TEST REPORT

Applicant Name:	Fanvil Link Technology Co.,LTD
Address:	Room 1517, Building G, Hualian City Panorama.27 Region, Bao'an District; Shenzhen, China
Report Number:	SZ1231214-75457E-RF-00A
FCC ID:	2BCUQ-MS10

Test Standard (s)

FCC PART 15.407

Sample Description

Product Type:	All-in-one Conference Solution
Model No.:	MS10
Multiple Model(s) No.:	CA400; CA400-MS10
Trade Mark:	LINKVIL
Date Received:	2023/12/18
Report Date:	2024/02/22

Test Result:	Pass▲

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

Prepared and Checked By:

April Zhang

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	SZ1231214-75457E-RF-00A	Original Report	2024/02/22

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	All-in-one Conference Solution
Tested Model	MS10
Multiple Model(s)	CA400; CA400-MS10 (Please refer to the DoS# provided by the applicant)
Frequency Range	5G Wi-Fi: 5150-5250MHz; 5250-5350MHz; 5470-5725MHz; 5725-5850MHz
Mode	802.11a/n20/n40/ac20/ac40/ac80
Maximum Conducted Average Output Power	5150-5250MHz: 16.98dBm 5250-5350MHz: 16.47dBm 5470-5725MHz: 18.11dBm 5725-5850MHz: 18.87dBm
Modulation Technique	OFDM
Antenna Specification#	5.3dBi (provided by the applicant)
Voltage Range	DC5V from Type-C Port
Sample serial number	2F2I-2 for Conducted and Radiated Emissions Test 2F2I-1 for RF Conducted Test (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	N/A

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		±5%
RF Frequency		213.55 Hz(k=2, 95% level of confidence)
RF output power, conducted		0.72 dB(k=2, 95% level of confidence)
Unwanted Emission, conducted		1.75 dB(k=2, 95% level of confidence)
AC Power Lines Conducted Emissions	9kHz-150kHz	3.94dB(k=2, 95% level of confidence)
	150kHz-30MHz	3.84dB(k=2, 95% level of confidence)
Radiated Emissions	9kHz - 30MHz	3.30dB(k=2, 95% level of confidence)
	30MHz~200MHz (Horizontal)	4.48dB(k=2, 95% level of confidence)
	30MHz~200MHz (Vertical)	4.55dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Horizontal)	4.85dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Vertical)	5.05dB(k=2, 95% level of confidence)
	1GHz - 6GHz	5.35dB(k=2, 95% level of confidence)
	6GHz - 18GHz	5.44dB(k=2, 95% level of confidence)
	18GHz - 40GHz	5.16dB(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.

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

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 5250-5350MHz Band, 7 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
54	5270	62	5310
56	5280	64	5320
58	5290	/	/

For 802.11a/ac20 mode: channel 52, 56, 64 were tested;
For 802.11ac40 mode: channel 54, 62 were tested;
For 802.11ac80 mode, channel 58 was tested.

For 5470-5725MHz Band, 21 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	124	5620
102	5510	126	5630
104	5520	128	5640
106	5530	132	5660
108	5540	134	5670
110	5550	136	5680
112	5560	138	5690
116	5580	140	5700
118	5590	142	5710
120	5600	144	5720
122	5610	/	/

For 802.11a/ac20 mode: channel 100, 116, 140, 144 were tested;
For 802.11ac40 mode: channel 102, 110, 134, 142 were tested;
For 802.11ac80 mode, channel 106, 122, 138 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

"CMD.exe"[#] software was used and power level as below. The software and power level was provided by the applicant. The device was tested with the worst case was performed as below:

5150-5250 MHz Band:					
Test Modes	**Test Channels**	**Test Frequency (MHz)**	**Data rate**	**Power Level Setting[#]**	
				ANT 1	**ANT 2**
802.11a	Lowest	5180	6Mbps	Default	Default
	Middle	5200	6Mbps	Default	Default
	Highest	5240	6Mbps	Default	Default
802.11ac vht20	Lowest	5180	MCS0	Default	Default
	Middle	5200	MCS0	Default	Default
	Highest	5240	MCS0	Default	Default
802.11ac vht40	Lowest	5190	MCS0	Default	Default
	Highest	5230	MCS0	Default	Default
802.11ac vht80	Middle	5210	MCS0	Default	Default
5250-5350 MHz Band:					
Test Modes	**Test Channels**	**Test Frequency (MHz)**	**Data rate**	**Power Level Setting[#]**	
				ANT 1	**ANT 2**
802.11a	Lowest	5260	6Mbps	Default	Default
	Middle	5280	6Mbps	Default	Default
	Highest	5320	6Mbps	Default	Default
802.11ac vht20	Lowest	5260	MCS0	Default	Default
	Middle	5280	MCS0	Default	Default
	Highest	5320	MCS0	Default	Default
802.11ac vht40	Lowest	5270	MCS0	Default	Default
	Highest	5310	MCS0	Default	Default
802.11ac vht80	Middle	5290	MCS0	Default	Default

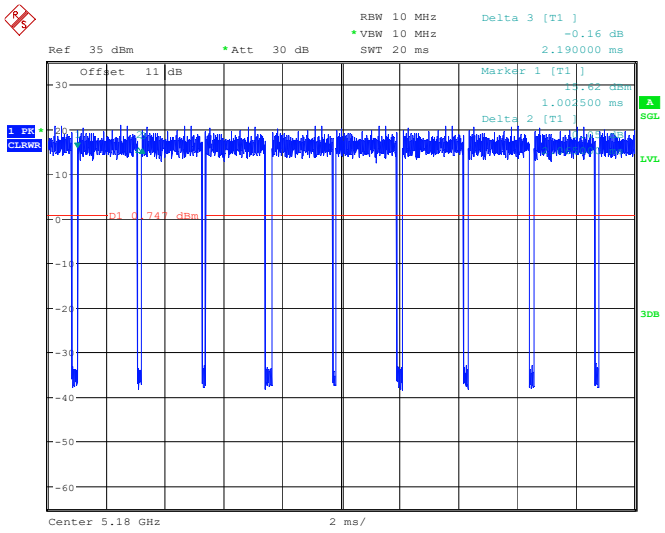
5470-5725 MHz Band:					
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting#	
				ANT 1	ANT 2
802.11a	Lowest	5500	6Mbps	Default	Default
	Middle	5580	6Mbps	Default	Default
	Highest	5700	6Mbps	Default	Default
	Cross	5720	6Mbps	Default	Default
802.11ac vht20	Lowest	5500	MCS0	Default	Default
	Middle	5580	MCS0	Default	Default
	Highest	5700	MCS0	Default	Default
	Cross	5720	MCS0	Default	Default
802.11ac vht40	Lowest	5510	MCS0	Default	Default
	Middle	5550	MCS0	Default	Default
	Highest	5670	MCS0	Default	Default
	Cross	5710	MCS0	Default	Default
802.11ac vht80	Lowest	5530	MCS0	Default	Default
	Highest	5610	MCS0	Default	Default
	Cross	5690	MCS0	Default	Default
5725-5850 MHz Band:					
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting#	
				ANT 1	ANT 2
802.11a	Lowest	5745	6Mbps	Default	Default
	Middle	5785	6Mbps	Default	Default
	Highest	5825	6Mbps	Default	Default
802.11ac vht20	Lowest	5745	MCS0	Default	Default
	Middle	5785	MCS0	Default	Default
	Highest	5825	MCS0	Default	Default
802.11ac vht40	Lowest	5755	MCS0	Default	Default
	Highest	5795	MCS0	Default	Default
802.11ac vht80	Middle	5775	MCS0	Default	Default

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.
2. For 802.11 a mode, the device only support SISO mode.
3. For 802.11n/ac modes, the device supports SISO and MIMO in all modes, per pretest, the MIMO mode was the worst mode for all the modes.

Duty cycle

Test Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)	Duty Cycle Factor (dB)	1/T (Hz)	VBW Setting (kHz)
802.11a	2.065	2.190	94.29	0.26	484	1
802.11ac vht20	1.933	2.100	92.05	0.36	517	1
802.11ac vht40	0.953	1.164	81.87	0.87	1049	3
802.11ac vht80	0.460	0.626	73.48	1.34	2174	3

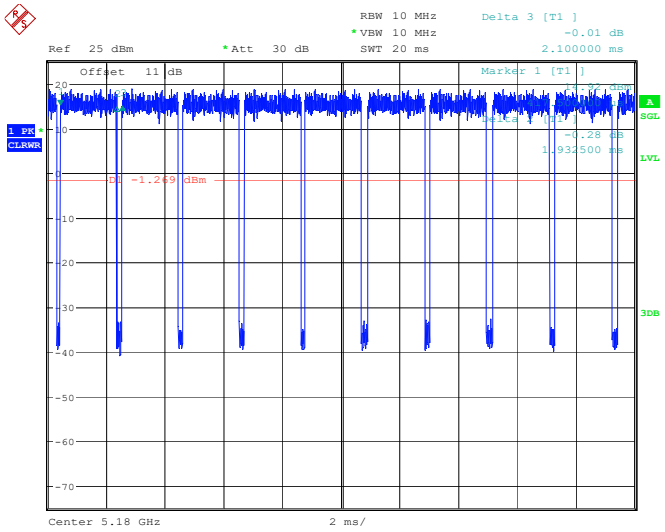
802.11a



ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang

Date: 20.JAN.2024 10:39:15

802.11ac 20



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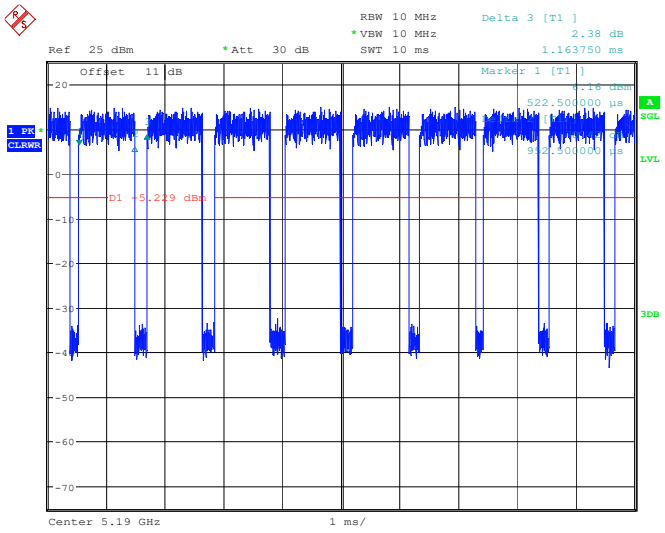
802.11ac 40



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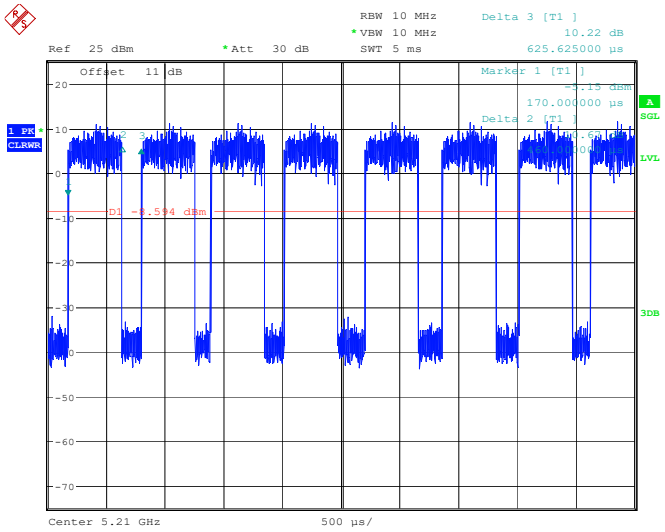
802.11ac 80



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Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

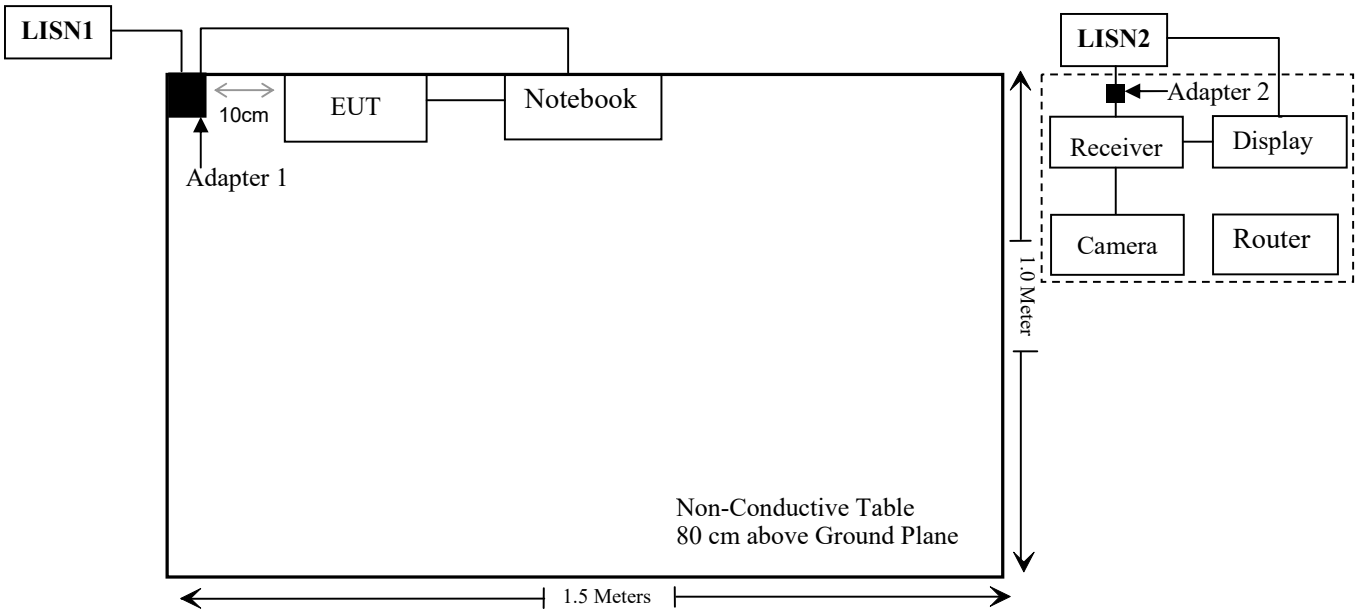
Manufacturer	Description	Model	Serial Number
Dell	Notebook	Latitude E6410	11429208685
Dell	Adapter 1	DA90PE1-00	CN-0WK890-48661
LINKVIL	Camera	CM70	Unknown
LINKVIL	Receiver	RC10	Unknown
FUSHIGANG	Adapter 2	AS1201A-0502000USL	Unknown
Samsung	Display	Unknown	Unknown
HUAWEI	Router	WS5100	A4933FEF1D01

External I/O Cable

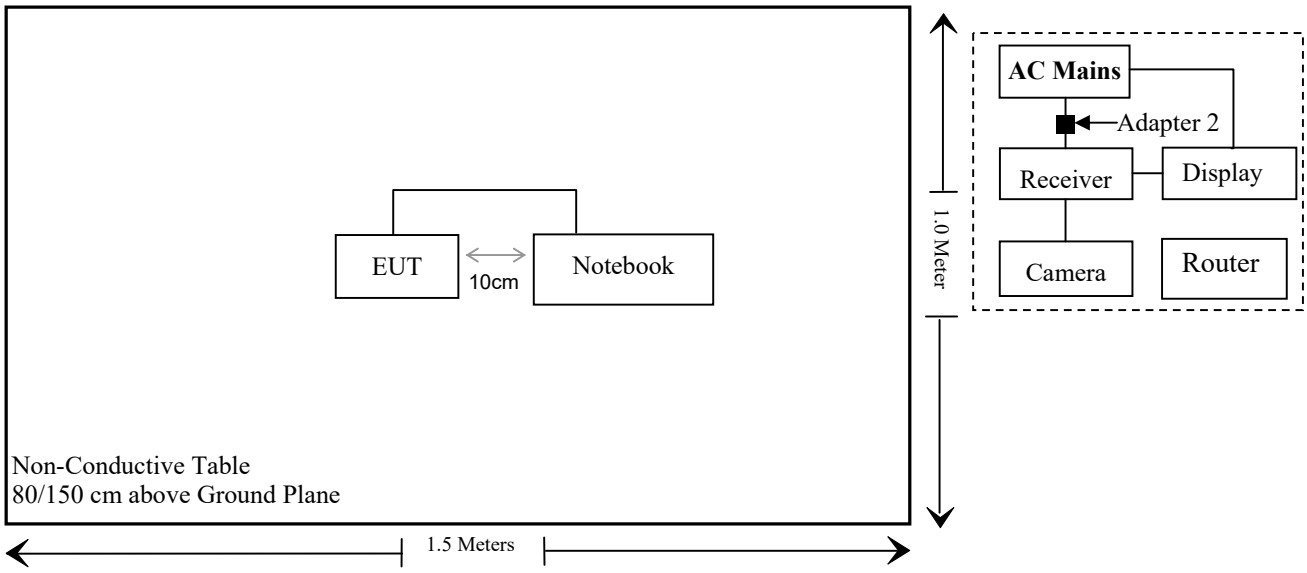
Cable Description	Length (m)	From Port	To
Un-shielding Detachable AC Cable	1.5	Adapter 1	LISN1
Un-shielding Un-Detachable DC Cable	1.5	Adapter 1	Notebook
Un-shielding Detachable USB Cable	0.1	EUT	Notebook
Un-shielding Un-Detachable DC Cable	1.5	Receiver	Adapter 2
Un-shielding Detachable USB Cable	1.2	Receiver	USB camera
Un-shielding Detachable HDMI cable	1.2	Receiver	Display
Un-shielding Detachable AC Cable	1.5	LISN2/AC Mains	Display

Block Diagram of Test Setup

For Conducted Emissions



For Radiated Emissions:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 (b) & §2.1091	MPE-Based Exemption	Compliant
§15.203	Antenna Requirement	Compliant
§15.407(b)(9)& §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)	Compliant*

Compliant*: Please refer to the DFS report SZ1231214-75457E-RF-00B.
Not Applicable –The supplier declared that the equipment has no this function.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emissions Test					
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2023/02/08	2024/02/07
Rohde & Schwarz	LISN	ENV216	101613	2023/02/08	2024/02/07
Rohde & Schwarz	Transient Limiter	ESH3Z2	DE25985	2023/08/03	2024/08/02
Unknown	CE Cable	CE Cable	UF A210B-1-0720-504504	2023/08/03	2024/08/02
Audix	EMI Test software	E3	191218	NCR	NCR
Radiated Emissions Test					
R&S	EMI Test Receiver	ESR3	102455	2023/02/08	2024/02/07
Sonoma instrument	Pre-amplifier	310 N	186238	2023/06/08	2024/06/07
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2024/07/19
ETS	Passive Loop Antenna	6512	29604	2023/07/07	2024/07/06
Unknown	Cable	Chamber Cable 1	F-03-EM236	2023/08/03	2024/08/02
Unknown	Cable	Chamber Cable 4	EC-007	2023/08/03	2024/08/02
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
Rohde & Schwarz	Spectrum Analyzer	FSV40	101605	2023/04/18	2024/04/17
COM-POWER	Pre-amplifier	PA-122	181919	2023/06/29	2024/06/28
Schwarzbeck	Horn Anetenna	BBHA9120D(1201)	1143	2023/07/26	2024/07/25
Unknown	RF Cable	KMSE	0735	2023/10/08	2024/10/07
Unknown	RF Cable	UFA147	219661	2023/10/08	2024/10/07
Unknown	RF Cable	XH750A-N	J-10M	2023/10/08	2024/10/07
SNSD	5G Band Reject filter	BSF5150-5850MN-0899-004	5G filter	2023/08/03	2024/08/02
A.H.System	Pre-amplifier	PAM-1840VH	190	2023/08/03	2024/08/02
Electro-Mechanics Co	Horn Antenna	3116	9510-2270	2023/09/18	2026/09/17
UTIFLEX	RF Cable	NO. 13	232308-001	2023/08/03	2024/08/02

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
Agilent	USB wideband power sensor	U2021XA	MY52350001	2023/06/08	2024/06/07
R&S	SPECTRUM ANALYZER	FSU26	200120	2024/01/08	2025/01/07
MARCONI	10dB Attenuator	6534/3	2942	2023/07/04	2024/07/03
Micro-Tronics	RF Cable	8082135	W1113	2023/07/04	2024/07/03

*** 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).

FCC 1.1307 (B) & §2.1091- 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 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)(1)(i)(C)] to support an exemptionfrom 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

Result

Mode	Frequency (MHz)	Tune up conducted power#	Antenna Gain#		ERP		Evaluation Distance (m)	ERP Limit (mW)
		(dBm)	(dBi)	(dBd)	(dBm)	(mW)		
5.2G Wi-Fi	5180-5240	17.0	5.3	3.15	20.15	103.51	0.2	768
5.3G Wi-Fi	5260-5320	17.0	5.3	3.15	20.15	103.51	0.2	768
5.6G Wi-Fi	5500-5720	19.0	5.3	3.15	22.15	164.06	0.2	768
5.8G Wi-Fi	5745-5825	19.0	5.3	3.15	22.15	164.06	0.2	768

Note: The tune up conducted power and antenna gain was declared by the applicant.

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

Result: Compliant

FCC §15.203 – ANTENNA REQUIREMENT

Applicable Standard

According to § 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 user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

a. Antenna must be permanently attached to the unit.
b. Antenna must use a unique type of connector to attach to the EUT.
c. Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.407 (a), if the transmitting antennas of directional gain greater than 6dBi are used, the transmit power and power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

The EUT has two internal antennas which was permanently attached, and the maximum antenna gain# is 5.3dBi, fulfill the requirement of this section. Please refer to the EUT photos.

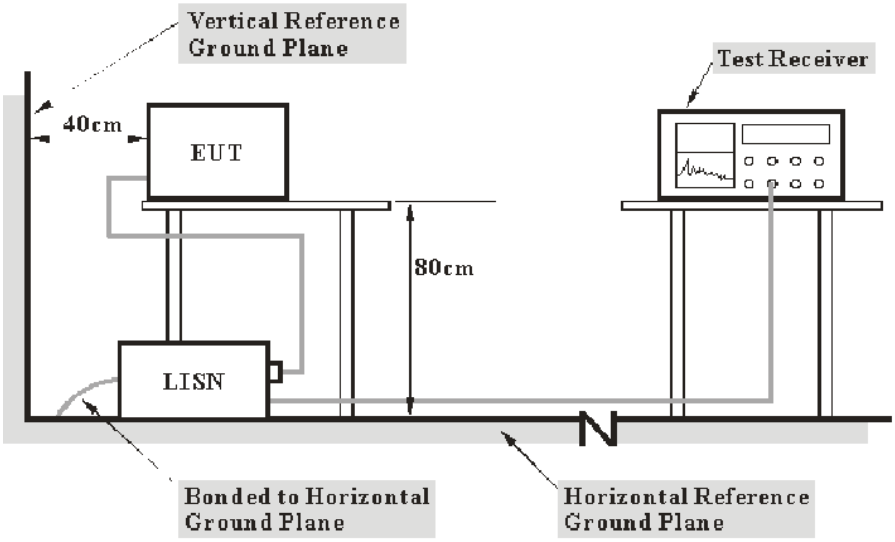
Result: Compliant

FCC §15.407 (b) (6) §15.207 (a) – CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207, §15.407(b) (6)

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	IF B/W
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).

Test Data

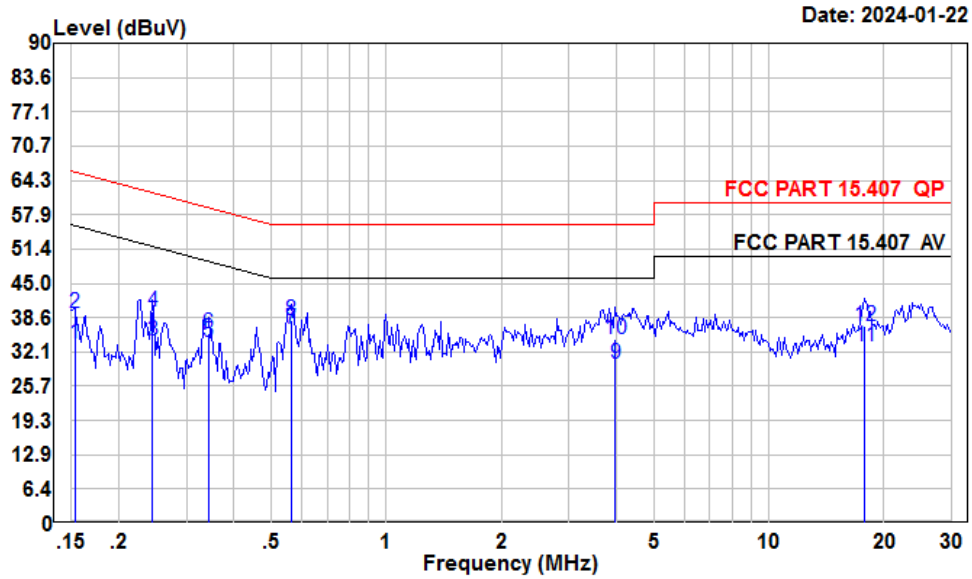
Environmental Conditions

Temperature:	25 ℃
Relative Humidity:	45 %
ATM Pressure:	101 kPa

The testing was performed by Macy Shi on 2024-01-22.

EUT operation mode: Transmitting (Maximum output power mode, 802.11 ac 20, 5785MHz MIMO)

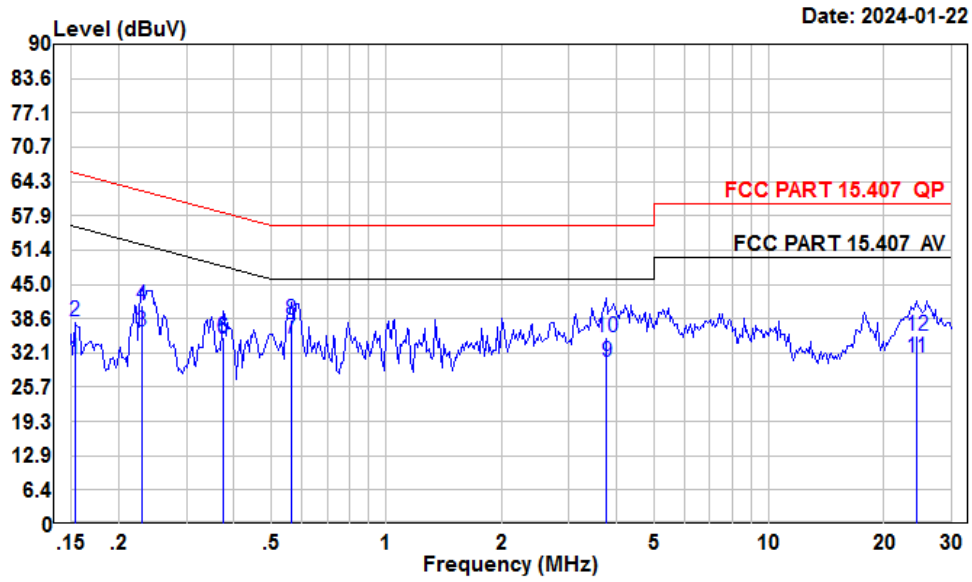
AC 120V/60 Hz, Line



Condition: Line
Project : SZ1231214-75457E-RF
Tester : Macy shi
Note : 5G WIFI

	Freq	Read Level	LISN Level	Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.15	13.34	33.69	10.20	10.15	65.82	-32.13	Average
2	0.15	19.17	39.52	10.20	10.15	65.82	-26.30	QP
3	0.24	13.77	34.17	10.20	10.20	61.95	-27.78	Average
4	0.24	19.43	39.83	10.20	10.20	61.95	-22.12	QP
5	0.34	13.61	33.96	10.20	10.15	59.13	-25.17	Average
6	0.34	15.15	35.50	10.20	10.15	59.13	-23.63	QP
7	0.56	15.87	36.33	10.27	10.19	56.00	-19.67	Average
8	0.56	17.68	38.14	10.27	10.19	56.00	-17.86	QP
9	3.96	9.49	30.05	10.30	10.26	56.00	-25.95	Average
10	3.96	14.00	34.56	10.30	10.26	56.00	-21.44	QP
11	17.85	13.34	33.17	9.72	10.11	60.00	-26.83	Average
12	17.85	17.08	36.91	9.72	10.11	60.00	-23.09	QP

AC 120V/60 Hz, Neutral



Condition: Neutral
Project : SZ1231214-75457E-RF
Tester : Macy shi
Note : 5G WIFI

	Freq	Read Level	Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.15	10.58	30.94	10.21	10.15	65.82	-34.88	Average
2	0.15	17.72	38.08	10.21	10.15	65.82	-27.74	QP
3	0.23	15.67	36.12	10.29	10.16	62.48	-26.36	Average
4	0.23	20.64	41.09	10.29	10.16	62.48	-21.39	QP
5	0.37	14.46	34.88	10.23	10.19	58.43	-23.55	Average
6	0.37	14.67	35.09	10.23	10.19	58.43	-23.34	QP
7	0.56	14.50	34.93	10.24	10.19	56.00	-21.07	Average
8	0.56	17.83	38.26	10.24	10.19	56.00	-17.74	QP
9	3.76	10.01	30.49	10.22	10.26	56.00	-25.51	Average
10	3.76	14.61	35.09	10.22	10.26	56.00	-20.91	QP
11	24.27	11.28	31.16	9.66	10.22	60.00	-28.84	Average
12	24.27	15.55	35.43	9.66	10.22	60.00	-24.57	QP

§15.205 & §15.209 & §15.407(B)– UNDESIRABLE EMISSION

Applicable Standard

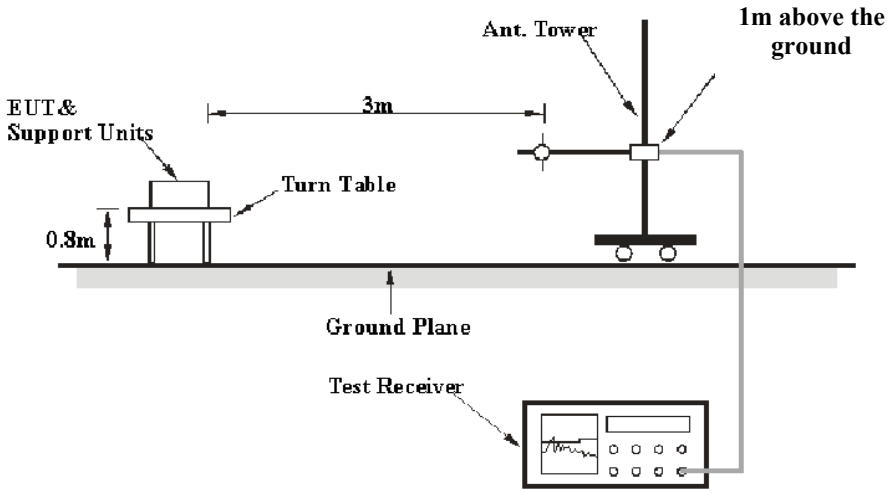
FCC §15.407 (b); §15.209; §15.205;

(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.

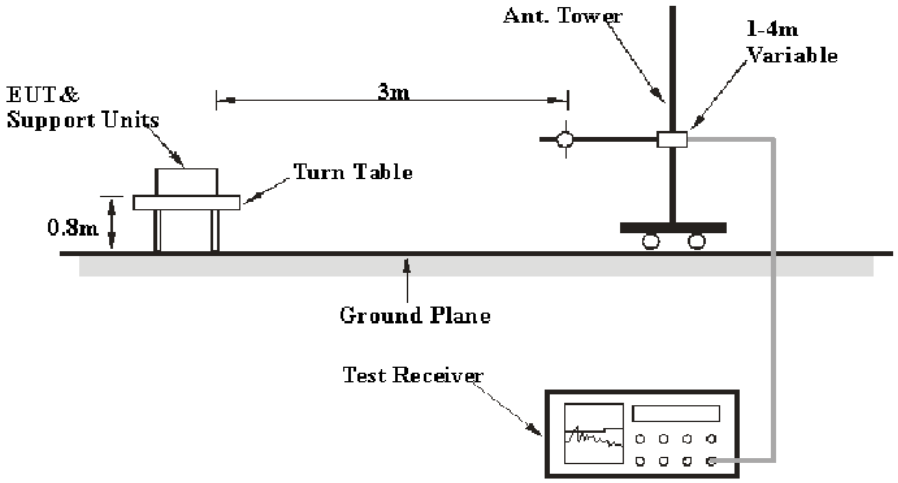
Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

EUT Setup

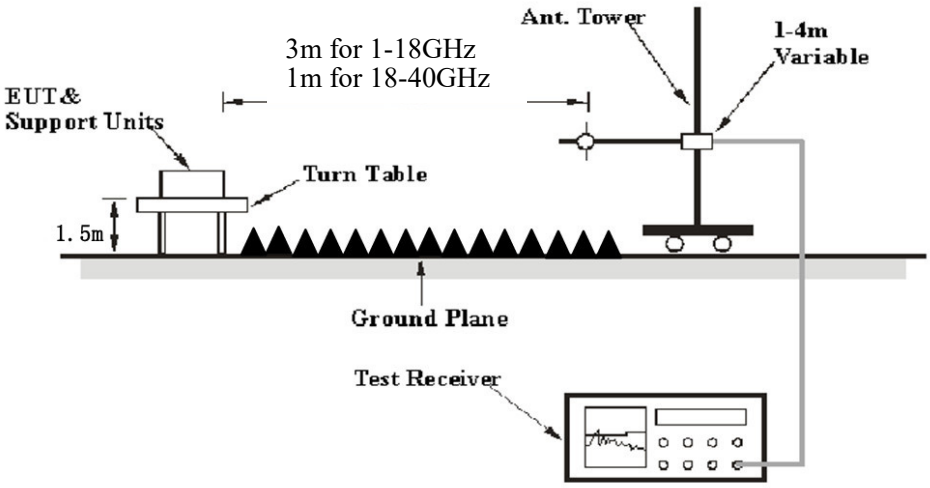
9 kHz-30MHz:



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

1-40GHz:

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

Note: T is minimum transmission duration

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

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.

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

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(1/3)= -9.5 dB, for 18-40GHz range, the limit of 1m distance was added by 9.5dB from limit of 3m to compared with the result measurement at 1m 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/Margin = Level/Corrected Amplitude – Limit
Level / Corrected Amplitude = Read Level + Factor

Test Data

Environmental Conditions

Temperature:	22-24.5 ℃
Relative Humidity:	50-55 %
ATM Pressure:	101 kPa

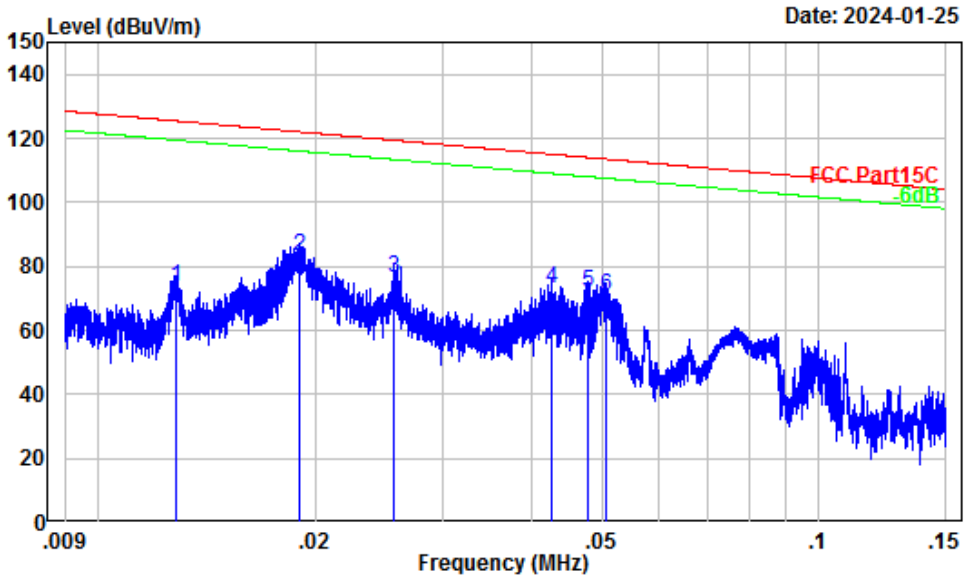
The testing was performed by Warren Huang on 2024-01-25 for below 1GHz, Dylan Yang and Zenos Qiao from 2024-01-23 to2024-02-02 for above 1GHz.

EUT operation mode: Transmitting

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

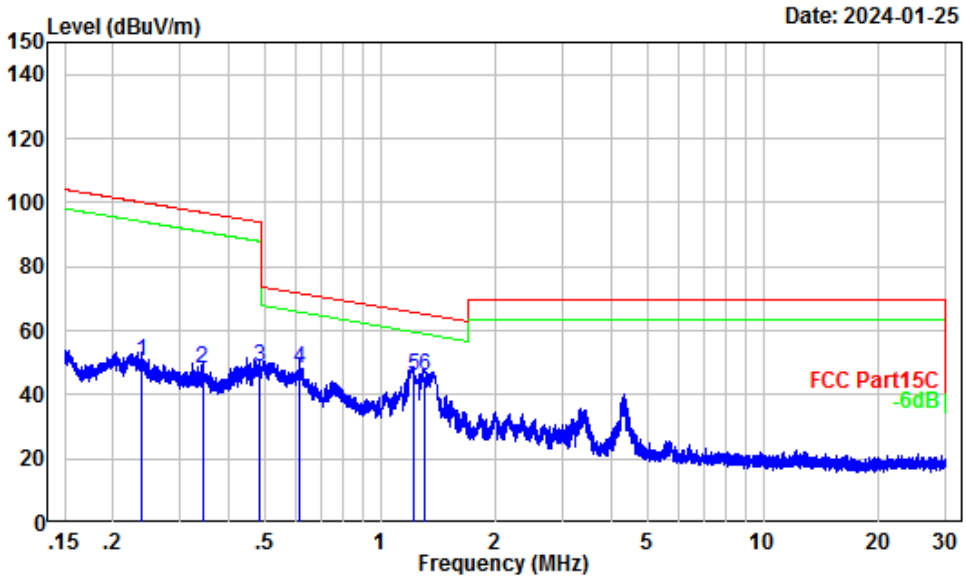
9 kHz-30MHz: *(Maximum output power mode, 802.11 ac 20, 5785MHz MIMO)*

Parallel:



Site : chamber
Condition : 3m
Project Number: SZ1231214-75457E-RF
Note : 5G WIFI
Tester : Warren Huang

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.01	52.44	21.33	73.77	125.43	-51.66	QP
2	0.02	50.52	32.69	83.21	122.01	-38.80	QP
3	0.03	48.47	27.79	76.26	119.39	-43.13	QP
4	0.04	43.29	29.66	72.95	115.03	-42.08	QP
5	0.05	41.64	30.12	71.76	113.99	-42.23	QP
6	0.05	40.92	29.86	70.78	113.52	-42.74	QP

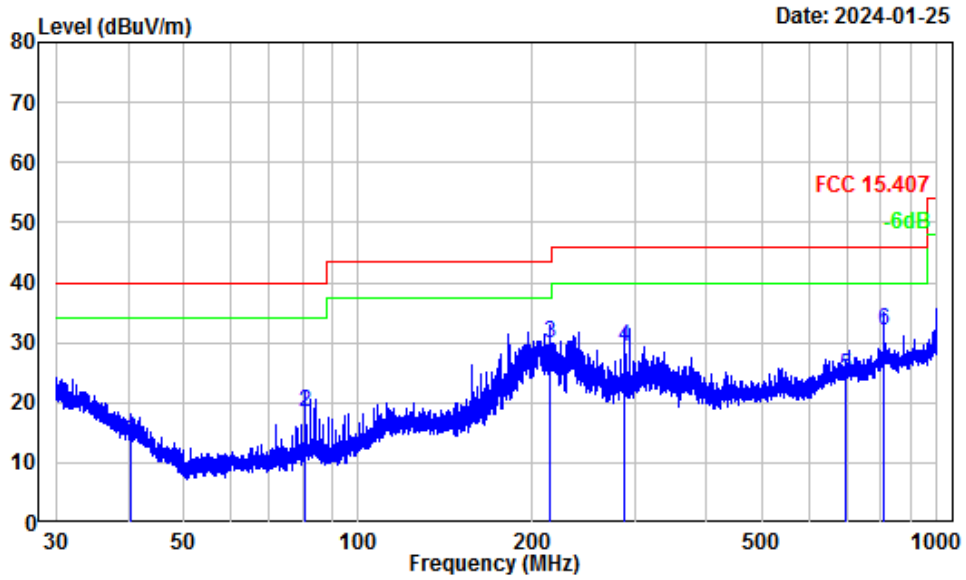


Site : chamber
Condition : 3m
Project Number: SZ1231214-75457E-RF
Note : 5G WIFI
Tester : Warren Huang

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.24	27.65	22.60	50.25	100.09	-49.84	QP
2	0.34	24.10	23.80	47.90	96.90	-49.00	QP
3	0.49	21.16	27.60	48.76	93.89	-45.13	QP
4	0.61	19.48	28.89	48.37	71.79	-23.42	QP
5	1.22	14.34	31.61	45.95	65.70	-19.75	QP
6	1.31	13.91	32.00	45.91	65.08	-19.17	QP

30 MHz–1 GHz: *(Maximum output power mode, 802.11 ac 20, 5785MHz MIMO)*

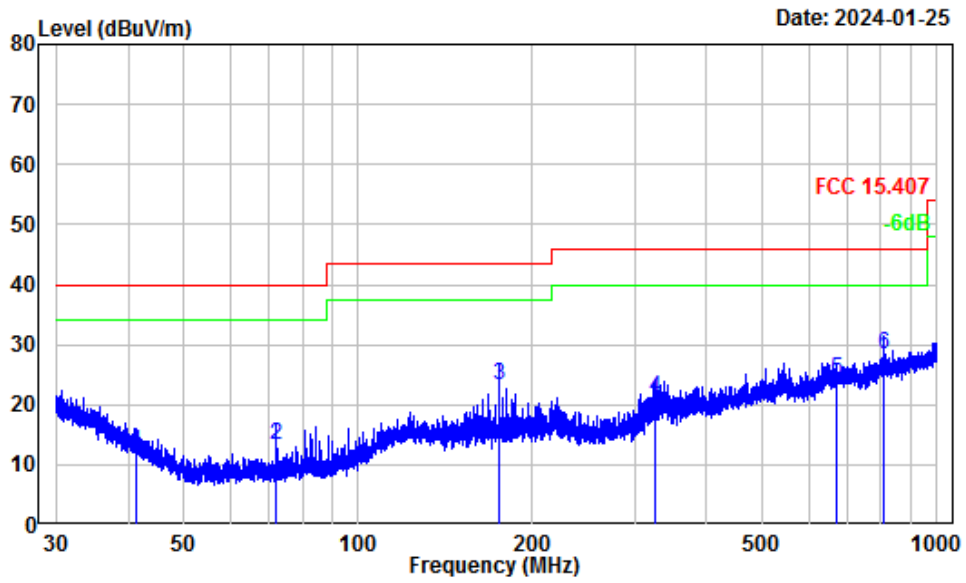
Horizontal



Site : chamber
Condition : 3m Horizontal
Project Number: SZ1231214-75457E-RF
Note : 5G WIFI
Tester : Warren Huang

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	40.51	-10.71	24.72	14.01	40.00	-25.99	QP
2	81.00	-16.70	35.12	18.42	40.00	-21.58	QP
3	214.23	-11.26	41.06	29.80	43.50	-13.70	QP
4	288.50	-10.39	39.64	29.25	46.00	-16.75	QP
5	696.25	-1.58	26.03	24.45	46.00	-21.55	QP
6	810.27	-0.40	32.27	31.87	46.00	-14.13	QP

Vertical



Site : chamber
Condition : 3m Vertical
Project Number: SZ1231214-75457E-RF
Note : 5G WIFI
Tester : Warren Huang

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	41.37	-12.67	24.75	12.08	40.00	-27.92	QP
2	72.02	-17.28	30.52	13.24	40.00	-26.76	QP
3	175.50	-12.50	35.81	23.31	43.50	-20.19	QP
4	326.74	-10.25	31.27	21.02	46.00	-24.98	QP
5	671.96	-2.43	26.58	24.15	46.00	-21.85	QP
6	810.27	-0.54	28.86	28.32	46.00	-17.68	QP

Above 1GHz:

5150-5250 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11a (ANT 1)									
5180MHz									
10360.00	44.56	PK	53	1.1	H	13.07	57.63	68.2	-10.57
10360.00	44.87	PK	53	1.1	V	13.07	57.94	68.2	-10.26
5200MHz									
10400.00	44.89	PK	180	2.4	H	13.12	58.01	68.2	-10.19
10400.00	45.28	PK	180	2.4	V	13.12	58.40	68.2	-9.80
5240MHz									
10480.00	45.33	PK	254	1.6	H	13.07	58.40	68.2	-9.80
10480.00	46.05	PK	254	1.6	V	13.07	59.12	68.2	-9.08
802.11a (ANT 2)									
5180MHz									
10360.00	44.39	PK	139	2.4	H	13.07	57.46	68.2	-10.74
10360.00	44.64	PK	139	2.4	V	13.07	57.71	68.2	-10.49
5200MHz									
10400.00	44.78	PK	224	1.8	H	13.12	57.90	68.2	-10.30
10400.00	45.02	PK	224	1.8	V	13.12	58.14	68.2	-10.06
5240MHz									
10480.00	45.19	PK	315	1.5	H	13.07	58.26	68.2	-9.94
10480.00	45.58	PK	315	1.5	V	13.07	58.65	68.2	-9.55
802.11ac20									
5180MHz									
10360.00	44.69	PK	244	2.4	H	13.07	57.76	68.2	-10.44
10360.00	44.94	PK	244	2.4	V	13.07	58.01	68.2	-10.19
5200MHz									
10400.00	44.97	PK	170	1.9	H	13.12	58.09	68.2	-10.11
10400.00	45.25	PK	170	1.9	V	13.12	58.37	68.2	-9.83
5240MHz									
10480.00	45.27	PK	170	2.4	H	13.07	58.34	68.2	-9.86
10480.00	45.56	PK	170	2.4	V	13.07	58.63	68.2	-9.57

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac40									
5190MHz									
10380.00	44.65	PK	119	1.5	H	13.09	57.74	68.2	-10.46
10380.00	44.88	PK	119	1.5	V	13.09	57.97	68.2	-10.23
5230MHz									
10460.00	45.43	PK	214	1.6	H	13.09	58.52	68.2	-9.68
10460.00	45.72	PK	214	1.6	V	13.09	58.81	68.2	-9.39
802.11AC80									
5210MHz									
10420.00	45.18	PK	341	1.6	H	13.12	58.30	68.2	-9.90
10420.00	45.02	PK	341	1.6	V	13.12	58.14	68.2	-10.06

5250-5350MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11a (ANT 1)									
5260MHz									
10520.00	44.75	PK	228	2.1	H	13.05	57.80	68.2	-10.40
10520.00	45.06	PK	228	2.1	V	13.05	58.11	68.2	-10.09
5280MHz									
10560.00	45.48	PK	38	2.1	H	13.02	58.50	68.2	-9.70
10560.00	45.73	PK	38	2.1	V	13.02	58.75	68.2	-9.45
5320MHz									
10640.00	48.32	PK	344	1.3	H	13.19	61.51	74	-12.49
10640.00	35.15	AV	344	1.3	H	13.19	48.34	54	-5.66
10640.00	48.89	PK	214	1.2	V	13.19	62.08	74	-11.92
10640.00	35.64	AV	214	1.2	V	13.19	48.83	54	-5.17
802.11a (ANT 2)									
5260MHz									
10520.00	44.93	PK	73	1.4	H	13.05	57.98	68.2	-10.22
10520.00	45.16	PK	73	1.4	V	13.05	58.21	68.2	-9.99
5280MHz									
10560.00	45.37	PK	19	1.7	H	13.02	58.39	68.2	-9.81
10560.00	45.52	PK	19	1.7	V	13.02	58.54	68.2	-9.66
5320MHz									
10640.00	46.04	PK	195	2.2	H	13.19	59.23	74	-14.77
10640.00	32.18	AV	195	2.2	H	13.19	45.37	54	-8.63
10640.00	45.85	PK	303	1.2	V	13.19	59.04	74	-14.96
10640.00	32.01	AV	303	1.2	V	13.19	45.20	54	-8.80
802.11ac20									
5260MHz									
10520.00	45.16	PK	88	2.2	H	13.05	58.21	68.2	-9.99
10520.00	45.51	PK	88	2.2	V	13.05	58.56	68.2	-9.64
5280MHz									
10560.00	45.54	PK	311	1.1	H	13.02	58.56	68.2	-9.64
10560.00	45.87	PK	311	1.1	V	13.02	58.89	68.2	-9.31
5320MHz									
10640.00	46.03	PK	37	2.3	H	13.19	59.22	74	-14.78
10640.00	32.32	AV	37	2.3	H	13.19	45.51	54	-8.49
10640.00	46.45	PK	218	1.5	V	13.19	59.64	74	-14.36
10640.00	32.58	AV	218	1.5	V	13.19	45.77	54	-8.23

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac40									
5270MHz									
10540.00	45.17	PK	235	2.4	H	13.03	58.20	68.2	-10.00
10540.00	45.46	PK	235	2.4	V	13.03	58.49	68.2	-9.71
5310MHz									
10620.00	45.52	PK	167	1.8	H	13.09	58.61	74	-15.39
10620.00	32.75	AV	167	1.8	H	13.09	45.84	54	-8.16
10620.00	45.89	PK	158	1.5	V	13.09	58.98	74	-15.02
10620.00	32.94	AV	158	1.5	V	13.09	46.03	54	-7.97
802.11AC80									
5290MHz									
10580.00	45.36	PK	235	1.1	H	13.00	58.36	68.2	-9.84
10580.00	45.75	PK	235	1.1	V	13.00	58.75	68.2	-9.45

5470-5725MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11a (ANT 1)									
5500MHz									
11000.00	44.29	PK	355	1.8	H	13.98	58.27	74	-15.73
11000.00	31.12	AV	355	1.8	H	13.98	45.10	54	-8.90
11000.00	44.63	PK	211	1.3	V	13.98	58.61	74	-15.39
11000.00	31.37	AV	211	1.3	V	13.98	45.35	54	-8.65
5580MHz									
11160.00	44.78	PK	57	2.5	H	13.62	58.40	74	-15.60
11160.00	31.39	AV	57	2.5	H	13.62	45.01	54	-8.99
11160.00	45.15	PK	58	1.7	V	13.62	58.77	74	-15.23
11160.00	31.64	AV	58	1.7	V	13.62	45.26	54	-8.74
5700MHz									
11400.00	45.42	PK	201	2.1	H	14.08	59.50	74	-14.50
11400.00	31.74	AV	201	2.1	H	14.08	45.82	54	-8.18
11400.00	45.88	PK	12	1.3	V	14.08	59.96	74	-14.04
11400.00	32.06	AV	12	1.3	V	14.08	46.14	54	-7.86
5720MHz									
11440.00	45.68	PK	191	2.3	H	14.08	59.76	74	-14.24
11440.00	31.87	AV	191	2.3	H	14.08	45.95	54	-8.05
11440.00	45.91	PK	41	2.0	V	14.08	59.99	74	-14.01
11440.00	32.12	AV	41	2.0	V	14.08	46.20	54	-7.80

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11a (ANT 2)									
5500MHz									
11000.00	44.51	PK	328	2.0	H	13.98	58.49	74	-15.51
11000.00	30.86	AV	328	2.0	H	13.98	44.84	54	-9.16
11000.00	44.74	PK	315	1.7	V	13.98	58.72	74	-15.28
11000.00	31.09	AV	315	1.7	V	13.98	45.07	54	-8.93
5580MHz									
11160.00	44.83	PK	304	2.5	H	13.62	58.45	74	-15.55
11160.00	31.32	AV	304	2.5	H	13.62	44.94	54	-9.06
11160.00	45.07	PK	29	1.9	V	13.62	58.69	74	-15.31
11160.00	31.56	AV	29	1.9	V	13.62	45.18	54	-8.82
5700MHz									
11400.00	45.28	PK	127	1.2	H	14.08	59.36	74	-14.64
11400.00	31.75	AV	127	1.2	H	14.08	45.83	54	-8.17
11400.00	45.47	PK	19	2.0	V	14.08	59.55	74	-14.45
11400.00	31.93	AV	19	2.0	V	14.08	46.01	54	-7.99
5720MHz									
11440.00	45.43	PK	172	2.4	H	14.08	59.51	74	-14.49
11440.00	31.89	AV	172	2.4	H	14.08	45.97	54	-8.03
11440.00	45.58	PK	167	1.9	V	14.08	59.66	74	-14.34
11440.00	32.05	AV	167	1.9	V	14.08	46.13	54	-7.87

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac20									
5500MHz									
11000.00	44.65	PK	148	2.4	H	13.98	58.63	74	-15.37
11000.00	30.93	AV	148	2.4	H	13.98	44.91	54	-9.09
11000.00	44.87	PK	319	1.6	V	13.98	58.85	74	-15.15
11000.00	31.12	AV	319	1.6	V	13.98	45.10	54	-8.90
5580MHz									
11160.00	44.94	PK	313	1.9	H	13.62	58.56	74	-15.44
11160.00	31.31	AV	313	1.9	H	13.62	44.93	54	-9.07
11160.00	45.18	PK	298	1.3	V	13.62	58.80	74	-15.20
11160.00	31.57	AV	298	1.3	V	13.62	45.19	54	-8.81
5700MHz									
11400.00	45.37	PK	315	2.1	H	14.08	59.45	74	-14.55
11400.00	31.89	AV	315	2.1	H	14.08	45.97	54	-8.03
11400.00	45.64	PK	297	1.5	V	14.08	59.72	74	-14.28
11400.00	32.06	AV	297	1.5	V	14.08	46.14	54	-7.86
5720MHz									
11440.00	45.54	PK	134	2.3	H	14.08	59.62	74	-14.38
11440.00	31.78	AV	134	2.3	H	14.08	45.86	54	-8.14
11440.00	45.82	PK	32	2.2	V	14.08	59.90	74	-14.10
11440.00	31.99	AV	32	2.2	V	14.08	46.07	54	-7.93

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac40									
5510MHz									
11020.00	44.14	PK	73	1.9	H	13.89	58.03	74	-15.97
11020.00	31.36	AV	73	1.9	H	13.89	45.25	54	-8.75
11020.00	44.33	PK	146	2.1	V	13.89	58.22	74	-15.78
11020.00	31.52	AV	146	2.1	V	13.89	45.41	54	-8.59
5550MHz									
11100.00	44.63	PK	266	1.9	H	13.53	58.16	74	-15.84
11100.00	31.75	AV	266	1.9	H	13.53	45.28	54	-8.72
11100.00	44.86	PK	63	1.7	V	13.53	58.39	74	-15.61
11100.00	31.92	AV	63	1.7	V	13.53	45.45	54	-8.55
5670MHz									
11340.00	45.05	PK	87	1.2	H	13.99	59.04	74	-14.96
11340.00	32.27	AV	87	1.2	H	13.99	46.26	54	-7.74
11340.00	45.31	PK	43	1.9	V	13.99	59.30	74	-14.70
11340.00	32.46	AV	43	1.9	V	13.99	46.45	54	-7.55
5710MHz									
11420.00	45.24	PK	143	1.3	H	14.08	59.32	74	-14.68
11420.00	32.35	AV	143	1.3	H	14.08	46.43	54	-7.57
11420.00	45.69	PK	14	1.8	V	14.08	59.77	74	-14.23
11420.00	32.57	AV	14	1.8	V	14.08	46.65	54	-7.35

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC80									
5530MHz									
11060.00	44.69	PK	35	2.4	H	13.71	58.40	74	-15.60
11060.00	32.24	AV	35	2.4	H	13.71	45.95	54	-8.05
11060.00	44.87	PK	198	1.7	V	13.71	58.58	74	-15.42
11060.00	32.46	AV	198	1.7	V	13.71	46.17	54	-7.83
5610MHz									
11220.00	45.16	PK	103	1.1	H	13.73	58.89	74	-15.11
11220.00	32.73	AV	103	1.1	H	13.73	46.46	54	-7.54
11220.00	45.38	PK	190	2.2	V	13.73	59.11	74	-14.89
11220.00	32.91	AV	190	2.2	V	13.73	46.64	54	-7.36
5690MHz									
11380.00	45.13	PK	127	1.6	H	13.99	59.12	74	-14.88
11380.00	32.72	AV	127	1.6	H	13.99	46.71	54	-7.29
11380.00	45.45	PK	138	2.0	V	13.99	59.44	74	-14.56
11380.00	32.87	AV	138	2.0	V	13.99	46.86	54	-7.14

5725-5850 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11a (ANT 1)									
5745MHz									
11490.00	44.28	PK	16	1.7	H	14.31	58.59	74	-15.41
11490.00	30.65	AV	16	1.7	H	14.31	44.96	54	-9.04
11490.00	44.43	PK	338	2.1	V	14.31	58.74	74	-15.26
11490.00	30.76	AV	338	2.1	V	14.31	45.07	54	-8.93
5785MHz									
11570.00	44.87	PK	268	1.8	H	14.05	58.92	74	-15.08
11570.00	31.02	AV	268	1.8	H	14.05	45.07	54	-8.93
11570.00	45.05	PK	19	2.3	V	14.05	59.10	74	-14.90
11570.00	31.18	AV	19	2.3	V	14.05	45.23	54	-8.77
5825MHz									
11650.00	45.39	PK	146	1.3	H	13.83	59.22	74	-14.78
11650.00	31.43	AV	146	1.3	H	13.83	45.26	54	-8.74
11650.00	45.61	PK	306	2.1	V	13.83	59.44	74	-14.56
11650.00	31.57	AV	306	2.1	V	13.83	45.40	54	-8.60
802.11a (ANT 2)									
5745MHz									
11490.00	44.24	PK	321	1.5	H	14.31	58.55	74	-15.45
11490.00	30.55	AV	321	1.5	H	14.31	44.86	54	-9.14
11490.00	44.47	PK	229	2.2	V	14.31	58.78	74	-15.22
11490.00	30.69	AV	229	2.2	V	14.31	45.00	54	-9.00
5785MHz									
11570.00	44.68	PK	215	1.4	H	14.05	58.73	74	-15.27
11570.00	30.82	AV	215	1.4	H	14.05	44.87	54	-9.13
11570.00	44.94	PK	31	2.0	V	14.05	58.99	74	-15.01
11570.00	31.07	AV	31	2.0	V	14.05	45.12	54	-8.88
5825MHz									
11650.00	45.16	PK	213	1.7	H	13.83	58.99	74	-15.01
11650.00	31.35	AV	213	1.7	H	13.83	45.18	54	-8.82
11650.00	45.42	PK	8	1.5	V	13.83	59.25	74	-14.75
11650.00	31.54	AV	8	1.5	V	13.83	45.37	54	-8.63

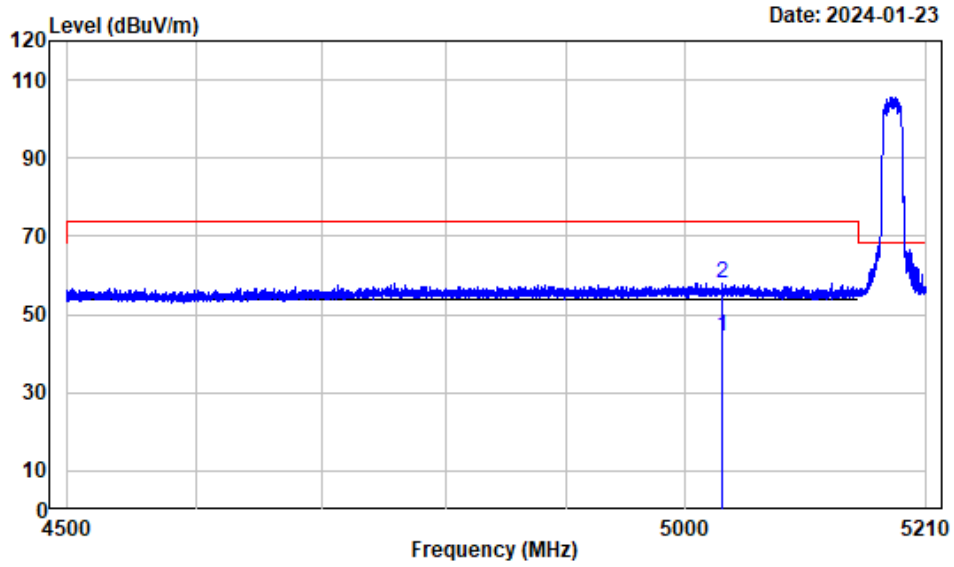
Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac20									
5745MHz									
11490.00	44.35	PK	37	1.5	H	14.31	58.66	74	-15.34
11490.00	30.77	AV	37	1.5	H	14.31	45.08	54	-8.92
11490.00	44.58	PK	103	1.1	V	14.31	58.89	74	-15.11
11490.00	30.93	AV	103	1.1	V	14.31	45.24	54	-8.76
5785MHz									
11570.00	44.82	PK	245	1.1	H	14.05	58.87	74	-15.13
11570.00	31.23	AV	245	1.1	H	14.05	45.28	54	-8.72
11570.00	45.06	PK	217	1.8	V	14.05	59.11	74	-14.89
11570.00	31.39	AV	217	1.8	V	14.05	45.44	54	-8.56
5825MHz									
11650.00	45.14	PK	14	1.1	H	13.83	58.97	74	-15.03
11650.00	31.72	AV	14	1.1	H	13.83	45.55	54	-8.45
11650.00	45.37	PK	134	2.3	V	13.83	59.20	74	-14.80
11650.00	31.86	AV	134	2.3	V	13.83	45.69	54	-8.31
802.11ac40									
5755MHz									
11510.00	44.96	PK	360	1.7	H	14.29	59.25	74	-14.75
11510.00	32.04	AV	360	1.7	H	14.29	46.33	54	-7.67
11510.00	45.15	PK	233	2.2	V	14.29	59.44	74	-14.56
11510.00	32.23	AV	233	2.2	V	14.29	46.52	54	-7.48
5795MHz									
11590.00	45.58	PK	188	1.7	H	13.97	59.55	74	-14.45
11590.00	32.46	AV	188	1.7	H	13.97	46.43	54	-7.57
11590.00	45.87	PK	101	1.1	V	13.97	59.84	74	-14.16
11590.00	32.63	AV	101	1.1	V	13.97	46.60	54	-7.40
802.11AC80									
5775MHz									
11550.00	45.07	PK	271	2.1	H	14.13	59.20	74	-14.80
11550.00	32.64	AV	271	2.1	H	14.13	46.77	54	-7.23
11550.00	45.45	PK	280	1.6	V	14.13	59.58	74	-14.42
11550.00	32.88	AV	280	1.6	V	14.13	47.01	54	-6.99

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 for Band Edge Measurements (Radiated)

5150-5250MHz:
ANT 1

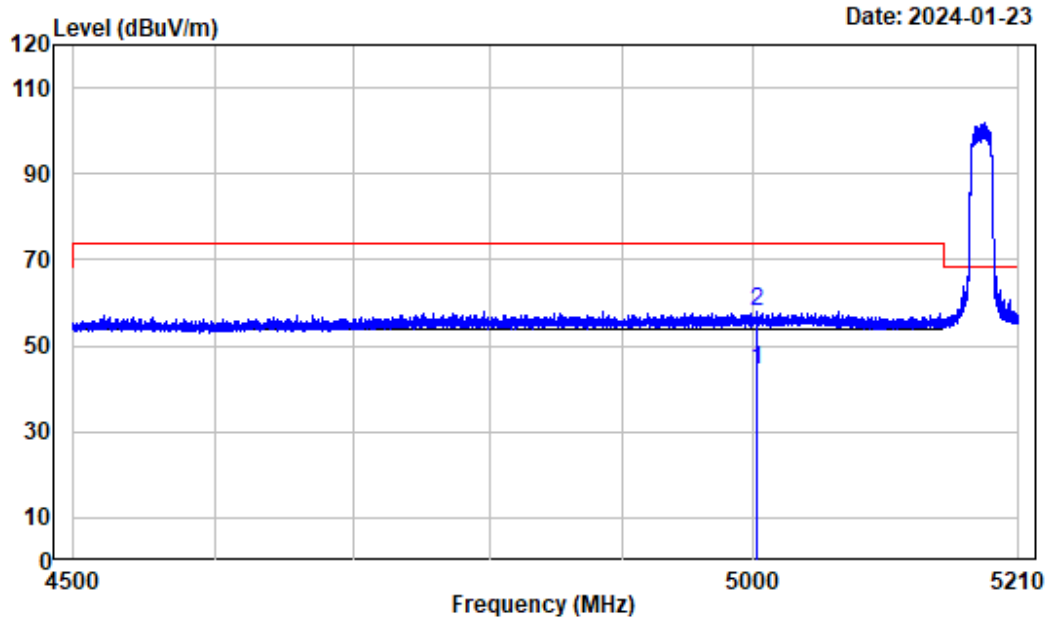
802.11a			
Test Channel:	**5180MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT1

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5032.261	2.95	41.61	44.56	54.00	Average	-9.44
2	5032.261	2.95	55.09	58.04	74.00	Peak	-15.96

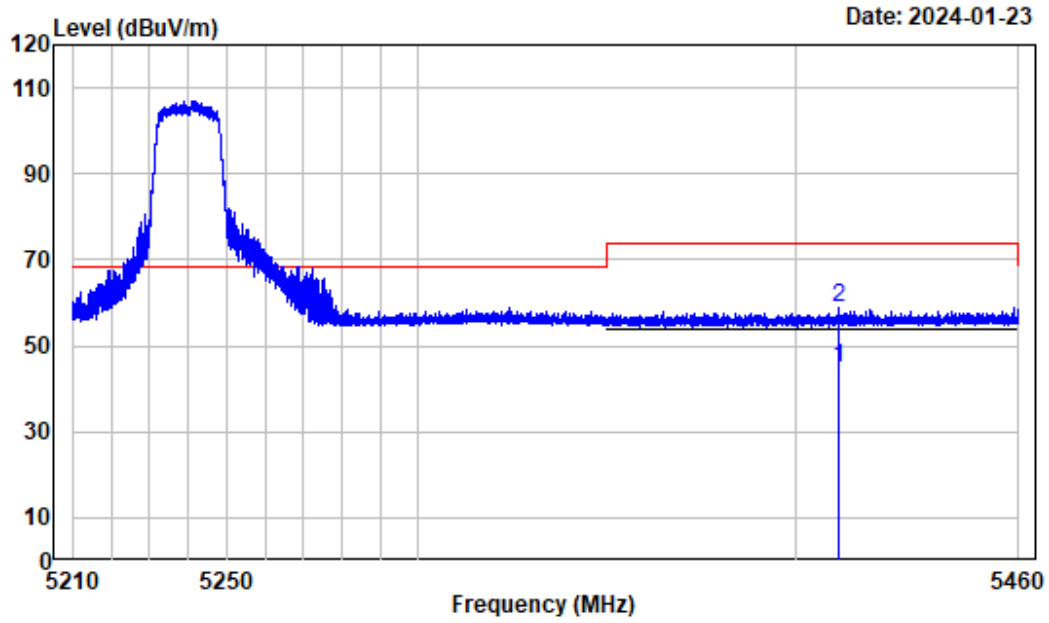
802.11a			
Test Channel:	**5180MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT1

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5003.791	2.97	41.44	44.41	54.00	Average	-9.59
2	5003.791	2.97	55.21	58.18	74.00	Peak	-15.82

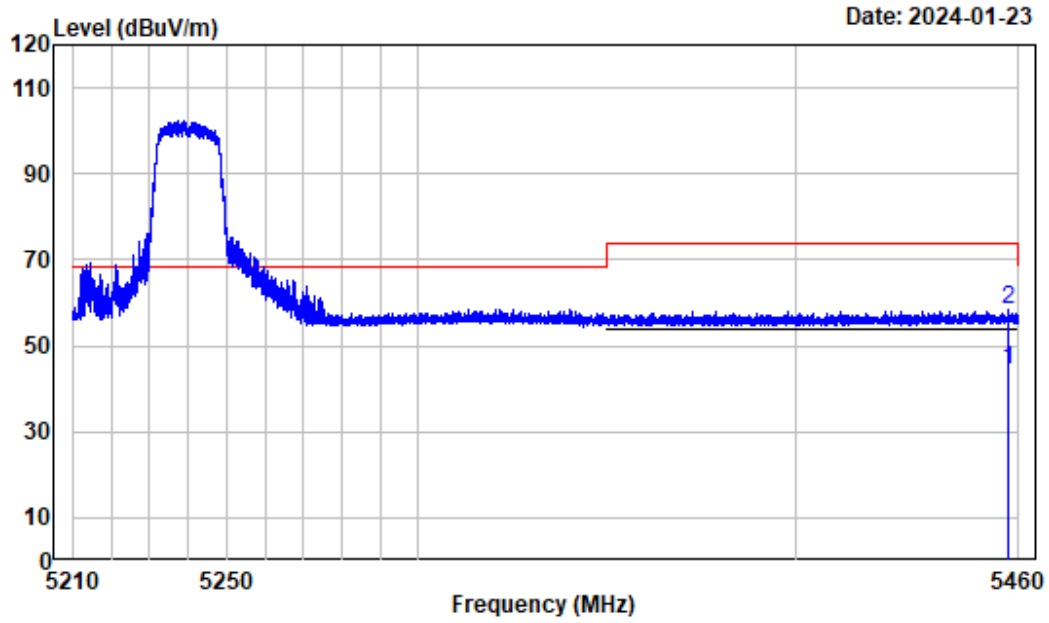
802.11a			
Test Channel:	**5240MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT1

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5411.603	3.00	41.75	44.75	54.00	Average	-9.25
2	5411.603	3.00	56.00	59.00	74.00	Peak	-15.00

802.11a			
Test Channel:	**5240MHz**	**Ant. Polar. :**	**Vertical**

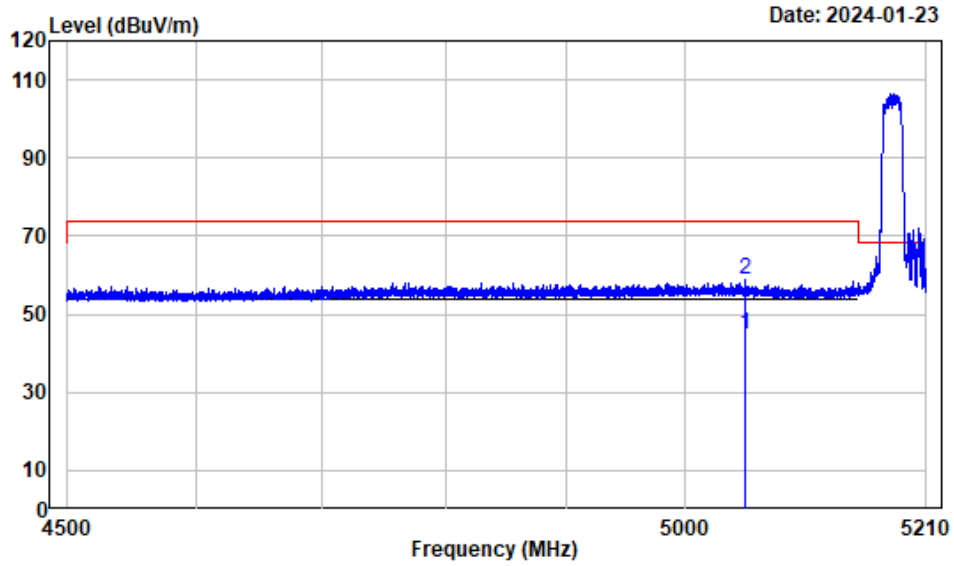


Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT1

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5457.064	3.06	41.47	44.53	54.00	Average	-9.47
2	5457.064	3.06	55.14	58.20	74.00	Peak	-15.80

ANT 2

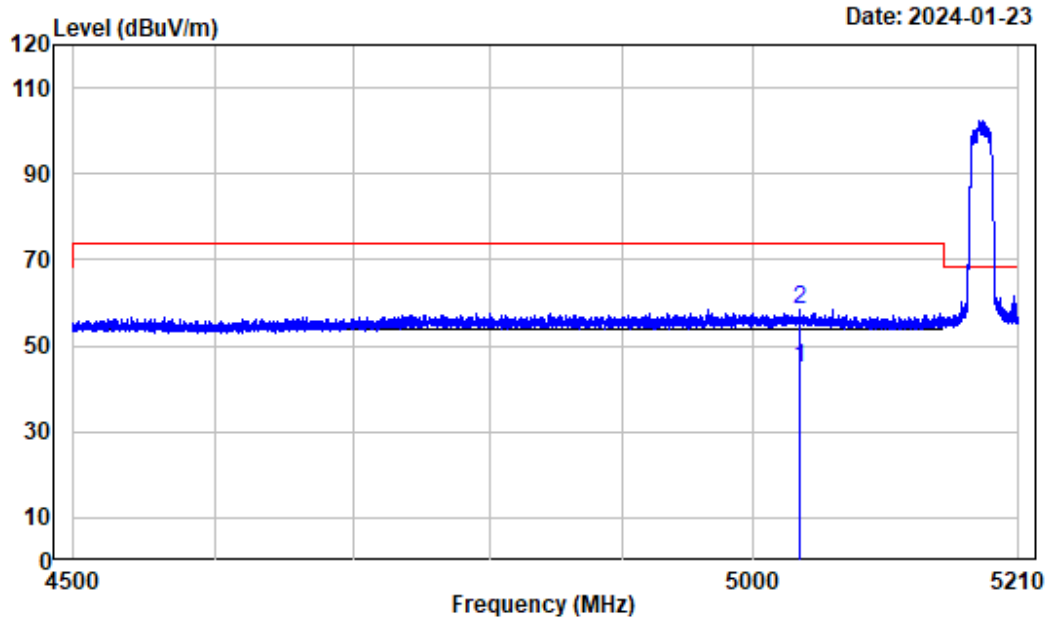
802.11a			
Test Channel:	**5180MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT2

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5052.428	2.93	42.02	44.95	54.00	Average	-9.05
2	5052.428	2.93	55.77	58.70	74.00	Peak	-15.30

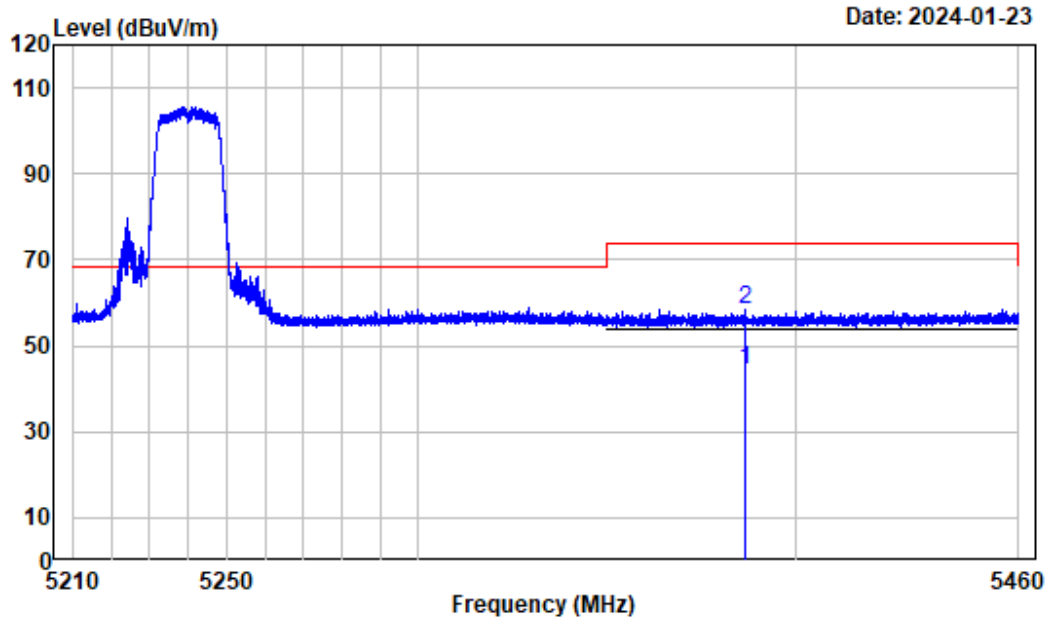
802.11a			
Test Channel:	**5180MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT2

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5037.098	2.95	41.68	44.63	54.00	Average	-9.37
2	5037.098	2.95	55.51	58.46	74.00	Peak	-15.54

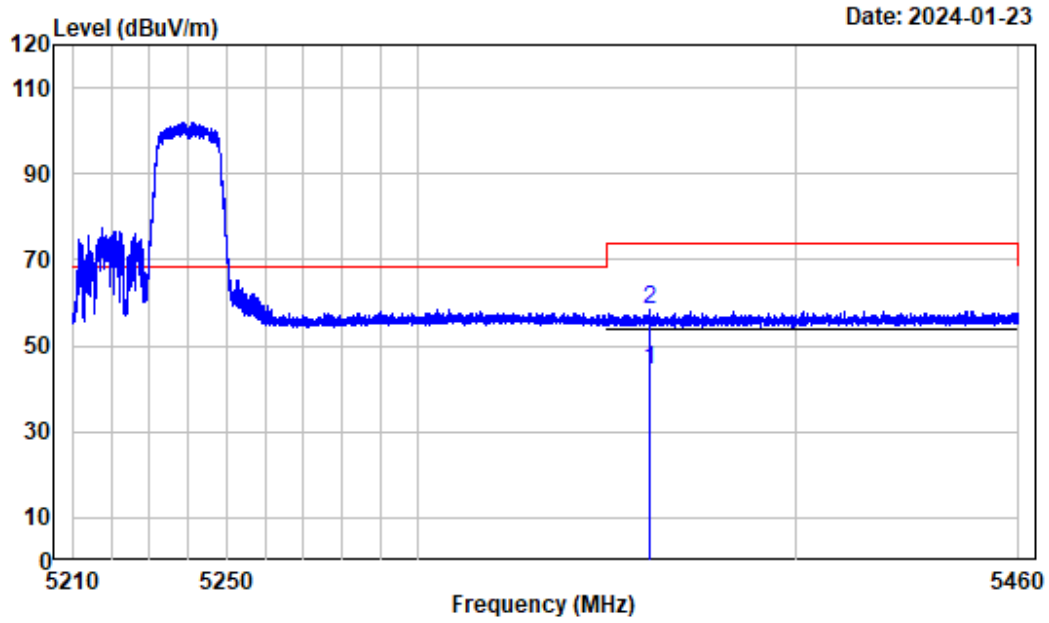
802.11a			
Test Channel:	**5240MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT2

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5386.459	2.96	41.43	44.39	54.00	Average	-9.61
2	5386.459	2.96	55.50	58.46	74.00	Peak	-15.54

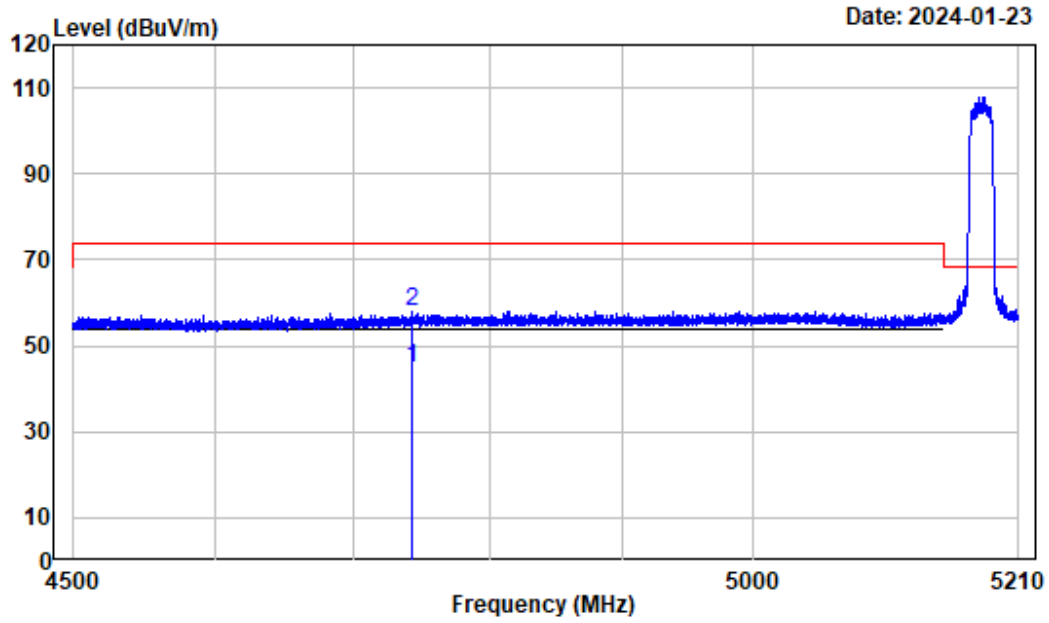
802.11a			
Test Channel:	**5240MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT2

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5360.978	2.92	41.32	44.24	54.00	Average	-9.76
2	5360.978	2.92	55.65	58.57	74.00	Peak	-15.43

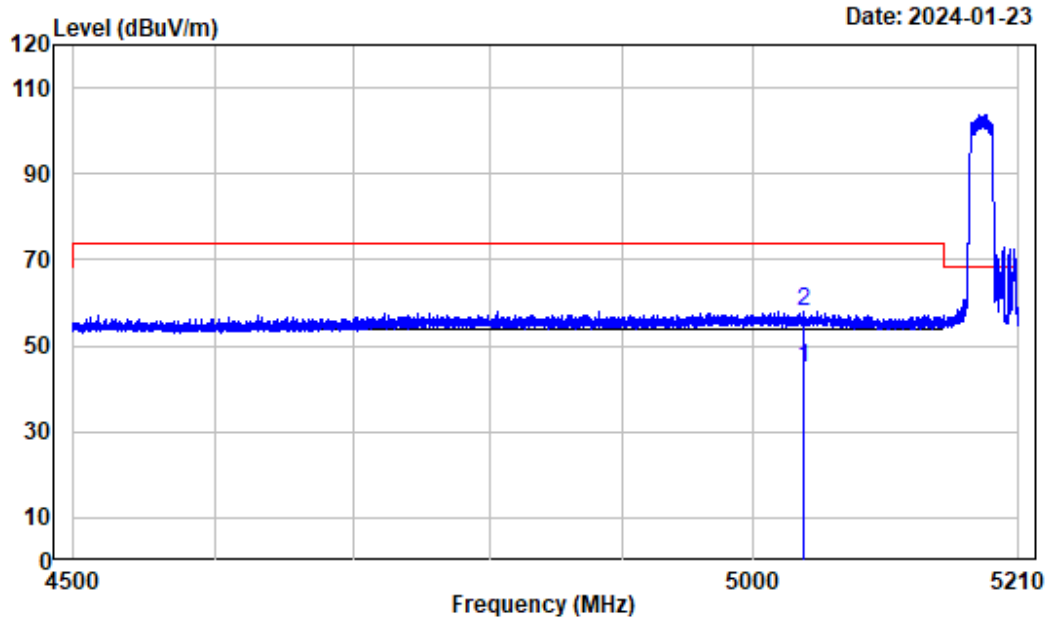
802.11ac20			
Test Channel:	**5180MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC20

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	4743.455	2.40	42.37	44.77	54.00	Average	-9.23
2	4743.455	2.40	55.77	58.17	74.00	Peak	-15.83

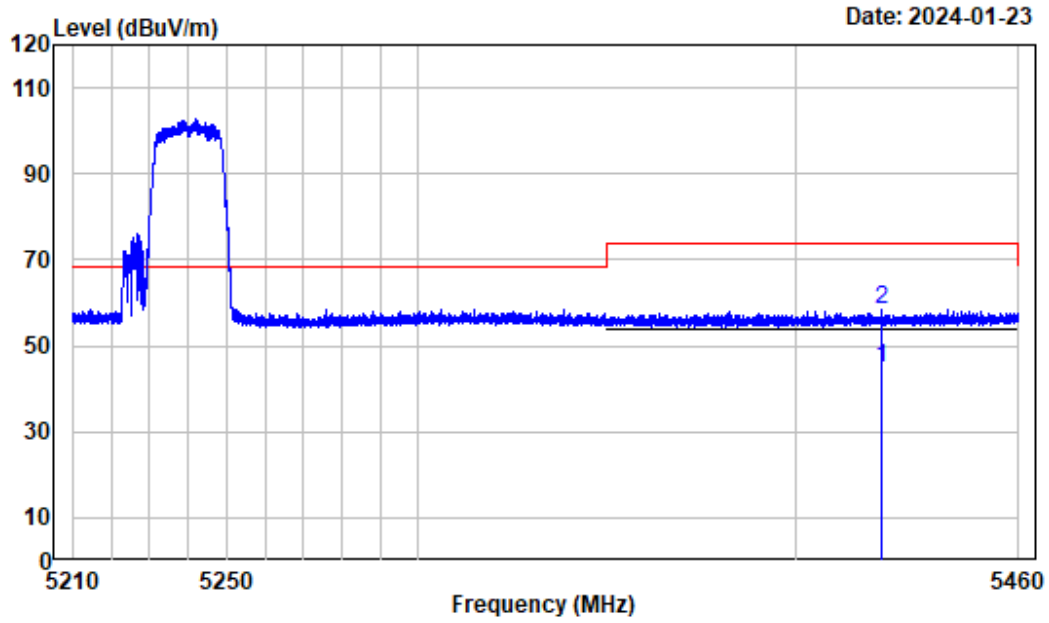
802.11ac20			
Test Channel:	**5180MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC20

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5039.196	2.96	41.94	44.90	54.00	Average	-9.10
2	5039.196	2.96	55.15	58.11	74.00	Peak	-15.89

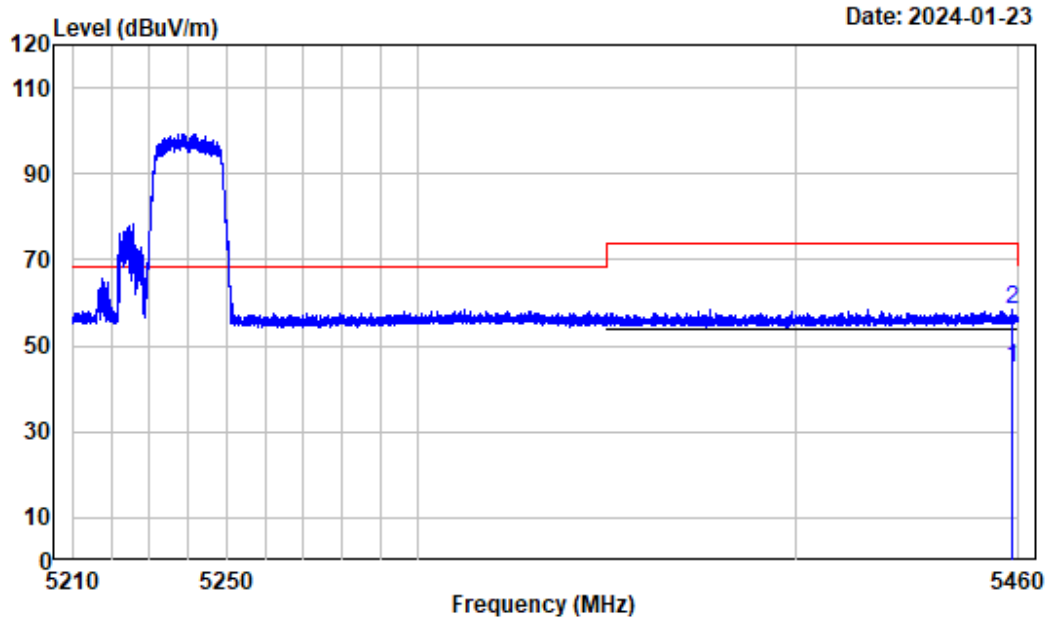
802.11ac20			
Test Channel:	**5240MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC20

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5423.145	3.02	41.73	44.75	54.00	Average	-9.25
2	5423.145	3.02	55.46	58.48	74.00	Peak	-15.52

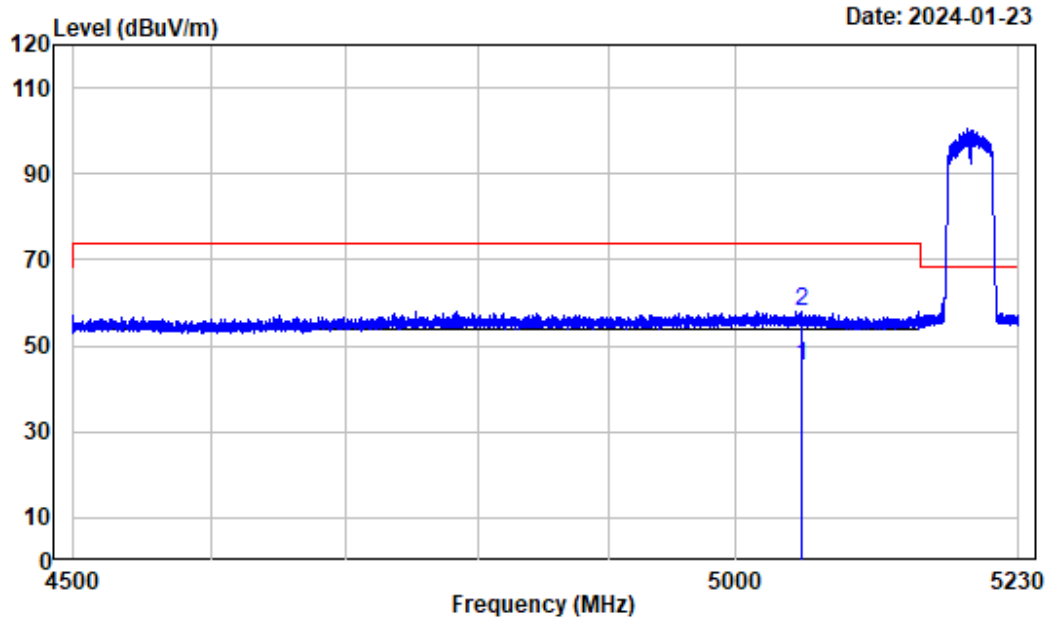
802.11ac20			
Test Channel:	**5240MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC20

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5458.279	3.06	41.60	44.66	54.00	Average	-9.34
2	5458.279	3.06	55.45	58.51	74.00	Peak	-15.49

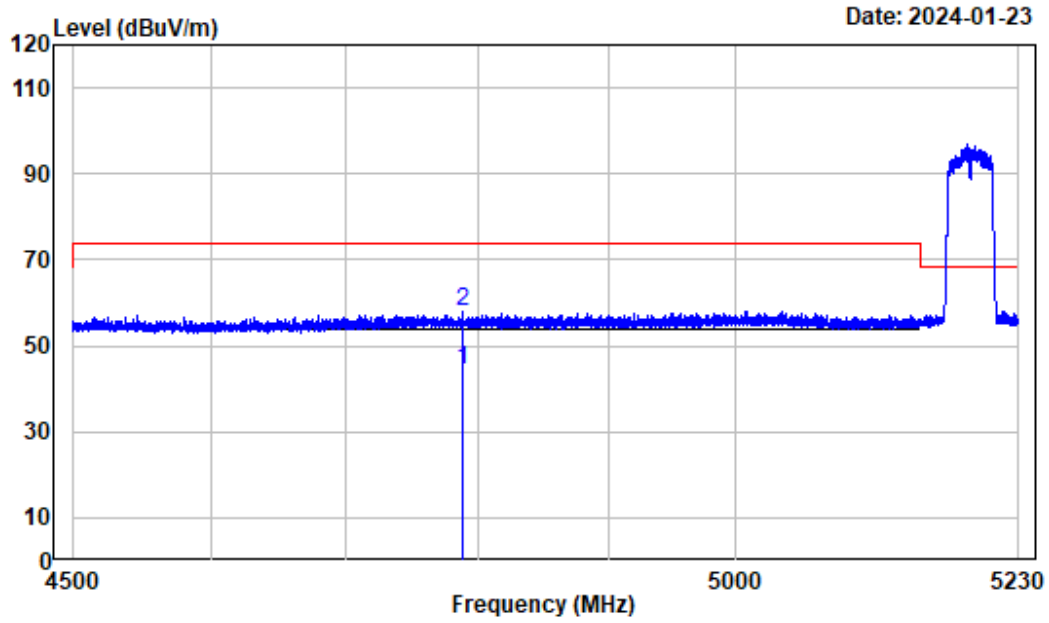
802.11ac40			
Test Channel:	**5190MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC40

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5053.340	2.93	42.17	45.10	54.00	-8.90	Average
2	5053.340	2.93	55.05	57.98	74.00	-16.02	Peak

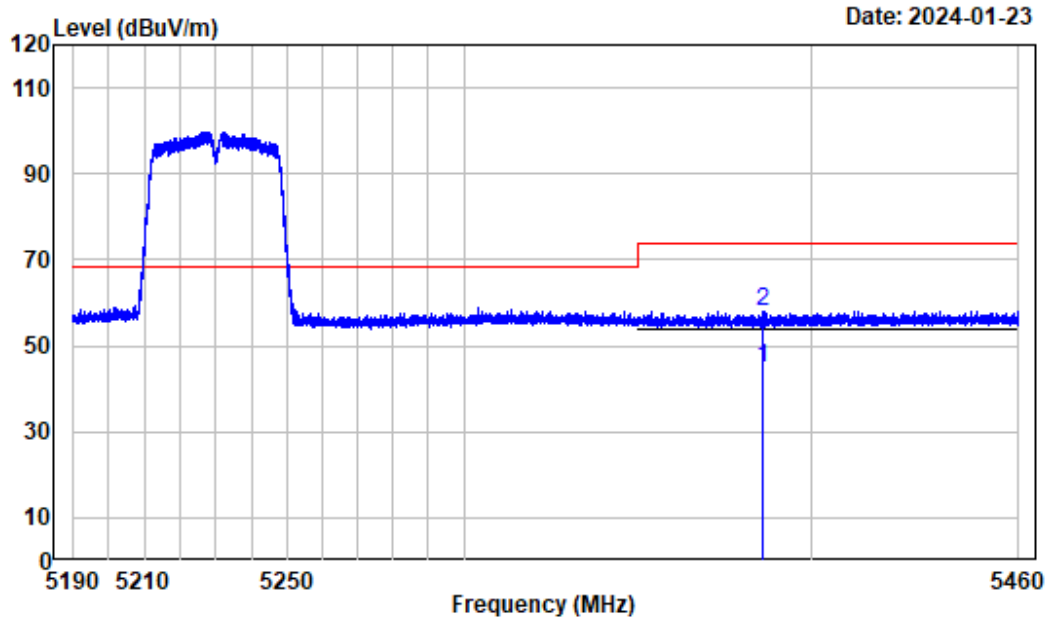
802.11ac40			
Test Channel:	**5190MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC40

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4788.259	2.42	42.00	44.42	54.00	-9.58	Average
2	4788.259	2.42	55.64	58.06	74.00	-15.94	Peak

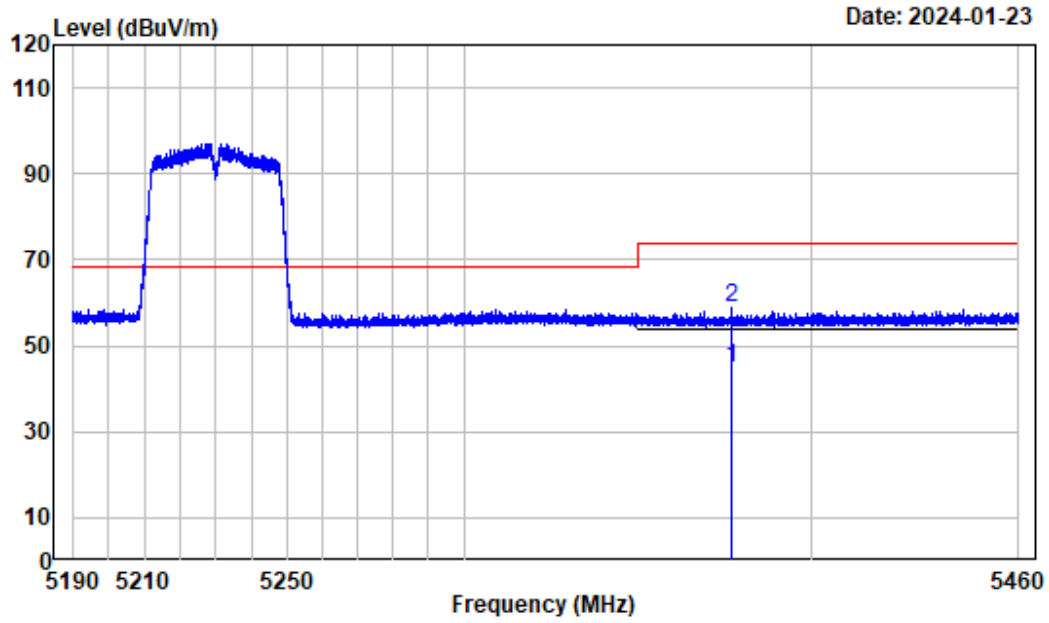
802.11ac40			
Test Channel:	**5230MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC40

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5385.750	2.97	41.98	44.95	54.00	-9.05	Average
2	5385.750	2.97	55.12	58.09	74.00	-15.91	Peak

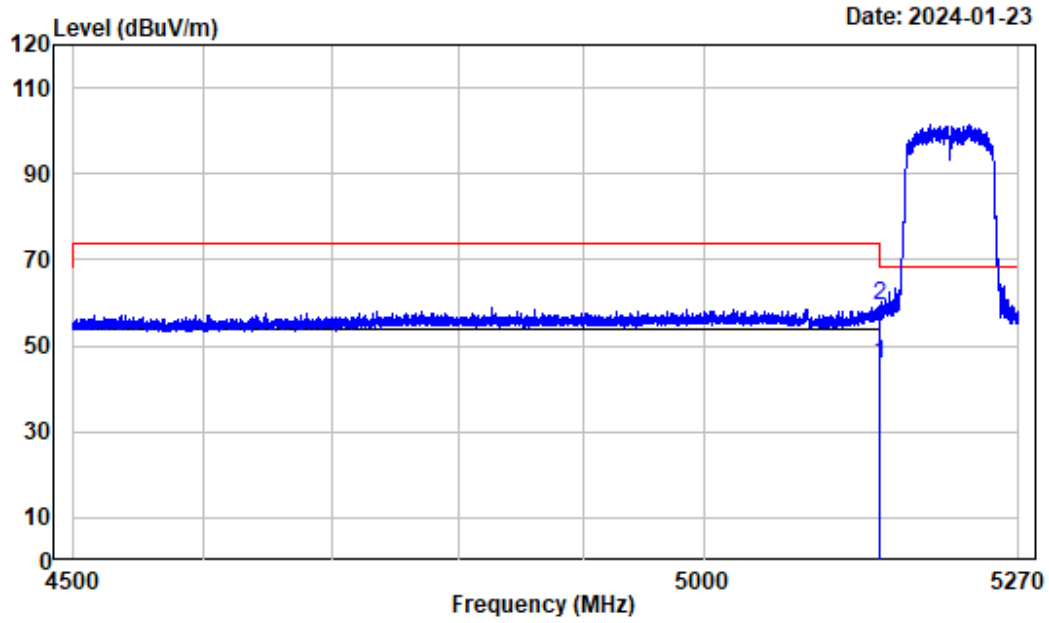
802.11ac40			
Test Channel:	**5230MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC40

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5376.671	2.95	41.78	44.73	54.00	-9.27	Average
2	5376.671	2.95	55.88	58.83	74.00	-15.17	Peak

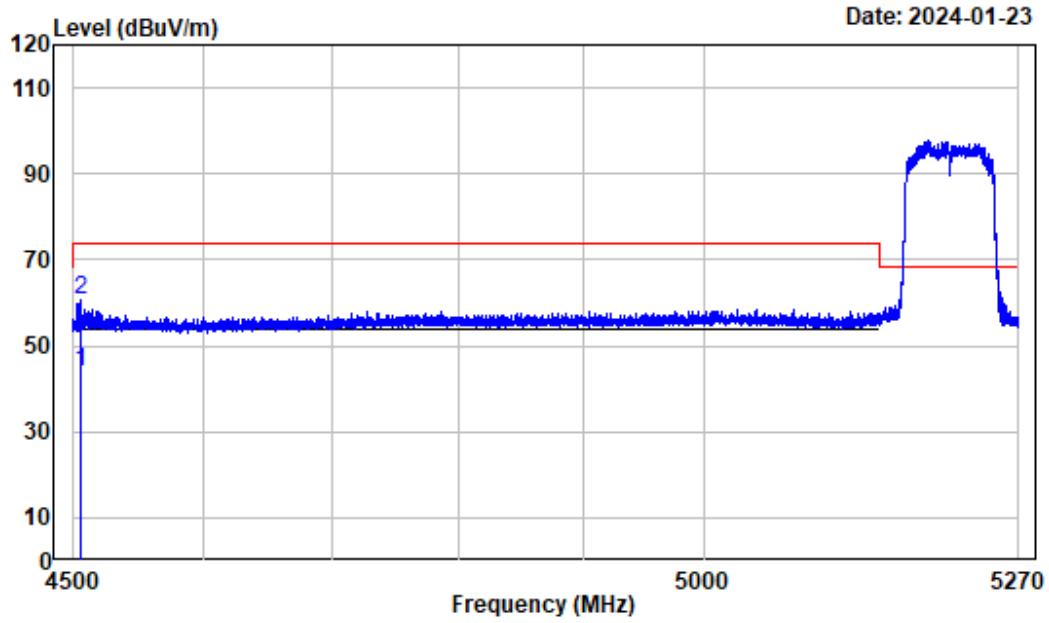
802.11ac80			
Test Channel:	**5210MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC80

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5148.629	2.71	42.82	45.53	54.00	Average	-8.47
2	5148.629	2.71	56.42	59.13	74.00	Peak	-14.87

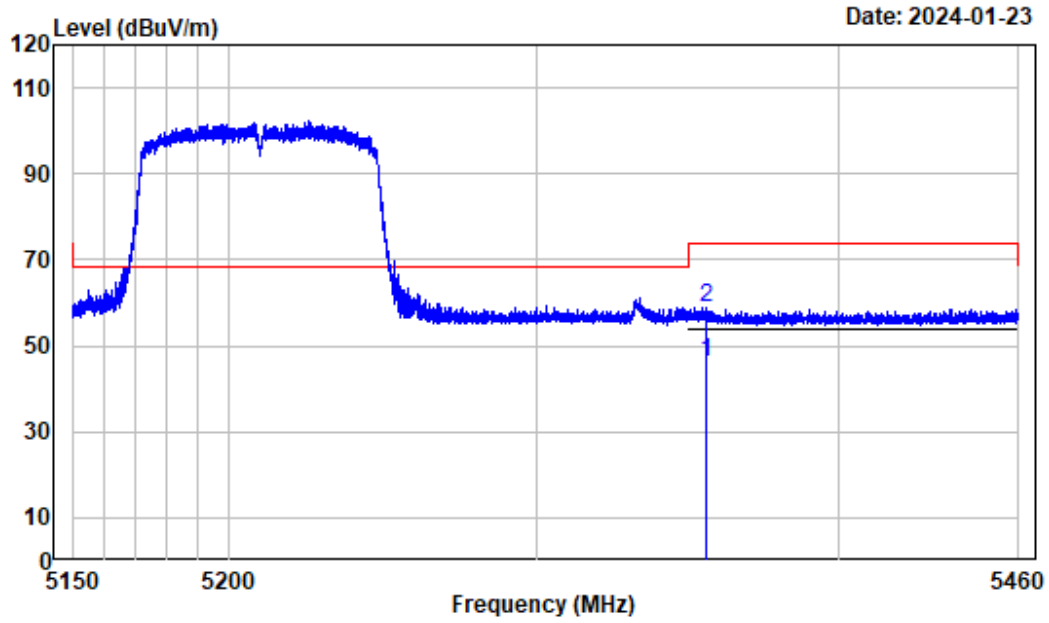
802.11ac80			
Test Channel:	**5210MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC80

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	4505.871	1.53	42.59	44.12	54.00	Average	-9.88
2	4505.871	1.53	59.19	60.72	74.00	Peak	-13.28

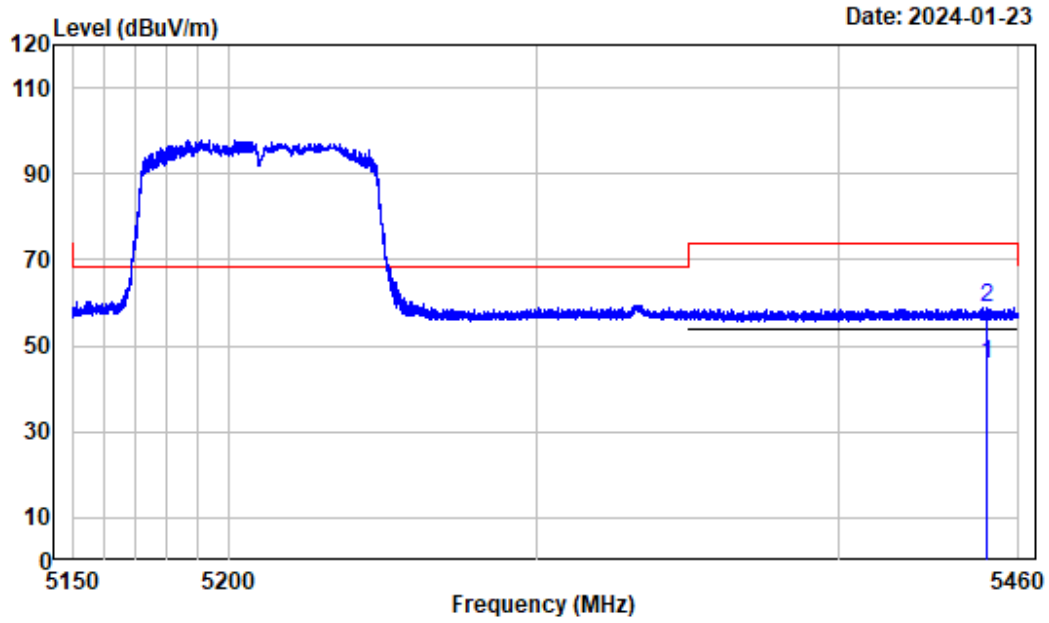
802.11ac80			
Test Channel:	**5210MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC80

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5355.607	2.92	43.25	46.17	54.00	Average	-7.83
2	5355.607	2.92	55.91	58.83	74.00	Peak	-15.17

802.11ac80			
Test Channel:	**5210MHz**	**Ant. Polar. :**	**Vertical**

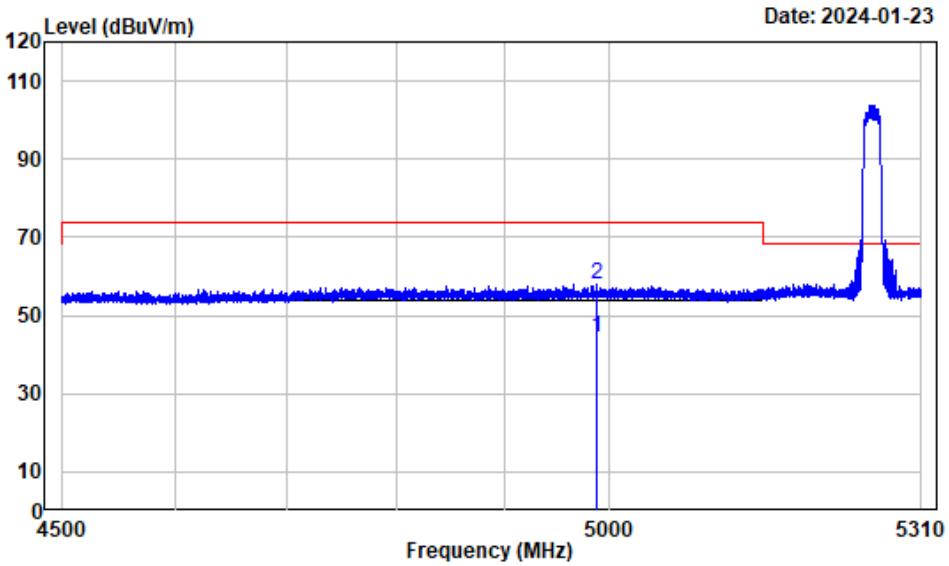


Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC80

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5449.150	3.07	42.88	45.95	54.00	Average	-8.05
2	5449.150	3.07	55.93	59.00	74.00	Peak	-15.00

5250-5350MHz:
ANT 1

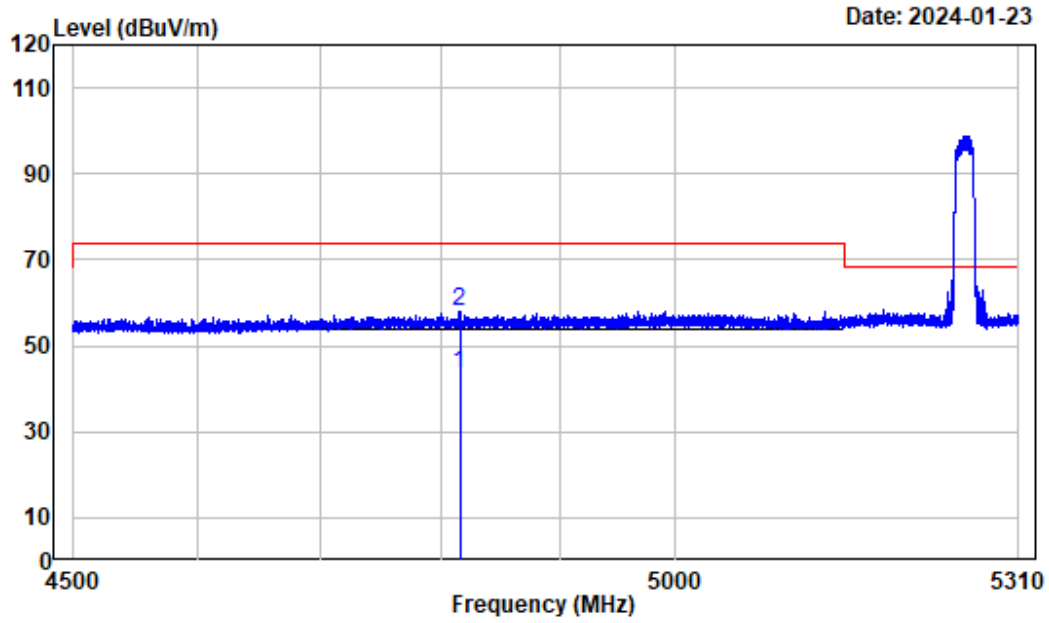
802.11a			
Test Channel:	**5260MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT1

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	4988.632	2.88	41.39	44.27	54.00	Average	-9.73
2	4988.632	2.88	55.27	58.15	74.00	Peak	-15.85

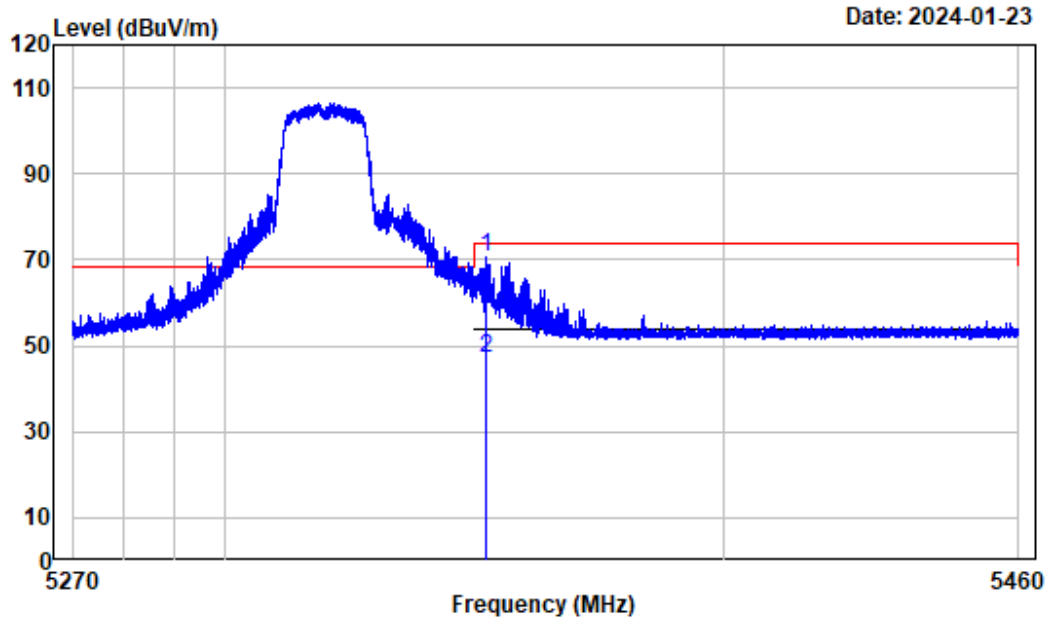
802.11a			
Test Channel:	**5260MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT1

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	4815.495	2.44	41.24	43.68	54.00	Average	-10.32
2	4815.495	2.44	55.54	57.98	74.00	Peak	-16.02

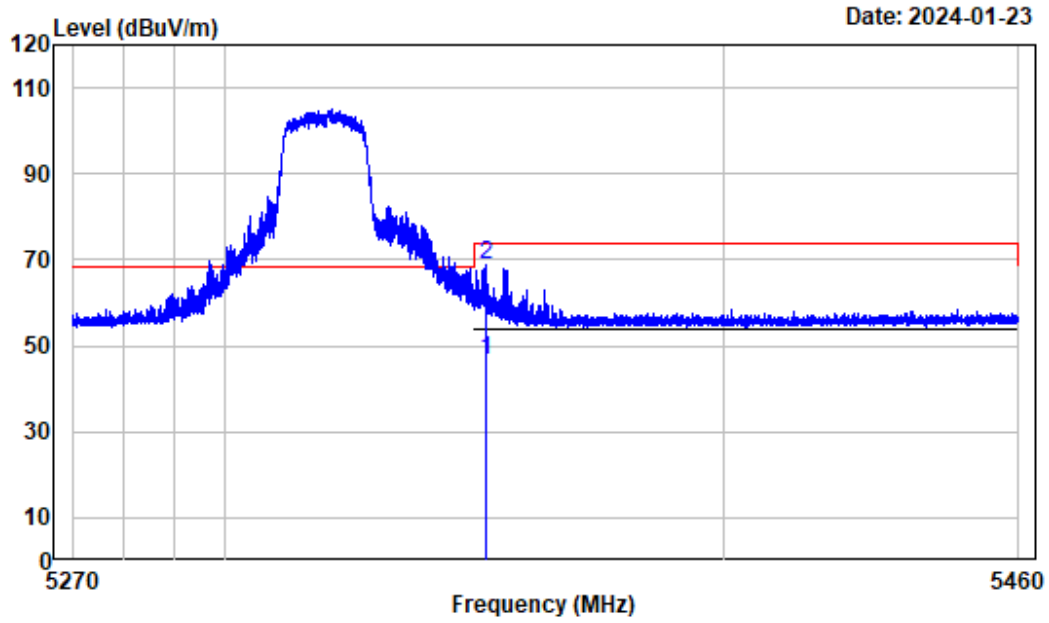
802.11a			
Test Channel:	**5320MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT1

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5352.063	2.91	67.72	70.63	74.00	Peak	-3.37
2	5352.063	2.91	44.32	47.23	54.00	Average	-6.77

802.11a			
Test Channel:	**5320MHz**	**Ant. Polar. :**	**Vertical**

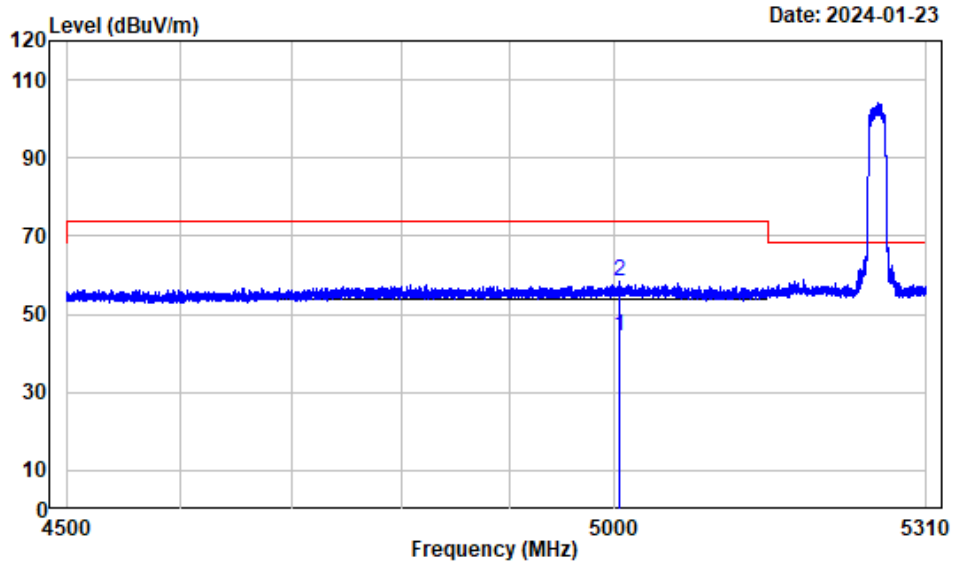


Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT1

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5352.145	2.91	43.69	46.60	54.00	Average	-7.40
2	5352.145	2.91	65.83	68.74	74.00	Peak	-5.26

ANT 2

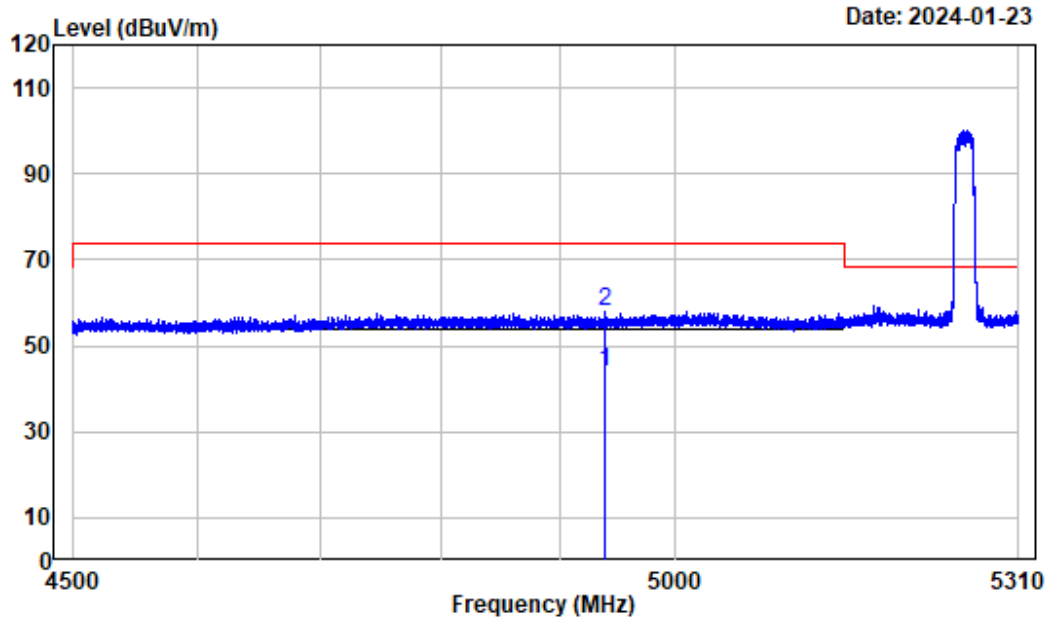
802.11a			
Test Channel:	**5260MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT2

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5006.250	2.96	41.45	44.41	54.00	Average	-9.59
2	5006.250	2.96	55.50	58.46	74.00	Peak	-15.54

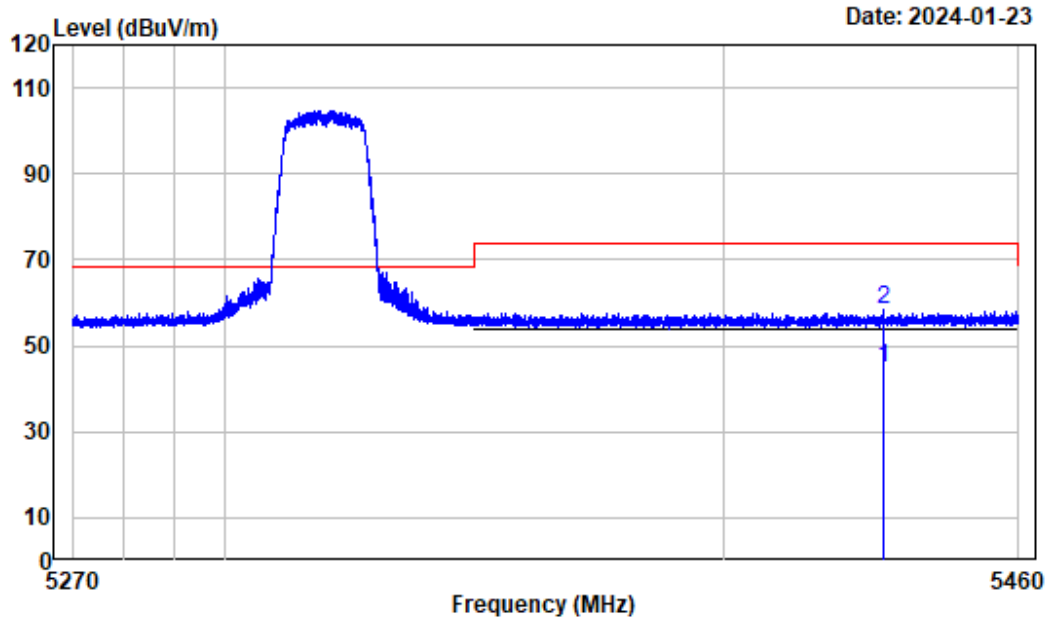
802.11a			
Test Channel:	**5260MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT2

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	4938.615	2.62	41.30	43.92	54.00	Average	-10.08
2	4938.615	2.62	55.21	57.83	74.00	Peak	-16.17

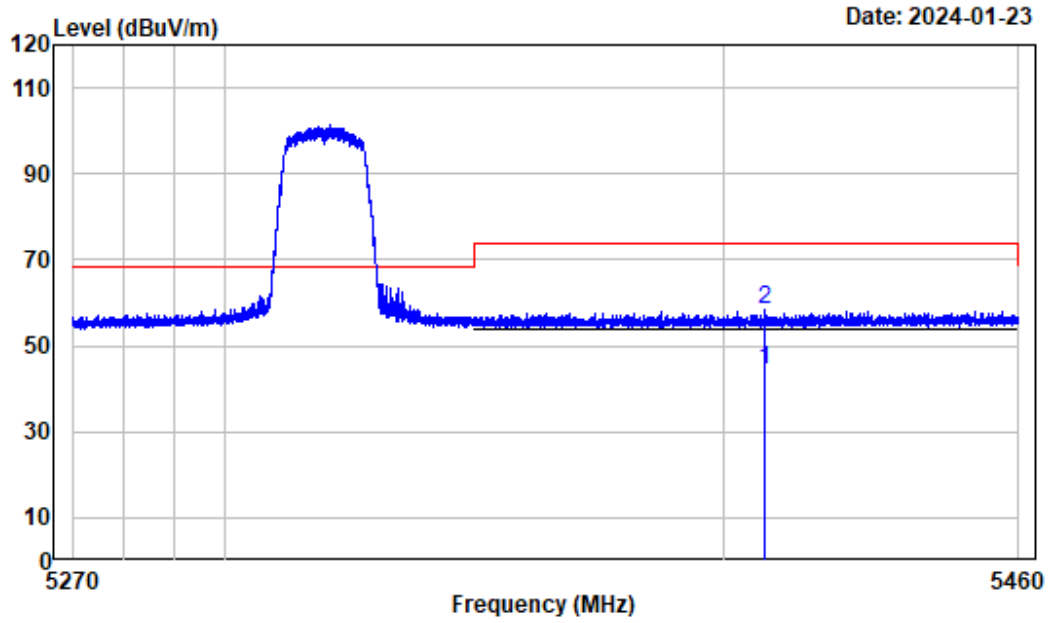
802.11a			
Test Channel:	**5320MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT2

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5432.308	3.03	41.58	44.61	54.00	Average	-9.39
2	5432.308	3.03	55.44	58.47	74.00	Peak	-15.53

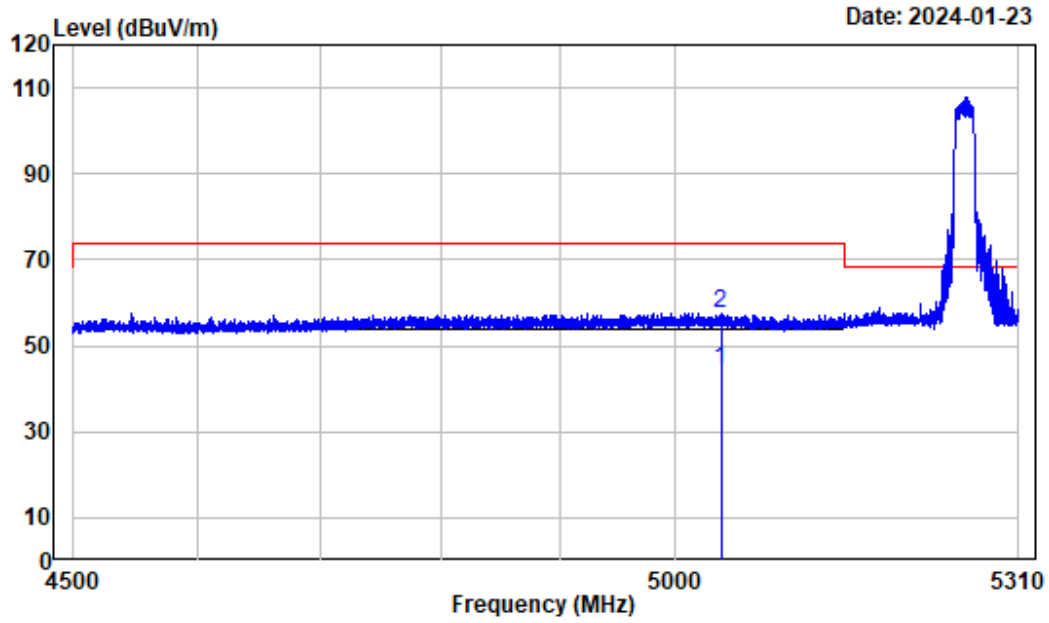
802.11a			
Test Channel:	**5320MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT2

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5408.382	3.00	41.23	44.23	54.00	Average	-9.77
2	5408.382	3.00	55.25	58.25	74.00	Peak	-15.75

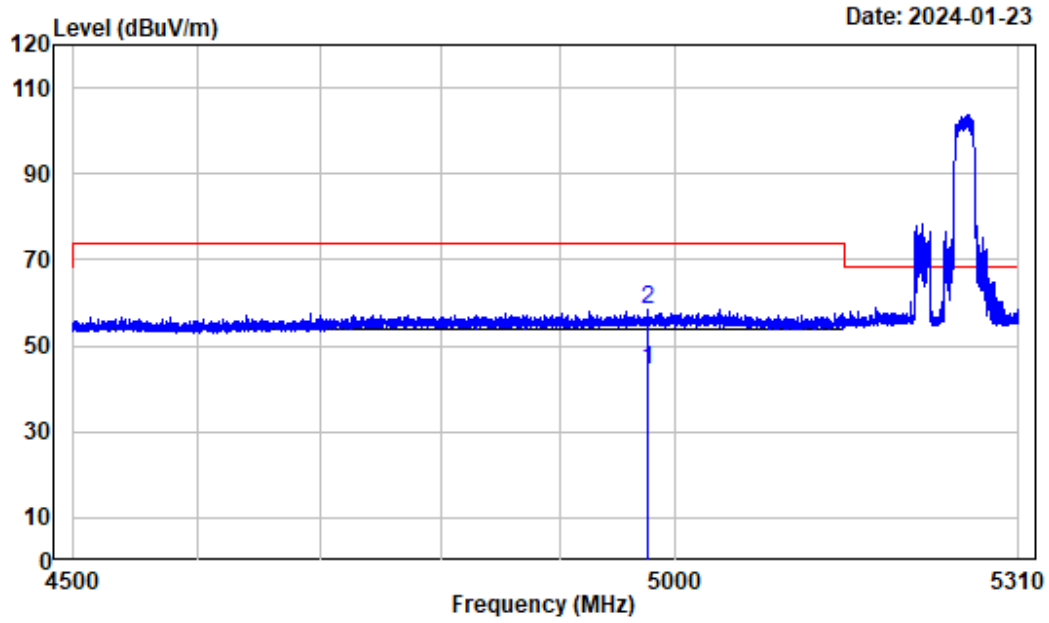
802.11ac20			
Test Channel:	**5260MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC20

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	5040.574	2.96	41.63	44.59	54.00	-9.41	Average
2	5040.574	2.96	54.67	57.63	74.00	-16.37	Peak

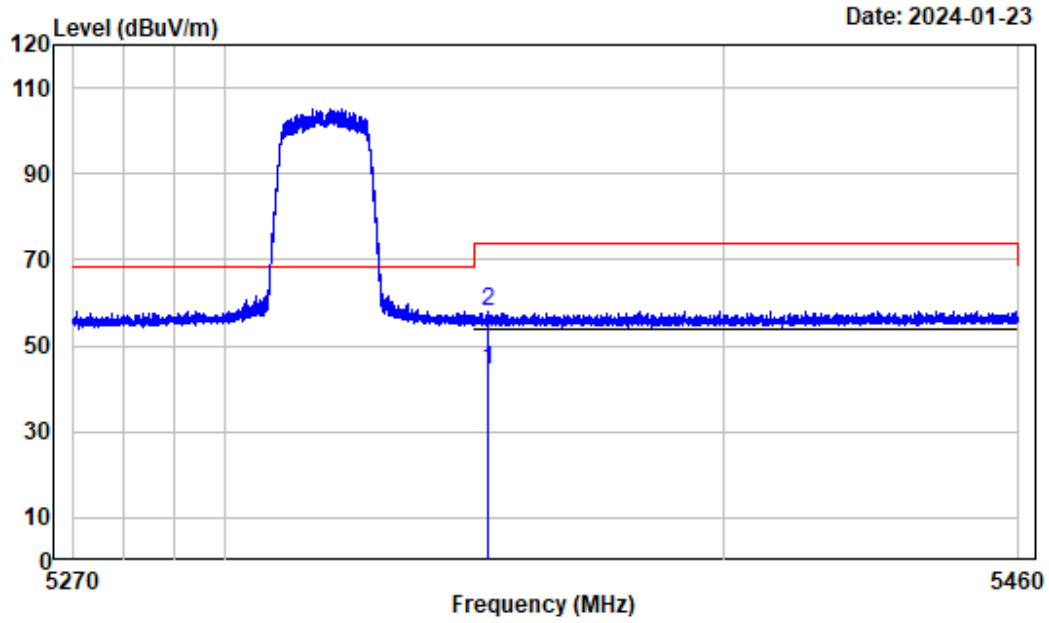
802.11ac20			
Test Channel:	**5260MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC20

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4976.989	2.80	41.51	44.31	54.00	-9.69	Average
2	4976.989	2.80	55.73	58.53	74.00	-15.47	Peak

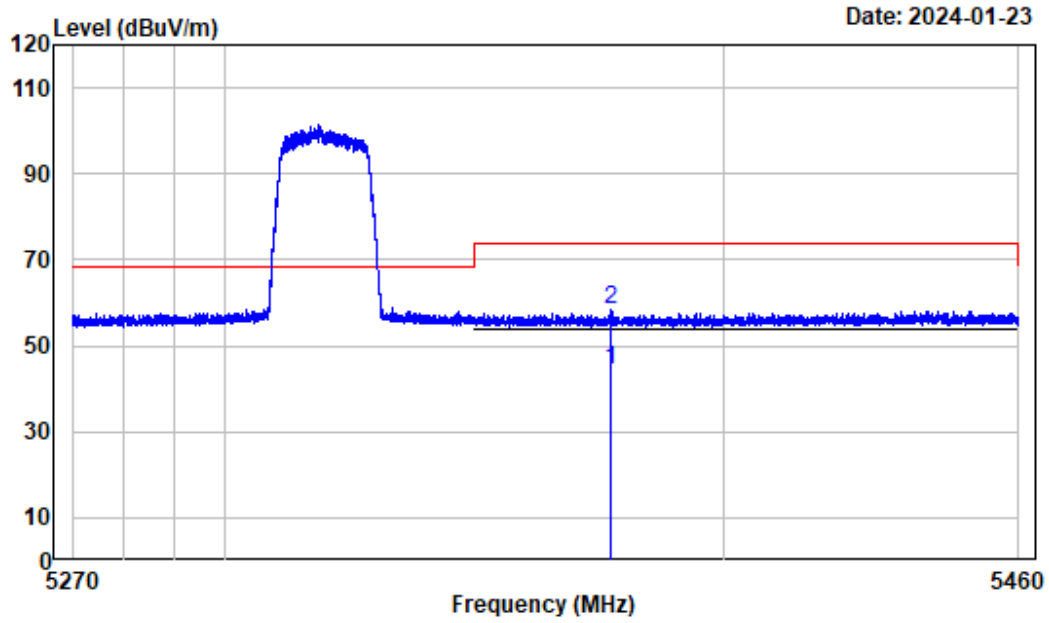
802.11ac20			
Test Channel:	**5320MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC20

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5352.475	2.91	41.68	44.59	54.00	Average	-9.41
2	5352.475	2.91	55.24	58.15	74.00	Peak	-15.85

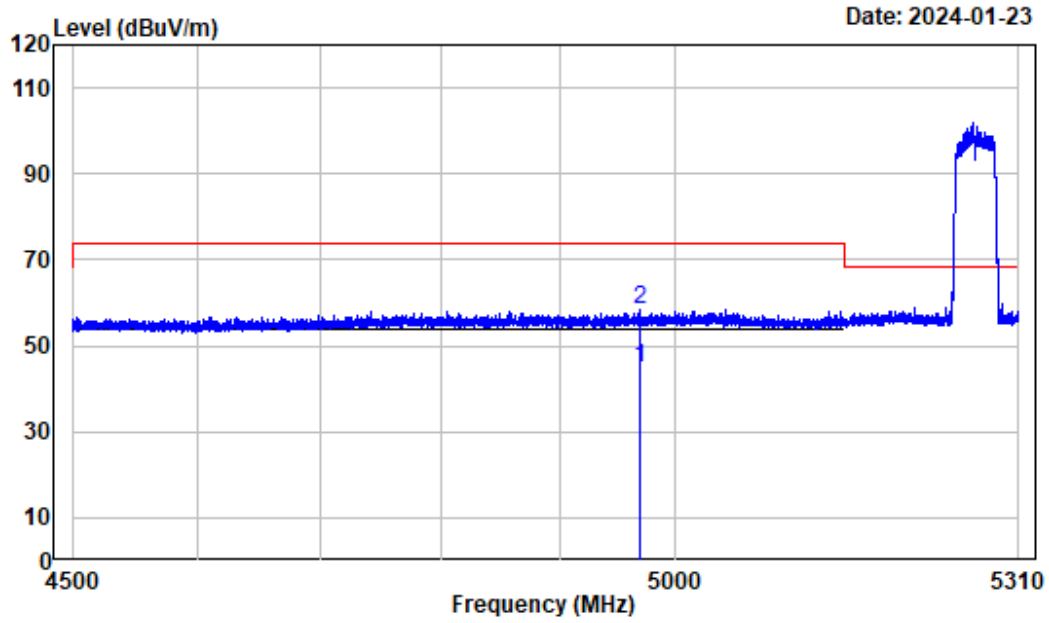
802.11ac20			
Test Channel:	**5320MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC20

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5377.473	2.94	41.54	44.48	54.00	Average	-9.52
2	5377.473	2.94	55.41	58.35	74.00	Peak	-15.65

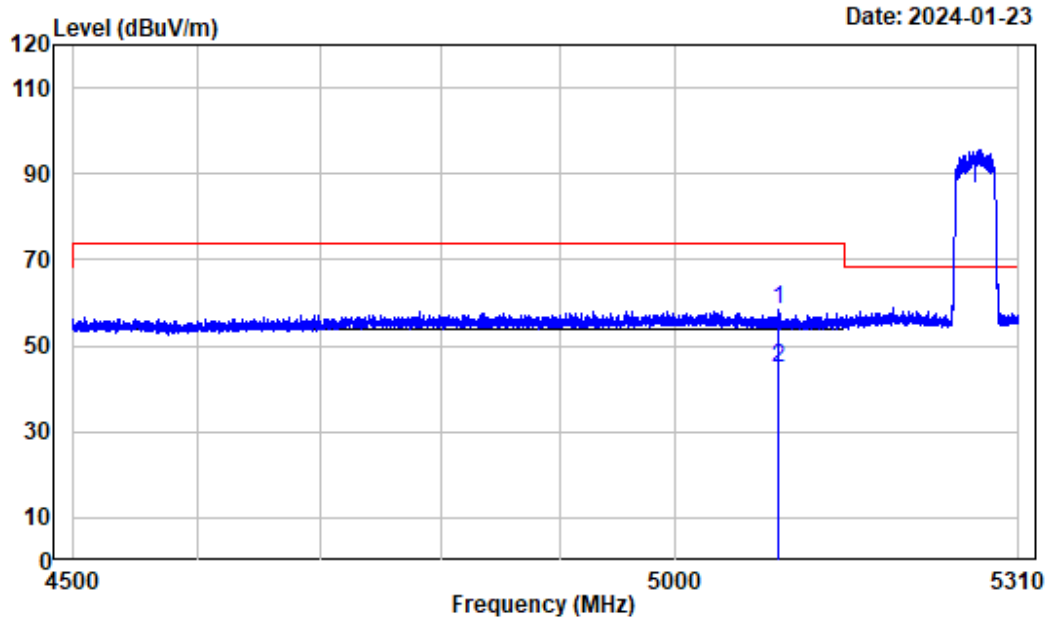
802.11ac40			
Test Channel:	**5270MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC40

	Freq	Factor	Read Level	Limit Line	Level	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	4968.990	2.74	42.07	54.00	44.81	Average	-9.19
2	4968.990	2.74	55.78	74.00	58.52	Peak	-15.48

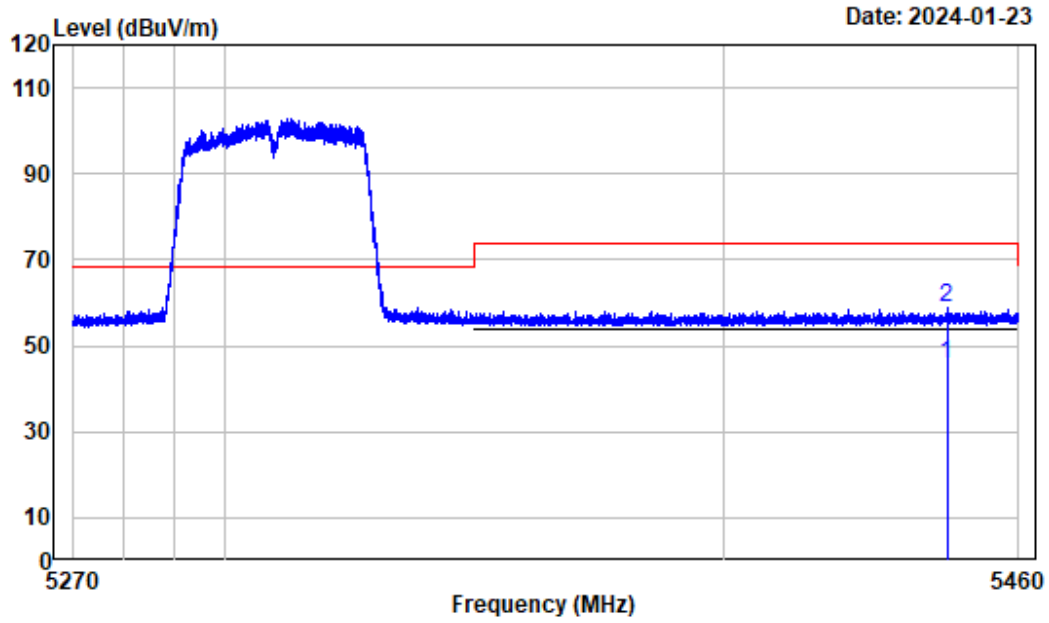
802.11ac40			
Test Channel:	**5270MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC40

	Freq	Factor	Read Level	Limit Line	Level	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5092.313	2.76	55.43	74.00	58.19	Peak	-15.81
2	5092.313	2.76	42.24	54.00	45.00	Average	-9.00

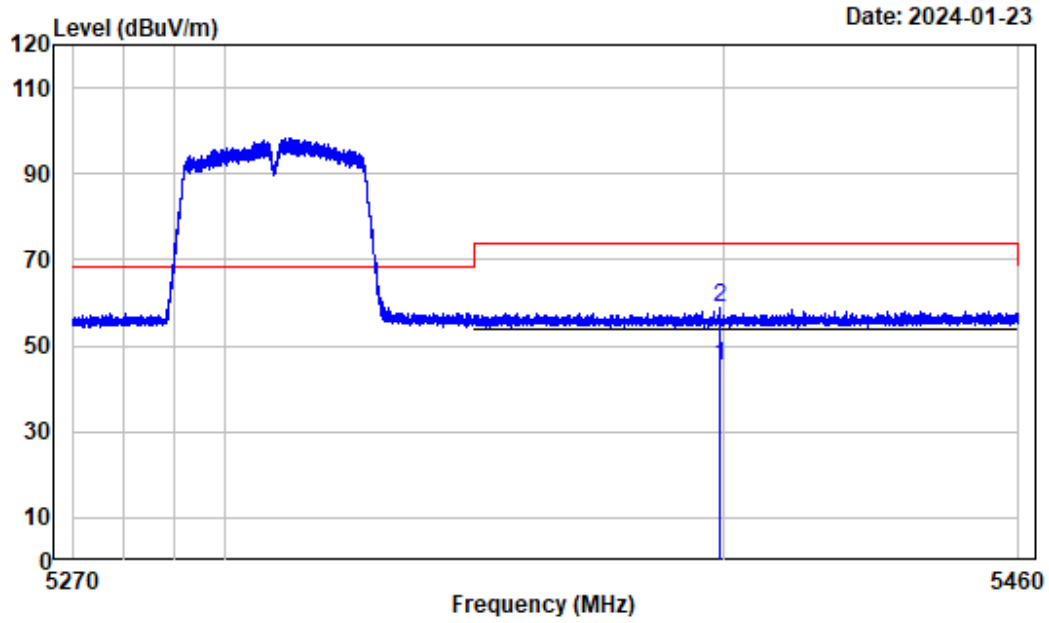
802.11ac40			
Test Channel:	**5310MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC40

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5445.370	3.06	42.64	45.70	54.00	Average	-8.30
2	5445.370	3.06	55.74	58.80	74.00	Peak	-15.20

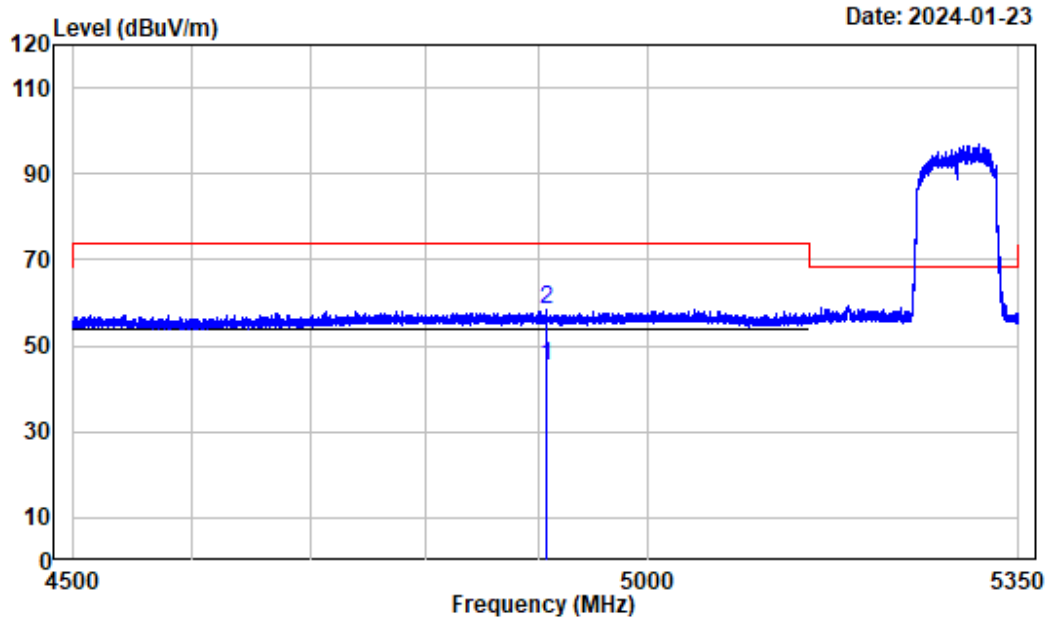
802.11ac40			
Test Channel:	**5310MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC40

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5399.115	2.99	42.45	45.44	54.00	Average	-8.56
2	5399.115	2.99	55.81	58.80	74.00	Peak	-15.20

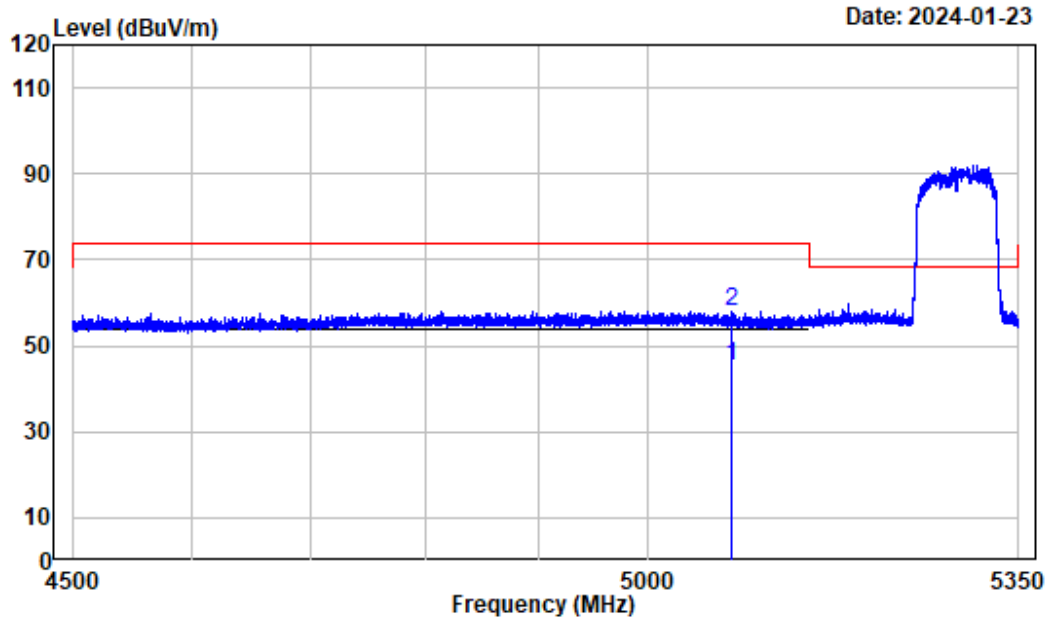
802.11ac80			
Test Channel:	**5290MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC80

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	4908.212	2.64	42.72	45.36	54.00	Average	-8.64
2	4908.212	2.64	55.99	58.63	74.00	Peak	-15.37

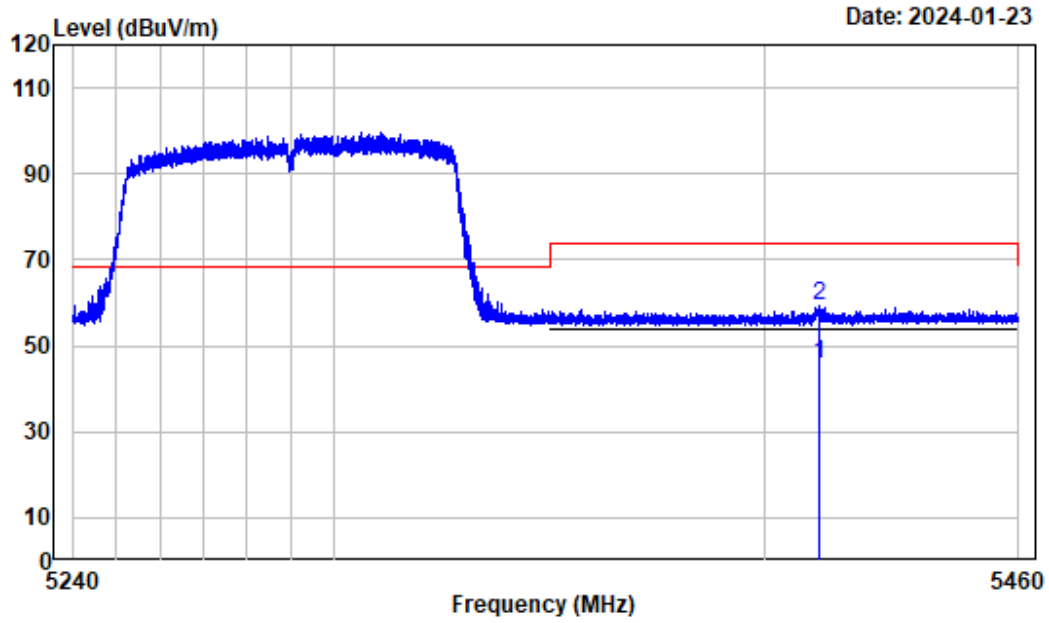
802.11ac80			
Test Channel:	**5290MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC80

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5077.362	2.82	42.57	45.39	54.00	Average	-8.61
2	5077.362	2.82	55.25	58.07	74.00	Peak	-15.93

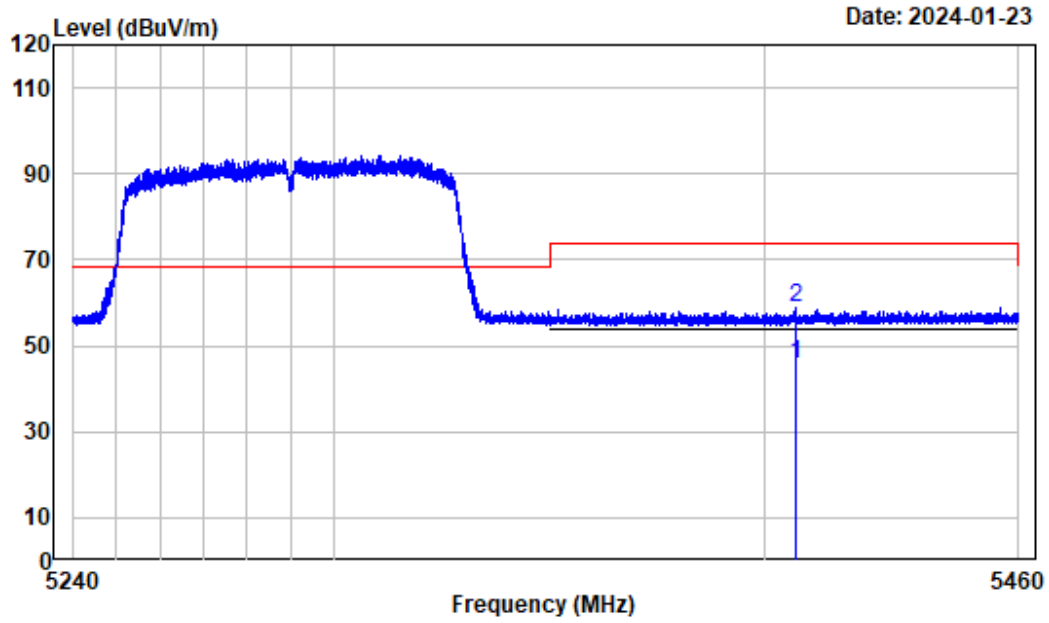
802.11ac80			
Test Channel:	**5290MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC80

	Freq	Factor	Read Level	Limit Line	Level	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5412.700	3.01	42.86	54.00	45.87	Average	-8.13
2	5412.700	3.01	56.11	74.00	59.12	Peak	-14.88

802.11ac80			
Test Channel:	**5290MHz**	**Ant. Polar. :**	**Vertical**

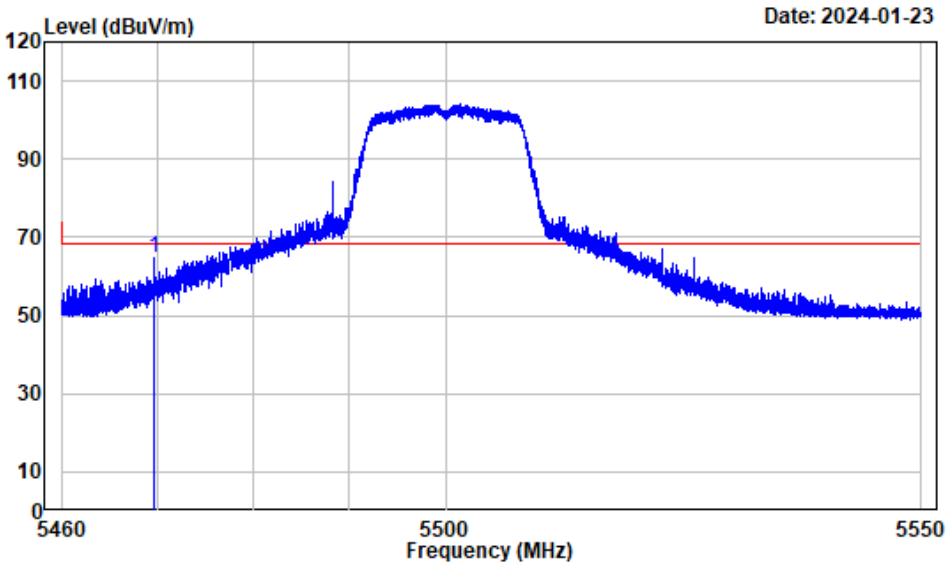


Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC80

	Freq	Factor	Read Level	Limit Line	Level	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5407.200	2.99	42.58	54.00	45.57	Average	-8.43
2	5407.200	2.99	55.75	74.00	58.74	Peak	-15.26

5470-5725MHz:
ANT 1

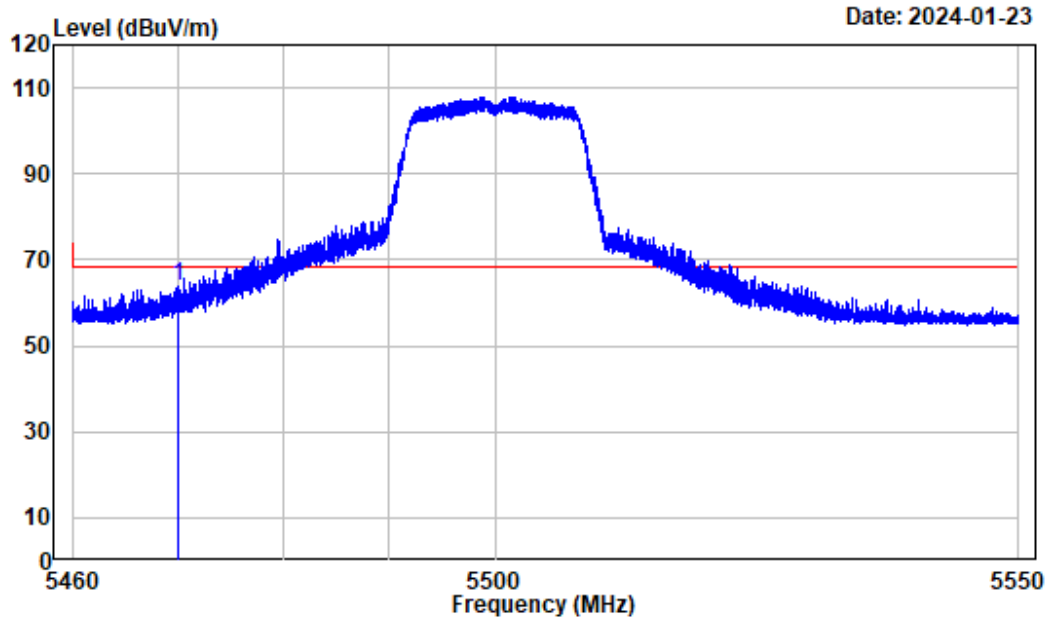
802.11a			
Test Channel:	**5500MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT1

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5469.596	3.05	61.64	64.69	68.20	Peak	-3.51

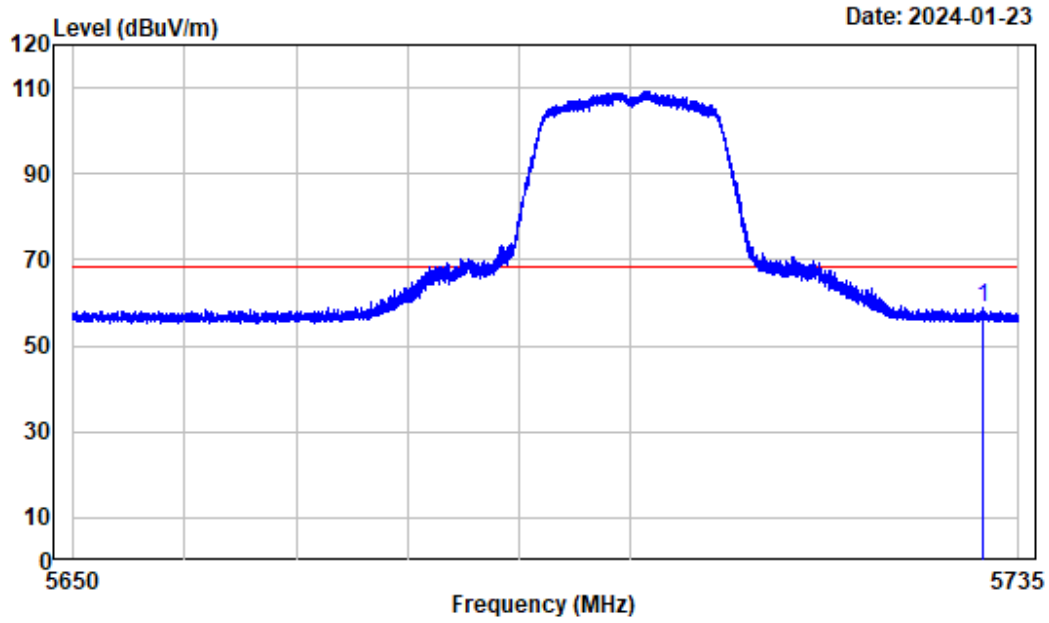
802.11a			
Test Channel:	**5500MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT1

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5469.911	3.05	60.97	64.02	68.20	Peak	-4.18

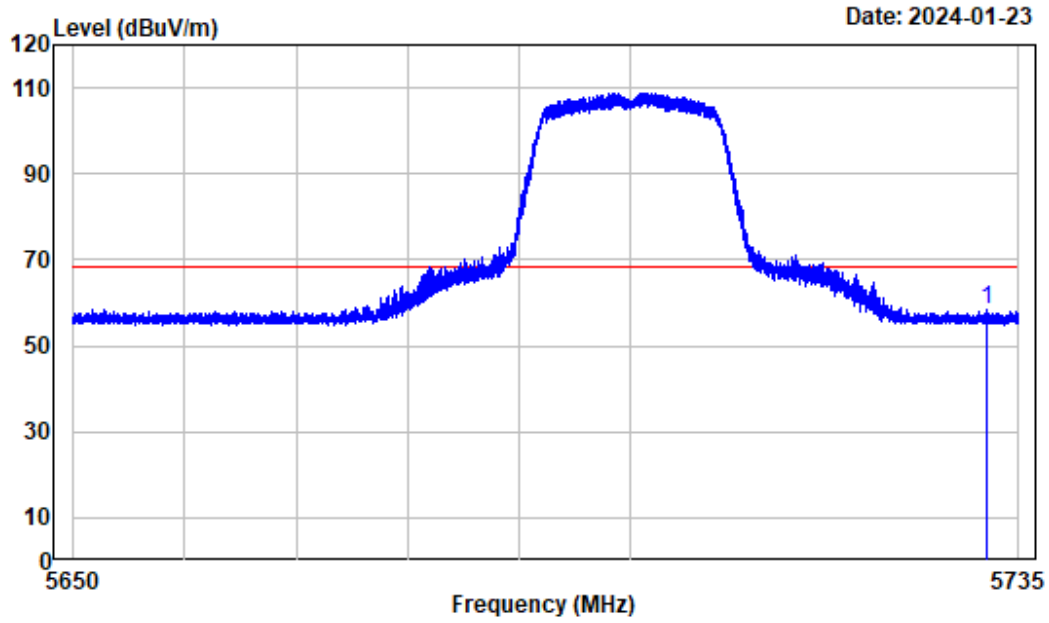
802.11a			
Test Channel:	**5700MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT1

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5731.706	3.50	55.15	58.65	68.20	Peak	-9.55

802.11a			
Test Channel:	**5700MHz**	**Ant. Polar. :**	**Vertical**

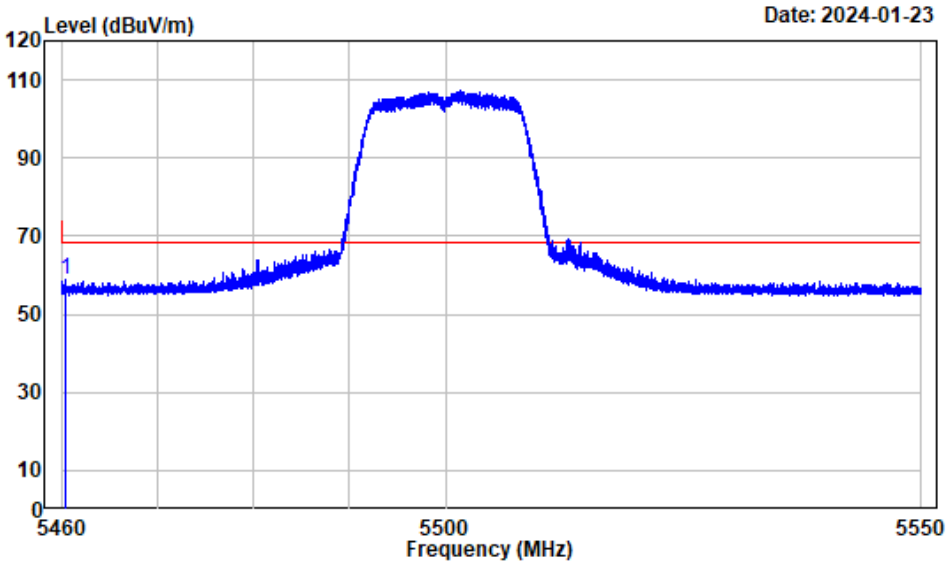


Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT1

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5732.057	3.49	54.83	58.32	68.20	Peak	-9.88

ANT 2

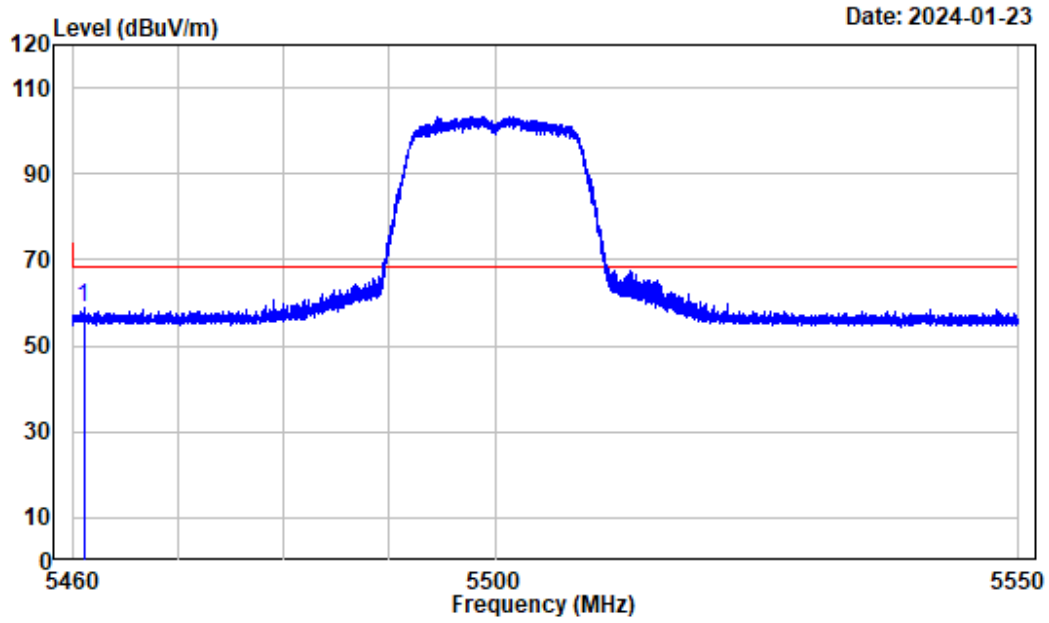
802.11a			
Test Channel:	**5500MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT2

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5460.416	3.05	55.85	58.90	68.20	Peak	-9.30

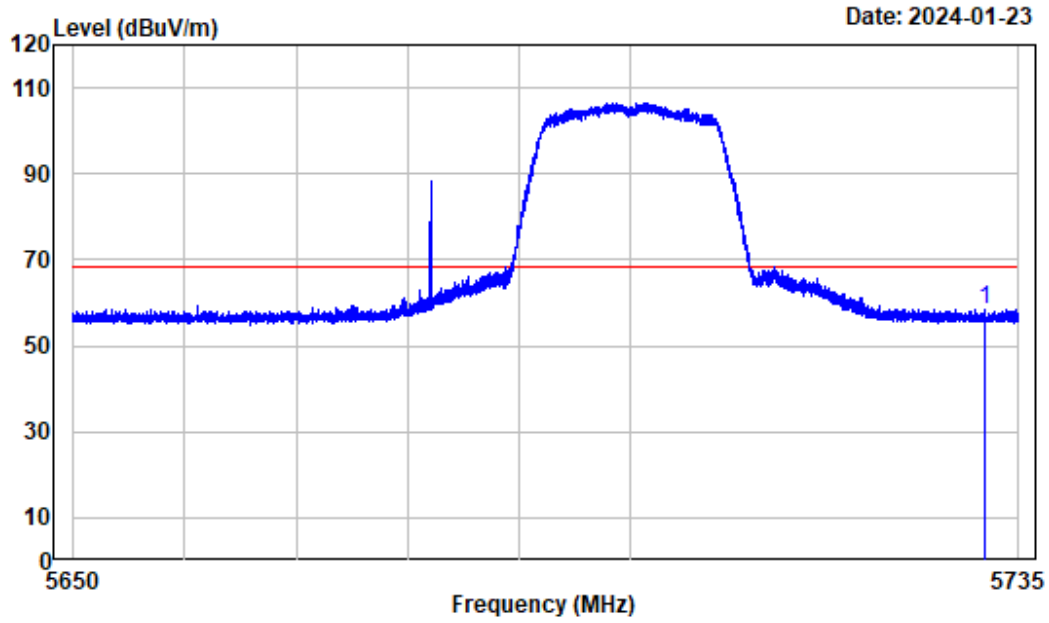
802.11a			
Test Channel:	**5500MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT2

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5461.069	3.06	55.80	58.86	68.20	Peak	-9.34

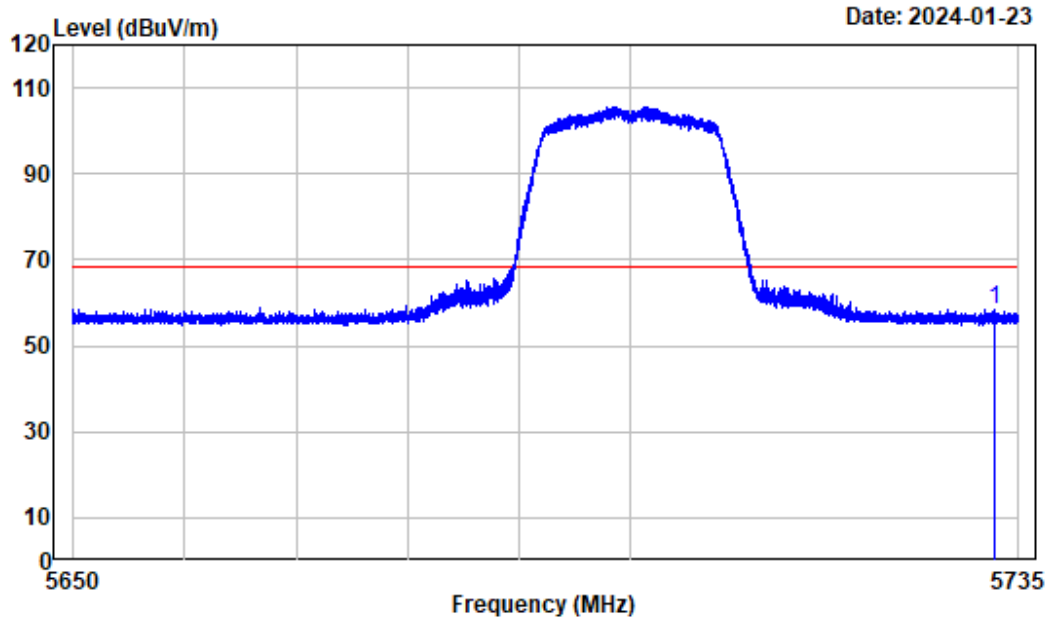
802.11a			
Test Channel:	**5700MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT2

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5731.961	3.49	55.10	58.59	68.20	Peak	-9.61

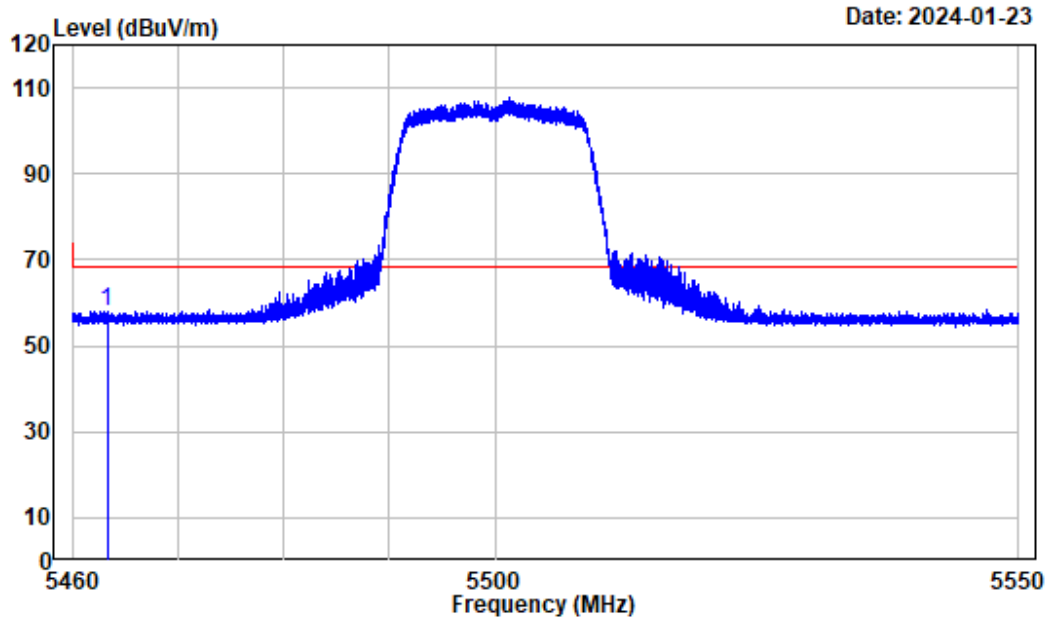
802.11a			
Test Channel:	**5700MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT2

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5732.917	3.50	54.71	58.21	68.20	Peak	-9.99

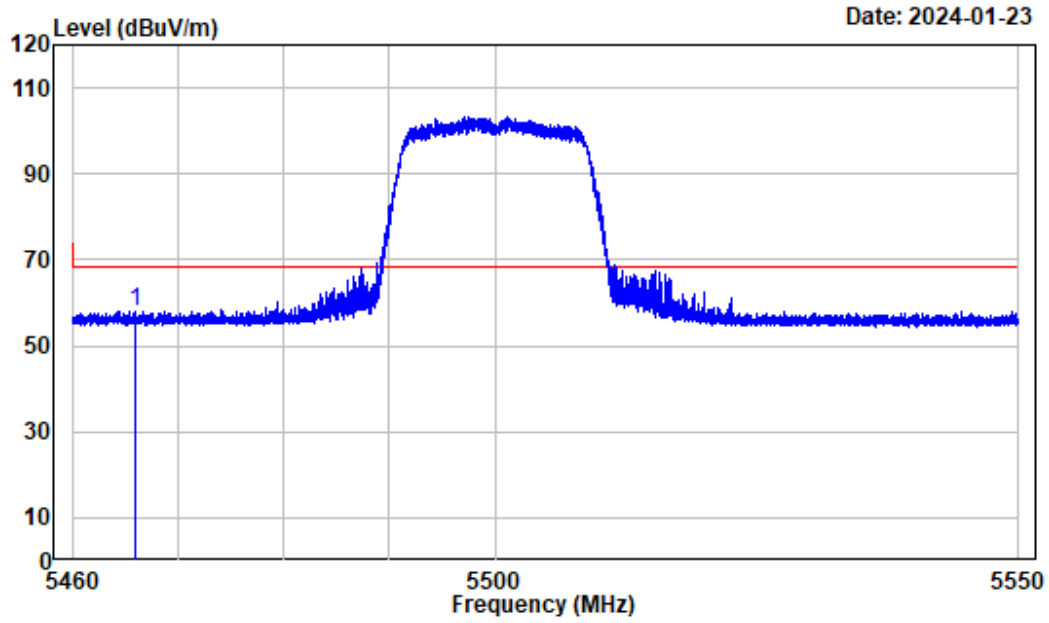
802.11ac20			
Test Channel:	**5500MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC20

	Freq	Factor	Read Level	Limit Line	Level	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5463.274	3.06	54.96	68.20	58.02	Peak	-10.18

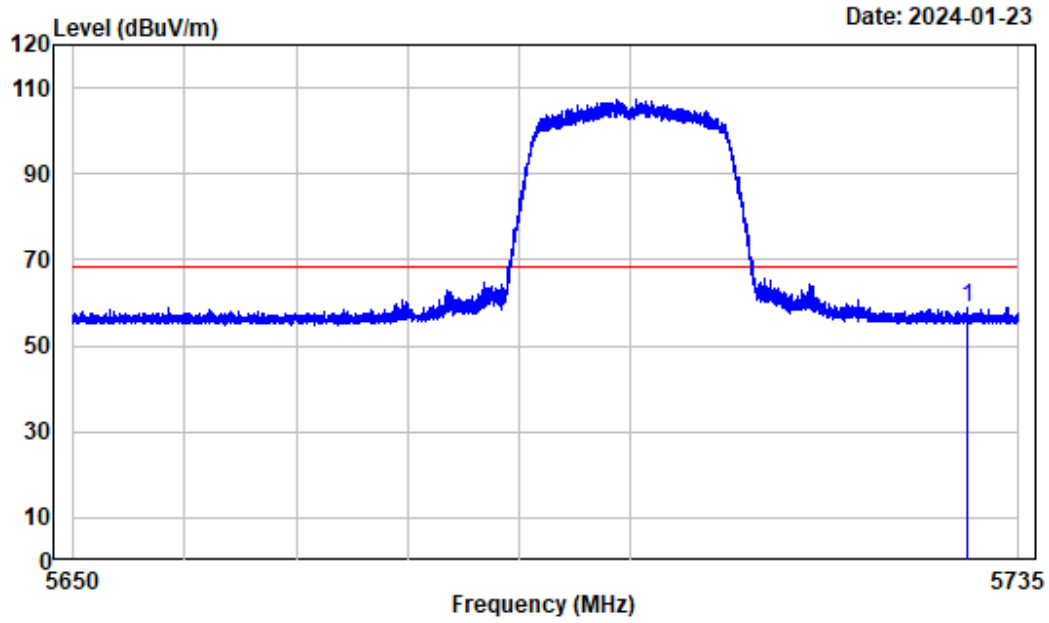
802.11ac20			
Test Channel:	**5500MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC20

	Freq	Factor	Read Level	Limit Line	Level	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5465.929	3.06	54.98	68.20	58.04	Peak	-10.16

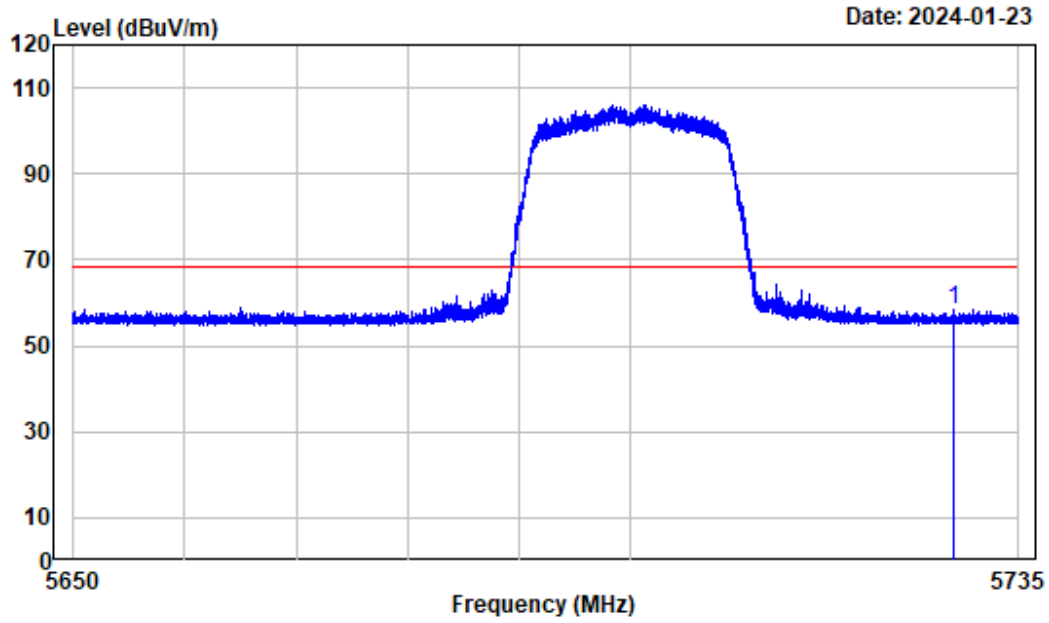
802.11ac20			
Test Channel:	**5700MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC20

	Freq	Factor	Read Level	Limit Line	Level	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5730.335	3.50	55.32	68.20	58.82	Peak	-9.38

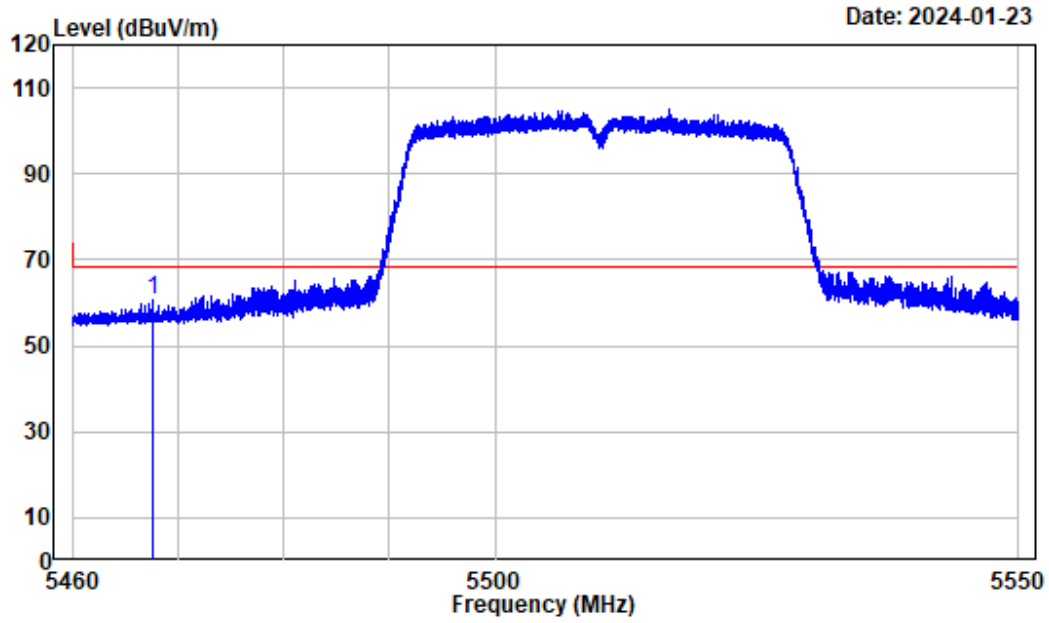
802.11ac20			
Test Channel:	**5700MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC20

	Freq	Factor	Read Level	Limit Line	Level	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5729.092	3.50	54.95	68.20	58.45	Peak	-9.75

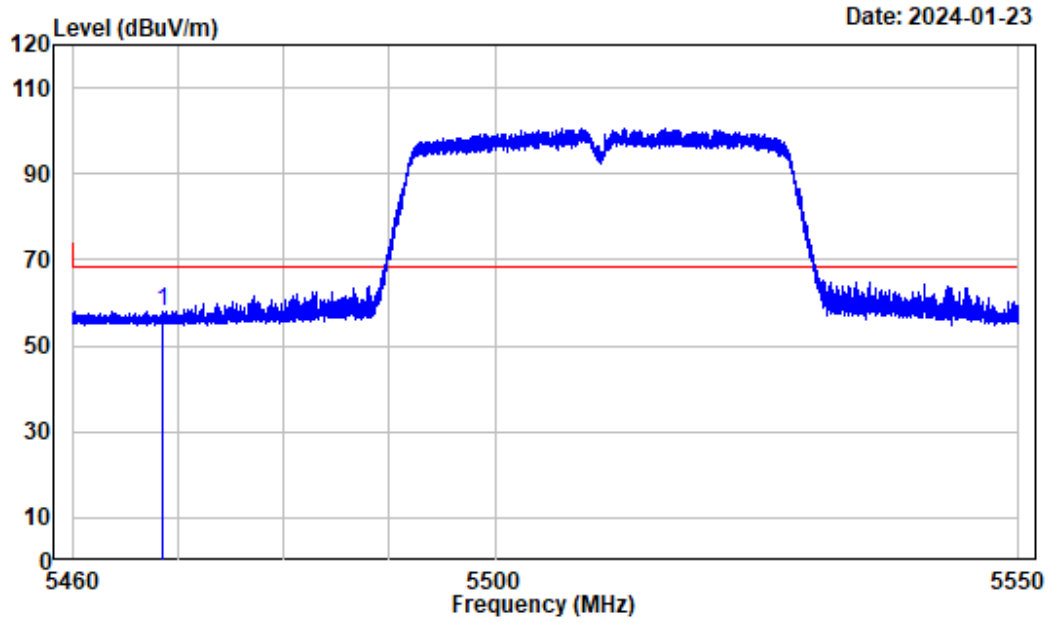
802.11ac40			
Test Channel:	**5510MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC40

	Freq	Factor	Read Level	Limit Line	Level	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5467.639	3.06	57.41	68.20	60.47	Peak	-7.73

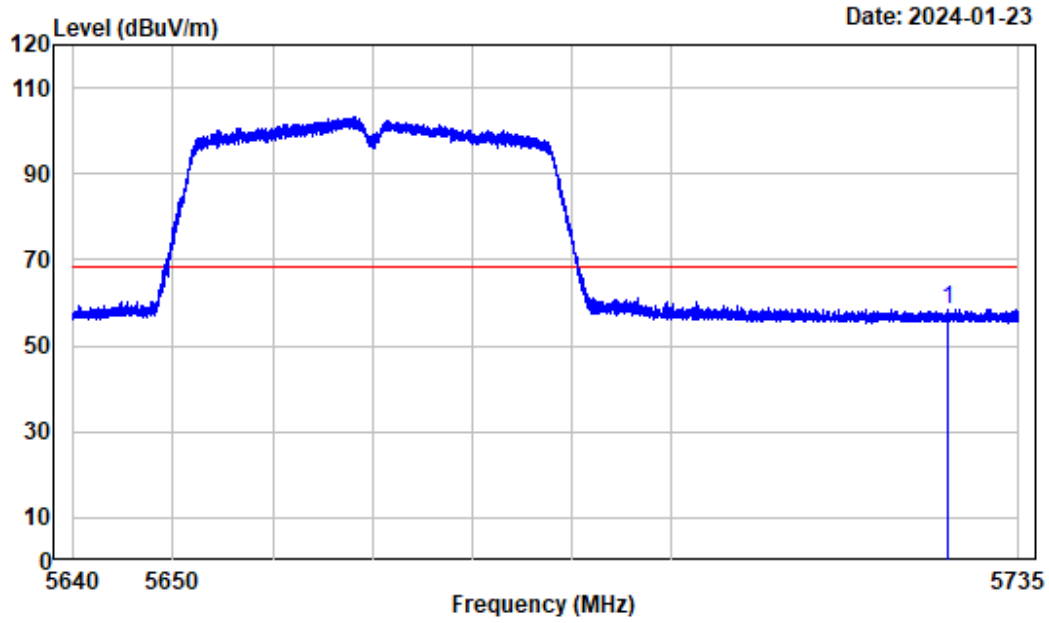
802.11ac40			
Test Channel:	**5510MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC40

	Freq	Factor	Read Level	Limit Line	Level	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5468.516	3.05	55.00	68.20	58.05	Peak	-10.15

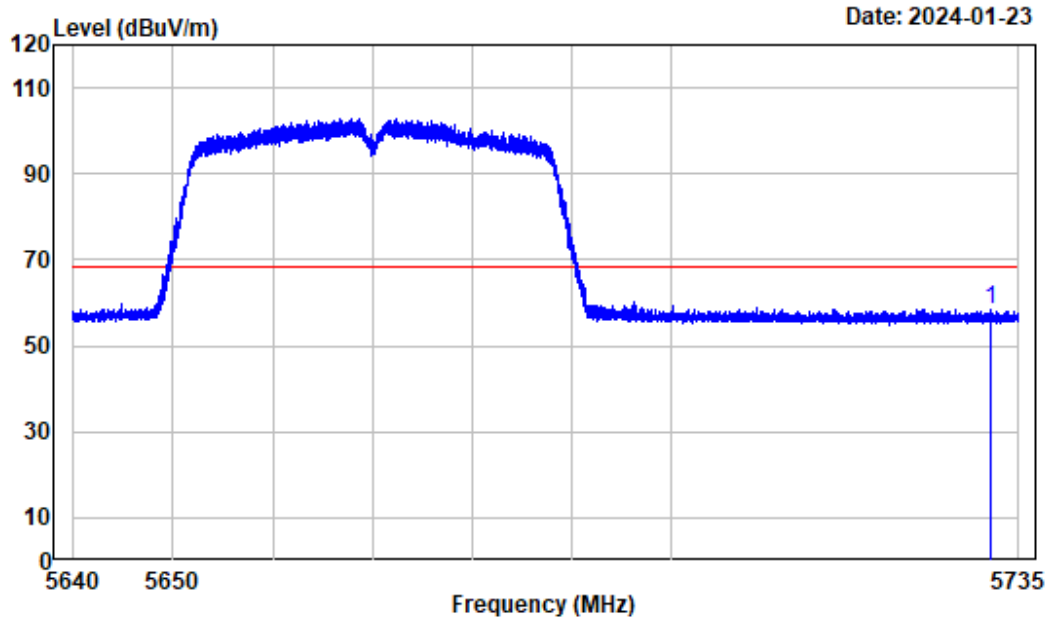
802.11ac40			
Test Channel:	**5670MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC40

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5727.935	3.50	55.04	58.54	68.20	Peak	-9.66

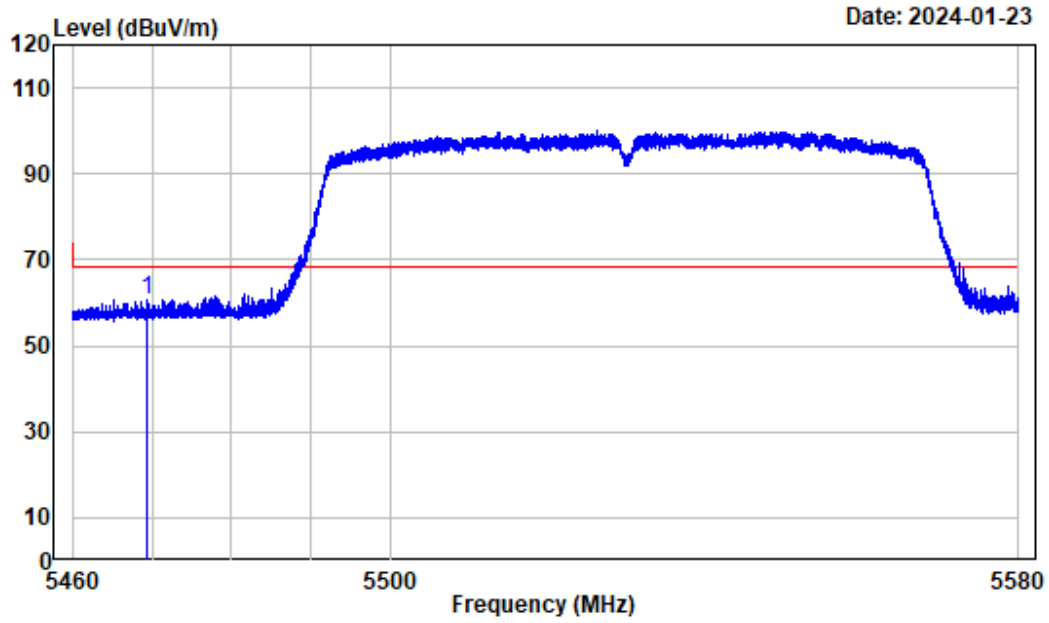
802.11ac40			
Test Channel:	**5670MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC40

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5732.138	3.49	54.96	58.45	68.20	Peak	-9.75

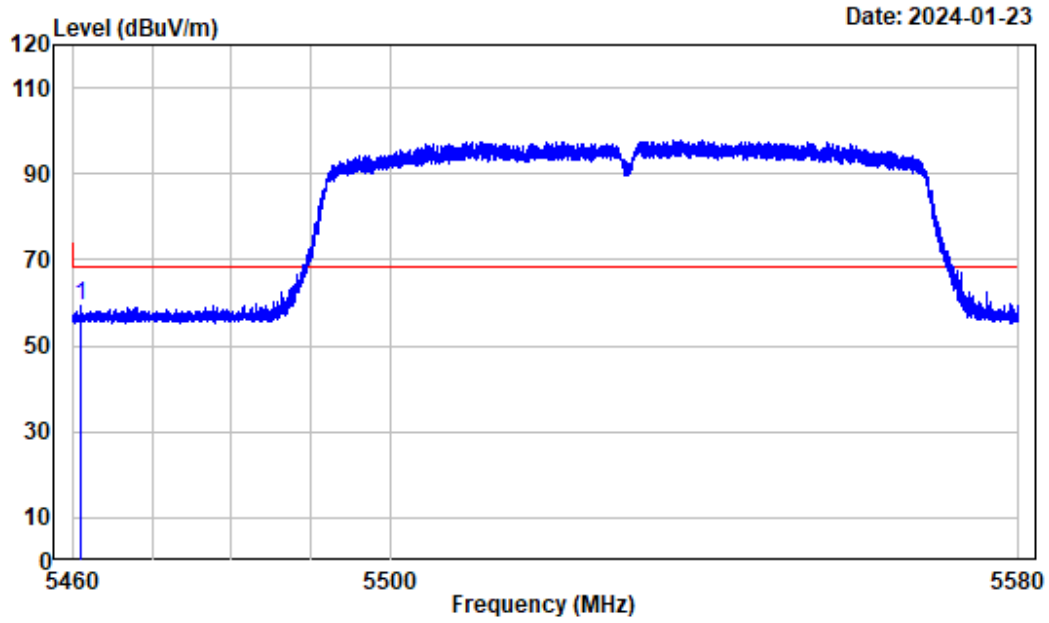
802.11ac80			
Test Channel:	**5530MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC80

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5469.420	3.05	57.64	60.69	68.20	Peak	-7.51

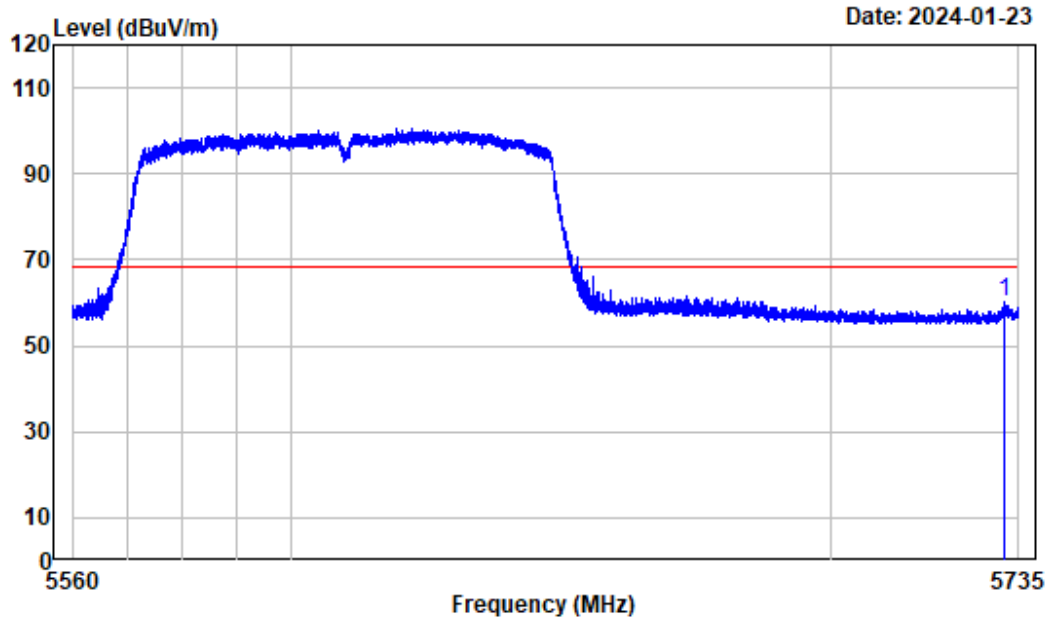
802.11ac80			
Test Channel:	**5530MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC80

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5461.170	3.06	56.04	59.10	68.20	Peak	-9.10

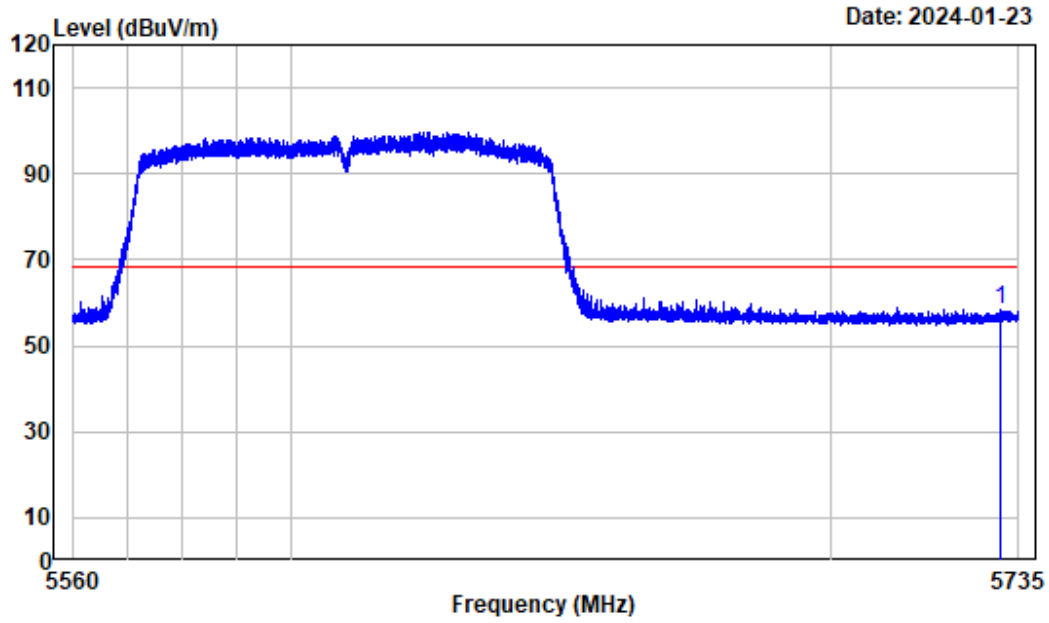
802.11ac80			
Test Channel:	**5610MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC80

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5732.310	3.49	56.68	60.17	68.20	Peak	-8.03

802.11ac80			
Test Channel:	**5610MHz**	**Ant. Polar. :**	**Vertical**

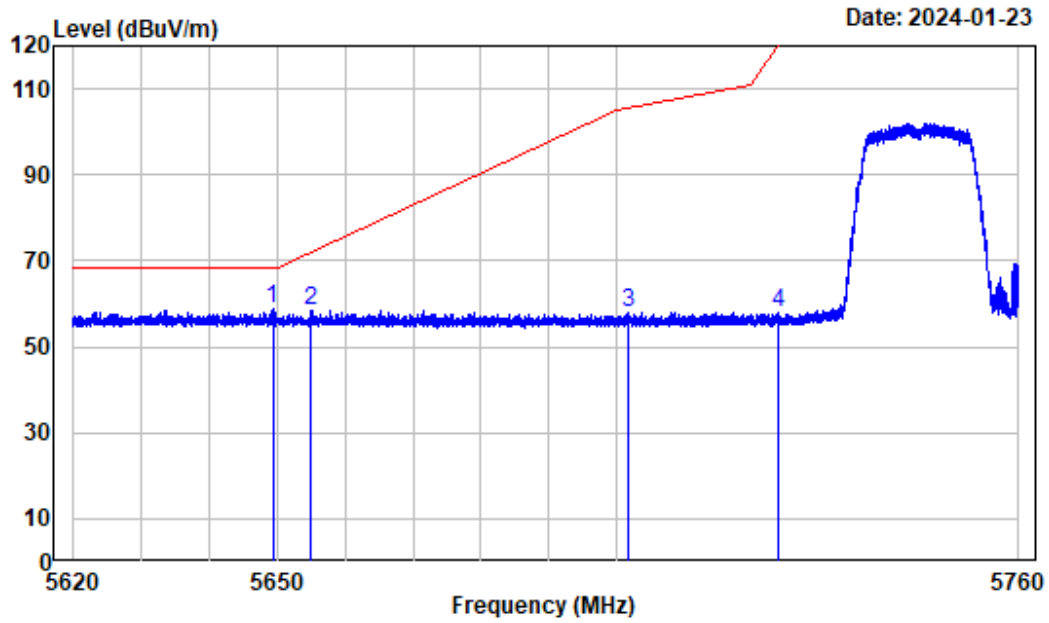


Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC80

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5731.631	3.50	54.87	58.37	68.20	Peak	-9.83

5725-5850MHz:
ANT 1

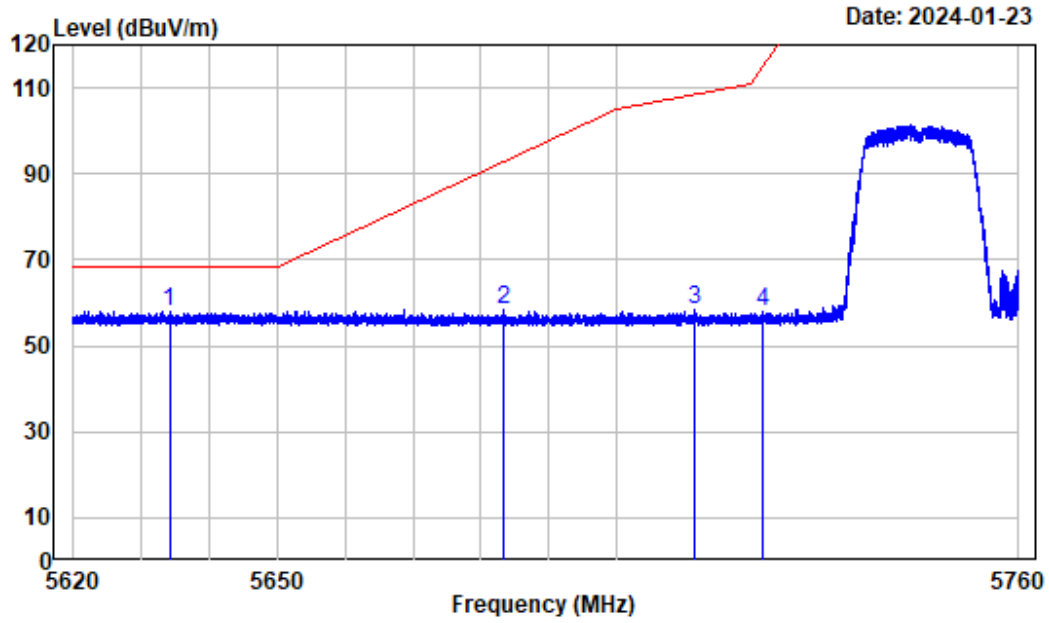
802.11a			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT1

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5649.353	3.27	55.41	58.68	68.20	Peak	-9.52
2	5654.914	3.29	55.28	58.57	71.85	Peak	-13.28
3	5701.956	3.45	54.63	58.08	105.75	Peak	-47.67
4	5724.257	3.48	54.40	57.88	120.51	Peak	-62.63

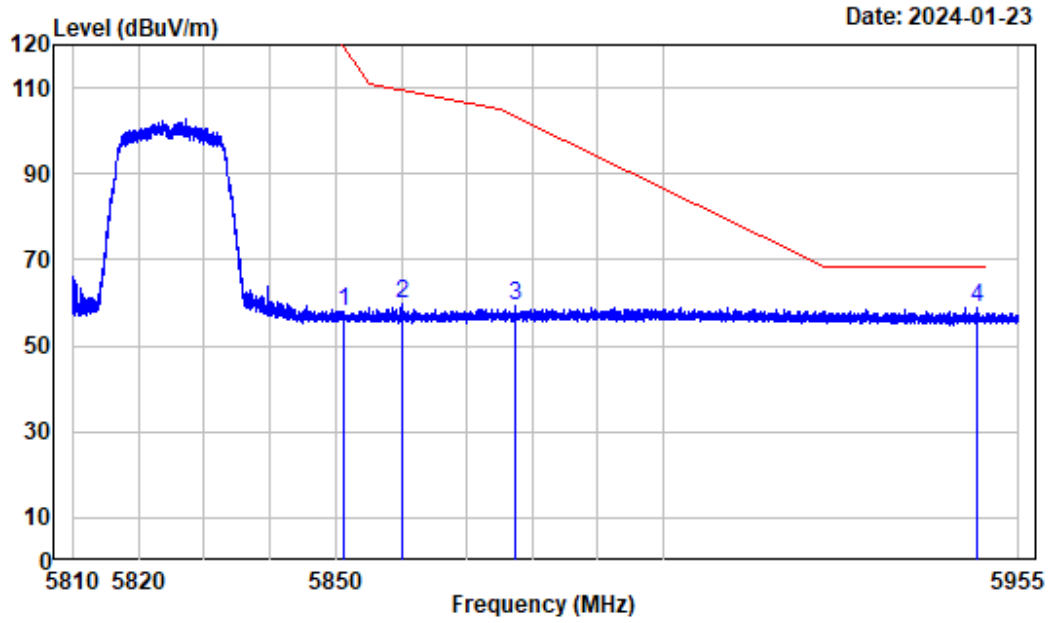
802.11a			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT1

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5634.202	3.15	54.86	58.01	68.20	Peak	-10.19
2	5683.453	3.39	55.09	58.48	92.99	Peak	-34.51
3	5711.760	3.47	54.98	58.45	108.50	Peak	-50.05
4	5721.932	3.48	54.57	58.05	115.21	Peak	-57.16

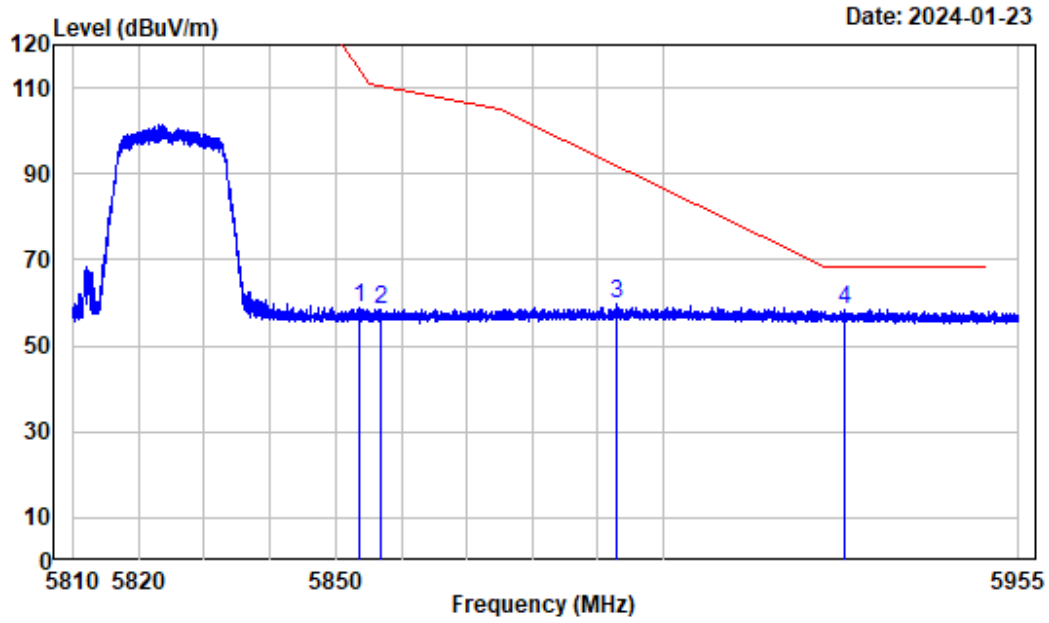
802.11a			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT1

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5851.120	3.67	54.47	58.14	119.65	Peak	-61.51
2	5860.160	3.71	56.09	59.80	109.35	Peak	-49.55
3	5877.540	3.77	55.56	59.33	103.31	Peak	-43.98
4	5948.600	3.74	54.97	58.71	68.20	Peak	-9.49

802.11a			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Vertical**

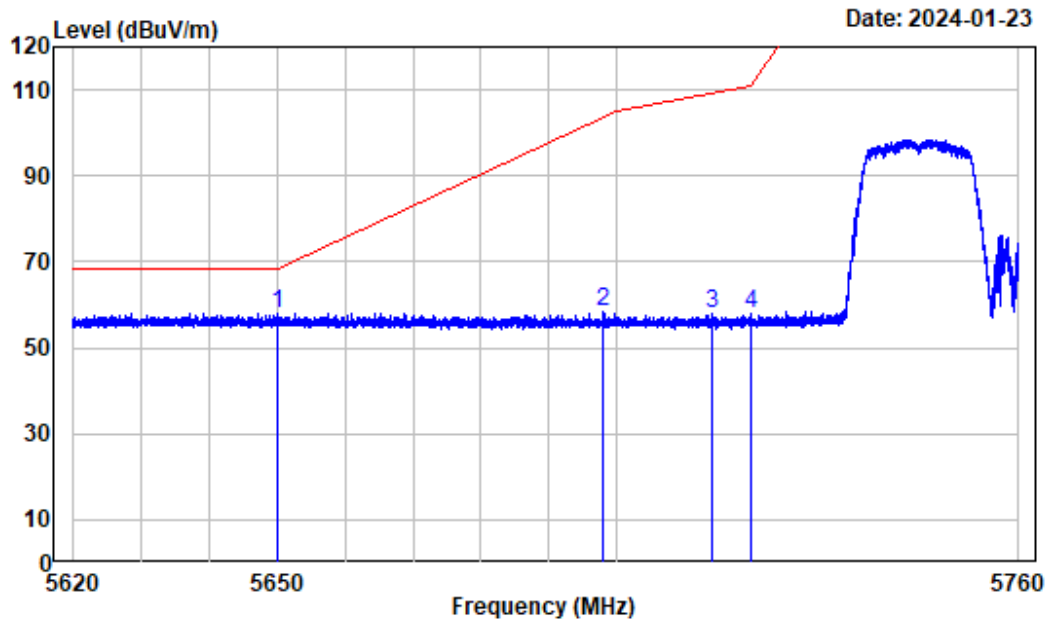


Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT1

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5853.640	3.69	55.26	58.95	113.90	Peak	-54.95
2	5856.780	3.71	54.90	58.61	110.30	Peak	-51.69
3	5892.940	3.83	55.78	59.61	91.89	Peak	-32.28
4	5928.140	3.78	54.75	58.53	68.20	Peak	-9.67

ANT 2

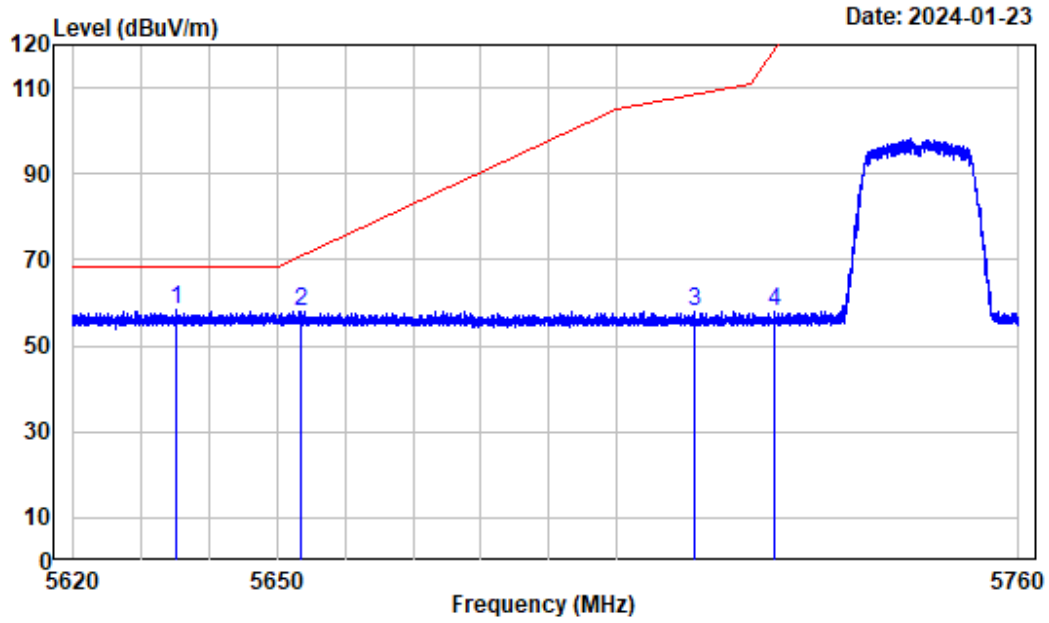
802.11a			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT2

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5649.954	3.28	54.62	57.90	68.20	Peak	-10.30
2	5698.217	3.44	55.06	58.50	103.89	Peak	-45.39
3	5714.298	3.47	54.62	58.09	109.21	Peak	-51.12
4	5720.130	3.48	54.60	58.08	111.10	Peak	-53.02

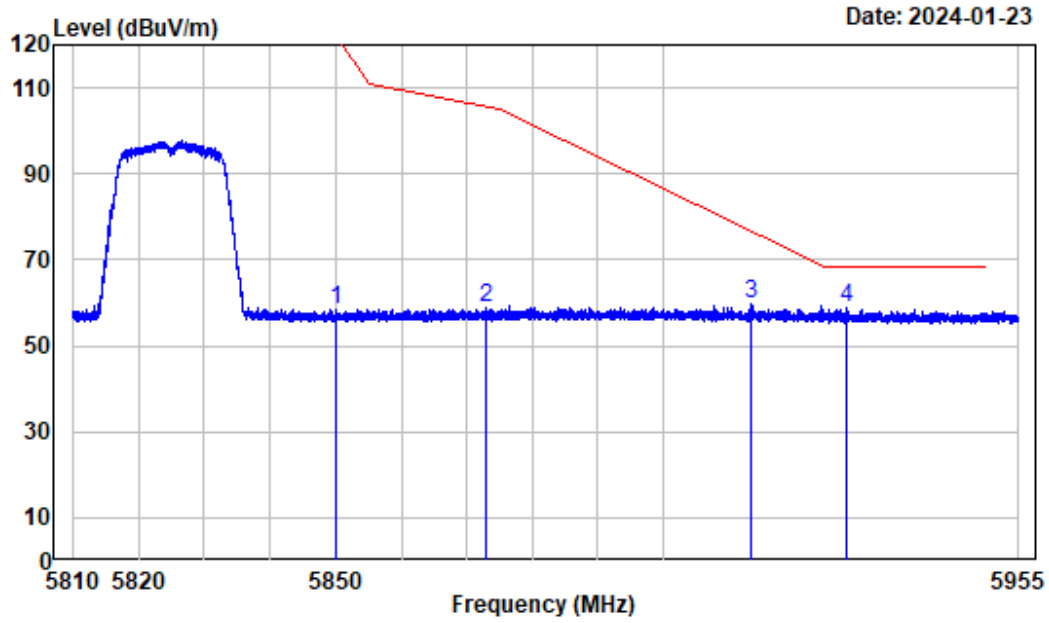
802.11a			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT2

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5635.287	3.16	55.16	58.32	68.20	Peak	-9.88
2	5653.538	3.28	54.90	58.18	70.83	Peak	-12.65
3	5711.566	3.47	54.56	58.03	108.44	Peak	-50.41
4	5723.443	3.48	54.28	57.76	118.65	Peak	-60.89

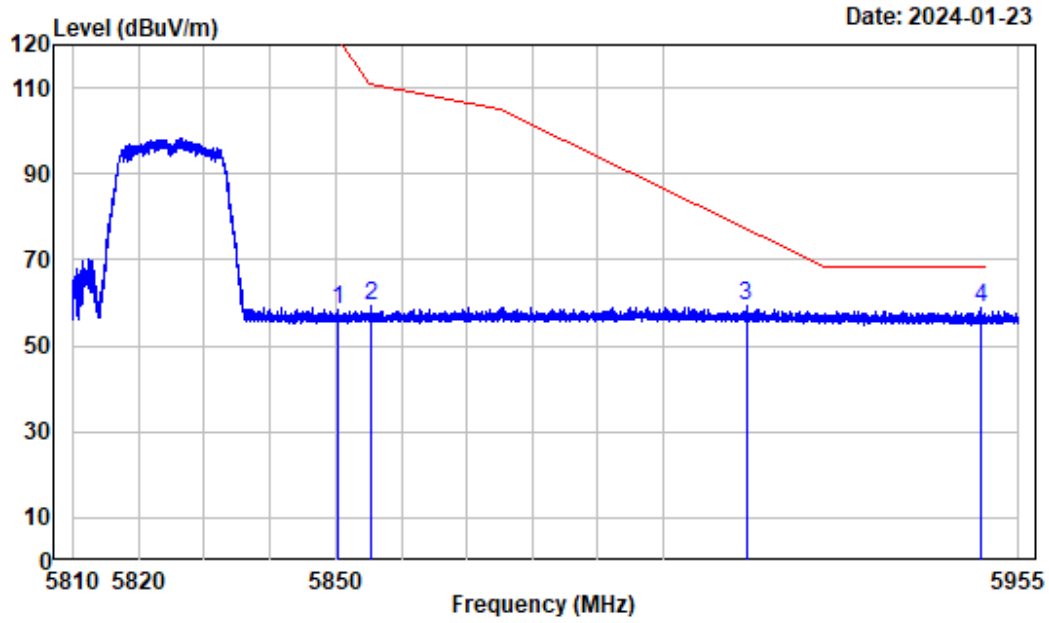
802.11a			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT2

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5850.160	3.67	54.63	58.30	121.83	Peak	-63.53
2	5872.900	3.76	55.09	58.85	105.79	Peak	-46.94
3	5913.780	3.81	55.79	59.60	76.48	Peak	-16.88
4	5928.440	3.78	54.93	58.71	68.20	Peak	-9.49

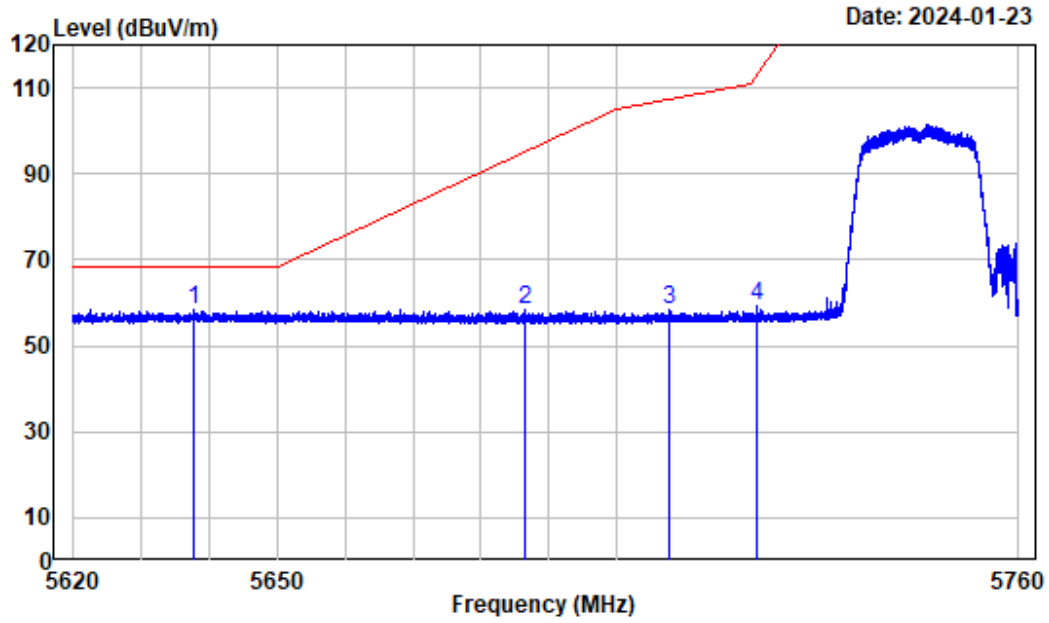
802.11a			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11A_ANT2

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5850.300	3.67	54.67	58.34	121.52	Peak	-63.18
2	5855.320	3.70	55.59	59.29	110.71	Peak	-51.42
3	5912.900	3.82	55.53	59.35	77.13	Peak	-17.78
4	5949.220	3.74	54.98	58.72	68.20	Peak	-9.48

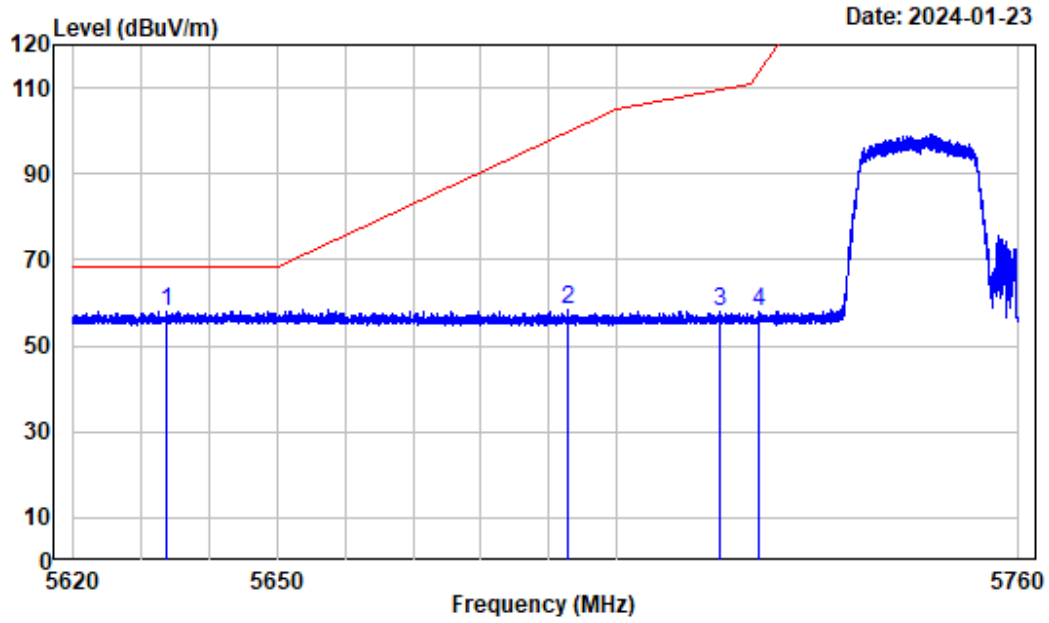
802.11ac20			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC20

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5637.806	3.18	55.43	58.61	68.20	Peak	-9.59
2	5686.417	3.40	55.05	58.45	95.18	Peak	-36.73
3	5707.982	3.46	54.78	58.24	107.44	Peak	-49.20
4	5720.905	3.48	55.68	59.16	112.86	Peak	-53.70

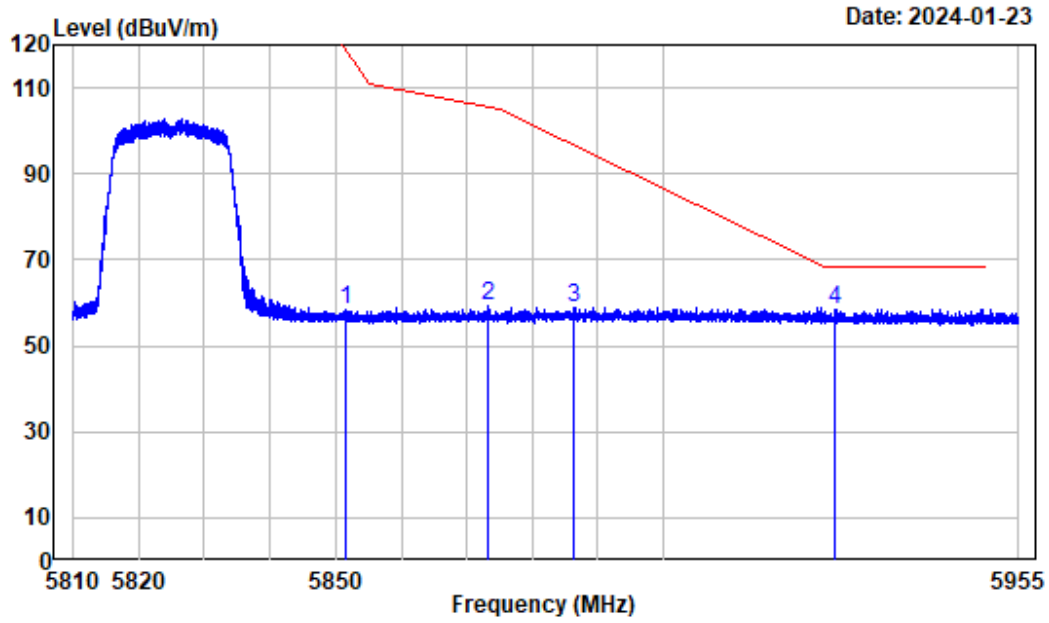
802.11ac20			
Test Channel:	**5745MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC20

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5633.640	3.15	54.90	58.05	68.20	Peak	-10.15
2	5692.792	3.42	54.96	58.38	99.89	Peak	-41.51
3	5715.480	3.47	54.67	58.14	109.54	Peak	-51.40
4	5721.138	3.48	54.57	58.05	113.39	Peak	-55.34

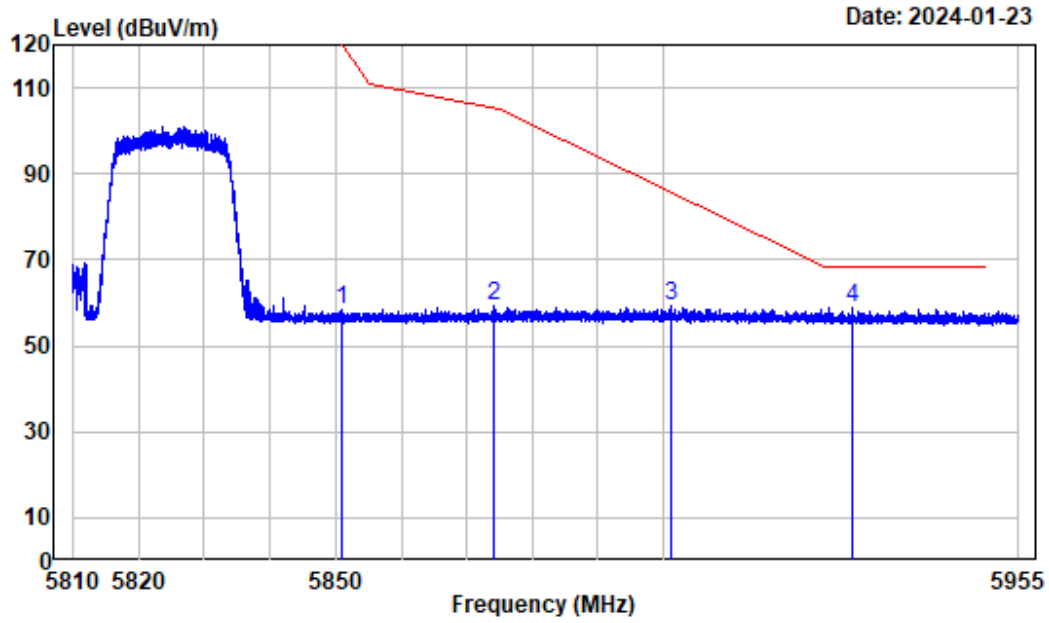
802.11ac20			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC20

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5851.560	3.68	54.53	58.21	118.64	Peak	-60.43
2	5873.320	3.76	55.37	59.13	105.67	Peak	-46.54
3	5886.260	3.82	55.17	58.99	96.84	Peak	-37.85
4	5926.460	3.79	54.67	58.46	68.20	Peak	-9.74

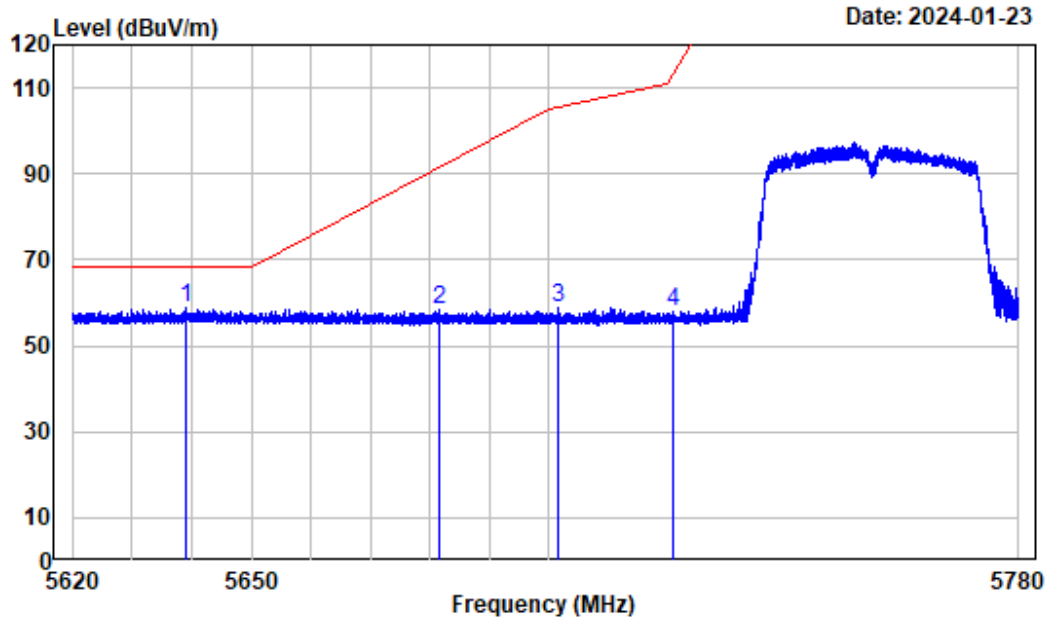
802.11ac20			
Test Channel:	**5825MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC20

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5850.800	3.67	54.78	58.45	120.38	Peak	-61.93
2	5874.100	3.77	55.35	59.12	105.45	Peak	-46.33
3	5901.240	3.86	55.25	59.11	85.74	Peak	-26.63
4	5929.320	3.78	55.12	58.90	68.20	Peak	-9.30

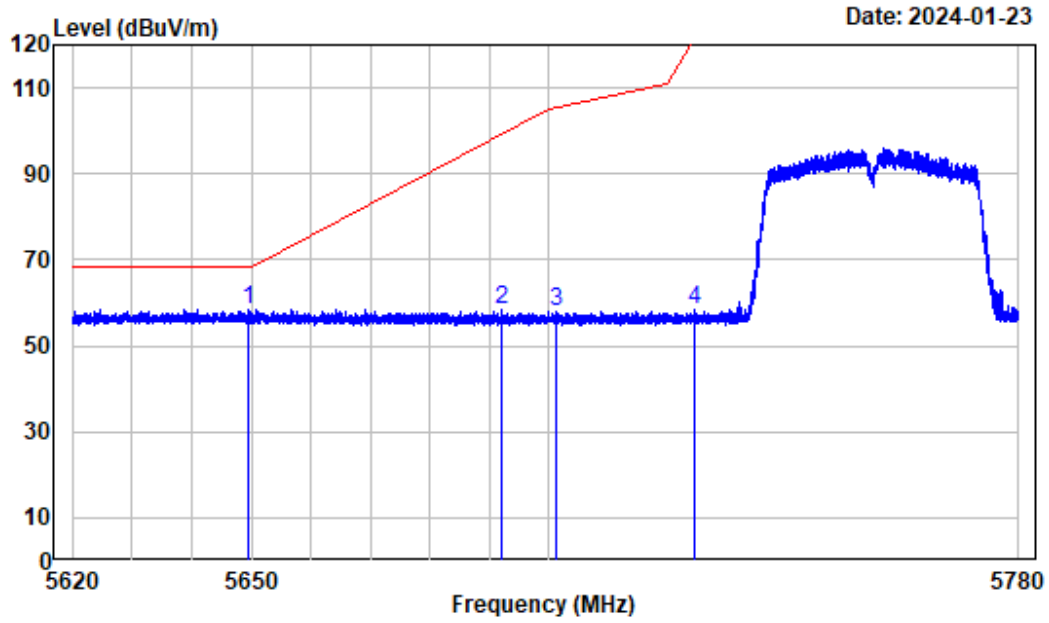
802.11ac40			
Test Channel:	**5755MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC40

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5638.860	3.19	55.74	58.93	68.20	Peak	-9.27
2	5681.640	3.39	55.00	58.39	91.65	Peak	-33.26
3	5701.700	3.45	55.64	59.09	105.68	Peak	-46.59
4	5720.920	3.48	54.59	58.07	112.90	Peak	-54.83

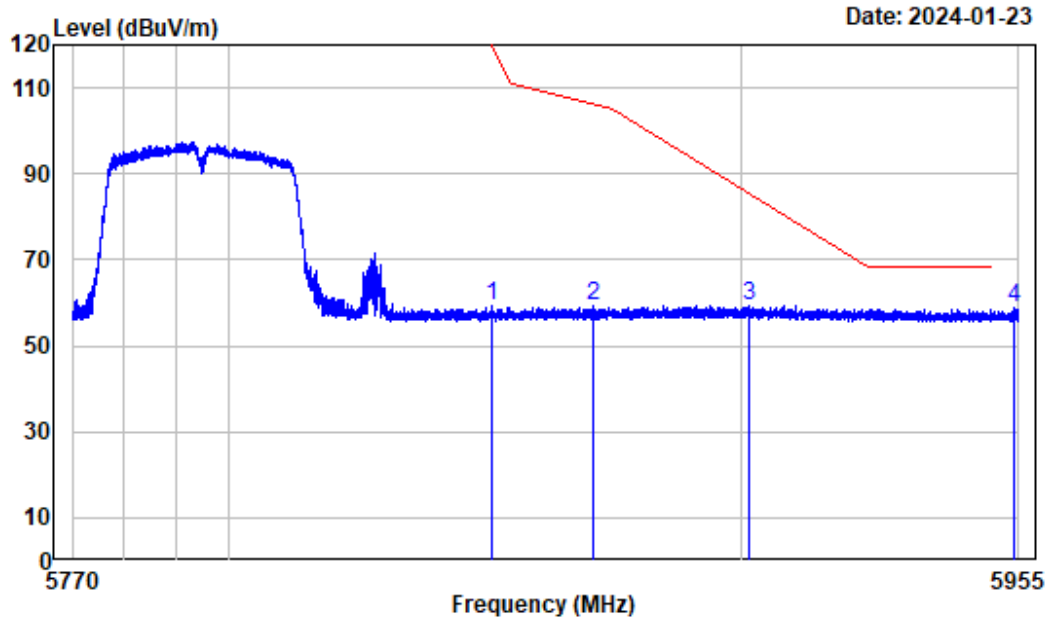
802.11ac40			
Test Channel:	**5755MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC40

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5649.480	3.28	55.28	58.56	68.20	Peak	-9.64
2	5692.120	3.42	55.06	58.48	99.39	Peak	-40.91
3	5701.160	3.45	54.70	58.15	105.53	Peak	-47.38
4	5724.700	3.48	55.04	58.52	121.52	Peak	-63.00

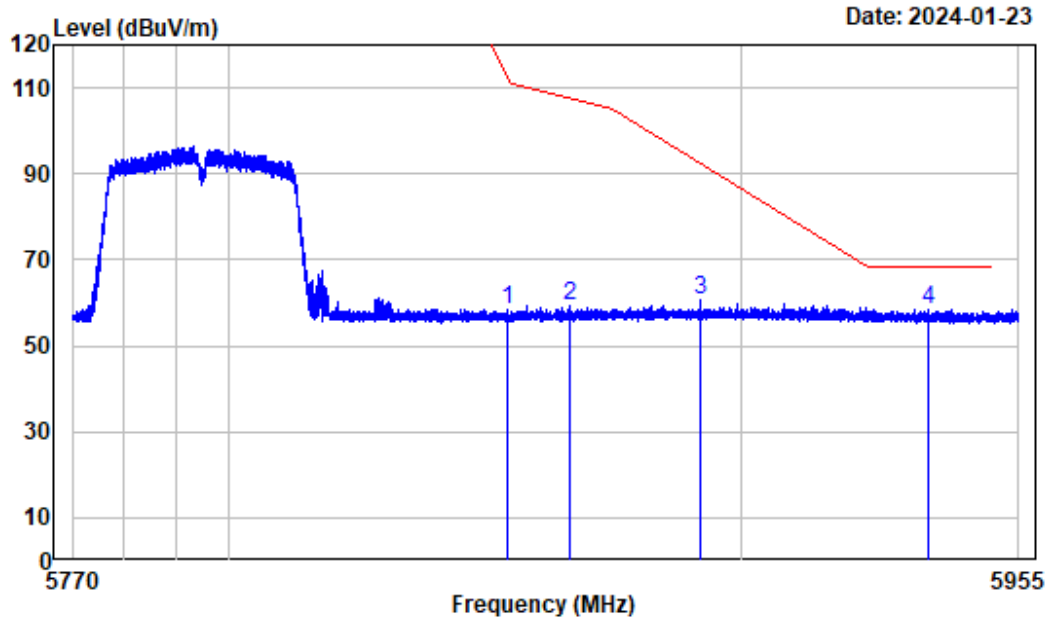
802.11ac40			
Test Channel:	**5795MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC40

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5851.308	3.68	55.77	59.45	119.22	Peak	-59.77
2	5871.288	3.76	55.74	59.50	106.24	Peak	-46.74
3	5901.905	3.86	55.65	59.51	85.25	Peak	-25.74
4	5954.075	3.72	55.36	59.08	68.20	Peak	-9.12

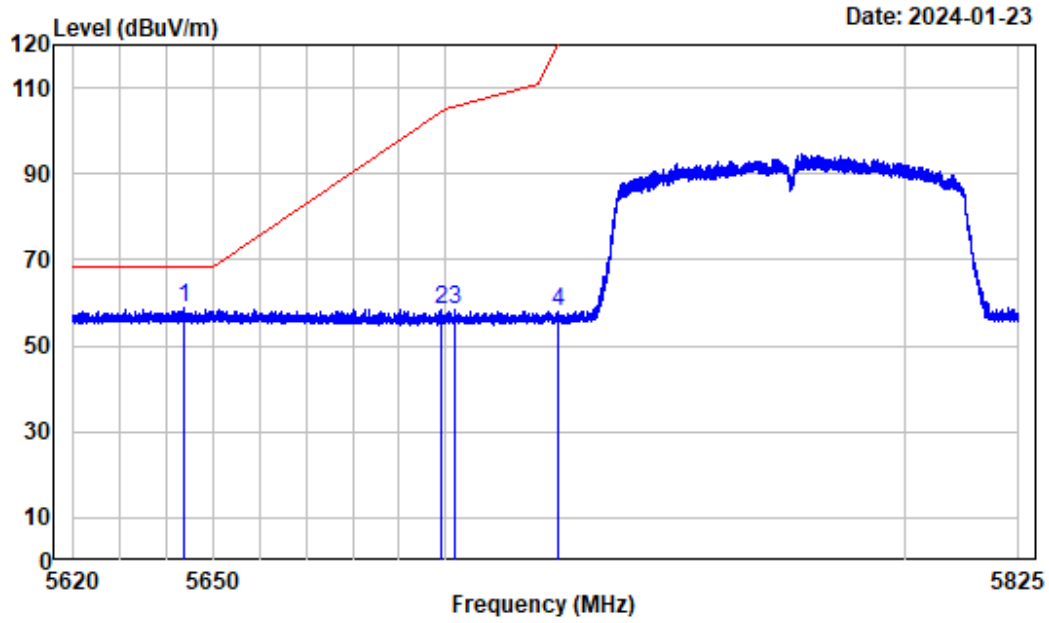
802.11ac40			
Test Channel:	**5795MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC40

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5854.198	3.70	54.63	58.33	112.63	Peak	-54.30
2	5866.431	3.74	55.61	59.35	107.60	Peak	-48.25
3	5892.077	3.83	56.79	60.62	92.53	Peak	-31.91
4	5937.147	3.77	54.84	58.61	68.20	Peak	-9.59

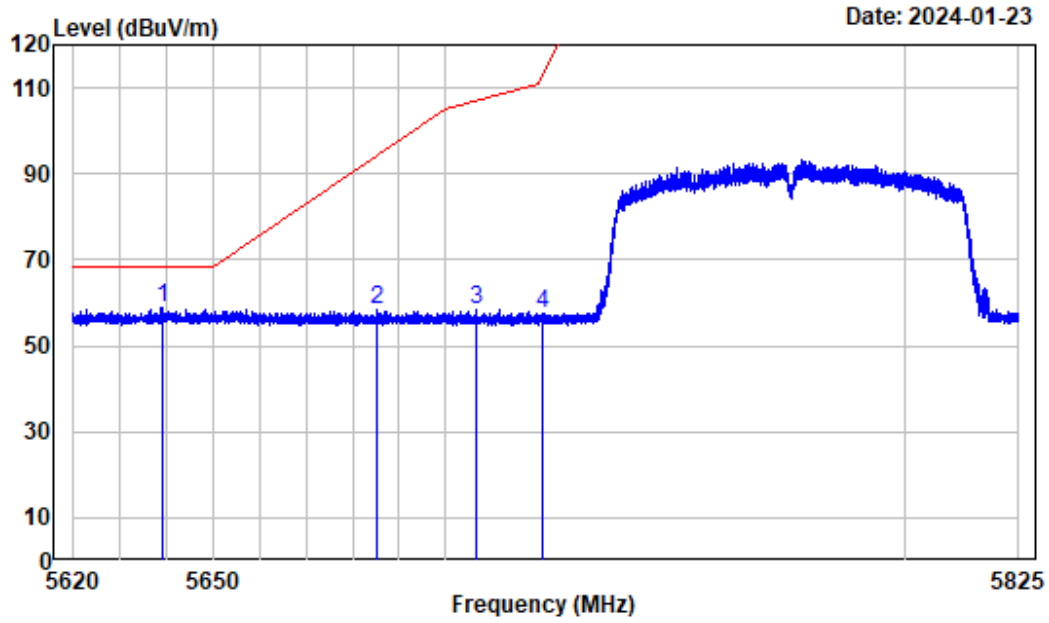
802.11ac80			
Test Channel:	**5775MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC80

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5643.857	3.22	55.54	58.76	68.20	Peak	-9.44
2	5699.156	3.45	55.16	58.61	104.58	Peak	-45.97
3	5702.000	3.45	54.75	58.20	105.76	Peak	-47.56
4	5724.447	3.48	54.64	58.12	120.94	Peak	-62.82

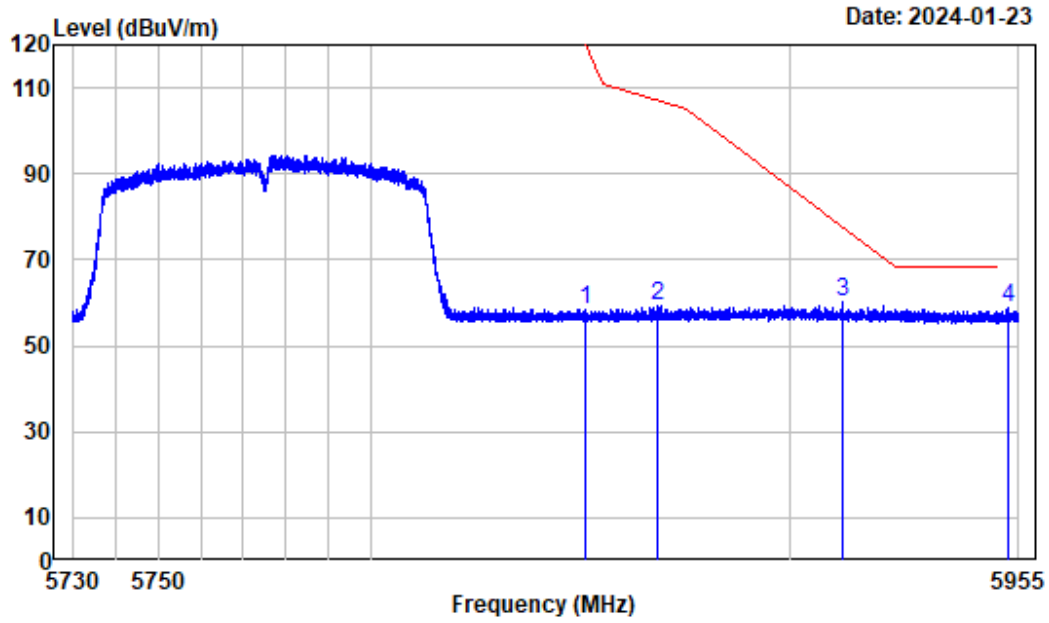
802.11ac80			
Test Channel:	**5775MHz**	**Ant. Polar. :**	**Vertical**



Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC80

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5639.373	3.19	55.73	58.92	68.20	Peak	-9.28
2	5685.292	3.40	54.97	58.37	94.35	Peak	-35.98
3	5706.638	3.45	55.10	58.55	107.06	Peak	-48.51
4	5721.142	3.48	54.07	57.55	113.40	Peak	-55.85

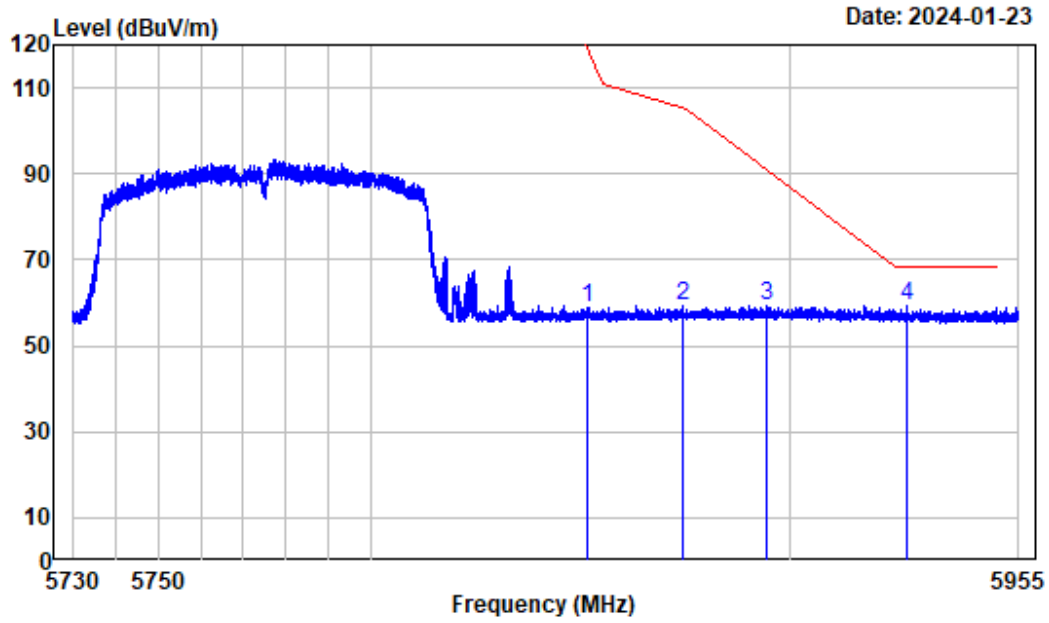
802.11ac80			
Test Channel:	**5775MHz**	**Ant. Polar. :**	**Horizontal**



Condition : Horizontal
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC80

	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5850.797	3.67	54.72	58.39	120.38	Peak	-61.99
2	5867.925	3.75	55.43	59.18	107.18	Peak	-48.00
3	5912.560	3.82	56.28	60.10	77.38	Peak	-17.28
4	5952.328	3.73	55.05	58.78	68.20	Peak	-9.42

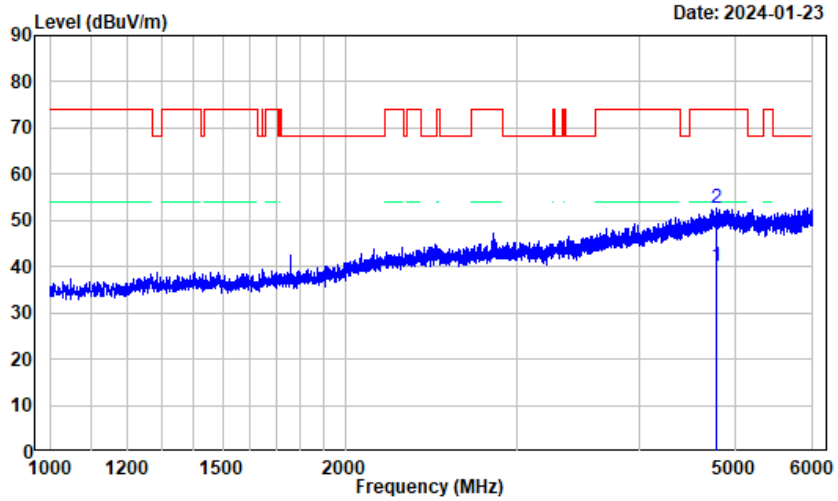
802.11ac80			
Test Channel:	**5775MHz**	**Ant. Polar. :**	**Vertical**

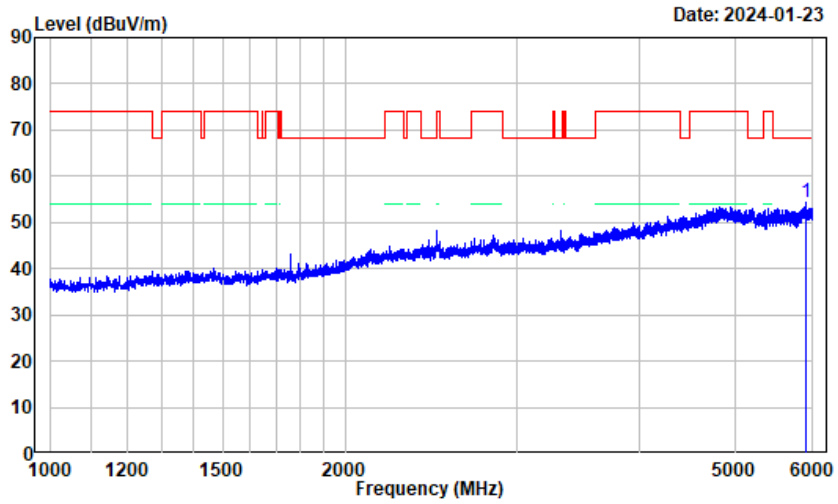


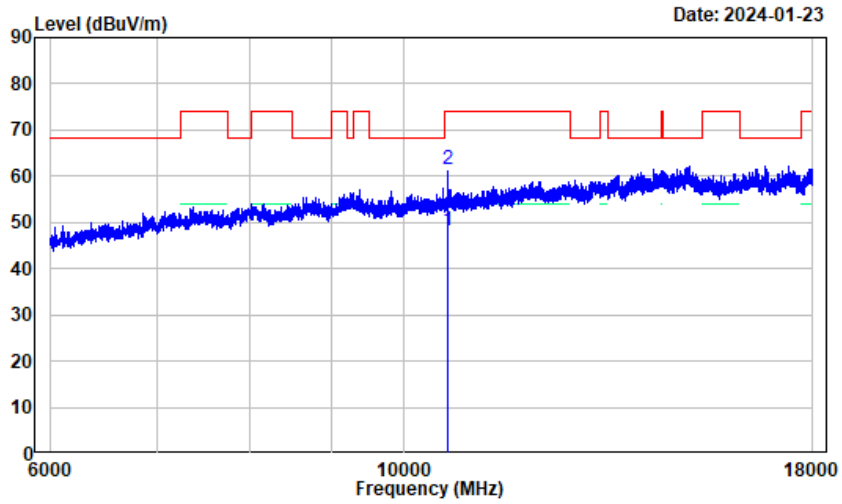
Condition : Vertical
Project No.: SZ1231214-75457E-RF
Tester : Zenos Qiao
Note : 802.11AC80

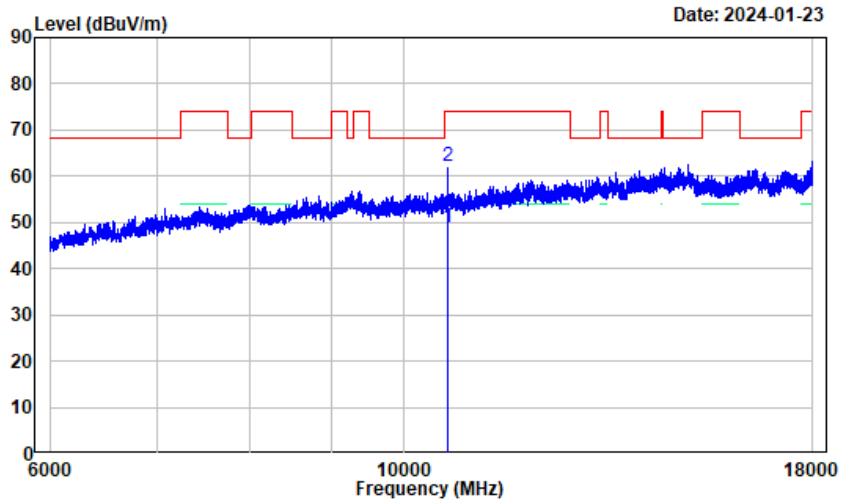
	Freq	Factor	Read Level	Level	Limit Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5851.556	3.68	55.26	58.94	118.65	Peak	-59.71
2	5873.972	3.77	55.53	59.30	105.49	Peak	-46.19
3	5894.419	3.84	55.35	59.19	90.79	Peak	-31.60
4	5928.056	3.78	55.55	59.33	68.20	Peak	-8.87

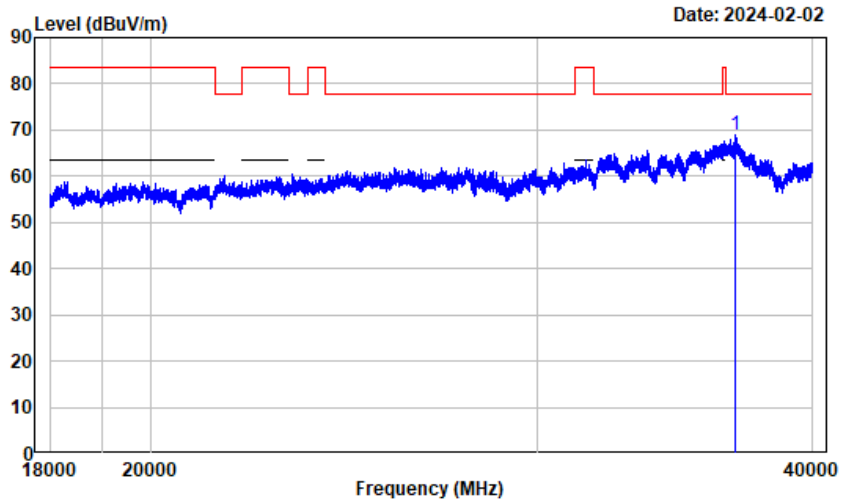
Listed with the worst harmonic margin test plot (802.11a, ANT1, 5320MHz)

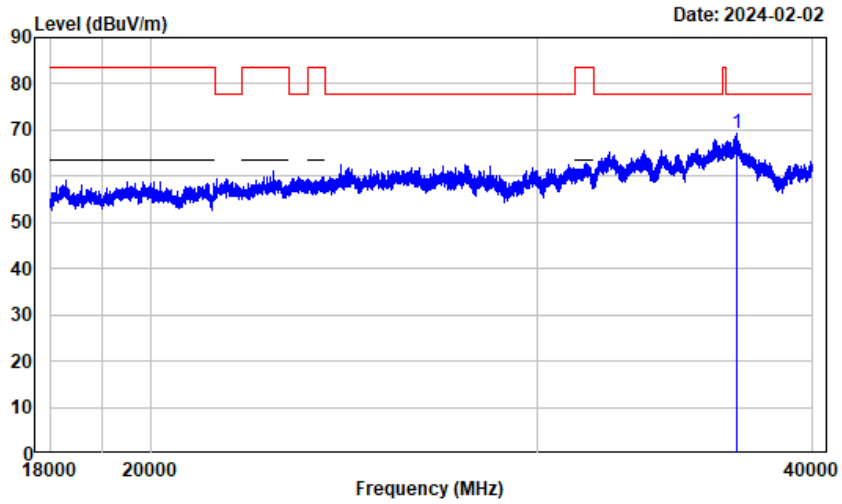
Horizontal	
1-6GHz	 Project No. : SZ1231214-75457E Tester : Dylan Polarization: Horizontal Note : 5Gwifi | | Freq | Factor | Read Level | Level | Limit Line | Remark | Over Limit | | | MHz | dB/m | dBuV | dBuV/m | dBuV/m | | dB | | 1 | 4789.375 | 2.42 | 37.67 | 40.09 | 54.00 | Average | -13.91 | | 2 | 4789.375 | 2.42 | 50.34 | 52.76 | 74.00 | Peak | -21.24 |

Vertical	
1-6GHz	 Project No. : SZ1231214-75457E Tester : Dylan Polarization: Vertical Note : 5Gwifi Freq / Factor / Read Level / Limit Level / Limit Line / Remark / Over Limit MHz / dB/m / dBuV / dBuV/m / dBuV/m / / dB 1 5904.375 3.85 50.38 54.23 68.20 Peak -13.97

Horizontal	
6-18GHz	 Project No. : SZ1231214-75457E Tester : Dylan Polarization: Horizontal Note : 5Gwifi Freq / Factor / Read Level / Limit Level / Limit Line / Remark / Over Limit MHz / dB/m / dBuV / dBuV/m / dBuV/m / / dB 1 10640.000 13.19 35.15 48.34 54.00 Average -5.66 2 10640.000 13.19 48.32 61.51 74.00 Peak -12.49

Vertical	
6-18GHz	 Project No. : SZ1231214-75457E Tester : Dylan Polarization: Vertical Note : 5Gwifi Freq / Factor / Read Level / Limit Level / Limit Line / Remark / Over Limit MHz / dB/m / dBuV / dBuV/m / dBuV/m / / dB 1 10640.000 13.19 35.64 48.83 54.00 Average -5.17 2 10640.000 13.19 48.89 62.08 74.00 Peak -11.92

Horizontal	
18-40GHz	 Project No. : SZ1231214-75457E Tester : Dylan Polarization: Horizontal Note : 5GWIFI Freq Factor Read Level Limit Level Limit Line Remark Over Limit MHz dB/m dBuV dBuV/m dBuV/m dB 1 36884.250 25.01 43.86 68.87 77.70 Peak -8.83

Vertical	
18-40GHz	 Project No. : SZ1231214-75457E Tester : Dylan Polarization: Vertical Note : 5GWIFI Freq / Factor / Read Level / Limit Level / Limit Line / Remark / Over Limit MHz / dB/m / dBuV / dBuV/m / dBuV/m / / dB 1 36958.500 24.94 44.37 69.31 77.70 Peak -8.39

FCC §15.407(a), (e) – 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%.

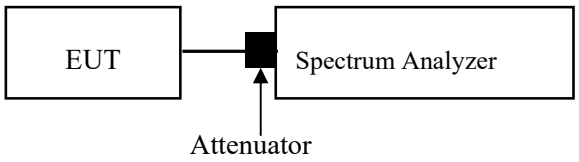
2. Minimum Emission Bandwidth for the band 5.725-5.85 GHz
Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth:
a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3 × RBW.
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).



Test Data

Environmental Conditions

Temperature:	25.4 ℃
Relative Humidity:	44 %
ATM Pressure:	101 kPa

The testing was performed by Cheeb Huang on 2024-01-20.

EUT operation mode: Transmitting

Test Result: Compliant.

5150-5250MHz:

Test Modes	Test Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5180	18.76	16.36
	5200	18.85	16.36
	5240	18.76	16.32
802.11ac vht20	5180	19.88	17.52
	5200	19.75	17.52
	5240	19.8	17.52
802.11ac vht40	5190	39.6	36.00
	5230	39.69	36.00
802.11ac vht80	5210	83.81	75.04
Note: Test only was performed at ANT 1. The 99% Occupied Bandwidth have not fall into the band 5250-5350MHz, please refer to the test plots of 99% Occupied Bandwidth			

5250-5350MHz:

Test Modes	Test Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260	18.84	16.36
	5280	18.88	16.36
	5320	18.76	16.36
802.11ac vht20	5260	19.72	17.48
	5280	19.64	17.48
	5320	19.68	17.52
802.11ac vht40	5270	39.52	36.00
	5310	39.36	35.92
802.11ac vht80	5290	83.04	75.36
Note: Test only was performed at ANT 1.			

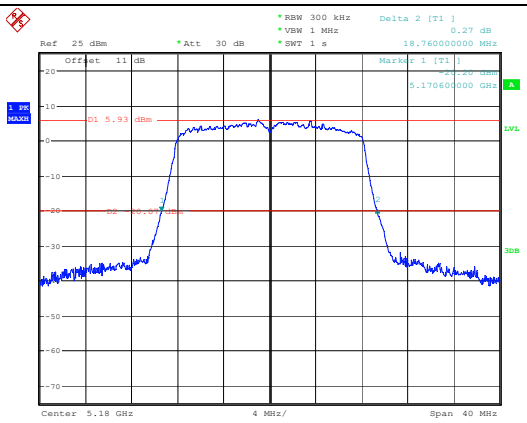
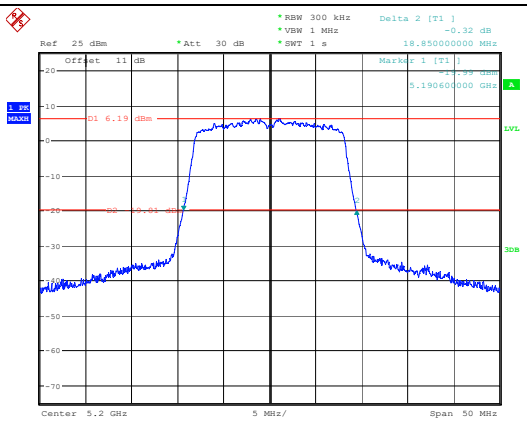
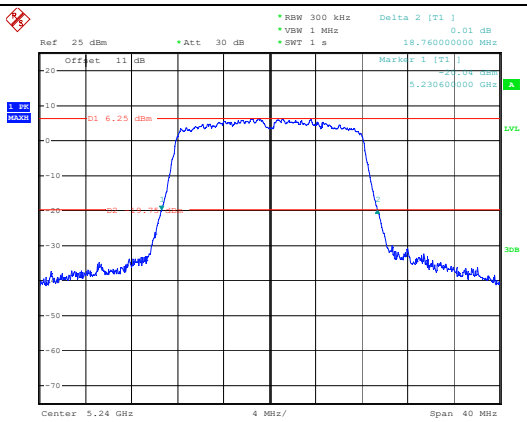
5470-5725MHz:

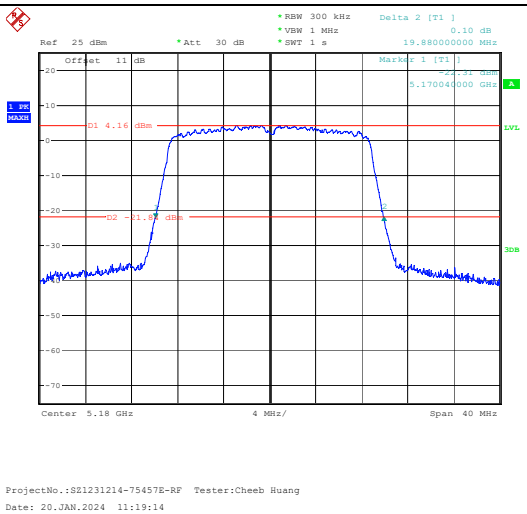
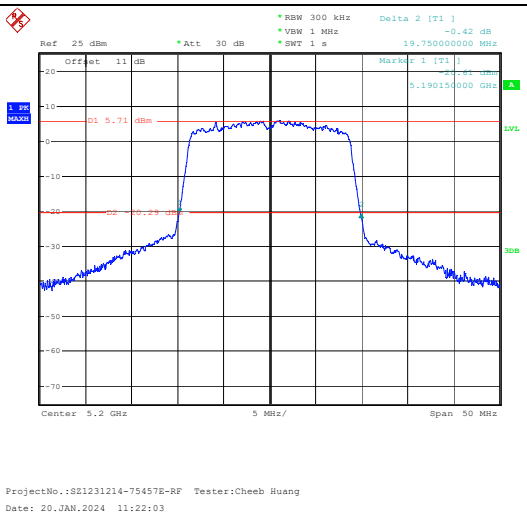
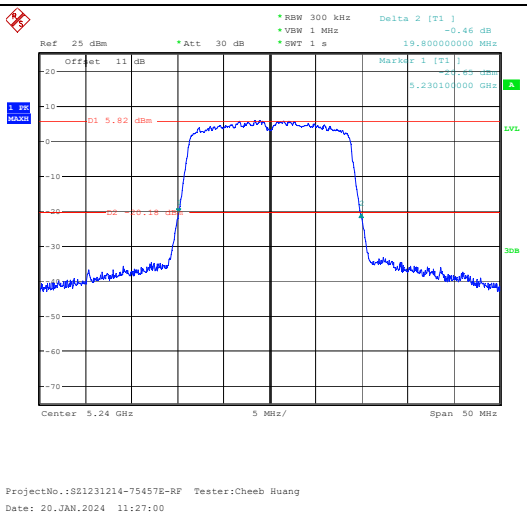
Test Modes	Test Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5500	19.48	16.44
	5580	18.88	16.44
	5700	18.68	16.28
	5720	20.2	16.48
802.11ac vht20	5500	19.72	17.52
	5580	19.72	17.60
	5700	19.52	17.40
	5720	19.88	17.56
802.11ac vht40	5510	39.68	36.00
	5550	41.76	36.08
	5670	39.28	35.76
	5710	39.44	35.84
802.11ac vht80	5530	84.32	75.20
	5610	85.28	75.52
	5690	91.84	75.36
Note: Test only was performed at ANT 1.			

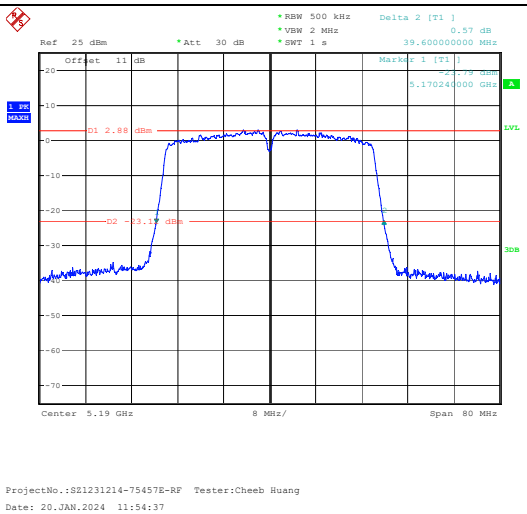
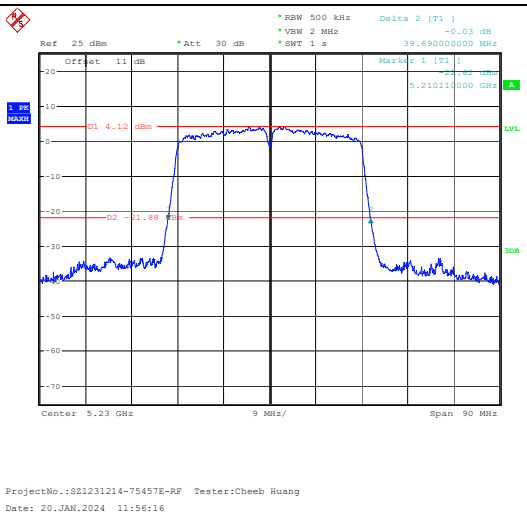
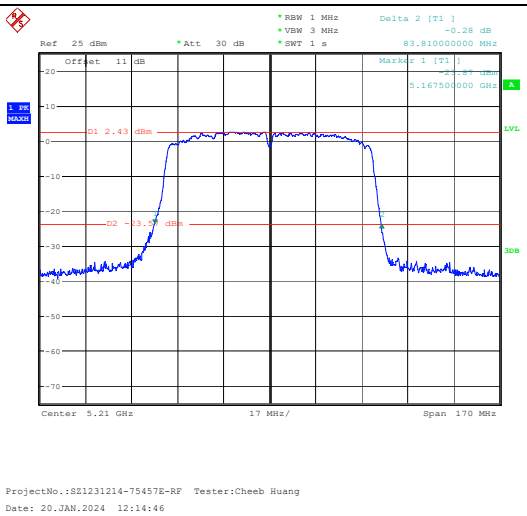
5725-5850MHz:

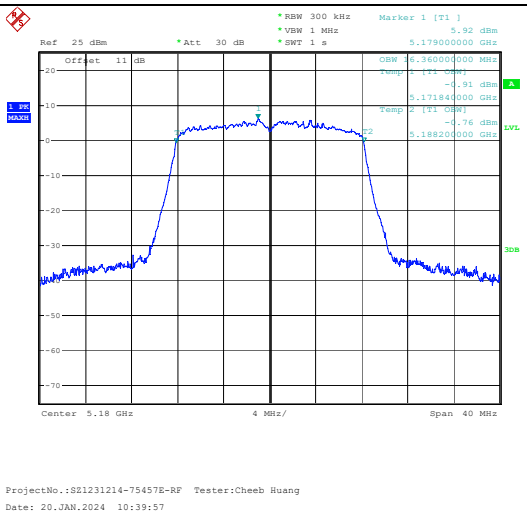
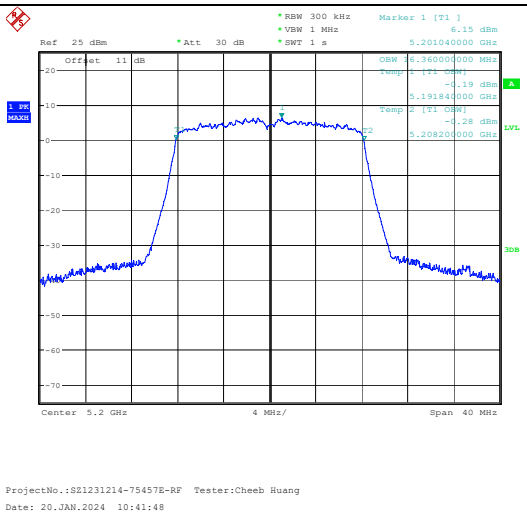
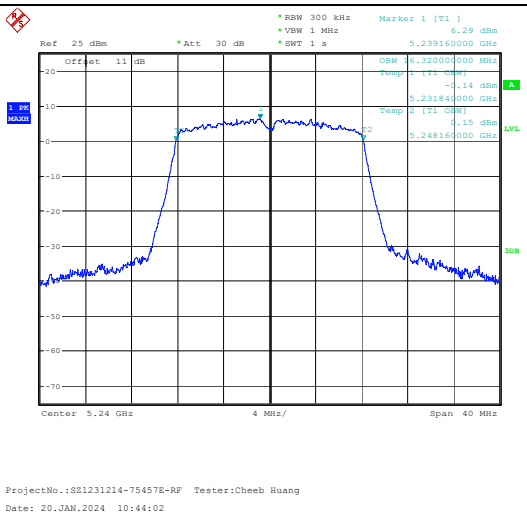
Test Modes	Test Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5745	15.60	16.72
	5785	15.64	16.60
	5825	15.64	16.92
802.11ac vht20	5745	16.24	17.76
	5785	16.12	17.72
	5825	16.12	17.92
802.11ac vht40	5755	35.28	36.24
	5795	35.28	36.40
802.11ac vht80	5775	75.36	76.00
Note: Test only was performed at ANT 1. 6dB Emission Bandwidth Limit: ≥0.5 MHz The 99% Occupied Bandwidth have not fall into the band 5470-5725MHz, please refer to the test plots of 99% Occupied Bandwidth.			

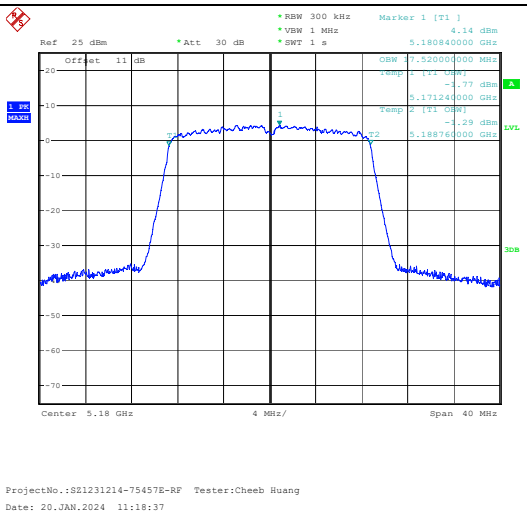
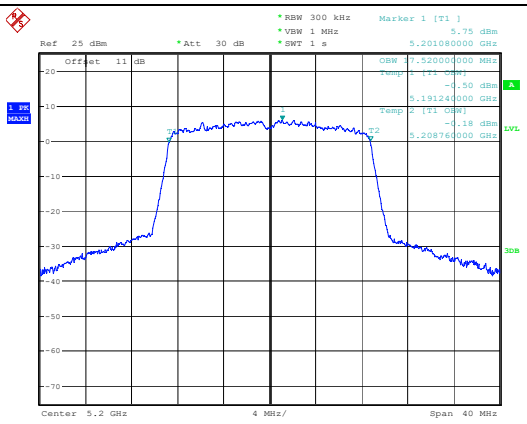
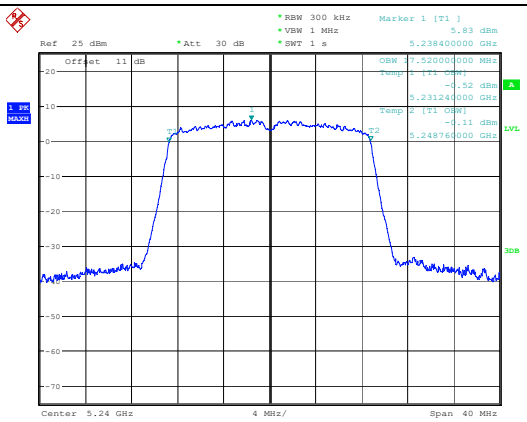
5150-5250MHz:

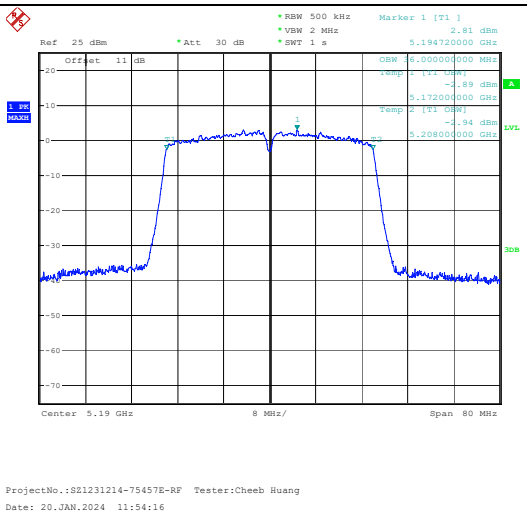
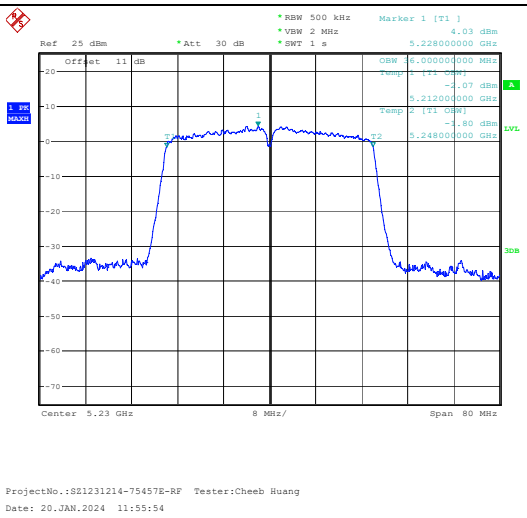
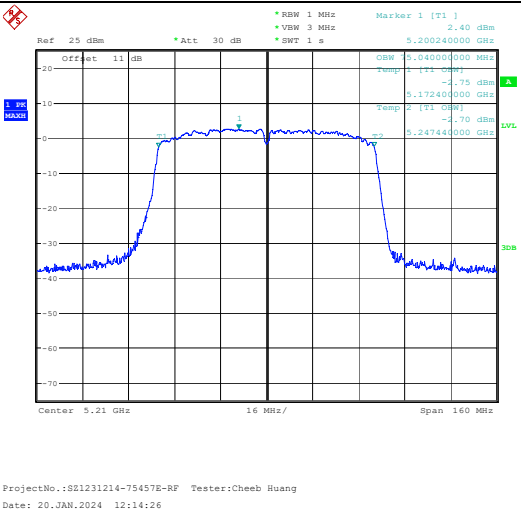
26dB Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

26dB Emission Bandwidth	
802.11ac vht20 Lowest Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 11:19:14
802.11ac vht20 Middle Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 11:22:03
802.11ac vht20 Highest Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 11:27:00

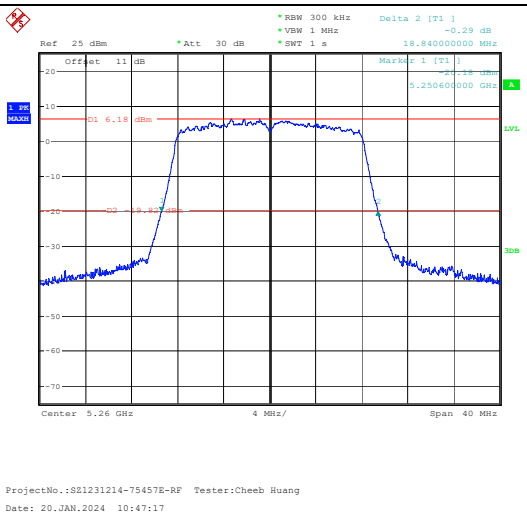
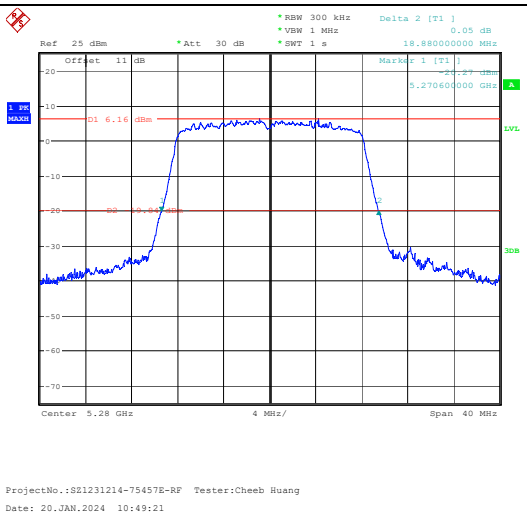
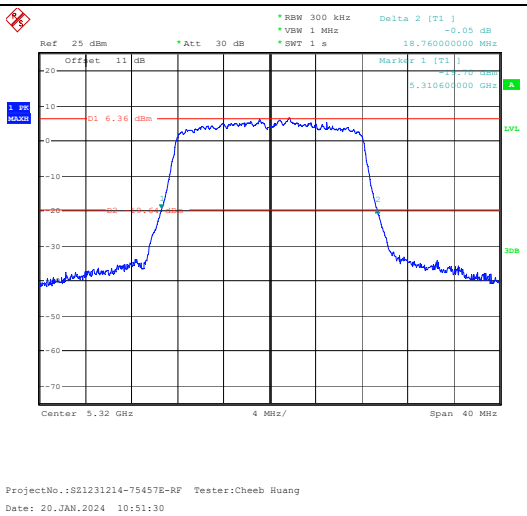
26dB Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

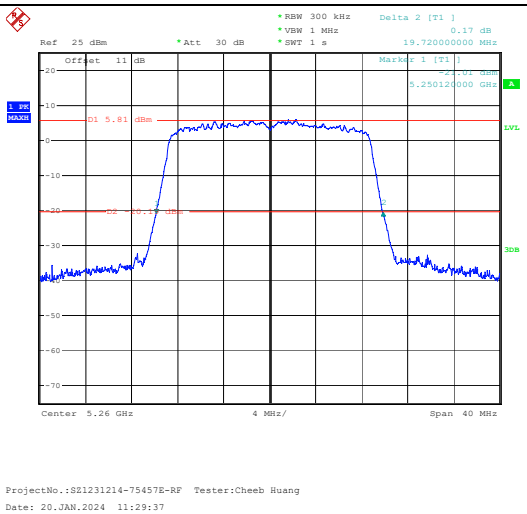
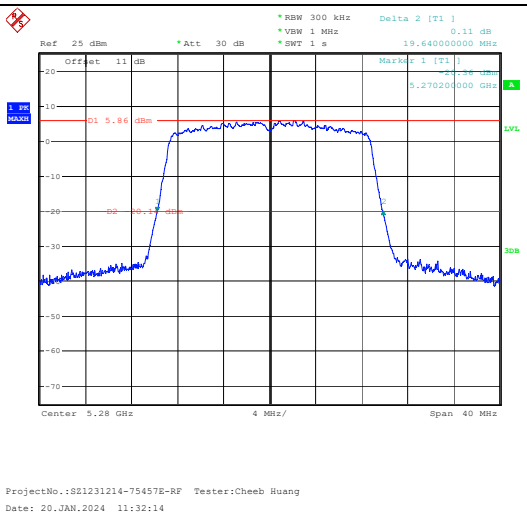
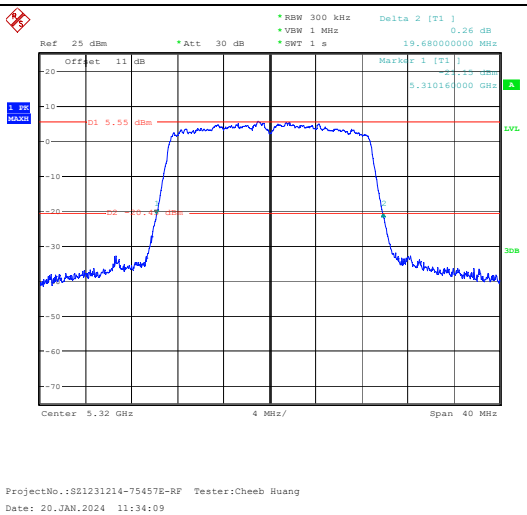
99% Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

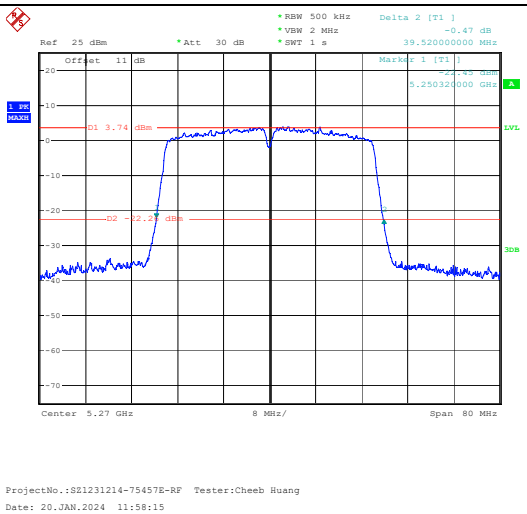
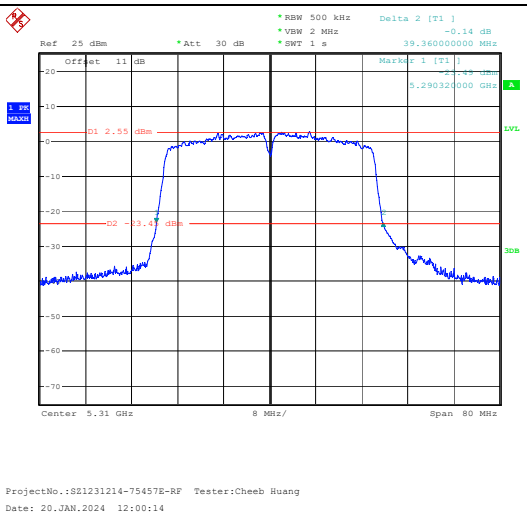
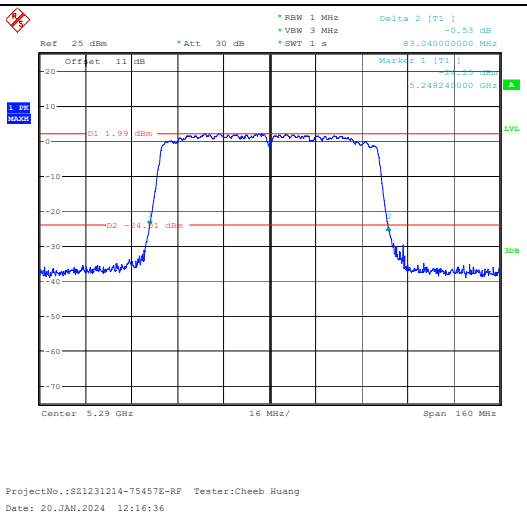
99% Emission Bandwidth	
802.11ac vht20 Lowest Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 11:18:37
802.11ac vht20 Middle Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 11:21:35
802.11ac vht20 Highest Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 11:26:36

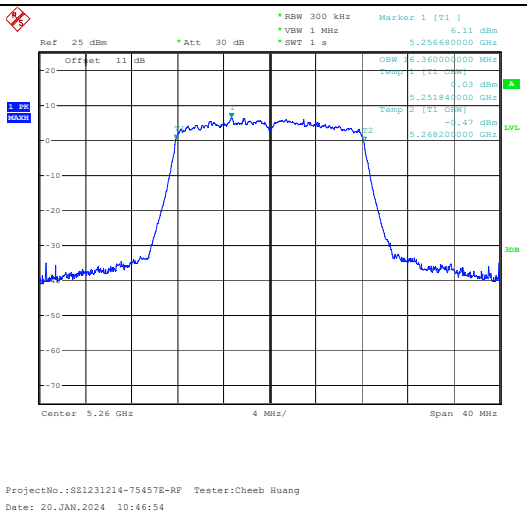
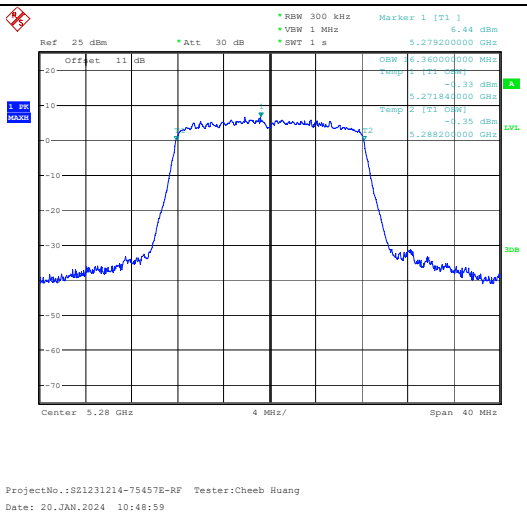
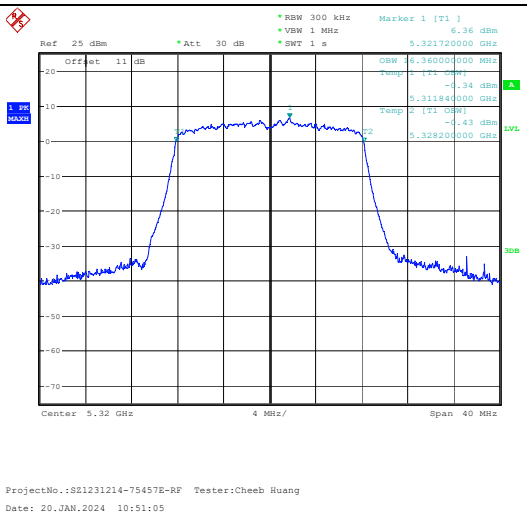
99% Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

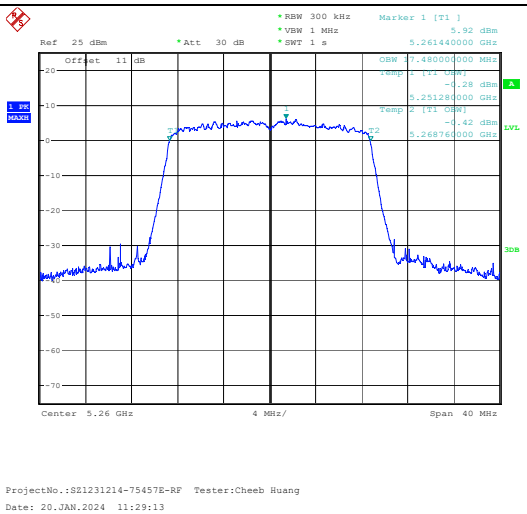
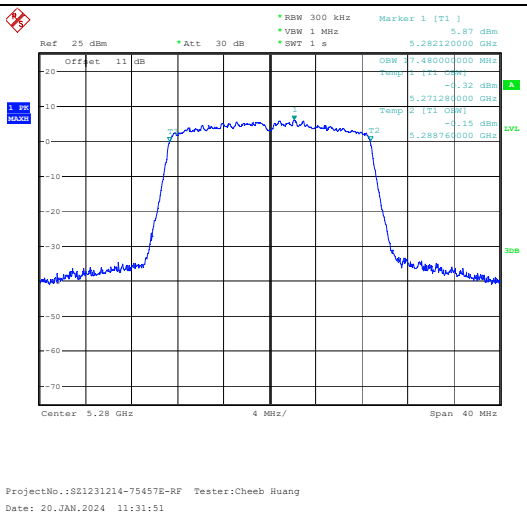
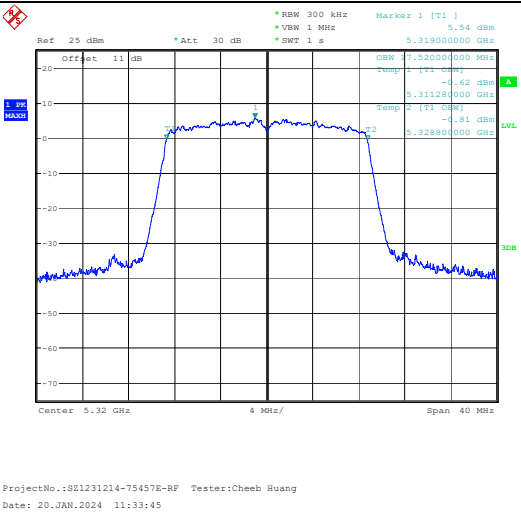
5250-5350MHz:

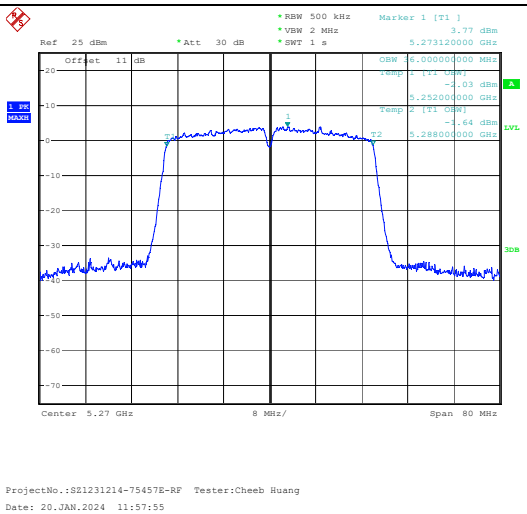
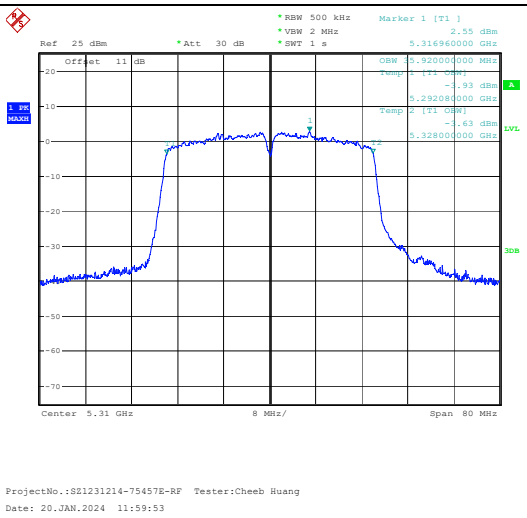
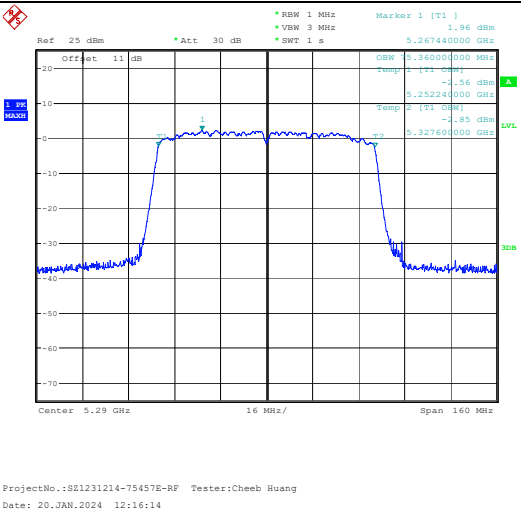
26dB Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

26dB Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

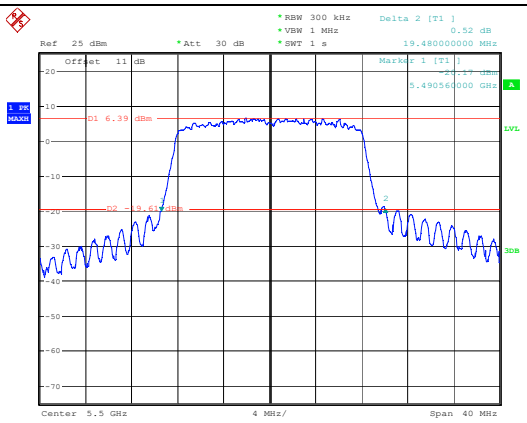
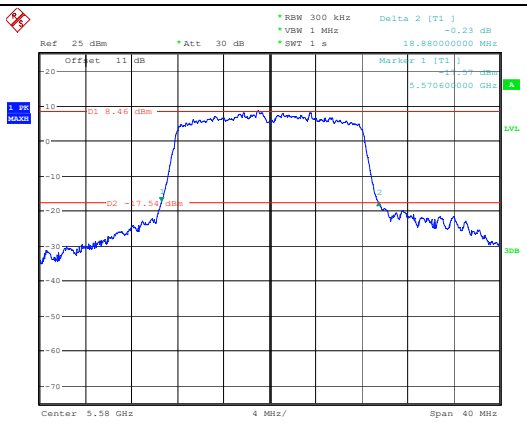
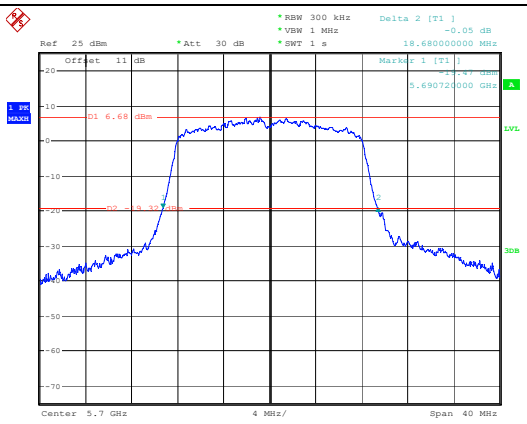
26dB Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

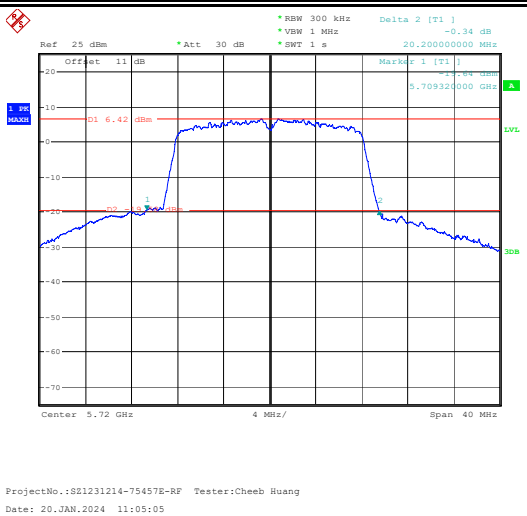
99% Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

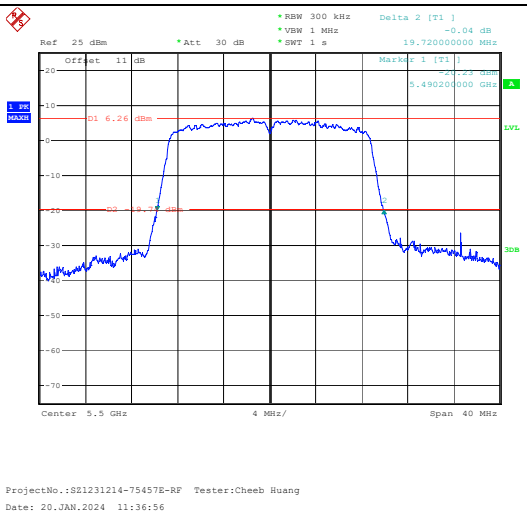
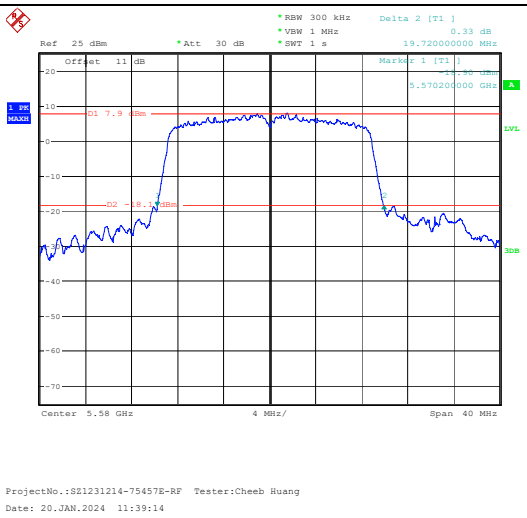
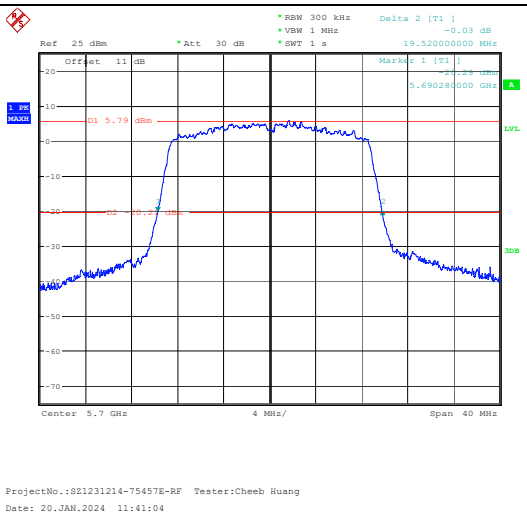
99% Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

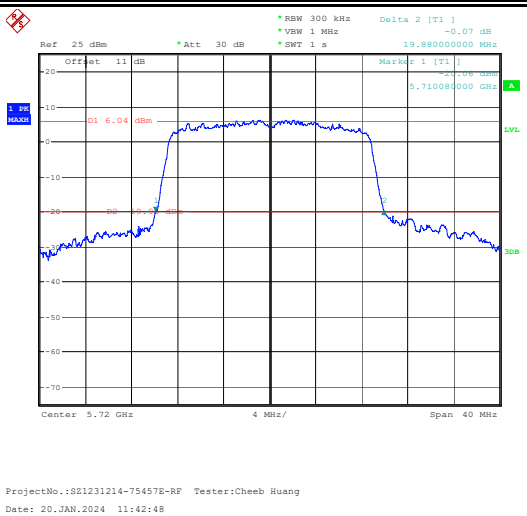
99% Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

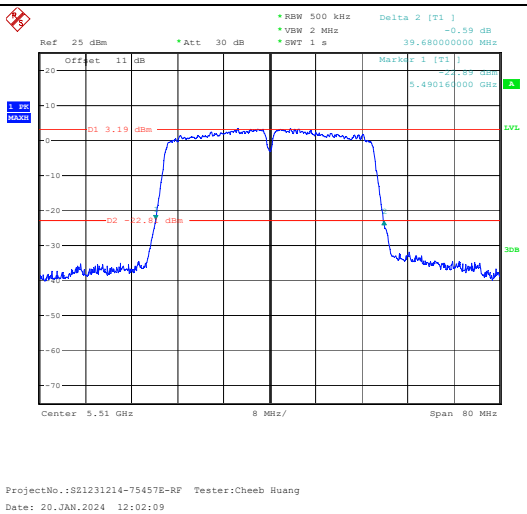
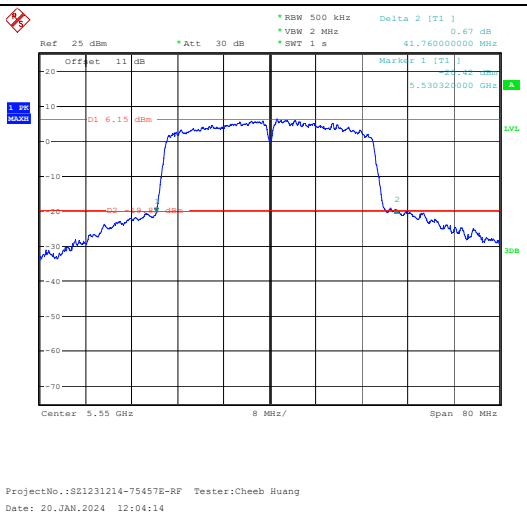
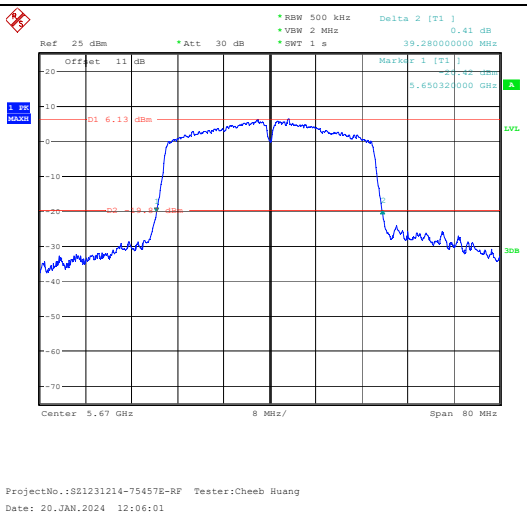
5470-5725MHz:

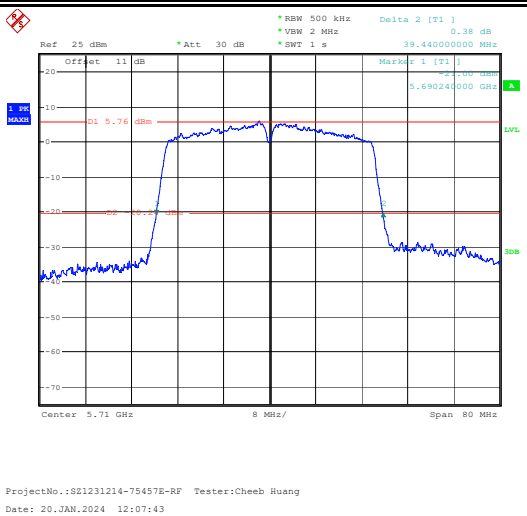
26dB Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

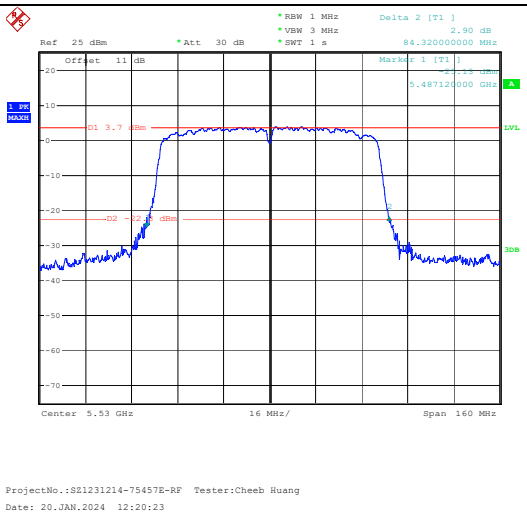
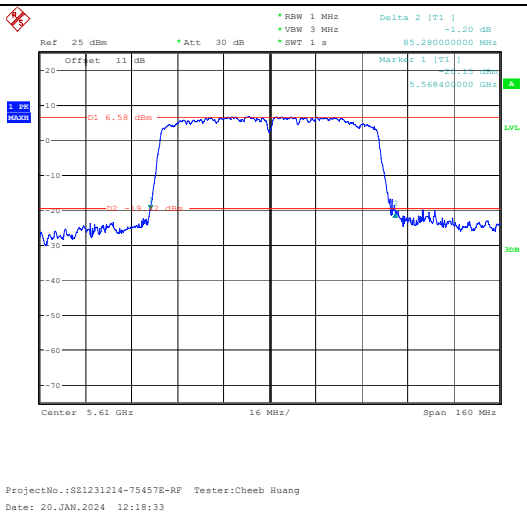
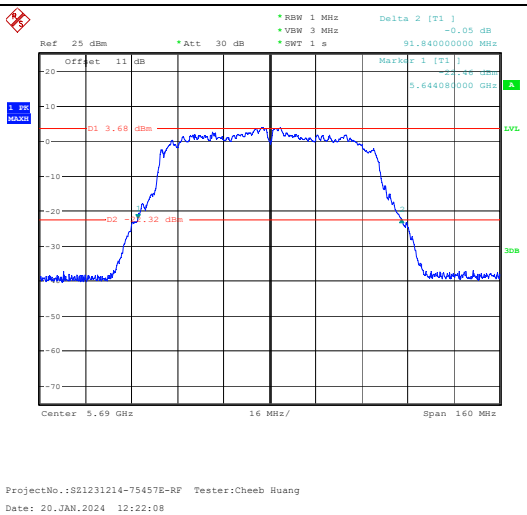
802.11a Cross Channel	

26dB Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

802.11ac vht20 Cross Channel	

26dB Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Middle Channel	
802.11ac vht40 Highest Channel	

802.11ac vht40 Cross Channel	

26dB Emission Bandwidth	
802.11ac vht80 Lowest Channel	
802.11ac vht80 Highest Channel	
802.11ac vht80 Cross Channel	

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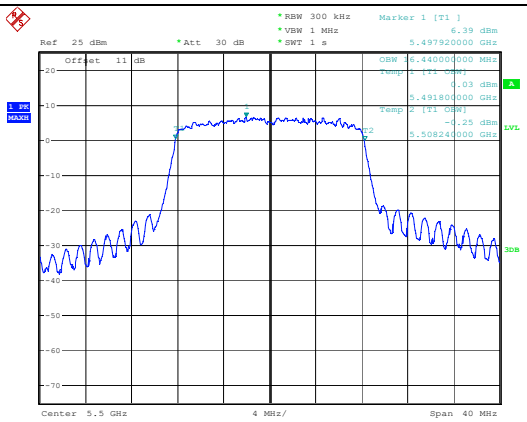
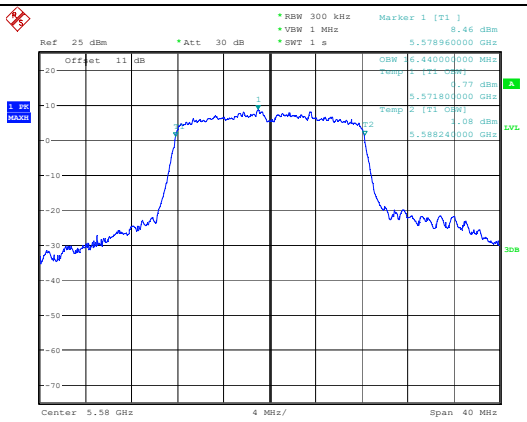
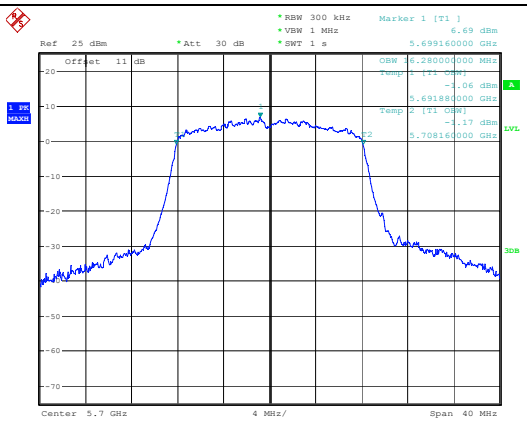
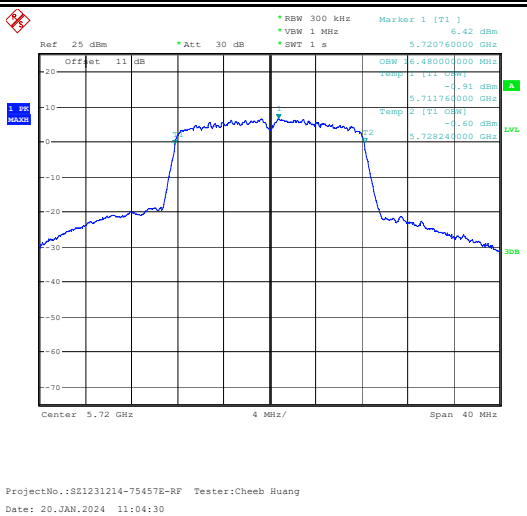
802.11a Lowest Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 10:55:09
802.11a Middle Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 10:57:38
802.11a Highest Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 11:00:08

802.11a Cross Channel	

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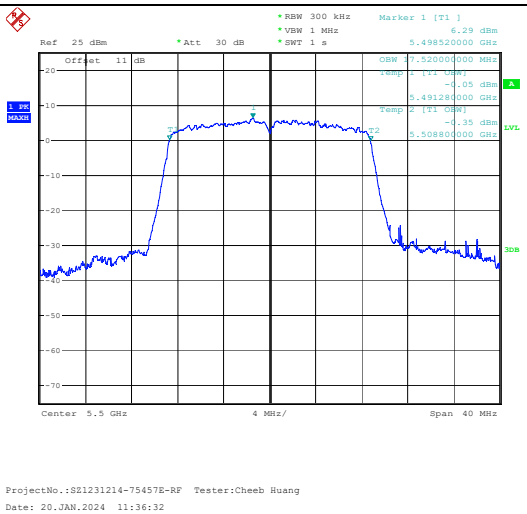
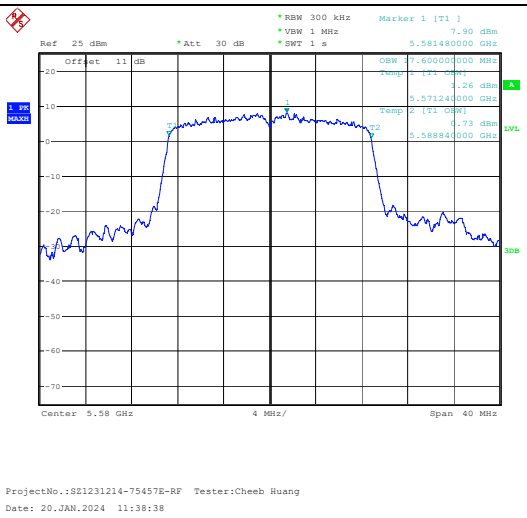
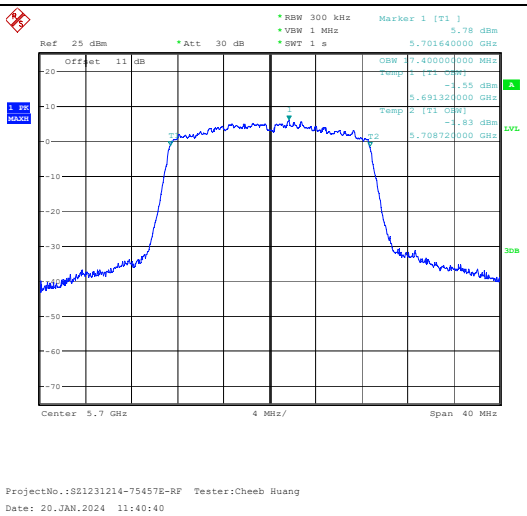
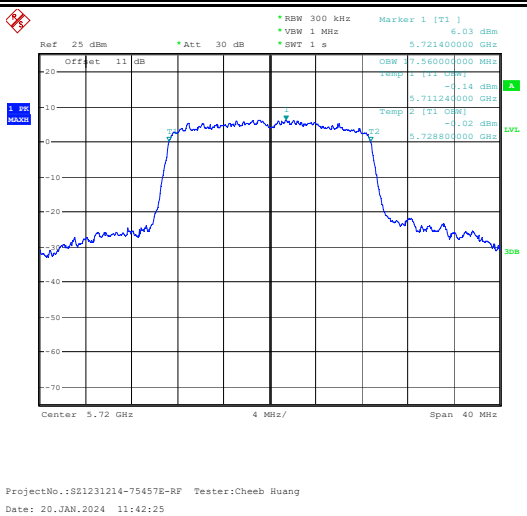
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

802.11ac vht20 Cross Channel	

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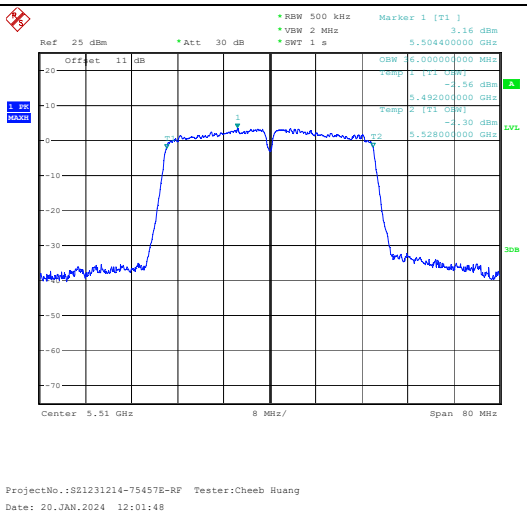
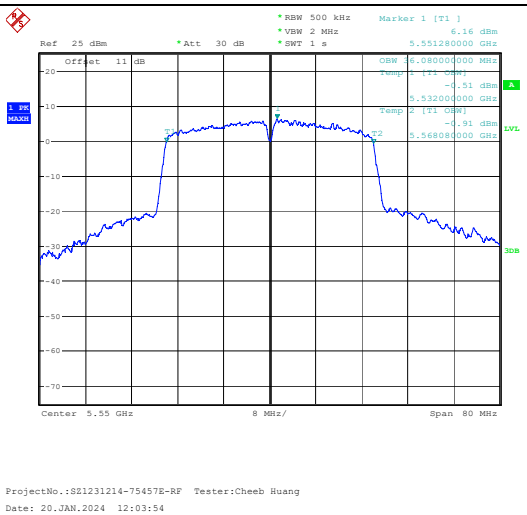
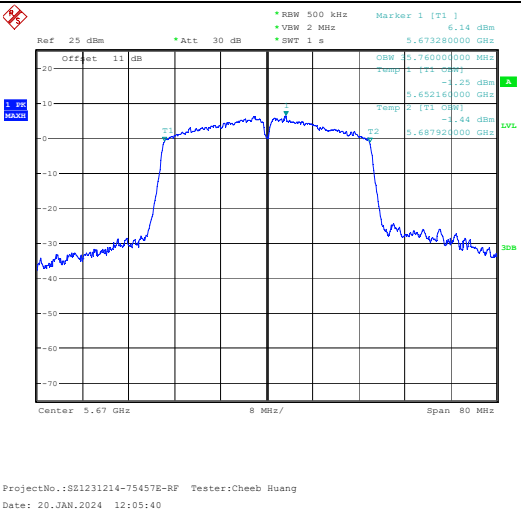
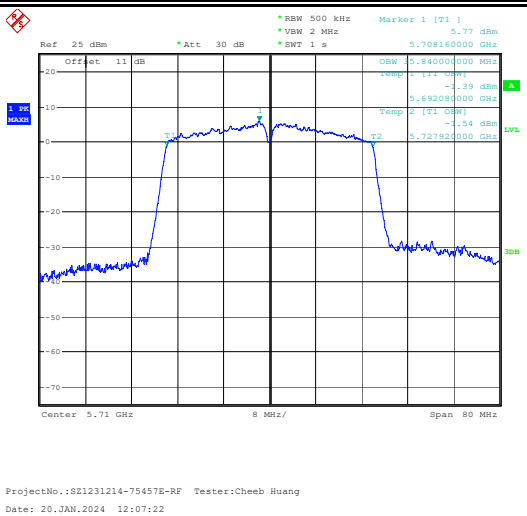
802.11ac vht40 Lowest Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 12:01:48
802.11ac vht40 Middle Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 12:03:54
802.11ac vht40 Highest Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 12:05:40

802.11ac vht40 Cross Channel	

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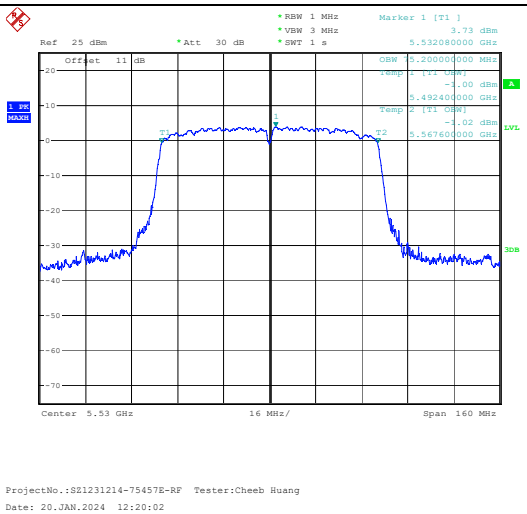
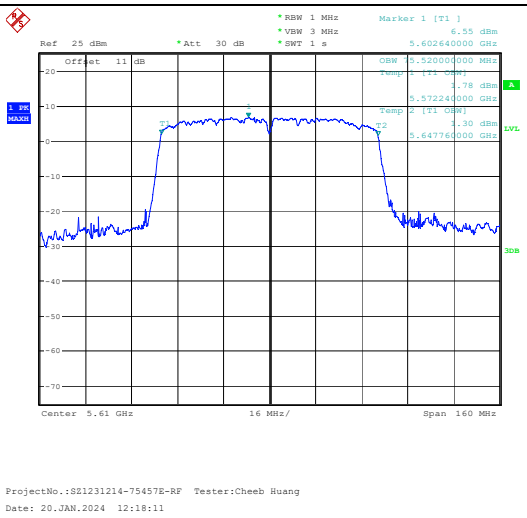
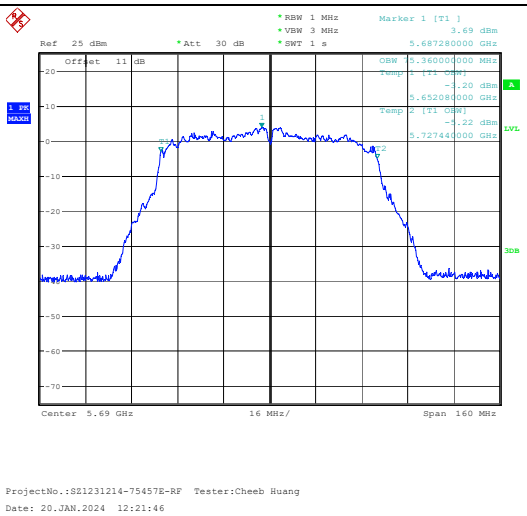
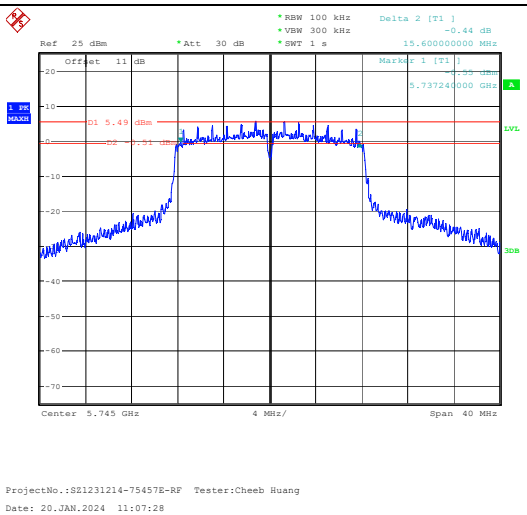
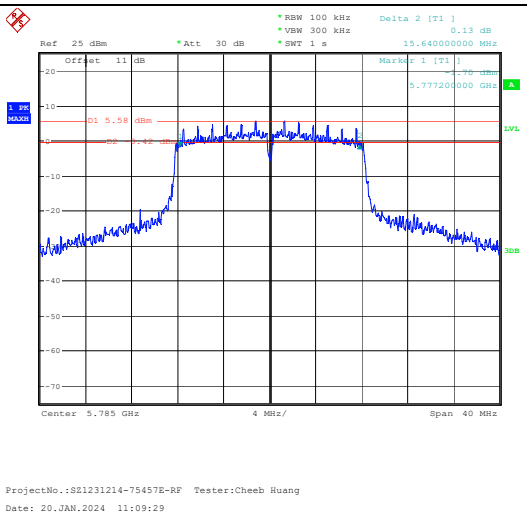
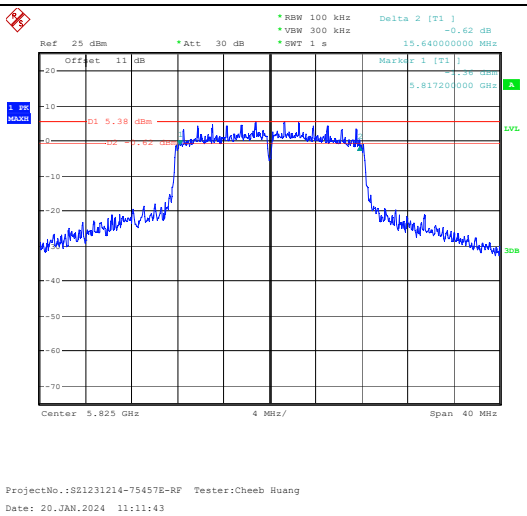
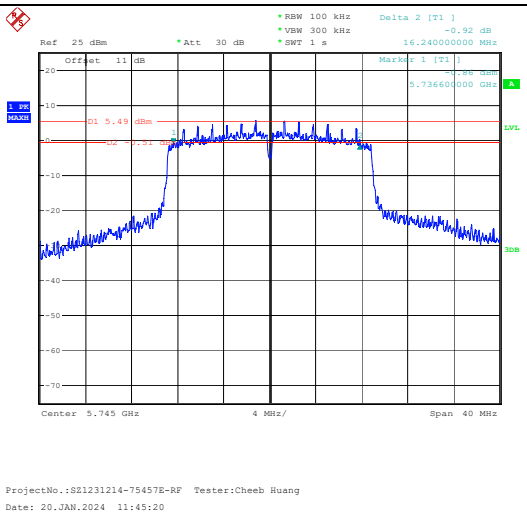
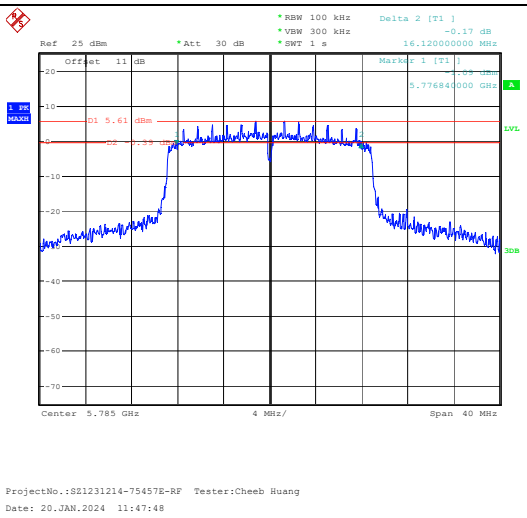
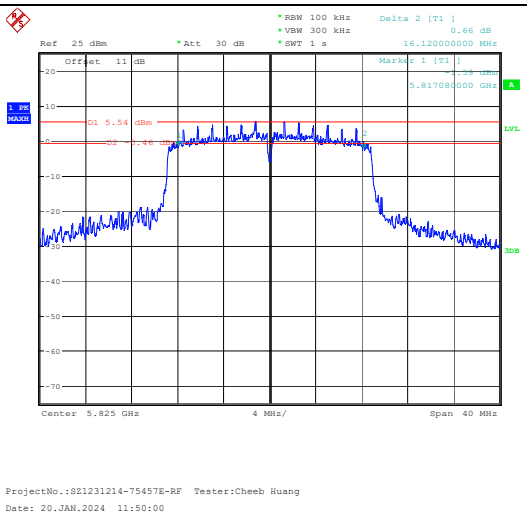
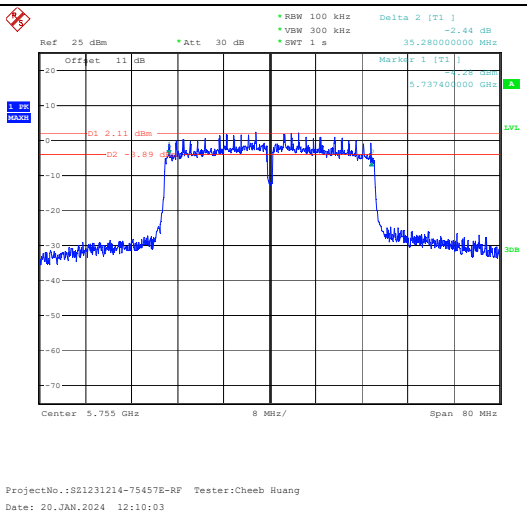
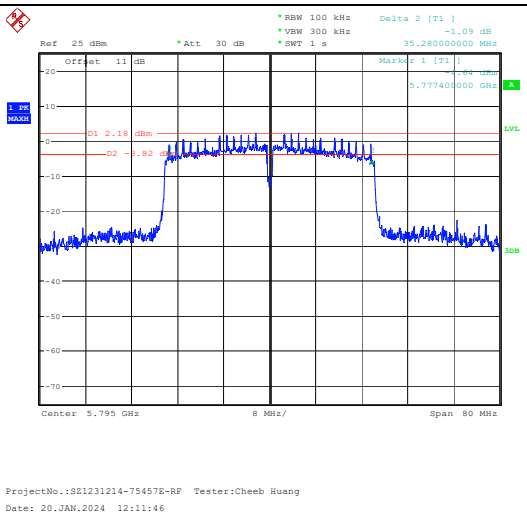
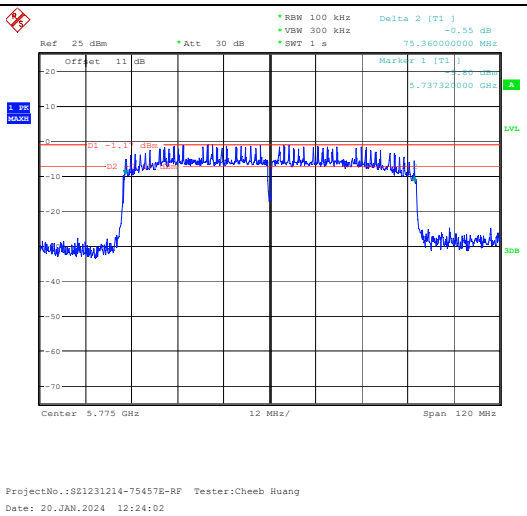
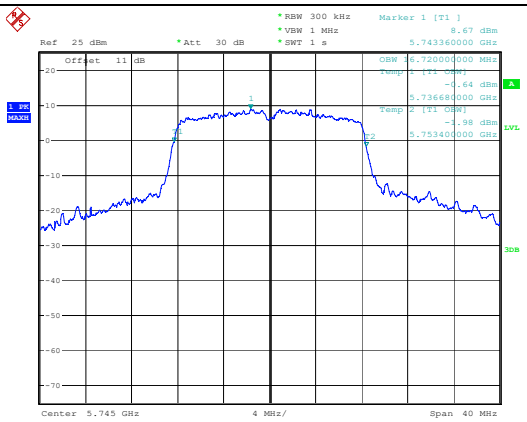
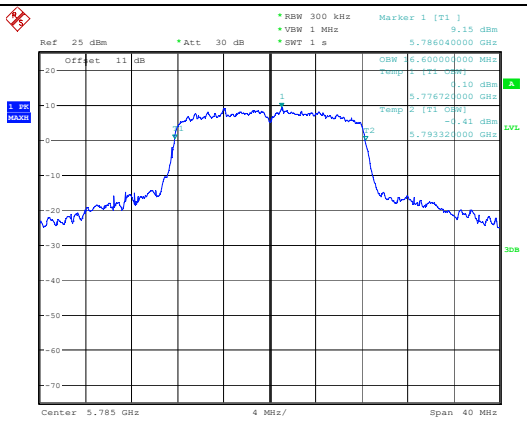
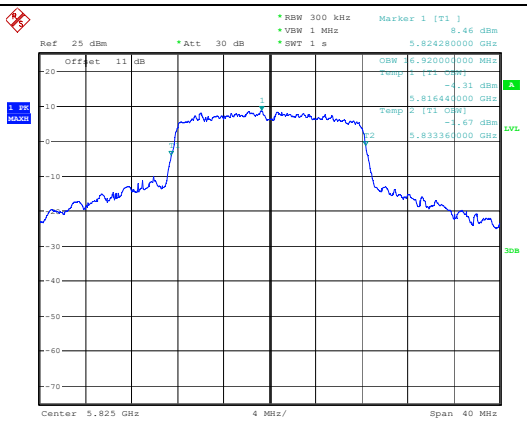
802.11ac vht80 Lowest Channel	
802.11ac vht80 Highest Channel	
802.11ac vht80 Cross Channel	

5725-5850MHz:

6dB Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

6dB Emission Bandwidth	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

6dB Emission Bandwidth	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

99% Emission Bandwidth	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

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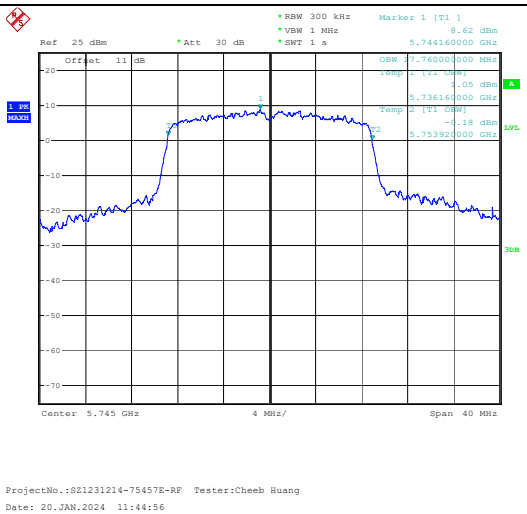
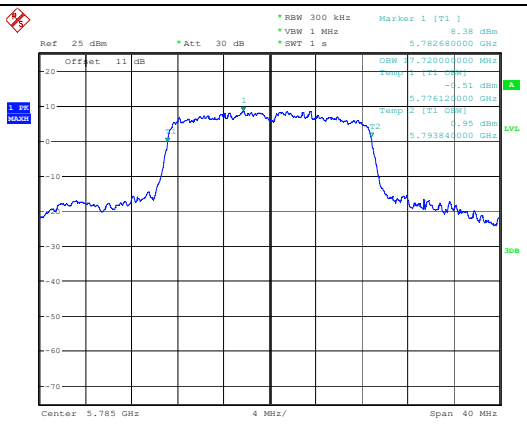
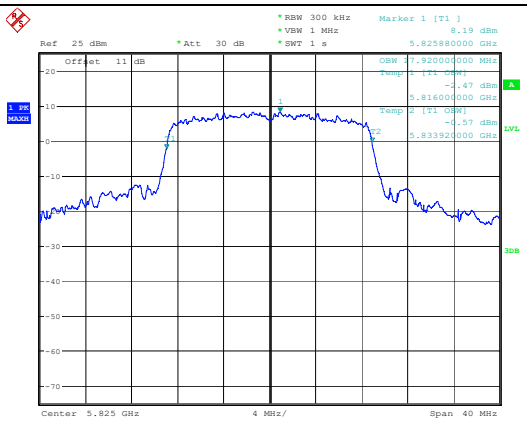
802.11ac vht20 Lowest Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 11:44:56
802.11ac vht20 Middle Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 11:47:26
802.11ac vht20 Highest Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 11:49:24

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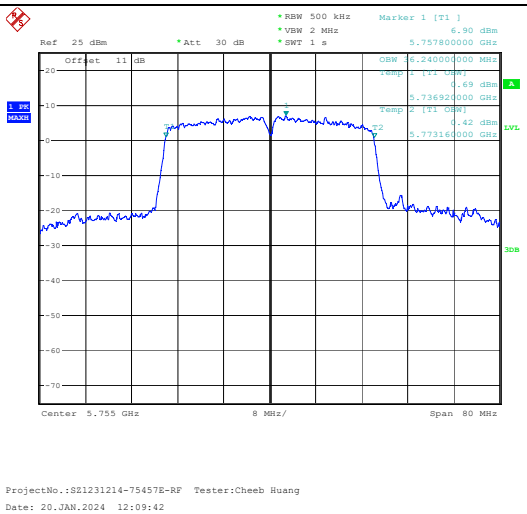
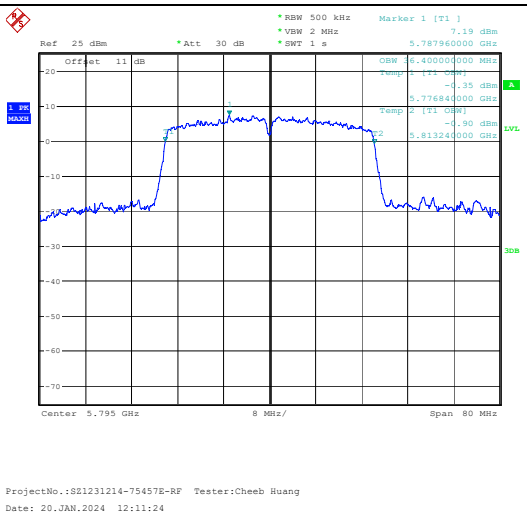
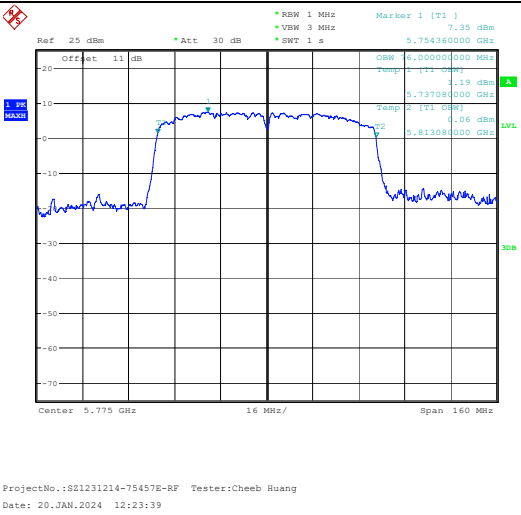
802.11ac vht40 Lowest Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 12:09:42
802.11ac vht40 Highest Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 12:11:24
802.11ac vht80 Middle Channel	 ProjectNo.:SZ1231214-75457E-RF Tester:Cheeb Huang Date: 20.JAN.2024 12:23:39

FCC §15.407(a) – 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.

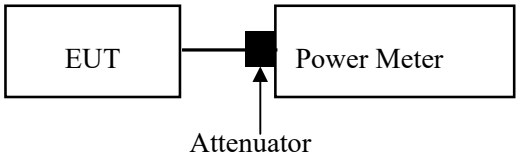
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 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.



Test Data

Environmental Conditions

Temperature:	25.4 ℃
Relative Humidity:	44 %
ATM Pressure:	101 kPa

The testing was performed by Cheeb Huang on 2024-01-20.

EUT operation mode: Transmitting

Test Result: Compliant.

5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			
		ANT 1	ANT 2	Total	Limit
802.11a	5180	13.11	13.96	/	24
	5200	13.67	14.41	/	24
	5240	13.87	13.98	/	24
802.11ac vht20	5180	12.49	13.08	15.81	24
	5200	13.76	14.17	**16.98**	24
	5240	13.79	13.91	16.86	24
802.11ac vht40	5190	11.62	11.77	14.71	24
	5230	13.02	13.17	16.11	24
802.11ac vht80	5210	10.80	10.74	13.78	24
Note: The device is a client unit. The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$					
Antenna Gain:	5.3	dBi	Directional gain:	5.30	dBi

5250-5350 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			
		ANT 1	ANT 2	Total	Limit
802.11a	5260	13.58	13.38	/	23.75
	5280	13.70	13.36	/	23.76
	5320	13.42	12.78	/	23.73
802.11ac vht20	5260	13.60	13.31	**16.47**	23.95
	5280	13.56	13.28	16.43	23.93
	5320	13.27	12.77	16.04	23.94
802.11ac vht40	5270	12.93	12.87	15.91	24
	5310	11.25	10.67	13.98	24
802.11ac vht80	5290	10.36	9.81	13.10	24
Note: The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$					
Antenna Gain:	5.3	dBi	Directional gain:	5.30	dBi

5470-5725 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			
		ANT 1	ANT 2	Total	Limit
802.11a	5500	14.34	13.53	/	23.90
	5580	15.48	14.84	/	23.76
	5700	13.35	13.75	/	23.71
	5720	14.11	14.70	/	24
802.11ac vht20	5500	13.92	13.18	16.58	23.95
	5580	15.37	14.81	**18.11**	23.95
	5700	12.74	13.09	15.93	23.90
	5720	14.10	14.68	17.41	23.98
802.11ac vht40	5510	12.35	11.61	15.01	24
	5550	14.82	13.94	17.41	24
	5670	14.07	13.84	16.97	24
	5710	13.70	13.74	16.73	24
802.11ac vht80	5530	12.18	11.28	14.76	24
	5610	15.13	13.48	17.39	24
	5690	10.08	9.71	12.91	24
Note: The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$					
Antenna Gain:	5.3	dBi	Directional gain:	5.30	dBi

5725-5850 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			
		ANT 1	ANT 2	Total	Limit
802.11a	5745	16.28	15.14	/	30
	5785	16.32	15.45	/	30
	5825	16.09	15.61	/	30
802.11ac vht20	5745	16.24	15.08	18.71	30
	5785	16.26	15.41	**18.87**	30
	5825	16.07	15.56	18.83	30
802.11ac vht40	5755	15.83	14.29	18.14	30
	5795	15.86	14.59	18.28	30
802.11ac vht80	5775	15.49	14.23	17.92	30
Note: The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices: Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$					
Antenna Gain:	5.3	dBi	Directional gain:	5.30	dBi

FCC §15.407(a) - POWER SPECTRAL DENSITY

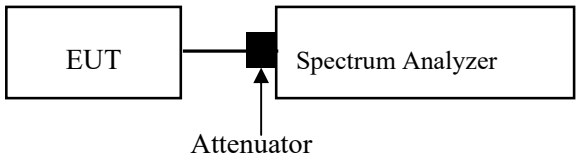
For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting 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 Method SA-2 should be applied
a) Set span to encompass the entire EBW(or, alternatively, the entire 99% occupied Bandwidth) of the signal.
b) Set sweep trigger to “free run.”.
c) Set RBW=1MHz or 500kHz Set VBW>3 MHz or 2MHz.
d) Number of points in sweep>2 x span/RBW.(This ensures that bin-to-bin spacing is <RBW/2. so that narrowband signals are not lost between frequency bins.)
e) Sweep time = auto.
f) Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
g) Trace mode = max hold.
h) Do not use sweep triggering. Allow the sweep to “free run.”
i) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.
j) Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission).



Test Data

Environmental Conditions

Temperature:	25.4 ℃
Relative Humidity:	44 %
ATM Pressure:	101 kPa

The testing was performed by Cheeb Huang on 2024-01-20.

EUT operation mode: Transmitting

Test Result: Compliant.

5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Reading (dBm/MHz)		Duty Cycle Factor (dB)	Maximum Power Spectral Density (dBm/MHz)			
		ANT 1	ANT 2		ANT 1	ANT 2	Total	Limit
802.11a	5180	2.39	3.35	0.26	2.65	3.61	/	11
	5200	3.12	3.74	0.26	3.38	4.00	/	11
	5240	3.22	3.40	0.26	3.48	3.66	/	11
802.11ac vht20	5180	1.55	2.19	0.36	1.91	2.55	5.25	8.7
	5200	2.88	3.23	0.36	3.24	3.59	6.43	8.7
	5240	2.92	3.15	0.36	3.28	3.51	6.41	8.7
802.11ac vht40	5190	-2.55	-2.53	0.87	-1.68	-1.66	1.34	8.7
	5230	-1.26	-1.05	0.87	-0.39	-0.18	2.73	8.7
802.11ac vht80	5210	-7.34	-7.15	1.34	-6.00	-5.81	-2.89	8.7

Note:
The device is a client.

Method SA-2 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01was used for PSD test.

The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:
Array Gain = 10 $\log(N_{ANT}/N_{SS})$ dB

Antenna Gain:	5.3	dBi	Directional gain:	8.30	dBi

5250-5350 MHz:

Test Modes	Test Frequency (MHz)	Reading (dBm/MHz)		Duty Cycle Factor (dB)	Maximum Power Spectral Density (dBm/MHz)			
		ANT 1	ANT 2		ANT 1	ANT 2	Total	Limit
802.11a	5260	2.92	2.75	0.26	3.18	3.01	/	11
	5280	3.1	2.87	0.26	3.36	3.13	/	11
	5320	2.8	2.12	0.26	3.06	2.38	/	11
802.11ac vht20	5260	2.8	2.51	0.36	3.16	2.87	6.03	8.7
	5280	2.72	2.41	0.36	3.08	2.77	5.94	8.7
	5320	2.34	1.84	0.36	2.7	2.2	5.47	8.7
802.11ac vht40	5270	-1.25	-1.38	0.87	-0.38	-0.51	2.57	8.7
	5310	-2.55	-3.55	0.87	-1.68	-2.68	0.86	8.7
802.11ac vht80	5290	-7.77	-7.9	1.34	-6.43	-6.56	-3.48	8.7
Method SA-2 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01was used for PSD test. The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB								
Antenna Gain:	5.3	dBi	Directional gain:		8.30		dBi	

5470-5725 MHz:

Test Modes	Test Frequency (MHz)	Reading (dBm/MHz)		Duty Cycle Factor (dB)	Maximum Power Spectral Density (dBm/MHz)			
		ANT 1	ANT 2		ANT 1	ANT 2	Total	Limit
802.11a	5500	3.72	2.93	0.26	3.98	3.19	/	11
	5580	4.73	4.17	0.26	4.99	4.43	/	11
	5700	3.22	3.62	0.26	3.48	3.88	/	11
	5720	3.48	3.99	0.26	3.74	4.25	/	11
802.11ac vht20	5500	2.96	2.25	0.36	3.32	2.61	5.99	8.7
	5580	4.45	3.91	0.36	4.81	4.27	7.56	8.7
	5700	2.31	2.77	0.36	2.67	3.13	5.92	8.7
	5720	3.31	3.77	0.36	3.67	4.13	6.92	8.7
802.11ac vht40	5510	-1.81	-2.56	0.87	-0.94	-1.69	1.71	8.7
	5550	0.53	-0.1	0.87	1.4	0.77	4.11	8.7
	5670	0.52	0.46	0.87	1.39	1.33	4.37	8.7
	5710	0.09	0	0.87	0.96	0.87	3.93	8.7
802.11ac vht80	5530	-6.09	-6.64	1.34	-4.75	-5.3	-2.01	8.7
	5610	-3.11	-4.52	1.34	-1.77	-3.18	0.59	8.7
	5690	-6.68	-6.92	1.34	-5.34	-5.58	-2.45	8.7
Method SA-2 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01was used for PSD test. The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB								
Antenna Gain:	5.3	dBi	Directional gain:		8.30		dBi	

5725-5850 MHz:

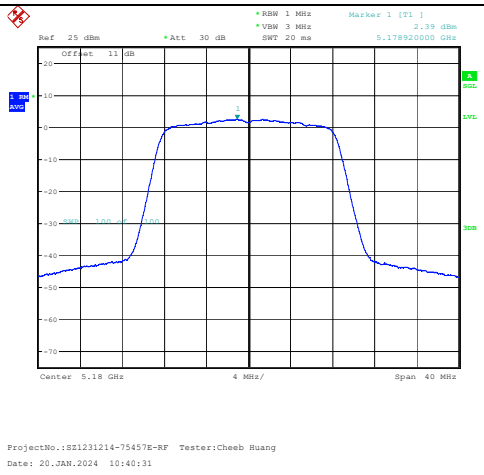
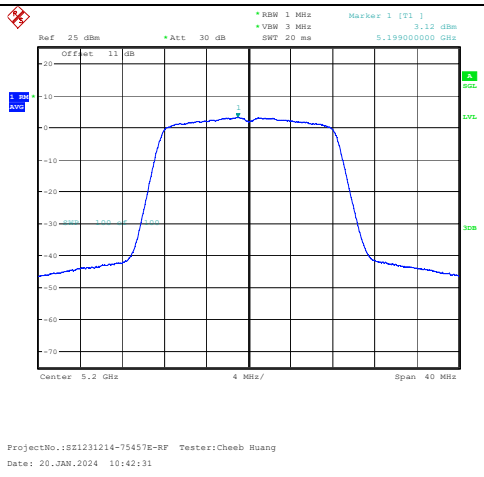
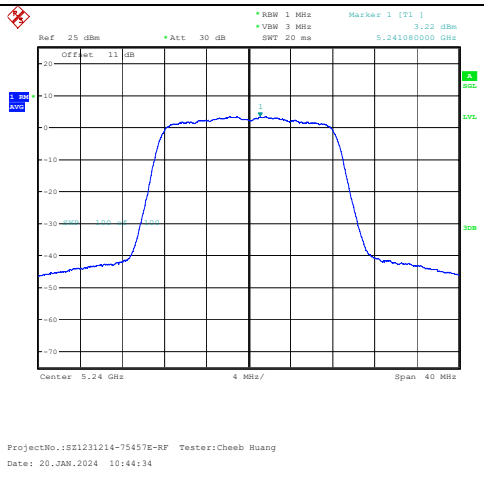
Test Modes	Test Frequency (MHz)	Reading (dBm/500kHz)		Duty Cycle Factor (dB)	Maximum Power Spectral Density (dBm/500kHz)			
		ANT 1	ANT 2		ANT 1	ANT 2	Total	Limit
802.11a	5745	2.78	1.58	0.26	3.04	1.84	/	30
	5785	2.79	1.95	0.26	3.05	2.21	/	30
	5825	2.6	2.01	0.26	2.86	2.27	/	30
802.11ac vht20	5745	2.46	1.22	0.36	2.82	1.58	5.25	27.7
	5785	2.41	1.53	0.36	2.77	1.89	5.36	27.7
	5825	2.22	1.71	0.36	2.58	2.07	5.34	27.7
802.11ac vht40	5755	-1.58	-2.84	0.87	-0.71	-1.97	1.72	27.7
	5795	-1.51	-2.4	0.87	-0.64	-1.53	1.95	27.7
802.11ac vht80	5775	-5.38	-6.73	1.34	-4.24	-5.39	-1.77	27.7

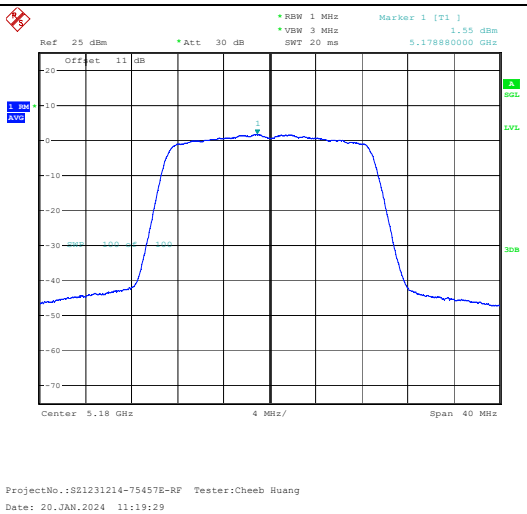
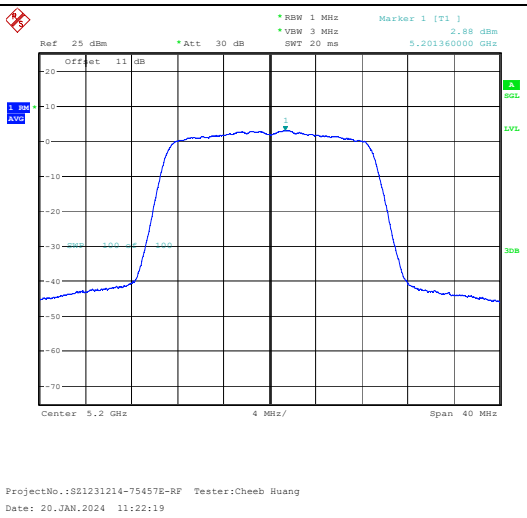
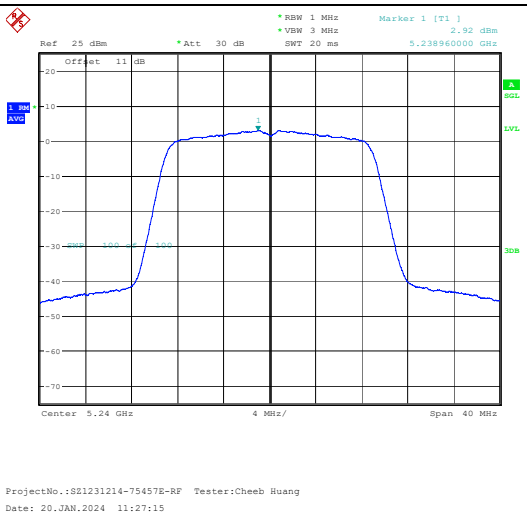
Method SA-2 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01was used for PSD test.

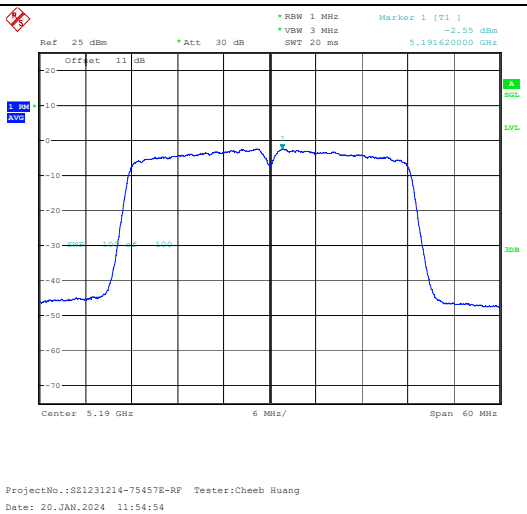
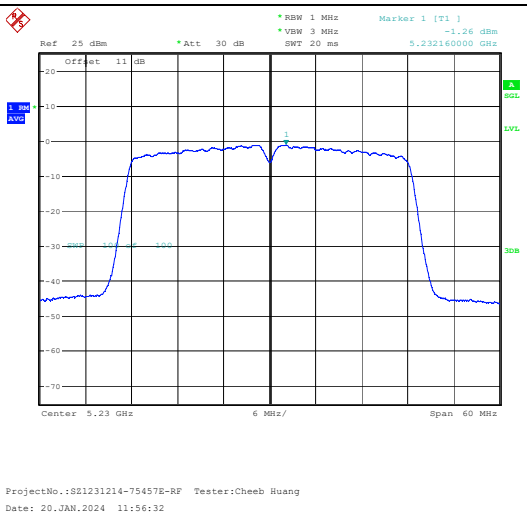
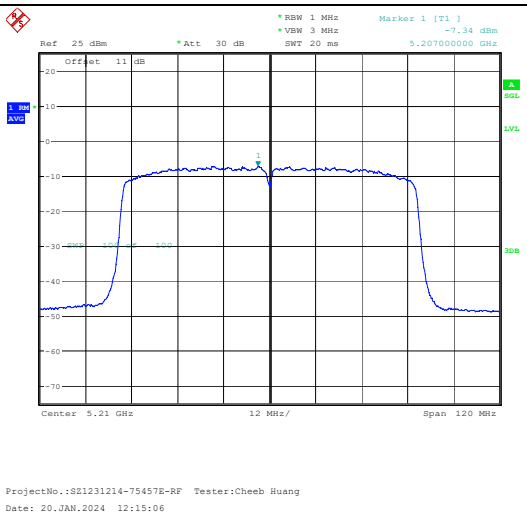
The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:
Array Gain = 10 $\log(N_{ANT}/N_{SS})$ dB

Antenna Gain:	5.3	dBi	Directional gain:	8.30	dBi

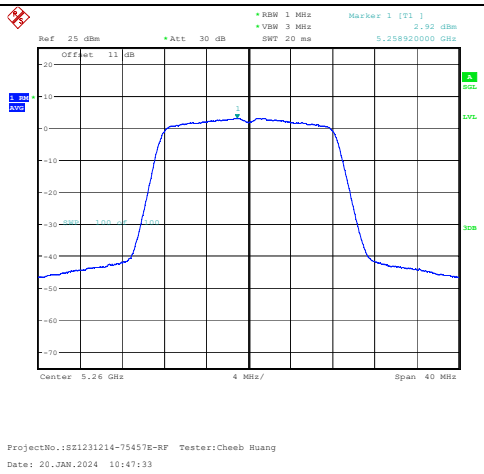
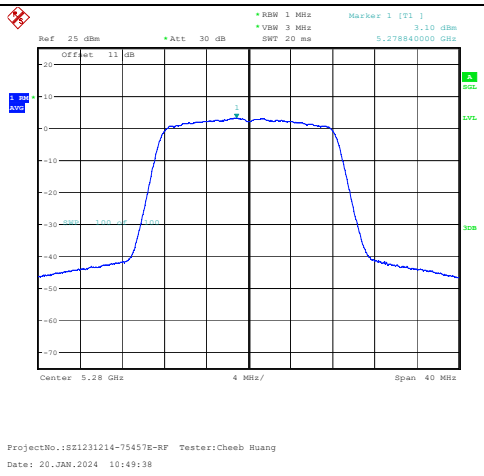
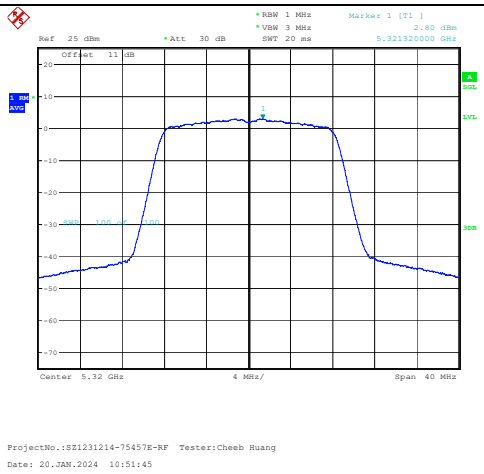
ANT 1
5150-5250MHz:

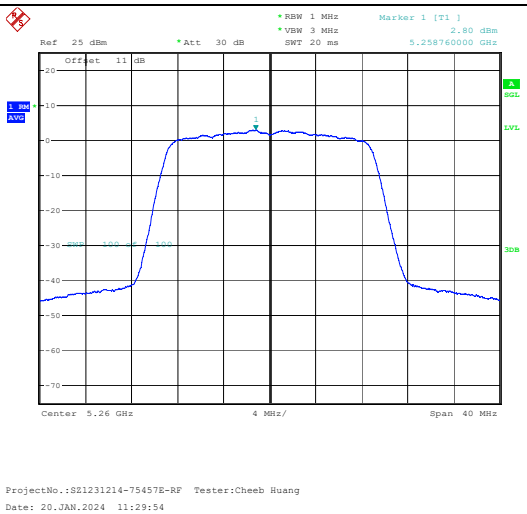
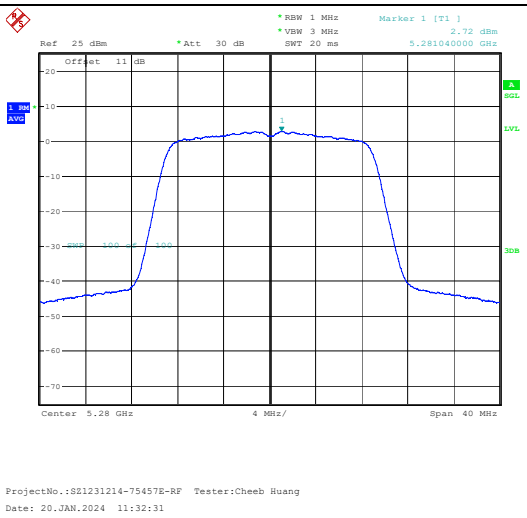
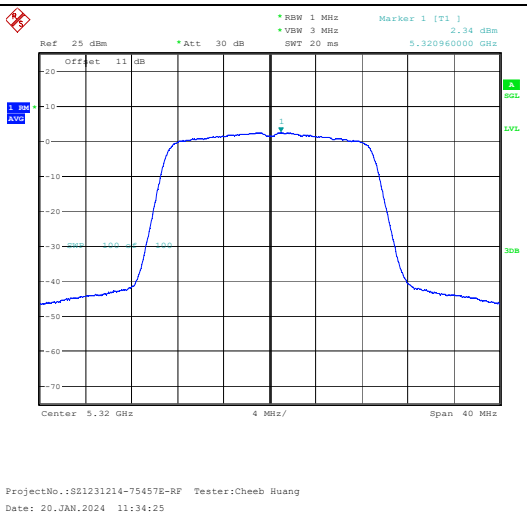
Maximum power spectral density	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

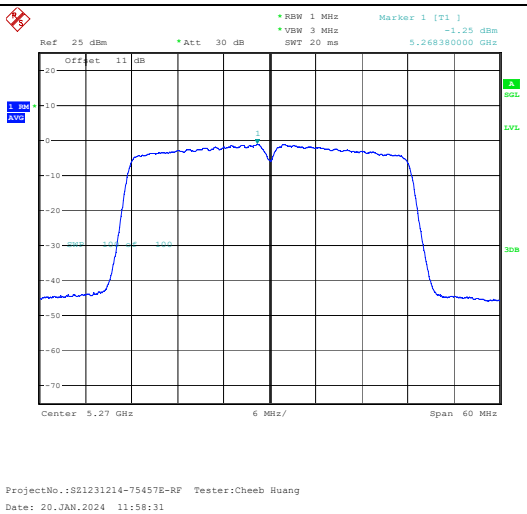
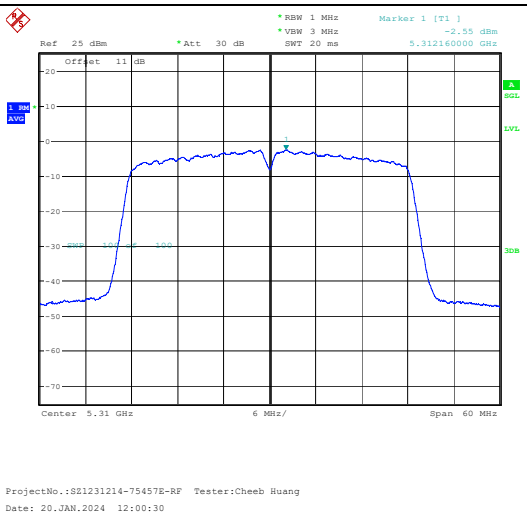
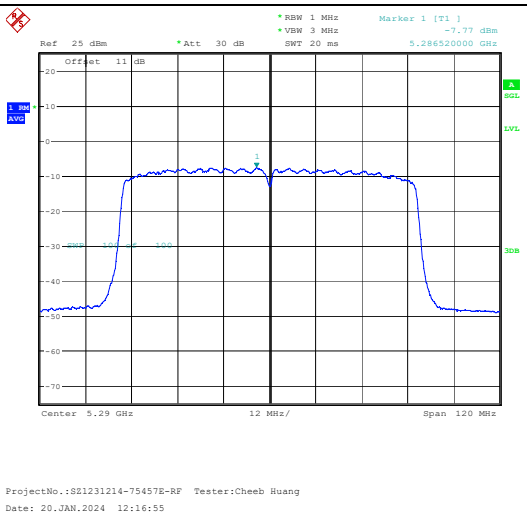
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

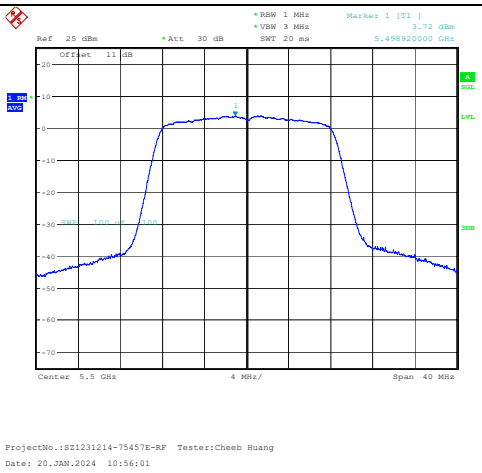
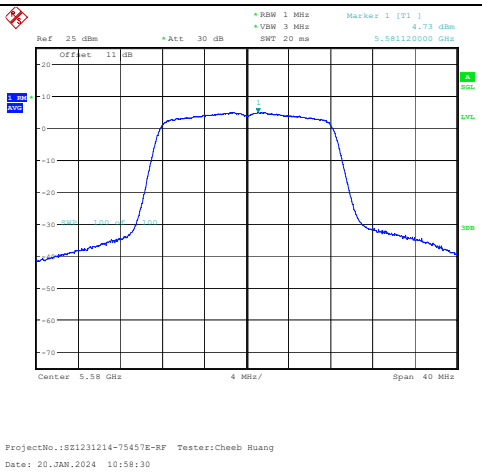
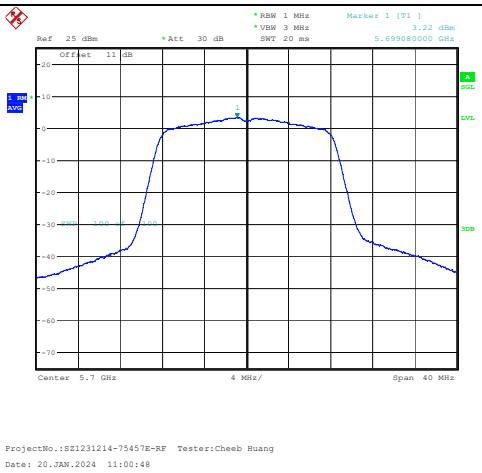
5250-5350MHz:

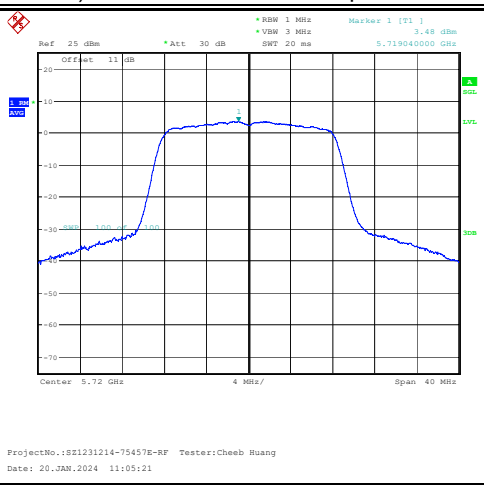
Maximum power spectral density	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

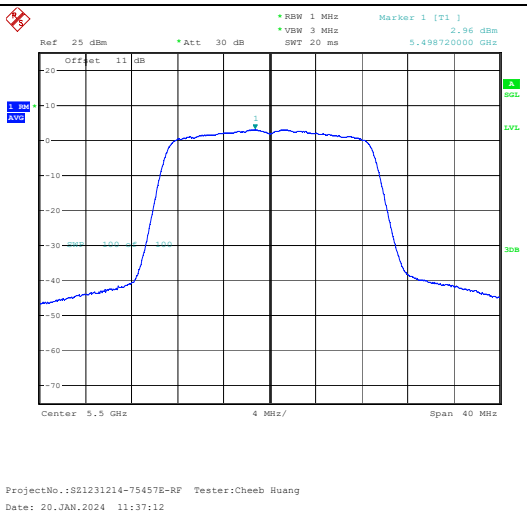
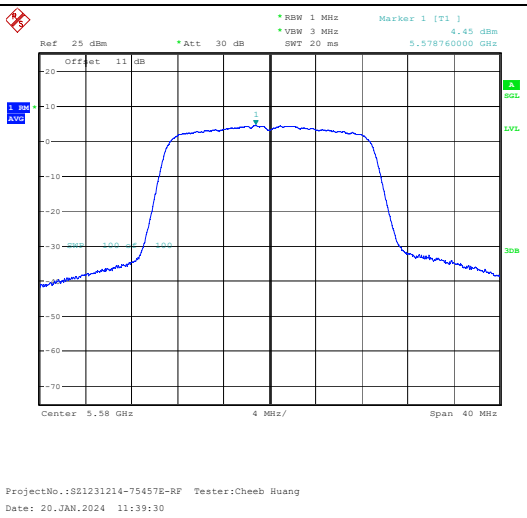
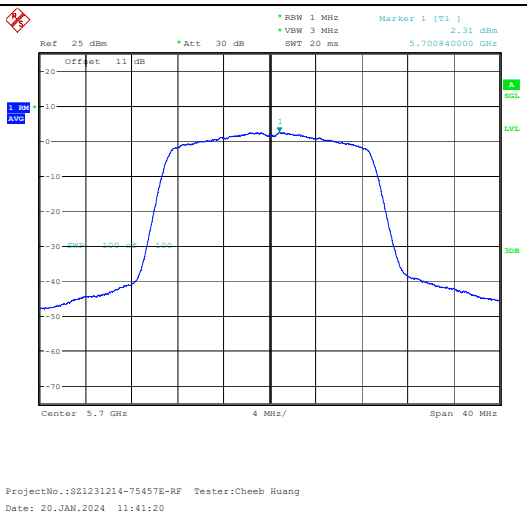
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

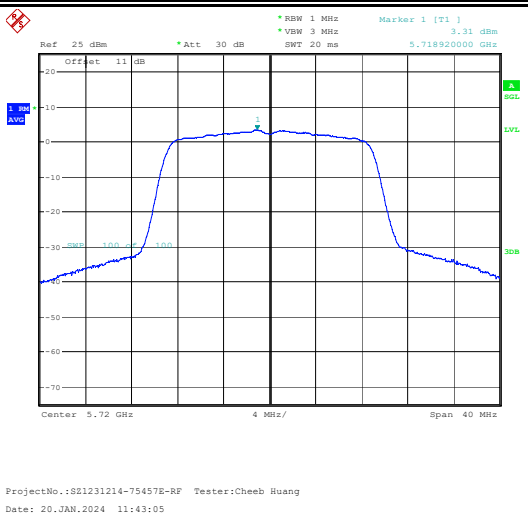
Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

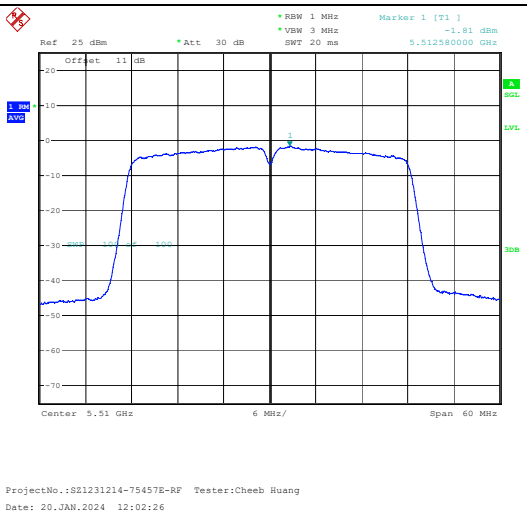
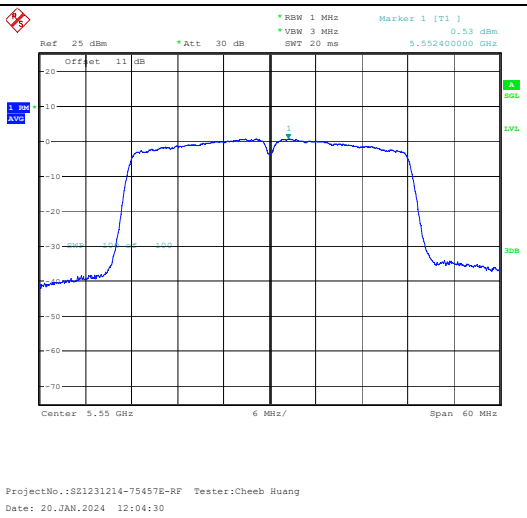
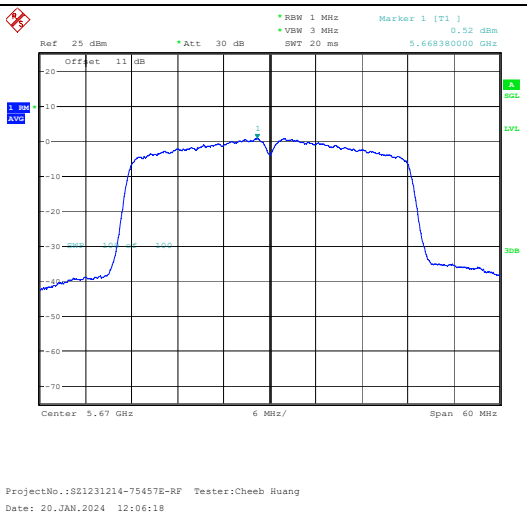
5470-5725MHz:

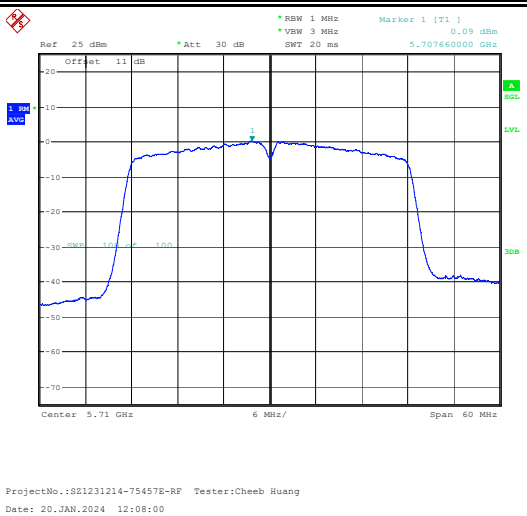
Maximum power spectral density	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

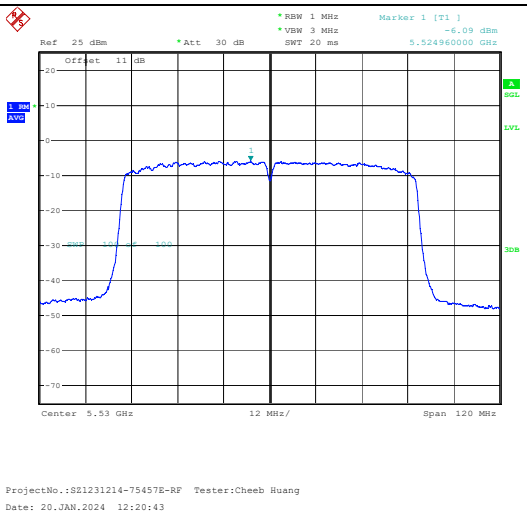
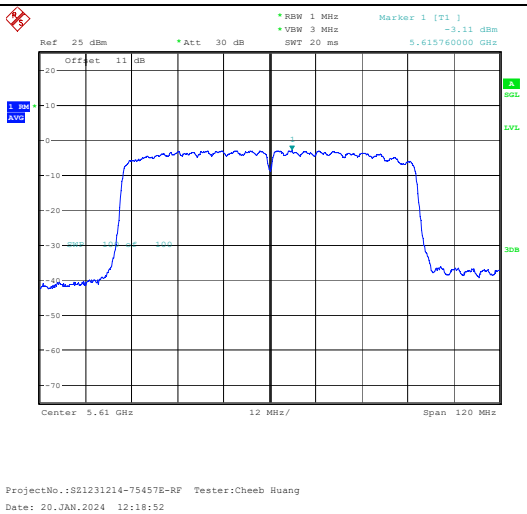
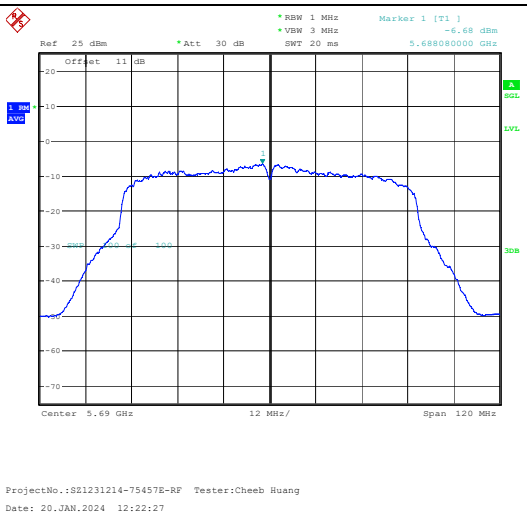
802.11a Cross Channel	

Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

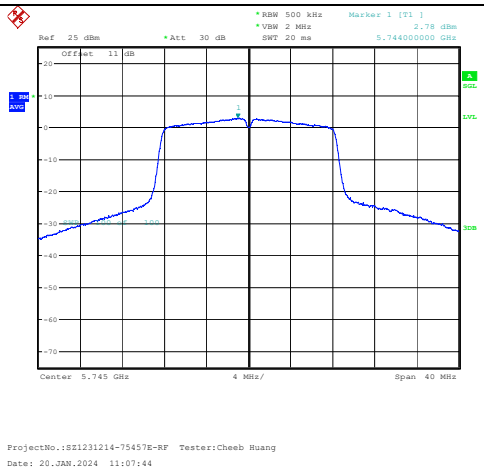
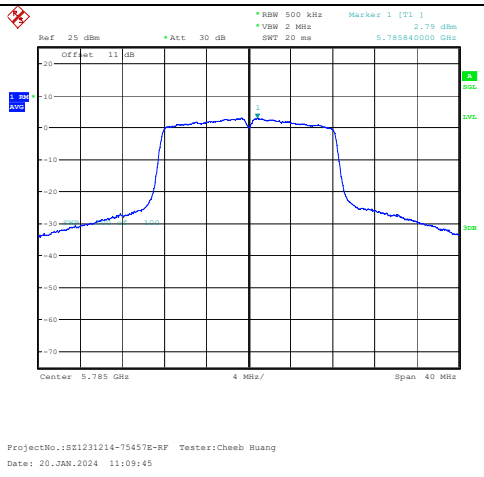
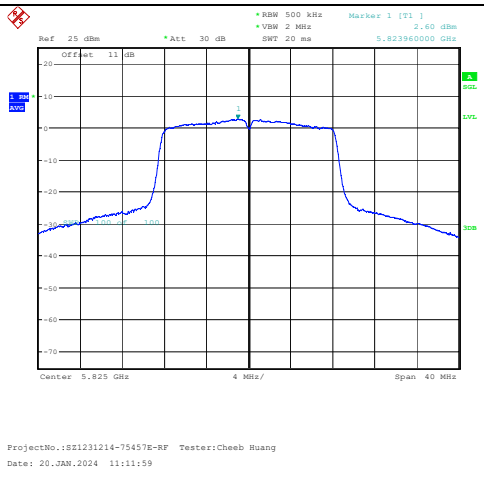
802.11ac vht20 Cross Channel	

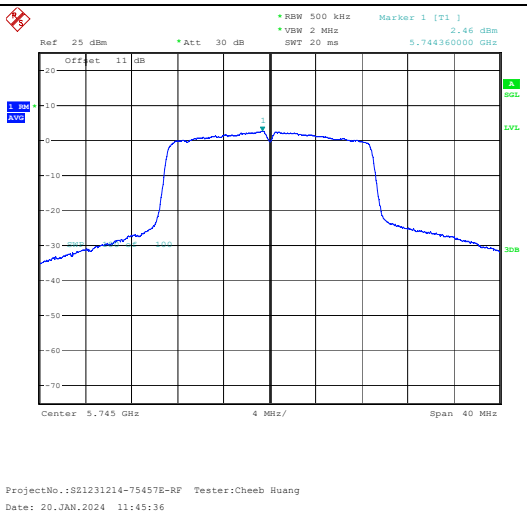
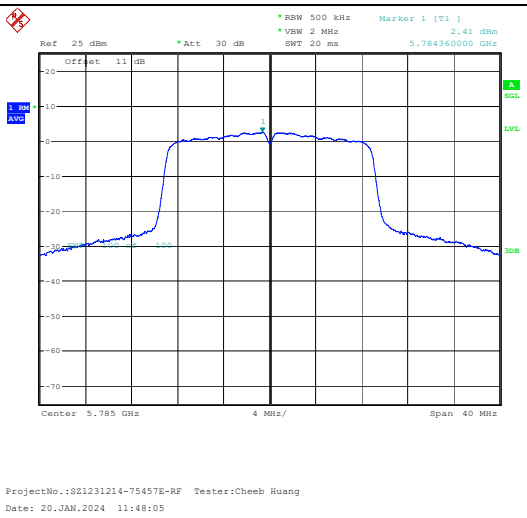
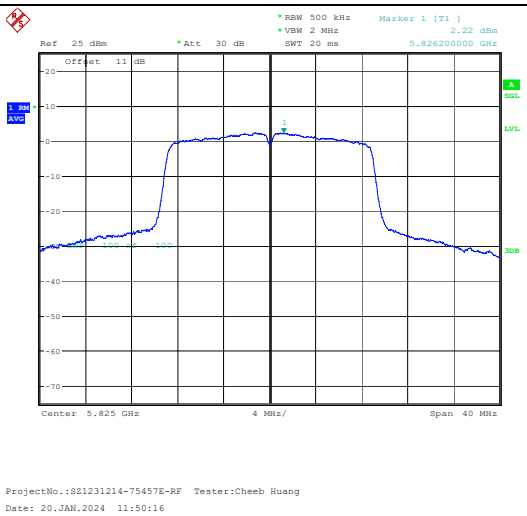
Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Middle Channel	
802.11ac vht40 Highest Channel	

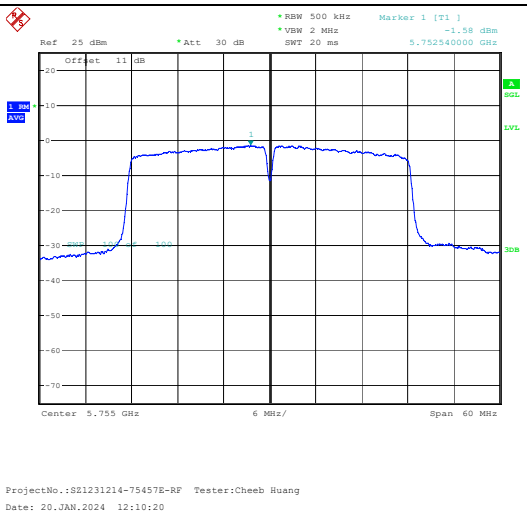
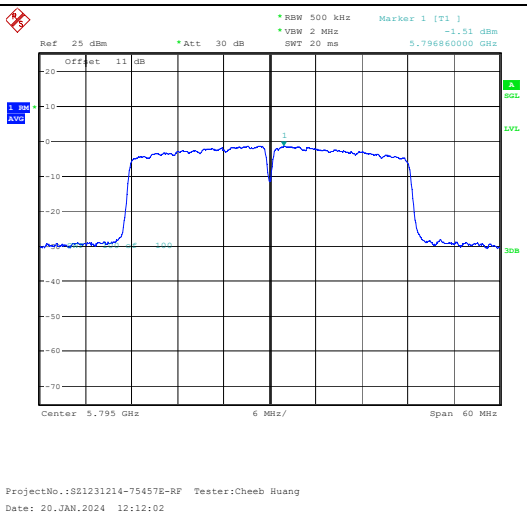
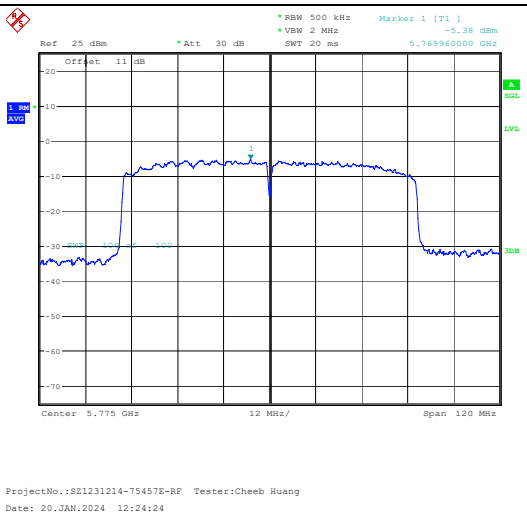
802.11ac vht40 Cross Channel	

Maximum power spectral density	
802.11ac vht80 Lowest Channel	
802.11ac vht80 Highest Channel	
802.11ac vht80 Cross Channel	

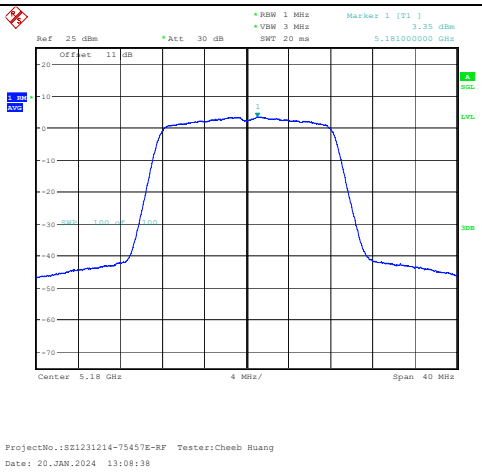
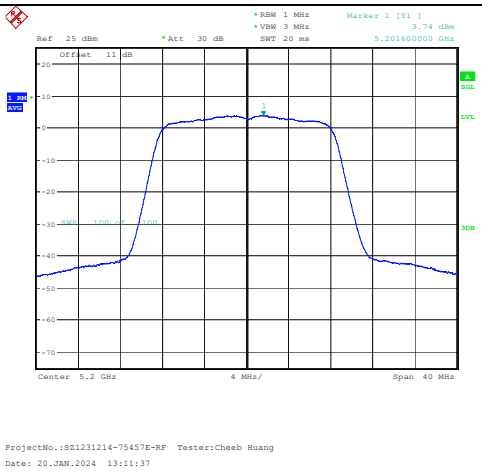
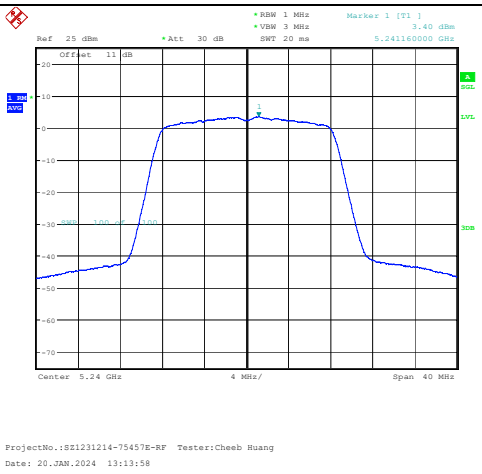
5725-5850MHz:

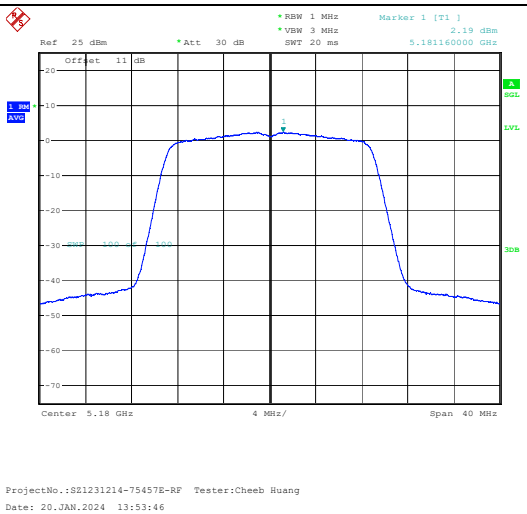
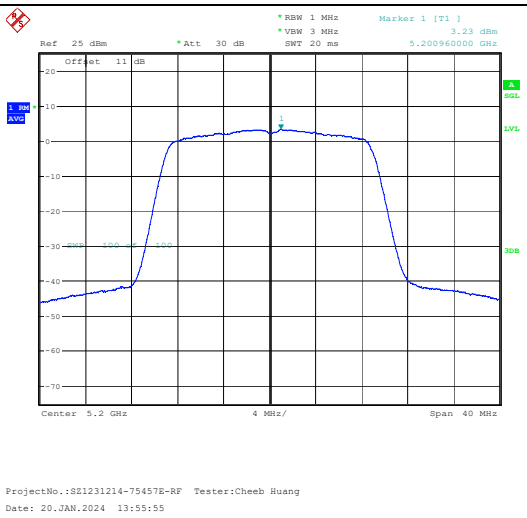
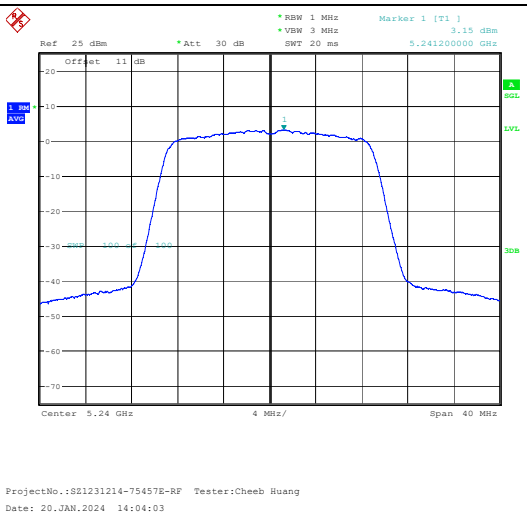
Maximum power spectral density	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

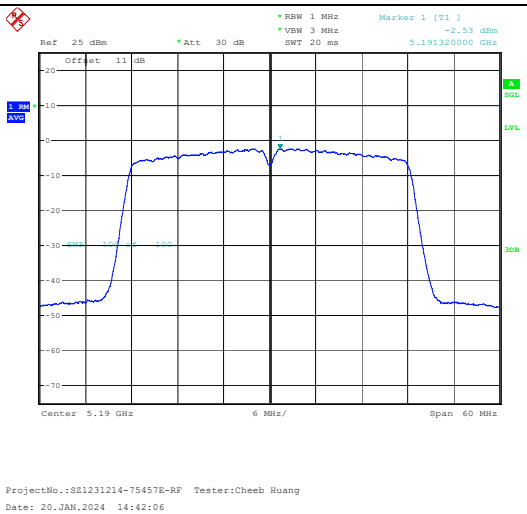
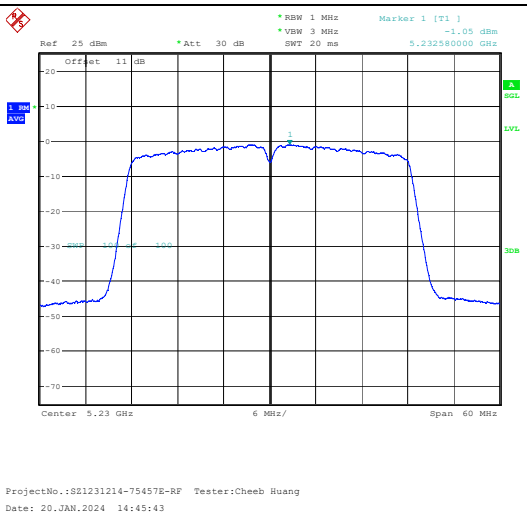
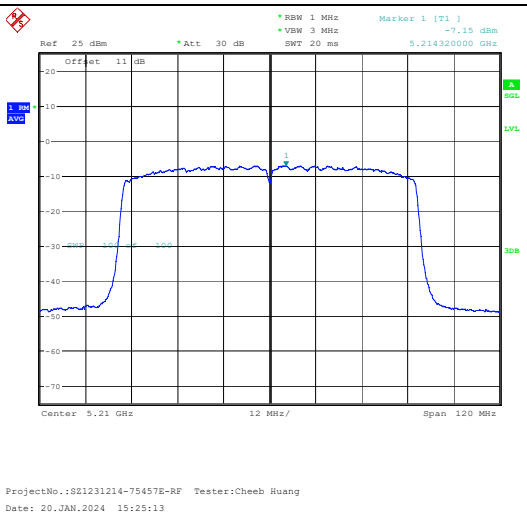
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

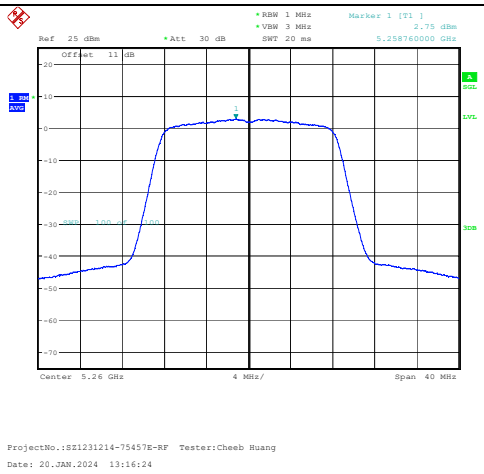
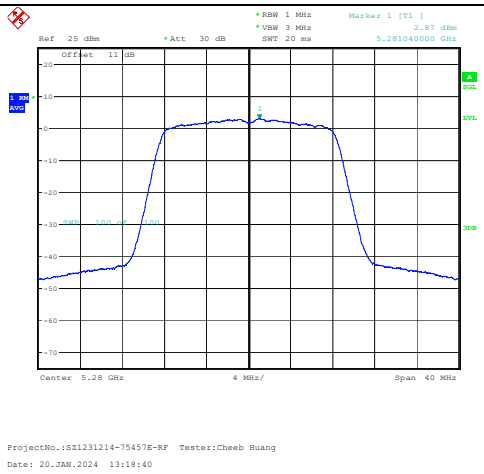
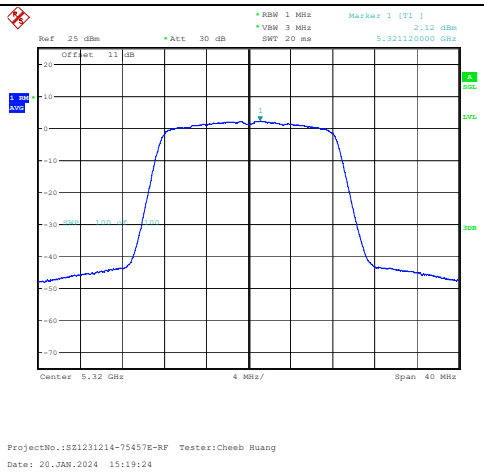
ANT 2
5150-5250MHz:

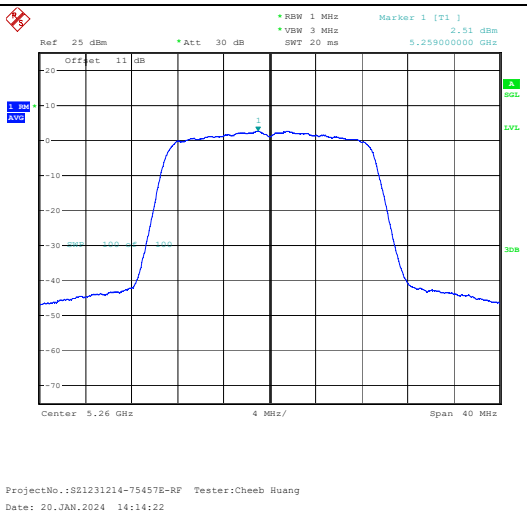
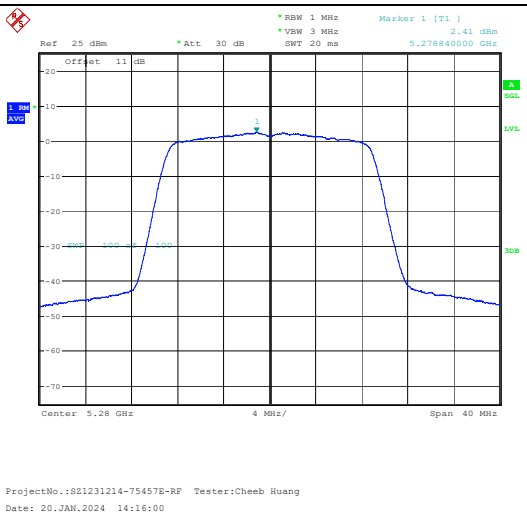
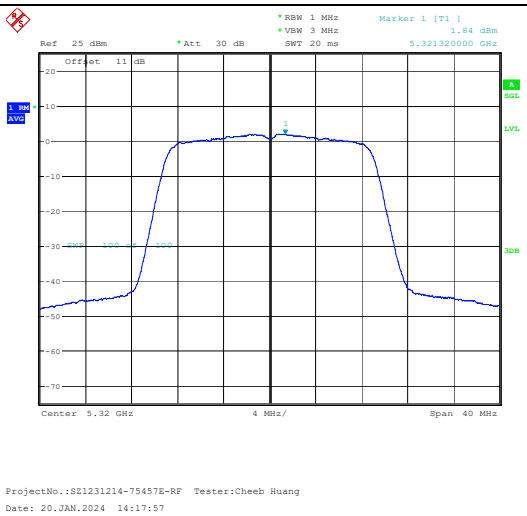
Maximum power spectral density	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

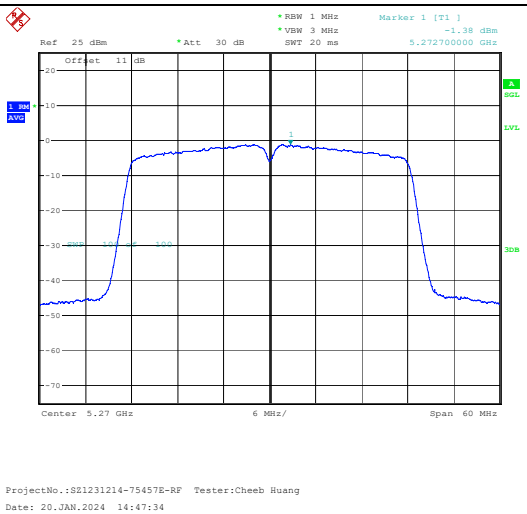
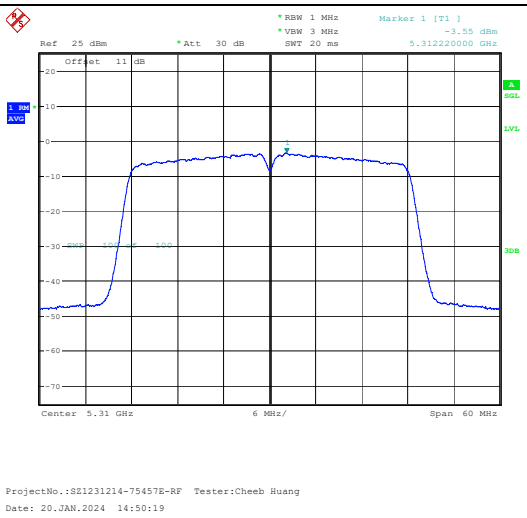
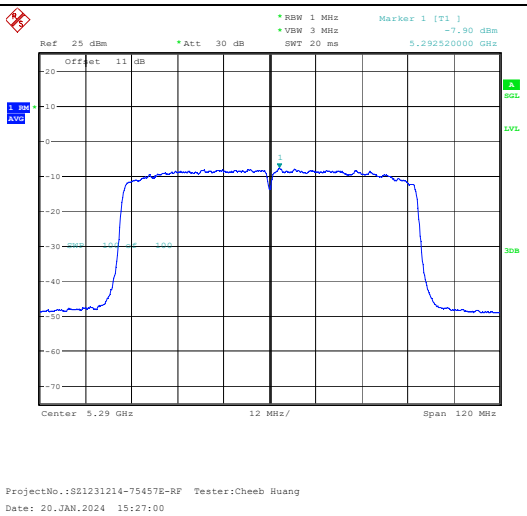
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

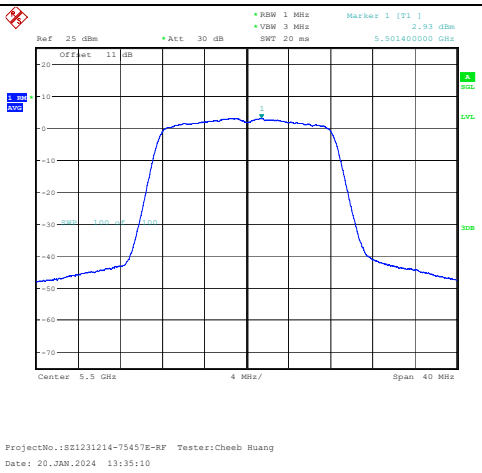
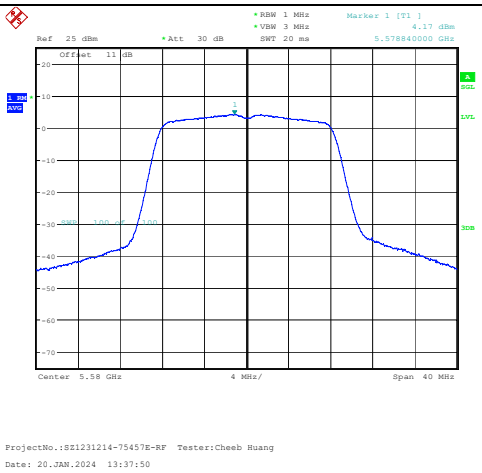
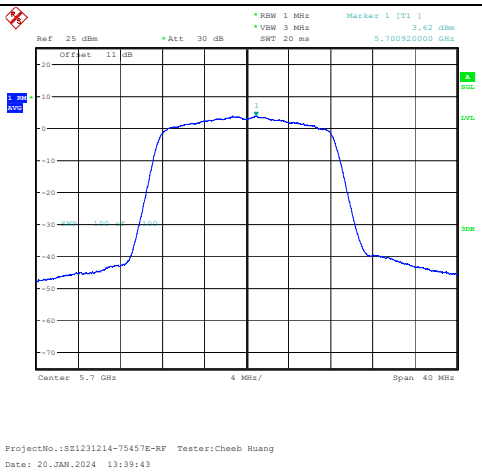
5250-5350MHz:

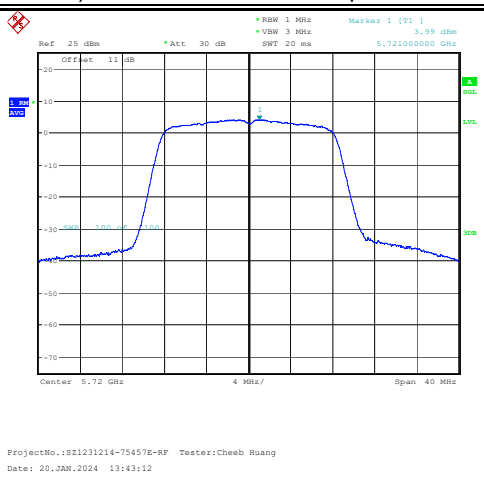
Maximum power spectral density	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

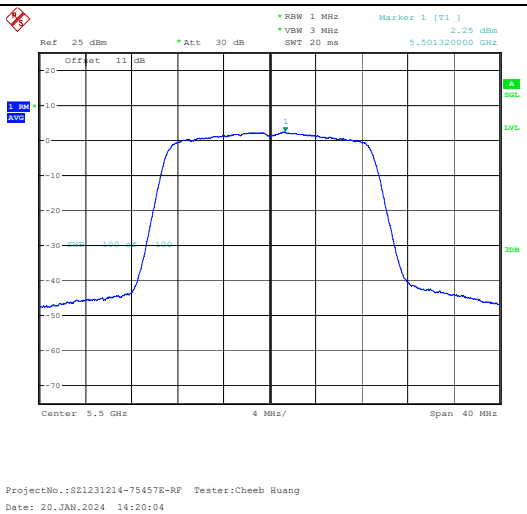
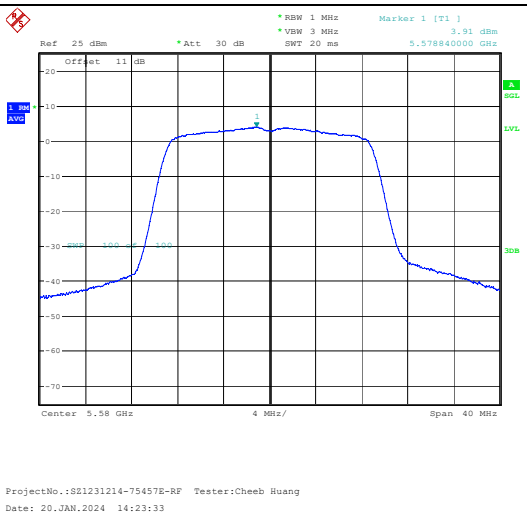
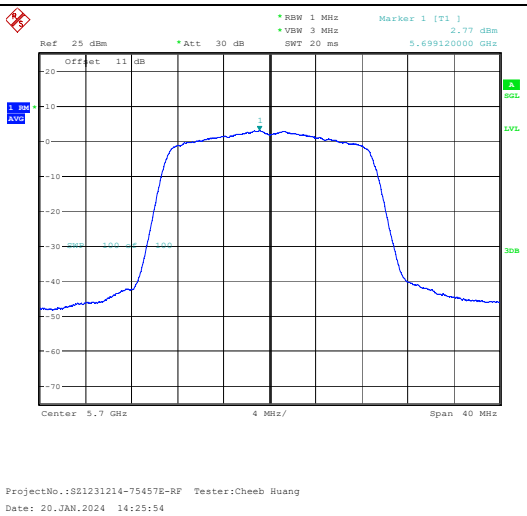
Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

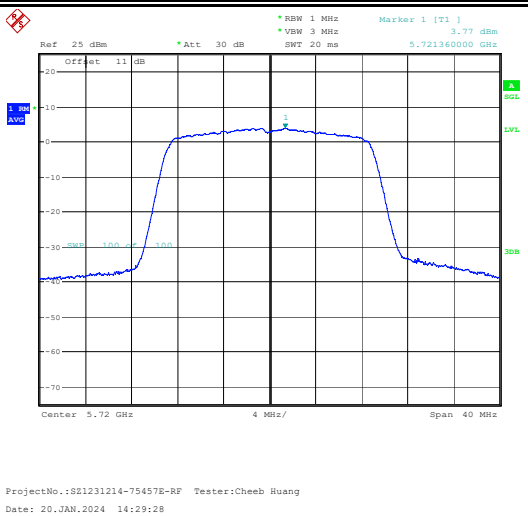
Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

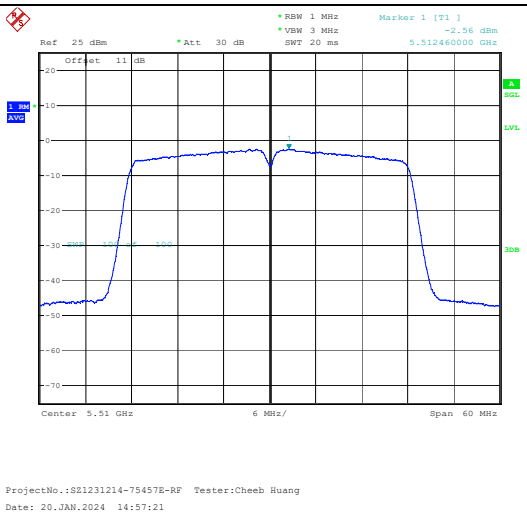
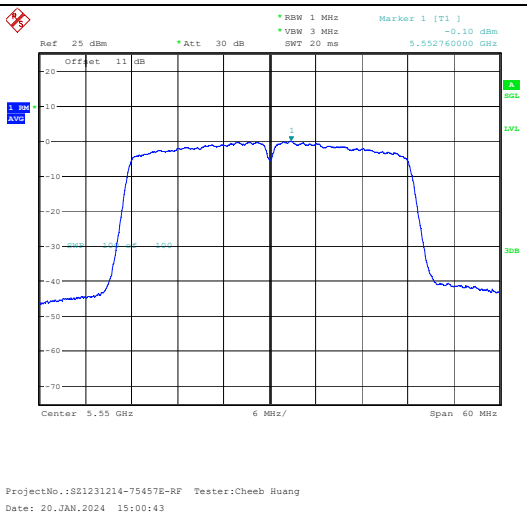
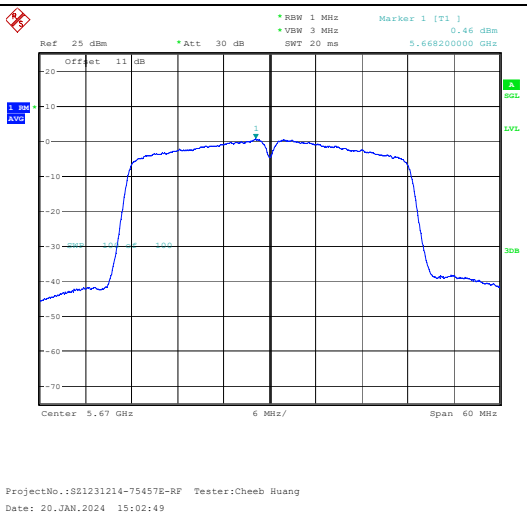
5470-5725MHz:

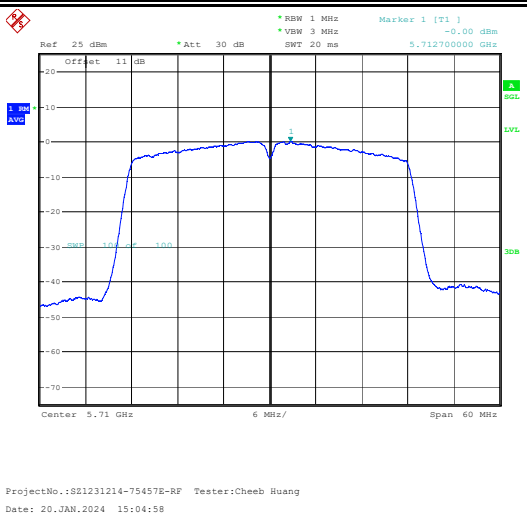
Maximum power spectral density	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

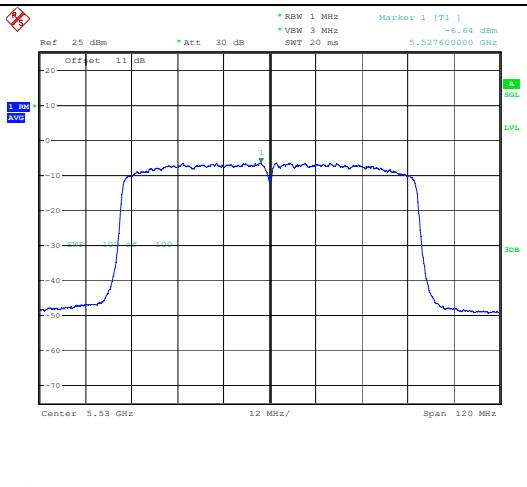
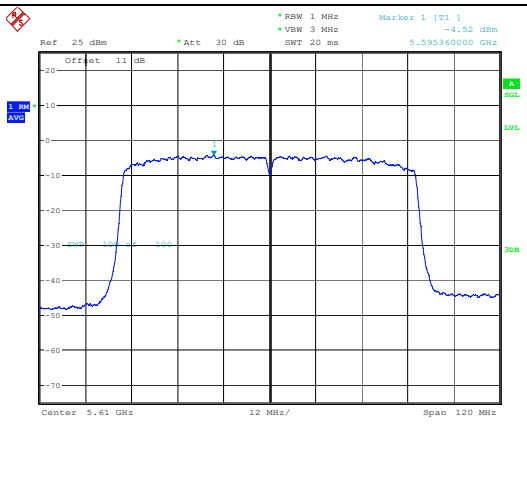
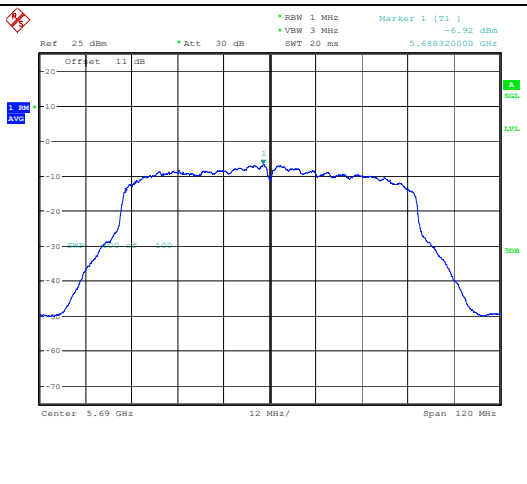
802.11a Cross Channel	

Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

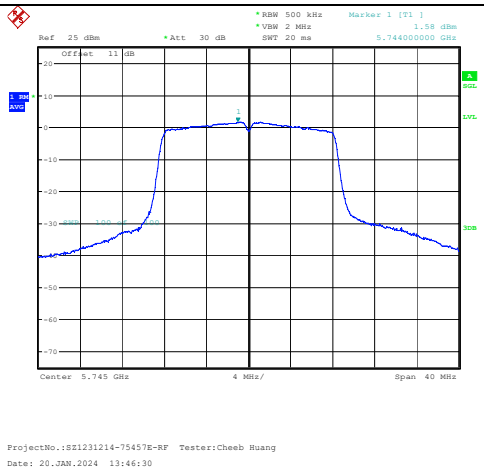
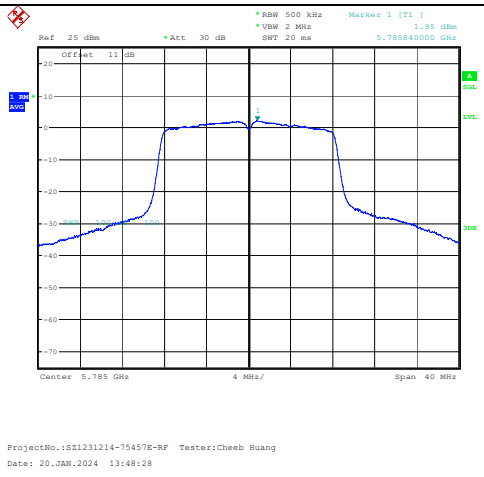
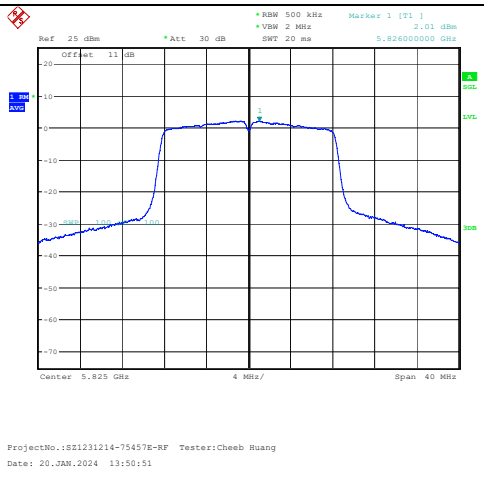
802.11ac vht20 Cross Channel	

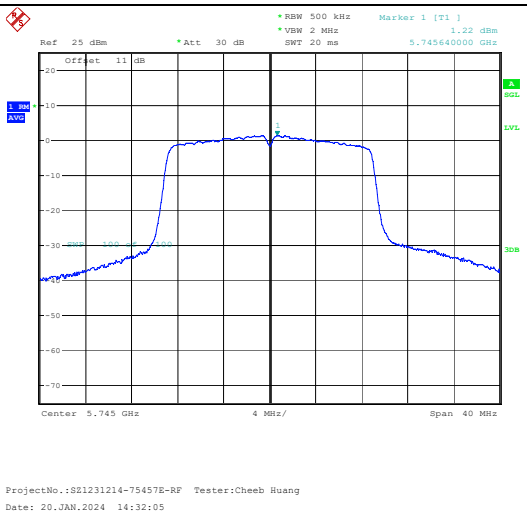
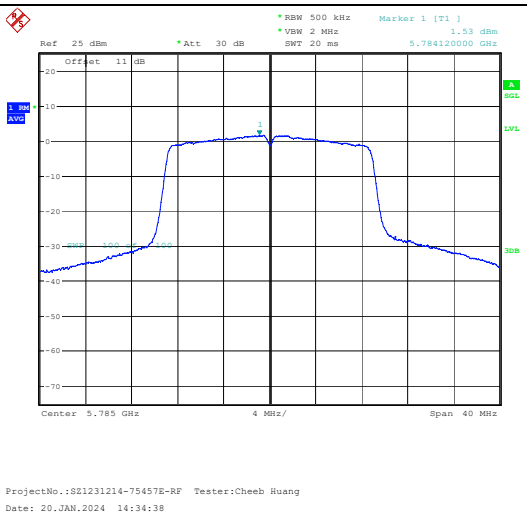
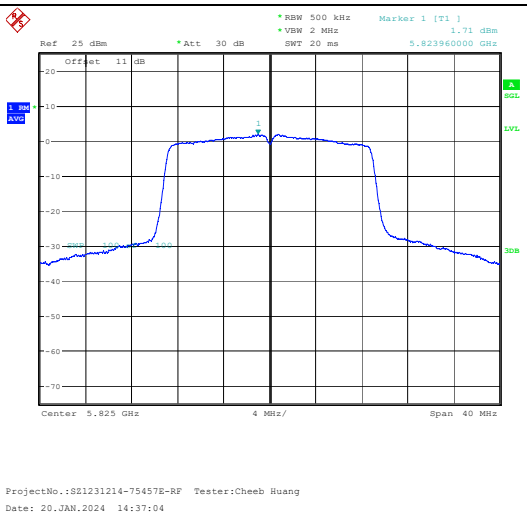
Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Middle Channel	
802.11ac vht40 Highest Channel	

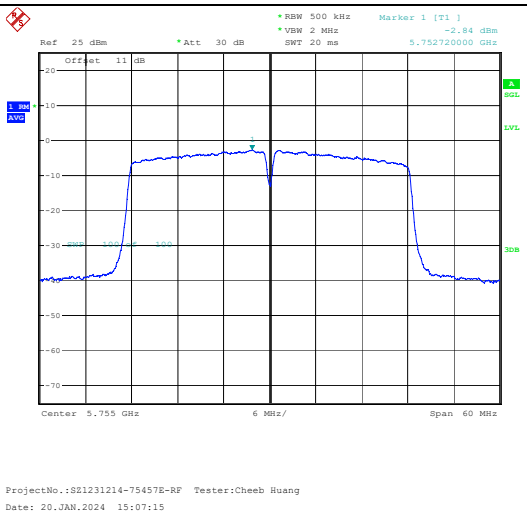
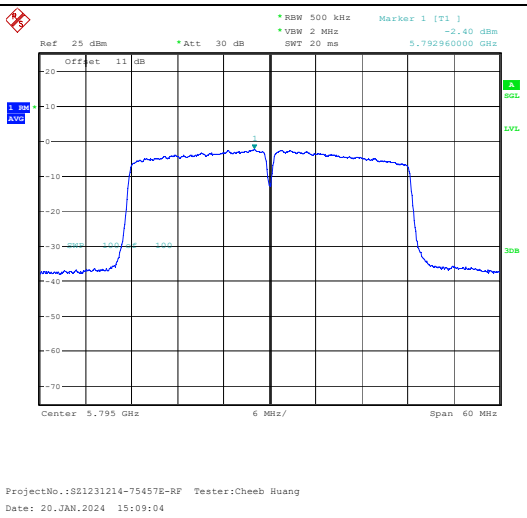
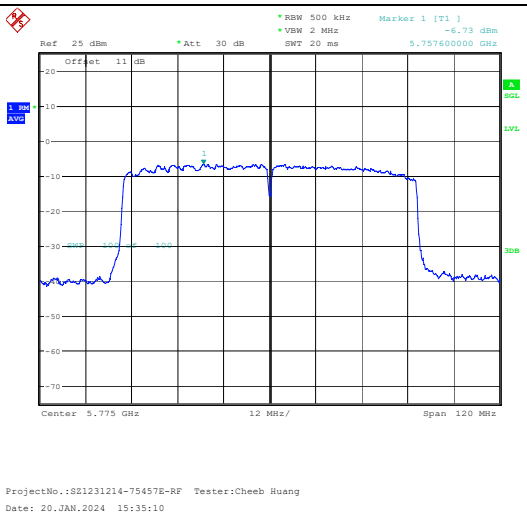
802.11ac vht40 Cross Channel	

Maximum power spectral density	
802.11ac vht80 Lowest Channel	
802.11ac vht80 Highest Channel	
802.11ac vht80 Cross Channel	

5725-5850MHz:

Maximum power spectral density	
802.11a Lowest Channel	
802.11a Middle Channel	
802.11a Highest Channel	

Maximum power spectral density	
802.11ac vht20 Lowest Channel	
802.11ac vht20 Middle Channel	
802.11ac vht20 Highest Channel	

Maximum power spectral density	
802.11ac vht40 Lowest Channel	
802.11ac vht40 Highest Channel	
802.11ac vht80 Middle Channel	

EUT PHOTOGRAPHS

Please refer to the attachment SZ1231214-75457E-RF External photo and SZ1231214-75457E-RF Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment SZ1231214-75457E-RF Test Setup photo.

******* END OF REPORT *******