TEST REPORT

Applicant Name:	Shenzhen Neutop Optoelectronics Co., Ltd
Address:	502, BLDG 4, Pingshan minQi Technology Park, No. 65 Lishan Road, Pingshan Community,Taoyuan Street, Nanshan District,Shenzhen China
Report Number:	2501S37731E-RF-00B
FCC ID:	2BEGB-A01M31

Test Standard (s)

FCC PART 15.407

Sample Description

Product Type:	Projector
Model No.:	A01M31
Multiple Model(s) No.:	A**M31("**"= 01-99, indicates for different market or business purposes), A01M31S
Trade Mark:	Aurzen, AURZEN
Date Received:	2025-04-21
Issue Date:	2025-06-11

Test Result:	Pass▲

▲ In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Ekko Wu
RF Engineer

Approved By:

Nancy Wang
RF Supervisor

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. Customer model name, addresses, names, trademarks etc. are included.

This report may contain data that are not covered by the NVLAP accreditation and are marked with an asterisk "▼".

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2501S37731E-RF-00B	Original Report	2025-06-11

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Projector
Tested Model	A01M31
Multiple Model(s)	A**M31("**"= 01-99, indicates for different market or business purposes), A01M31S
Frequency Range	5150-5250MHz; 5725-5850MHz
Mode	802.11a/n20/n40/ac20/ac40/ac80
Maximum Conducted Average Output Power	5150-5250MHz: 15.90dBm; 5725-5850MHz: 13.44dBm
Modulation Technique	OFDM
Antenna Specification#	ANT0: 5150-5250MHz: 2.12dBi; 5725-5850MHz: 1.87dBi ANT1: 5150-5250MHz: 1.70dBi; 5725-5850MHz: 1.77dBi (provided by the applicant)
Voltage Range	DC 35V from adapter
Sample serial number	31NX-2 for Conducted and Radiated Emissions Test 31NX-1 for RF Conducted Test (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	Model: SOY-3500428-454 Input: AC 100-240V, 50/60Hz 2.5A Max Output: DC 35.0V, 4.28A 149.8W
Note: The Multiple models are electrically identical with the test model except for model number and sales channel. Please refer to the declaration letter# for more detail, which was provided by manufacturer.	

Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A and E of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

And KDB789033 D02 General U-NII Test Procedures New Rules v02r01.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		109.2kHz(k=2, 95% level of confidence)
RF Frequency		56.6Hz(k=2, 95% level of confidence)
RF output power, conducted		0.86dB(k=2, 95% level of confidence)
Unwanted Emission, conducted		1.60dB(k=2, 95% level of confidence)
Power Spectral Density		0.90dB(k=2, 95% level of confidence)
AC Power Lines Conducted Emissions	9kHz-150kHz	3.63dB(k=2, 95% level of confidence)
	150kHz-30MHz	3.66dB(k=2, 95% level of confidence)
Radiated Emissions	9kHz - 30MHz	3.60dB(k=2, 95% level of confidence)
	30MHz~200MHz (Horizontal)	5.32dB(k=2, 95% level of confidence)
	30MHz~200MHz (Vertical)	5.43dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Horizontal)	5.77dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Vertical)	5.73dB(k=2, 95% level of confidence)
	1GHz - 6GHz	5.34dB(k=2, 95% level of confidence)
	6GHz - 18GHz	5.40dB(k=2, 95% level of confidence)
	18GHz - 40GHz	5.64dB(k=2, 95% level of confidence)
Temperature		±1℃
Humidity		±1%
Supply voltages		±0.4%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, 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. : 715558, the FCC Designation No. : CN5045.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in an engineering mode, which was provided by manufacturer.

For 5150-5250MHz Band, 7 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
38	5190	46	5230
40	5200	48	5240
42	5210	/	/

For 802.11a/ac20 mode: channel 36, 40, 48 were tested;
For 802.11ac40 mode: channel 38, 46 were tested;
For 802.11ac80 mode, channel 42 was tested.

For 5725-5850MHz Band, 8 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	157	5785
151	5755	159	5795
153	5765	161	5805
155	5775	165	5825

For 802.11a/ac20 mode: channel 149, 157, 165 were tested;
For 802.11ac40 mode: channel 151, 159 were tested;
For 802.11ac80 mode, channel 155 was tested.

EUT Exercise Software

Exercise Software#	CMD			
5150-5250 MHz Band				
Mode	**Test Channels**	**Data rate**	**Power Level#**	
			ANT 0	**ANT 1**
802.11a	Low	6Mbps	14	14
	Middle	6Mbps	12	12
	High	6Mbps	12	12
802.11ac-VHT20	Low	MCS0	12	12
	Middle	MCS0	12	12
	High	MCS0	12	12
802.11ac-VHT40	Low	MCS0	12	12
	High	MCS0	12	12
802.11ac-VHT80	Middle	MCS0	12	12

5725-5850 MHz Band				
Mode	Test Channels	Data rate	Power Level#	
			ANT 0	ANT 1
802.11a	Low	6Mbps	14	14
	Middle	6Mbps	12	12
	High	6Mbps	12	12
802.11ac-VHT20	Low	MCS0	12	12
	Middle	MCS0	12	12
	High	MCS0	12	12
802.11ac-VHT40	Low	MCS0	12	12
	High	MCS0	12	12
802.11ac-VHT80	Middle	MCS0	12	12

Note:
1. The worst-case data rates are determined to be as follows for each mode based upon inverstigation by measuring the power and PSD across all data rates bandwidths, and modulations.
2. The device supports SISO in all modes, and MIMO 2T2R in 802.11n/ac modes, per pretest, 2T2R mode was the worst mode and reported for 802.11n/ac modes.
3. The n20/n40 mode was reduced test as identical parameter with ac20/ac40 mode.

Special Accessories

No special accessory.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

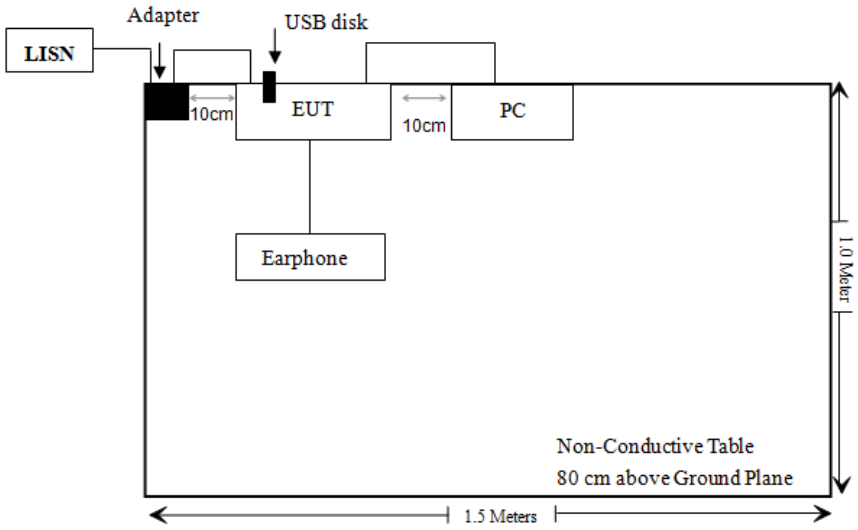
Manufacturer	Description	Model	Serial Number
snom	Earphone	/	/
DELL	PC	Latitude E5430	37K4X AOO
SUOSHI	USB disk	/	/

External I/O Cable

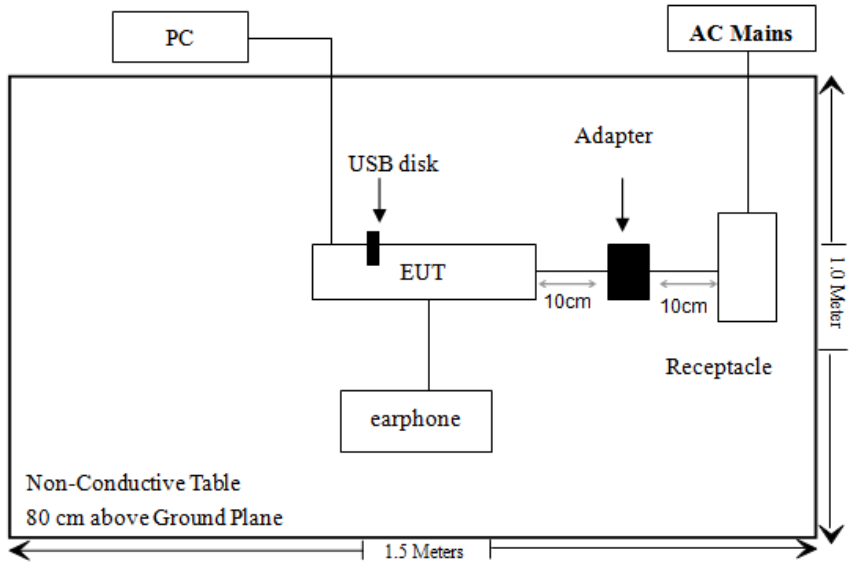
Cable Description	Length (m)	From Port	To
Unshielded Un-detachable AC cable	1.5	Receptacle	AC Mains
Unshielded Detachable AC cable	1.5	Adapter	LISN/Receptacle/ AC Mains
Shielded Un-detachable DC cable	1.0	Adapter	EUT
Unshielded Un-detachable Audio cable	1.0	EUT	Earphone
Shielded detachable HDMI cable	1.0	EUT	PC

Block Diagram of Test Setup

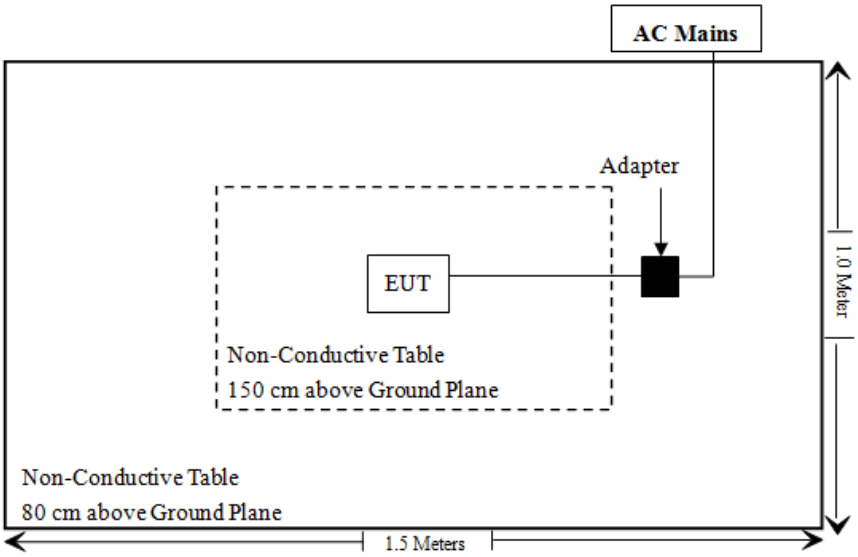
For Conducted Emissions:



For Radiated Emissions below 1GHz:



For Radiated Emissions above 1GHz:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 (b) & §2.1091	MPE-Based Exemption	Compliant
§15.203	Antenna Requirement	Compliant
§15.207(a)	Conducted Emissions	Compliant
§15.205& §15.209 &§15.407(b)	Undesirable Emission& Restricted Bands	Compliant
§15.407(a) (e)	26 dB Emission Bandwidth & 6dB Bandwidth	Compliant
§15.407(a)	Conducted Transmitter Output Power	Compliant
§15.407 (a)	Power Spectral Density	Compliant
§15.407 (h)	Transmit Power Control (TPC)	Not Applicable
§15.407 (h)	Dynamic Frequency Selection (DFS)	Not Applicable
C63.10 §11.6	Duty Cycle	/

Not Applicable: The EUT is support 5150-5250MHz/5725-5850MHz only.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2024/12/04	2025/12/03
Rohde & Schwarz	LISN	ENV216	101613	2024/12/04	2025/12/03
Unknown	CE Cable	Unknown	UF A210B-1-0720-504504	2025/04/29	2026/04/28
Rohde & Schwarz	Transient Limiter	ESH3Z2	DE25985	2025/04/29	2026/04/28
Audix	EMI Test software	E3	191218(V9)	NCR	NCR
Radiated Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2024/12/04	2025/12/03
Sonoma instrument	Pre-amplifier	310N	186238	2025/04/29	2026/04/28
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
Unknown	Cable	XH500C	J-10M-A	2025/04/29	2026/04/28
Unknown	Cable	Chamber Cable 1	F-03-EM236	2025/04/29	2026/04/28
BACL	Active Loop Antenna	1313-1A	4031911	2024/05/14	2027/05/13
Unknown	Cable	PNG214	1354	2024/12/04	2025/12/03
Unknown	Cable	2Y194	0735	2024/12/04	2025/12/03
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
Rohde&Schwarz	Spectrum Analyzer	FSV40	101605	2025/03/26	2026/03/25
COM-POWER	Pre-amplifier	PA-122	181919	2025/04/29	2026/04/28
Schwarzbeck	Horn Antenna	BBHA9120D(1201)	1143	2023/07/26	2026/07/25
Unknown	RF Cable	KMSE	0735	2024/12/06	2025/12/05
Unknown	RF Cable	UFA147	219661	2024/12/06	2025/12/05
Unknown	RF Cable	XH750A-N	J-10M	2024/12/06	2025/12/05
JD	Filter Switch Unit	DT7220FSU	DS79906	2024/09/09	2025/09/08
JD	Multiplex Switch Test Control Set	DT7220SCU	DS79903	2024/09/09	2025/09/08
A.H.System	Pre-amplifier	PAM-1840VH	190	2025/04/29	2026/04/28
Electro-Mechanics Co	Horn Antenna	3116	9510-2270	2023/09/18	2026/09/17
UTIFLEX	RF Cable	NO. 13	232308-001	2024/12/18	2025/12/17
Audix	EMI Test software	E3	191218(V9)	NCR	NCR

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
ANRITSU	Microwave peak power sensor	MA24418A	12622	2025/04/29	2026/04/28
Tonscend	RF control Unit	JS0806-2	19D8060154	2024/08/06	2025/08/05
Rohde & Schwarz	Spectrum Analyzer	FSV40	101473	2024/12/04	2025/12/03
Narda	20dB Attenuator	99899	0107	2024/06/27	2025/06/26

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

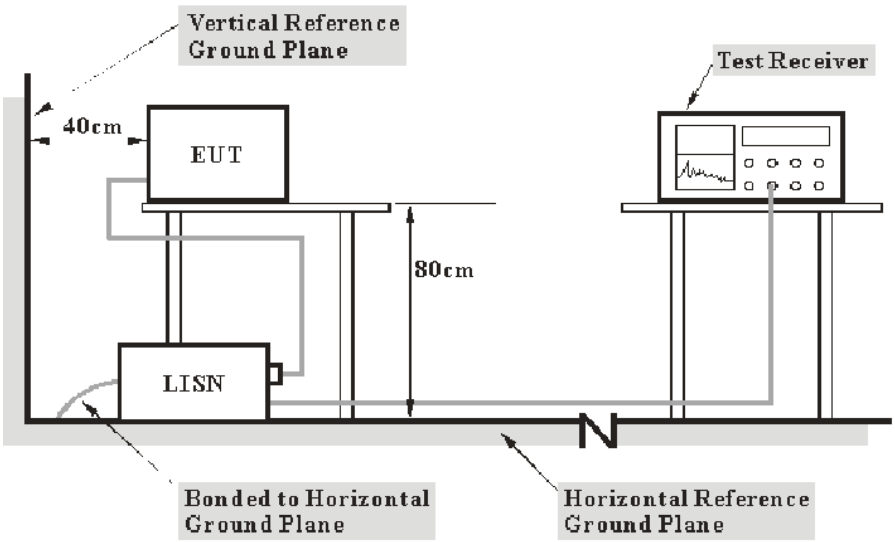
REQUIREMENTS AND TEST PROCEDURES

Conducted Emissions

Applicable Standard

FCC §15.207

EUT Setup



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

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

The spacing between the peripherals was 10 cm.

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	RBW
150 kHz – 30 MHz	9 kHz

Test Procedure

During the conducted emission test, the adapter was connected to the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and Average detection mode.

Factor & Over Limit Calculation

The factor is calculated by adding LISN VDF (Voltage Division Factor) and Cable Loss. The basic equation is as follows:

Factor = LISN VDF + Cable Loss

The "**Over limit**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over limit of -7 dB means the emission is 7 dB below the limit. The equation for calculation is as follows:

Over Limit = Level – Limit
Level = Read Level + Factor

Note: The term "cable loss" refers to the combination of a cable and a 10dB transient limiter (attenuator).

Undesirable Emission

Applicable Standard

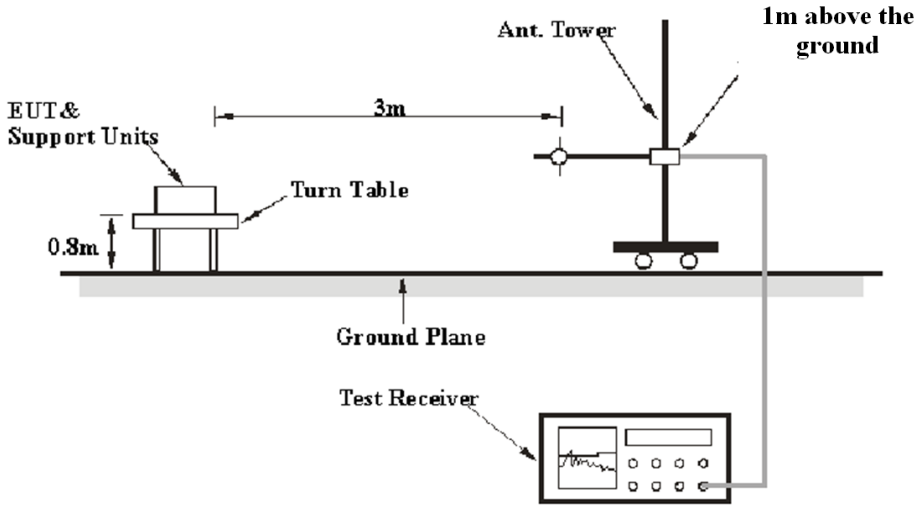
FCC §15.407 (b); §15.209; §15.205;

(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 in the 5.725-5.85 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.

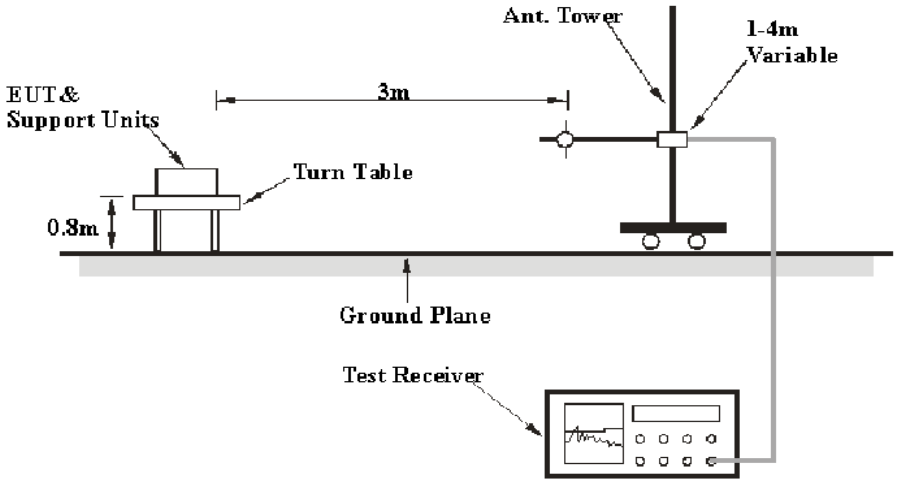
Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

EUT Setup

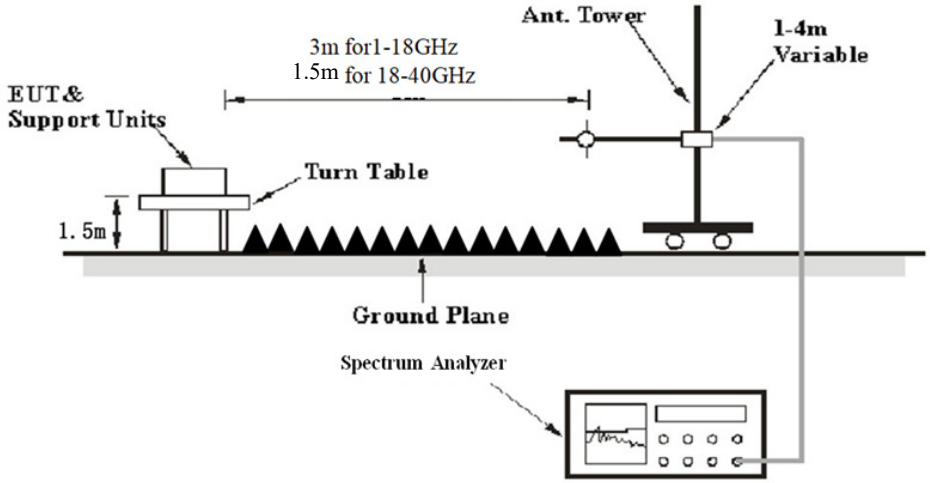
9 kHz-30MHz:



30MHz-1GHz:



Above 1 GHz:



The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC 15.209 and FCC 15.407 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9 kHz to 40 GHz.

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

9 kHz-1GHz:

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

1-40GHz:

Pre-scan

Measurement	Duty cycle	RBW	Video B/W	Detector
PK	Any	1MHz	3 MHz	Peak
AV	>98%	1MHz	1 kHz	Peak
	<98%	1MHz	≥1/Ton	Peak

Final measurement for emission identified during pre-scan

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

Note: Ton is minimum transmission duration

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

Test Procedure

Radiated Spurious Emission

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

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all the installation combinations.

All final data was recorded in Quasi-peak detection mode except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz, average detection modes for frequency bands 9–90 kHz and 110–490 kHz, peak and average detection modes for frequencies above 1 GHz.

For 9 kHz-30MHz, the report shall list the six emissions with the smallest margin relative to the limit, for each of the three antenna orientations (parallel, perpendicular, and ground-parallel) unless the margin is greater than 20 dB.

According to ANSI C63.10-2013,9.4: For field strength measurements made at other than the distance at which the applicable limit is specified, extrapolate the measured field strength to the field strength at the distance specified by the limit using an inverse distance correction factor (20 dB/decade of distance). In some cases, a different distance correction factor may be required;

$$E_{\mathrm{SpecLimit}} = E_{\mathrm{Meas}} + 20\log\left(\frac{d_{\mathrm{Meas}}}{d_{\mathrm{SpecLimit}}}\right)$$

where

$E_{\mathrm{SpecLimit}}$	is the field strength of the emission at the distance specified by the limit, in dBμV/m
E_{Meas}	is the field strength of the emission at the measurement distance, in dBμV/m
d_{Meas}	is the measurement distance, in m
$d_{\mathrm{SpecLimit}}$	is the distance specified by the limit, in m

So the extrapolation factor of 1m is 20*log(1.5/3)= -6.0 dB, for 18-40GHz range, the limit of 1.5m distance was added by 6.0dB from limit of 3m to compared with the result measurement at 1.5m distance.

Factor & Over Limit/Margin Calculation

The Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain. The basic equation is as follows:

Factor = Antenna Factor + Cable Loss - Amplifier Gain

The "**Over Limit/Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit/margin of -7dB means the emission is 7dB below the limit. The equation for calculation is as follows:

Over Limit = Level – Limit; Margin = Limit–Corrected Amplitude
Level / Corrected Amplitude = Read Level + Factor

26 dB & 6dB Emission Bandwidth

Applicable Standard

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Test Procedure

According to KDB789033 D02 section II.C and section II.D

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

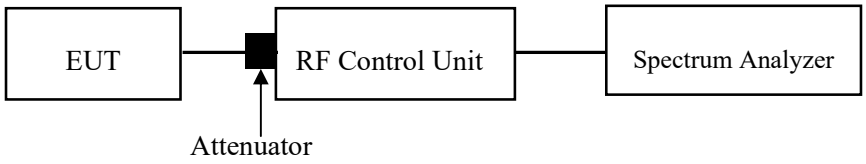
2. Minimum Emission Bandwidth for the band 5.725-5.85 GHz
Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth:
a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3 × RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

3. 99% Occupied Bandwidth:

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

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:
a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.

c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.
d) Step a) through step c) might require iteration to adjust within the specified range.
e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).



Conducted Transmitter Output Power

Applicable Standard

For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 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.

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.

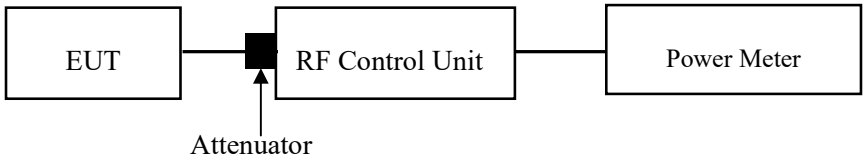
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11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

For the band 5.725-5.85 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.

Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method PM-G should be applied

a. Place the EUT on a bench and set it in transmitting mode.
b. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.



Note: A short RF cable with low cable loss connected to the EUT antenna port,which was provided by client or lab, the cable loss was add with offset into test equipment, the total offset consists of attenuator and/or RF cable and/or power splitter loss

Power Spectral Density

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.

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

For the band 5.725-5.85 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.

Test Procedure

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

Duty cycle ≥98%

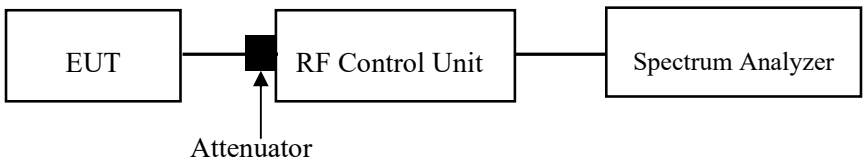
KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-1 should be applied.

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

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

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

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



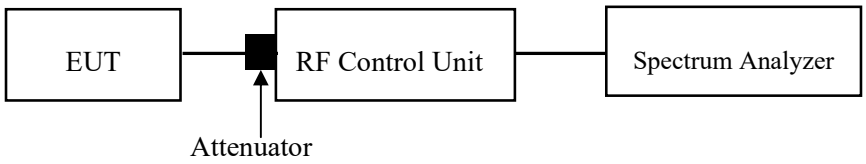
Note: A short RF cable with low cable loss connected to the EUT antenna port,which was provided by client or lab, the cable loss was add with offset into test equipment, the total offset consists of attenuator and/or RF cable and/or power splitter loss

Duty Cycle

Test Procedure

According to ANSI C63.10-2013 Section 12.2

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



ANTENNA REQUIREMENT

Applicable Standard

According to 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.

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.

Antenna Connector Construction

The EUT has two internal antennas which were permanently attached, fulfill the requirement of this section. Please refer to the EUT photos.

ANT	Type	Antenna Gain#	Impedance	Frequency Range
ANT0	FPC	2.12dBi	50Ω	5150-5250MHz
ANT1	FPC	1.70dBi	50Ω	5150-5250MHz
ANT0	FPC	1.87dBi	50Ω	5725-5850MHz
ANT1	FPC	1.77dBi	50Ω	5725-5850MHz

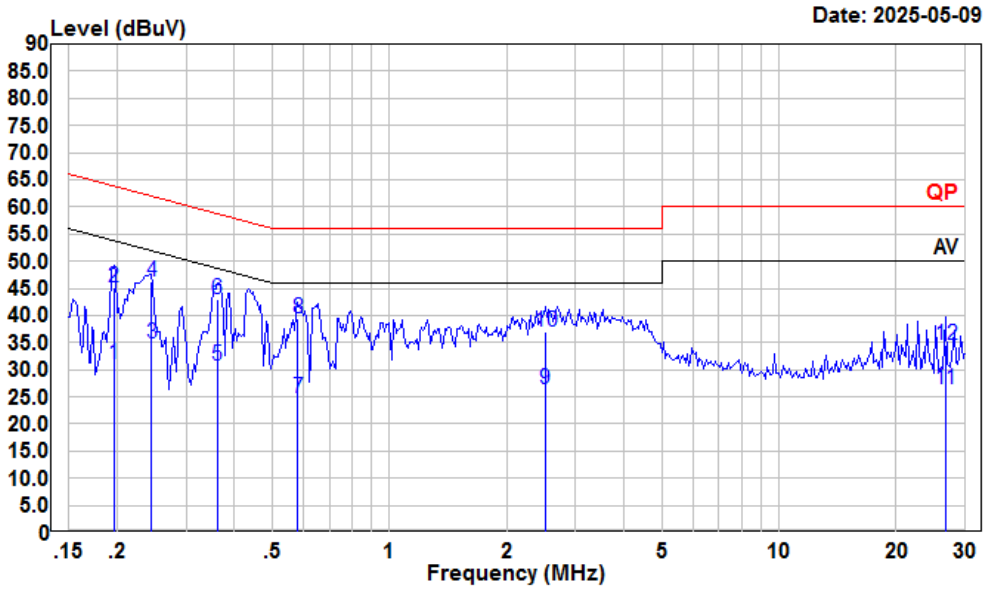
Result: Compliant

TEST DATA AND RESULTS

Conducted Emissions

Temperature (℃)	23.8	**Relative Humidity (%)**	57
ATM Pressure (kPa)	100	**Test engineer**	Macy.shi
Test date	2025.5.9		
EUT operation mode	Transmitting(Maximum output power mode, ANT1 802.11a 5180MHz)		

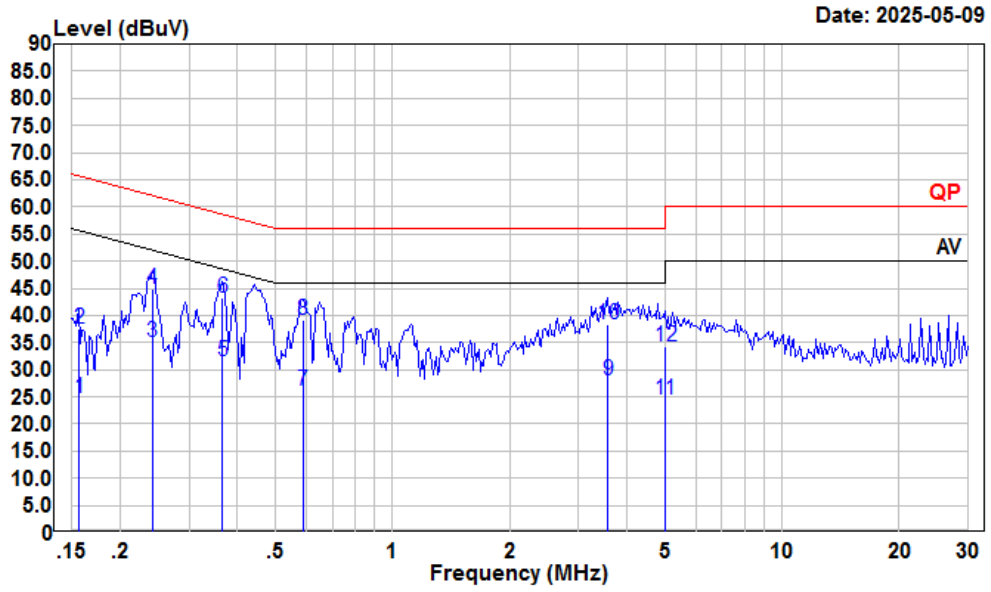
AC 120V 60 Hz, Line



Condition: Line
Project : 2501S37731E-RF
tester : Macy.shi Note:5G WIFI Transmitting
Setting : RBW:9kHz

	Freq	Read Level	Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.195	11.09	31.10	9.92	10.09	53.80	-22.70	Average
2	0.195	25.12	45.13	9.92	10.09	63.80	-18.67	QP
3	0.244	14.61	34.72	10.03	10.08	51.95	-17.23	Average
4	0.244	26.04	46.15	10.03	10.08	61.95	-15.80	QP
5	0.361	10.43	30.84	10.29	10.12	48.69	-17.85	Average
6	0.361	22.45	42.86	10.29	10.12	58.69	-15.83	QP
7	0.582	4.17	24.88	10.59	10.12	46.00	-21.12	Average
8	0.582	18.77	39.48	10.59	10.12	56.00	-16.52	QP
9	2.513	5.89	26.26	10.20	10.17	46.00	-19.74	Average
10	2.513	16.52	36.89	10.20	10.17	56.00	-19.11	QP
11	26.699	5.87	26.40	10.33	10.20	50.00	-23.60	Average
12	26.699	13.89	34.42	10.33	10.20	60.00	-25.58	QP

AC 120V 60 Hz, Neutral



Condition: Neutral
Project : 2501S37731E-RF
tester : Macy.shi Note:5G WIFI Transmitting
Setting : RBW:9kHz

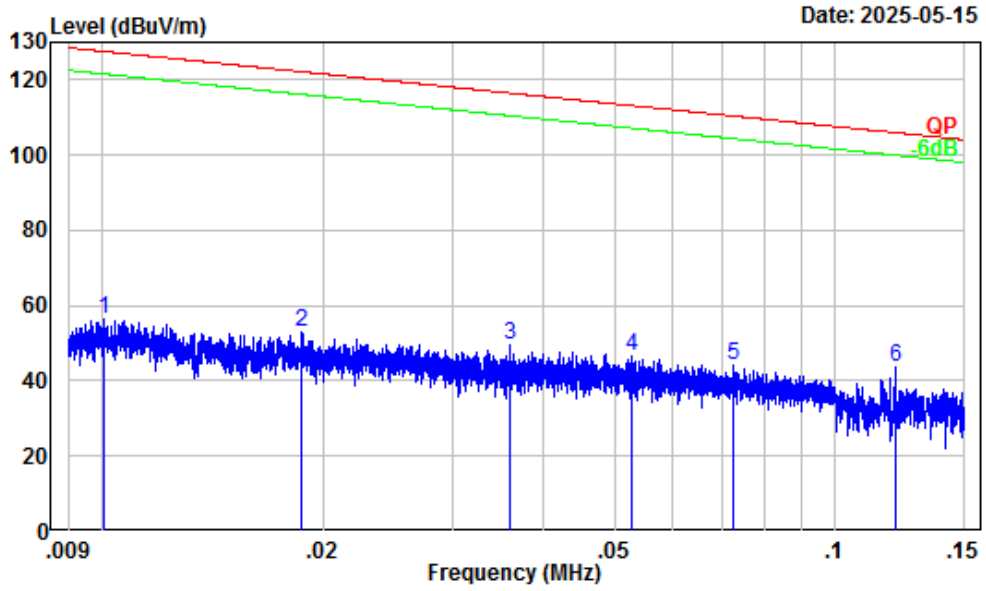
	Freq	Read Level	Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.156	4.42	24.81	10.27	10.12	55.65	-30.84	Average
2	0.156	17.08	37.47	10.27	10.12	65.65	-28.18	QP
3	0.242	14.79	35.07	10.20	10.08	52.04	-16.97	Average
4	0.242	24.72	45.00	10.20	10.08	62.04	-17.04	QP
5	0.365	11.15	31.69	10.43	10.11	48.61	-16.92	Average
6	0.365	22.73	43.27	10.43	10.11	58.61	-15.34	QP
7	0.589	5.46	26.13	10.55	10.12	46.00	-19.87	Average
8	0.589	18.41	39.08	10.55	10.12	56.00	-16.92	QP
9	3.565	7.82	28.15	10.13	10.20	46.00	-17.85	Average
10	3.565	18.15	38.48	10.13	10.20	56.00	-17.52	QP
11	5.005	4.09	24.57	10.30	10.18	50.00	-25.43	Average
12	5.005	13.79	34.27	10.30	10.18	60.00	-25.73	QP

Undesirable Emission

Temperature (℃)	25.3&24.5	**Relative Humidity (%)**	46&49
ATM Pressure (kPa):	101.1	**Test engineer:**	Anson Su&Wing K Ji
Test date:	2025.5.15&2025.5.14		
EUT operation mode:	Below 1GHz: Transmitting(Maximum output power mode, ANT1 802.11a 5180MHz) Above 1GHz: Transmitting		
Note:	1. For the radiated spurious emission below 30MHz, only the worst case (parallel) was recorded. 2. When the test result of peak was less than the limit of QP/Average more than 6dB, just peak value were recorded.		

Below 1GHz:

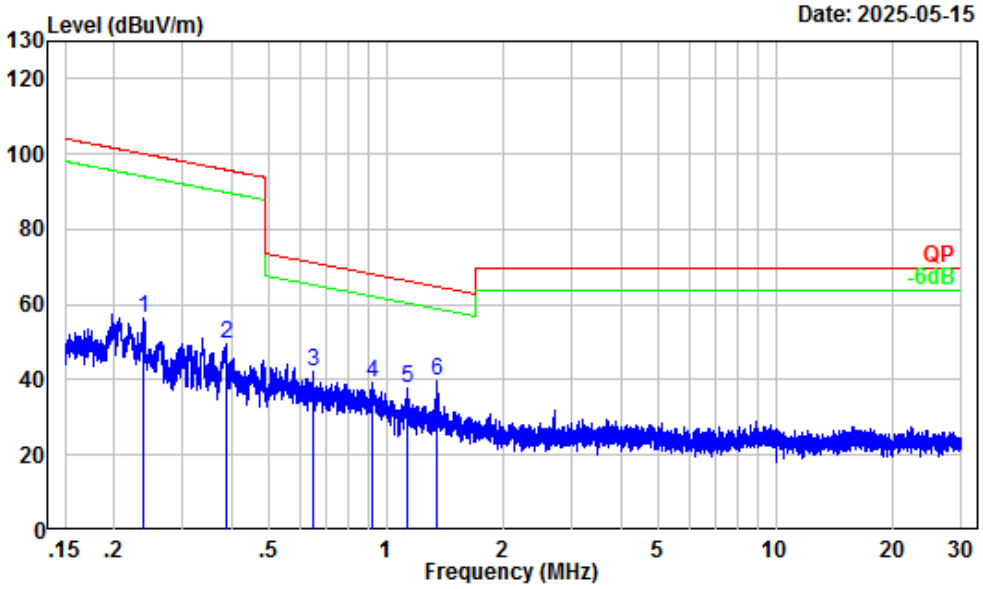
9kHz-150kHz



Site : Chamber A
Condition : 3m
Project Number : 2501S37731E-RF
Test Mode : 5G WIFI Transmitting
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.010	32.29	23.89	56.18	127.56	-71.38	Peak
2	0.019	30.64	22.45	53.09	122.14	-69.05	Peak
3	0.036	27.86	21.56	49.42	116.47	-67.05	Peak
4	0.053	26.11	20.45	46.56	113.14	-66.58	Peak
5	0.073	24.14	20.14	44.28	110.38	-66.10	Peak
6	0.121	20.78	22.97	43.75	105.97	-62.22	Peak

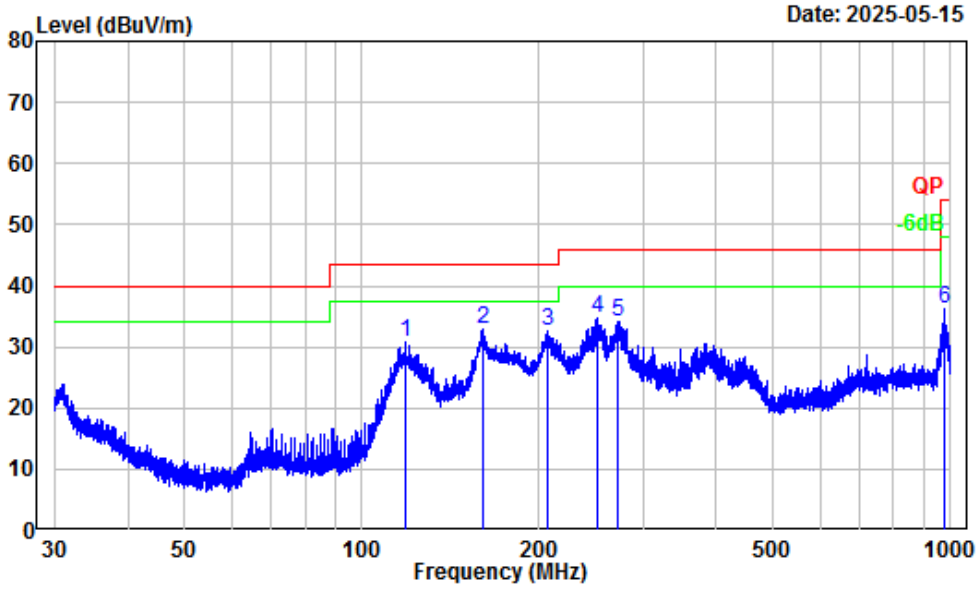
150kHz-30MHz



Site : Chamber A
Condition : 3m
Project Number : 2501S37731E-RF
Test Mode : 5G WIFI Transmitting
Detector: Peak RBW/VBW: 10/30kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.237	13.91	42.47	56.38	100.11	-43.73	Peak
2	0.387	8.54	41.01	49.55	95.84	-46.29	Peak
3	0.648	4.58	37.82	42.40	71.32	-28.92	Peak
4	0.921	1.79	37.70	39.49	68.20	-28.71	Peak
5	1.132	0.83	36.84	37.67	66.37	-28.70	Peak
6	1.349	0.22	39.70	39.92	64.81	-24.89	Peak

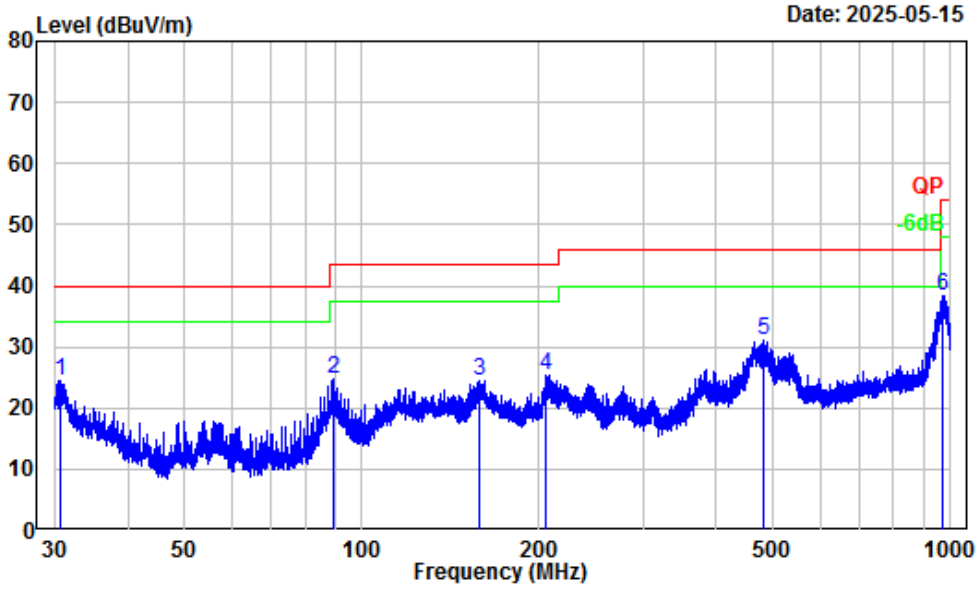
30MHz-1GHz_Horizontal



Site : Chamber A
Condition : 3m Horizontal
Project Number : 2501S37731E-RF
Test Mode : 5G WIFI Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	118.86	-11.58	42.44	30.86	43.50	-12.64	Peak
2	160.70	-12.72	45.60	32.88	43.50	-10.62	Peak
3	206.58	-13.63	46.21	32.58	43.50	-10.92	Peak
4	251.29	-13.09	47.94	34.85	46.00	-11.15	Peak
5	272.64	-11.59	45.57	33.98	46.00	-12.02	Peak
6	975.33	-0.77	37.11	36.34	54.00	-17.66	Peak

30MHz-1GHz_Vertical



Site : Chamber A
Condition : 3m Vertical
Project Number : 2501S37731E-RF
Test Mode : 5G WIFI Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	30.65	-6.30	30.82	24.52	40.00	-15.48	Peak
2	89.16	-18.05	42.74	24.69	43.50	-18.81	Peak
3	158.04	-12.63	37.02	24.39	43.50	-19.11	Peak
4	205.86	-13.54	38.84	25.30	43.50	-18.20	Peak
5	479.69	-6.35	37.35	31.00	46.00	-15.00	Peak
6	969.78	-0.88	39.31	38.43	54.00	-15.57	Peak

Above 1GHz:

5150-5250 MHz

Frequency (MHz)	Reading (dBµV)	PK/Ave	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
ANT0 802.11a							
Low Channel							
5150	69.51	PK	H	-7.46	62.05	74	-11.95
5150	55.33	AV	H	-7.46	47.87	54	-6.13
5150	70.06	PK	V	-7.46	62.60	74	-11.40
5150	55.92	AV	V	-7.46	48.46	54	-5.54
10360	55.85	PK	H	2.53	58.38	68.2	-9.82
10360	61.36	PK	V	2.53	63.89	68.2	-4.31
Middle Channel							
10400	51.21	PK	H	2.55	53.76	68.2	-14.44
10400	51.07	PK	V	2.55	53.62	68.2	-14.58
High Channel							
5350	65.17	PK	H	-6.74	58.43	74	-15.57
5350	52.98	AV	H	-6.74	46.24	54	-7.76
5350	65.69	PK	V	-6.74	58.95	74	-15.05
5350	53.34	AV	V	-6.74	46.6	54	-7.4
10480	50.96	PK	H	2.25	53.21	68.2	-14.99
10480	51.69	PK	V	2.25	53.94	68.2	-14.26
ANT1 802.11a							
Low Channel							
5150	68.95	PK	H	-7.46	61.49	74	-12.51
5150	54.93	AV	H	-7.46	47.47	54	-6.53
5150	67.56	PK	V	-7.46	60.10	74	-13.90
5150	53.66	AV	V	-7.46	46.20	54	-7.80
10360	53.18	PK	H	2.53	55.71	68.2	-12.49
10360	54.58	PK	V	2.53	57.11	68.2	-11.09
Middle Channel							
10400	51.02	PK	H	2.55	53.57	68.2	-14.63
10400	50.93	PK	V	2.55	53.48	68.2	-14.72
High Channel							
5350	65.14	PK	H	-6.74	58.4	74	-15.6
5350	53	AV	H	-6.74	46.26	54	-7.74
5350	65.56	PK	V	-6.74	58.82	74	-15.18
5350	53.32	AV	V	-6.74	46.58	54	-7.42
10480	51.4	PK	H	2.25	53.65	68.2	-14.55
10480	51.18	PK	V	2.25	53.43	68.2	-14.77

Frequency (MHz)	Reading (dBµV)	PK/Ave	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
802.11ac20							
Low Channel							
5150	69.82	PK	H	-7.46	62.36	74	-11.64
5150	54.25	AV	H	-7.46	46.79	54	-7.21
5150	69.31	PK	V	-7.46	61.85	74	-12.15
5150	54.35	AV	V	-7.46	46.89	54	-7.11
10360	59.34	PK	H	2.53	61.87	68.2	-6.33
10360	57.17	PK	V	2.53	59.7	68.2	-8.5
Middle Channel							
10400	51.03	PK	H	2.55	53.58	68.2	-14.62
10400	50.83	PK	V	2.55	53.38	68.2	-14.82
High Channel							
5350	65.17	PK	H	-6.74	58.43	74	-15.57
5350	52.98	AV	H	-6.74	46.24	54	-7.76
5350	65.69	PK	V	-6.74	58.95	74	-15.05
5350	53.34	AV	V	-6.74	46.6	54	-7.4
10480	51.39	PK	H	2.25	53.64	68.2	-14.56
10480	51.5	PK	V	2.25	53.75	68.2	-14.45
802.11ac40							
Low Channel							
5150	72.89	PK	H	-7.46	65.43	74	-8.57
5150	55.66	AV	H	-7.46	48.20	54	-5.80
5150	74.27	PK	V	-7.46	66.81	74	-7.19
5150	58.82	AV	V	-7.46	51.36	54	-2.64
10380	50.81	PK	H	2.54	53.35	68.2	-14.85
10380	51.04	PK	V	2.54	53.58	68.2	-14.62
High Channel							
5350	65.15	PK	H	-6.74	58.41	74	-15.59
5350	52.99	AV	H	-6.74	46.25	54	-7.75
5350	65.43	PK	V	-6.74	58.69	74	-15.31
5350	53.29	AV	V	-6.74	46.55	54	-7.45
10460	51.4	PK	H	2.32	53.72	68.2	-14.48
10460	51.16	PK	V	2.32	53.48	68.2	-14.72

Frequency (MHz)	Reading (dBµV)	PK/Ave	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
802.11ac80							
Middle Channel							
5149.28	74.88	PK	H	-7.46	67.42	74	-6.58
5149.28	57.44	AV	H	-7.46	49.98	54	-4.02
5150.00	72.72	PK	H	-7.46	65.26	74	-8.74
5150.00	56.64	AV	H	-7.46	49.18	54	-4.82
5150.00	78.76	PK	V	-7.46	71.30	74	-2.70
5150.00	60.01	AV	V	-7.46	52.55	54	-1.45
5350.00	65.03	PK	H	-6.74	58.29	74	-15.71
5350.00	51.01	AV	H	-6.74	44.27	54	-9.73
5350.00	65.22	PK	V	-6.74	58.48	74	-15.52
5350.00	50.84	AV	V	-6.74	44.10	54	-9.90
5458.08	66.20	PK	H	-6.29	59.91	74	-14.09
5456.76	51.74	AV	H	-6.31	45.43	54	-8.57
5428.68	65.10	PK	V	-6.43	58.67	74	-15.33
5457.48	51.71	AV	V	-6.31	45.40	54	-8.60
10420	51.2	PK	H	2.48	53.68	68.2	-14.52
10420	51.35	PK	V	2.48	53.83	68.2	-14.37

5725-5850MHz

Frequency (MHz)	Reading (dBµV)	PK/Ave	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
ANT0 802.11a							
Low Channel							
5725	81.58	PK	H	-5.49	76.09	122.2	-46.11
5725	82.75	PK	V	-5.49	77.26	122.2	-44.94
5720	72.11	PK	H	-5.53	66.58	110.8	-44.22
5720	74.08	PK	V	-5.53	68.55	110.8	-42.25
5700	67.52	PK	H	-5.71	61.81	105.2	-43.39
5700	67.23	PK	V	-5.71	61.52	105.2	-43.68
5650	67.17	PK	H	-5.86	61.31	68.2	-6.89
5650	67.2	PK	V	-5.86	61.34	68.2	-6.86
11490	51.93	PK	H	3.54	55.47	74	-18.53
11490	39.98	AV	H	3.54	43.52	54	-10.48
11490	51.89	PK	V	3.54	55.43	74	-18.57
11490	40.2	AV	V	3.54	43.74	54	-10.26
Middle Channel							
11570	52.06	PK	H	3.3	55.36	74	-18.64
11570	40.23	AV	H	3.3	43.53	54	-10.47
11570	52.43	PK	V	3.3	55.73	74	-18.27
11570	39.98	AV	V	3.3	43.28	54	-10.72
High Channel							
5850	71.71	PK	H	-4.68	67.03	122.2	-55.17
5850	74.08	PK	V	-4.68	69.4	122.2	-52.8
5855	68.12	PK	H	-4.66	63.46	110.8	-47.34
5855	70.32	PK	V	-4.66	65.66	110.8	-45.14
5875	65.73	PK	H	-4.57	61.16	105.2	-44.04
5875	66.56	PK	V	-4.57	61.99	105.2	-43.21
5925	67.24	PK	H	-4.45	62.79	68.2	-5.41
5925	66.51	PK	V	-4.45	62.06	68.2	-6.14
11650	52.41	PK	H	3.42	55.83	74	-18.17
11650	40.05	AV	H	3.42	43.47	54	-10.53
11650	51.94	PK	V	3.42	55.36	74	-18.64
11650	40.44	AV	V	3.42	43.86	54	-10.14

Frequency (MHz)	Reading (dBµV)	PK/Ave	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
ANT1 802.11a							
Low Channel							
5725	81.69	PK	H	-5.49	76.2	122.2	-46
5725	79.3	PK	V	-5.49	73.81	122.2	-48.39
5720	72.32	PK	H	-5.53	66.79	110.8	-44.01
5720	70.56	PK	V	-5.53	65.03	110.8	-45.77
5700	67.22	PK	H	-5.71	61.51	105.2	-43.69
5700	67.5	PK	V	-5.71	61.79	105.2	-43.41
5650	67.48	PK	H	-5.86	61.62	68.2	-6.58
5650	67.37	PK	V	-5.86	61.51	68.2	-6.69
11490	52.18	PK	H	3.54	55.72	74	-18.28
11490	39.82	AV	H	3.54	43.36	54	-10.64
11490	52.1	PK	V	3.54	55.64	74	-18.36
11490	40.28	AV	V	3.54	43.82	54	-10.18
Middle Channel							
11570	52.62	PK	H	3.3	55.92	74	-18.08
11570	40.42	AV	H	3.3	43.72	54	-10.28
11570	52.05	PK	V	3.3	55.35	74	-18.65
11570	40.14	AV	V	3.3	43.44	54	-10.56
High Channel							
5850	70.52	PK	H	-4.68	65.84	122.2	-56.36
5850	70.49	PK	V	-4.68	65.81	122.2	-56.39
5855	67.45	PK	H	-4.66	62.79	110.8	-48.01
5855	66.52	PK	V	-4.66	61.86	110.8	-48.94
5875	66.46	PK	H	-4.57	61.89	105.2	-43.31
5875	66.4	PK	V	-4.57	61.83	105.2	-43.37
5925	67.2	PK	H	-4.45	62.75	68.2	-5.45
5925	66.64	PK	V	-4.45	62.19	68.2	-6.01
11650	52.41	PK	H	3.42	55.83	74	-18.17
11650	40	AV	H	3.42	43.42	54	-10.58
11650	51.83	PK	V	3.42	55.25	74	-18.75
11650	39.93	AV	V	3.42	43.35	54	-10.65

Frequency (MHz)	Reading (dBµV)	PK/Ave	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
802.11ac20							
Low Channel							
5725	85.5	PK	H	-5.49	80.01	122.2	-42.19
5725	83.79	PK	V	-5.49	78.3	122.2	-43.9
5720	76.7	PK	H	-5.53	71.17	110.8	-39.63
5720	73.86	PK	V	-5.53	68.33	110.8	-42.47
5700	66.77	PK	H	-5.71	61.06	105.2	-44.14
5700	67.1	PK	V	-5.71	61.39	105.2	-43.81
5650	67.82	PK	H	-5.86	61.96	68.2	-6.24
5650	67.19	PK	V	-5.86	61.33	68.2	-6.87
11490	51.99	PK	H	3.54	55.53	74	-18.47
11490	39.92	AV	H	3.54	43.46	54	-10.54
11490	51.58	PK	V	3.54	55.12	74	-18.88
11490	40.09	AV	V	3.54	43.63	54	-10.37
Middle Channel							
11570	52.18	PK	H	3.3	55.48	74	-18.52
11570	40.34	AV	H	3.3	43.64	54	-10.36
11570	52.18	PK	V	3.3	55.48	74	-18.52
11570	40.56	AV	V	3.3	43.86	54	-10.14
High Channel							
5850	81.33	PK	H	-4.68	76.65	122.2	-45.55
5850	75.63	PK	V	-4.68	70.95	122.2	-51.25
5855	74.91	PK	H	-4.66	70.25	110.8	-40.55
5855	69.93	PK	V	-4.66	65.27	110.8	-45.53
5875	65.79	PK	H	-4.57	61.22	105.2	-43.98
5875	65.75	PK	V	-4.57	61.18	105.2	-44.02
5925	66.89	PK	H	-4.45	62.44	68.2	-5.76
5925	67.14	PK	V	-4.45	62.69	68.2	-5.51
11650	52.19	PK	H	3.42	55.61	74	-18.39
11650	40.33	AV	H	3.42	43.75	54	-10.25
11650	51.72	PK	V	3.42	55.14	74	-18.86
11650	39.94	AV	V	3.42	43.36	54	-10.64

Frequency (MHz)	Reading (dBµV)	PK/Ave	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
802.11ac40							
Low Channel							
5725	90.94	PK	H	-5.49	85.45	122.2	-36.75
5725	86.29	PK	V	-5.49	80.8	122.2	-41.4
5720	87.64	PK	H	-5.53	82.11	110.8	-28.69
5720	83.4	PK	V	-5.53	77.87	110.8	-32.93
5700	76.19	PK	H	-5.71	70.48	105.2	-34.72
5700	70.59	PK	V	-5.71	64.88	105.2	-40.32
5650	67.55	PK	H	-5.86	61.69	68.2	-6.51
5650	67.31	PK	V	-5.86	61.45	68.2	-6.75
11510	51.95	PK	H	3.53	55.48	74	-18.52
11510	40.24	AV	H	3.53	43.77	54	-10.23
11510	52.15	PK	V	3.53	55.68	74	-18.32
11510	39.9	AV	V	3.53	43.43	54	-10.57
High Channel							
5850	71.94	PK	H	-4.68	67.26	122.2	-54.94
5850	71.19	PK	V	-4.68	66.51	122.2	-55.69
5855	70.89	PK	H	-4.66	66.23	110.8	-44.57
5855	69.08	PK	V	-4.66	64.42	110.8	-46.38
5875	65.69	PK	H	-4.57	61.12	105.2	-44.08
5875	65.77	PK	V	-4.57	61.2	105.2	-44
5925	67.25	PK	H	-4.45	62.8	68.2	-5.4
5925	66.7	PK	V	-4.45	62.25	68.2	-5.95
11590	52.52	PK	H	3.21	55.73	74	-18.27
11590	40.08	AV	H	3.21	43.29	54	-10.71
11590	52.15	PK	V	3.21	55.36	74	-18.64
11590	40.16	AV	V	3.21	43.37	54	-10.63

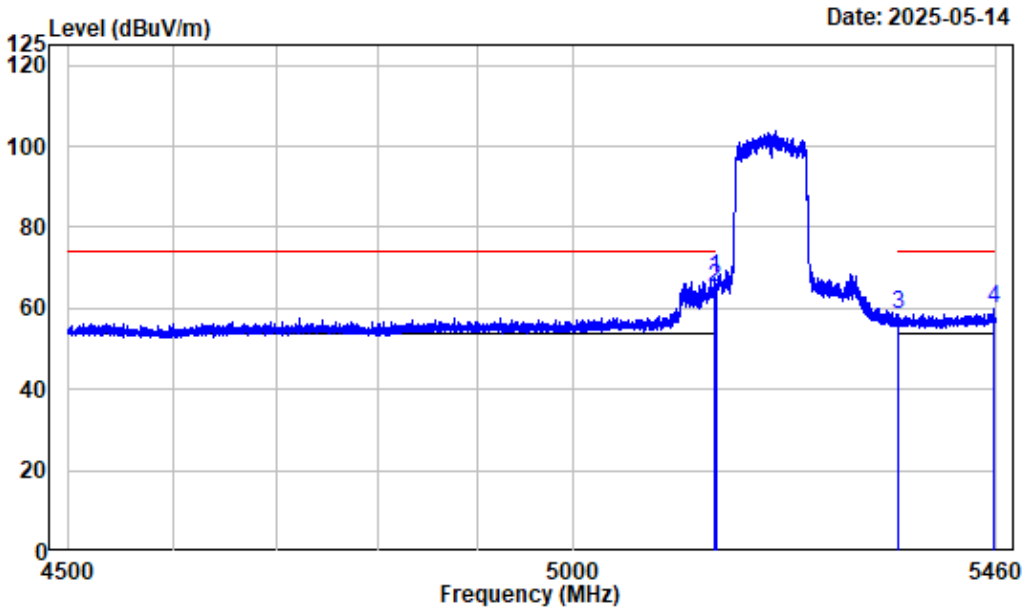
Frequency (MHz)	Reading (dBµV)	PK/Ave	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
802.11ac80							
Middle Channel							
5725	88.5	PK	H	-5.49	83.01	122.2	-39.19
5725	87.18	PK	V	-5.49	81.69	122.2	-40.51
5720	86.81	PK	H	-5.53	81.28	110.8	-29.52
5720	84.32	PK	V	-5.53	78.79	110.8	-32.01
5700	82.1	PK	H	-5.71	76.39	105.2	-28.81
5700	78.52	PK	V	-5.71	72.81	105.2	-32.39
5650	67.08	PK	H	-5.86	61.22	68.2	-6.98
5650	67.55	PK	V	-5.86	61.69	68.2	-6.51
5850	81.17	PK	H	-4.68	76.49	122.2	-45.71
5850	79.66	PK	V	-4.68	74.98	122.2	-47.22
5855	80.87	PK	H	-4.66	76.21	110.8	-34.59
5855	78.91	PK	V	-4.66	74.25	110.8	-36.55
5875	73.17	PK	H	-4.57	68.6	105.2	-36.6
5875	72.87	PK	V	-4.57	68.3	105.2	-36.9
5925	67.17	PK	H	-4.45	62.72	68.2	-5.48
5925	66.79	PK	V	-4.45	62.34	68.2	-5.86
11550	52.49	PK	H	3.37	55.86	74	-18.14
11550	40.15	AV	H	3.37	43.52	54	-10.48
11550	52.45	PK	V	3.37	55.82	74	-18.18
11550	40.39	AV	V	3.37	43.76	54	-10.24

Note:
Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Factor + Reading
Margin = Corrected. Amplitude - Limit
The other spurious emission which is in the noise floor level was not recorded.

Test plots:

Band Edge (Listed with the worst margin test plots)

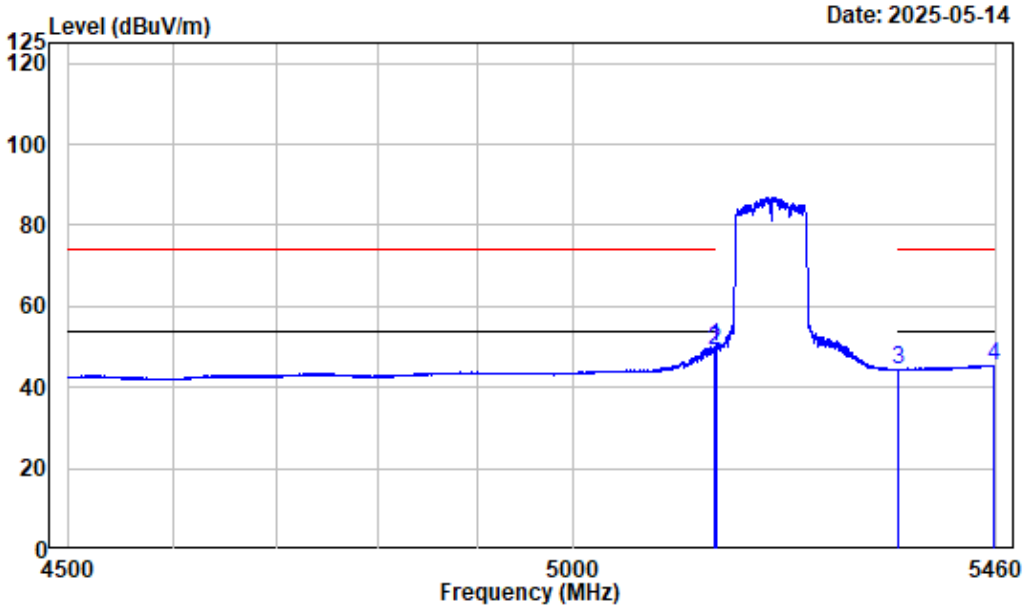
Band edge_Horizontal_Peak_AC80_5210MHz



Condition : Horizontal
Project No. : 2501S37731E-RF
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : 5GWiFi_AC80_5210

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5149.281	-7.46	74.88	67.42	74.00	-6.58	Peak
2	5150.000	-7.46	72.72	65.26	74.00	-8.74	Peak
3	5350.000	-6.74	65.03	58.29	74.00	-15.71	Peak
4	5458.080	-6.29	66.20	59.91	74.00	-14.09	Peak

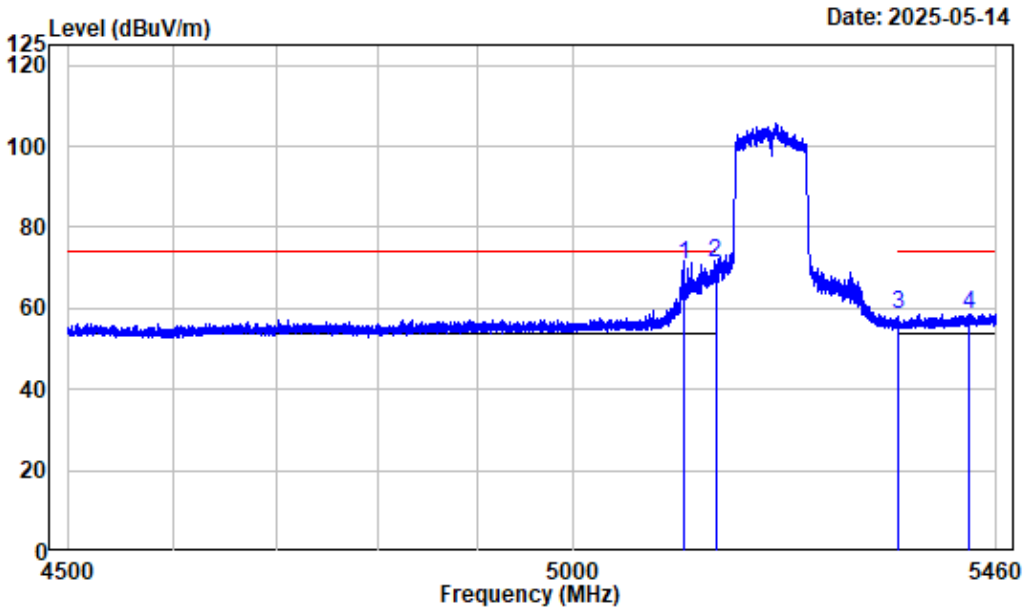
Band edge_Horizontal_Average_AC80_5210MHz



Condition : Horizontal
Project No. : 2501S37731E-RF
Tester : Wing K Ji
Spectrum setting: Average reading: RBW:1MHz VBW:5kHz Detector:Peak
Note : 5GWiFi_AC80_5210

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5149.281	-7.46	57.44	49.98	54.00	-4.02	Average
2	5150.000	-7.46	56.64	49.18	54.00	-4.82	Average
3	5350.000	-6.74	51.01	44.27	54.00	-9.73	Average
4	5456.760	-6.31	51.74	45.43	54.00	-8.57	Average

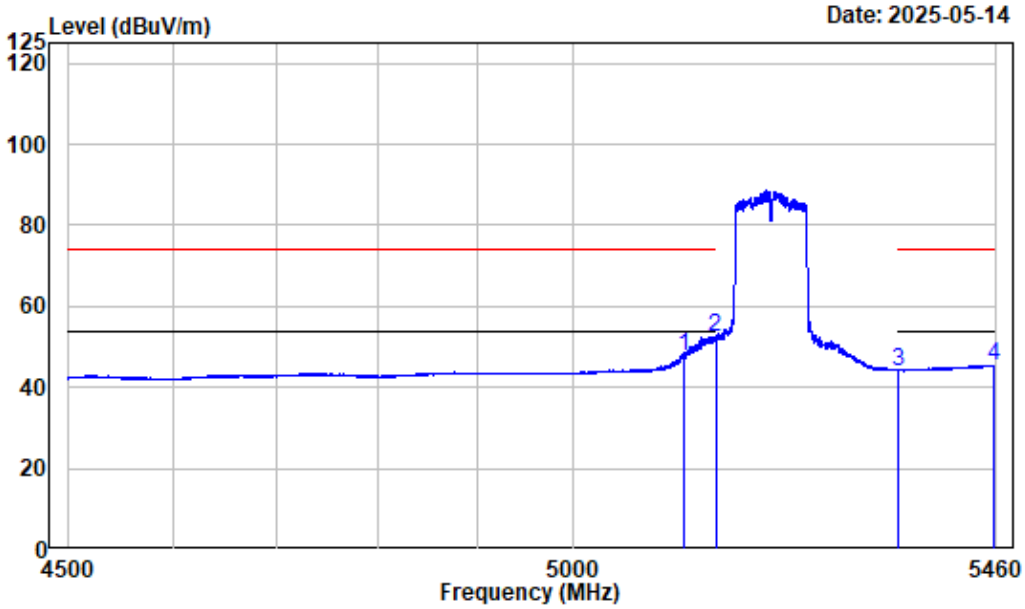
Band edge_Vertical_Peak_AC80_5210MHz



Condition : Vertical
Project No. : 2501S37731E-RF
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : 5GWiFi_AC80_5210

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5116.277	-7.47	78.31	70.84	74.00	-3.16	Peak
2	5150.000	-7.46	78.76	71.30	74.00	-2.70	Peak
3	5350.000	-6.74	65.22	58.48	74.00	-15.52	Peak
4	5428.676	-6.43	65.10	58.67	74.00	-15.33	Peak

Right Band edge_Vertical_Average_AC80_5210MHz

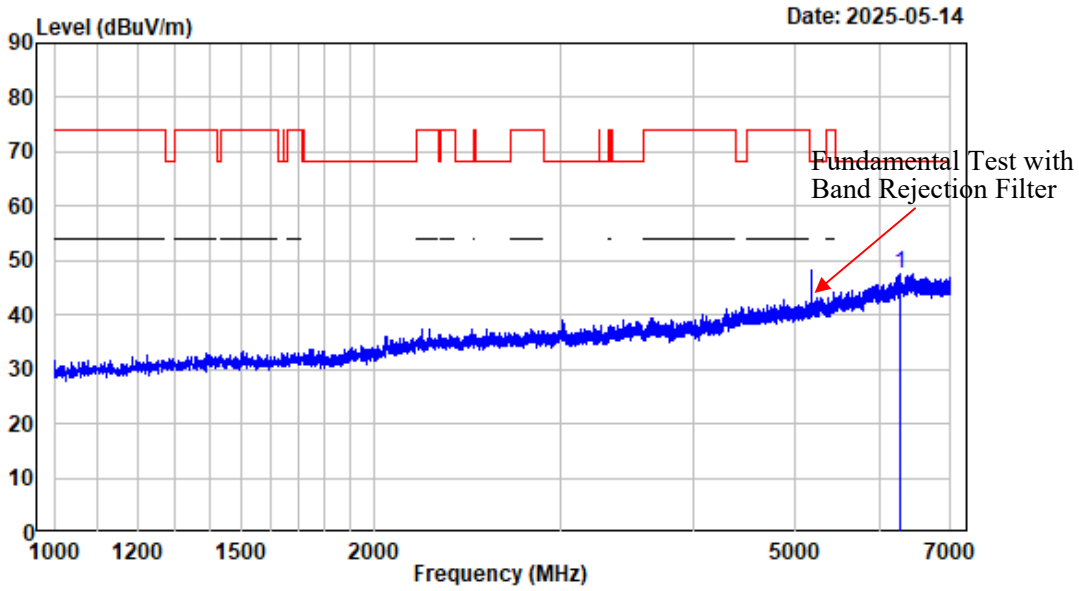


Condition : Vertical
Project No. : 2501S37731E-RF
Tester : Wing K Ji
Spectrum setting: Average reading: RBW:1MHz VBW:5kHz Detector:Peak
Note : 5GWiFi_AC80_5210

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5116.277	-7.47	55.08	47.61	54.00	-6.39	Average
2	5150.000	-7.46	60.01	52.55	54.00	-1.45	Average
3	5350.000	-6.74	50.84	44.10	54.00	-9.90	Average
4	5457.479	-6.31	51.71	45.40	54.00	-8.60	Average

Listed with the worst harmonic margin test plot

1-7GHz_Horizontal_ANT0_Band1_A_5180MHz




```
Condition         : Horizontal
Project No.       : 2501S37731E-RF
Tester            : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note              : ANT0_5GWiFi_Band1_A_5180
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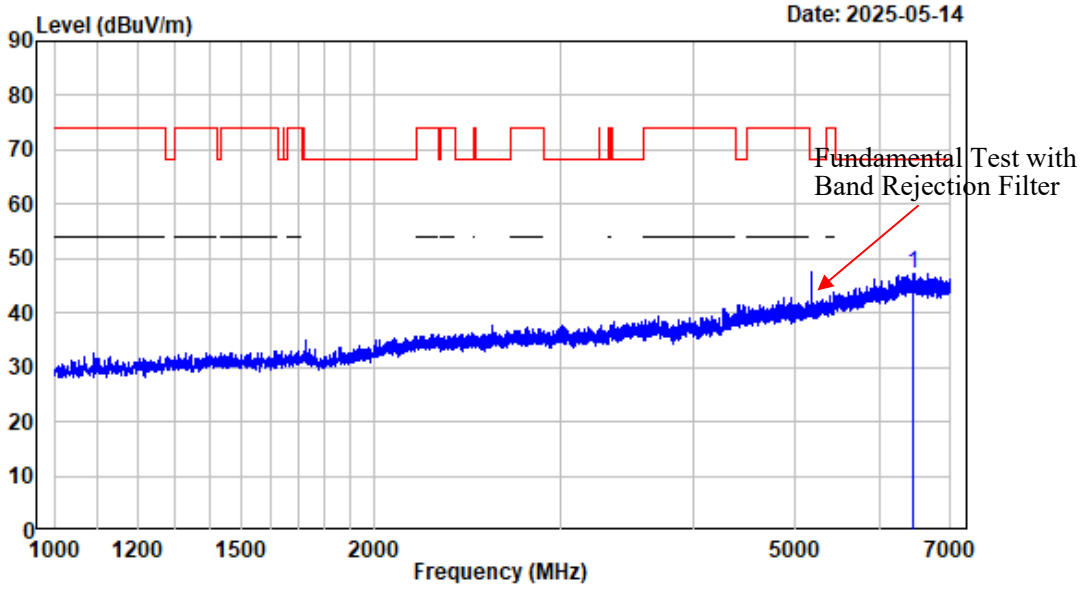
	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	6266.408	-3.76	51.37	47.61	68.20	-20.59	Peak

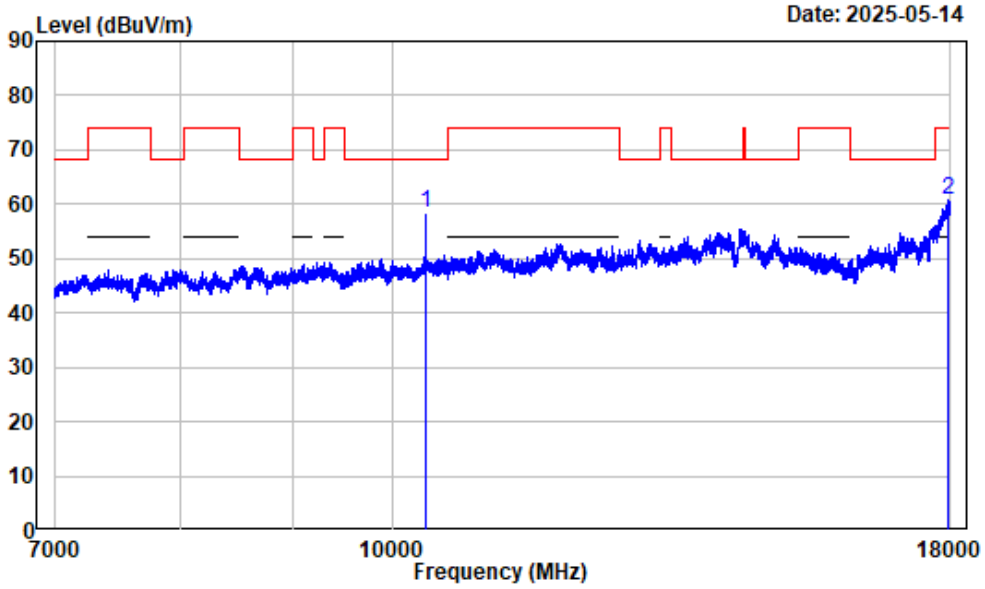
1-7GHz_Vertical_ANT0_Band1_A_5180MHz



Condition : Vertical
Project No. : 2501S37731E-RF
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : ANT0_5GWiFi_Band1_A_5180

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	6462.183	-2.89	50.13	47.24	68.20	-20.96	Peak

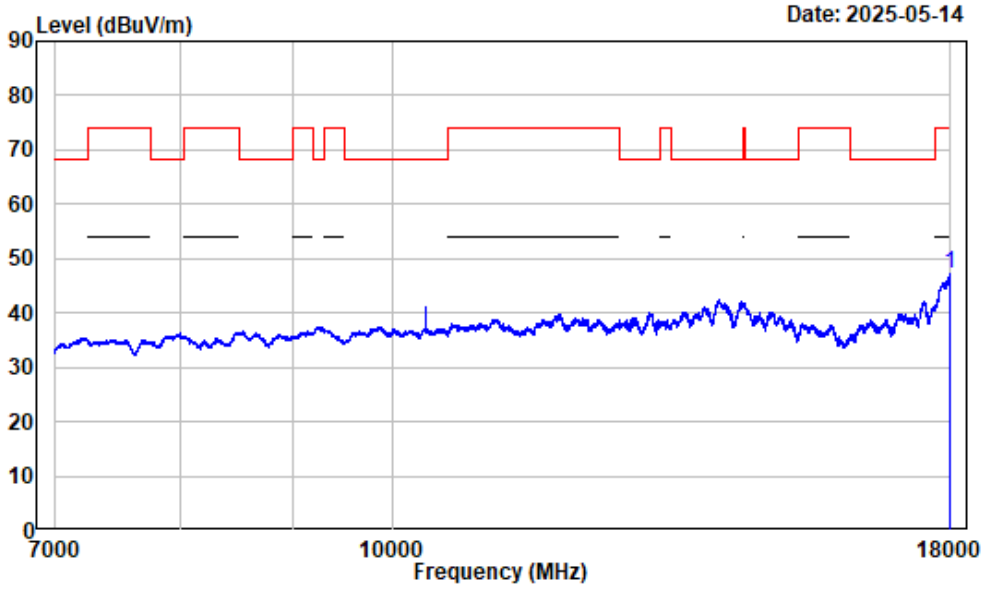
7-18GHz_Horizontal_Peak_ANT0_Band1_A_5180MHz



Condition : Horizontal
Project No. : 2501S37731E-RF
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : ANT0_5GWiFi_Band1_A_5180

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	10360.000	2.53	55.85	58.38	68.20	-9.82	Peak
2	17949.120	12.95	47.68	60.63	74.00	-13.37	Peak

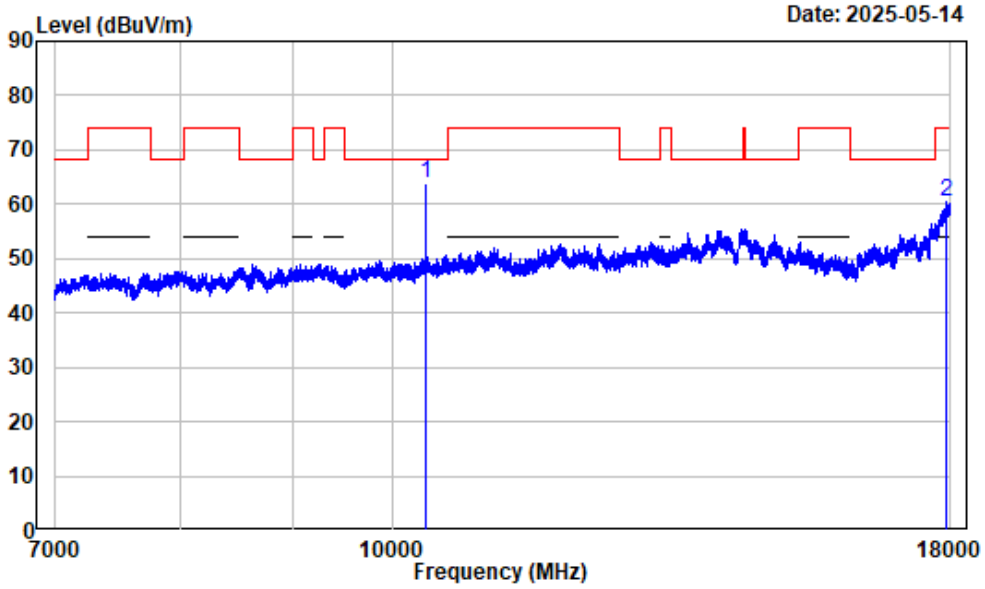
7-18GHz_Horizontal_Average_ANT0_Band1_A_5180MHz



Condition : Horizontal
Project No. : 2501S37731E-RF
Tester : Wing K Ji
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak
Note : ANT0_5GWiFi_Band1_A_5180

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17995.880	13.18	34.06	47.24	54.00	-6.76	Average

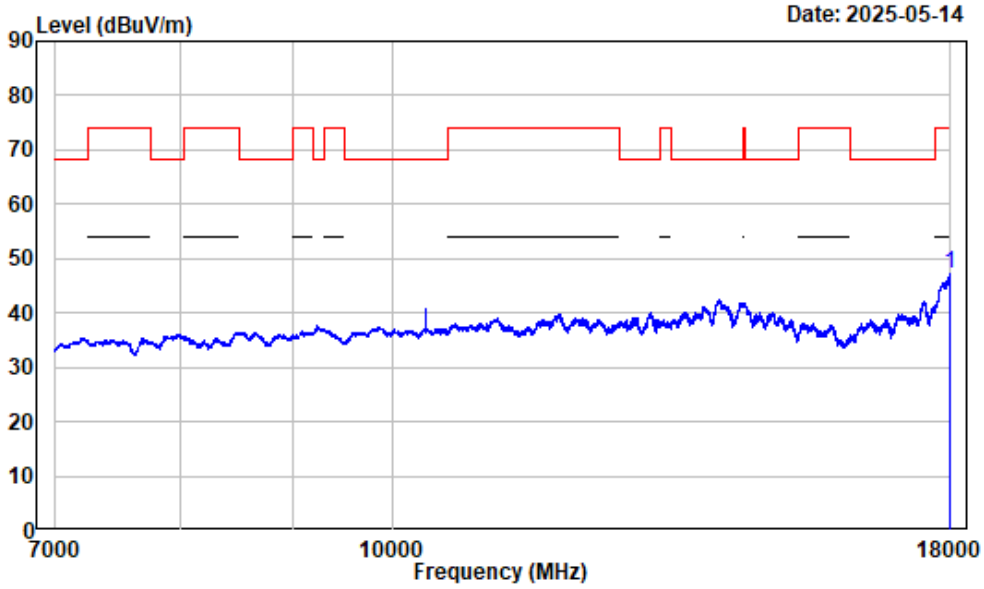
7-18GHz_Vertical_Peak_ANT0_Band1_A_5180MHz



Condition : Vertical
Project No. : 2501S37731E-RF
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : ANT0_5GWiFi_Band1_A_5180

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	10360.000	2.53	61.36	63.89	68.20	-4.31	Peak
2	17925.740	12.84	47.51	60.35	74.00	-13.65	Peak

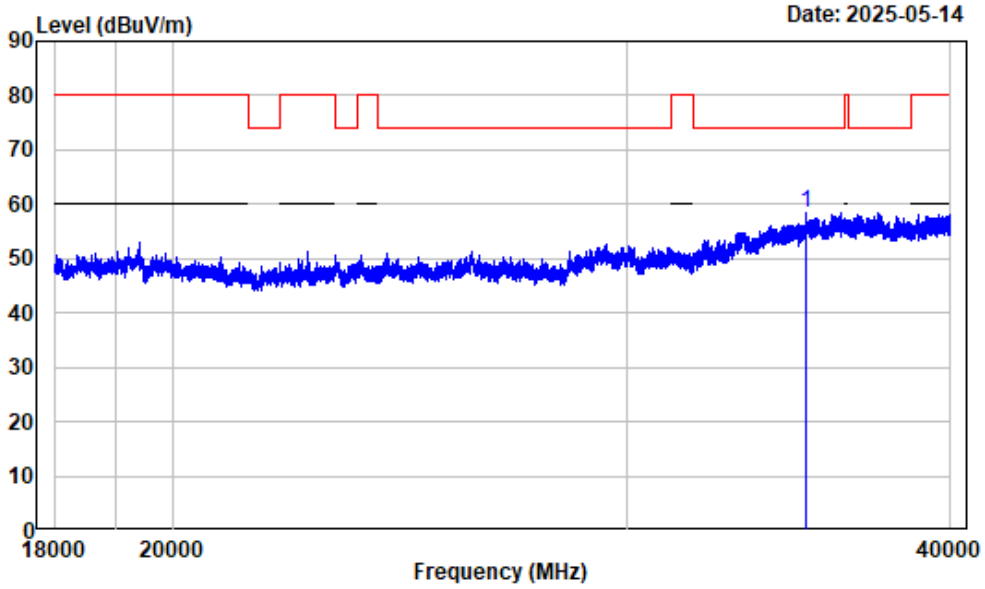
7-18GHz_Vertical_Average_ANT0_Band1_A_5180MHz



Condition : Vertical
Project No. : 2501S37731E-RF
Tester : Wing K Ji
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak
Note : ANT0_5GWiFi_Band1_A_5180

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17993.130	13.17	34.07	47.24	54.00	-6.76	Average

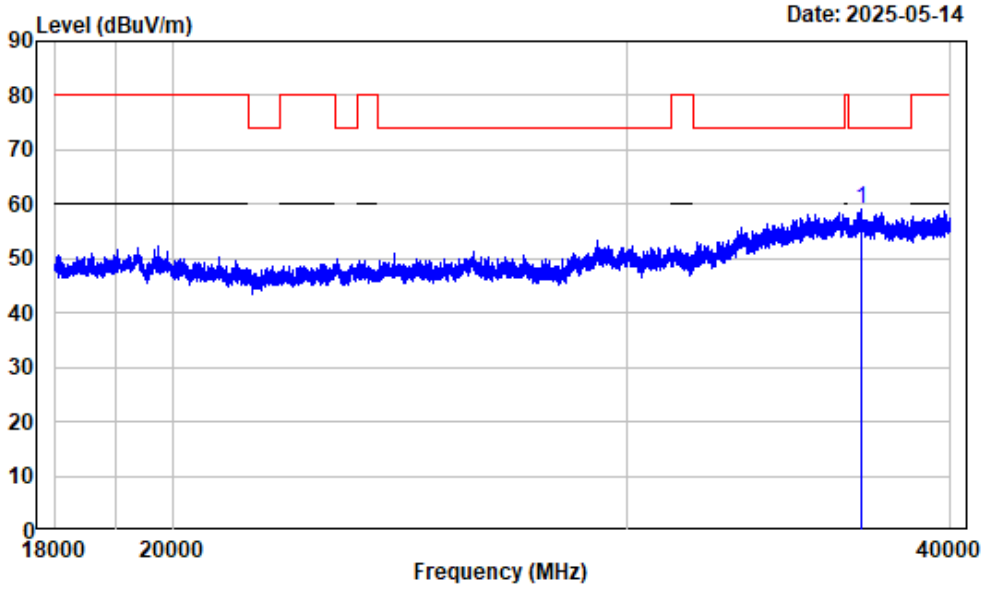
18-40GHz_Horizontal_ANT0_Band1_A_5180MHz



Condition : Horizontal
Project No. : 2501S37731E-RF
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : ANT0_5GWiFi_Band1_A_5180

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	35159.390	23.53	34.99	58.52	74.20	-15.68	peak

18-40GHz_Vertical_ANT0_Band1_A_5180MHz



Condition : Vertical
Project No. : 2501S37731E-RF
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : ANT0_5GWiFi_Band1_A_5180

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	36925.120	22.78	36.38	59.16	74.20	-15.04	peak

RF Conducted data

Test Information:

Sample No.:	31NX-1	**Test Date:**	2025/05/10
Test Site:	RF	**Test Mode:**	Transmitting
Tester:	Lee Li	**Test Result:**	Pass

Environmental Conditions:

Temperature: (°C)	25	**Relative Humidity: (%)**	55	**ATM Pressure: (kPa)**	101

The test data please refer to the Appendix.

RF EXPOSURE EVALUATION

MPE-Based Exemption

Applicable Standard

According to subpart 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

According to KDB 447498 D04 v01 Interim General RF Exposure Guidance

MPE-Based Exemption:
General frequency and separation-distance dependent MPE-based effective radiated power(ERP) thresholds are in Table B.1 [Table 1 of § 1.1307(b)(3)(i)(C)] to support an exemption from further evaluation from 300 kHz through 100 GHz.

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	1,920 R^2.
1.34-30	3,450 R^2/f^2.
30-300	3.83 R^2.
300-1,500	0.0128 R^2f.
1,500-100,000	19.2R^2.

R is the minimum separation distance in meters
f = frequency in MHz

For multiple RF sources: Multiple RF sources are exempt if:

in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation:

$$\sum_{i=1}^{a} \frac{P_i}{P_{th,i}} + \sum_{j=1}^{b} \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^{c} \frac{Evaluated_k}{Exposure\ Limit_k} \leq 1$$

Result

Mode	Frequency (MHz)	Tune up conducted power#(dBm)	Antenna Gain#		ERP		Evaluation Distance (m)	ERP Limit (mW)
			(dBi)	(dBd)	(dBm)	(mW)		
BT	2402-2480	5.5	2.22	0.07	5.57	3.61	0.2	768
BLE	2402-2480	0.5	2.22	0.07	0.57	1.14	0.2	768
2.4G Wi-Fi	2412-2462	19.0	4.92	2.77	21.77	150.31	0.2	768
5.2G Wi-Fi	5180-5240	16.0	4.92	2.77	18.77	75.34	0.2	768
5.8G Wi-Fi	5745-5825	13.5	4.83	2.68	16.18	41.50	0.2	768

Note: 1. The tune up conducted power and antenna gain was declared by the applicant.
2. 0dBd=2.15dBi
3. For Wi-Fi, the antenna gain should be the directional gain.
4. The BT and Wi-Fi can transmit at same time, the 2.4G and 5G Wi-Fi cannot transmit at same time.

Simultaneous transmitting consideration (worst case):

The ratio= ERP_{BT} /limit + $ERP_{2.4G\ Wi\text{-}Fi}$/limit = 3.61/768+ 150.31/768 =0.200<1.0

So simultaneous exposure is compliant.

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

Result: Compliant

EUT PHOTOGRAPHS

Please refer to the attachment 2501S37731E-RF External photo and 2501S37731E-RF Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2501S37731E-RFB Test Setup photo.

APPENDIX

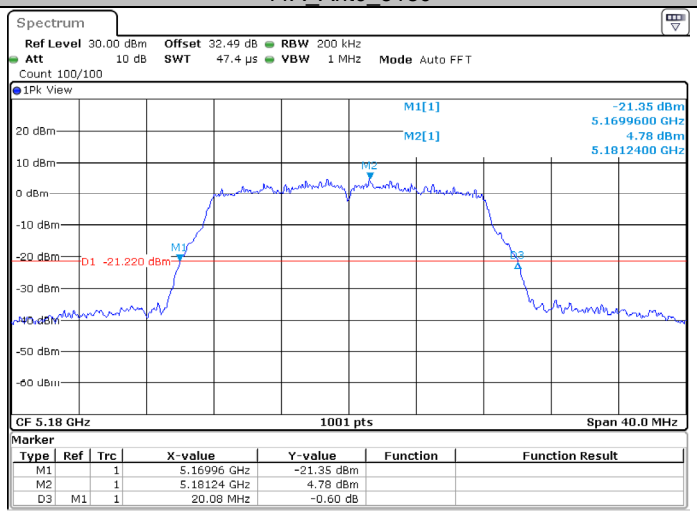
Appendix A1: Emission Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	26dB EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant0	5180	20.08	5169.96	5190.04	---	---
	Ant1	5180	20.00	5170.00	5190.00	---	---
	Ant0	5200	20.28	5189.92	5210.20	---	---
	Ant1	5200	19.96	5190.04	5210.00	---	---
	Ant0	5240	20.12	5230.00	5250.12	---	---
	Ant1	5240	19.92	5230.08	5250.00	---	---
11AC20MIMO	Ant0	5180	20.24	5169.88	5190.12	---	---
	Ant1	5180	20.04	5169.96	5190.00	---	---
	Ant0	5200	20.20	5189.92	5210.12	---	---
	Ant1	5200	20.12	5189.96	5210.08	---	---
	Ant0	5240	20.12	5229.92	5250.04	---	---
	Ant1	5240	20.20	5229.80	5250.00	---	---
11AC40MIMO	Ant0	5190	41.12	5169.52	5210.64	---	---
	Ant1	5190	40.48	5169.76	5210.24	---	---
	Ant0	5230	41.20	5209.36	5250.56	---	---
	Ant1	5230	40.56	5209.84	5250.40	---	---
11AC80MIMO	Ant0	5210	82.08	5169.04	5251.12	---	---
	Ant1	5210	80.80	5169.68	5250.48	---	---

Test Graphs

11A_Ant0_5180



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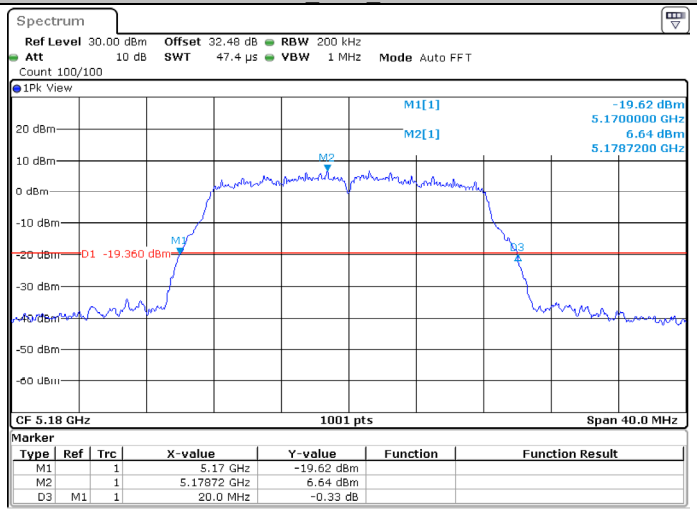
Date: 10.MAY.2025 02:23:44

11A_Ant1_5180



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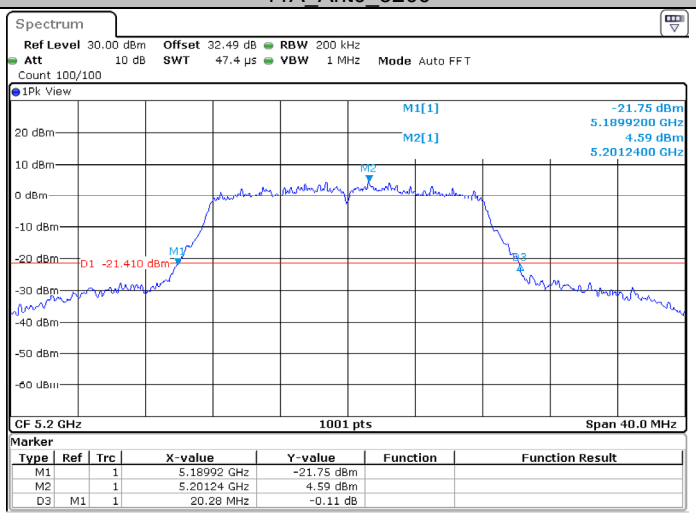
Date: 10.MAY.2025 02:25:10

11A_Ant0_5200



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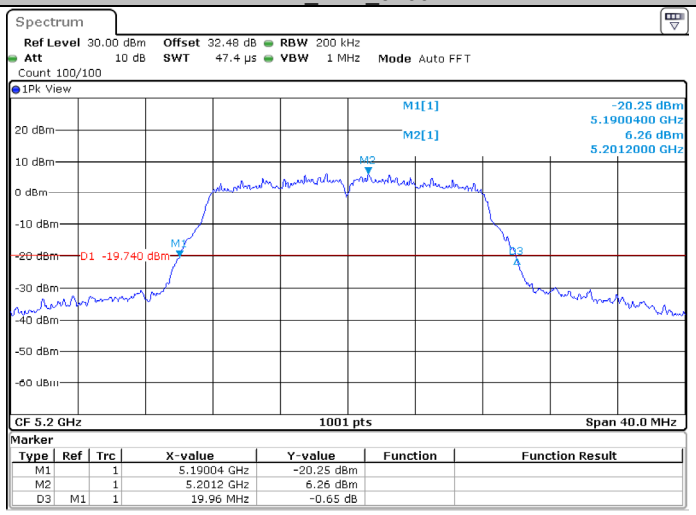
Date: 10.MAY.2025 02:26:58

11A_Ant1_5200



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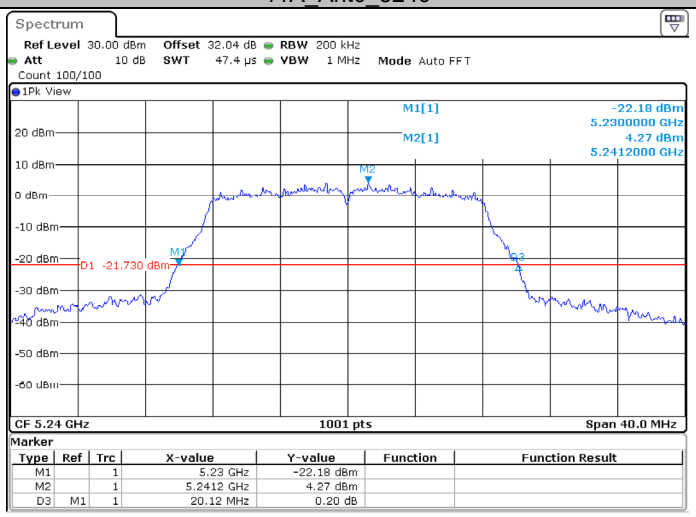
Date: 10.MAY.2025 03:02:20

11A_Ant0_5240



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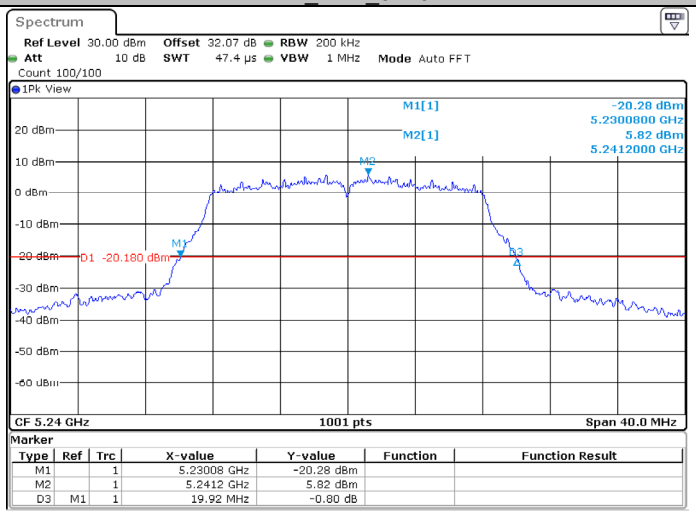
Date: 10.MAY.2025 02:28:20

11A_Ant1_5240



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Date: 10.MAY.2025 03:04:55

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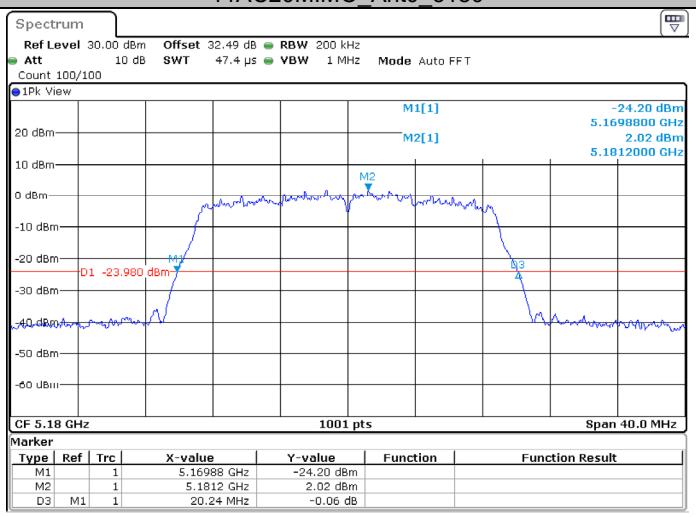

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Date: 10.MAY.2025 03:29:29

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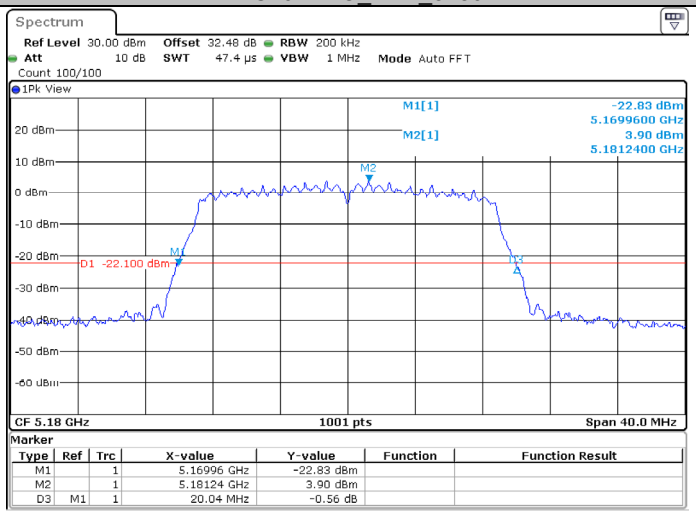

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Date: 10.MAY.2025 03:30:20

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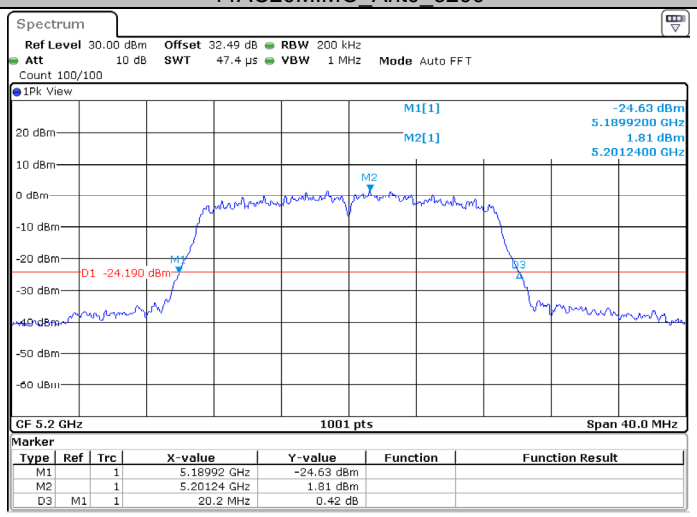

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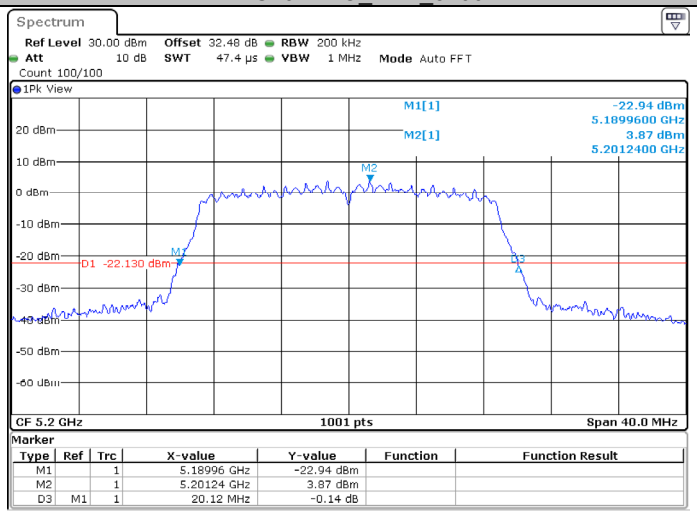
Date: 10.MAY.2025 03:32:20

11AC20MIMO_Ant1_5200



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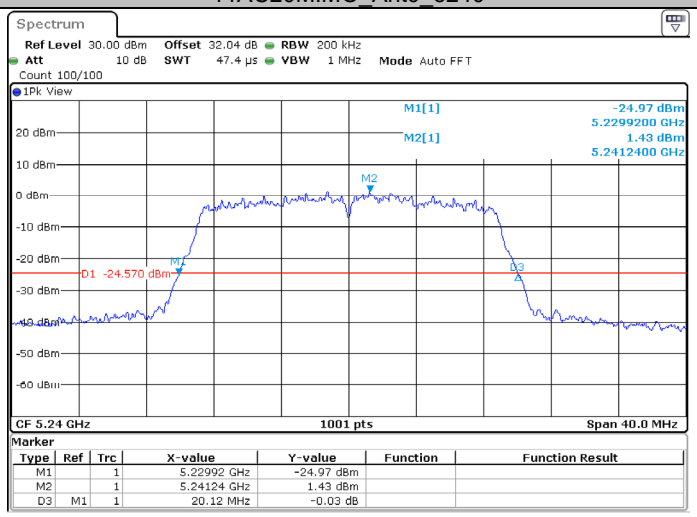
Date: 10.MAY.2025 03:33:11

11AC20MIMO_Ant0_5240



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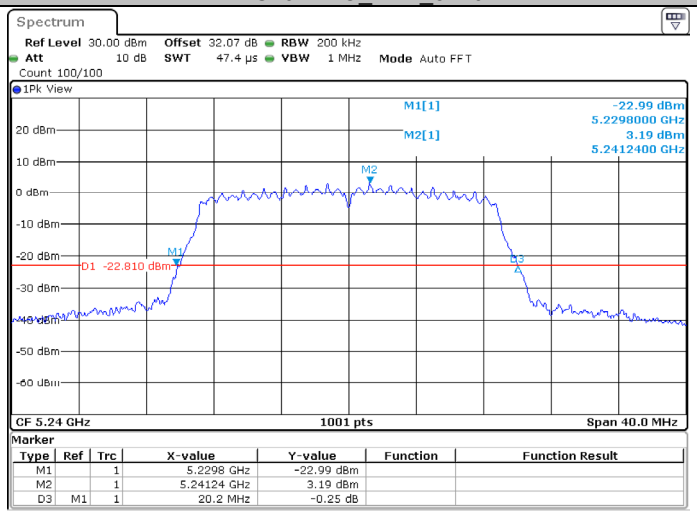
Date: 10.MAY.2025 03:42:23

11AC20MIMO_Ant1_5240



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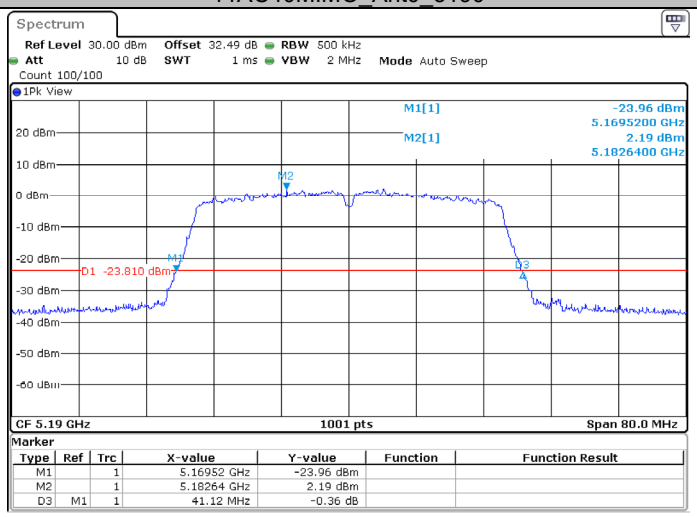
11AC40MIMO_Ant0_5190



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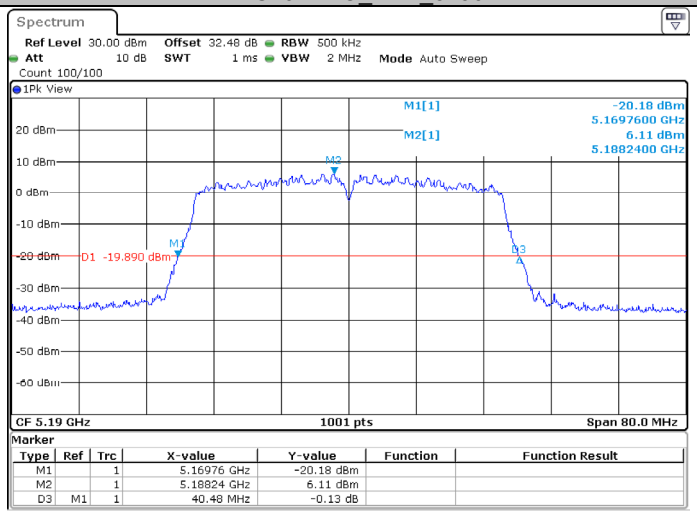
Date: 10.MAY.2025 04:29:23

11AC40MIMO_Ant1_5190



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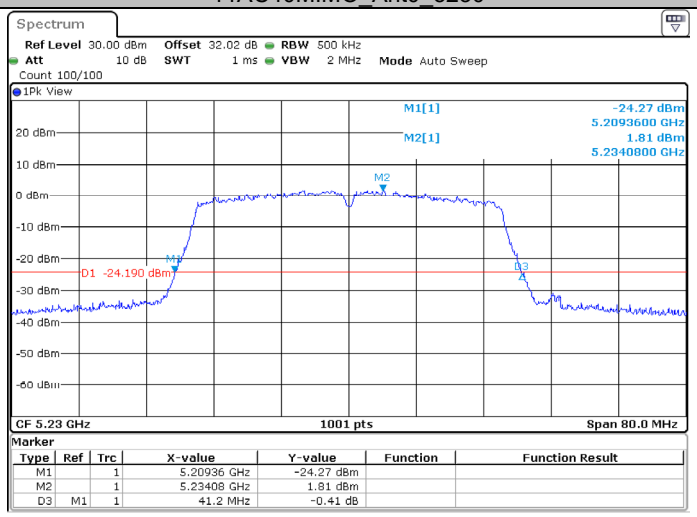
11AC40MIMO_Ant0_5230



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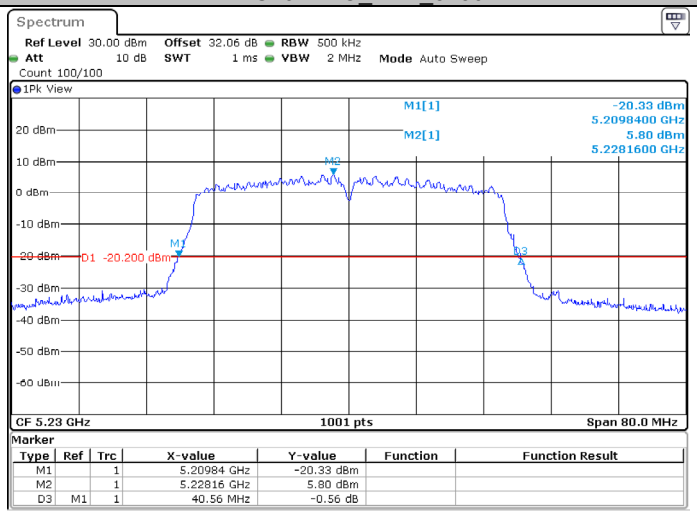
11AC40MIMO_Ant1_5230



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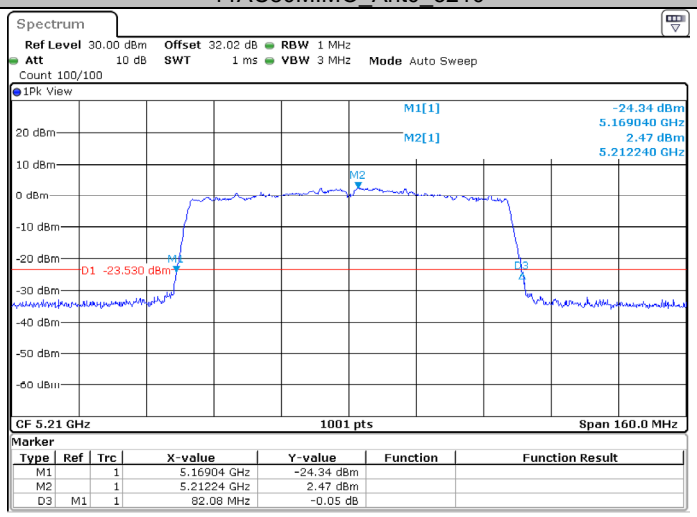
Date: 10.MAY.2025 04:34:00

11AC80MIMO_Ant0_5210



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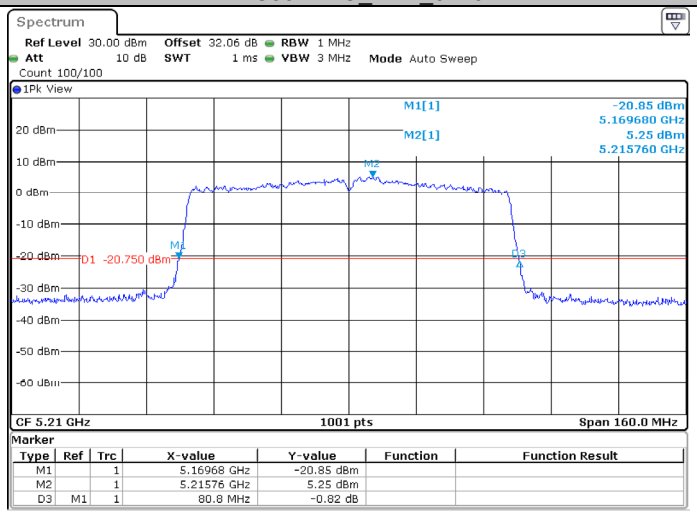
Date: 10.MAY.2025 05:01:53

11AC80MIMO_Ant1_5210



ProjectNo.:2501S37731E-RFTester:Lee.Li
Date: 10.MAY.2025 05:02:44

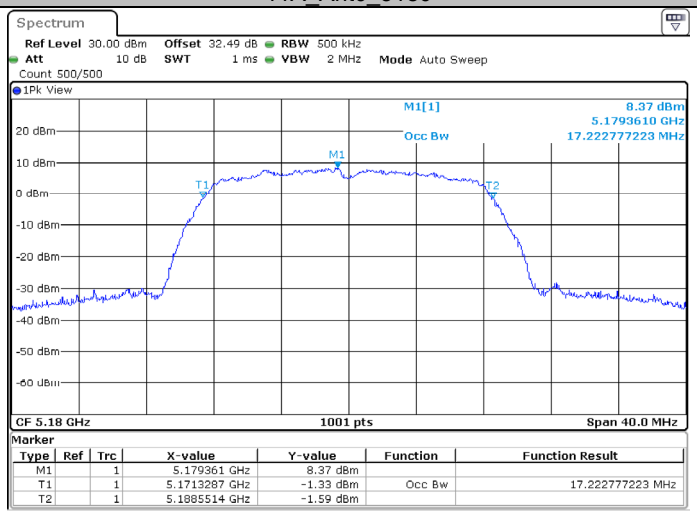
Appendix A2: Occupied channel bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant0	5180	17.223	5171.3287	5188.5514	---	---
	Ant1	5180	17.183	5171.3287	5188.5115	---	---
	Ant0	5200	17.343	5191.3287	5208.6713	---	---
	Ant1	5200	17.263	5191.3287	5208.5914	---	---
	Ant0	5240	17.223	5231.3287	5248.5514	---	---
	Ant1	5240	17.263	5231.3287	5248.5914	---	---
	Ant0	5745	17.263	5736.2887	5753.5514	---	---
	Ant1	5745	17.263	5736.2887	5753.5514	---	---
	Ant0	5785	17.263	5776.2887	5793.5514	---	---
	Ant1	5785	17.263	5776.2887	5793.5514	---	---
	Ant0	5825	17.423	5816.2488	5833.6713	---	---
	Ant1	5825	17.263	5816.3287	5833.5914	---	---
11AC20MIMO	Ant0	5180	17.982	5170.9690	5188.9510	---	---
	Ant1	5180	17.662	5171.1289	5188.7912	---	---
	Ant0	5200	18.022	5191.0090	5209.0310	---	---
	Ant1	5200	17.702	5191.1289	5208.8312	---	---
	Ant0	5240	18.022	5230.9690	5248.9910	---	---
	Ant1	5240	17.702	5231.1289	5248.8312	---	---
	Ant0	5745	18.062	5735.9291	5753.9910	---	---
	Ant1	5745	17.742	5736.0889	5753.8312	---	---
	Ant0	5785	18.022	5775.9291	5793.9510	---	---
	Ant1	5785	17.702	5776.0889	5793.7912	---	---
	Ant0	5825	18.062	5815.9690	5834.0310	---	---
	Ant1	5825	17.702	5816.1289	5833.8312	---	---
11AC40MIMO	Ant0	5190	36.284	5171.8581	5208.1419	---	---
	Ant1	5190	36.523	5171.7782	5208.3017	---	---
	Ant0	5230	36.204	5211.8581	5248.0619	---	---
	Ant1	5230	36.444	5211.7782	5248.2218	---	---
	Ant0	5755	36.444	5736.7782	5773.2218	---	---
	Ant1	5755	36.603	5736.7782	5773.3816	---	---
	Ant0	5795	36.523	5776.6983	5813.2218	---	---
	Ant1	5795	36.603	5776.7782	5813.3816	---	---
11AC80MIMO	Ant0	5210	75.604	5172.2777	5247.8821	---	---
	Ant1	5210	75.285	5172.4376	5247.7223	---	---
	Ant0	5775	75.764	5737.1179	5812.8821	---	---
	Ant1	5775	75.445	5737.4376	5812.8821	---	---
Note: For W52 and W58 band, no transmitted signal in the 99% bandwidth extends into the U-NII-2A band and U-NII-2C band.							

Test Graphs

11A_Ant0_5180



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Date: 10.MAY.2025 02:23:50

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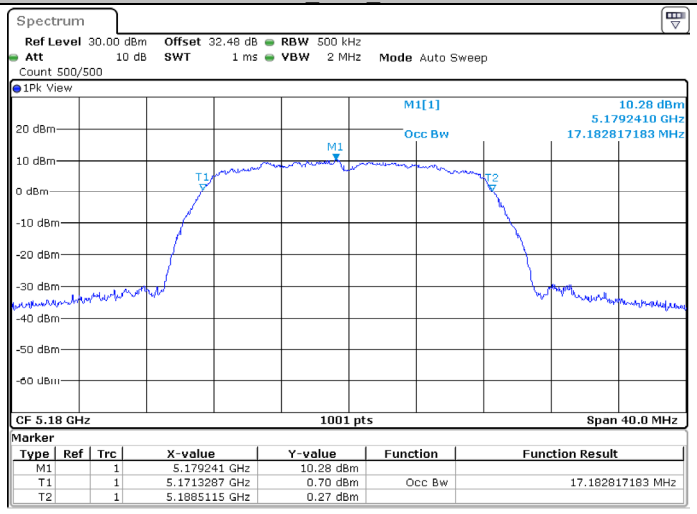

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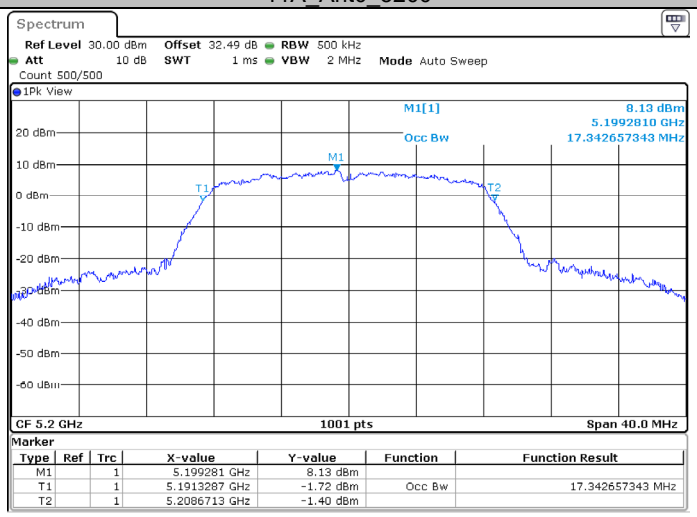
11A_Ant0_5200



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Date: 10.MAY.2025 02:27:05

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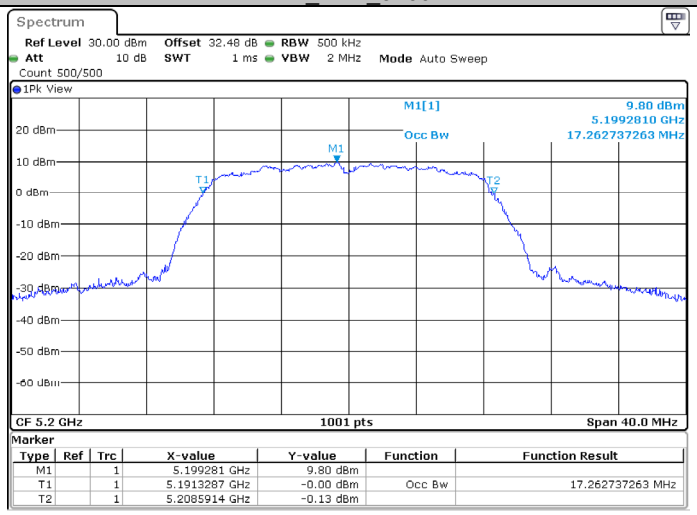

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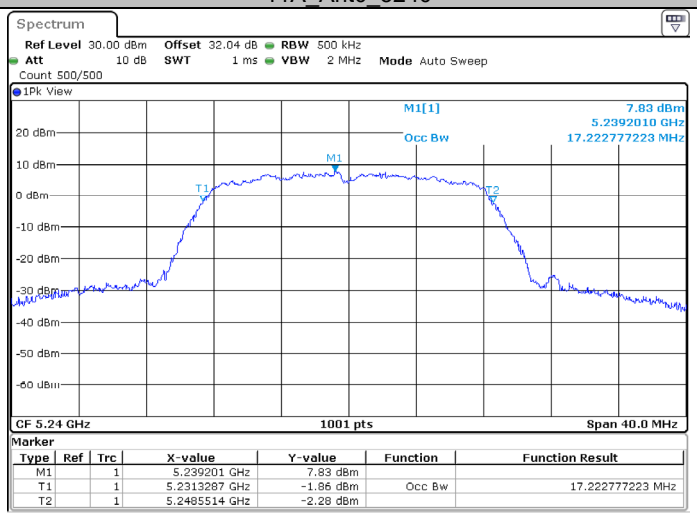

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Date: 10.MAY.2025 02:28:26

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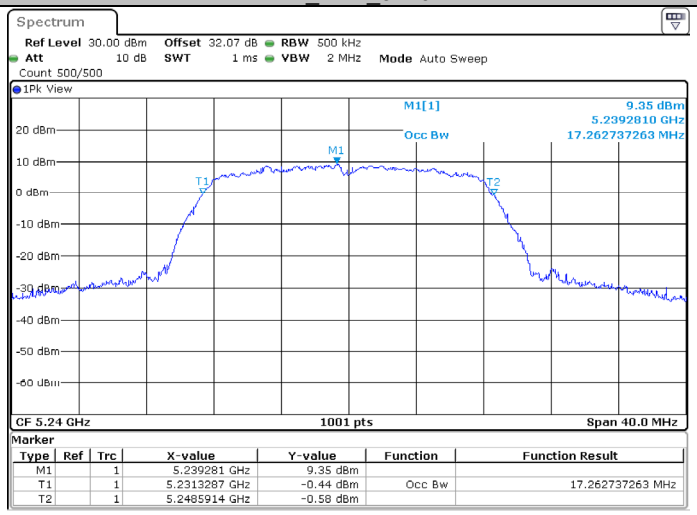

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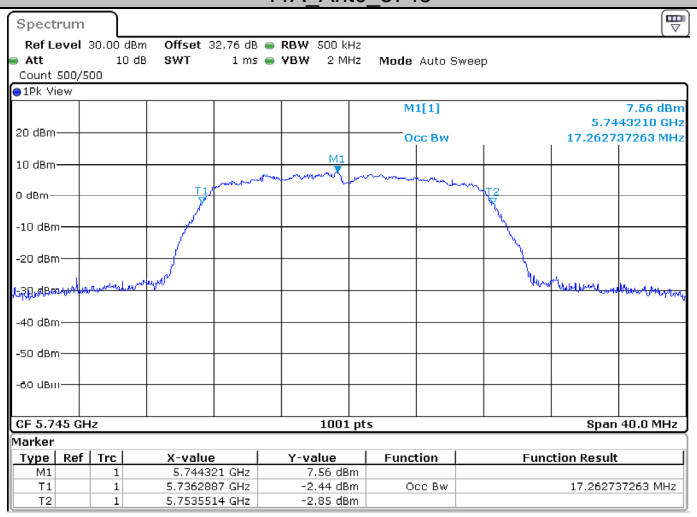
Date: 10.MAY.2025 03:05:01

11A_Ant0_5745



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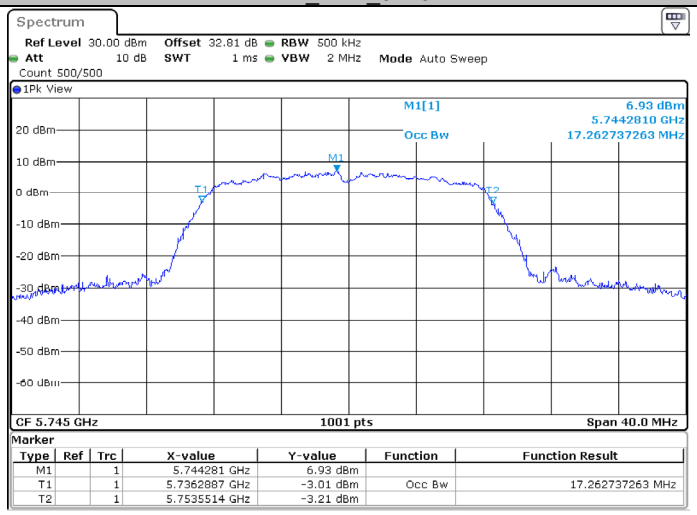

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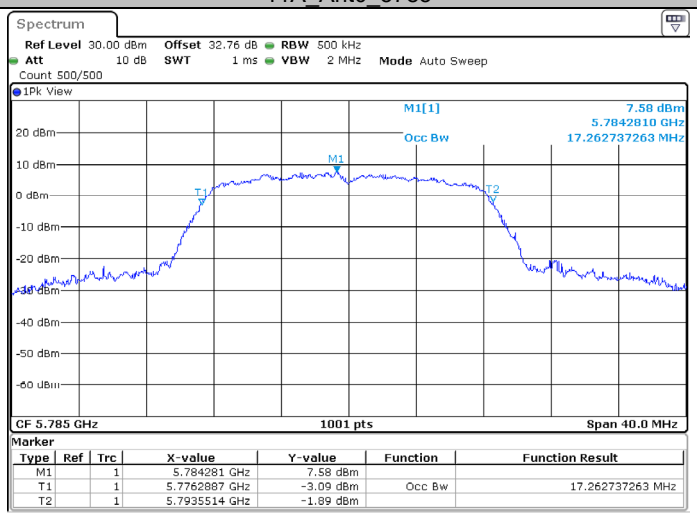
11A_Ant0_5785



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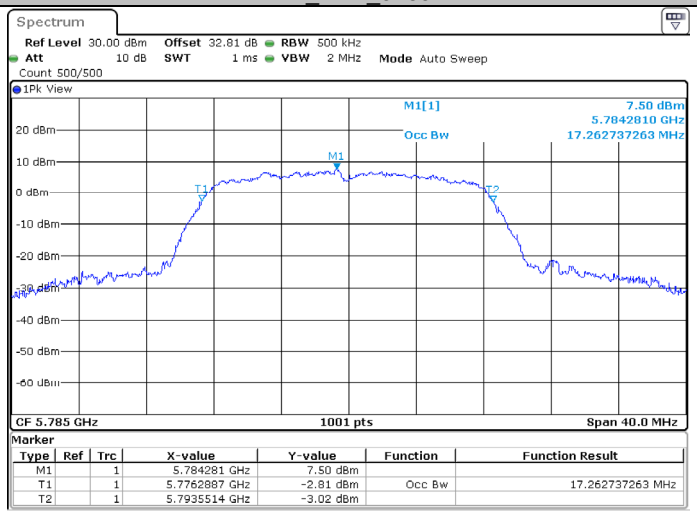

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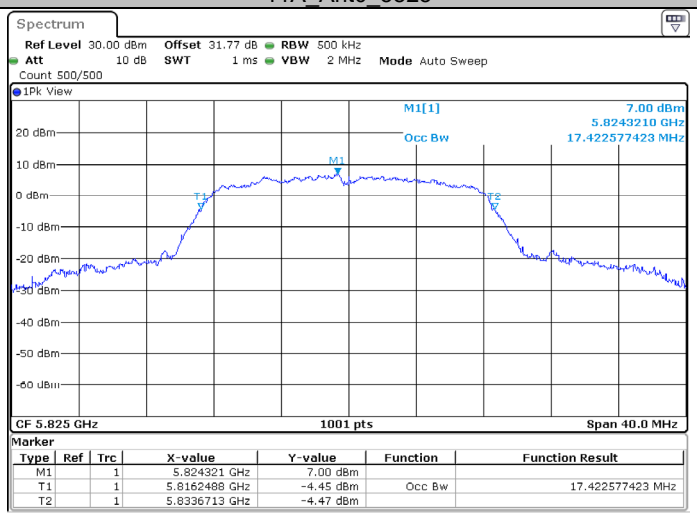

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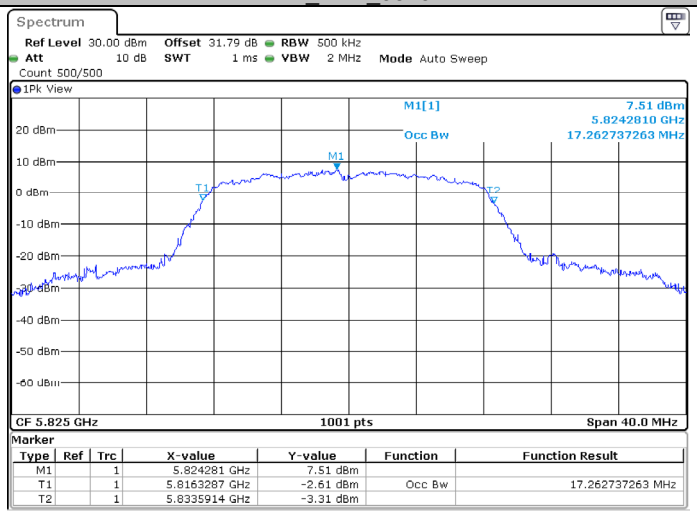

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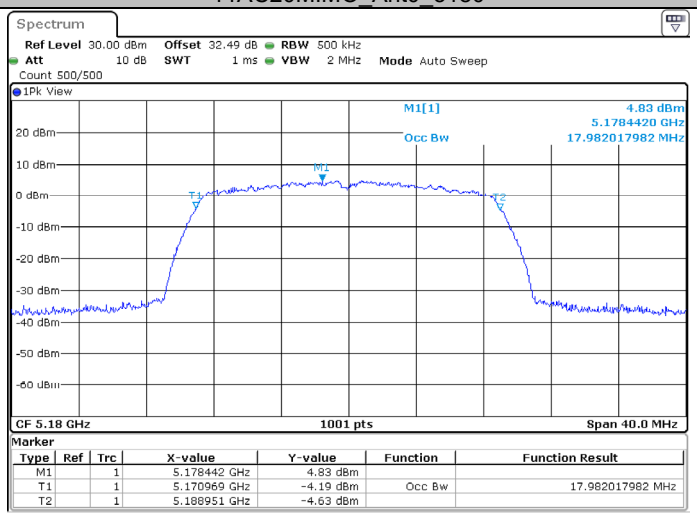
11AC20MIMO_Ant0_5180



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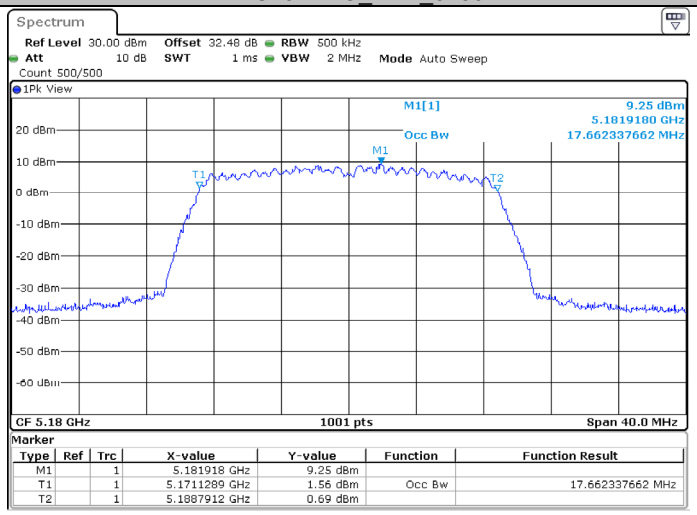
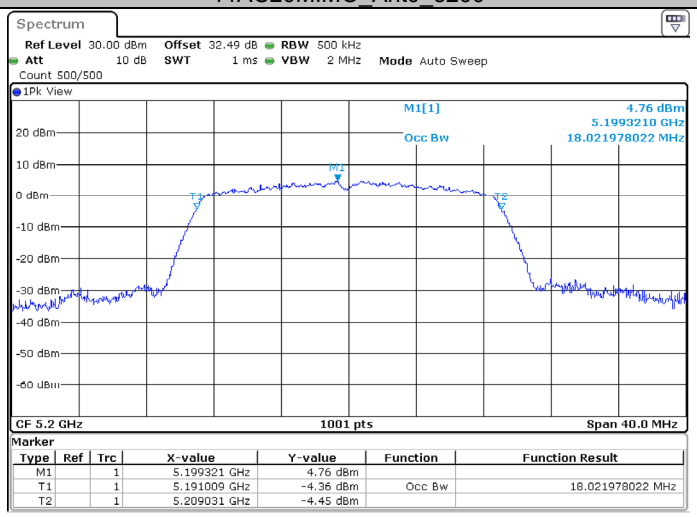
Date: 10.MAY.2025 03:29:36

11AC20MIMO_Ant1_5180



ProjectNo.:2501S37731E-RFTester:Lee.Li
Date: 10.MAY.2025 03:30:26

11AC20MIMO_Ant0_5200



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Date: 10.MAY.2025 03:32:27

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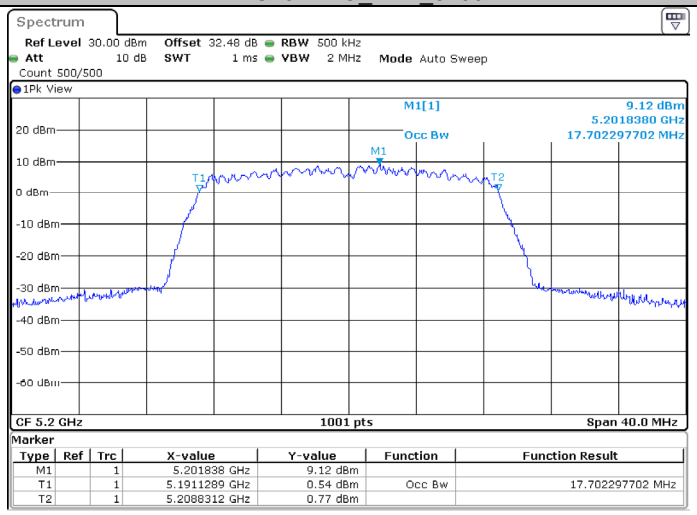

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Date: 10.MAY.2025 03:33:17

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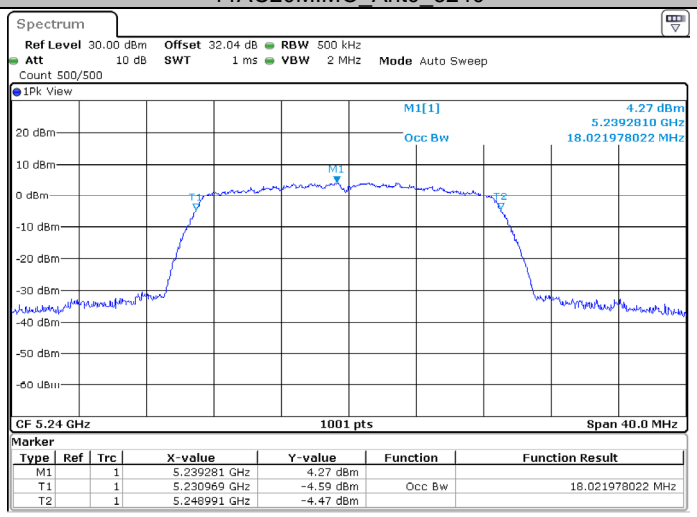

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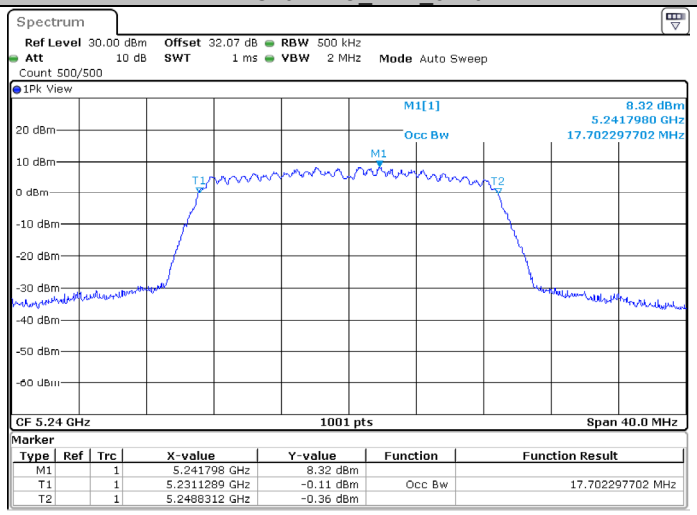

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Date: 10.MAY.2025 03:43:20

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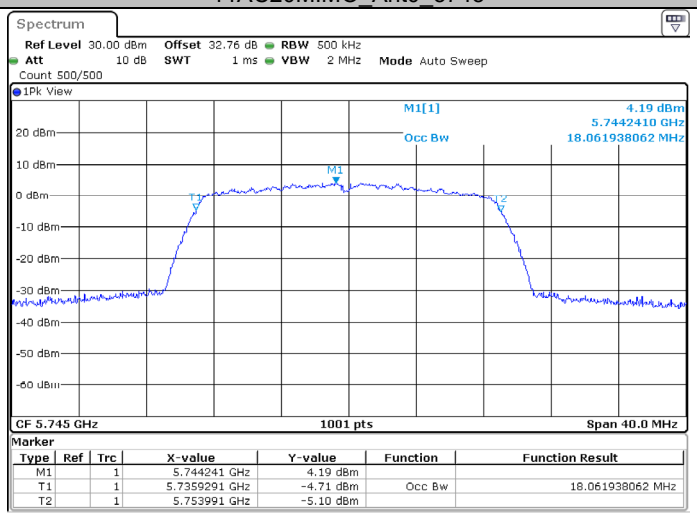

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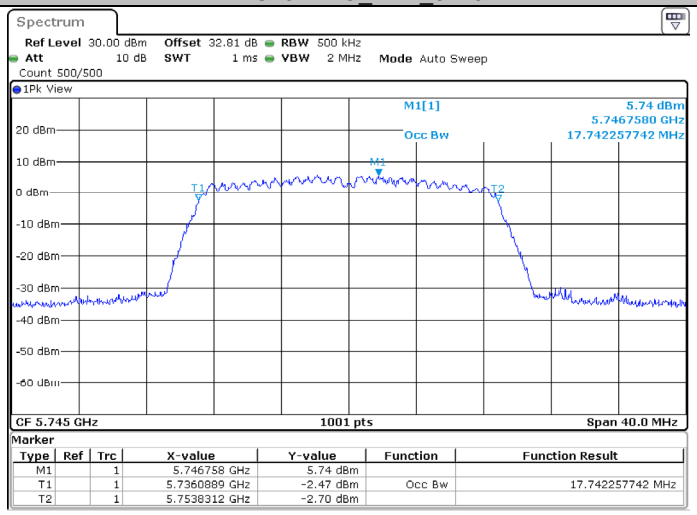

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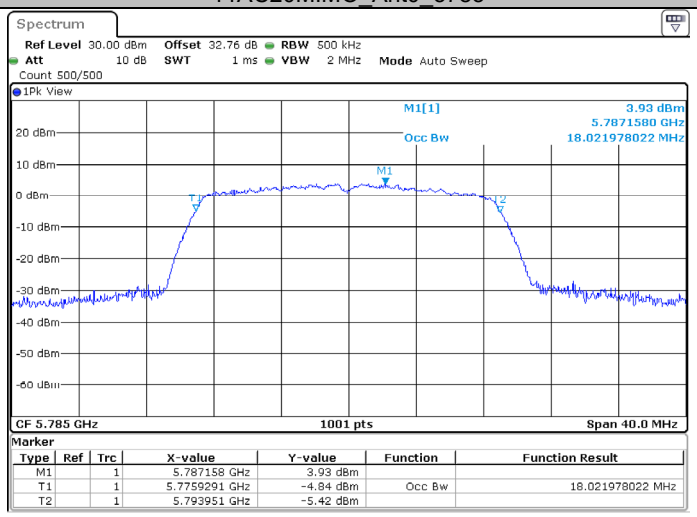

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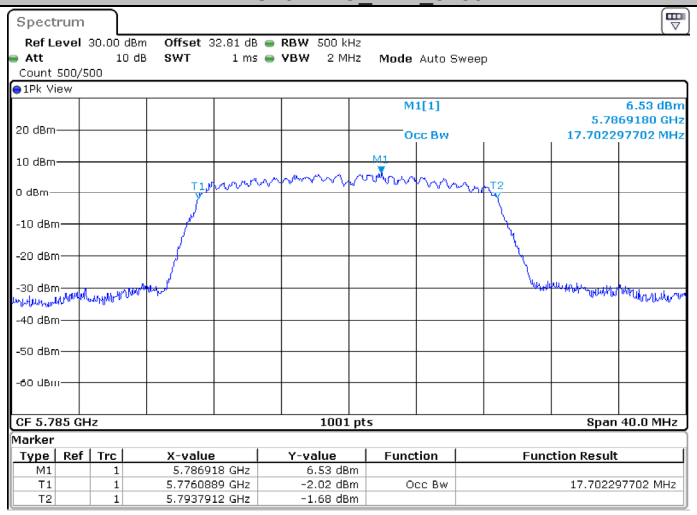

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Date: 10.MAY.2025 04:18:18

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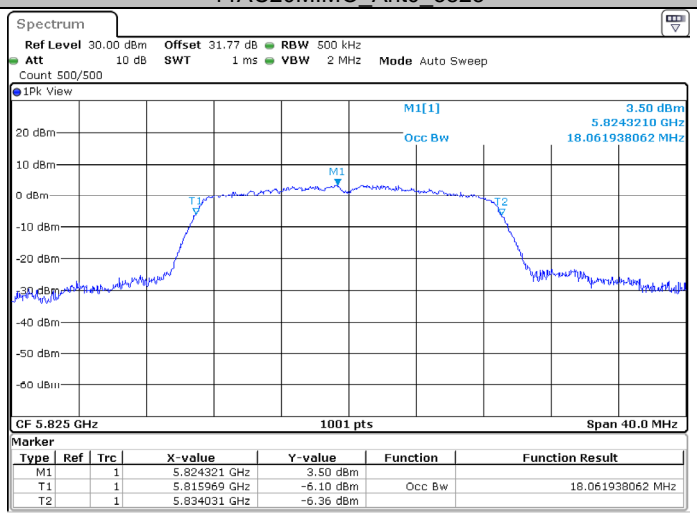

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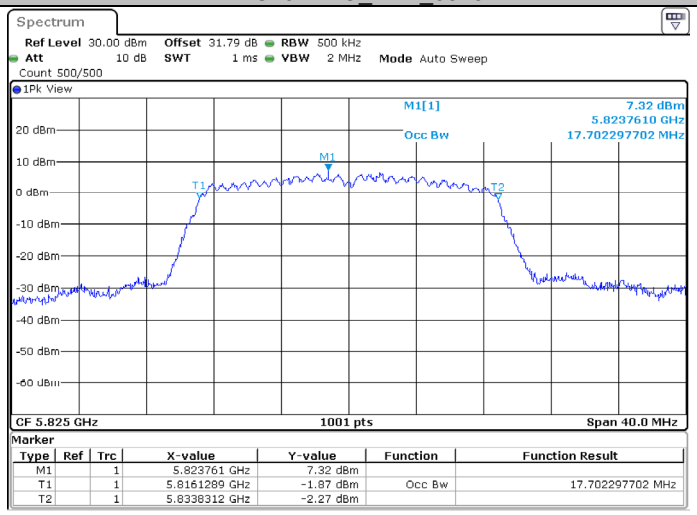

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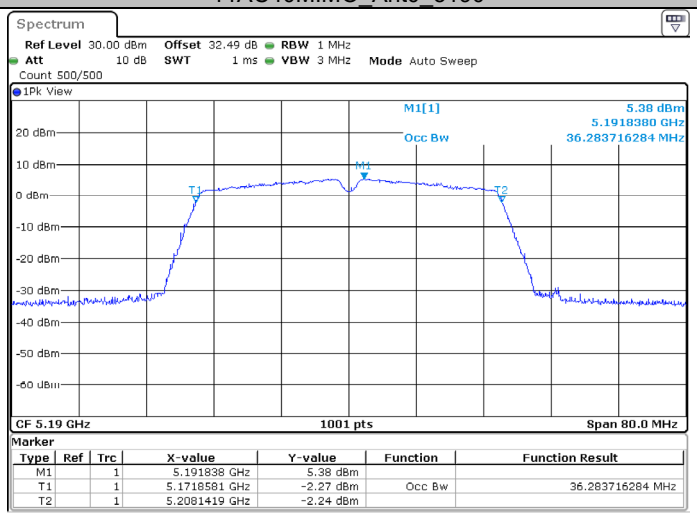

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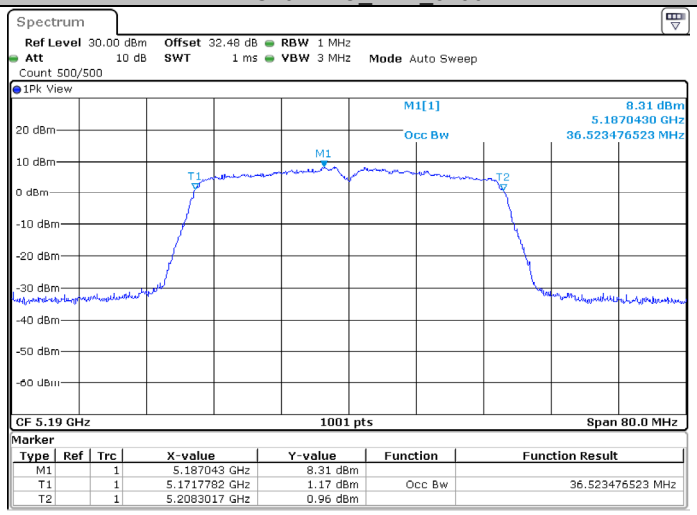

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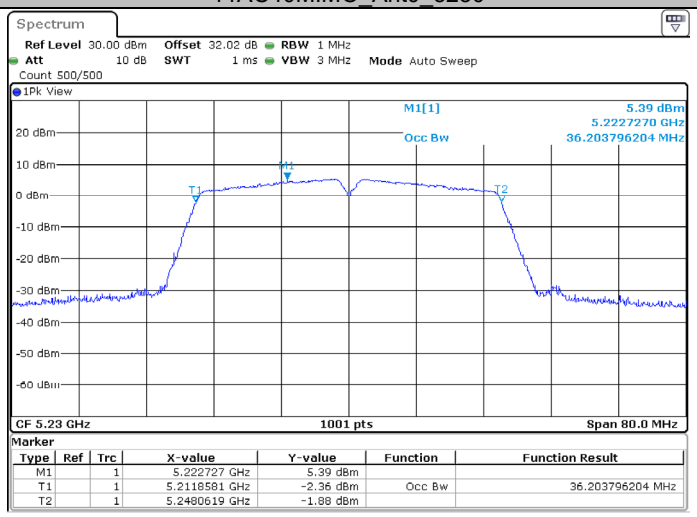

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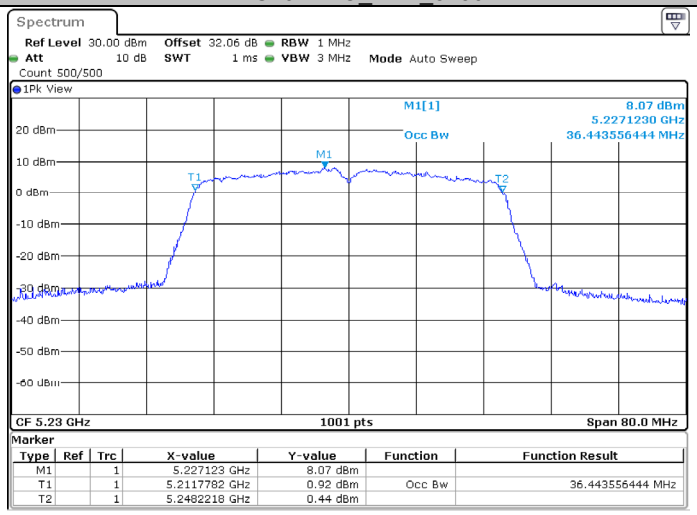
11AC40MIMO_Ant1_5230



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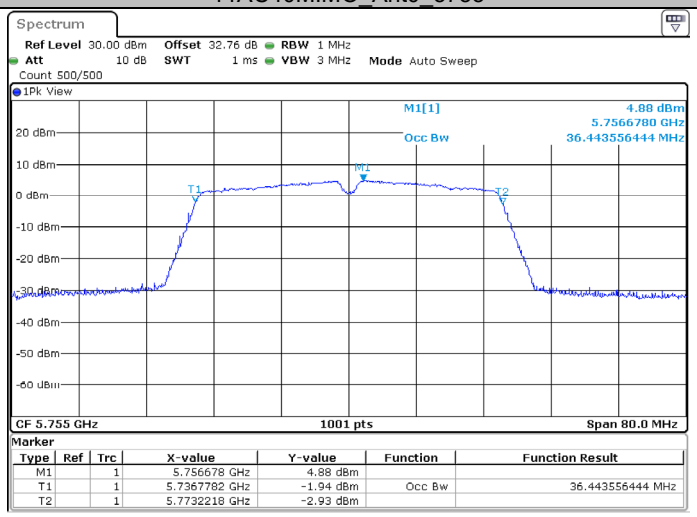

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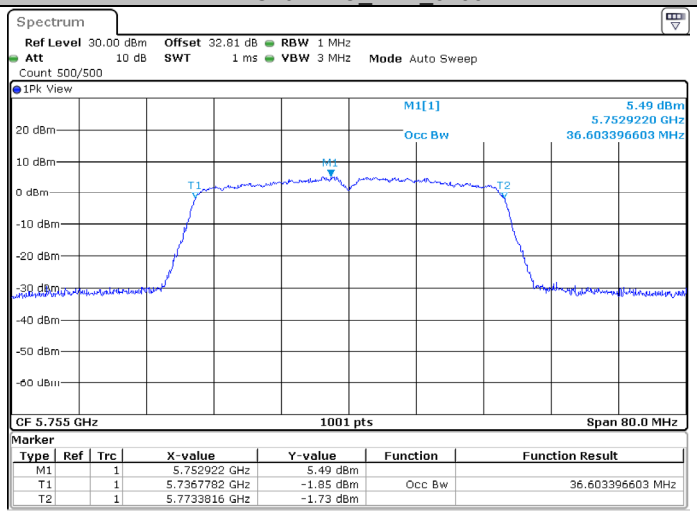

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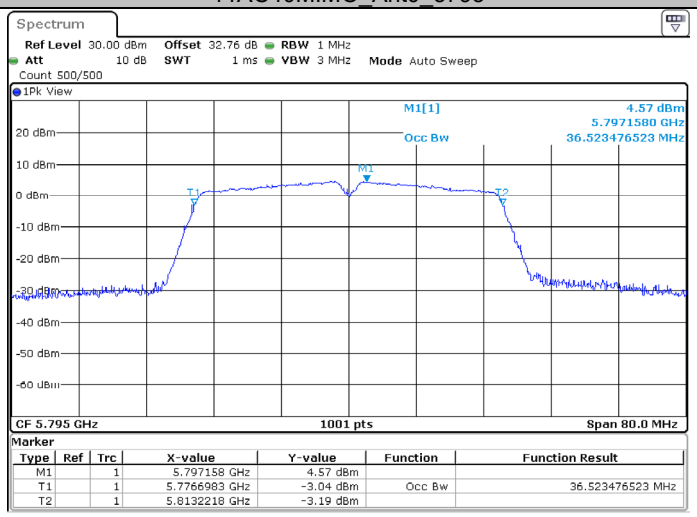

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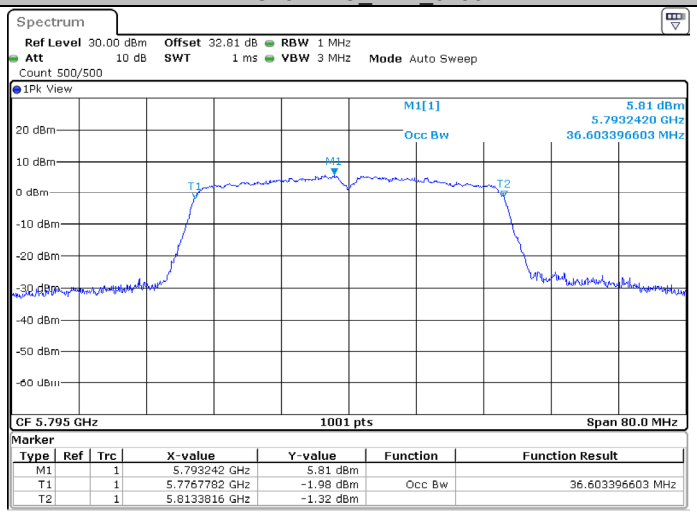
Date: 10.MAY.2025 04:59:03

11AC40MIMO_Ant1_5795



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Date: 10.MAY.2025 05:00:00

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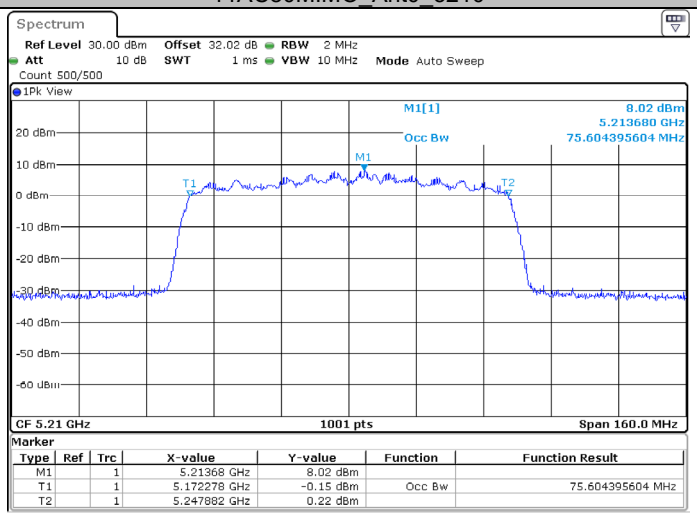
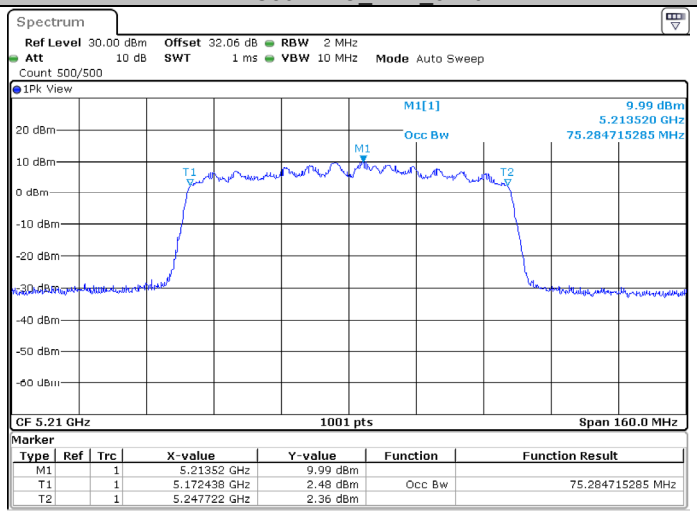


ProjectNo.:2501S37731E-RFTester:Lee.Li
Date: 10.MAY.2025 05:02:00

11AC80MIMO_Ant1_5210



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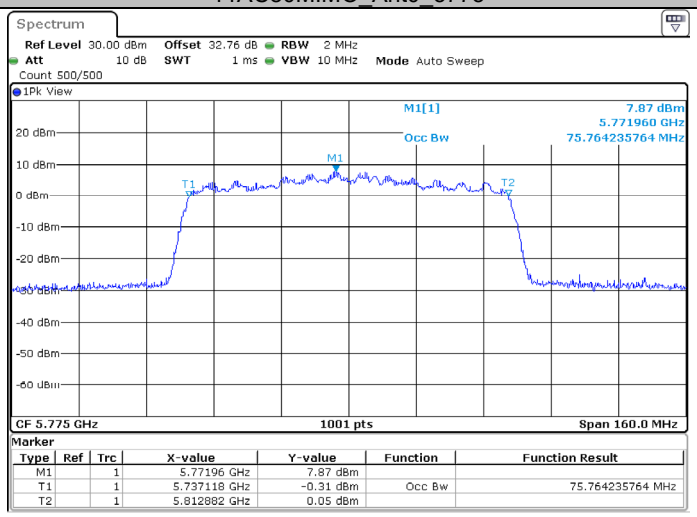
11AC80MIMO_Ant0_5775



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Date: 10.MAY.2025 05:04:36

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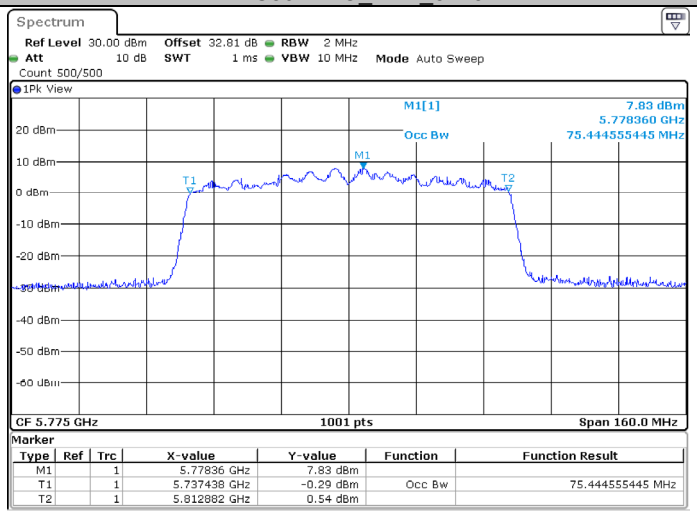


ProjectNo.:2501S37731E-RFTester:Lee.Li
Date: 10.MAY.2025 05:05:33

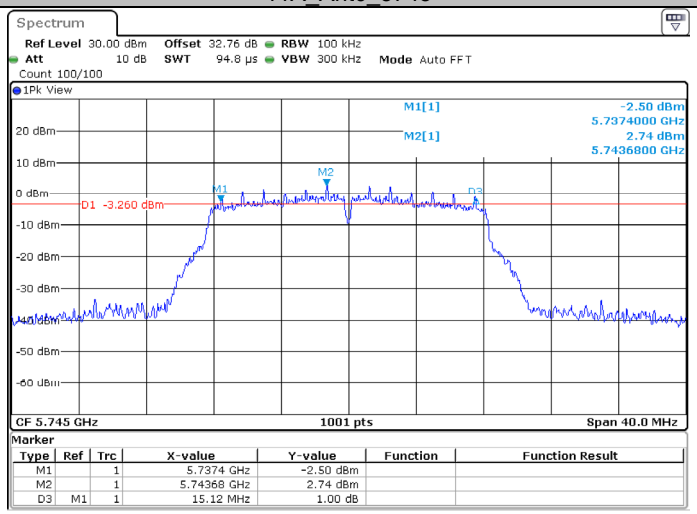
Appendix A3: Min emission bandwidth

Test Result B4

Test Mode	Antenna	Frequency[MHz]	6dB EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant0	5745	15.12	5737.40	5752.52	0.5	PASS
	Ant1	5745	15.12	5737.40	5752.52	0.5	PASS
	Ant0	5785	15.44	5777.08	5792.52	0.5	PASS
	Ant1	5785	15.08	5777.40	5792.48	0.5	PASS
	Ant0	5825	15.44	5817.08	5832.52	0.5	PASS
	Ant1	5825	15.12	5817.40	5832.52	0.5	PASS
11AC20MIMO	Ant0	5745	15.12	5737.40	5752.52	0.5	PASS
	Ant1	5745	16.68	5736.44	5753.12	0.5	PASS
	Ant0	5785	15.12	5777.40	5792.52	0.5	PASS
	Ant1	5785	16.56	5776.56	5793.12	0.5	PASS
	Ant0	5825	15.16	5817.40	5832.56	0.5	PASS
	Ant1	5825	15.12	5817.40	5832.52	0.5	PASS
11AC40MIMO	Ant0	5755	35.12	5737.40	5772.52	0.5	PASS
	Ant1	5755	35.04	5737.48	5772.52	0.5	PASS
	Ant0	5795	35.12	5777.48	5812.60	0.5	PASS
	Ant1	5795	35.12	5777.48	5812.60	0.5	PASS
11AC80MIMO	Ant0	5775	68.96	5743.64	5812.60	0.5	PASS
	Ant1	5775	75.20	5737.40	5812.60	0.5	PASS

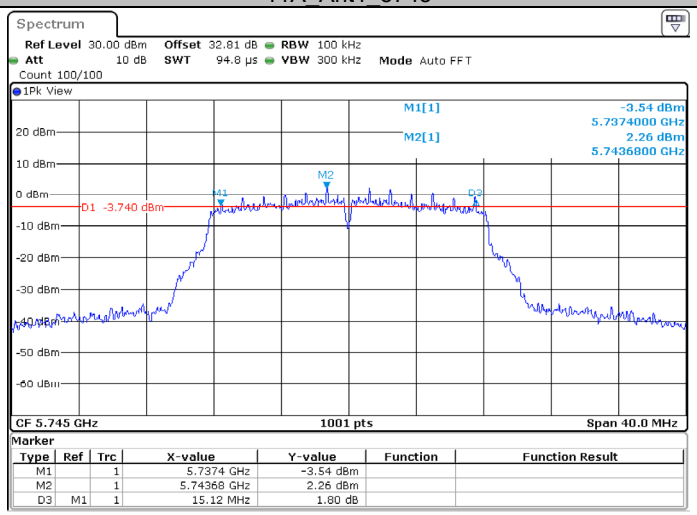
Test Graphs B4

11A_Ant0_5745



ProjectNo.:2501S37731E-RFTester:Lee.Li
Date: 10.MAY.2025 02:47:16

11A_Ant1_5745



ProjectNo.:2501S37731E-RFTester:Lee.Li
Date: 10.MAY.2025 03:22:06

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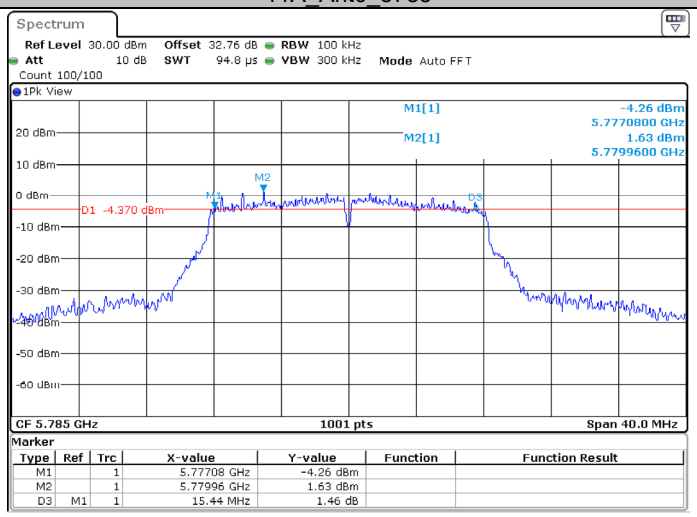
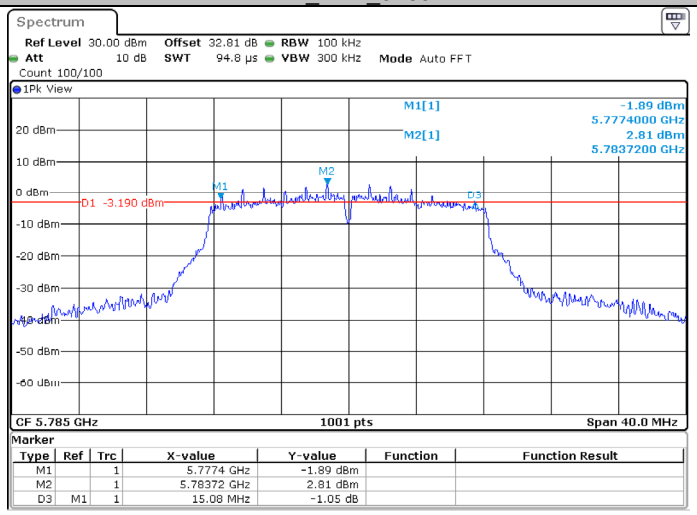


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.77708 GHz	-4.26 dBm		
M2		1	5.77996 GHz	1.63 dBm		
D3	M1	1	15.44 MHz	1.46 dB		

ProjectNo.:2501S37731E-RFTester:Lee.Li
Date: 10.MAY.2025 02:48:52

11A_Ant1_5785

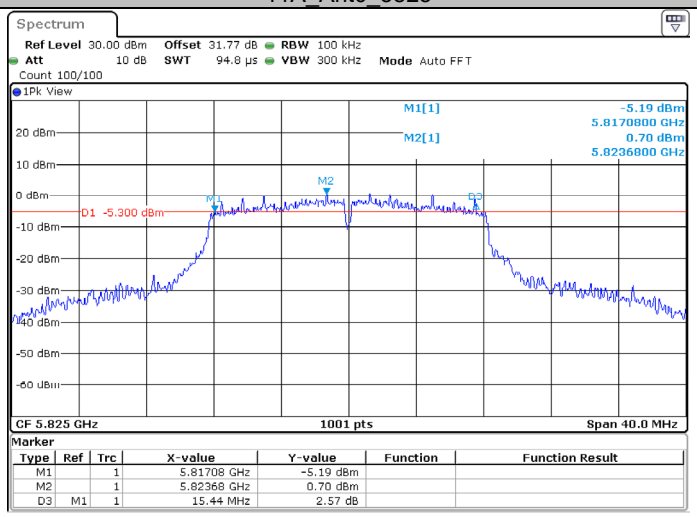


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.7774 GHz	-1.89 dBm		
M2		1	5.78372 GHz	2.81 dBm		
D3	M1	1	15.08 MHz	-1.05 dB		

ProjectNo.:2501S37731E-RFTester:Lee.Li
Date: 10.MAY.2025 03:23:54

11A_Ant0_5825



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Date: 10.MAY.2025 02:59:02

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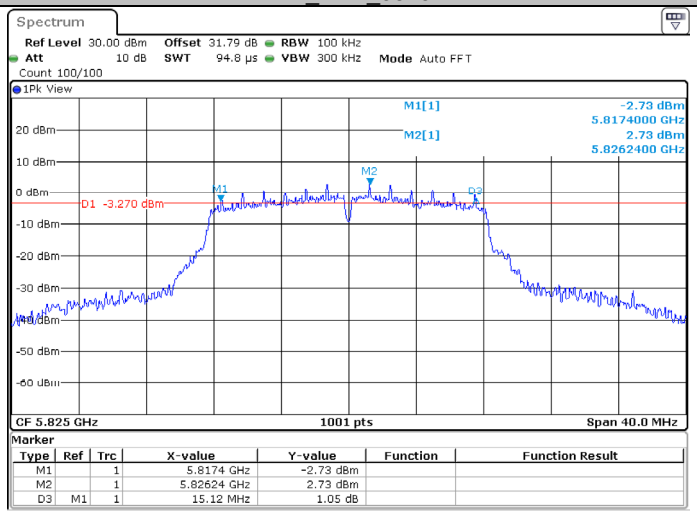

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Date: 10.MAY.2025 03:26:51