average
3	0.168	28.18	10.85	39.03	65.07	26.04	QP
4	0.168	19.95	10.85	30.80	55.07	24.27	Average
5	0.177	27.97	10.85	38.82	64.64	25.82	QP
6	0.177	19.11	10.85	29.96	54.64	24.68	Average
7	0.202	27.59	10.85	38.44	63.51	25.07	QP
8	0.202	19.82	10.85	30.67	53.51	22.84	Average
9	0.370	37.39	10.77	48.16	58.49	10.33	QP
10	0.370	30.35	10.77	41.12	48.49	7.37	Average
11	18.025	22.49	10.86	33.35	60.00	26.65	QP
12	18.025	17.50	10.86	28.36	50.00	21.64	Average

Configuration 4#:

Project No.: 2402W92356E-RF
Port: Line
Test Mode: Transmitting
Note: 802.11ac 5775MHZ

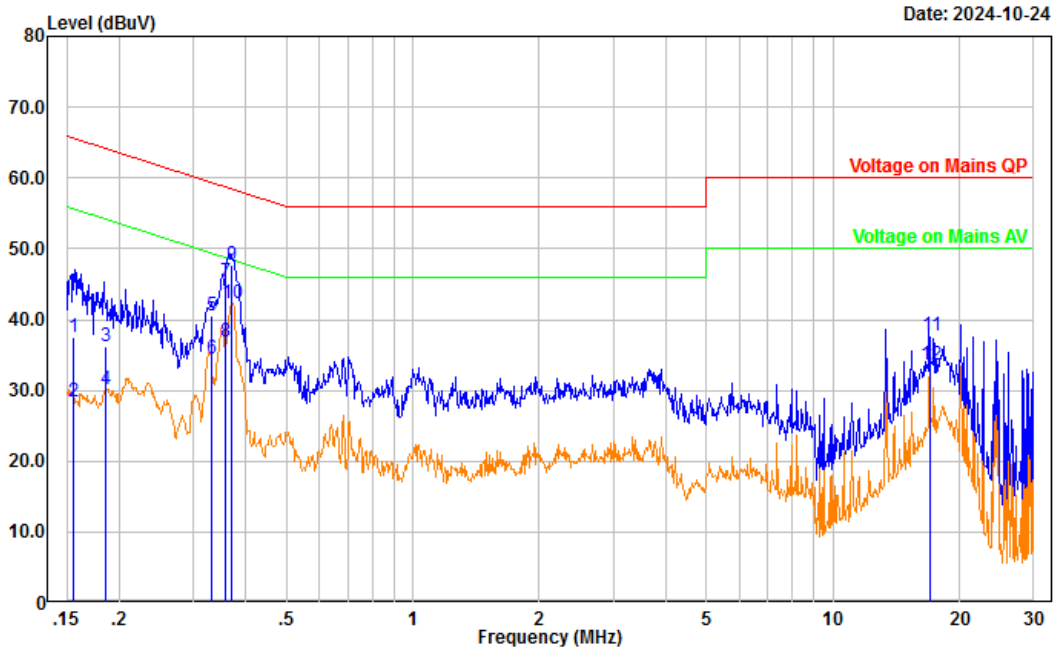
Serial No.: 2QUD-4
Tester: Yukin Qiu



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.152	27.13	10.75	37.88	65.90	28.02	QP
2	0.152	18.11	10.75	28.86	55.90	27.04	Average
3	0.173	24.68	10.80	35.48	64.80	29.32	QP
4	0.173	16.66	10.80	27.46	54.80	27.34	Average
5	0.203	25.81	10.85	36.66	63.48	26.82	QP
6	0.203	17.65	10.85	28.50	53.48	24.98	Average
7	0.368	36.50	10.83	47.33	58.55	11.22	QP
8	0.368	30.52	10.83	41.35	48.55	7.20	Average
9	13.420	26.46	10.83	37.29	60.00	22.71	QP
10	13.420	23.47	10.83	34.30	50.00	15.70	Average
11	16.839	27.13	10.87	38.00	60.00	22.00	QP
12	16.839	23.02	10.87	33.89	50.00	16.11	Average

Project No.: 2402W92356E-RF
Port: neutral
Test Mode: Transmitting
Note: 802.11ac 5775MHZ

Serial No.: 2QUD-4
Tester: Yukin Qiu



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.156	26.68	10.85	37.53	65.68	28.15	QP
2	0.156	17.60	10.85	28.45	55.68	27.23	Average
3	0.186	25.46	10.85	36.31	64.22	27.91	QP
4	0.186	19.34	10.85	30.19	54.22	24.03	Average
5	0.331	29.82	10.79	40.61	59.42	18.81	QP
6	0.331	23.66	10.79	34.45	49.42	14.97	Average
7	0.357	34.43	10.78	45.21	58.80	13.59	QP
8	0.357	26.04	10.78	36.82	48.80	11.98	Average
9	0.370	36.87	10.77	47.64	58.50	10.86	QP
10	0.370	31.53	10.77	42.30	48.50	6.20	Average
11	17.082	26.85	10.87	37.72	60.00	22.28	QP
12	17.082	22.70	10.87	33.57	50.00	16.43	Average

5.2 Radiation Spurious Emissions

1) 9kHz - 1GHz

Serial Number:	2QUD-1, 2QUD-3, 2QUD-2, 2QUD-4	Test Date:	2024/9/12~2025/1/14
Test Site:	Chamber A	Test Mode:	Transmitting
Tester:	Jayce Wang, Alan Xie	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	21.6~27.2	Relative Humidity: (%)	26~37	ATM Pressure: (kPa)	100.9~101.4

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
EMCO	Passive Loop Antenna	6512	9706-1206	2023/10/25	2026/10/24
Sunol Sciences	Hybrid Antenna	JB3	A060611-3	2024/1/12	2027/1/11
Wilson	Coaxial Attenuator	859936	F-08-EM014	2024/1/12	2027/1/11
Unknown	Coaxial Cable	C-NJNJ-50	C-0075-01	2024/7/1	2025/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-01	2024/7/1	2025/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-1400-01	2024/7/1	2025/6/30
Sonoma	Amplifier	310N	372193	2024/8/16	2025/8/15
R&S	EMI Test Receiver	ESR3	102453	2024/8/26	2025/8/25
Audix	Test Software	E3	191218 V9	N/A	N/A
Sunol Sciences	Hybrid Antenna	JB3	A060611-2	2024/4/16	2027/4/15
Narda	Coaxial Attenuator	757C-6dB	34010	2024/4/16	2027/4/15
Sinoscite	Band Rejection Filter	BSF824-862MS	1438001	2024/6/7	2025/6/6
R&S	Wideband Radio Communication Tester	CMW500	149216	2024/9/5	2025/9/4

** Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

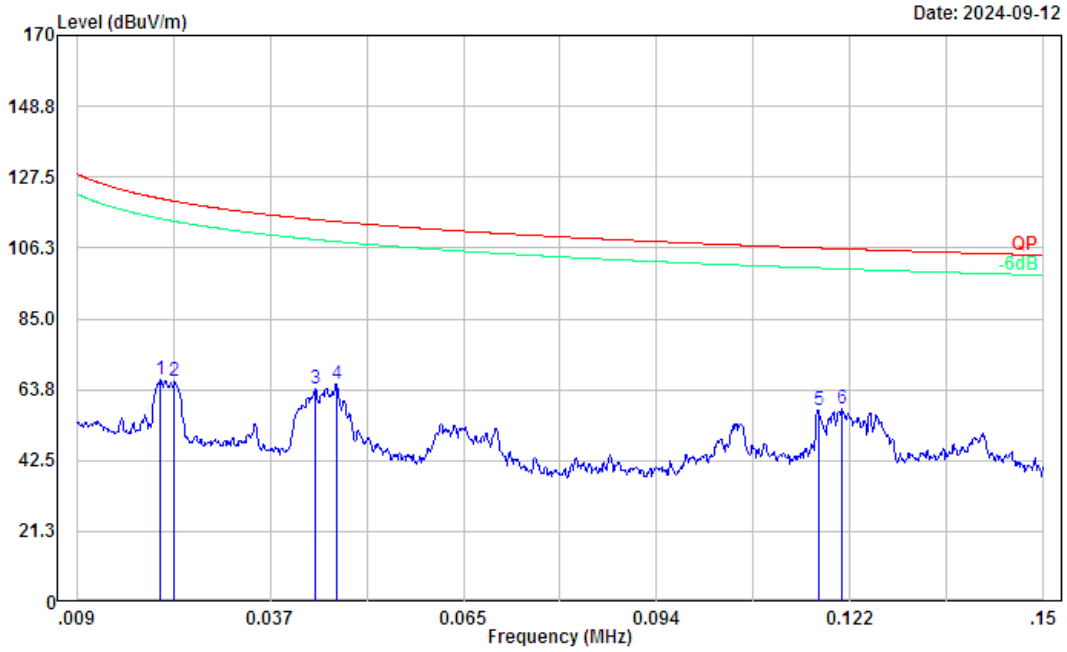
Please refer to the below table and plots.

9kHz~30MHz

Three antenna orientations (parallel, perpendicular, and ground-parallel) was measured, the worst orientations was below:

Configuration 1#:

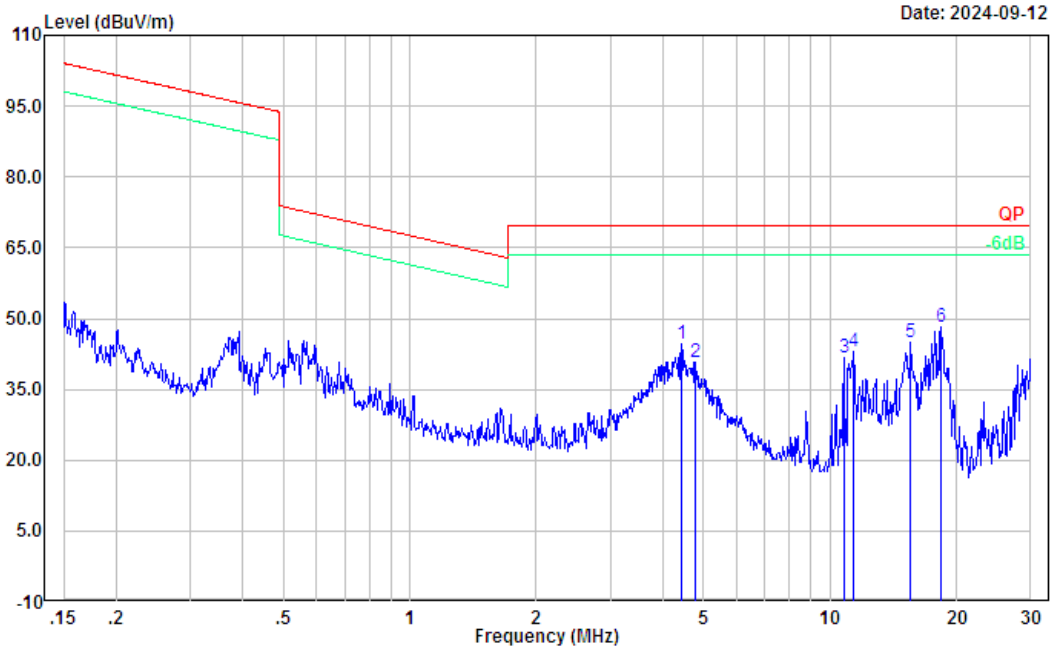
```
Project No.: 2402W92356E-RF          Serial No.: 2QUD-1
Polarization: Parallel                   Tester: Jayce Wang
   Test Mode: Transmitting
        Note: 802.11ac80 5775MHz
```



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.021	17.90	48.75	66.65	121.11	54.46	Peak
2	0.023	18.24	48.27	66.51	120.28	53.77	Peak
3	0.044	19.77	44.36	64.13	114.77	50.64	Peak
4	0.047	21.54	43.89	65.43	114.18	48.75	Peak
5	0.117	23.65	34.03	57.68	106.23	48.55	Peak
6	0.121	24.45	33.83	58.28	105.97	47.69	Peak

Project No.: 2402W92356E-RF
Polarization: Parallel
Test Mode: Transmitting
Note: 802.11ac80 5775MHz

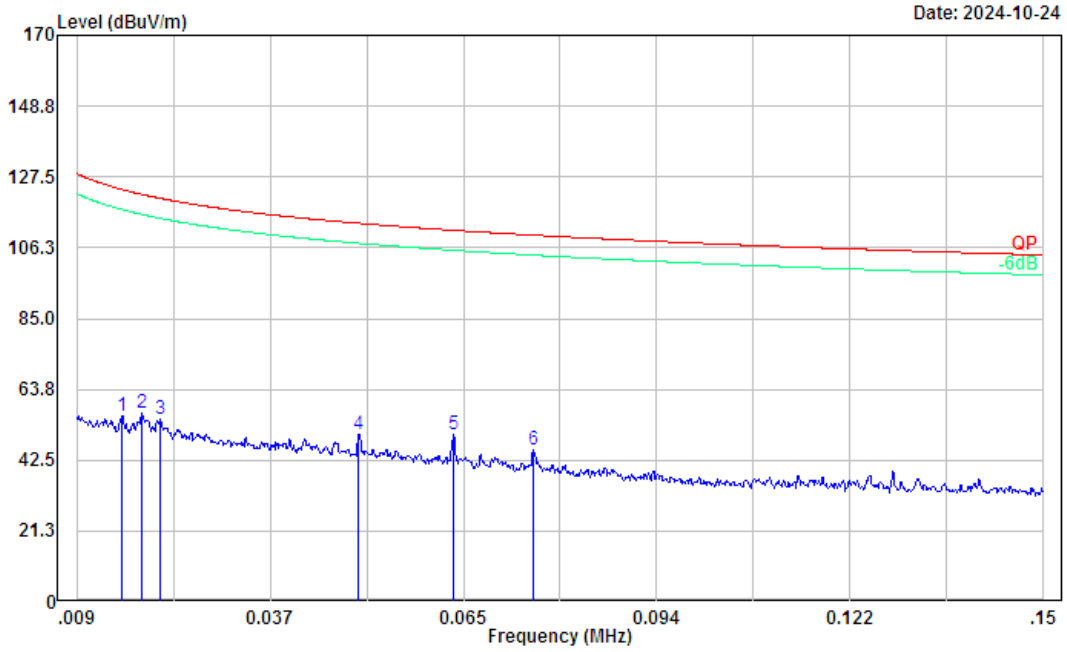
Serial No.: 2QUD-1
Tester: Jayce Wang



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4.430	38.13	6.46	44.59	69.54	24.95	Peak
2	4.772	34.86	6.00	40.86	69.54	28.68	Peak
3	10.790	37.98	3.89	41.87	69.54	27.67	Peak
4	11.377	39.17	3.84	43.01	69.54	26.53	Peak
5	15.552	41.40	3.62	45.02	69.54	24.52	Peak
6	18.426	44.55	3.62	48.17	69.54	21.37	Peak

Spot Check:
Configuration 2#:

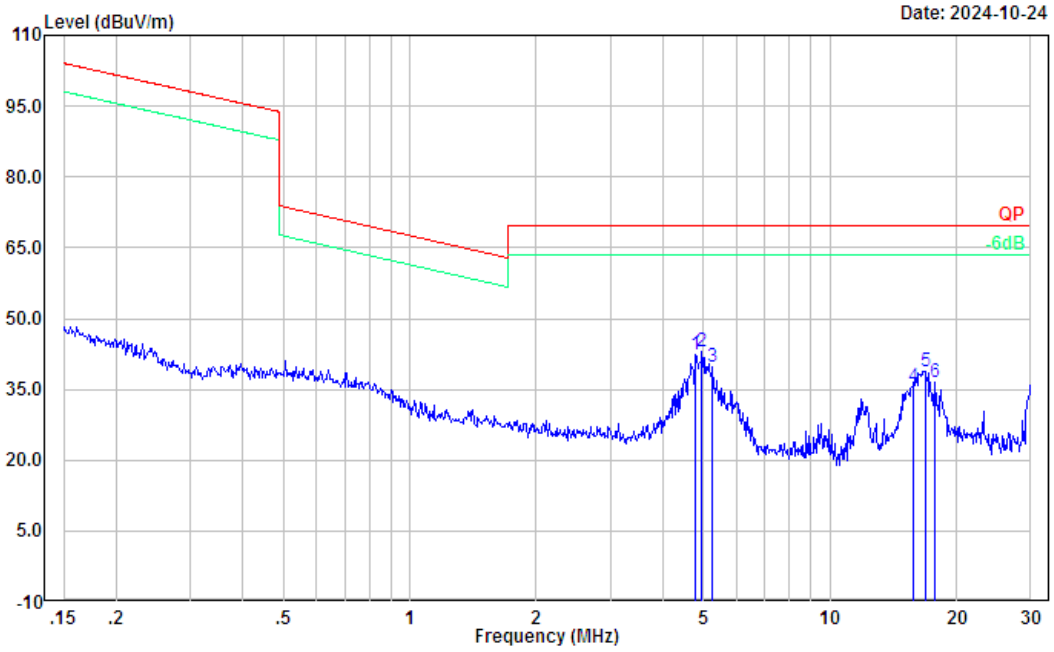
```
Project No.: 2402W92356E-RF                Serial No.: 2QUD-3
Polarization: Parallel                         Tester: Jayce Wang
   Test Mode: Transmitting
        Note: 802.11ac80 5775MHz
```



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.016	5.54	50.12	55.66	123.73	68.07	Peak
2	0.019	7.09	49.36	56.45	122.22	65.77	Peak
3	0.021	5.91	48.72	54.63	121.05	66.42	Peak
4	0.050	6.86	43.41	50.27	113.60	63.33	Peak
5	0.064	8.85	41.15	50.00	111.48	61.48	Peak
6	0.076	6.50	39.17	45.67	110.04	64.37	Peak

Project No.: 2402W92356E-RF
Polarization: Parallel
Test Mode: Transmitting
Note: 802.11ac80 5775MHz

Serial No.: 2QUD-3
Tester: Jayce Wang

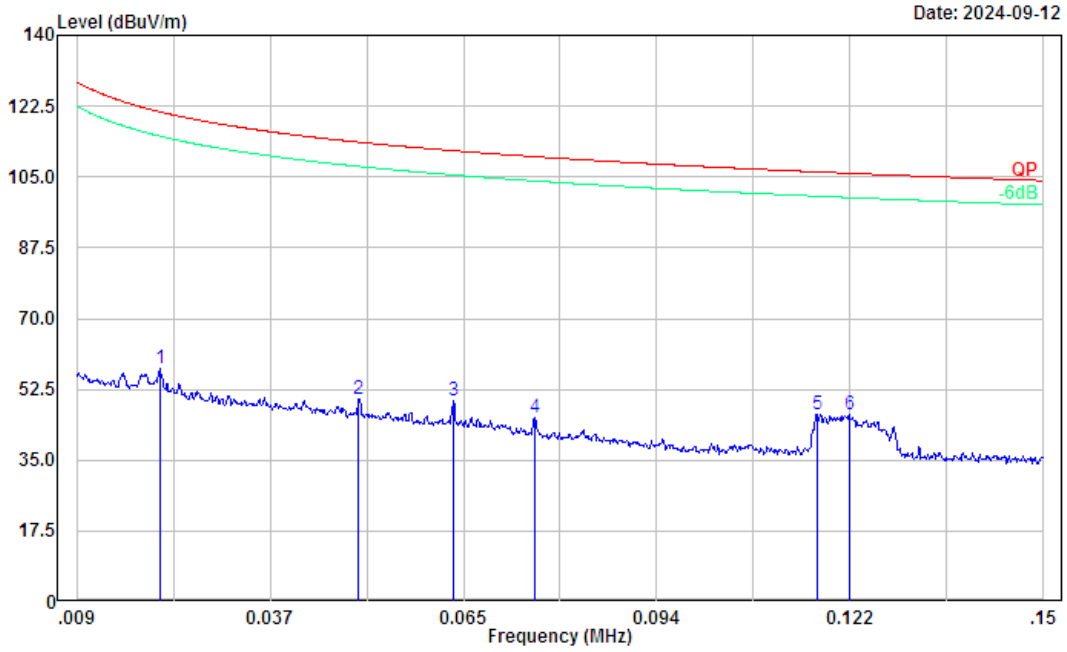


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4.797	36.49	5.97	42.46	69.54	27.08	Peak
2	4.952	37.28	5.76	43.04	69.54	26.50	Peak
3	5.249	34.09	5.53	39.62	69.54	29.92	Peak
4	15.801	32.01	3.59	35.60	69.54	33.94	Peak
5	16.839	35.07	3.75	38.82	69.54	30.72	Peak
6	17.755	32.65	3.79	36.44	69.54	33.10	Peak

Configuration 3#:

Project No.: 2402W92356E-RF
Polarization: Parallel
Test Mode: Transmitting
Note: 802.11ac80 5775MHz

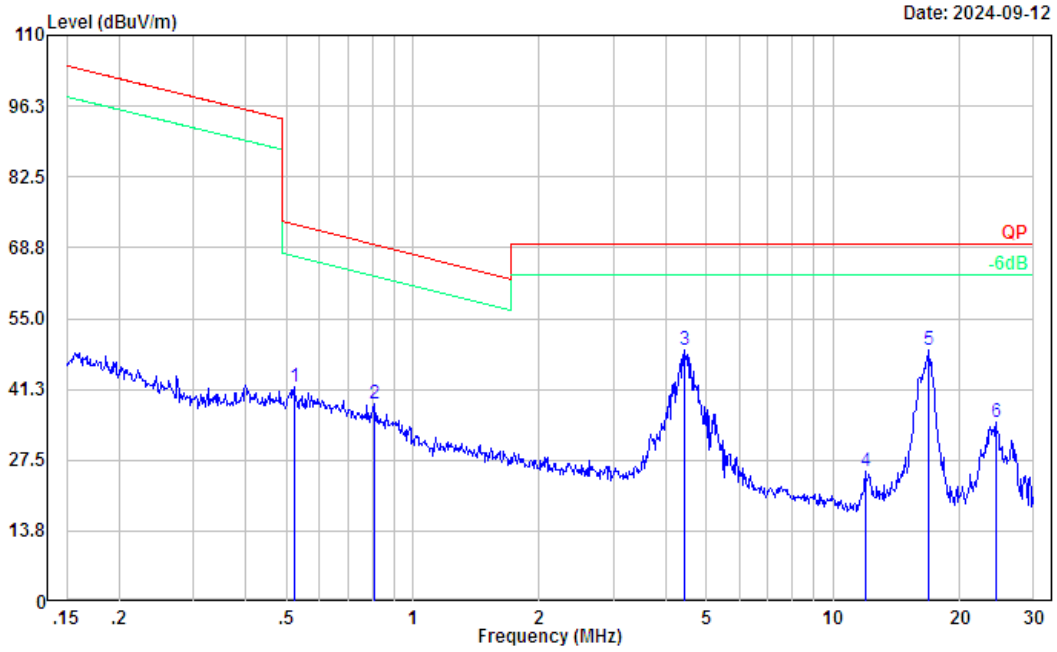
Serial No.: 2QUD-2
Tester: Alan Xie



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.021	8.81	48.75	57.56	121.11	63.55	Peak
2	0.050	6.71	43.41	50.12	113.60	63.48	Peak
3	0.064	8.59	41.15	49.74	111.48	61.74	Peak
4	0.076	6.38	39.12	45.50	110.01	64.51	Peak
5	0.117	12.38	34.04	46.42	106.24	59.82	Peak
6	0.122	12.46	33.78	46.24	105.90	59.66	Peak

Project No.: 2402W92356E-RF
Polarization: Parallel
Test Mode: Transmitting
Note: 802.11ac80 5775MHz

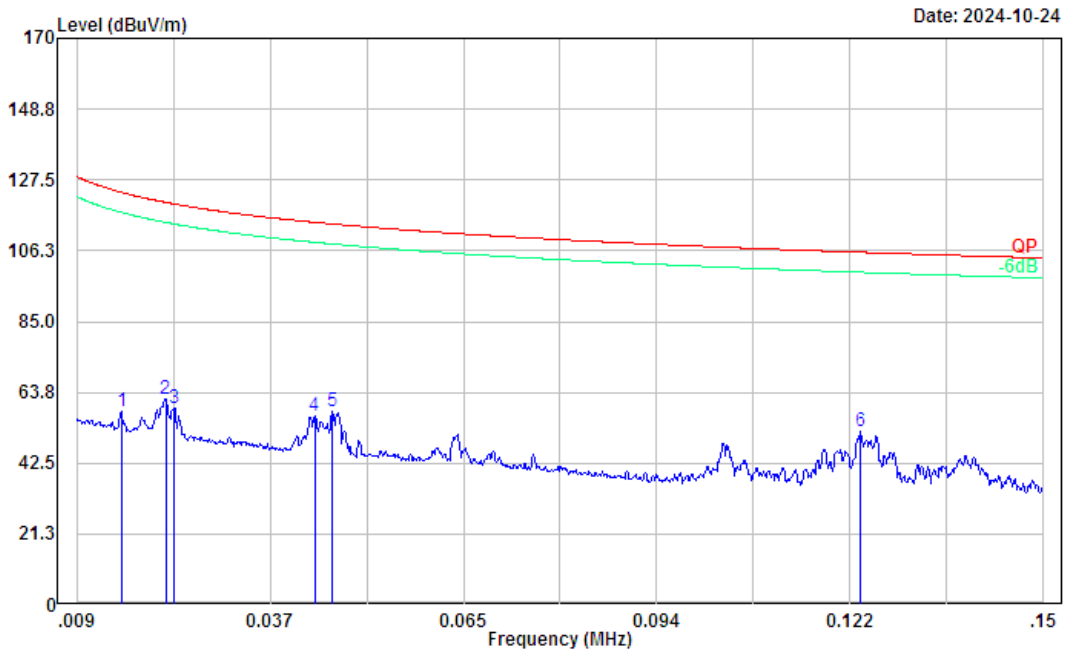
Serial No.: 2QUD-2
Tester: Alan Xie



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.521	19.28	22.49	41.77	73.26	31.49	Peak
2	0.809	19.02	19.54	38.56	69.36	30.80	Peak
3	4.430	42.36	6.46	48.82	69.54	20.72	Peak
4	11.933	21.34	3.87	25.21	69.54	44.33	Peak
5	16.928	44.98	3.77	48.75	69.54	20.79	Peak
6	24.400	31.08	3.68	34.76	69.54	34.78	Peak

Configuration 4#:

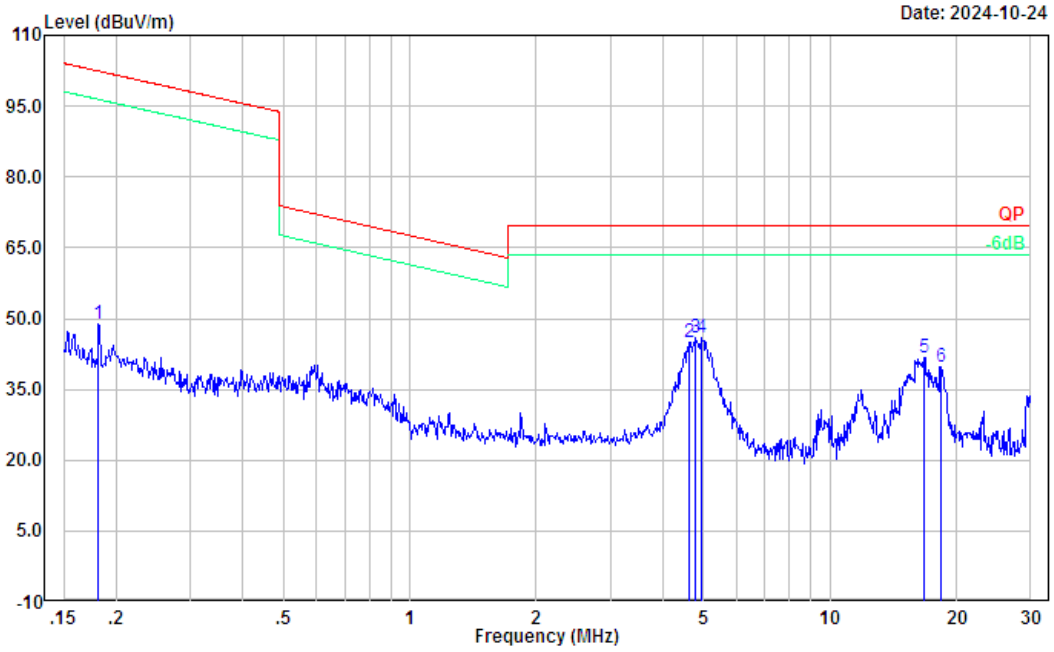
Project No.: 2402W92356E-RF Serial No.: 2QUD-4
Polarization: Parallel Tester: Jayce Wang
Test Mode: Transmitting
Note: 802.11ac80 5775MHz



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.015	7.78	50.15	57.93	123.81	65.88	Peak
2	0.022	13.30	48.56	61.86	120.77	58.91	Peak
3	0.023	10.82	48.27	59.09	120.28	61.19	Peak
4	0.044	12.10	44.38	56.48	114.80	58.32	Peak
5	0.046	14.21	43.98	58.19	114.28	56.09	Peak
6	0.123	18.25	33.68	51.93	105.79	53.86	Peak

Project No.: 2402W92356E-RF
Polarization: Parallel
Test Mode: Transmitting
Note: 802.11ac80 5775MHz

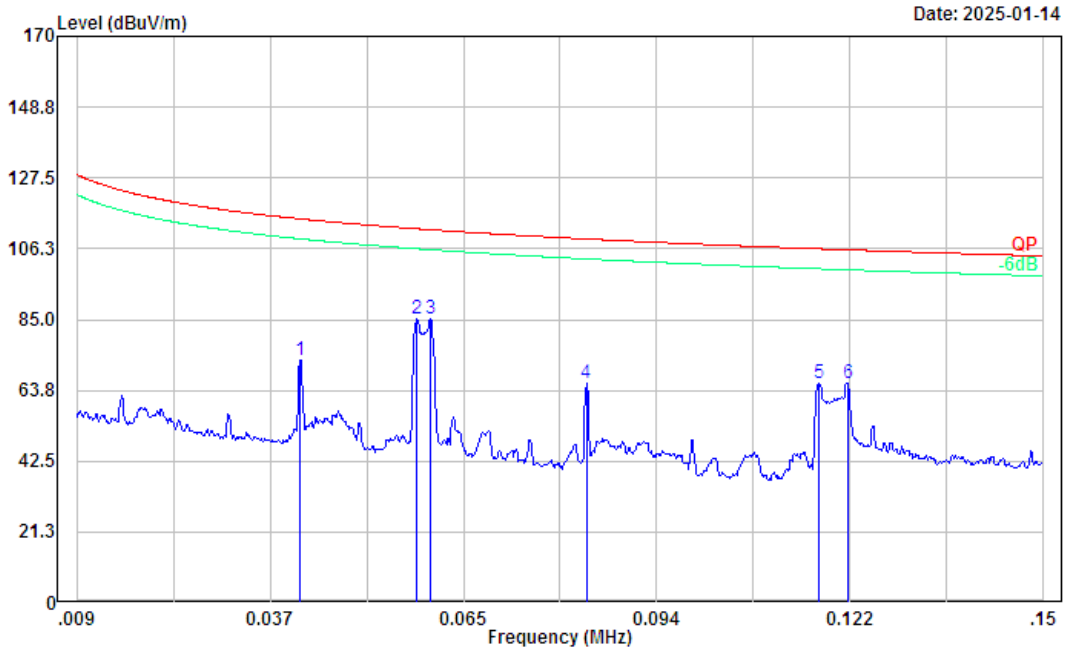
Serial No.: 2QUD-4
Tester: Jayce Wang



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.182	18.55	30.27	48.82	102.43	53.61	Peak
2	4.622	38.73	6.20	44.93	69.54	24.61	Peak
3	4.797	40.08	5.97	46.05	69.54	23.49	Peak
4	4.926	40.27	5.79	46.06	69.54	23.48	Peak
5	16.750	38.06	3.73	41.79	69.54	27.75	Peak
6	18.328	36.20	3.66	39.86	69.54	29.68	Peak

5G Wifi is transmitted simultaneously with WWAN and NFC (Configuration 1#):
802.11ac80_U-NII-3 middle channel 5775MHz+GSM 850(GPRS) 848.8MHz +NFC was tested:

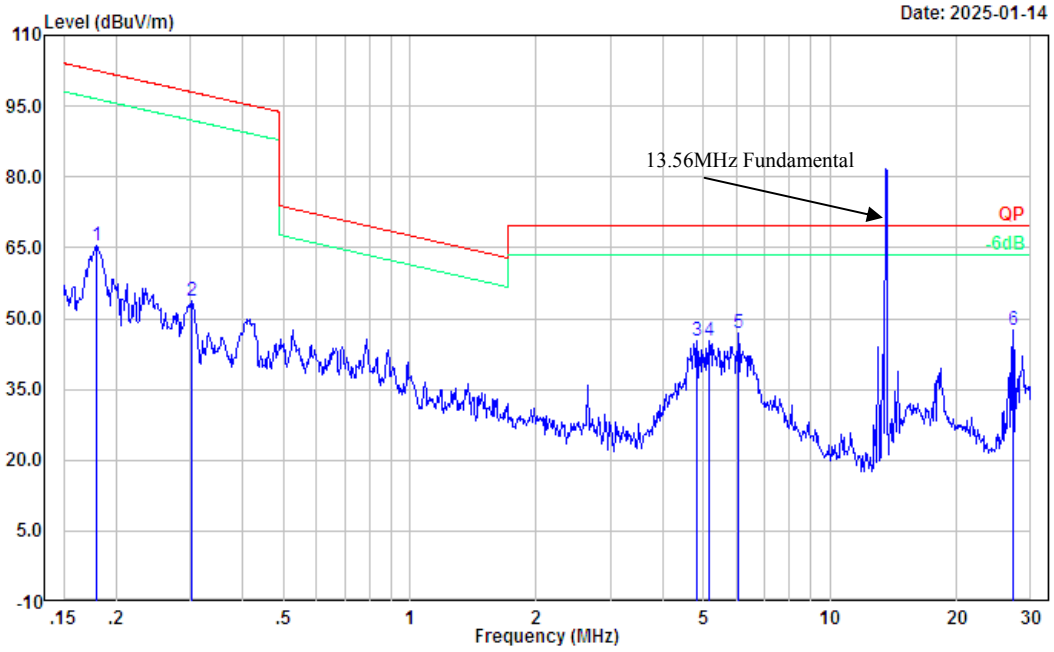
```
Project No.: 2402W92356E-RF          Serial No.: 2QUD-1
Polarization: Parallel                   Tester: Jayce Wang
   Test Mode: Transmitting
           : RBW:300Hz,VBW:1kHz
```



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.042	27.90	44.69	72.59	115.23	42.64	Peak
2	0.059	43.08	42.03	85.11	112.24	27.13	Peak
3	0.061	43.32	41.71	85.03	111.95	26.92	Peak
4	0.083	28.05	37.73	65.78	109.19	43.41	Peak
5	0.117	31.69	34.03	65.72	106.23	40.51	Peak
6	0.121	32.11	33.79	65.90	105.92	40.02	Peak

Project No.: 2402W92356E-RF
Polarization: Parallel
Test Mode: Transmitting
: RBW:10kHz,VBW:30kHz

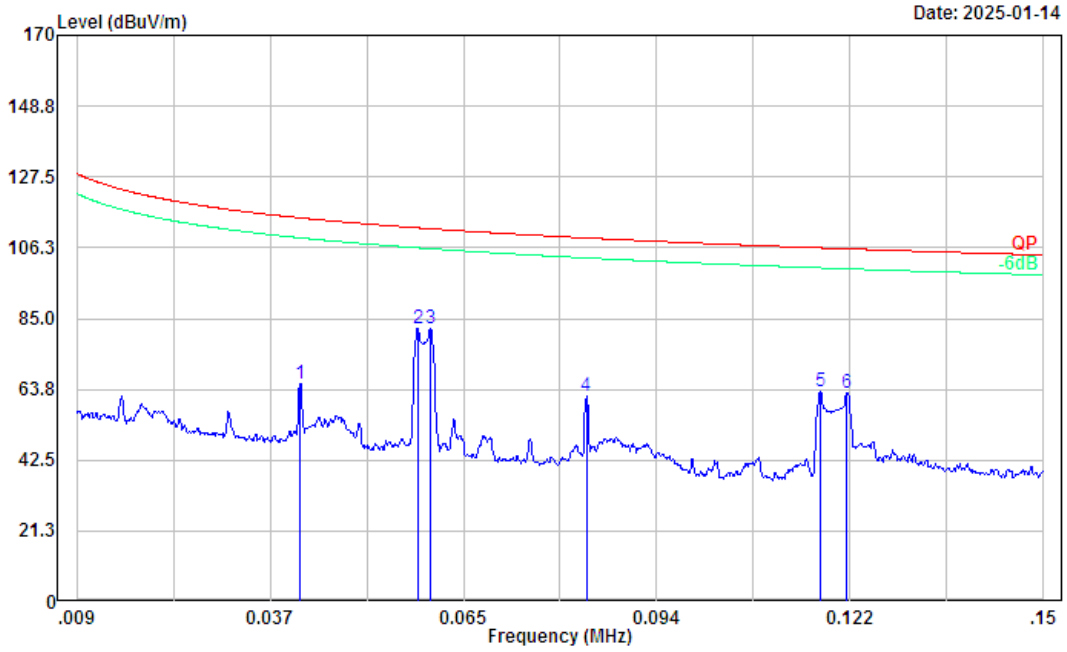
Serial No.: 2QUD-1
Tester: Jayce Wang



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.180	35.21	30.38	65.59	102.52	36.93	Peak
2	0.302	30.57	23.26	53.83	98.01	44.18	Peak
3	4.822	39.48	5.93	45.41	69.54	24.13	Peak
4	5.139	39.74	5.61	45.35	69.54	24.19	Peak
5	6.056	41.87	5.04	46.91	69.54	22.63	Peak
6	27.271	43.98	3.49	47.47	69.54	22.07	Peak

Project No.: 2402W92356E-RF
Polarization: Perpendicular
Test Mode: Transmitting
: RBW:300Hz,VBW:1kHz

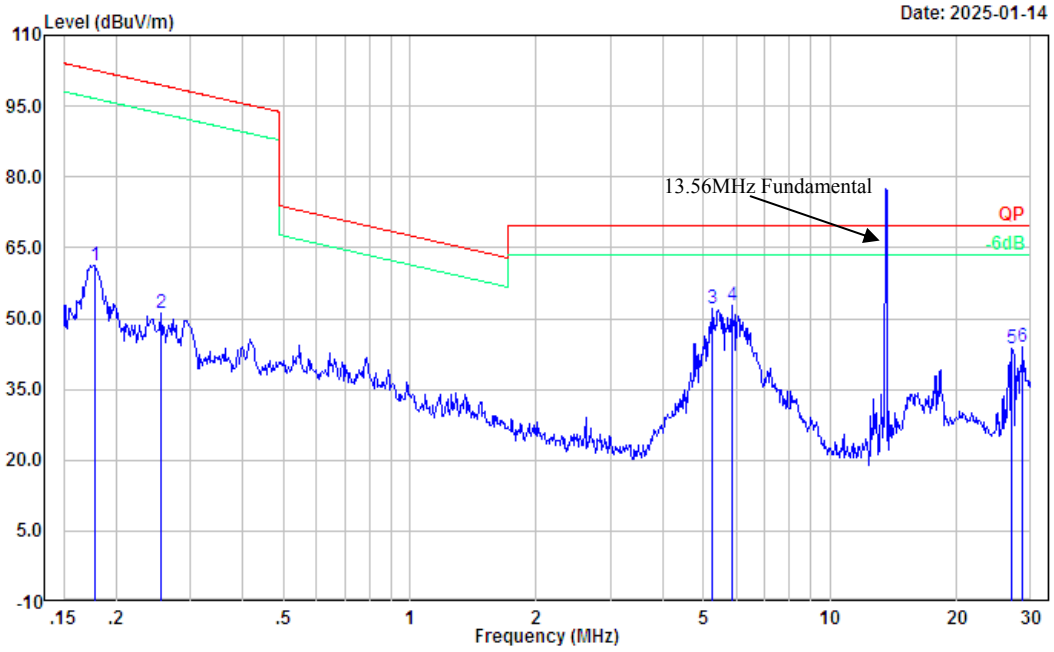
Serial No.: 2QUD-1
Tester: Jayce Wang



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.042	20.58	44.69	65.27	115.23	49.96	Peak
2	0.059	39.91	42.01	81.92	112.22	30.30	Peak
3	0.061	40.19	41.71	81.90	111.95	30.05	Peak
4	0.083	23.98	37.73	61.71	109.19	47.48	Peak
5	0.117	28.88	34.02	62.90	106.21	43.31	Peak
6	0.121	29.08	33.80	62.88	105.93	43.05	Peak

Project No.: 2402W92356E-RF
Polarization: Perpendicular
Test Mode: Transmitting
: RBW:10kHz,VBW:30kHz

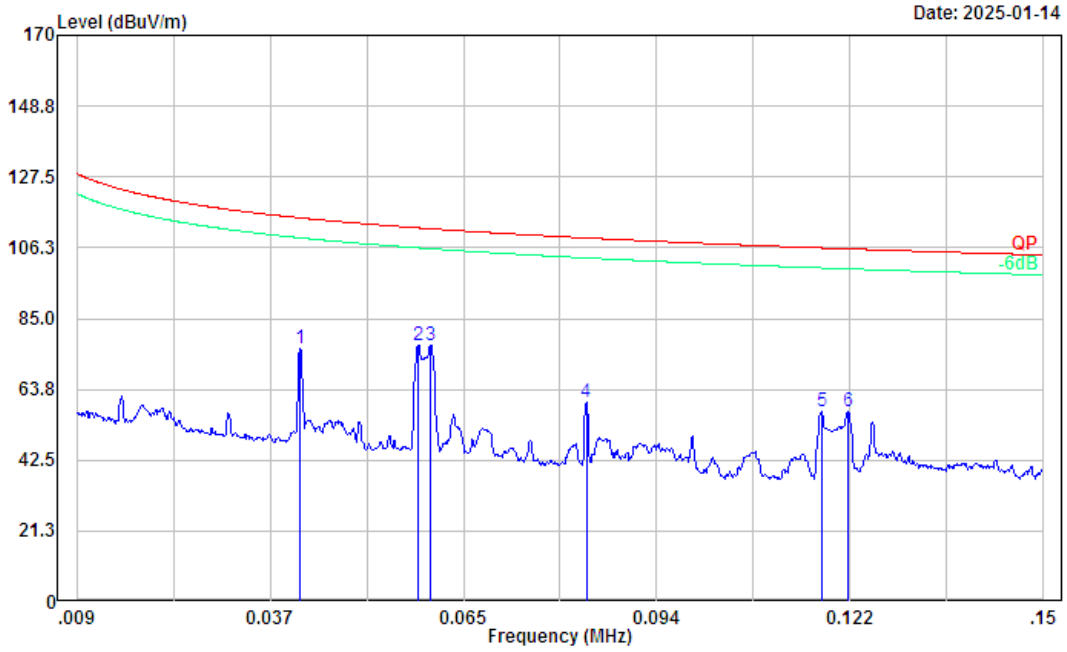
Serial No.: 2QUD-1
Tester: Jayce Wang



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.178	30.85	30.50	61.35	102.61	41.26	Peak
2	0.255	25.13	25.95	51.08	99.48	48.40	Peak
3	5.249	46.51	5.53	52.04	69.54	17.50	Peak
4	5.836	47.52	5.15	52.67	69.54	16.87	Peak
5	27.127	40.23	3.47	43.70	69.54	25.84	Peak
6	28.755	40.37	3.47	43.84	69.54	25.70	Peak

Project No.: 2402W92356E-RF
Polarization: Ground-parallel
Test Mode: Transmitting
: RBW:300Hz,VBW:1kHz

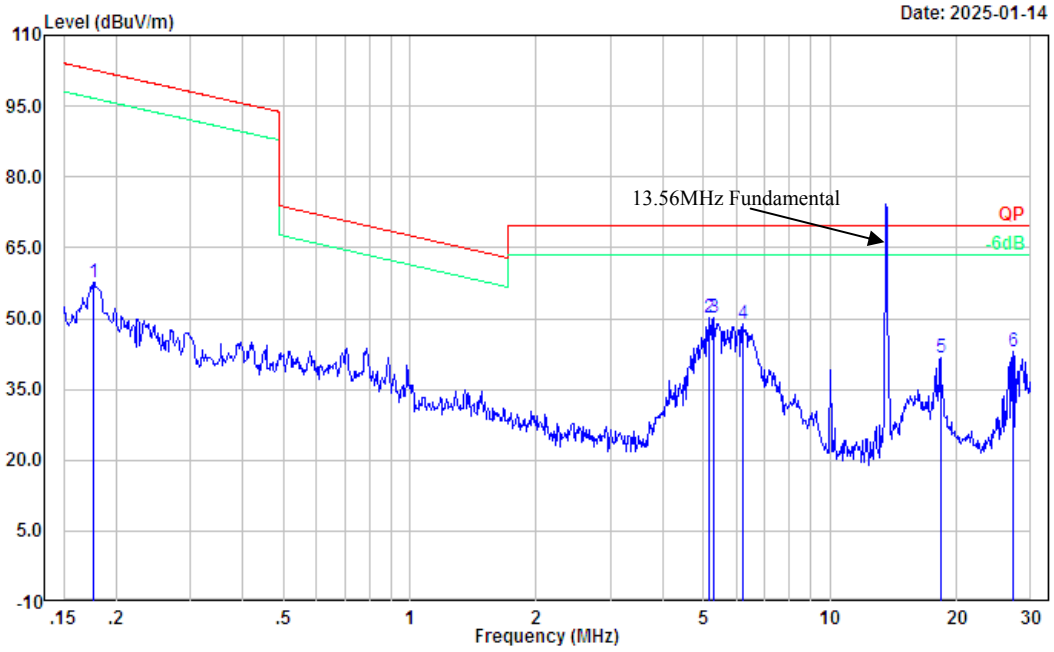
Serial No.: 2QUD-1
Tester: Jayce Wang



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.042	31.21	44.69	75.90	115.23	39.33	Peak
2	0.059	35.09	42.01	77.10	112.22	35.12	Peak
3	0.061	35.23	41.71	76.94	111.95	35.01	Peak
4	0.083	22.07	37.73	59.80	109.19	49.39	Peak
5	0.118	22.99	34.01	57.00	106.20	49.20	Peak
6	0.121	23.31	33.79	57.10	105.92	48.82	Peak

Project No.: 2402W92356E-RF
Polarization: Ground-parallel
Test Mode: Transmitting
: RBW:10kHz,VBW:30kHz

Serial No.: 2QUD-1
Tester: Jayce Wang

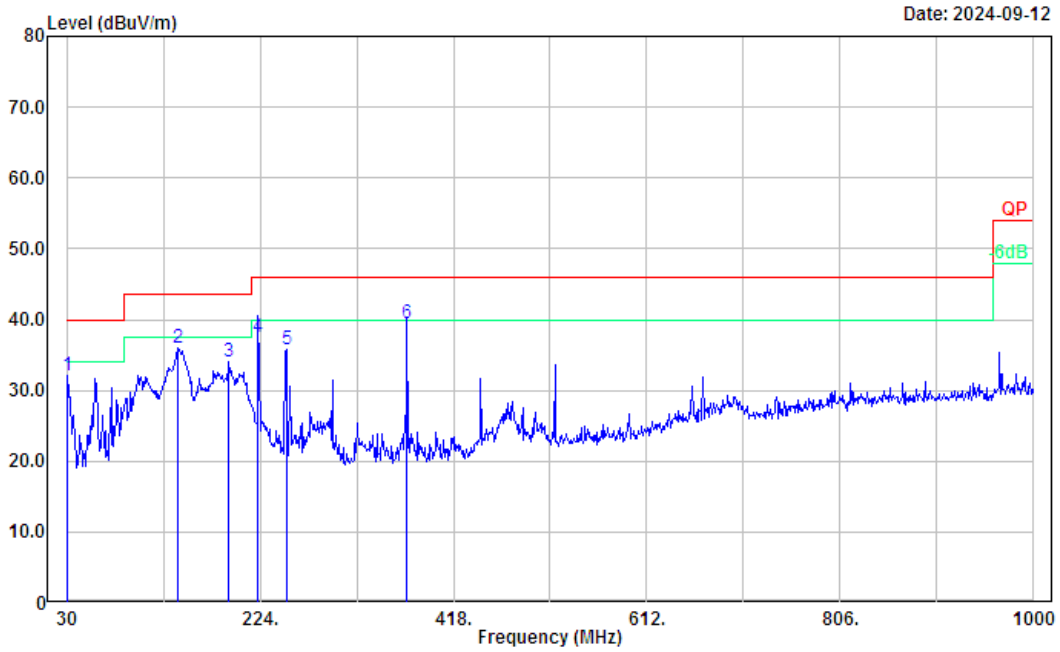


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.177	27.22	30.55	57.77	102.66	44.89	Peak
2	5.139	44.40	5.61	50.01	69.54	19.53	Peak
3	5.305	44.63	5.50	50.13	69.54	19.41	Peak
4	6.186	43.78	5.04	48.82	69.54	20.72	Peak
5	18.328	37.91	3.66	41.57	69.54	27.97	Peak
6	27.271	39.48	3.49	42.97	69.54	26.57	Peak

30MHz-1GHz
Configuration 1#:

Project No.: 2402W92356E-RF
Polarization: Horizontal
Test Mode: Transmitting
Note: 802.11ac80 5775MHz

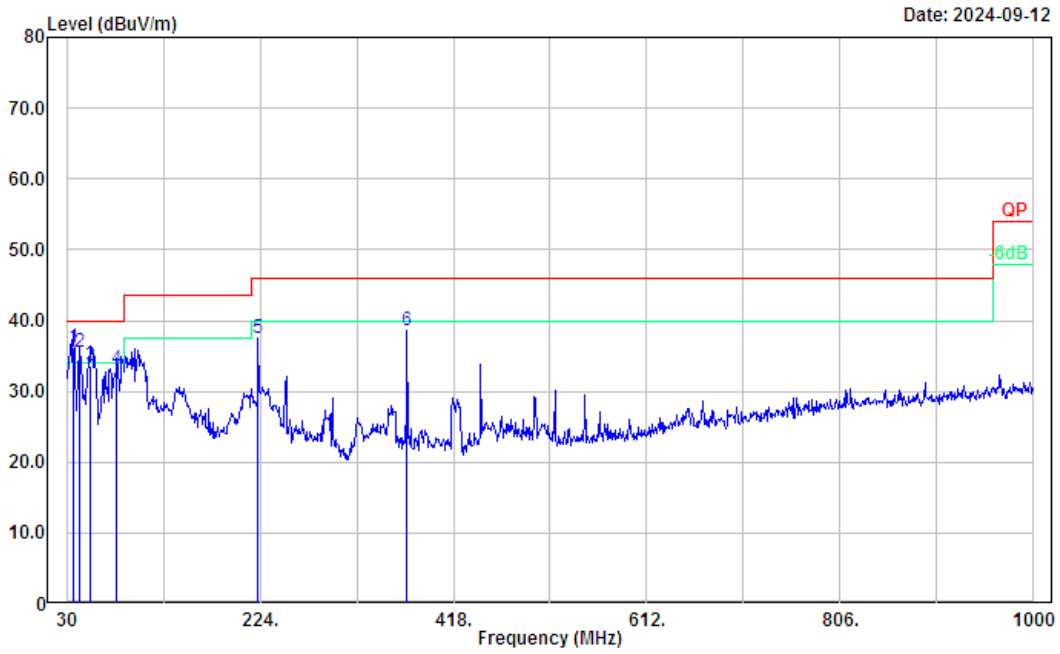
Serial No.: 2QUD-1
Tester: Jayce Wang



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.00	35.69	-3.51	32.18	40.00	7.82	Peak
2	141.55	46.67	-10.66	36.01	43.50	7.49	Peak
3	192.96	46.07	-11.93	34.14	43.50	9.36	Peak
4	222.06	48.50	-11.08	37.42	46.00	8.58	QP
5	250.19	47.02	-11.17	35.85	46.00	10.15	Peak
6	371.44	47.21	-7.82	39.39	46.00	6.61	QP

Project No.: 2402W92356E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: 802.11ac80 5775MHz

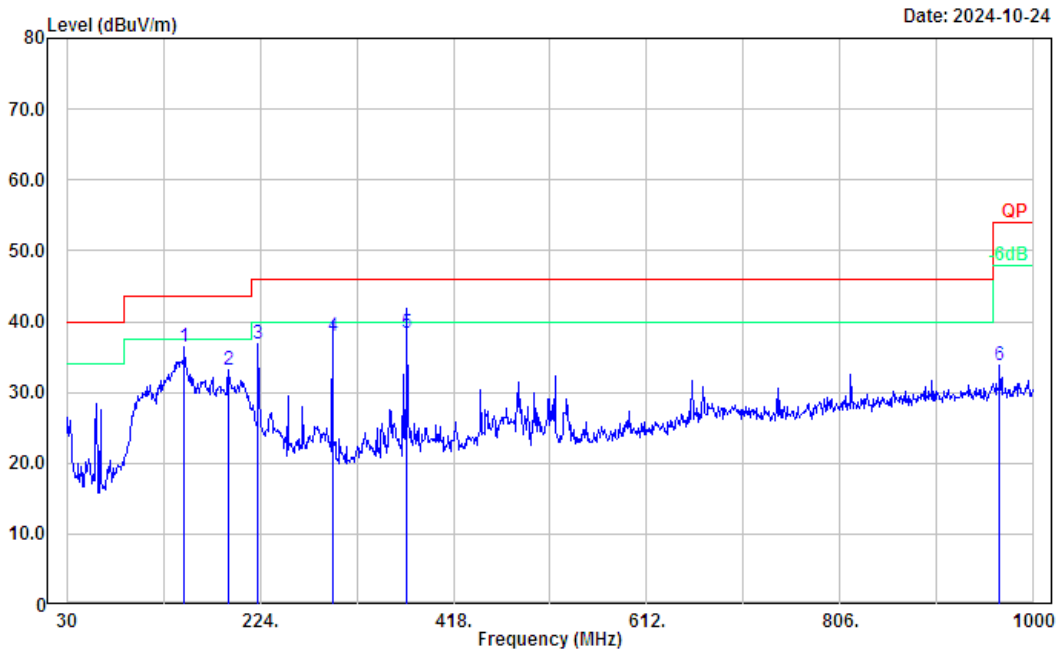
Serial No.: 2QUD-1
Tester: Jayce Wang



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	36.79	44.19	-8.01	36.18	40.00	3.82	QP
2	43.58	47.90	-12.34	35.56	40.00	4.44	QP
3	53.28	50.21	-16.60	33.61	40.00	6.39	QP
4	80.44	49.79	-16.56	33.23	40.00	6.77	QP
5	222.06	48.61	-11.08	37.53	46.00	8.47	Peak
6	371.44	46.36	-7.82	38.54	46.00	7.46	Peak

Spot Check:
Configuration 2#:

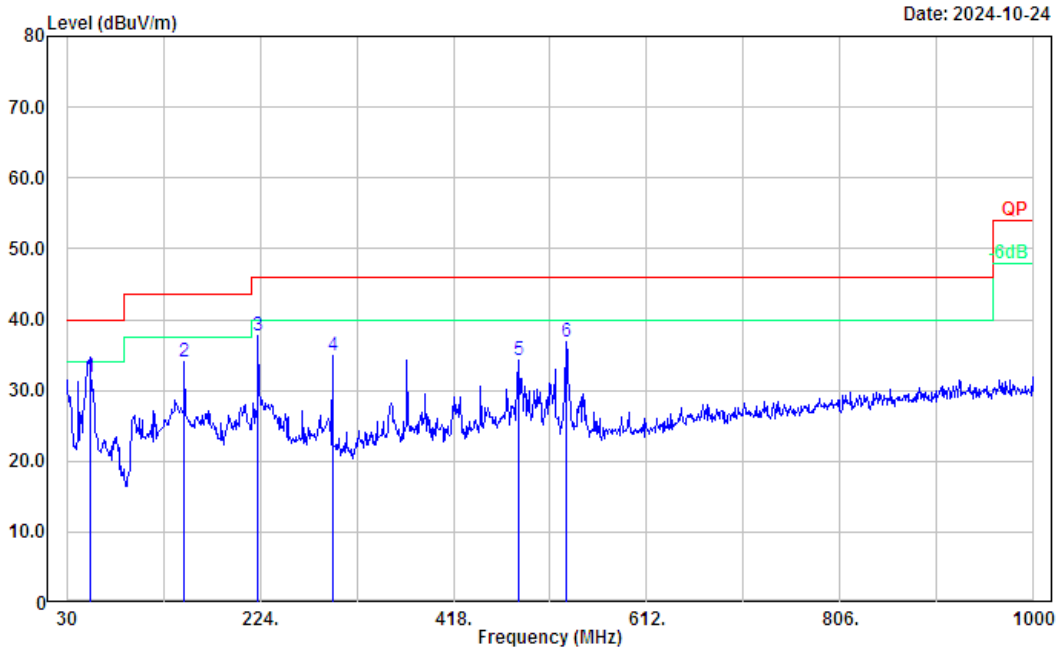
```
Project No.: 2402W92356E-RF                Serial No.: 2QUD-3
Polarization: Horizontal                       Tester: Jayce Wang
   Test Mode: Transmitting
        Note: 802.11ac80 5775MHz
```



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	148.34	47.85	-11.40	36.45	43.50	7.05	Peak
2	192.96	45.07	-11.99	33.08	43.50	10.42	Peak
3	222.06	47.80	-10.96	36.84	46.00	9.16	Peak
4	296.75	47.40	-9.41	37.99	46.00	8.01	QP
5	371.44	45.80	-7.47	38.33	46.00	7.67	QP
6	966.05	29.31	4.58	33.89	54.00	20.11	Peak

Project No.: 2402W92356E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: 802.11ac80 5775MHz

Serial No.: 2QUD-3
Tester: Jayce Wang

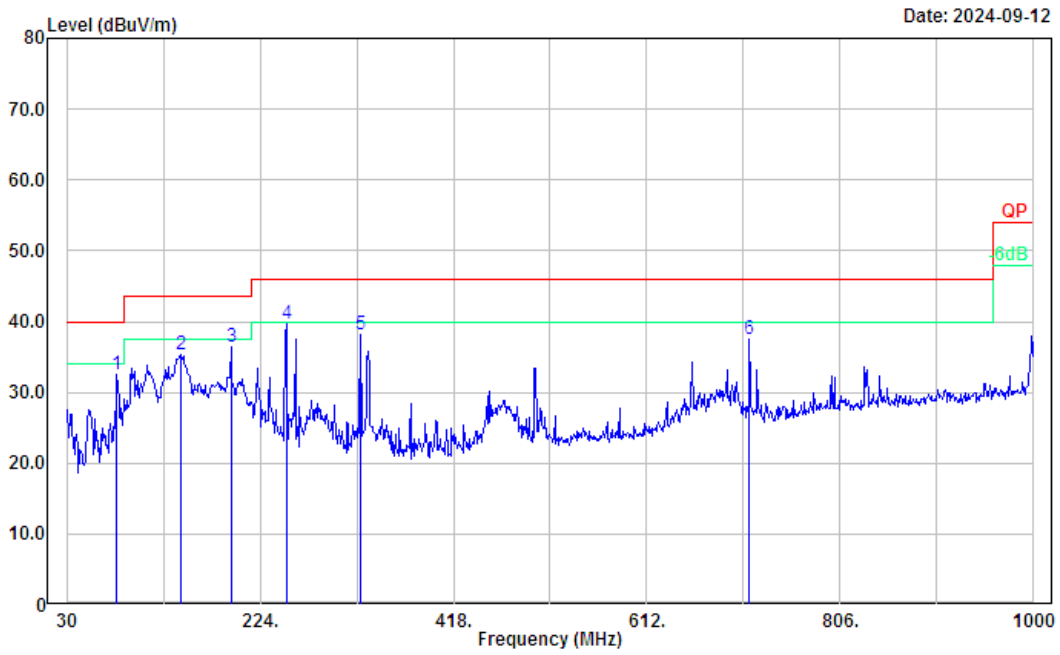


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	53.28	48.61	-16.63	31.98	40.00	8.02	QP
2	148.34	45.33	-11.40	33.93	43.50	9.57	Peak
3	222.06	48.76	-10.96	37.80	46.00	8.20	Peak
4	296.75	44.28	-9.41	34.87	46.00	11.13	Peak
5	483.96	38.81	-4.61	34.20	46.00	11.80	Peak
6	530.52	40.58	-3.82	36.76	46.00	9.24	Peak

Configuration 3#:

Project No.: 2402W92356E-RF
Polarization: Horizontal
Test Mode: Transmitting
Note: 802.11ac80 5775MHz

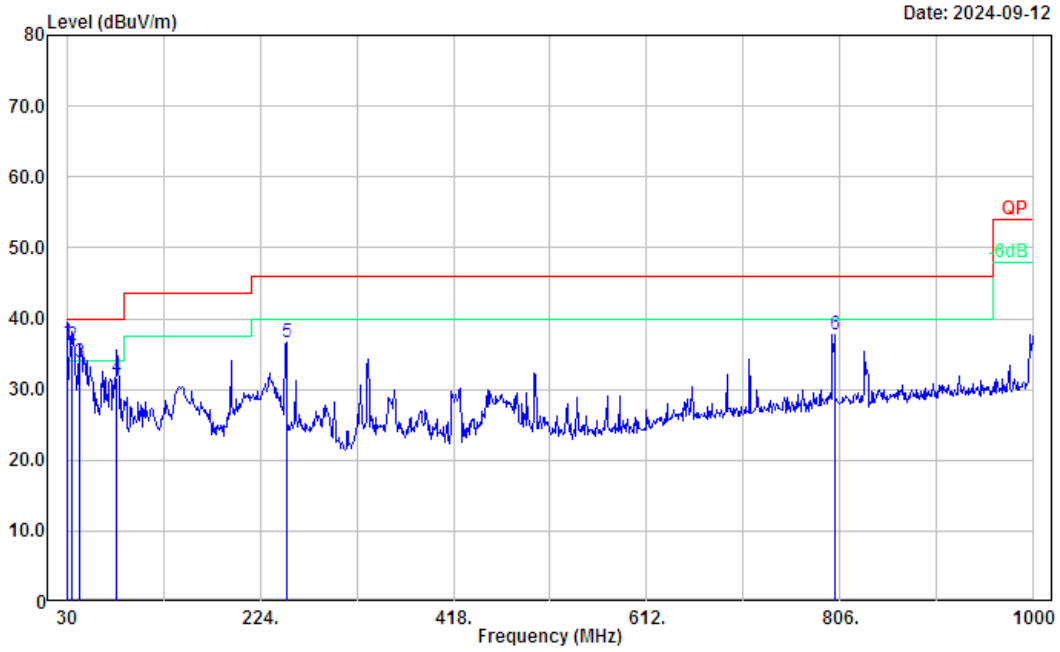
Serial No.: 2QUD-2
Tester: Alan Xie



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	80.44	48.98	-16.56	32.42	40.00	7.58	Peak
2	144.46	46.19	-10.93	35.26	43.50	8.24	Peak
3	194.90	48.28	-11.82	36.46	43.50	7.04	Peak
4	250.19	50.88	-11.17	39.71	46.00	6.29	Peak
5	324.88	46.69	-8.58	38.11	46.00	7.89	Peak
6	714.82	38.13	-0.54	37.59	46.00	8.41	Peak

Project No.: 2402W92356E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: 802.11ac80 5775MHz

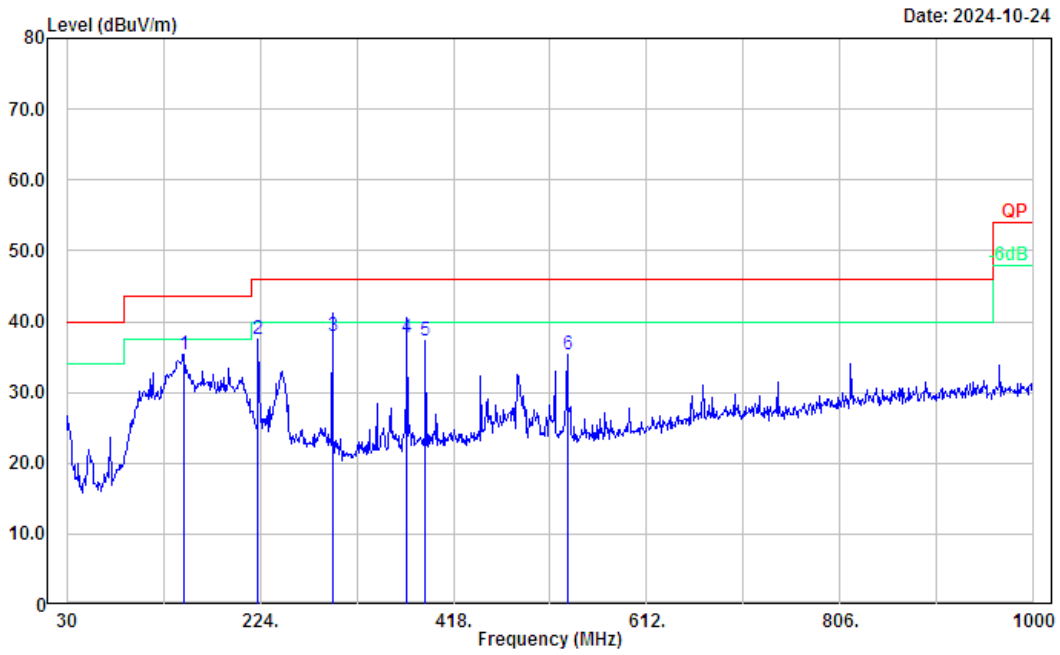
Serial No.: 2QUD-2
Tester: Alan Xie



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.00	40.10	-3.51	36.59	40.00	3.41	QP
2	35.82	43.58	-7.35	36.23	40.00	3.77	QP
3	43.58	46.25	-12.34	33.91	40.00	6.09	QP
4	80.44	48.17	-16.56	31.61	40.00	8.39	QP
5	250.19	47.71	-11.17	36.54	46.00	9.46	Peak
6	800.18	36.30	1.40	37.70	46.00	8.30	Peak

Configuration 4#:

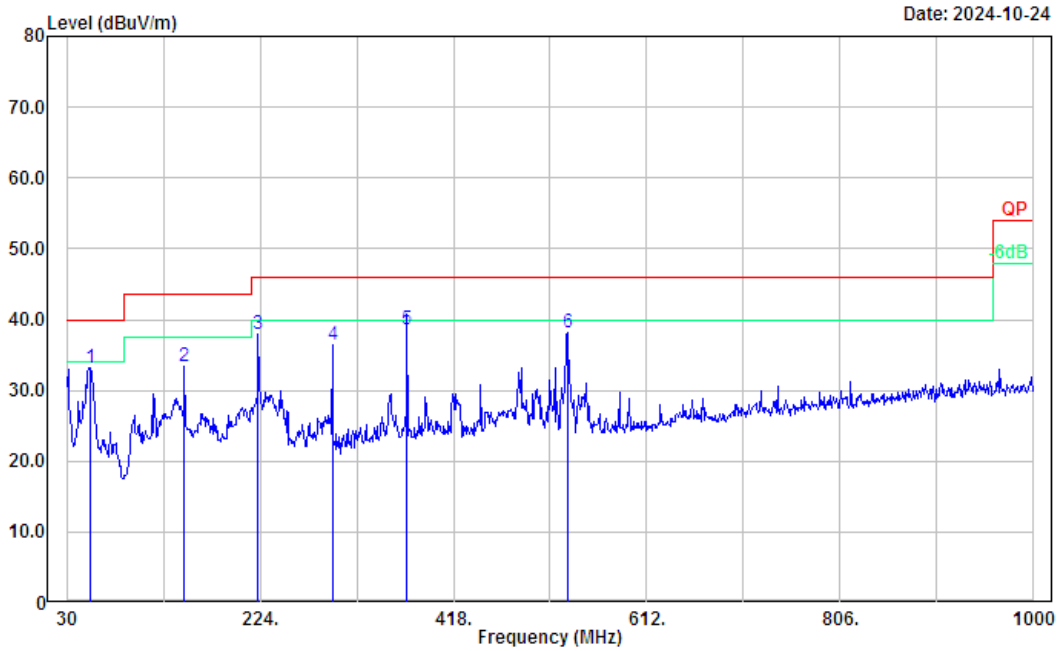
Project No.: 2402W92356E-RF Serial No.: 2QUD-4
Polarization: Horizontal Tester: Jayce Wang
Test Mode: Transmitting
Note: 802.11ac80 5775MHz



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	148.34	46.77	-11.40	35.37	43.50	8.13	Peak
2	222.06	48.47	-10.96	37.51	46.00	8.49	Peak
3	296.75	47.40	-9.41	37.99	46.00	8.01	QP
4	371.44	45.20	-7.47	37.73	46.00	8.27	QP
5	389.87	44.34	-6.96	37.38	46.00	8.62	Peak
6	532.46	39.20	-3.79	35.41	46.00	10.59	Peak

Project No.: 2402W92356E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: 802.11ac80 5775MHz

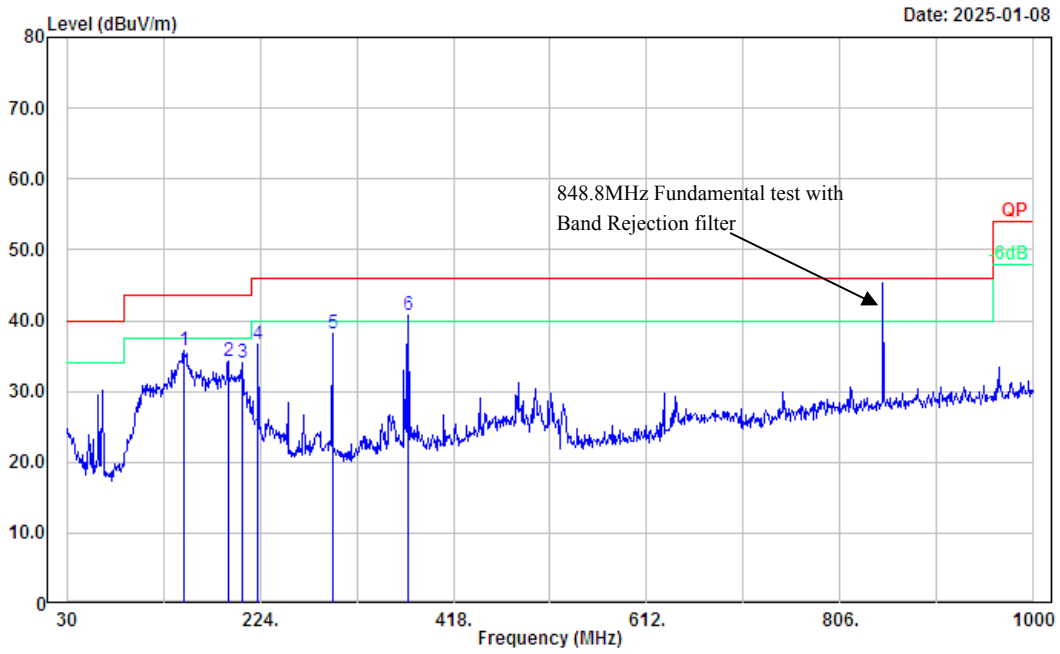
Serial No.: 2QUD-4
Tester: Jayce Wang



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	54.25	49.79	-16.69	33.10	40.00	6.90	Peak
2	148.34	44.79	-11.40	33.39	43.50	10.11	Peak
3	222.06	48.91	-10.96	37.95	46.00	8.05	Peak
4	296.75	45.93	-9.41	36.52	46.00	9.48	Peak
5	371.44	46.10	-7.47	38.63	46.00	7.37	QP
6	532.46	41.95	-3.79	38.16	46.00	7.84	Peak

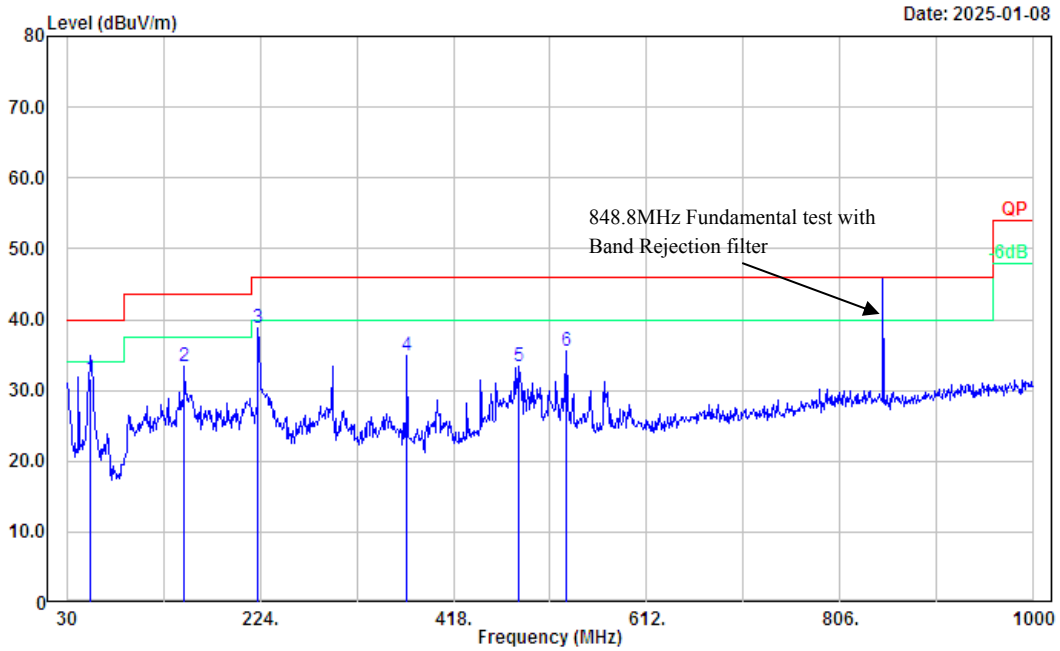
5G Wifi is transmitted simultaneously with WWAN and NFC(Configuration 1#):
802.11ac80_U-NII-3 middle channel 5775MHz+GSM 850(GPRS) 848.8MHz+NFC was tested:

```
Project No.: 2402W92356E-RF                Serial No.: 2QUD-1
Polarization: Horizontal                       Tester: Jayce Wang
   Test Mode: Transmitting
           :
```



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	147.37	46.88	-11.19	35.69	43.50	7.81	Peak
2	191.99	46.19	-12.00	34.19	43.50	9.31	Peak
3	206.54	45.36	-11.36	34.00	43.50	9.50	Peak
4	222.06	47.77	-11.08	36.69	46.00	9.31	Peak
5	296.75	47.57	-9.41	38.16	46.00	7.84	Peak
6	372.41	48.51	-7.79	40.72	46.00	5.28	Peak

Project No.: 2402W92356E-RF Serial No.: 2QUD-1
Polarization: Vertical Tester: Jayce Wang
Test Mode: Transmitting
:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	54.25	48.32	-16.62	31.70	40.00	8.30	QP
2	148.34	44.71	-11.28	33.43	43.50	10.07	Peak
3	222.06	49.85	-11.08	38.77	46.00	7.23	Peak
4	371.44	42.79	-7.82	34.97	46.00	11.03	Peak
5	483.96	37.93	-4.51	33.42	46.00	12.58	Peak
6	530.52	39.54	-3.91	35.63	46.00	10.37	Peak

2) 1-40GHz:

Serial Number:	2QUD-6, 2QUD-3, 2QUD-4, 2QUD-8	Test Date:	2024/9/19~2025/1/9
Test Site:	Chamber B	Test Mode:	Transmitting
Tester:	Colin Yang, Nat Zhou	Test Result:	Pass

Environmental Conditions:

Temperature: (℃)	21.9~27.8	Relative Humidity: %	31~62	ATM Pressure: (kPa)	100.4~101.8

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
ETS-Lindgren	Horn Antenna	3115	000 527 35	2023/9/7	2026/9/6
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726-02 1304	2023/2/22	2026/2/21
Ducommun Technologies	Horn Antenna	ARH-2823-02	1007726-01 1302	2023/2/22	2026/2/21
Xinhang Macrowave	Coaxial Cable	XH750A-N/J-SMA/J-10M	20231117004 #0001	2023/11/17	2024/11/16
Xinhang Macrowave	Coaxial Cable	XH750A-N/J-SMA/J-10M	20231117004 #0001	2024/11/17	2025/11/16
Xinhang Macrowave	Coaxial Cable	XH360A-2.92/J-2.92/J-6M-A	20231208001 #0001	2023/12/11	2024/12/10
Xinhang Macrowave	Coaxial Cable	XH360A-2.92/J-2.92/J-6M-A	20231208001 #0001	2024/12/9	2025/12/8
AH	Preamplifier	PAM-0118P	469	2024/4/15	2025/4/15
AH	Preamplifier	PAM-1840VH	191	2024/9/5	2025/9/4
R&S	FSV40	FSV40	101944	2024/9/6	2025/9/5
Audix	Test Software	E3	191218 (V9)	N/A	N/A
Sinoscite	Band Rejection Filter	BSF5150-5850MN	0899003	2024/2/21	2025/2/20
Mini-Circuits	High Pass Filter	VHF-6010+	31118	2023/12/1	2024/11/30
Mini-Circuits	High Pass Filter	VHF-6010+	31118	2024/6/11	2025/6/10
Mini-Circuits	High Pass Filter	VHF-7150+	31023	2024/6/4	2025/6/3
Decentest	Multiplex Switch Test Control Set & Filter Switch Unit	DT7220SCU & DT7220FCU	DC79902 & DC79905	2024/8/27	2025/8/26

** Statement of Traceability: Bay Area Compliance Laboratories Corp.(Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

Configuration 1#:

802.11a_U-NII-1

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel				**5180**	**MHz**		
5150.00	52.15	PK	H	6.53	58.68	74.00	15.32
5150.00	40.64	AV	H	6.53	47.17	54.00	6.83
5150.00	56.67	PK	V	6.53	63.20	74.00	10.80
5150.00	41.88	AV	V	6.53	48.41	54.00	5.59
10360.00	47.38	PK	H	0.33	47.71	68.20	20.49
10360.00	47.16	PK	V	0.33	47.49	68.20	20.71
15540.00	47.95	PK	H	0.6	48.55	74.00	25.45
15540.00	35.89	AV	H	0.6	36.49	54.00	17.51
15540.00	48.22	PK	V	0.6	48.82	74.00	25.18
15540.00	36.15	AV	V	0.6	36.75	54.00	17.25
Middle channel				**5200**	**MHz**		
10400.00	47.82	PK	H	0.4	48.22	68.20	19.98
10400.00	48.03	PK	V	0.4	48.43	68.20	19.77
15600.00	48.16	PK	H	0.58	48.74	74.00	25.26
15600.00	36.35	AV	H	0.58	36.93	54.00	17.07
15600.00	47.89	PK	V	0.58	48.47	74.00	25.53
15600.00	35.68	AV	V	0.58	36.26	54.00	17.74
High channel				**5240**	**MHz**		
5350.00	49.43	PK	H	7.1	56.53	74.00	17.47
5350.00	38.90	AV	H	7.1	46.00	54.00	8.00
5350.00	49.29	PK	V	7.1	56.39	74.00	17.61
5350.00	38.62	AV	V	7.1	45.72	54.00	8.28
10480.00	48.19	PK	H	0.56	48.75	68.20	19.45
10480.00	47.93	PK	V	0.56	48.49	68.20	19.71
15720.00	48.73	PK	H	0.55	49.28	74.00	24.72
15720.00	36.82	AV	H	0.55	37.37	54.00	16.63
15720.00	47.67	PK	V	0.55	48.22	74.00	25.78
15720.00	37.47	AV	V	0.55	38.02	54.00	15.98

802.11n20_U-NII-1

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel				**5180**	**MHz**		
5150.00	50.84	PK	H	6.53	57.37	74.00	16.63
5150.00	39.54	AV	H	6.53	46.07	54.00	7.93
5150.00	56.48	PK	V	6.53	63.01	74.00	10.99
5150.00	40.81	AV	V	6.53	47.34	54.00	6.66
10360.00	48.52	PK	H	0.33	48.85	68.20	19.35
10360.00	47.56	PK	V	0.33	47.89	68.20	20.31
15540.00	48.22	PK	H	0.6	48.82	74.00	25.18
15540.00	36.51	AV	H	0.6	37.11	54.00	16.89
15540.00	47.81	PK	V	0.6	48.41	74.00	25.59
15540.00	36.51	AV	V	0.6	37.11	54.00	16.89
Middle channel				**5200**	**MHz**		
10400.00	47.15	PK	H	0.4	47.55	68.20	20.65
10400.00	47.68	PK	V	0.4	48.08	68.20	20.12
15600.00	48.35	PK	H	0.58	48.93	74.00	25.07
15600.00	36.12	AV	H	0.58	36.70	54.00	17.30
15600.00	48.19	PK	V	0.58	48.77	74.00	25.23
15600.00	36.05	AV	V	0.58	36.63	54.00	17.37
High channel				**5240**	**MHz**		
5350.00	49.43	PK	H	7.1	56.53	74.00	17.47
5350.00	38.77	AV	H	7.1	45.87	54.00	8.13
5350.00	49.22	PK	V	7.1	56.32	74.00	17.68
5350.00	38.84	AV	V	7.1	45.94	54.00	8.06
10480.00	47.15	PK	H	0.56	47.71	68.20	20.49
10480.00	47.98	PK	V	0.56	48.54	68.20	19.66
15720.00	47.58	PK	H	0.55	48.13	74.00	25.87
15720.00	35.16	AV	H	0.55	35.71	54.00	18.29
15720.00	47.18	PK	V	0.55	47.73	74.00	26.27
15720.00	35.23	AV	V	0.55	35.78	54.00	18.22

802.11n40_U-NII-1

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel 5190 MHz							
5150.00	53.64	PK	H	6.53	60.17	74.00	13.83
5150.00	38.98	AV	H	6.53	45.51	54.00	8.49
5150.00	57.08	PK	V	6.53	63.61	74.00	10.39
5150.00	39.86	AV	V	6.53	46.39	54.00	7.61
10380.00	48.26	PK	H	0.37	48.63	68.20	19.57
10380.00	48.57	PK	V	0.37	48.94	68.20	19.26
15570.00	47.54	PK	H	0.59	48.13	74.00	25.87
15570.00	37.19	AV	H	0.59	37.78	54.00	16.22
15570.00	48.10	PK	V	0.59	48.69	74.00	25.31
15570.00	36.81	AV	V	0.59	37.40	54.00	16.60
High channel 5230 MHz							
5350.00	49.58	PK	H	7.1	56.68	74.00	17.32
5350.00	38.75	AV	H	7.1	45.85	54.00	8.15
5350.00	49.50	PK	V	7.1	56.60	74.00	17.40
5350.00	38.89	AV	V	7.1	45.99	54.00	8.01
10460.00	47.84	PK	H	0.51	48.35	68.20	19.85
10460.00	48.22	PK	V	0.51	48.73	68.20	19.47
15690.00	47.86	PK	H	0.56	48.42	74.00	25.58
15690.00	35.73	AV	H	0.56	36.29	54.00	17.71
15690.00	48.16	PK	V	0.56	48.72	74.00	25.28
15690.00	36.32	AV	V	0.56	36.88	54.00	17.12

802.11ac80_U-NII-1

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Middle channel 5210 MHz							
5150.00	50.32	PK	H	6.53	56.85	74.00	17.15
5150.00	39.24	AV	H	6.53	45.77	54.00	8.23
5150.00	53.12	PK	V	6.53	59.65	74.00	14.35
5150.00	40.74	AV	V	6.53	47.27	54.00	6.73
5350.00	50.05	PK	H	7.1	57.15	74.00	16.85
5350.00	38.41	AV	H	7.1	45.51	54.00	8.49
5350.00	48.87	PK	V	7.1	55.97	74.00	18.03
5350.00	39.03	AV	V	7.1	46.13	54.00	7.87
10420.00	48.97	PK	H	0.43	49.40	68.20	18.80
10420.00	47.22	PK	V	0.43	47.65	68.20	20.55
15630.00	47.45	PK	H	0.57	48.02	74.00	25.98
15630.00	37.49	AV	H	0.57	38.06	54.00	15.94
15630.00	48.74	PK	V	0.57	49.31	74.00	24.69
15630.00	36.86	AV	V	0.57	37.43	54.00	16.57

802.11a_U-NII-2A

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel				**5260**	**MHz**		
5150.00	49.26	PK	H	6.53	55.79	74.00	18.21
5150.00	38.90	AV	H	6.53	45.43	54.00	8.57
5150.00	48.26	PK	V	6.53	54.79	74.00	19.21
5150.00	38.59	AV	V	6.53	45.12	54.00	8.88
10520.00	47.95	PK	H	0.6	48.55	68.20	19.65
10520.00	47.16	PK	V	0.6	47.76	68.20	20.44
15780.00	47.98	PK	H	0.55	48.53	74.00	25.47
15780.00	35.40	AV	H	0.55	35.95	54.00	18.05
15780.00	48.22	PK	V	0.55	48.77	74.00	25.23
15780.00	36.31	AV	V	0.55	36.86	54.00	17.14
Middle channel				**5280**	**MHz**		
10560.00	47.16	PK	H	0.61	47.77	68.20	20.43
10560.00	48.39	PK	V	0.61	49.00	68.20	19.20
15840.00	48.11	PK	H	0.54	48.65	74.00	25.35
15840.00	36.24	AV	H	0.54	36.78	54.00	17.22
15840.00	47.98	PK	V	0.54	48.52	74.00	25.48
15840.00	35.62	AV	V	0.54	36.16	54.00	17.84
High channel				**5320**	**MHz**		
5350.00	52.78	PK	H	7.1	59.88	74.00	14.12
5350.00	40.14	AV	H	7.1	47.24	54.00	6.76
5350.00	51.92	PK	V	7.1	59.02	74.00	14.98
5350.00	40.21	AV	V	7.1	47.31	54.00	6.69
10640.00	47.29	PK	H	0.62	47.91	74.00	26.09
10640.00	36.95	AV	H	0.62	37.57	54.00	16.43
10640.00	48.20	PK	V	0.62	48.82	74.00	25.18
10640.00	36.94	AV	V	0.62	37.56	54.00	16.44
15960.00	48.78	PK	H	0.5	49.28	74.00	24.72
15960.00	36.17	AV	H	0.5	36.67	54.00	17.33
15960.00	47.52	PK	V	0.5	48.02	74.00	25.98
15960.00	36.16	AV	V	0.5	36.66	54.00	17.34

802.11n20_U-NII-2A

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel				**5260**	**MHz**		
5150.00	46.82	PK	H	6.53	53.35	74.00	20.65
5150.00	38.41	AV	H	6.53	44.94	54.00	9.06
5150.00	49.12	PK	V	6.53	55.65	74.00	18.35
5150.00	38.10	AV	V	6.53	44.63	54.00	9.37
10520.00	47.26	PK	H	0.6	47.86	68.20	20.34
10520.00	48.37	PK	V	0.6	48.97	68.20	19.23
15780.00	48.76	PK	H	0.55	49.31	74.00	24.69
15780.00	36.26	AV	H	0.55	36.81	54.00	17.19
15780.00	47.98	PK	V	0.55	48.53	74.00	25.47
15780.00	35.79	AV	V	0.55	36.34	54.00	17.66
Middle channel				**5280**	**MHz**		
10560.00	48.21	PK	H	0.61	48.82	68.20	19.38
10560.00	47.16	PK	V	0.61	47.77	68.20	20.43
15840.00	47.81	PK	H	0.54	48.35	74.00	25.65
15840.00	35.73	AV	H	0.54	36.27	54.00	17.73
15840.00	48.15	PK	V	0.54	48.69	74.00	25.31
15840.00	36.04	AV	V	0.54	36.58	54.00	17.42
high channel				**5320**	**MHz**		
5350.00	50.65	PK	H	7.1	57.75	74.00	16.25
5350.00	39.50	AV	H	7.1	46.60	54.00	7.40
5350.00	49.88	PK	V	7.1	56.98	74.00	17.02
5350.00	40.09	AV	V	7.1	47.19	54.00	6.81
10640.00	47.86	PK	H	0.62	48.48	74.00	25.52
10640.00	37.01	AV	H	0.62	37.63	54.00	16.37
10640.00	47.71	PK	V	0.62	48.33	74.00	25.67
10640.00	36.90	AV	V	0.62	37.52	54.00	16.48
15960.00	48.79	PK	H	0.5	49.29	74.00	24.71
15960.00	36.81	AV	H	0.5	37.31	54.00	16.69
15960.00	48.06	PK	V	0.5	48.56	74.00	25.44
15960.00	36.62	AV	V	0.5	37.12	54.00	16.88

802.11n40_U-NII-2A

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel 5270 MHz							
5150.00	48.52	PK	H	6.53	55.05	74.00	18.95
5150.00	38.14	AV	H	6.53	44.67	54.00	9.33
5150.00	48.42	PK	V	6.53	54.95	74.00	19.05
5150.00	38.50	AV	V	6.53	45.03	54.00	8.97
10540.00	48.26	PK	H	0.59	48.85	68.20	19.35
10540.00	47.62	PK	V	0.59	48.21	68.20	19.99
15810.00	47.95	PK	H	0.54	48.49	74.00	25.51
15810.00	35.44	AV	H	0.54	35.98	54.00	18.02
15810.00	48.16	PK	V	0.54	48.70	74.00	25.30
15810.00	36.13	AV	V	0.54	36.67	54.00	17.33
High channel 5310 MHz							
5350.00	50.45	PK	H	7.1	57.55	74.00	16.45
5350.00	39.48	AV	H	7.1	46.58	54.00	7.42
5350.00	57.47	PK	V	7.1	64.57	74.00	9.43
5350.00	41.24	AV	V	7.1	48.34	54.00	5.66
10620.00	47.31	PK	H	0.62	47.93	74.00	26.07
10620.00	36.99	AV	H	0.62	37.61	54.00	16.39
10620.00	48.23	PK	V	0.62	48.85	74.00	25.15
10620.00	36.95	AV	V	0.62	37.57	54.00	16.43
15930.00	48.33	PK	H	0.51	48.84	74.00	25.16
15930.00	36.57	AV	H	0.51	37.08	54.00	16.92
15930.00	46.70	PK	V	0.51	47.21	74.00	26.79
15930.00	36.14	AV	V	0.51	36.65	54.00	17.35

802.11ac80_U-NII-2A

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Middle channel 5290 MHz							
5150.00	48.42	PK	H	6.53	54.95	74.00	19.05
5150.00	38.26	AV	H	6.53	44.79	54.00	9.21
5150.00	49.07	PK	V	6.53	55.60	74.00	18.40
5150.00	38.70	AV	V	6.53	45.23	54.00	8.77
5350.00	50.85	PK	H	7.1	57.95	74.00	16.05
5350.00	39.60	AV	H	7.1	46.70	54.00	7.30
5350.00	53.00	PK	V	7.1	60.10	74.00	13.90
5350.00	40.93	AV	V	7.1	48.03	54.00	5.97
10580.00	48.32	PK	H	0.61	48.93	68.20	19.27
10580.00	48.77	PK	V	0.61	49.38	68.20	18.82
15870.00	47.58	PK	H	0.53	48.11	74.00	25.89
15870.00	37.45	AV	H	0.53	37.98	54.00	16.02
15870.00	48.24	PK	V	0.53	48.77	74.00	25.23
15870.00	36.77	AV	V	0.53	37.30	54.00	16.70

802.11a_U-NII-2C

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel				**5500**	**MHz**		
5460.00	49.40	PK	H	7.33	56.73	74.00	17.27
5460.00	38.79	AV	H	7.33	46.12	54.00	7.88
5460.00	48.78	PK	V	7.33	56.11	74.00	17.89
5460.00	39.22	AV	V	7.33	46.55	54.00	7.45
5470.00	52.39	PK	H	7.34	59.73	68.20	8.47
5470.00	53.55	PK	V	7.34	60.89	68.20	7.31
11000.00	47.84	PK	H	0.72	48.56	74.00	25.44
11000.00	35.96	AV	H	0.72	36.68	54.00	17.32
11000.00	48.11	PK	V	0.72	48.83	74.00	25.17
11000.00	36.23	AV	V	0.72	36.95	54.00	17.05
16500.00	46.78	PK	H	1.1	47.88	68.20	20.32
16500.00	46.83	PK	V	1.1	47.93	68.20	20.27
Middle channel				**5580**	**MHz**		
11160.00	48.22	PK	H	1	49.22	74.00	24.78
11160.00	36.35	AV	H	1	37.35	54.00	16.65
11160.00	47.96	PK	V	1	48.96	74.00	25.04
11160.00	35.78	AV	V	1	36.78	54.00	17.22
16740.00	47.86	PK	H	2.42	50.28	68.20	17.92
16740.00	46.71	PK	V	2.42	49.13	68.20	19.07
High channel				**5700**	**MHz**		
5725.00	50.57	PK	H	8.03	58.60	68.20	9.60
5725.00	51.86	PK	V	8.03	59.89	68.20	8.31
11400.00	48.76	PK	H	1.4	50.16	74.00	23.84
11400.00	36.31	AV	H	1.4	37.71	54.00	16.29
11400.00	47.04	PK	V	1.4	48.44	74.00	25.56
11400.00	35.95	AV	V	1.4	37.35	54.00	16.65
17100.00	46.45	PK	H	4	50.45	68.20	17.75
17100.00	46.76	PK	V	4	50.76	68.20	17.44

802.11n20_U-NII-2C

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel				**5500**	**MHz**		
5460.00	48.55	PK	H	7.33	55.88	74.00	18.12
5460.00	38.83	AV	H	7.33	46.16	54.00	7.84
5460.00	49.18	PK	V	7.33	56.51	74.00	17.49
5460.00	38.95	AV	V	7.33	46.28	54.00	7.72
5470.00	49.95	PK	H	7.34	57.29	68.20	10.91
5470.00	51.50	PK	V	7.34	58.84	68.20	9.36
11000.00	47.51	PK	H	0.72	48.23	74.00	25.77
11000.00	36.62	AV	H	0.72	37.34	54.00	16.66
11000.00	52.78	PK	V	0.72	53.50	74.00	20.50
11000.00	42.13	AV	V	0.72	42.85	54.00	11.15
16500.00	46.82	PK	H	1.1	47.92	68.20	20.28
16500.00	47.33	PK	V	1.1	48.43	68.20	19.77
Middle channel				**5580**	**MHz**		
11160.00	48.22	PK	H	1	49.22	74.00	24.78
11160.00	36.35	AV	H	1	37.35	54.00	16.65
11160.00	50.49	PK	V	1	51.49	74.00	22.51
11160.00	40.18	AV	V	1	41.18	54.00	12.82
16740.00	46.98	PK	H	2.42	49.40	68.20	18.80
16740.00	47.02	PK	V	2.42	49.44	68.20	18.76
High channel				**5700**	**MHz**		
5725.00	51.36	PK	H	8.03	59.39	68.20	8.81
5725.00	51.09	PK	V	8.03	59.12	68.20	9.08
11400.00	48.33	PK	H	1.4	49.73	74.00	24.27
11400.00	36.34	AV	H	1.4	37.74	54.00	16.26
11400.00	51.22	PK	V	1.4	52.62	74.00	21.38
11400.00	41.16	AV	V	1.4	42.56	54.00	11.44
17100.00	47.22	PK	H	4	51.22	68.20	16.98
17100.00	48.35	PK	V	4	52.35	68.20	15.85

802.11n40_U-NII-2C

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel				**5510**	**MHz**		
5460.00	49.13	PK	H	7.33	56.46	74.00	17.54
5460.00	38.60	AV	H	7.33	45.93	54.00	8.07
5460.00	49.87	PK	V	7.33	57.20	74.00	16.80
5460.00	38.79	AV	V	7.33	46.12	54.00	7.88
5470.00	53.25	PK	H	7.34	60.59	68.20	7.61
5470.00	53.08	PK	V	7.34	60.42	68.20	7.78
11020.00	48.57	PK	H	0.75	49.32	74.00	24.68
11020.00	36.34	AV	H	0.75	37.09	54.00	16.91
11020.00	48.29	PK	V	0.75	49.04	74.00	24.96
11020.00	36.19	AV	V	0.75	36.94	54.00	17.06
16530.00	46.72	PK	H	1.27	47.99	68.20	20.21
16530.00	46.53	PK	V	1.27	47.80	68.20	20.40
Middle channel				**5550**	**MHz**		
11100.00	48.22	PK	H	0.89	49.11	74.00	24.89
11100.00	36.69	AV	H	0.89	37.58	54.00	16.42
11100.00	49.02	PK	V	0.89	49.91	74.00	24.09
11100.00	37.11	AV	V	0.89	38.00	54.00	16.00
16650.00	46.87	PK	H	1.93	48.80	68.20	19.40
16650.00	46.15	PK	V	1.93	48.08	68.20	20.12
High channel				**5670**	**MHz**		
5725.00	47.55	PK	H	8.03	55.58	68.20	12.62
5725.00	48.83	PK	V	8.03	56.86	68.20	11.34
11340.00	48.46	PK	H	1.29	49.75	74.00	24.25
11340.00	36.76	AV	H	1.29	38.05	54.00	15.95
11340.00	49.46	PK	V	1.29	50.75	74.00	23.25
11340.00	37.16	AV	V	1.29	38.45	54.00	15.55
17010.00	46.78	PK	H	3.87	50.65	68.20	17.55
17010.00	46.31	PK	V	3.87	50.18	68.20	18.02

802.11ac80_U-NII-2C

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel				**5530**	**MHz**		
5460.00	53.25	PK	H	7.33	60.58	74.00	13.42
5460.00	41.04	AV	H	7.33	48.37	54.00	5.63
5460.00	53.44	PK	V	7.33	60.77	74.00	13.23
5460.00	41.00	AV	V	7.33	48.33	54.00	5.67
5470.00	56.07	PK	H	7.34	63.41	68.20	4.79
5470.00	54.59	PK	V	7.34	61.93	68.20	6.27
11060.00	47.69	PK	H	0.82	48.51	74.00	25.49
11060.00	36.49	AV	H	0.82	37.31	54.00	16.69
11060.00	48.22	PK	V	0.82	49.04	74.00	24.96
11060.00	36.67	AV	V	0.82	37.49	54.00	16.51
16590.00	46.63	PK	H	1.6	48.23	68.20	19.97
16590.00	47.26	PK	V	1.6	48.86	68.20	19.34
High channel				**5610**	**MHz**		
5725.00	48.21	PK	H	8.03	56.24	68.20	11.96
5725.00	48.32	PK	V	8.03	56.35	68.20	11.85
11220.00	47.49	PK	H	1.1	48.59	74.00	25.41
11220.00	35.18	AV	H	1.1	36.28	54.00	17.72
11220.00	47.88	PK	V	1.1	48.98	74.00	25.02
11220.00	35.61	AV	V	1.1	36.71	54.00	17.29
16830.00	46.77	PK	H	2.91	49.68	68.20	18.52
16830.00	46.92	PK	V	2.91	49.83	68.20	18.37

802.11a_U-NII-3

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel				**5745**	**MHz**		
5725.00	58.10	PK	H	8.03	66.13	122.20	56.07
5720.00	51.87	PK	H	8.02	59.89	110.80	50.91
5700.00	46.89	PK	H	7.98	54.87	105.20	50.33
5650.00	47.40	PK	H	7.89	55.29	68.20	12.91
5725.00	57.43	PK	V	8.03	65.46	122.20	56.74
5720.00	51.67	PK	V	8.02	59.69	110.80	51.11
5700.00	49.87	PK	V	7.98	57.85	105.20	47.35
5650.00	47.86	PK	V	7.89	55.75	68.20	12.45
11490.00	48.75	PK	H	1.55	50.30	74.00	23.70
11490.00	36.26	AV	H	1.55	37.81	54.00	16.19
11490.00	47.83	PK	V	1.55	49.38	74.00	24.62
11490.00	35.45	AV	V	1.55	37.00	54.00	17.00
17235.00	47.04	PK	H	4.2	51.24	68.20	16.96
17235.00	47.37	PK	V	4.2	51.57	68.20	16.63
Middle channel				**5785**	**MHz**		
11570.00	47.75	PK	H	1.59	49.34	74.00	24.66
11570.00	35.49	AV	H	1.59	37.08	54.00	16.92
11570.00	47.93	PK	V	1.59	49.52	74.00	24.48
11570.00	35.80	AV	V	1.59	37.39	54.00	16.61
17355.00	47.11	PK	H	4.37	51.48	68.20	16.72
17355.00	46.80	PK	V	4.37	51.17	68.20	17.03
High channel				**5825**	**MHz**		
5850.00	52.01	PK	H	8.2	60.21	122.20	61.99
5855.00	49.85	PK	H	8.21	58.06	110.80	52.74
5875.00	47.11	PK	H	8.28	55.39	105.20	49.81
5925.00	47.98	PK	H	8.4	56.38	68.20	11.82
5850.00	50.17	PK	V	8.2	58.37	122.20	63.83
5855.00	49.35	PK	V	8.21	57.56	110.80	53.24
5875.00	47.48	PK	V	8.28	55.76	105.20	49.44
5925.00	48.97	PK	V	8.4	57.37	68.20	10.83
11650.00	47.28	PK	H	1.59	48.87	74.00	25.13
11650.00	35.46	AV	H	1.59	37.05	54.00	16.95
11650.00	47.19	PK	V	1.59	48.78	74.00	25.22
11650.00	35.89	AV	V	1.59	37.48	54.00	16.52
17475.00	47.23	PK	H	4.56	51.79	68.20	16.41
17475.00	47.18	PK	V	4.56	51.74	68.20	16.46

802.11n20_U-NII-3

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel				**5745**	**MHz**		
5725.00	58.85	PK	H	8.03	66.88	122.20	55.32
5720.00	56.89	PK	H	8.02	64.91	110.80	45.89
5700.00	48.67	PK	H	7.98	56.65	105.20	48.55
5650.00	47.97	PK	H	7.89	55.86	68.20	12.34
5725.00	58.25	PK	V	8.03	66.28	122.20	55.92
5720.00	52.79	PK	V	8.02	60.81	110.80	49.99
5700.00	47.98	PK	V	7.98	55.96	105.20	49.24
5650.00	49.16	PK	V	7.89	57.05	68.20	11.15
11490.00	47.88	PK	H	1.55	49.43	74.00	24.57
11490.00	35.79	AV	H	1.55	37.34	54.00	16.66
11490.00	48.16	PK	V	1.55	49.71	74.00	24.29
11490.00	36.32	AV	V	1.55	37.87	54.00	16.13
17235.00	47.15	PK	H	4.2	51.35	68.20	16.85
17235.00	47.53	PK	V	4.2	51.73	68.20	16.47
Middle channel				**5785**	**MHz**		
11570.00	48.12	PK	H	1.59	49.71	74.00	24.29
11570.00	36.17	AV	H	1.59	37.76	54.00	16.24
11570.00	47.99	PK	V	1.59	49.58	74.00	24.42
11570.00	35.81	AV	V	1.59	37.40	54.00	16.60
17355.00	47.16	PK	H	4.37	51.53	68.20	16.67
17355.00	47.38	PK	V	4.37	51.75	68.20	16.45
High channel				**5825**	**MHz**		
5850.00	52.12	PK	H	8.2	60.32	122.20	61.88
5855.00	48.62	PK	H	8.21	56.83	110.80	53.97
5875.00	48.71	PK	H	8.28	56.99	105.20	48.21
5925.00	48.15	PK	H	8.4	56.55	68.20	11.65
5850.00	52.54	PK	V	8.2	60.74	122.20	61.46
5855.00	49.45	PK	V	8.21	57.66	110.80	53.14
5875.00	47.69	PK	V	8.28	55.97	105.20	49.23
5925.00	48.25	PK	V	8.4	56.65	68.20	11.55
11650.00	47.62	PK	H	1.59	49.21	74.00	24.79
11650.00	36.66	AV	H	1.59	38.25	54.00	15.75
11650.00	48.52	PK	V	1.59	50.11	74.00	23.89
11650.00	37.17	AV	V	1.59	38.76	54.00	15.24
17475.00	47.08	PK	H	4.56	51.64	68.20	16.56
17475.00	47.49	PK	V	4.56	52.05	68.20	16.15

802.11n40_U-NII-3

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel				**5755**	**MHz**		
5725.00	59.92	PK	H	8.03	67.95	122.20	54.25
5720.00	57.89	PK	H	8.02	65.91	110.80	44.89
5700.00	49.24	PK	H	7.98	57.22	105.20	47.98
5650.00	47.32	PK	H	7.89	55.21	68.20	12.99
5725.00	59.71	PK	V	8.03	67.74	122.20	54.46
5720.00	58.58	PK	V	8.02	66.60	110.80	44.20
5700.00	49.96	PK	V	7.98	57.94	105.20	47.26
5650.00	48.11	PK	V	7.89	56.00	68.20	12.20
11510.00	48.01	PK	H	1.57	49.58	74.00	24.42
11510.00	36.13	AV	H	1.57	37.70	54.00	16.30
11510.00	47.98	PK	V	1.57	49.55	74.00	24.45
11510.00	35.83	AV	V	1.57	37.40	54.00	16.60
17265.00	47.15	PK	H	4.24	51.39	68.20	16.81
17265.00	47.22	PK	V	4.24	51.46	68.20	16.74
High channel				**5795**	**MHz**		
5850.00	51.57	PK	H	8.2	59.77	122.20	62.43
5855.00	50.11	PK	H	8.21	58.32	110.80	52.48
5875.00	46.76	PK	H	8.28	55.04	105.20	50.16
5925.00	48.82	PK	H	8.4	57.22	68.20	10.98
5850.00	53.85	PK	V	8.2	62.05	122.20	60.15
5855.00	48.48	PK	V	8.21	56.69	110.80	54.11
5875.00	48.33	PK	V	8.28	56.61	105.20	48.59
5925.00	48.23	PK	V	8.4	56.63	68.20	11.57
11590.00	48.05	PK	H	1.58	49.63	74.00	24.37
11590.00	36.47	AV	H	1.58	38.05	54.00	15.95
11590.00	47.78	PK	V	1.58	49.36	74.00	24.64
11590.00	36.62	AV	V	1.58	38.20	54.00	15.80
17385.00	47.62	PK	H	4.42	52.04	68.20	16.16
17385.00	47.27	PK	V	4.42	51.69	68.20	16.51

802.11ac80_U-NII-3

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Middle channel 5775 MHz							
5725.00	67.25	PK	H	8.03	75.28	122.20	46.92
5720.00	66.60	PK	H	8.02	74.62	110.80	36.18
5700.00	63.49	PK	H	7.98	71.47	105.20	33.73
5650.00	53.38	PK	H	7.89	61.27	68.20	6.93
5850.00	59.07	PK	H	8.2	67.27	122.20	54.93
5855.00	56.22	PK	H	8.21	64.43	110.80	46.37
5875.00	51.91	PK	H	8.28	60.19	105.20	45.01
5925.00	47.90	PK	H	8.4	56.30	68.20	11.90
5725.00	66.36	PK	V	8.03	74.39	122.20	47.81
5720.00	67.46	PK	V	8.02	75.48	110.80	35.32
5700.00	62.76	PK	V	7.98	70.74	105.20	34.46
5650.00	55.11	PK	V	7.89	63.00	68.20	5.20
5850.00	62.18	PK	V	8.2	70.38	122.20	51.82
5855.00	59.87	PK	V	8.21	68.08	110.80	42.72
5875.00	53.22	PK	V	8.28	61.50	105.20	43.70
5925.00	49.15	PK	V	8.4	57.55	68.20	10.65
11550.00	48.73	PK	H	1.58	50.31	74.00	23.69
11550.00	36.72	AV	H	1.58	38.30	54.00	15.70
11550.00	48.10	PK	V	1.58	49.68	74.00	24.32
11550.00	36.37	AV	V	1.58	37.95	54.00	16.05
17325.00	46.99	PK	H	4.33	51.32	68.20	16.88
17325.00	47.50	PK	V	4.33	51.83	68.20	16.37

802.11a_U-NII-4

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel				**5845**	**MHz**		
5725.00	33.19	PK	H	29.81	63.00	122.20	59.20
5720.00	32.43	PK	H	29.8	62.23	110.80	48.57
5700.00	31.45	PK	H	29.77	61.22	105.20	43.98
5650.00	31.44	PK	H	29.69	61.13	68.20	7.07
5725.00	31.31	PK	V	29.81	61.12	122.20	61.08
5720.00	31.58	PK	V	29.8	61.38	110.80	49.42
5700.00	31.69	PK	V	29.77	61.46	105.20	43.74
5650.00	31.56	PK	V	29.69	61.25	68.20	6.95
11690.00	48.26	PK	H	1.6	49.86	74.00	24.14
11690.00	36.26	AV	H	1.6	37.86	54.00	16.14
11690.00	47.19	PK	V	1.6	48.79	74.00	25.21
11690.00	35.18	AV	V	1.6	36.78	54.00	17.22
17535.00	47.69	PK	H	4.84	52.53	88.20	35.67
17535.00	35.49	AV	H	4.84	40.33	68.20	27.87
17535.00	48.22	PK	V	4.84	53.06	88.20	35.14
17535.00	36.34	AV	V	4.84	41.18	68.20	27.02
Middle channel				**5865**	**MHz**		
11730.00	48.15	PK	H	1.6	49.75	74.00	24.25
11730.00	36.27	AV	H	1.6	37.87	54.00	16.13
11730.00	48.19	PK	V	1.6	49.79	74.00	24.21
11730.00	36.53	AV	V	1.6	38.13	54.00	15.87
17595.00	47.52	PK	H	5.26	52.78	88.20	35.42
17595.00	35.19	AV	H	5.26	40.45	68.20	27.75
17595.00	48.27	PK	V	5.26	53.53	88.20	34.67
17595.00	36.49	AV	V	5.26	41.75	68.20	26.45
High channel				**5885**	**MHz**		
5895.00	53.81	PK	H	30.07	83.88	110.20	26.32
5895.00	40.67	AV	H	30.07	70.74	90.20	19.46
5895.00	54.67	PK	V	30.07	84.74	110.20	25.46
5895.00	42.39	AV	V	30.07	72.46	90.20	17.74
5925.00	33.82	PK	H	30.12	63.94	88.20	24.26
5925.00	21.57	AV	H	30.12	51.69	68.20	16.51
5925.00	32.35	PK	V	30.12	62.47	88.20	25.73
5925.00	20.92	AV	V	30.12	51.04	68.20	17.16
11770.00	48.76	PK	H	1.61	50.37	74.00	23.63
11770.00	36.77	AV	H	1.61	38.38	54.00	**15.62**
11770.00	48.32	PK	V	1.61	49.93	74.00	24.07
11770.00	36.37	AV	V	1.61	37.98	54.00	16.02
17655.00	47.86	PK	H	5.69	53.55	88.20	34.65
17655.00	35.62	AV	H	5.69	41.31	68.20	26.89
17655.00	47.69	PK	V	5.69	53.38	88.20	34.82
17655.00	35.56	AV	V	5.69	41.25	68.20	26.95

802.11n20_U-NII-4

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel				**5845**	**MHz**		
5725.00	31.45	PK	H	29.81	61.26	122.20	60.94
5720.00	31.22	PK	H	29.8	61.02	110.80	49.78
5700.00	31.17	PK	H	29.77	60.94	105.20	44.26
5650.00	30.71	PK	H	29.69	60.40	68.20	7.80
5725.00	31.37	PK	V	29.81	61.18	122.20	61.02
5720.00	32.02	PK	V	29.8	61.82	110.80	48.98
5700.00	32.34	PK	V	29.77	62.11	105.20	43.09
5650.00	31.06	PK	V	29.69	60.75	68.20	7.45
11690.00	47.70	PK	H	1.6	49.30	74.00	24.70
11690.00	35.48	AV	H	1.6	37.08	54.00	16.92
11690.00	48.37	PK	V	1.6	49.97	74.00	24.03
11690.00	36.98	AV	V	1.6	38.58	54.00	**15.42**
17535.00	47.58	PK	H	4.84	52.42	88.20	35.78
17535.00	35.78	AV	H	4.84	40.62	68.20	27.58
17535.00	47.43	PK	V	4.84	52.27	88.20	35.93
17535.00	35.67	AV	V	4.84	40.51	68.20	27.69
Middle channel				**5865**	**MHz**		
11730.00	48.11	PK	H	1.6	49.71	74.00	24.29
11730.00	36.09	AV	H	1.6	37.69	54.00	16.31
11730.00	48.25	PK	V	1.6	49.85	74.00	24.15
11730.00	36.19	AV	V	1.6	37.79	54.00	16.21
17595.00	49.13	PK	H	5.26	54.39	88.20	33.81
17595.00	37.35	AV	H	5.26	42.61	68.20	25.59
17595.00	48.27	PK	V	5.26	53.53	88.20	34.67
17595.00	36.82	AV	V	5.26	42.08	68.20	26.12
High channel				**5885**	**MHz**		
5895.00	52.53	PK	H	30.07	82.60	110.20	27.60
5895.00	40.19	AV	H	30.07	70.26	90.20	19.94
5895.00	54.58	PK	V	30.07	84.65	110.20	25.55
5895.00	42.19	AV	V	30.07	72.26	90.20	17.94
5925.00	32.38	PK	H	30.12	62.50	88.20	25.70
5925.00	20.36	AV	H	30.12	50.48	68.20	17.72
5925.00	32.42	PK	V	30.12	62.54	88.20	25.66
5925.00	20.37	AV	V	30.12	50.49	68.20	17.71
11770.00	48.16	PK	H	1.61	49.77	74.00	24.23
11770.00	36.30	AV	H	1.61	37.91	54.00	16.09
11770.00	48.97	PK	V	1.61	50.58	74.00	23.42
11770.00	36.79	AV	V	1.61	38.40	54.00	15.60
17655.00	48.32	PK	H	5.69	54.01	88.20	34.19
17655.00	36.75	AV	H	5.69	42.44	68.20	25.76
17655.00	49.16	PK	V	5.69	54.85	88.20	33.35
17655.00	37.35	AV	V	5.69	43.04	68.20	25.16

802.11n40_U-NII-4

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
			Low channel	5835	MHz		
5725.00	31.99	PK	H	29.81	61.80	122.20	60.40
5720.00	31.46	PK	H	29.8	61.26	110.80	49.54
5700.00	32.18	PK	H	29.77	61.95	105.20	43.25
5650.00	30.30	PK	H	29.69	59.99	68.20	8.21
5725.00	31.82	PK	V	29.81	61.63	122.20	60.57
5720.00	31.91	PK	V	29.8	61.71	110.80	49.09
5700.00	31.87	PK	V	29.77	61.64	105.20	43.56
5650.00	31.93	PK	V	29.69	61.62	68.20	6.58
11670.00	47.63	PK	H	1.6	49.23	74.00	24.77
11670.00	35.48	AV	H	1.6	37.08	54.00	16.92
11670.00	49.11	PK	V	1.6	50.71	74.00	23.29
11670.00	37.25	AV	V	1.6	38.85	54.00	**15.15**
17505.00	47.90	PK	H	4.62	52.52	88.20	35.68
17505.00	35.65	AV	H	4.62	40.27	68.20	27.93
17505.00	47.26	PK	V	4.62	51.88	88.20	36.32
17505.00	35.46	AV	V	4.62	40.08	68.20	28.12
			High channel	5875	MHz		
5895.00	47.29	PK	H	30.07	77.36	110.20	32.84
5895.00	35.38	AV	H	30.07	65.45	90.20	24.75
5895.00	48.82	PK	V	30.07	78.89	110.20	31.31
5895.00	36.79	AV	V	30.07	66.86	90.20	23.34
5925.00	35.80	PK	H	30.12	65.92	88.20	22.28
5925.00	23.26	AV	H	30.12	53.38	68.20	14.82
5925.00	38.05	PK	V	30.12	68.17	88.20	20.03
5925.00	26.75	AV	V	30.12	56.87	68.20	11.33
11750.00	48.59	PK	H	1.6	50.19	74.00	23.81
11750.00	36.27	AV	H	1.6	37.87	54.00	16.13
11750.00	48.14	PK	V	1.6	49.74	74.00	24.26
11750.00	36.23	AV	V	1.6	37.83	54.00	16.17
17625.00	48.71	PK	H	5.48	54.19	88.20	34.01
17625.00	36.93	AV	H	5.48	42.41	68.20	25.79
17625.00	49.21	PK	V	5.48	54.69	88.20	33.51
17625.00	37.02	AV	V	5.48	42.50	68.20	25.70

802.11ac80_U-NII-4

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Middle channel 5855 MHz							
5725.00	32.52	PK	H	29.81	62.33	122.20	59.87
5720.00	32.58	PK	H	29.8	62.38	110.80	48.42
5700.00	32.63	PK	H	29.77	62.40	105.20	42.80
5650.00	31.70	PK	H	29.69	61.39	68.20	6.81
5725.00	32.29	PK	V	29.81	62.10	122.20	60.10
5720.00	31.60	PK	V	29.8	61.40	110.80	49.40
5700.00	32.14	PK	V	29.77	61.91	105.20	43.29
5650.00	31.24	PK	V	29.69	60.93	68.20	7.27
5895.00	46.49	PK	H	30.07	76.56	110.20	33.64
5895.00	34.12	AV	H	30.07	64.19	90.20	26.01
5895.00	48.60	PK	V	30.07	78.67	110.20	31.53
5895.00	36.31	AV	V	30.07	66.38	90.20	23.82
5925.00	41.34	PK	H	30.12	71.46	88.20	16.74
5925.00	29.31	AV	H	30.12	59.43	68.20	8.77
5925.00	43.91	PK	V	30.12	74.03	88.20	14.17
5925.00	31.57	AV	V	30.12	61.69	68.20	6.51
11710.00	47.63	PK	H	1.6	49.23	74.00	24.77
11710.00	35.74	AV	H	1.6	37.34	54.00	16.66
11710.00	47.11	PK	V	1.6	48.71	74.00	25.29
11710.00	35.77	AV	V	1.6	37.37	54.00	16.63
17565.00	48.06	PK	H	5.04	53.10	88.20	35.10
17565.00	36.46	AV	H	5.04	41.50	68.20	26.70
17565.00	46.74	PK	V	5.04	51.78	88.20	36.42
17565.00	35.08	AV	V	5.04	40.12	68.20	28.08

Spot Check:
Note: Worst mode was test

Configuration 2#:
802.11ac80_U-NII-1

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Middle channel 5210 MHz							
5150.00	51.43	PK	H	6.53	57.96	74.00	16.04
5150.00	38.34	AV	H	6.53	44.87	54.00	9.13
5150.00	53.16	PK	V	6.53	59.69	74.00	14.31
5150.00	39.98	AV	V	6.53	46.51	54.00	7.49
5350.00	49.44	PK	H	7.1	56.54	74.00	17.46
5350.00	37.78	AV	H	7.1	44.88	54.00	9.12
5350.00	49.51	PK	V	7.1	56.61	74.00	17.39
5350.00	37.68	AV	V	7.1	44.78	54.00	9.22
10420.00	46.87	PK	H	0.43	47.30	68.20	20.90
10420.00	46.16	PK	V	0.43	46.59	68.20	21.61
15630.00	47.98	PK	H	0.57	48.55	74.00	25.45
15630.00	36.39	AV	H	0.57	36.96	54.00	17.04
15630.00	47.43	PK	V	0.57	48.00	74.00	26.00
15630.00	36.26	AV	V	0.57	36.83	54.00	17.17

802.11ac80_U-NII-2A

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Middle channel 5290 MHz							
5150.00	48.50	PK	H	6.53	55.03	74.00	18.97
5150.00	38.02	AV	H	6.53	44.55	54.00	9.45
5150.00	49.48	PK	V	6.53	56.01	74.00	17.99
5150.00	38.13	AV	V	6.53	44.66	54.00	9.34
5350.00	52.37	PK	H	7.1	59.47	74.00	14.53
5350.00	39.69	AV	H	7.1	46.79	54.00	7.21
5350.00	53.05	PK	V	7.1	60.15	74.00	13.85
5350.00	39.81	AV	V	7.1	46.91	54.00	7.09
10580.00	48.49	PK	H	0.61	49.10	68.20	19.10
10580.00	49.27	PK	V	0.61	49.88	68.20	18.32
15870.00	47.98	PK	H	0.53	48.51	74.00	25.49
15870.00	37.08	AV	H	0.53	37.61	54.00	16.39
15870.00	47.72	PK	V	0.53	48.25	74.00	25.75
15870.00	37.35	AV	V	0.53	37.88	54.00	16.12

802.11n20_U-NII-2C

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
			Low channel	5500	MHz		
5460.00	50.22	PK	H	7.33	57.55	74.00	16.45
5460.00	38.04	AV	H	7.33	45.37	54.00	8.63
5460.00	50.84	PK	V	7.33	58.17	74.00	15.83
5460.00	38.09	AV	V	7.33	45.42	54.00	8.58
5470.00	52.70	PK	H	7.34	60.04	68.20	8.16
5470.00	54.46	PK	V	7.34	61.80	68.20	6.40
11000.00	51.53	PK	H	0.72	52.25	74.00	21.75
11000.00	41.49	AV	H	0.72	42.21	54.00	11.79
11000.00	49.29	PK	V	0.72	50.01	74.00	23.99
11000.00	39.36	AV	V	0.72	40.08	54.00	13.92
16500.00	50.43	PK	H	1.1	51.53	68.20	16.67
16500.00	47.08	PK	V	1.1	48.18	68.20	20.02
			Middle channel	5580	MHz		
11160.00	50.85	PK	H	1	51.85	74.00	22.15
11160.00	40.29	AV	H	1	41.29	54.00	12.71
11160.00	48.79	PK	V	1	49.79	74.00	24.21
11160.00	38.66	AV	V	1	39.66	54.00	14.34
16740.00	49.36	PK	H	2.42	51.78	68.20	16.42
16740.00	47.25	PK	V	2.42	49.67	68.20	18.53
			High channel	5700	MHz		
5725.00	54.03	PK	H	8.03	62.06	68.20	6.14
5725.00	53.11	PK	V	8.03	61.14	68.20	7.06
11400.00	50.69	PK	H	1.4	52.09	74.00	21.91
11400.00	40.23	AV	H	1.4	41.63	54.00	12.37
11400.00	48.98	PK	V	1.4	50.38	74.00	23.62
11400.00	38.87	AV	V	1.4	40.27	54.00	13.73
17100.00	49.89	PK	H	4	53.89	68.20	14.31
17100.00	47.83	PK	V	4	51.83	68.20	16.37

802.11n20_U-NII-3

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
			Low channel	5745	MHz		
5725.00	59.78	PK	H	8.03	67.81	122.20	54.39
5720.00	54.91	PK	H	8.02	62.93	110.80	47.87
5700.00	49.45	PK	H	7.98	57.43	105.20	47.77
5650.00	48.71	PK	H	7.89	56.60	68.20	11.60
5725.00	61.61	PK	V	8.03	69.64	122.20	52.56
5720.00	54.92	PK	V	8.02	62.94	110.80	47.86
5700.00	50.29	PK	V	7.98	58.27	105.20	46.93
5650.00	49.81	PK	V	7.89	57.70	68.20	10.50
11490.00	46.98	PK	H	1.55	48.53	74.00	25.47
11490.00	36.38	AV	H	1.55	37.93	54.00	16.07
11490.00	47.15	PK	V	1.55	48.70	74.00	25.30
11490.00	37.11	AV	V	1.55	38.66	54.00	15.34
17235.00	47.19	PK	H	4.2	51.39	68.20	16.81
17235.00	47.53	PK	V	4.2	51.73	68.20	16.47
			Middle channel	5785	MHz		
11570.00	47.25	PK	H	1.59	48.84	74.00	25.16
11570.00	36.89	AV	H	1.59	38.48	54.00	15.52
11570.00	47.25	PK	V	1.59	48.84	74.00	25.16
11570.00	36.98	AV	V	1.59	38.57	54.00	15.43
17355.00	47.05	PK	H	4.37	51.42	68.20	16.78
17355.00	46.38	PK	V	4.37	50.75	68.20	17.45
			High channel	5825	MHz		
5850.00	53.37	PK	H	8.2	61.57	122.20	60.63
5855.00	50.92	PK	H	8.21	59.13	110.80	51.67
5875.00	48.79	PK	H	8.28	57.07	105.20	48.13
5925.00	47.65	PK	H	8.4	56.05	68.20	12.15
5850.00	52.44	PK	V	8.2	60.64	122.20	61.56
5855.00	49.53	PK	V	8.21	57.74	110.80	53.06
5875.00	48.79	PK	V	8.28	57.07	105.20	48.13
5925.00	48.56	PK	V	8.4	56.96	68.20	11.24
11650.00	47.97	PK	H	1.59	49.56	74.00	24.44
11650.00	37.14	AV	H	1.59	38.73	54.00	15.27
11650.00	46.80	PK	V	1.59	48.39	74.00	25.61
11650.00	36.32	AV	V	1.59	37.91	54.00	16.09
17475.00	47.43	PK	H	4.56	51.99	68.20	16.21
17475.00	46.98	PK	V	4.56	51.54	68.20	16.66

802.11n40_U-NII-4

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
			Low channel	5835	MHz		
5725.00	33.20	PK	H	29.81	63.01	122.20	59.19
5720.00	33.48	PK	H	29.8	63.28	110.80	47.52
5700.00	33.19	PK	H	29.77	62.96	105.20	42.24
5650.00	31.70	PK	H	29.69	61.39	68.20	6.81
5725.00	32.78	PK	V	29.81	62.59	122.20	59.61
5720.00	32.96	PK	V	29.8	62.76	110.80	48.04
5700.00	32.94	PK	V	29.77	62.71	105.20	42.49
5650.00	31.78	PK	V	29.69	61.47	68.20	6.73
11670.00	46.06	PK	H	1.6	47.66	74.00	26.34
11670.00	36.22	AV	H	1.6	37.82	54.00	16.18
11670.00	46.85	PK	V	1.6	48.45	74.00	25.55
11670.00	35.67	AV	V	1.6	37.27	54.00	16.73
17505.00	46.79	PK	H	4.62	51.41	88.20	36.79
17505.00	35.69	AV	H	4.62	40.31	68.20	27.89
17505.00	47.34	PK	V	4.62	51.96	88.20	36.24
17505.00	36.38	AV	V	4.62	41.00	68.20	27.20
			High channel	5875	MHz		
5895.00	47.07	PK	H	30.07	77.14	110.20	33.06
5895.00	31.39	AV	H	30.07	61.46	90.20	28.74
5895.00	47.99	PK	V	30.07	78.06	110.20	32.14
5895.00	32.43	AV	V	30.07	62.50	90.20	27.70
5925.00	35.36	PK	H	30.12	65.48	88.20	22.72
5925.00	21.19	AV	H	30.12	51.31	68.20	16.89
5925.00	36.01	PK	V	30.12	66.13	88.20	22.07
5925.00	22.86	AV	V	30.12	52.98	68.20	15.22
11750.00	46.22	PK	H	1.6	47.82	74.00	26.18
11750.00	36.18	AV	H	1.6	37.78	54.00	16.22
11750.00	46.53	PK	V	1.6	48.13	74.00	25.87
11750.00	36.11	AV	V	1.6	37.71	54.00	16.29
17625.00	46.98	PK	H	5.48	52.46	88.20	35.74
17625.00	36.32	AV	H	5.48	41.80	68.20	26.40
17625.00	47.22	PK	V	5.48	52.70	88.20	35.50
17625.00	36.51	AV	V	5.48	41.99	68.20	26.21

Configuration 3#:

802.11ac80_U-NII-1

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Middle channel 5210 MHz							
5150.00	50.27	PK	H	6.53	56.80	74.00	17.20
5150.00	39.74	AV	H	6.53	46.27	54.00	7.73
5150.00	50.49	PK	V	6.53	57.02	74.00	16.98
5150.00	40.23	AV	V	6.53	46.76	54.00	7.24
5350.00	48.91	PK	H	7.1	56.01	74.00	17.99
5350.00	38.96	AV	H	7.1	46.06	54.00	7.94
5350.00	49.55	PK	V	7.1	56.65	74.00	17.35
5350.00	38.69	AV	V	7.1	45.79	54.00	8.21
10420.00	47.70	PK	H	0.43	48.13	68.20	20.07
10420.00	47.21	PK	V	0.43	47.64	68.20	20.56
15630.00	46.93	PK	H	0.57	47.50	74.00	26.50
15630.00	37.40	AV	H	0.57	37.97	54.00	16.03
15630.00	48.48	PK	V	0.57	49.05	74.00	24.95
15630.00	37.57	AV	V	0.57	38.14	54.00	15.86

802.11ac80_U-NII-2A

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Middle channel 5290 MHz							
5150.00	47.48	PK	H	6.53	54.01	74.00	19.99
5150.00	38.70	AV	H	6.53	45.23	54.00	8.77
5150.00	49.05	PK	V	6.53	55.58	74.00	18.42
5150.00	38.75	AV	V	6.53	45.28	54.00	8.72
5350.00	50.52	PK	H	7.1	57.62	74.00	16.38
5350.00	40.04	AV	H	7.1	47.14	54.00	6.86
5350.00	49.78	PK	V	7.1	56.88	74.00	17.12
5350.00	40.13	AV	V	7.1	47.23	54.00	6.77
10580.00	47.68	PK	H	0.61	48.29	68.20	19.91
10580.00	48.04	PK	V	0.61	48.65	68.20	19.55
15870.00	47.02	PK	H	0.53	47.55	74.00	26.45
15870.00	36.77	AV	H	0.53	37.30	54.00	16.70
15870.00	47.61	PK	V	0.53	48.14	74.00	25.86
15870.00	36.86	AV	V	0.53	37.39	54.00	16.61

802.11n20_U-NII-2C

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel				**5500**	**MHz**		
5460.00	49.64	PK	H	7.33	56.97	74.00	17.03
5460.00	39.19	AV	H	7.33	46.52	54.00	7.48
5460.00	50.04	PK	V	7.33	57.37	74.00	16.63
5460.00	39.16	AV	V	7.33	46.49	54.00	7.51
5470.00	50.02	PK	H	7.34	57.36	68.20	10.84
5470.00	53.04	PK	V	7.34	60.38	68.20	7.82
11000.00	48.37	PK	H	0.72	49.09	74.00	24.91
11000.00	40.31	AV	H	0.72	41.03	54.00	12.97
11000.00	52.41	PK	V	0.72	53.13	74.00	20.87
11000.00	42.08	AV	V	0.72	42.80	54.00	11.20
16500.00	49.85	PK	H	1.1	50.95	68.20	17.25
16500.00	48.42	PK	V	1.1	49.52	68.20	18.68
Middle channel				**5580**	**MHz**		
11160.00	49.58	PK	H	1	50.58	74.00	23.42
11160.00	39.31	AV	H	1	40.31	54.00	13.69
11160.00	48.42	PK	V	1	49.42	74.00	24.58
11160.00	38.22	AV	V	1	39.22	54.00	14.78
16740.00	48.41	PK	H	2.42	50.83	68.20	17.37
16740.00	48.20	PK	V	2.42	50.62	68.20	17.58
High channel				**5700**	**MHz**		
5725.00	50.51	PK	H	8.03	58.54	68.20	9.66
5725.00	53.07	PK	V	8.03	61.10	68.20	7.10
11400.00	47.45	PK	H	1.4	48.85	74.00	25.15
11400.00	37.52	AV	H	1.4	38.92	54.00	15.08
11400.00	48.39	PK	V	1.4	49.79	74.00	24.21
11400.00	38.19	AV	V	1.4	39.59	54.00	14.41
17100.00	47.49	PK	H	4	51.49	68.20	16.71
17100.00	47.76	PK	V	4	51.76	68.20	16.44

802.11n20_U-NII-3

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel				**5745**	**MHz**		
5725.00	57.27	PK	H	8.03	65.30	122.20	56.90
5720.00	51.76	PK	H	8.02	59.78	110.80	51.02
5700.00	51.13	PK	H	7.98	59.11	105.20	46.09
5650.00	51.96	PK	H	7.89	59.85	68.20	8.35
5725.00	63.07	PK	V	8.03	71.10	122.20	51.10
5720.00	55.19	PK	V	8.02	63.21	110.80	47.59
5700.00	50.02	PK	V	7.98	58.00	105.20	47.20
5650.00	50.10	PK	V	7.89	57.99	68.20	10.21
11490.00	47.64	PK	H	1.55	49.19	74.00	24.81
11490.00	37.39	AV	H	1.55	38.94	54.00	15.06
11490.00	48.17	PK	V	1.55	49.72	74.00	24.28
11490.00	37.01	AV	V	1.55	38.56	54.00	15.44
17235.00	48.54	PK	H	4.2	52.74	68.20	15.46
17235.00	48.26	PK	V	4.2	52.46	68.20	15.74
Middle channel				**5785**	**MHz**		
11570.00	48.01	PK	H	1.59	49.60	74.00	24.40
11570.00	37.28	AV	H	1.59	38.87	54.00	15.13
11570.00	48.06	PK	V	1.59	49.65	74.00	24.35
11570.00	37.23	AV	V	1.59	38.82	54.00	15.18
17355.00	48.16	PK	H	4.37	52.53	68.20	15.67
17355.00	48.34	PK	V	4.37	52.71	68.20	15.49
High channel				**5825**	**MHz**		
5850.00	54.17	PK	H	8.2	62.37	122.20	59.83
5855.00	51.61	PK	H	8.21	59.82	110.80	50.98
5875.00	51.25	PK	H	8.28	59.53	105.20	45.67
5925.00	48.65	PK	H	8.4	57.05	68.20	11.15
5850.00	55.03	PK	V	8.2	63.23	122.20	58.97
5855.00	53.99	PK	V	8.21	62.20	110.80	48.60
5875.00	49.98	PK	V	8.28	58.26	105.20	46.94
5925.00	50.79	PK	V	8.4	59.19	68.20	9.01
11650.00	48.38	PK	H	1.59	49.97	74.00	24.03
11650.00	36.23	AV	H	1.59	37.82	54.00	16.18
11650.00	48.49	PK	V	1.59	50.08	74.00	23.92
11650.00	37.89	AV	V	1.59	39.48	54.00	14.52
17475.00	47.96	PK	H	4.56	52.52	68.20	15.68
17475.00	48.17	PK	V	4.56	52.73	68.20	15.47

802.11n40_U-NII-4

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
			Low channel	5835	MHz		
5725.00	31.48	PK	H	29.81	61.29	122.20	60.91
5720.00	31.89	PK	H	29.8	61.69	110.80	49.11
5700.00	31.26	PK	H	29.77	61.03	105.20	44.17
5650.00	31.55	PK	H	29.69	61.24	68.20	6.96
5725.00	31.88	PK	V	29.81	61.69	122.20	60.51
5720.00	32.12	PK	V	29.8	61.92	110.80	48.88
5700.00	31.89	PK	V	29.77	61.66	105.20	43.54
5650.00	30.98	PK	V	29.69	60.67	68.20	7.53
11670.00	47.20	PK	H	1.6	48.80	74.00	25.20
11670.00	36.76	AV	H	1.6	38.36	54.00	15.64
11670.00	47.80	PK	V	1.6	49.40	74.00	24.60
11670.00	36.66	AV	V	1.6	38.26	54.00	15.74
17505.00	47.74	PK	H	4.62	52.36	88.20	35.84
17505.00	36.39	AV	H	4.62	41.01	68.20	27.19
17505.00	48.11	PK	V	4.62	52.73	88.20	35.47
17505.00	36.90	AV	V	4.62	41.52	68.20	26.68
			High channel	5875	MHz		
5895.00	47.56	PK	H	30.07	77.63	110.20	32.57
5895.00	36.07	AV	H	30.07	66.14	90.20	24.06
5895.00	47.48	PK	V	30.07	77.55	110.20	32.65
5895.00	36.35	AV	V	30.07	66.42	90.20	23.78
5925.00	35.96	PK	H	30.12	66.08	88.20	22.12
5925.00	22.69	AV	H	30.12	52.81	68.20	15.39
5925.00	35.18	PK	V	30.12	65.30	88.20	22.90
5925.00	22.84	AV	V	30.12	52.96	68.20	15.24
11750.00	47.22	PK	H	1.6	48.82	74.00	25.18
11750.00	36.15	AV	H	1.6	37.75	54.00	16.25
11750.00	47.19	PK	V	1.6	48.79	74.00	25.21
11750.00	36.23	AV	V	1.6	37.83	54.00	16.17
17625.00	47.01	PK	H	5.48	52.49	88.20	35.71
17625.00	36.22	AV	H	5.48	41.70	68.20	26.50
17625.00	47.19	PK	V	5.48	52.67	88.20	35.53
17625.00	36.85	AV	V	5.48	42.33	68.20	25.87

Configuration 4#:

802.11ac80_U-NII-1

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Middle channel 5210 MHz							
5150.00	53.99	PK	H	6.53	60.52	74.00	13.48
5150.00	41.16	AV	H	6.53	47.69	54.00	6.31
5150.00	52.77	PK	V	6.53	59.30	74.00	14.70
5150.00	40.26	AV	V	6.53	46.79	54.00	7.21
5350.00	51.03	PK	H	7.1	58.13	74.00	15.87
5350.00	39.26	AV	H	7.1	46.36	54.00	7.64
5350.00	51.67	PK	V	7.1	58.77	74.00	15.23
5350.00	39.86	AV	V	7.1	46.96	54.00	7.04
10420.00	47.82	PK	H	0.43	48.25	68.20	19.95
10420.00	49.16	PK	V	0.43	49.59	68.20	18.61
15630.00	47.32	PK	H	0.57	47.89	74.00	26.11
15630.00	37.06	AV	H	0.57	37.63	54.00	16.37
15630.00	47.19	PK	V	0.57	47.76	74.00	26.24
15630.00	37.69	AV	V	0.57	38.26	54.00	15.74

802.11ac80_U-NII-2A

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Middle channel 5290 MHz							
5150.00	50.29	PK	H	6.53	56.82	74.00	17.18
5150.00	38.36	AV	H	6.53	44.89	54.00	9.11
5150.00	51.30	PK	V	6.53	57.83	74.00	16.17
5150.00	39.35	AV	V	6.53	45.88	54.00	8.12
5350.00	53.64	PK	H	7.1	60.74	74.00	13.26
5350.00	40.42	AV	H	7.1	47.52	54.00	6.48
5350.00	53.77	PK	V	7.1	60.87	74.00	13.13
5350.00	40.39	AV	V	7.1	47.49	54.00	6.51
10580.00	48.50	PK	H	0.61	49.11	68.20	19.09
10580.00	47.07	PK	V	0.61	47.68	68.20	20.52
15870.00	47.94	PK	H	0.53	48.47	74.00	25.53
15870.00	37.62	AV	H	0.53	38.15	54.00	15.85
15870.00	47.43	PK	V	0.53	47.96	74.00	26.04
15870.00	37.20	AV	V	0.53	37.73	54.00	16.27

802.11n20_U-NII-2C

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel 5500 MHz							
5460.00	51.00	PK	H	7.33	58.33	74.00	15.67
5460.00	39.23	AV	H	7.33	46.56	54.00	7.44
5460.00	51.60	PK	V	7.33	58.93	74.00	15.07
5460.00	39.66	AV	V	7.33	46.99	54.00	7.01
5470.00	52.00	PK	H	7.34	59.34	68.20	8.86
5470.00	53.61	PK	V	7.34	60.95	68.20	7.25
11000.00	47.10	PK	H	0.72	47.82	74.00	26.18
11000.00	37.02	AV	H	0.72	37.74	54.00	16.26
11000.00	47.85	PK	V	0.72	48.57	74.00	25.43
11000.00	37.36	AV	V	0.72	38.08	54.00	15.92
16500.00	47.26	PK	H	1.1	48.36	68.20	19.84
16500.00	47.78	PK	V	1.1	48.88	68.20	19.32
Middle channel 5580 MHz							
11160.00	47.16	PK	H	1	48.16	74.00	25.84
11160.00	37.06	AV	H	1	38.06	54.00	15.94
11160.00	47.19	PK	V	1	48.19	74.00	25.81
11160.00	36.88	AV	V	1	37.88	54.00	16.12
16740.00	47.53	PK	H	2.42	49.95	68.20	18.25
16740.00	47.19	PK	V	2.42	49.61	68.20	18.59
High channel 5700 MHz							
5725.00	52.82	PK	H	8.03	60.85	68.20	7.35
5725.00	56.00	PK	V	8.03	64.03	68.20	4.17
11400.00	47.25	PK	H	1.4	48.65	74.00	25.35
11400.00	36.14	AV	H	1.4	37.54	54.00	16.46
11400.00	47.08	PK	V	1.4	48.48	74.00	25.52
11400.00	36.50	AV	V	1.4	37.90	54.00	16.10
17100.00	47.12	PK	H	4	51.12	68.20	17.08
17100.00	47.52	PK	V	4	51.52	68.20	16.68

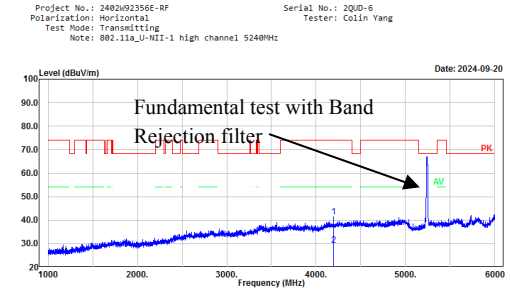
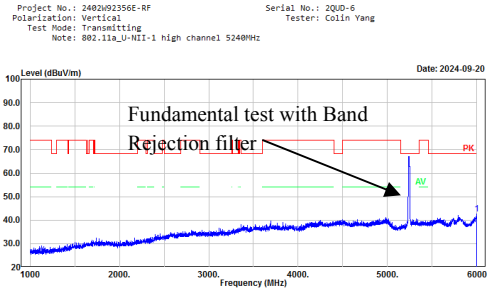
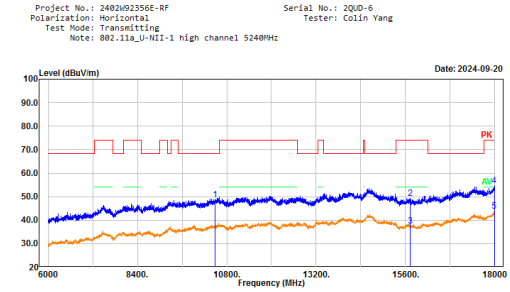
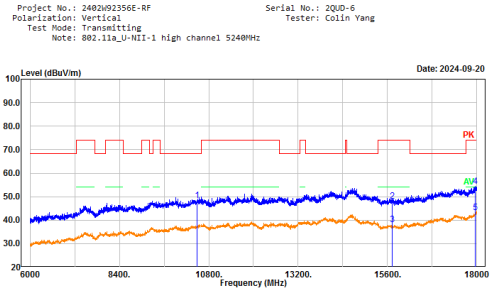
802.11n20_U-NII-3

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
Low channel				**5745**	**MHz**		
5725.00	59.28	PK	H	8.03	67.31	122.20	54.89
5720.00	55.38	PK	H	8.02	63.40	110.80	47.40
5700.00	51.04	PK	H	7.98	59.02	105.20	46.18
5650.00	50.83	PK	H	7.89	58.72	68.20	9.48
5725.00	55.59	PK	V	8.03	63.62	122.20	58.58
5720.00	52.08	PK	V	8.02	60.10	110.80	50.70
5700.00	50.64	PK	V	7.98	58.62	105.20	46.58
5650.00	51.09	PK	V	7.89	58.98	68.20	9.22
11490.00	47.25	PK	H	1.55	48.80	74.00	25.20
11490.00	37.16	AV	H	1.55	38.71	54.00	15.29
11490.00	47.89	PK	V	1.55	49.44	74.00	24.56
11490.00	37.36	AV	V	1.55	38.91	54.00	15.09
17235.00	47.15	PK	H	4.2	51.35	68.20	16.85
17235.00	47.53	PK	V	4.2	51.73	68.20	16.47
Middle channel				**5785**	**MHz**		
11570.00	47.88	PK	H	1.59	49.47	74.00	24.53
11570.00	37.11	AV	H	1.59	38.70	54.00	15.30
11570.00	47.92	PK	V	1.59	49.51	74.00	24.49
11570.00	37.23	AV	V	1.59	38.82	54.00	15.18
17355.00	47.05	PK	H	4.37	51.42	68.20	16.78
17355.00	47.62	PK	V	4.37	51.99	68.20	16.21
High channel				**5825**	**MHz**		
5850.00	52.52	PK	H	8.2	60.72	122.20	61.48
5855.00	51.46	PK	H	8.21	59.67	110.80	51.13
5875.00	51.44	PK	H	8.28	59.72	105.20	45.48
5925.00	51.06	PK	H	8.4	59.46	68.20	8.74
5850.00	56.30	PK	V	8.2	64.50	122.20	57.70
5855.00	53.84	PK	V	8.21	62.05	110.80	48.75
5875.00	50.04	PK	V	8.28	58.32	105.20	46.88
5925.00	49.50	PK	V	8.4	57.90	68.20	10.30
11650.00	47.77	PK	H	1.59	49.36	74.00	24.64
11650.00	37.49	AV	H	1.59	39.08	54.00	14.92
11650.00	46.93	PK	V	1.59	48.52	74.00	25.48
11650.00	36.78	AV	V	1.59	38.37	54.00	15.63
17475.00	47.91	PK	H	4.56	52.47	68.20	15.73
17475.00	48.07	PK	V	4.56	52.63	68.20	15.57

802.11n40_U-NII-4

Frequency	Reading	Detector	Polar	Factor	Corrected Amplitude	Limit	Margin
MHz	dBµV	PK/QP/AV	H/V	dB/m	dBµV/m	dBµV/m	dB
			Low channel	**5835**	**MHz**		
5725.00	31.39	PK	H	29.81	61.20	122.20	61.00
5720.00	31.00	PK	H	29.8	60.80	110.80	50.00
5700.00	31.53	PK	H	29.77	61.30	105.20	43.90
5650.00	30.82	PK	H	29.69	60.51	68.20	7.69
5725.00	31.03	PK	V	29.81	60.84	122.20	61.36
5720.00	31.80	PK	V	29.8	61.60	110.80	49.20
5700.00	30.85	PK	V	29.77	60.62	105.20	44.58
5650.00	31.35	PK	V	29.69	61.04	68.20	7.16
11670.00	48.10	PK	H	1.6	49.70	74.00	24.30
11670.00	36.97	AV	H	1.6	38.57	54.00	15.43
11670.00	47.25	PK	V	1.6	48.85	74.00	25.15
11670.00	36.52	AV	V	1.6	38.12	54.00	15.88
17505.00	47.74	PK	H	4.62	52.36	88.20	35.84
17505.00	36.26	AV	H	4.62	40.88	68.20	27.32
17505.00	47.70	PK	V	4.62	52.32	88.20	35.88
17505.00	36.88	AV	V	4.62	41.50	68.20	26.70
			High channel	**5875**	**MHz**		
5895.00	47.83	PK	H	30.07	77.90	110.20	32.30
5895.00	36.23	AV	H	30.07	66.30	90.20	23.90
5895.00	47.51	PK	V	30.07	77.58	110.20	32.62
5895.00	36.52	AV	V	30.07	66.59	90.20	23.61
5925.00	36.13	PK	H	30.12	66.25	88.20	21.95
5925.00	23.32	AV	H	30.12	53.44	68.20	14.76
5925.00	36.98	PK	V	30.12	67.10	88.20	21.10
5925.00	23.38	AV	V	30.12	53.50	68.20	14.70
11750.00	47.16	PK	H	1.6	48.76	74.00	25.24
11750.00	36.84	AV	H	1.6	38.44	54.00	15.56
11750.00	47.19	PK	V	1.6	48.79	74.00	25.21
11750.00	36.75	AV	V	1.6	38.35	54.00	15.65
17625.00	47.15	PK	H	5.48	52.63	88.20	35.57
17625.00	36.91	AV	H	5.48	42.39	68.20	25.81
17625.00	47.22	PK	V	5.48	52.70	88.20	35.50
17625.00	36.83	AV	V	5.48	42.31	68.20	25.89

Worst Channel Test plots:
Configuration 1#:
1-18GHz:
5150-5250MHz:

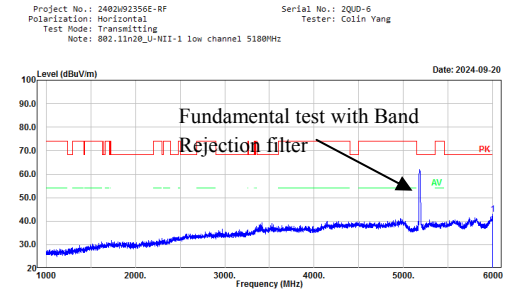
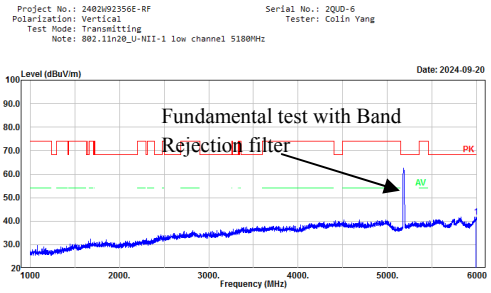
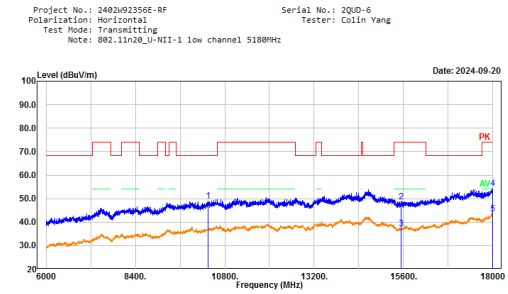
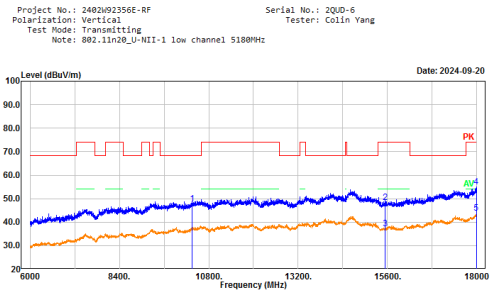
802.11a mode, High Channel, Horizontal	802.11a mode, High Channel, Vertical
	
	

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4192.00	52.18	-10.69	41.49	74.00	32.51	Peak
2	4192.00	40.12	-10.69	29.43	54.00	24.57	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5994.00	50.76	-8.19	42.57	68.20	25.63	Peak

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	10480.00	48.19	0.56	48.75	68.20	19.45	Peak
2	15720.00	48.73	0.55	49.28	74.00	24.72	Peak
3	15720.00	36.82	0.55	37.37	54.00	16.63	Average
4	17983.20	46.65	8.02	54.67	74.00	19.33	Peak
5	17983.20	35.77	8.02	43.79	54.00	10.21	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	10480.00	47.93	0.56	48.49	68.20	19.71	Peak
2	15720.00	47.67	0.55	48.22	74.00	25.78	Peak
3	15720.00	37.47	0.55	38.02	54.00	15.98	Average
4	17952.00	46.48	7.79	54.27	74.00	19.73	Peak
5	17952.00	35.54	7.79	43.33	54.00	10.67	Average

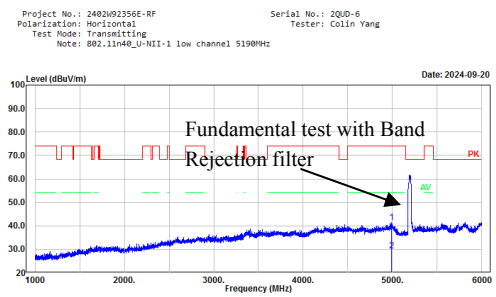
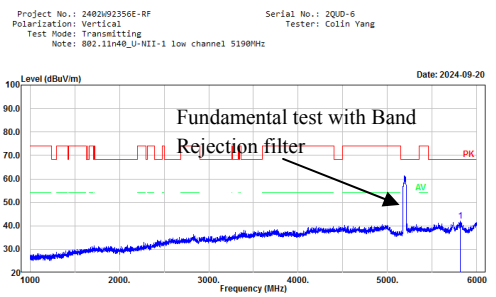
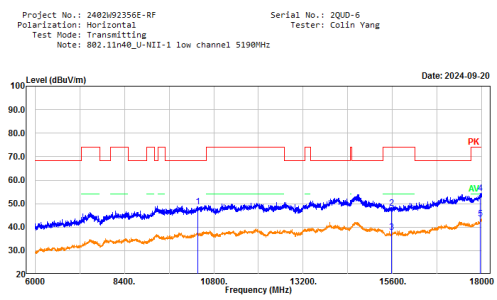
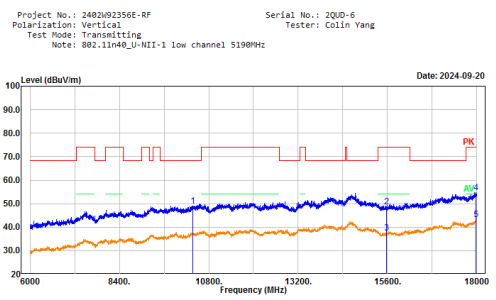
802.11n ht20 mode, Low Channel, Horizontal	802.11n ht20 mode, Low Channel, Vertical
	
	

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5997.00	51.10	-8.19	42.91	68.20	25.29	Peak

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5991.00	49.81	-8.19	41.62	68.20	26.58	Peak

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	10360.00	48.52	0.33	48.85	68.20	19.35	Peak
2	15540.00	48.22	0.60	48.82	74.00	25.18	Peak
3	15540.00	36.51	0.60	37.11	54.00	16.89	Average
4	17997.60	46.43	8.12	54.55	74.00	19.45	Peak
5	17997.60	35.44	8.12	43.56	54.00	10.44	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	10360.00	47.56	0.33	47.89	68.20	20.31	Peak
2	15540.00	47.81	0.60	48.41	74.00	25.59	Peak
3	15540.00	36.51	0.60	37.11	54.00	16.89	Average
4	17983.20	46.89	8.02	54.91	74.00	19.09	Peak
5	17983.20	35.72	8.02	43.74	54.00	10.26	Average

802.11n ht40 mode, Low Channel, Horizontal	802.11n ht40 mode, Low Channel, Vertical
	
	

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4985.00	51.34	-9.99	41.35	74.00	32.65	Peak
2	4985.00	39.35	-9.99	29.36	54.00	24.64	Average

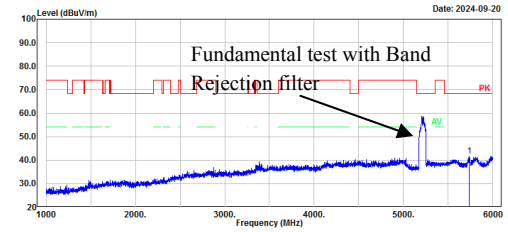
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5815.00	50.57	-8.46	42.11	68.20	26.09	Peak

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	10380.00	48.26	0.37	48.63	68.20	19.57	Peak
2	15570.00	47.54	0.59	48.13	74.00	25.87	Peak
3	15570.00	37.19	0.59	37.78	54.00	16.22	Average
4	17961.60	46.71	7.85	54.56	74.00	19.44	Peak
5	17961.60	35.82	7.85	43.67	54.00	10.33	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	10380.00	48.57	0.37	48.94	68.20	19.26	Peak
2	15570.00	48.10	0.59	48.69	74.00	25.31	Peak
3	15570.00	36.81	0.59	37.40	54.00	16.60	Average
4	17971.20	46.83	7.92	54.75	74.00	19.25	Peak
5	17971.20	35.39	7.92	43.31	54.00	10.69	Average

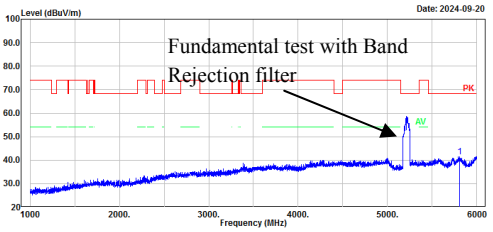
802.11ac80 mode, Middle Channel, Horizontal	802. 11ac80 mode, Middle Channel, Vertical

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-1 middle channel 5210MHz



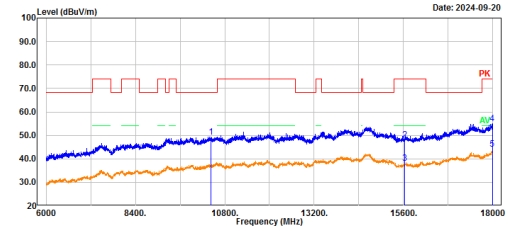
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5734.00	50.10	-8.50	41.60	68.20	26.60	Peak

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-1 middle channel 5210MHz



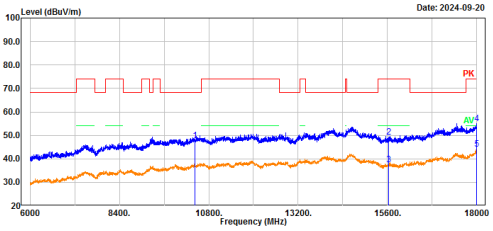
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5804.00	49.99	-8.50	41.49	68.20	26.71	Peak

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-1 middle channel 5210MHz



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	10420.00	48.97	0.43	49.40	68.20	18.80	Peak
2	15630.00	47.45	0.57	48.02	74.00	25.98	Peak
3	15630.00	37.49	0.57	38.06	54.00	15.94	Average
4	17983.20	46.99	8.02	55.01	74.00	18.99	Peak
5	17983.20	36.14	8.02	44.16	54.00	9.84	Average

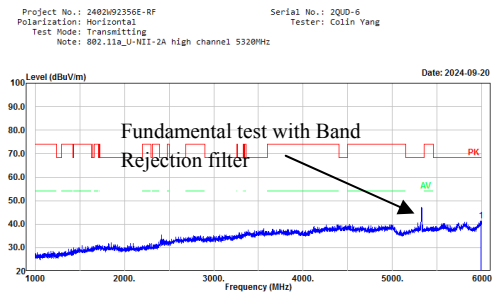
Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-1 middle channel 5210MHz



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	10420.00	47.22	0.43	47.65	68.20	20.55	Peak
2	15630.00	48.74	0.57	49.31	74.00	24.69	Peak
3	15630.00	36.86	0.57	37.43	54.00	16.57	Average
4	17992.80	47.03	8.09	55.12	74.00	18.88	Peak
5	17992.80	36.21	8.09	44.30	54.00	9.70	Average

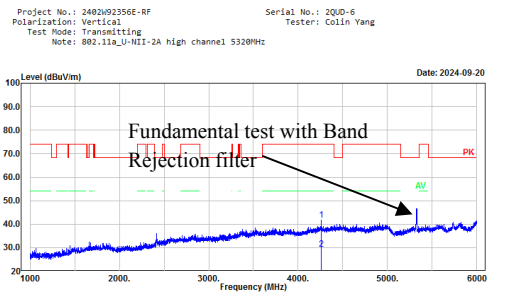
5250-5350MHz

802.11a mode, High Channel, Horizontal

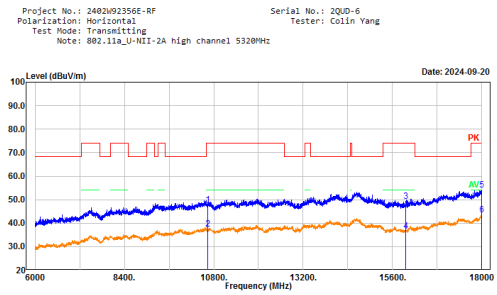


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5988.00	49.50	-8.20	41.30	68.20	26.90	Peak

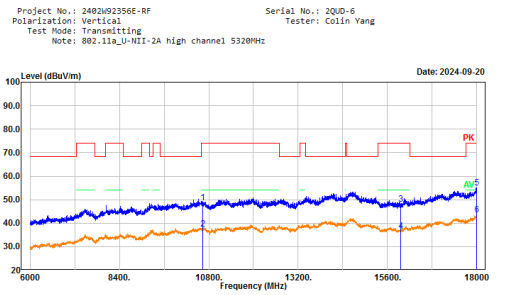
802.11a mode, High Channel, Vertical



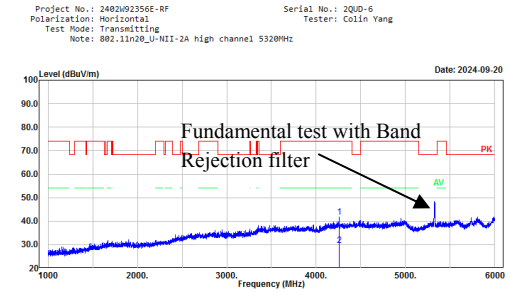
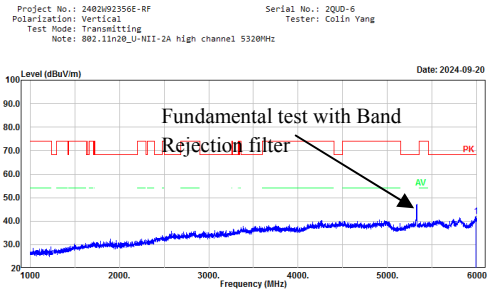
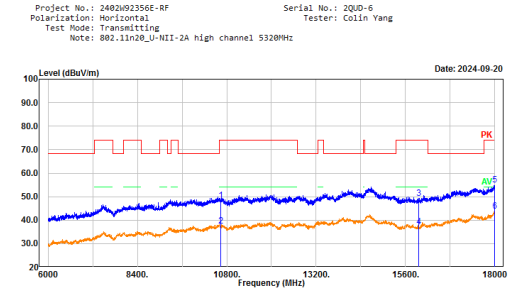
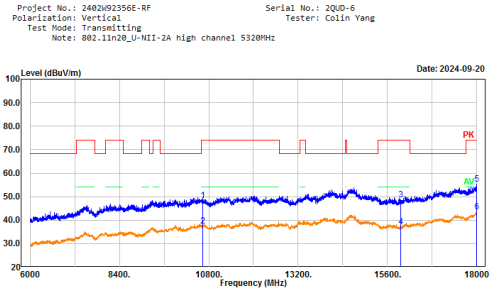
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4256.00	52.35	-10.61	41.74	74.00	32.26	Peak
2	4256.00	40.12	-10.61	29.51	54.00	24.49	Average



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	10640.00	47.29	0.62	47.91	74.00	26.09	Peak
2	10640.00	36.95	0.62	37.57	54.00	16.43	Average
3	15960.00	48.78	0.50	49.28	74.00	24.72	Peak
4	15960.00	36.17	0.50	36.67	54.00	17.33	Average
5	18000.00	46.11	8.13	54.24	74.00	19.76	Peak
6	18000.00	35.27	8.13	43.40	54.00	10.60	Average



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	10640.00	48.20	0.62	48.82	74.00	25.18	Peak
2	10640.00	36.94	0.62	37.56	54.00	16.44	Average
3	15960.00	47.52	0.50	48.02	74.00	25.98	Peak
4	15960.00	36.16	0.50	36.66	54.00	17.34	Average
5	17997.60	46.83	8.12	54.95	74.00	19.05	Peak
6	17997.60	35.46	8.12	43.58	54.00	10.42	Average

802.11n ht20 mode, High Channel, Horizontal	802.11n ht20 mode, High Channel, Vertical
	
	

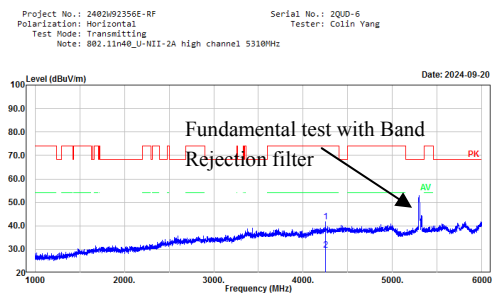
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4256.00	52.27	-10.61	41.66	74.00	32.34	Peak
2	4256.00	40.26	-10.61	29.65	54.00	24.35	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5990.00	50.10	-8.19	41.91	68.20	26.29	Peak

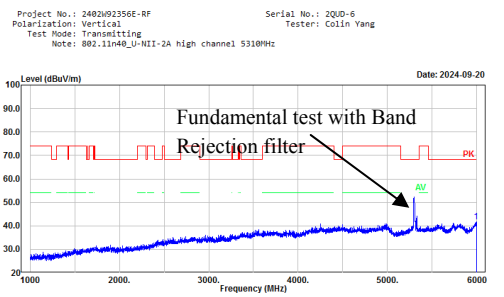
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	10640.00	47.86	0.62	48.48	74.00	25.52	Peak
2	10640.00	37.01	0.62	37.63	54.00	16.37	Average
3	15960.00	48.79	0.50	49.29	74.00	24.71	Peak
4	15960.00	36.81	0.50	37.31	54.00	16.69	Average
5	18000.00	46.79	8.13	54.92	74.00	19.08	Peak
6	18000.00	35.79	8.13	43.92	54.00	10.08	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	10640.00	47.71	0.62	48.33	74.00	25.67	Peak
2	10640.00	36.90	0.62	37.52	54.00	16.48	Average
3	15960.00	48.06	0.50	48.56	74.00	25.44	Peak
4	15960.00	36.62	0.50	37.12	54.00	16.88	Average
5	17985.60	47.43	8.03	55.46	74.00	18.54	Peak
6	17985.60	35.48	8.03	43.51	54.00	10.49	Average

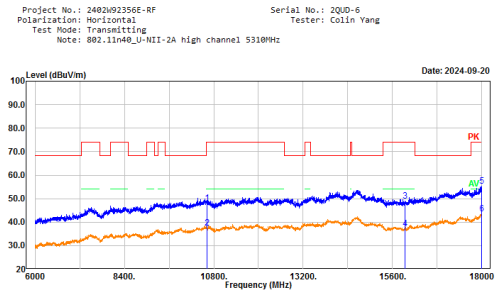
802.11n ht40 mode, High Channel, Horizontal	802.11n ht40 mode, High Channel, Vertical



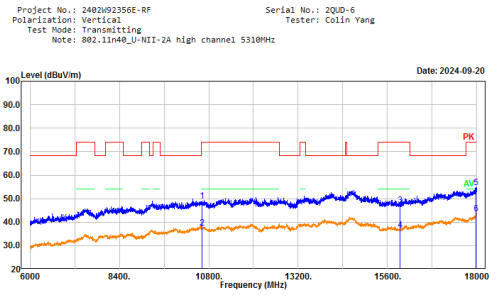
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4248.00	52.31	-10.62	41.69	74.00	32.31	Peak
2	4248.00	40.15	-10.62	29.53	54.00	24.47	Average



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5993.00	49.83	-8.19	41.64	68.20	26.56	Peak



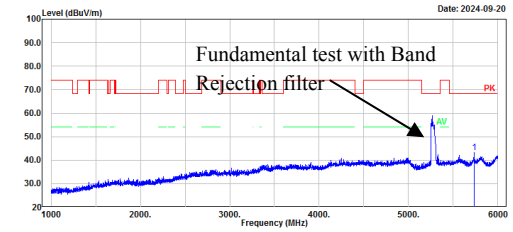
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	10620.00	47.31	0.62	47.93	74.00	26.07	Peak
2	10620.00	36.99	0.62	37.61	54.00	16.39	Average
3	15930.00	48.33	0.51	48.84	74.00	25.16	Peak
4	15930.00	36.57	0.51	37.08	54.00	16.92	Average
5	17995.20	47.36	8.10	55.46	74.00	18.54	Peak
6	17995.20	35.35	8.10	43.45	54.00	10.55	Average



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	10620.00	48.23	0.62	48.85	74.00	25.15	Peak
2	10620.00	36.95	0.62	37.57	54.00	16.43	Average
3	15930.00	46.70	0.51	47.21	74.00	26.79	Peak
4	15930.00	36.14	0.51	36.65	54.00	17.35	Average
5	17980.80	46.60	8.00	54.60	74.00	19.40	Peak
6	17980.80	35.66	8.00	43.66	54.00	10.34	Average

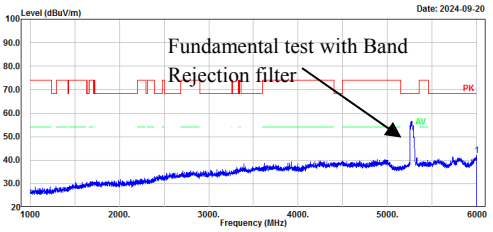
802.11ac80 mode, Middle Channel, Horizontal	802. 11ac80 mode, Middle Channel, Vertical

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-2A middle channel 5290MHz



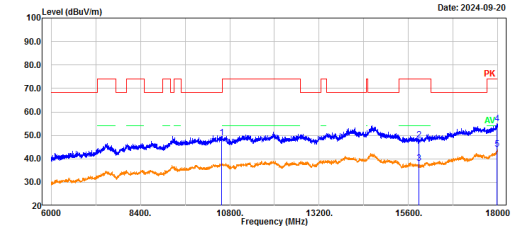
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5735.00	51.60	-8.50	43.10	68.20	25.10	Peak

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-2A middle channel 5290MHz



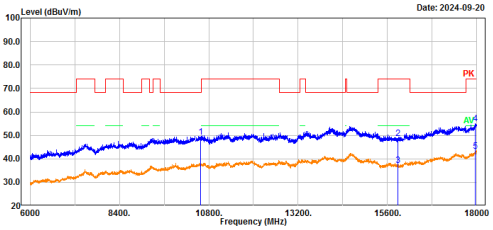
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5997.00	50.18	-8.19	41.99	68.20	26.21	Peak

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-2A middle channel 5290MHz



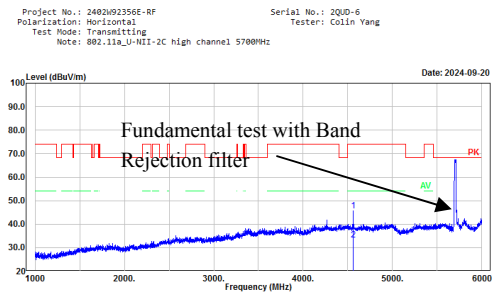
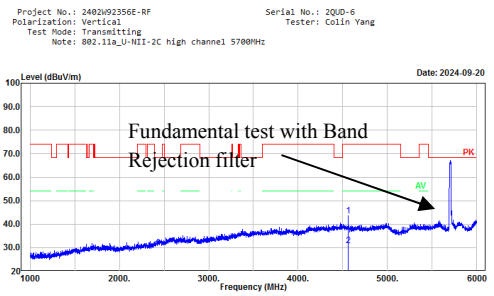
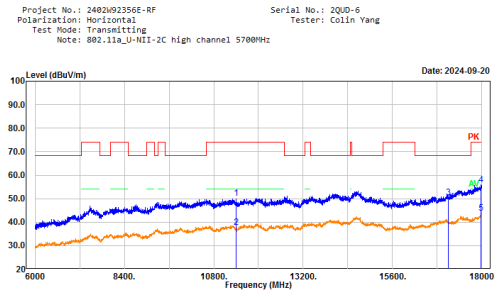
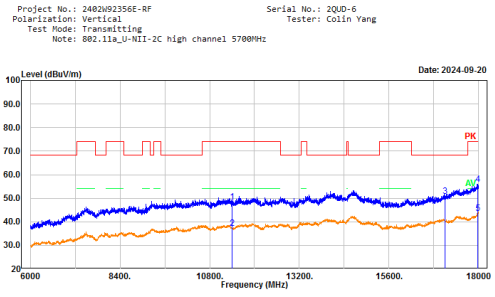
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	10580.00	48.32	0.61	48.93	68.20	19.27	Peak
2	15870.00	47.58	0.53	48.11	74.00	25.89	Peak
3	15870.00	37.45	0.53	37.98	54.00	16.02	Average
4	17978.40	47.00	7.99	54.99	74.00	19.01	Peak
5	17978.40	36.20	7.99	44.19	54.00	9.81	Average

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-2A middle channel 5290MHz



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	10580.00	48.77	0.61	49.38	68.20	18.82	Peak
2	15870.00	48.24	0.53	48.77	74.00	25.23	Peak
3	15870.00	36.77	0.53	37.30	54.00	16.70	Average
4	17959.20	47.07	7.84	54.91	74.00	19.09	Peak
5	17959.20	35.44	7.84	43.28	54.00	10.72	Average

5470-5725MHz:

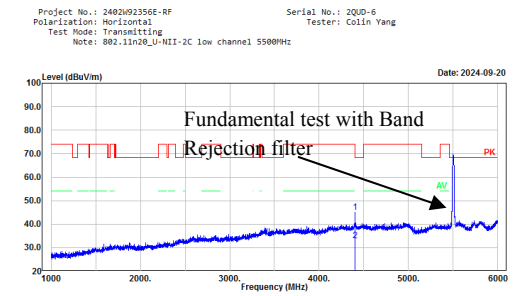
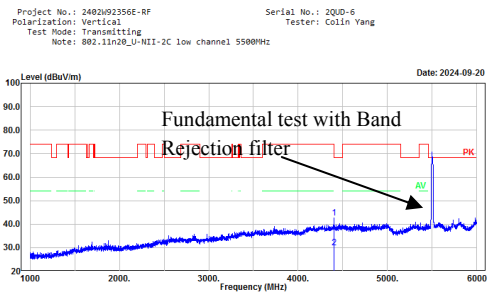
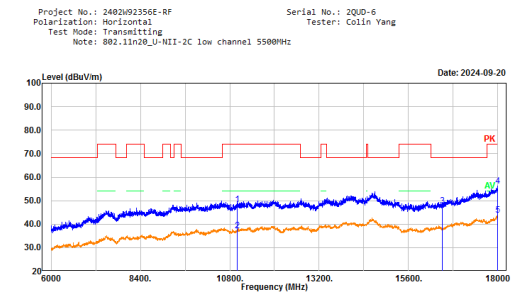
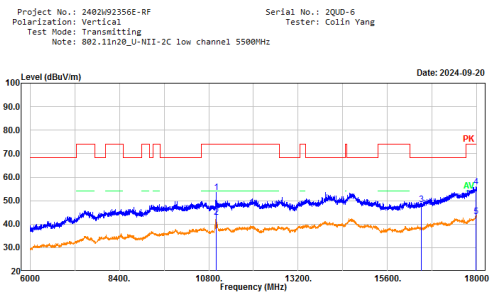
802.11a mode, High Channel, Horizontal	802.11a mode, High Channel, Vertical
	
	

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4560.00	55.75	-10.20	45.55	74.00	28.45	Peak
2	4560.00	43.37	-10.20	33.17	54.00	20.83	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4560.00	53.70	-10.20	43.50	74.00	30.50	Peak
2	4560.00	41.18	-10.20	30.98	54.00	23.02	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11400.00	48.76	1.40	50.16	74.00	23.84	Peak
2	11400.00	36.31	1.40	37.71	54.00	16.29	Average
3	17100.00	46.45	4.00	50.45	68.20	17.75	Peak
4	17976.00	48.11	7.96	56.07	74.00	17.93	Peak
5	17976.00	35.74	7.96	43.70	54.00	10.30	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11400.00	47.04	1.40	48.44	74.00	25.56	Peak
2	11400.00	35.95	1.40	37.35	54.00	16.65	Average
3	17100.00	46.76	4.00	50.76	68.20	17.44	Peak
4	17978.40	48.06	7.99	56.05	74.00	17.95	Peak
5	17978.40	35.45	7.99	43.44	54.00	10.56	Average

802.11n ht20 mode, Low Channel, Horizontal	802.11n ht20 mode, Low Channel, Vertical
	
	

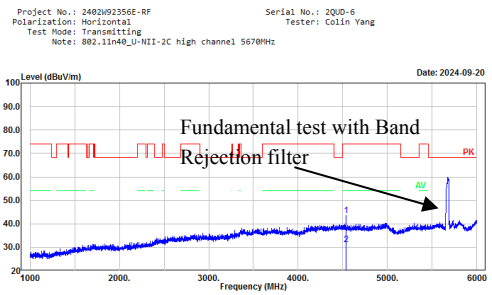
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4400.00	55.23	-10.30	44.93	68.20	23.27	Peak
2	4400.00	43.26	-10.30	32.96	54.00	21.04	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4400.00	52.90	-10.30	42.60	68.20	25.60	Peak
2	4400.00	40.31	-10.30	30.01	54.00	23.99	Average

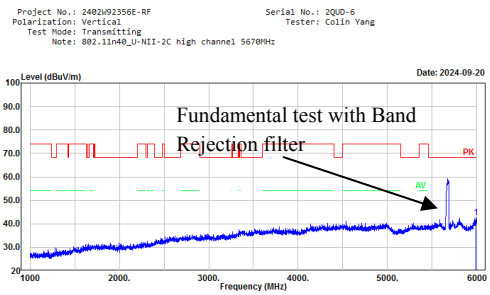
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11000.00	47.51	0.72	48.23	74.00	25.77	Peak
2	11000.00	36.62	0.72	37.34	54.00	16.66	Average
3	16500.00	46.82	1.10	47.92	68.20	20.28	Peak
4	17985.60	48.06	8.03	56.09	74.00	17.91	Peak
5	17985.60	35.74	8.03	43.77	54.00	10.23	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11000.00	52.78	0.72	53.50	74.00	20.50	Peak
2	11000.00	42.13	0.72	42.85	54.00	11.15	Average
3	16500.00	47.33	1.10	48.43	68.20	19.77	Peak
4	17978.40	47.98	7.99	55.97	74.00	18.03	Peak
5	17978.40	35.34	7.99	43.33	54.00	10.67	Average

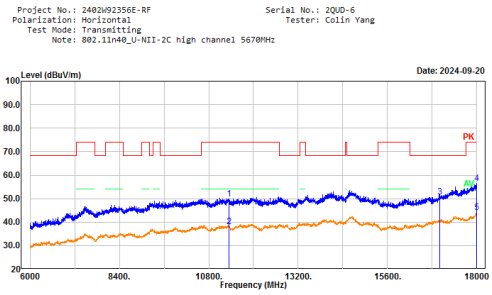
802.11n ht40 mode, High Channel, Horizontal	802.11n ht40 mode, High Channel, Vertical



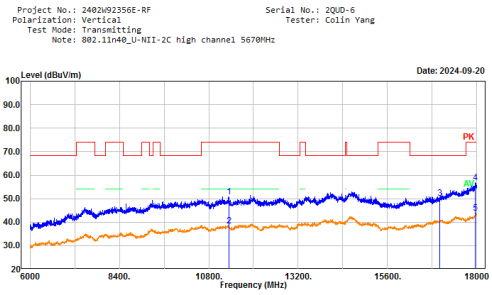
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4536.00	53.78	-10.24	43.54	74.00	30.46	Peak
2	4536.00	41.52	-10.24	31.28	54.00	22.72	Average



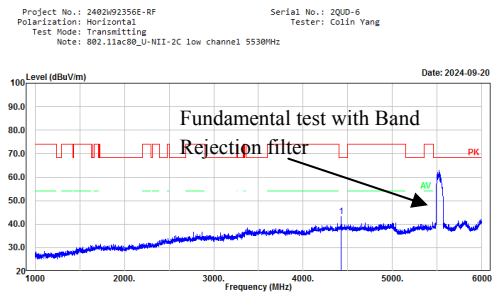
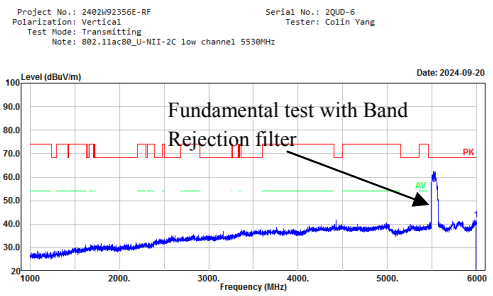
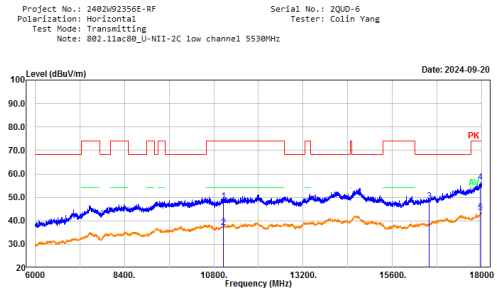
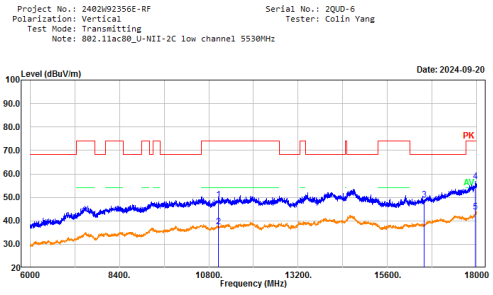
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5992.00	50.70	-8.19	42.51	68.20	25.69	Peak



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11340.00	48.46	1.29	49.75	74.00	24.25	Peak
2	11340.00	36.76	1.29	38.05	54.00	15.95	Average
3	17010.00	46.78	3.87	50.65	68.20	17.55	Peak
4	17995.20	48.33	8.10	56.43	74.00	17.57	Peak
5	17995.20	36.17	8.10	44.27	54.00	9.73	Average



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11340.00	49.46	1.29	50.75	74.00	23.25	Peak
2	11340.00	37.16	1.29	38.45	54.00	15.55	Average
3	17010.00	46.31	3.87	50.18	68.20	18.02	Peak
4	17952.00	48.94	7.79	56.73	74.00	17.27	Peak
5	17952.00	36.16	7.79	43.95	54.00	10.05	Average

802.11ac80 mode, Low Channel, Horizontal	802. 11ac80 mode, Low Channel, Vertical
	
	

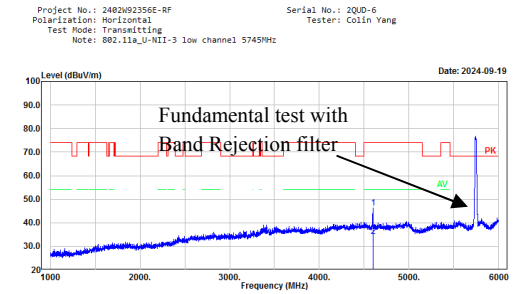
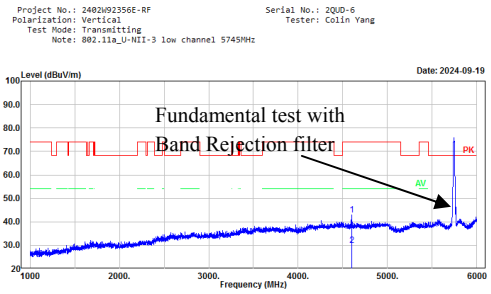
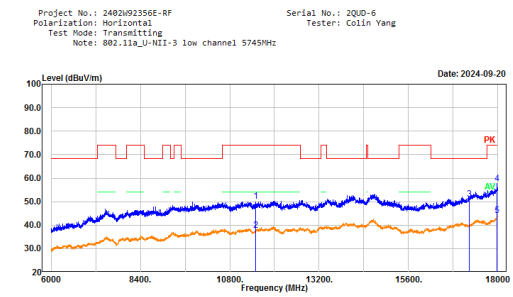
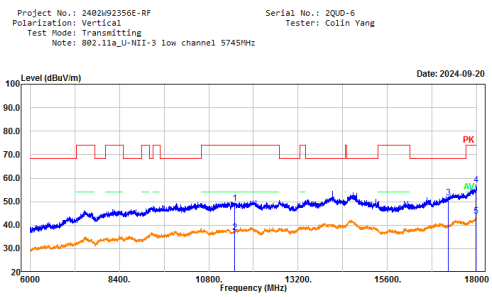
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4424.00	53.61	-10.30	43.31	68.20	24.89	Peak

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5991.00	50.03	-8.19	41.84	68.20	26.36	Peak

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11060.00	47.69	0.82	48.51	74.00	25.49	Peak
2	11060.00	36.49	0.82	37.31	54.00	16.69	Average
3	16590.00	46.63	1.60	48.23	68.20	19.97	Peak
4	17947.20	48.71	7.75	56.46	74.00	17.54	Peak
5	17947.20	35.80	7.75	43.55	54.00	10.45	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11060.00	48.22	0.82	49.04	74.00	24.96	Peak
2	11060.00	36.67	0.82	37.49	54.00	16.51	Average
3	16590.00	47.26	1.60	48.86	68.20	19.34	Peak
4	17956.80	48.93	7.82	56.75	74.00	17.25	Peak
5	17956.80	35.93	7.82	43.75	54.00	10.25	Average

5725-5850MHz:

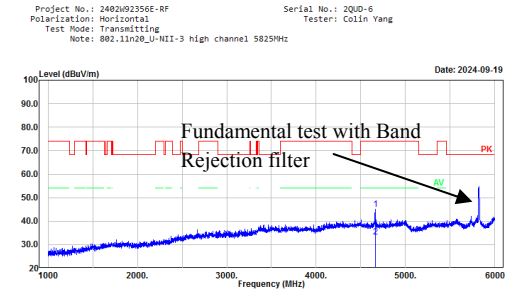
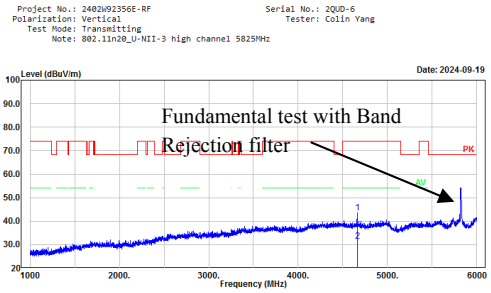
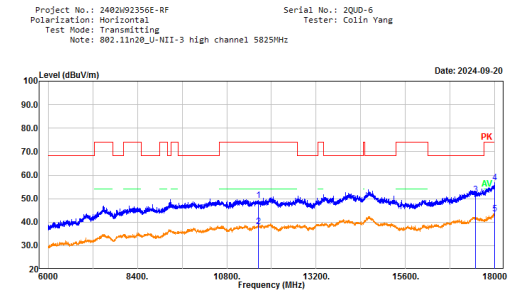
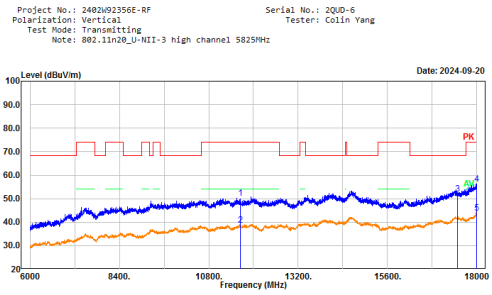
802.11a mode, Low Channel, Horizontal	802.11a mode, Low Channel, Vertical
	
	

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4596.00	56.38	-10.15	46.23	74.00	27.77	Peak
2	4596.00	44.25	-10.15	34.10	54.00	19.90	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4596.00	52.96	-10.15	42.81	74.00	31.19	Peak
2	4596.00	40.11	-10.15	29.96	54.00	24.04	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11490.00	48.75	1.55	50.30	74.00	23.70	Peak
2	11490.00	36.26	1.55	37.81	54.00	16.19	Average
3	17235.00	47.04	4.20	51.24	68.20	16.96	Peak
4	17976.00	49.80	7.96	57.76	74.00	16.24	Peak
5	17976.00	36.16	7.96	44.12	54.00	9.88	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11490.00	47.83	1.55	49.38	74.00	24.62	Peak
2	11490.00	35.45	1.55	37.00	54.00	17.00	Average
3	17235.00	47.37	4.20	51.57	68.20	16.63	Peak
4	17966.40	49.38	7.89	57.27	74.00	16.73	Peak
5	17966.40	35.84	7.89	43.73	54.00	10.27	Average

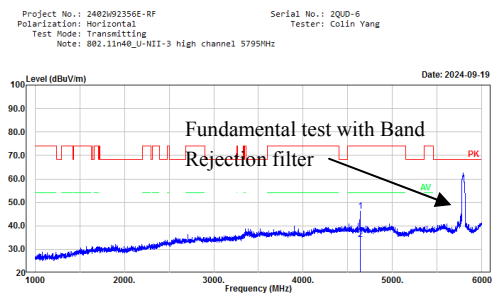
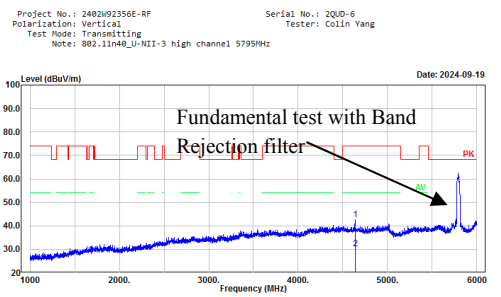
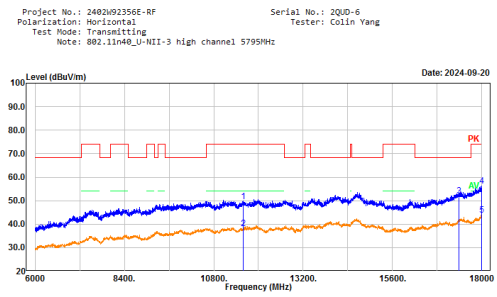
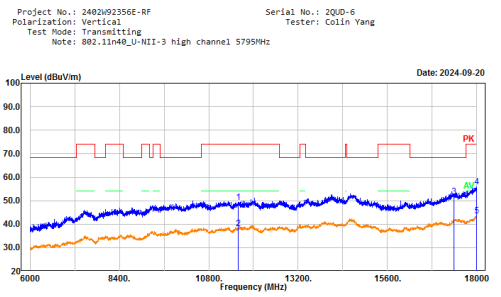
802.11n ht20 mode, High Channel, Horizontal	802.11n ht20 mode, High Channel, Vertical
	
	

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4660.00	55.07	-10.12	44.95	74.00	29.05	Peak
2	4660.00	43.48	-10.12	33.36	54.00	20.64	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4660.00	53.78	-10.12	43.66	74.00	30.34	Peak
2	4660.00	41.65	-10.12	31.53	54.00	22.47	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11650.00	47.62	1.59	49.21	74.00	24.79	Peak
2	11650.00	36.66	1.59	38.25	54.00	15.75	Average
3	17475.00	47.08	4.56	51.64	68.20	16.56	Peak
4	17985.60	48.70	8.03	56.73	74.00	17.27	Peak
5	17985.60	35.45	8.03	43.48	54.00	10.52	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11650.00	48.52	1.59	50.11	74.00	23.89	Peak
2	11650.00	37.17	1.59	38.76	54.00	15.24	Average
3	17475.00	47.49	4.56	52.05	68.20	16.15	Peak
4	17992.80	48.11	8.09	56.20	74.00	17.80	Peak
5	17992.80	35.67	8.09	43.76	54.00	10.24	Average

802.11n ht40 mode, High Channel, Horizontal	802.11n ht40 mode, High Channel, Vertical
	
	

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4636.00	56.53	-10.13	46.40	74.00	27.60	Peak
2	4636.00	44.18	-10.13	34.05	54.00	19.95	Average

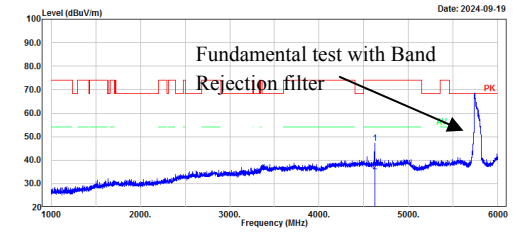
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4636.00	52.92	-10.13	42.79	74.00	31.21	Peak
2	4636.00	40.38	-10.13	30.25	54.00	23.75	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11590.00	48.05	1.58	49.63	74.00	24.37	Peak
2	11590.00	36.47	1.58	38.05	54.00	15.95	Average
3	17385.00	47.62	4.42	52.04	68.20	16.16	Peak
4	17995.20	48.04	8.10	56.14	74.00	17.86	Peak
5	17995.20	35.74	8.10	43.84	54.00	10.16	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11590.00	47.78	1.58	49.36	74.00	24.64	Peak
2	11590.00	36.62	1.58	38.20	54.00	15.80	Average
3	17385.00	47.27	4.42	51.69	68.20	16.51	Peak
4	17990.40	47.80	8.06	55.86	74.00	18.14	Peak
5	17990.40	35.63	8.06	43.69	54.00	10.31	Average

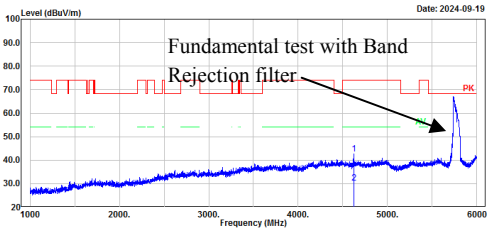
802.11ac80 mode, Middle Channel, Horizontal	802. 11ac80 mode, Middle Channel, Vertical

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-3 middle channel 5775MHz



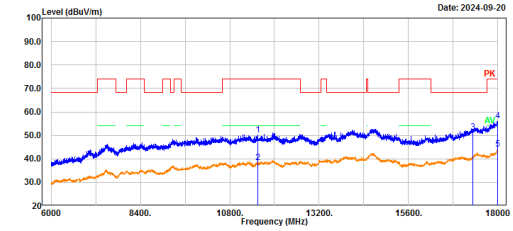
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4620.00	57.33	-10.13	47.20	74.00	26.80	Peak
2	4620.00	45.17	-10.13	35.04	54.00	18.96	Average

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-3 middle channel 5775MHz



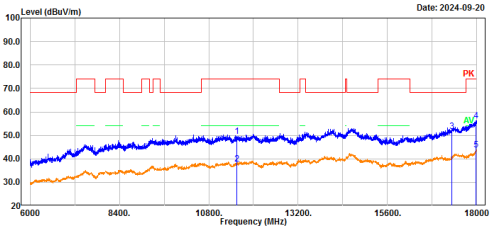
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4620.00	52.67	-10.13	42.54	74.00	31.46	Peak
2	4620.00	40.41	-10.13	30.28	54.00	23.72	Average

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-3 middle channel 5775MHz



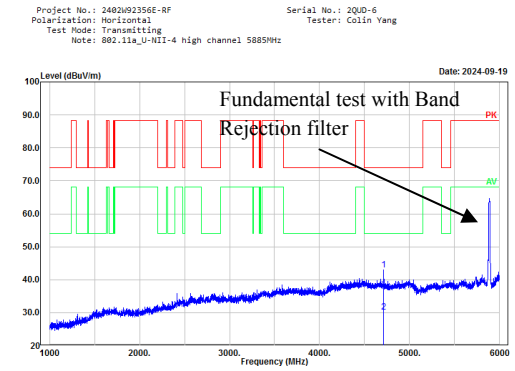
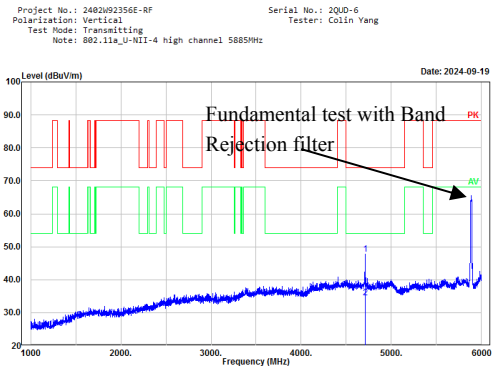
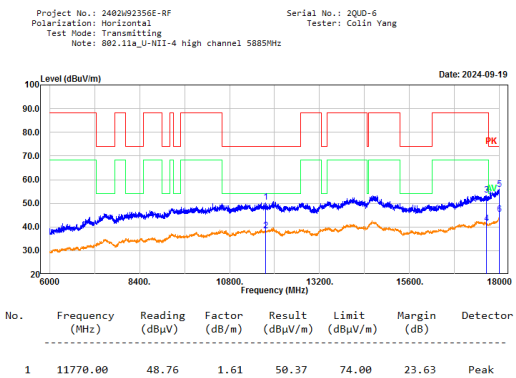
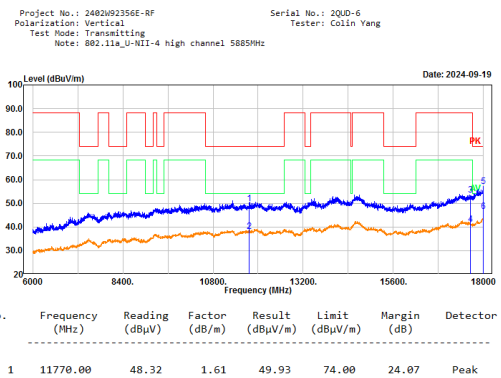
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11550.00	48.73	1.58	50.31	74.00	23.69	Peak
2	11550.00	36.72	1.58	38.30	54.00	15.70	Average
3	17325.00	46.99	4.33	51.32	68.20	16.88	Peak
4	18000.00	48.23	8.13	56.36	74.00	17.64	Peak
5	18000.00	36.09	8.13	44.22	54.00	9.78	Average

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-3 middle channel 5775MHz



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11550.00	48.10	1.58	49.68	74.00	24.32	Peak
2	11550.00	36.37	1.58	37.95	54.00	16.05	Average
3	17325.00	47.50	4.33	51.83	68.20	16.37	Peak
4	17976.00	48.29	7.96	56.25	74.00	17.75	Peak
5	17976.00	36.01	7.96	43.97	54.00	10.03	Average

5850-5895MHz:

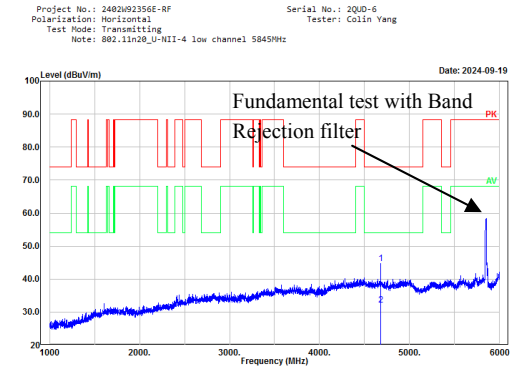
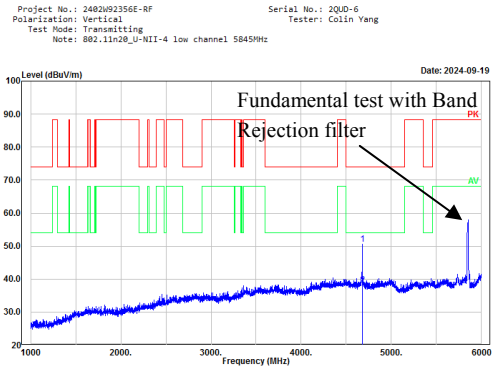
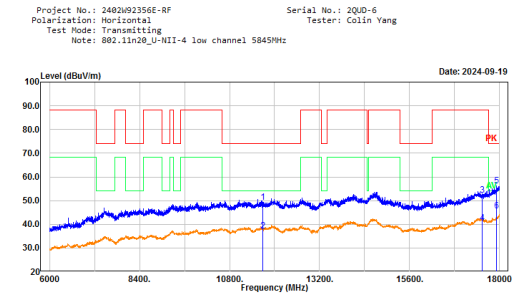
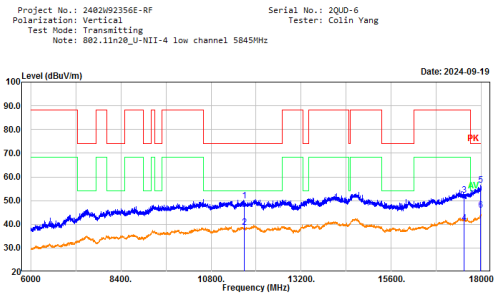
802.11a mode, High Channel, Horizontal	802.11a mode, High Channel, Vertical
	
	

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4708.00	52.98	-10.10	42.88	74.00	31.12	Peak
2	4708.00	40.35	-10.10	30.25	54.00	23.75	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4708.00	57.81	-10.10	47.71	74.00	26.29	Peak
2	4708.00	44.58	-10.10	34.48	54.00	19.52	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11770.00	48.76	1.61	50.37	74.00	23.63	Peak
2	11770.00	36.77	1.61	38.38	54.00	15.62	Average
3	17655.00	47.86	5.69	53.55	88.20	34.65	Peak
4	17655.00	35.62	5.69	41.31	68.20	26.89	Average
5	17995.20	47.78	8.10	55.88	74.00	18.12	Peak
6	17995.20	37.31	8.10	45.41	54.00	8.59	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11770.00	48.32	1.61	49.93	74.00	24.07	Peak
2	11770.00	36.37	1.61	37.98	54.00	16.02	Average
3	17655.00	47.69	5.69	53.38	88.20	34.82	Peak
4	17655.00	35.56	5.69	41.25	68.20	26.95	Average
5	17997.60	48.86	8.12	56.98	74.00	17.02	Peak
6	17997.60	38.43	8.12	46.55	54.00	7.45	Average

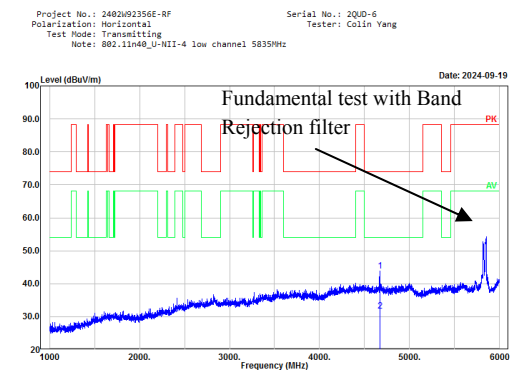
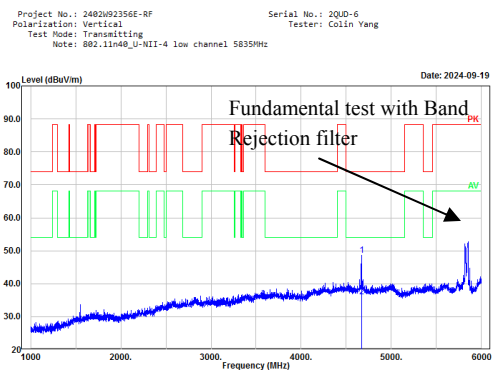
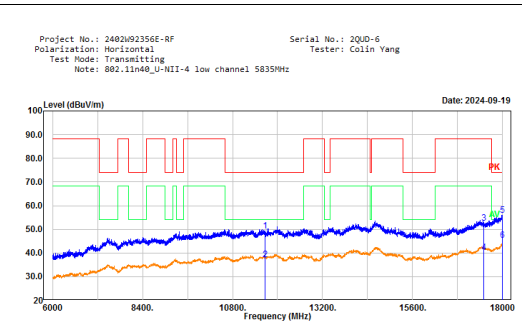
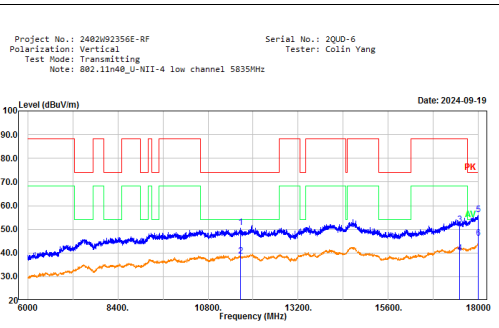
802.11n ht20 mode, Low Channel, Horizontal	802.11n ht20 mode, Low Channel, Vertical
	
	

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4676.00	54.81	-10.12	44.69	74.00	29.31	Peak
2	4676.00	42.27	-10.12	32.15	54.00	21.85	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4676.00	60.65	-10.12	50.53	74.00	23.47	Peak
2	4676.00	48.27	-10.12	38.15	54.00	15.85	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11690.00	47.70	1.60	49.30	74.00	24.70	Peak
2	11690.00	35.48	1.60	37.08	54.00	16.92	Average
3	17535.00	47.58	4.84	52.42	88.20	35.78	Peak
4	17535.00	35.78	4.84	40.62	68.20	27.58	Average
5	17920.80	48.68	7.57	56.25	74.00	17.75	Peak
6	17920.80	38.12	7.57	45.69	54.00	8.31	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11690.00	48.37	1.60	49.97	74.00	24.03	Peak
2	11690.00	36.98	1.60	38.58	54.00	15.42	Average
3	17535.00	47.43	4.84	52.27	88.20	35.93	Peak
4	17535.00	35.67	4.84	40.51	68.20	27.69	Average
5	17973.60	48.53	7.94	56.47	74.00	17.53	Peak
6	17973.60	38.15	7.94	46.09	54.00	7.91	Average

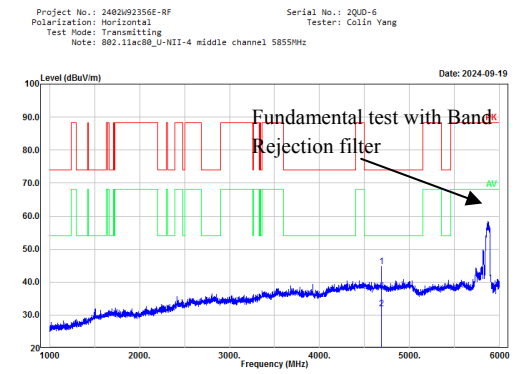
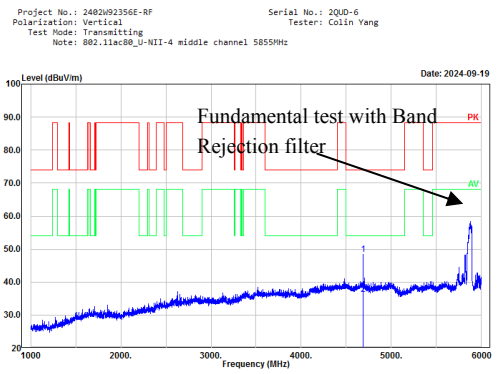
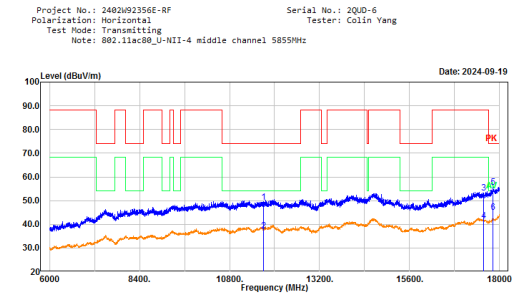
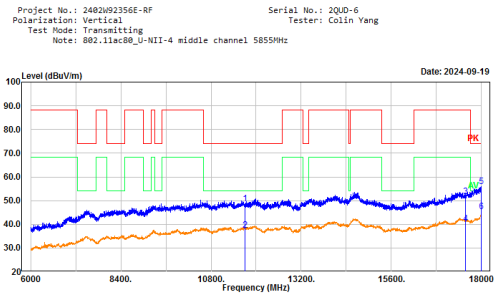
802.11n ht40 mode, Low Channel, Horizontal	802.11n ht40 mode, Low Channel, Vertical
	
	

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4668.00	53.99	-10.12	43.87	74.00	30.13	Peak
2	4668.00	41.75	-10.12	31.63	54.00	22.37	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4668.00	58.75	-10.12	48.63	74.00	25.37	Peak
2	4668.00	46.23	-10.12	36.11	54.00	17.89	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11670.00	47.63	1.60	49.23	74.00	24.77	Peak
2	11670.00	35.48	1.60	37.08	54.00	16.92	Average
3	17505.00	47.90	4.62	52.52	88.20	35.68	Peak
4	17505.00	35.65	4.62	40.27	68.20	27.93	Average
5	17995.20	47.78	8.10	55.88	74.00	18.12	Peak
6	17995.20	37.22	8.10	45.32	54.00	8.68	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11670.00	49.11	1.60	50.71	74.00	23.29	Peak
2	11670.00	37.25	1.60	38.85	54.00	15.15	Average
3	17505.00	47.26	4.62	51.88	88.20	36.32	Peak
4	17505.00	35.46	4.62	40.08	68.20	28.12	Average
5	18000.00	48.13	8.13	56.26	74.00	17.74	Peak
6	18000.00	38.04	8.13	46.17	54.00	7.83	Average

802.11ac80 mode, Middle Channel, Horizontal	802. 11ac80 mode, Middle Channel, Vertical
	
	

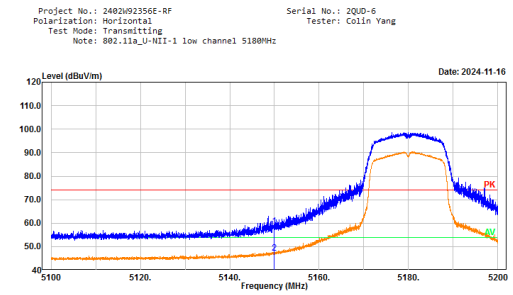
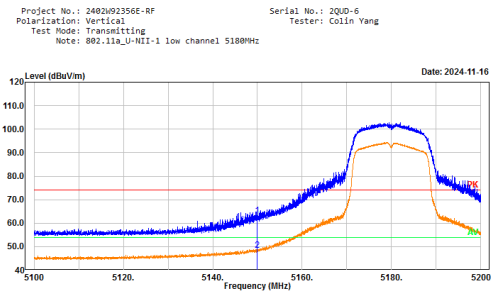
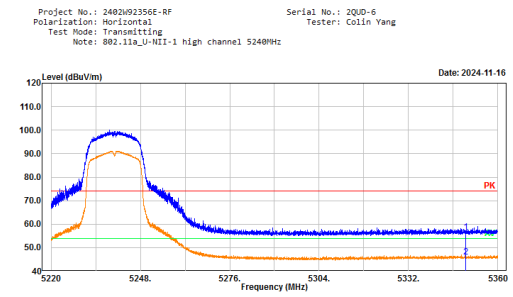
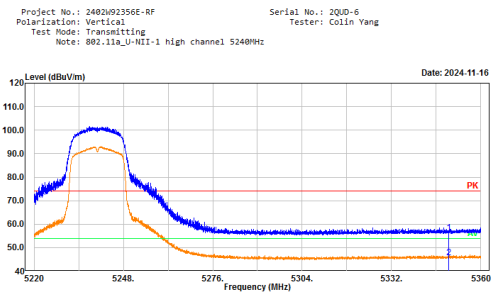
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4684.00	54.75	-10.10	44.65	74.00	29.35	Peak
2	4684.00	42.11	-10.10	32.01	54.00	21.99	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4684.00	58.59	-10.10	48.49	74.00	25.51	Peak
2	4684.00	46.32	-10.10	36.22	54.00	17.78	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11710.00	47.63	1.60	49.23	74.00	24.77	Peak
2	11710.00	35.74	1.60	37.34	54.00	16.66	Average
3	17565.00	48.06	5.04	53.10	88.20	35.10	Peak
4	17565.00	36.46	5.04	41.50	68.20	26.70	Average
5	17827.20	48.69	6.91	55.60	74.00	18.40	Peak
6	17827.20	38.10	6.91	45.01	54.00	8.99	Average

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11710.00	47.11	1.60	48.71	74.00	25.29	Peak
2	11710.00	35.77	1.60	37.37	54.00	16.63	Average
3	17565.00	46.74	5.04	51.78	88.20	36.42	Peak
4	17565.00	35.08	5.04	40.12	68.20	28.08	Average
5	17997.60	47.89	8.12	56.01	74.00	17.99	Peak
6	17997.60	37.23	8.12	45.35	54.00	8.65	Average

Bandedge:
5150-5250MHz:

802.11a mode, Low Channel, Horizontal	802.11a mode, Low Channel, Vertical
	
802.11a mode, High Channel, Horizontal	802.11a mode, High Channel, Vertical
	

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11a_U-NII-1 low channel 5180MHz

Level (dBuV/m) Date: 2024-11-16

Frequency (MHz)

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5150.00	52.15	6.53	58.68	74.00	15.32	Peak
2	5150.00	40.64	6.53	47.17	54.00	6.83	Average

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11a_U-NII-1 low channel 5180MHz

Level (dBuV/m) Date: 2024-11-16

Frequency (MHz)

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5150.00	56.67	6.53	63.20	74.00	10.80	Peak
2	5150.00	41.88	6.53	48.41	54.00	5.59	Average

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11a_U-NII-1 high channel 5240MHz

Level (dBuV/m) Date: 2024-11-16

Frequency (MHz)

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5350.00	49.43	7.10	56.53	74.00	17.47	Peak
2	5350.00	38.90	7.10	46.00	54.00	8.00	Average

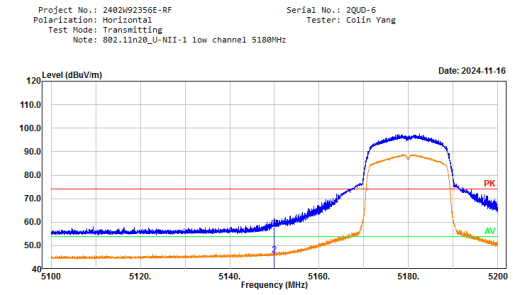
Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11a_U-NII-1 high channel 5240MHz

Level (dBuV/m) Date: 2024-11-16

Frequency (MHz)

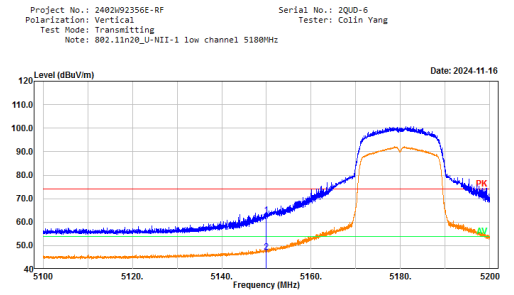
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5350.00	49.29	7.10	56.39	74.00	17.61	Peak
2	5350.00	38.62	7.10	45.72	54.00	8.28	Average

802.11n20 mode, Low Channel, Horizontal



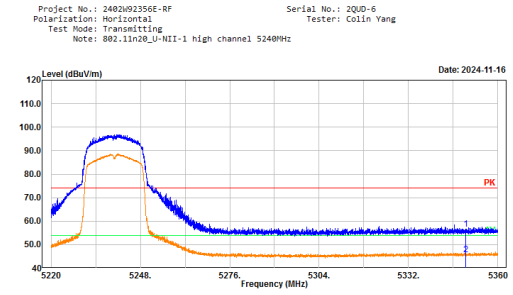
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5150.00	50.84	6.53	57.37	74.00	16.63	Peak
2	5150.00	39.54	6.53	46.07	54.00	7.93	Average

802.11n20 mode, Low Channel, Vertical



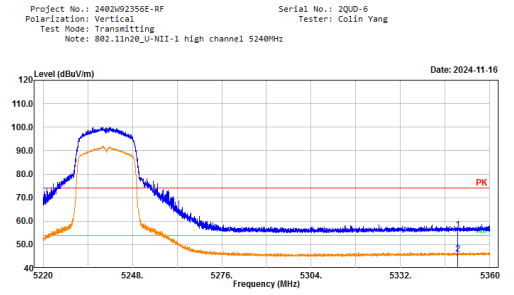
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5150.00	56.48	6.53	63.01	74.00	10.99	Peak
2	5150.00	40.81	6.53	47.34	54.00	6.66	Average

802.11n20 mode, High Channel, Horizontal



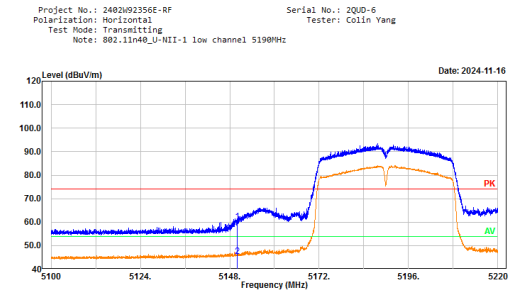
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5350.00	49.43	7.10	56.53	74.00	17.47	Peak
2	5350.00	38.77	7.10	45.87	54.00	8.13	Average

802.11n20 mode, High Channel, Vertical



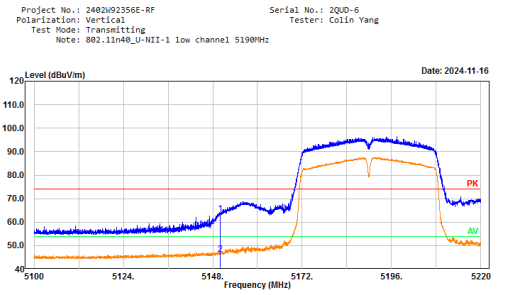
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5350.00	49.22	7.10	56.32	74.00	17.68	Peak
2	5350.00	38.84	7.10	45.94	54.00	8.06	Average

802.11n40 mode, Low Channel, Horizontal



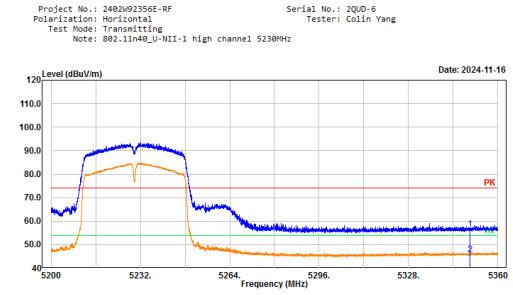
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5150.00	53.64	6.53	60.17	74.00	13.83	Peak
2	5150.00	38.98	6.53	45.51	54.00	8.49	Average

802.11n40 mode, Low Channel, Vertical



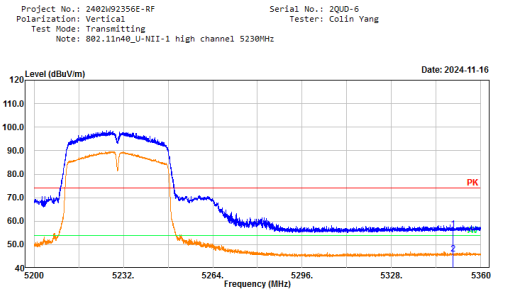
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5150.00	57.08	6.53	63.61	74.00	10.39	Peak
2	5150.00	39.86	6.53	46.39	54.00	7.61	Average

802.11n40 mode, High Channel, Horizontal



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5350.00	49.58	7.10	56.68	74.00	17.32	Peak
2	5350.00	38.75	7.10	45.85	54.00	8.15	Average

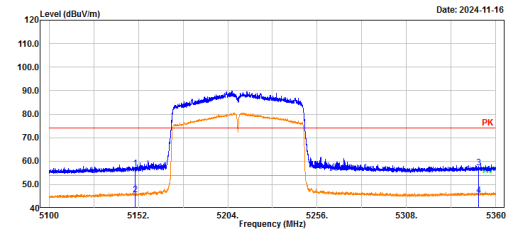
802.11n40 mode, High Channel, Vertical



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5350.00	49.50	7.10	56.60	74.00	17.40	Peak
2	5350.00	38.89	7.10	45.99	54.00	8.01	Average

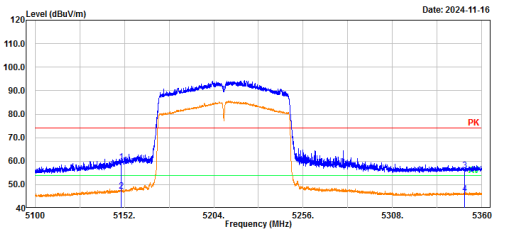
802.11ac80 mode, Middle Channel, Horizontal	802. 11ac80 mode, Middle Channel, Vertical

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-1 middle channel 5210MHz



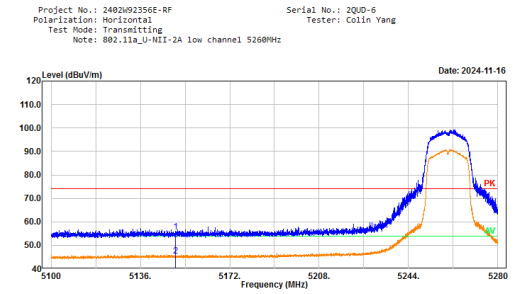
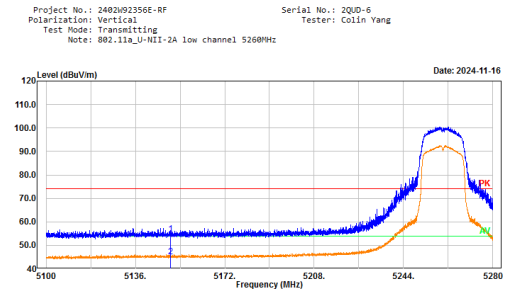
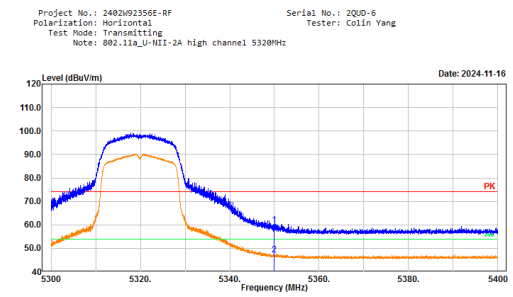
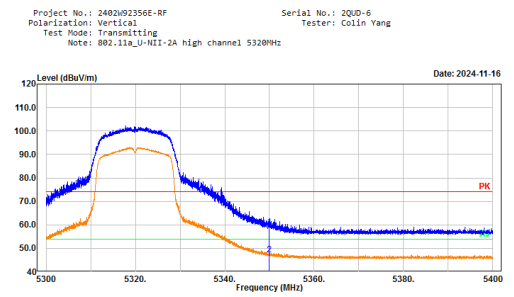
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5150.00	50.32	6.53	56.85	74.00	17.15	Peak
2	5150.00	39.24	6.53	45.77	54.00	8.23	Average
3	5350.00	50.05	7.10	57.15	74.00	16.85	Peak
4	5350.00	38.41	7.10	45.51	54.00	8.49	Average

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-1 middle channel 5210MHz



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5150.00	53.12	6.53	59.65	74.00	14.35	Peak
2	5150.00	40.74	6.53	47.27	54.00	6.73	Average
3	5350.00	48.87	7.10	55.97	74.00	18.03	Peak
4	5350.00	39.03	7.10	46.13	54.00	7.87	Average

5250-5350MHz:

802.11a mode, Low Channel, Horizontal	802.11a mode, Low Channel, Vertical
	
802.11a mode, High Channel, Horizontal	802.11a mode, High Channel, Vertical
	

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11a_U-NII-2A low channel 5260MHz

Level (dBuV/m) Date: 2024-11-16

Frequency (MHz)

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5150.00	49.26	6.53	55.79	74.00	18.21	Peak
2	5150.00	38.90	6.53	45.43	54.00	8.57	Average

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11a_U-NII-2A low channel 5260MHz

Level (dBuV/m) Date: 2024-11-16

Frequency (MHz)

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5150.00	48.26	6.53	54.79	74.00	19.21	Peak
2	5150.00	38.59	6.53	45.12	54.00	8.88	Average

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11a_U-NII-2A high channel 5320MHz

Level (dBuV/m) Date: 2024-11-16

Frequency (MHz)

No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5350.00	52.78	7.10	59.88	74.00	14.12	Peak
2	5350.00	40.14	7.10	47.24	54.00	6.76	Average

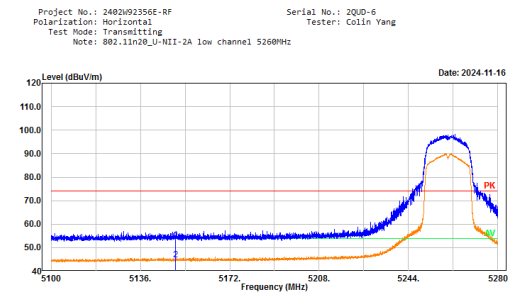
Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11a_U-NII-2A high channel 5320MHz

Level (dBuV/m) Date: 2024-11-16

Frequency (MHz)

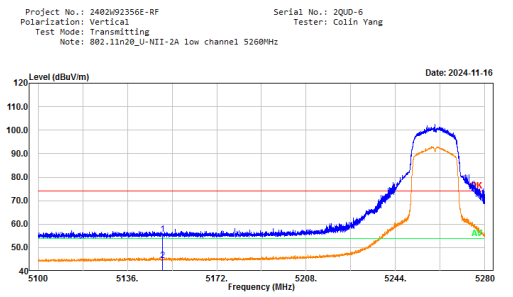
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5350.00	51.92	7.10	59.02	74.00	14.98	Peak
2	5350.00	40.21	7.10	47.31	54.00	6.69	Average

802.11n20 mode, Low Channel, Horizontal



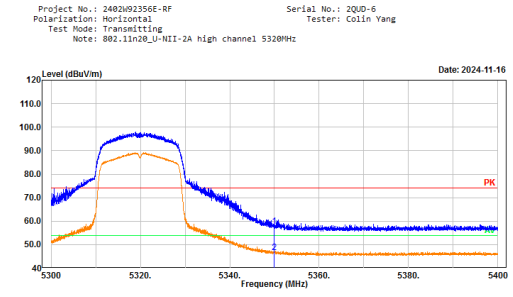
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5150.00	46.82	6.53	53.35	74.00	20.65	Peak
2	5150.00	38.41	6.53	44.94	54.00	9.06	Average

802.11n20 mode, Low Channel, Vertical



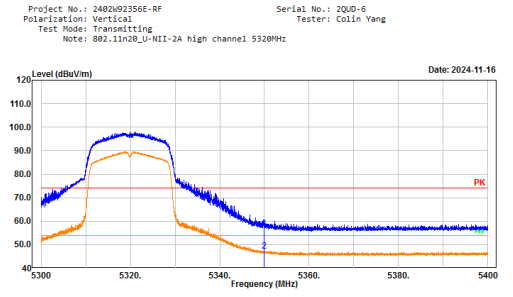
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5150.00	49.12	6.53	55.65	74.00	18.35	Peak
2	5150.00	38.10	6.53	44.63	54.00	9.37	Average

802.11n20 mode, High Channel, Horizontal



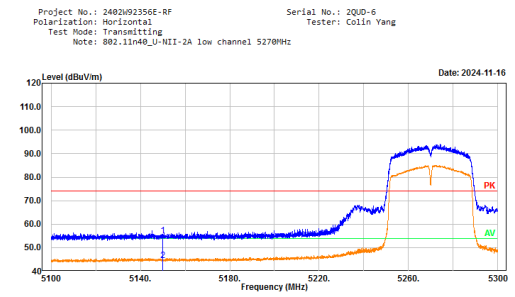
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5350.00	50.65	7.10	57.75	74.00	16.25	Peak
2	5350.00	39.50	7.10	46.60	54.00	7.40	Average

802.11n20 mode, High Channel, Vertical



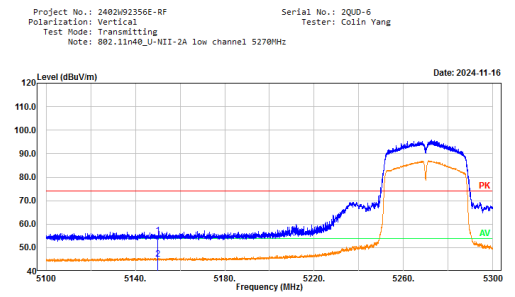
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5350.00	49.88	7.10	56.98	74.00	17.02	Peak
2	5350.00	40.09	7.10	47.19	54.00	6.81	Average

802.11n40 mode, Low Channel, Horizontal



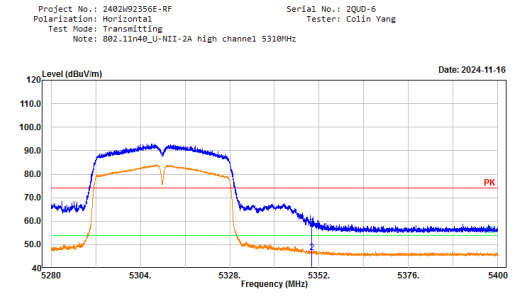
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5150.00	48.52	6.53	55.05	74.00	18.95	Peak
2	5150.00	38.14	6.53	44.67	54.00	9.33	Average

802.11n40 mode, Low Channel, Vertical



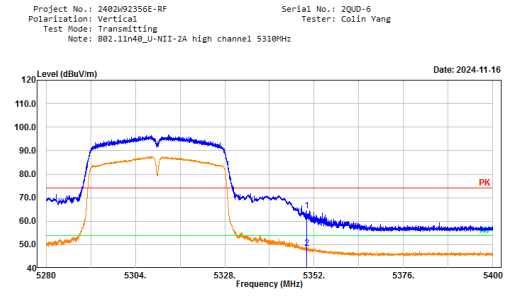
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5150.00	48.42	6.53	54.95	74.00	19.05	Peak
2	5150.00	38.50	6.53	45.03	54.00	8.97	Average

802.11n40 mode, High Channel, Horizontal



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5350.00	50.45	7.10	57.55	74.00	16.45	Peak
2	5350.00	39.48	7.10	46.58	54.00	7.42	Average

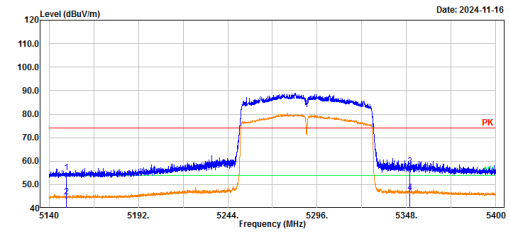
802.11n40 mode, High Channel, Vertical



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5350.00	57.47	7.10	64.57	74.00	9.43	Peak
2	5350.00	41.24	7.10	48.34	54.00	5.66	Average

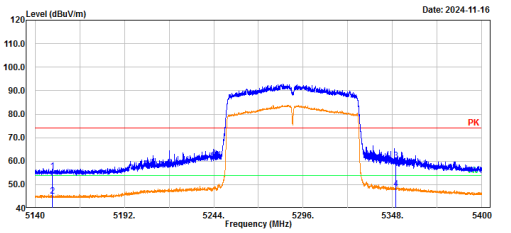
802.11ac80 mode, Middle Channel, Horizontal	802. 11ac80 mode, Middle Channel, Vertical

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-2A middle channel 5290MHz



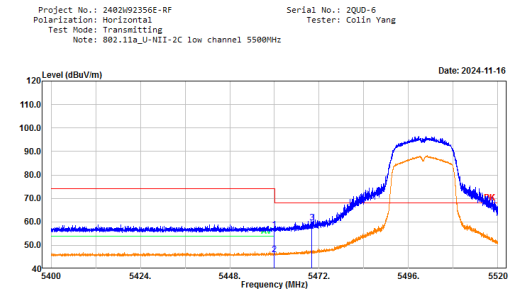
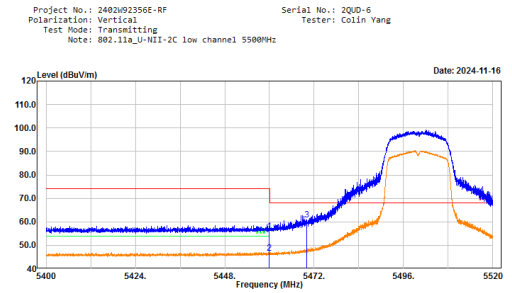
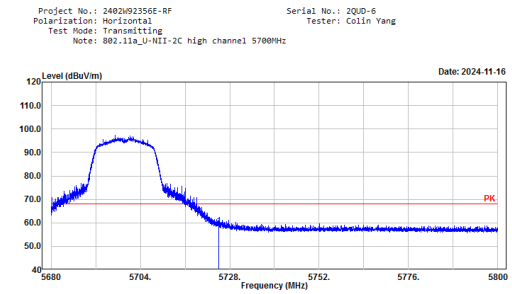
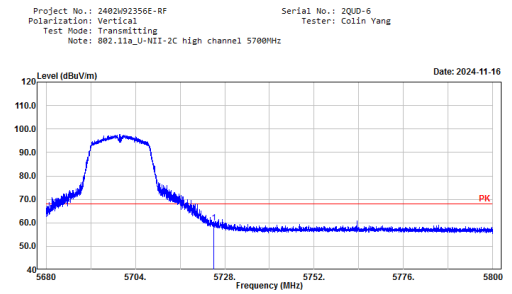
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5150.00	48.42	6.53	54.95	74.00	19.05	Peak
2	5150.00	38.26	6.53	44.79	54.00	9.21	Average
3	5350.00	50.85	7.10	57.95	74.00	16.05	Peak
4	5350.00	39.60	7.10	46.70	54.00	7.30	Average

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-2A middle channel 5290MHz



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5150.00	49.07	6.53	55.60	74.00	18.40	Peak
2	5150.00	38.70	6.53	45.23	54.00	8.77	Average
3	5350.00	53.00	7.10	60.10	74.00	13.90	Peak
4	5350.00	40.93	7.10	48.03	54.00	5.97	Average

5470-5725MHz:

802.11a mode, Low Channel, Horizontal	802.11a mode, Low Channel, Vertical
	
802.11a mode, High Channel, Horizontal	802.11a mode, High Channel, Vertical
	

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11a_U-NII-2C low channel 5500MHz

Level (dBuV/m) Date: 2024-11-16

Frequency (MHz)

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5460.00	49.40	7.33	56.73	74.00	17.27	Peak
2	5460.00	38.79	7.33	46.12	54.00	7.88	Average
3	5470.00	52.39	7.34	59.73	68.20	8.47	Peak

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11a_U-NII-2C low channel 5500MHz

Level (dBuV/m) Date: 2024-11-16

Frequency (MHz)

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5460.00	48.78	7.33	56.11	74.00	17.89	Peak
2	5460.00	39.22	7.33	46.55	54.00	7.45	Average
3	5470.00	53.55	7.34	60.89	68.20	7.31	Peak

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11a_U-NII-2C high channel 5700MHz

Level (dBuV/m) Date: 2024-11-16

Frequency (MHz)

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5725.00	50.57	8.03	58.60	68.20	9.60	Peak

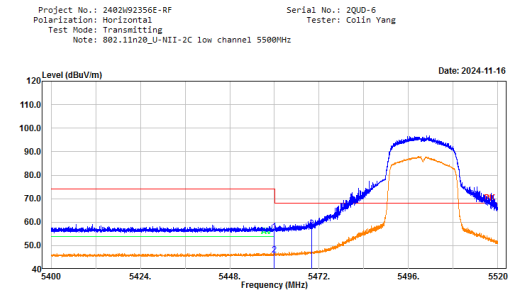
Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11a_U-NII-2C high channel 5700MHz

Level (dBuV/m) Date: 2024-11-16

Frequency (MHz)

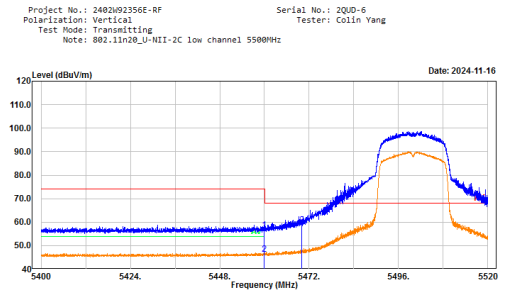
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5725.00	51.86	8.03	59.89	68.20	8.31	Peak

802.11n20 mode, Low Channel, Horizontal



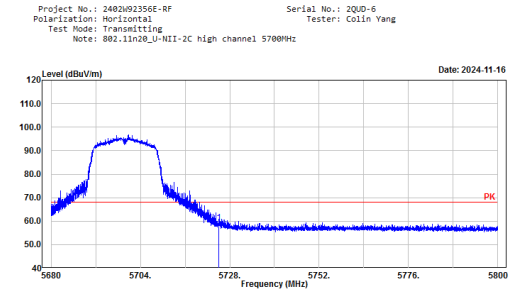
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5460.00	48.55	7.33	55.88	74.00	18.12	Peak
2	5460.00	38.83	7.33	46.16	54.00	7.84	Average
3	5470.00	49.95	7.34	57.29	68.20	10.91	Peak

802.11n20 mode, Low Channel, Vertical



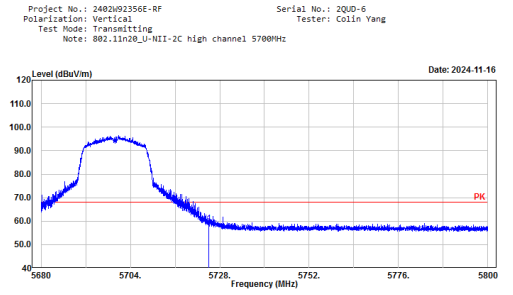
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5460.00	49.18	7.33	56.51	74.00	17.49	Peak
2	5460.00	38.95	7.33	46.28	54.00	7.72	Average
3	5470.00	51.50	7.34	58.84	68.20	9.36	Peak

802.11n20 mode, High Channel, Horizontal



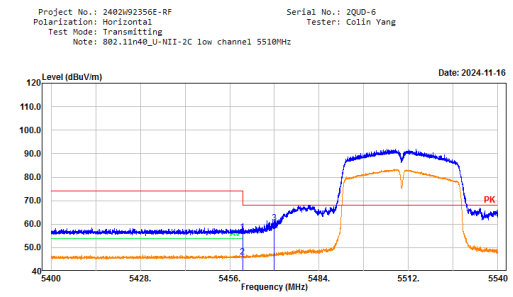
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5725.00	51.36	8.03	59.39	68.20	8.81	Peak

802.11n20 mode, High Channel, Vertical



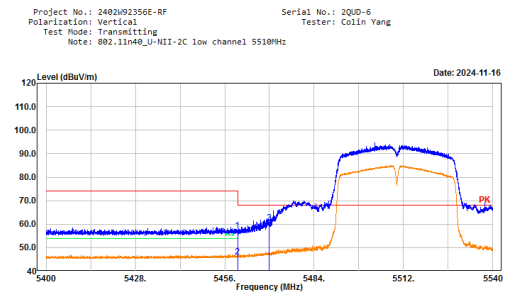
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5725.00	51.09	8.03	59.12	68.20	9.08	Peak

802.11n40 mode, Low Channel, Horizontal



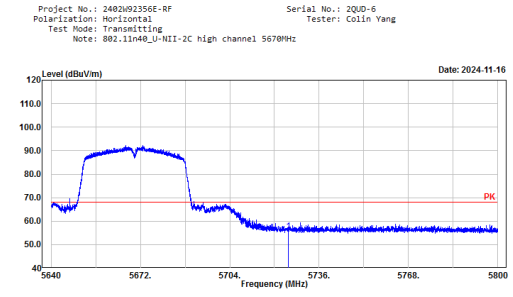
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5460.00	49.13	7.33	56.46	74.00	17.54	Peak
2	5460.00	38.60	7.33	45.93	54.00	8.07	Average
3	5470.00	53.25	7.34	60.59	68.20	7.61	Peak

802.11n40 mode, Low Channel, Vertical



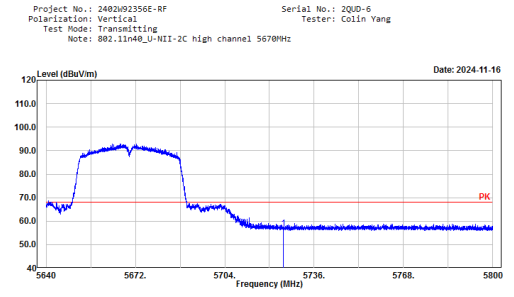
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5460.00	49.87	7.33	57.20	74.00	16.80	Peak
2	5460.00	38.79	7.33	46.12	54.00	7.88	Average
3	5470.00	53.08	7.34	60.42	68.20	7.78	Peak

802.11n40 mode, High Channel, Horizontal



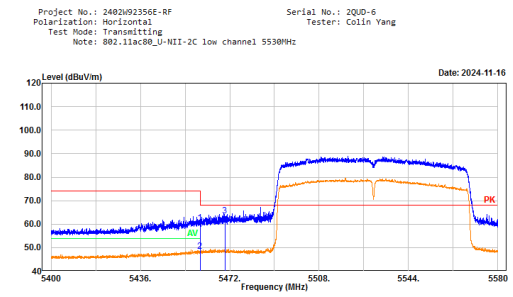
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5725.00	47.55	8.03	55.58	68.20	12.62	Peak

802.11n40 mode, High Channel, Vertical



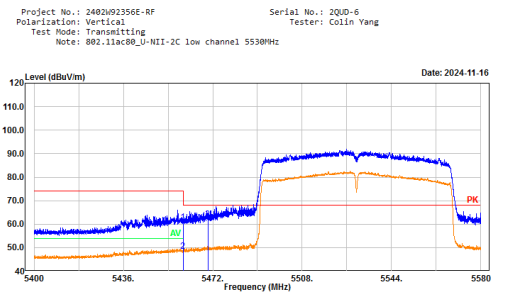
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5725.00	48.83	8.03	56.86	68.20	11.34	Peak

802.11ac80 mode, Low Channel, Horizontal



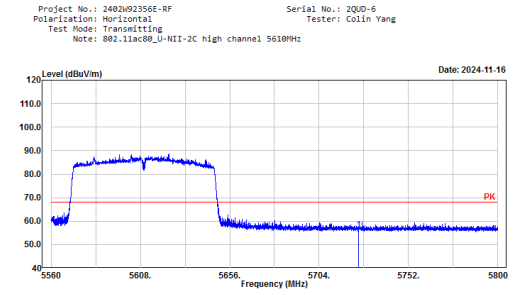
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5460.00	53.25	7.33	60.58	74.00	13.42	Peak
2	5460.00	41.04	7.33	48.37	54.00	5.63	Average
3	5470.00	56.07	7.34	63.41	68.20	4.79	Peak

802. 11ac80 mode, Low Channel, Vertical



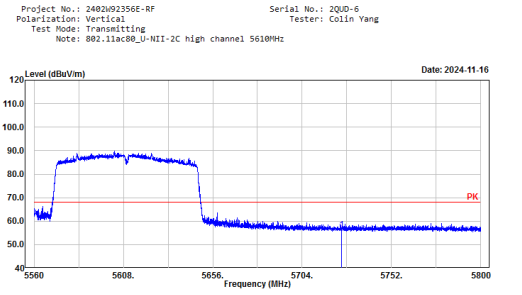
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5460.00	53.44	7.33	60.77	74.00	13.23	Peak
2	5460.00	41.00	7.33	48.33	54.00	5.67	Average
3	5470.00	54.59	7.34	61.93	68.20	6.27	Peak

802. 11ac80 mode, High Channel, Horizontal



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5725.00	48.21	8.03	56.24	68.20	11.96	Peak

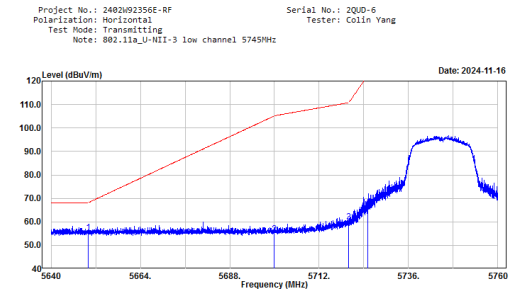
802. 11ac80 mode, High Channel, Vertical



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5725.00	48.32	8.03	56.35	68.20	11.85	Peak

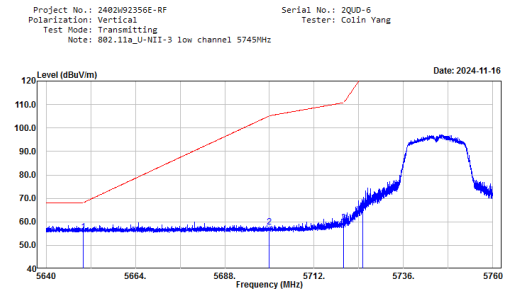
5725-5850MHz:

802.11a mode, Low Channel, Horizontal



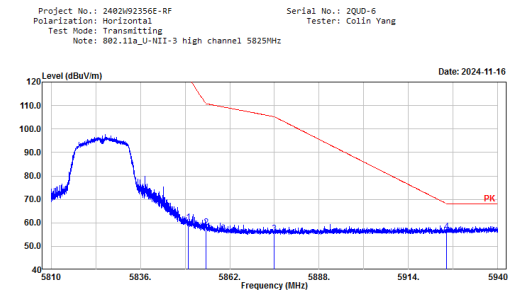
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5650.00	47.40	7.89	55.29	68.20	12.91	Peak
2	5700.00	46.89	7.98	54.87	105.20	50.33	Peak
3	5720.00	51.87	8.02	59.89	110.80	50.91	Peak
4	5725.00	58.10	8.03	66.13	122.20	56.07	Peak

802.11a mode, Low Channel, Vertical



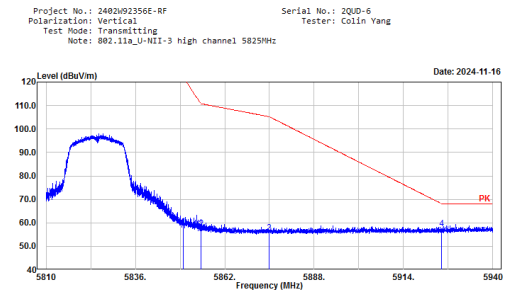
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5650.00	47.86	7.89	55.75	68.20	12.45	Peak
2	5700.00	49.87	7.98	57.85	105.20	47.35	Peak
3	5720.00	51.67	8.02	59.69	110.80	51.11	Peak
4	5725.00	57.43	8.03	65.46	122.20	56.74	Peak

802.11a mode, High Channel, Horizontal



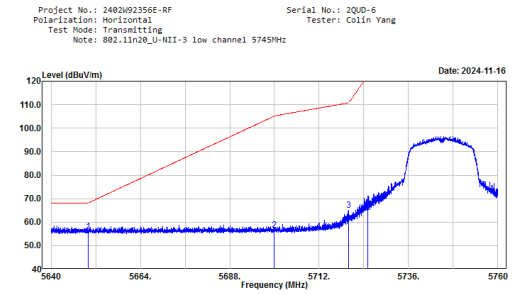
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5850.00	52.01	8.20	60.21	122.20	61.99	Peak
2	5855.00	49.85	8.21	58.06	110.80	52.74	Peak
3	5875.00	47.11	8.28	55.39	105.20	49.81	Peak
4	5925.00	47.98	8.40	56.38	68.20	11.82	Peak

802.11a mode, High Channel, Vertical



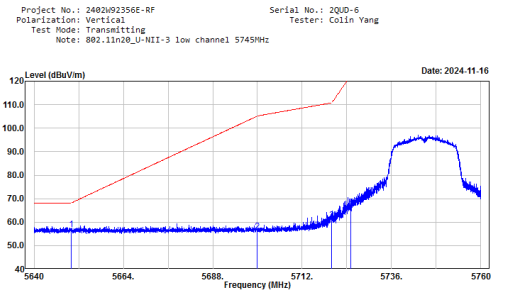
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5850.00	50.17	8.20	58.37	122.20	63.83	Peak
2	5855.00	49.35	8.21	57.56	110.80	53.24	Peak
3	5875.00	47.48	8.28	55.76	105.20	49.44	Peak
4	5925.00	48.97	8.40	57.37	68.20	10.83	Peak

802.11n20 mode, Low Channel, Horizontal



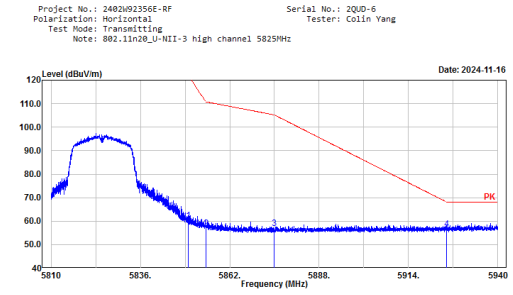
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5650.00	47.97	7.89	55.86	68.20	12.34	Peak
2	5700.00	48.67	7.98	56.65	105.20	48.55	Peak
3	5720.00	56.89	8.02	64.91	110.80	45.89	Peak
4	5725.00	58.85	8.03	66.88	122.20	55.32	Peak

802.11n20 mode, Low Channel, Vertical



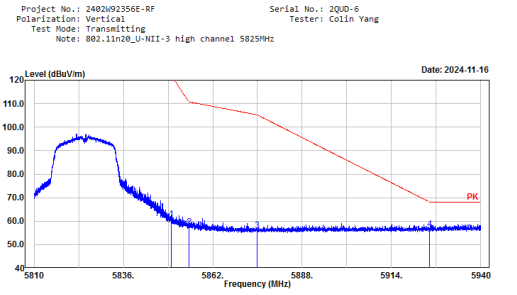
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5650.00	49.16	7.89	57.05	68.20	11.15	Peak
2	5700.00	47.98	7.98	55.96	105.20	49.24	Peak
3	5720.00	52.79	8.02	60.81	110.80	49.99	Peak
4	5725.00	58.25	8.03	66.28	122.20	55.92	Peak

802.11n20 mode, High Channel, Horizontal



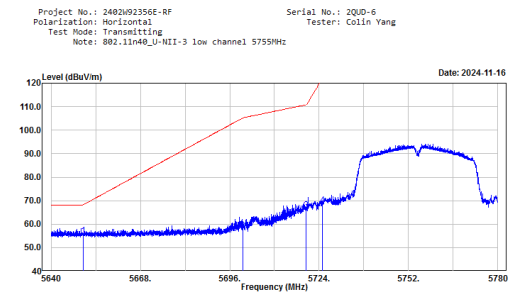
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5850.00	52.12	8.20	60.32	122.20	61.88	Peak
2	5855.00	48.62	8.21	56.83	110.80	53.97	Peak
3	5875.00	48.71	8.28	56.99	105.20	48.21	Peak
4	5925.00	48.15	8.40	56.55	68.20	11.65	Peak

802.11n20 mode, High Channel, Vertical



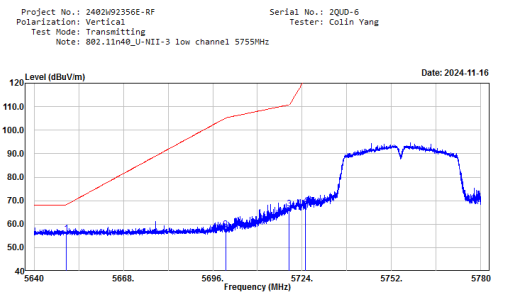
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5850.00	52.54	8.20	60.74	122.20	61.46	Peak
2	5855.00	49.45	8.21	57.66	110.80	53.14	Peak
3	5875.00	47.69	8.28	55.97	105.20	49.23	Peak
4	5925.00	48.25	8.40	56.65	68.20	11.55	Peak

802.11n40 mode, Low Channel, Horizontal



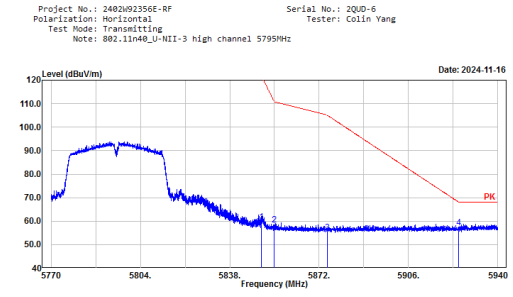
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5650.00	47.32	7.89	55.21	68.20	12.99	Peak
2	5700.00	49.24	7.98	57.22	105.20	47.98	Peak
3	5720.00	57.89	8.02	65.91	110.80	44.89	Peak
4	5725.00	59.92	8.03	67.95	122.20	54.25	Peak

802.11n40 mode, Low Channel, Vertical



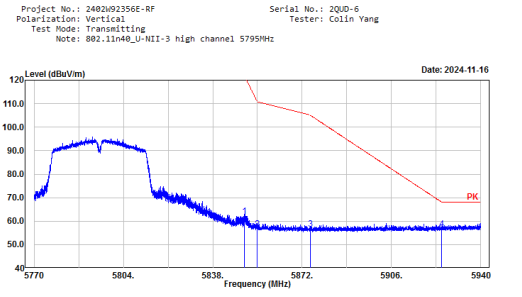
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5650.00	48.11	7.89	56.00	68.20	12.20	Peak
2	5700.00	49.96	7.98	57.94	105.20	47.26	Peak
3	5720.00	58.58	8.02	66.60	110.80	44.20	Peak
4	5725.00	59.71	8.03	67.74	122.20	54.46	Peak

802.11n40 mode, High Channel, Horizontal



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5850.00	51.57	8.20	59.77	122.20	62.43	Peak
2	5855.00	50.11	8.21	58.32	110.80	52.48	Peak
3	5875.00	46.76	8.28	55.04	105.20	50.16	Peak
4	5925.00	48.82	8.40	57.22	68.20	10.98	Peak

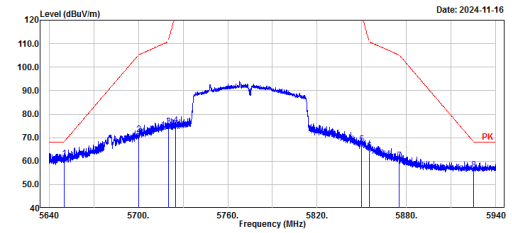
802.11n40 mode, High Channel, Vertical



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5850.00	53.85	8.20	62.05	122.20	60.15	Peak
2	5855.00	48.48	8.21	56.69	110.80	54.11	Peak
3	5875.00	48.33	8.28	56.61	105.20	48.59	Peak
4	5925.00	48.23	8.40	56.63	68.20	11.57	Peak

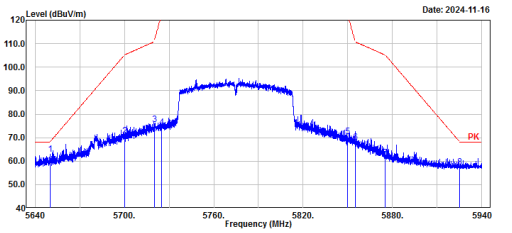
802.11ac80 mode, Middle Channel, Horizontal	802. 11ac80 mode, Middle Channel, Vertical

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-3 middle channel 5775MHz



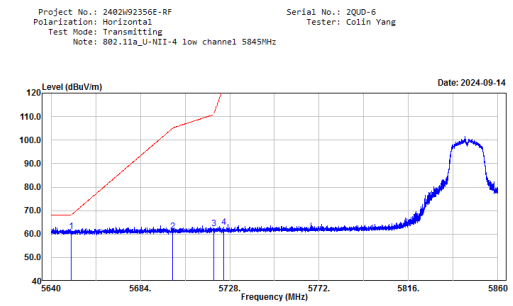
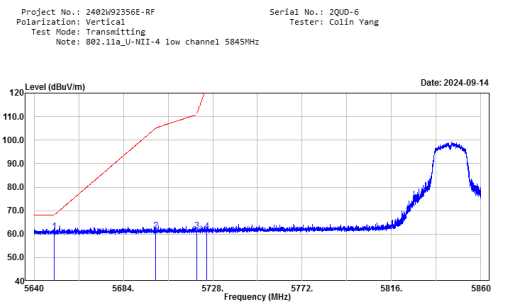
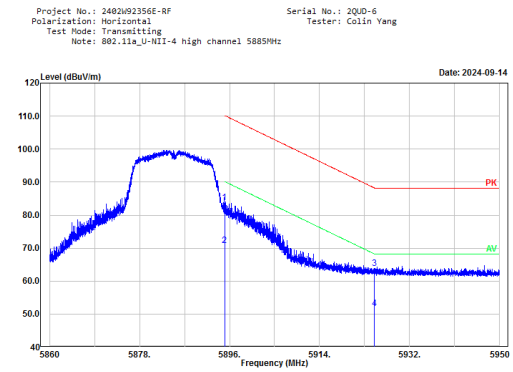
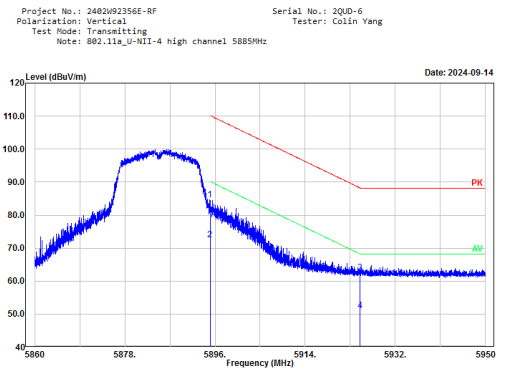
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5650.00	53.38	7.89	61.27	68.20	6.93	Peak
2	5700.00	63.49	7.98	71.47	105.20	33.73	Peak
3	5720.00	66.60	8.02	74.62	110.80	36.18	Peak
4	5725.00	67.25	8.03	75.28	122.20	46.92	Peak
5	5850.00	59.07	8.20	67.27	122.20	54.93	Peak
6	5855.00	56.22	8.21	64.43	110.80	46.37	Peak
7	5875.00	51.91	8.28	60.19	105.20	45.01	Peak
8	5925.00	47.90	8.40	56.30	68.20	11.90	Peak

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-3 middle channel 5775MHz



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5650.00	55.11	7.89	63.00	68.20	5.20	Peak
2	5700.00	62.76	7.98	70.74	105.20	34.46	Peak
3	5720.00	67.46	8.02	75.48	110.80	35.32	Peak
4	5725.00	66.36	8.03	74.39	122.20	47.81	Peak
5	5850.00	62.18	8.20	70.38	122.20	51.82	Peak
6	5855.00	59.87	8.21	68.08	110.80	42.72	Peak
7	5875.00	53.22	8.28	61.50	105.20	43.70	Peak
8	5925.00	49.15	8.40	57.55	68.20	10.65	Peak

5850-5895MHz:

802.11a mode, Low Channel, Horizontal	802.11a mode, Low Channel, Vertical
	
802.11a mode, High Channel, Horizontal	802.11a mode, High Channel, Vertical
	

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11a_U-NII-4 low channel 5845MHz

Level (dBuV/m) Date: 2024-09-14

Frequency (MHz)

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5650.00	31.44	29.69	61.13	68.20	7.07	Peak
2	5700.00	31.45	29.77	61.22	105.20	43.98	Peak
3	5720.00	32.43	29.80	62.23	110.80	48.57	Peak
4	5725.00	33.19	29.81	63.00	122.20	59.20	Peak

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11a_U-NII-4 low channel 5845MHz

Level (dBuV/m) Date: 2024-09-14

Frequency (MHz)

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5650.00	31.56	29.69	61.25	68.20	6.95	Peak
2	5700.00	31.69	29.77	61.46	105.20	43.74	Peak
3	5720.00	31.58	29.80	61.38	110.80	49.42	Peak
4	5725.00	31.31	29.81	61.12	122.20	61.08	Peak

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11a_U-NII-4 high channel 5885MHz

Level (dBuV/m) Date: 2024-09-14

PK AV

Frequency (MHz)

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5895.00	53.81	30.07	83.88	110.20	26.32	Peak
2	5895.00	40.67	30.07	70.74	90.20	19.46	Average
3	5925.00	33.82	30.12	63.94	88.20	24.26	Peak
4	5925.00	21.57	30.12	51.69	68.20	16.51	Average

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11a_U-NII-4 high channel 5885MHz

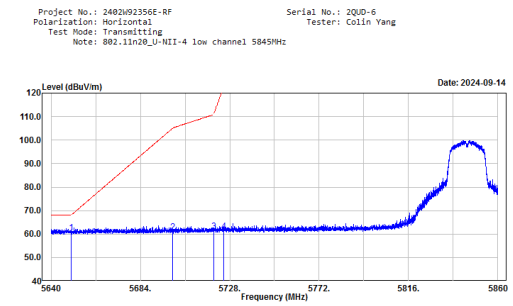
Level (dBuV/m) Date: 2024-09-14

PK AV

Frequency (MHz)

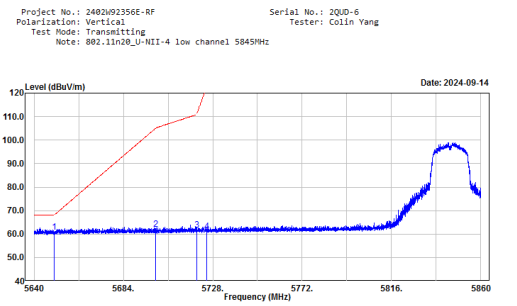
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5895.00	54.67	30.07	84.74	110.20	25.46	Peak
2	5895.00	42.39	30.07	72.46	90.20	17.74	Average
3	5925.00	32.35	30.12	62.47	88.20	25.73	Peak
4	5925.00	20.92	30.12	51.04	68.20	17.16	Average

802.11n20 mode, Low Channel, Horizontal



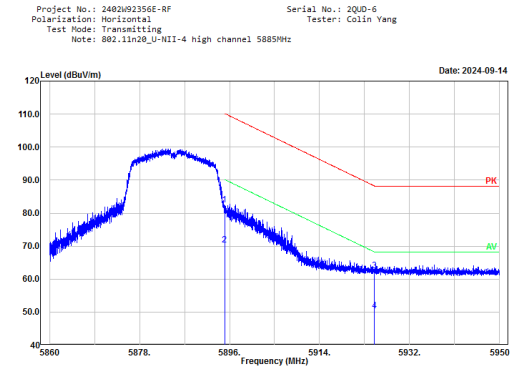
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5650.00	30.71	29.69	60.40	68.20	7.80	Peak
2	5700.00	31.17	29.77	60.94	105.20	44.26	Peak
3	5720.00	31.22	29.80	61.02	110.80	49.78	Peak
4	5725.00	31.45	29.81	61.26	122.20	60.94	Peak

802.11n20 mode, Low Channel, Vertical



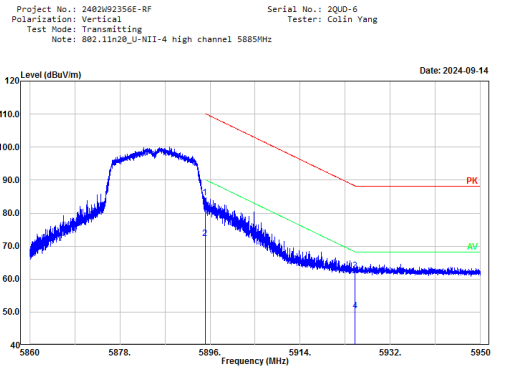
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5650.00	31.06	29.69	60.75	68.20	7.45	Peak
2	5700.00	32.34	29.77	62.11	105.20	43.09	Peak
3	5720.00	32.02	29.80	61.82	110.80	48.98	Peak
4	5725.00	31.37	29.81	61.18	122.20	61.02	Peak

802.11n20 mode, High Channel, Horizontal



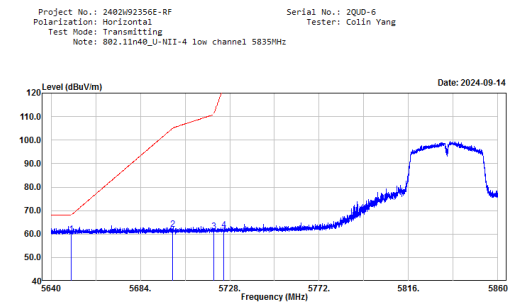
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5895.00	52.53	30.07	82.60	110.20	27.60	Peak
2	5895.00	40.19	30.07	70.26	90.20	19.94	Average
3	5925.00	32.38	30.12	62.50	88.20	25.70	Peak
4	5925.00	20.36	30.12	50.48	68.20	17.72	Average

802.11n20 mode, High Channel, Vertical



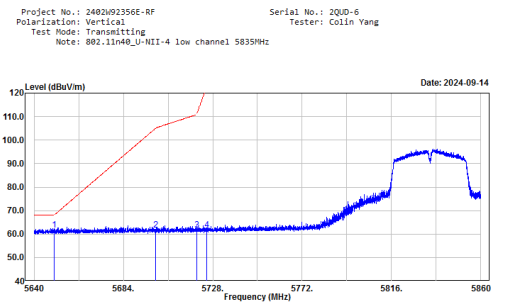
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5895.00	54.58	30.07	84.65	110.20	25.55	Peak
2	5895.00	42.19	30.07	72.26	90.20	17.94	Average
3	5925.00	32.42	30.12	62.54	88.20	25.66	Peak
4	5925.00	20.37	30.12	50.49	68.20	17.71	Average

802.11n40 mode, Low Channel, Horizontal



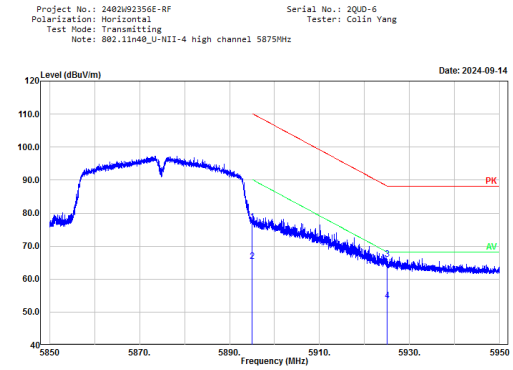
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5650.00	30.30	29.69	59.99	68.20	8.21	Peak
2	5700.00	32.18	29.77	61.95	105.20	43.25	Peak
3	5720.00	31.46	29.80	61.26	110.80	49.54	Peak
4	5725.00	31.99	29.81	61.80	122.20	60.40	Peak

802.11n40 mode, Low Channel, Vertical



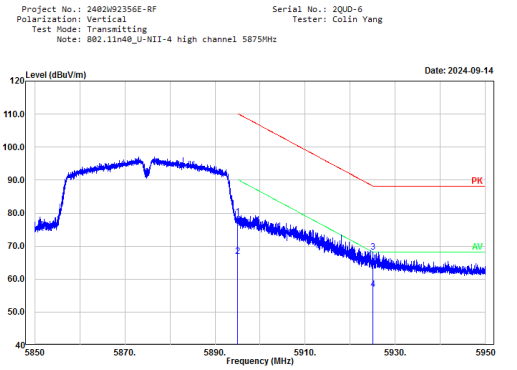
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5650.00	31.93	29.69	61.62	68.20	6.58	Peak
2	5700.00	31.87	29.77	61.64	105.20	43.56	Peak
3	5720.00	31.91	29.80	61.71	110.80	49.09	Peak
4	5725.00	31.82	29.81	61.63	122.20	60.57	Peak

802.11n40 mode, High Channel, Horizontal



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5895.00	47.29	30.07	77.36	110.20	32.84	Peak
2	5895.00	35.38	30.07	65.45	90.20	24.75	Average
3	5925.00	35.80	30.12	65.92	88.20	22.28	Peak
4	5925.00	23.26	30.12	53.38	68.20	14.82	Average

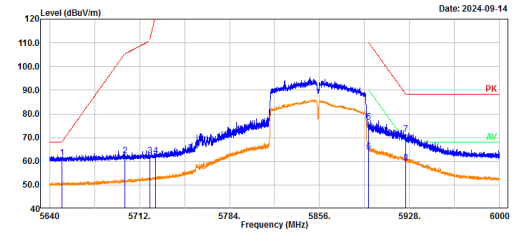
802.11n40 mode, High Channel, Vertical



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5895.00	48.82	30.07	78.89	110.20	31.31	Peak
2	5895.00	36.79	30.07	66.86	90.20	23.34	Average
3	5925.00	38.05	30.12	68.17	88.20	20.03	Peak
4	5925.00	26.75	30.12	56.87	68.20	11.33	Average

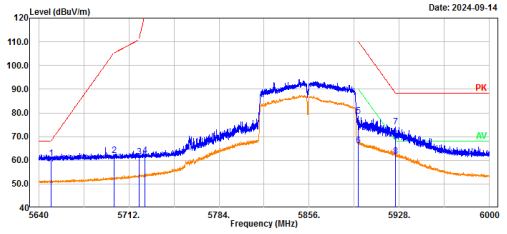
802.11ac80 mode, Low Channel, Horizontal	802. 11ac80 mode, Low Channel, Vertical

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-4 low channel 5855MHz



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5650.00	31.70	29.69	61.39	68.20	6.81	Peak
2	5700.00	32.63	29.77	62.40	105.20	42.80	Peak
3	5720.00	32.58	29.80	62.38	110.80	48.42	Peak
4	5725.00	32.52	29.81	62.33	122.20	59.87	Peak
5	5895.00	46.49	30.07	76.56	110.20	33.64	Peak
6	5895.00	34.12	30.07	64.19	90.20	26.01	Average
7	5925.00	41.34	30.12	71.46	88.20	16.74	Peak
8	5925.00	29.31	30.12	59.43	68.20	8.77	Average

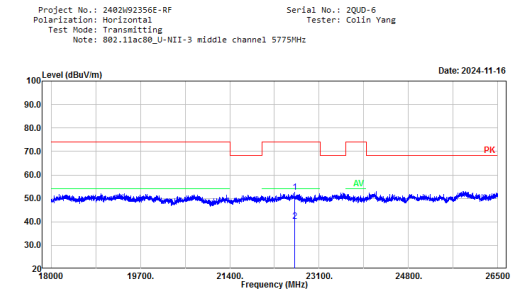
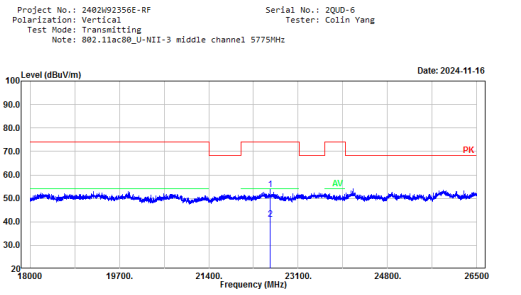
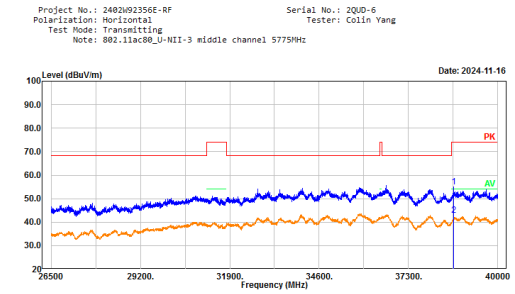
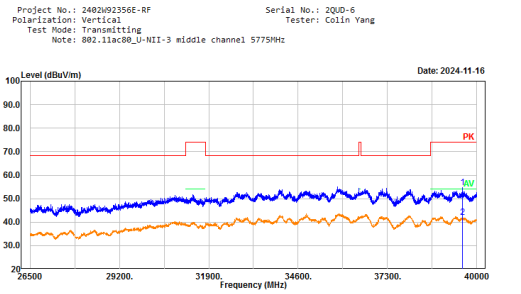
Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Colin Yang
Test Mode: Transmitting
Note: 802.11ac80_U-NII-4 low channel 5855MHz



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	5650.00	31.24	29.69	60.93	68.20	7.27	Peak
2	5700.00	32.14	29.77	61.91	105.20	43.29	Peak
3	5720.00	31.60	29.80	61.40	110.80	49.40	Peak
4	5725.00	32.29	29.81	62.10	122.20	60.10	Peak
5	5895.00	48.60	30.07	78.67	110.20	31.53	Peak
6	5895.00	36.31	30.07	66.38	90.20	23.82	Average
7	5925.00	43.91	30.12	74.03	88.20	14.17	Peak
8	5925.00	31.57	30.12	61.69	68.20	6.51	Average

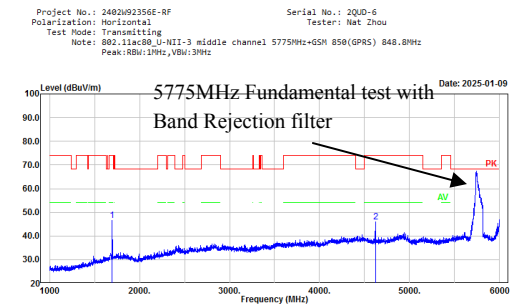
18-40GHz:

No Emission was detected in the range 18-40GHz,test was performed on the mode and channel which with the maximum power.

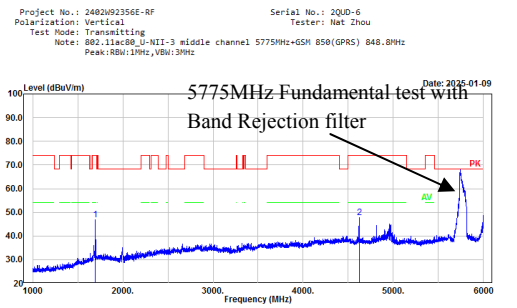
802.11ac80 mode, middle Channel, Horizontal	802.11ac80 mode, middle Channel, Vertical
 No. Frequency (MHz) Reading (dBµV) Factor (dB/m) Result (dBµV/m) Limit (dBµV/m) Margin (dB) Detector 1 22634.20 44.43 8.08 52.51 74.00 21.49 Peak 2 22634.20 32.13 8.08 40.21 54.00 13.79 Average	 No. Frequency (MHz) Reading (dBµV) Factor (dB/m) Result (dBµV/m) Limit (dBµV/m) Margin (dB) Detector 1 22571.30 45.72 7.98 53.70 74.00 20.30 Peak 2 22571.30 33.09 7.98 41.07 54.00 12.93 Average
 No. Frequency (MHz) Reading (dBµV) Factor (dB/m) Result (dBµV/m) Limit (dBµV/m) Margin (dB) Detector 1 38666.20 45.40 9.54 54.94 74.00 19.06 Peak 2 38666.20 33.36 9.54 42.90 54.00 11.10 Average	 No. Frequency (MHz) Reading (dBµV) Factor (dB/m) Result (dBµV/m) Limit (dBµV/m) Margin (dB) Detector 1 39570.70 44.98 9.74 54.72 74.00 19.28 Peak 2 39570.70 32.39 9.74 42.13 54.00 11.87 Average

5G Wifi is transmitted simultaneously with WWAN +NFC:

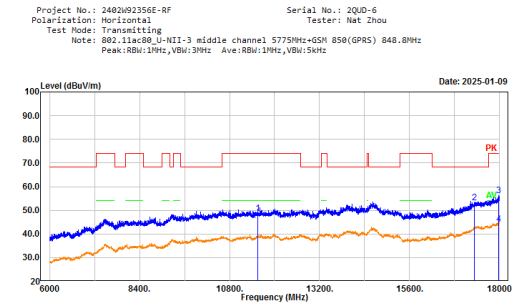
802.11ac80 mode, 5775MHz+GSM 850(GPRS) 848.8MHz+NFC, Horizontal	802.11ac80 mode, 5775MHz+GSM 850(GPRS) 848.8MHz+NFC, Vertical



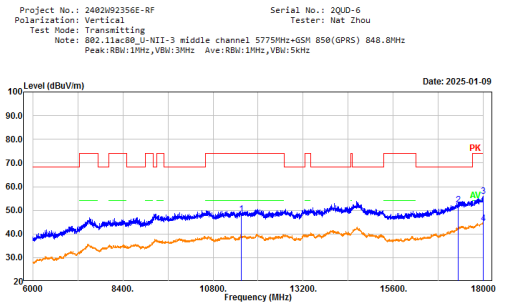
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	1697.00	63.32	-16.71	46.61	74.00	27.39	Peak
2	4620.00	56.03	-10.13	45.90	74.00	28.10	Peak



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	1697.00	63.58	-16.71	46.87	74.00	27.13	Peak
2	4620.00	57.78	-10.13	47.65	74.00	26.35	Peak



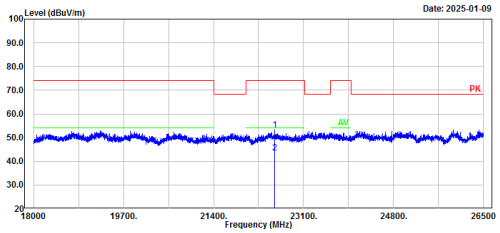
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11550.00	47.02	1.58	48.60	74.00	25.40	Peak
2	17325.00	48.83	4.33	53.16	68.20	15.04	Peak
3	17966.40	48.29	7.89	56.18	74.00	17.82	Peak
4	17966.40	36.36	7.89	44.25	54.00	9.75	Average



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	11550.00	46.72	1.58	48.30	74.00	25.70	Peak
2	17325.00	48.08	4.33	52.41	68.20	15.79	Peak
3	17985.60	47.83	8.03	55.86	74.00	18.14	Peak
4	17985.60	36.49	8.03	44.52	54.00	9.48	Average

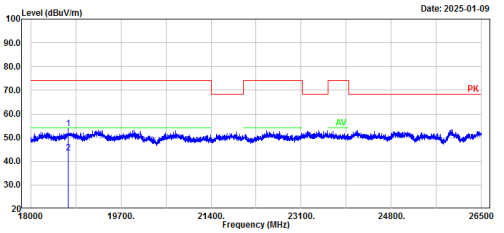
802.11ac80 mode, 5775MHz+GSM 850(GPRS) 848.8MHz+NFC, Horizontal	802.11ac80 mode, 5775MHz+GSM 850(GPRS) 848.8MHz+NFC, Vertical

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Nat Zhou
Test Mode: Transmitting
Note: 802.11ac80_U-NII-3 middle channel 5775MHz+GSM 850(GPRS) 848.8MHz
Peak:RBW:1MHz,VBW:3MHz



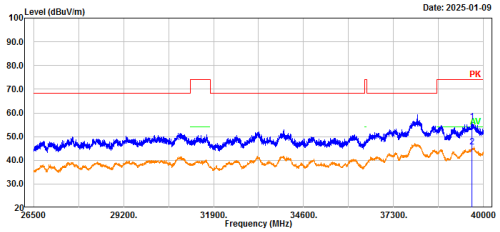
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	22556.00	45.12	7.96	53.08	74.00	20.92	Peak
2	22556.00	35.58	7.96	43.54	54.00	10.46	Average

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Nat Zhou
Test Mode: Transmitting
Note: 802.11ac80_U-NII-3 middle channel 5775MHz+GSM 850(GPRS) 848.8MHz
Peak:RBW:1MHz,VBW:3MHz



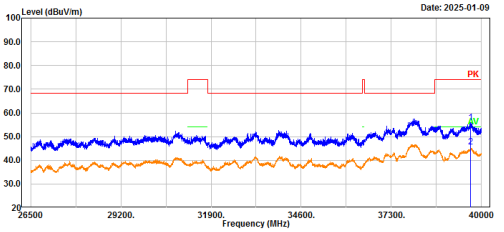
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	18712.30	47.33	6.38	53.71	74.00	20.29	Peak
2	18712.30	37.29	6.38	43.67	54.00	10.33	Average

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Horizontal Tester: Nat Zhou
Test Mode: Transmitting
Note: 802.11ac80_U-NII-3 middle channel 5775MHz+GSM 850(GPRS) 848.8MHz
Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	39649.00	44.91	11.27	56.18	74.00	17.82	Peak
2	39649.00	34.31	11.27	45.58	54.00	8.42	Average

Project No.: 2402W92356E-RF Serial No.: 2QUD-6
Polarization: Vertical Tester: Nat Zhou
Test Mode: Transmitting
Note: 802.11ac80_U-NII-3 middle channel 5775MHz+GSM 850(GPRS) 848.8MHz
Peak:RBW:1MHz,VBW:3MHz Ave:RBW:1MHz,VBW:5kHz



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	39673.30	44.75	11.28	56.03	74.00	17.97	Peak
2	39673.30	34.31	11.28	45.59	54.00	8.41	Average

5.3 26dB attenuated below the channel power

Serial No.:	2QUD-5	**Test Date:**	2024/11/09
Test Site:	RF	**Test Mode:**	Transmitting
Tester:	Jeff Wei	**Test Result:**	Pass

Environmental Conditions:

Temperature: (℃)	26.5	**Relative Humidity: (%)**	37	**ATM Pressure: (kPa)**	101.6

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Eastsheep	Coaxial Attenuator	5W-N-JK-6G-10dB	F-08-EM488	2024/06/07	2025/06/06
R&S	Spectrum Analyzer	FSV40	101589	2024/09/05	2025/09/04

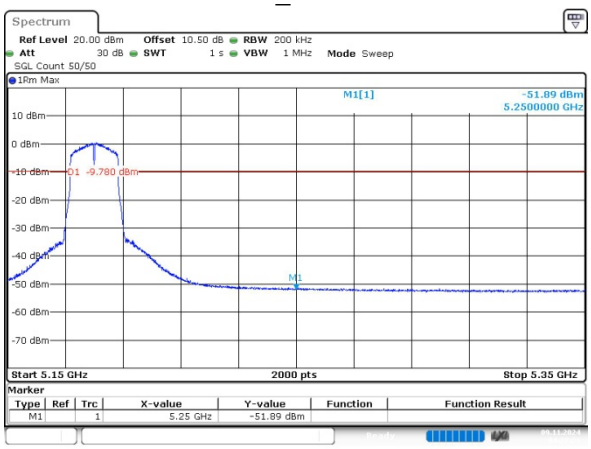
** Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

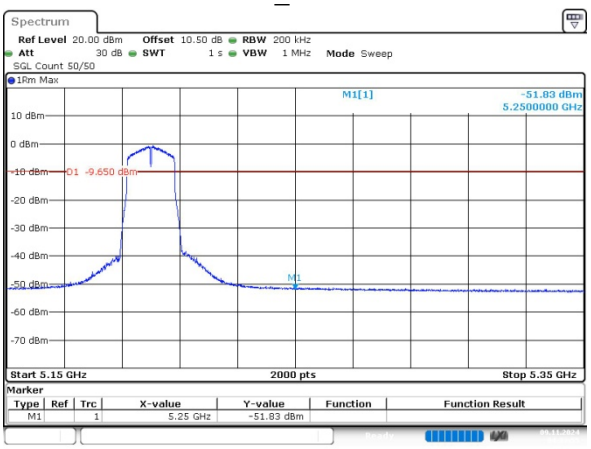
The channel power please refer to the power test result. Please refer to the following plots.

5150-5250MHz

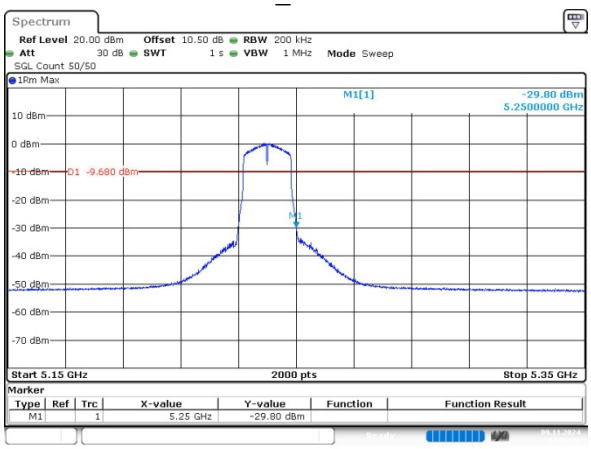
802.11a_5180MHz



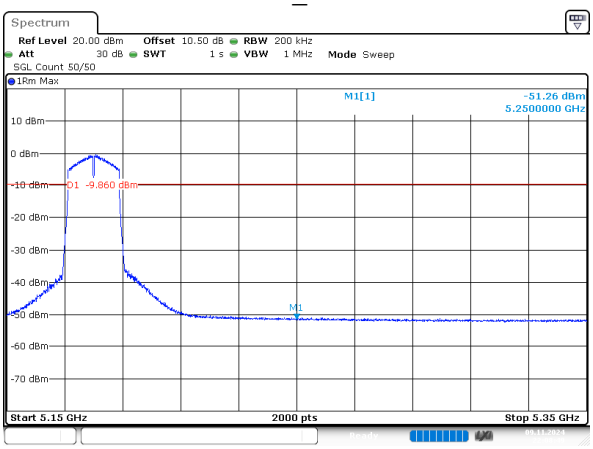
802.11a_5200MHz



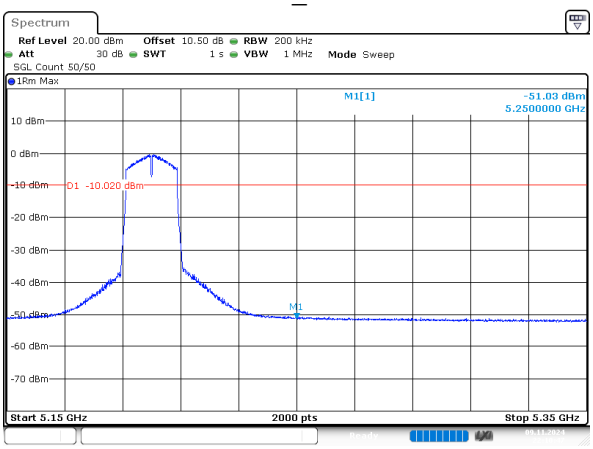
802.11a_5240MHz



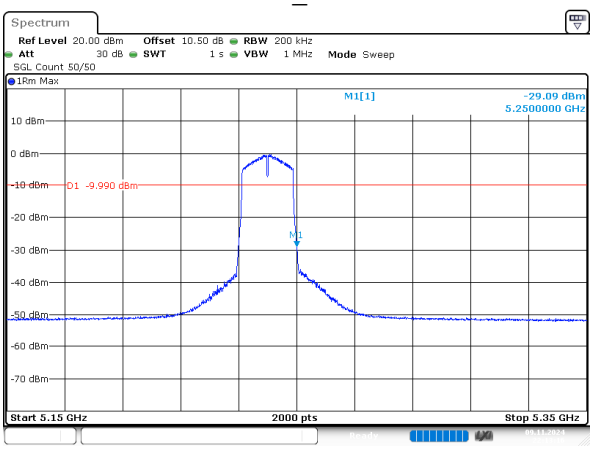
802.11n20_5180MHz



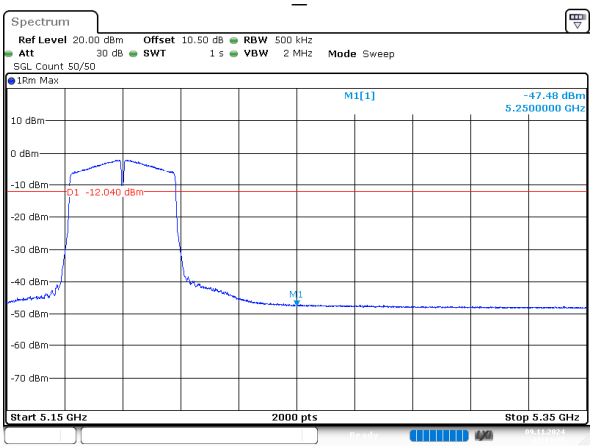
802.11n20_5200MHz



802.11n20_5240MHz

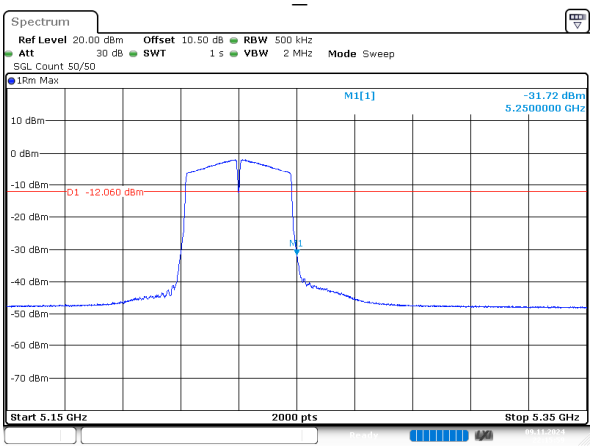


802.11n40_5190MHz



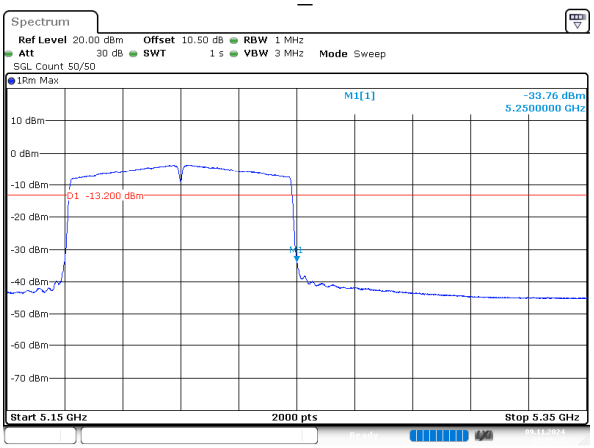
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 9.NOV.2024 22:14:47

802.11n40_5230MHz



ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 9.NOV.2024 22:15:59

802.11ac80_5210MHz



ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 9.NOV.2024 22:17:12

5.4 Emission Bandwidth

Test Information:

Serial No.:	2QUD-5	**Test Date:**	2024/10/11~2024/10/12
Test Site:	RF	**Test Mode:**	Transmitting
Tester:	Jeff Wei	**Test Result:**	Pass

Environmental Conditions:

Temperature: (°C):	26.1-26.3	**Relative Humidity: (%)**	43-44	**ATM Pressure: (kPa)**	100.9-101.5

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Eastsheep	Coaxial Attenuator	5W-N-JK-6G-10dB	F-08-EM503	2024/06/07	2025/06/06
R&S	Spectrum Analyzer	FSV40	101589	2024/09/05	2025/09/04

** Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

26dB Emission Bandwidth
5150-5250MHz

Mode	Test Frequency (MHz)	Result (MHz)
802.11a	5180	24.679
	5200	23.325
	5240	24.246
802.11n20	5180	22.972
	5200	23.098
	5240	23.023
802.11n40	5190	40.440
	5230	41.041
802.11ac80	5210	81.481

5250-5350MHz

Mode	Test Frequency (MHz)	Result (MHz)
802.11a	5260	24.060
	5280	24.246
	5320	24.450
802.11n20	5260	24.914
	5280	27.171
	5320	24.437
802.11n40	5270	40.741
	5310	41.141
802.11ac80	5290	81.481

5470-5725MHz

Mode	Test Frequency (MHz)	Result (MHz)
802.11a	5500	24.138
	5580	25.972
	5700	23.629
	5720	23.974
802.11n20	5500	25.928
	5580	25.238
	5700	24.824
	5720	26.448
802.11n40	5510	41.041
	5550	41.141
	5670	41.041
	5710	40.941
802.11ac80	5530	81.281
	5610	81.281
	5690	82.082

6dB Emission Bandwidth
5725-5850MHz

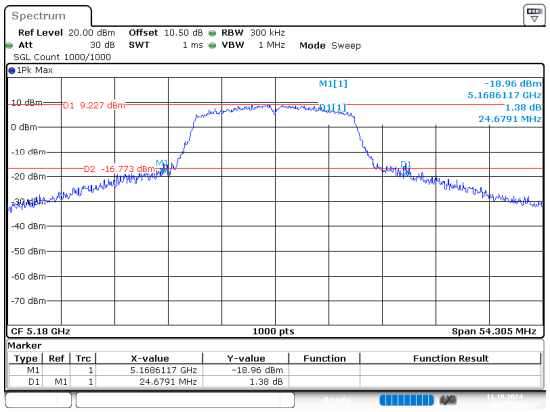
Mode	Test Frequency (MHz)	Result (MHz)	Limit (MHz)	Verdict
802.11a	5745	15.165	0.5	Pass
	5785	15.265	0.5	Pass
	5825	15.215	0.5	Pass
802.11n20	5745	15.165	0.5	Pass
	5785	15.215	0.5	Pass
	5825	15.215	0.5	Pass
802.11n40	5755	35.235	0.5	Pass
	5795	35.335	0.5	Pass
802.11ac80	5775	75.676	0.5	Pass

5850-5895MHz

Mode	Test Frequency (MHz)	Result (MHz)	Limit (MHz)	Verdict
802.11a	5845	15.215	0.5	Pass
	5865	15.215	0.5	Pass
	5885	15.215	0.5	Pass
802.11n20	5845	15.215	0.5	Pass
	5865	15.215	0.5	Pass
	5885	15.265	0.5	Pass
802.11n40	5835	35.235	0.5	Pass
	5875	35.335	0.5	Pass
802.11ac80	5855	75.676	0.5	Pass

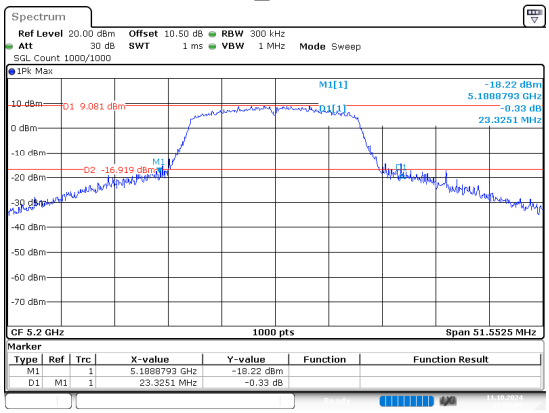
5150-5250MHz

802.11a_5180MHz



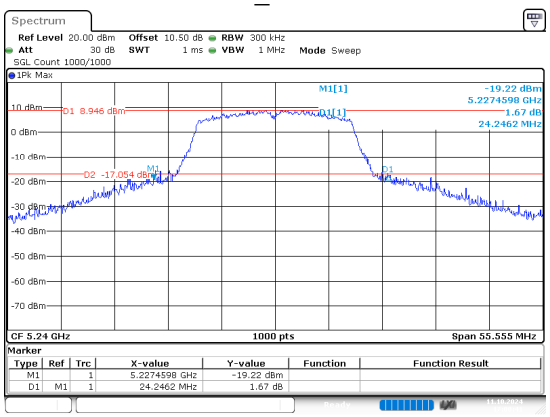
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 16:57:04

802.11a_5200MHz



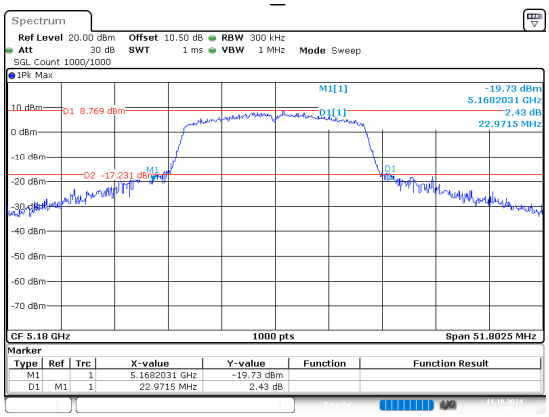
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 16:59:09

802.11a_5240MHz



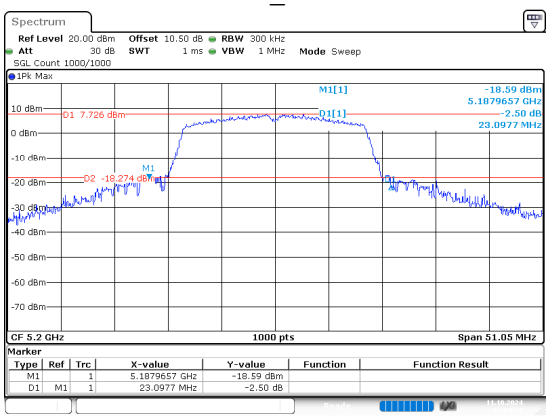
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:00:41

802.11n20_5180MHz



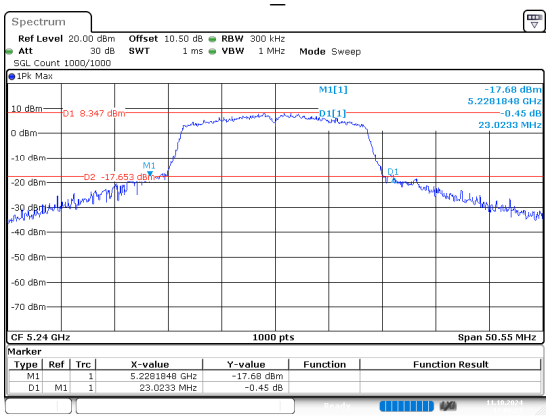
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:02:17

802.11n20_5200MHz



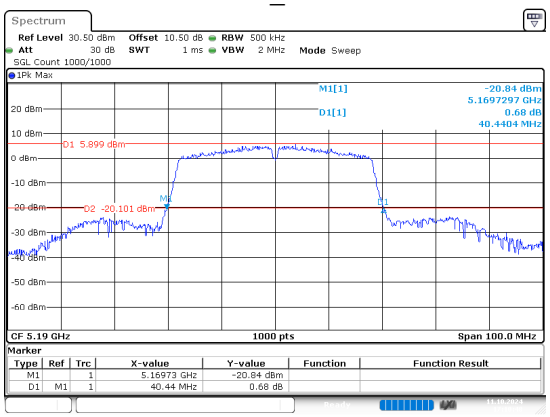
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:04:52

802.11n20_5240MHz



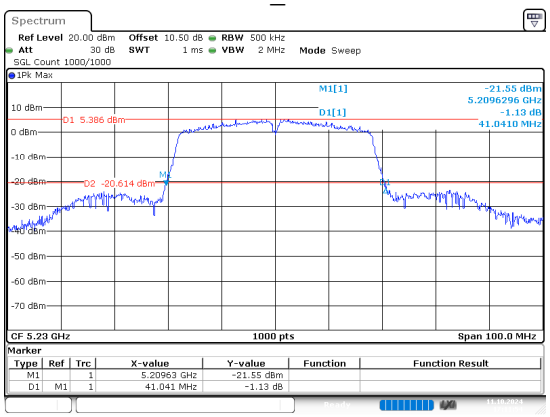
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:06:23

802.11n40_5190MHz



ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:10:48

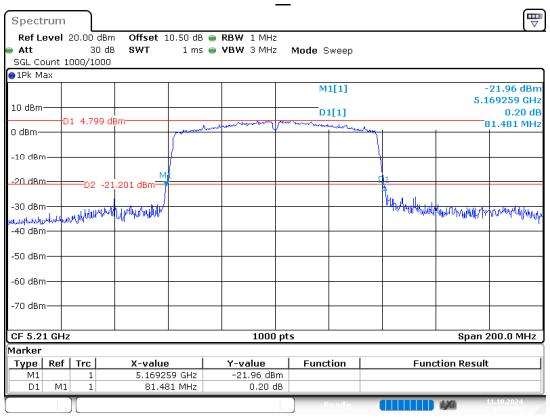
802.11n40_5230MHz



ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:11:54

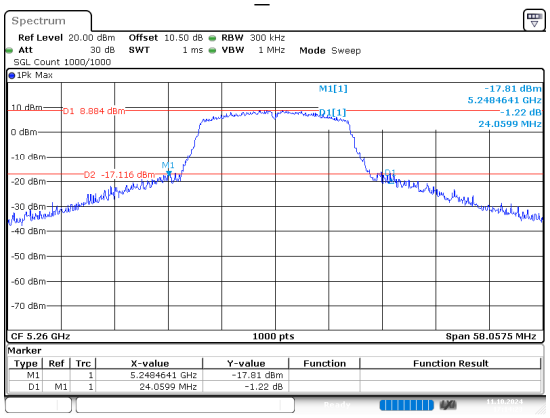
5250-5350MHz

802.11ac80_5210MHz



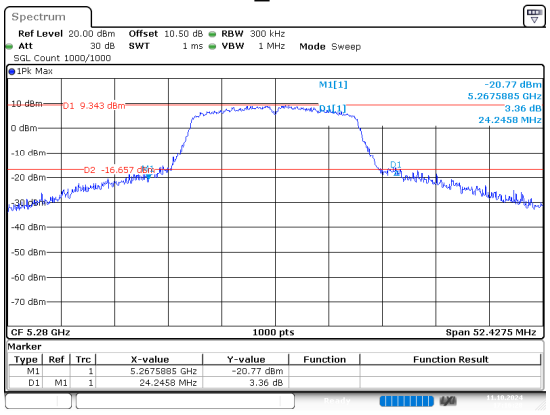
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:12:59

802.11a_5260MHz



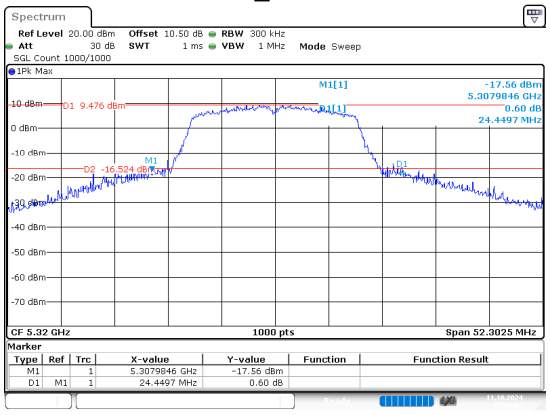
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:14:24

802.11a_5280MHz



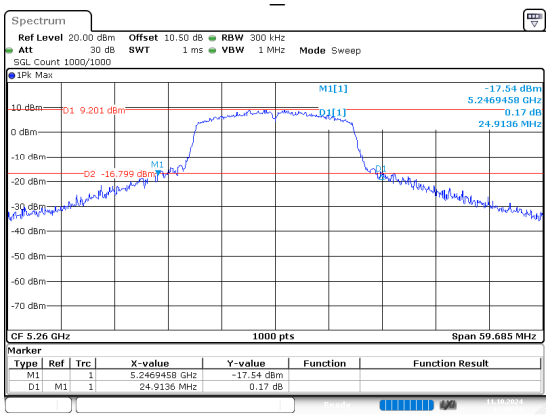
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:16:28

802.11a_5320MHz



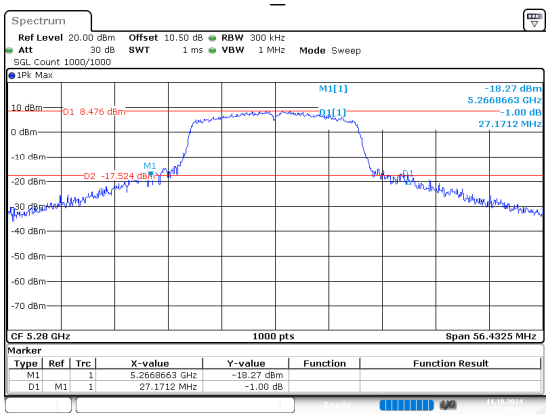
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:18:03

802.11n20_5260MHz



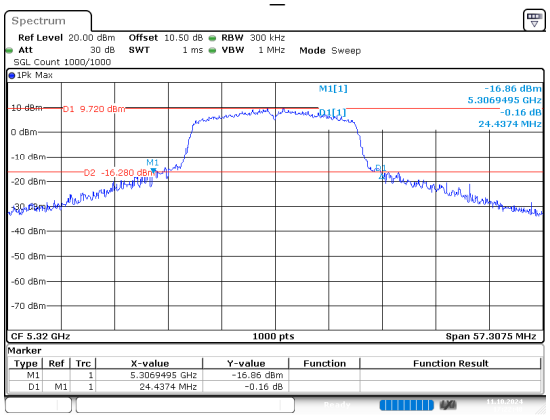
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:19:35

802.11n20_5280MHz



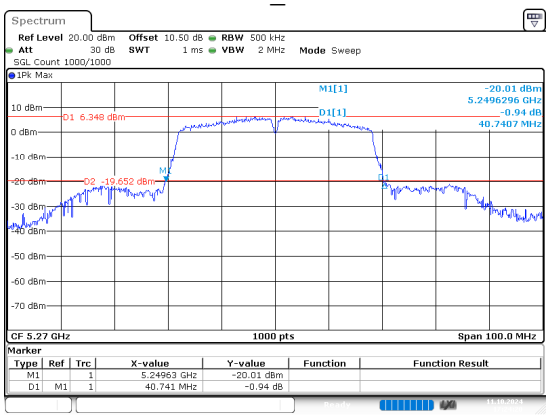
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:21:15

802.11n20_5320MHz



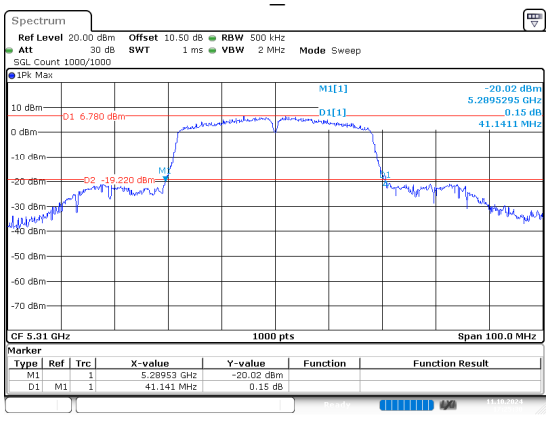
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:22:48

802.11n40_5270MHz



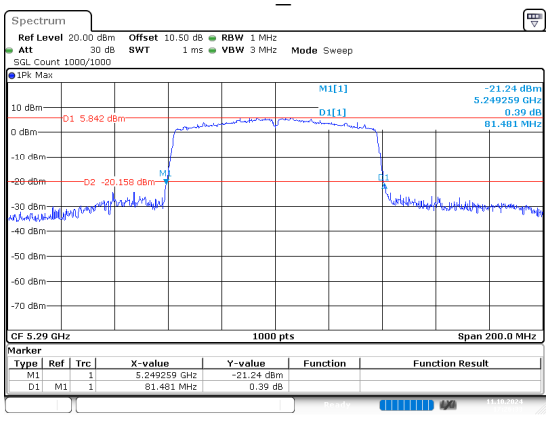
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:24:20

802.11n40_5310MHz



ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:25:30

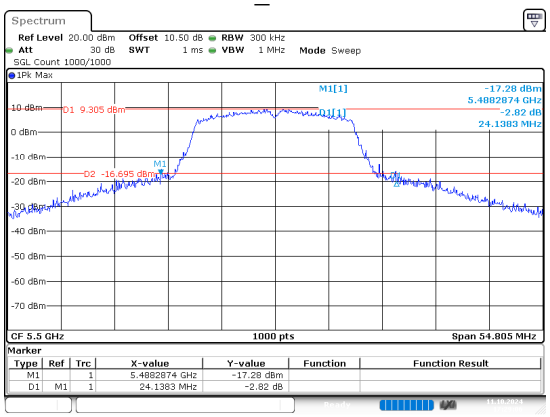
802.11ac80_5290MHz



ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:26:33

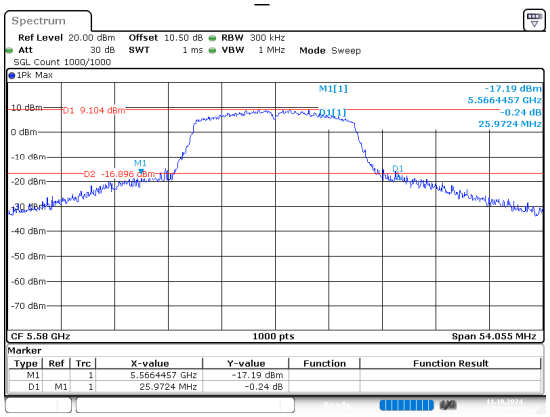
5470-5725MHz

802.11a_5500MHz



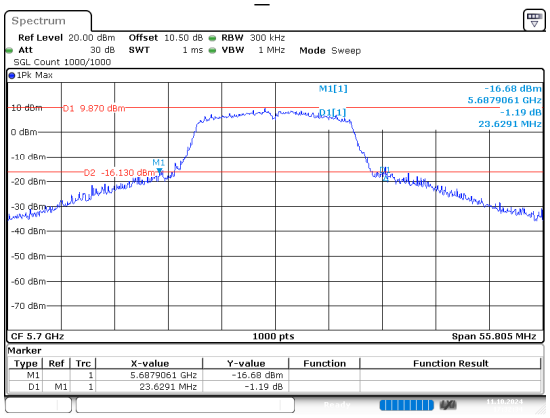
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:29:06

802.11a_5580MHz



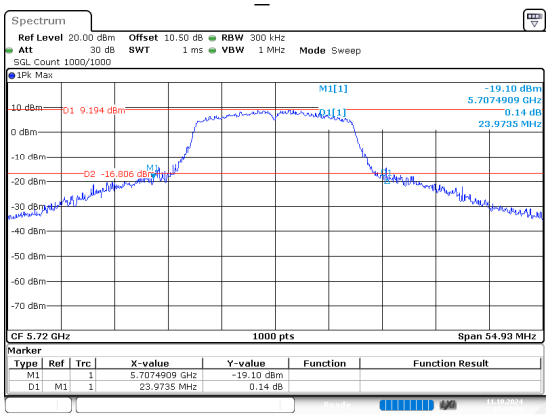
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:30:51

802.11a_5700MHz



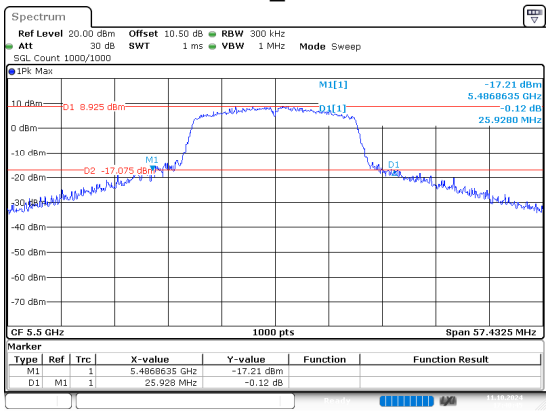
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:32:34

802.11a_5720MHz



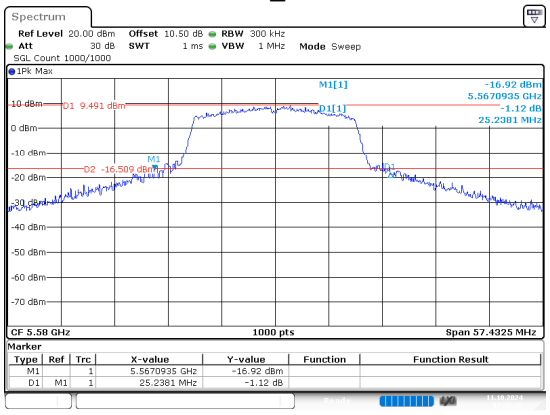
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:38:59

802.11n20_5500MHz



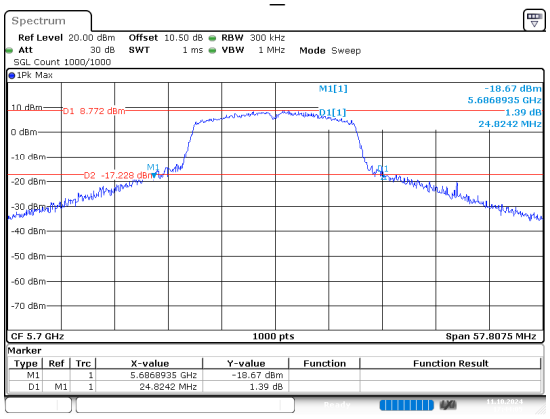
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:40:45

802.11n20_5580MHz



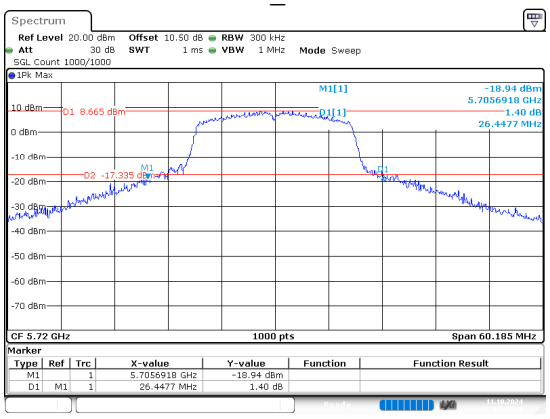
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:42:27

802.11n20_5700MHz



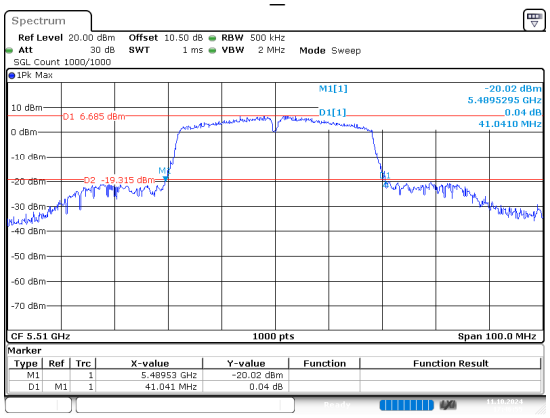
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:44:05

802.11n20_5720MHz



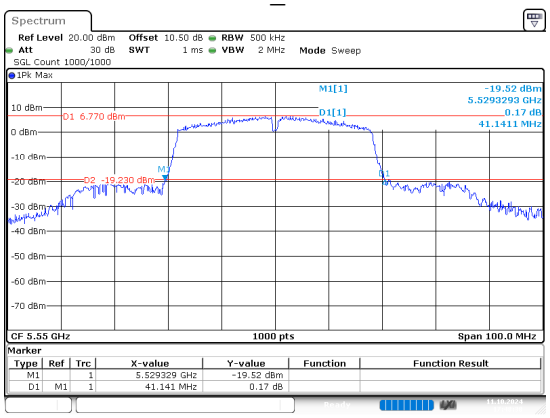
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:45:41

802.11n40_5510MHz



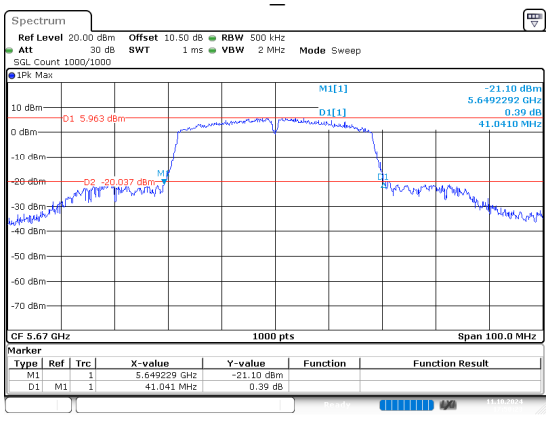
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:46:55

802.11n40_5550MHz



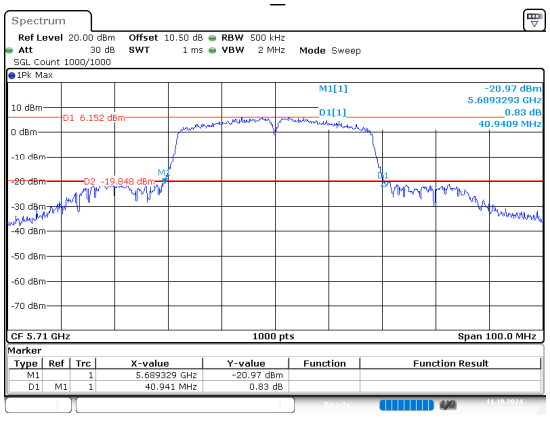
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:48:38

802.11n40_5670MHz



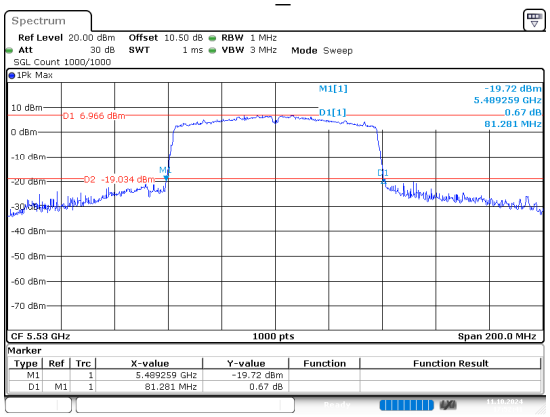
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:50:23

802.11n40_5710MHz

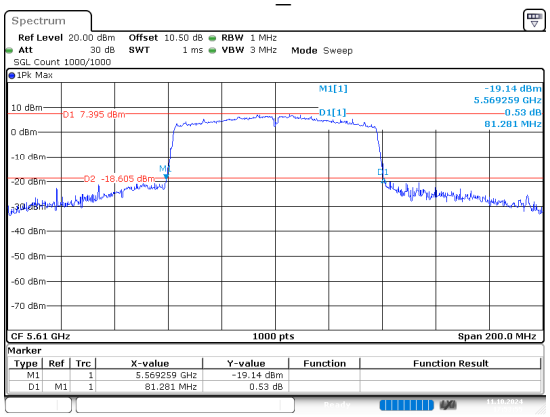


ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 17:51:28

802.11ac80_5530MHz

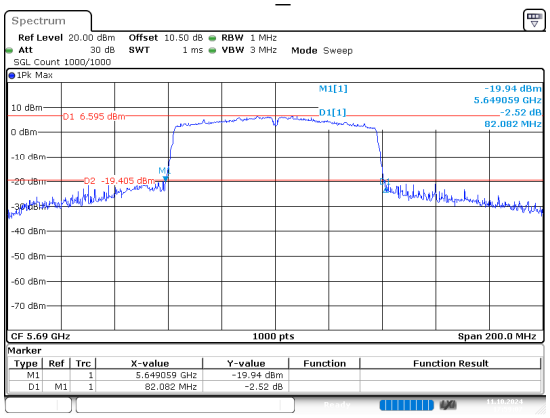


802.11ac80_5610MHz

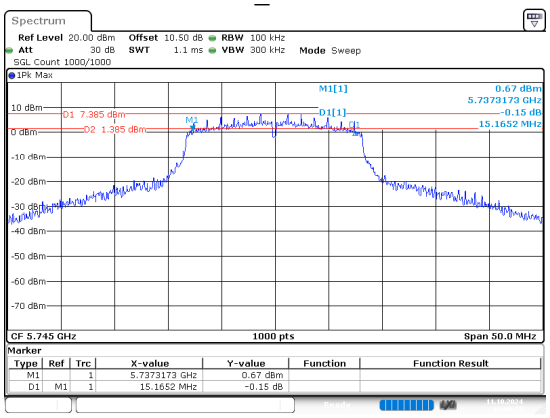


5725-5850MHz

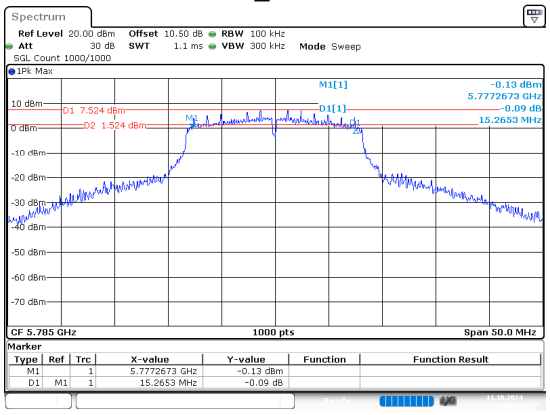
802.11ac80_5690MHz



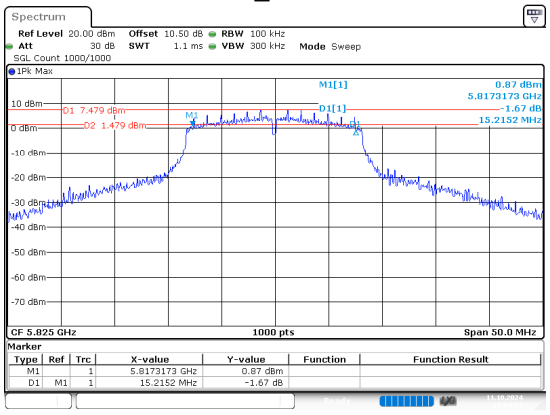
802.11a_5745MHz



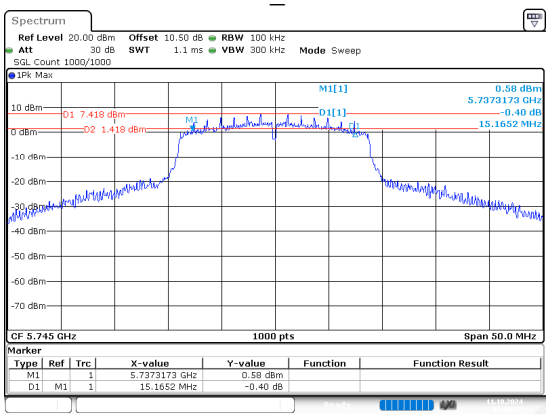
802.11a_5785MHz



802.11a_5825MHz

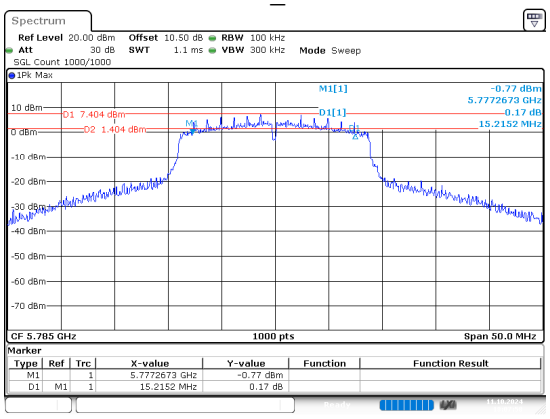


802.11n20_5745MHz



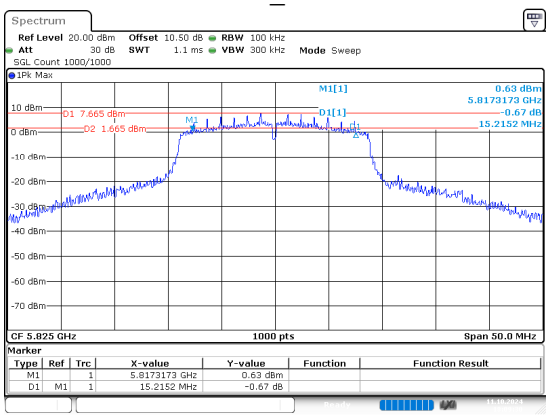
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 18:06:23

802.11n20_5785MHz



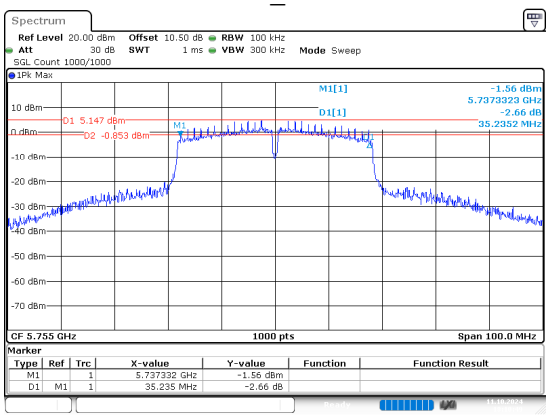
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 18:07:59

802.11n20_5825MHz



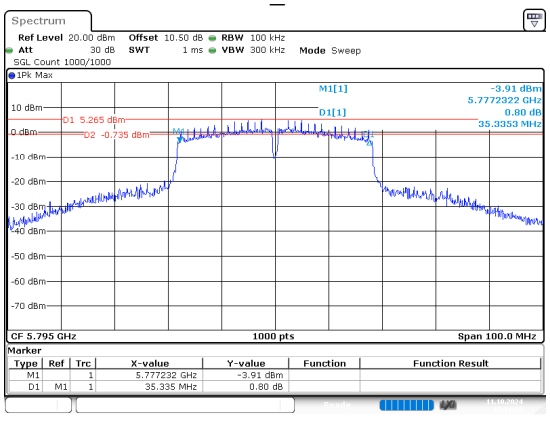
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 18:09:31

802.11n40_5755MHz



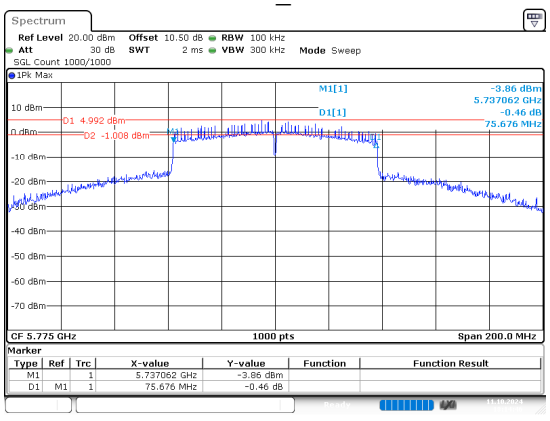
ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 18:10:49

802.11n40_5795MHz



ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 18:11:58

802.11ac80_5775MHz



ProjectNo.:2402W92356E-RF Tester:Jeff Wei
Date: 11.OCT.2024 18:14:46