

TEST REPORT

Applicant: YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD.

Address: No.666 Hu'an Rd,Huli District Xiamen City, Fujian, P.R. China

Product Name: Ultra Smart Business Phone

FCC ID: T2C-T88

IC: 10741A-T88

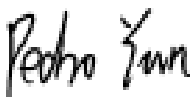
HVIN: T88V, T88W

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 C63.10-2020
KDB 789033 D02 General U-NII Test Procedures New Rules
v02r01

Report Number: 2502S13359E-RF-00D

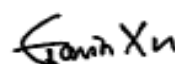
Report Date: 2025/6/24

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: Gavin Xu

Title: RF Supervisor

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	4
1. GENERAL INFORMATION	5
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	5
1.2 ACCESSORY INFORMATION	5
1.3 ANTENNA INFORMATION DETAIL▲	6
1.4 EQUIPMENT MODIFICATIONS	6
2. SUMMARY OF TEST RESULTS	7
3. DESCRIPTION OF TEST CONFIGURATION	8
3.1 OPERATION FREQUENCY DETAIL	8
3.2 EUT OPERATION CONDITION	9
3.3 SUPPORT EQUIPMENT LIST AND DETAILS	11
3.4 SUPPORT CABLE LIST AND DETAILS	11
3.5 BLOCK DIAGRAM OF TEST SETUP	11
3.6 TEST FACILITY	13
3.7 MEASUREMENT UNCERTAINTY	13
4. REQUIREMENTS AND TEST PROCEDURES	14
4.1 AC LINE CONDUCTED EMISSIONS	14
4.1.1 Applicable Standard	14
4.1.2 EUT Setup	16
4.1.3 EMI Test Receiver Setup	16
4.1.4 Test Procedure	17
4.1.5 Corrected Amplitude & Margin Calculation	17
4.1.6 Test Result	17
4.2 RADIATION SPURIOUS EMISSIONS	18
4.2.1 Applicable Standard	18
4.2.2 EUT Setup	20
4.2.3 EMI Test Receiver & Spectrum Analyzer Setup	22
4.2.4 Test Procedure	22
4.2.5 Corrected Result & Margin Calculation	22
4.2.6 Test Result	23
4.3 26DB ATTENUATED BELOW THE CHANNEL POWER	24
4.3.1 Applicable Standard	24
4.3.2 EUT Setup	24
4.3.3 Test Procedure	24
4.3.4 Test Result	24
4.4 EMISSION BANDWIDTH	25
4.4.1 Applicable Standard	25
4.4.2 EUT Setup	26
4.4.3 Test Procedure	26
4.4.4 Test Result	27
4.5 MAXIMUM CONDUCTED OUTPUT POWER	28

4.5.1 Applicable Standard	28
4.5.2 EUT Setup	29
4.5.3 Test Procedure	29
4.5.4 Test Result	29
4.6 MAXIMUM POWER SPECTRAL DENSITY	30
4.6.1 Applicable Standard	30
4.6.2 EUT Setup	31
4.6.3 Test Procedure	31
4.6.4 Test Result	31
4.7 DUTY CYCLE	32
4.7.1 EUT Setup	32
4.7.2 Test Procedure	32
4.7.3 Judgment	32
4.8 ANTENNA REQUIREMENT	33
4.8.1 Applicable Standard	33
4.8.2 Judgment	33
4.9 ADDITIONAL REQUIREMENT	34
4.9.1 Applicable Standard	34
4.9.2 Judgment	35
5. Test DATA AND RESULTS	36
5.1 AC LINE CONDUCTED EMISSIONS	36
5.2 RADIATION SPURIOUS EMISSIONS	39
5.3 26dB ATTENUATED BELOW THE CHANNEL POWER	91
5.4 EMISSION BANDWIDTH	93
5.5 99% OCCUPIED BANDWIDTH	101
5.6 MAXIMUM CONDUCTED OUTPUT POWER	109
5.7 MAXIMUM POWER SPECTRAL DENSITY	111
5.8 DUTY CYCLE	119
EXHIBIT A - EUT PHOTOGRAPHS	121
EXHIBIT B - TEST SETUP PHOTOGRAPHS	122

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2502S13359E-RF-00D	Original Report	2025/6/24

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Name:	Ultra Smart Business Phone
EUT Model:	SIP-T88V
Multiple Model:	SIP-T88W
Operation Frequency:	5150-5250MHz: 5180-5240 MHz(802.11a/n ht20) 5190-5230 MHz(802.11n ht40) 5250-5350MHz: 5260-5320 MHz (802.11a/n ht20) 5270-5310 MHz(802.11n ht40) 5470-5725MHz: 5500-5720 MHz (802.11a/n ht20) 5510-5710 MHz(802.11n ht40) 5725-5850MHz: 5745-5825 MHz (802.11a/n ht20) 5755-5795 MHz(802.11n ht40)
Maximum Average Output Power (Conducted):	16.0dBm in 5150-5250 MHz Band 16.39dBm in 5250-5350 MHz Band 13.65dBm in 5470-5725 MHz Band 14.14dBm in 5725-5850 MHz Band
Maximum Average Output Power (EIRP):	17.97dBm in 5150-5250 MHz Band 20.35dBm in 5250-5350 MHz Band 16.95dBm in 5470-5725 MHz Band
Modulation Type:	802.11a/n: OFDM-BPSK, QPSK, 16QAM, 64QAM
Rated Input Voltage:	DC 12V from Adapter or DC 48V from POE
Serial Number:	For AC line conducted emissions and Radiated Spurious Emissions test: 311A-1(Model: SIP-T88V) For RF Conducted test: 311A-7(Model: SIP-T88V)
EUT Received Date:	2025/4/18
EUT Received Status:	Good
Note: 1. 5600-5650 MHz was disabled by software in Canada Market. 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. The two models share the same RF design, only model SIP-T88V was tested for this report, EMC report have investigated all models.	

EUT Information:

Model	HVIN
SIP-T88V	T88V
SIP-T88W	T88W

1.2 Accessory Information

Accessory Description	Manufacturer	Model	Parameters
Adapter	YEALINK(XIAMEN)	YLPS121250C1-US	Input: 100-240Vac 50/60Hz 0.5A Output: 12Vdc 1.25A 15W

1.3 Antenna Information Detail ▲

Antenna Type	input impedance (Ohm)	Frequency Range	Antenna Gain
PCB	50	5150-5250MHz	1.97dBi
		5250-5350MHz	3.96dBi
		5470-5725MHz	3.30dBi
		5725-5850MHz	2.86dBi
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. Note 3: Per 15Breport, Powered by PoE was the worst for AC line conducted emissions and Radiated Spurious Emissions Below 1G, Powered by Adapter was the worst for Radiated Spurious Emissions Above 1G, so only performed it this report.		

3. DESCRIPTION OF TEST CONFIGURATION

3.1 Operation Frequency Detail

For 802.11a/n ht20

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	/	/

For 802.11n ht40:

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	/	/

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:		AuthenticationTool		
The software was provided by manufacturer. The maximum power was configured as below, that was provided by the manufacturer ▲:				
5150-5250 MHz Band:				
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting
802.11a	Lowest	5180	6Mbps	16
	Middle	5200	6Mbps	16
	Highest	5240	6Mbps	16
802.11n ht20	Lowest	5180	MCS0	16
	Middle	5200	MCS0	16
	Highest	5240	MCS0	16
802.11n ht40	Lowest	5190	MCS0	16
	Highest	5230	MCS0	16
5250-5350 MHz Band:				
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting
802.11a	Lowest	5260	6Mbps	16
	Middle	5280	6Mbps	16
	Highest	5320	6Mbps	16
802.11n ht20	Lowest	5260	MCS0	16
	Middle	5280	MCS0	16
	Highest	5320	MCS0	16
802.11n ht40	Lowest	5270	MCS0	16
	Highest	5310	MCS0	16

5470-5725 MHz Band:

Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting
802.11a	Lowest	5500	6Mbps	16
	Middle	5580	6Mbps	16
	Highest	5700	6Mbps	16
	Cross	5720	6Mbps	16
802.11n ht20	Lowest	5500	MCS0	16
	Middle	5580	MCS0	16
	Highest	5700	MCS0	16
	Cross	5720	MCS0	16
802.11n ht40	Lowest	5510	MCS0	16
	Middle	5550	MCS0	16
	Highest	5670	MCS0	16
	Cross	5710	MCS0	16

5725-5850 MHz Band:

Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting
802.11a	Lowest	5745	6Mbps	16
	Middle	5785	6Mbps	16
	Highest	5825	6Mbps	16
802.11n ht20	Lowest	5745	MCS0	16
	Middle	5785	MCS0	16
	Highest	5825	MCS0	16
802.11n ht40	Lowest	5755	MCS0	16
	Highest	5795	MCS0	16

Note:

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

3.3 Support Equipment List and Details

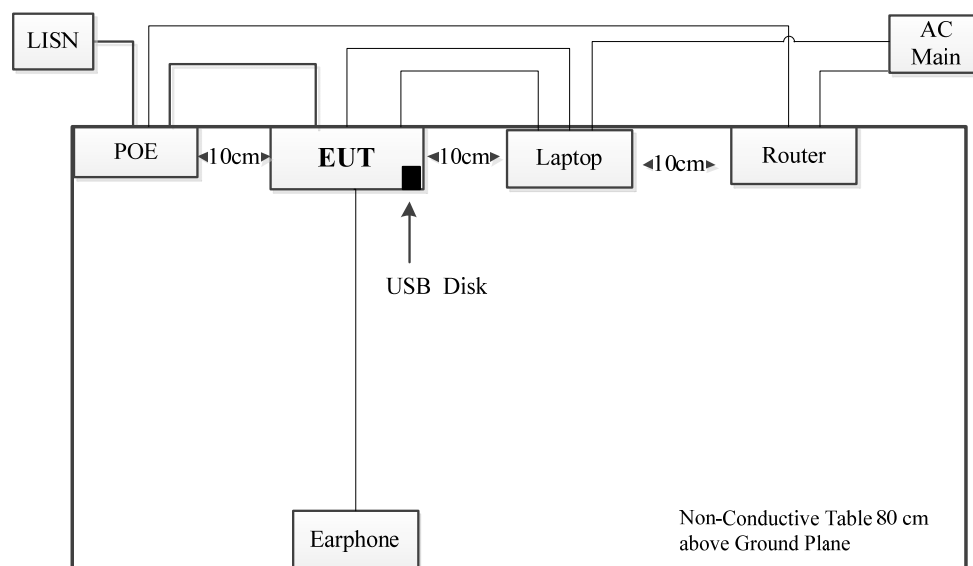
Manufacturer	Description	Model	Serial Number
YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD.	Earphone	Unknown	Unknown
Kingston	USB Disk	32G	EMZBUD21103001
Lenovo	Laptop	E450	PF-OMR8KV
Lenovo	Adapter	92P1108	Unknown
TOTO Link	Router(For CE)	LR1200	190924004S1
ZIONCOM	Router(For RE)	MB-R210-00	EMZBWR21103001
MAIPU	PoE(48.0V)	POE40-1PSE-A	B626-184681105414V00

3.4 Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
DC Cable	no	no	2.5	Adapter	EUT
Earphone Cable	no	no	2.2	Earphone	EUT
DC Cable	no	no	1.5	Adapter	Laptop
USB Cable	no	no	2.0	Laptop	EUT
RJ45 Cable	no	no	2.0	Router(For RE)	EUT
RJ45 Cable	no	no	2.0	Laptop	EUT
RJ45 Cable	no	no	2.0	PoE	EUT
RJ45 Cable	no	no	2.0	PoE	Router(For CE)
RJ45 Cable	no	no	2.0	PoE	Router(For RE)

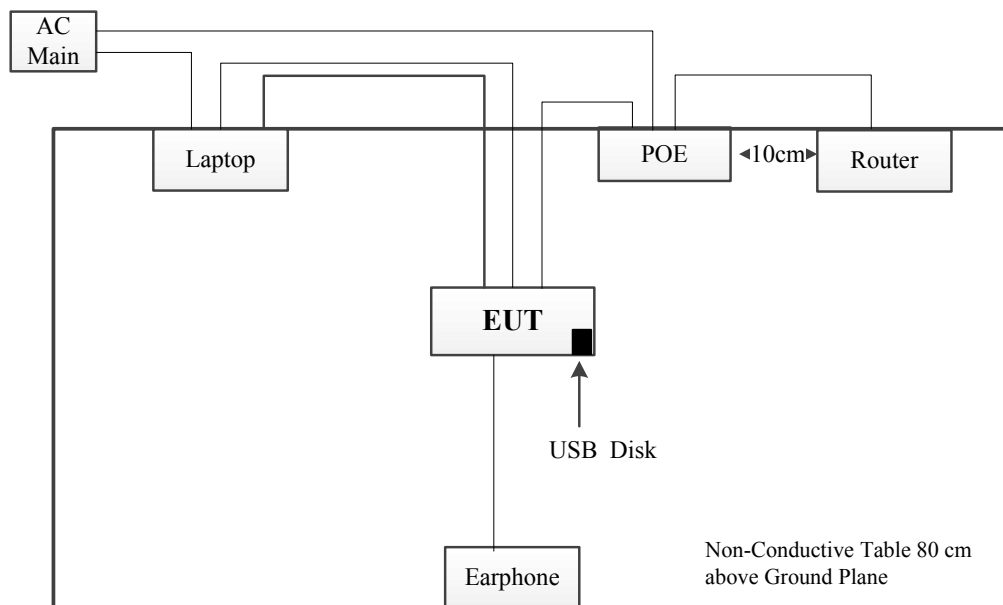
3.5 Block Diagram of Test Setup

AC line conducted emissions:

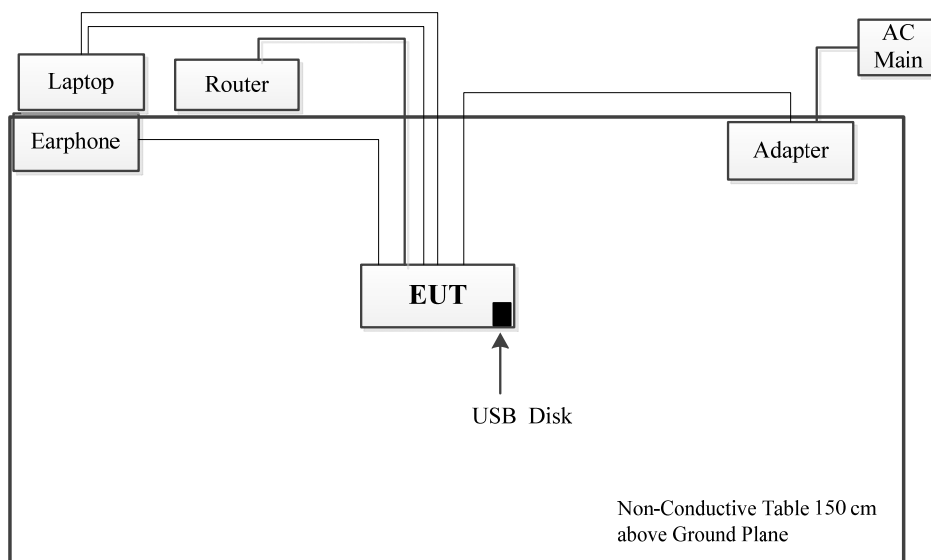


Spurious Emissions:

Below 1GHz:



Above 1GHz:



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 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

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

*Decreases with the logarithm of the frequency.

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

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

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

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

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

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 μ H / 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

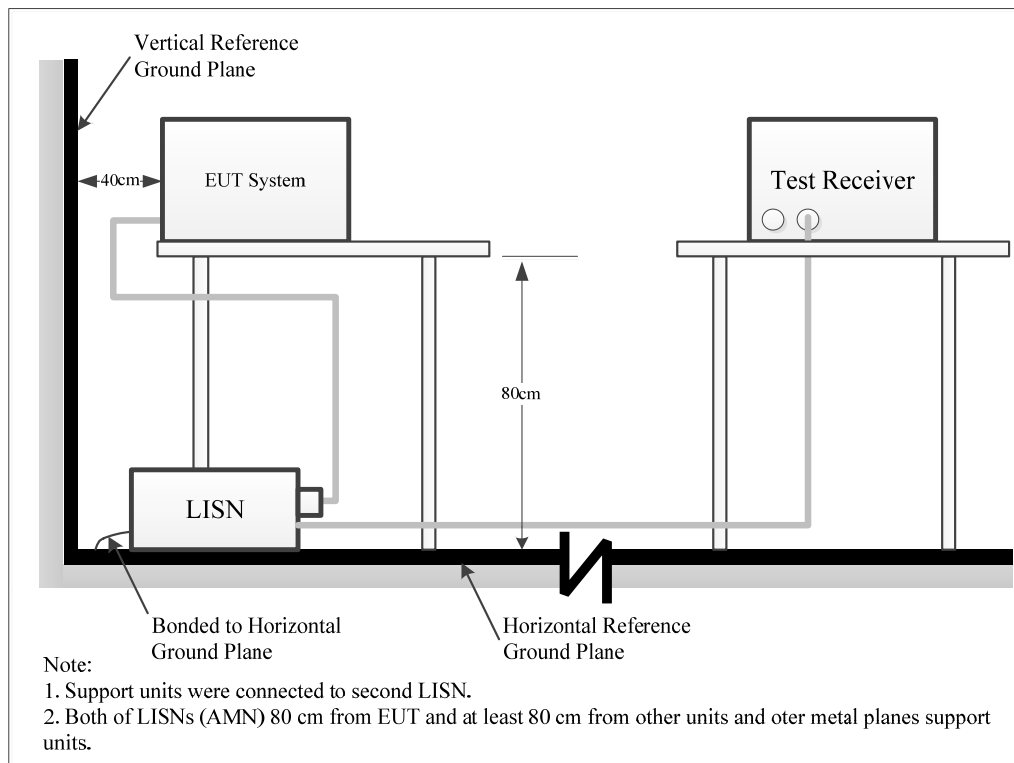
Frequency (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 ¹	56 to 46 ¹
0.5 – 5	56	46
5 – 30	60	50

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



The setup of EUT is according with per ANSI C63.10-2020 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.

(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.

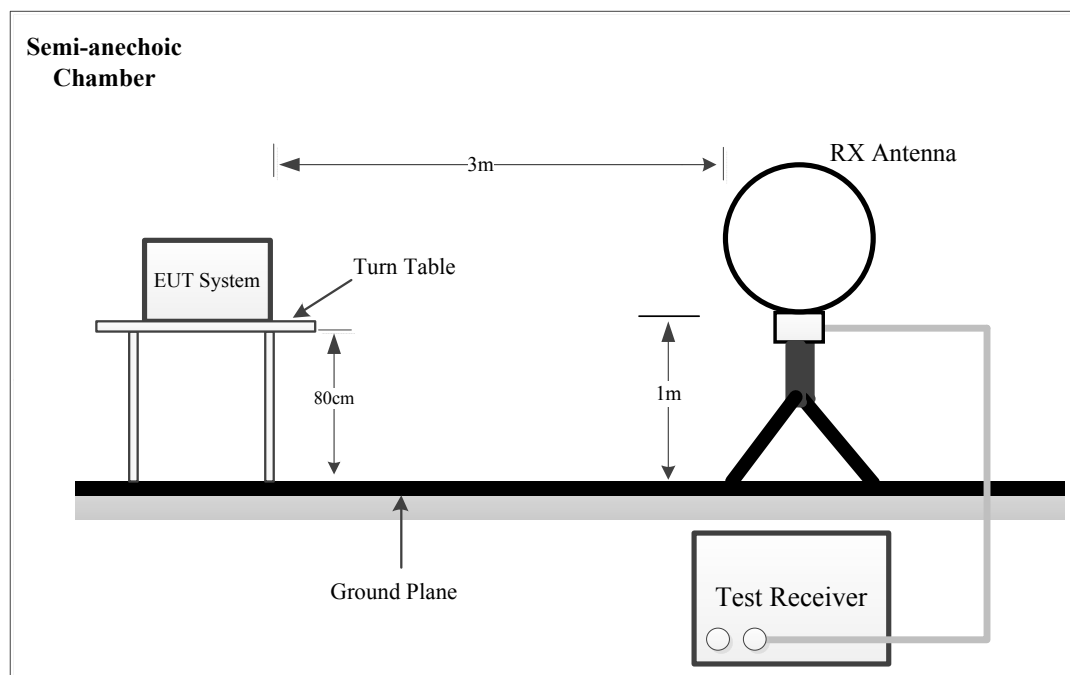
Devices operating in the band 5725-5850 MHz with antenna gain of 10 dBi or less can have unwanted emissions that comply with either the limits in this section or in section 5.5 until April 1, 2018 for certification. Certified devices that do not comply with emission limits in this section shall not be 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:

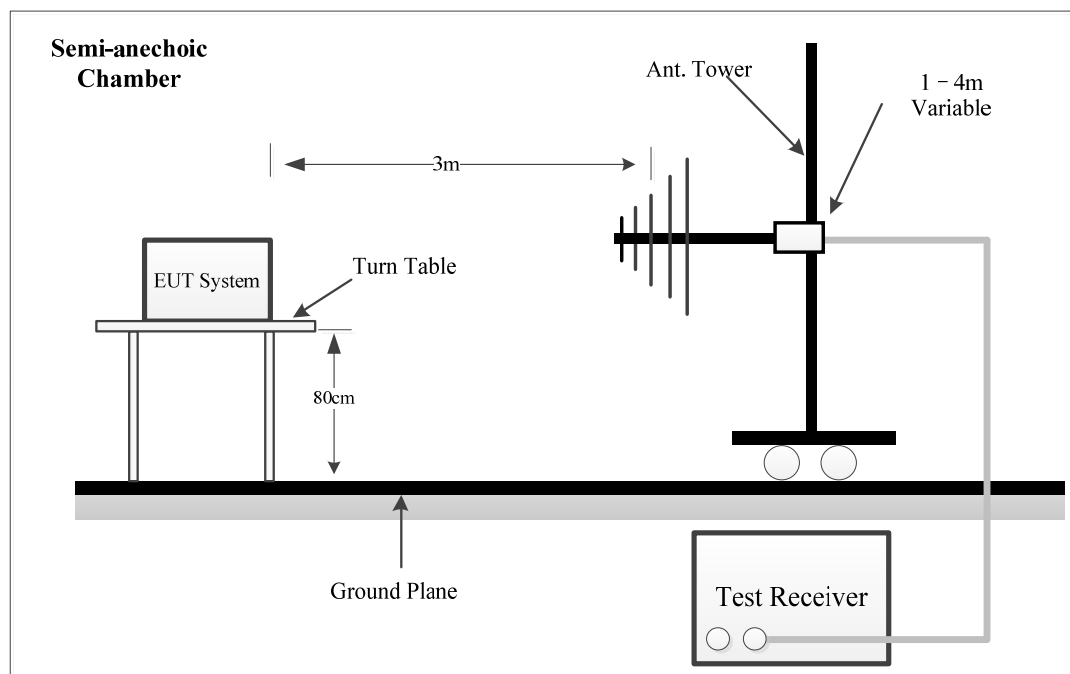
- a) 27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 dBm/MHz at 5 MHz above or below the band edges;
- b) 15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;
- c) 10 dBm/MHz at 25 MHz above or below the 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.

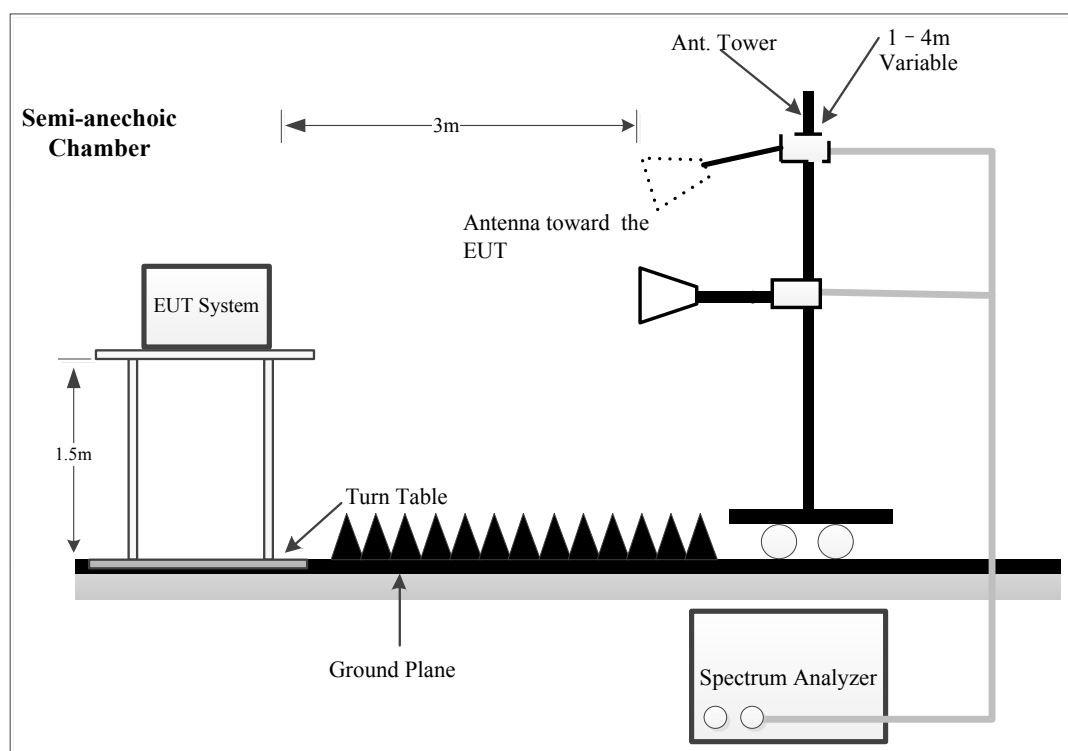
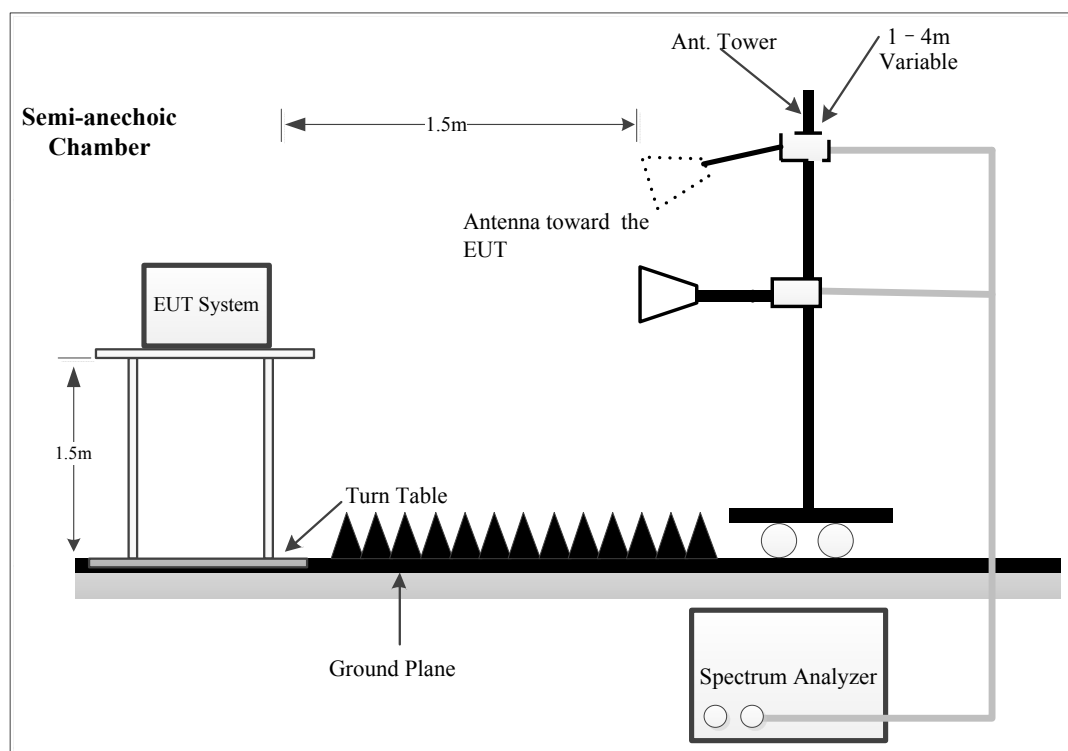
4.2.2 EUT Setup

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 C63.10-2020. 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.

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	300Hz	1 kHz	200 Hz	QP/AV
150 kHz – 30 MHz	QP/AV	10 kHz	30 kHz	9 kHz	QP/AV
30MHz – 1000 MHz	PK	100 kHz	300 kHz	/	PK
	QP	/	/	120kHz	QP

1GHz- 40GHz:

Pre-scan:

Frequency Range	Measurement	RBW	Video B/W	Detector
Above 1 GHz	Peak	1MHz	3 MHz	PK
	AV	1MHz	5kHz	PK

Final measurement for emission identified during the pre-scan:

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

Note: T is minimum transmission duration

4.2.4 Test Procedure

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

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

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 = $20 \log (\text{specific distance [3m]}/\text{test distance [1.5m]})$ dB= 6.0 dB

4.2.5 Corrected Result & Margin Calculation

$$E_{Log} = 20 \times \log_{10}(E_{Linear})$$

E_{Linear} is the field strength of the emission, in $\mu V/m$

E_{Log} is the field strength of the emission, in dB $\mu V/m$

For 9kHz-30MHz test, test distance is 3m, extrapolation limit shall be calculated using Equation:

$$E_{\text{limit-measure}} = E_{\text{limit-Standard}} + 40 \times \log_{10} (d_{\text{standard}}/d_{\text{measure}})$$

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

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

For Radiated 26.5-40GHz test:

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Distance extrapolation Factor}$$

$$\text{Result} = \text{Reading} + \text{Factor}$$

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:

$$\text{Margin} = \text{Limit} - \text{Result}$$

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.

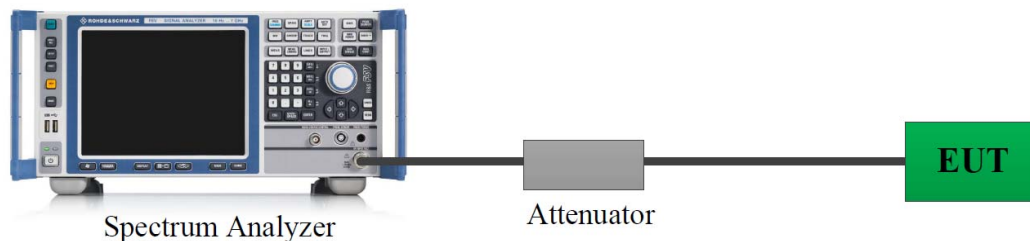
4.3 26dB Attenuated Below The Channel Power

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.

4.3.3 Test Procedure

- Set RBW = 1%~5% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = RMS.
- Trace mode = max hold
- 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

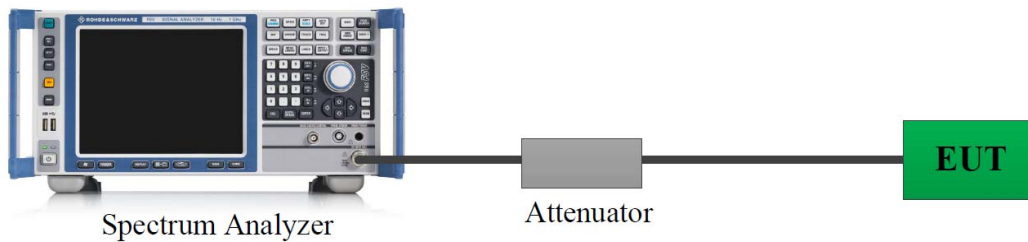
The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

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 6.2.4.1

For equipment operating in the band 5725-5850 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.

4.4.3 Test Procedure

26dB Emission Bandwidth:

According to ANSI C63.10-2020 Section 12.5.2

- Set RBW = shall be in the range of 1% to 5% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is in the range of 1% to 5%.

6 dB emission bandwidth:

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

- Set RBW = 100 kHz.
- Set the video bandwidth (VBW) ≥ 3 RBW.
- Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Allow the trace to stabilize.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described in this section. For devices that use channel aggregation refer to III.A and III.C for determining emission bandwidth.

99% Occupied Bandwidth:

According to ANSI C63.10-2020 Section 12.5.3&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 4.1.6.2.
- 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 $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

!

FCC §15.407(a) (3)(i)

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

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

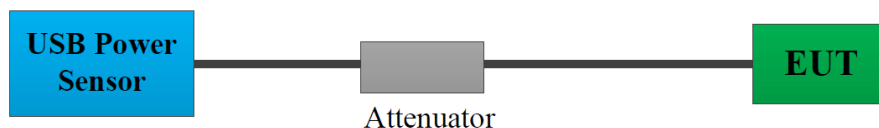
The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

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 systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

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 cable loss of this RF cable was offset into the setting of test equipment, which was provided by manufacturer▲.

4.5.3 Test Procedure

According to ANSI C63.10-2020 Section 12.4.3.2

Method PM-G is measurement using a gated RF average power meter.

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

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 $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

!

FCC §15.407(a) (3)(i)

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

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

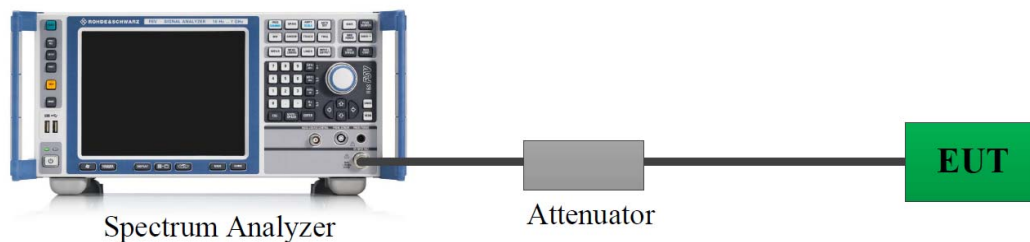
The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

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 systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

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 cable loss of this RF cable was offset into the setting of test equipment, which was provided by manufacturer ▲.

4.6.3 Test Procedure

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

Duty cycle $\geq 98\%$

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

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

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

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

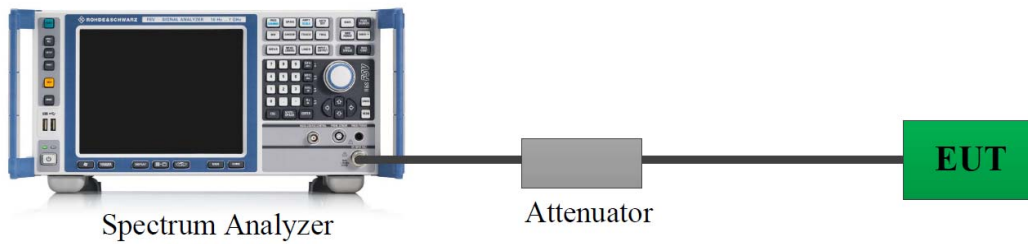
KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-3 should be applied.

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.

4.7.2 Test Procedure

According to ANSI C63.10-2020 Section 12.2

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

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

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.
- ii). The device operates on 5250-5350MHz/5470-5725MHz 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:	31IA-1	Test Date:	2025/05/14
Test Site:	CE	Test Mode:	Transmitting
Tester:	Yolo Fan	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26.5	Relative Humidity: (%)	61	ATM Pressure: (kPa)	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
Unknown	Coaxial Cable	RG 142	C-0200-05	2025/5/6	2026/5/5
R&S	EMI Test Receiver	ESCI	101121	2024/9/5	2025/9/4
Audix	Test Software	E3	191218 V9	N/A	N/A

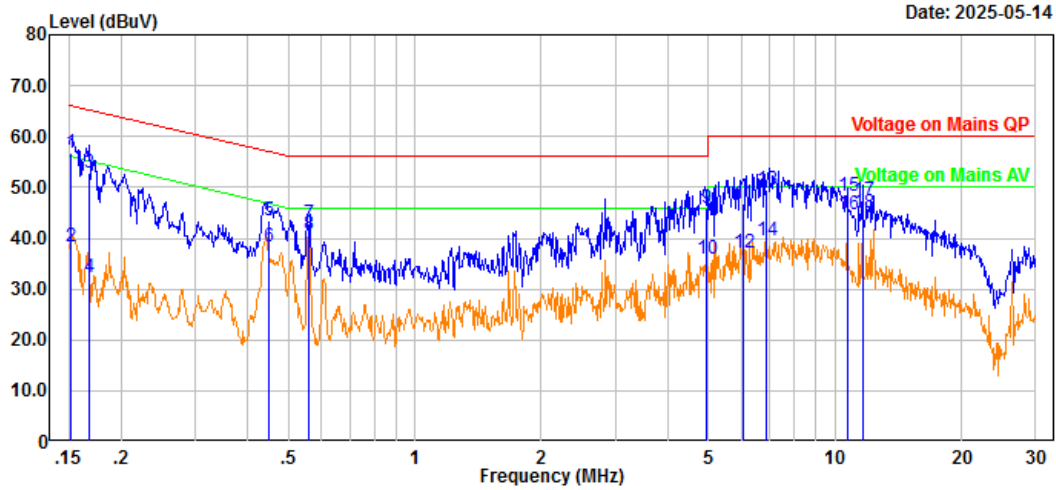
** Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

Note:802.11n20 5260MHz was tested.

Project No.: 2502S13359E-RF
Port: Line
Test Mode: Transmitting
Note: IF B/W 9KHz PK/AV

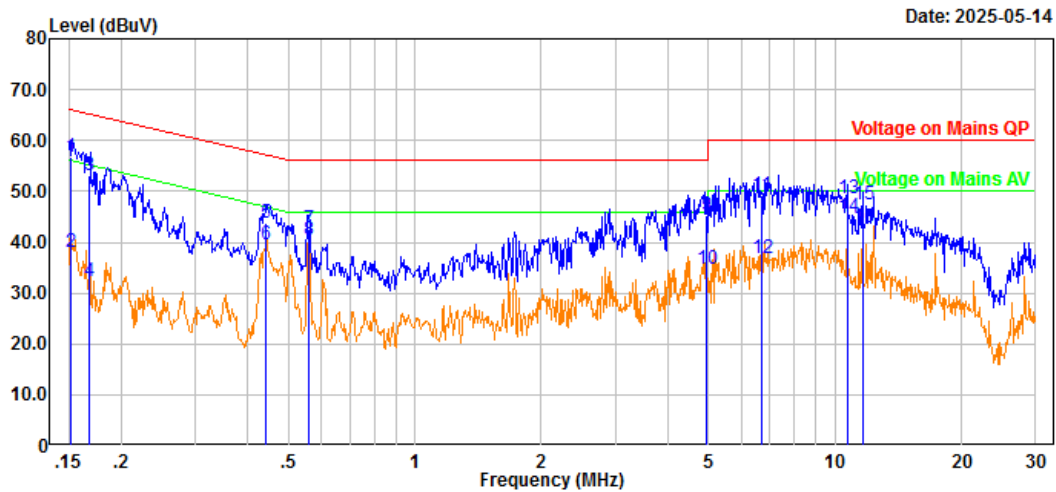
Serial No.: 31IA-1
Tester: Yolo Fan



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Measurement
1	0.152	46.04	10.70	56.74	65.87	9.13	QP
2	0.152	27.64	10.70	38.34	55.87	17.53	Average
3	0.168	41.97	10.74	52.71	65.08	12.37	QP
4	0.168	21.43	10.74	32.17	55.08	22.91	Average
5	0.448	32.72	10.81	43.53	56.91	13.38	QP
6	0.448	27.56	10.81	38.37	46.91	8.54	Average
7	0.559	32.12	10.81	42.93	56.00	13.07	QP
8	0.559	30.02	10.81	40.83	46.00	5.17	Average
9	4.938	35.18	10.78	45.96	56.00	10.04	QP
10	4.938	25.21	10.78	35.99	46.00	10.01	Average
11	6.028	36.02	10.87	46.89	60.00	13.11	QP
12	6.028	26.33	10.87	37.20	50.00	12.80	Average
13	6.870	38.62	10.93	49.55	60.00	10.45	QP
14	6.870	28.71	10.93	39.64	50.00	10.36	Average
15	10.720	37.51	10.78	48.29	60.00	11.71	QP
16	10.720	33.93	10.78	44.71	50.00	5.29	Average
17	11.672	36.73	10.80	47.53	60.00	12.47	QP
18	11.672	34.20	10.80	45.00	50.00	5.00	Average

Project No.: 2502S13359E-RF
Port: neutral
Test Mode: Transmitting
Note: IF B/W 9KHz PK/AV

Serial No.: 31IA-1
Tester: Yolo Fan



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Measurement
1	0.152	46.07	10.80	56.87	65.88	9.01	QP
2	0.152	27.14	10.80	37.94	55.88	17.94	Average
3	0.167	42.46	10.80	53.26	65.08	11.82	QP
4	0.167	21.40	10.80	32.20	55.08	22.88	Average
5	0.441	33.01	10.73	43.74	57.03	13.29	QP
6	0.441	28.85	10.73	39.58	47.03	7.45	Average
7	0.558	31.83	10.71	42.54	56.00	13.46	QP
8	0.558	29.82	10.71	40.53	46.00	5.47	Average
9	4.930	34.40	10.82	45.22	56.00	10.78	QP
10	4.930	24.04	10.82	34.86	46.00	11.14	Average
11	6.688	38.29	10.84	49.13	60.00	10.87	QP
12	6.688	26.13	10.84	36.97	50.00	13.03	Average
13	10.720	37.69	10.87	48.56	60.00	11.44	QP
14	10.720	34.13	10.87	45.00	50.00	5.00	Average
15	11.676	36.40	10.87	47.27	60.00	12.73	QP
16	11.676	32.00	10.87	42.87	50.00	7.13	Average

5.2 Radiation Spurious Emissions

1) 9kHz - 1GHz

Serial Number:	31IA-1	Test Date:	2025/5/14
Test Site:	Chamber10m	Test Mode:	Transmitting
Tester:	Willem Qiu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.2	Relative Humidity: (%)	47	ATM Pressure: (kPa)	101.2
----------------------	------	---------------------------	----	---------------------------	-------

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	A060611-1	2023/9/6	2026/9/5
Narda	Coaxial Attenuator	779-6dB	04269	2023/9/6	2026/9/5
Unknown	Coaxial Cable	C-NJNJ-50	C-1000-01	2024/7/1	2025/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-04	2024/7/1	2025/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-0530-01	2024/7/1	2025/6/30
Sonoma	Amplifier	310N	185914	2024/8/26	2025/8/25
R&S	EMI Test Receiver	ESCI	100224	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).

Test Data:

Please refer to the below plots.

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

Note: 802.11n20 5260MHz was tested.

9kHz~30MHz

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

Project No.: 2502S13359E-RF

Serial No.: 31IA-1

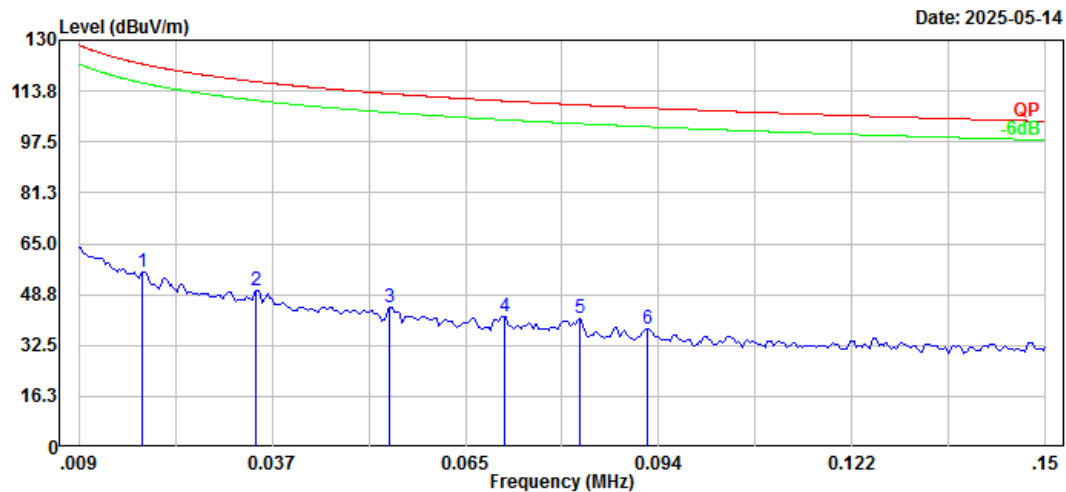
Polarization: Parallel

Tester: Willem Qiu

Test Mode: Transmitting

Note:

RBW:300Hz VBW:1kHz



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	0.018	5.57	50.51	56.08	122.35	66.27	Peak
2	0.035	3.43	46.67	50.10	116.74	66.64	Peak
3	0.054	1.29	43.30	44.59	112.89	68.30	Peak
4	0.071	1.30	40.41	41.71	110.57	68.86	Peak
5	0.082	2.42	38.56	40.98	109.32	68.34	Peak
6	0.092	1.11	36.81	37.92	108.34	70.42	Peak

Project No.: 2502S13359E-RF

Serial No.: 31IA-1

Polarization: Parallel

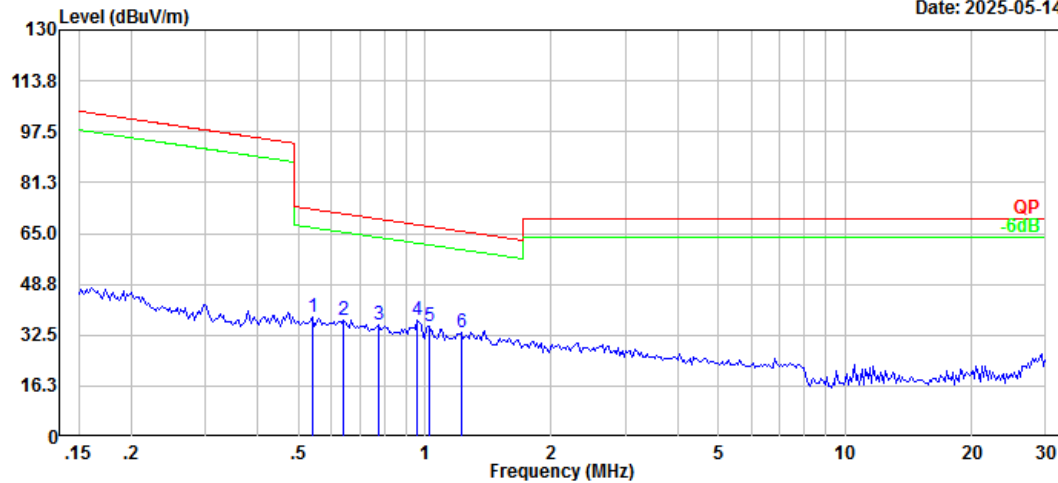
Tester: Willem Qiu

Test Mode: Transmitting

Note:

RBW:10kHz VBW:30kHz

Date: 2025-05-14



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	0.541	14.99	23.10	38.09	72.93	34.84	Peak
2	0.641	15.33	22.06	37.39	71.42	34.03	Peak
3	0.775	15.26	20.78	36.04	69.73	33.69	Peak
4	0.958	19.83	17.40	37.23	67.85	30.62	Peak
5	1.021	18.64	16.47	35.11	67.29	32.18	Peak
6	1.223	18.02	15.57	33.59	65.69	32.10	Peak

30MHz-1GHz

Project No.: 2502S13359E-RF

Serial No.: 31IA-1

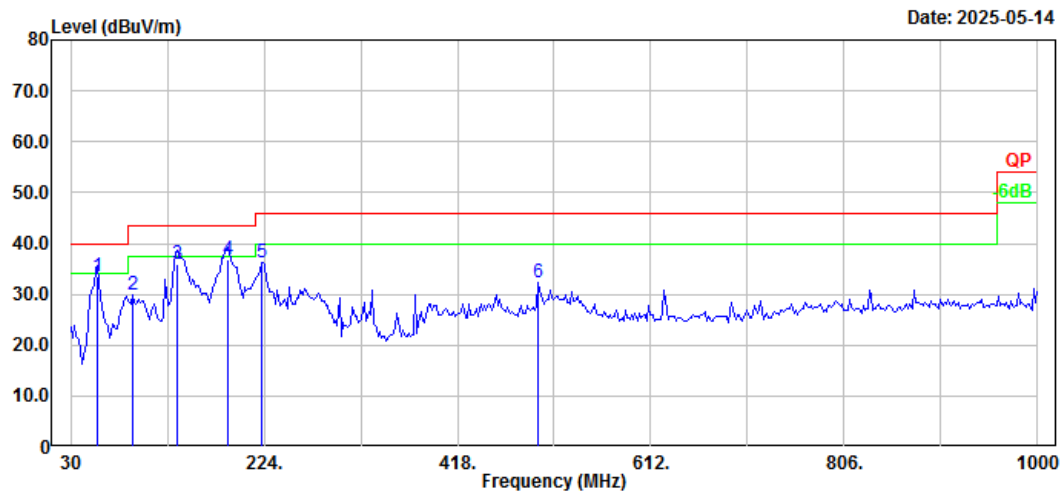
Polarization: Horizontal

Tester: Willem Qiu

Test Mode: Transmitting

Note:

RBW:100kHz VBW:300kHz



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	57.16	50.00	-16.59	33.41	40.00	6.59	QP
2	92.08	45.88	-16.08	29.80	43.50	13.70	Peak
3	136.70	46.30	-10.26	36.04	43.50	7.46	QP
4	187.14	49.10	-12.19	36.91	43.50	6.59	QP
5	222.06	48.60	-12.45	36.15	46.00	9.85	Peak
6	499.48	36.59	-4.29	32.30	46.00	13.70	Peak

Project No.: 2502S13359E-RF

Serial No.: 31IA-1

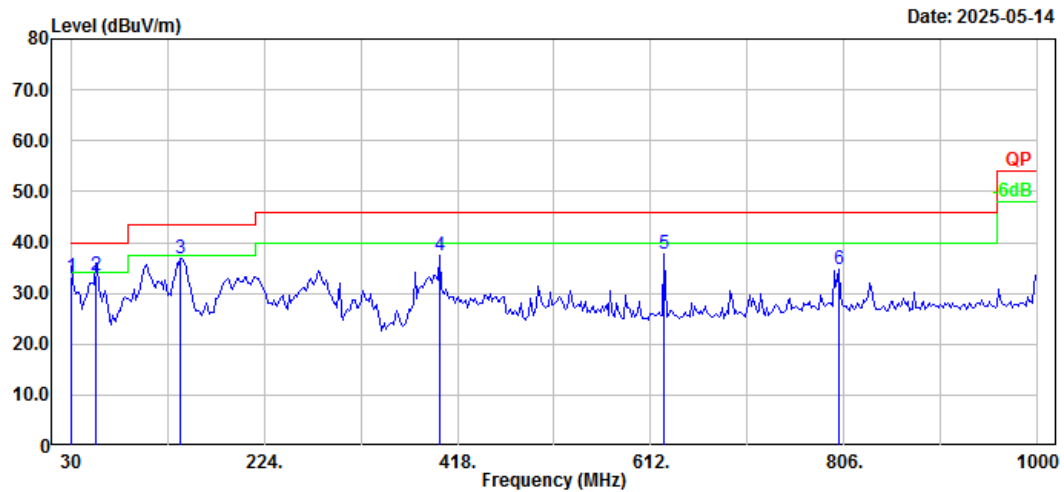
Polarization: Vertical

Tester: Willem Qiu

Test Mode: Transmitting

Note:

RBW:100kHz VBW:300kHz



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	30.00	37.00	-3.80	33.20	40.00	6.80	QP
2	55.22	50.10	-16.55	33.55	40.00	6.45	QP
3	140.58	47.26	-10.49	36.77	43.50	6.73	Peak
4	400.54	44.28	-6.96	37.32	46.00	8.68	Peak
5	625.58	40.03	-2.38	37.65	46.00	8.35	Peak
6	800.18	34.40	0.46	34.86	46.00	11.14	Peak

2) 1-40GHz:

Serial Number:	31IA-1	Test Date:	2025/5/24~2025/5/25
Test Site:	Chamber B	Test Mode:	Transmitting
Tester:	Leo Xiao, Alan Xie	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.1~27	Relative Humidity: (%)	36~41	ATM Pressure: (kPa)	100.9~101.4
----------------------	---------	------------------------------	-------	---------------------------	-------------

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	2024/11/17	2025/11/16
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	2025/4/11	2026/4/10
AH	Preamplifier	PAM-1840VH	191	2024/9/5	2025/9/4
R&S	Spectrum Analyzer	FSV40	101589	2024/9/5	2025/9/4
Audix	Test Software	E3	191218 V9	N/A	N/A
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).*

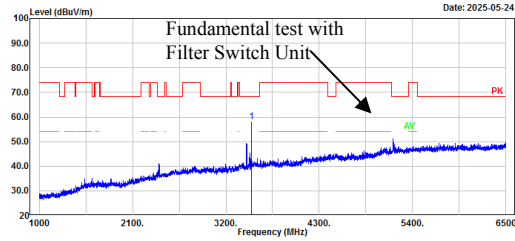
Test Data:

Please refer to the below plots.

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

**1-18GHz:
5150-5250MHz:****802.11a, Low Channel, Horizontal**

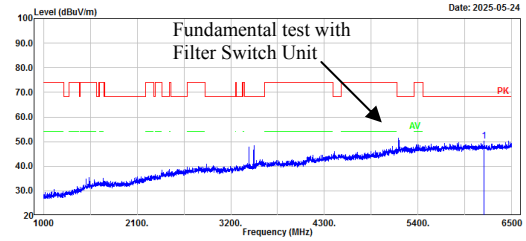
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a_U-NII-1 low channel 5180MHz
Peak: RBW:1MHz, VBW:30Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	3498.10	64.83	-6.68	58.15	68.20	10.05	Peak

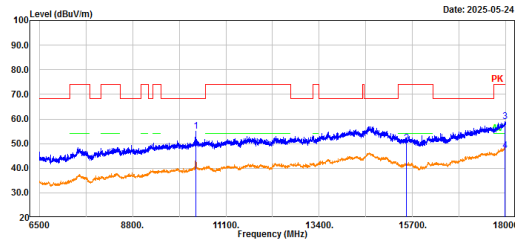
802.11a, Low Channel, Vertical

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a_U-NII-1 low channel 5180MHz
Peak: RBW:1MHz, VBW:30Hz



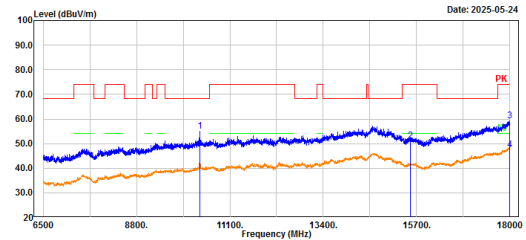
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	6172.20	50.60	-0.42	50.18	68.20	18.02	Peak

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a_U-NII-1 low channel 5180MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	10368.00	52.10	2.79	54.89	68.20	13.31	Peak
2	15540.00	46.50	3.56	50.06	74.00	23.94	Peak
3	17979.30	47.52	11.37	58.89	74.00	15.11	Peak
4	17979.30	35.83	11.37	47.20	54.00	6.80	Average

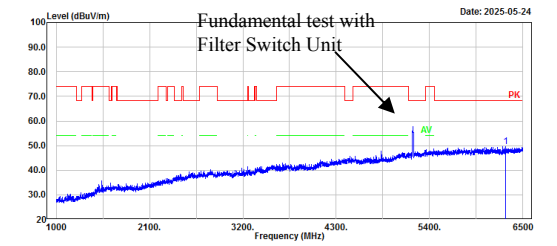
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a_U-NII-1 low channel 5180MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	10368.00	52.20	2.79	54.99	68.20	13.21	Peak
2	15540.00	47.50	3.56	51.06	74.00	22.94	Peak
3	17995.40	47.76	11.49	59.25	74.00	14.75	Peak
4	17995.40	35.92	11.49	47.41	54.00	6.59	Average

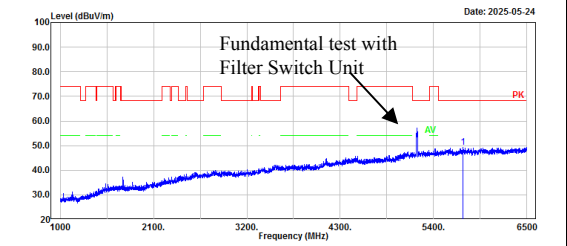
802.11a, Middle Channel, Horizontal

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a_U-NII-1 middle channel 5200MHz
Peak: RBW:1MHz, VBW:30Hz

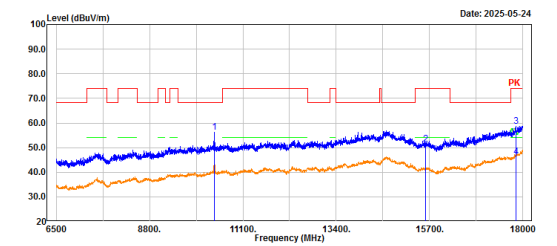


802.11a, Middle Channel, Vertical

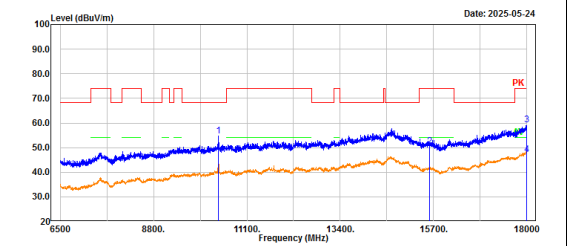
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a_U-NII-1 middle channel 5200MHz
Peak: RBW:1MHz, VBW:30Hz



Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a_U-NII-1 middle channel 5200MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz

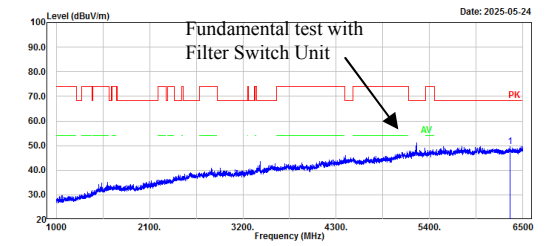


Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a_U-NII-1 middle channel 5200MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



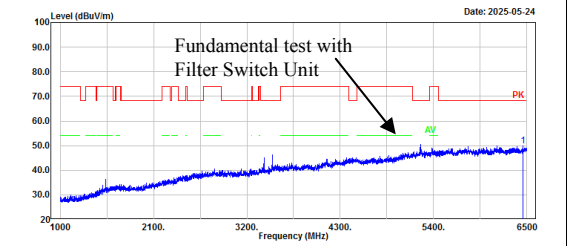
802.11a, High Channel, Horizontal

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a_U-NII-1 high channel 5240MHz
Peak: RBW:1MHz, VBW:30Hz

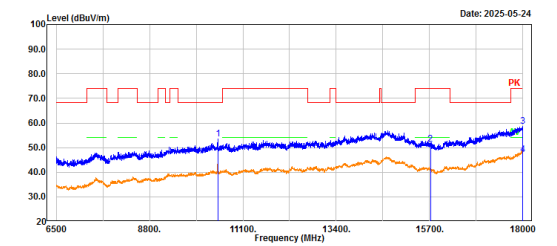


802.11a, High Channel, Vertical

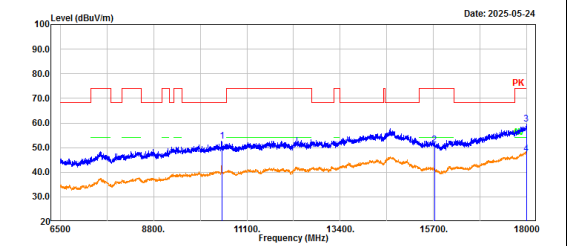
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a_U-NII-1 high channel 5240MHz
Peak: RBW:1MHz, VBW:30Hz



Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a_U-NII-1 high channel 5240MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz

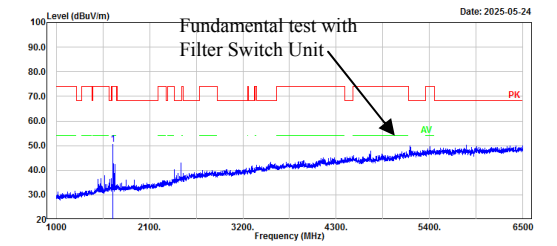


Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a_U-NII-1 high channel 5240MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



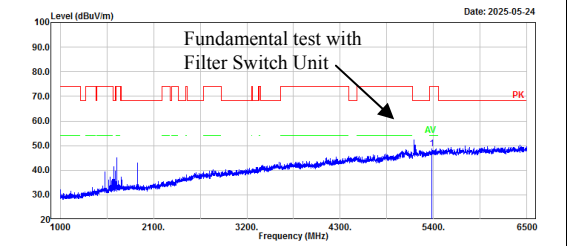
802.11n20, Low Channel, Horizontal

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-1 low channel 5180MHz
Peak: RBW:1MHz, VBW:30Hz

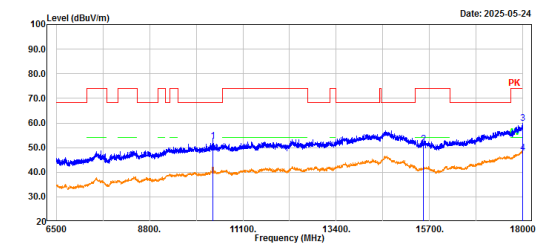


802.11n20, Low Channel, Vertical

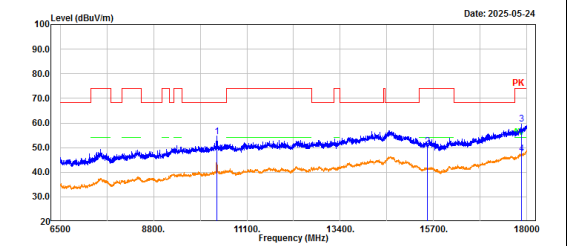
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-1 low channel 5180MHz
Peak: RBW:1MHz, VBW:30Hz



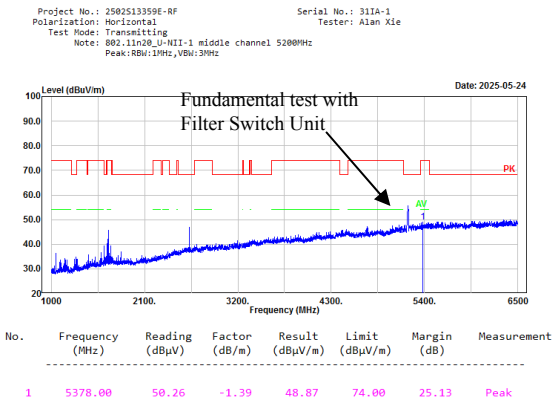
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-1 low channel 5180MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



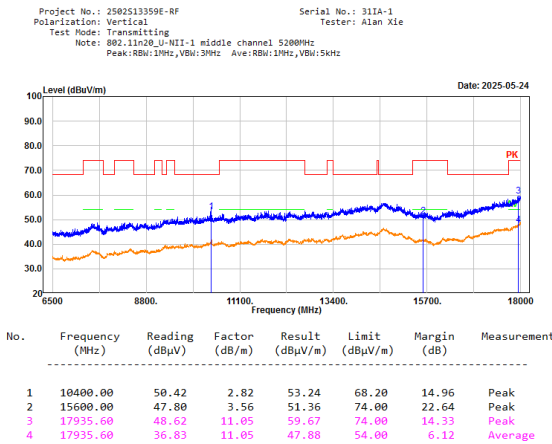
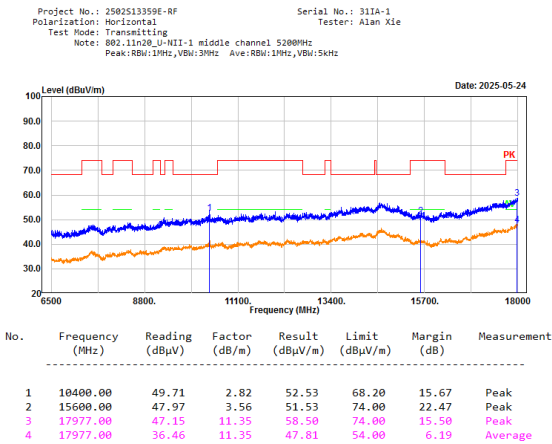
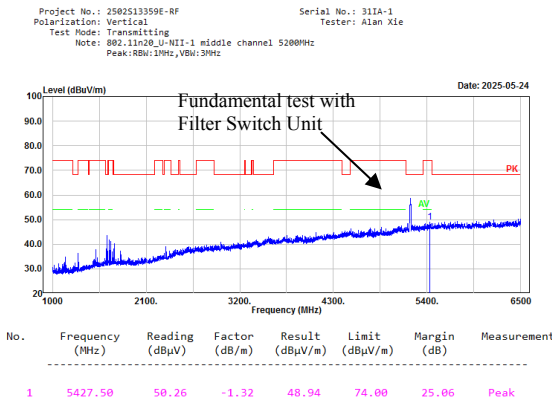
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-1 low channel 5180MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



802.11n20, Middle Channel, Horizontal

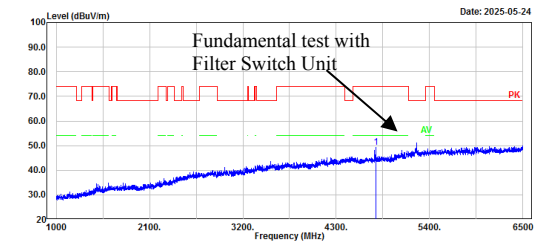


802.11n20, Middle Channel, Vertical



802.11n20, High Channel, Horizontal

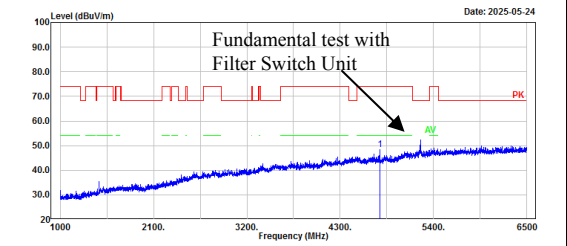
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n20_U-NII-1 high channel 5240MHz
Peak: RBW:1MHz, VBW:30Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	4768.60	53.21	-4.01	49.20	74.00	24.80	Peak

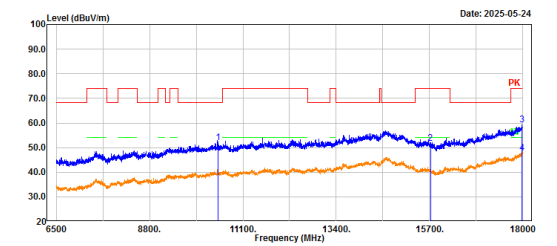
802.11n20, High Channel, Vertical

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n20_U-NII-1 high channel 5240MHz
Peak: RBW:1MHz, VBW:30Hz



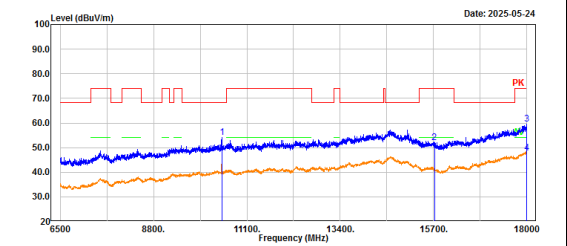
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	4768.60	52.27	-4.01	48.26	74.00	25.74	Peak

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n20_U-NII-1 high channel 5240MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	10480.00	49.16	2.93	52.09	68.20	16.11	Peak
2	15720.00	48.20	3.43	51.63	74.00	22.37	Peak
3	17970.10	48.00	11.29	59.29	74.00	14.71	Peak
4	17970.10	36.36	11.29	47.65	54.00	6.35	Average

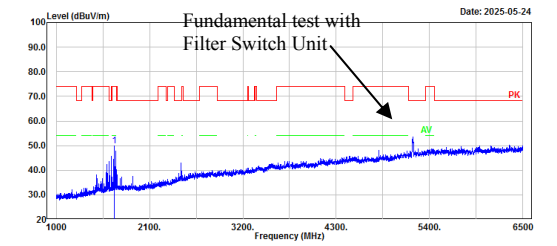
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n20_U-NII-1 high channel 5240MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	10480.00	51.15	2.93	54.08	68.20	14.13	Peak
2	15720.00	48.55	3.43	51.98	74.00	22.02	Peak
3	17995.40	48.04	11.49	59.53	74.00	14.47	Peak
4	17995.40	36.30	11.49	47.79	54.00	6.21	Average

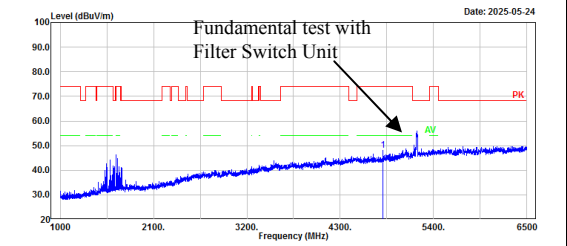
802.11n40, Low Channel, Horizontal

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-1 low channel 5190MHz
Peak: RBW:1MHz, VBW:30Hz

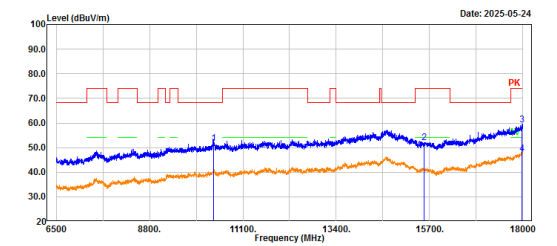


802.11n40, Low Channel, Vertical

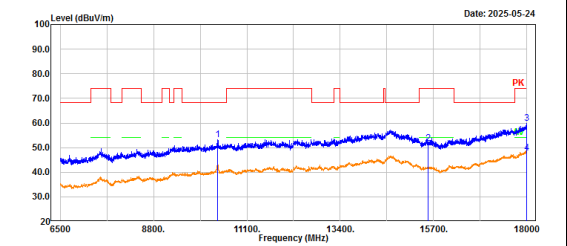
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-1 low channel 5190MHz
Peak: RBW:1MHz, VBW:30Hz



Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-1 low channel 5190MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz

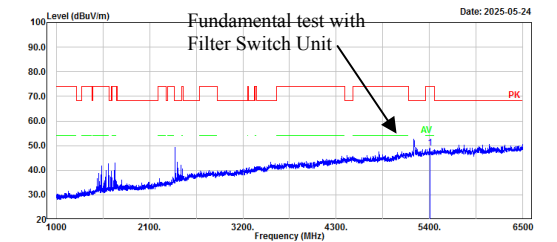


Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-1 low channel 5190MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



802.11n40, High Channel, Horizontal

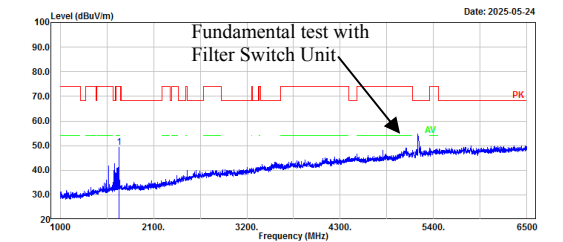
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-1 high channel 5230MHz
Peak: RBW:1MHz, VBW:30Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5405.50	50.33	-1.34	48.99	74.00	25.01	Peak

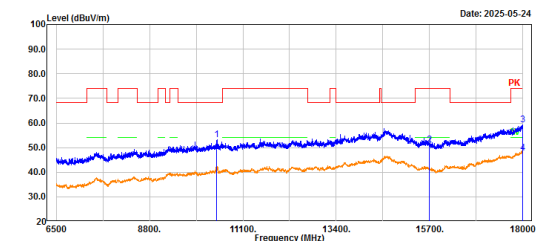
802.11n40, High Channel, Vertical

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-1 high channel 5230MHz
Peak: RBW:1MHz, VBW:30Hz



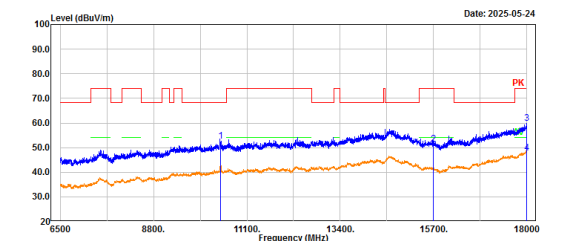
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	1689.70	62.49	-13.20	49.29	74.00	24.71	Peak

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-1 high channel 5230MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	10460.00	50.18	2.92	53.10	68.20	15.10	Peak
2	15690.00	47.75	3.45	51.20	74.00	22.80	Peak
3	17990.80	47.73	11.45	59.18	74.00	14.82	Peak
4	17998.80	36.36	11.45	47.81	54.00	6.19	Average

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-1 high channel 5230MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz

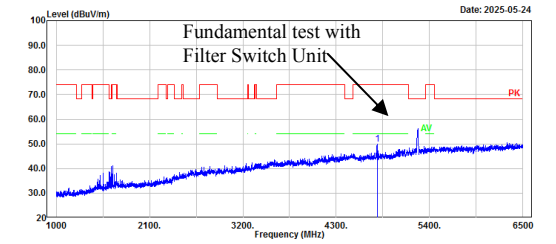


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	10460.00	49.74	2.92	52.66	68.20	15.54	Peak
2	15690.00	47.83	3.45	51.28	74.00	22.72	Peak
3	17997.70	48.19	11.51	59.70	74.00	14.30	Peak
4	17997.70	36.40	11.51	47.91	54.00	6.09	Average

5250-5350MHz:

802.11a, Low Channel, Horizontal

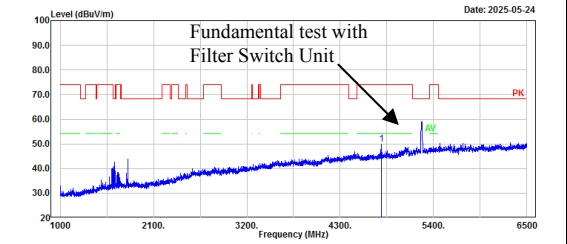
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a_U-NII-2A low channel 5260MHz
Peak: RBW:1MHz, VBW:30Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	4787.30	53.90	-3.99	49.91	74.00	24.09	Peak

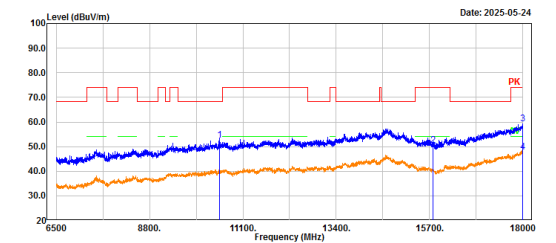
802.11a, Low Channel, Vertical

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a_U-NII-2A low channel 5260MHz
Peak: RBW:1MHz, VBW:30Hz



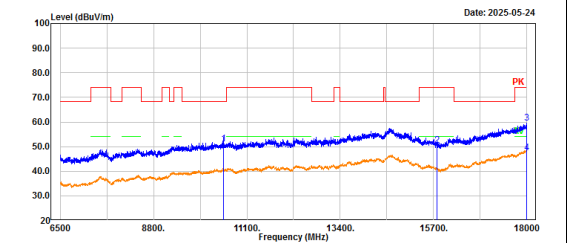
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	4787.30	53.73	-3.99	49.74	74.00	24.26	Peak

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a_U-NII-2A low channel 5260MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	10520.00	49.84	2.90	52.74	68.20	15.46	Peak
2	15780.00	47.10	3.45	50.55	74.00	23.45	Peak
3	17995.40	47.79	11.49	59.28	74.00	14.72	Peak
4	17995.40	36.37	11.49	47.86	54.00	6.14	Average

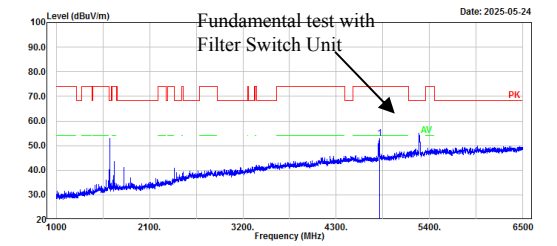
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a_U-NII-2A low channel 5260MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	10520.00	48.33	2.90	51.23	68.20	16.97	Peak
2	15780.00	46.95	3.45	50.40	74.00	23.60	Peak
3	17986.20	48.25	11.41	59.66	74.00	14.34	Peak
4	17986.20	36.21	11.41	47.62	54.00	6.38	Average

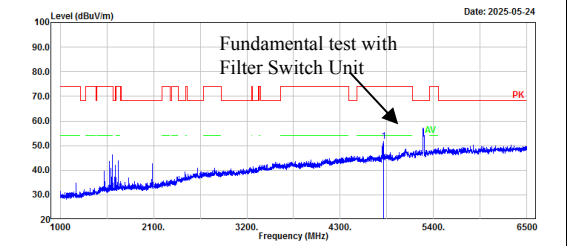
802.11a, Middle Channel, Horizontal

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a_U-NII-2A middle channel 5280MHz
Peak: RBW:1MHz, VBW:30Hz

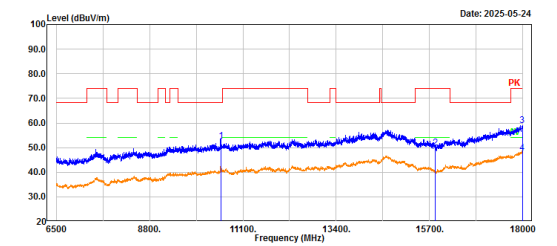


802.11a, Middle Channel, Vertical

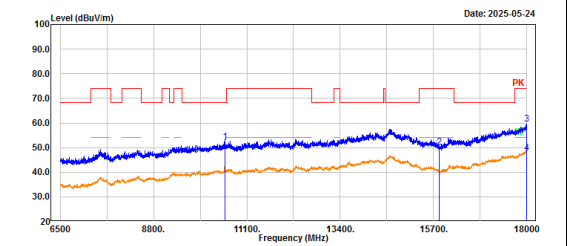
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a_U-NII-2A middle channel 5280MHz
Peak: RBW:1MHz, VBW:30Hz



Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a_U-NII-2A middle channel 5280MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz

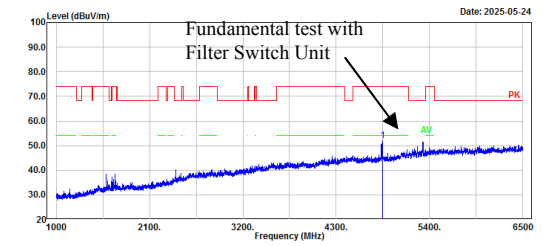


Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a_U-NII-2A middle channel 5280MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



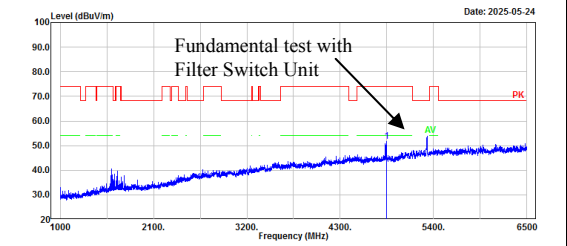
802.11a, High Channel, Horizontal

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a.U-NII-2A high channel 5320MHz
Peak: RBW:1MHz, VBW:3MHz

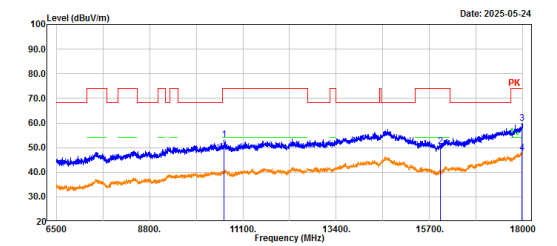


802.11a, High Channel, Vertical

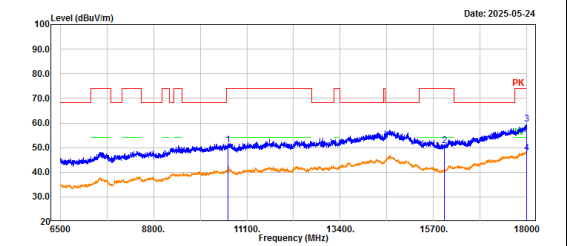
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a.U-NII-2A high channel 5320MHz
Peak: RBW:1MHz, VBW:3MHz



Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a.U-NII-2A high channel 5320MHz
Peak: RBW:1MHz, VBW:3MHz Ave: RBW:1MHz, VBW:5kHz

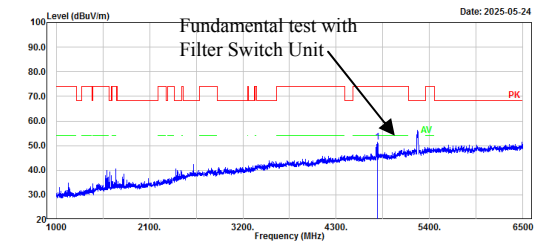


Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a.U-NII-2A high channel 5320MHz
Peak: RBW:1MHz, VBW:3MHz Ave: RBW:1MHz, VBW:5kHz



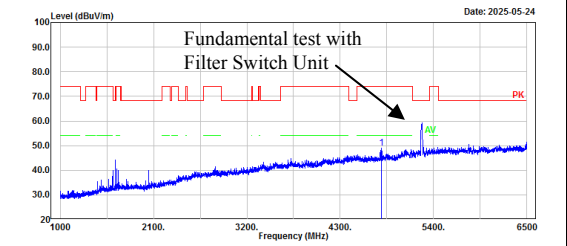
802.11n20, Low Channel, Horizontal

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-2A low channel 5260MHz
Peak: RBW:1MHz, VBW:3MHz

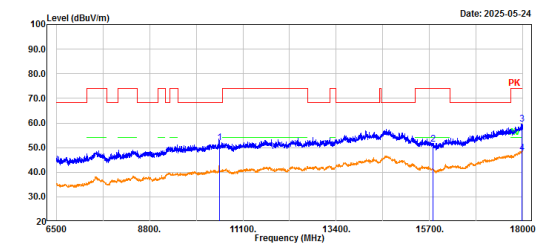


802.11n20, Low Channel, Vertical

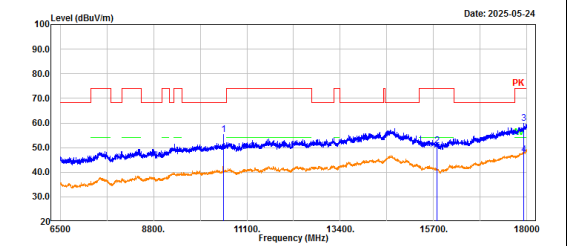
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-2A low channel 5260MHz
Peak: RBW:1MHz, VBW:3MHz



Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-2A low channel 5260MHz
Peak: RBW:1MHz, VBW:3MHz Ave: RBW:1MHz, VBW:5kHz



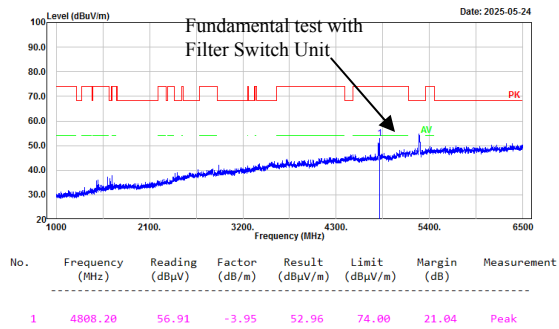
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-2A low channel 5260MHz
Peak: RBW:1MHz, VBW:3MHz Ave: RBW:1MHz, VBW:5kHz



802.11n20, Middle Channel, Horizontal

Project No.: 2502S13359E-RF
Polarization: Horizontal
Test Mode: Transmitting
Note: 802.11n20, U-NII-2A middle channel 5280MHz
Peak: RBW:1MHz, VBW:3MHz

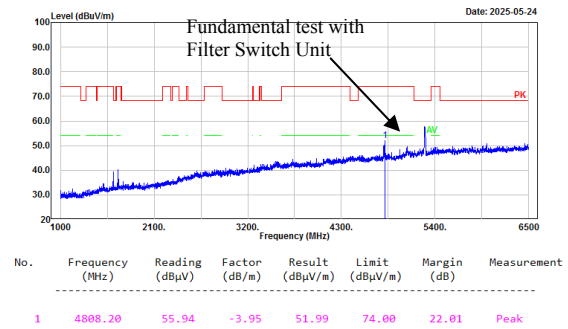
Serial No.: 311A-1
Tester: Leo Xiao



802.11n20, Middle Channel, Vertical

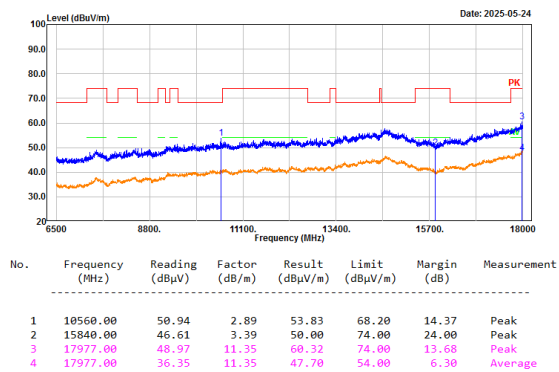
Project No.: 2502S13359E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: 802.11n20, U-NII-2A middle channel 5280MHz
Peak: RBW:1MHz, VBW:3MHz

Serial No.: 311A-1
Tester: Leo Xiao



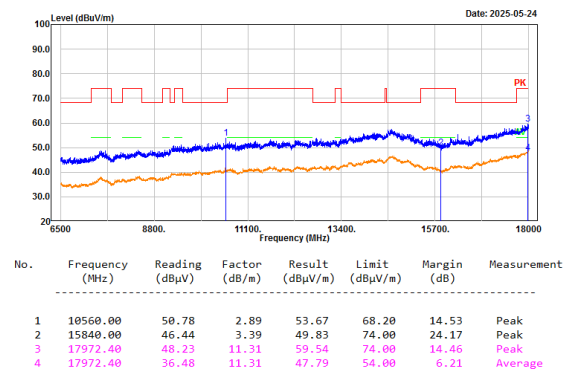
Project No.: 2502S13359E-RF
Polarization: Horizontal
Test Mode: Transmitting
Note: 802.11n20, U-NII-2A middle channel 5280MHz
Peak: RBW:1MHz, VBW:3MHz Ave: RBW:1MHz, VBW:5kHz

Serial No.: 311A-1
Tester: Leo Xiao



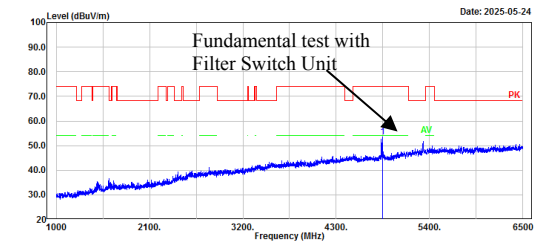
Project No.: 2502S13359E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: 802.11n20, U-NII-2A middle channel 5280MHz
Peak: RBW:1MHz, VBW:3MHz Ave: RBW:1MHz, VBW:5kHz

Serial No.: 311A-1
Tester: Leo Xiao



802.11n20, High Channel, Horizontal

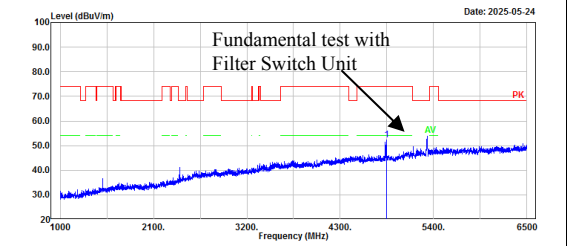
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-2A high channel 5320MHz
Peak: RBW:1MHz, VBW:30Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	4847.80	57.29	-3.81	53.48	74.00	20.52	Peak

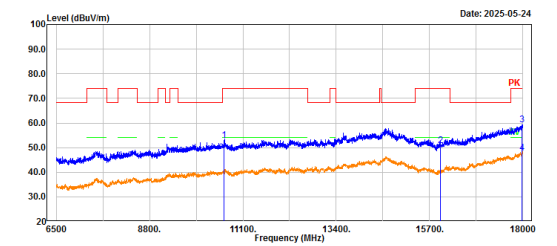
802.11n20, High Channel, Vertical

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-2A high channel 5320MHz
Peak: RBW:1MHz, VBW:30Hz



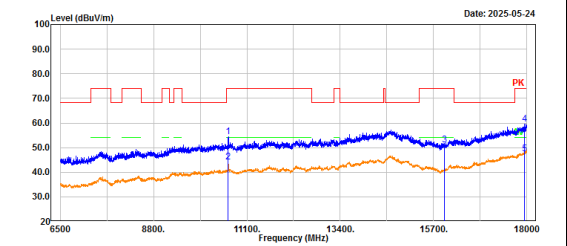
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	4847.80	55.99	-3.81	52.18	74.00	21.82	Peak

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-2A high channel 5320MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	10640.00	49.98	3.06	53.04	74.00	20.96	Peak
2	15960.00	47.23	3.59	50.82	74.00	23.18	Peak
3	17981.60	47.99	11.39	59.38	74.00	14.62	Peak
4	17981.60	36.32	11.39	47.71	54.00	6.29	Average

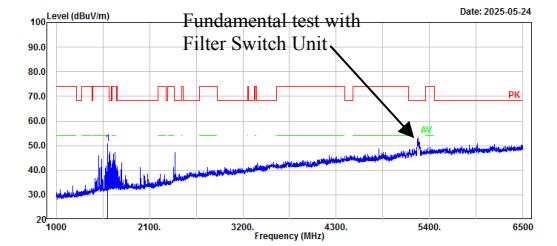
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-2A high channel 5320MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	10640.00	51.21	3.06	54.27	74.00	19.73	Peak
2	10640.00	41.23	3.06	44.29	54.00	9.71	Average
3	15960.00	47.64	3.59	51.23	74.00	22.77	Peak
4	17942.50	48.53	11.10	59.63	74.00	14.37	Peak
5	17942.50	36.38	11.10	47.48	54.00	6.52	Average

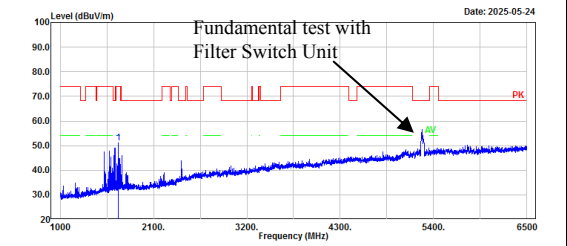
802.11n40, Low Channel, Horizontal

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-2A low channel 5270MHz
Peak: RBW:1MHz, VBW:3MHz

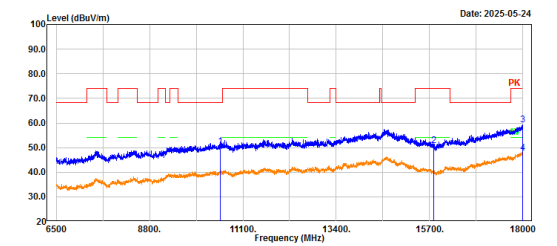


802.11n40, Low Channel, Vertical

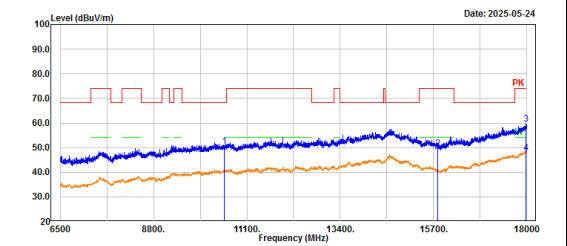
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-2A low channel 5270MHz
Peak: RBW:1MHz, VBW:3MHz



Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-2A low channel 5270MHz
Peak: RBW:1MHz, VBW:3MHz Ave: RBW:1MHz, VBW:5kHz

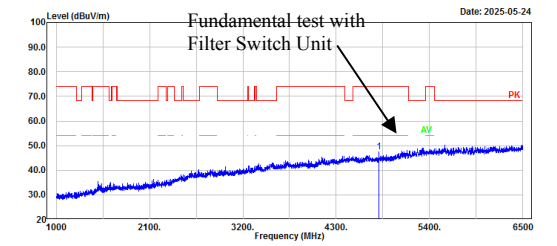


Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-2A low channel 5270MHz
Peak: RBW:1MHz, VBW:3MHz Ave: RBW:1MHz, VBW:5kHz



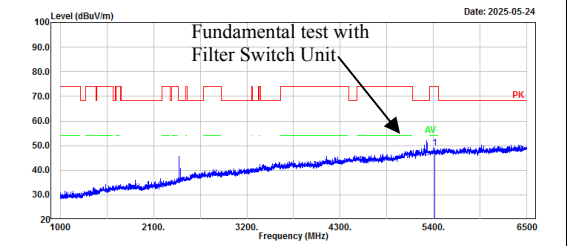
802.11n40, High Channel, Horizontal

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-2A high channel 5310MHz
Peak: RBW:1MHz, VBW:3MHz

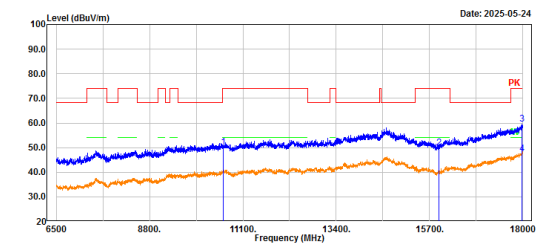


802.11n40, High Channel, Vertical

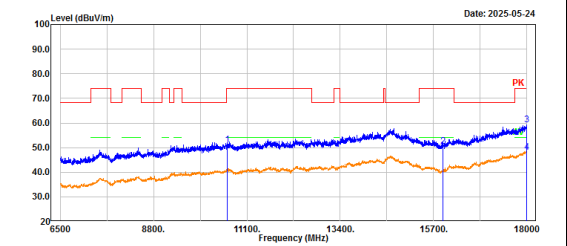
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-2A high channel 5310MHz
Peak: RBW:1MHz, VBW:3MHz



Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-2A high channel 5310MHz
Peak: RBW:1MHz, VBW:3MHz Ave: RBW:1MHz, VBW:5kHz

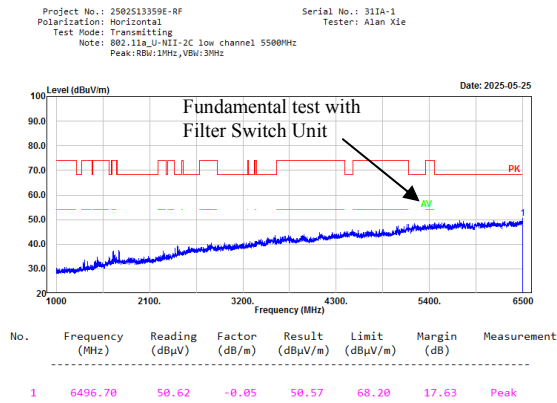


Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-2A high channel 5310MHz
Peak: RBW:1MHz, VBW:3MHz Ave: RBW:1MHz, VBW:5kHz

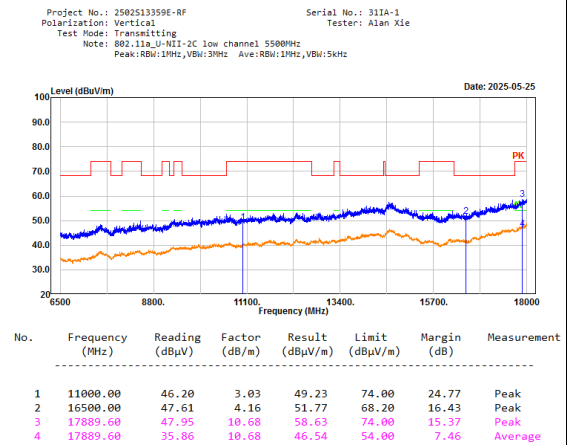
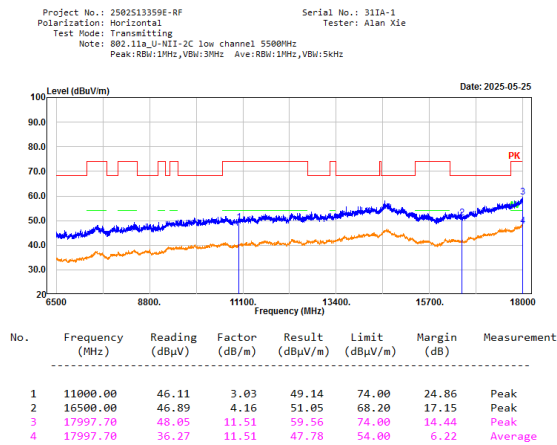
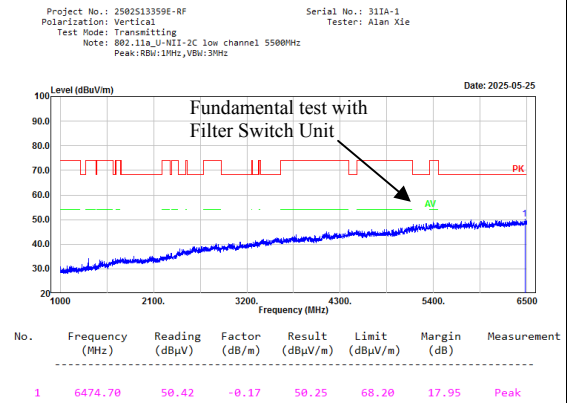


5470-5725MHz:

802.11a, Low Channel, Horizontal

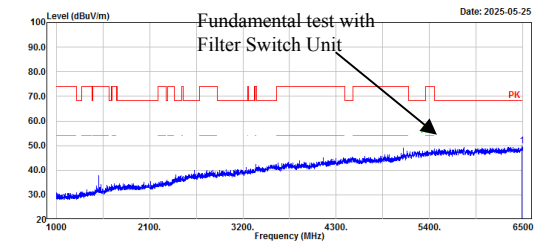


802.11a, Low Channel, Vertical



802.11a, Middle Channel, Horizontal

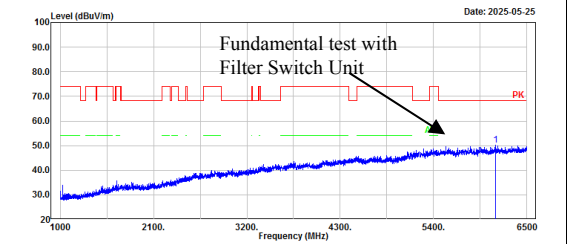
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a.U-NII-2C middle channel 5580MHz
Peak: RBW:1MHz, VBW:30Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	6489.00	49.90	-0.11	49.79	68.20	18.41	Peak

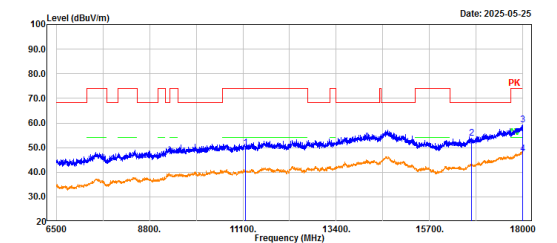
802.11a, Middle Channel, Vertical

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a.U-NII-2C middle channel 5580MHz
Peak: RBW:1MHz, VBW:30Hz



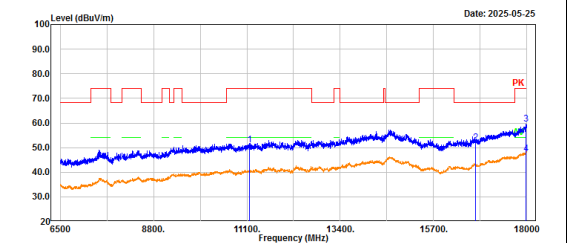
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	6131.50	50.80	-0.58	50.22	68.20	17.98	Peak

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a.U-NII-2C middle channel 5580MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11160.00	46.56	3.44	50.00	74.00	24.00	Peak
2	16740.00	48.48	5.45	53.93	68.20	14.27	Peak
3	17990.80	47.68	11.45	59.13	74.00	14.87	Peak
4	17990.80	35.92	11.45	47.37	54.00	6.63	Average

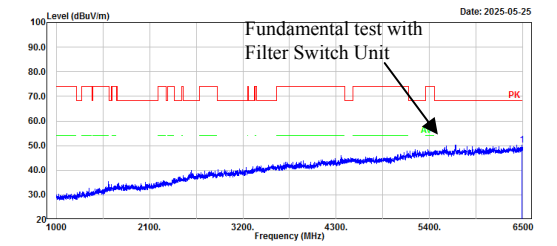
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a.U-NII-2C middle channel 5580MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11160.00	47.59	3.44	51.03	74.00	22.97	Peak
2	16740.00	46.47	5.45	51.92	68.20	16.28	Peak
3	17979.30	48.18	11.37	59.55	74.00	14.45	Peak
4	17979.30	36.19	11.37	47.56	54.00	6.44	Average

802.11a, High Channel, Horizontal

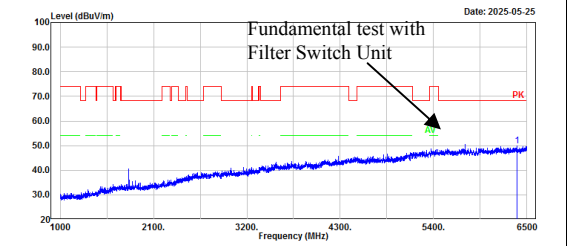
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a-U-NII-2C high channel 5700MHz
Peak: RBW:1MHz, VBW:30Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	6487.90	50.23	-0.12	50.11	68.20	18.09	Peak

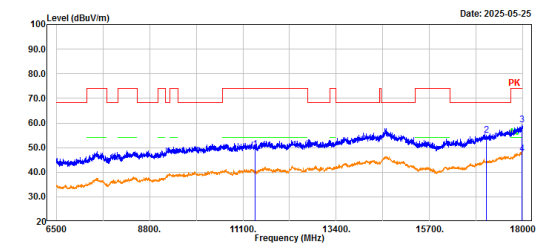
802.11a, High Channel, Vertical

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a-U-NII-2C high channel 5700MHz
Peak: RBW:1MHz, VBW:30Hz



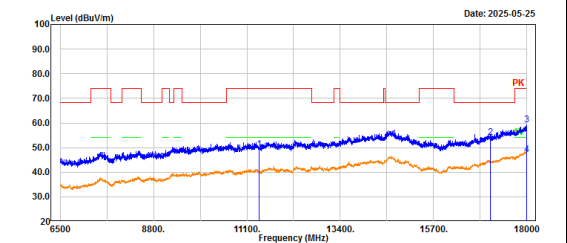
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	6382.30	50.30	-0.27	50.03	68.20	18.17	Peak

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a-U-NII-2C high channel 5700MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11400.00	45.13	4.19	49.32	74.00	24.68	Peak
2	17100.00	47.86	7.13	54.99	68.20	13.21	Peak
3	17967.80	48.08	11.28	59.36	74.00	14.64	Peak
4	17967.80	36.23	11.28	47.51	54.00	6.49	Average

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11a-U-NII-2C high channel 5700MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11400.00	45.16	4.19	49.35	74.00	24.65	Peak
2	17100.00	47.12	7.13	54.25	68.20	13.95	Peak
3	17993.10	47.82	11.48	59.30	74.00	14.70	Peak
4	17993.10	35.81	11.48	47.29	54.00	6.71	Average

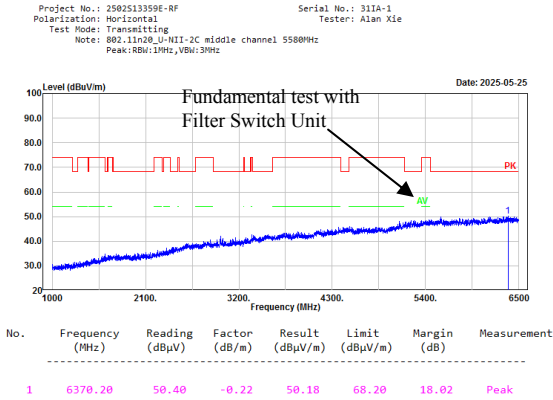
802.11n20, Low Channel, Horizontal							
Project No.: 2502S13359E-RF Polarization: Horizontal Test Mode: Transmitting Note: 802.11n20_U-NII-2C low channel 5500MHz Peak:RBW:1MHz,VBW:30Hz				Serial No.: 311A-1 Tester: Alan Xie			
Date: 2025-05-25							
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	6201.90	50.91	-0.49	50.42	68.20	17.78	Peak

802.11n20, Low Channel, Vertical							
Project No.: 2502S13359E-RF Polarization: Vertical Test Mode: Transmitting Note: 802.11n20_U-NII-2C low channel 5500MHz Peak:RBW:1MHz,VBW:30Hz				Serial No.: 311A-1 Tester: Alan Xie			
Date: 2025-05-25							
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	6495.60	49.80	-0.06	49.74	68.20	18.46	Peak

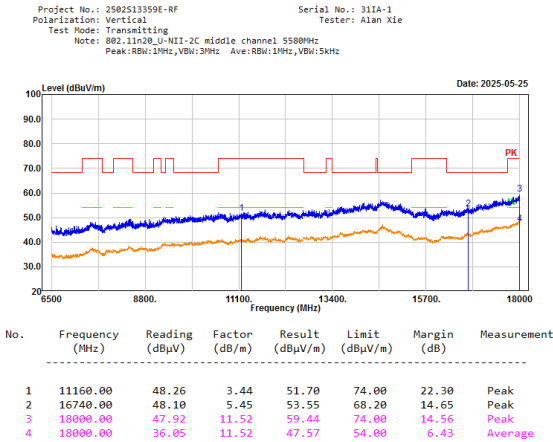
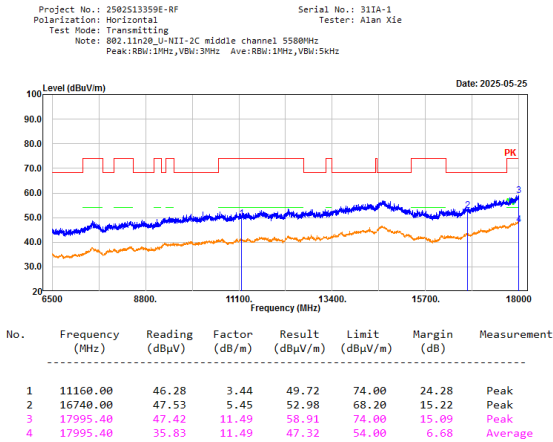
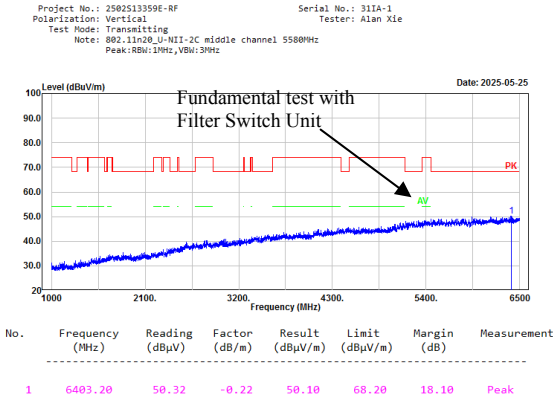
Project No.: 2502S13359E-RF Polarization: Horizontal Test Mode: Transmitting Note: 802.11n20_U-NII-2C low channel 5500MHz Peak:RBW:1MHz,VBW:30Hz Ave:RBW:1MHz,VBW:5kHz				Serial No.: 311A-1 Tester: Alan Xie			
Date: 2025-05-25							
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11000.00	46.66	3.03	49.69	74.00	24.31	Peak
2	16500.00	46.73	4.16	50.89	68.20	17.31	Peak
3	17988.50	47.18	11.43	58.61	74.00	15.39	Peak
4	17988.50	35.97	11.43	47.40	54.00	6.60	Average

Project No.: 2502S13359E-RF Polarization: Vertical Test Mode: Transmitting Note: 802.11n20_U-NII-2C low channel 5500MHz Peak:RBW:1MHz,VBW:30Hz Ave:RBW:1MHz,VBW:5kHz				Serial No.: 311A-1 Tester: Alan Xie			
Date: 2025-05-25							
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11000.00	47.35	3.03	50.38	74.00	23.62	Peak
2	16500.00	46.84	4.16	51.00	68.20	17.20	Peak
3	17983.90	48.20	11.40	59.60	74.00	14.40	Peak
4	17983.90	36.27	11.40	47.67	54.00	6.33	Average

802.11n20, Middle Channel, Horizontal

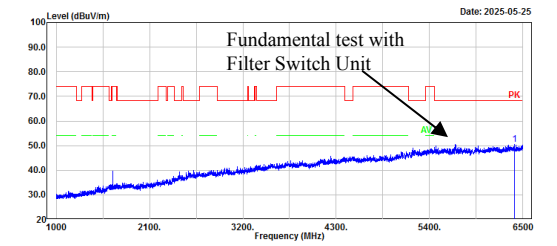


802.11n20, Middle Channel, Vertical



802.11n20, High Channel, Horizontal

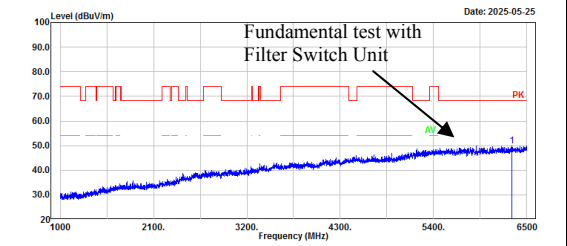
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n20_U-NII-2C high channel 5700MHz
Peak: RBW:1MHz, VBW:30Hz



No.	Frequency (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	6403.20	50.62	-0.22	50.40	68.20	17.80	Peak

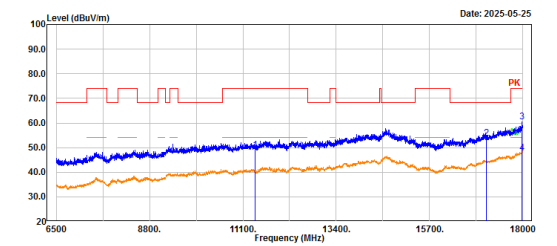
802.11n20, High Channel, Vertical

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n20_U-NII-2C high channel 5700MHz
Peak: RBW:1MHz, VBW:30Hz



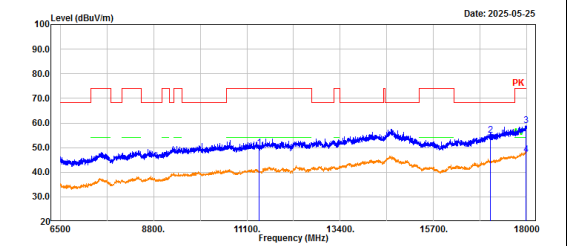
No.	Frequency (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	6321.80	50.10	-0.32	49.78	68.20	18.42	Peak

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n20_U-NII-2C high channel 5700MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11400.00	44.91	4.19	49.10	74.00	24.90	Peak
2	17100.00	46.57	7.13	53.70	68.20	14.50	Peak
3	17981.60	49.13	11.39	60.52	74.00	13.48	Peak
4	17981.60	36.52	11.39	47.91	54.00	6.09	Average

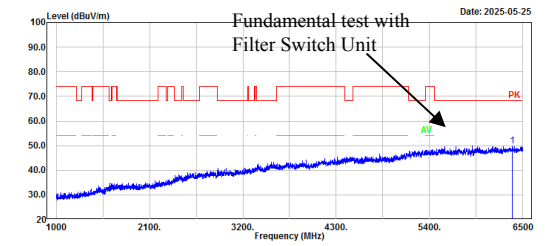
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n20_U-NII-2C high channel 5700MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11400.00	45.77	4.19	49.96	74.00	24.04	Peak
2	17100.00	47.83	7.13	54.96	68.20	13.24	Peak
3	17981.60	47.67	11.39	59.06	74.00	14.94	Peak
4	17981.60	35.75	11.39	47.14	54.00	6.86	Average

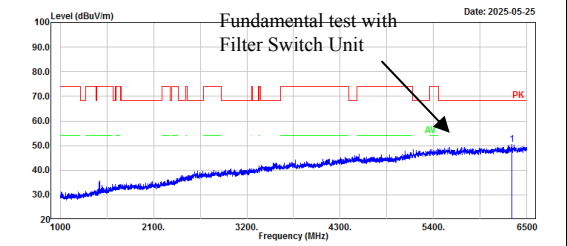
802.11n40, Low Channel, Horizontal

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n40_U-NII-2C low channel 5510MHz
Peak: RBW:1MHz, VBW:30Hz

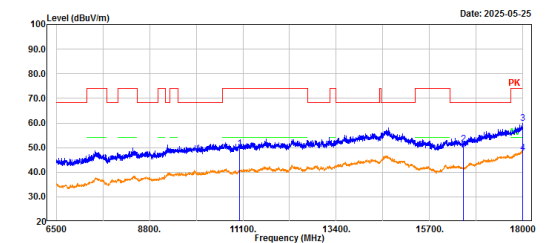


802.11n40, Low Channel, Vertical

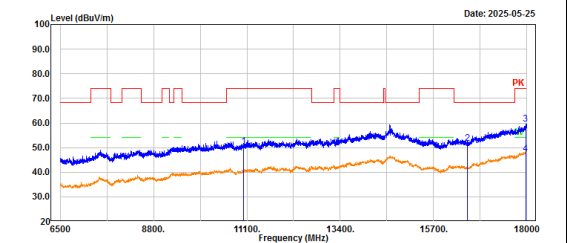
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n40_U-NII-2C low channel 5510MHz
Peak: RBW:1MHz, VBW:30Hz



Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n40_U-NII-2C low channel 5510MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz

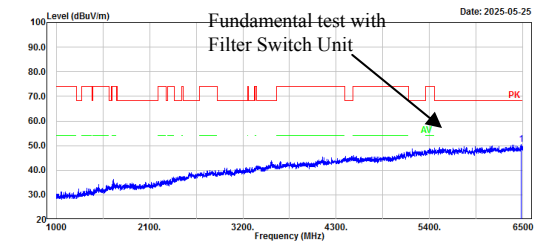


Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n40_U-NII-2C low channel 5510MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



802.11n40, Middle Channel, Horizontal

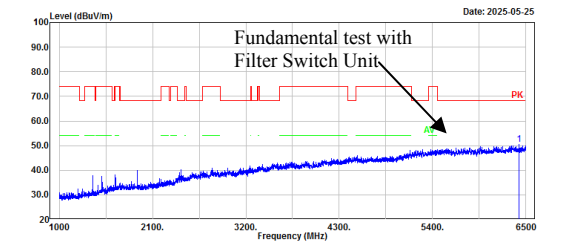
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n40_U-NII-2C middle channel 5550MHz
Peak: RBW:1MHz, VBW:30Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	6476.90	50.59	-0.15	50.44	68.20	17.76	Peak

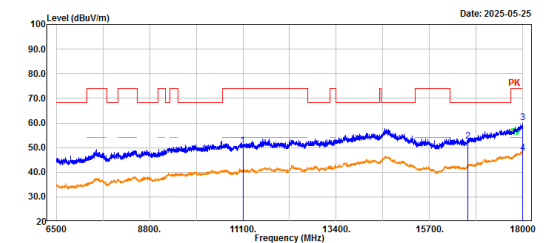
802.11n40, Middle Channel, Vertical

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n40_U-NII-2C middle channel 5550MHz
Peak: RBW:1MHz, VBW:30Hz



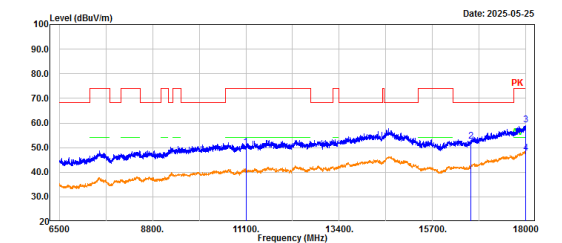
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	6420.00	50.69	-0.18	50.51	68.20	17.69	Peak

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n40_U-NII-2C middle channel 5550MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11100.00	47.54	3.31	50.85	74.00	23.15	Peak
2	16650.00	47.48	5.03	52.51	68.20	15.69	Peak
3	18000.00	48.54	11.52	60.06	74.00	13.94	Peak
4	18000.00	36.15	11.52	47.67	54.00	6.33	Average

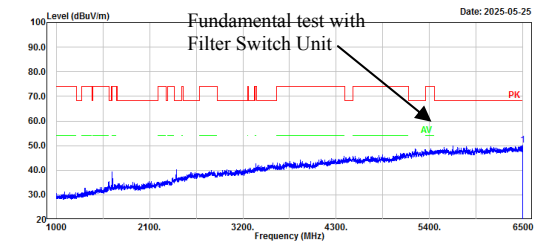
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n40_U-NII-2C middle channel 5550MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11100.00	46.82	3.31	50.13	74.00	23.87	Peak
2	16650.00	47.53	5.03	52.56	68.20	15.64	Peak
3	18000.00	47.74	11.52	59.26	74.00	14.74	Peak
4	18000.00	36.38	11.52	47.90	54.00	6.10	Average

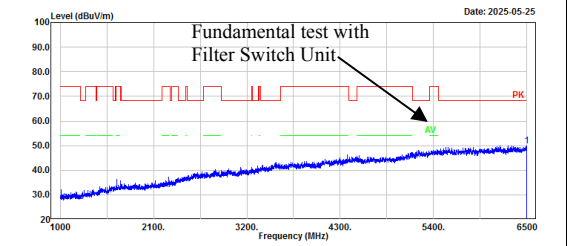
802.11n40, High Channel, Horizontal

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n40_U-NII-2C high channel 5670MHz
Peak: RBW:1MHz, VBW:30Hz

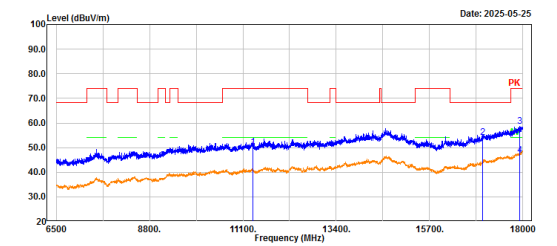


802.11n40, High Channel, Vertical

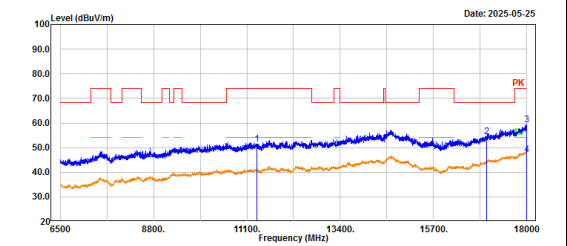
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n40_U-NII-2C high channel 5670MHz
Peak: RBW:1MHz, VBW:30Hz



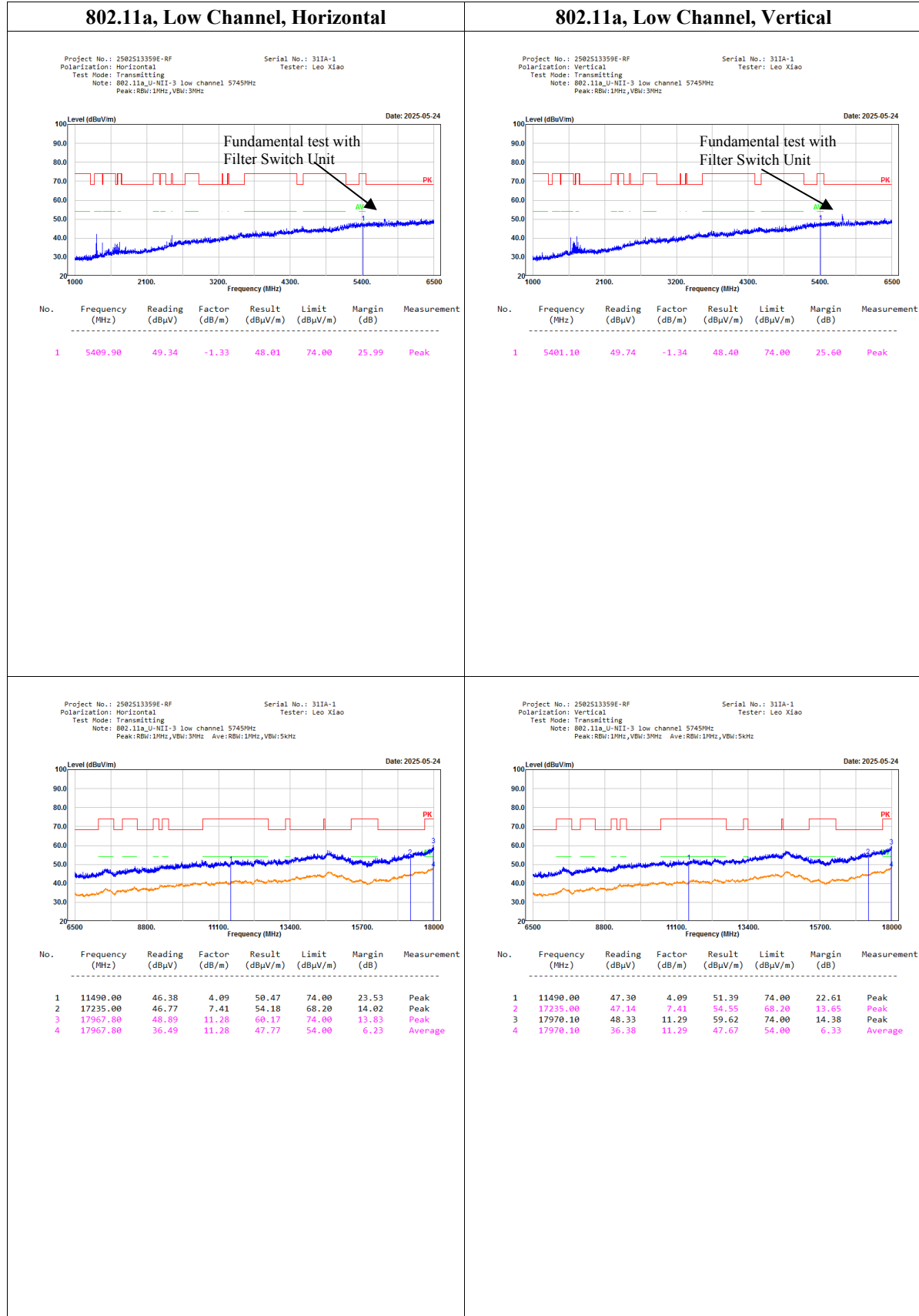
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n40_U-NII-2C high channel 5670MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n40_U-NII-2C high channel 5670MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz

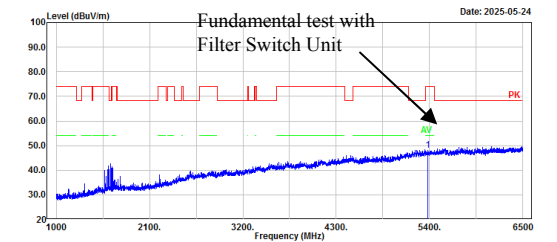


5725-5850MHz:



802.11a, Middle Channel, Horizontal

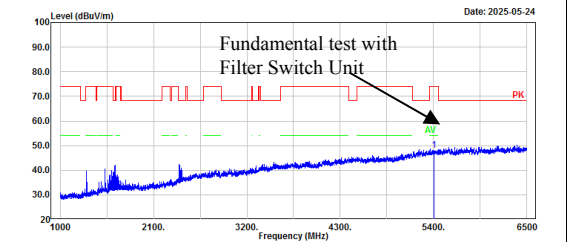
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a_U-NII-3 middle channel 5785MHz
Peak: RBW:1MHz, VBW:30Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5379.10	49.32	-1.39	47.93	74.00	26.07	Peak

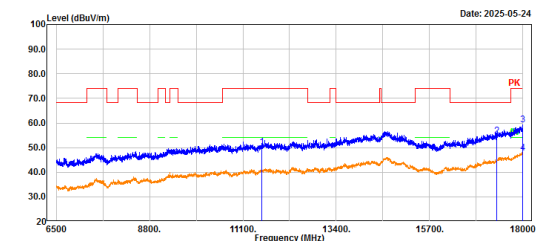
802.11a, Middle Channel, Vertical

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a_U-NII-3 middle channel 5785MHz
Peak: RBW:1MHz, VBW:30Hz



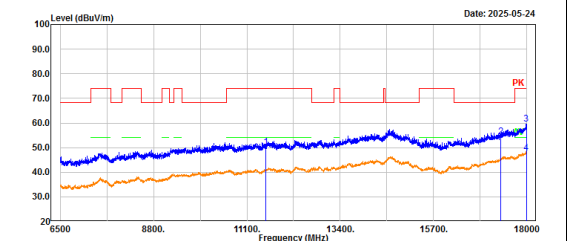
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5407.70	49.36	-1.34	48.02	74.00	25.98	Peak

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a_U-NII-3 middle channel 5785MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11570.00	46.03	4.07	50.10	74.00	23.90	Peak
2	17355.00	47.34	7.37	54.71	68.20	13.49	Peak
3	17997.70	47.71	11.51	59.22	74.00	14.78	Peak
4	17997.70	36.39	11.51	47.90	54.00	6.10	Average

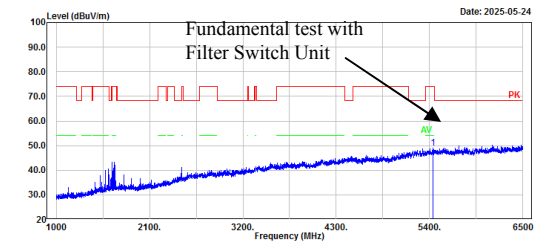
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a_U-NII-3 middle channel 5785MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11570.00	46.20	4.07	50.27	74.00	23.73	Peak
2	17355.00	46.97	7.37	54.34	68.20	13.86	Peak
3	17983.90	48.25	11.40	59.65	74.00	14.35	Peak
4	17983.90	36.35	11.40	47.75	54.00	6.25	Average

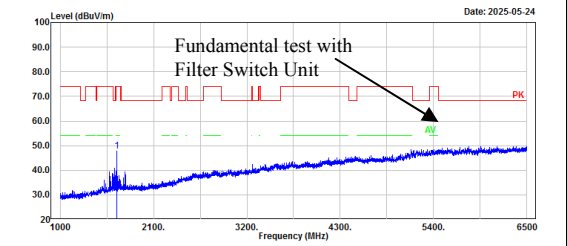
802.11a, High Channel, Horizontal

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a-U-NII-3 high channel 5825MHz
Peak: RBW:1MHz, VBW:30Hz

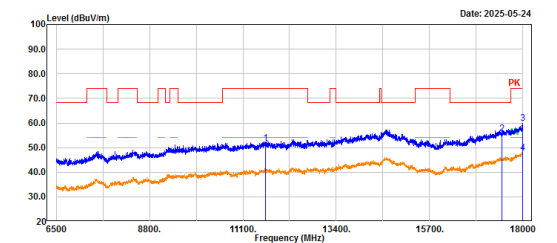


802.11a, High Channel, Vertical

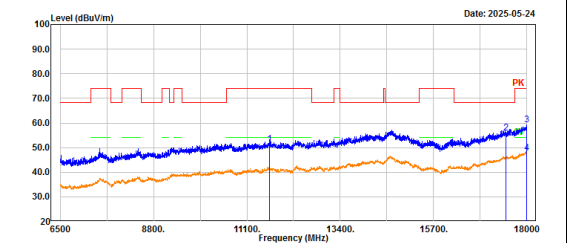
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a-U-NII-3 high channel 5825MHz
Peak: RBW:1MHz, VBW:30Hz



Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a-U-NII-3 high channel 5825MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz

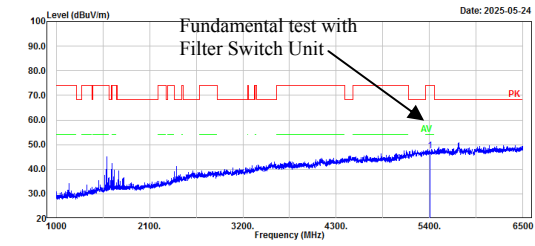


Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a-U-NII-3 high channel 5825MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



802.11n20, Low Channel, Horizontal

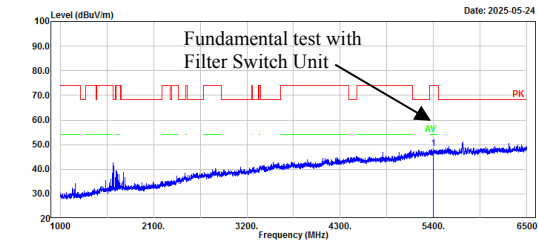
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-3 low channel 5745MHz
Peak: RBW:1MHz, VBW:30Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5404.40	48.94	-1.34	47.60	74.00	26.40	Peak

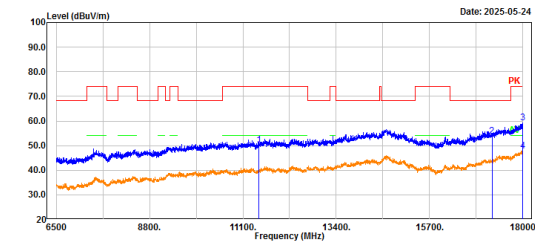
802.11n20, Low Channel, Vertical

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-3 low channel 5745MHz
Peak: RBW:1MHz, VBW:30Hz



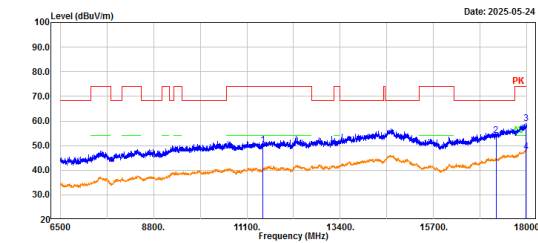
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5397.80	49.58	-1.34	48.24	74.00	25.76	Peak

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-3 low channel 5745MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11490.00	46.06	4.09	50.15	74.00	23.85	Peak
2	17235.00	46.31	7.41	53.72	68.20	14.48	Peak
3	17990.00	47.72	11.45	59.17	74.00	14.83	Peak
4	17990.00	36.33	11.45	47.78	54.00	6.22	Average

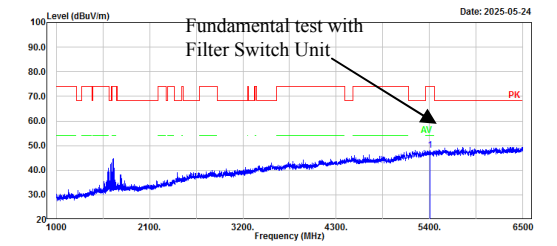
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-3 low channel 5745MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11490.00	46.25	4.09	50.34	74.00	23.66	Peak
2	17235.00	46.82	7.41	54.23	68.20	13.97	Peak
3	17979.30	47.50	11.37	58.87	74.00	15.13	Peak
4	17979.30	36.22	11.37	47.59	54.00	6.41	Average

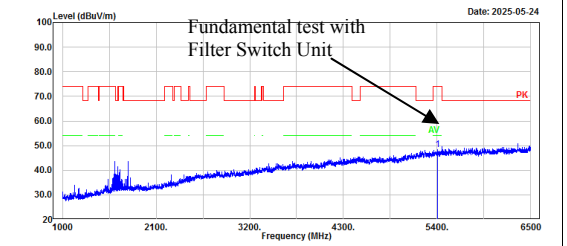
802.11n20, Middle Channel, Horizontal

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20 U-NII-3 middle channel 5785MHz
Peak: RBW:1MHz, VBW:30Hz

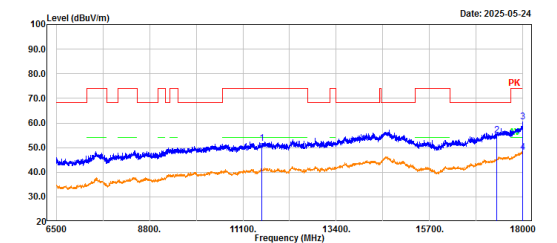


802.11n20, Middle Channel, Vertical

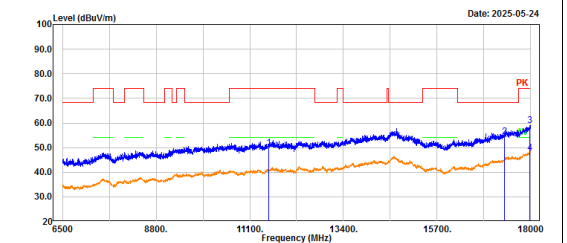
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20 U-NII-3 middle channel 5785MHz
Peak: RBW:1MHz, VBW:30Hz



Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20 U-NII-3 middle channel 5785MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz

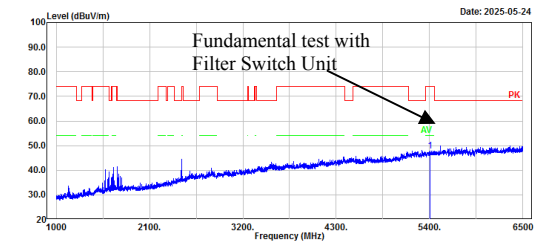


Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20 U-NII-3 middle channel 5785MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



802.11n20, High Channel, Horizontal

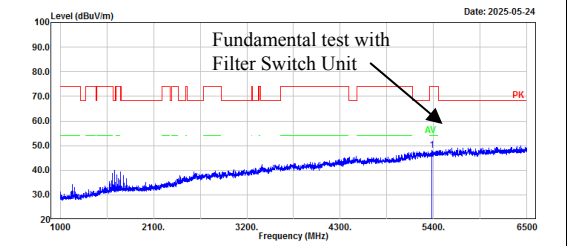
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-3 high channel 5825MHz
Peak: RBW:1MHz, VBW:30Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5403.30	49.26	-1.34	47.92	74.00	26.08	Peak

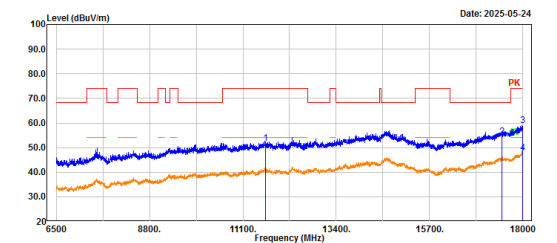
802.11n20, High Channel, Vertical

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-3 high channel 5825MHz
Peak: RBW:1MHz, VBW:30Hz



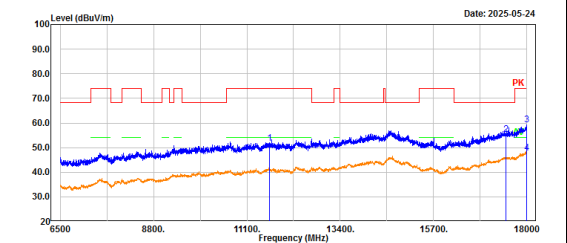
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5376.90	49.40	-1.40	48.00	74.00	26.00	Peak

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-3 high channel 5825MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11650.00	47.63	4.13	51.76	74.00	22.24	Peak
2	17475.00	46.63	7.88	54.51	68.20	13.69	Peak
3	17999.00	47.36	11.51	58.87	74.00	15.13	Peak
4	17999.00	36.36	11.51	47.87	54.00	6.13	Average

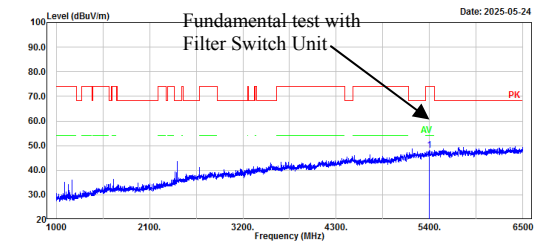
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-3 high channel 5825MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11650.00	47.55	4.13	51.68	74.00	22.32	Peak
2	17475.00	47.58	7.88	55.46	68.20	12.74	Peak
3	17995.40	47.73	11.49	59.22	74.00	14.78	Peak
4	17995.40	36.38	11.49	47.87	54.00	6.13	Average

802.11n40, Low Channel, Horizontal

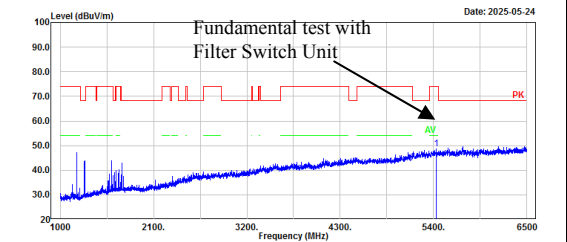
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-3 low channel 5755MHz
Peak: RBW:1MHz, VBW:30Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5397.80	49.37	-1.34	48.03	74.00	25.97	Peak

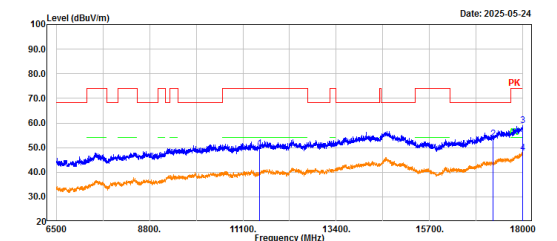
802.11n40, Low Channel, Vertical

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-3 low channel 5755MHz
Peak: RBW:1MHz, VBW:30Hz



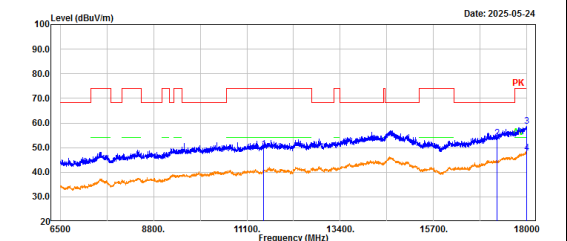
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5428.60	50.08	-1.32	48.76	74.00	25.24	Peak

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-3 low channel 5755MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11510.00	45.57	4.09	49.66	74.00	24.34	Peak
2	17265.00	46.28	7.38	53.66	68.20	14.54	Peak
3	17995.40	47.42	11.49	58.91	74.00	15.09	Peak
4	17995.40	36.39	11.49	47.88	54.00	6.12	Average

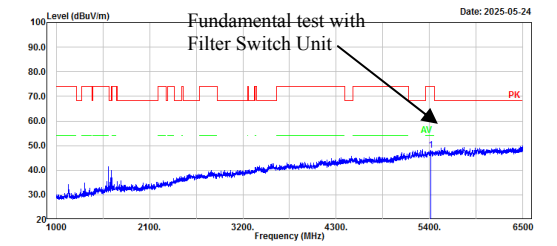
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-3 low channel 5755MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	11510.00	45.34	4.09	49.43	74.00	24.57	Peak
2	17265.00	46.49	7.38	53.87	68.20	14.33	Peak
3	17993.10	47.31	11.48	58.79	74.00	15.21	Peak
4	17993.10	36.39	11.48	47.87	54.00	6.13	Average

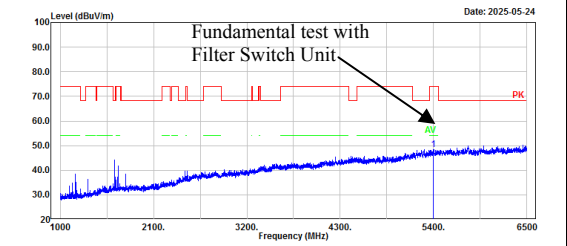
802.11n40, High Channel, Horizontal

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-3 high channel 5795MHz
Peak: RBW:1MHz, VBW:30Hz

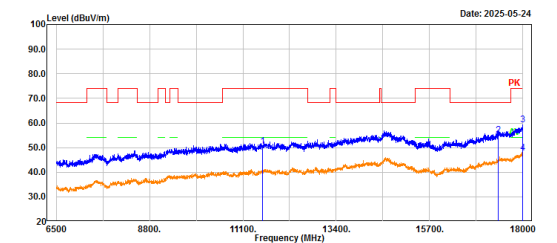


802.11n40, High Channel, Vertical

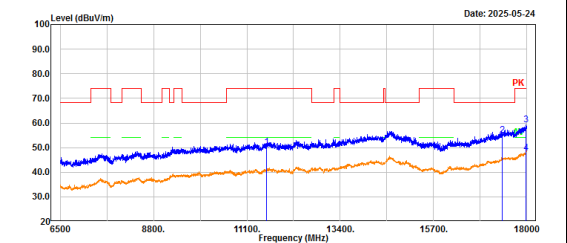
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-3 high channel 5795MHz
Peak: RBW:1MHz, VBW:30Hz



Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-3 high channel 5795MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz

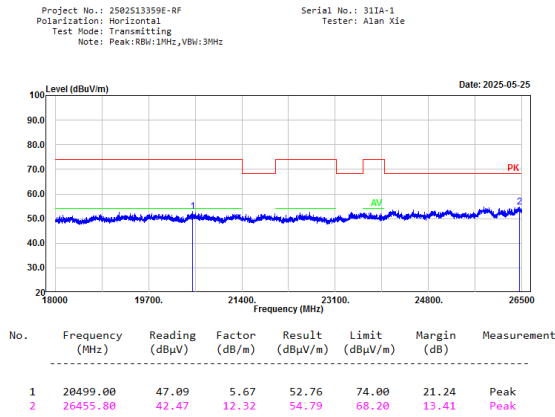
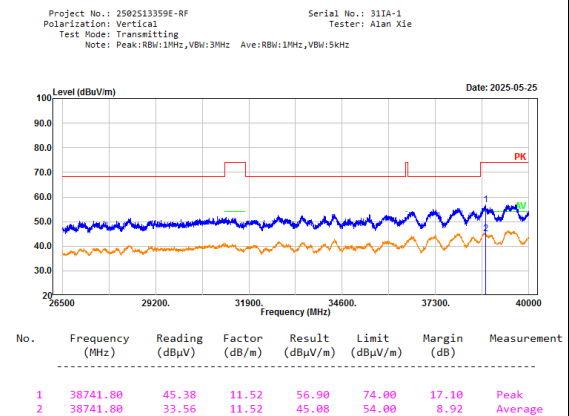
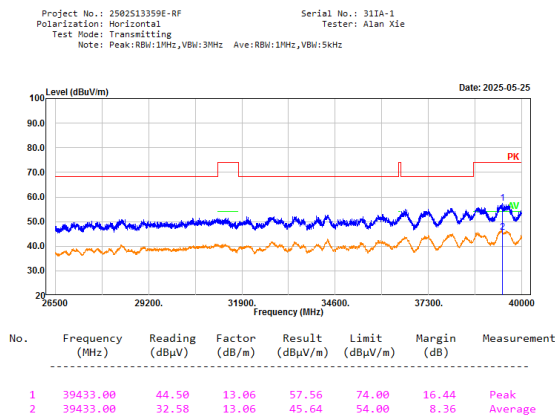
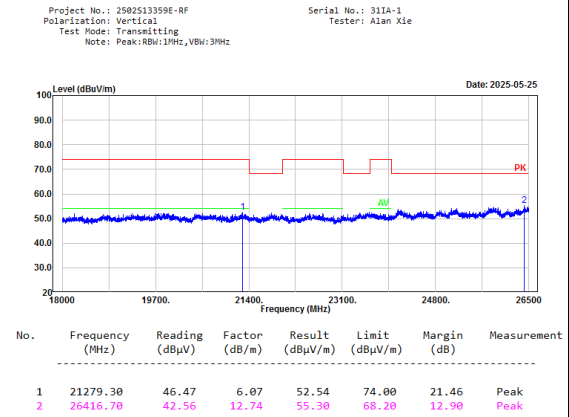


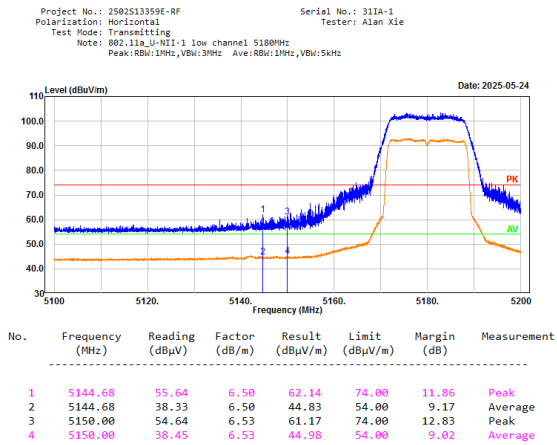
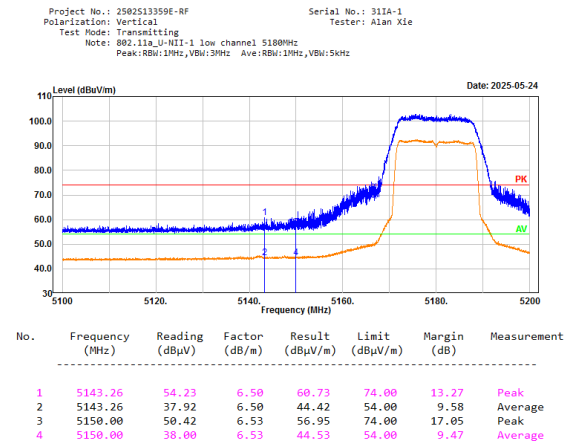
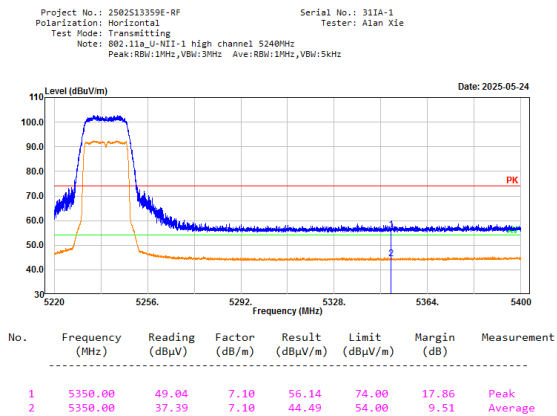
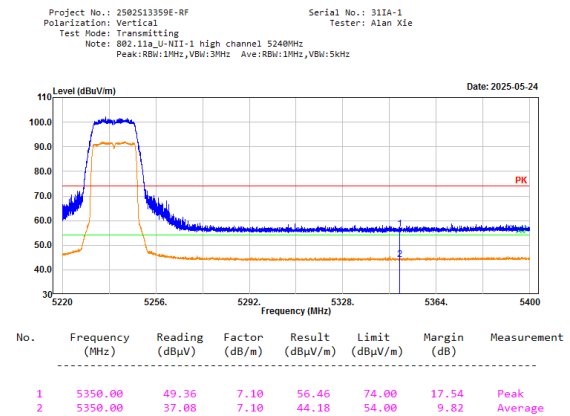
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-3 high channel 5795MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



18GHz-40GHz:

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

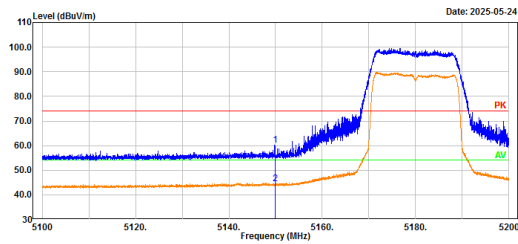
802.11n20 mode 5260MHz, Horizontal**802.11n20 mode 5260MHz, Vertical**

**Test plots for Bandedge:
5150-5250MHz:****802.11a, Low Channel, Bandedge, Horizontal****802.11a, Low Channel, Bandedge, Vertical****802.11a, High Channel, Bandedge, Horizontal****802.11a, High Channel, Bandedge, Vertical**

802.11n20, Low Channel, Bandedge, Horizontal

Project No.: 2502S13359E-RF
Polarization: Horizontal
Test Mode: Transmitting
Note: 802.11n20_U-NII-1 low channel 5180MHz
Peak: RBW:1MHz, VBW:30Hz Ave:RBW:1MHz, VBW:5kHz

Serial No.: 311A-1
Tester: Leo Xiao

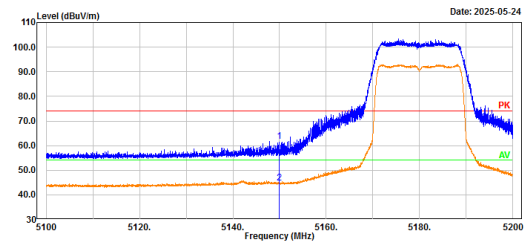


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5150.00	53.59	6.53	60.12	74.00	13.88	Peak
2	5150.00	38.01	6.53	44.54	54.00	9.46	Average

802.11n20, Low Channel, Bandedge, Vertical

Project No.: 2502S13359E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: 802.11n20_U-NII-1 low channel 5180MHz
Peak: RBW:1MHz, VBW:30Hz Ave:RBW:1MHz, VBW:5kHz

Serial No.: 311A-1
Tester: Leo Xiao

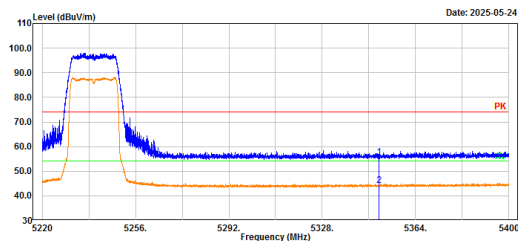


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5150.00	55.16	6.53	61.69	74.00	12.31	Peak
2	5150.00	38.19	6.53	44.72	54.00	9.28	Average

802.11n20, High Channel, Bandedge, Horizontal

Project No.: 2502S13359E-RF
Polarization: Horizontal
Test Mode: Transmitting
Note: 802.11n20_U-NII-1 high channel 5240MHz
Peak: RBW:1MHz, VBW:30Hz Ave:RBW:1MHz, VBW:5kHz

Serial No.: 311A-1
Tester: Leo Xiao

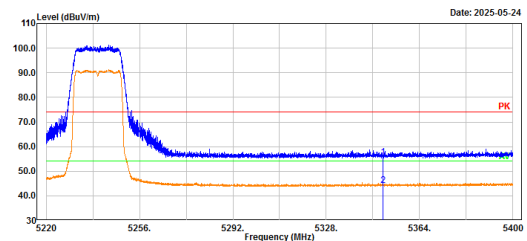


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5350.00	48.55	7.10	55.65	74.00	18.35	Peak
2	5350.00	36.99	7.10	44.09	54.00	9.91	Average

802.11n20, High Channel, Bandedge, Vertical

Project No.: 2502S13359E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: 802.11n20_U-NII-1 high channel 5240MHz
Peak: RBW:1MHz, VBW:30Hz Ave:RBW:1MHz, VBW:5kHz

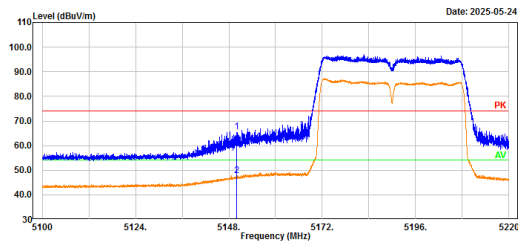
Serial No.: 311A-1
Tester: Leo Xiao



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5350.00	48.64	7.10	55.74	74.00	18.26	Peak
2	5350.00	37.05	7.10	44.15	54.00	9.85	Average

802.11n40, Low Channel, Bandedge, Horizontal

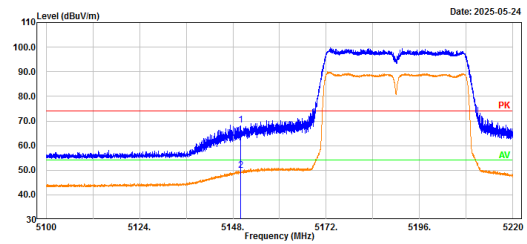
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-1 low channel 5190MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5150.00	58.95	6.53	65.48	74.00	8.52	Peak
2	5150.00	41.42	6.53	47.95	54.00	6.05	Average

802.11n40, Low Channel, Bandedge, Vertical

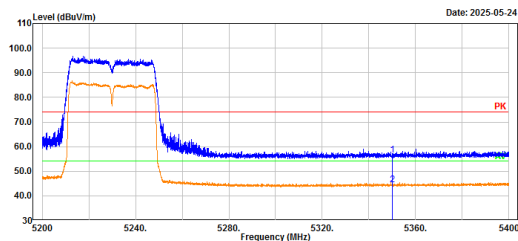
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-1 low channel 5190MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5150.00	61.69	6.53	68.22	74.00	5.78	Peak
2	5150.00	43.32	6.53	49.85	54.00	4.15	Average

802.11n40, High Channel, Bandedge, Horizontal

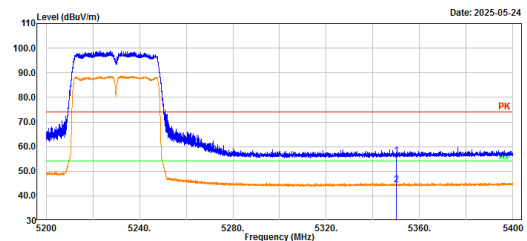
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-1 high channel 5230MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5350.00	49.53	7.10	56.63	74.00	17.37	Peak
2	5350.00	37.24	7.10	44.34	54.00	9.66	Average

802.11n40, High Channel, Bandedge, Vertical

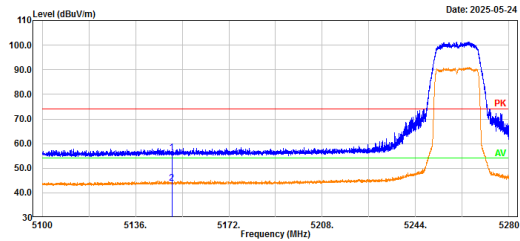
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-1 high channel 5230MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5350.00	49.21	7.10	56.31	74.00	17.69	Peak
2	5350.00	37.41	7.10	44.51	54.00	9.49	Average

5250-5350MHz:**802.11a,Low Channel, Bandedge, Horizontal**

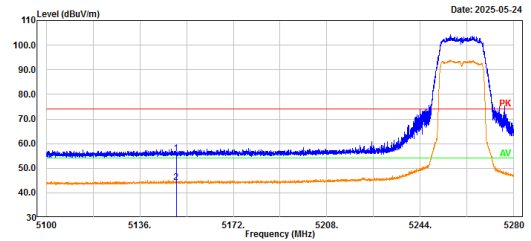
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a_U-NII-2A low channel 5260MHz
Peak:RBW:1MHz,VBW:30Hz Ave:RBW:1MHz,VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5150.00	49.88	6.53	56.41	74.00	17.59	Peak
2	5150.00	37.26	6.53	43.79	54.00	10.21	Average

802.11a,Low Channel, Bandedge, Vertical

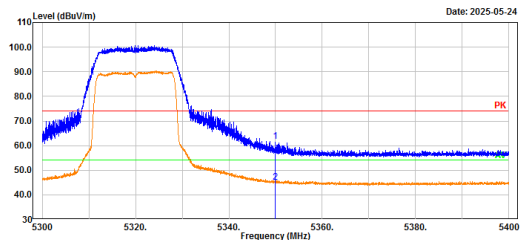
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a_U-NII-2A low channel 5260MHz
Peak:RBW:1MHz,VBW:30Hz Ave:RBW:1MHz,VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5150.00	49.29	6.53	55.82	74.00	18.18	Peak
2	5150.00	37.76	6.53	44.29	54.00	9.71	Average

802.11a,High Channel, Bandedge, Horizontal

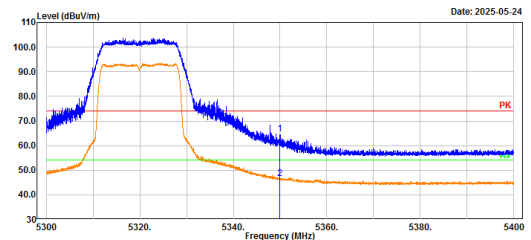
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a_U-NII-2A high channel 5320MHz
Peak:RBW:1MHz,VBW:30Hz Ave:RBW:1MHz,VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5350.00	54.49	7.10	61.59	74.00	12.41	Peak
2	5350.00	37.99	7.10	45.09	54.00	8.91	Average

802.11a,High Channel, Bandedge, Vertical

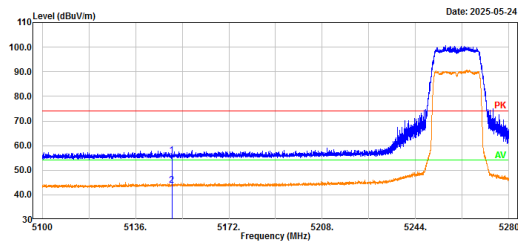
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11a_U-NII-2A high channel 5320MHz
Peak:RBW:1MHz,VBW:30Hz Ave:RBW:1MHz,VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5350.00	57.65	7.10	64.75	74.00	9.25	Peak
2	5350.00	39.42	7.10	46.52	54.00	7.48	Average

802.11n20, Low Channel, Bandedge, Horizontal

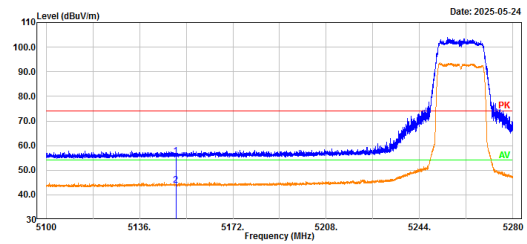
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-2A low channel 5260MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5150.00	49.32	6.53	55.85	74.00	18.15	Peak
2	5150.00	37.29	6.53	43.82	54.00	10.18	Average

802.11n20,Low Channel, Bandedge, Vertical

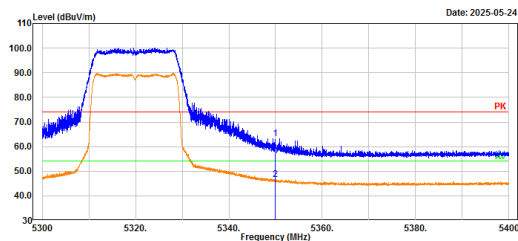
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-2A low channel 5260MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5150.00	49.25	6.53	55.78	74.00	18.22	Peak
2	5150.00	37.38	6.53	43.91	54.00	10.09	Average

802.11n20,High Channel, Bandedge, Horizontal

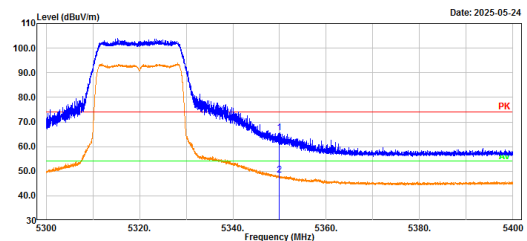
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-2A high channel 5320MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5350.00	56.20	7.10	63.30	74.00	10.70	Peak
2	5350.00	39.59	7.10	46.69	54.00	7.31	Average

802.11n20,High Channel, Bandedge, Vertical

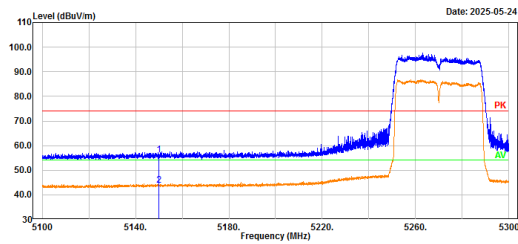
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n20_U-NII-2A high channel 5320MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5350.00	58.43	7.10	65.53	74.00	8.47	Peak
2	5350.00	41.41	7.10	48.51	54.00	5.49	Average

802.11n40,Low Channel, Bandedge, Horizontal

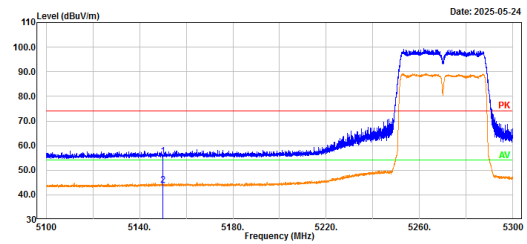
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-2A low channel 5270MHz
Peak: RBW:1MHz,VBW:30Hz Ave:RBW:1MHz,VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5150.00	49.63	6.53	56.16	74.00	17.84	Peak
2	5150.00	37.36	6.53	43.89	54.00	10.11	Average

802.11n40,Low Channel, Bandedge, Vertical

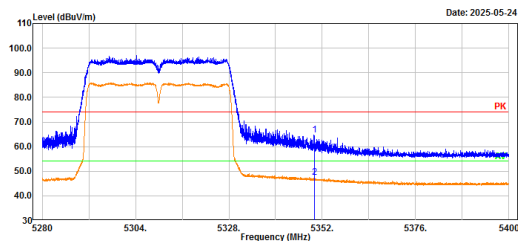
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-2A low channel 5270MHz
Peak: RBW:1MHz,VBW:30Hz Ave:RBW:1MHz,VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5150.00	49.22	6.53	55.75	74.00	18.25	Peak
2	5150.00	37.29	6.53	43.82	54.00	10.18	Average

802.11n40,High Channel, Bandedge, Horizontal

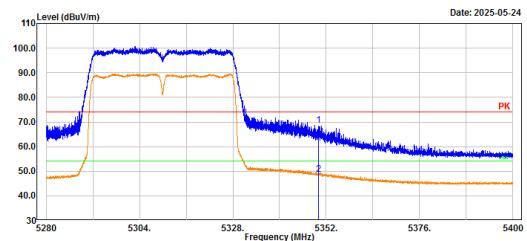
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-2A high channel 5310MHz
Peak: RBW:1MHz,VBW:30Hz Ave:RBW:1MHz,VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5350.00	57.49	7.10	64.59	74.00	9.41	Peak
2	5350.00	40.34	7.10	47.44	54.00	6.56	Average

802.11n40,High Channel, Bandedge, Vertical

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Leo Xiao
Test Mode: Transmitting
Note: 802.11n40_U-NII-2A high channel 5310MHz
Peak: RBW:1MHz,VBW:30Hz Ave:RBW:1MHz,VBW:5kHz



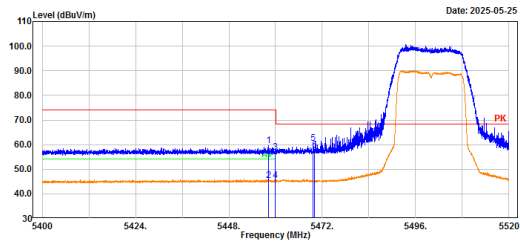
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5350.00	61.48	7.10	68.58	74.00	5.42	Peak
2	5350.00	41.48	7.10	48.58	54.00	5.42	Average

5470-5725MHz:

802.11a, Low Channel, Bandedge, Horizontal

Project No.: 2502S13359E-RF
Polarization: Horizontal
Test Mode: Transmitting
Note: 802.11a_U-NII-2C low channel 5500MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz

Serial No.: 311A-1
Tester: Alan Xie

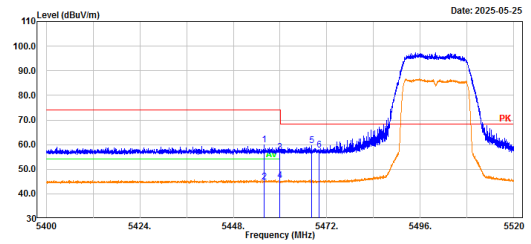


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5458.13	52.19	7.32	59.51	74.00	14.49	Peak
2	5458.13	37.97	7.32	45.29	54.00	8.71	Average
3	5460.00	49.66	7.33	56.99	74.00	17.01	Peak
4	5460.00	38.04	7.33	45.37	54.00	8.63	Average
5	5469.65	53.30	7.34	60.64	68.20	7.56	Peak
6	5470.00	50.43	7.34	57.77	68.20	10.43	Peak

802.11a, Low Channel, Bandedge, Vertical

Project No.: 2502S13359E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: 802.11a_U-NII-2C low channel 5500MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz

Serial No.: 311A-1
Tester: Alan Xie

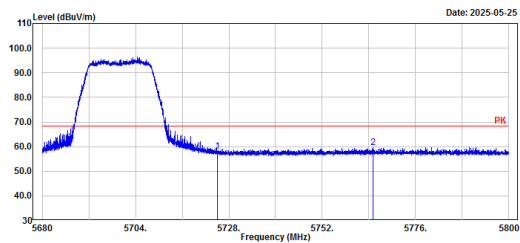


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5455.92	52.41	7.33	59.74	74.00	14.26	Peak
2	5455.92	37.55	7.33	44.88	54.00	9.12	Average
3	5460.00	49.66	7.33	56.99	74.00	17.01	Peak
4	5460.00	37.99	7.33	45.32	54.00	8.68	Average
5	5468.09	52.22	7.34	59.56	68.20	8.64	Peak
6	5470.00	50.51	7.34	57.85	68.20	10.35	Peak

802.11a, High Channel, Bandedge, Horizontal

Project No.: 2502S13359E-RF
Polarization: Horizontal
Test Mode: Transmitting
Note: 802.11a_U-NII-2C high channel 5700MHz
Peak: RBW:1MHz, VBW:30Hz

Serial No.: 311A-1
Tester: Alan Xie

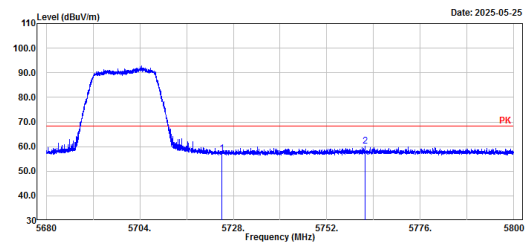


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5725.00	50.06	8.03	58.09	68.20	10.11	Peak
2	5765.01	51.62	8.11	59.73	68.20	8.47	Peak

802.11a, High Channel, Bandedge, Vertical

Project No.: 2502S13359E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: 802.11a_U-NII-2C high channel 5700MHz
Peak: RBW:1MHz, VBW:30Hz

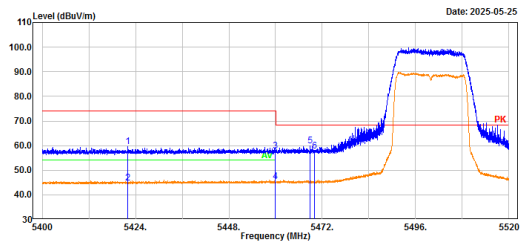
Serial No.: 311A-1
Tester: Alan Xie



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5725.00	49.07	8.03	57.10	68.20	11.10	Peak
2	5761.84	52.21	8.10	60.31	68.20	7.89	Peak

802.11n20, Low Channel, Bandedge, Horizontal

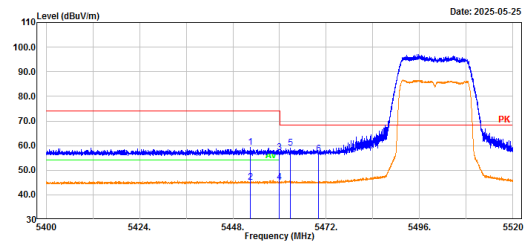
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n20_U-NII-2C low channel 5500MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5422.08	52.37	7.32	59.69	74.00	14.31	Peak
2	5422.08	37.46	7.32	44.78	54.00	9.22	Average
3	5460.00	50.59	7.33	57.92	74.00	16.08	Peak
4	5460.00	37.95	7.33	45.28	54.00	8.72	Average
5	5468.81	52.48	7.34	59.82	68.20	8.38	Peak
6	5470.00	50.53	7.34	57.87	68.20	10.33	Peak

802.11n20, Low Channel, Bandedge, Vertical

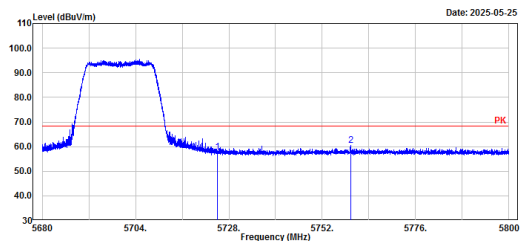
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n20_U-NII-2C low channel 5500MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5452.49	51.89	7.33	59.22	74.00	14.78	Peak
2	5452.49	37.80	7.33	45.13	54.00	8.87	Average
3	5460.00	49.77	7.33	57.10	74.00	16.90	Peak
4	5460.00	37.78	7.33	45.11	54.00	8.89	Average
5	5462.76	51.60	7.34	58.94	68.20	9.26	Peak
6	5470.00	49.15	7.34	56.49	68.20	11.71	Peak

802.11n20, High Channel, Bandedge, Horizontal

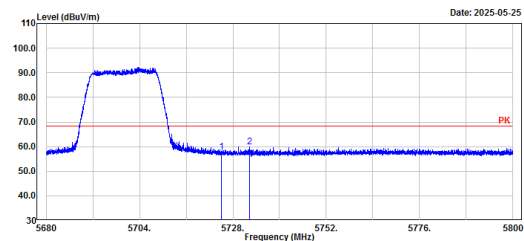
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n20_U-NII-2C high channel 5700MHz
Peak: RBW:1MHz, VBW:30Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5725.00	49.68	8.03	57.71	68.20	10.49	Peak
2	5759.39	52.39	8.10	60.49	68.20	7.71	Peak

802.11n20, High Channel, Bandedge, Vertical

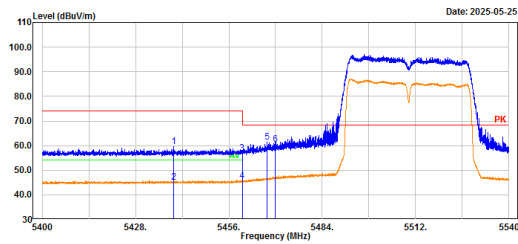
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n20_U-NII-2C high channel 5700MHz
Peak: RBW:1MHz, VBW:30Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5725.00	49.86	8.03	57.89	68.20	10.31	Peak
2	5732.30	51.86	8.04	59.90	68.20	8.30	Peak

802.11n40, Low Channel, Bandedge, Horizontal

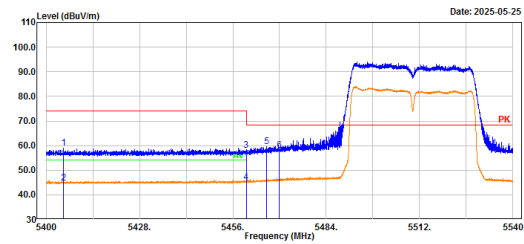
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n40_U-NII-2C low channel 5510MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5439.40	52.24	7.33	59.57	74.00	14.43	Peak
2	5439.40	37.88	7.33	45.21	54.00	8.79	Average
3	5460.00	49.40	7.33	56.73	74.00	17.27	Peak
4	5460.00	38.22	7.33	45.55	54.00	8.45	Average
5	5467.45	54.10	7.33	61.43	68.20	6.77	Peak
6	5470.00	53.25	7.34	60.59	68.20	7.61	Peak

802.11n40, Low Channel, Bandedge, Vertical

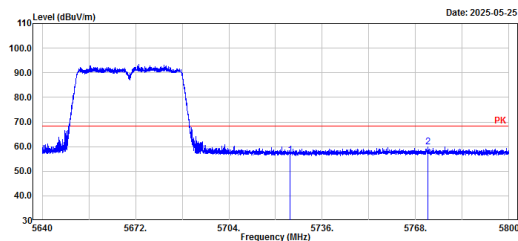
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n40_U-NII-2C low channel 5510MHz
Peak: RBW:1MHz, VBW:30Hz Ave: RBW:1MHz, VBW:5kHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5405.15	51.65	7.32	58.97	74.00	15.03	Peak
2	5405.15	37.54	7.32	44.86	54.00	9.14	Average
3	5460.00	50.69	7.33	58.02	74.00	15.98	Peak
4	5460.00	37.91	7.33	45.24	54.00	8.76	Average
5	5466.11	52.20	7.33	59.53	68.20	8.67	Peak
6	5470.00	50.59	7.34	57.93	68.20	10.27	Peak

802.11n40, High Channel, Bandedge, Horizontal

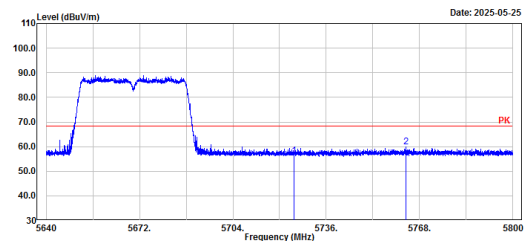
Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Horizontal Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n40_U-NII-2C high channel 5670MHz
Peak: RBW:1MHz, VBW:30Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5725.00	48.65	8.03	56.68	68.20	11.52	Peak
2	5772.29	51.77	8.12	59.89	68.20	8.31	Peak

802.11n40, High Channel, Bandedge, Vertical

Project No.: 2502S13359E-RF Serial No.: 311A-1
Polarization: Vertical Tester: Alan Xie
Test Mode: Transmitting
Note: 802.11n40_U-NII-2C high channel 5670MHz
Peak: RBW:1MHz, VBW:30Hz

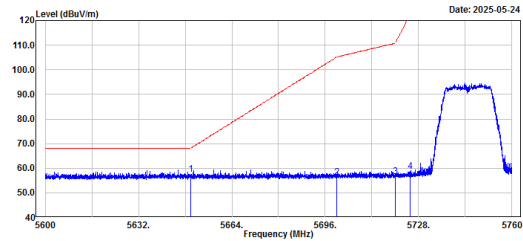


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5725.00	48.28	8.03	56.31	68.20	11.89	Peak
2	5763.33	51.82	8.11	59.93	68.20	8.27	Peak

5725-5850MHz:**802.11a,Low Channel, Bandedge, Horizontal**

Project No.: 2502S13359E-RF
Polarization: Horizontal
Test Mode: Transmitting
Note: 802.11a_U-NII-3 low channel 5745MHz
Peak:RBW:1MHz,VBW:30Hz

Serial No.: 311A-1
Tester: Leo Xiao

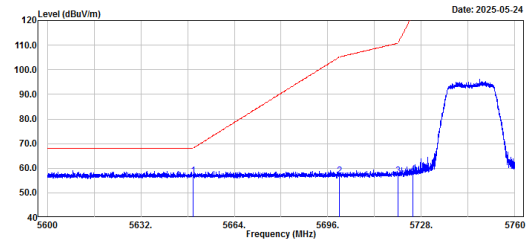


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5650.00	49.54	7.89	57.43	68.20	10.77	Peak
2	5700.00	48.17	7.98	56.15	105.20	49.05	Peak
3	5720.00	48.62	8.02	56.64	110.80	54.16	Peak
4	5725.00	50.64	8.03	58.67	122.20	63.53	Peak

802.11a,Low Channel, Bandedge, Vertical

Project No.: 2502S13359E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: 802.11a_U-NII-3 low channel 5745MHz
Peak:RBW:1MHz,VBW:30Hz

Serial No.: 311A-1
Tester: Leo Xiao

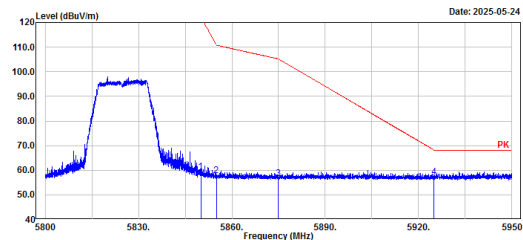


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5650.00	49.05	7.89	56.94	68.20	11.26	Peak
2	5700.00	49.05	7.98	57.03	105.20	48.17	Peak
3	5720.00	48.91	8.02	56.93	110.80	53.87	Peak
4	5725.00	49.62	8.03	57.65	122.20	64.55	Peak

802.11a,High Channel, Bandedge, Horizontal

Project No.: 2502S13359E-RF
Polarization: Horizontal
Test Mode: Transmitting
Note: 802.11a_U-NII-3 high channel 5825MHz
Peak:RBW:1MHz,VBW:30Hz

Serial No.: 311A-1
Tester: Leo Xiao

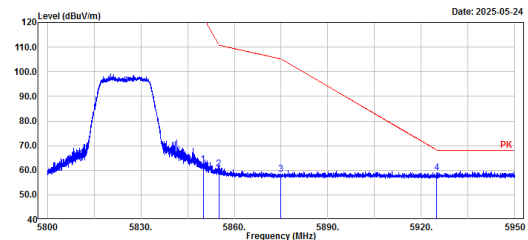


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5850.00	51.08	8.20	59.28	122.20	62.92	Peak
2	5855.00	49.62	8.21	57.83	110.80	52.97	Peak
3	5875.00	48.27	8.28	56.55	105.20	48.65	Peak
4	5925.00	48.87	8.40	57.27	68.20	10.93	Peak

802.11a,High Channel, Bandedge, Vertical

Project No.: 2502S13359E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: 802.11a_U-NII-3 high channel 5825MHz
Peak:RBW:1MHz,VBW:30Hz

Serial No.: 311A-1
Tester: Leo Xiao

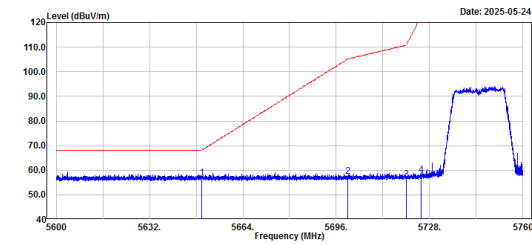


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5850.00	54.06	8.20	62.26	122.20	59.94	Peak
2	5855.00	52.44	8.21	60.65	110.80	50.15	Peak
3	5875.00	50.26	8.28	58.54	105.20	46.66	Peak
4	5925.00	50.52	8.40	58.92	68.20	9.28	Peak

802.11n20,Low Channel, Bandedge, Horizontal

Project No.: 2502S13359E-RF
Polarization: Horizontal
Test Mode: Transmitting
Note: 802.11n20_U-NII-3 low channel 5745MHz
Peak: RBW:1MHz, VBW:30Hz

Serial No.: 311A-1
Tester: Leo Xiao

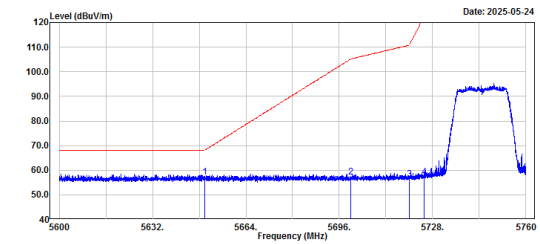


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5650.00	48.88	7.89	56.77	68.20	11.43	Peak
2	5700.00	49.41	7.98	57.39	105.20	47.81	Peak
3	5720.00	48.38	8.02	56.40	110.80	54.40	Peak
4	5725.00	50.07	8.03	58.10	122.20	64.10	Peak

802.11n20,Low Channel, Bandedge, Vertical

Project No.: 2502S13359E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: 802.11n20_U-NII-3 low channel 5745MHz
Peak: RBW:1MHz, VBW:30Hz

Serial No.: 311A-1
Tester: Leo Xiao

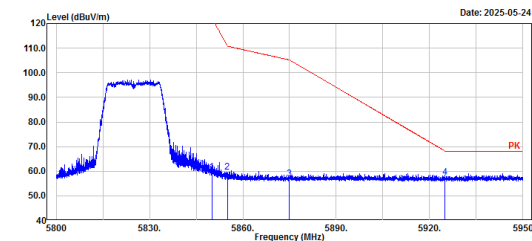


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5650.00	49.24	7.89	57.13	68.20	11.07	Peak
2	5700.00	49.19	7.98	57.17	105.20	48.03	Peak
3	5720.00	48.36	8.02	56.38	110.80	54.42	Peak
4	5725.00	49.11	8.03	57.14	122.20	65.06	Peak

802.11n20,High Channel, Bandedge, Horizontal

Project No.: 2502S13359E-RF
Polarization: Horizontal
Test Mode: Transmitting
Note: 802.11n20_U-NII-3 high channel 5825MHz
Peak: RBW:1MHz, VBW:30Hz

Serial No.: 311A-1
Tester: Leo Xiao

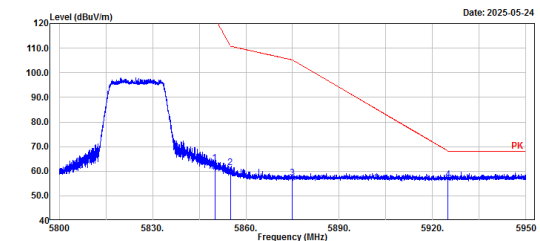


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5850.00	51.35	8.20	59.55	122.20	62.65	Peak
2	5855.00	51.40	8.21	59.61	110.80	51.19	Peak
3	5875.00	48.76	8.28	57.04	105.20	48.16	Peak
4	5925.00	49.25	8.40	57.65	68.20	10.55	Peak

802.11n20, High Channel, Bandedge, Vertical

Project No.: 2502S13359E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: 802.11n20_U-NII-3 high channel 5825MHz
Peak: RBW:1MHz, VBW:30Hz

Serial No.: 311A-1
Tester: Leo Xiao

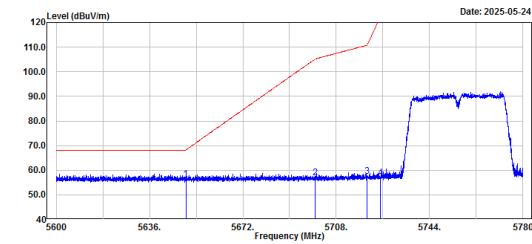


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5850.00	55.17	8.20	63.37	122.20	58.83	Peak
2	5855.00	53.22	8.21	61.43	110.80	49.37	Peak
3	5875.00	49.04	8.28	57.32	105.20	47.88	Peak
4	5925.00	48.35	8.40	56.75	68.20	11.45	Peak

802.11n40,Low Channel, Bandedge, Horizontal

Project No.: 2502S13359E-RF
Polarization: Horizontal
Test Mode: Transmitting
Note: 802.11n40_U-NII-3 low channel 5755MHz
Peak: RBW:1MHz, VBW:30Hz

Serial No.: 311A-1
Tester: Leo Xiao

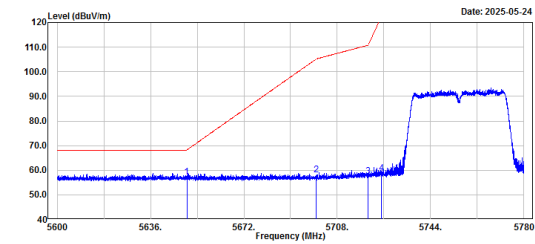


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5650.00	48.41	7.89	56.30	68.20	11.90	Peak
2	5700.00	48.92	7.98	56.90	105.20	48.30	Peak
3	5720.00	49.64	8.02	57.66	110.80	53.14	Peak
4	5725.00	48.89	8.03	56.92	122.20	65.28	Peak

802.11n40,Low Channel, Bandedge, Vertical

Project No.: 2502S13359E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: 802.11n40_U-NII-3 low channel 5755MHz
Peak: RBW:1MHz, VBW:30Hz

Serial No.: 311A-1
Tester: Leo Xiao

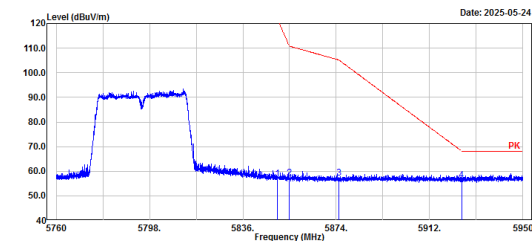


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5650.00	49.18	7.89	57.07	68.20	11.13	Peak
2	5700.00	50.20	7.98	58.18	105.20	47.02	Peak
3	5720.00	49.62	8.02	57.64	110.80	53.16	Peak
4	5725.00	50.70	8.03	58.73	122.20	63.47	Peak

802.11n40,High Channel, Bandedge, Horizontal

Project No.: 2502S13359E-RF
Polarization: Horizontal
Test Mode: Transmitting
Note: 802.11n40_U-NII-3 high channel 5795MHz
Peak: RBW:1MHz, VBW:30Hz

Serial No.: 311A-1
Tester: Leo Xiao

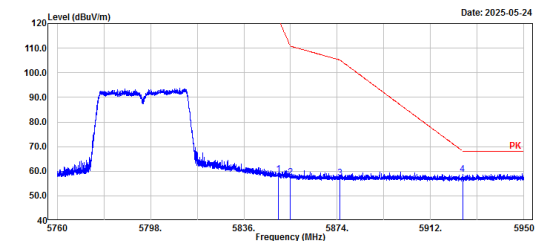


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5850.00	48.66	8.20	56.86	122.20	65.34	Peak
2	5855.00	48.90	8.21	57.11	110.80	53.69	Peak
3	5875.00	48.80	8.28	57.08	105.20	48.12	Peak
4	5925.00	47.97	8.40	56.37	68.20	11.83	Peak

802.11n40,High Channel, Bandedge, Vertical

Project No.: 2502S13359E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: 802.11n40_U-NII-3 high channel 5795MHz
Peak: RBW:1MHz, VBW:30Hz

Serial No.: 311A-1
Tester: Leo Xiao



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	5850.00	50.67	8.20	58.87	122.20	63.33	Peak
2	5855.00	49.37	8.21	57.58	110.80	53.22	Peak
3	5875.00	48.91	8.28	57.19	105.20	48.01	Peak
4	5925.00	50.18	8.40	58.58	68.20	9.62	Peak

5.3 26dB attenuated below the channel power

Test Information:

Serial No.:	311A-7	Test Date:	2025/06/14
Test Site:	RF	Test Mode:	Transmitting
Tester:	Jojo Zhou	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.6	Relative Humidity: (%)	52	ATM Pressure: (kPa)	100.7
----------------------	------	------------------------------	----	------------------------	-------

Test Equipment List and Details:

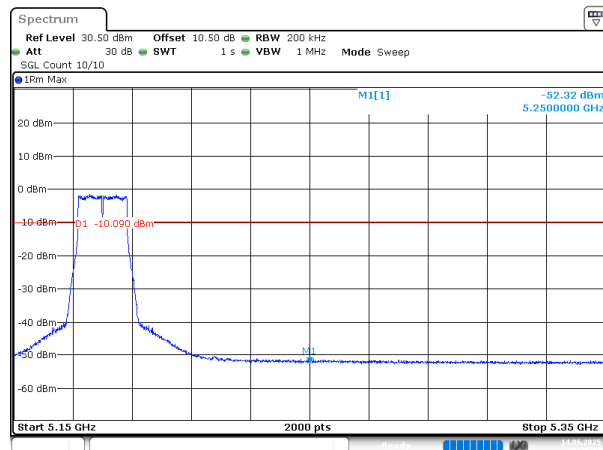
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101461	2024/09/05	2025/09/04
Eastsheep	Coaxial Attenuator	5W-N-JK-6G-10dB	F-08-EM503	2025/06/07	2026/06/06

* 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:

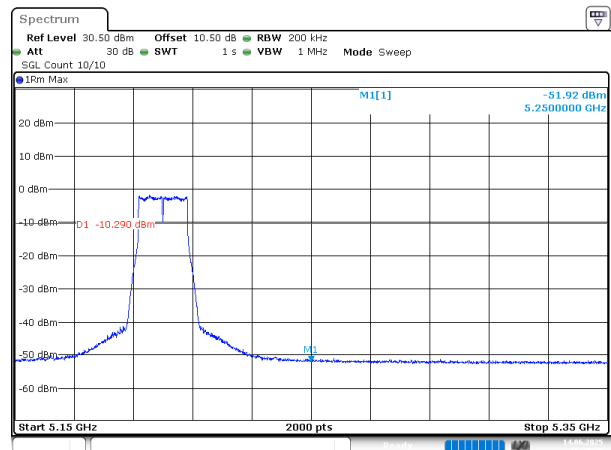
5150-5250MHz

802.11a_5180MHz



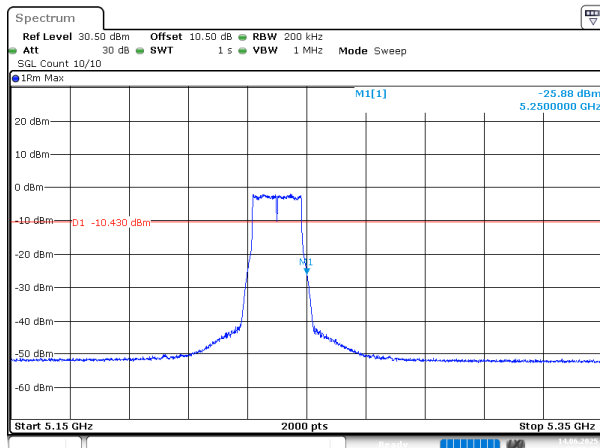
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:35:04

802.11a_5200MHz



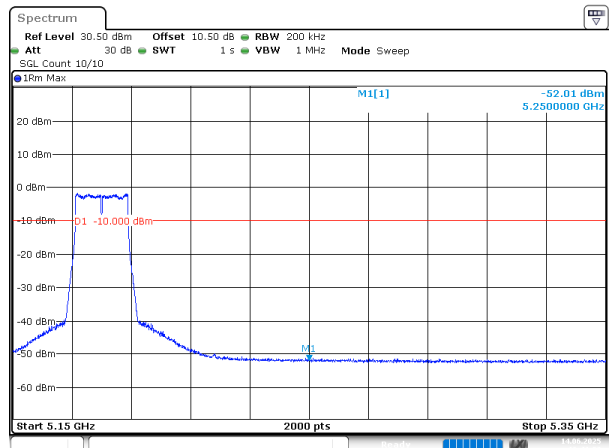
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:39:29

802.11a_5240MHz



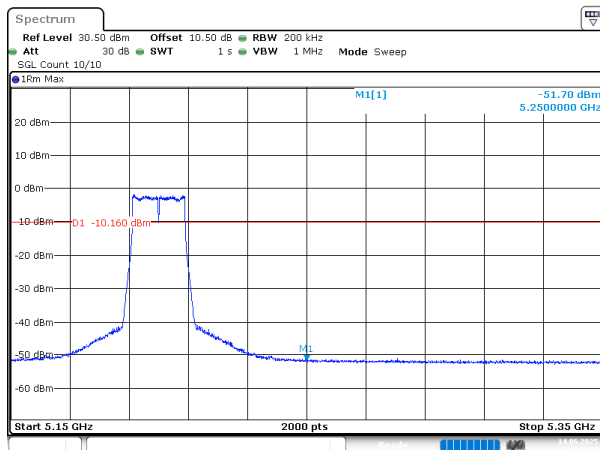
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:38:29

802.11n20_5180MHz



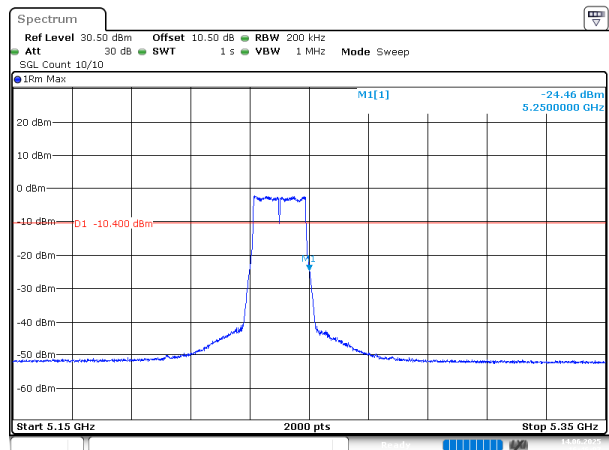
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:41:03

802.11n20_5200MHz



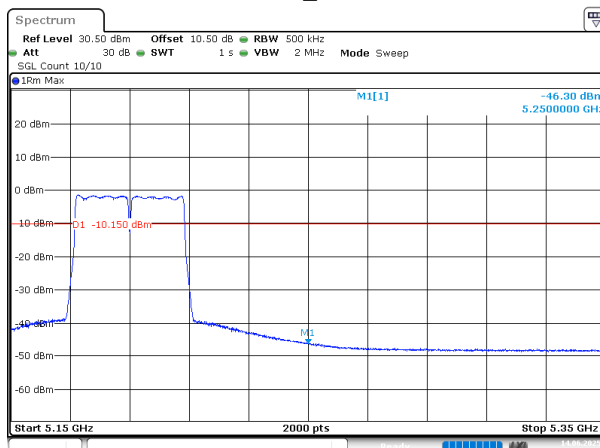
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:44:06

802.11n20_5240MHz



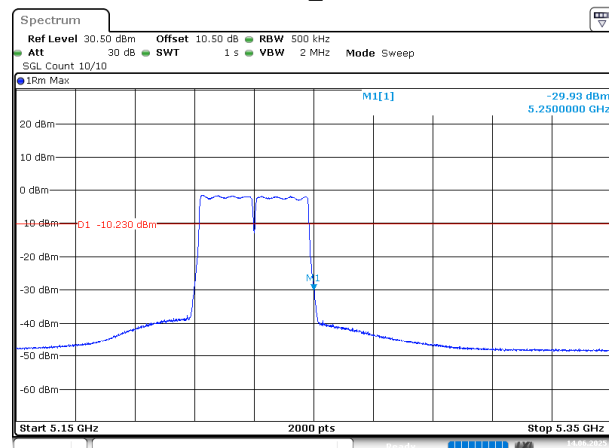
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:46:07

802.11n40_5190MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:46:58

802.11n40_5230MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:47:36

5.4 Emission Bandwidth

Test Information:

Serial No.:	311A-7	Test Date:	2025/06/14~2025/06/16
Test Site:	RF	Test Mode:	Transmitting
Tester:	Jojo Zhou	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.6~26.1	Relative Humidity: (%)	48~52	ATM Pressure: (kPa)	99.7~100.7
----------------------	-----------	------------------------------	-------	------------------------	------------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101461	2024/09/05	2025/09/04
Eastsheep	Coaxial Attenuator	5W-N-JK-6G-10dB	F-08-EM503	2025/06/07	2026/06/06

* 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	22.233
	5200	22.269
	5240	22.108
802.11n20	5180	22.375
	5200	22.481
	5240	22.430
802.11n40	5190	41.241
	5230	41.141

5250-5350MHz

Mode	Test Frequency (MHz)	Result (MHz)
802.11a	5260	22.657
	5280	22.260
	5320	23.091
802.11n20	5260	22.523
	5280	22.421
	5320	22.260
802.11n40	5270	41.341
	5310	41.241

5470-5725MHz

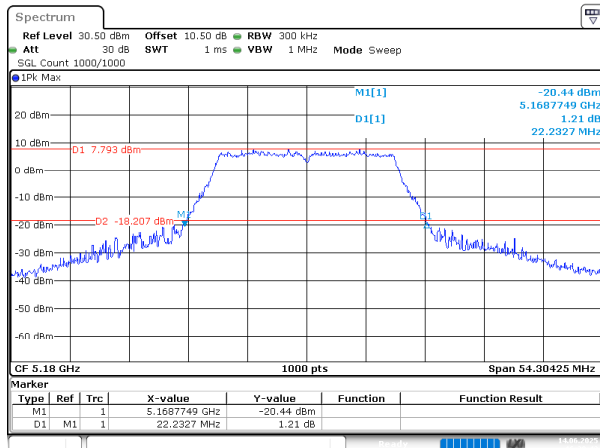
Mode	Test Frequency (MHz)	Result (MHz)
802.11a	5500	22.214
	5580	22.039
	5700	22.328
	5720	22.512
802.11n20	5500	22.426
	5580	22.518
	5700	22.757
	5720	22.557
802.11n40	5510	41.141
	5550	41.241
	5670	41.141
	5710	41.341

6dB Emission Bandwidth**5725-5850MHz**

Mode	Test Frequency (MHz)	Result (MHz)	Limit (MHz)	Verdict
802.11a	5745	16.517	0.5	Pass
	5785	16.567	0.5	Pass
	5825	16.517	0.5	Pass
802.11n20	5745	17.718	0.5	Pass
	5785	17.718	0.5	Pass
	5825	17.818	0.5	Pass
802.11n40	5755	36.537	0.5	Pass
	5795	36.537	0.5	Pass

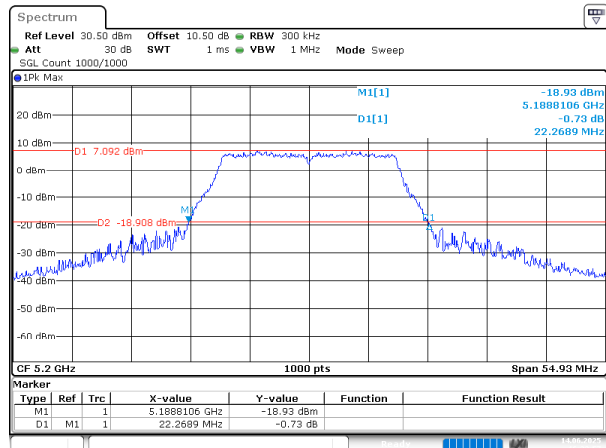
5150-5250MHz

802.11a_5180MHz



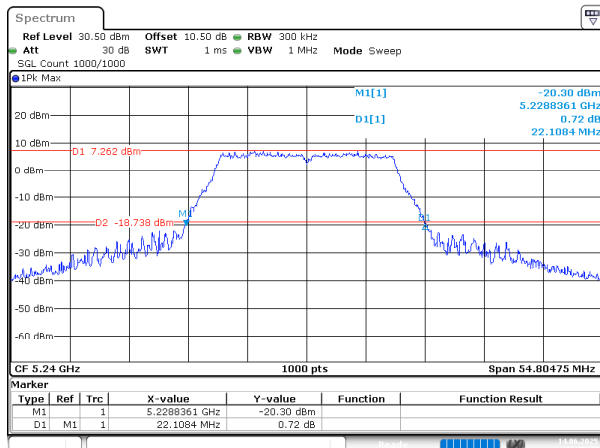
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:20:43

802.11a_5200MHz



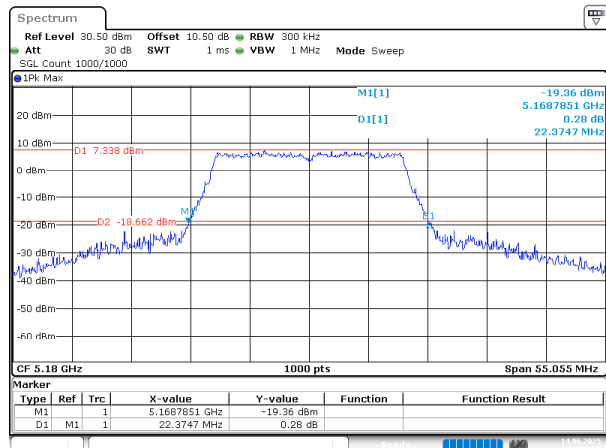
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:23:58

802.11a_5240MHz



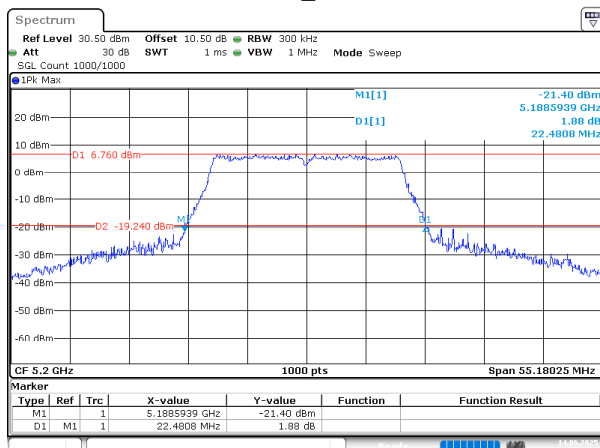
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:25:43

802.11n20_5180MHz



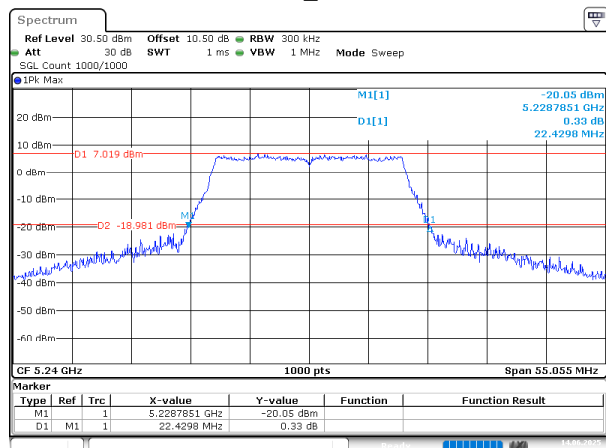
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:27:37

802.11n20_5200MHz



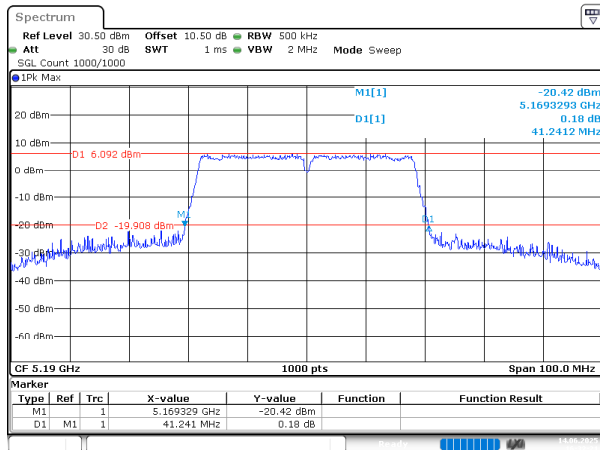
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:29:35

802.11n20_5240MHz

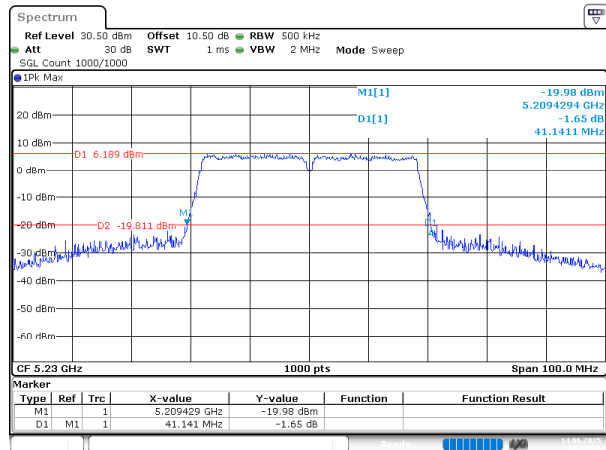


ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:31:16

802.11n40_5190MHz

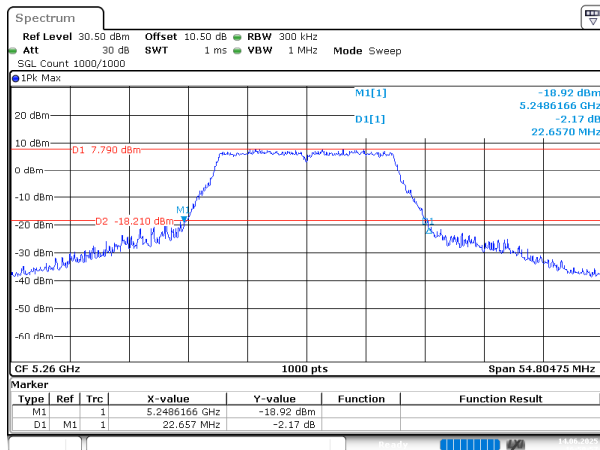


802.11n40_5230MHz

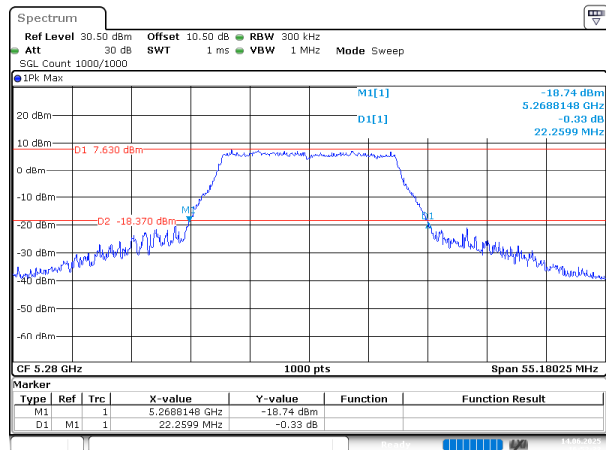


5250-5350MHz

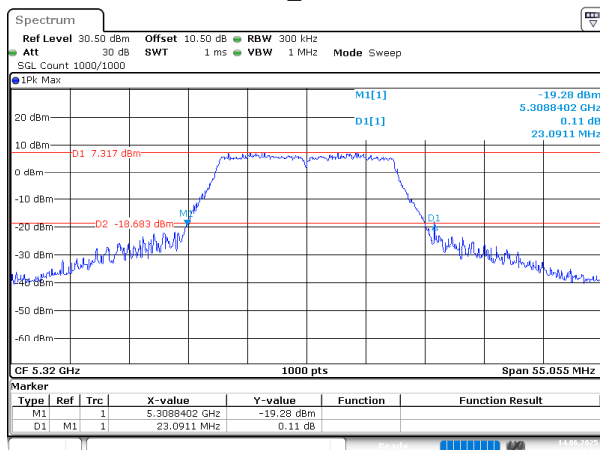
802.11a_5260MHz



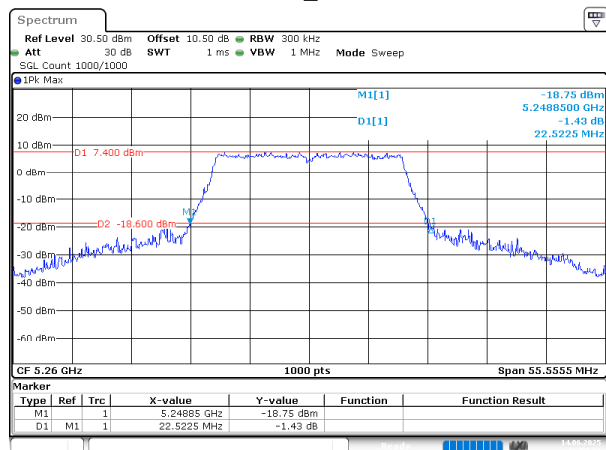
802.11a_5280MHz



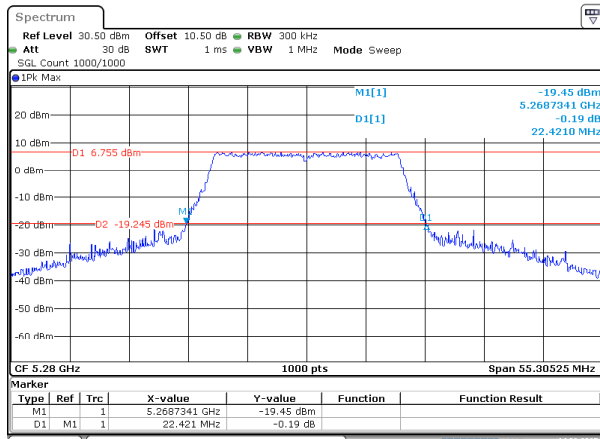
802.11a_5320MHz



802.11n20_5260MHz

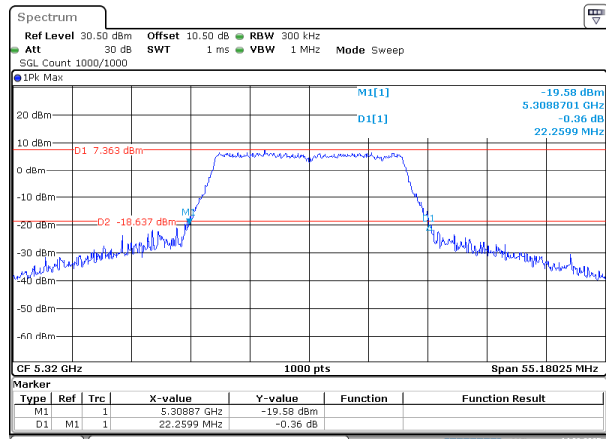


802.11n20_5280MHz



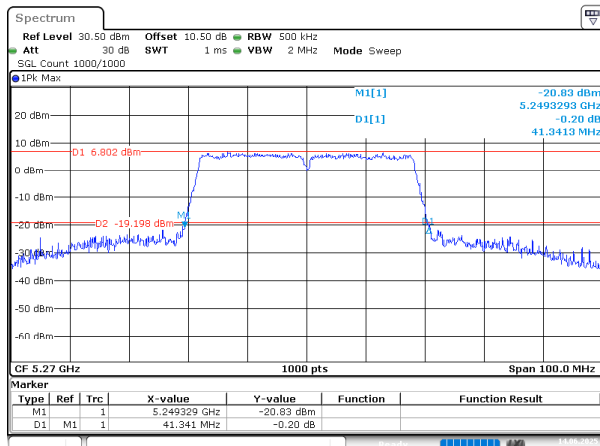
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 17:02:37

802.11n20_5320MHz



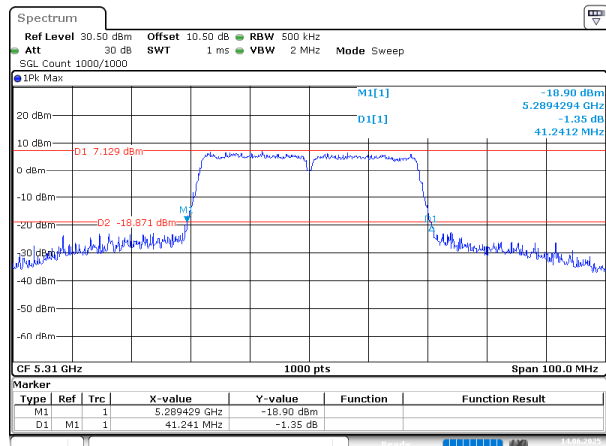
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 17:04:08

802.11n40_5270MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 17:08:52

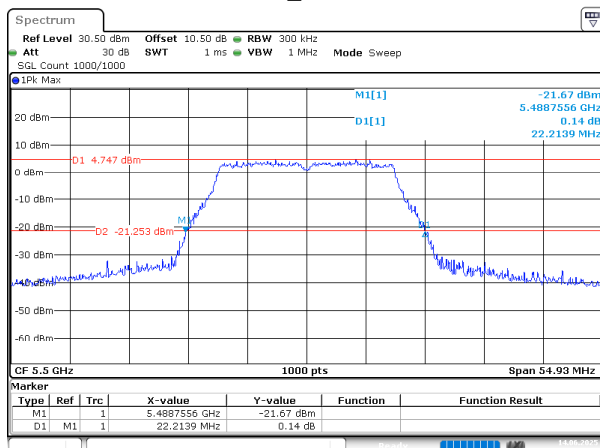
802.11n40_5310MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 17:26:12

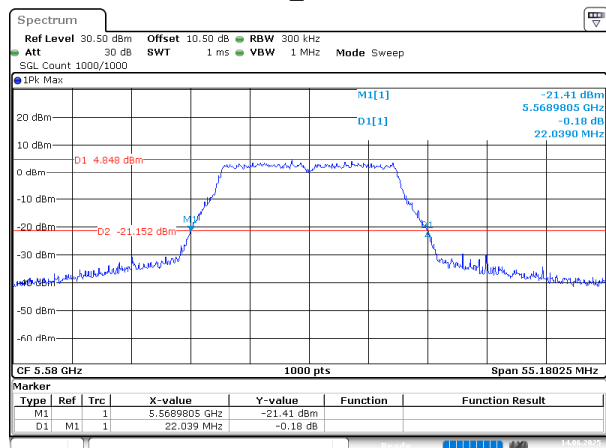
5470-5725MHz

802.11a_5500MHz



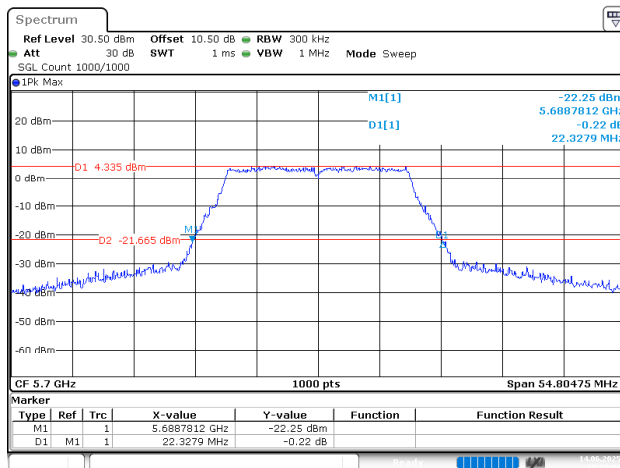
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 17:30:23

802.11a_5580MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 17:33:06

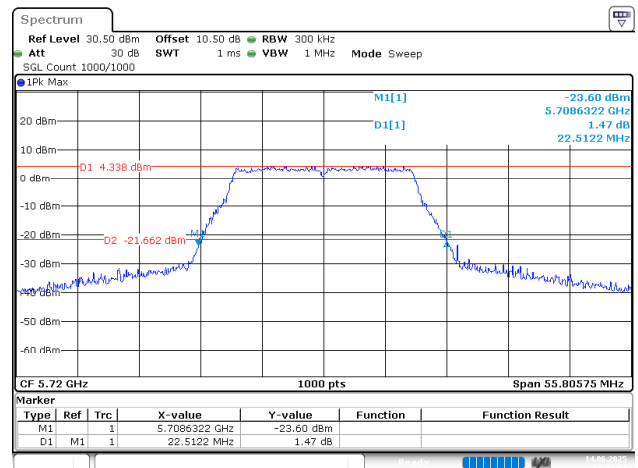
802.11a_5700MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

Date: 14.JUN.2025 17:37:01

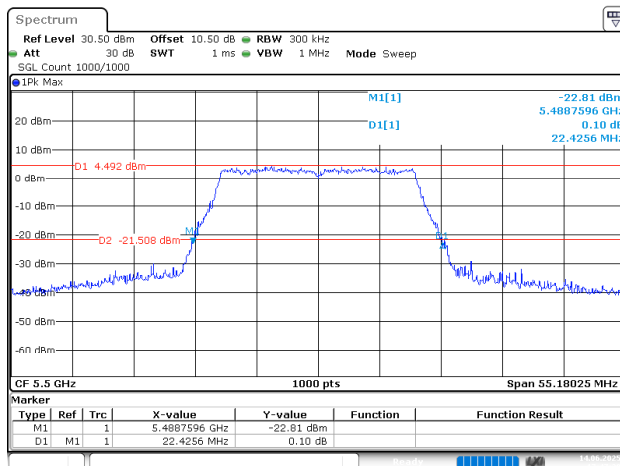
802.11a_5720MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

Date: 14.JUN.2025 17:45:01

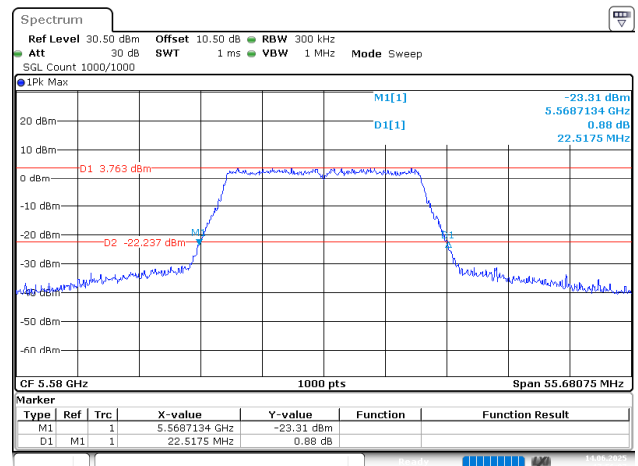
802.11n20_5500MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

Date: 14.JUN.2025 17:47:28

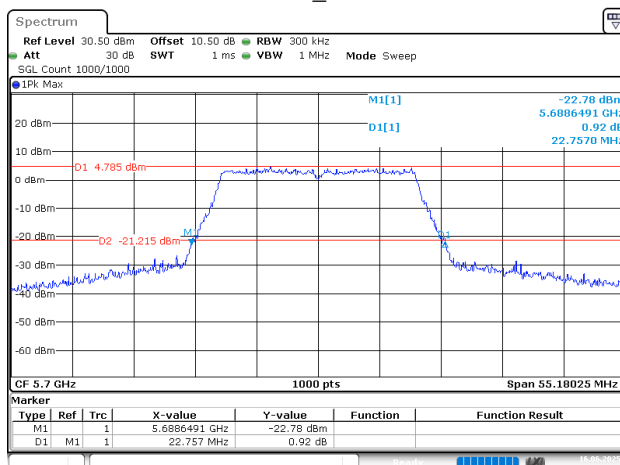
802.11n20_5580MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

Date: 14.JUN.2025 17:56:07

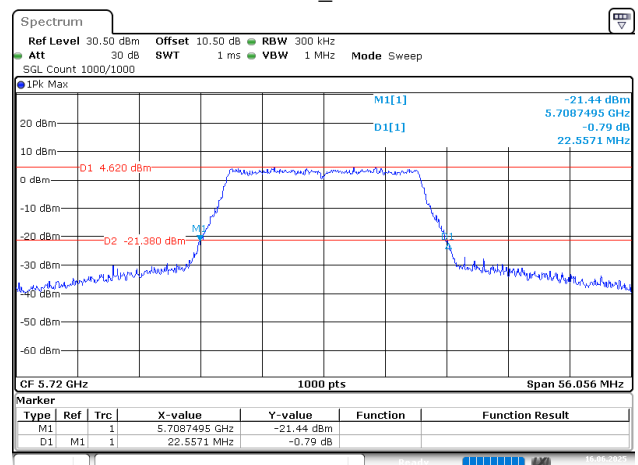
802.11n20_5700MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

Date: 16.JUN.2025 10:51:32

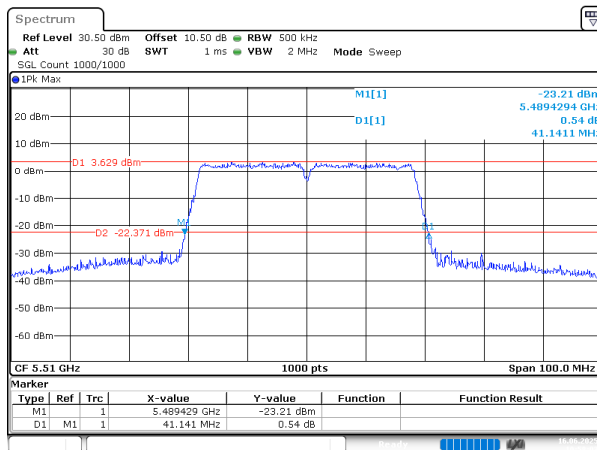
802.11n20_5720MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

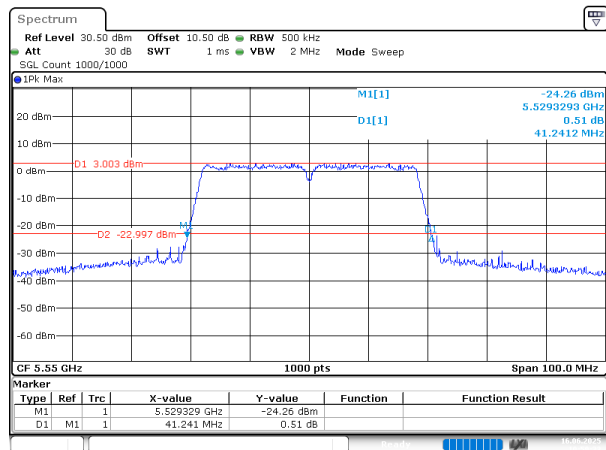
Date: 16.JUN.2025 10:55:09

802.11n40_5510MHz



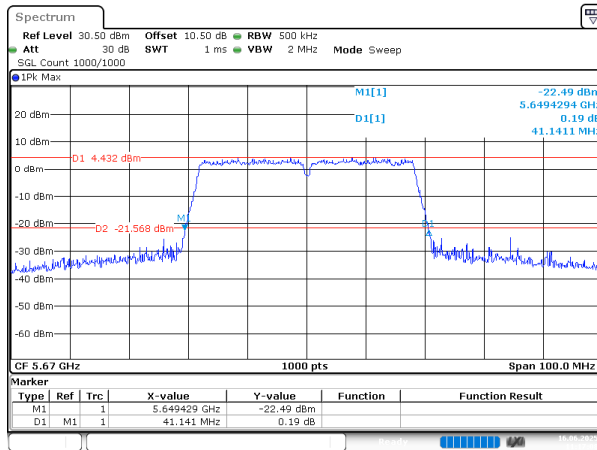
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 10:58:03

802.11n40_5550MHz



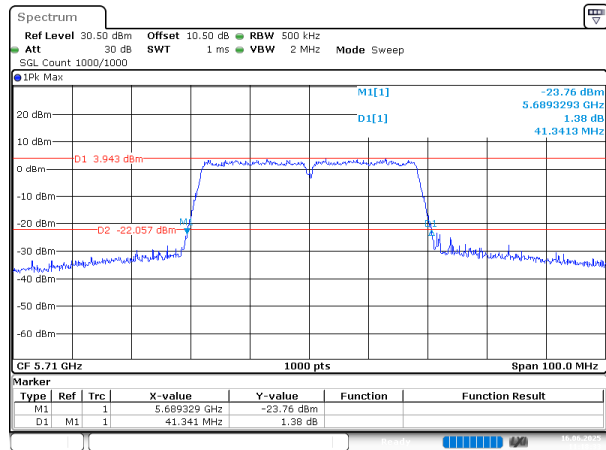
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 10:59:34

802.11n40_5670MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 11:17:09

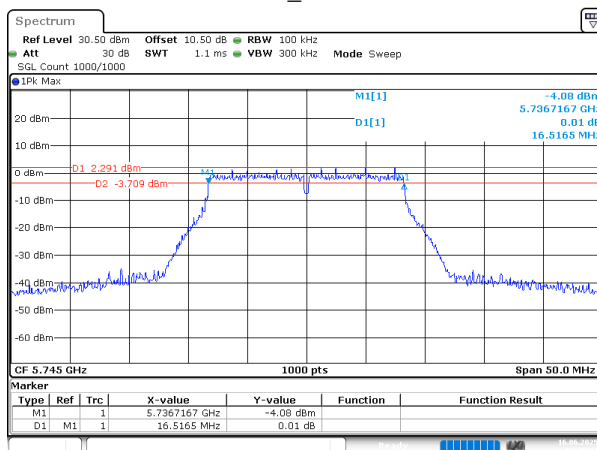
802.11n40_5710MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 11:18:33

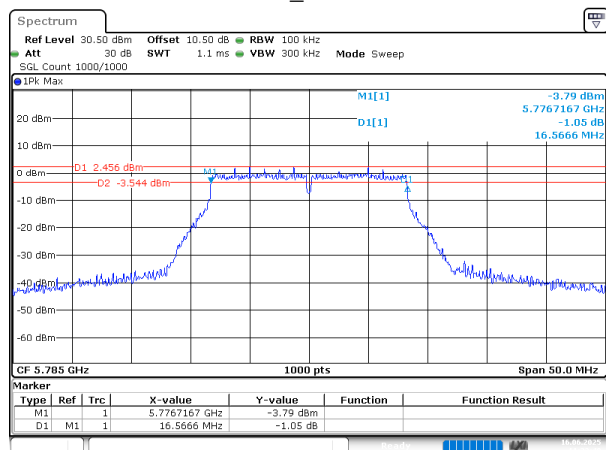
5725-5850MHz

802.11a_5745MHz



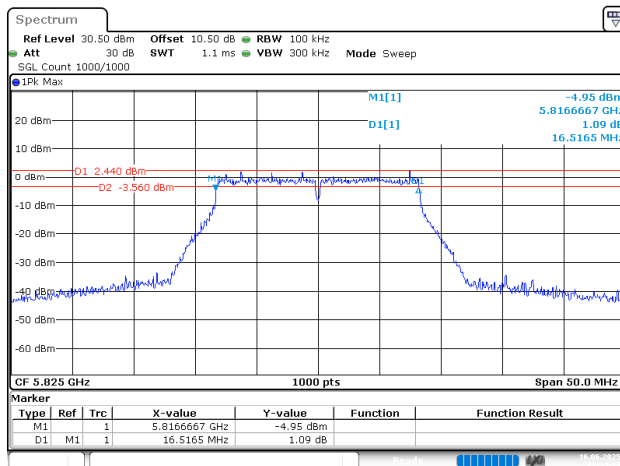
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 11:20:28

802.11a_5785MHz

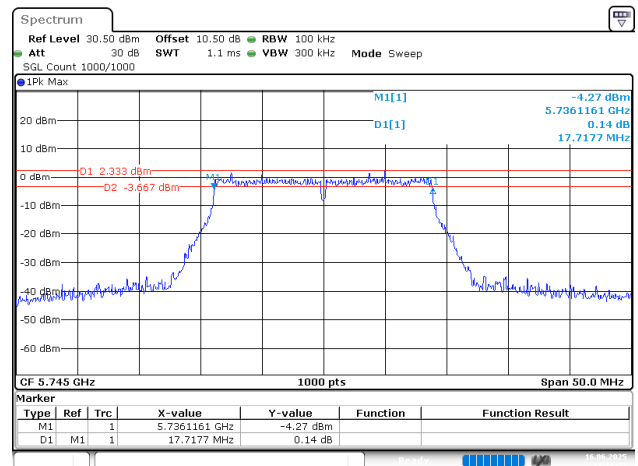


ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 11:22:41

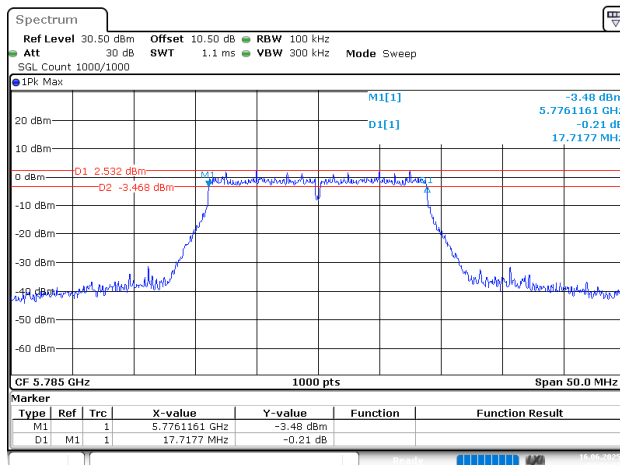
802.11a_5825MHz



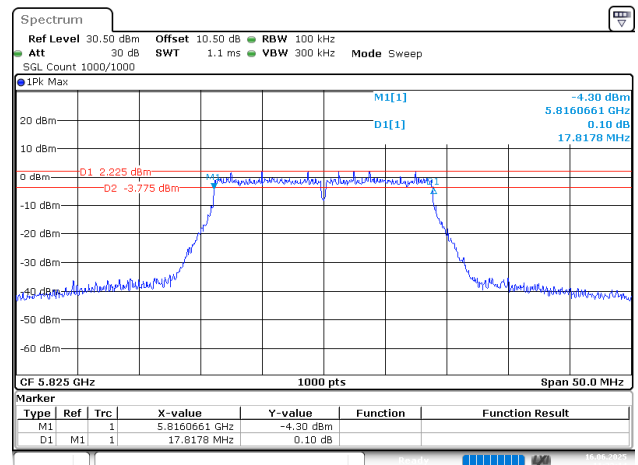
802.11n20_5745MHz



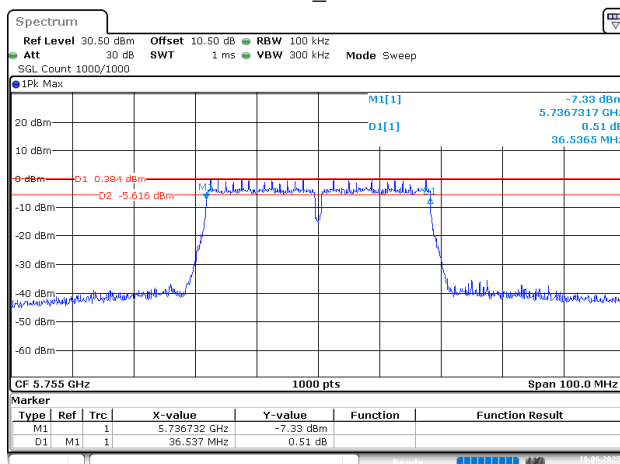
802.11n20_5785MHz



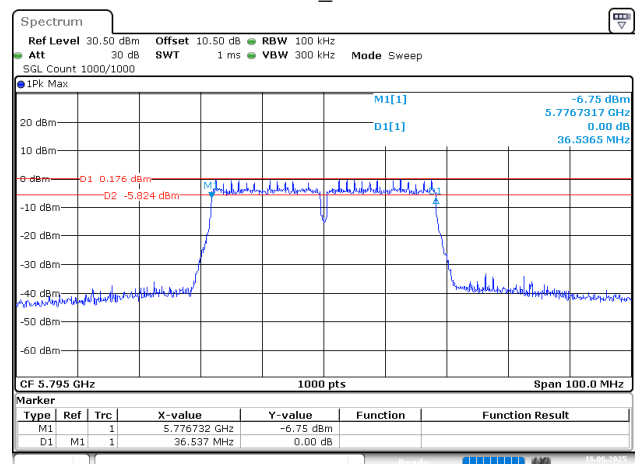
802.11n20_5825MHz



802.11n40_5755MHz



802.11n40_5795MHz



5.5 99% Occupied Bandwidth

Test Information:

Serial No.:	311A-7	Test Date:	2025/06/14~2025/06/16
Test Site:	RF	Test Mode:	Transmitting
Tester:	Jojo Zhou	Test Result:	N/A

Environmental Conditions:

Temperature: (°C)	25.6~26.1	Relative Humidity: (%)	48~52	ATM Pressure: (kPa)	99.7~100.7
----------------------	-----------	------------------------------	-------	------------------------	------------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101461	2024/09/05	2025/09/04
Eastsheep	Coaxial Attenuator	5W-N-JK-6G-10dB	F-08-EM503	2025/06/07	2026/06/06

* 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:

5150-5250MHz

Mode	Test Frequency (MHz)	99% OBW (MHz)
802.11a	5180	17.200
	5200	17.200
	5240	17.150
802.11n20	5180	18.050
	5200	18
	5240	18.050
802.11n40	5190	36.800
	5230	36.700

Note:

The 99% Occupied Bandwidth have not fall into the band 5250-5350MHz, please refer to the test plots of 99% Occupied Bandwidth.

5250-5350MHz

Mode	Test Frequency (MHz)	99% OBW (MHz)
802.11a	5260	17.150
	5280	17.150
	5320	17.200
802.11n20	5260	18.050
	5280	18.050
	5320	18.050
802.11n40	5270	36.700
	5310	36.800

5470-5725MHz

Mode	Test Frequency (MHz)	99% OBW (MHz)
802.11a	5500	17.050
	5580	17.050
	5700	17.050
	5720	17.050
802.11n20	5500	18.050
	5580	18
	5700	18.050
	5720	18.100
802.11n40	5510	36.700
	5550	36.700
	5670	36.700
	5710	36.800

5725-5850MHz

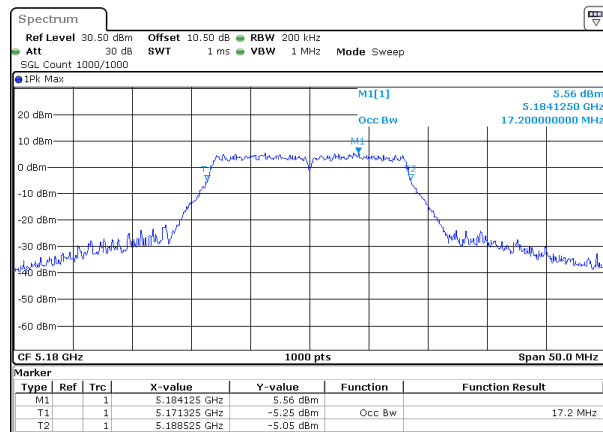
Mode	Test Frequency (MHz)	99% OBW (MHz)
802.11a	5745	17
	5785	17.050
	5825	17.050
802.11n20	5745	18
	5785	18
	5825	18
802.11n40	5755	36.800
	5795	36.700

Note:

The 99% Occupied Bandwidth have not fall into the band 5470-5725MHz, please refer to the test plots of 99% Occupied Bandwidth.

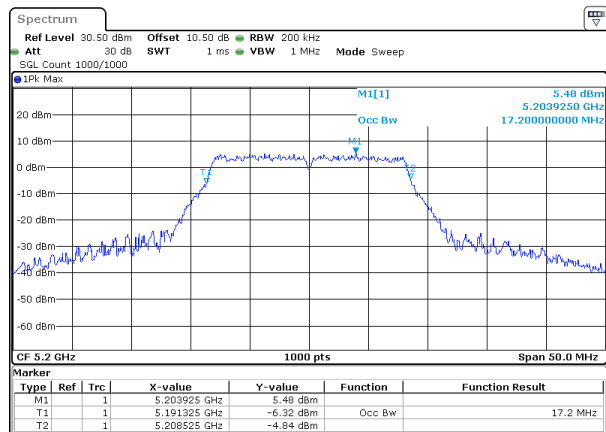
5150-5250MHz

802.11a_5180MHz



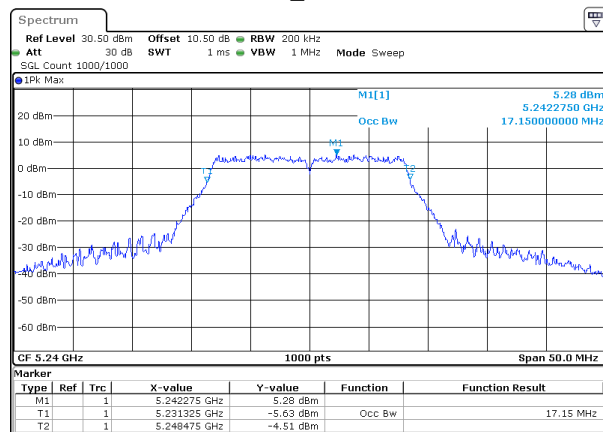
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:21:07

802.11a_5200MHz



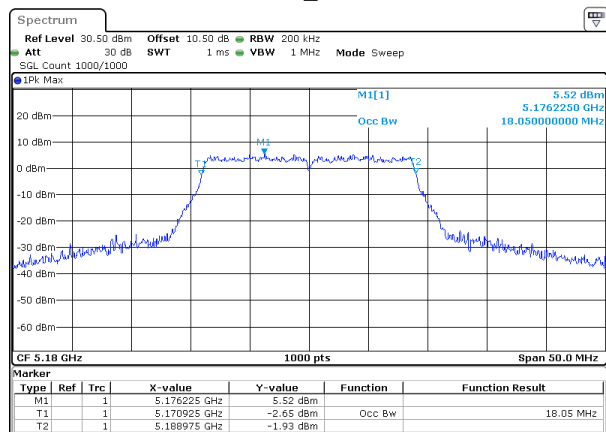
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:24:20

802.11a_5240MHz



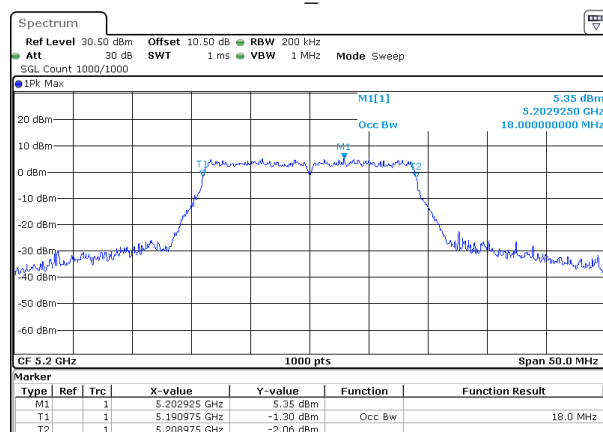
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:26:07

802.11n20_5180MHz



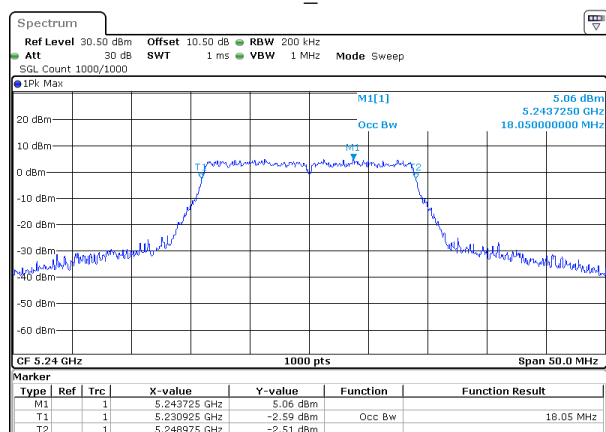
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:28:02

802.11n20_5200MHz



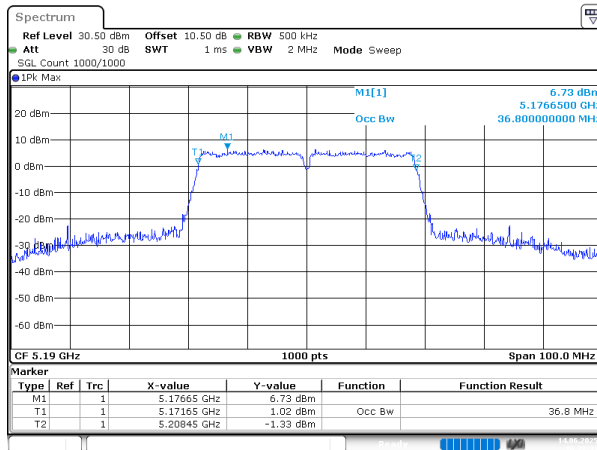
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:29:56

802.11n20_5240MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 16:31:37

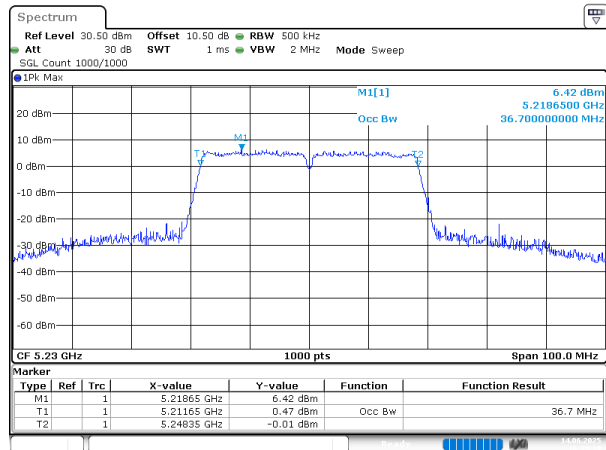
802.11n40_5190MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

Date: 14.JUN.2025 16:32:34

802.11n40_5230MHz

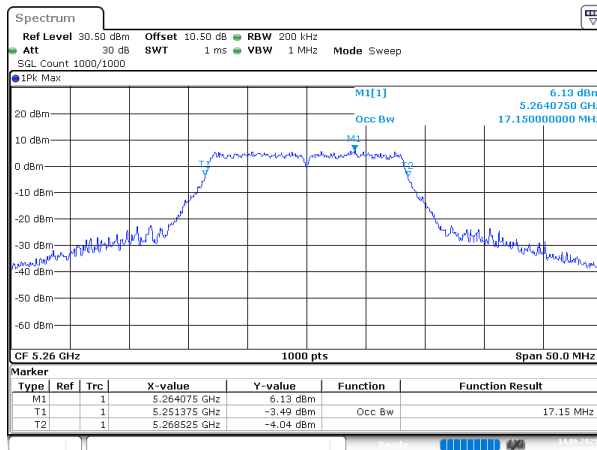


ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

Date: 14.JUN.2025 16:33:40

5250-5350MHz

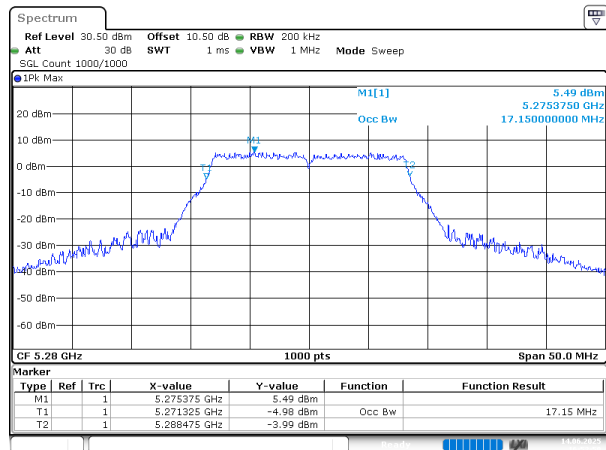
802.11a_5260MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

Date: 14.JUN.2025 16:51:21

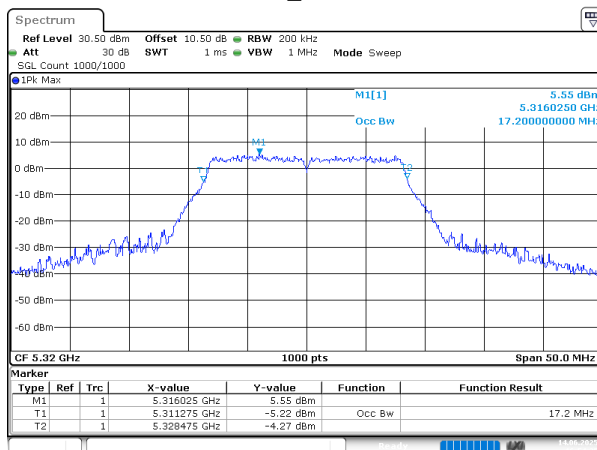
802.11a_5280MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

Date: 14.JUN.2025 16:52:59

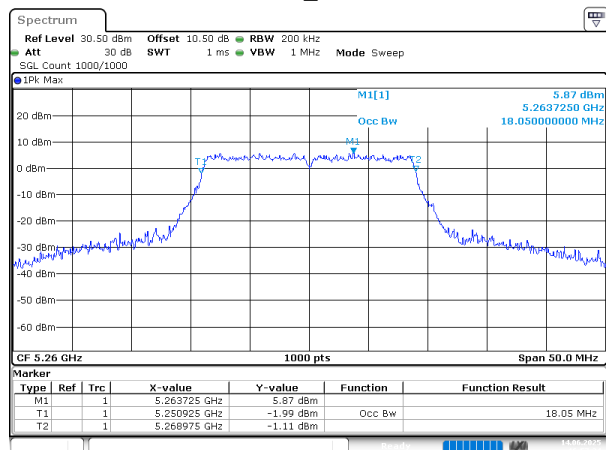
802.11a_5320MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

Date: 14.JUN.2025 16:54:35

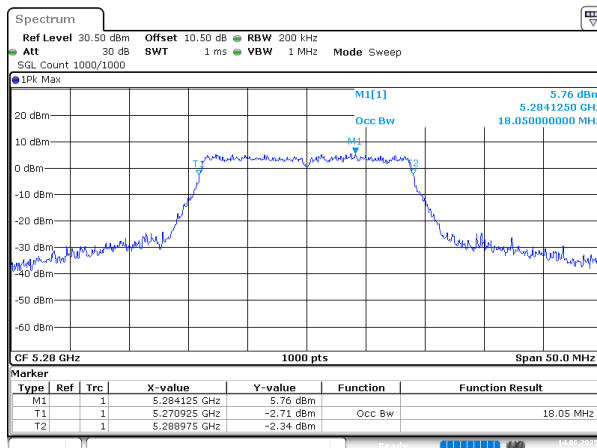
802.11n20_5260MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

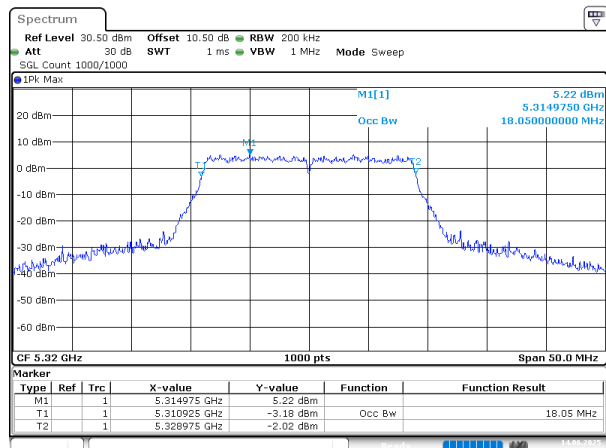
Date: 14.JUN.2025 16:57:24

802.11n20_5280MHz



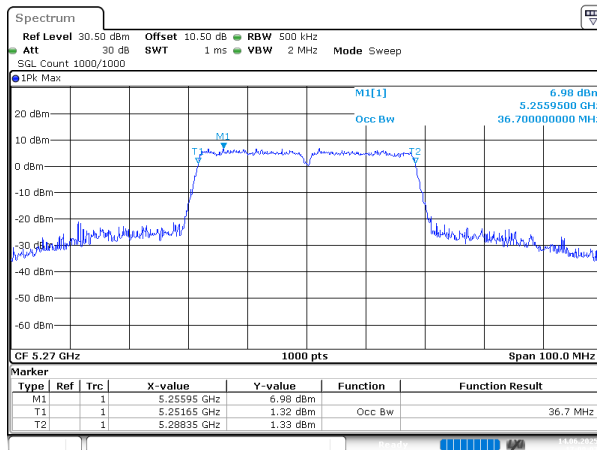
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 17:03:01

802.11n20_5320MHz



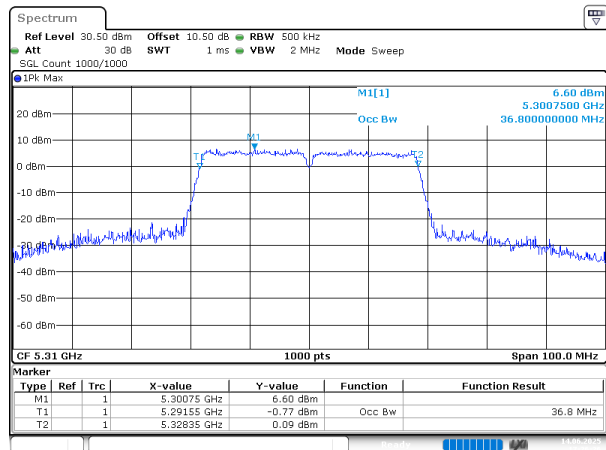
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 17:04:31

802.11n40_5270MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 17:09:07

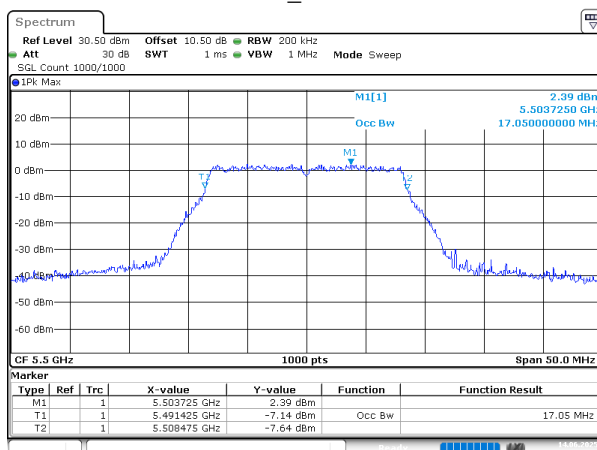
802.11n40_5310MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 17:26:26

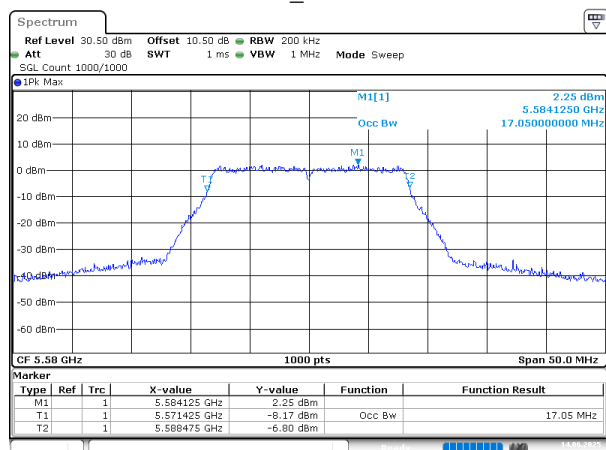
5470-5725MHz

802.11a_5500MHz



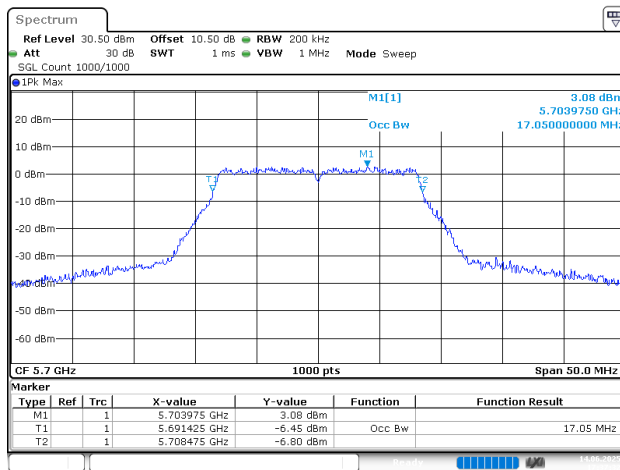
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 17:30:50

802.11a_5580MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 14.JUN.2025 17:33:33

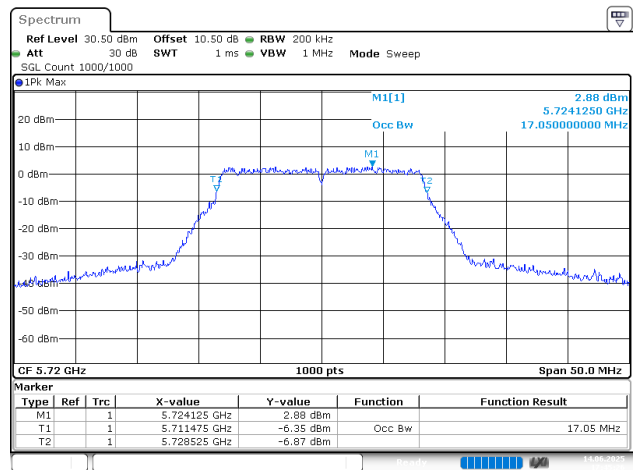
802.11a_5700MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

Date: 14.JUN.2025 17:37:32

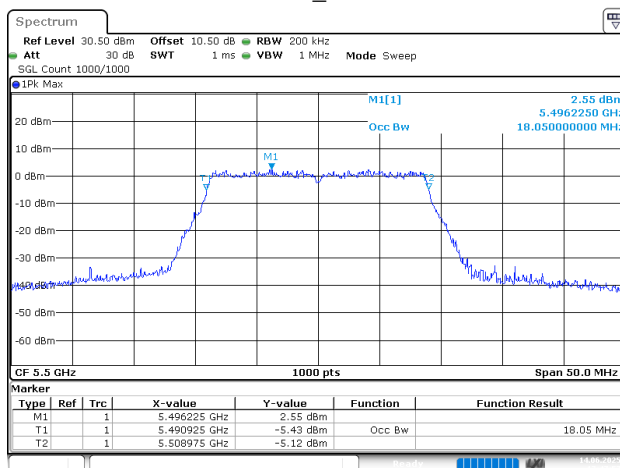
802.11a_5720MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

Date: 14.JUN.2025 17:45:26

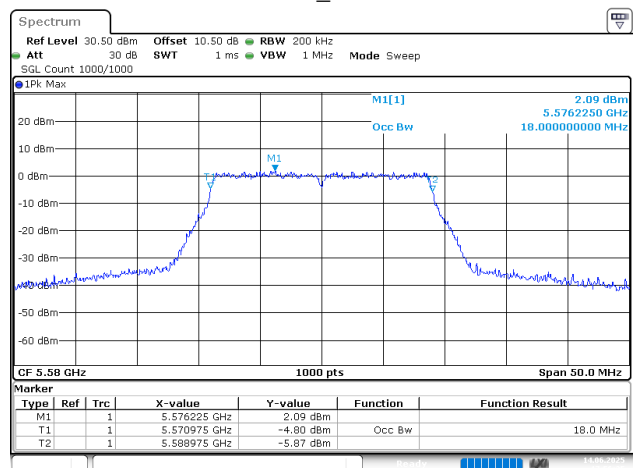
802.11n20_5500MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

Date: 14.JUN.2025 17:47:57

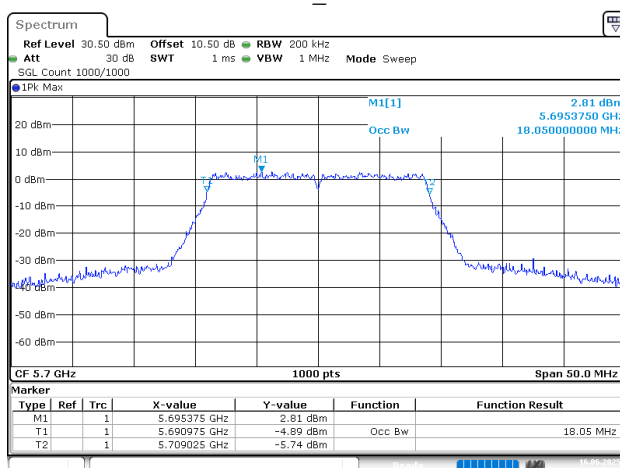
802.11n20_5580MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

Date: 14.JUN.2025 17:56:34

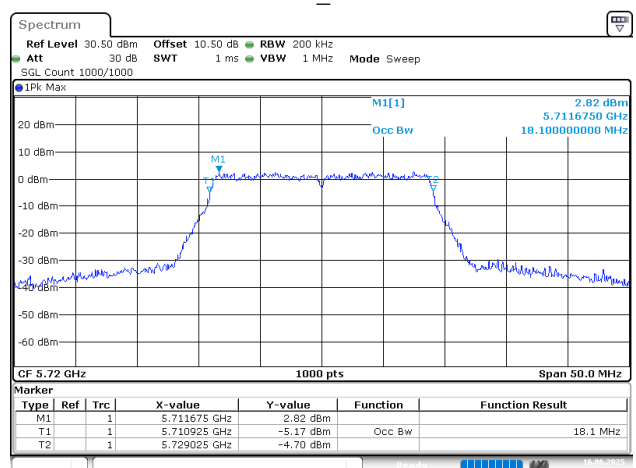
802.11n20_5700MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

Date: 16.JUN.2025 10:52:02

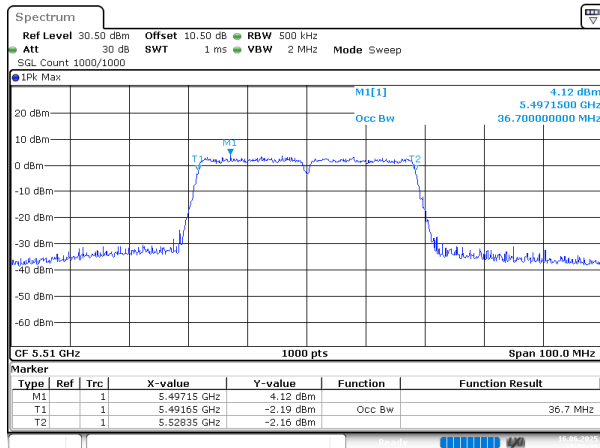
802.11n20_5720MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou

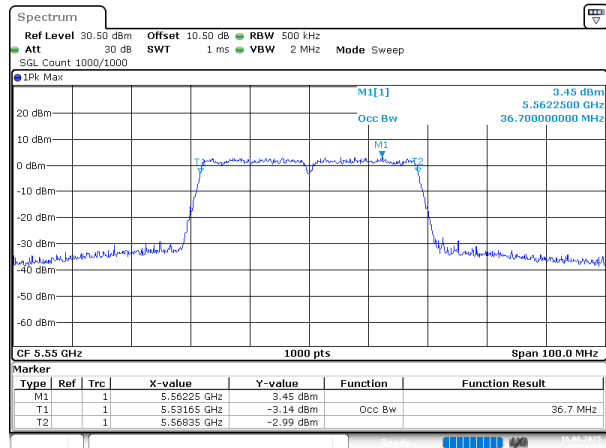
Date: 16.JUN.2025 10:55:33

802.11n40_5510MHz



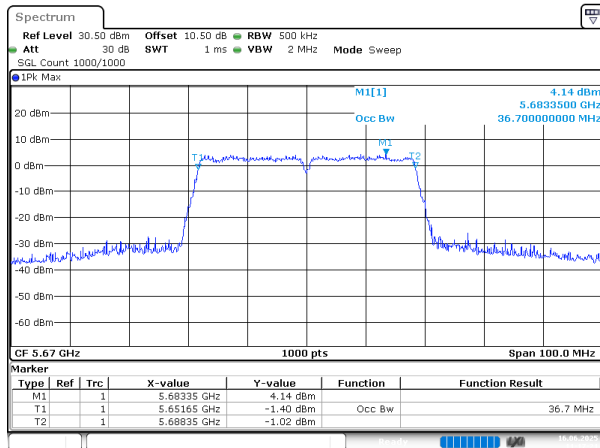
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 10:58:21

802.11n40_5550MHz



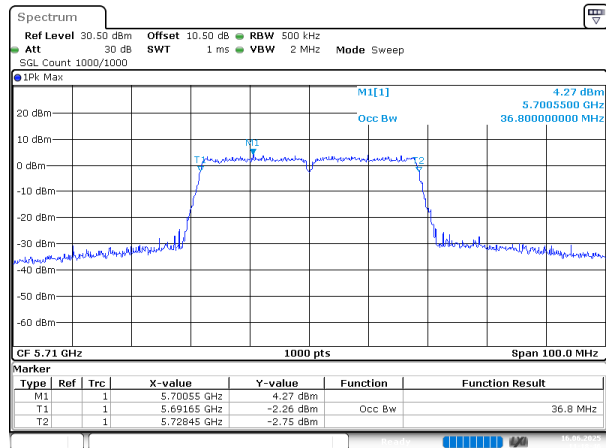
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 10:59:52

802.11n40_5670MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 11:17:22

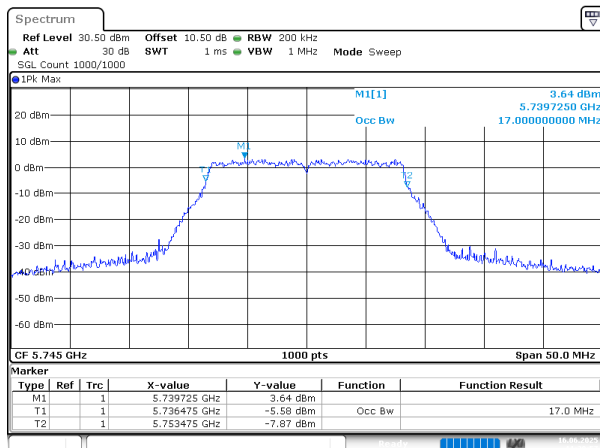
802.11n40_5710MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 11:18:47

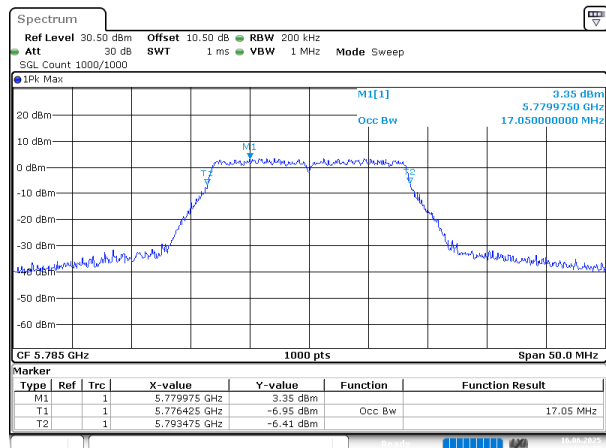
5725-5850MHz

802.11a_5745MHz



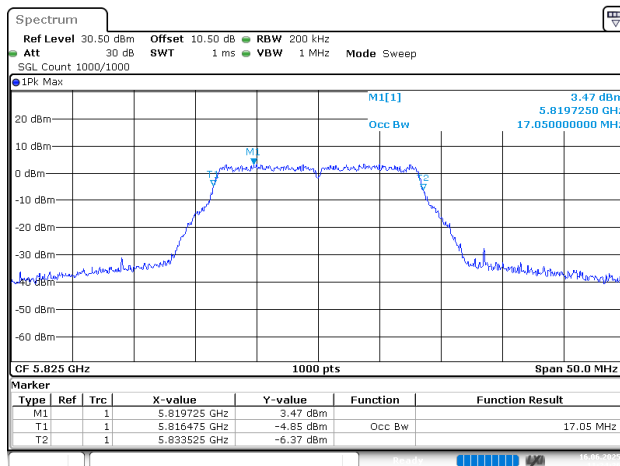
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 11:20:57

802.11a_5785MHz



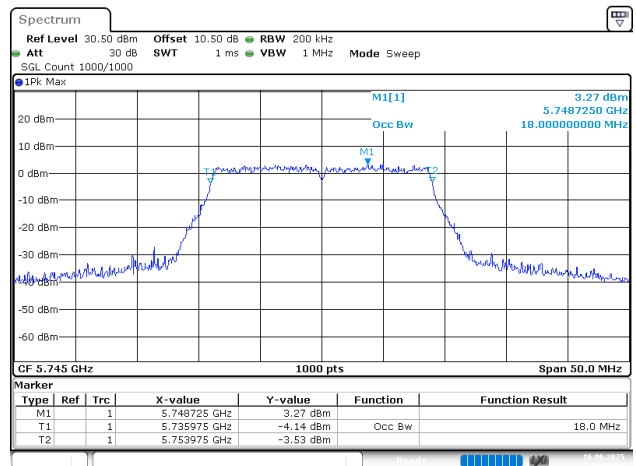
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 11:23:12

802.11a_5825MHz



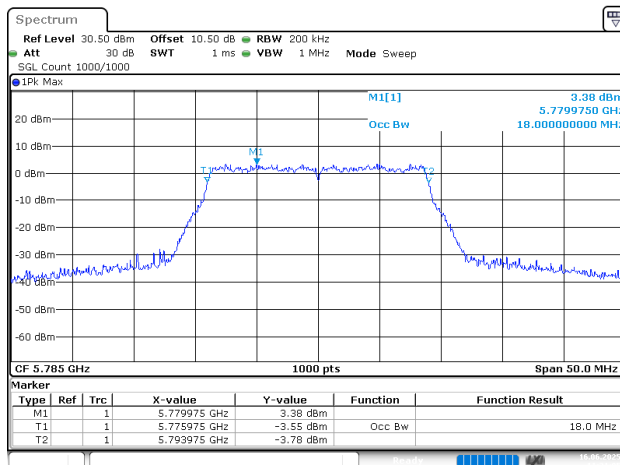
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 11:24:36

802.11n20_5745MHz



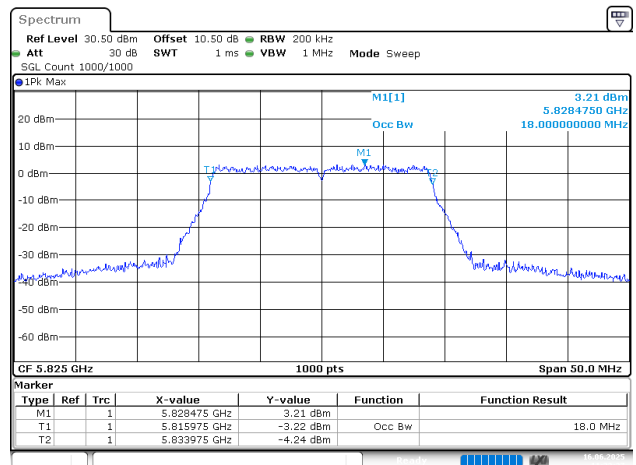
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 11:29:16

802.11n20_5785MHz



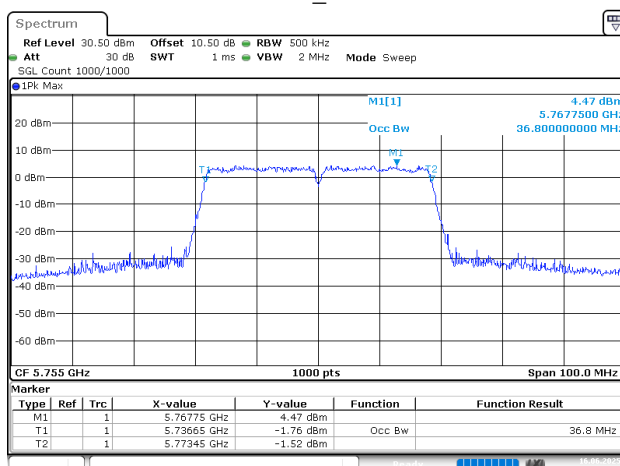
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 11:31:06

802.11n20_5825MHz



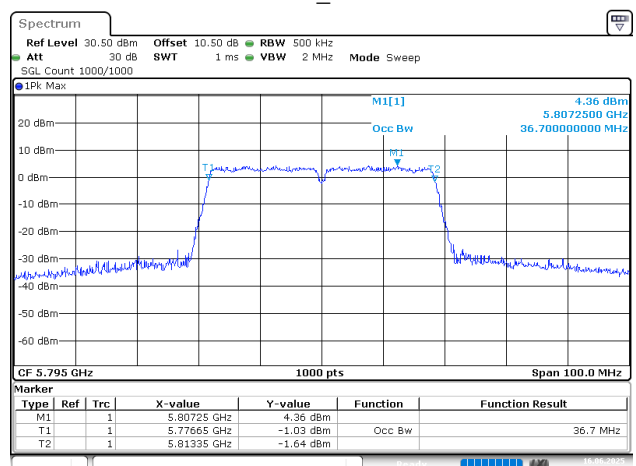
ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 11:32:37

802.11n40_5755MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 11:33:48

802.11n40_5795MHz



ProjectNo.:2502S13359E-RF Tester:Jojo Zhou
Date: 16.JUN.2025 11:34:52

5.6 Maximum Conducted Output Power

Test Information:

Serial No.:	311A-7	Test Date:	2025/06/14~2025/06/16
Test Site:	RF	Test Mode:	Transmitting
Tester:	Jojo Zhou	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.6~26.1	Relative Humidity: (%)	48~52	ATM Pressure: (kPa)	99.7~100.7
----------------------	-----------	------------------------------	-------	------------------------	------------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Anritsu	Microwave Peak Power Sensor	MA24418A	12618	2024/08/27	2025/08/26
Eastsheep	Coaxial Attenuator	5W-N-JK-6G-10dB	F-08-EM503	2025/06/07	2026/06/06

* 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:

5150-5250MHz

Mode	Test Frequency (MHz)	Average Output Power (dBm)	FCC Limit (dBm)	EIRP (dBm)	RSS 247 EIRP Limit (dBm)
802.11a	5180	15.91	24	17.88	22.36
	5200	15.71	24	17.68	22.36
	5240	15.57	24	17.54	22.34
802.11n20	5180	16.0	24	17.97	22.56
	5200	15.84	24	17.81	22.55
	5240	15.6	24	17.57	22.56
802.11n40	5190	15.85	24	17.82	23
	5230	15.77	24	17.74	23

Note: The device is a Client device.

5250-5350MHz

Mode	Test Frequency (MHz)	Average Output Power (dBm)	FCC Limit (dBm)	RSS 247 Limit (dBm)	EIRP (dBm)	RSS 247 EIRP Limit (dBm)
802.11a	5260	16.36	24	23.34	20.32	29.34
	5280	15.99	24	23.34	19.95	29.34
	5320	15.68	24	23.36	19.64	29.36
802.11n20	5260	16.39	24	23.56	20.35	29.56
	5280	15.95	24	23.56	19.91	29.56
	5320	15.76	24	23.56	19.72	29.56
802.11n40	5270	16.21	24	24	20.17	30
	5310	15.97	24	24	19.93	30

5470-5725MHz

Mode	Test Frequency (MHz)	Average Output Power (dBm)	Limit (dBm)	RSS 247 Limit (dBm)	EIRP (dBm)	RSS 247 EIRP Limit (dBm)
802.11a	5500	12.88	24	23.32	16.18	29.32
	5580	12.5	24	23.32	15.8	29.32
	5700	13.27	24	23.32	16.57	29.32
	5720	12.43	24	23.32	15.73	29.32
802.11n20	5500	12.99	24	23.56	16.29	29.56
	5580	12.61	24	23.55	15.91	29.55
	5700	13.39	24	23.56	16.69	29.56
	5720	12.37	24	23.58	15.67	29.58
802.11n40	5510	13.1	24	24	16.4	30
	5550	12.69	24	24	15.99	30
	5670	13.65	24	24	16.95	30
	5710	12.92	24	24	16.22	30

5725-5850MHz

Mode	Test Frequency (MHz)	Average Output Power (dBm)	FCC&RSS 247 Limit (dBm)	Verdict
802.11a	5745	13.94	30	Pass
	5785	14.11	30	Pass
	5825	14.01	30	Pass
802.11n20	5745	13.89	30	Pass
	5785	14.14	30	Pass
	5825	14.04	30	Pass
802.11n40	5755	14.09	30	Pass
	5795	14.05	30	Pass

5.7 Maximum power spectral density

Test Information:

Serial No.:	311A-7	Test Date:	2025/06/14~2025/06/16
Test Site:	RF	Test Mode:	Transmitting
Tester:	Jojo Zhou	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.6~26.1	Relative Humidity: (%)	48~52	ATM Pressure: (kPa)	99.7~100.7
----------------------	-----------	------------------------------	-------	------------------------	------------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101461	2024/09/05	2025/09/04
Eastsheep	Coaxial Attenuator	5W-N-JK-6G-10dB	F-08-EM503	2025/06/07	2026/06/06

* 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:

5150-5250MHz

Mode	Test Frequency (MHz)	Reading (dBm/MHz)	Duty Cycle Factor (dB)	Result (dBm/MHz)	FCC Limit (dBm/MHz)	EIRP (dBm/MHz)	RSS 247 EIRP Limit (dBm/MHz)
802.11a	5180	4.83	0.11	4.94	11	6.91	10
	5200	4.67	0.11	4.78	11	6.75	10
	5240	4.51	0.11	4.62	11	6.59	10
802.11n20	5180	4.64	0.13	4.77	11	6.74	10
	5200	4.38	0.13	4.51	11	6.48	10
	5240	4.34	0.13	4.47	11	6.44	10
802.11n40	5190	1.46	0.21	1.67	11	3.64	10
	5230	1.23	0.21	1.44	11	3.41	10

Note: The device is a Client device.