

TEST REPORT

Applicant Name: INFINIX MOBILITY LIMITED
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25 SHAN MEI STREET FOTAN NT, Hong Kong
Report Number: SZ1231213-75213E-RF-00F
FCC ID: 2AIZN-X6871

Test Standard (s)

FCC PART 15.407

Sample Description

Product Type: Mobile Phone
Model No.: X6871
Multiple Model(s) No.: N/A
Trade Mark: Infinix
Date Received: 2024/01/17
Issue Date: 2024/03/15

Test Result:	Pass▲
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▲ In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

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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.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	SZ1231213-75213E-RF-00F	Original Report	2024/03/15

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Mobile Phone
Tested Model	X6871
Multiple Model(s)	N/A
Frequency Range	5G Wi-Fi: 5150-5250MHz; 5725-5850MHz
Mode	802.11a/n20/n40/ac20/ac40/ac80/ax20/ax40/ax80
Maximum Conducted Average Output Power	5150-5250MHz: 15.00dBm 5725-5850MHz: 16.81dBm
Modulation Technique	OFDM, OFDMA
Antenna Specification [#]	-1.64dBi(ANT 1); -3.6dBi (ANT 2) (provided by the applicant)
Voltage Range	DC 3.91V from battery or DC 5-11V from adapter
Sample serial number	2F5J-5 for Conducted and Radiated Emissions Test 2F5J-1 for RF Conducted Test (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	Model: U450XSB Input: AC 100-240V~50/60Hz, 1.8A Output: DC 5.0V, 3.0A, 15.0W or 5.0-10.0V, 1.5A or 11.0V, 4.1A, 45.0W MAX

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 150kHz-30MHz	3.94dB(k=2, 95% level of confidence) 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°C	
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/ax HE20/ax HE40/ax HE80, 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/ax20 mode: channel 36, 40, 48 were tested;

For 802.11ac40/ax40 mode: channel 38, 46 were tested;

For 802.11ac80/ax80 mode, channel 42 was tested.

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

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

For 802.11a/ac20/ax20 mode: channel 149, 157, 165 were tested;

For 802.11ac40/ax40 mode: channel 151, 159 were tested;

For 802.11ac80/ax80 mode, channel 155 was tested.

EUT Exercise Software

EUT was testing in engineering mode and power level as below. The power level was provided by the applicant. The device was tested with the worst case was performed as below:

5150-5250 MHz Band:

Test Mode	Data rate	RU Size	RU Index	ANT1_Power Level#			ANT2_Power Level#		
				Low Channel	Middle Channel	High Channel	Low Channel	Middle Channel	High Channel
802.11a	6 Mbps	NA	NA	15.5	15.5	15.5	15.5	15.5	15.5
802.11ac20	MCS0	NA	NA	13.5	13.5	13.5	13.5	13.5	13.5
802.11ac40	MCS0	NA	NA	13.5	/	13.5	13.5	/	13.5
802.11ac80	MCS0	NA	NA	/	13.5	/	/	13.5	/
802.11ax20	MCS0	26Tone	RU0	8.5	8.5	8.5	8.5	8.5	8.5
		52Tone	RU37	9.5	9.5	9.5	9.5	9.5	9.5
		106Tone	RU53	11.5	11.5	11.5	11.5	11.5	11.5
		242Tone	RU61	13.5	13.5	13.5	13.5	13.5	13.5
802.11ax40	MCS0	26Tone	RU0	7	/	7	7	/	7
		52Tone	RU37	8.5	/	8.5	8.5	/	8.5
		106Tone	RU53	9.5	/	9.5	9.5	/	9.5
		242Tone	RU61	9.5	/	9.5	9.5	/	9.5
		484Tone	RU65	13.5	/	13.5	13.5	/	13.5
802.11ax80	MCS0	26Tone	RU0	/	6.5	/	/	6.5	/
		52Tone	RU37	/	7.5	/	/	7.5	/
		106Tone	RU53	/	8.5	/	/	8.5	/
		242Tone	RU61	/	9.5	/	/	9.5	/
		484Tone	RU65	/	11.5	/	/	11.5	/
		996Tone	RU67	/	13.5	/	/	13.5	/

5725-5850 MHz Band:

Test Mode	Data rate	RU Size	RU Index	ANT1_Power Level [#]			ANT2_Power Level [#]		
				Low Channel	Middle Channel	High Channel	Low Channel	Middle Channel	High Channel
802.11a	6 Mbps	NA	NA	10	10	10	18	18	18
802.11ac20	MCS0	NA	NA	10	10	10	10	10	10
802.11ac40	MCS0	NA	NA	11	/	11	11	/	11
802.11ac80	MCS0	NA	NA	/	11	/	/	11	/
802.11ax20	MCS0	26Tone	RU0	7	7	7	7	7	7
		52Tone	RU37	8	8	8	8	8	8
		106Tone	RU53	9	9	9	9	9	9
		242Tone	RU61	10	10	10	10	10	10
802.11ax40	MCS0	26Tone	RU0	6	/	6	6	/	6
		52Tone	RU37	7	/	7	7	/	7
		106Tone	RU53	8	/	8	8	/	8
		242Tone	RU61	9	/	9	9	/	9
		484Tone	RU65	10	/	10	10	/	10
802.11ax80	MCS0	26Tone	RU0	/	6	/	/	6	/
		52Tone	RU37	/	7	/	/	7	/
		106Tone	RU53	/	8	/	/	8	/
		242Tone	RU61	/	9	/	/	9	/
		484Tone	RU65	/	10	/	/	10	/
		996Tone	RU67	/	11	/	/	11	/

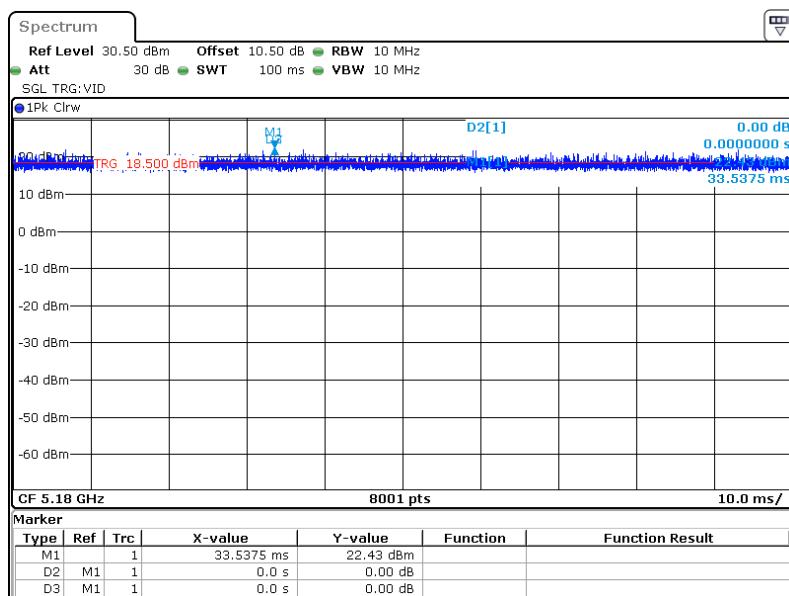
Note:

- 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.
- According to the manufacturer, for 802.11 a mode, the device only support SISO mode.
- According to the manufacturer, for 802.11 n/ac/ax mode, the device supports SISO and MIMO in all modes, per pretest, the MIMO mode was the worst mode for all the modes.

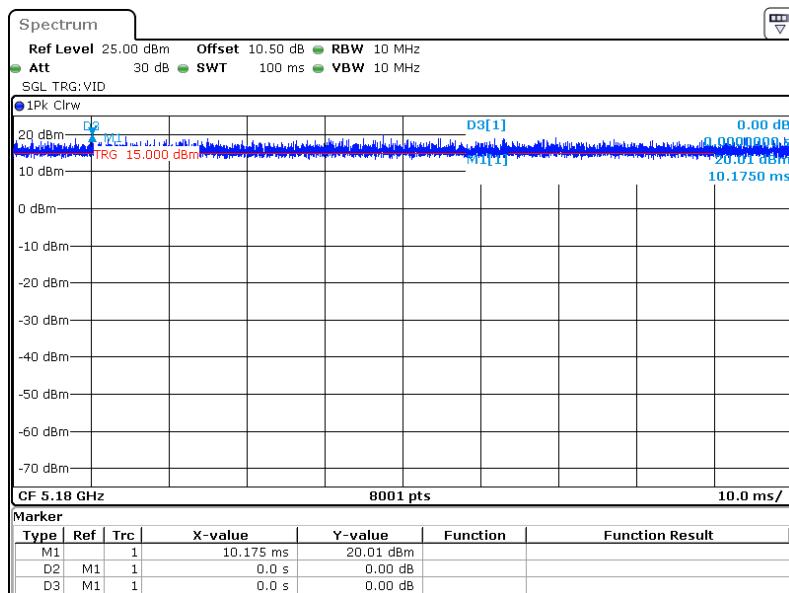
Duty cycle

Test Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)	Duty Cycle Factor (dB)	1/T (Hz)	VBW Setting (Hz)
802.11a	100	100	100.00	/	/	10.00
802.11ac vht20	100	100	100.00	/	/	10.00
802.11ac vht40	100	100	100.00	/	/	10.00
802.11ac vht80	100	100	100.00	/	/	10.00

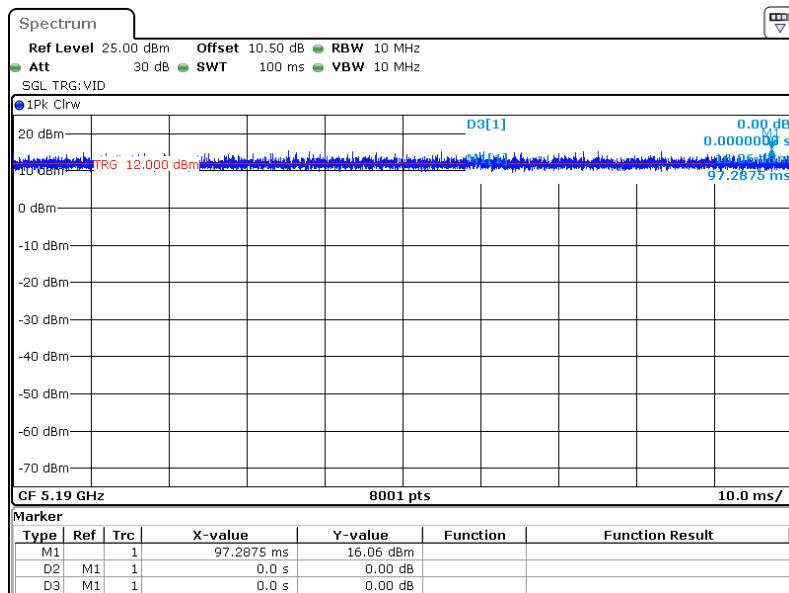
The test data of 802.11ax modes please refer to the Appendix.

802.11a

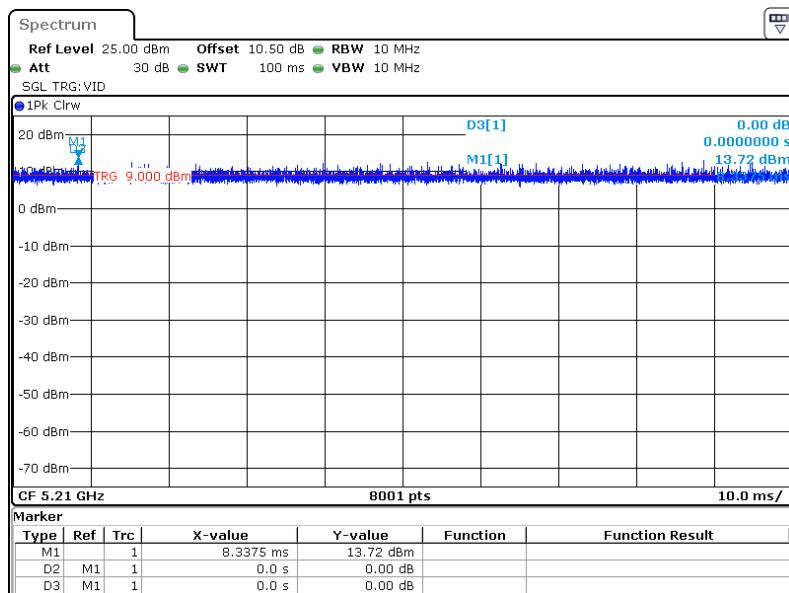
ProjectNo.:SZ1231213-75213E Tester:Bamboo Zhan
Date: 27.FEB.2024 16:39:24

802.11ac 20

ProjectNo.:SZ1231213-75213E Tester:Bamboo Zhan
Date: 27.FEB.2024 17:06:38

802.11ac 40

ProjectNo.:SZ1231213-75213E Tester:Bamboo Zhan
Date: 28.FEB.2024 09:04:57

802.11ac 80

ProjectNo.:SZ1231213-75213E Tester:Bamboo Zhan
Date: 28.FEB.2024 09:19:46

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

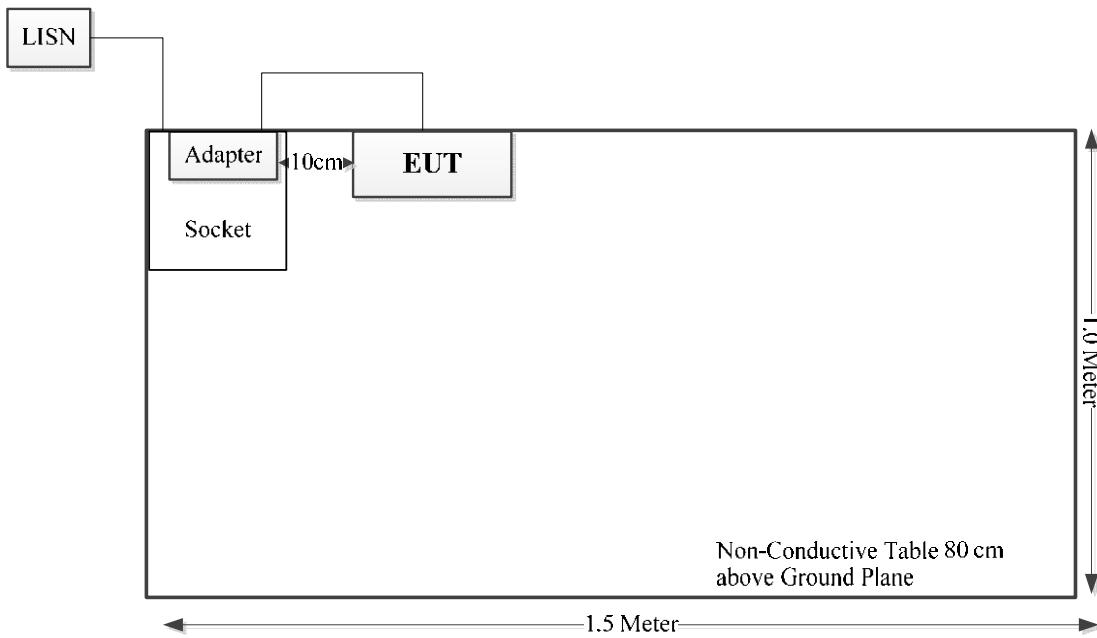
Manufacturer	Description	Model	Serial Number
Unknown	Socket	Unknown	Unknown

External I/O Cable

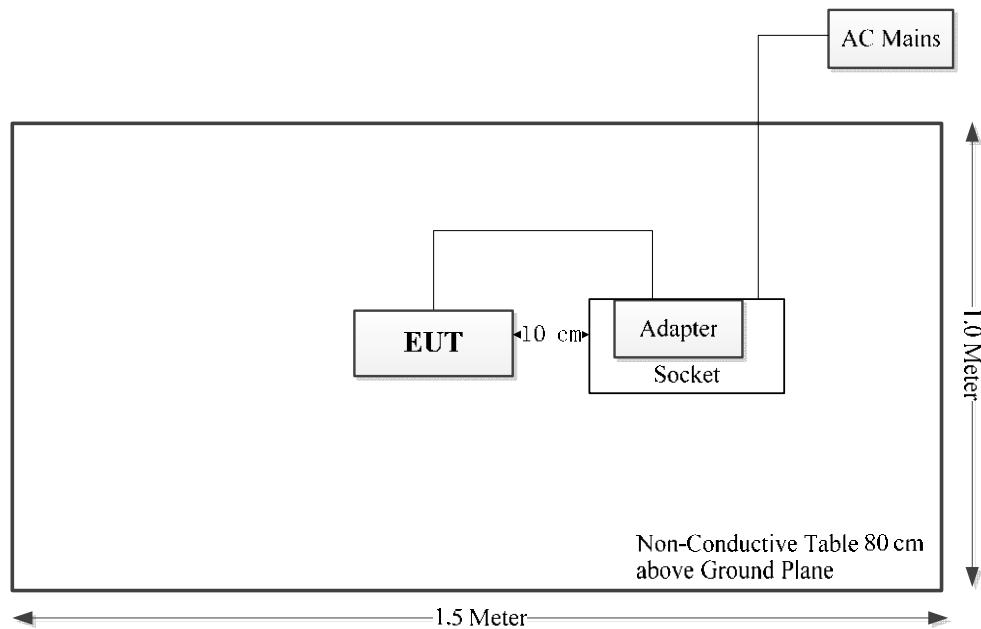
Cable Description	Length (m)	From Port	To
Un-shielding Detachable USB Cable	1.0	EUT	Adapter
Unshielded Un-detachable AC Cable	1.5	Socket	LISN/AC Main

Block Diagram of Test Setup

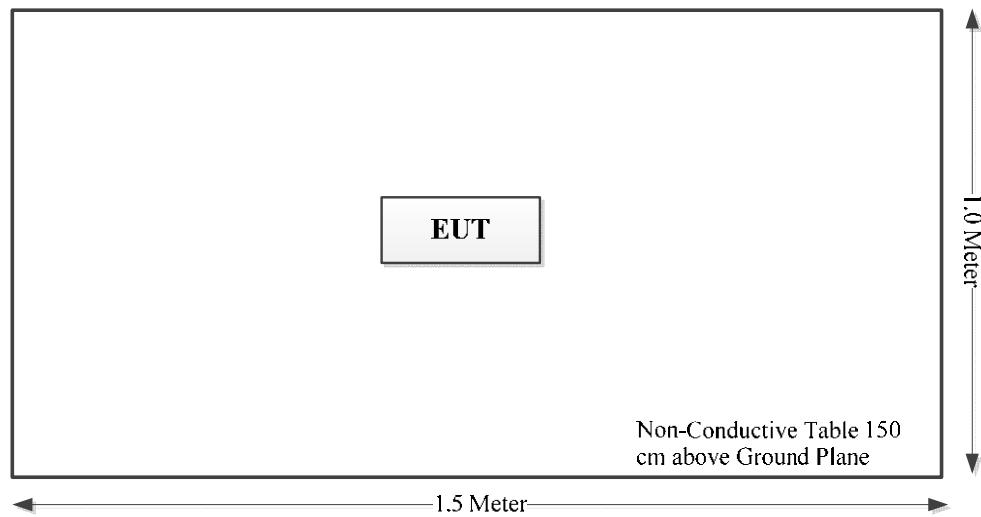
For Conducted Emissions:



Spurious emissions below 1GHz:



Spurious emissions above 1GHz:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 (b) (1) & §2.1093	RF Exposure	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)	Not Applicable

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 Emission 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 Emission Test					
R&S	EMI Test Receiver	ESR3	102455	2024/01/16	2025/01/15
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
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 Antenna	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
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	Horn Antenna	3116	9510-2270	2023/09/18	2026/09/17
Audix	EMI Test software	E3	191218(V9)	NCR	NCR
RF Conducted Test					
Tonscend	RF control Unit	JS0806-2	19D8060154	2023/09/06	2024/09/05
Agilent	USB wideband power sensor	U2021XA	MY52350001	2023/06/08	2024/06/07
Rohde & Schwarz	Signal and Spectrum Analyzer	FSV40	101473	2024/01/16	2025/01/15
R&S	spectrum analyzer	FSV40	101942	2023/12/18	2024/12/17
Unknown	10dB Attenuator	Unknown	F-03-EM190	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) (1) & §2.1093 – RF EXPOSURE

Applicable Standard

According to FCC §2.1093 and §1.1307(b) (1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

- a) According to KDB 447498 D01 General RF Exposure Guidance

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$

1. $f(\text{GHz})$ is the RF channel transmit frequency in GHz.

2. Power and distance are rounded to the nearest mW and mm before calculation.

3. The result is rounded to one decimal place for comparison.

4. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion.

Measurement Result

For Wi-Fi mode, please refer to SAR report: Please refer to SAR test report: SZ1231213-75213E-SA.

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 use 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 -1.64dBi(ANT 1); -3.6dBi (ANT 2), fulfill the requirement of this section. Please refer to the EUT photos.

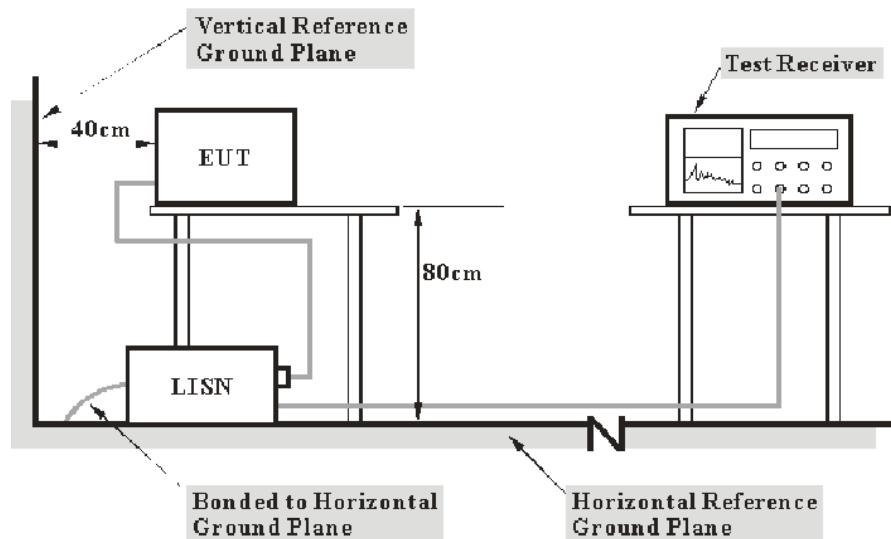
Result: Compliant

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:

$$\text{Factor} = \text{LISN VDF} + \text{Cable Loss}$$

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:

$$\begin{aligned}\text{Over Limit} &= \text{Level} - \text{Limit} \\ \text{Level} &= \text{Read Level} + \text{Factor}\end{aligned}$$

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

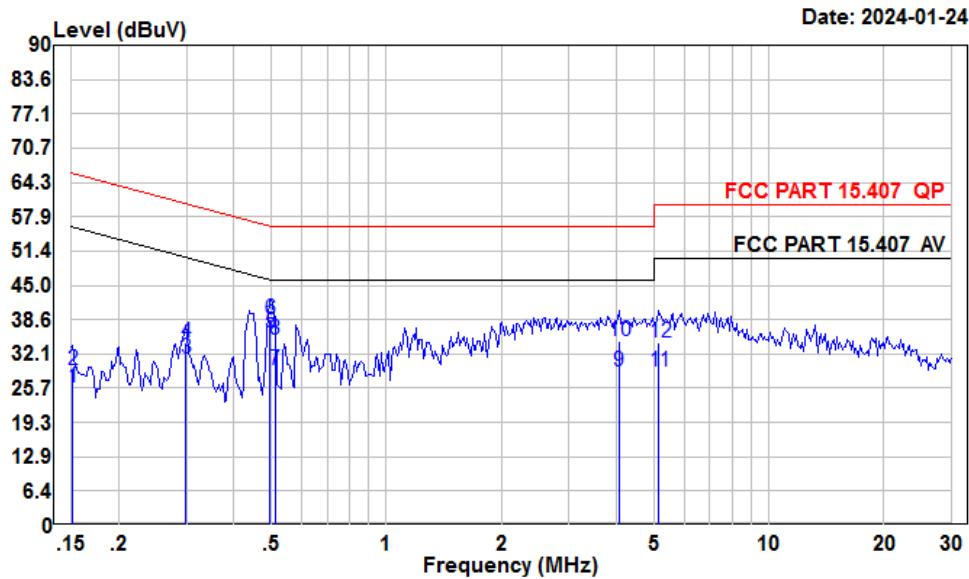
Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	54 %
ATM Pressure:	101 kPa

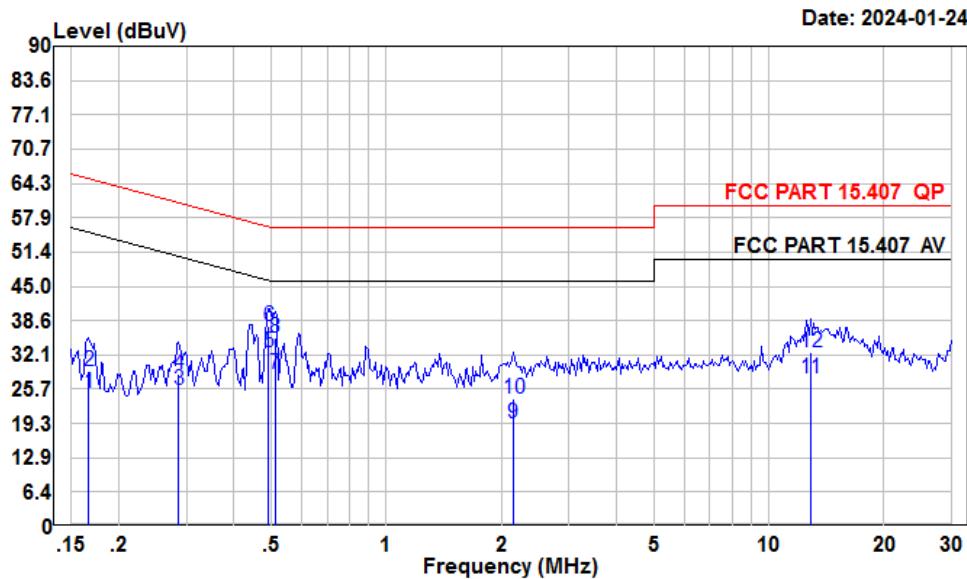
The testing was performed by Macy Shi on 2024-01-24.

EUT operation mode: Transmitting (Maximum output power mode, 802.11 a, 5825MHz, ANT2)

AC 120V/60 Hz, Line

Condition: Line
Project : SZ1231213-75213E-RF
Tester : Macy shi
Note : 5G WIFI

Freq	Read		LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV					
1	0.15	4.99	25.74	10.60	10.15	55.91	-30.17 Average
2	0.15	8.23	28.98	10.60	10.15	65.91	-36.93 QP
3	0.30	10.45	31.21	10.64	10.12	50.28	-19.07 Average
4	0.30	13.38	34.14	10.64	10.12	60.28	-26.14 QP
5	0.50	15.21	36.06	10.70	10.15	46.05	-9.99 Average
6	0.50	17.75	38.60	10.70	10.15	56.05	-17.45 QP
7	0.51	8.16	29.02	10.70	10.16	46.00	-16.98 Average
8	0.51	13.88	34.74	10.70	10.16	56.00	-21.26 QP
9	4.05	8.00	28.86	10.60	10.26	46.00	-17.14 Average
10	4.05	13.69	34.55	10.60	10.26	56.00	-21.45 QP
11	5.17	7.87	28.78	10.69	10.22	50.00	-21.22 Average
12	5.17	13.29	34.20	10.69	10.22	60.00	-25.80 QP

AC 120V/60 Hz, Neutral

Condition: Neutral

Project : SZ1231213-75213E-RF

Tester : Macy shi

Note : 5G WIFI

Freq	Read		LISN		Cable	Limit	Over	Remark
	MHz	Level	Level	Factor	Loss	Line	Limit	
1	0.17	4.23	24.95	10.57	10.15	55.12	-30.17	Average
2	0.17	8.43	29.15	10.57	10.15	65.12	-35.97	QP
3	0.29	4.67	25.55	10.74	10.14	50.63	-25.08	Average
4	0.29	7.61	28.49	10.74	10.14	60.63	-32.14	QP
5	0.49	11.60	32.56	10.80	10.16	46.14	-13.58	Average
6	0.49	16.51	37.47	10.80	10.16	56.14	-18.67	QP
7	0.51	7.52	28.46	10.78	10.16	46.00	-17.54	Average
8	0.51	14.53	35.47	10.78	10.16	56.00	-20.53	QP
9	2.14	-1.56	19.34	10.70	10.20	46.00	-26.66	Average
10	2.14	3.00	23.90	10.70	10.20	56.00	-32.10	QP
11	12.85	6.94	27.72	10.61	10.17	50.00	-22.28	Average
12	12.85	11.93	32.71	10.61	10.17	60.00	-27.29	QP

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

Applicable Standard

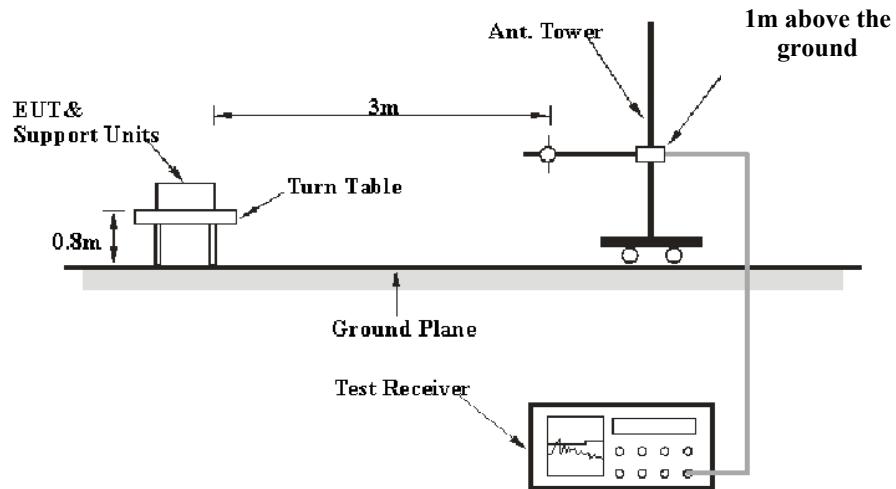
FCC §15.407 (b); §15.209; §15.205;

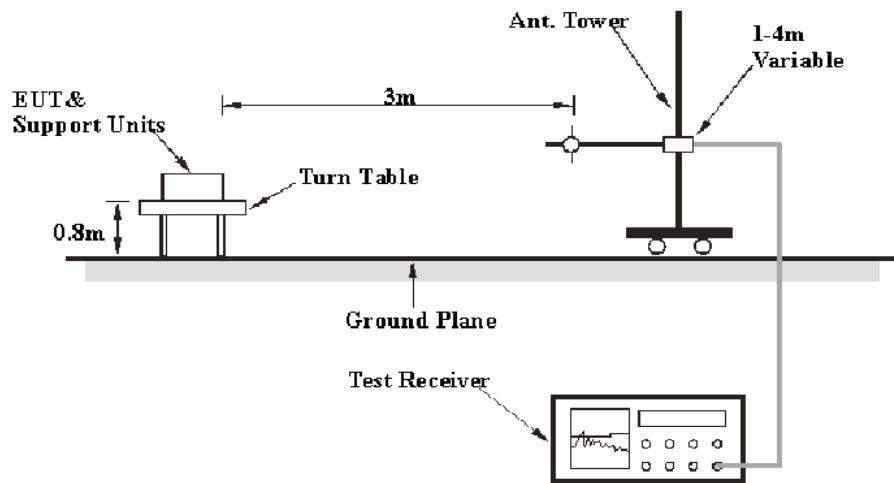
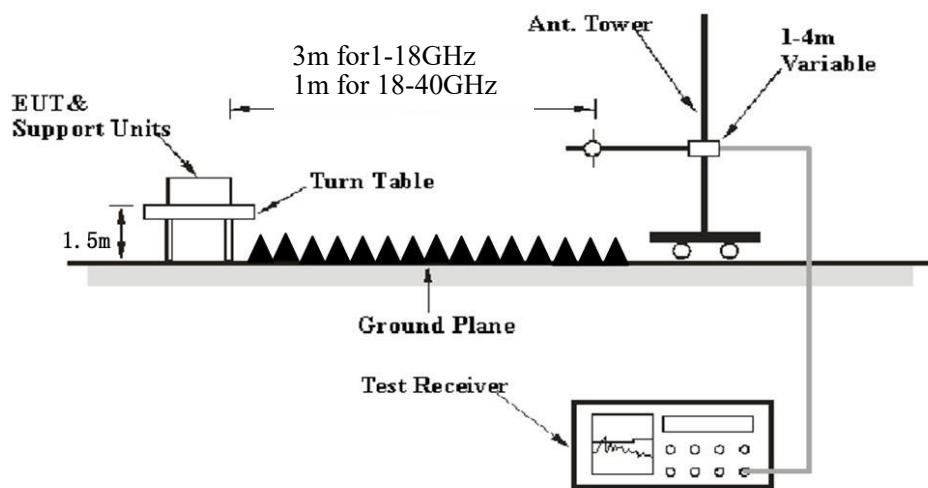
- (b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:
- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 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:

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

Note: T is minimum transmission duration

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

Test Procedure

Radiated Spurious Emission

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

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

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

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;

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

where

- $E_{\text{SpecLimit}}$ is the field strength of the emission at the distance specified by the limit, in $\text{dB}\mu\text{V/m}$
- E_{Meas} is the field strength of the emission at the measurement distance, in $\text{dB}\mu\text{V/m}$
- d_{Meas} is the measurement distance, in m
- $d_{\text{SpecLimit}}$ 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:

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

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:

$$\begin{aligned} \text{Over Limit} &= \text{Level} - \text{Limit}; \text{Margin} = \text{Limit} - \text{Corrected Amplitude} \\ \text{Level / Corrected Amplitude} &= \text{Read Level} + \text{Factor} \end{aligned}$$

Test Data

Environmental Conditions

Temperature:	23~24.5 °C
Relative Humidity:	50~55 %
ATM Pressure:	101 kPa

The testing was performed by Warren Huang on 2024-01-20 for below 1GHz and Zenos Qiao and Dylan Yang from 2024-01-27 to 2024-03-07 for above 1GHz.

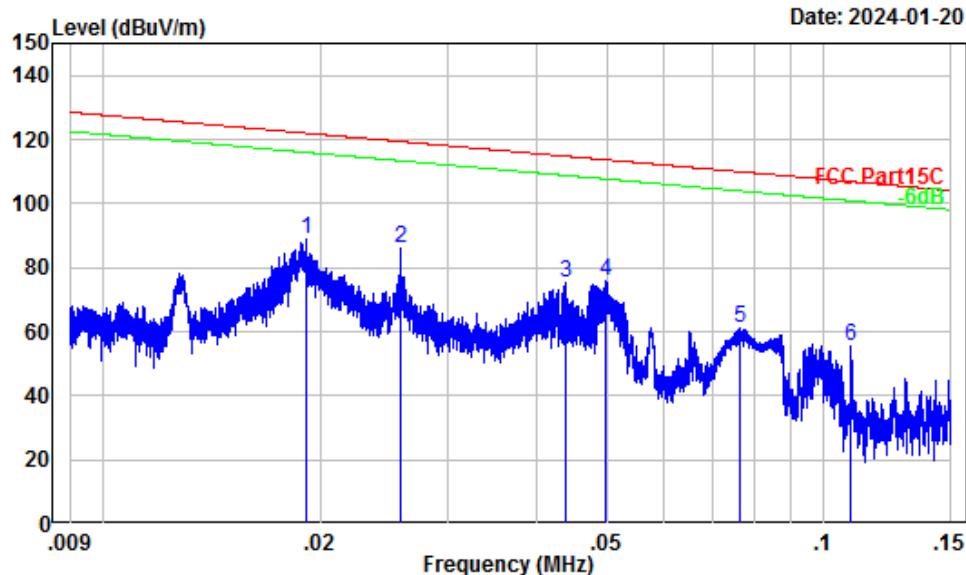
EUT operation mode: Transmitting

Note: Pre-scan in the X, Y and Z axes of orientation, the worst case Y-axis of orientation was recorded.

9 kHz-30MHz: (Maximum output power mode, 802.11 a, 5825MHz, ANT2)

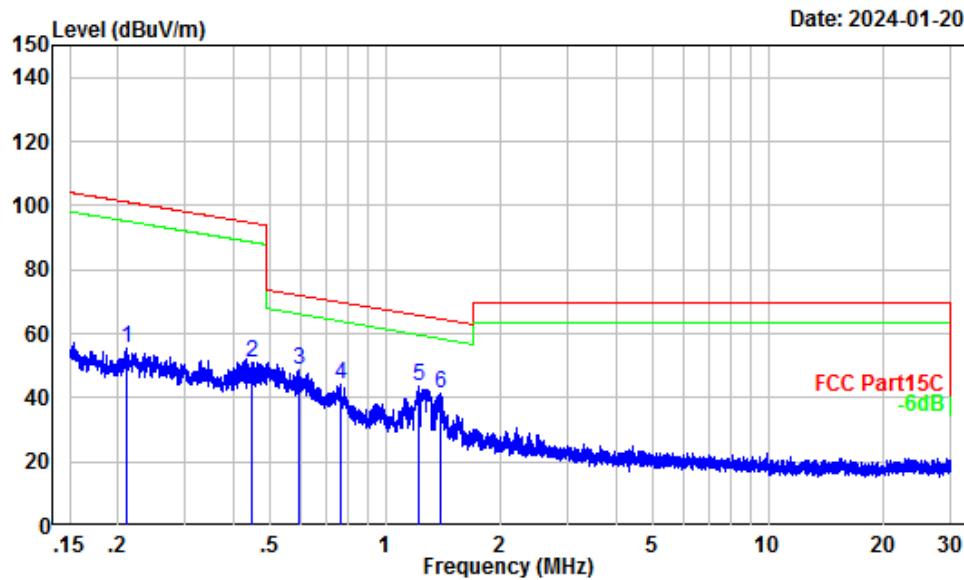
Note: When the test result of peak was less than the limit of QP/Average more than 6dB, just peak value were recorded.

Parallel (worst case)



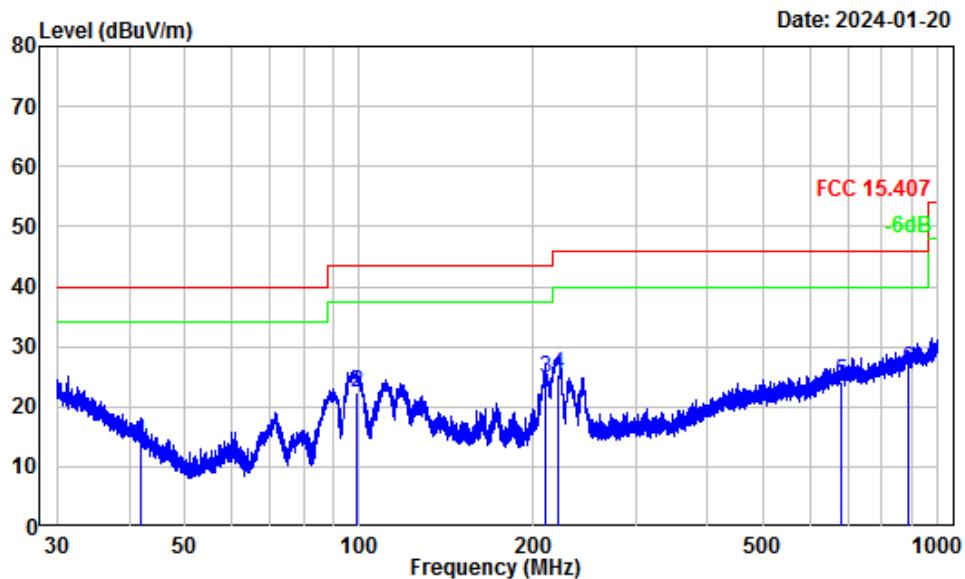
Site : chamber
Condition : 3m
Project Number: SZ1231213-75213E-RF
Note : 5G WIFI
Tester : Warren Huang

	Freq	Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.02	50.50	38.55	89.05	121.96	-32.91	Peak
2	0.03	48.44	37.65	86.09	119.36	-33.27	Peak
3	0.04	42.93	32.31	75.24	114.79	-39.55	Peak
4	0.05	41.04	34.67	75.71	113.64	-37.93	Peak
5	0.08	37.36	23.55	60.91	109.94	-49.03	Peak
6	0.11	33.67	22.02	55.69	106.86	-51.17	Peak



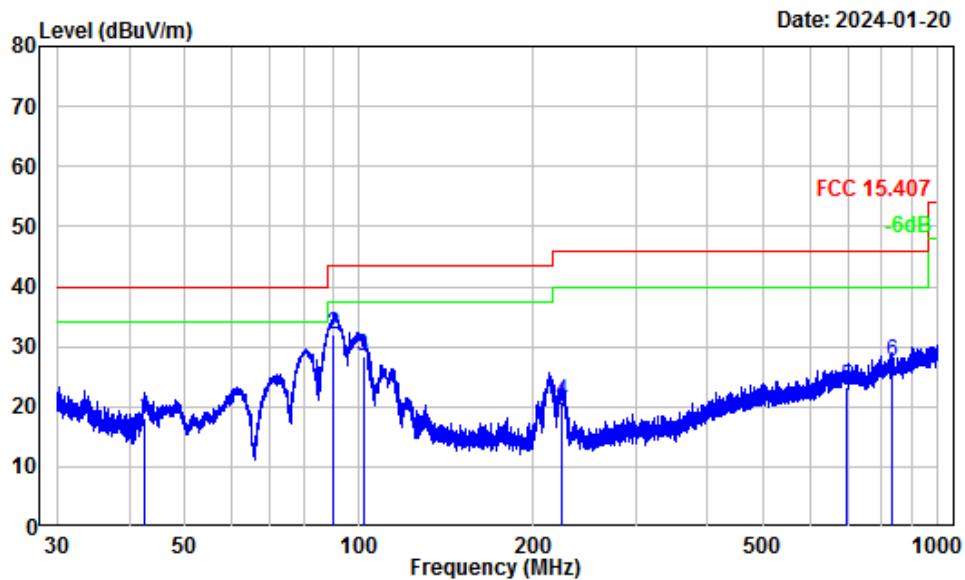
Site : chamber
Condition : 3m
Project Number: SZ1231213-75213E-RF
Note : 5G WIFI
Tester : Warren Huang

Freq	Factor	Read	Limit	Over	Remark	
		Level	Level	Line		
1	0.21	28.61	26.72	55.33	101.13	-45.80 Peak
2	0.45	21.66	29.50	51.16	94.55	-43.39 Peak
3	0.60	19.74	29.04	48.78	72.06	-23.28 Peak
4	0.76	17.44	26.56	44.00	69.87	-25.87 Peak
5	1.23	14.33	29.43	43.76	65.67	-21.91 Peak
6	1.40	13.47	27.94	41.41	64.50	-23.09 Peak

30 MHz-1 GHz: (Maximum output power mode, 802.11 a, 5825MHz, ANT2)**Horizontal**

Site : chamber
Condition : 3m Horizontal
Project Number: SZ1231213-75213E-RF
Note : 5G WIFI
Tester : Warren Huang

	Freq	Read Factor	Level	Limit Level	Line	Over Limit	Remark
	MHz	dB/m	dB _{uV}	dB _{uV/m}	dB _{uV/m}	dB	
1	41.79	-11.53	25.64	14.11	40.00	-25.89	QP
2	98.79	-14.08	36.50	22.42	43.50	-21.08	QP
3	209.68	-11.19	35.80	24.61	43.50	-18.89	QP
4	220.91	-11.37	36.63	25.26	46.00	-20.74	QP
5	682.95	-1.83	25.92	24.09	46.00	-21.91	QP
6	886.83	0.80	25.36	26.16	46.00	-19.84	QP

Vertical

Site : chamber
Condition : 3m Vertical
Project Number: SZ1231213-75213E-RF
Note : 5G WIFI
Tester : Warren Huang

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m	dBuV/m	
1	42.47	-13.29	31.55	18.26	40.00	-21.74	QP
2	90.34	-17.29	49.14	31.85	43.50	-11.65	QP
3	101.51	-14.79	43.24	28.45	43.50	-15.05	QP
4	224.22	-12.24	32.98	20.74	46.00	-25.26	QP
5	694.11	-2.02	25.12	23.10	46.00	-22.90	QP
6	834.05	-0.28	27.80	27.52	46.00	-18.48	QP

Above 1GHz:**5150-5250 MHz:**

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)					
	Reading (dB μ V)	PK/Ave		Height (m)	Polar (H/V)									
802.11a (ANT 1)														
5180MHz														
10360.00	50.89	PK	231	1.3	H	13.07	63.96	68.2	-4.24					
10360.00	50.18	PK	231	1.3	V	13.07	63.25	68.2	-4.95					
5200MHz														
10400.00	51.45	PK	145	2.2	H	13.12	64.57	68.2	-3.63					
10400.00	50.72	PK	145	2.2	V	13.12	63.84	68.2	-4.36					
5240MHz														
10480.00	52.06	PK	206	2.5	H	13.07	65.13	68.2	-3.07					
10480.00	51.21	PK	206	2.5	V	13.07	64.28	68.2	-3.92					
802.11a (ANT 2)														
5180MHz														
10360.00	49.96	PK	55	1.6	H	13.07	63.03	68.2	-5.17					
10360.00	49.17	PK	55	1.6	V	13.07	62.24	68.2	-5.96					
5200MHz														
10400.00	50.53	PK	261	1.7	H	13.12	63.65	68.2	-4.55					
10400.00	49.75	PK	261	1.7	V	13.12	62.87	68.2	-5.33					
5240MHz														
10480.00	51.18	PK	45	1.6	H	13.07	64.25	68.2	-3.95					
10480.00	50.35	PK	45	1.6	V	13.07	63.42	68.2	-4.78					
802.11ac20														
5180MHz														
10360.00	51.23	PK	181	2.4	H	13.07	64.30	68.2	-3.90					
10360.00	50.54	PK	181	2.4	V	13.07	63.61	68.2	-4.59					
5200MHz														
10400.00	51.68	PK	92	2.4	H	13.12	64.80	68.2	-3.40					
10400.00	50.95	PK	92	2.4	V	13.12	64.07	68.2	-4.13					
5240MHz														
10480.00	52.12	PK	232	1.6	H	13.07	65.19	68.2	-3.01					
10480.00	51.31	PK	232	1.6	V	13.07	64.38	68.2	-3.82					

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)					
	Reading (dB μ V)	PK/Ave		Height (m)	Polar (H/V)									
802.11ac40														
5190MHz														
10380.00	49.54	PK	257	1.0	H	13.09	62.63	68.2	-5.57					
10380.00	48.75	PK	257	1.0	V	13.09	61.84	68.2	-6.36					
5230MHz														
10460.00	51.77	PK	311	2.2	H	13.09	64.86	68.2	-3.34					
10460.00	50.93	PK	311	2.2	V	13.09	64.02	68.2	-4.18					
802.11ac80														
5210MHz														
10420.00	50.39	PK	209	1.6	H	13.12	63.51	68.2	-4.69					
10420.00	49.64	PK	209	1.6	V	13.12	62.76	68.2	-5.44					
802.11ax20														
5180MHz_242Tone_RU61														
10360.00	51.32	PK	4	1.3	H	13.07	64.39	68.2	-3.81					
10360.00	50.53	PK	4	1.3	V	13.07	63.60	68.2	-4.60					
5200MHz_242Tone_RU61														
10400.00	51.51	PK	13	1.1	H	13.12	64.63	68.2	-3.57					
10400.00	50.74	PK	13	1.1	V	13.12	63.86	68.2	-4.34					
5240MHz_242Tone_RU61														
10480.00	51.78	PK	289	2.5	H	13.07	64.85	68.2	-3.35					
10480.00	50.95	PK	289	2.5	V	13.07	64.02	68.2	-4.18					
802.11ax40														
5190MHz_484Tone_RU65														
10380.00	49.92	PK	2	1.7	H	13.09	63.01	68.2	-5.19					
10380.00	49.15	PK	2	1.7	V	13.09	62.24	68.2	-5.96					
5230MHz_484Tone_RU65														
10460.00	51.16	PK	104	2.2	H	13.09	64.25	68.2	-3.95					
10460.00	50.33	PK	104	2.2	V	13.09	63.42	68.2	-4.78					
802.11ax80														
5210MHz_996Tone_RU67														
10420.00	49.54	PK	23	1.2	H	13.12	62.66	68.2	-5.54					
10420.00	48.89	PK	23	1.2	V	13.12	62.01	68.2	-6.19					

5725-5850 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)					
	Reading (dB μ V)	PK/Ave		Height (m)	Polar (H/V)									
802.11a (ANT 1)														
5745MHz														
11490.00	49.72	PK	281	1.7	H	14.31	64.03	74	-9.97					
11490.00	34.66	AV	281	1.7	H	14.31	48.97	54	-5.03					
11490.00	50.53	PK	131	1.4	V	14.31	64.84	74	-9.16					
11490.00	35.94	AV	131	1.4	V	14.31	50.25	54	-3.75					
5785MHz														
11570.00	45.63	PK	357	1.9	H	14.05	59.68	74	-14.32					
11570.00	35.18	AV	357	1.9	H	14.05	49.23	54	-4.77					
11570.00	50.23	PK	346	1.2	V	14.05	64.28	74	-9.72					
11570.00	36.63	AV	346	1.2	V	14.05	50.68	54	-3.32					
5825MHz														
11650.00	46.17	PK	199	1.6	H	13.83	60.00	74	-14.00					
11650.00	35.88	AV	199	1.6	H	13.83	49.71	54	-4.29					
11650.00	50.25	PK	292	2.4	V	13.83	64.08	74	-9.92					
11650.00	36.55	AV	292	2.4	V	13.83	50.38	54	-3.62					
802.11a (ANT 2)														
5745MHz														
11490.00	47.33	PK	209	1.7	H	14.31	61.64	74	-12.36					
11490.00	33.62	AV	209	1.7	H	14.31	47.93	54	-6.07					
11490.00	48.58	PK	139	1.5	V	14.31	62.89	74	-11.11					
11490.00	36.58	AV	139	1.5	V	14.31	50.89	54	-3.11					
5785MHz														
11570.00	47.02	PK	342	1.3	H	14.05	61.07	74	-12.93					
11570.00	32.06	AV	342	1.3	H	14.05	46.11	54	-7.89					
11570.00	48.97	PK	218	2.1	V	14.05	63.02	74	-10.98					
11570.00	36.04	AV	218	2.1	V	14.05	50.09	54	-3.91					
5825MHz														
11650.00	46.78	PK	56	1.7	H	13.83	60.61	74	-13.39					
11650.00	31.91	AV	56	1.7	H	13.83	45.74	54	-8.26					
11650.00	49.02	PK	148	1.5	V	13.83	62.85	74	-11.15					
11650.00	36.22	AV	148	1.5	V	13.83	50.05	54	-3.95					

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)					
	Reading (dB μ V)	PK/Ave		Height (m)	Polar (H/V)									
802.11ac20														
5745MHz														
11490.00	44.95	PK	327	1.1	H	14.31	59.26	74	-14.74					
11490.00	34.22	AV	327	1.1	H	14.31	48.53	54	-5.47					
11490.00	48.66	PK	338	1.4	V	14.31	62.97	74	-11.03					
11490.00	36.38	AV	338	1.4	V	14.31	50.69	54	-3.31					
5785MHz														
11570.00	44.54	PK	118	1.9	H	14.05	58.59	74	-15.41					
11570.00	33.16	AV	118	1.9	H	14.05	47.21	54	-6.79					
11570.00	49.59	PK	278	2.3	V	14.05	63.64	74	-10.36					
11570.00	36.29	AV	278	2.3	V	14.05	50.34	54	-3.66					
5825MHz														
11650.00	44.85	PK	29	1.7	H	13.83	58.68	74	-15.32					
11650.00	33.26	AV	29	1.7	H	13.83	47.09	54	-6.91					
11650.00	49.53	PK	182	1.0	V	13.83	63.36	74	-10.64					
11650.00	36.51	AV	182	1.0	V	13.83	50.34	54	-3.66					
802.11ac40														
5755MHz														
11510.00	45.19	PK	124	1.8	H	14.29	59.48	74	-14.52					
11510.00	33.52	AV	124	1.8	H	14.29	47.81	54	-6.19					
11510.00	47.49	PK	5	2.1	V	14.29	61.78	74	-12.22					
11510.00	35.16	AV	5	2.1	V	14.29	49.45	54	-4.55					
5795MHz														
11590.00	45.44	PK	332	1.7	H	13.97	59.41	74	-14.59					
11590.00	31.02	AV	332	1.7	H	13.97	44.99	54	-9.01					
11590.00	49.29	PK	131	1.7	V	13.97	63.26	74	-10.74					
11590.00	32.08	AV	131	1.7	V	13.97	46.05	54	-7.95					
802.11ac80														
5775MHz														
11550.00	46.54	PK	229	1.8	H	14.13	60.67	74	-13.33					
11550.00	35.01	AV	229	1.8	H	14.13	49.14	54	-4.86					
11550.00	47.98	PK	147	1.3	V	14.13	62.11	74	-11.89					
11550.00	35.87	AV	147	1.3	V	14.13	50.00	54	-4.00					

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)					
	Reading (dB μ V)	PK/Ave		Height (m)	Polar (H/V)									
802.11ax20														
5745MHz_242Tone_RU61														
11490.00	49.25	PK	199	2.2	H	14.31	63.56	74	-10.44					
11490.00	35.42	AV	199	2.2	H	14.31	49.73	54	-4.27					
11490.00	50.31	PK	150	2.2	V	14.31	64.62	74	-9.38					
11490.00	36.54	AV	150	2.2	V	14.31	50.85	54	-3.15					
5785MHz_242Tone_RU61														
11570.00	48.89	PK	190	1.1	H	14.05	62.94	74	-11.06					
11570.00	35.21	AV	190	1.1	H	14.05	49.26	54	-4.74					
11570.00	49.75	PK	113	2.4	V	14.05	63.80	74	-10.20					
11570.00	36.08	AV	113	2.4	V	14.05	50.13	54	-3.87					
5825MHz_242Tone_RU61														
11650.00	48.57	PK	21	1.1	H	13.83	62.40	74	-11.60					
11650.00	34.96	AV	21	1.1	H	13.83	48.79	54	-5.21					
11650.00	49.34	PK	56	2.1	V	13.83	63.17	74	-10.83					
11650.00	35.85	AV	56	2.1	V	13.83	49.68	54	-4.32					
802.11ax40														
5755MHz_484Tone_RU65														
11510.00	48.48	PK	55	1.0	H	14.29	62.77	74	-11.23					
11510.00	35.57	AV	55	1.0	H	14.29	49.86	54	-4.14					
11510.00	49.32	PK	113	1.1	V	14.29	63.61	74	-10.39					
11510.00	36.71	AV	113	1.1	V	14.29	51.00	54	-3.00					
5795MHz_484Tone_RU65														
11590.00	47.99	PK	74	2.3	H	13.97	61.96	74	-12.04					
11590.00	34.68	AV	74	2.3	H	13.97	48.65	54	-5.35					
11590.00	49.02	PK	124	1.2	V	13.97	62.99	74	-11.01					
11590.00	36.35	AV	124	1.2	V	13.97	50.32	54	-3.68					
802.11ax80														
5775MHz_996Tone_RU67														
11550.00	47.85	PK	145	2.3	H	14.13	61.98	74	-12.02					
11550.00	35.24	AV	145	2.3	H	14.13	49.37	54	-4.63					
11550.00	49.52	PK	154	1.5	V	14.13	63.65	74	-10.35					
11550.00	36.17	AV	154	1.5	V	14.13	50.30	54	-3.70					

Note:

Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor

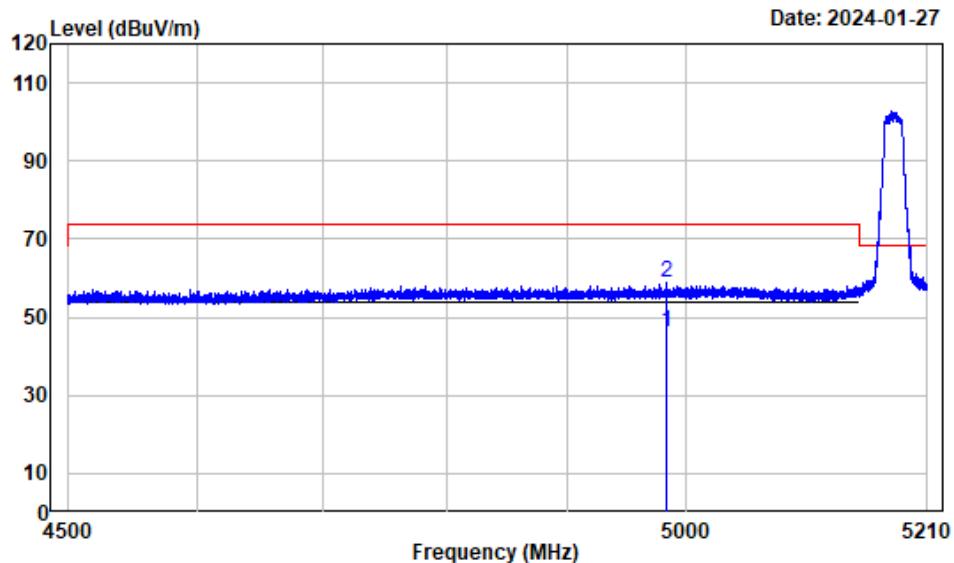
Corrected Amplitude = Factor + Reading

Margin = Corrected. Amplitude - Limit

The other spurious emission which is in the noise floor level was not recorded.

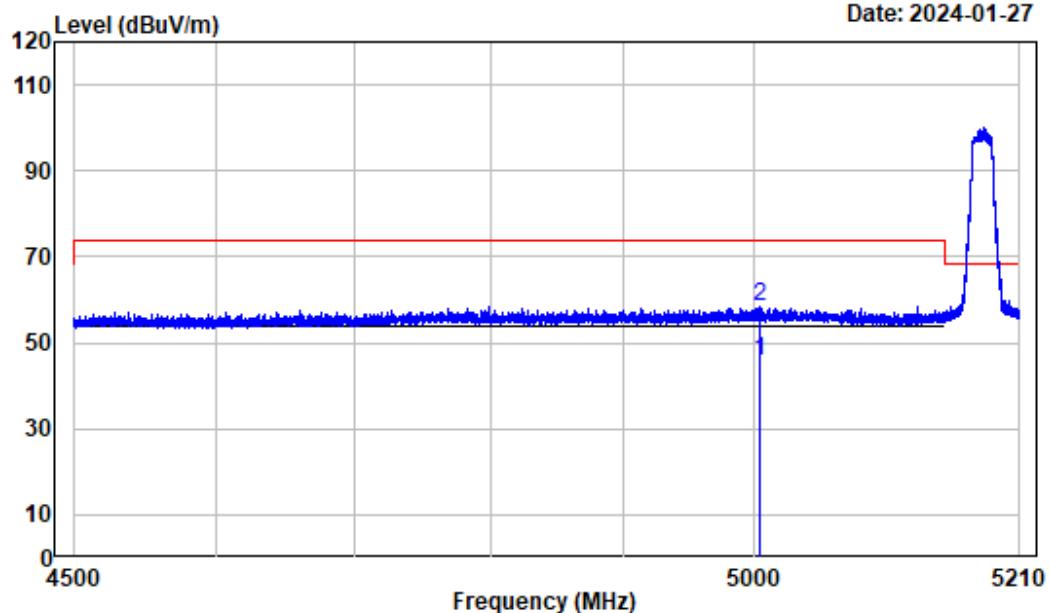
Test plots for Band Edge Measurements (Radiated)**5150-5250MHz:****802.11a, ANT 1**

Test Channel:	5180MHz	Ant. Polar. :	Horizontal
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Condition : Horizontal
Project No.: SZ1231213-75213E-RF
Tester : Zenos Qiao
Note :

Freq	Factor	Read		Limit		Over Limit
		MHz	dB/m	dB _B U	dB _B U/m	
1	4983.333	2.85	43.12	45.97	54.00 Average	-8.03
2	4983.333	2.85	55.81	58.66	74.00 Peak	-15.34

802.11a, ANT 1Test Channel: **5180MHz** Ant. Polar. : **Vertical**

Condition : Vertical

Project No.: SZ1231213-75213E-RF

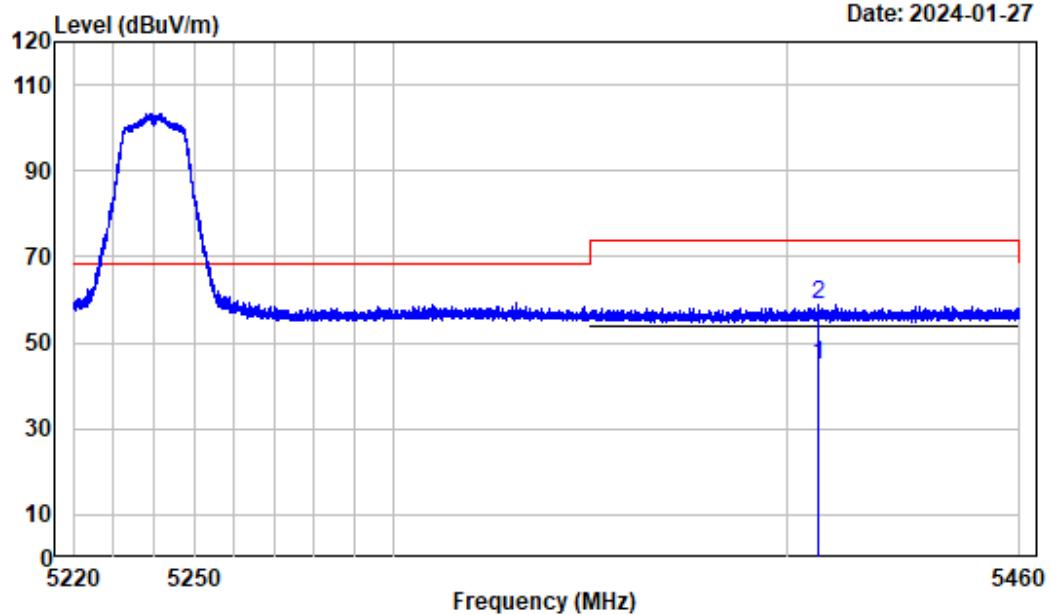
Tester : Zenos Qiao

Note :

Freq	Factor	Read		Limit		Over Limit
		Level	dBuV	Line	Remark	
MHz	dB/m	dBuV	dBuV/m	dBuV/m		
1 5004.544	2.97	42.75	45.72	54.00	Average	-8.28
2 5004.544	2.97	55.42	58.39	74.00	Peak	-15.61

802.11a, ANT 1

Test Channel:	5240MHz	Ant. Polar. :	Horizontal
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Condition : Horizontal

Project No.: SZ1231213-75213E-RF

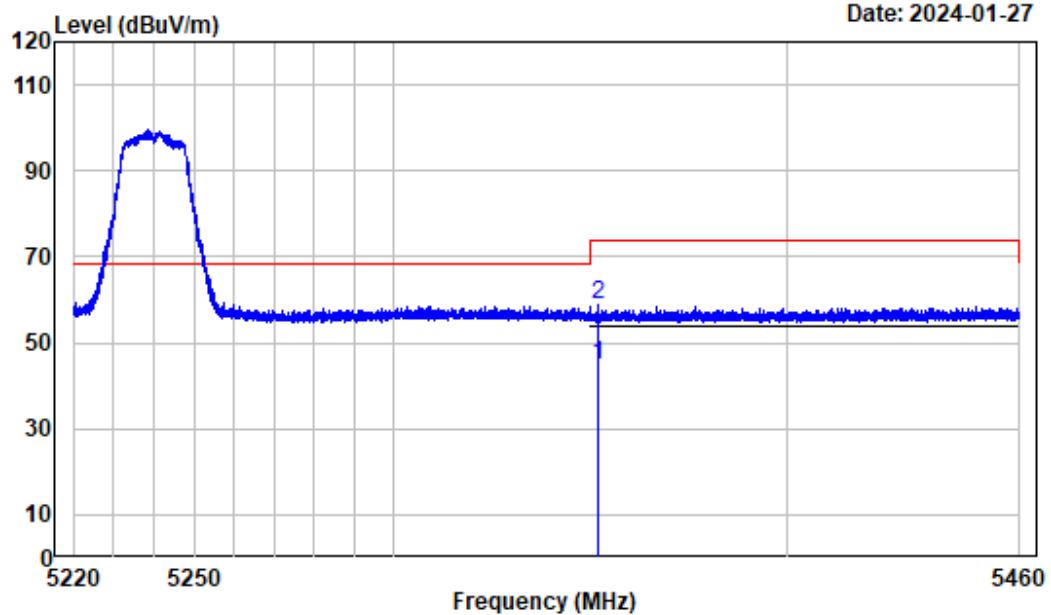
Tester : Zenos Qiao

Note :

Freq	Factor	Read		Limit		Over Limit
		Level	Level	Line	Remark	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 5407.860	3.00	42.05	45.05	54.00	Average	-8.95
2 5407.860	3.00	56.06	59.06	74.00	Peak	-14.94

802.11a, ANT 1

Test Channel: 5240MHz Ant. Polar.: Vertical



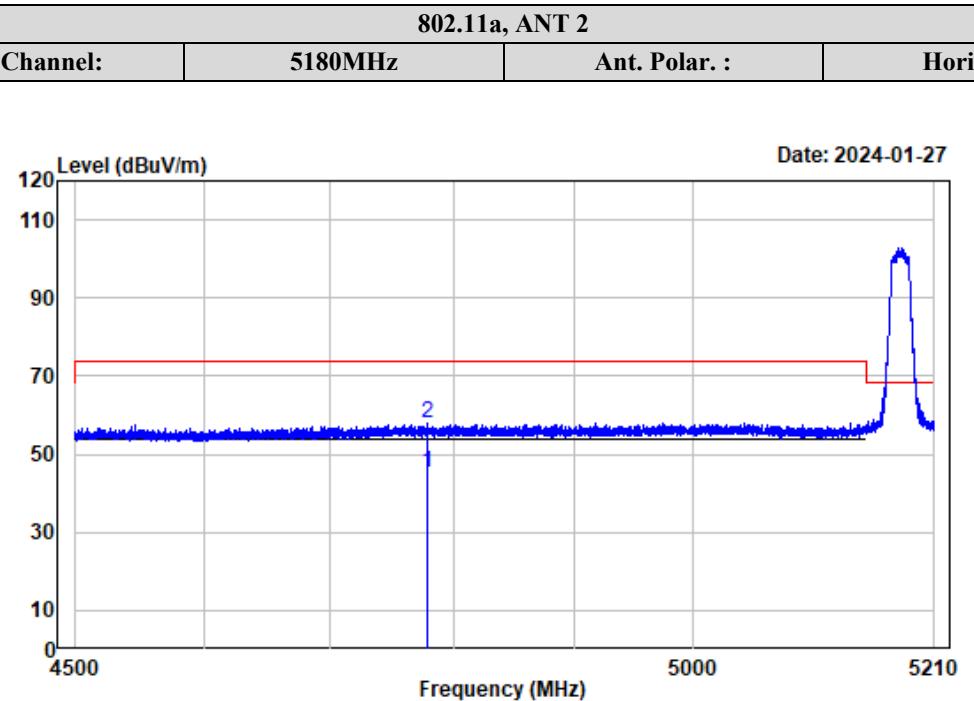
Condition : Vertical

Project No.: SZ1231213-75213E-RF

Tester : Zenos Qiao

Note :

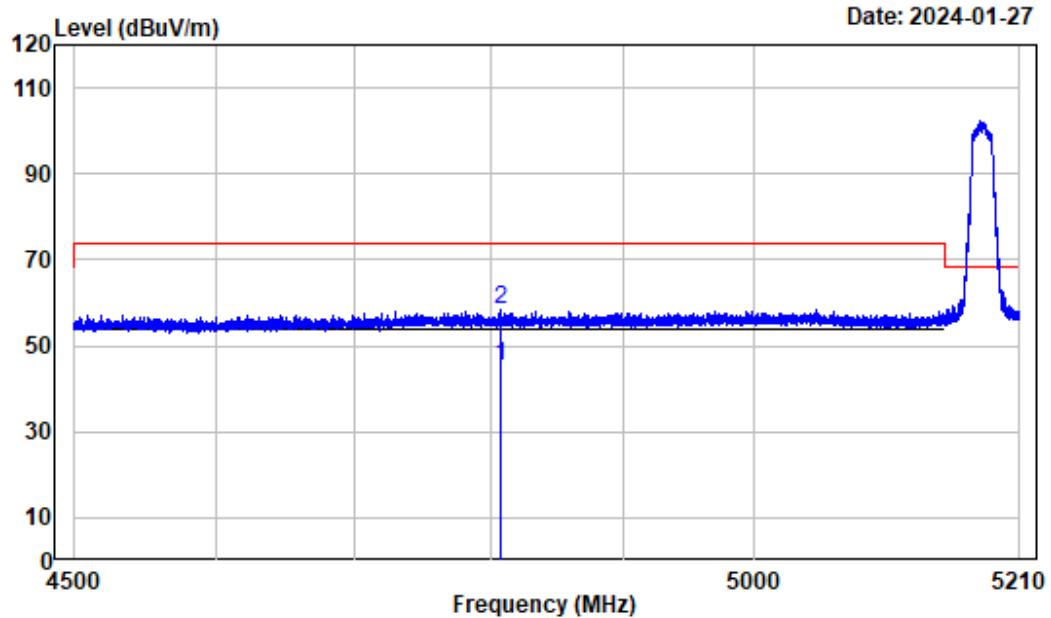
Freq	Factor	Read		Limit		Over Limit
		Level	Level	Line	Remark	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 5351.850	2.91	41.94	44.85	54.00	Average	-9.15
2 5351.850	2.91	56.00	58.91	74.00	Peak	-15.09



Freq	Factor	Read		Limit		Over Limit
		Level	Level	Line	Remark	
1	4779.296	2.44	42.85	45.29	54.00 Average	-8.71
2	4779.296	2.44	55.73	58.17	74.00 Peak	-15.83

802.11a, ANT 2

Test Channel: 5180MHz Ant. Polar.: Vertical



Condition : Vertical

Project No.: SZ1231213-75213E-RF

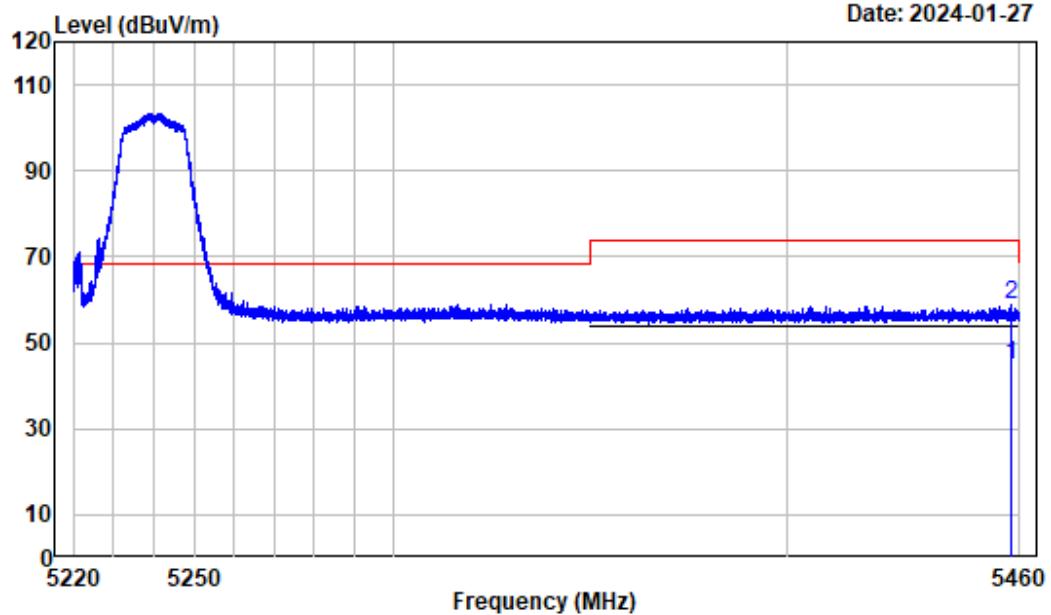
Tester : Zenos Qiao

Note :

Freq	Factor	Read		Limit		Over Limit
		Level	Level	Line	Remark	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 4807.252	2.43	42.88	45.31	54.00	Average	-8.69
2 4807.252	2.43	56.14	58.57	74.00	Peak	-15.43

802.11a, ANT 2

Test Channel: 5240MHz Ant. Polar.: Horizontal



Condition : Horizontal

Project No.: SZ1231213-75213E-RF

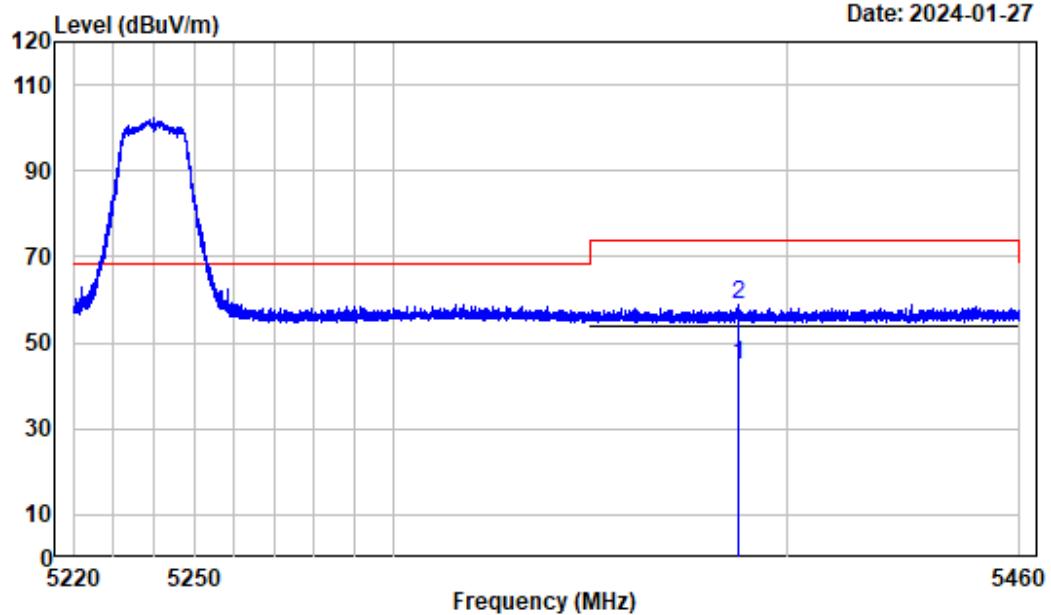
Tester : Zenos Qiao

Note :

Freq	Factor	Read		Limit		Over Limit
		Level	Level	Line	Remark	
MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1 5457.810	3.06	41.93	44.99	54.00	Average	-9.01
2 5457.810	3.06	56.00	59.06	74.00	Peak	-14.94

802.11a, ANT 2

Test Channel: 5240MHz Ant. Polar.: Vertical



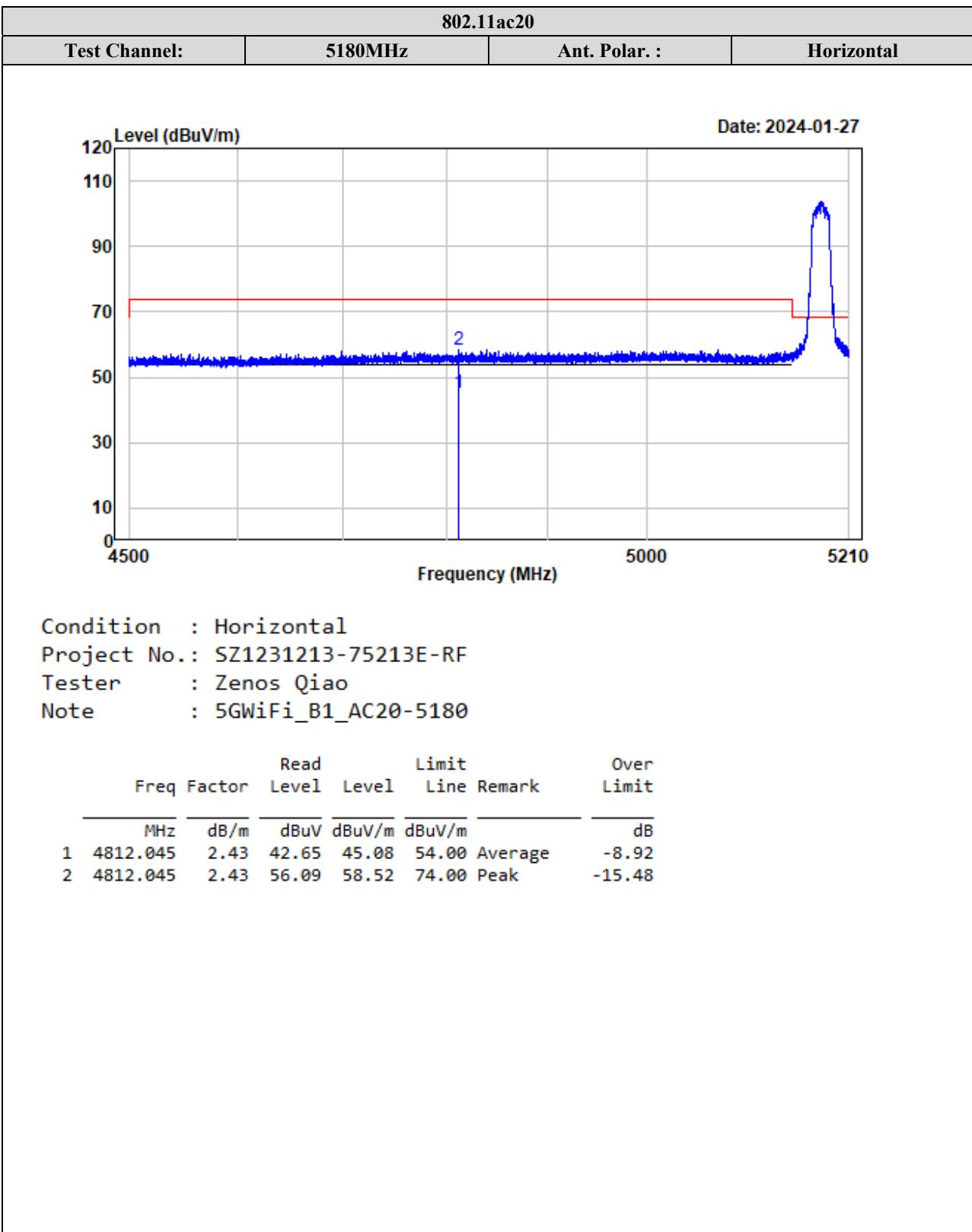
Condition : Vertical

Project No.: SZ1231213-75213E-RF

Tester : Zenos Qiao

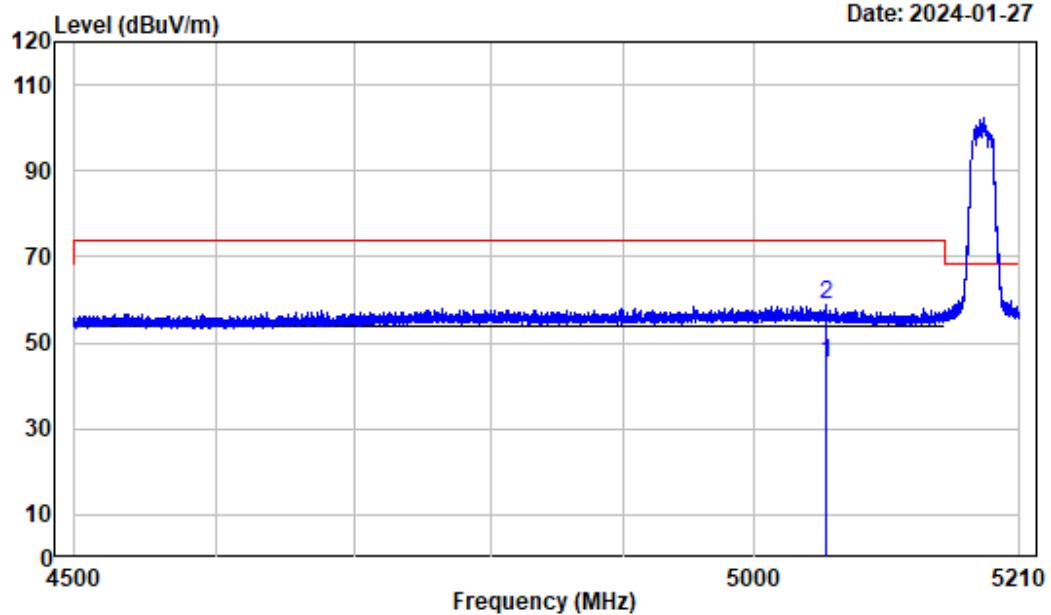
Note :

Freq	Factor	Read		Limit		Over Limit
		Level	Level	Line	Remark	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 5387.460	2.96	42.02	44.98	54.00	Average	-9.02
2 5387.460	2.96	55.87	58.83	74.00	Peak	-15.17



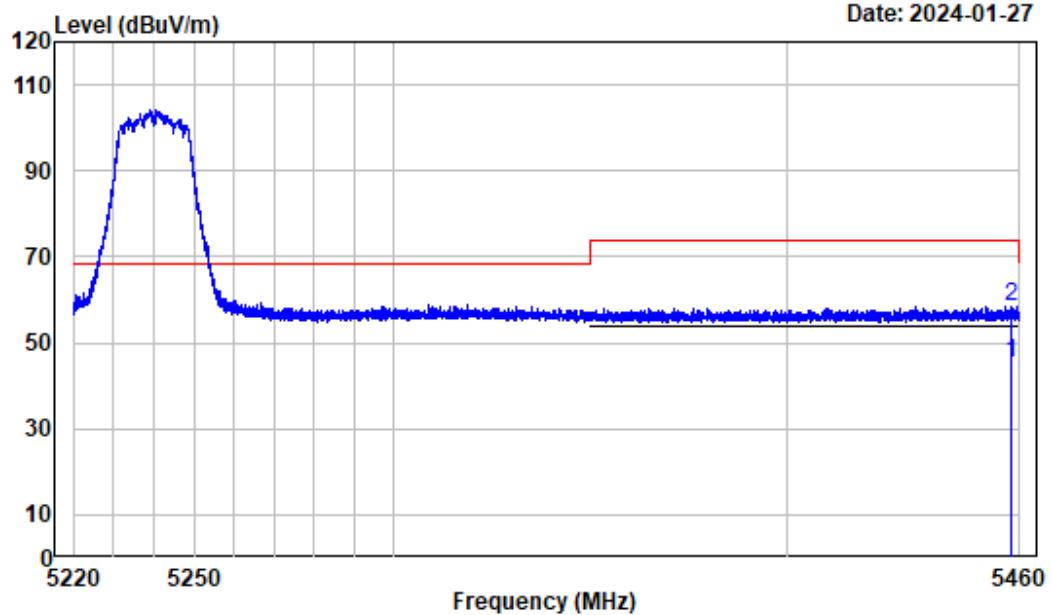
802.11ac20

Test Channel:	5180MHz	Ant. Polar. :	Vertical
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Condition : Vertical
Project No.: SZ1231213-75213E-RF
Tester : Zenos Qiao
Note : 5GWiFi_B1_AC20-5180

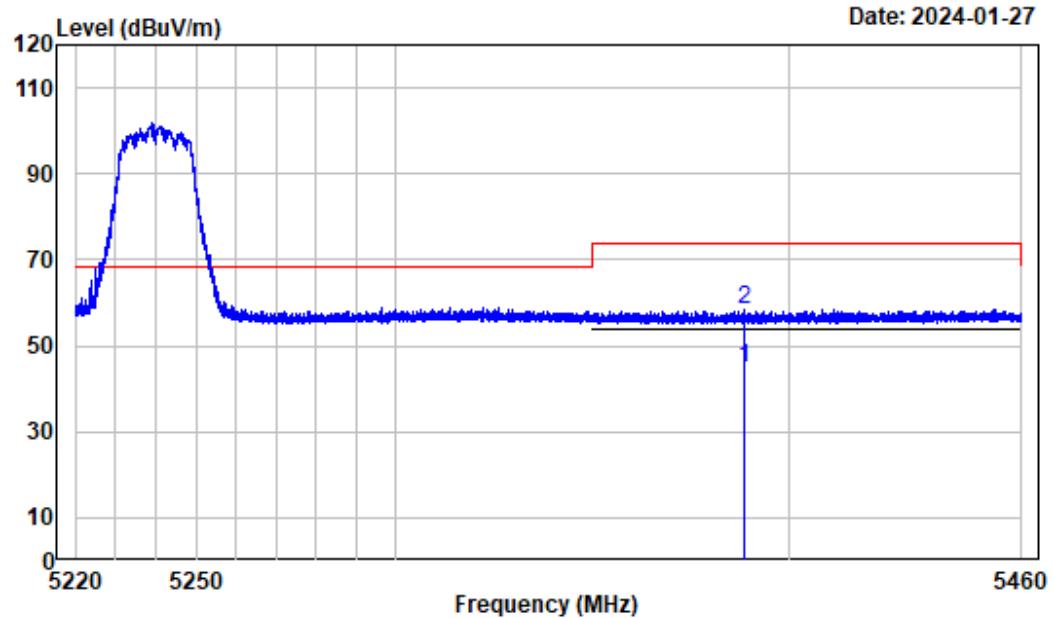
Freq	Factor	Read		Limit		Over Limit
		Level	Level	Line	Remark	
1	5055.575	2.93	42.43	45.36	54.00 Average	-8.64
2	5055.575	2.93	55.99	58.92	74.00 Peak	-15.08

802.11ac20Test Channel: **5240MHz** Ant. Polar. : **Horizontal**

Condition : Horizontal
Project No.: SZ1231213-75213E-RF
Tester : Zenos Qiao
Note : 5GWiFi_B1_AC20-5240

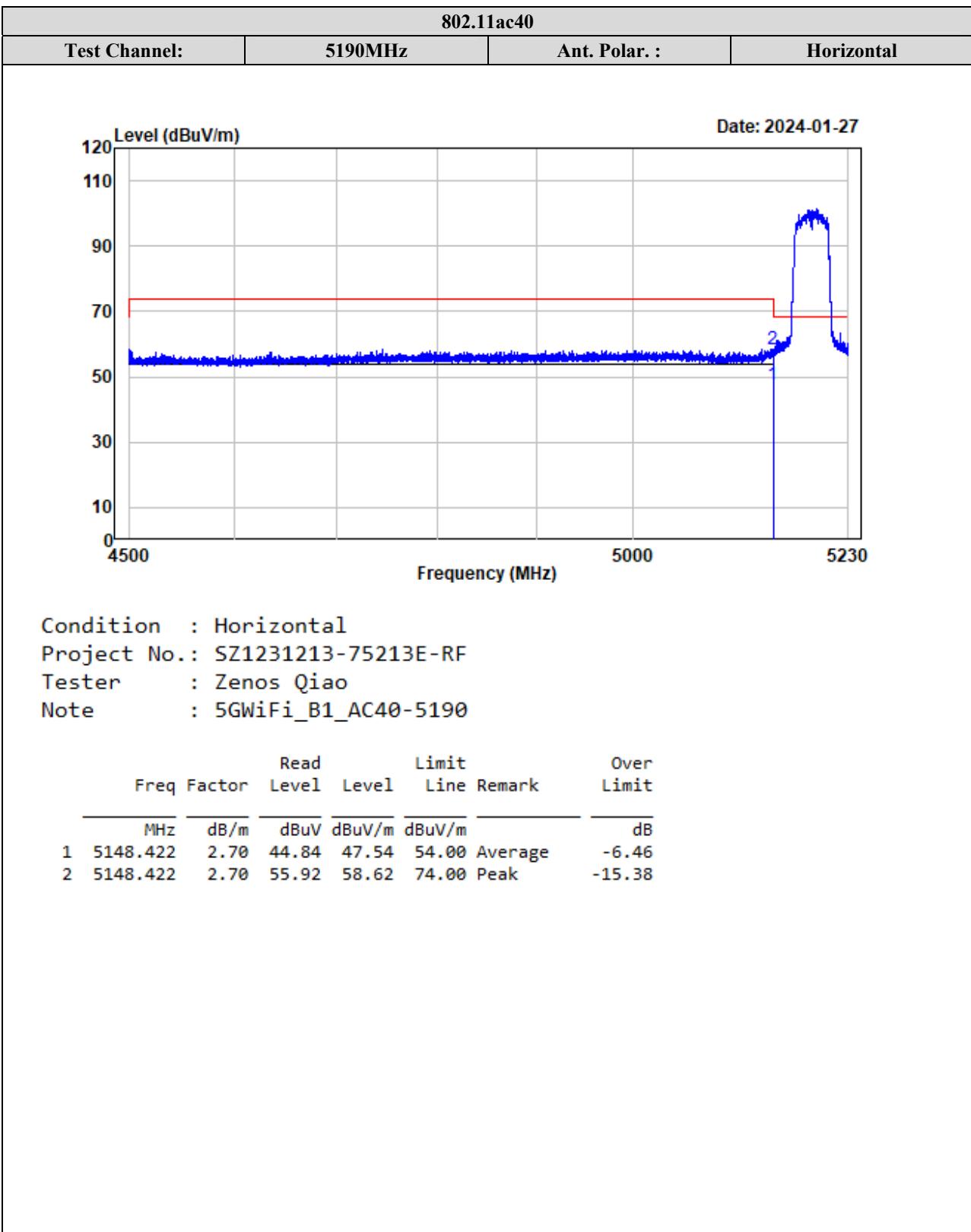
Freq	Factor	Read		Limit		Over Limit
		Level	Level	Line	Remark	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 5457.720	3.06	42.19	45.25	54.00	Average	-8.75
2 5457.720	3.06	55.45	58.51	74.00	Peak	-15.49

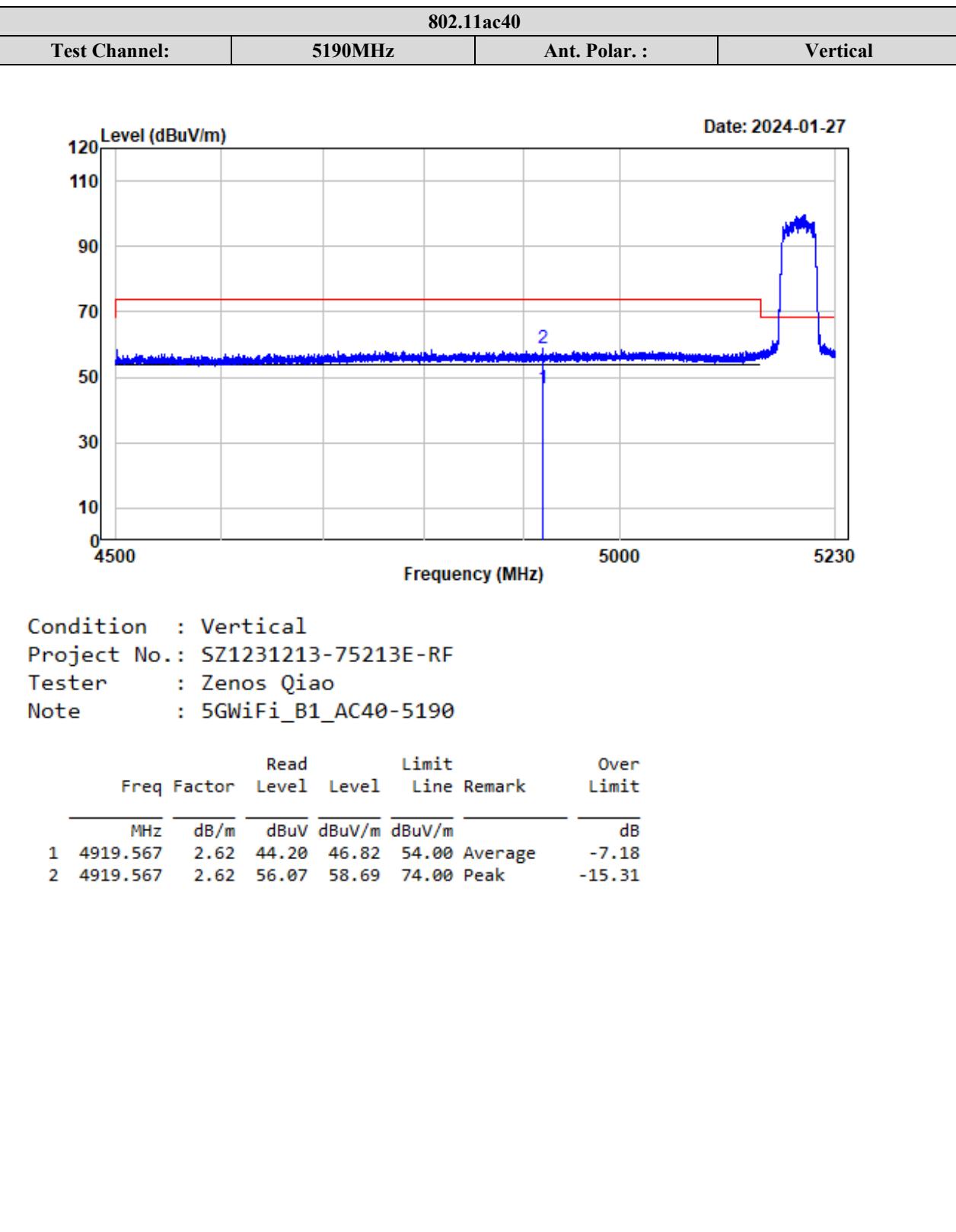
Test Channel:	5240MHz	Ant. Polar. :	Vertical
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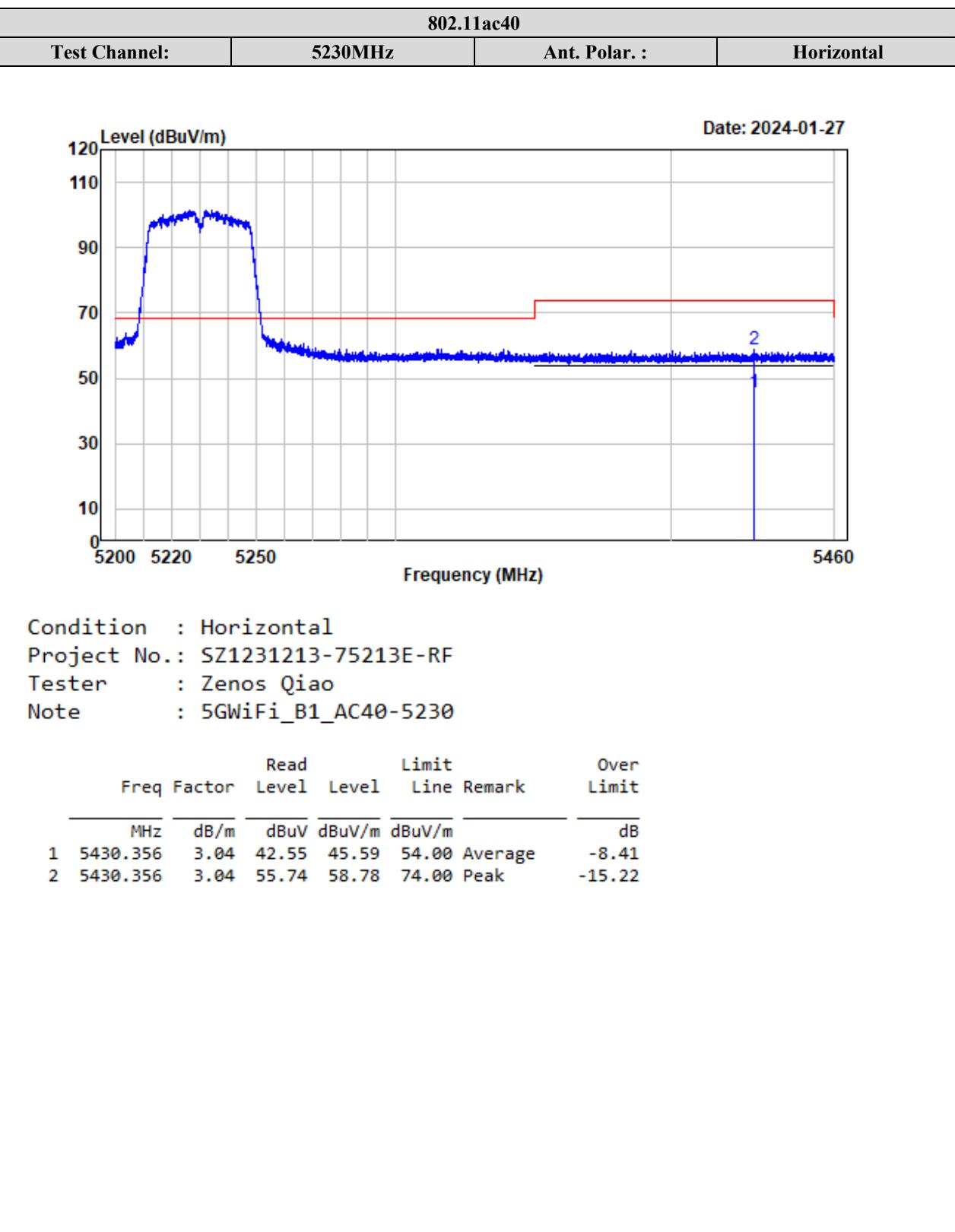


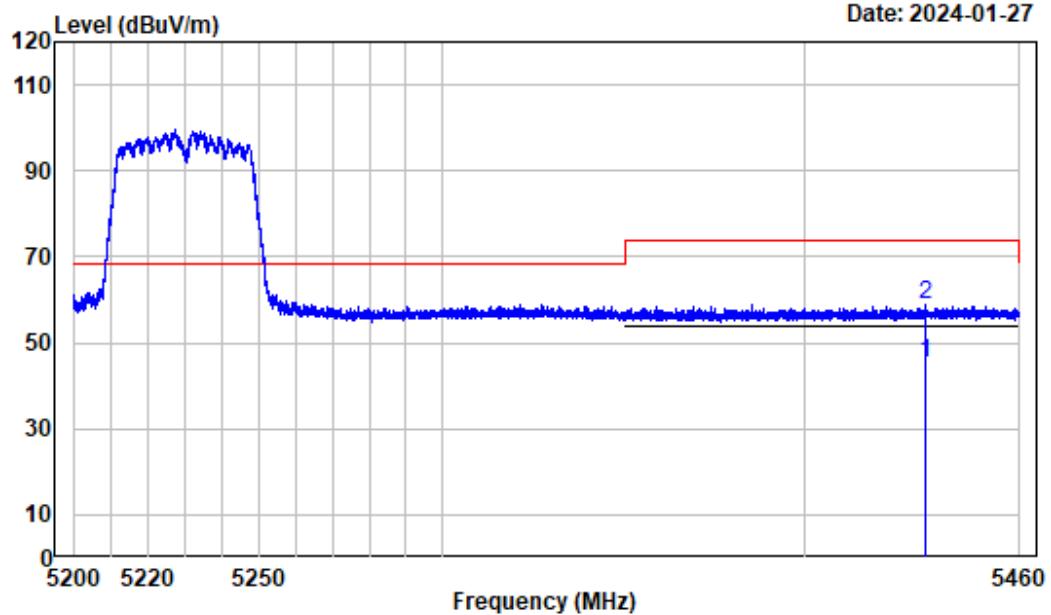
Condition : Vertical
Project No.: SZ1231213-75213E-RF
Tester : Zenos Qiao
Note : 5GWiFi_B1_AC20-5240

Freq	Factor	Read		Limit		Over Limit
		Level	dBuV	Line	dBuV/m	
1	5388.750	2.97	41.97	44.94	54.00	Average -9.06
2	5388.750	2.97	55.53	58.50	74.00	Peak -15.50

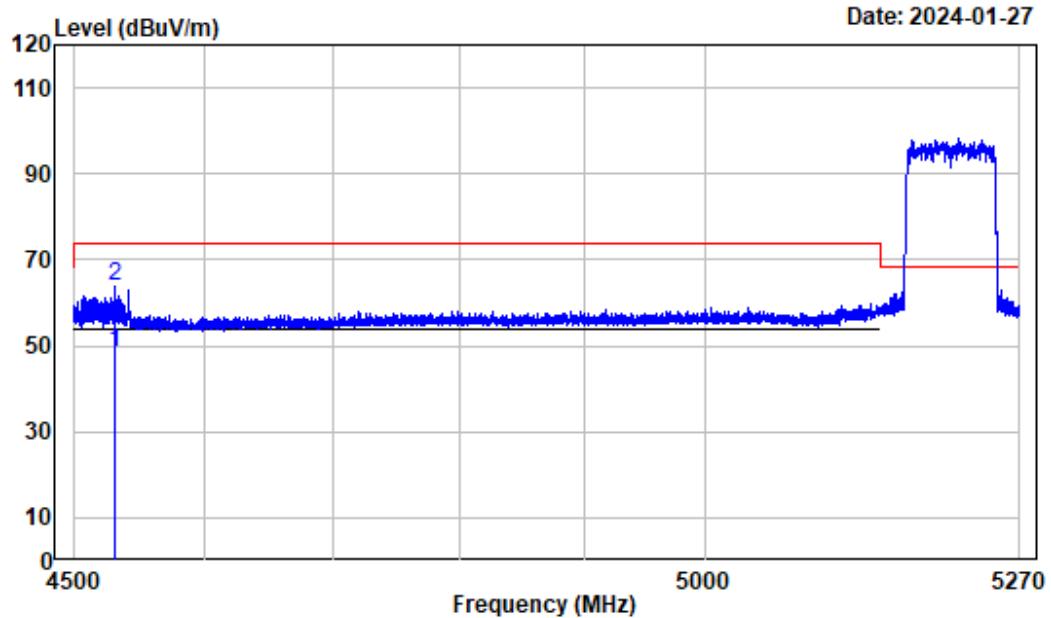






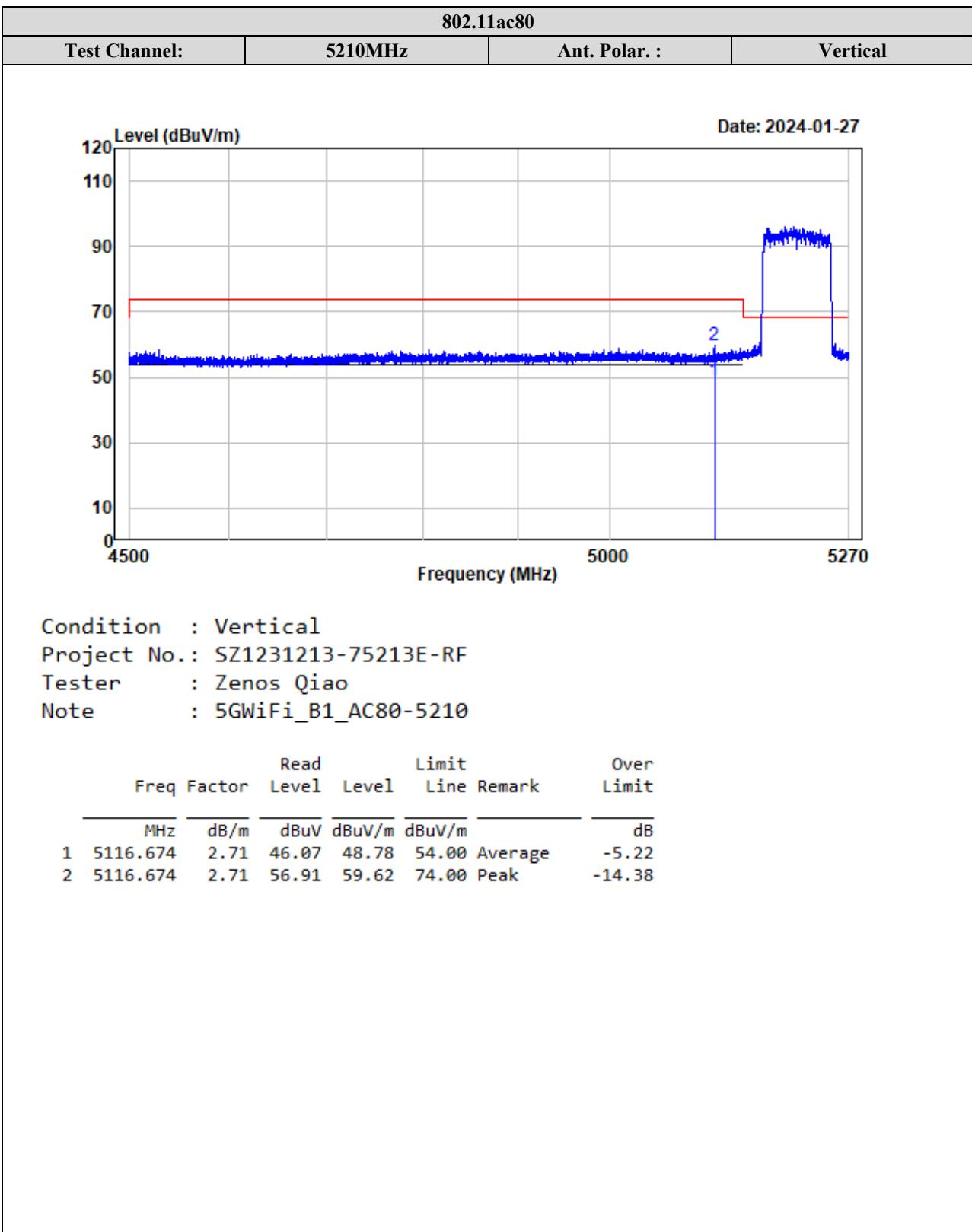
802.11ac40Test Channel: **5230MHz** Ant. Polar. : **Vertical**

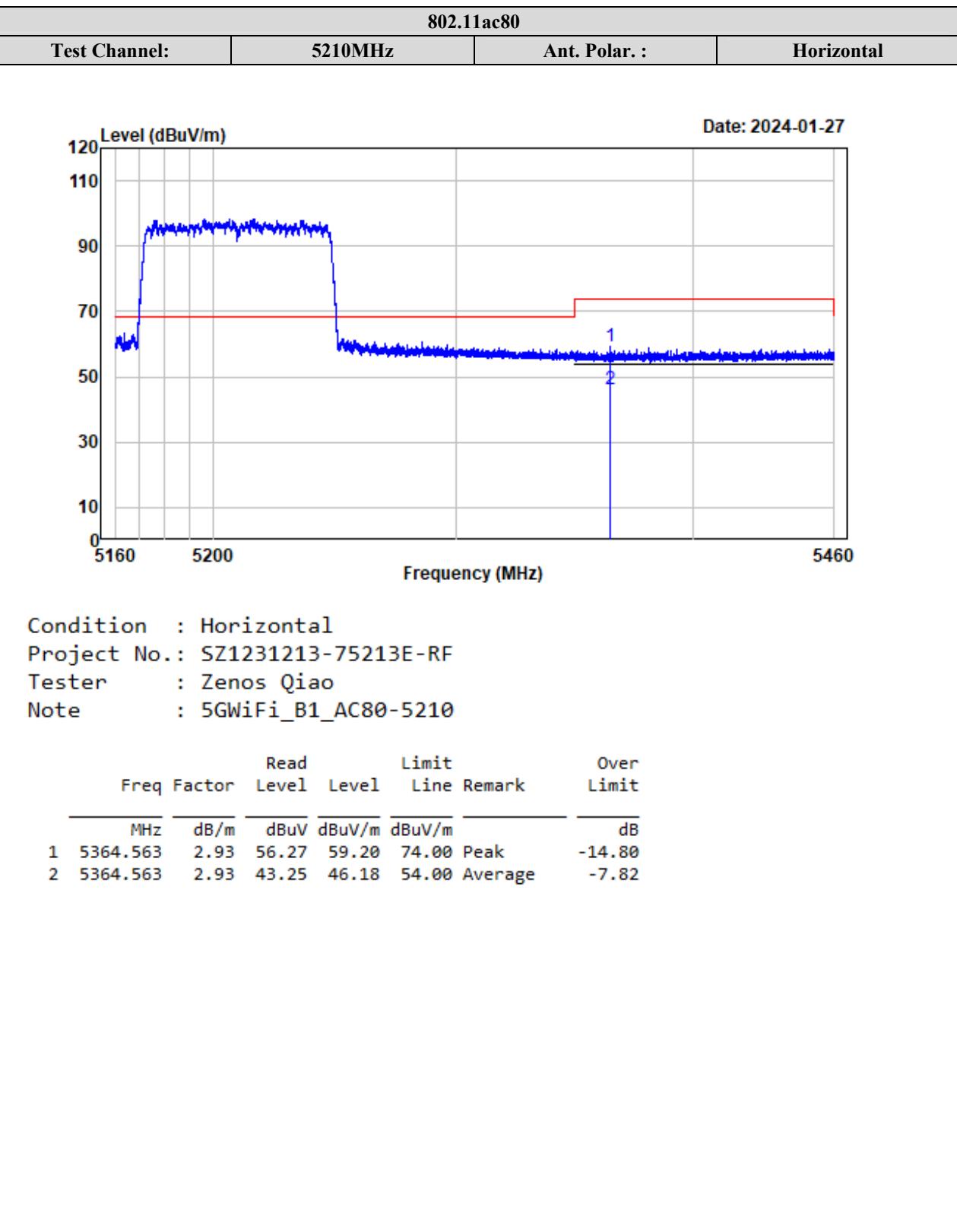
Test Channel:	5210MHz	Ant. Polar. :	Horizontal
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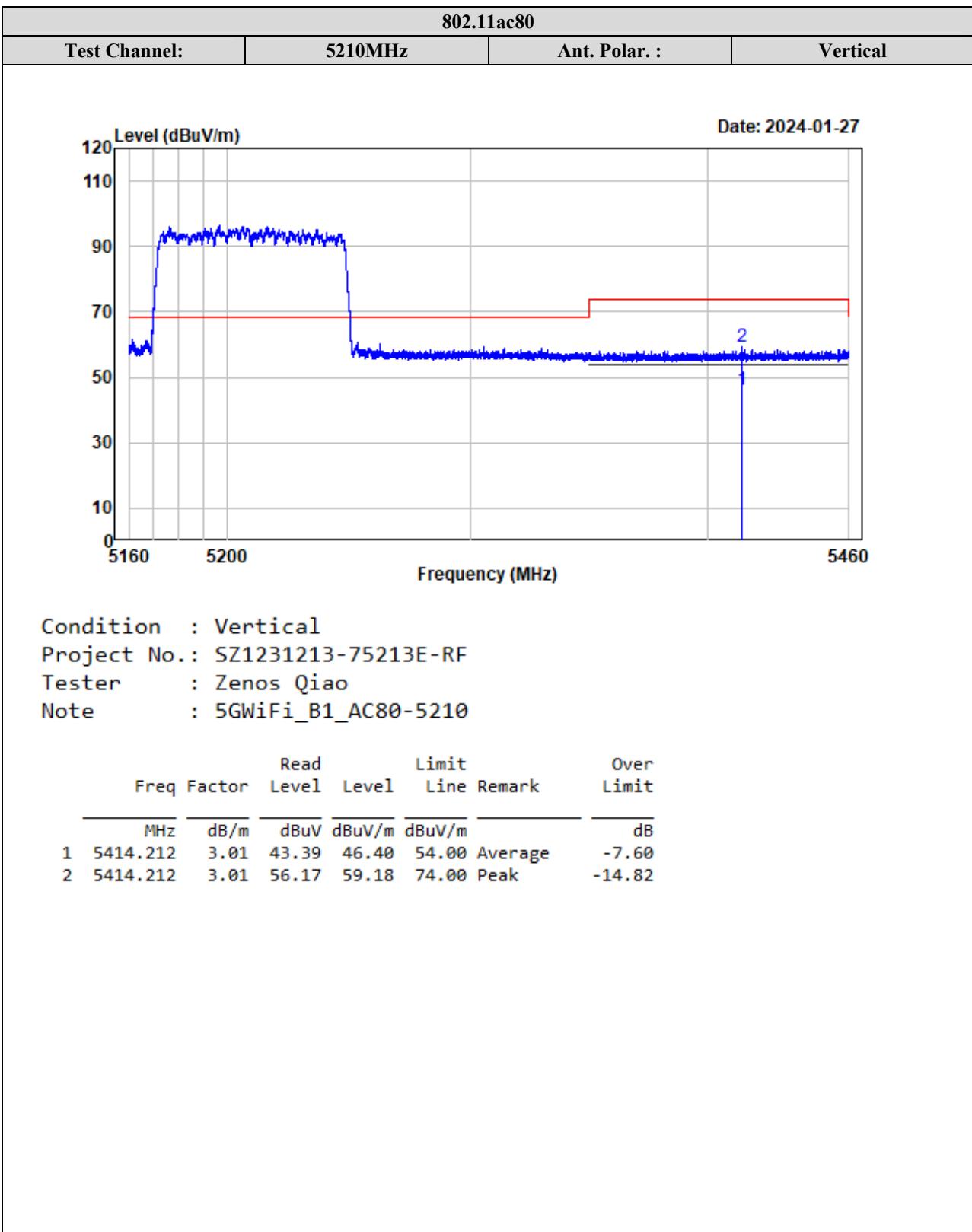


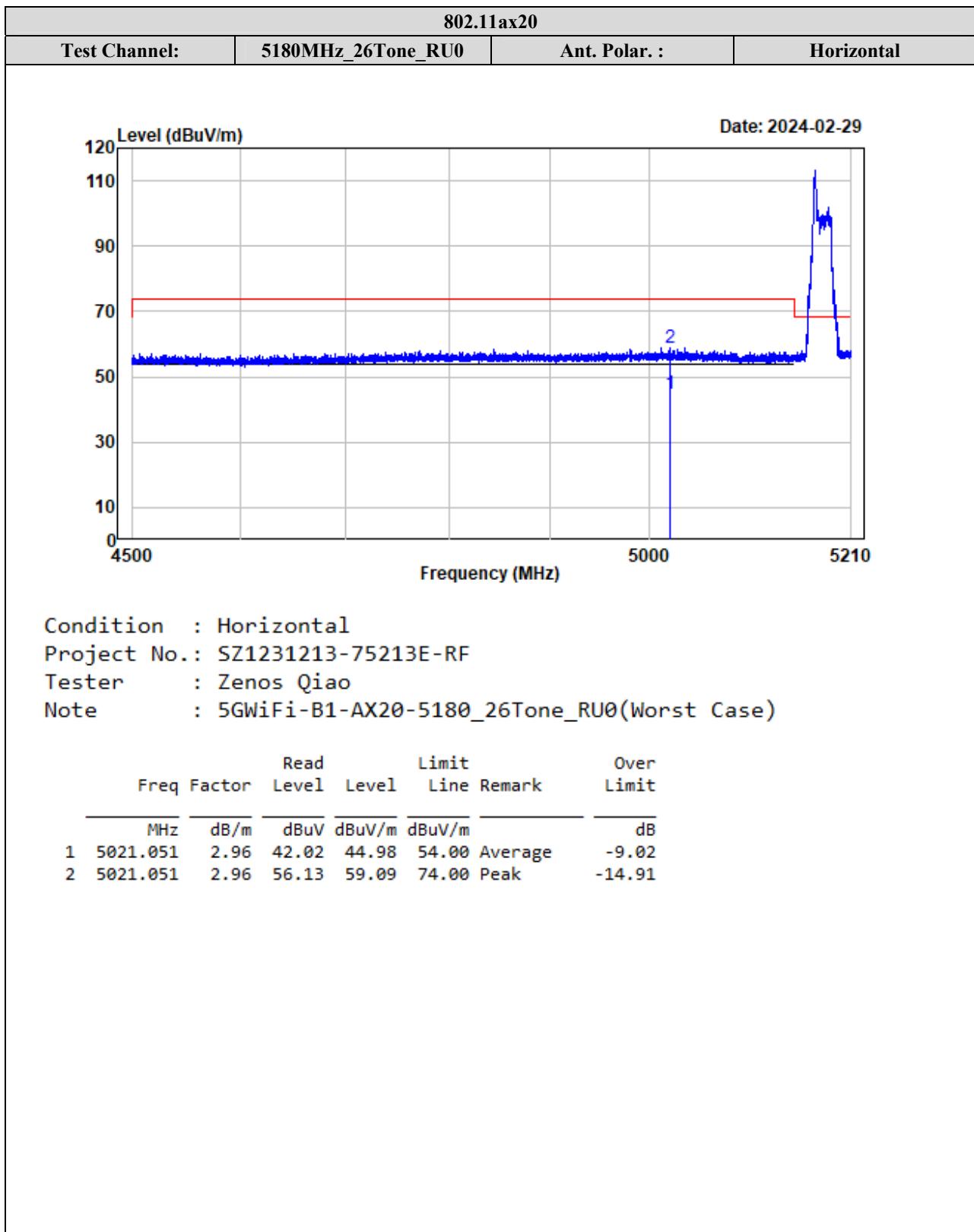
Condition : Horizontal
Project No.: SZ1231213-75213E-RF
Tester : Zenos Qiao
Note : 5GWiFi_B1_AC80-5210

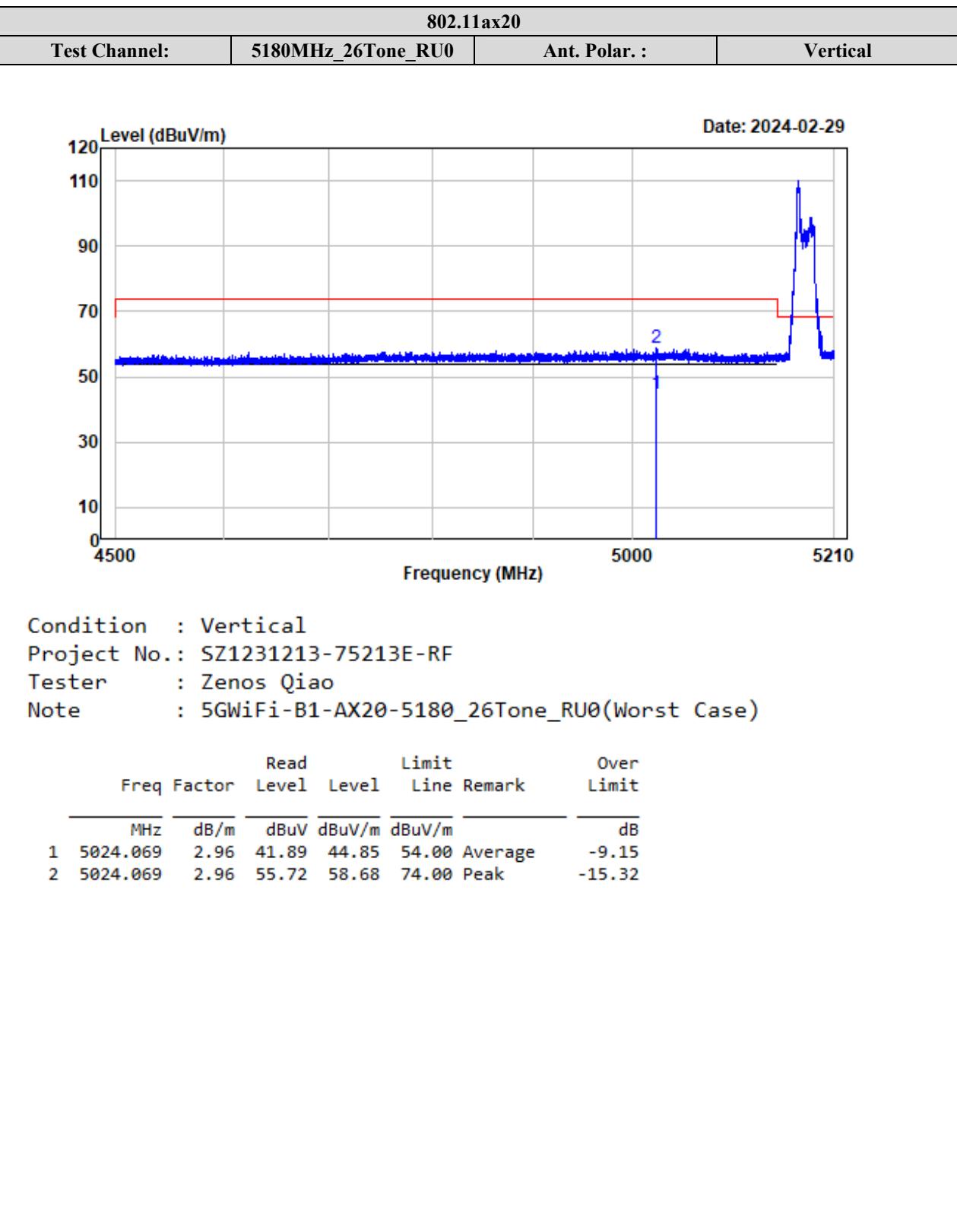
Freq	Factor	Read		Limit		Over Limit
		Level	Level	Line	Remark	
1	4531.474	1.52	46.94	48.46	54.00 Average	-5.54
2	4531.474	1.52	62.16	63.68	74.00 Peak	-10.32

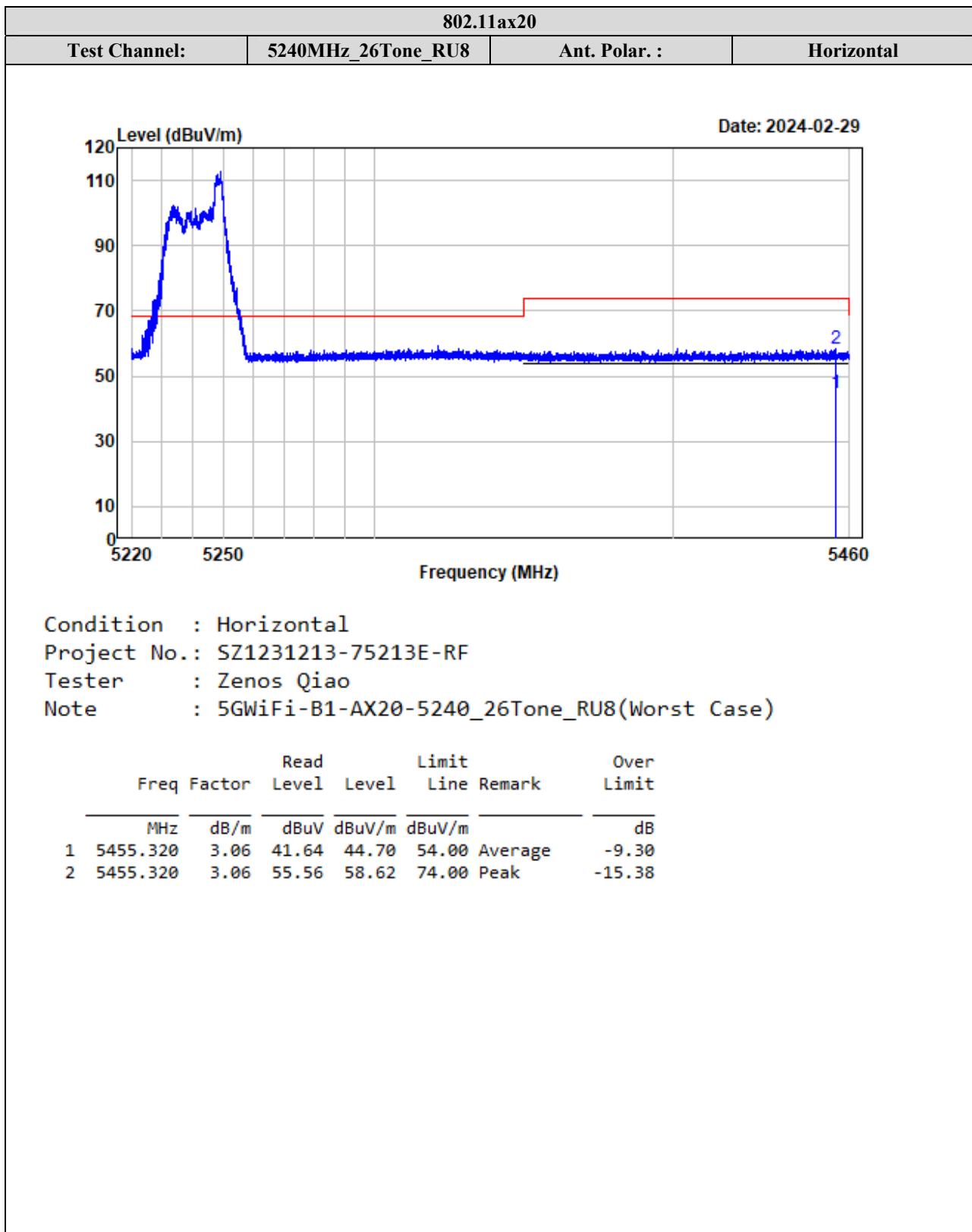


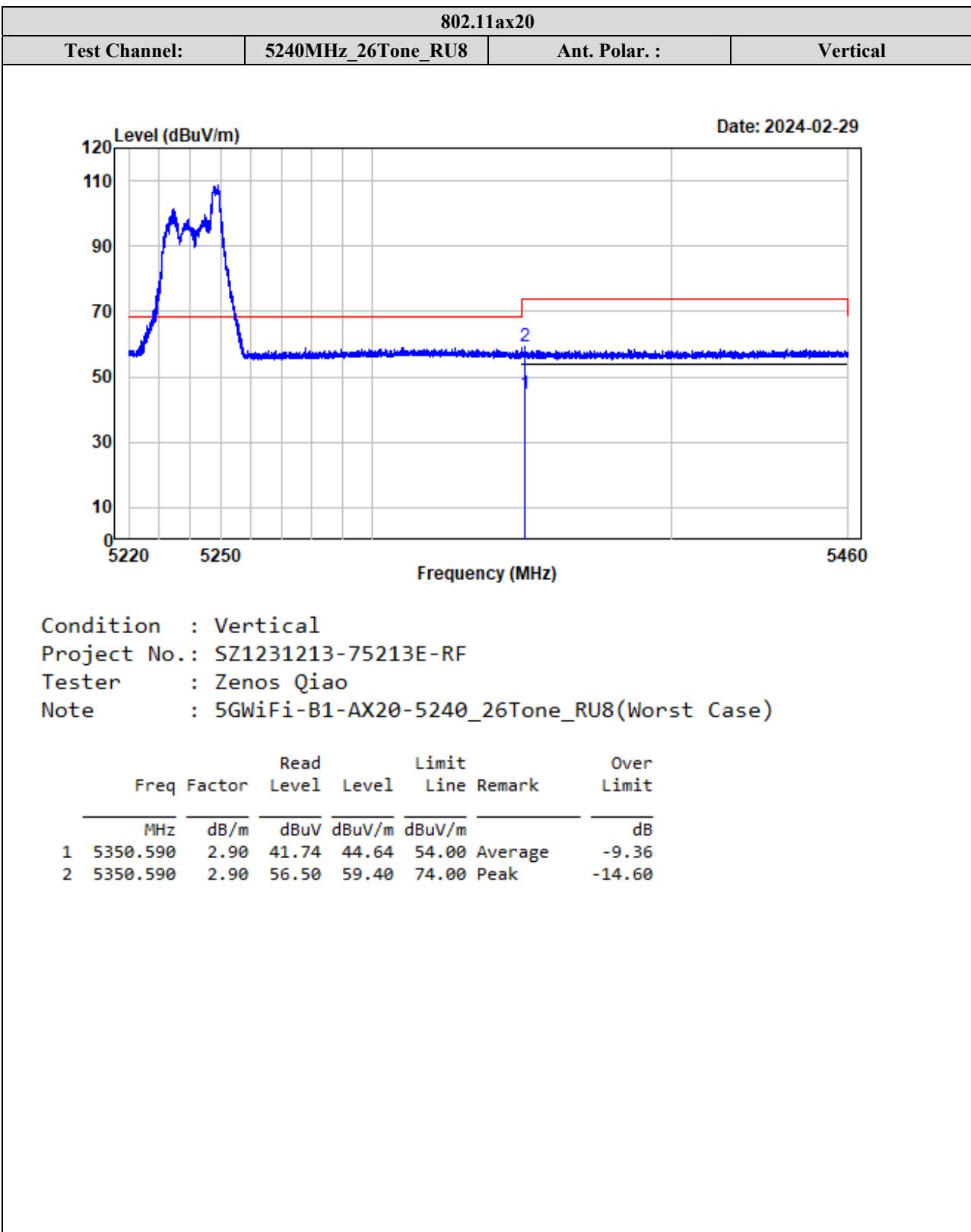


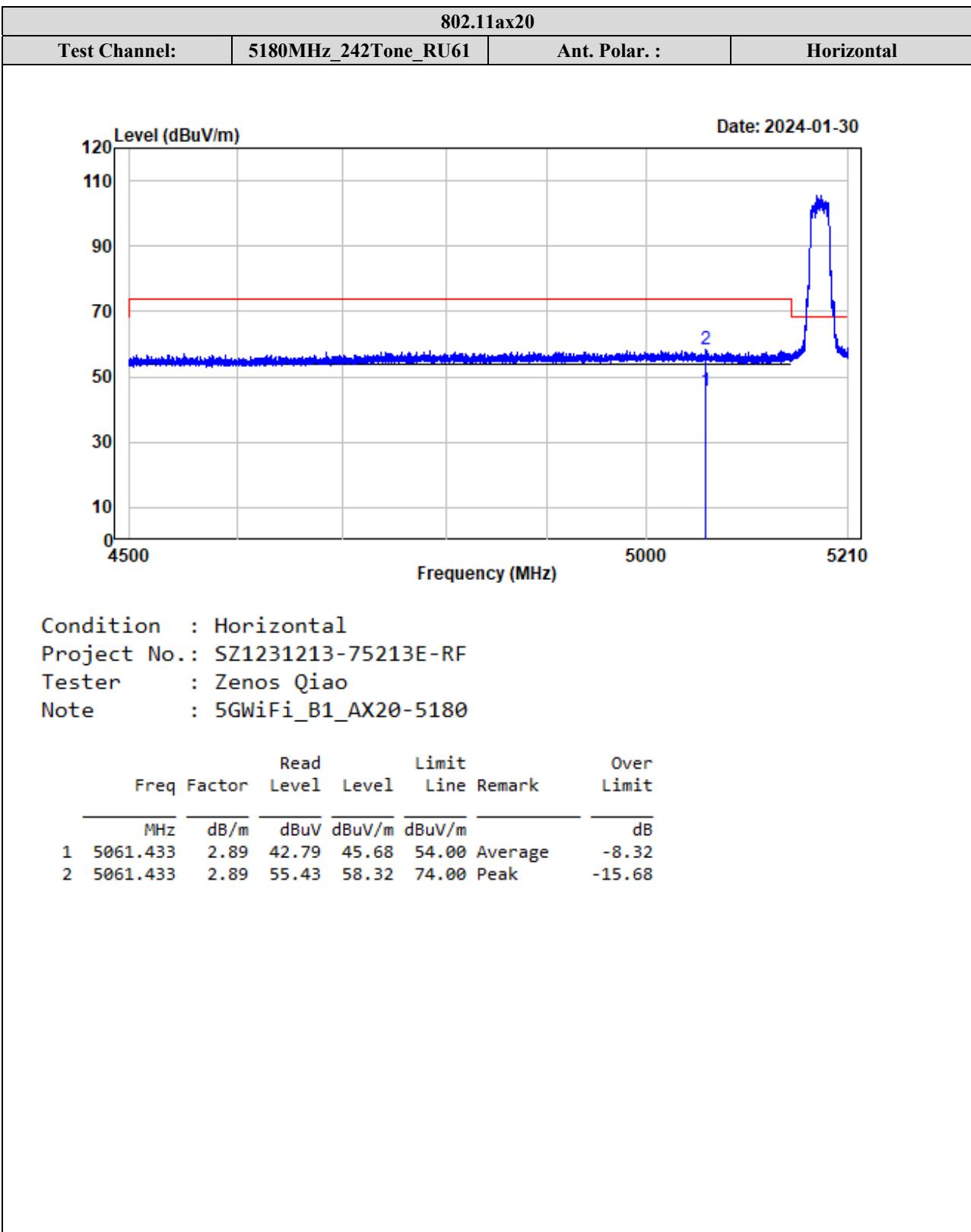


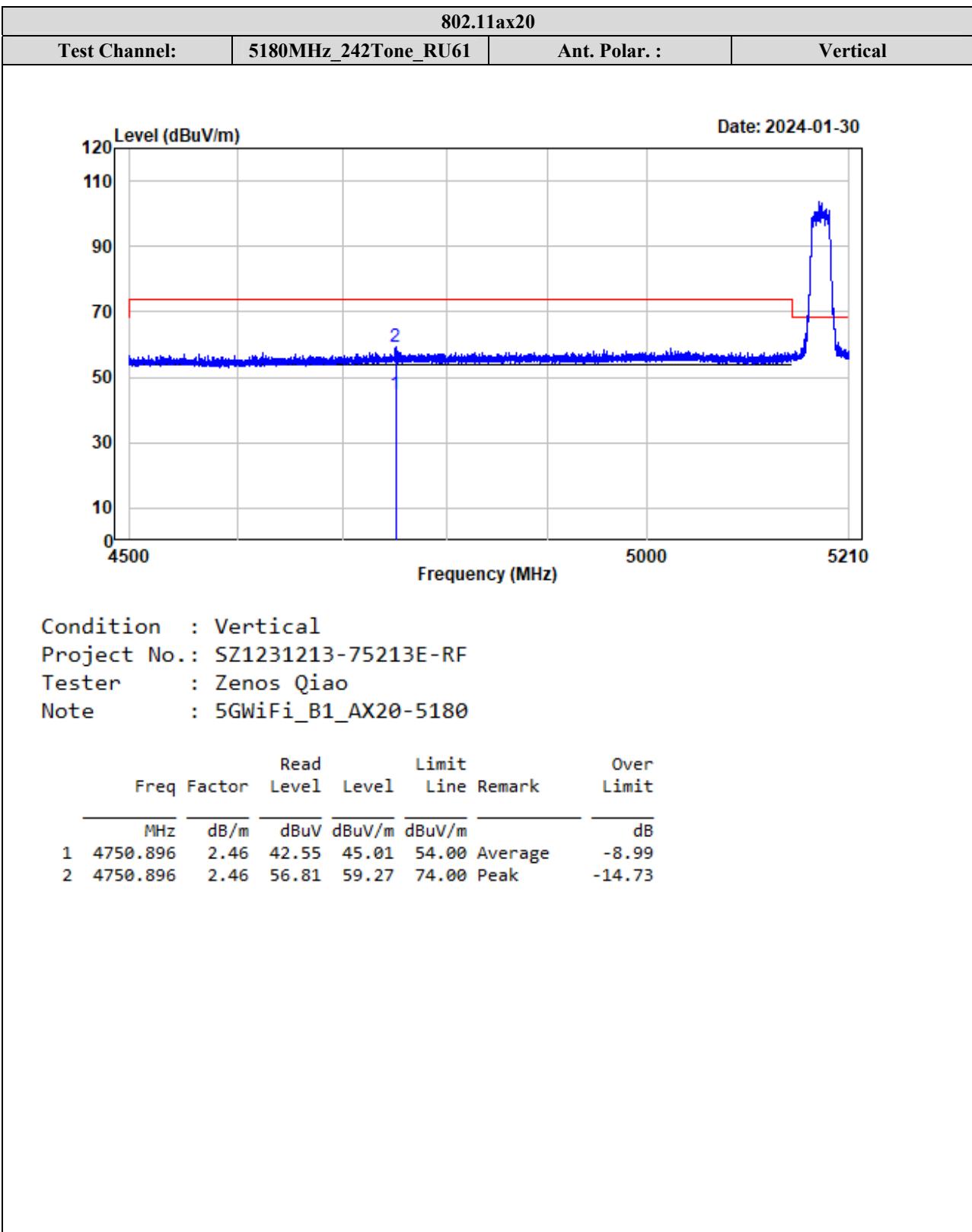


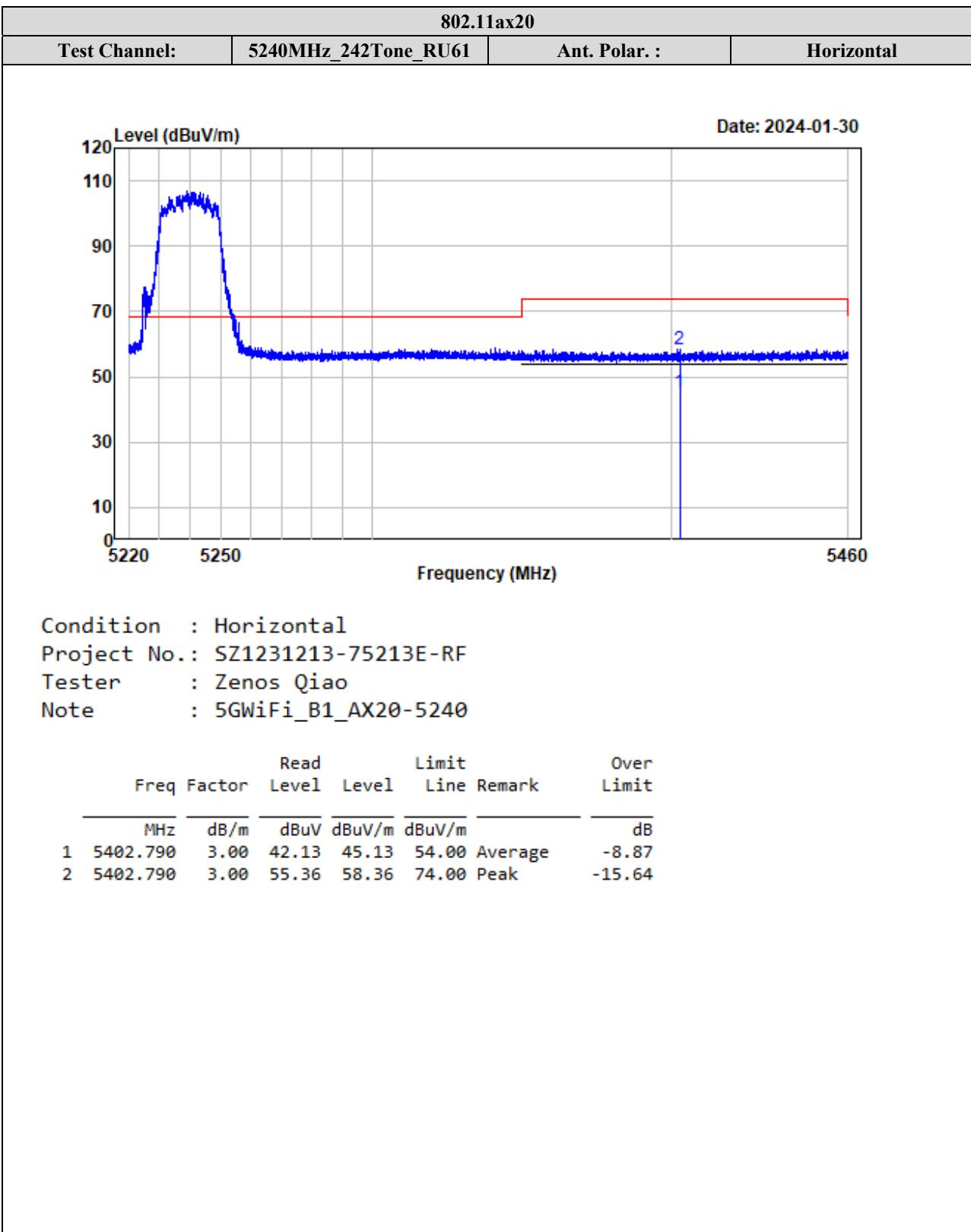


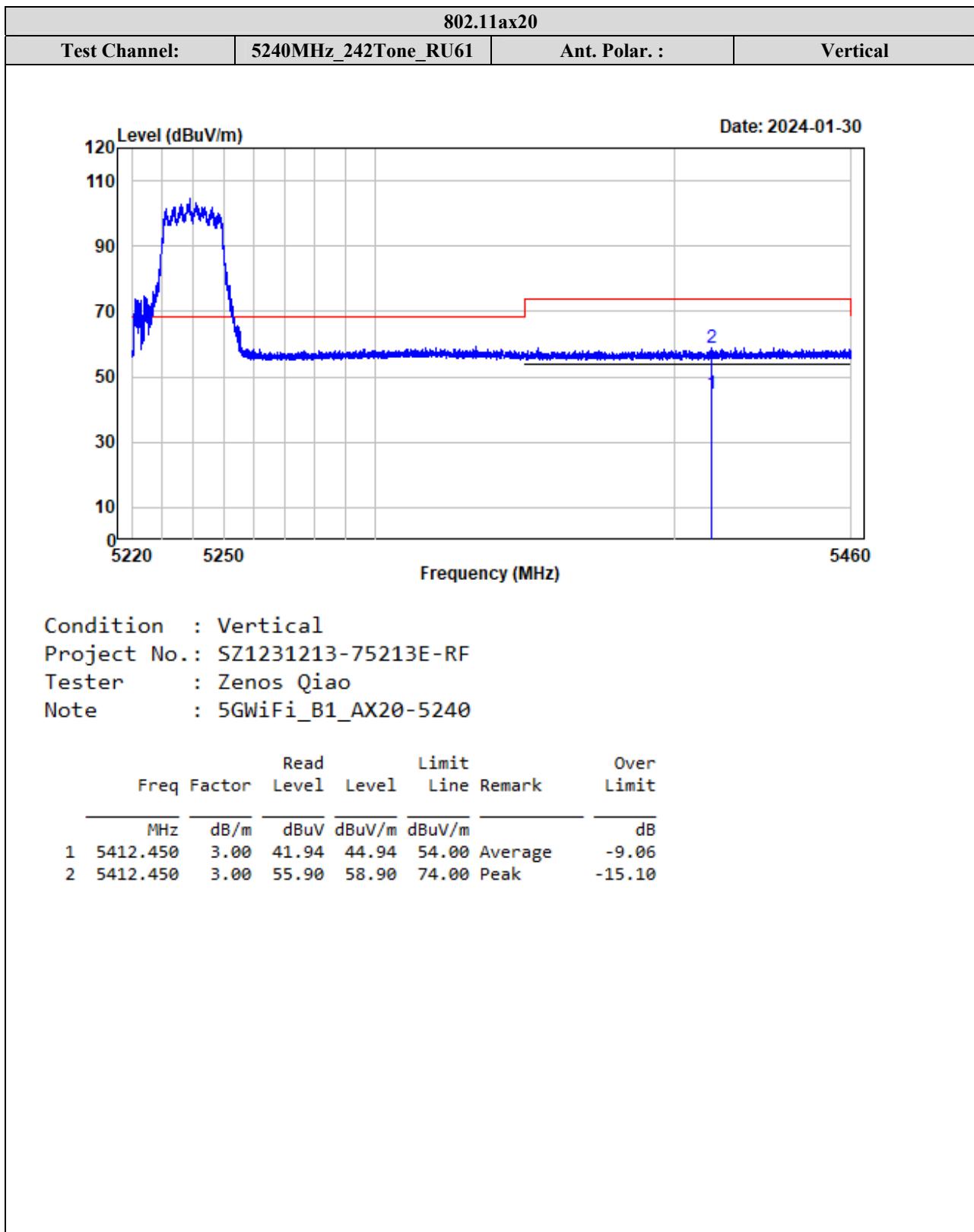


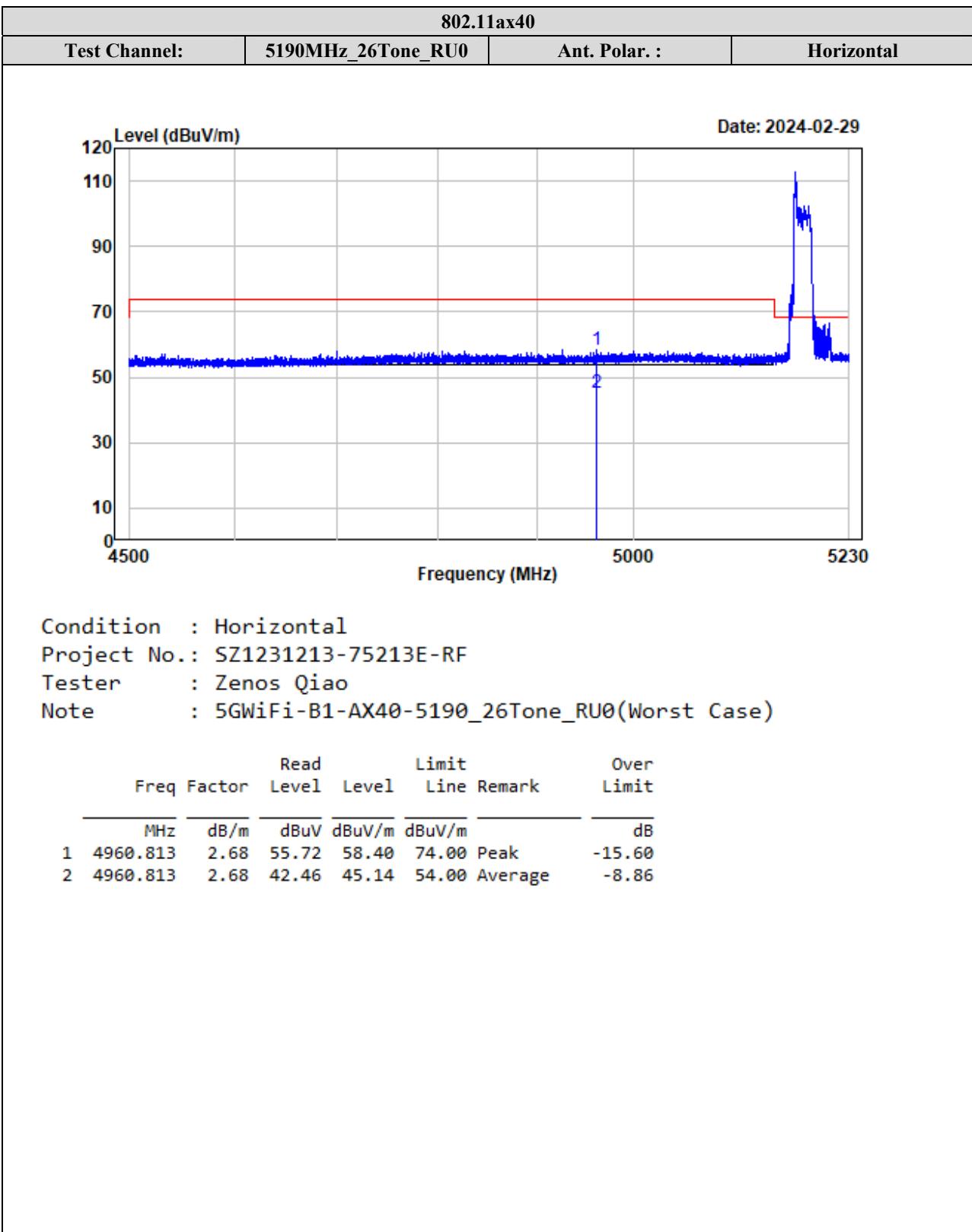




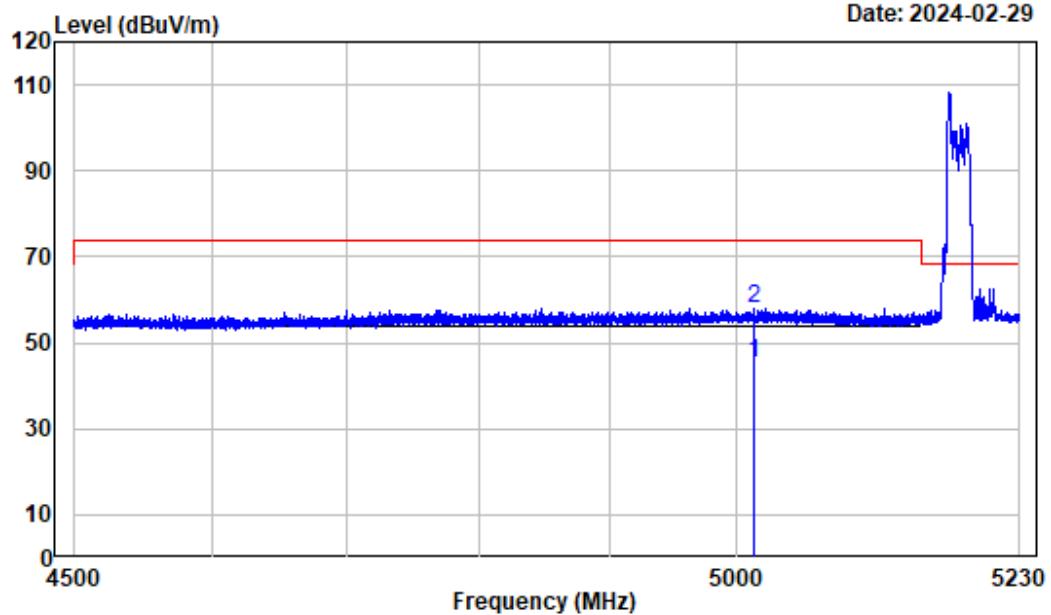








802.11ax40			
Test Channel:	5190MHz_26Tone_RU0	Ant. Polar. :	Vertical



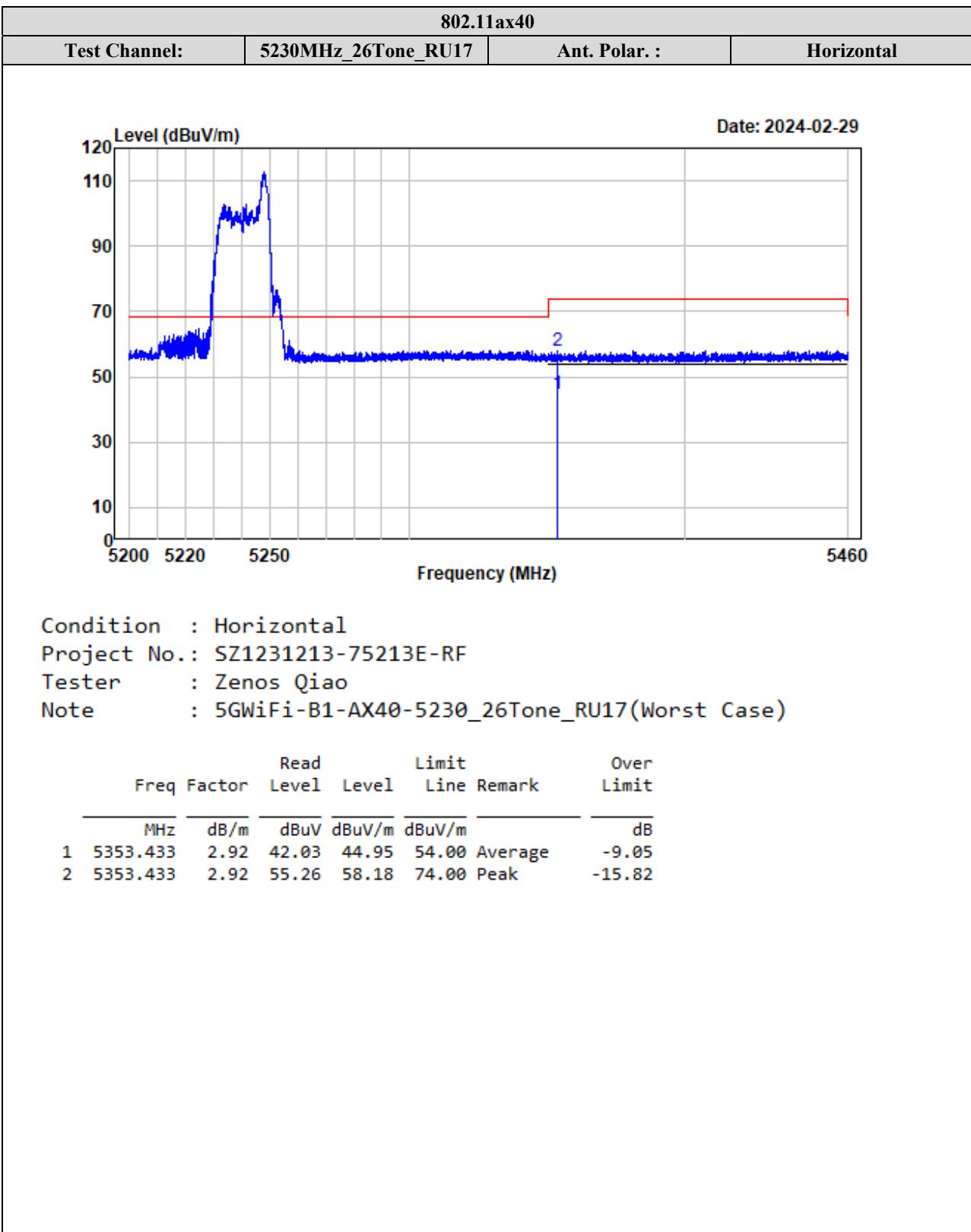
Condition : Vertical

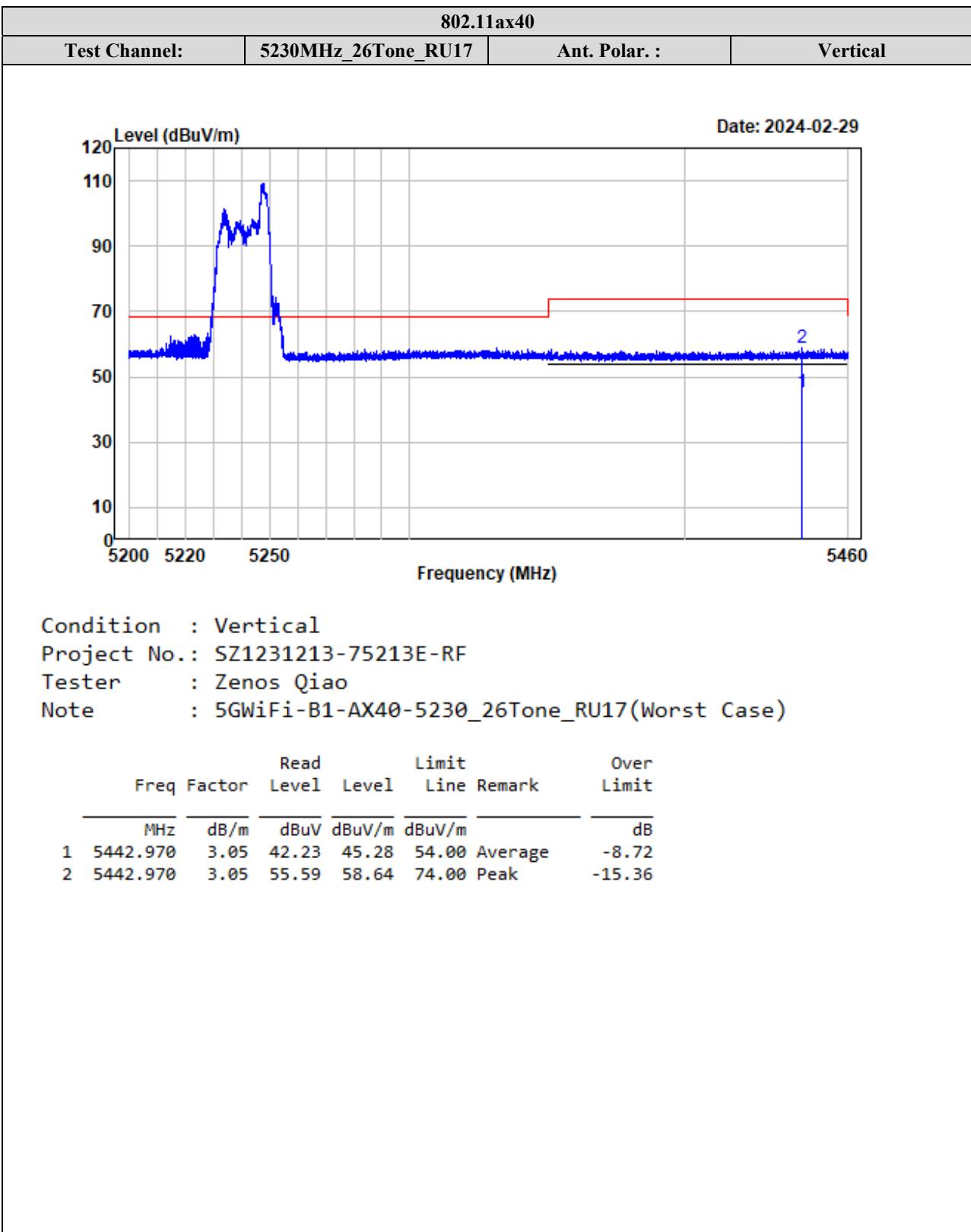
Project No.: SZ1231213-75213E-RF

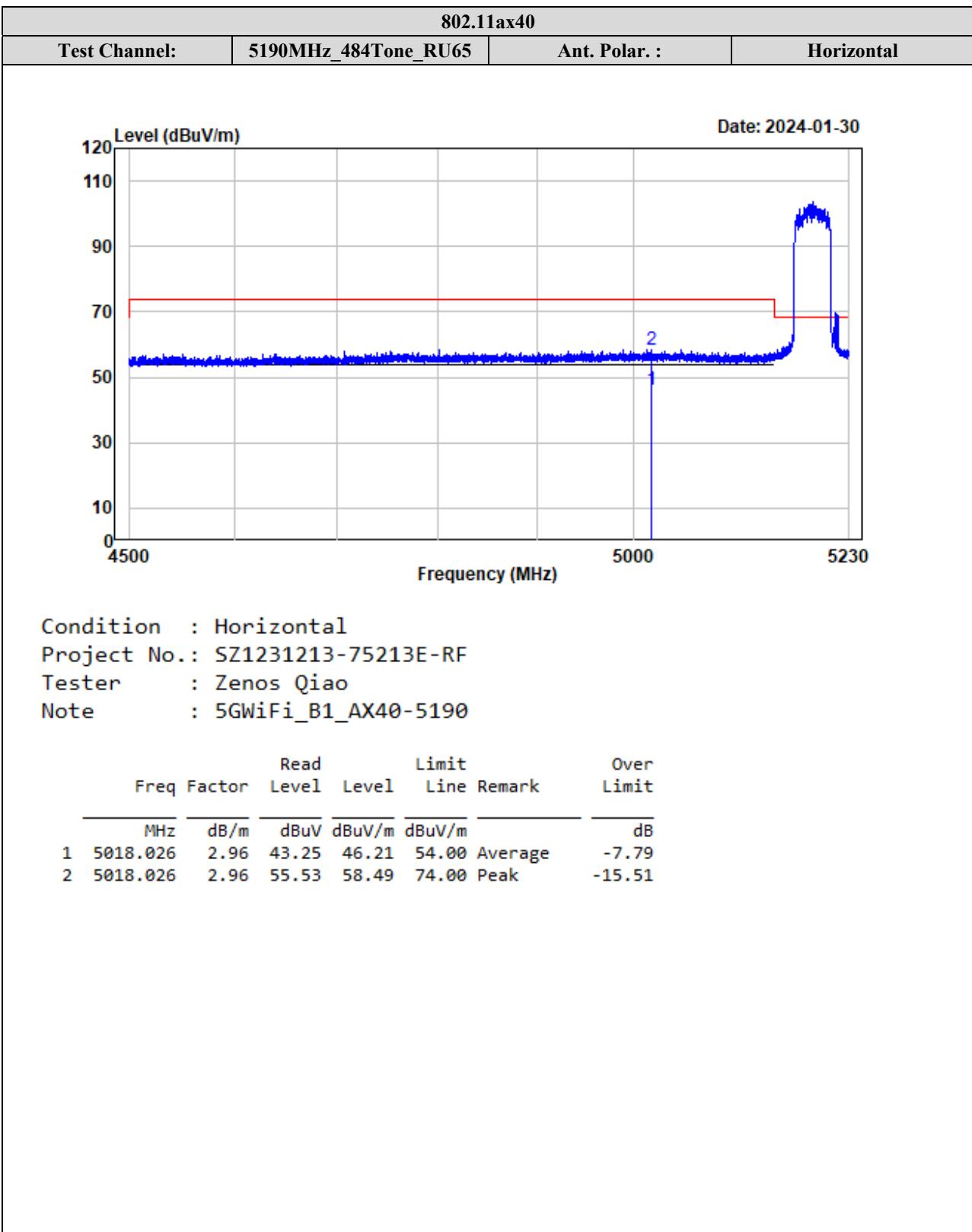
Tester : Zenos Qiao

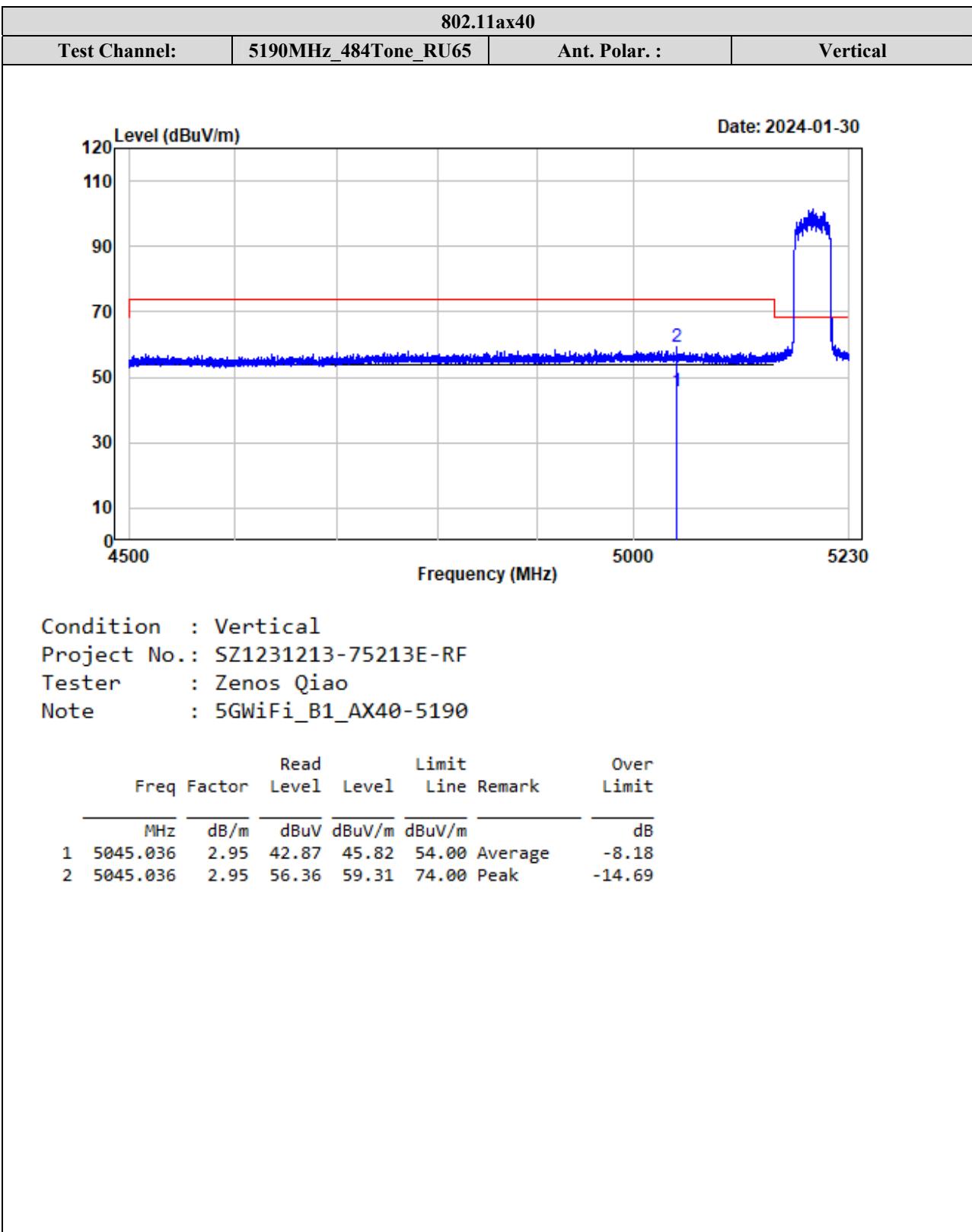
Note : 5GWiFi-B1-AX40-5190_26Tone_RU0(Worst Case)

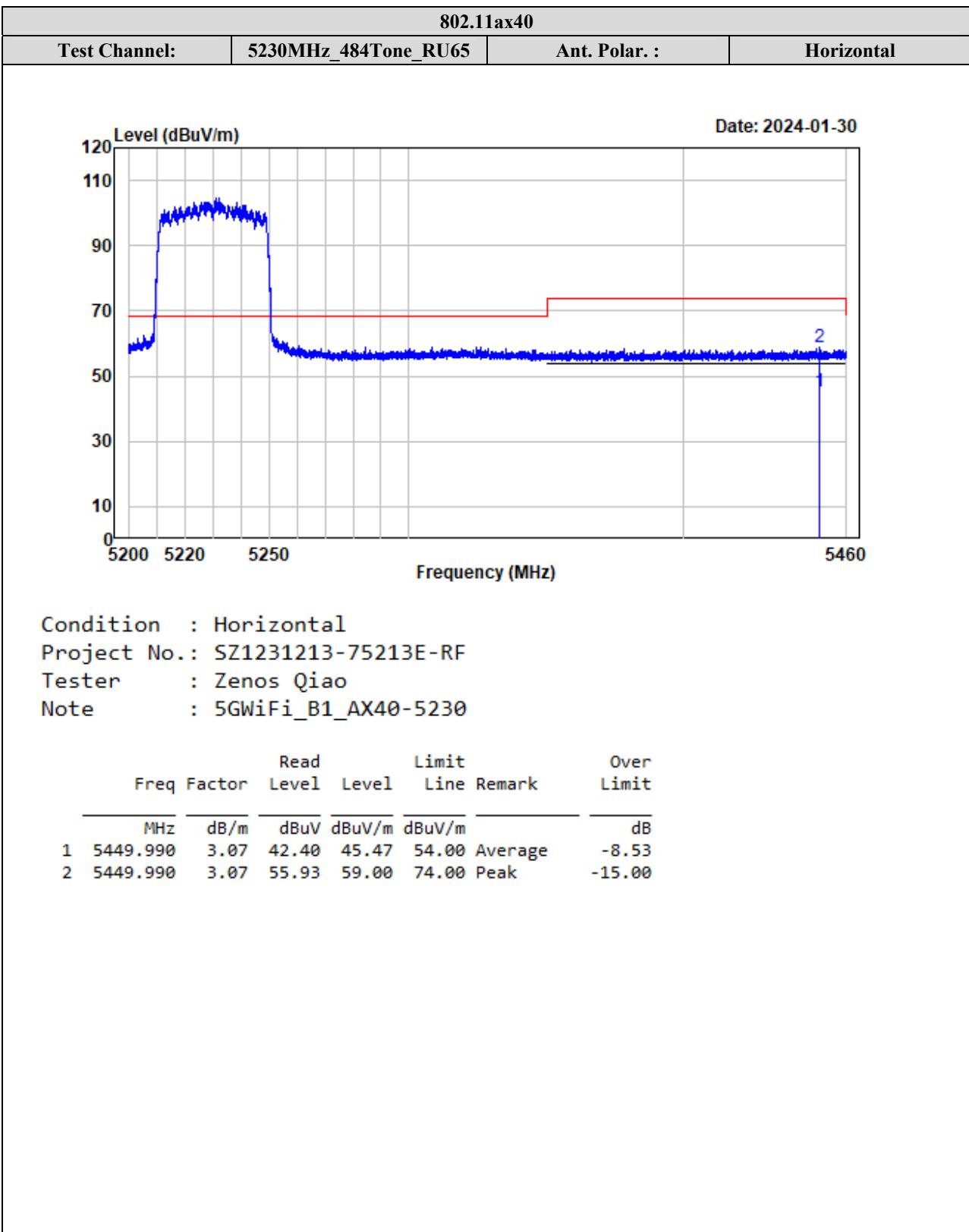
Freq	Factor	Read		Limit		Over Limit
		Level	Level	Line	Remark	
MHz	dB/m	dBuV	dBuV/m	dBuV/m		
1 5013.555	2.97	42.31	45.28	54.00	Average	-8.72
2 5013.555	2.97	55.21	58.18	74.00	Peak	-15.82

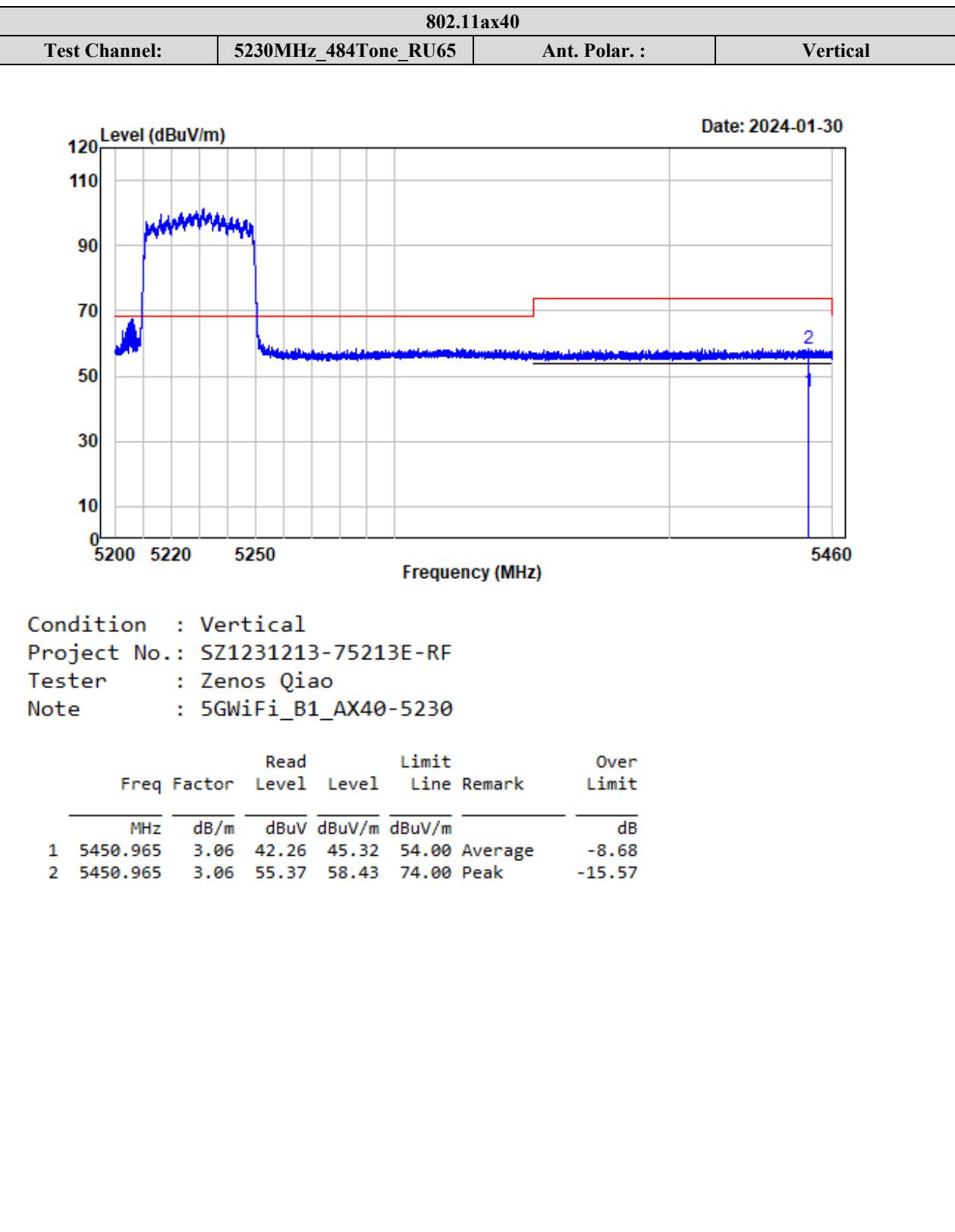


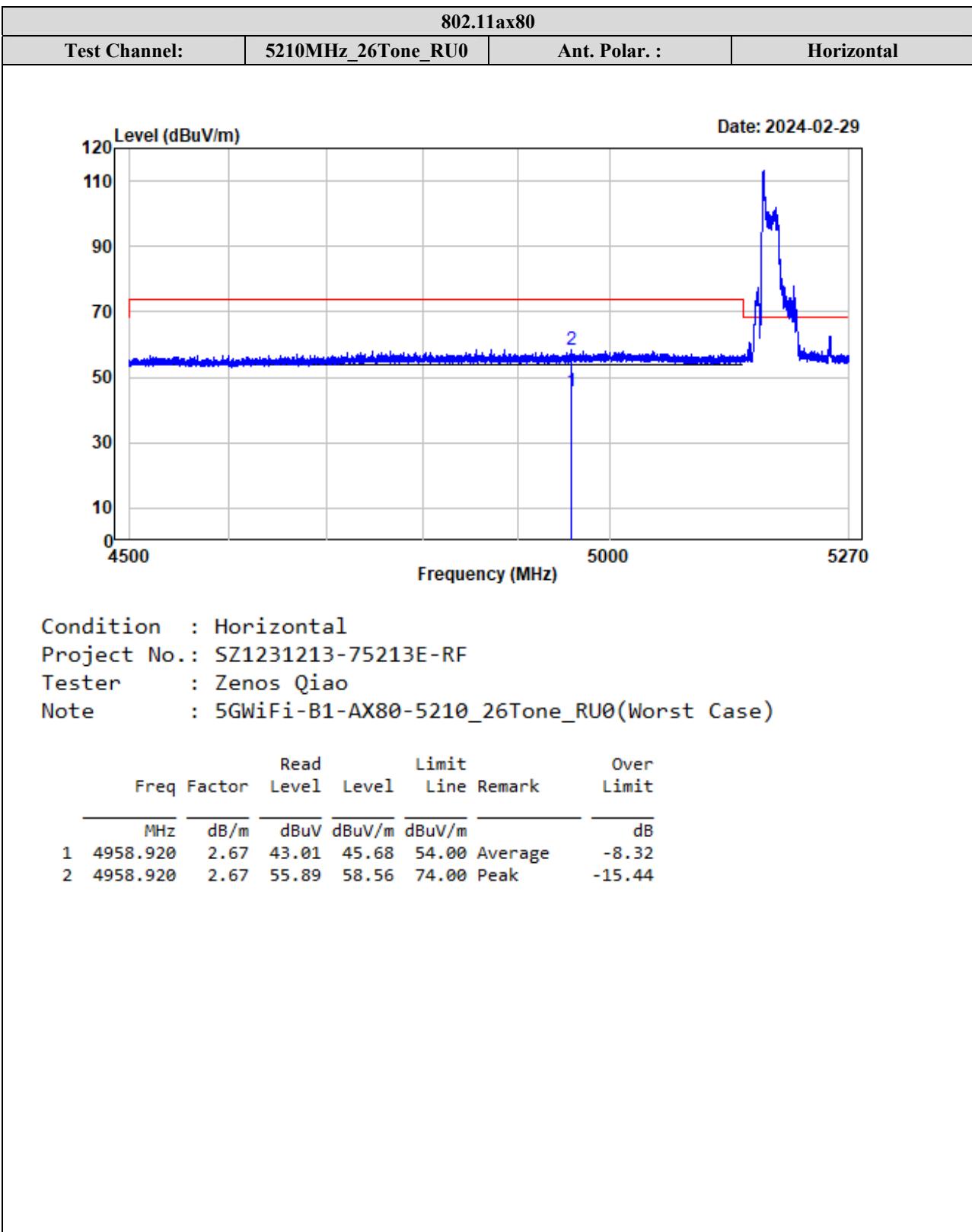


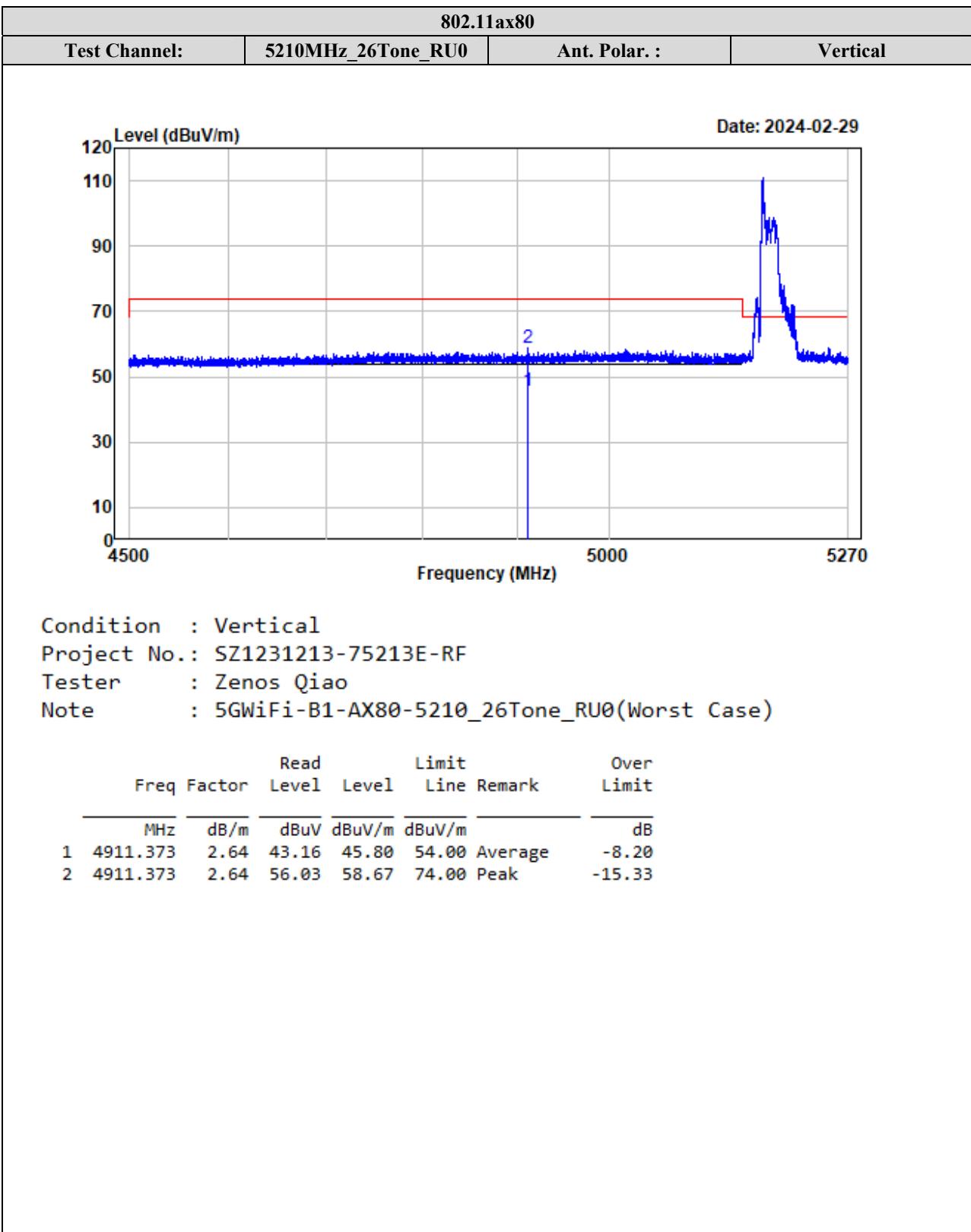


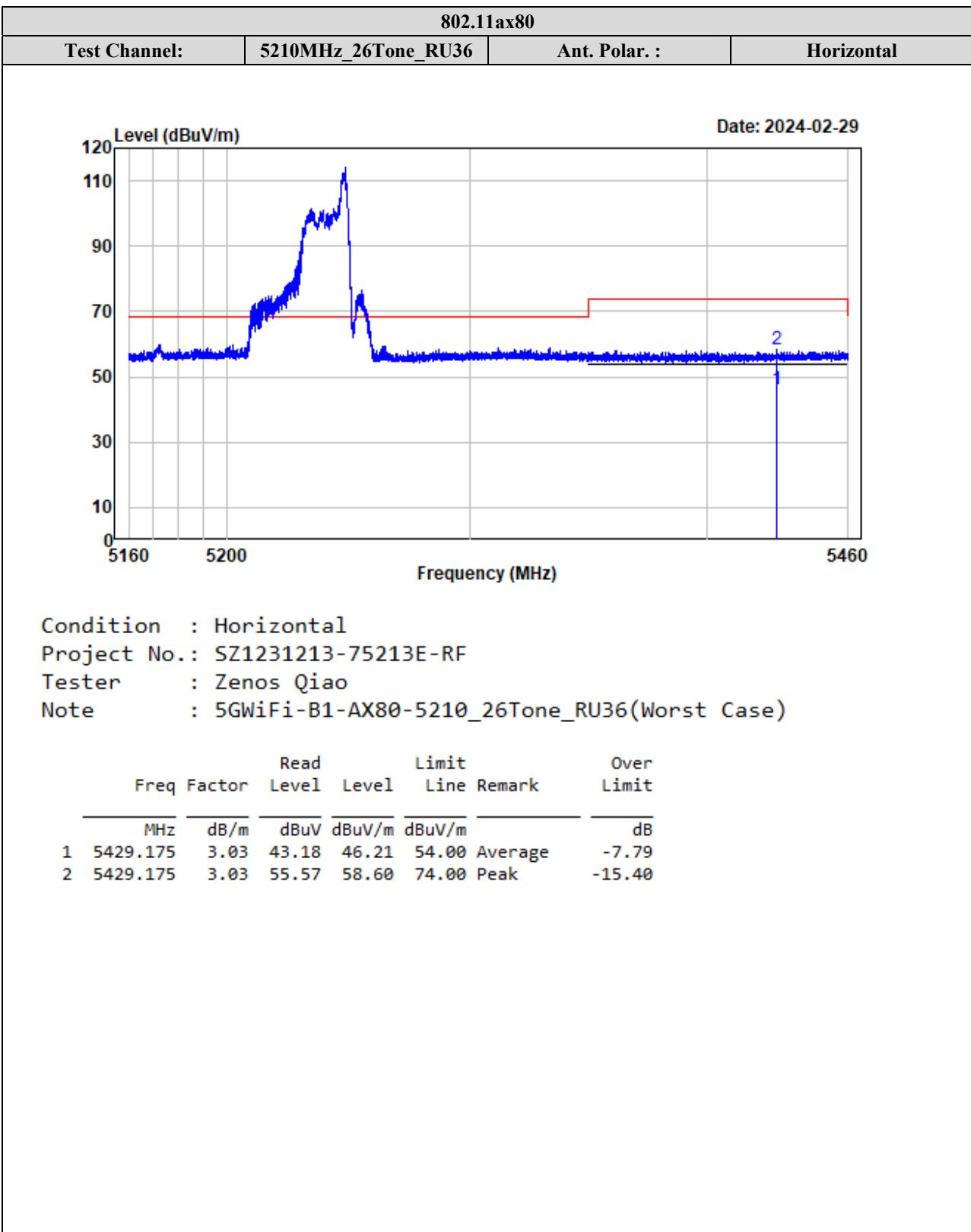


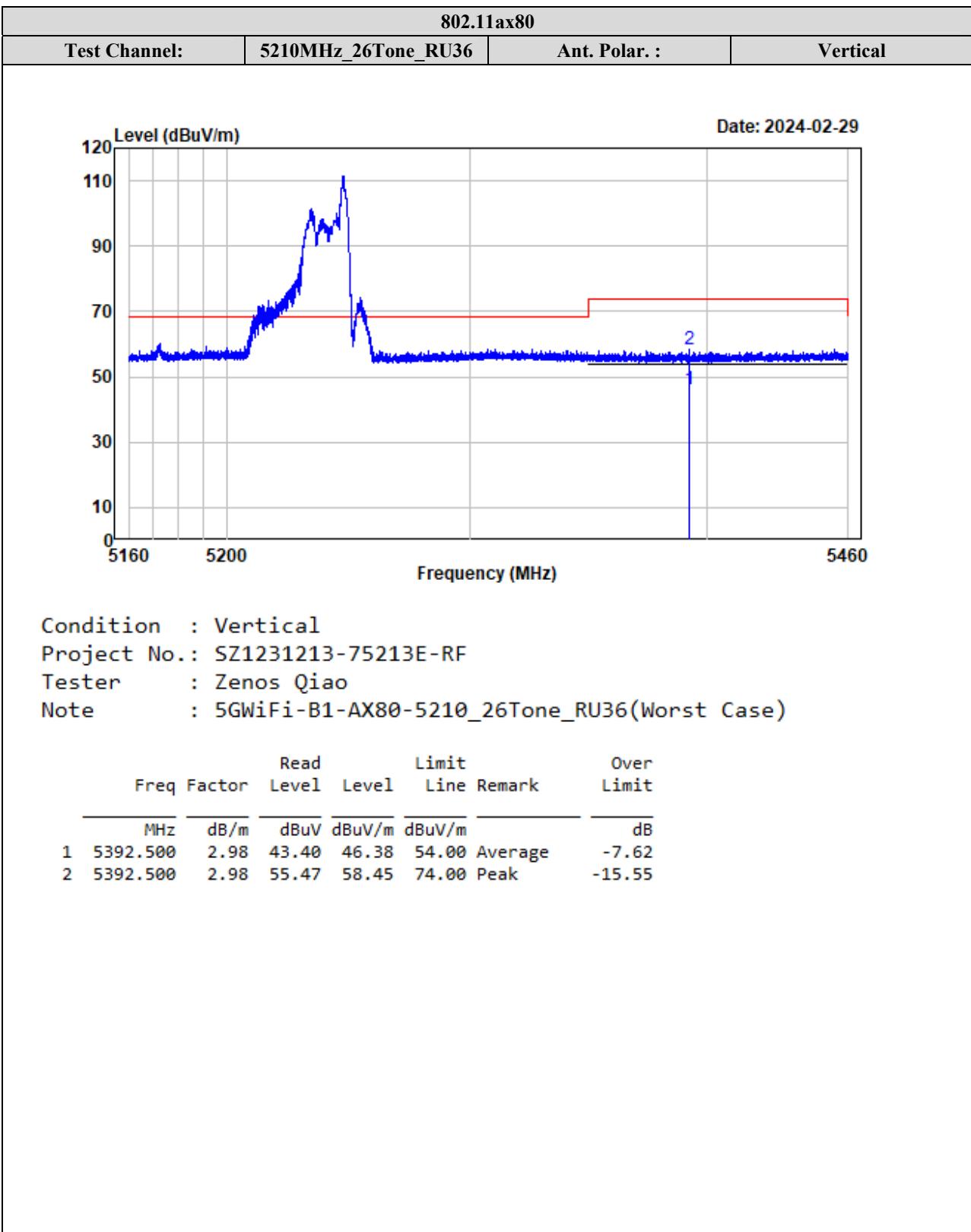


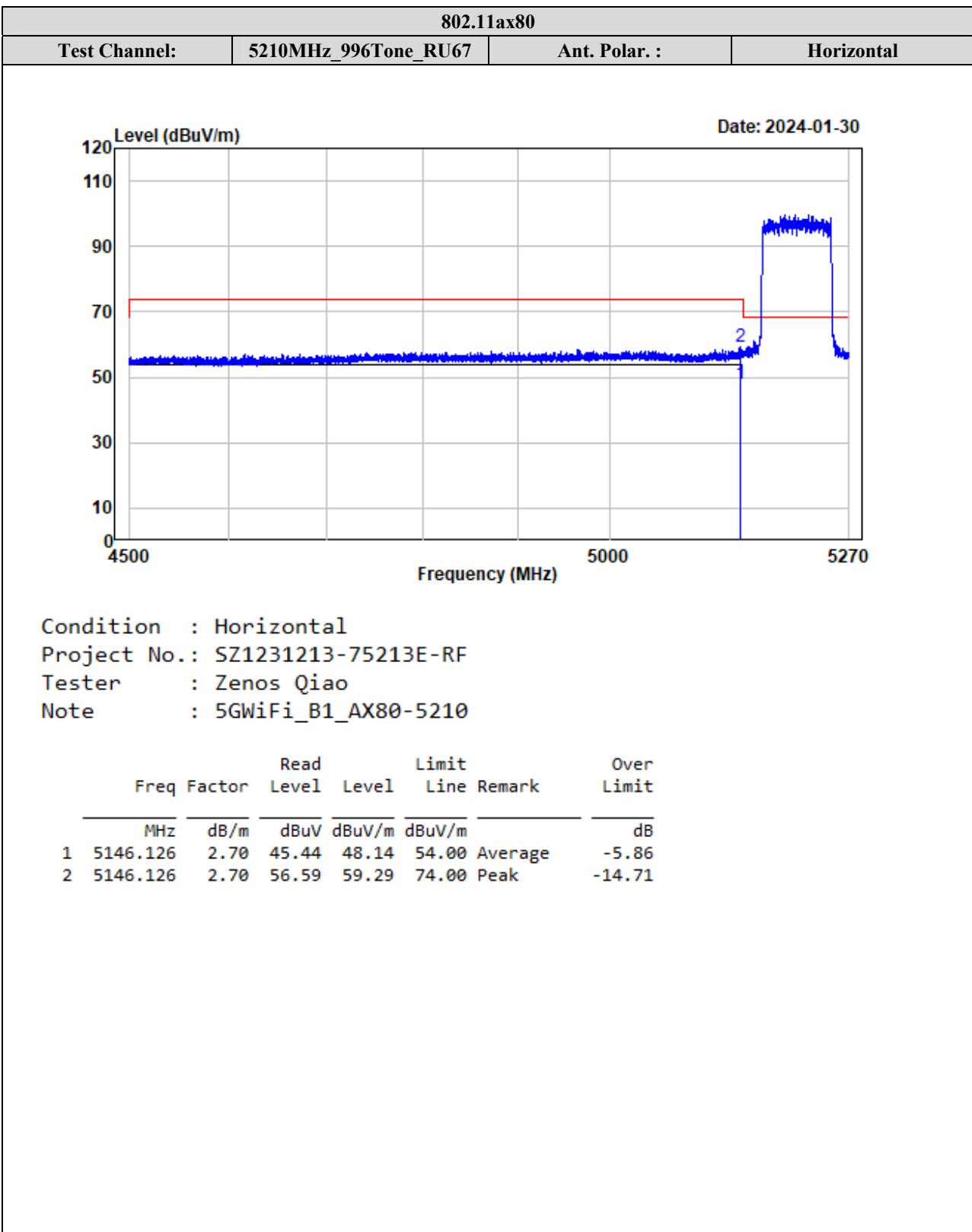


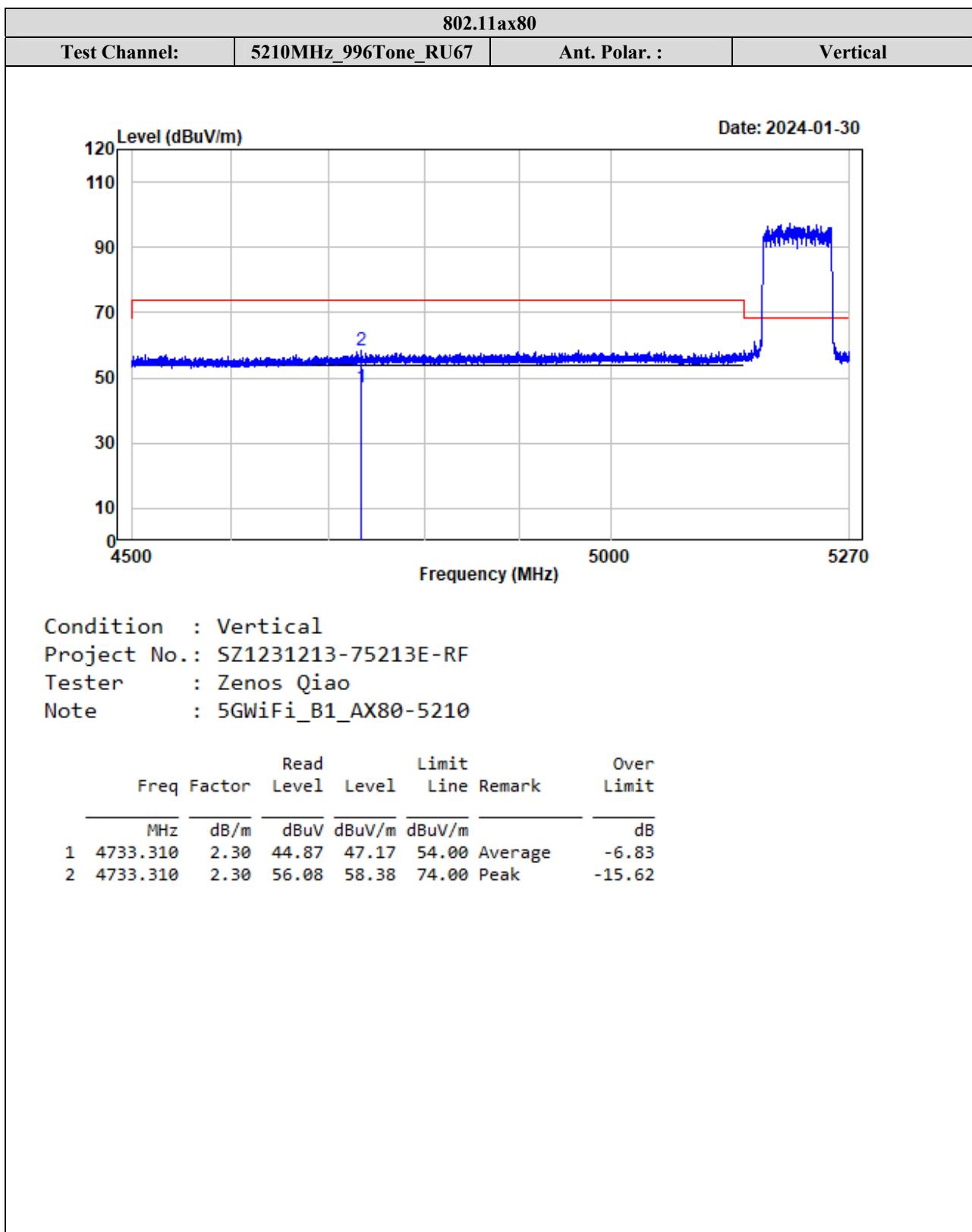


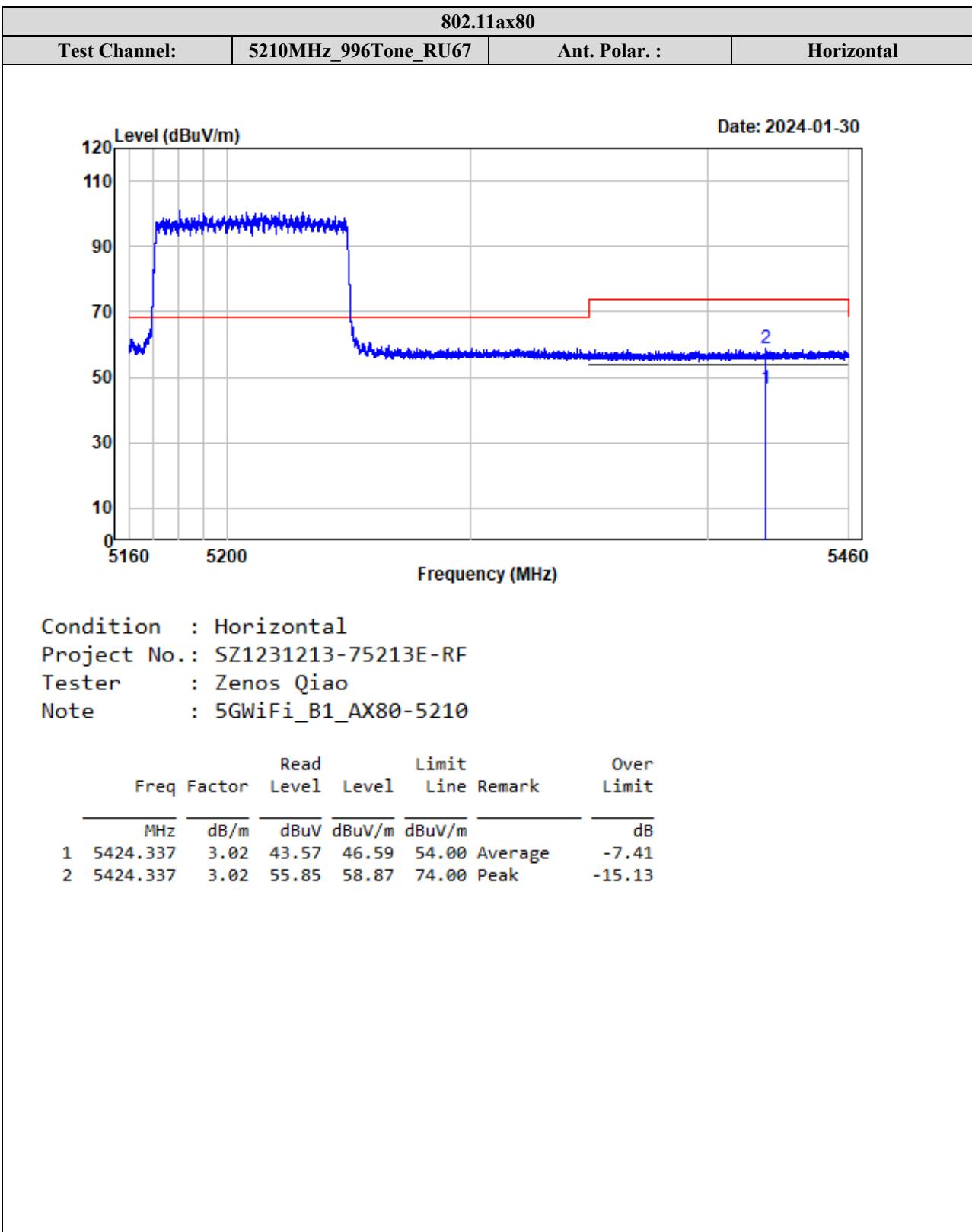


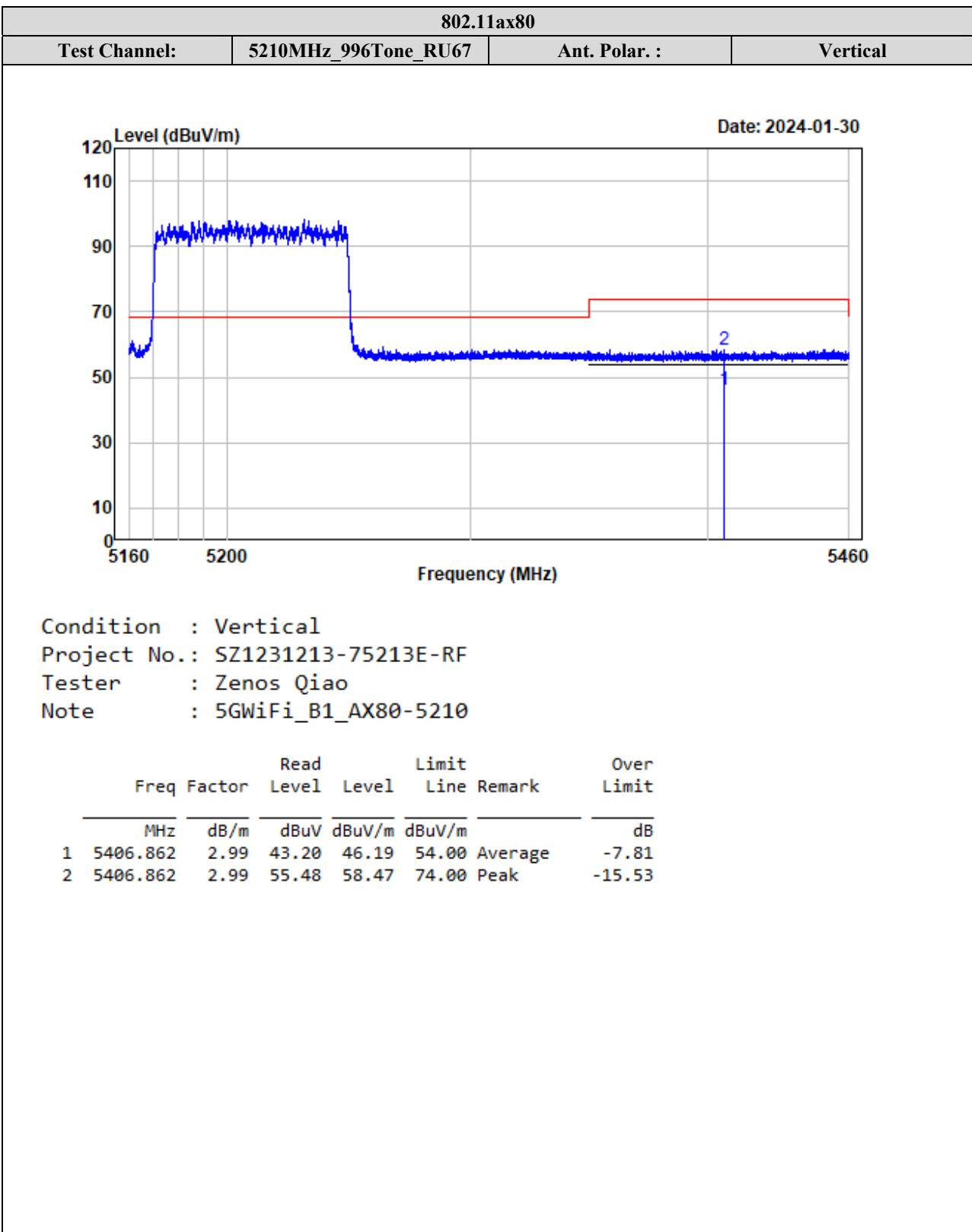


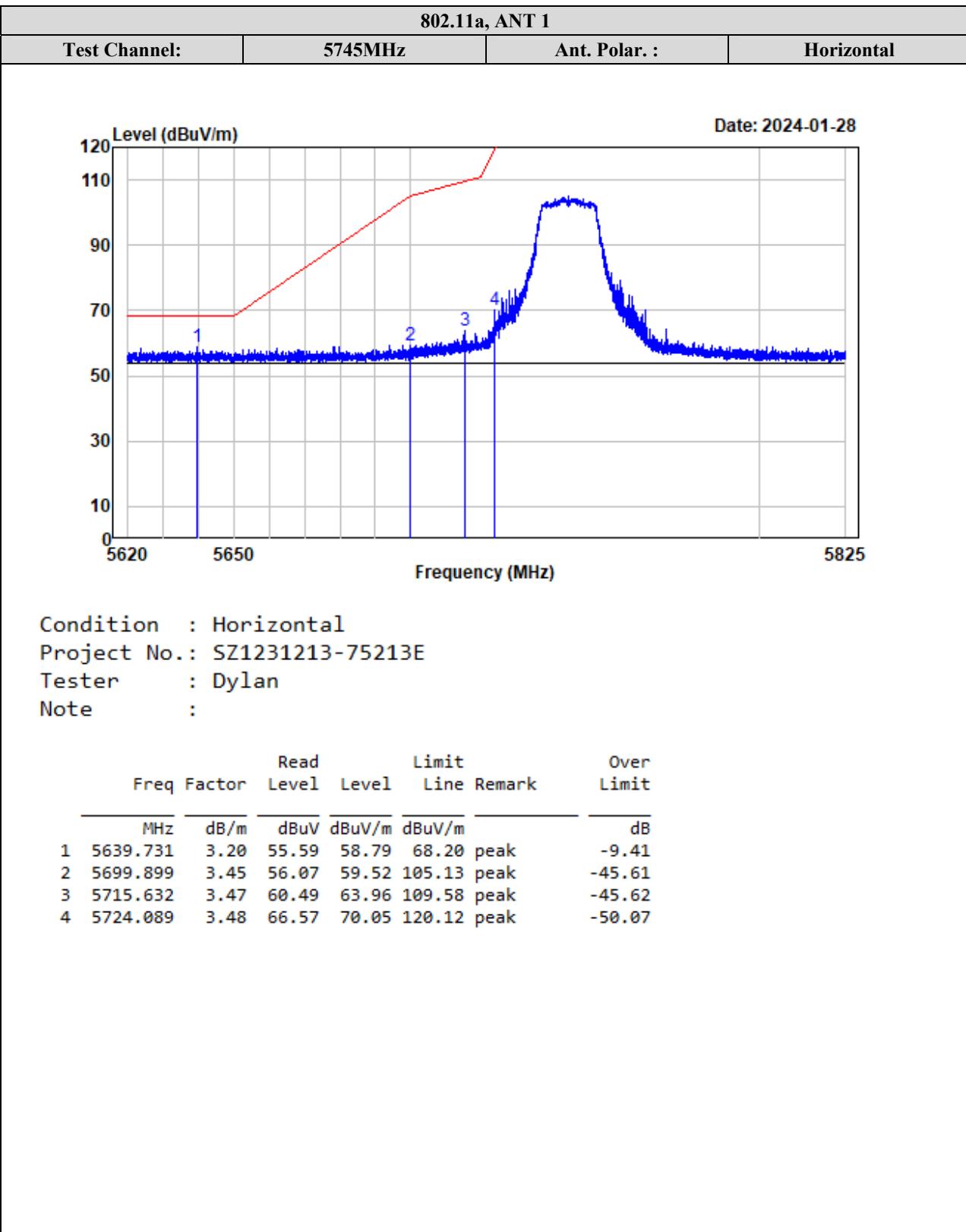






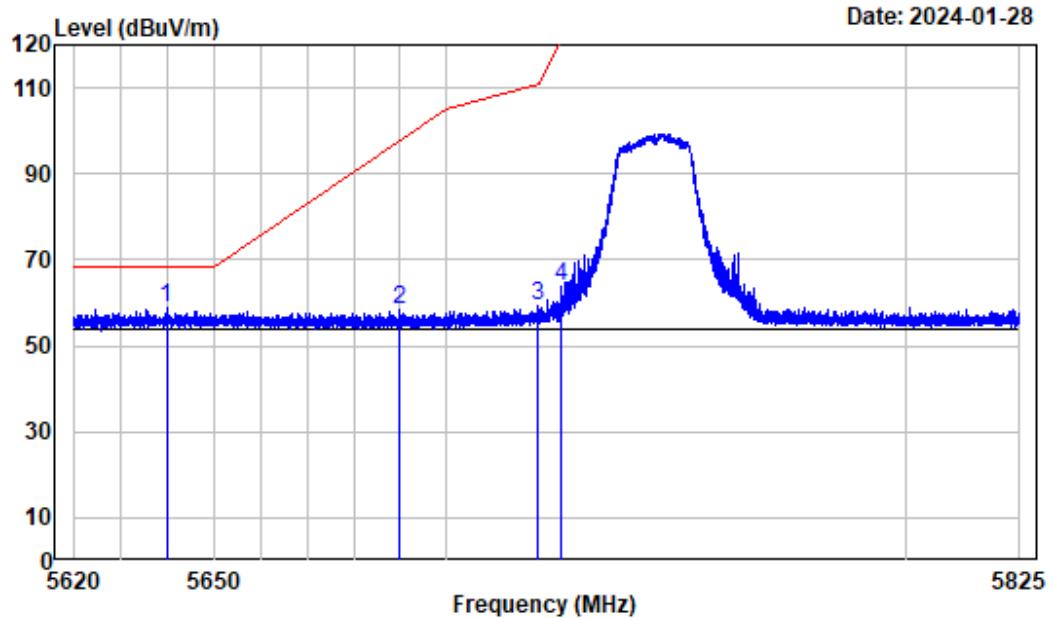




5725-5850MHz:

802.11a, ANT 1

Test Channel: 5745MHz Ant. Polar.: Vertical



Condition : Vertical

Project No.: SZ1231213-75213E

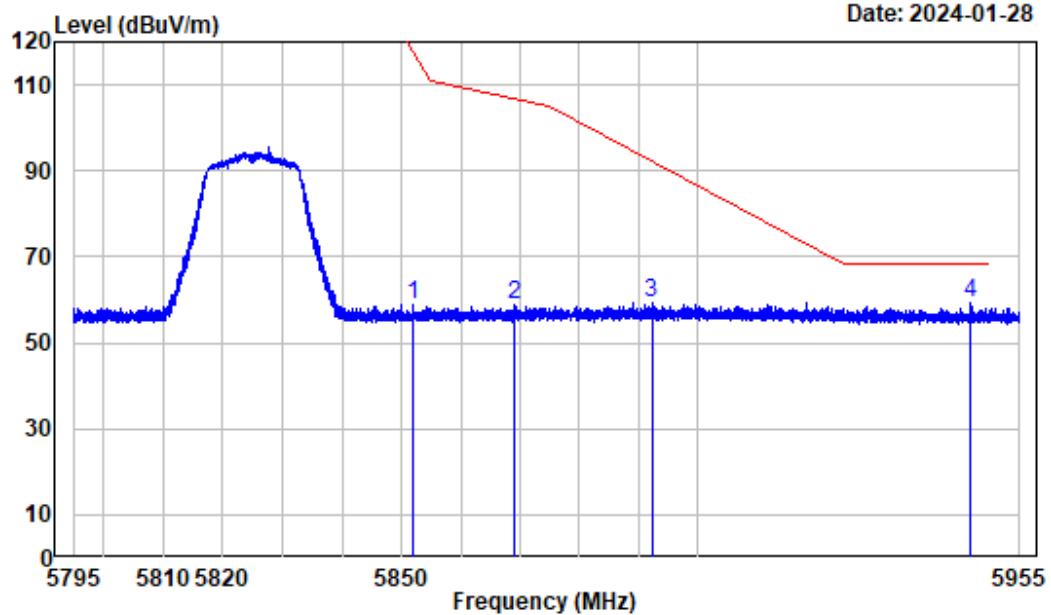
Tester : Dylan

Note :

	Freq	Factor	Read Level	Limit Level	Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5639.859	3.20	55.49	58.69	68.20	peak	-9.51
2	5689.674	3.41	54.99	58.40	97.59	peak	-39.19
3	5719.681	3.48	55.82	59.30	110.71	peak	-51.41
4	5724.652	3.48	60.40	63.88	121.41	peak	-57.53

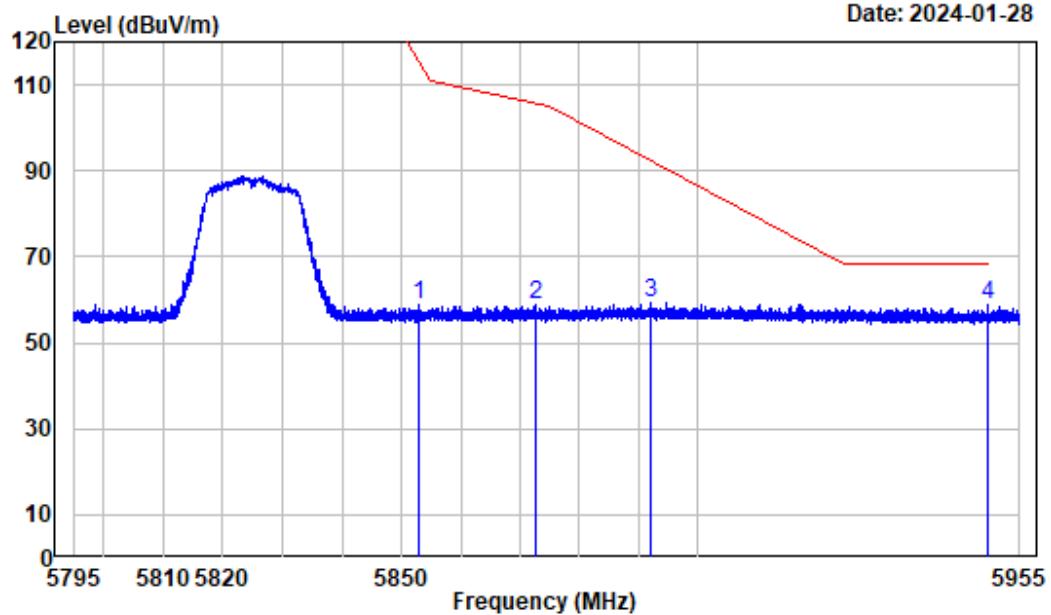
802.11a, ANT 1

Test Channel:	5825MHz	Ant. Polar. :	Horizontal
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Condition : Horizontal
Project No.: SZ1231213-75213E
Tester : Dylan
Note :

	Freq	Factor	Read Level	Limit Level	Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5851.800	3.69	55.22	58.91	118.10	peak	-59.19
2	5869.120	3.75	55.02	58.77	106.84	peak	-48.07
3	5892.280	3.83	55.64	59.47	92.38	peak	-32.91
4	5946.520	3.75	55.49	59.24	68.20	peak	-8.96

802.11a, ANT 1Test Channel: **5825MHz** Ant. Polar. : **Vertical**

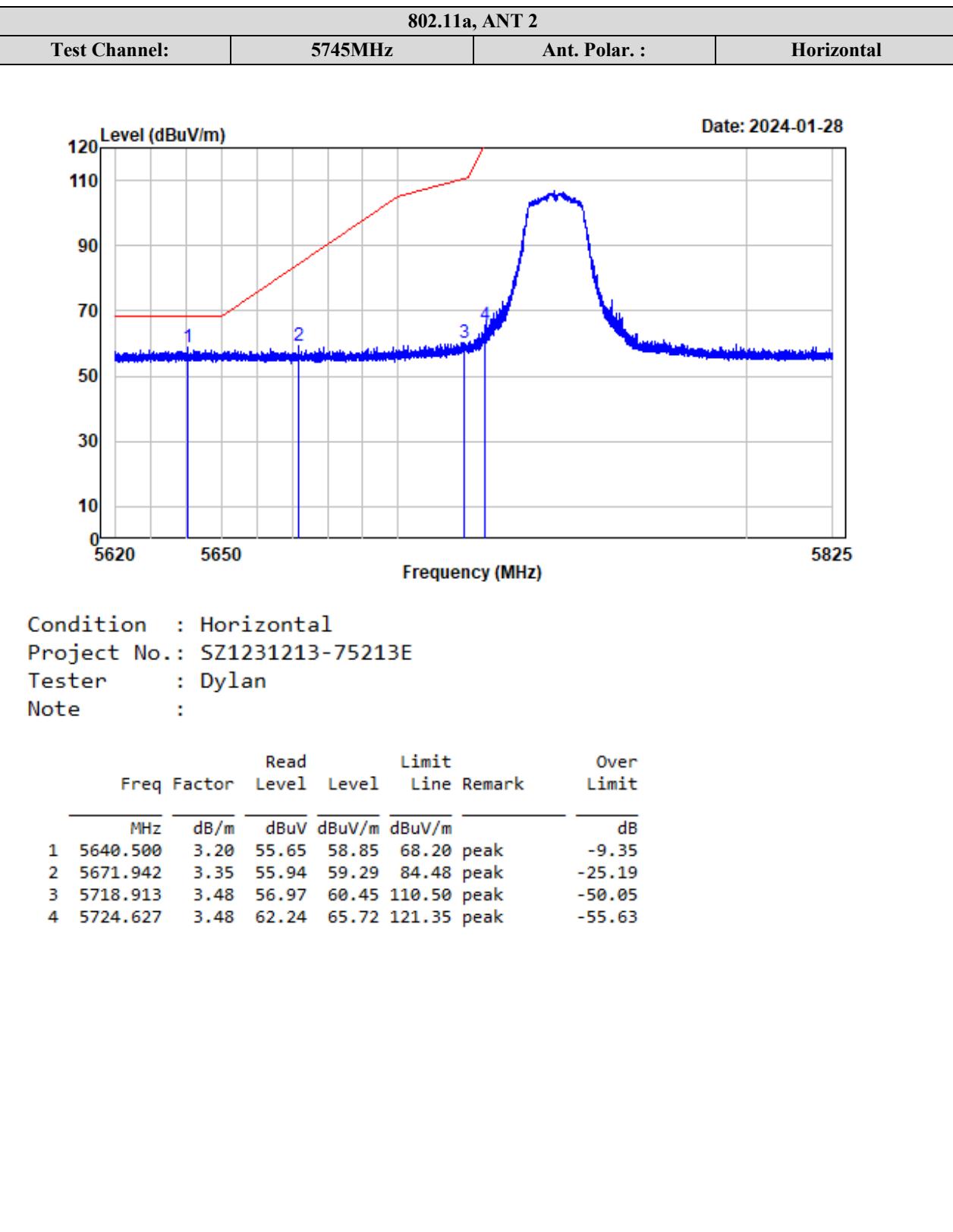
Condition : Vertical

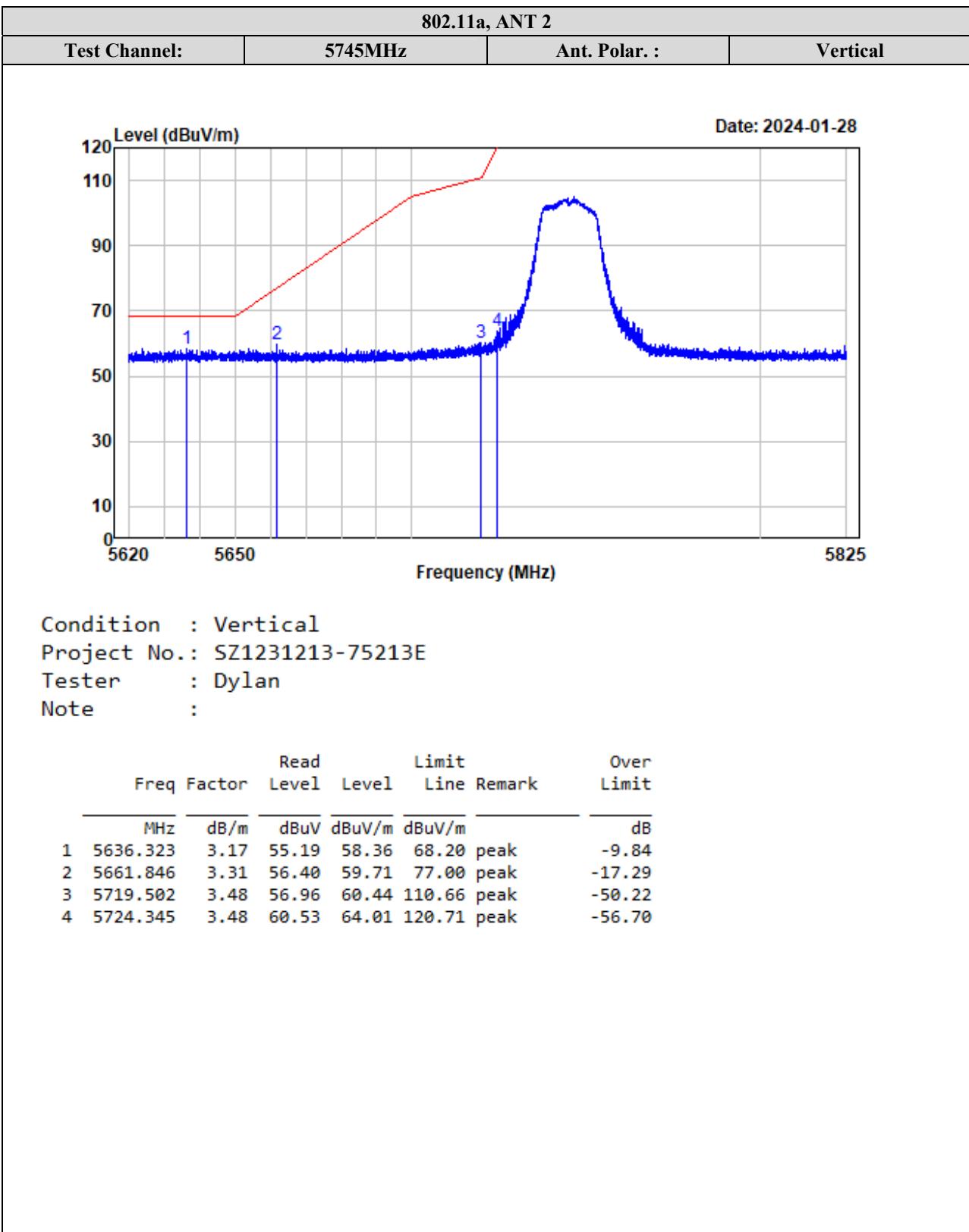
Project No.: SZ1231213-75213E

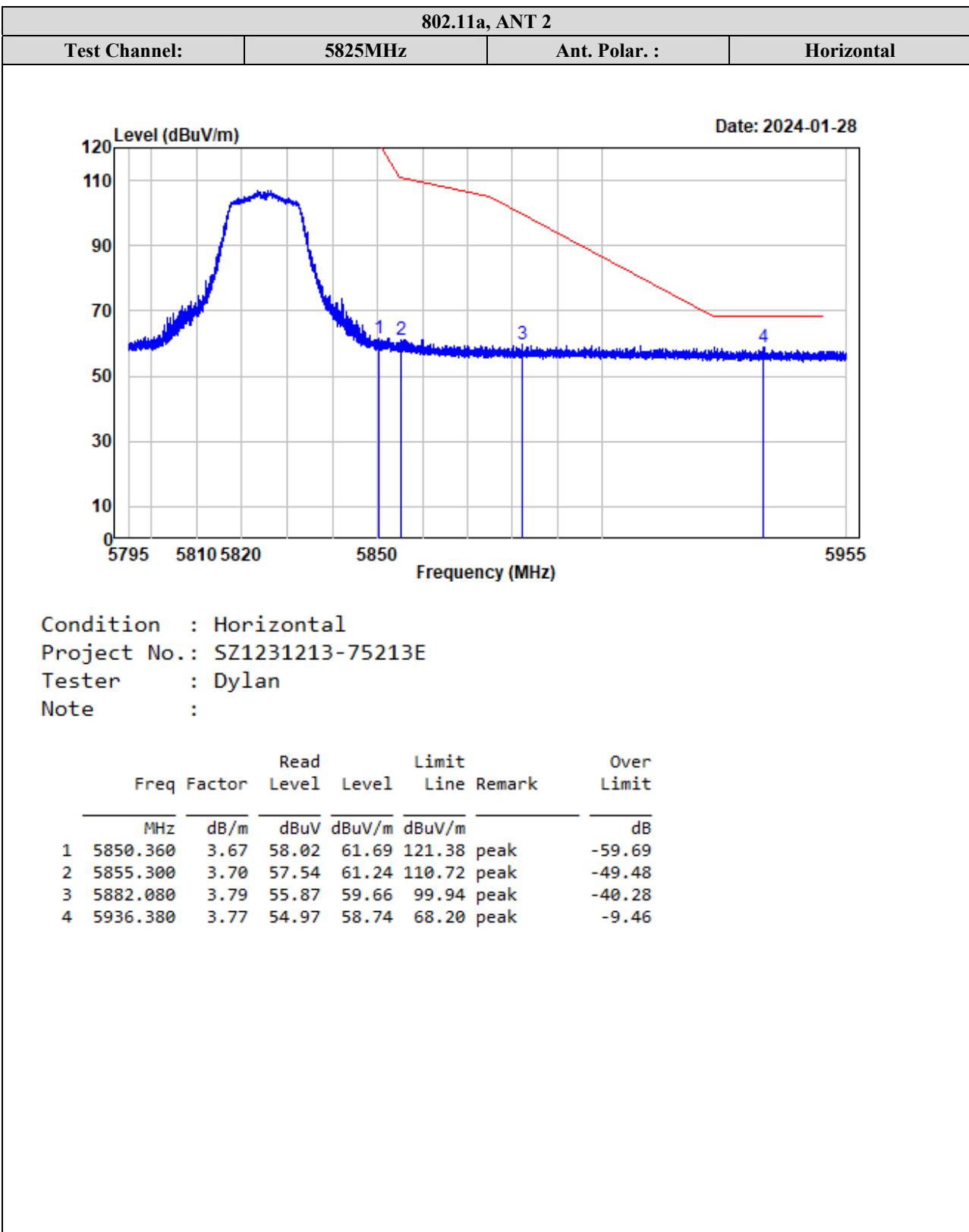
Tester : Dylan

Note :

	Freq	Factor	Read Level	Limit Level	Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5852.940	3.69	55.39	59.08	115.50	peak	-56.42
2	5872.800	3.76	55.10	58.86	105.82	peak	-46.96
3	5892.140	3.83	55.28	59.11	92.48	peak	-33.37
4	5949.540	3.74	55.18	58.92	68.20	peak	-9.28

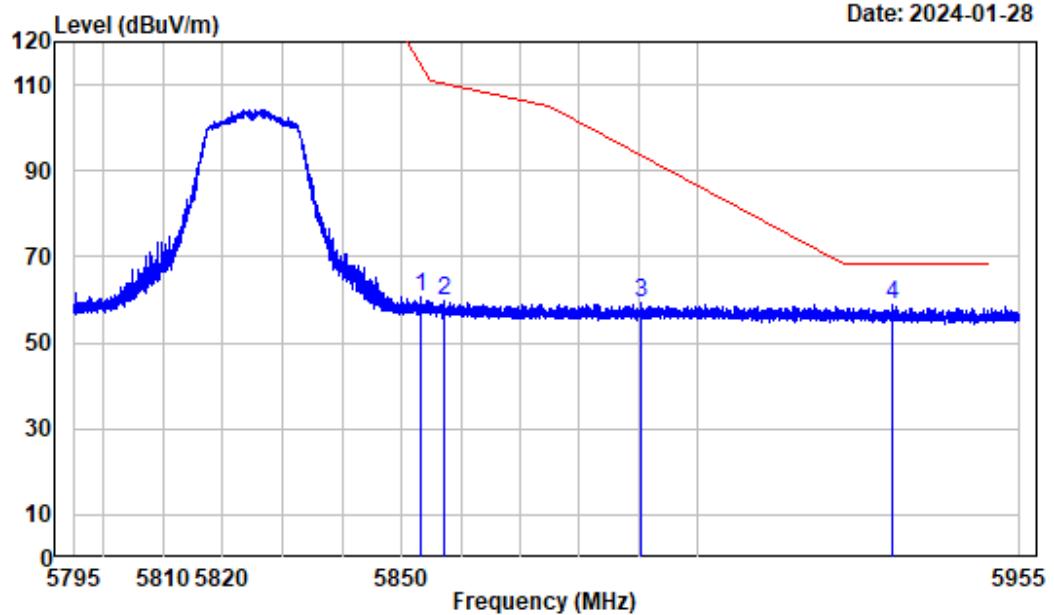






802.11a, ANT 2

Test Channel: 5825MHz Ant. Polar.: Vertical



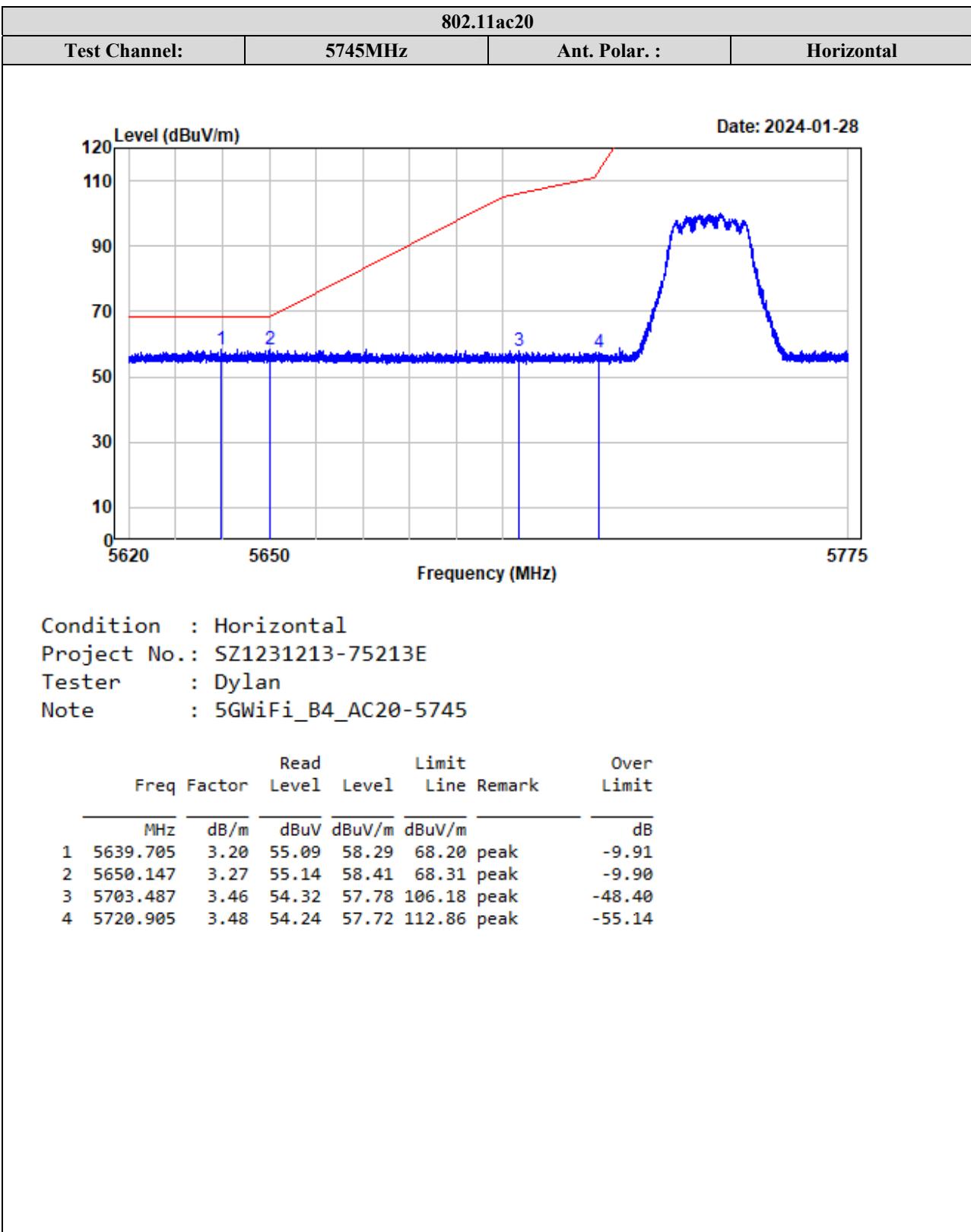
Condition : Vertical

Project No.: SZ1231213-75213E

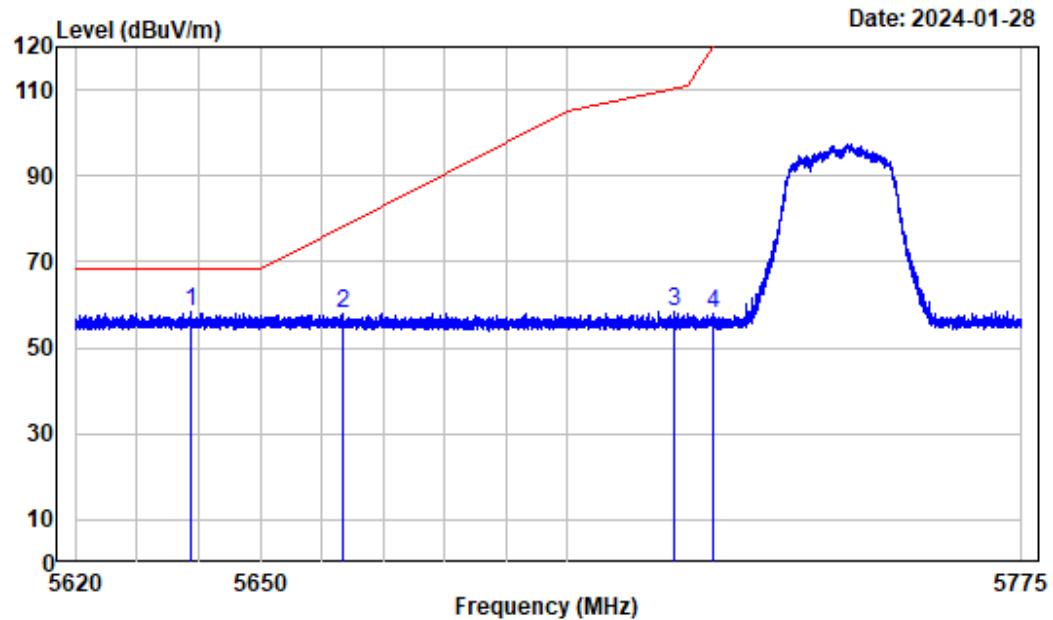
Tester : Dylan

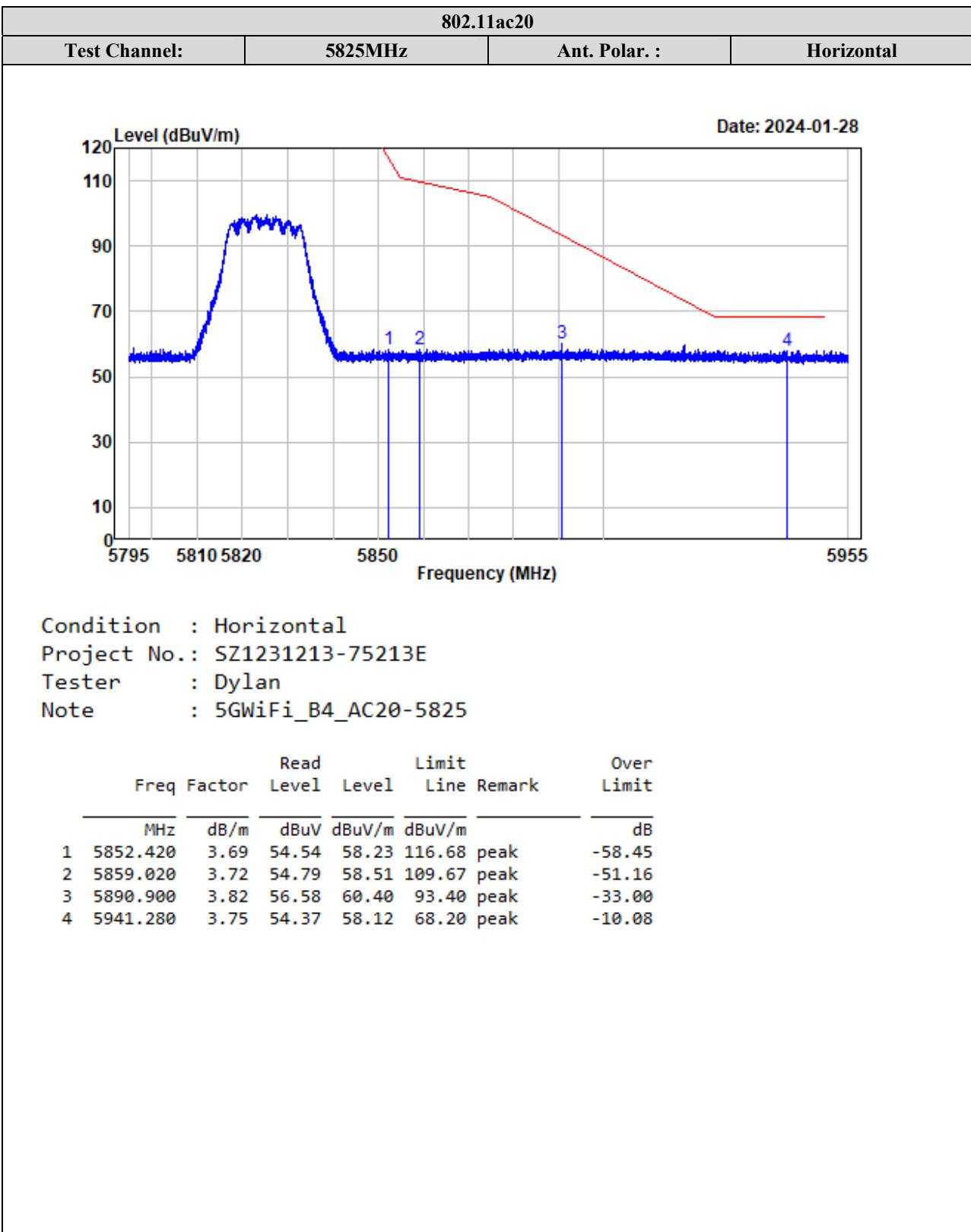
Note :

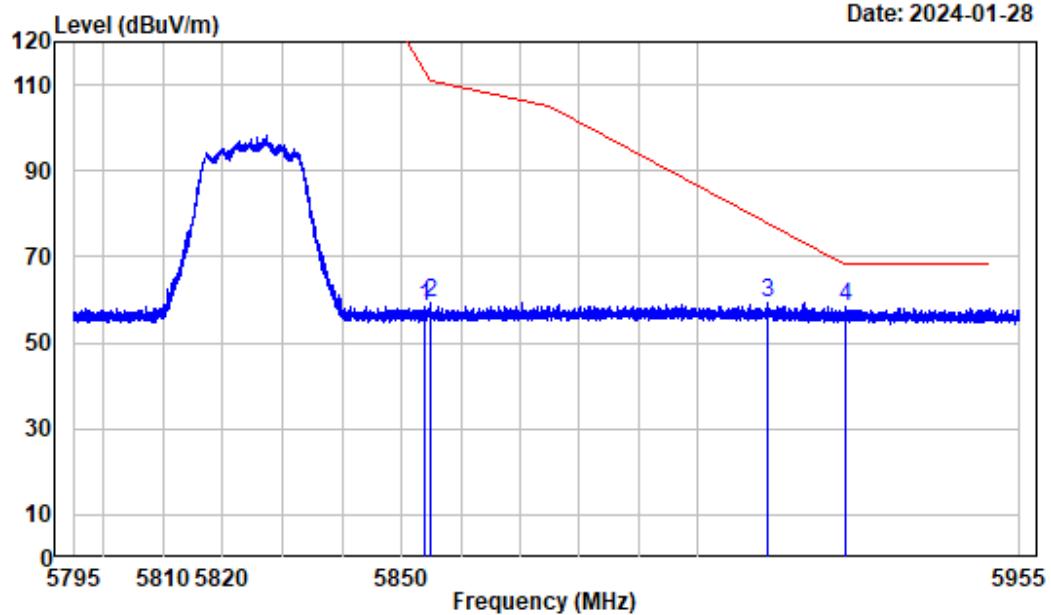
Freq MHz	Factor	Read		Limit		Over Limit
		dB/m	dBuV	dBuV/m	dBuV/m	
1 5853.280	3.69	57.12	60.81	114.72	peak	-53.91
2 5857.320	3.71	56.01	59.72	110.15	peak	-50.43
3 5890.620	3.82	55.52	59.34	93.61	peak	-34.27
4 5933.100	3.77	54.93	58.70	68.20	peak	-9.50



Test Channel:	5745MHz	Ant. Polar. :	Vertical
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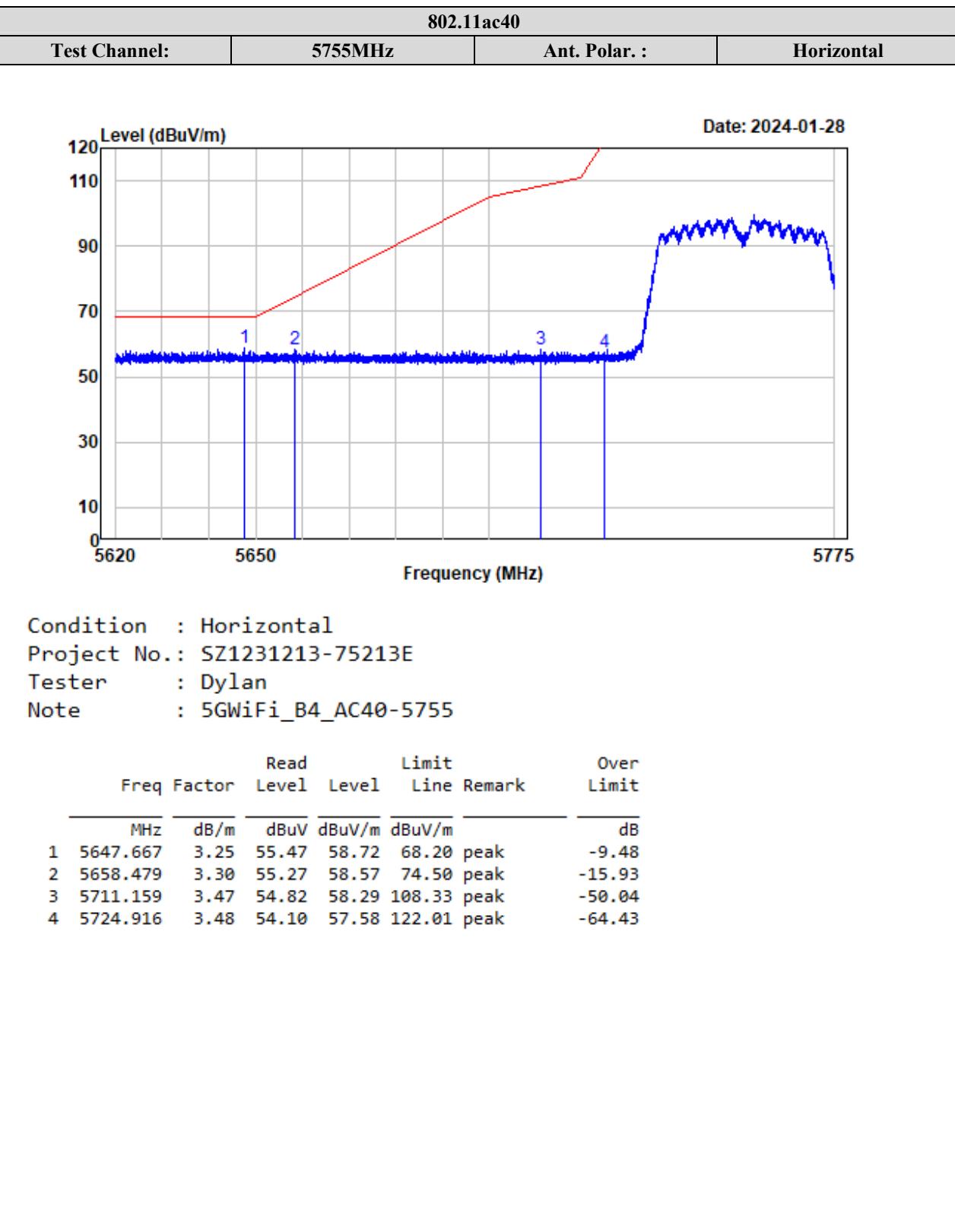


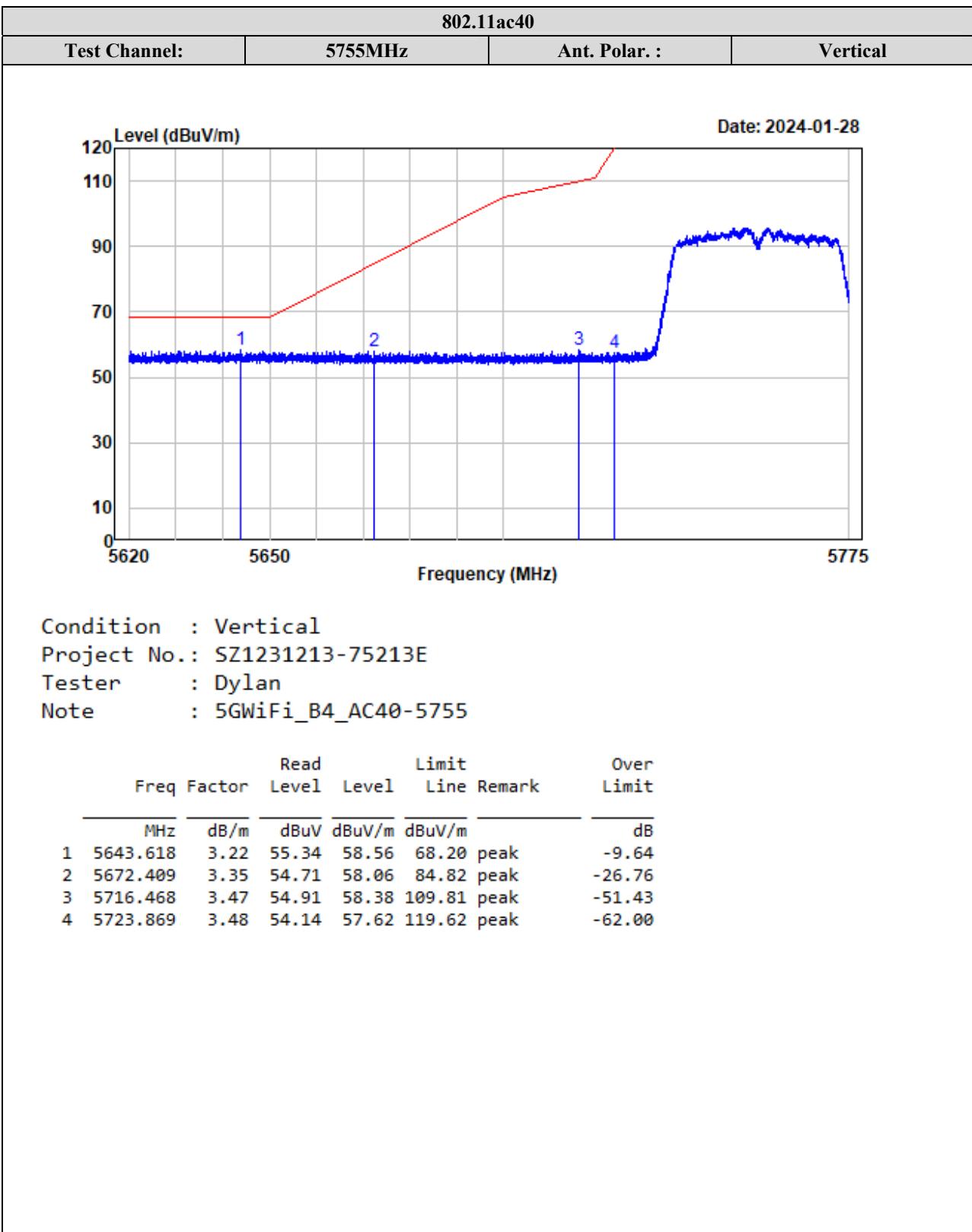


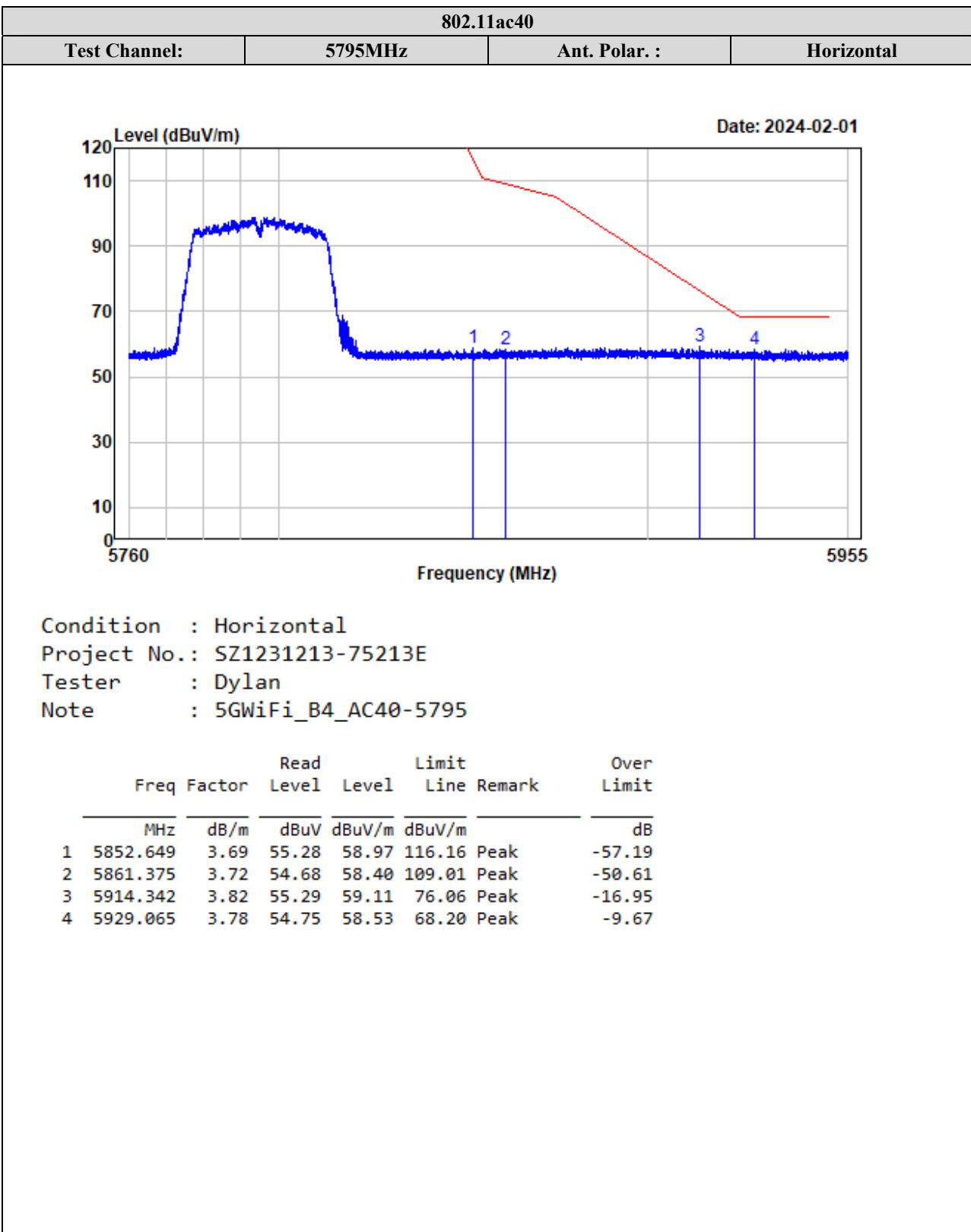
802.11ac20Test Channel: **5825MHz** Ant. Polar. : **Vertical**

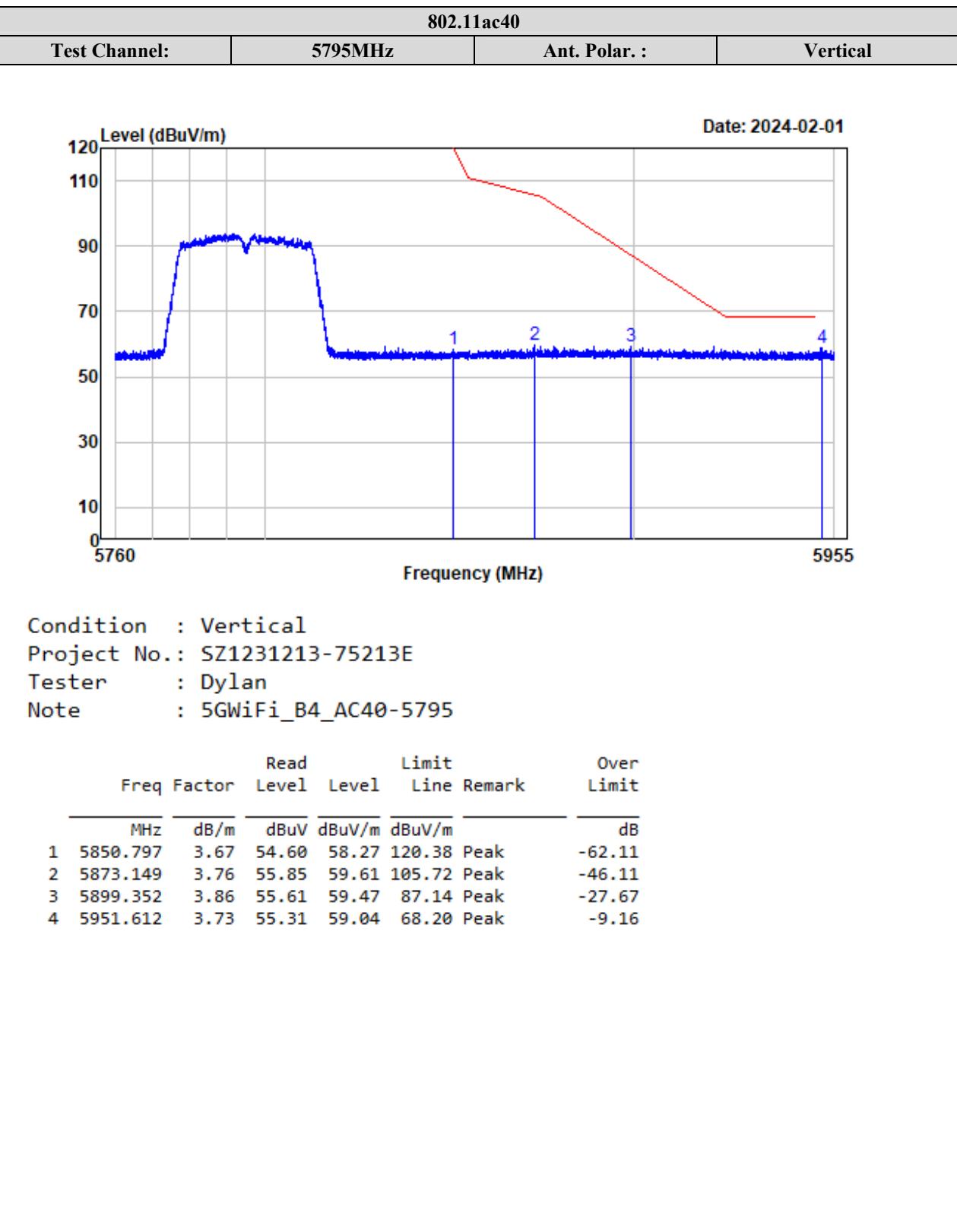
Condition : Vertical
Project No.: SZ1231213-75213E
Tester : Dylan
Note : 5GWiFi_B4_AC20-5825

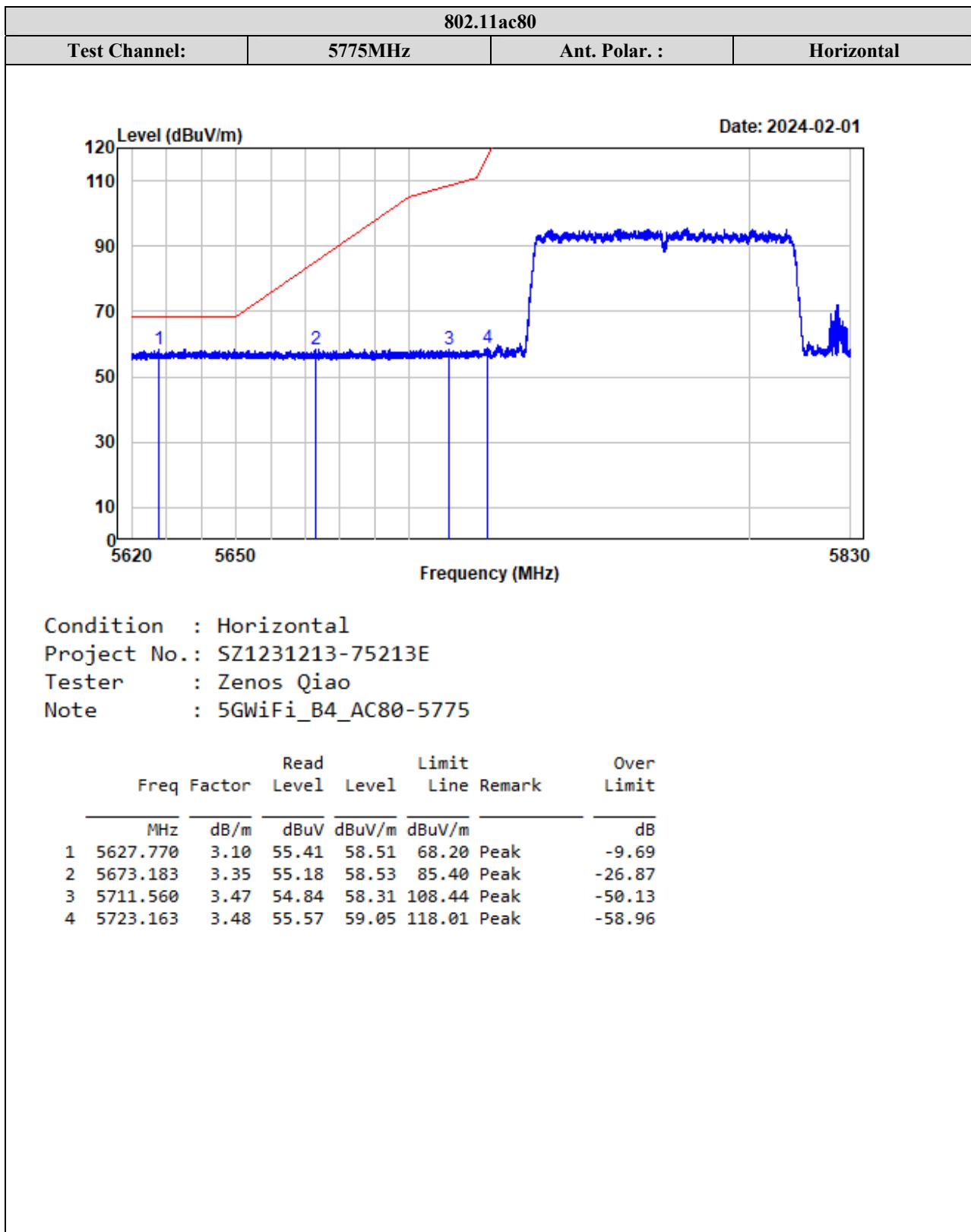
	Freq	Factor	Read Level	Limit Level	Line	Remark	Over Limit
	MHz	dB/m	dBuV	dBuV/m	dBuV/m		dB
1	5853.880	3.70	54.65	58.35	113.35	peak	-55.00
2	5855.020	3.70	55.59	59.29	110.79	peak	-51.50
3	5912.100	3.83	55.60	59.43	77.72	peak	-18.29
4	5925.240	3.79	54.40	58.19	68.20	peak	-10.01

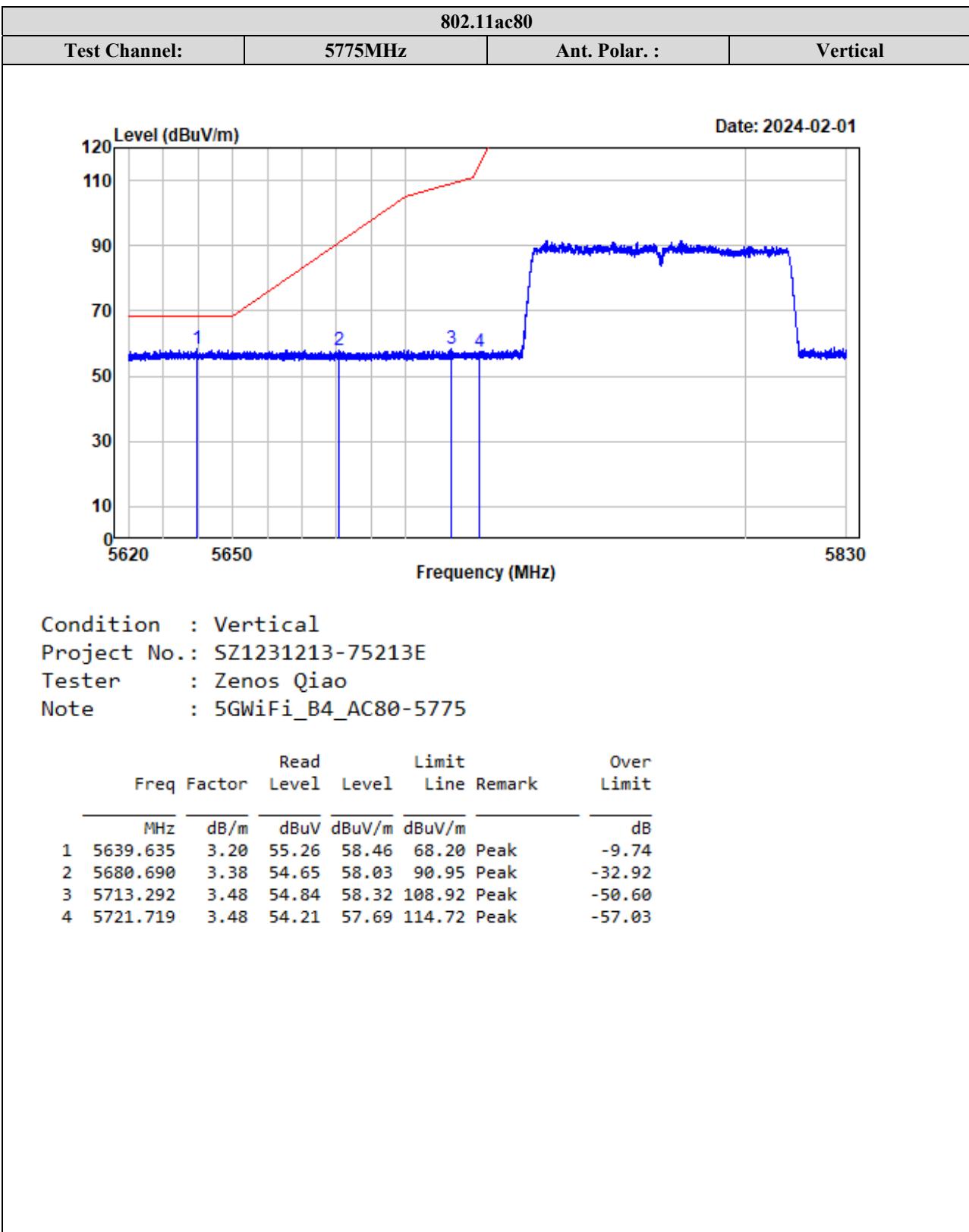


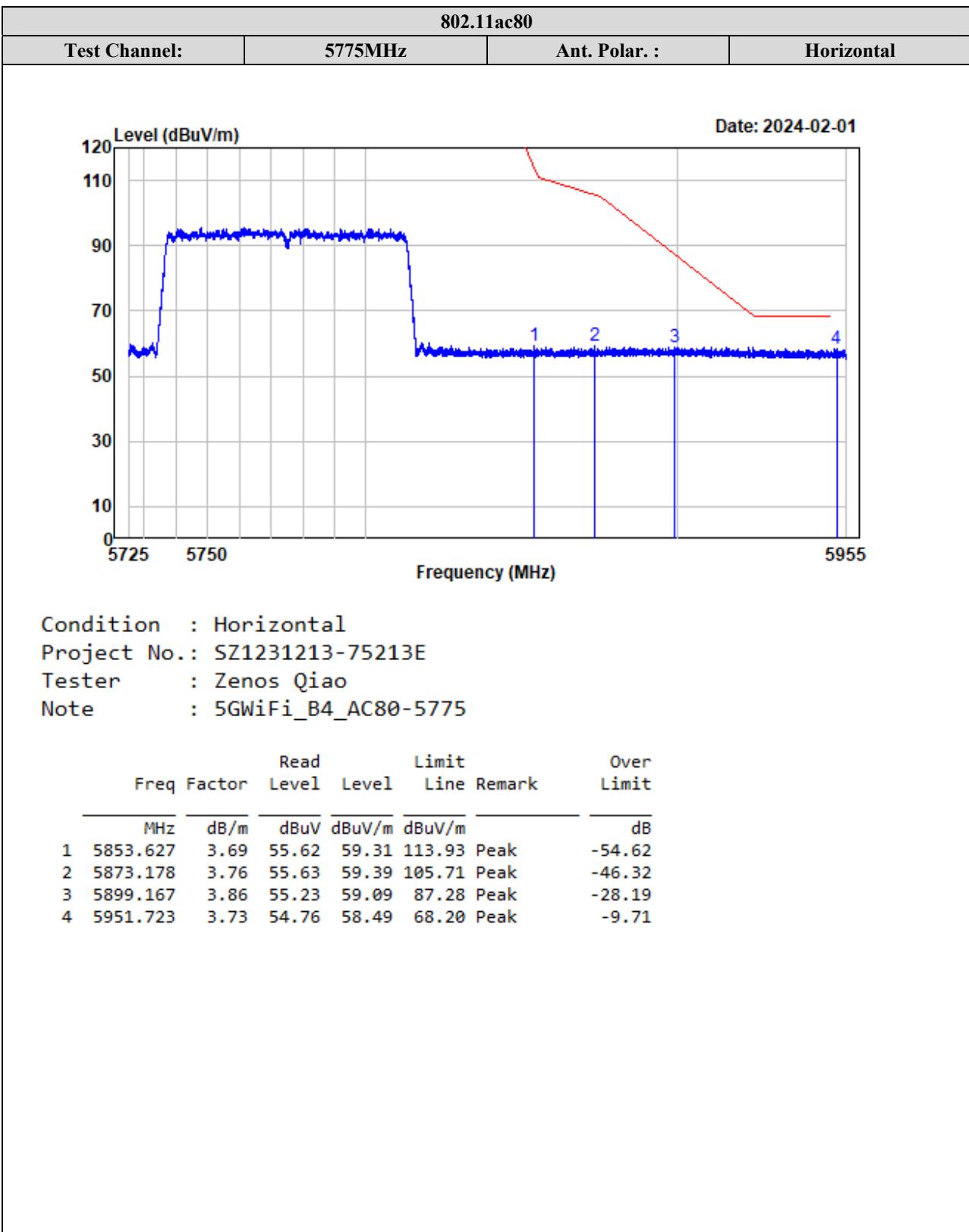


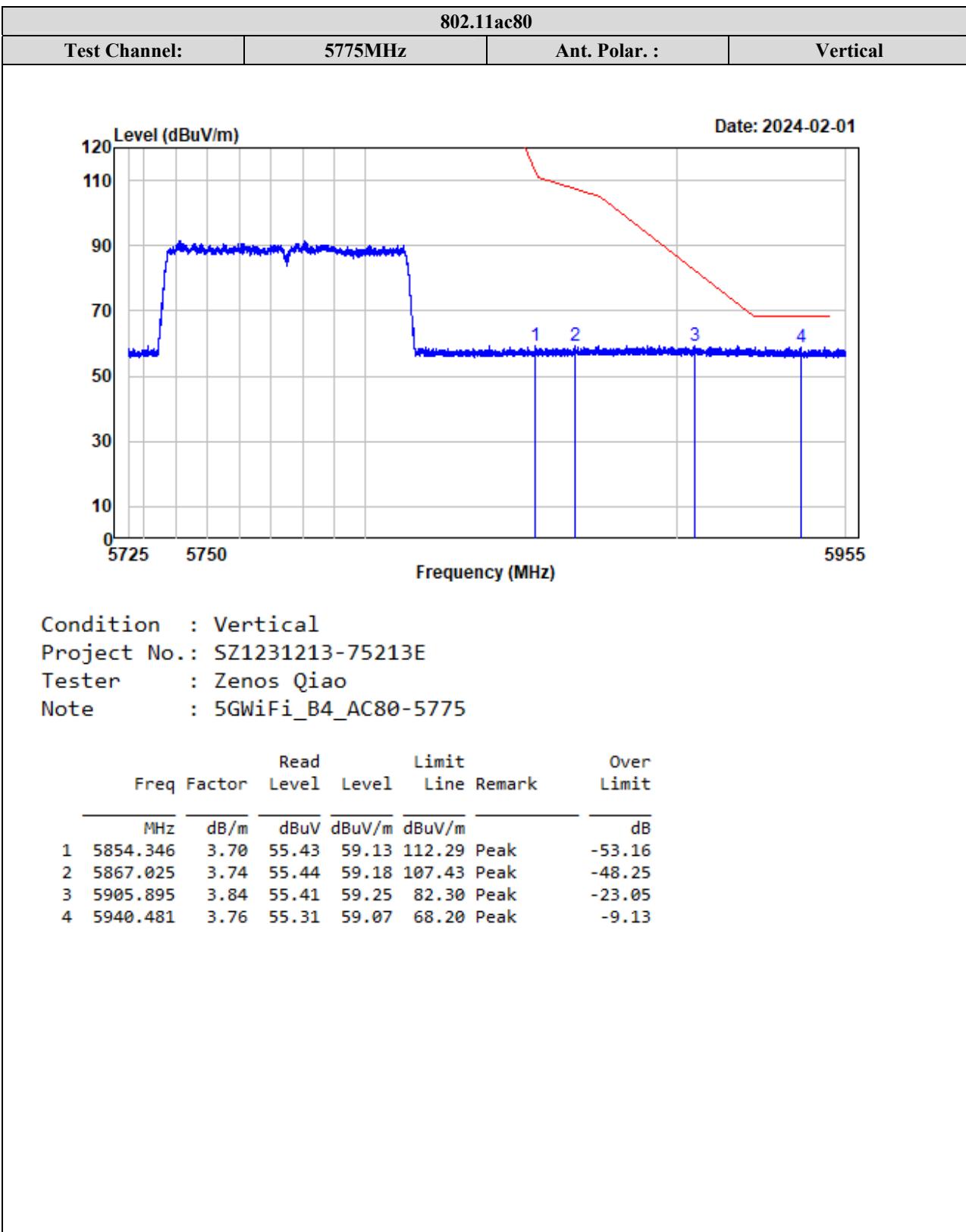


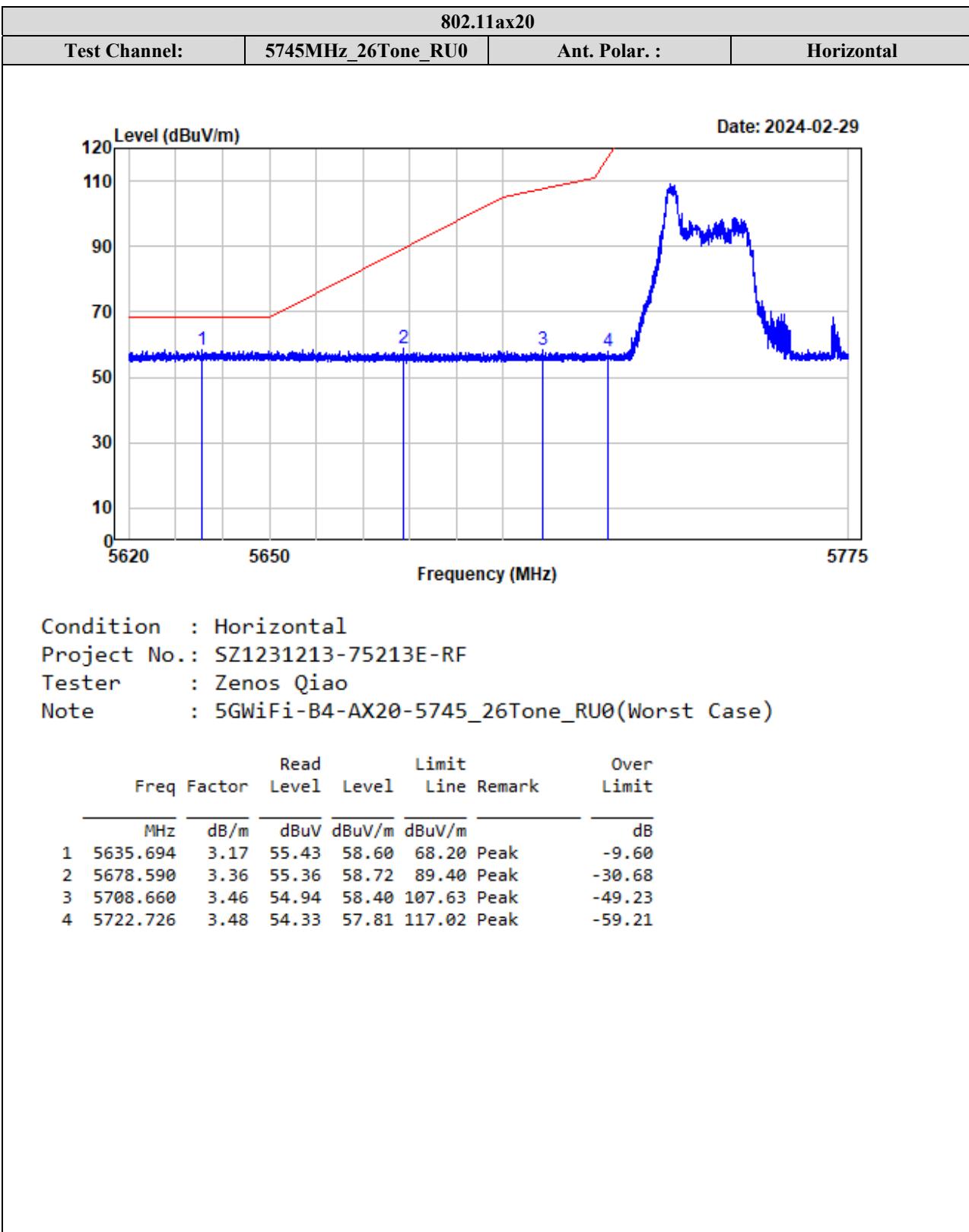


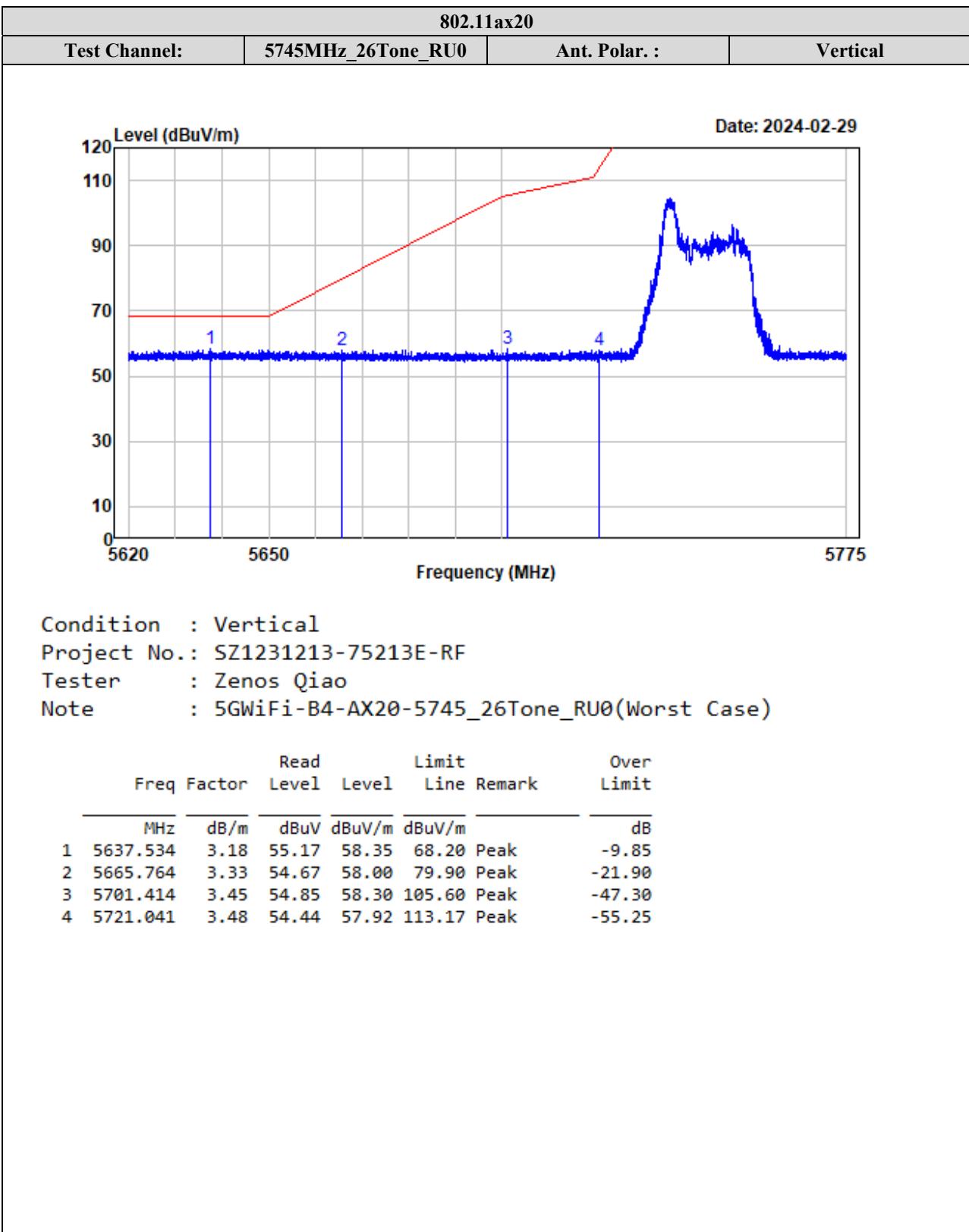


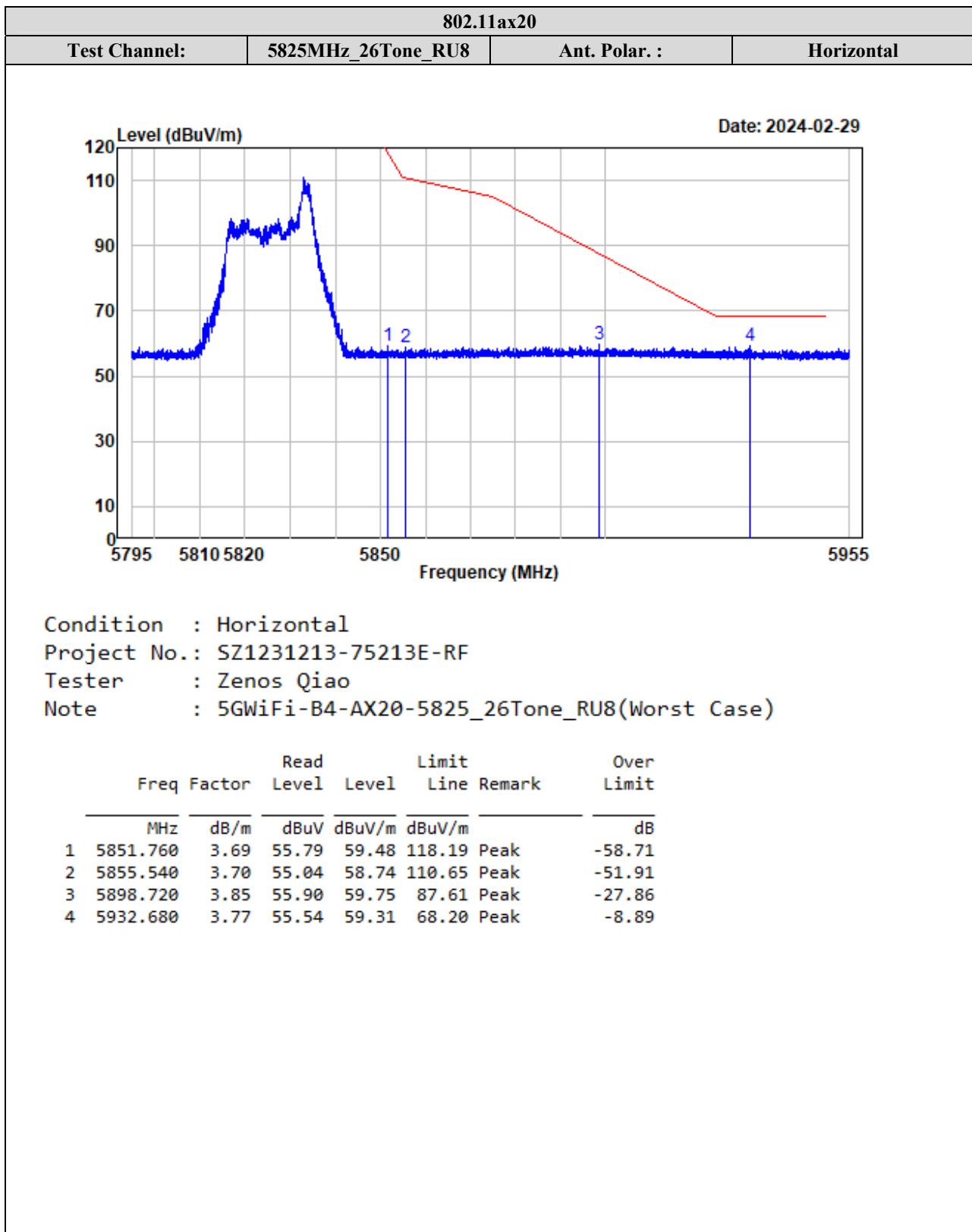


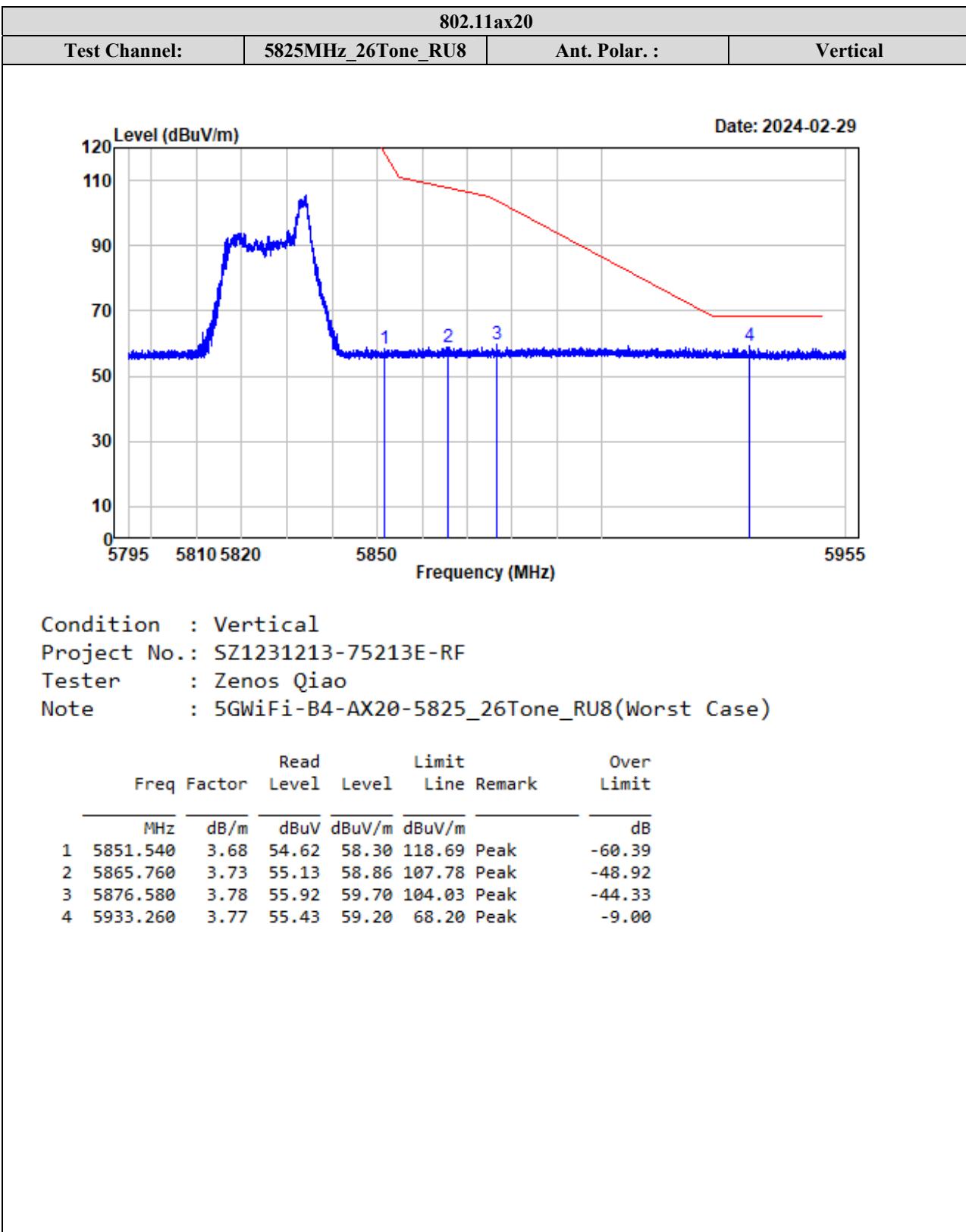


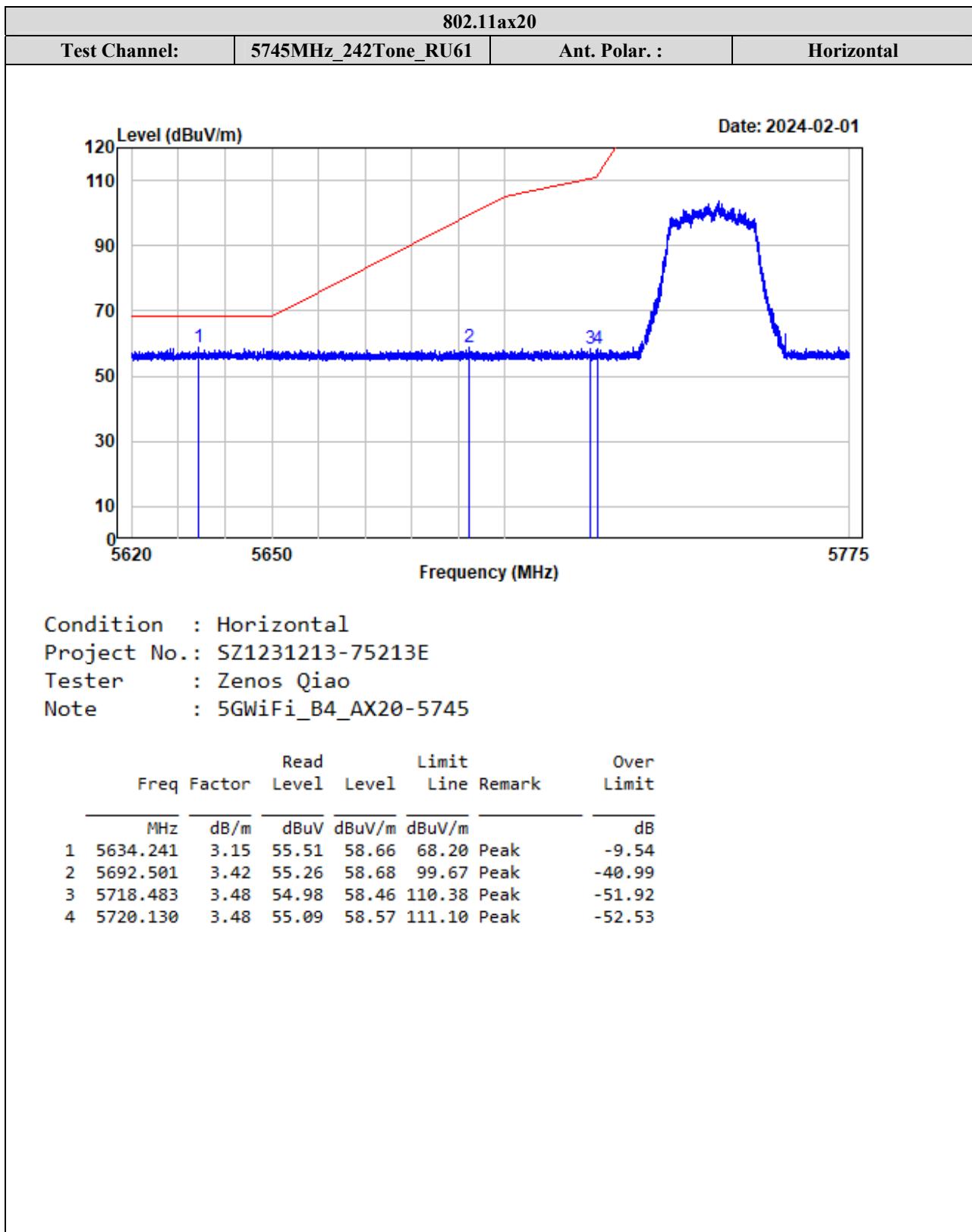




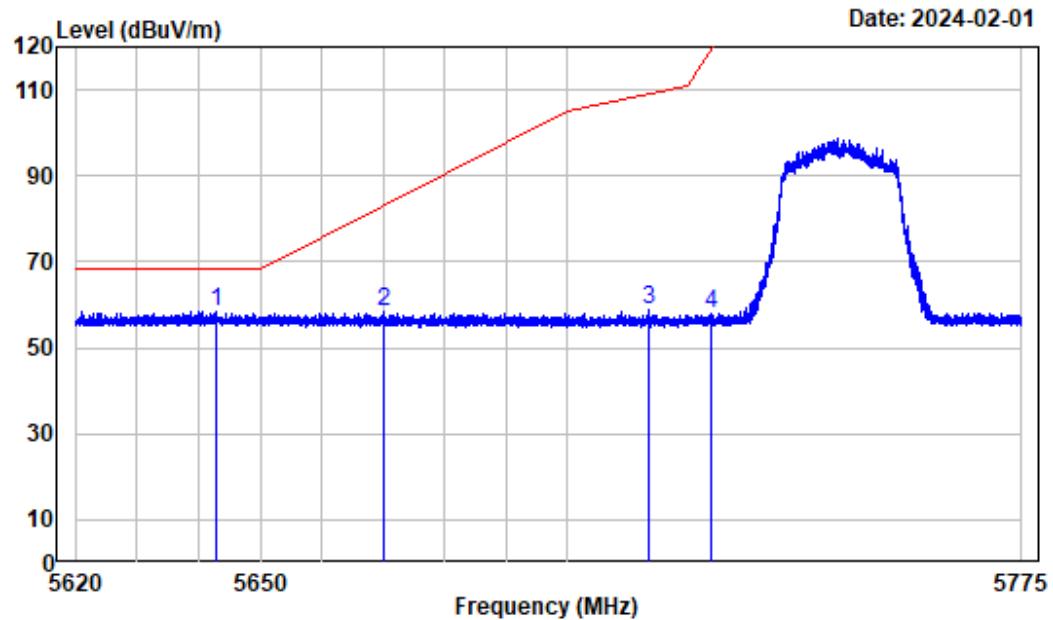






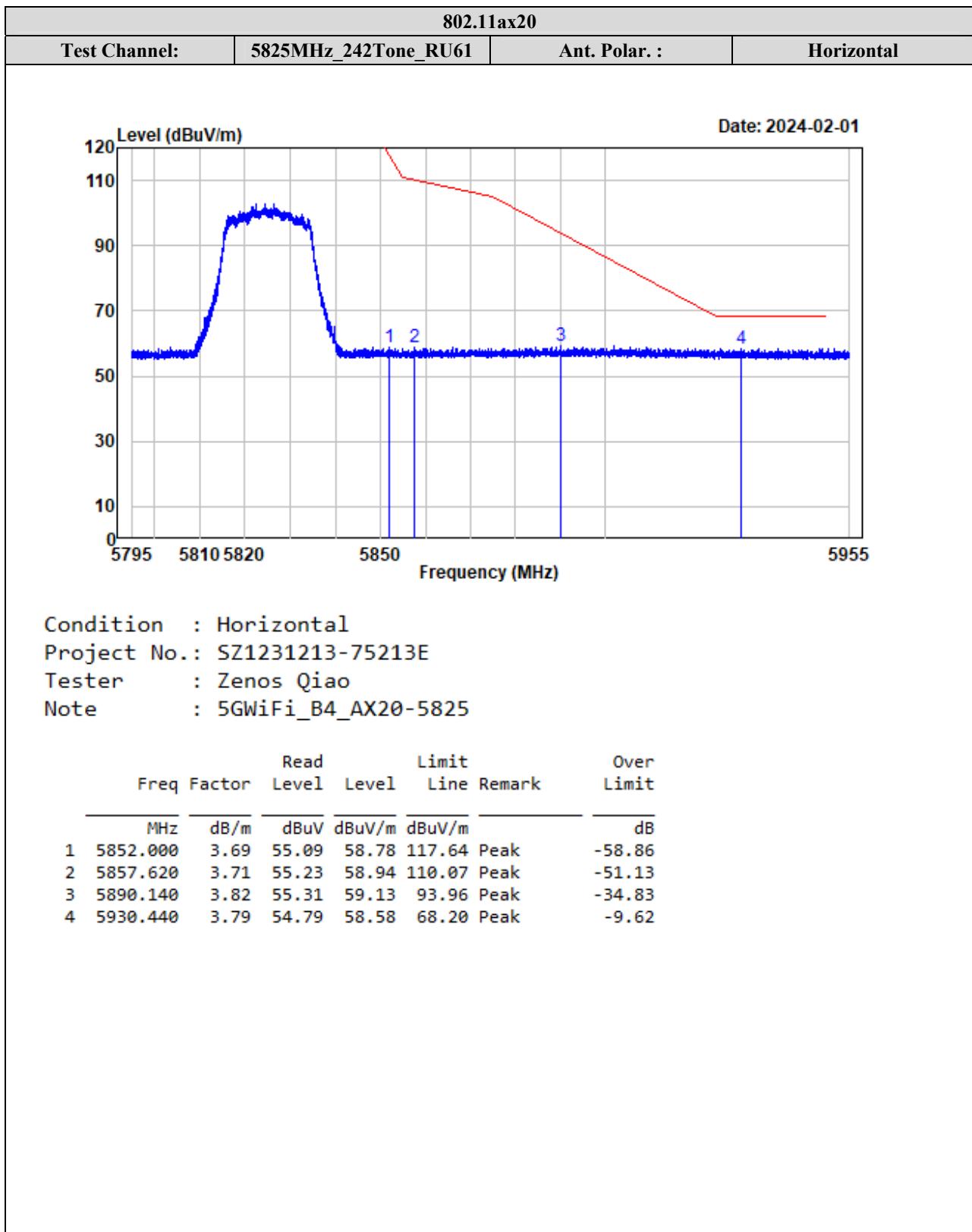


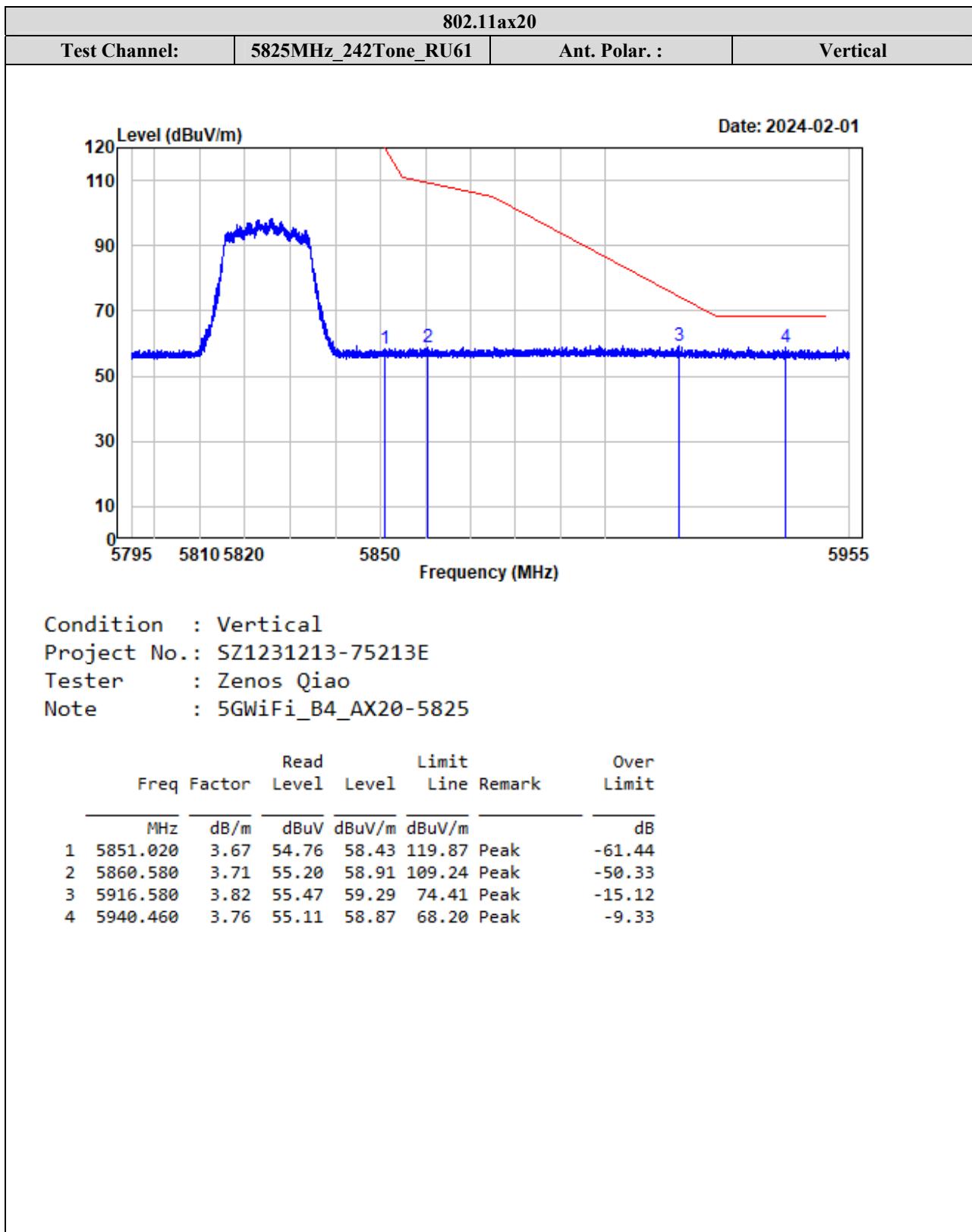
802.11ax20			
Test Channel:	5745MHz_242Tone_RU61	Ant. Polar. :	Vertical

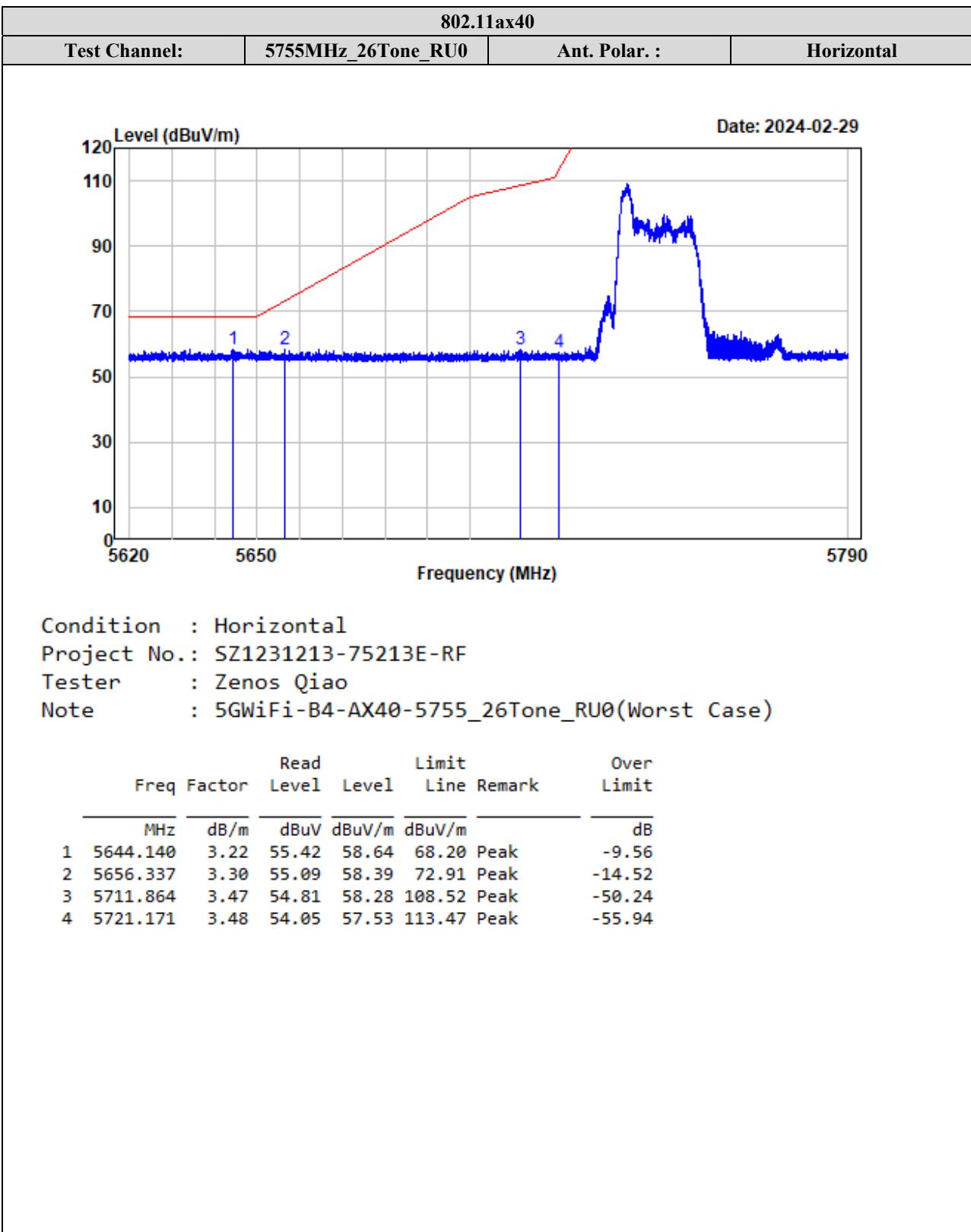


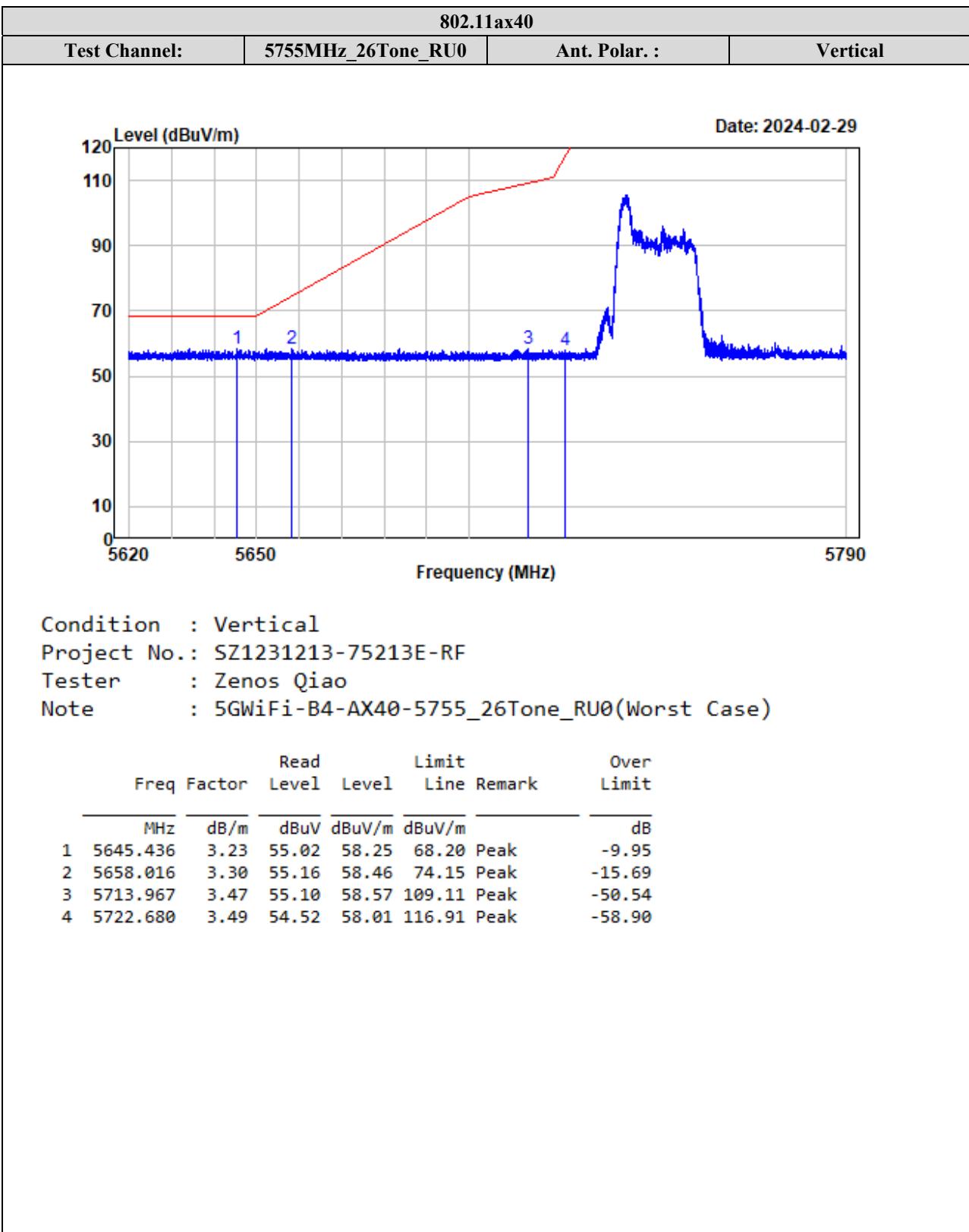
Condition : Vertical
Project No.: SZ1231213-75213E
Tester : Zenos Qiao
Note : 5GWiFi_B4_AX20-5745

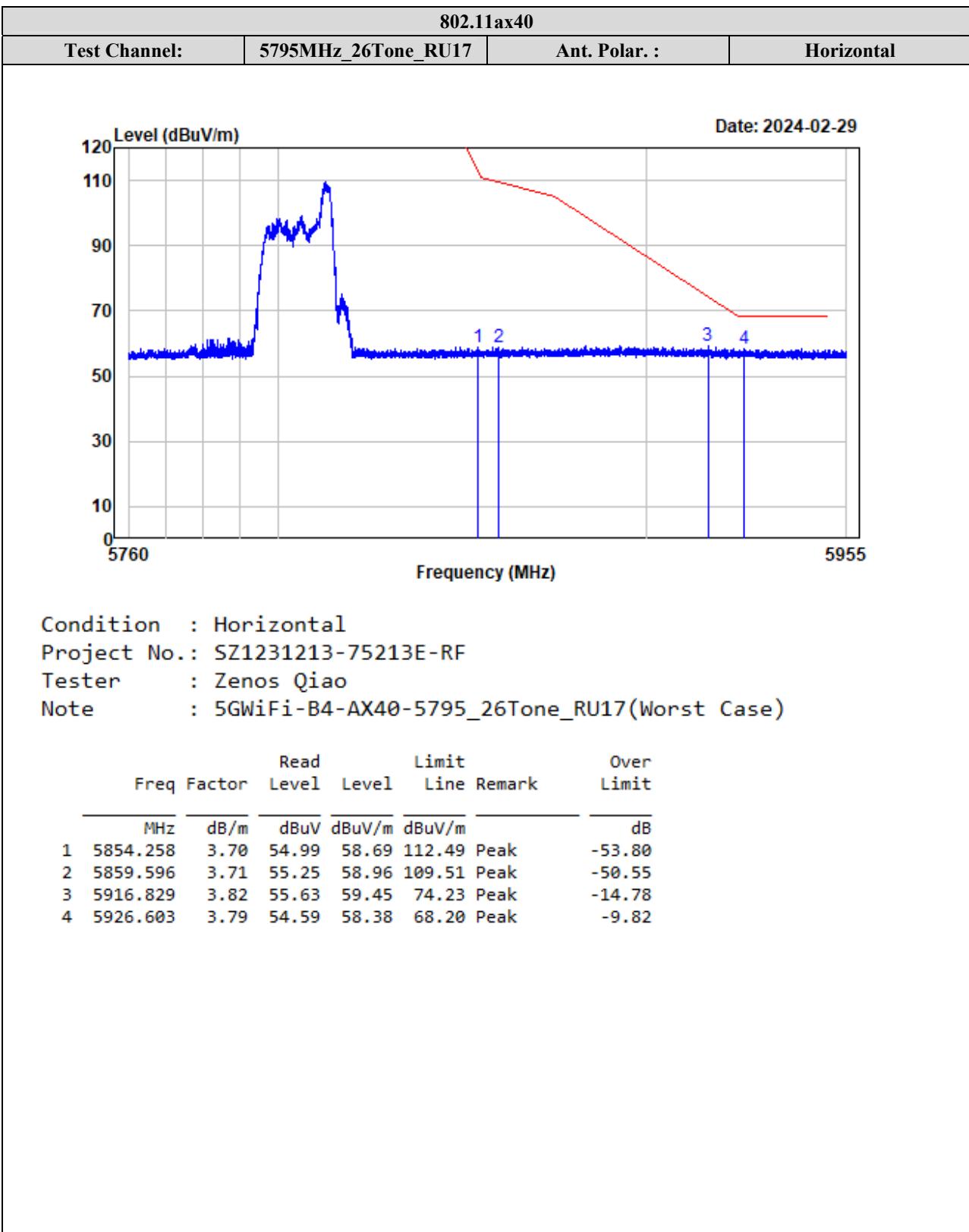
Freq	Factor	Read		Limit		Over Limit
		MHz	dB/m	dBuV	dBuV/m	
1	5642.920	3.21	55.37	58.58	68.20 Peak	-9.62
2	5670.104	3.34	54.89	58.23	83.12 Peak	-24.89
3	5713.542	3.48	55.27	58.75	108.99 Peak	-50.24
4	5723.579	3.48	54.64	58.12	118.96 Peak	-60.84

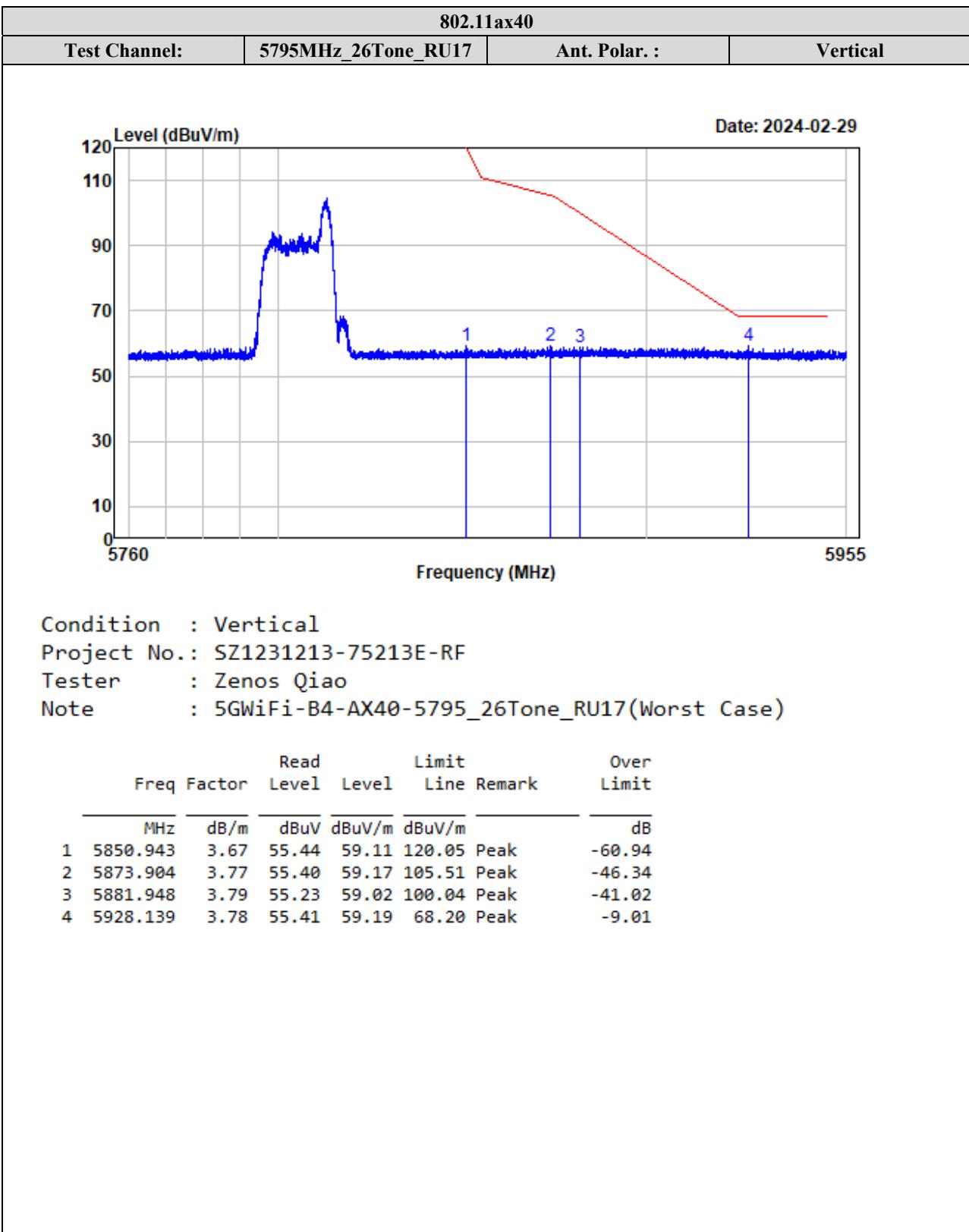


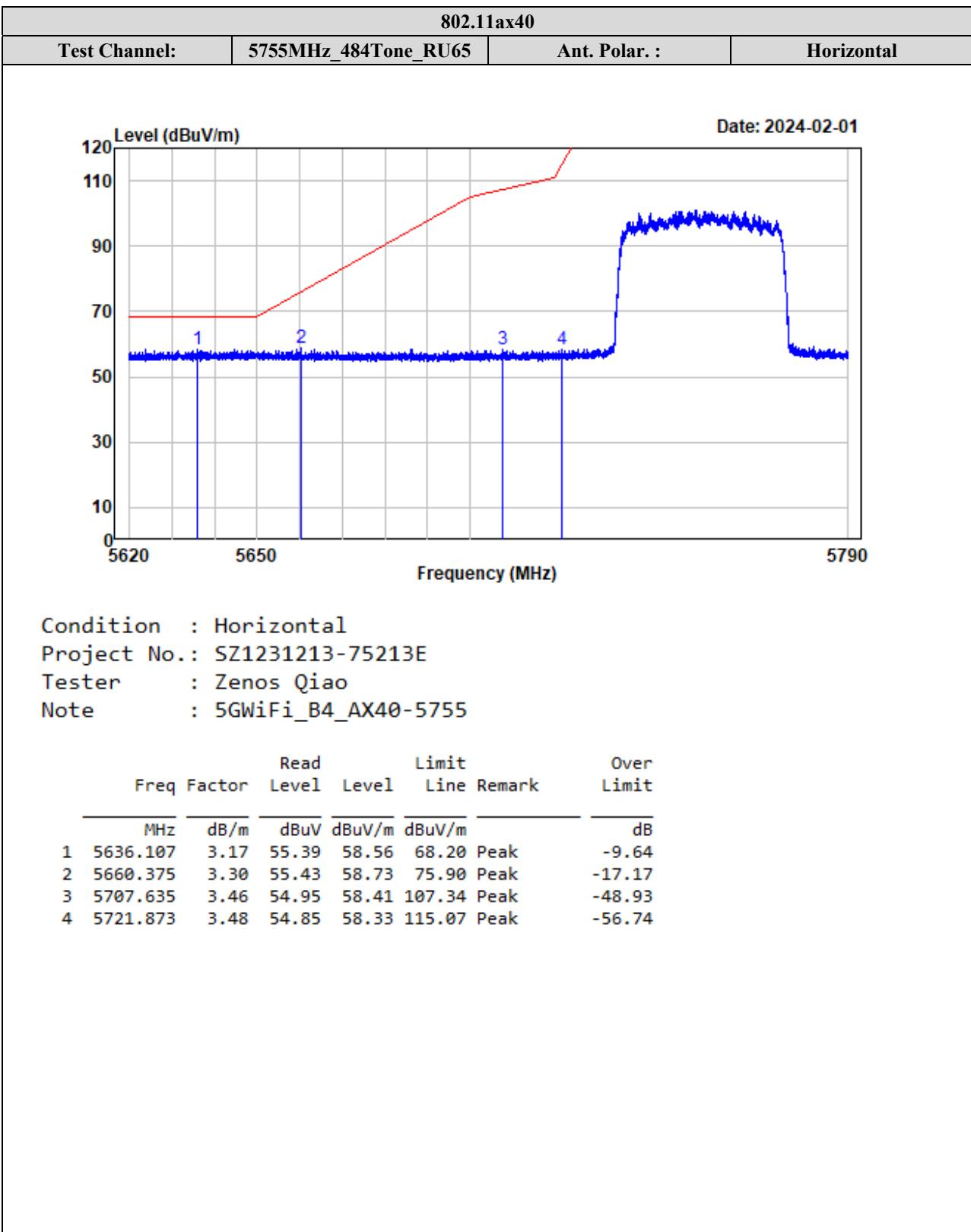


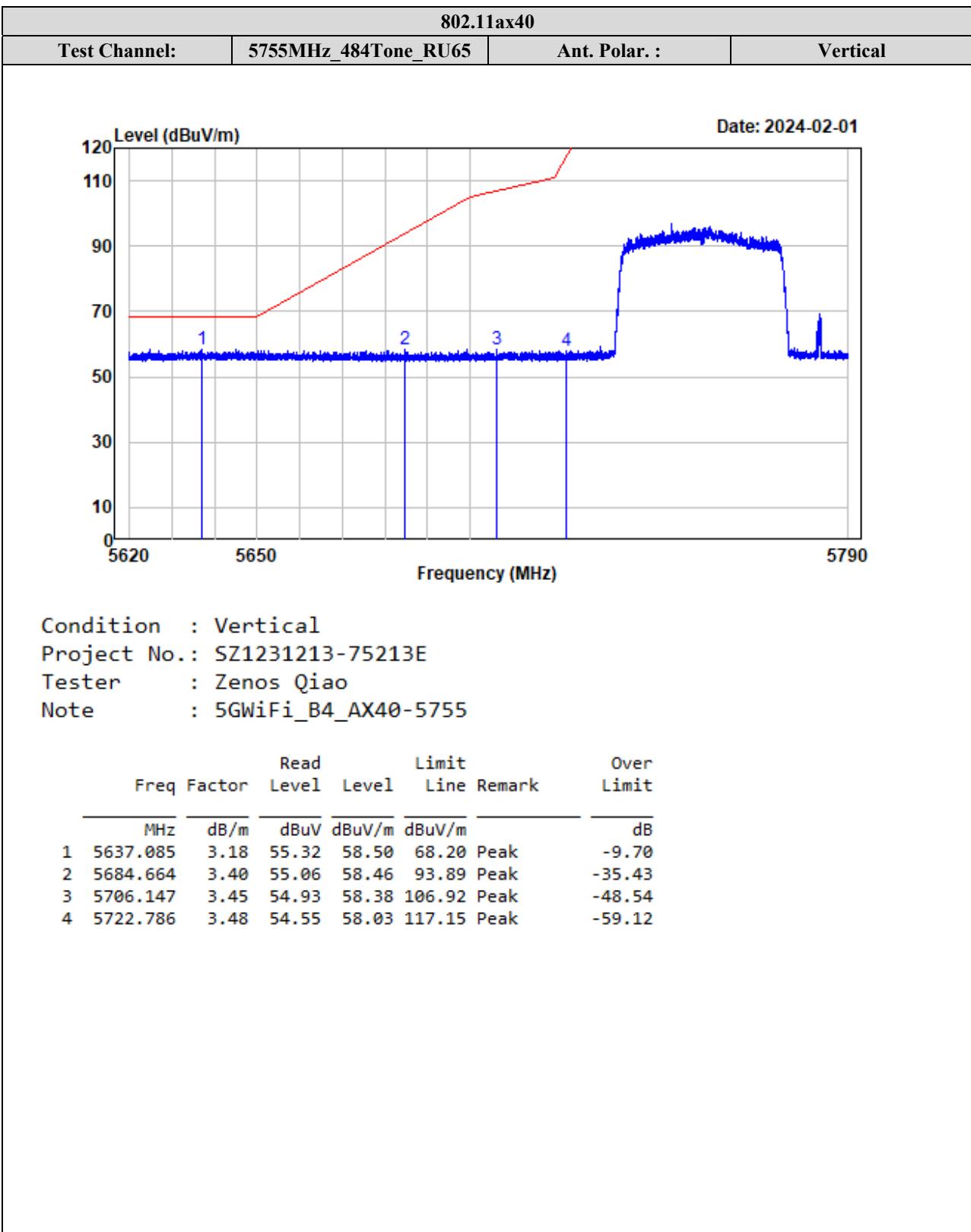


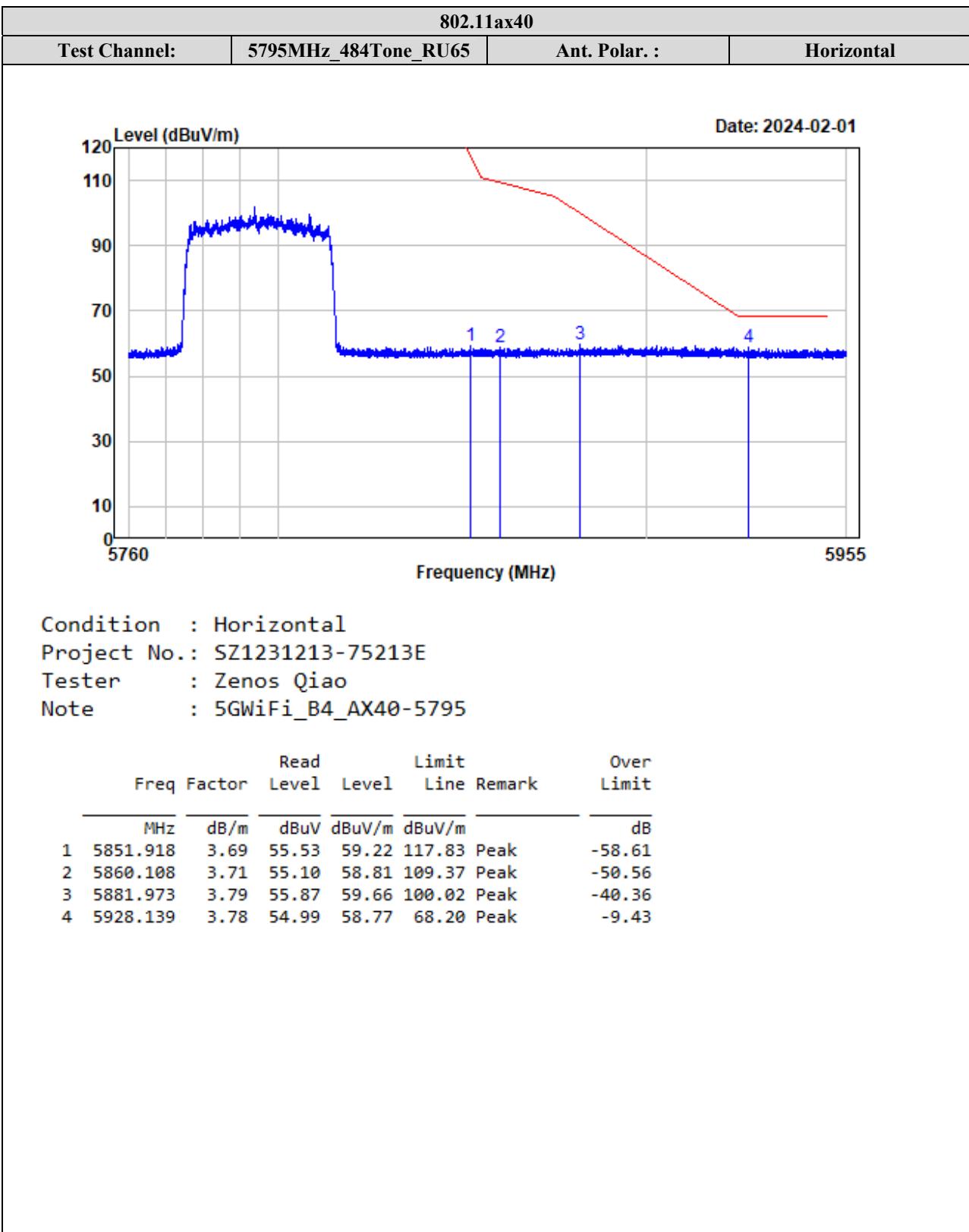


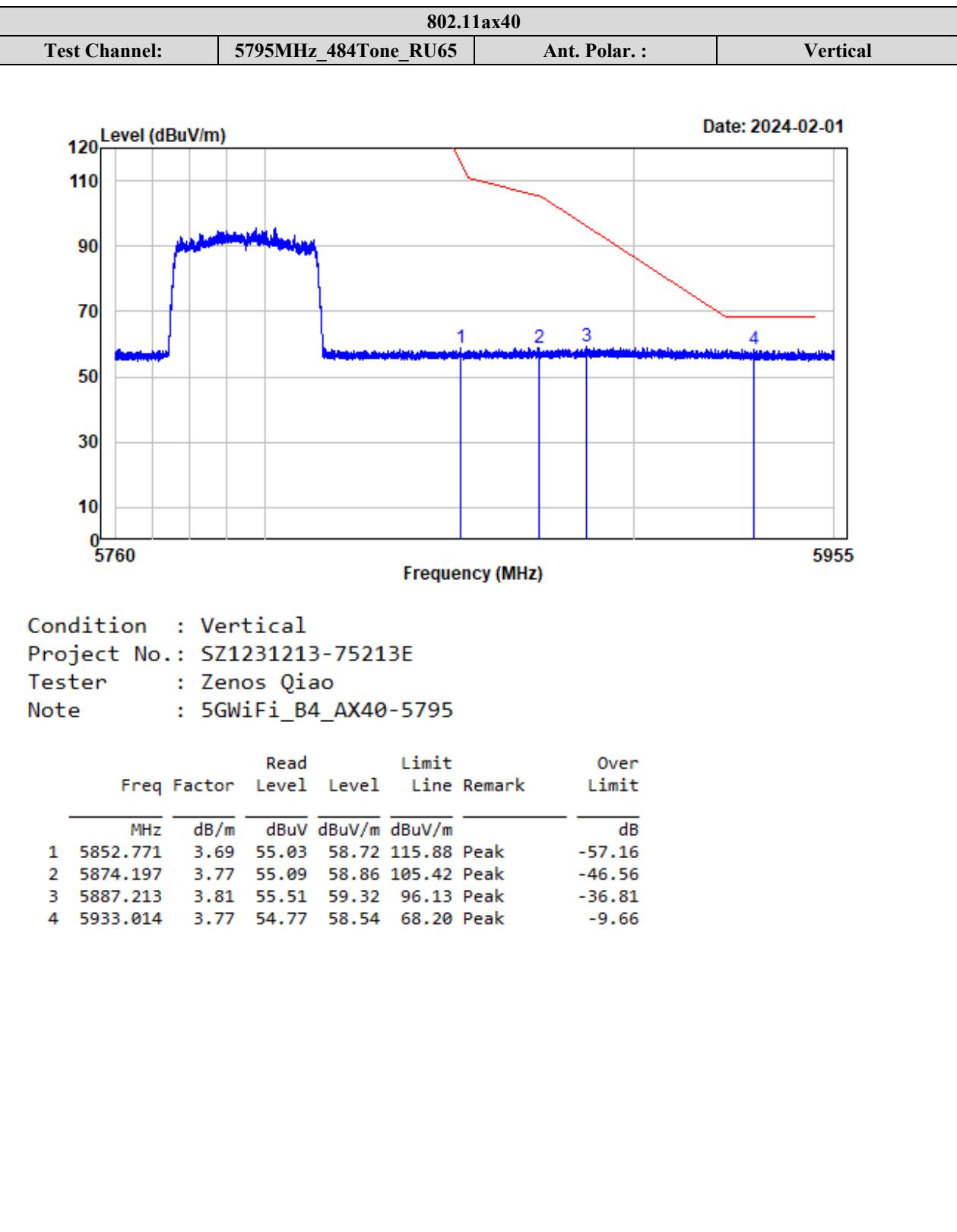


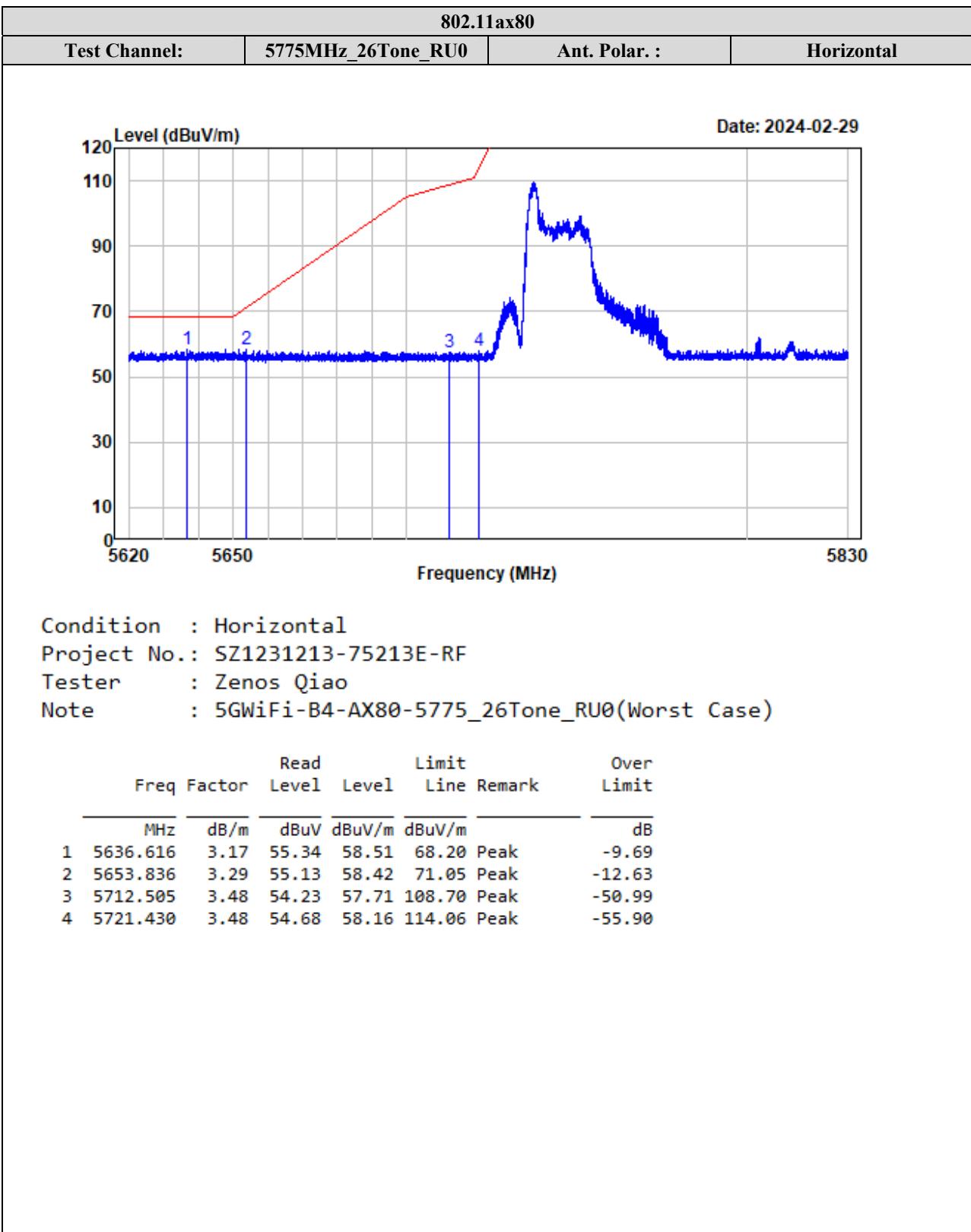


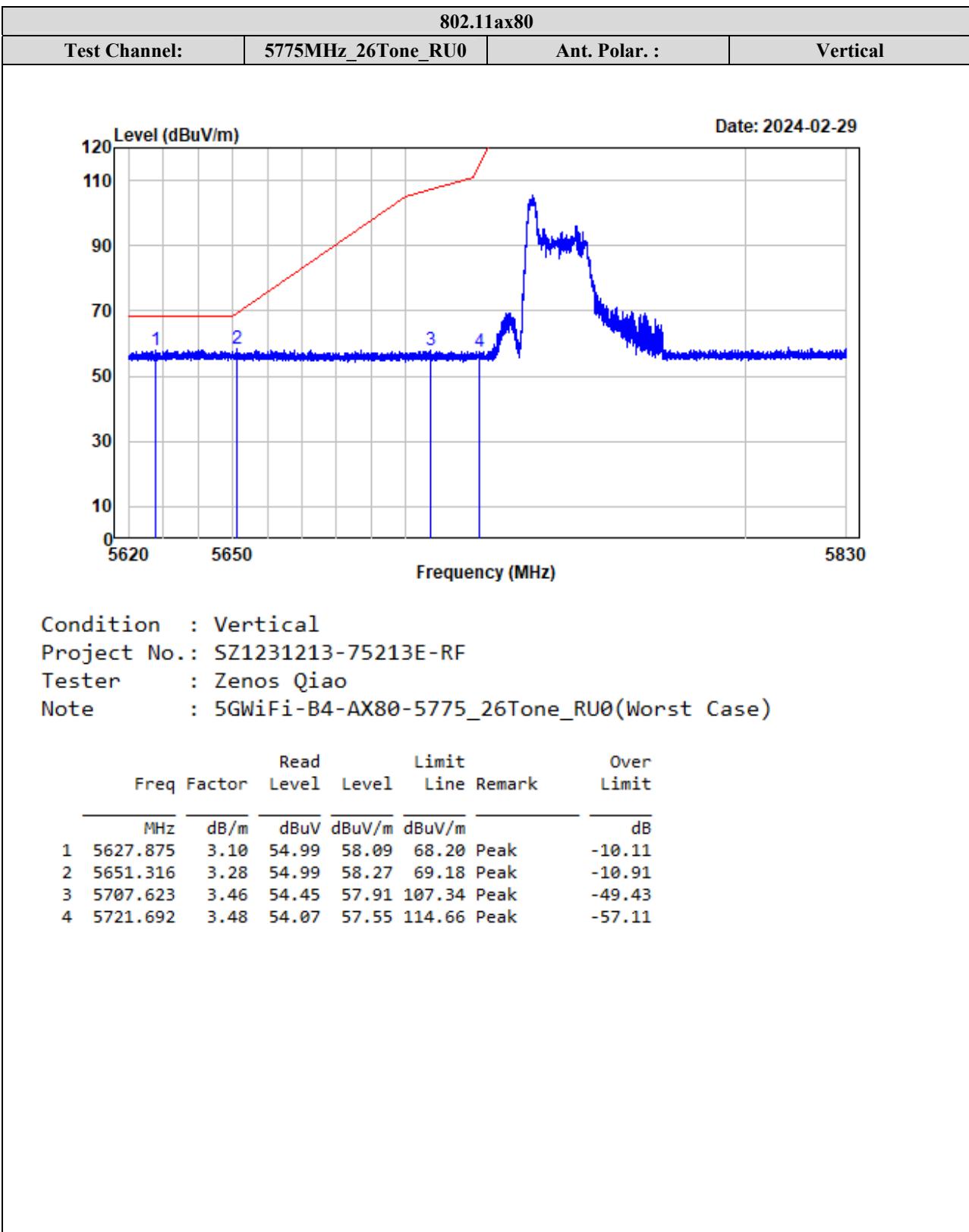


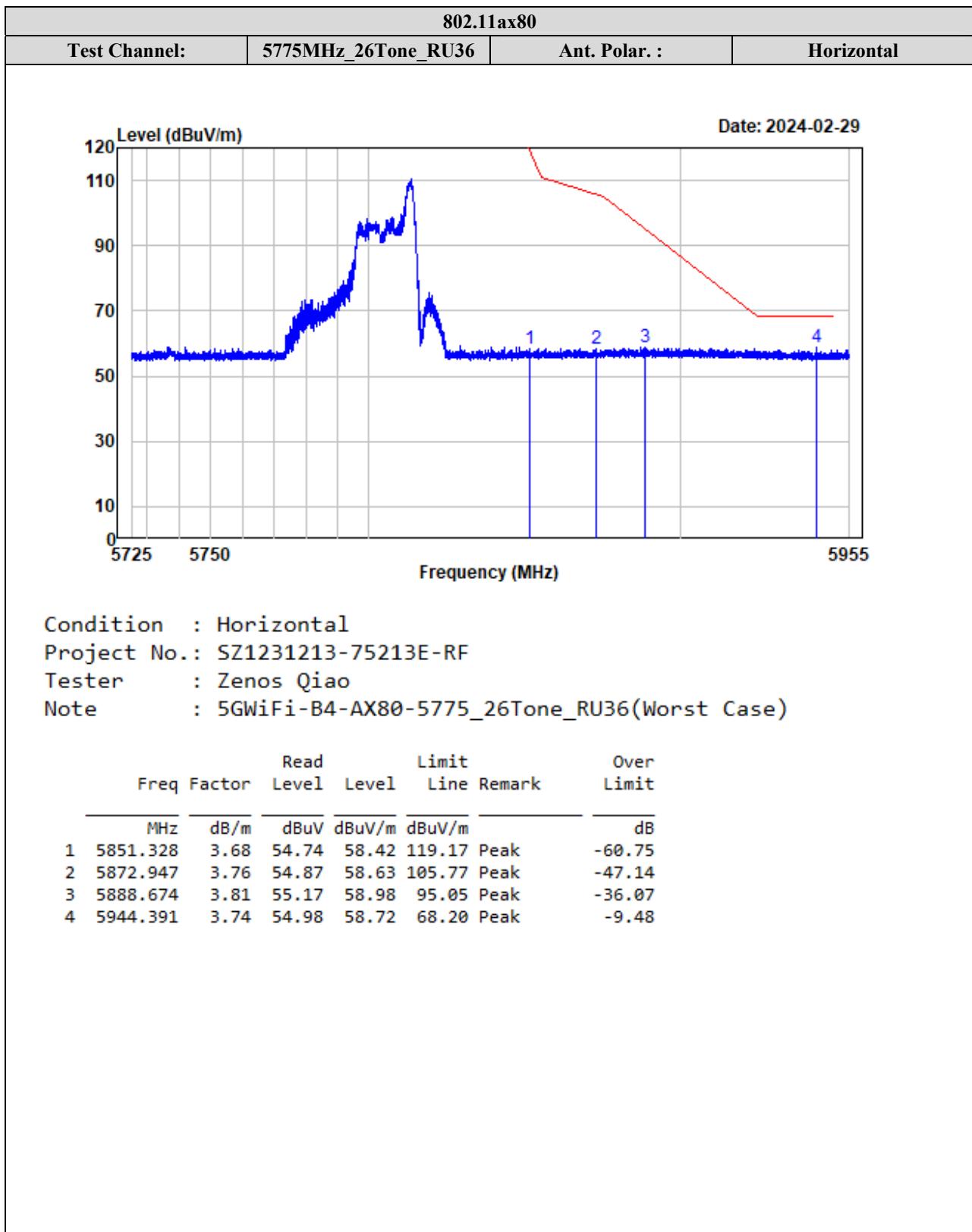


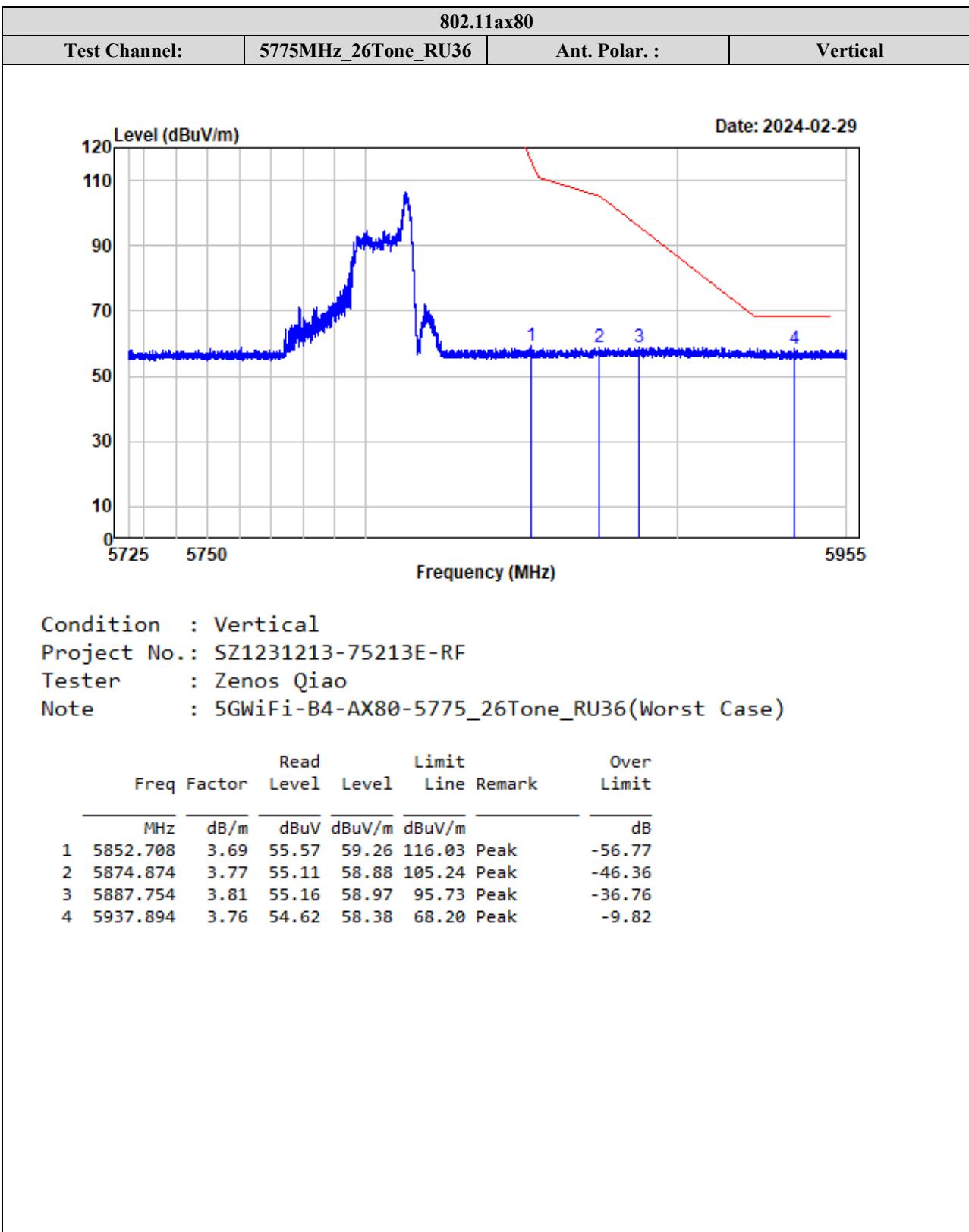


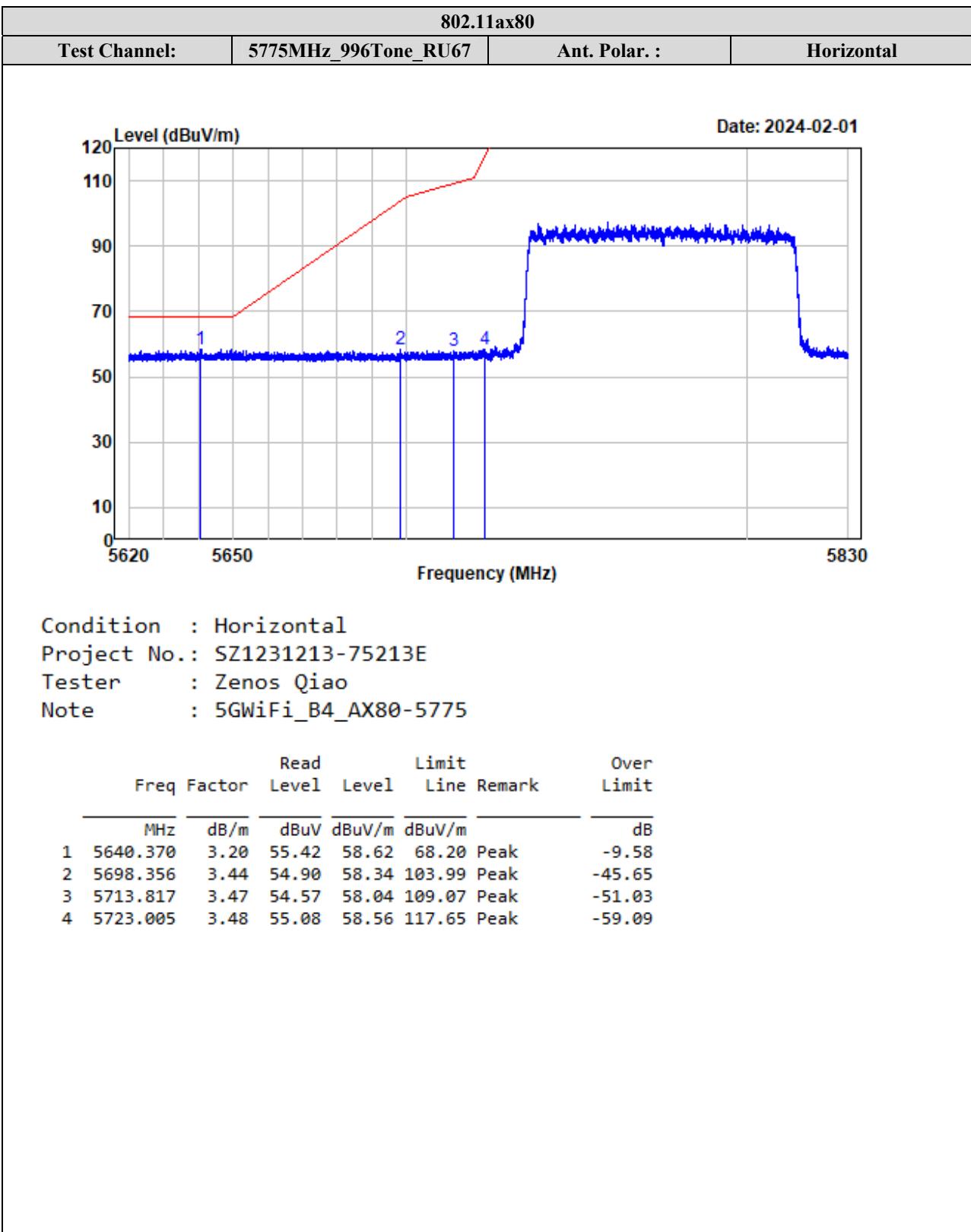


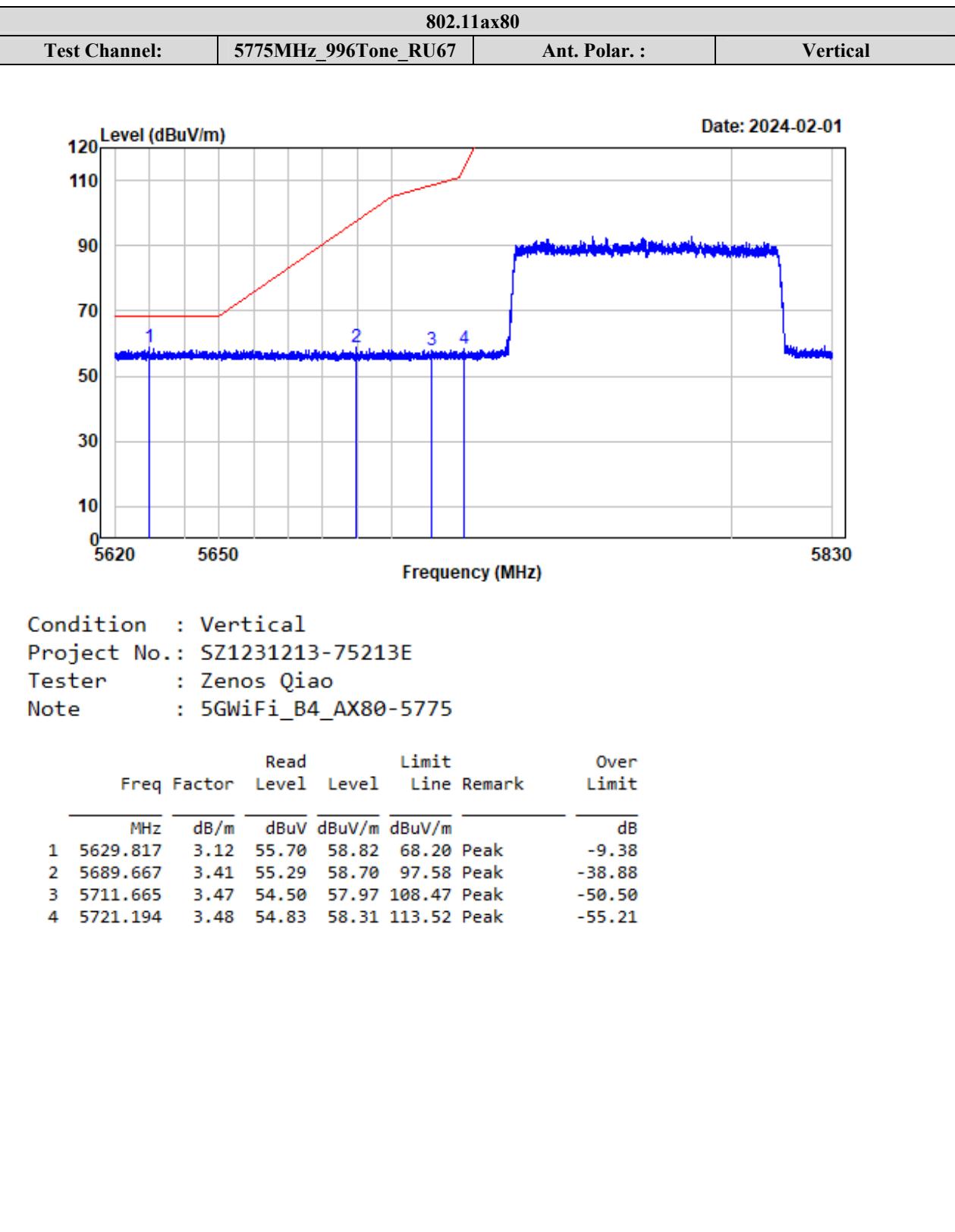


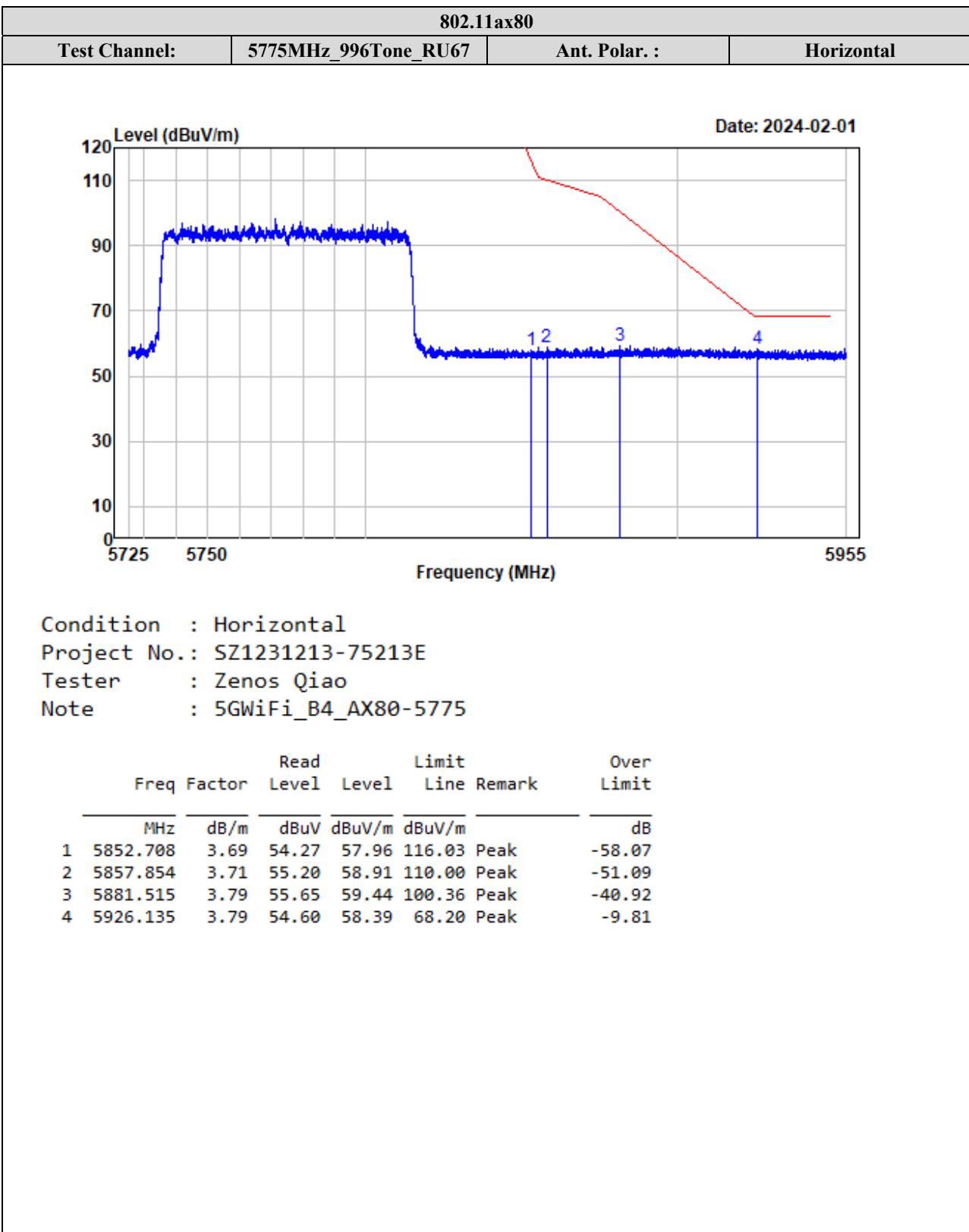




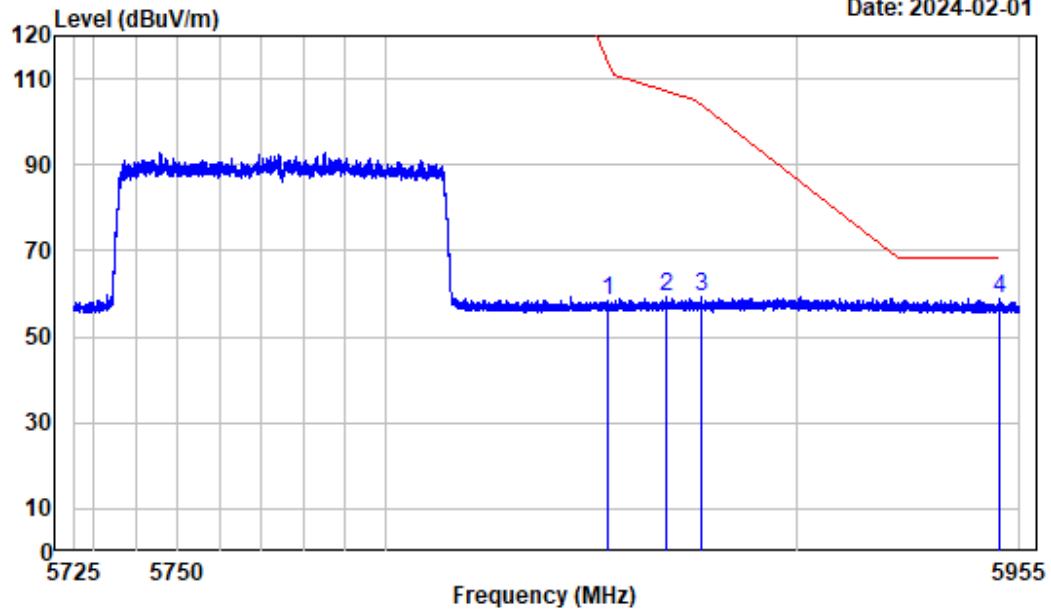




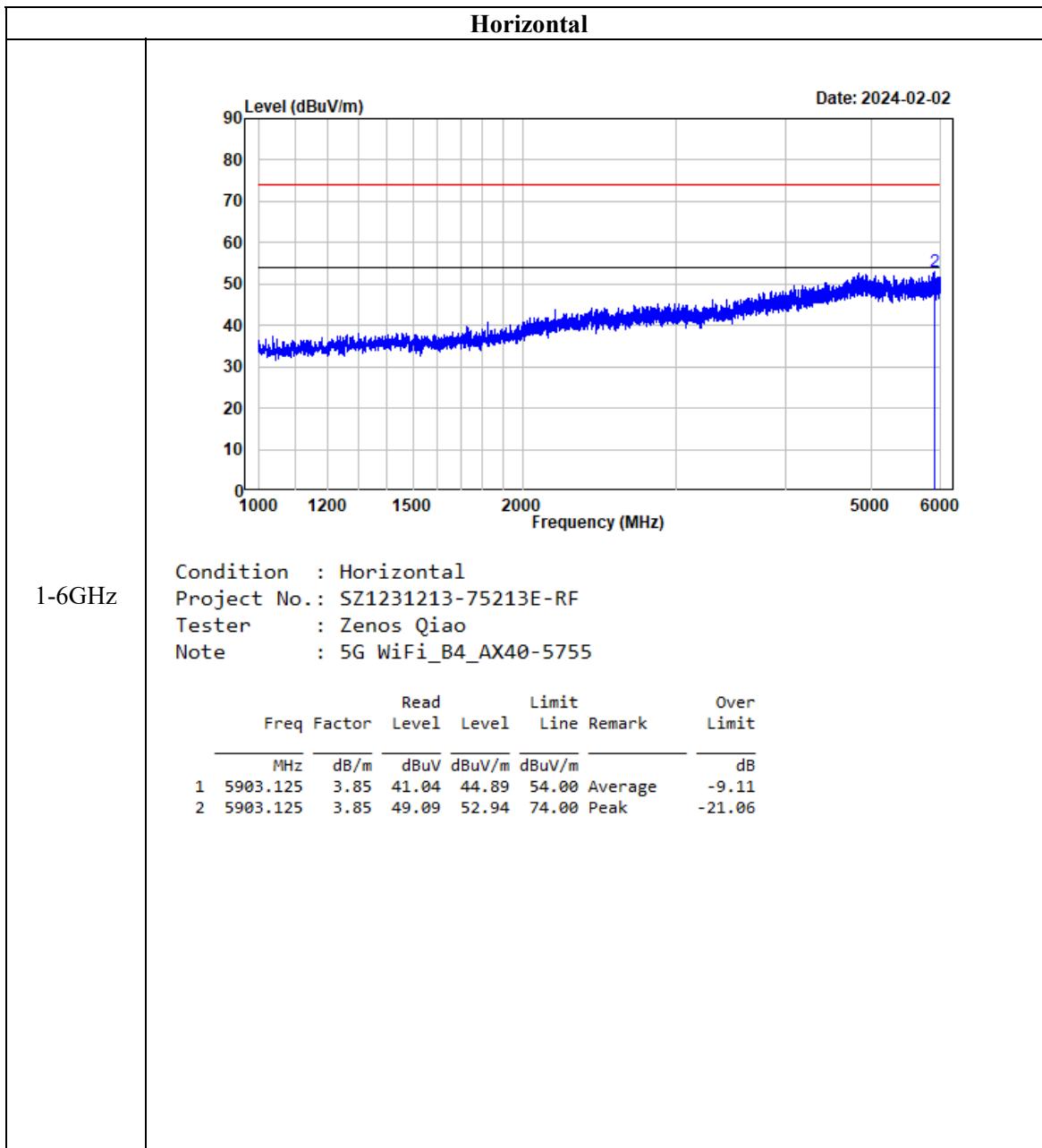


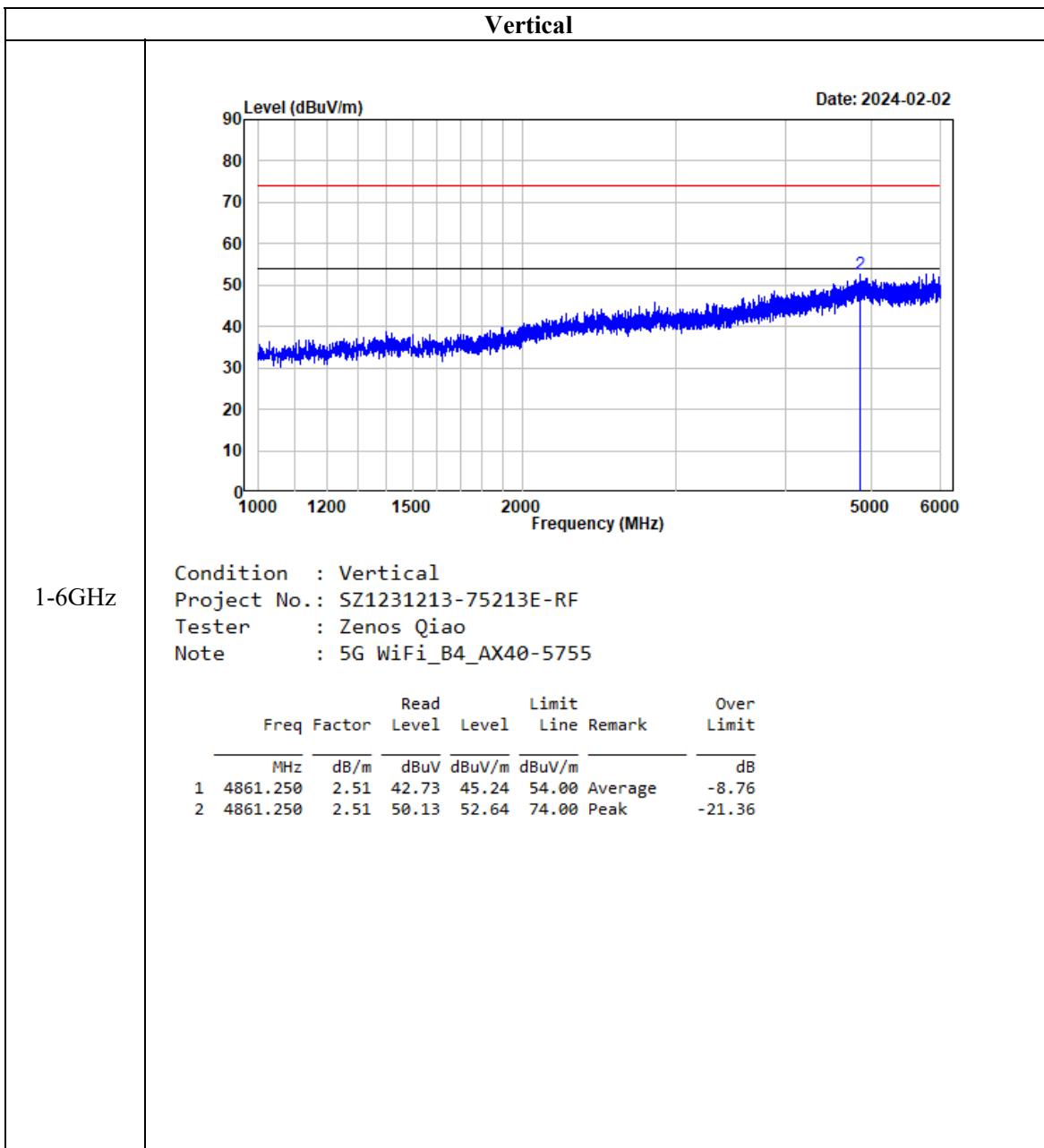


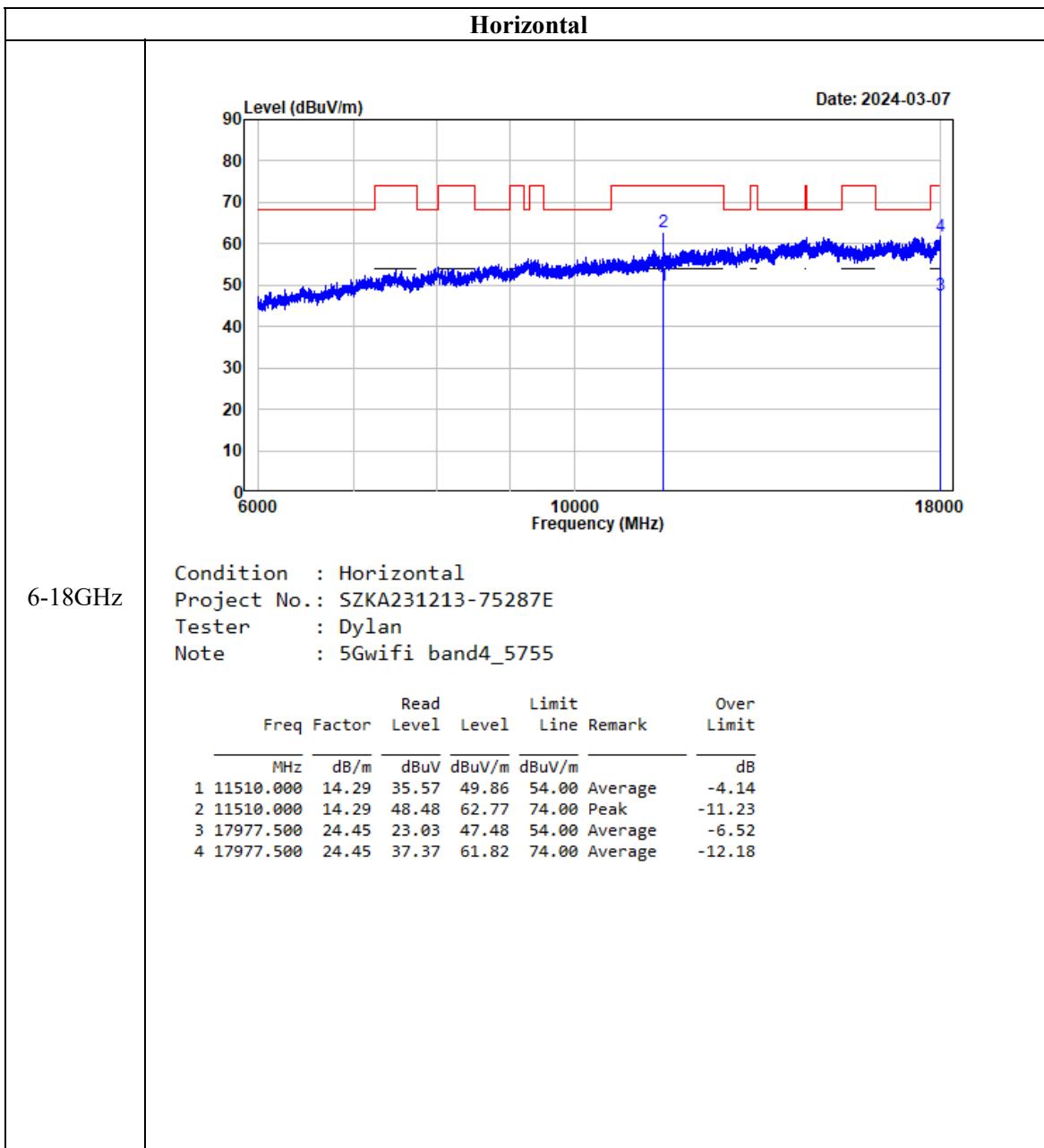
802.11ax80			
Test Channel:	5775MHz_996Tone_RU67	Ant. Polar. :	Vertical

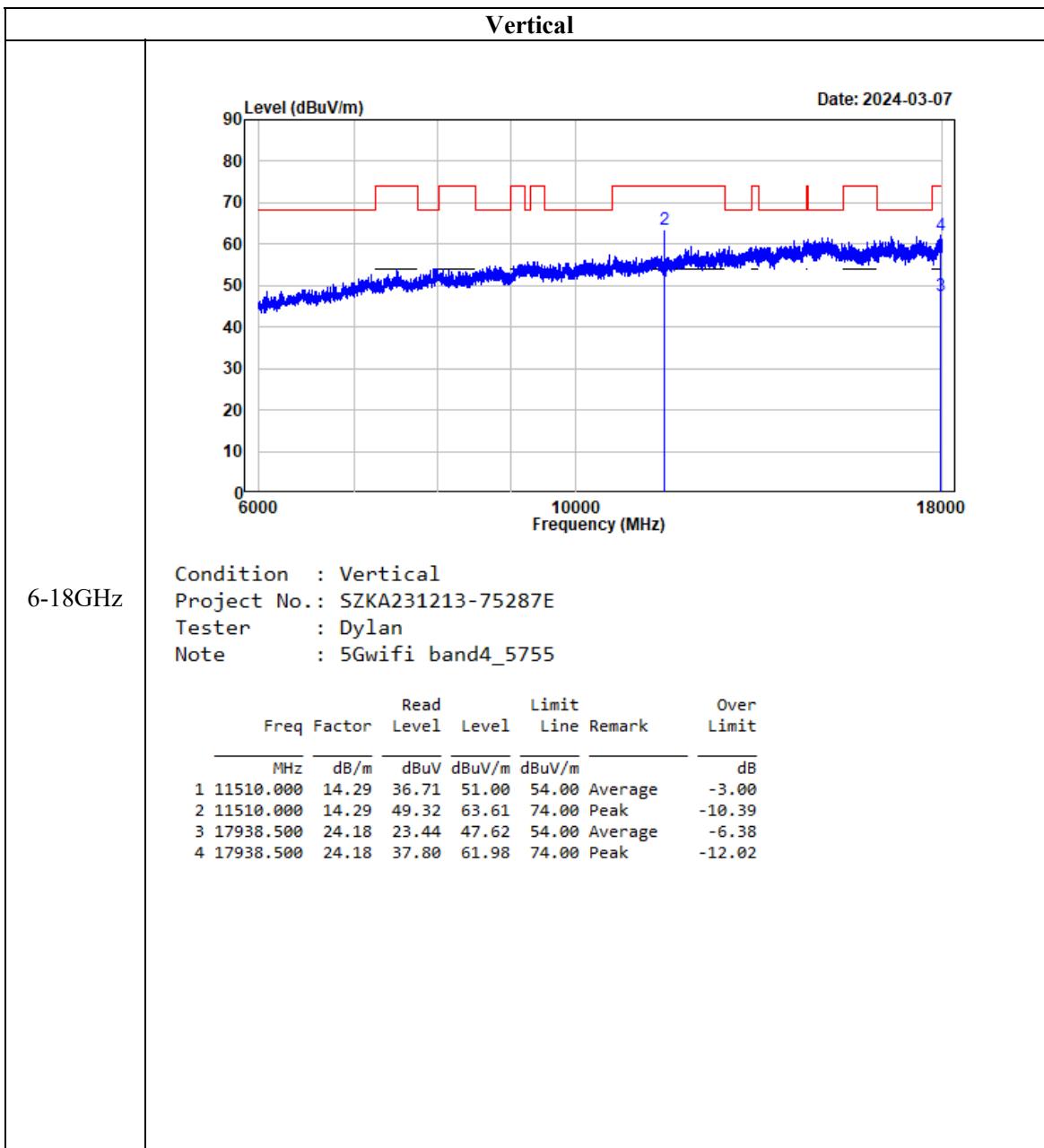


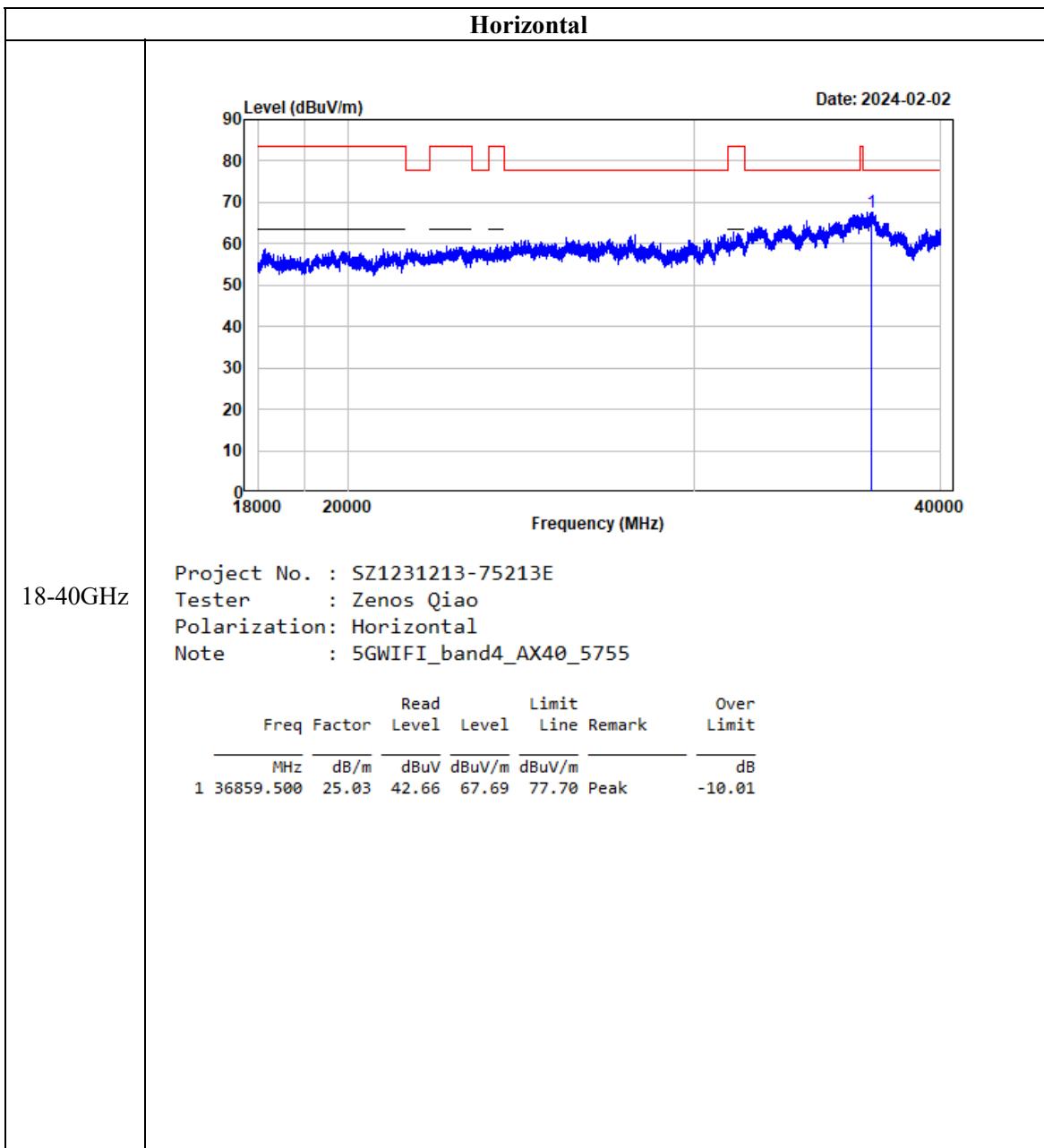
Listed with the worst harmonic margin test plot (802.11ax40, 5755MHz)

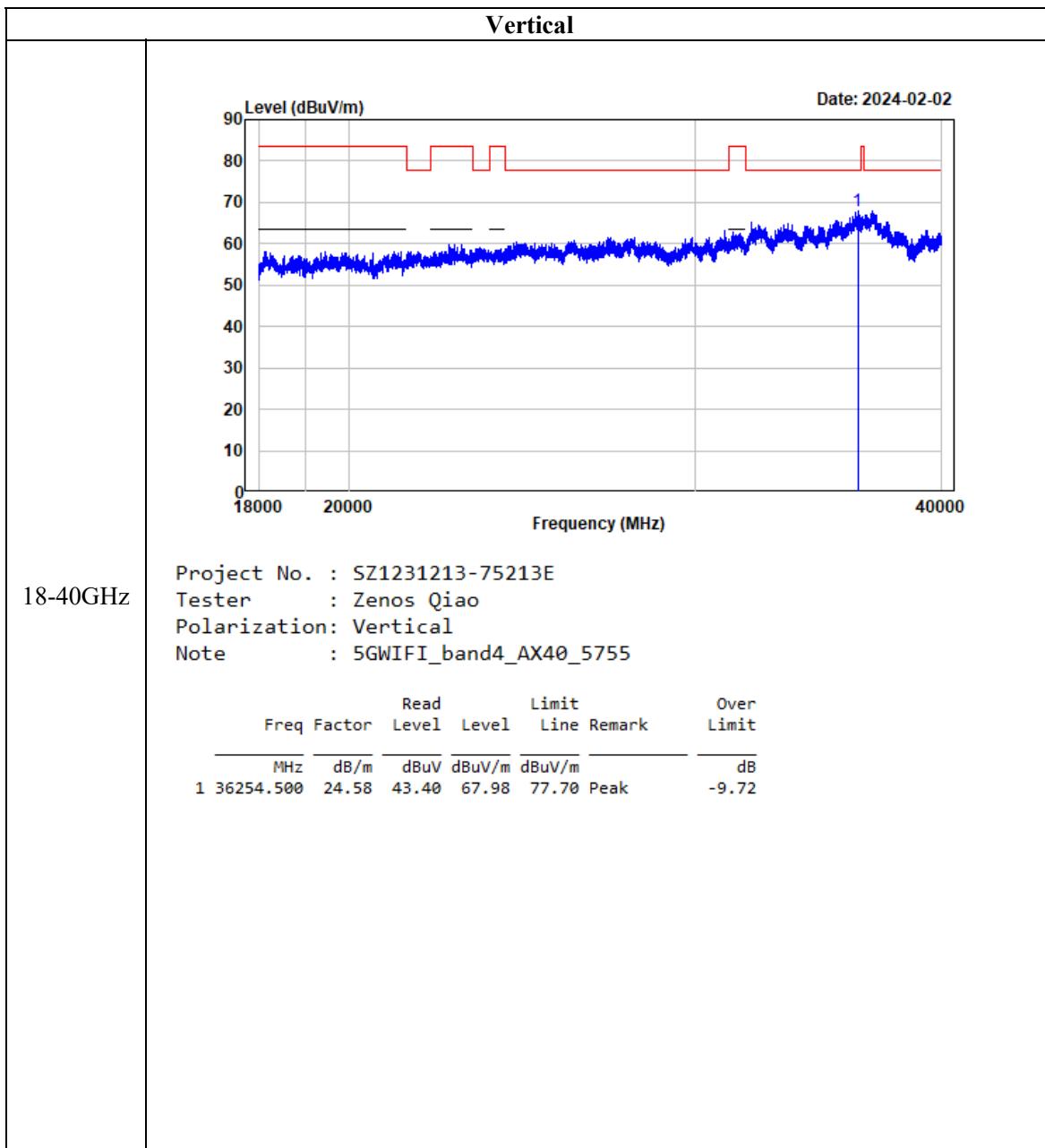












FCC §15.407(a), (e) – 26 dB & 6dB EMISSION BANDWIDTH

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)

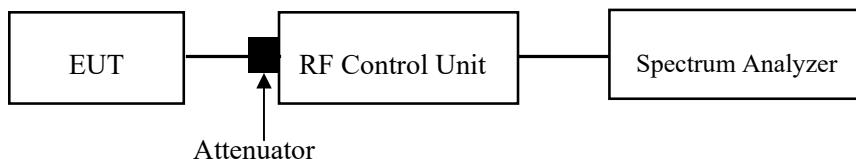
- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and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

2. Minimum Emission Bandwidth for the band 5.725-5.85 GHz

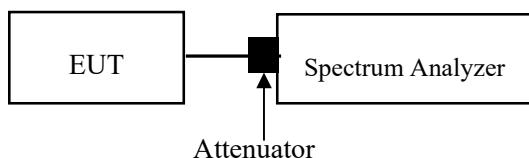
Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ 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.

For 802.11ax Mode:



For other Modes:



Test Data

Environmental Conditions

Temperature:	23~26 °C
Relative Humidity:	40~50 %
ATM Pressure:	100.1~101.0 kPa

The testing was performed by Bamboo Zhan from 2024-02-27 to 2024-02-28 and Tom Liu from 2024-02-29 to 2024-03-01.

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	24.64	17.34
	5200	23.10	17.02
	5240	23.16	17.02
802.11ac vht20	5180	25.76	18.50
	5200	24.05	18.22
	5240	24.70	18.18
802.11ac vht40	5190	41.28	36.28
	5230	40.95	36.28
802.11ac vht80	5210	80.92	75.76

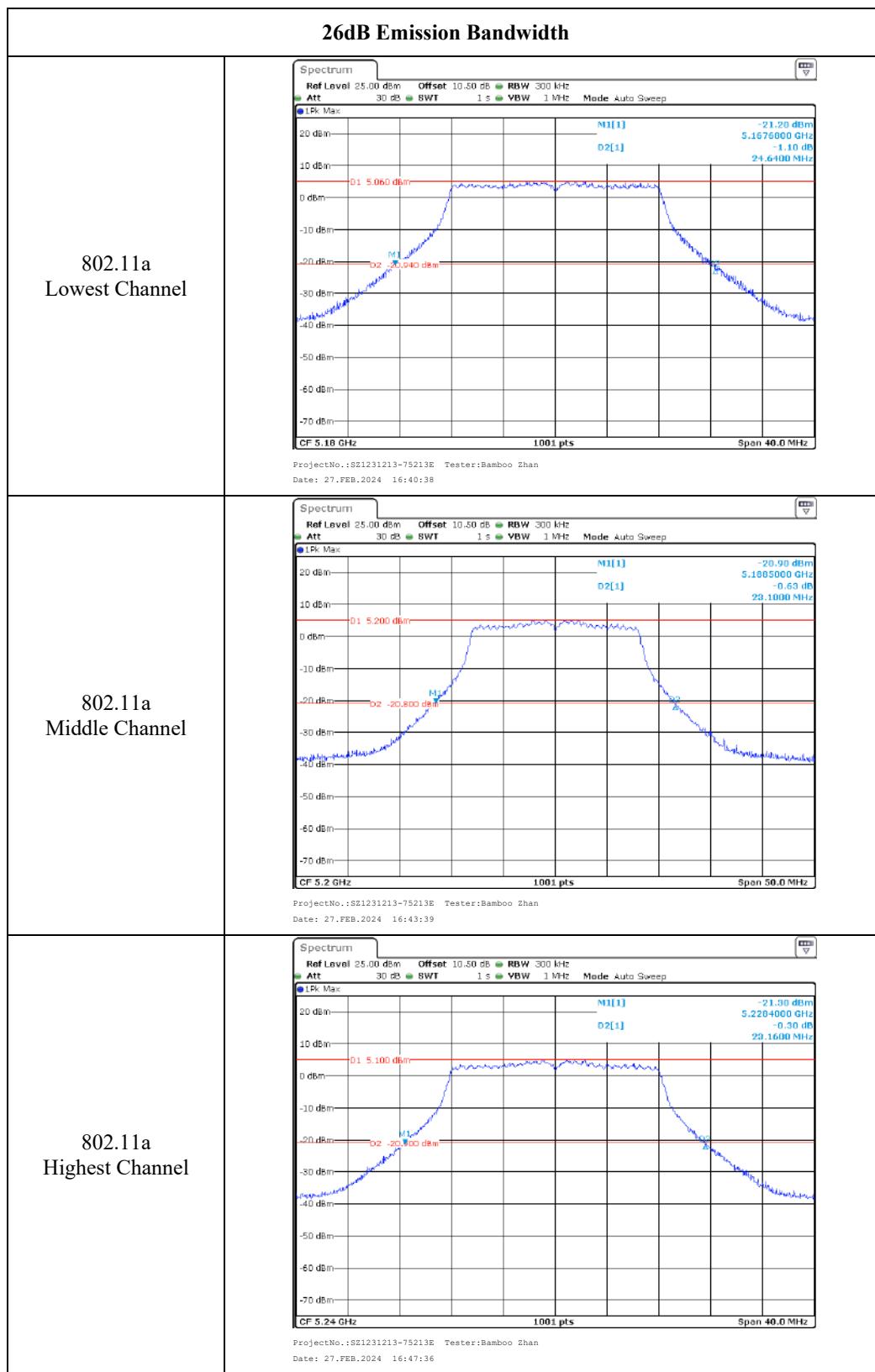
Note: Test only was performed at ANT 1.
The 99% Occupied Bandwidth have not fall into the band 5250-5350MHz,
please refer to the test plots of 99% Occupied Bandwidth

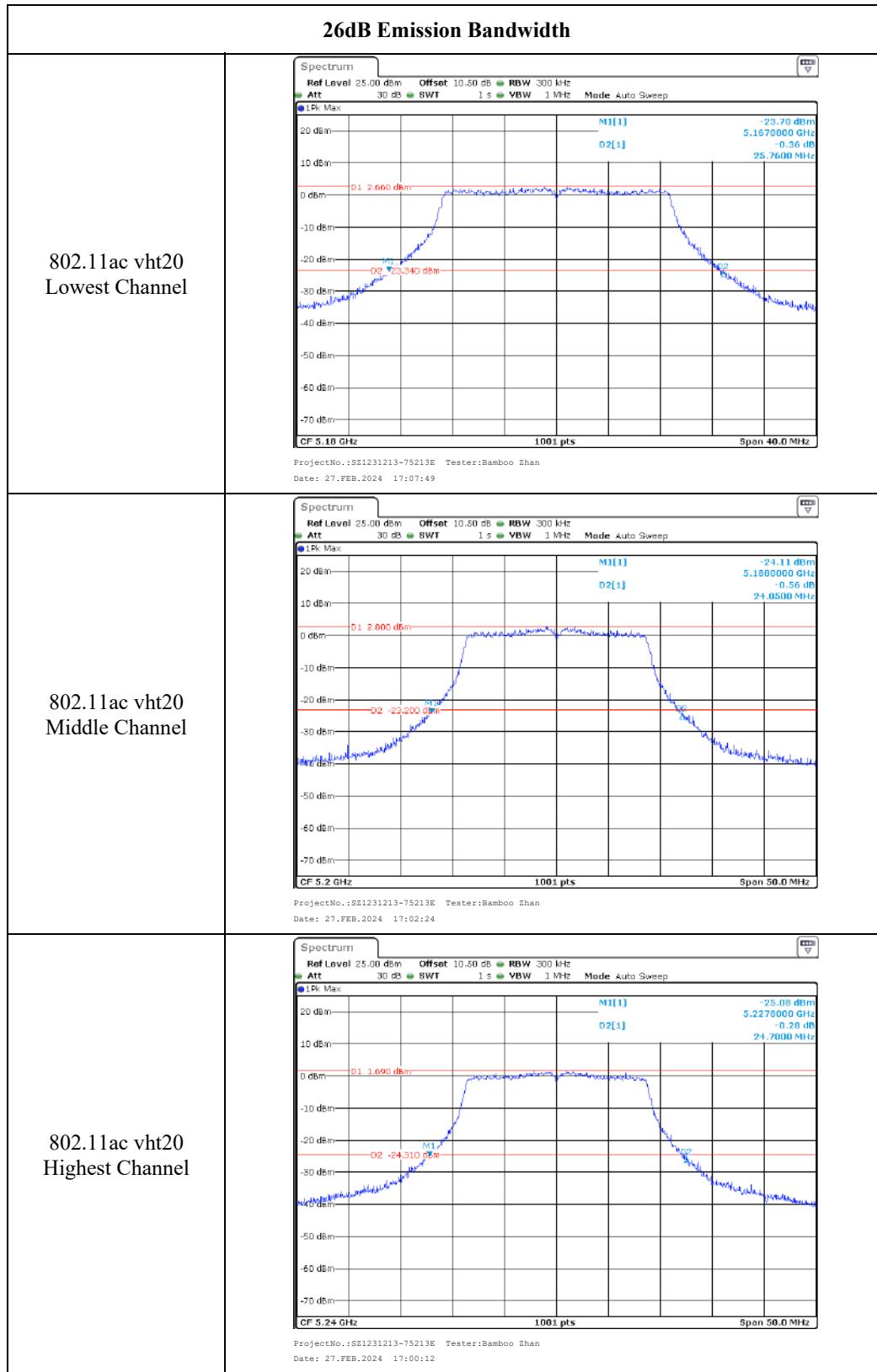
5725-5850MHz:

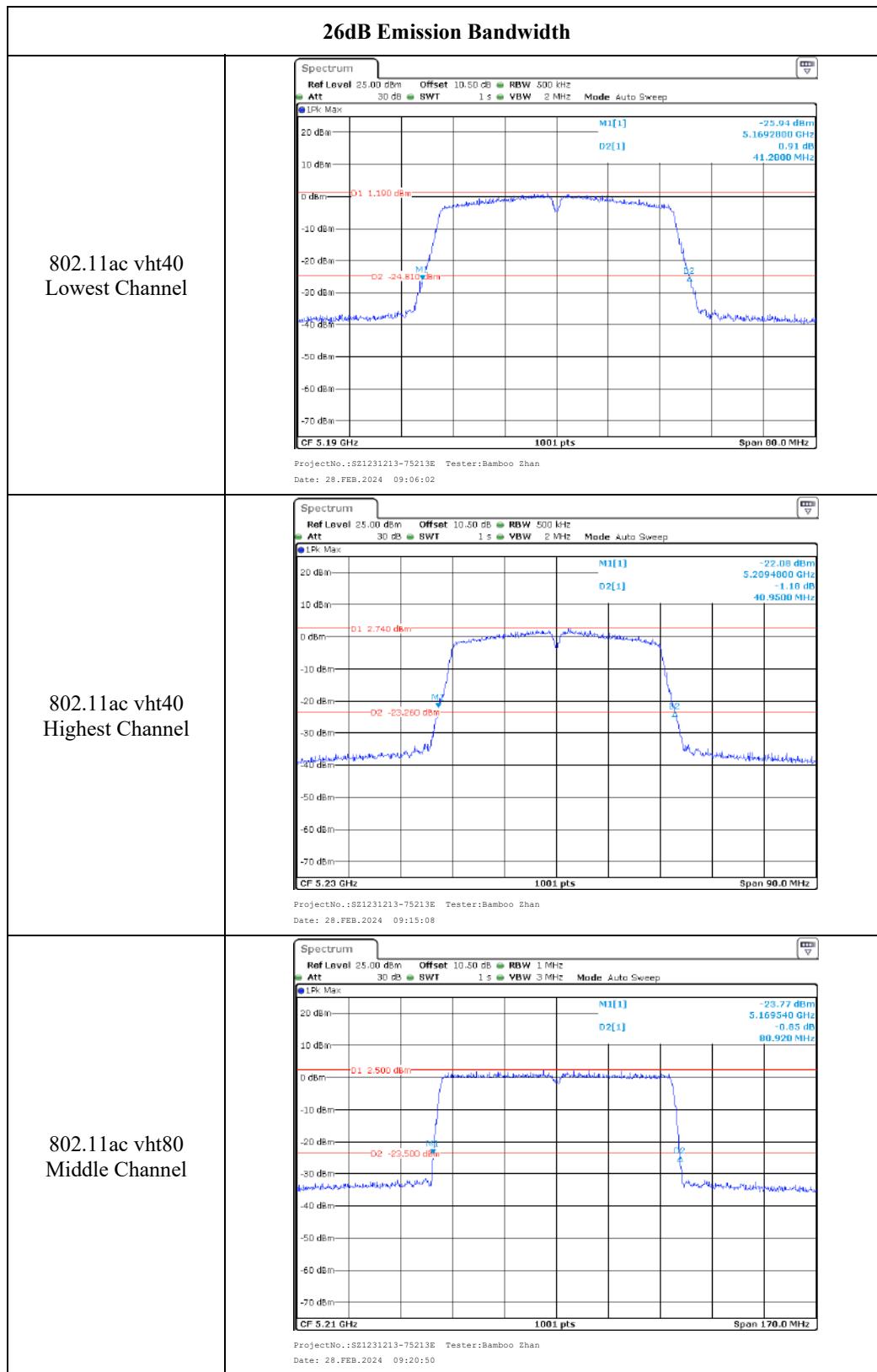
Test Modes	Test Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5745	16.64	17.02
	5785	16.52	17.02
	5825	16.60	17.02
802.11ac vht20	5745	17.80	18.18
	5785	17.84	18.18
	5825	17.88	18.22
802.11ac vht40	5755	36.48	36.28
	5795	36.48	36.28
802.11ac vht80	5775	76.80	75.76

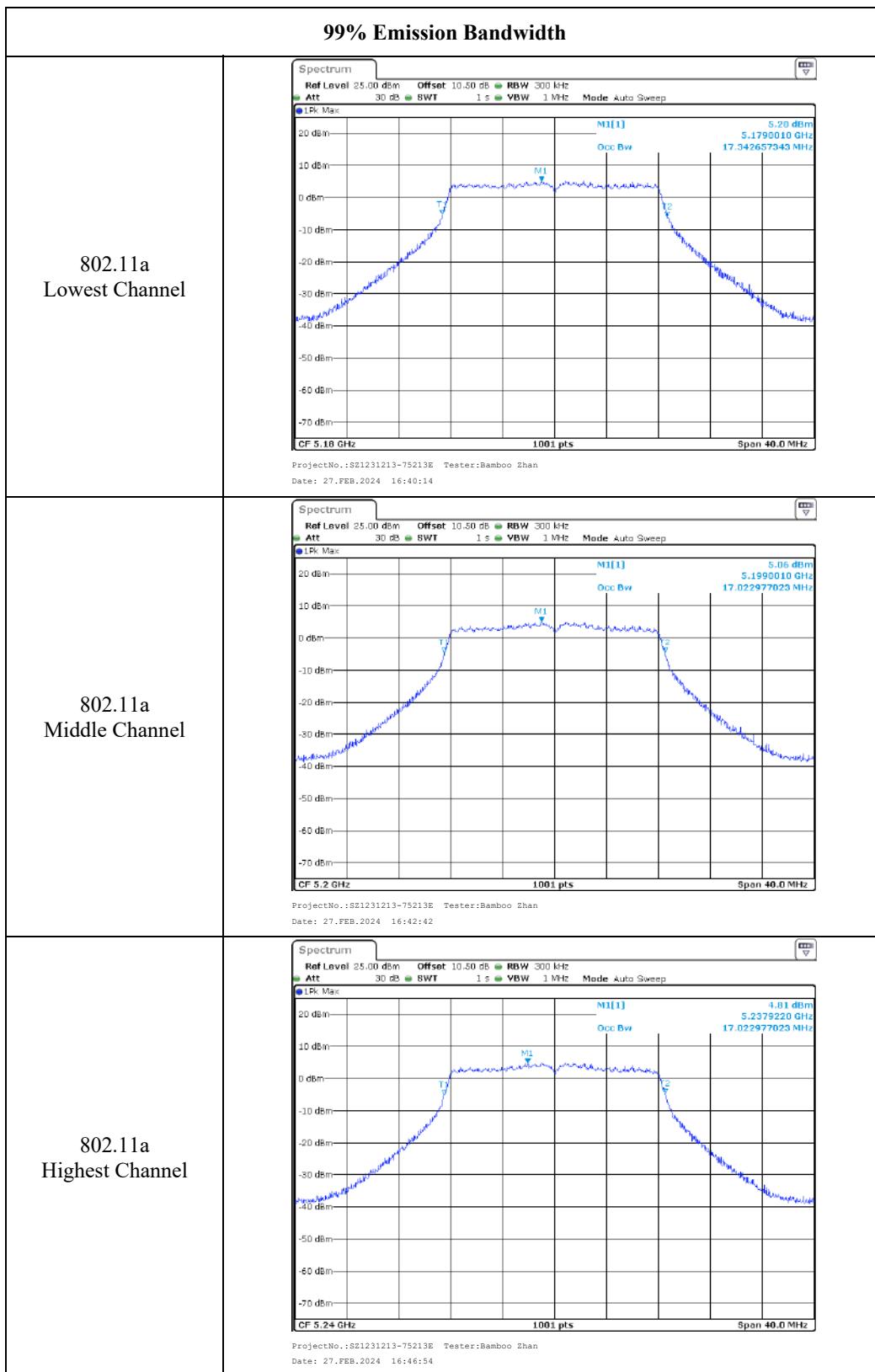
Note: Test only was performed at ANT 1.
6dB Emission Bandwidth Limit: ≥0.5 MHz
The 99% Occupied Bandwidth have not fall into the band 5470-5725MHz,
please refer to the test plots of 99% Occupied Bandwidth.

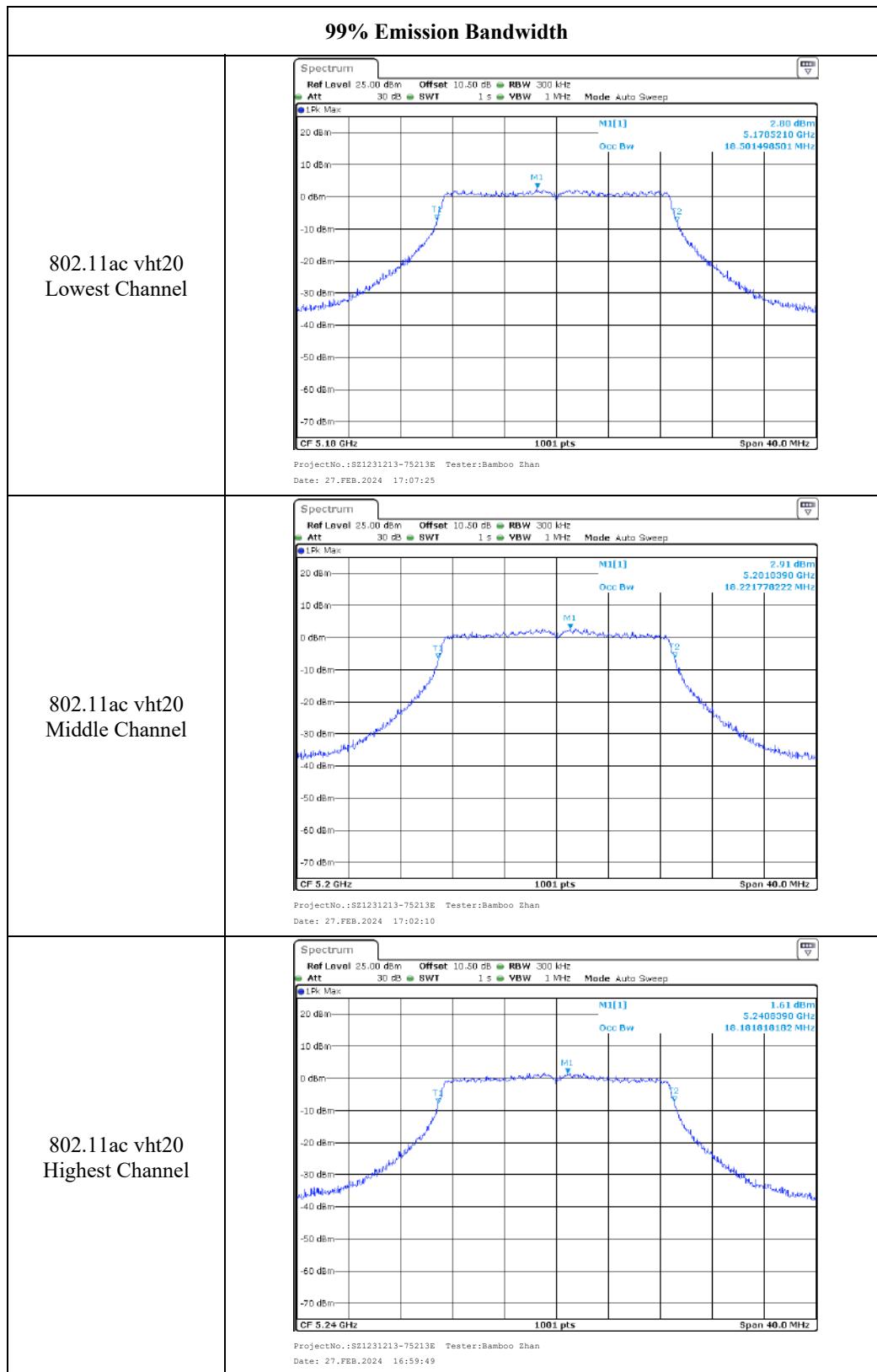
The test data of 802.11ax modes please refer to the Appendix.

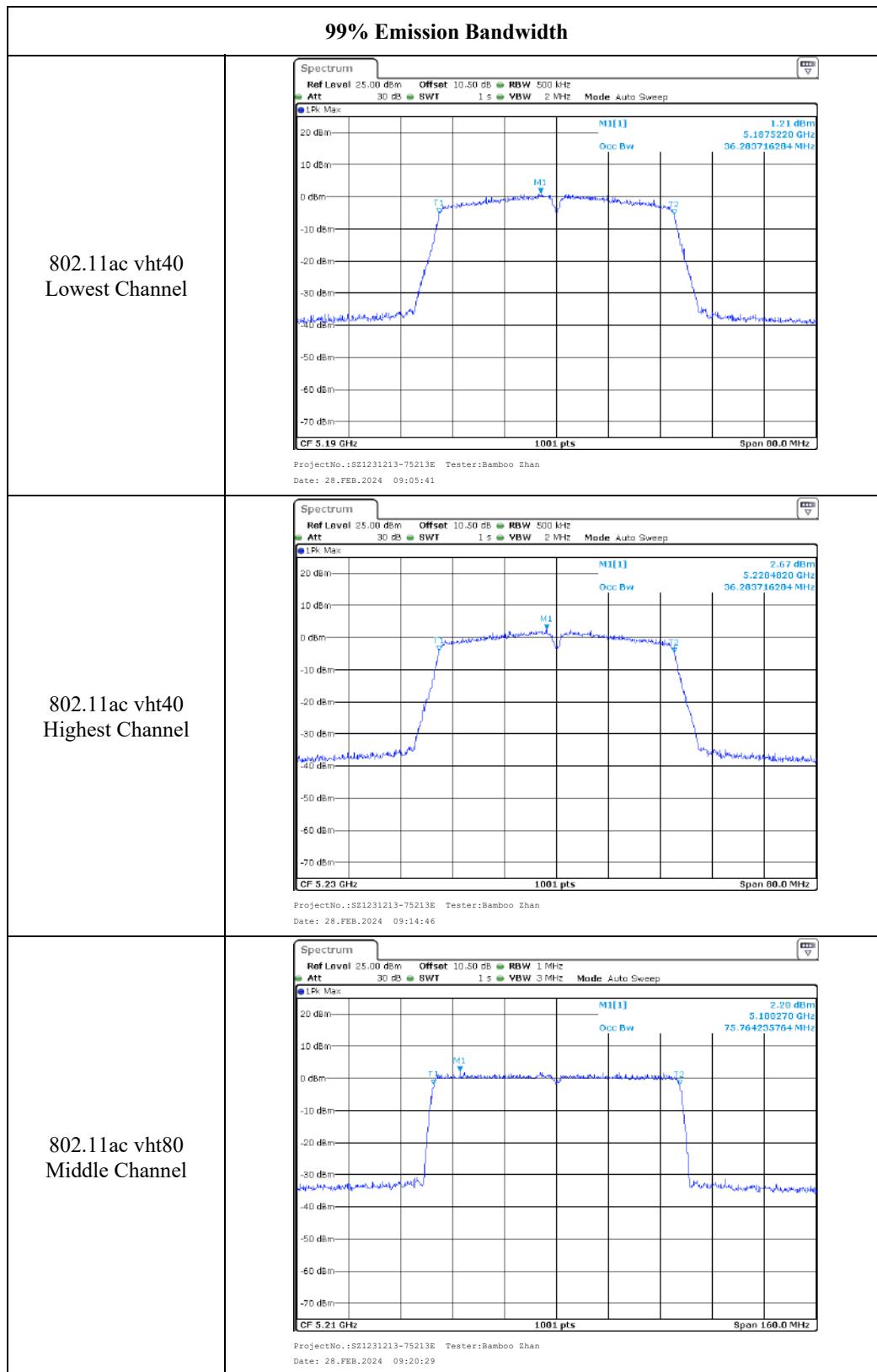
5150-5250MHz:**ANT0**



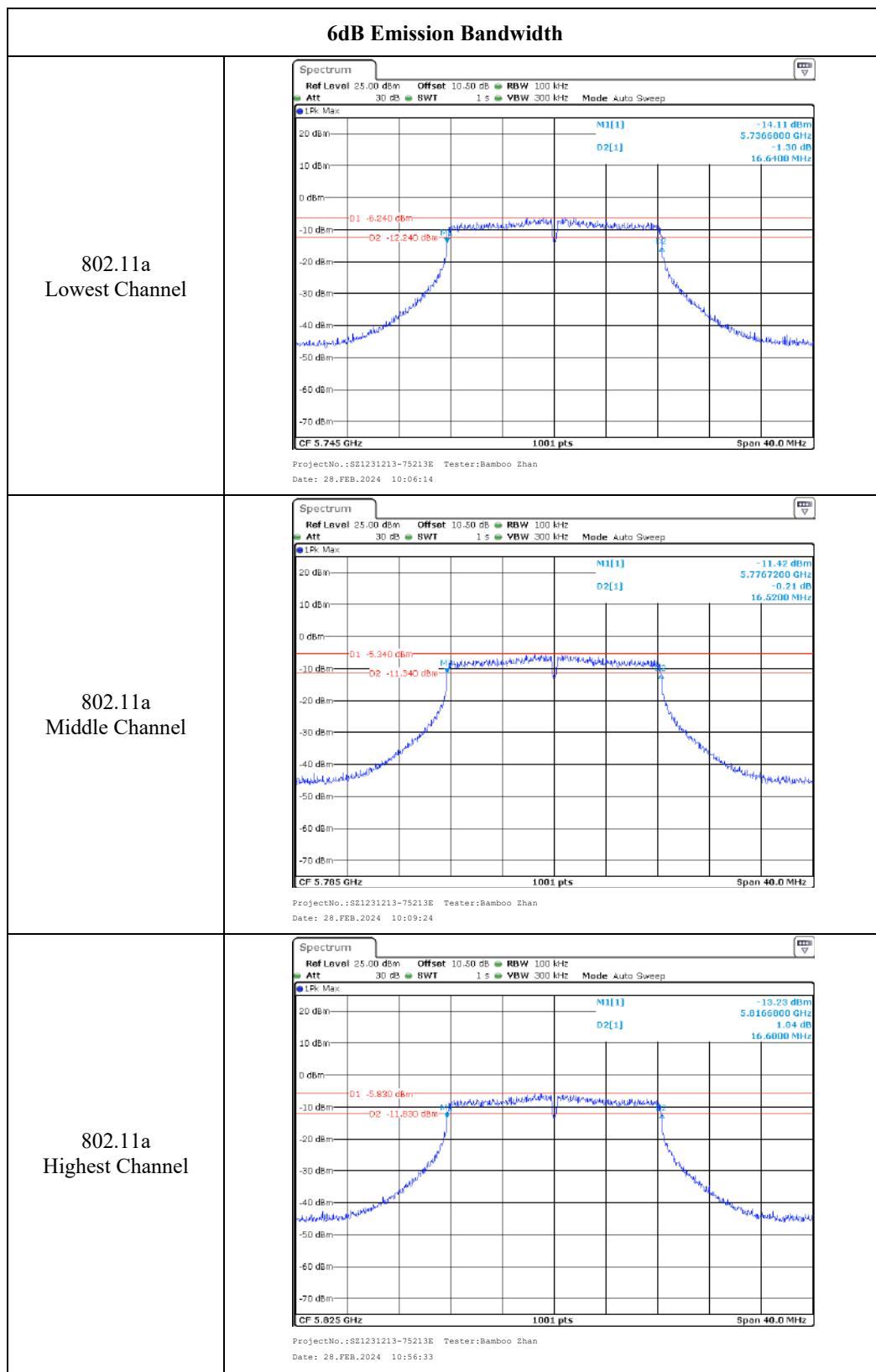


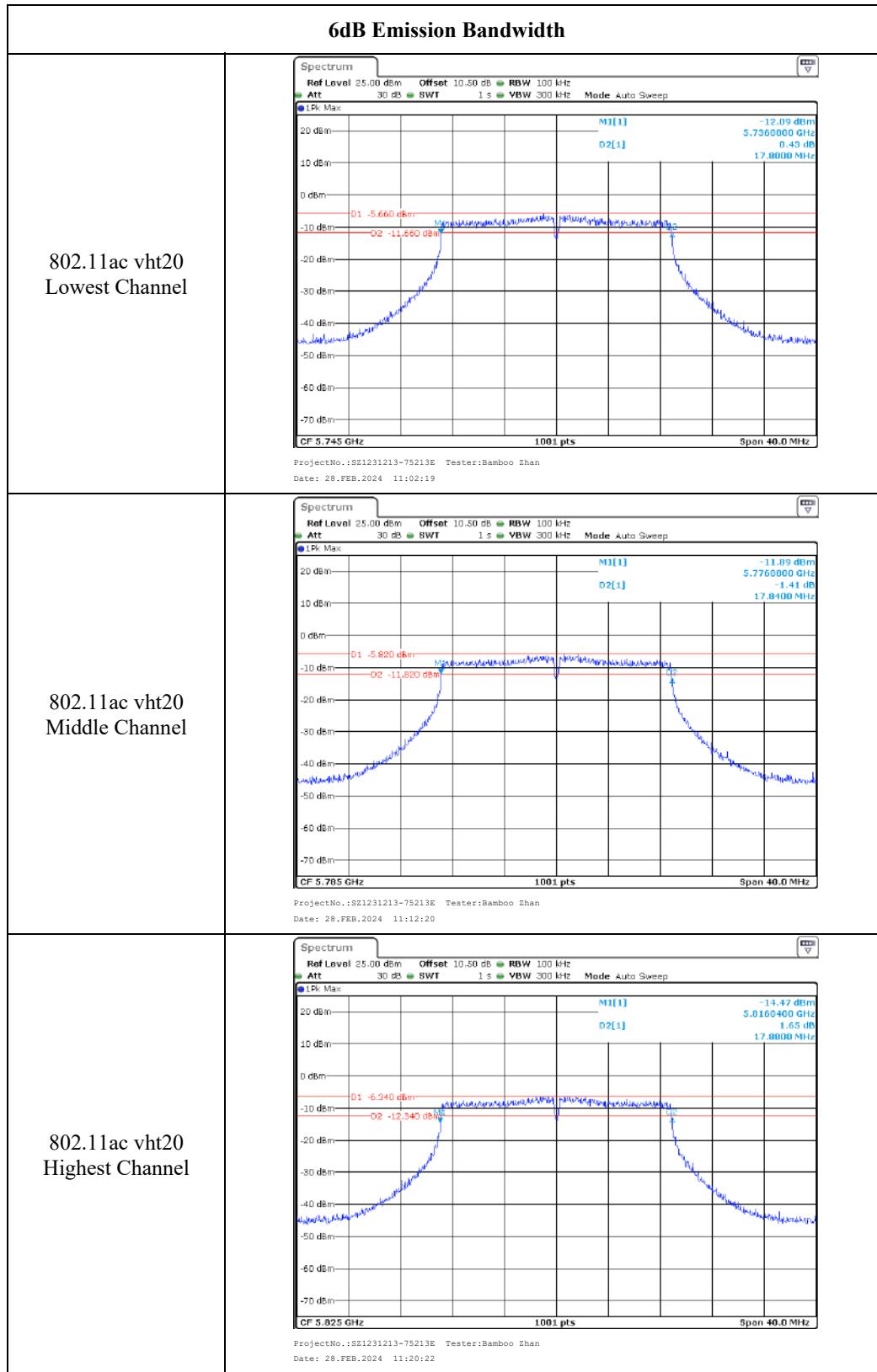


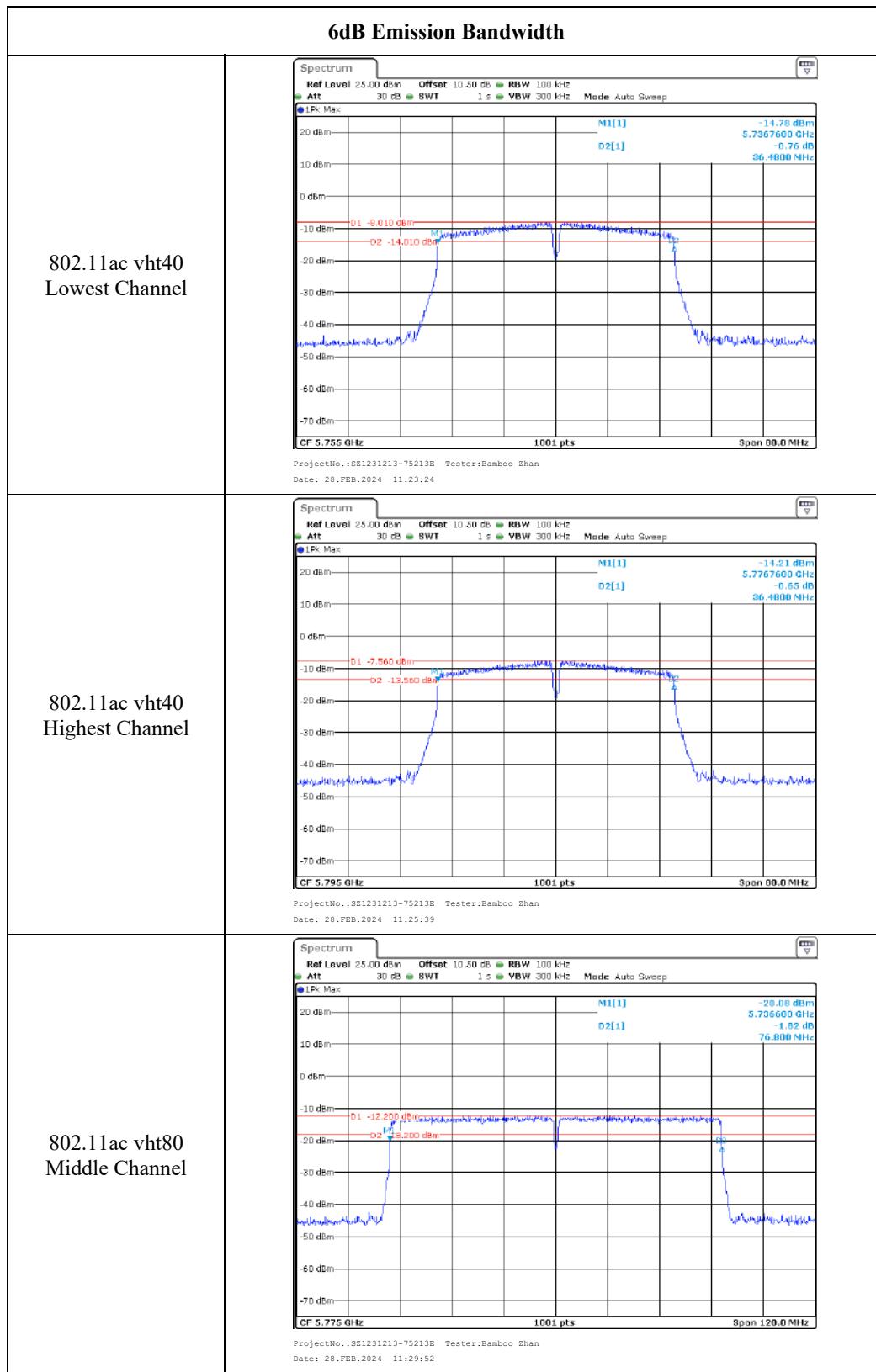


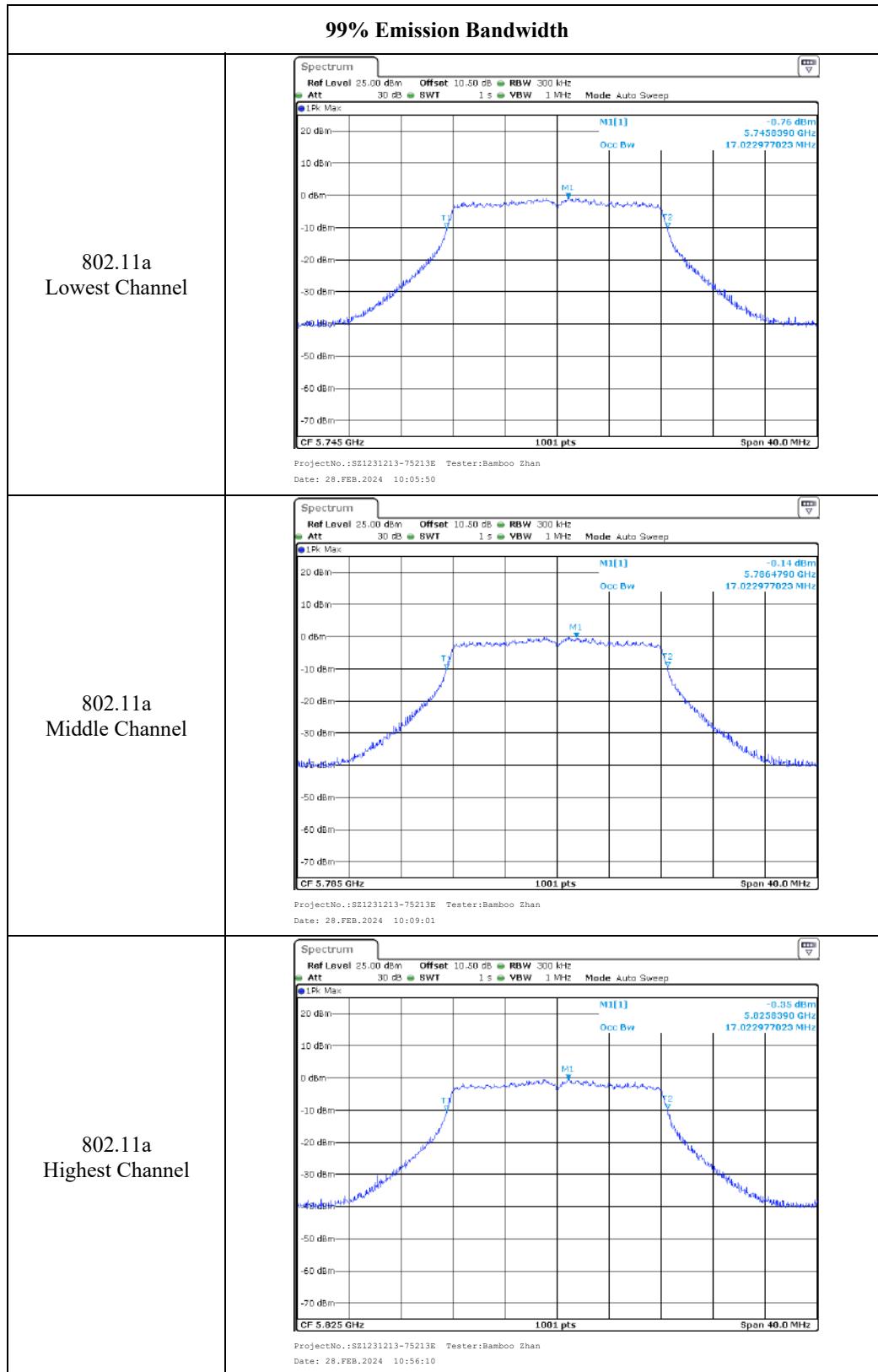


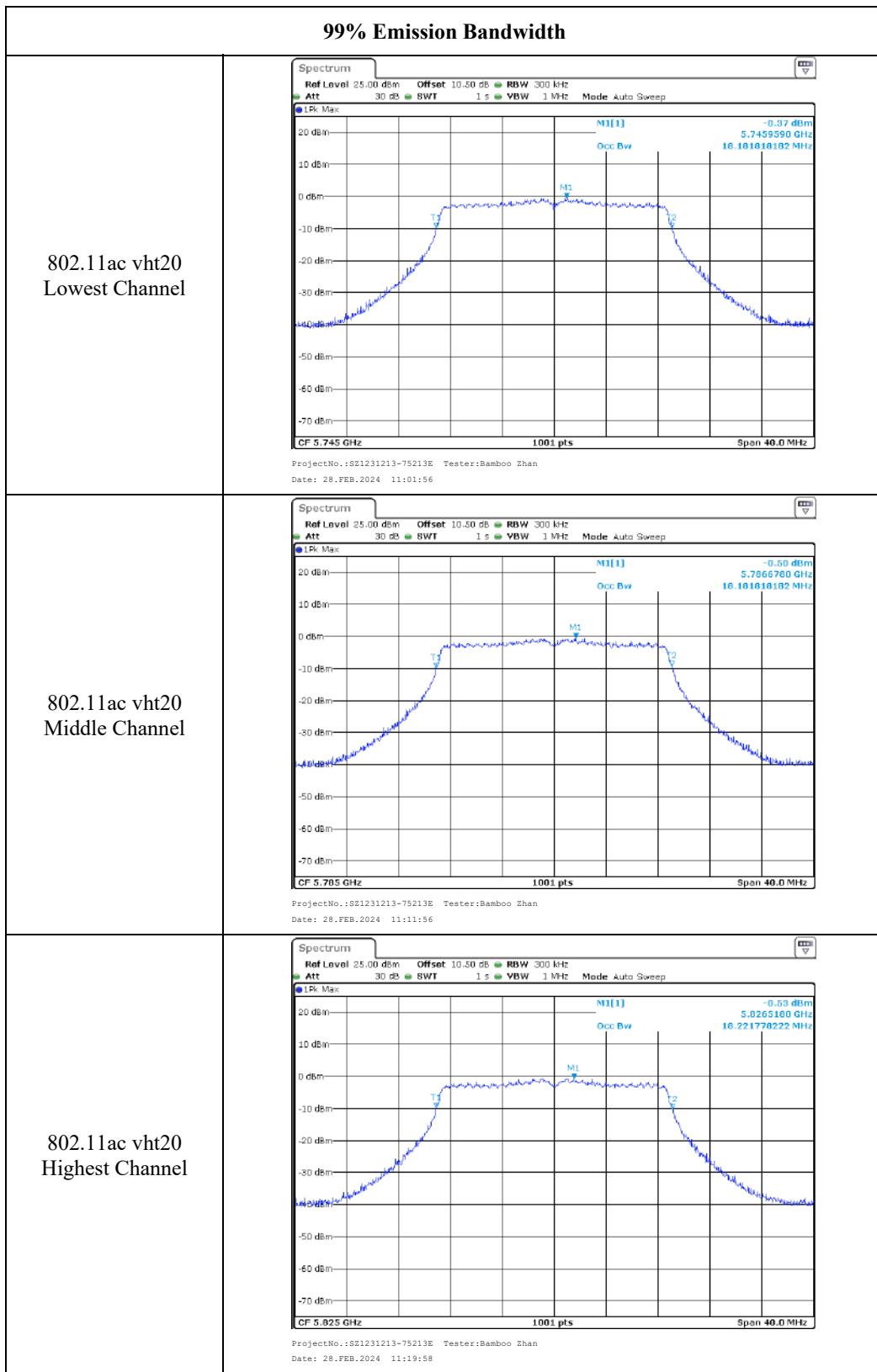
5725-5850MHz:
ANT0

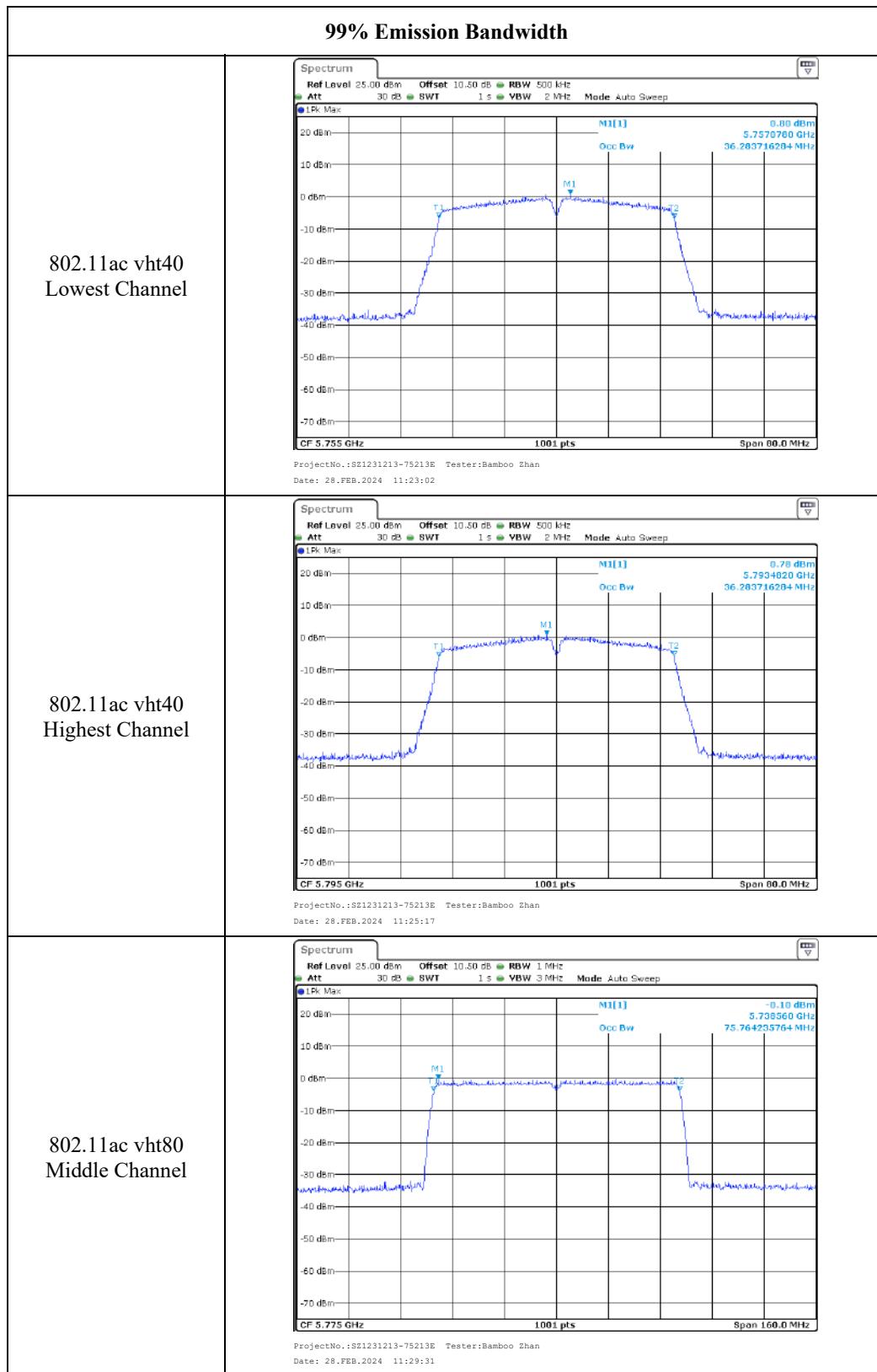












FCC §15.407(a) – CONDUCTED TRANSMITTER OUTPUT POWER

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.

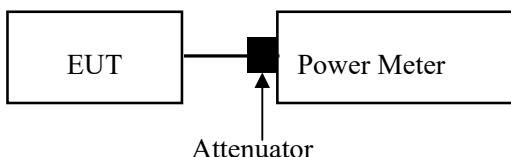
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not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

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:	23~26 °C
Relative Humidity:	40~50 %
ATM Pressure:	100.1~101.0 kPa

The testing was performed by Bamboo Zhan from 2024-02-27 to 2024-02-28 and Tom Liu from 2024-02-29 to 2024-03-01.

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	13.32	14.04	/	23.98
	5200	12.76	14.05	/	23.98
	5240	12.69	14.10	/	23.98
802.11ac vht20	5180	10.93	11.52	14.25	23.98
	5200	10.86	11.66	14.29	23.98
	5240	10.56	11.78	14.22	23.98
802.11ac vht40	5190	10.55	11.41	14.01	23.98
	5230	10.43	11.61	14.07	23.98
802.11ac vht80	5210	10.35	11.35	13.89	23.98

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:	-1.64	dBi	Directional gain:	-1.64	dBi
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5725-5850 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			
		ANT 1	ANT 2	Total	Limit
802.11a	5745	7.08	15.95	/	30
	5785	7.68	16.33	/	30
	5825	7.41	16.81	/	30
802.11ac vht20	5745	7.56	7.78	10.68	30
	5785	7.54	8.26	10.93	30
	5825	7.46	8.92	11.26	30
802.11ac vht40	5755	8.42	8.75	11.60	30
	5795	8.74	9.28	12.03	30
802.11ac vht80	5775	8.48	8.43	11.47	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:	-1.64	dBi	Directional gain:	-1.64	dBi

The test data of 802.11ax modes please refer to the Appendix.

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

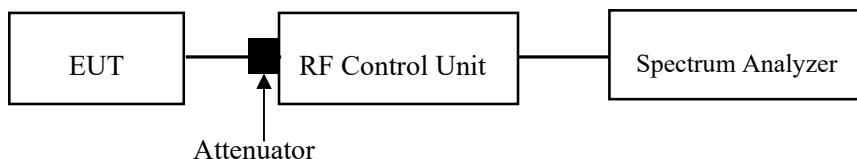
For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum 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

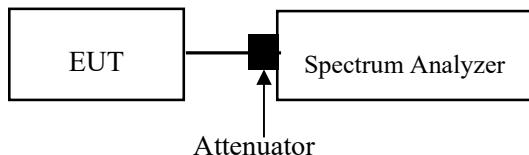
According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-2 should be applied

- 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).

For 802.11ax Mode:



For other Modes:



Test Data

Environmental Conditions

Temperature:	23~26 °C
Relative Humidity:	40~50 %
ATM Pressure:	100.1~101.0 kPa

The testing was performed by Bamboo Zhan from 2024-02-27 to 2024-02-28 and Tom Liu from 2024-02-29 to 2024-03-01.

EUT operation mode: Transmitting

Test Result: Compliant.

5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/MHz)			
		ANT 1	ANT 2	Total	Limit
802.11a	5180	2.27	3.12	/	11
	5200	1.91	3.14	/	11
	5240	1.88	3.16	/	11
802.11ac vht20	5180	-0.50	0.22	2.89	11
	5200	-0.76	0.37	2.85	11
	5240	-1.03	0.59	2.87	11
802.11ac vht40	5190	-2.28	-1.73	1.01	11
	5230	-2.36	-1.50	1.10	11
802.11ac vht80	5210	-6.86	-5.95	-3.37	11

Note:
The device is a client unit.
Method SA-1 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01 was used for PSD test, and the duty cycle factor was added into the result.
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 = $10 \log(N_{\text{ANT}}/N_{\text{SS}})$ dB

Antenna Gain:	-1.64	dBi	Directional gain:	1.36	dBi
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5725-5850 MHz:

Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/MHz)			
		ANT 1	ANT 2	Total	Limit
802.11a	5745	-6.63	2.73	/	30
	5785	-6.10	3.04	/	30
	5825	-6.35	3.13	/	30
802.11ac vht20	5745	-6.22	-6.41	-3.30	30
	5785	-6.29	-4.96	-2.56	30
	5825	-6.30	-4.94	-2.56	30
802.11ac vht40	5755	-7.69	-7.30	-4.48	30
	5795	-7.38	-6.88	-4.11	30
802.11ac vht80	5775	-11.49	-11.62	-8.54	30

Note:

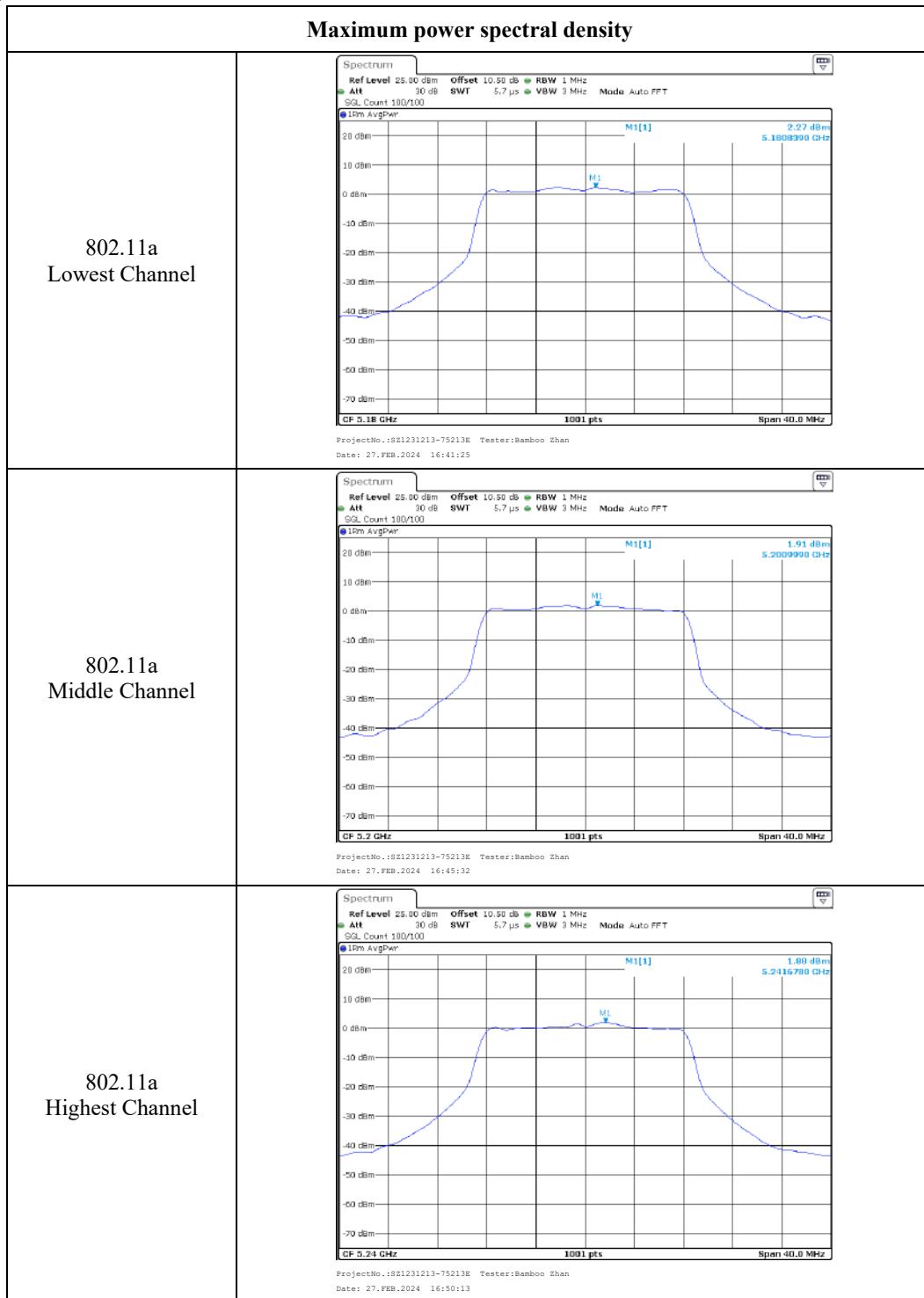
Method SA-1 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01 was used for PSD test, and the duty cycle factor was added into the result.

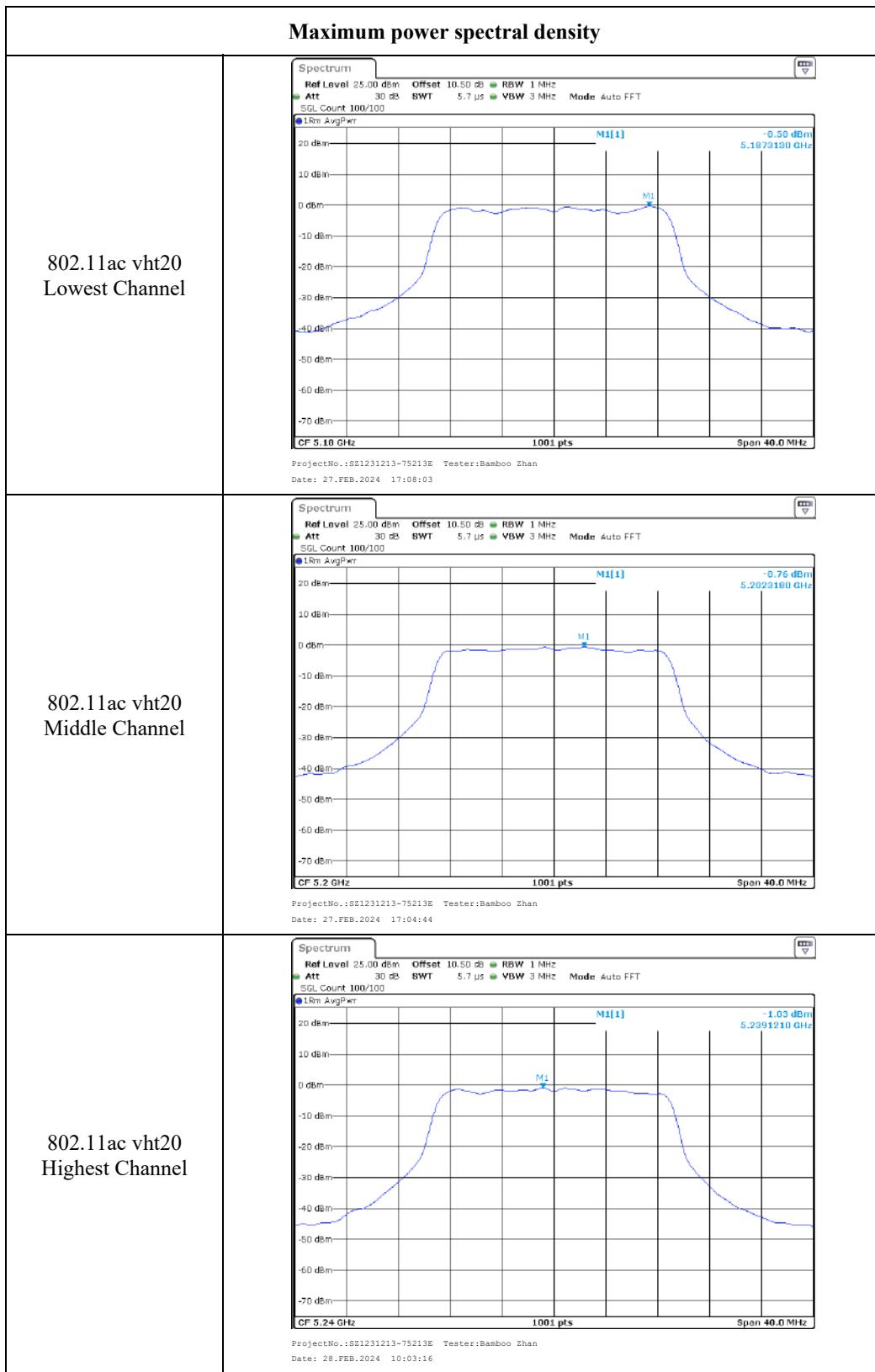
The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:

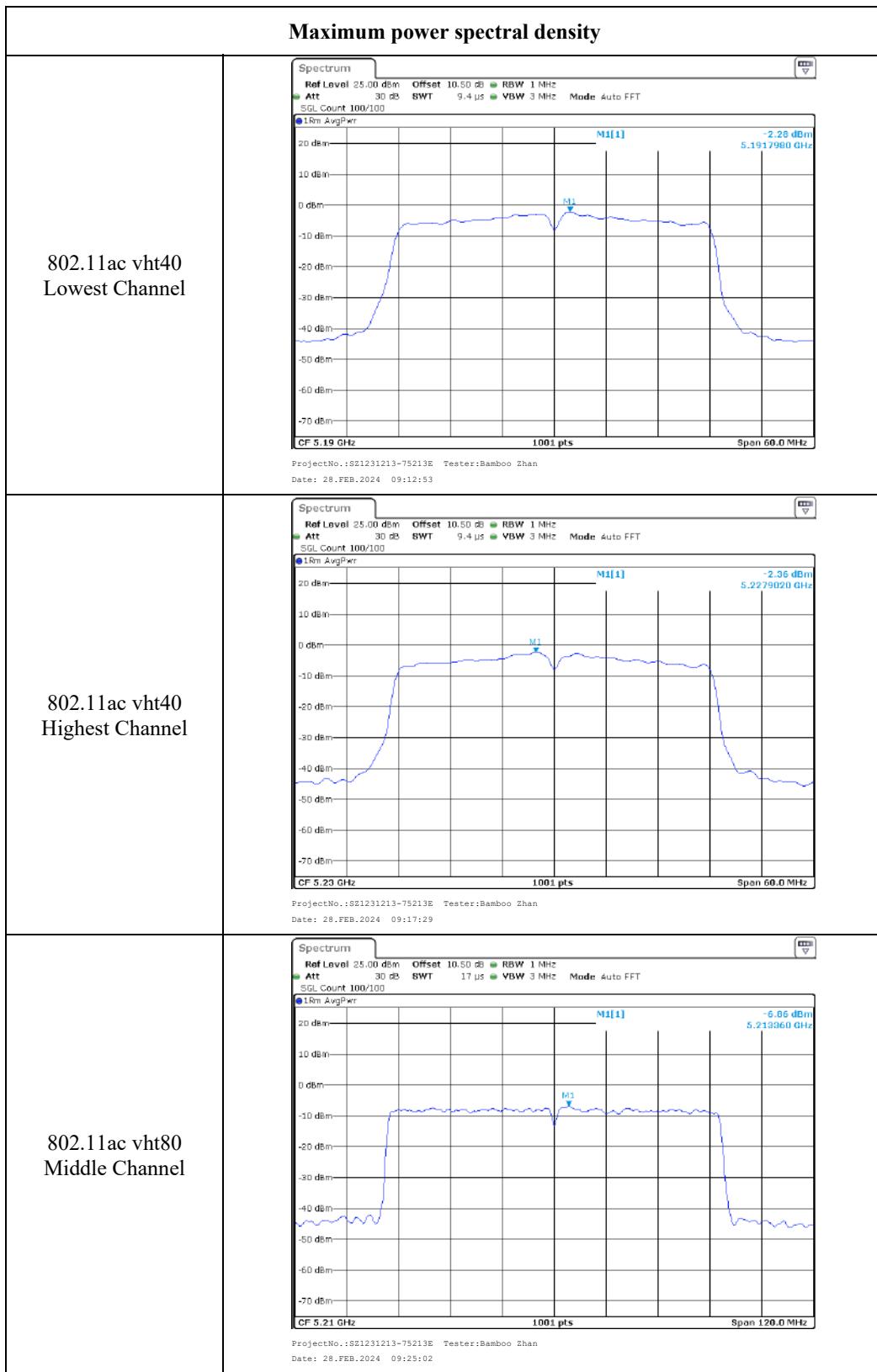
Array Gain = $10 \log(N_{\text{ANT}}/N_{\text{SS}})$ dB

Antenna Gain:	-1.64	dBi	Directional gain:	1.36	dBi
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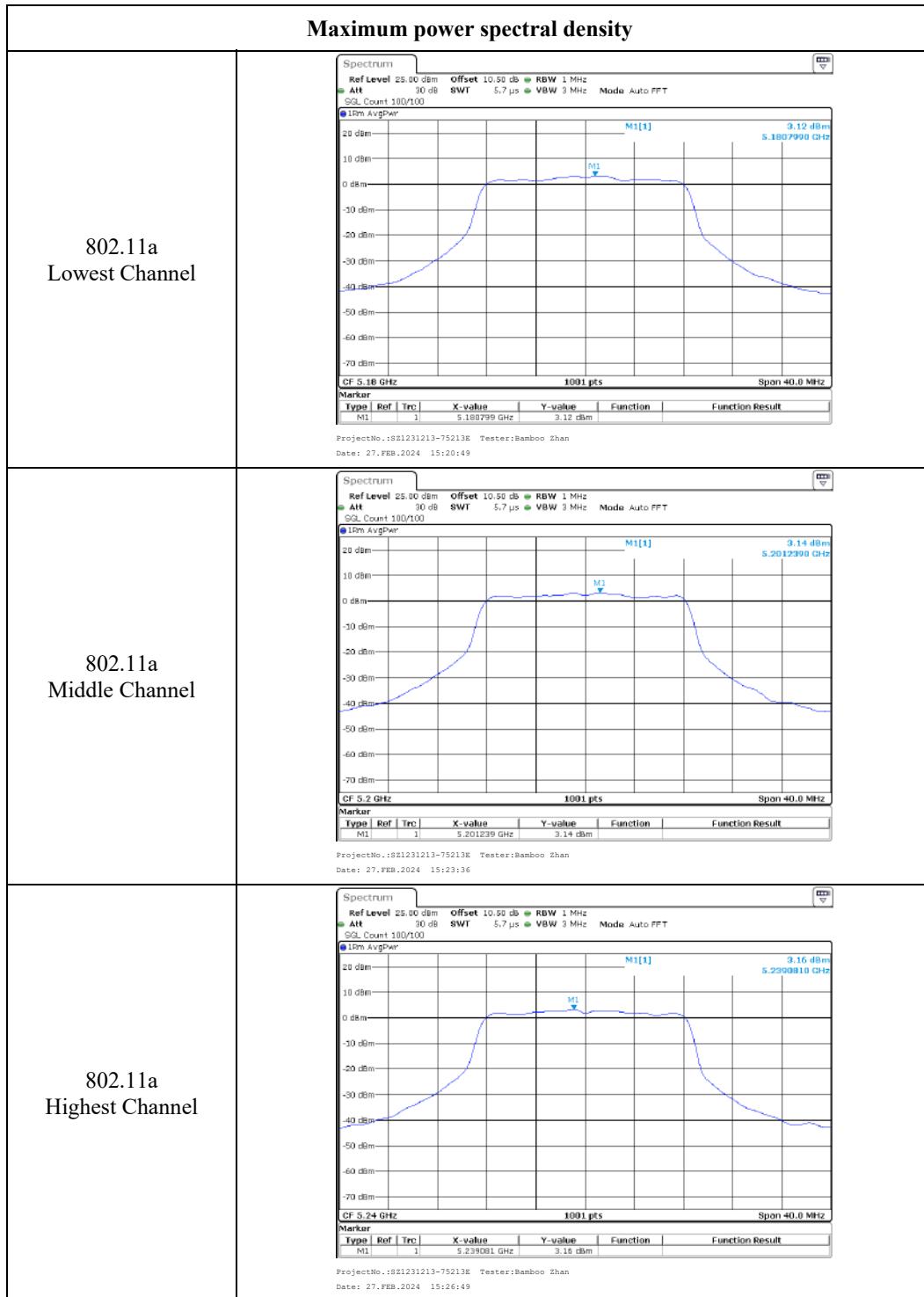
The test data of 802.11ax modes please refer to the Appendix.

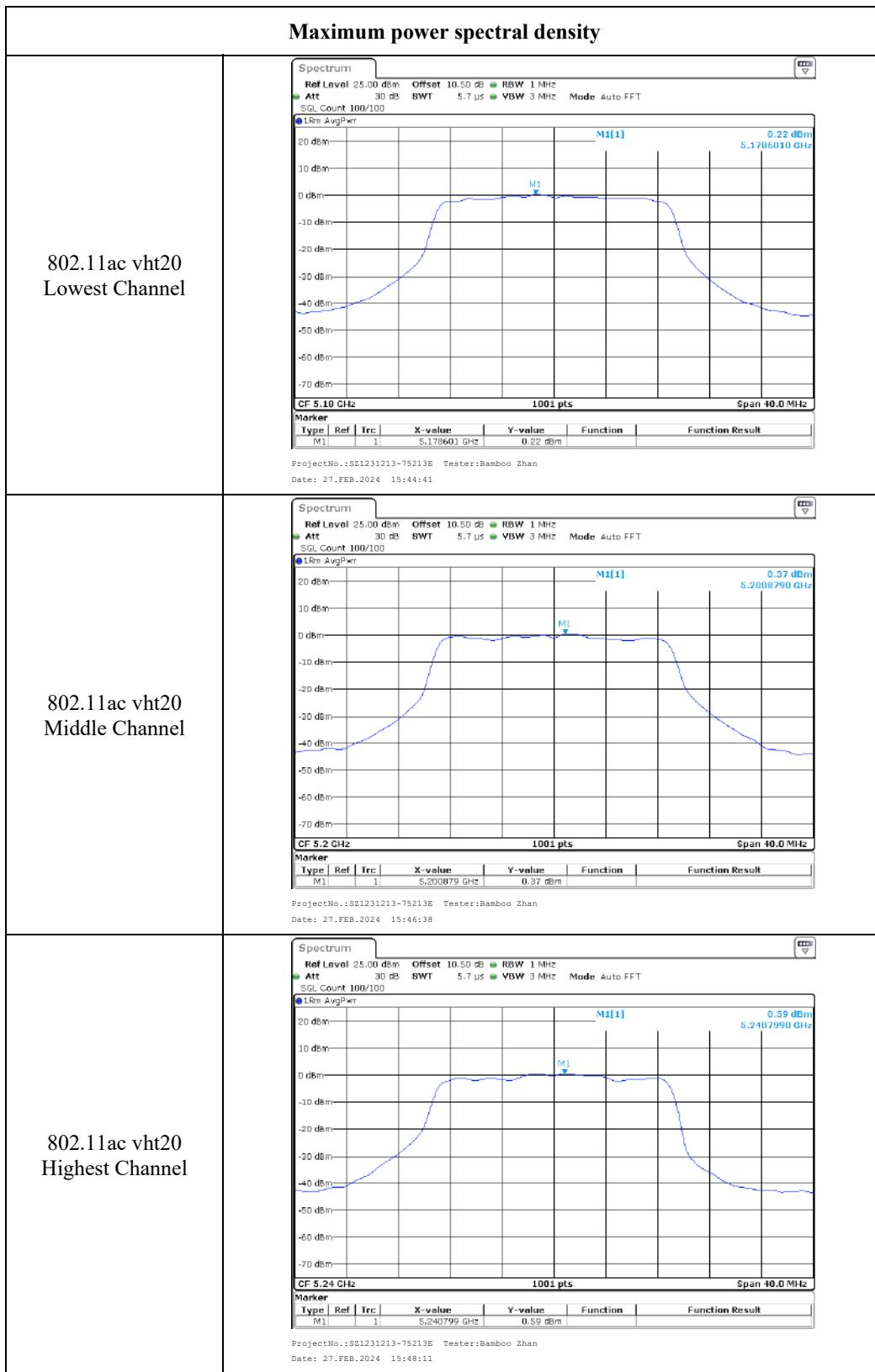
5150-5250MHz:**ANT 1**

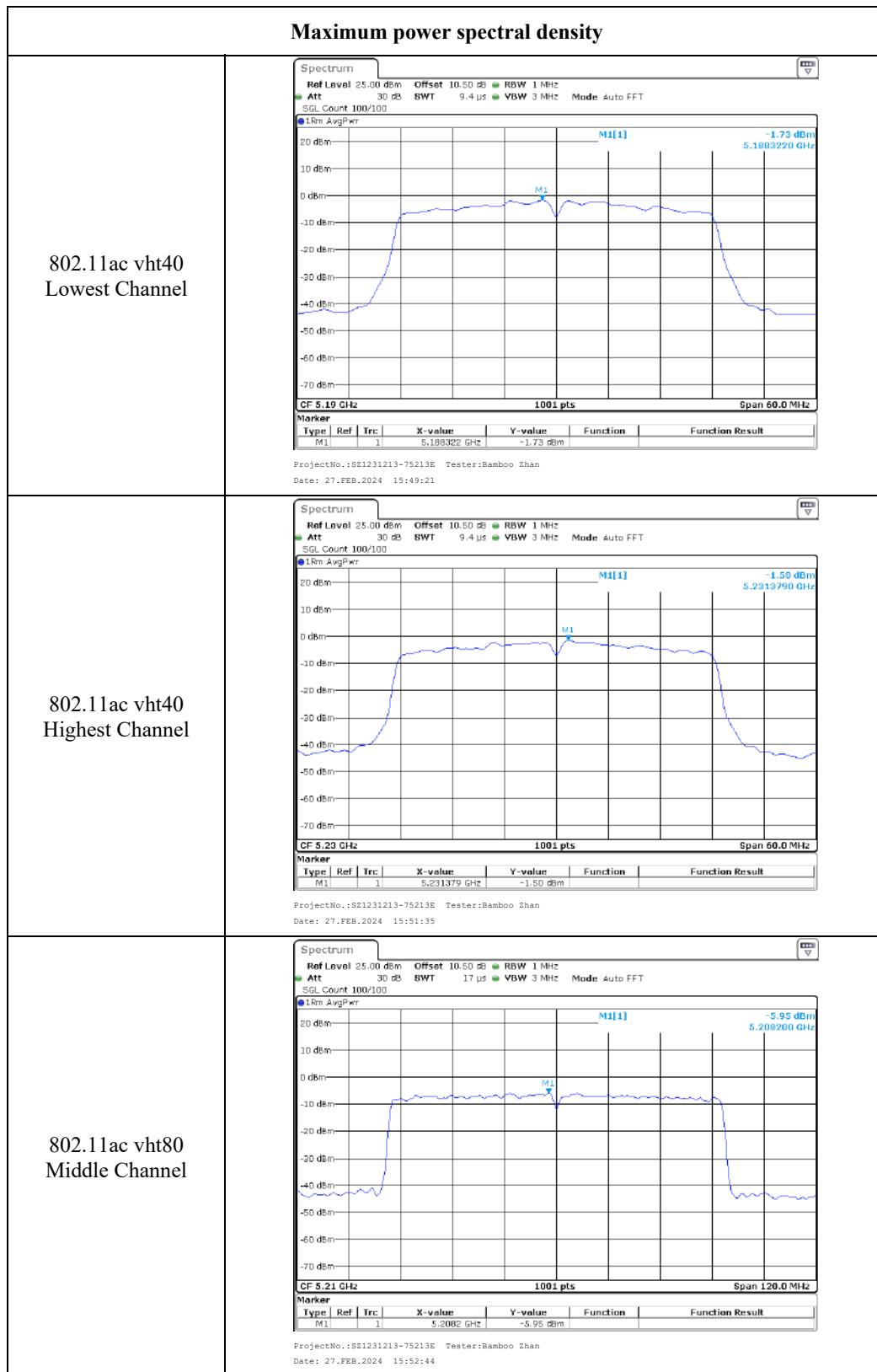


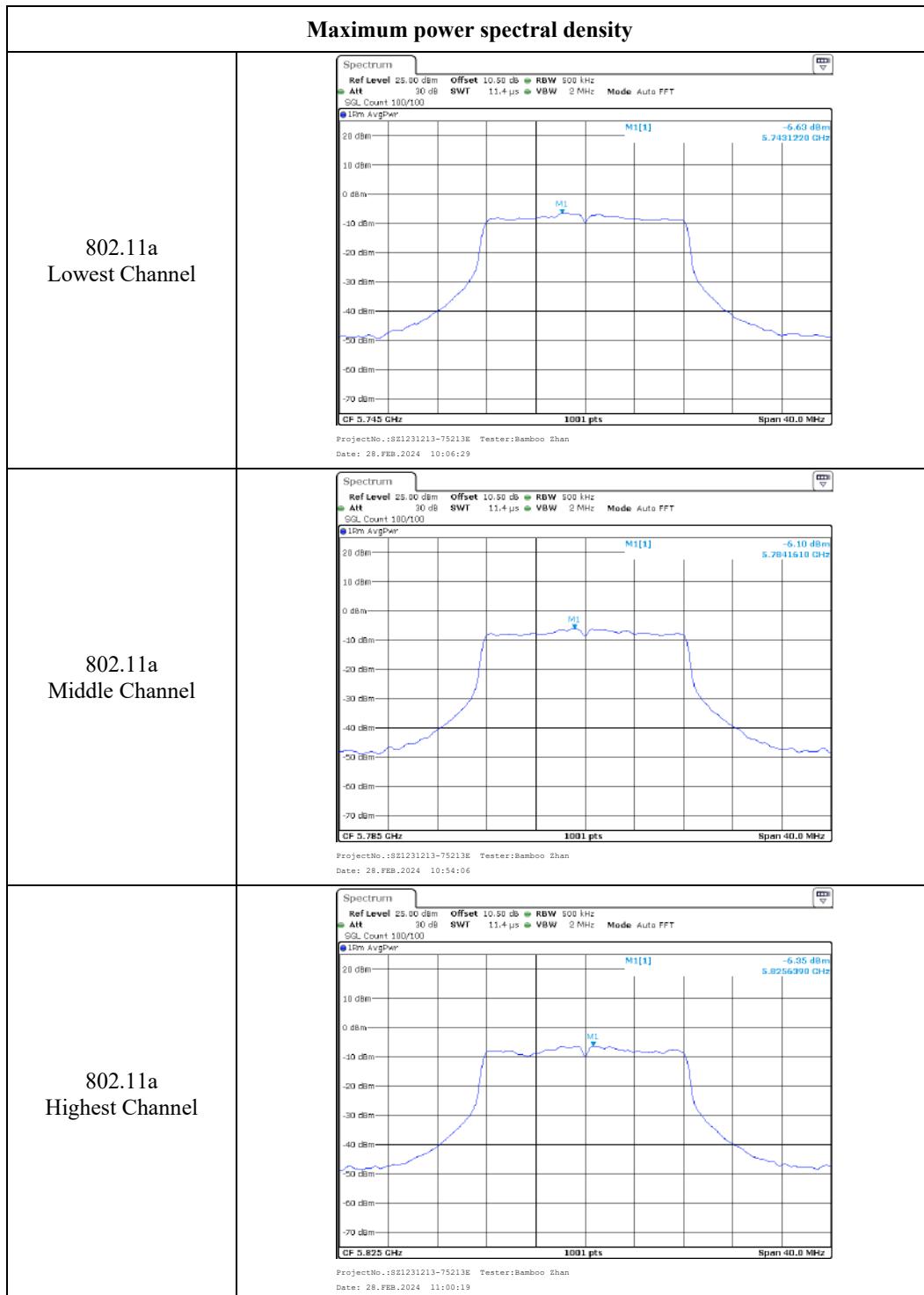


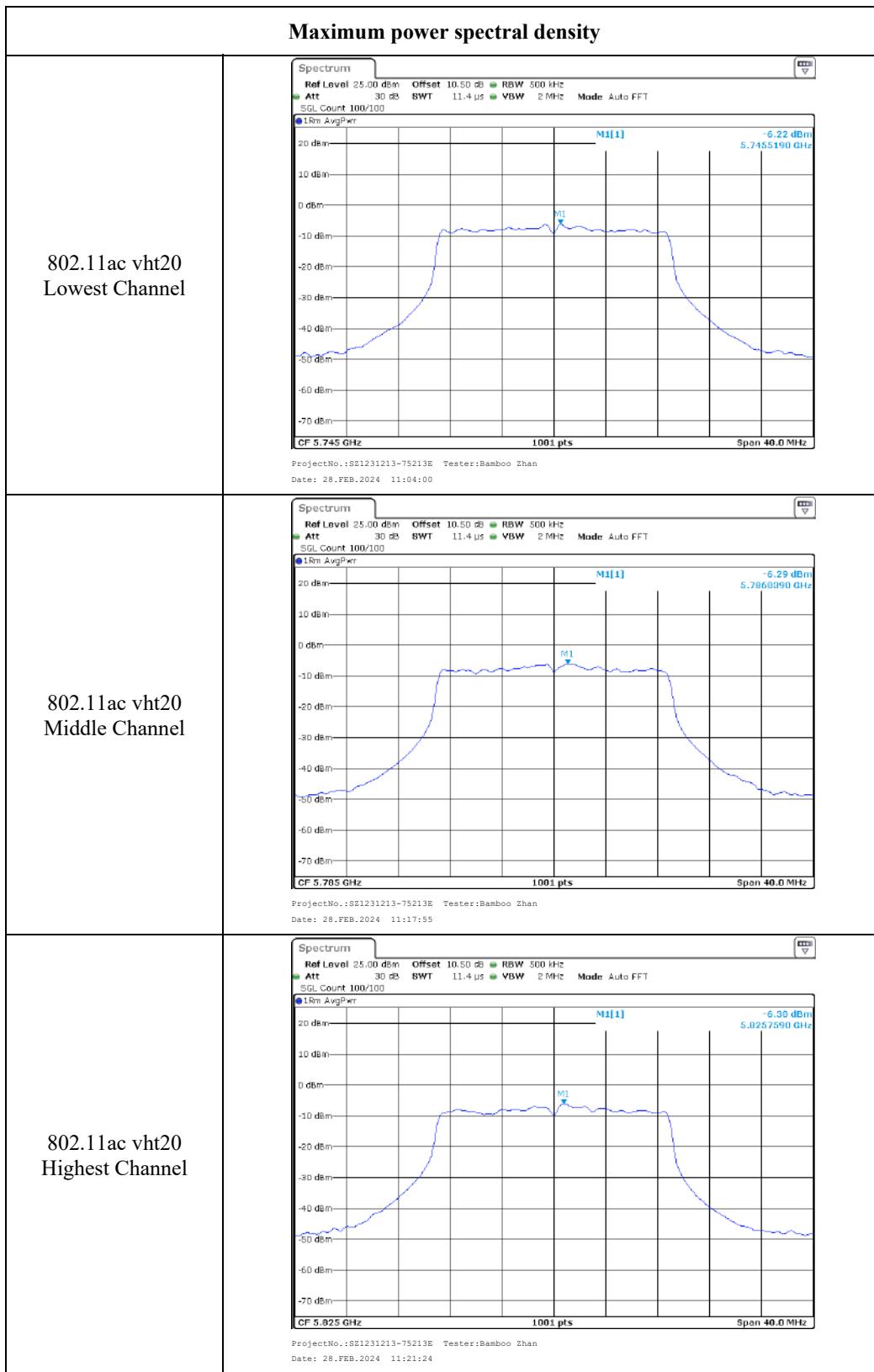
ANT 2

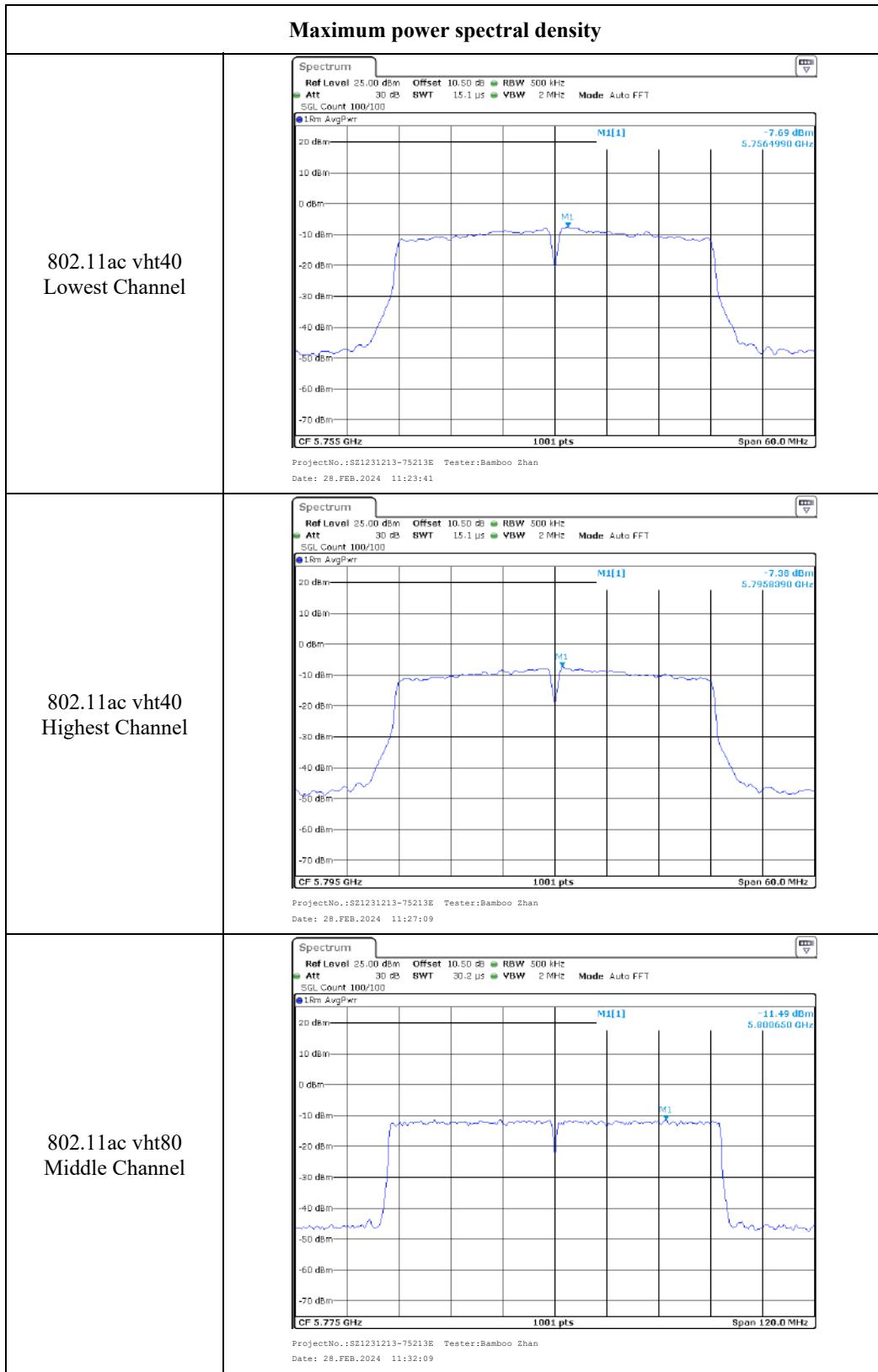




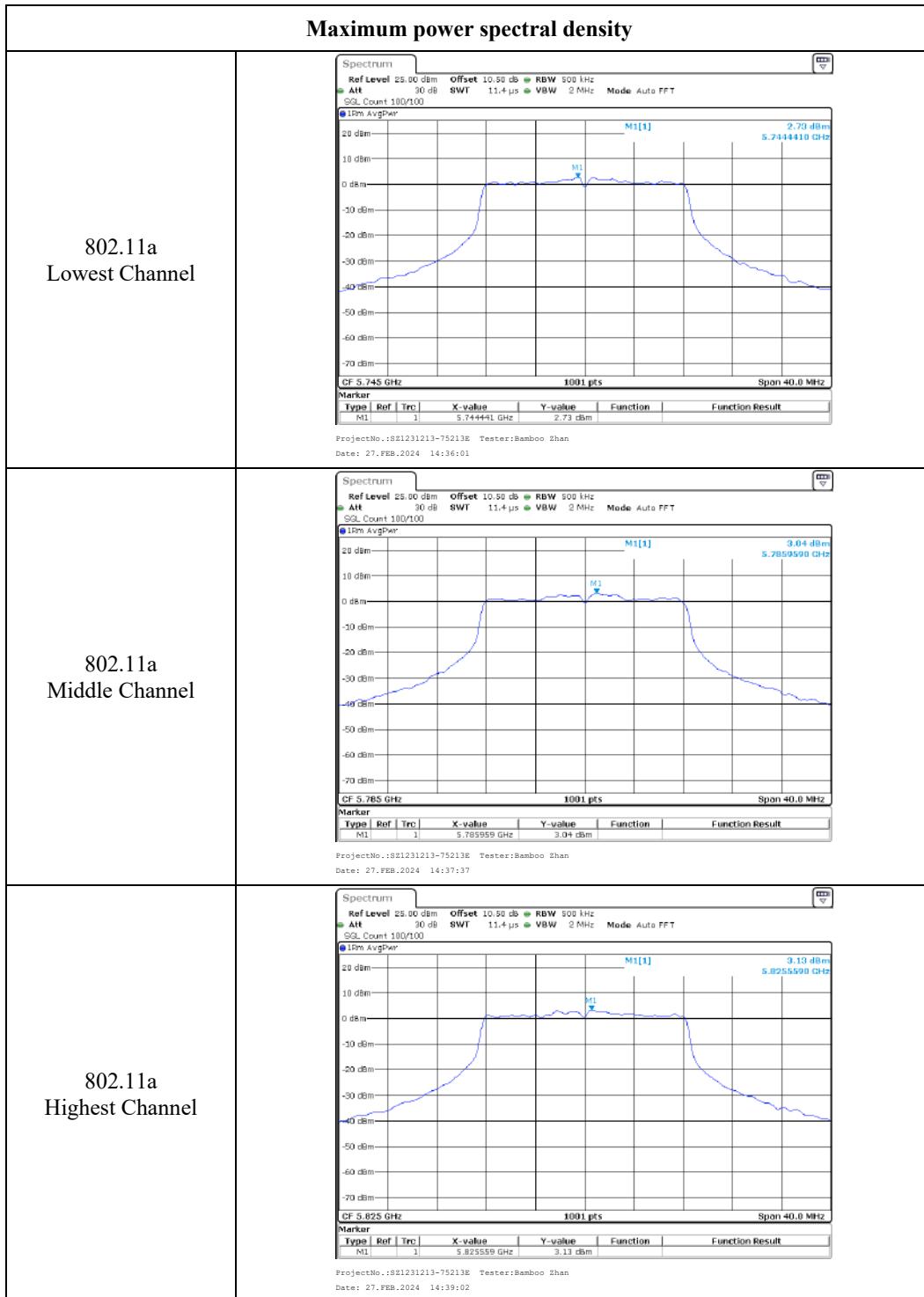


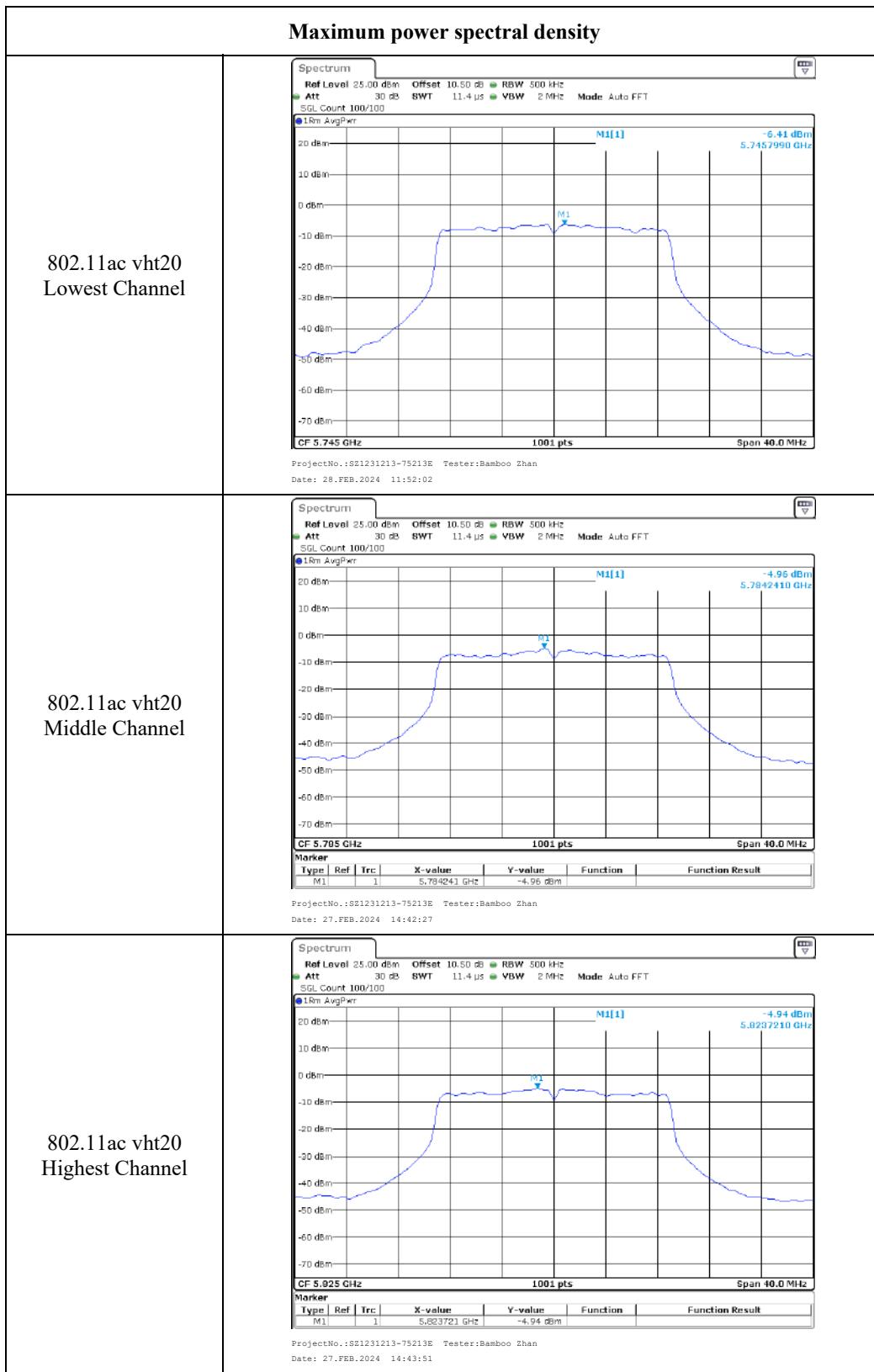
5725-5850MHz:**ANT1**

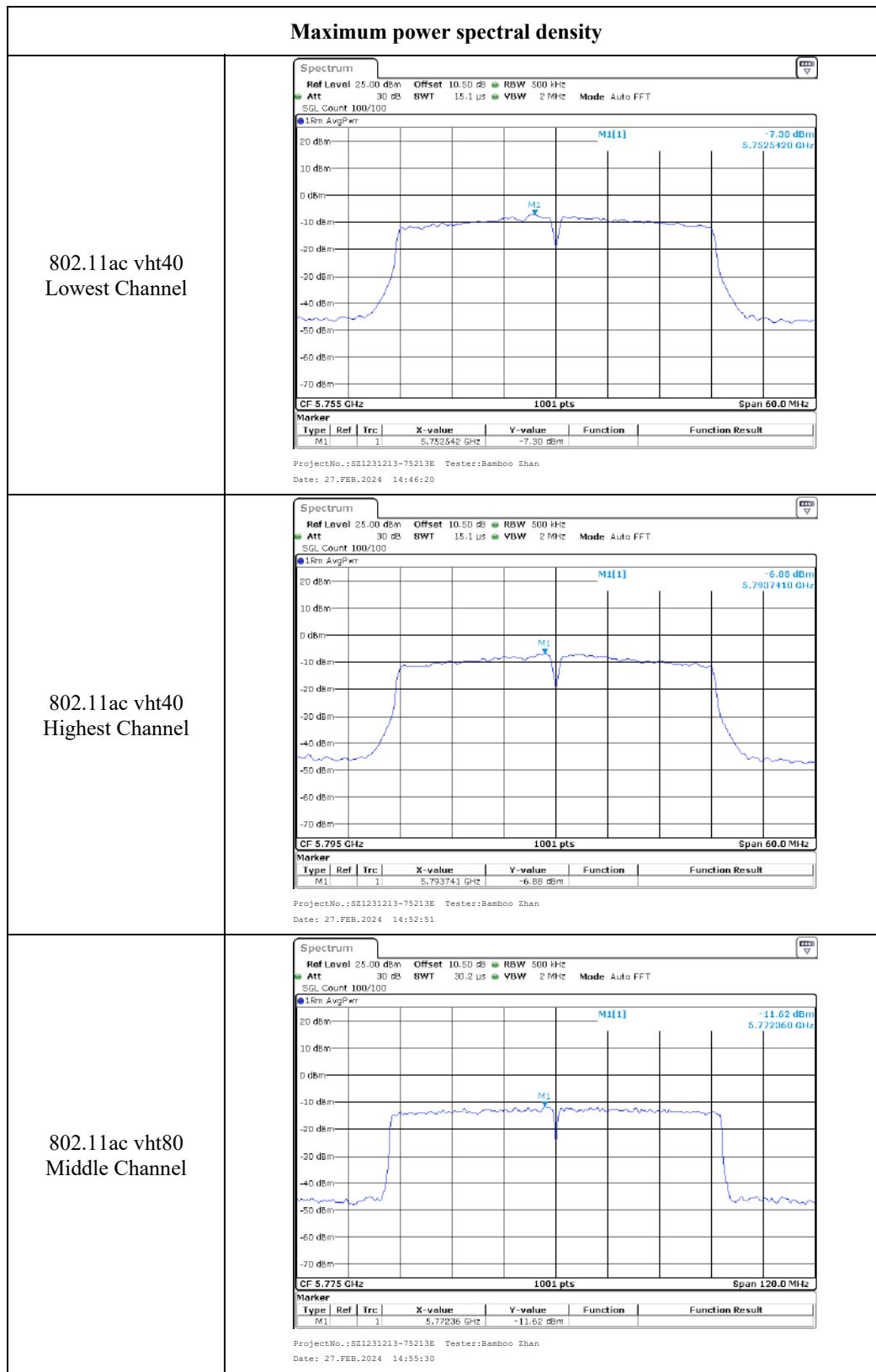




ANT2







EUT PHOTOGRAPHS

Please refer to the attachment SZ1231213-75213E-RF External photo and SZ1231213-75213E-RF Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment SZ1231213-75213E-RF Test Setup photo.

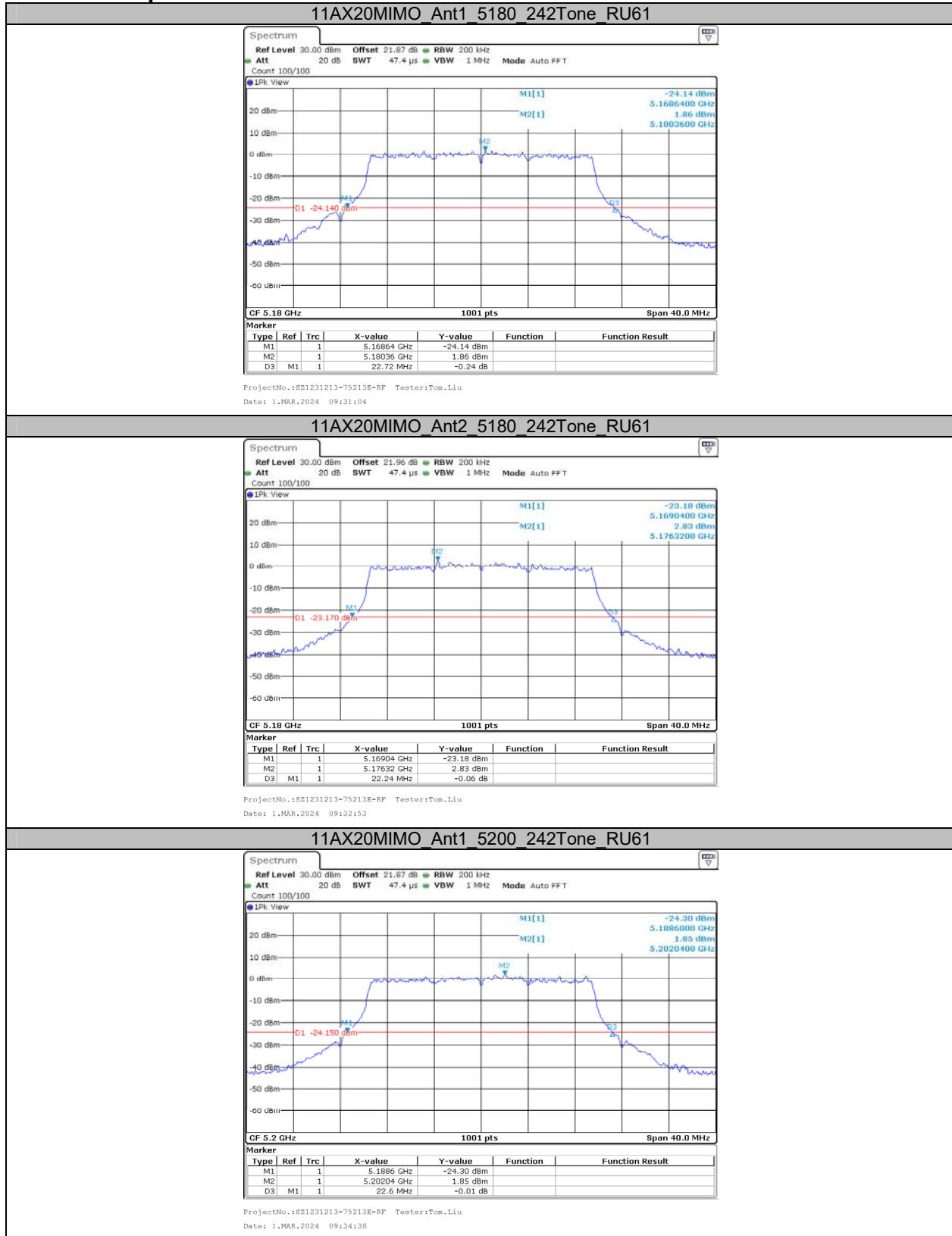
APPENDIX

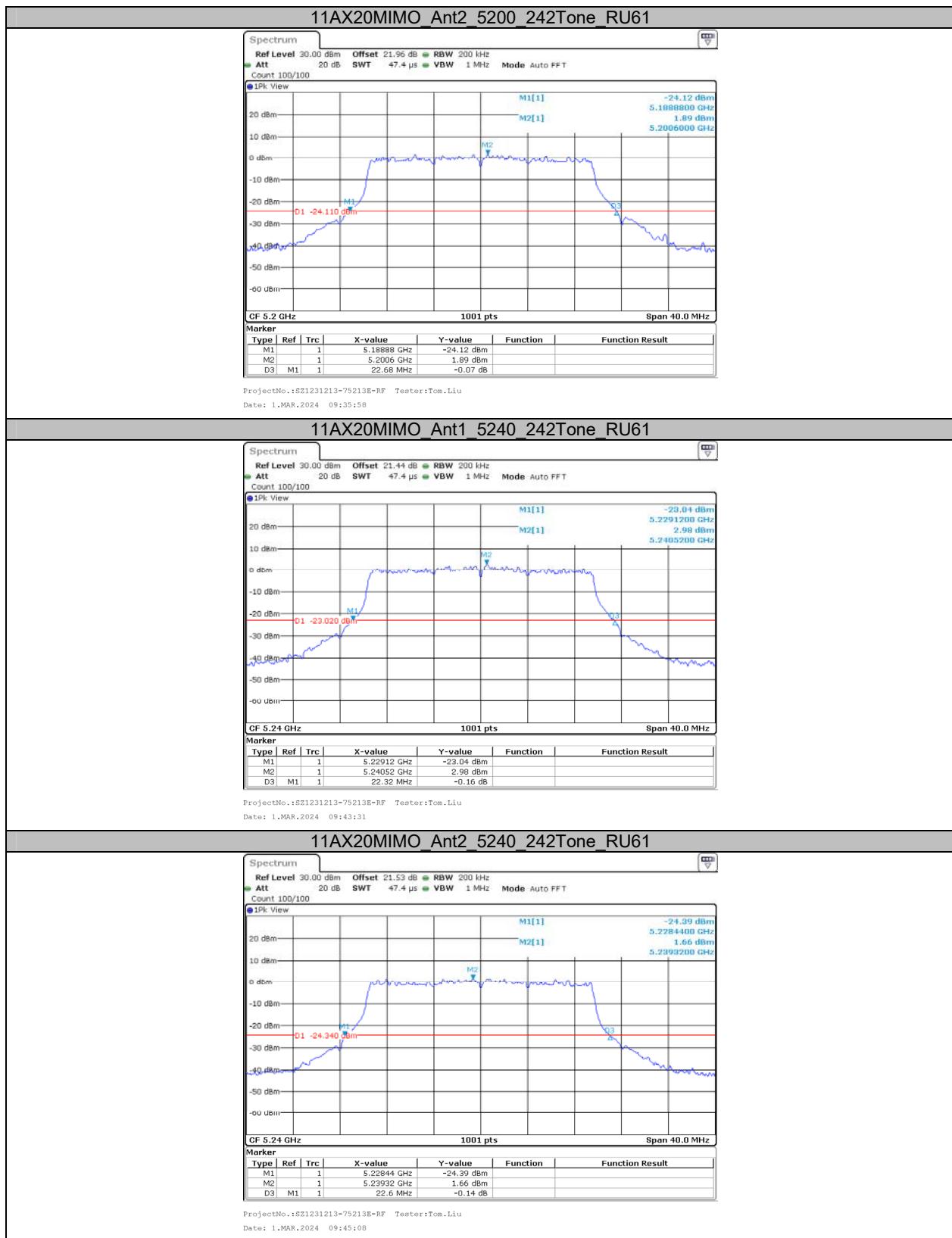
Appendix A1: Emission Bandwidth

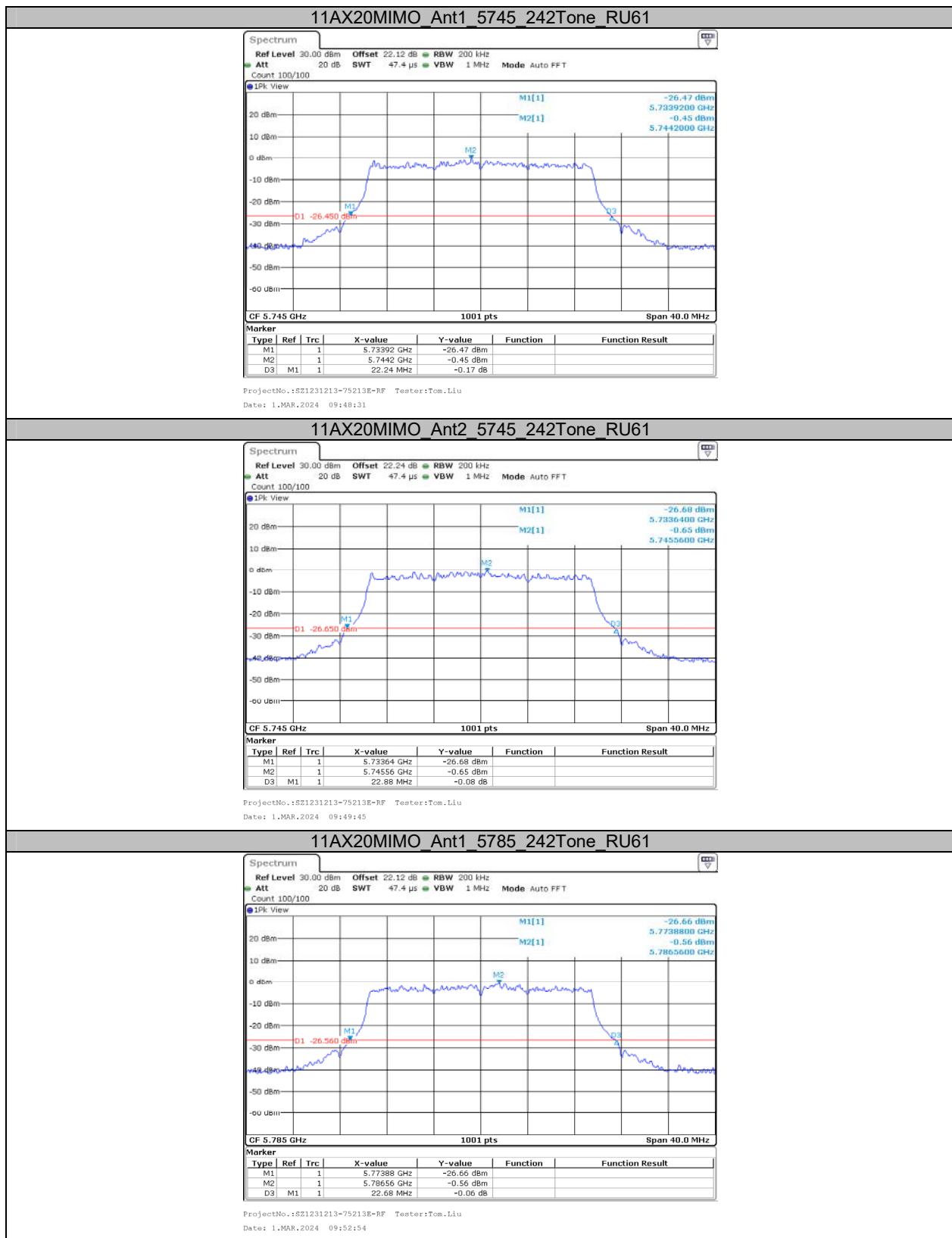
Test Result

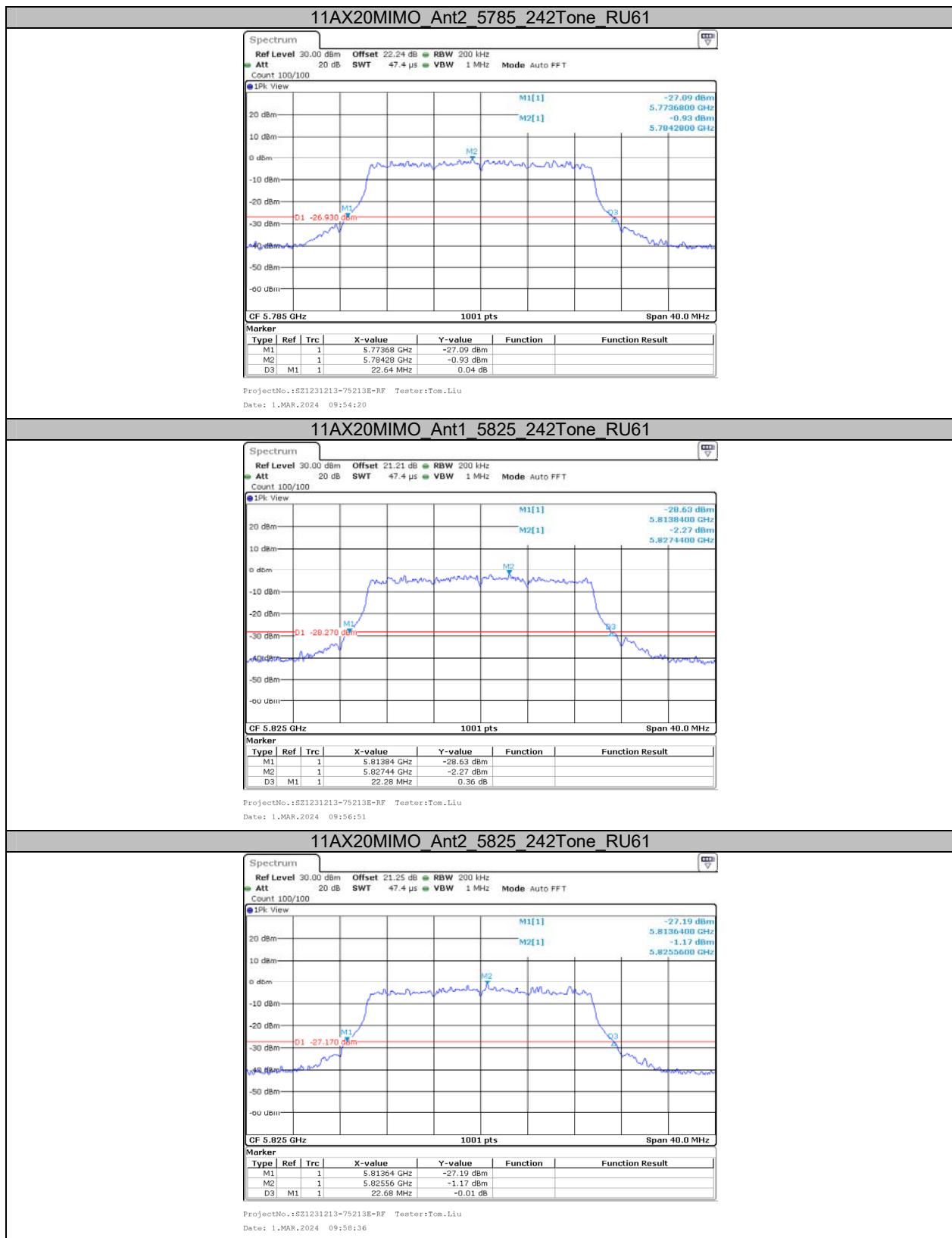
Test Mode	Antenna	Frequency[MHz]	Ru Size	Ru Index	26db BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11AX20MIMO	Ant1	5180	242Tone	RU61	22.72	5168.64	5191.36	---	---
	Ant2	5180	242Tone	RU61	22.24	5169.04	5191.28	---	---
	Ant1	5200	242Tone	RU61	22.60	5188.60	5211.20	---	---
	Ant2	5200	242Tone	RU61	22.68	5188.88	5211.56	---	---
	Ant1	5240	242Tone	RU61	22.32	5229.12	5251.44	---	---
	Ant2	5240	242Tone	RU61	22.60	5228.44	5251.04	---	---
	Ant1	5745	242Tone	RU61	22.24	5733.92	5756.16	---	---
	Ant2	5745	242Tone	RU61	22.88	5733.64	5756.52	---	---
	Ant1	5785	242Tone	RU61	22.68	5773.88	5796.56	---	---
	Ant2	5785	242Tone	RU61	22.64	5773.68	5796.32	---	---
	Ant1	5825	242Tone	RU61	22.28	5813.84	5836.12	---	---
	Ant2	5825	242Tone	RU61	22.68	5813.64	5836.32	---	---
11AX40MIMO	Ant1	5190	484Tone	RU65	39.92	5170.08	5210.00	---	---
	Ant2	5190	484Tone	RU65	39.84	5170.08	5209.92	---	---
	Ant1	5230	484Tone	RU65	39.92	5210.08	5250.00	---	---
	Ant2	5230	484Tone	RU65	39.68	5210.16	5249.84	---	---
	Ant1	5755	484Tone	RU65	39.92	5735.08	5775.00	---	---
	Ant2	5755	484Tone	RU65	39.76	5735.16	5774.92	---	---
	Ant1	5795	484Tone	RU65	40.00	5775.00	5815.00	---	---
	Ant2	5795	484Tone	RU65	39.76	5775.16	5814.92	---	---
11AX80MIMO	Ant1	5210	996Tone	RU67	81.12	5169.52	5250.64	---	---
	Ant2	5210	996Tone	RU67	81.12	5169.52	5250.64	---	---
	Ant1	5775	996Tone	RU67	81.12	5734.52	5815.64	---	---
	Ant2	5775	996Tone	RU67	80.80	5734.68	5815.48	---	---

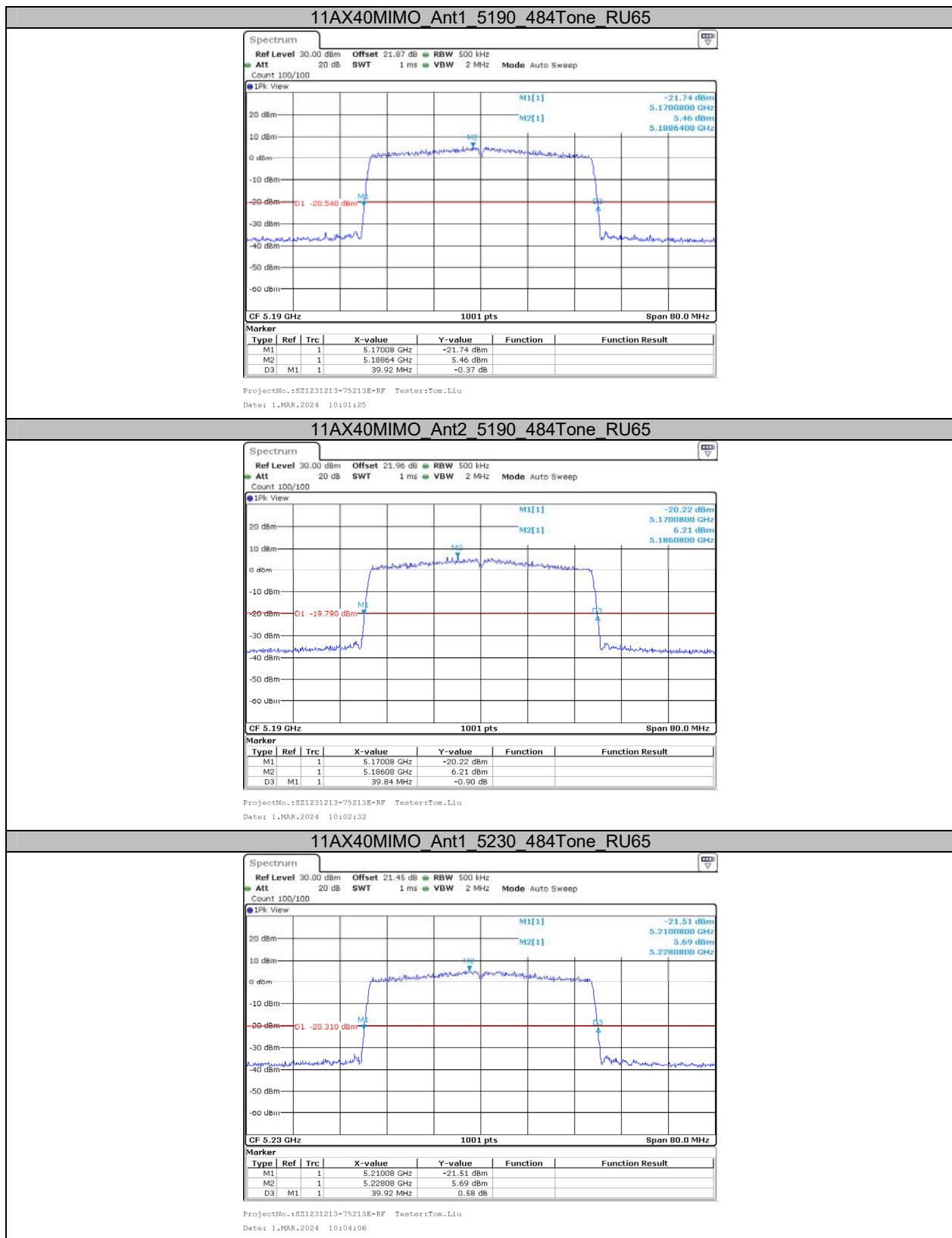
Test Graphs

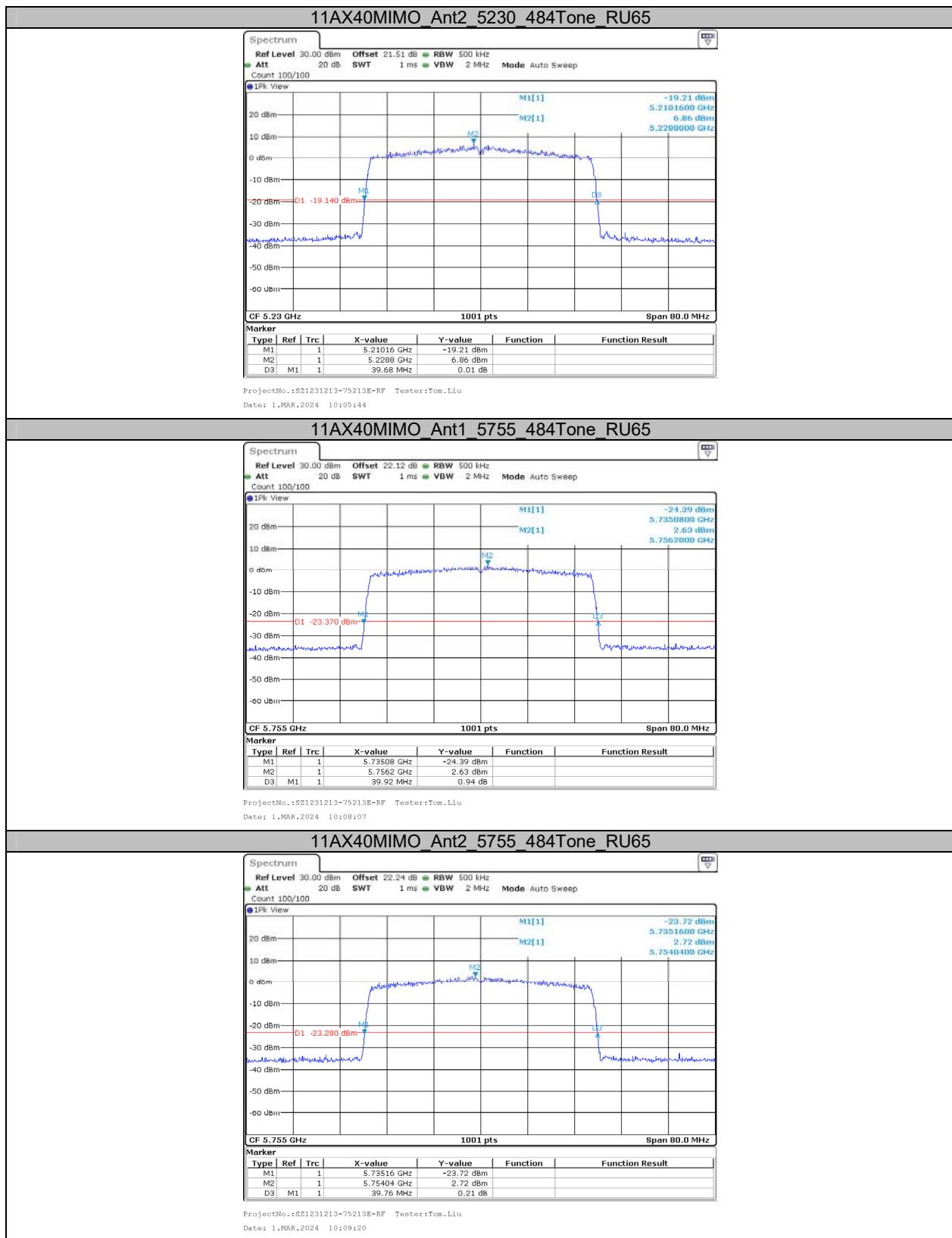


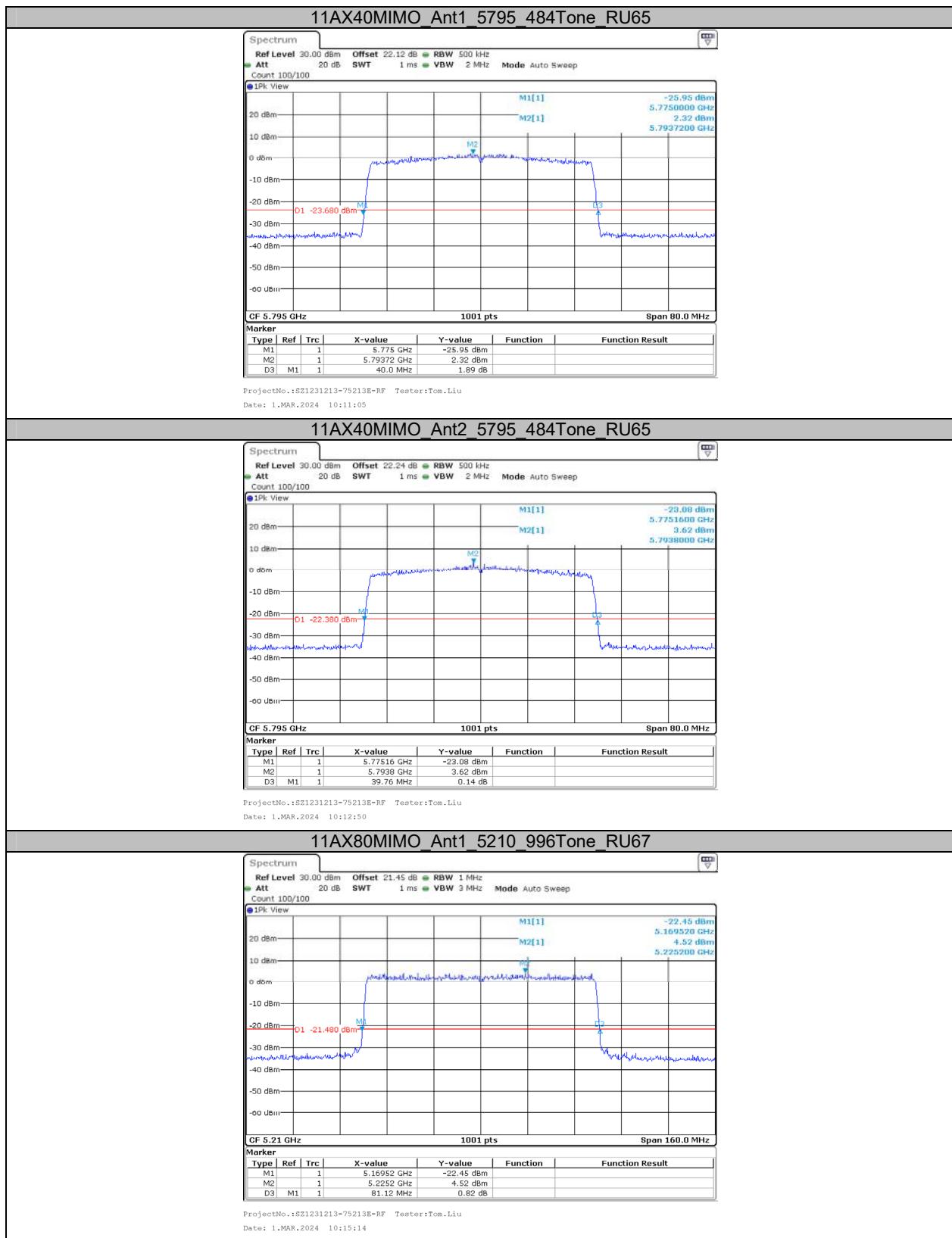


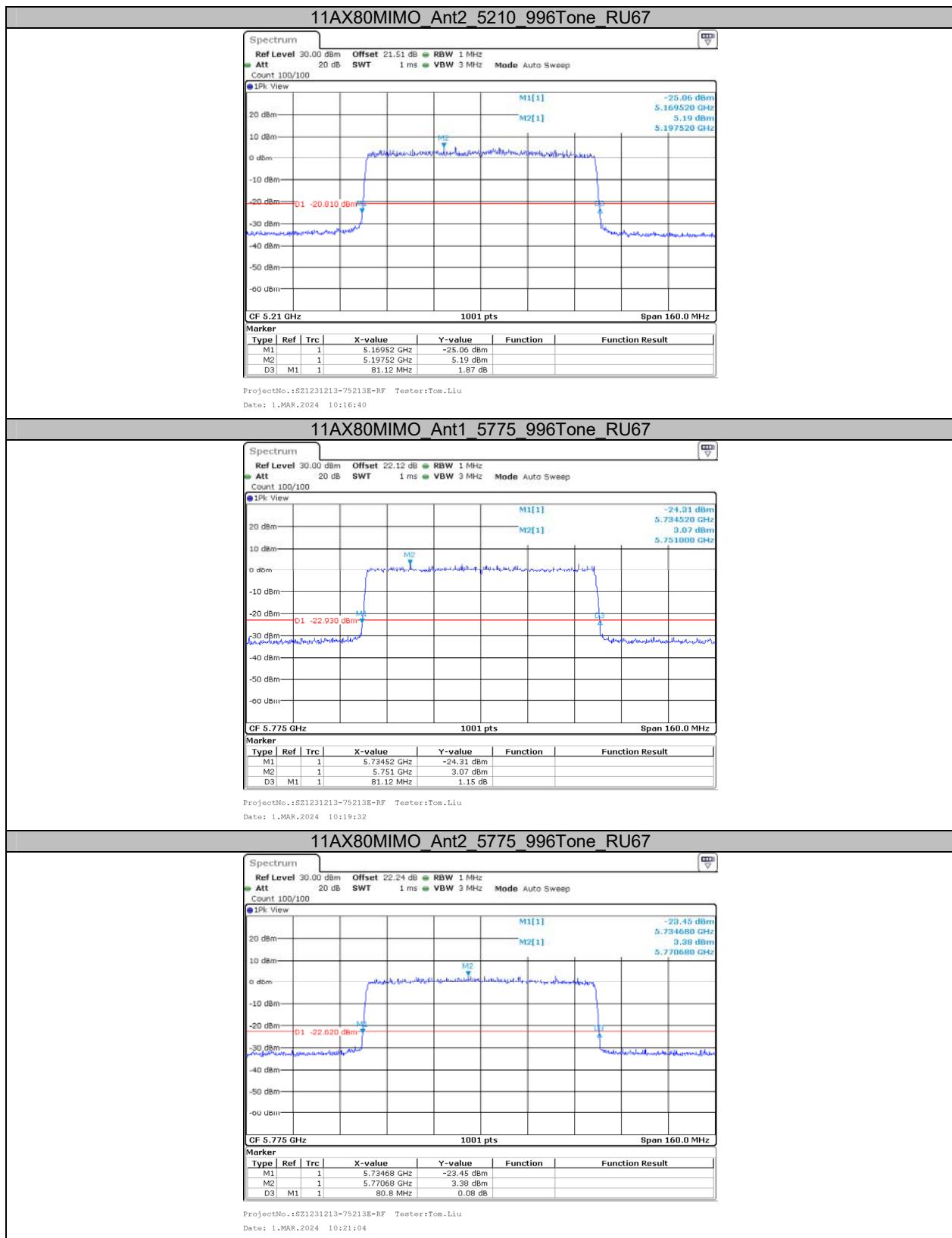










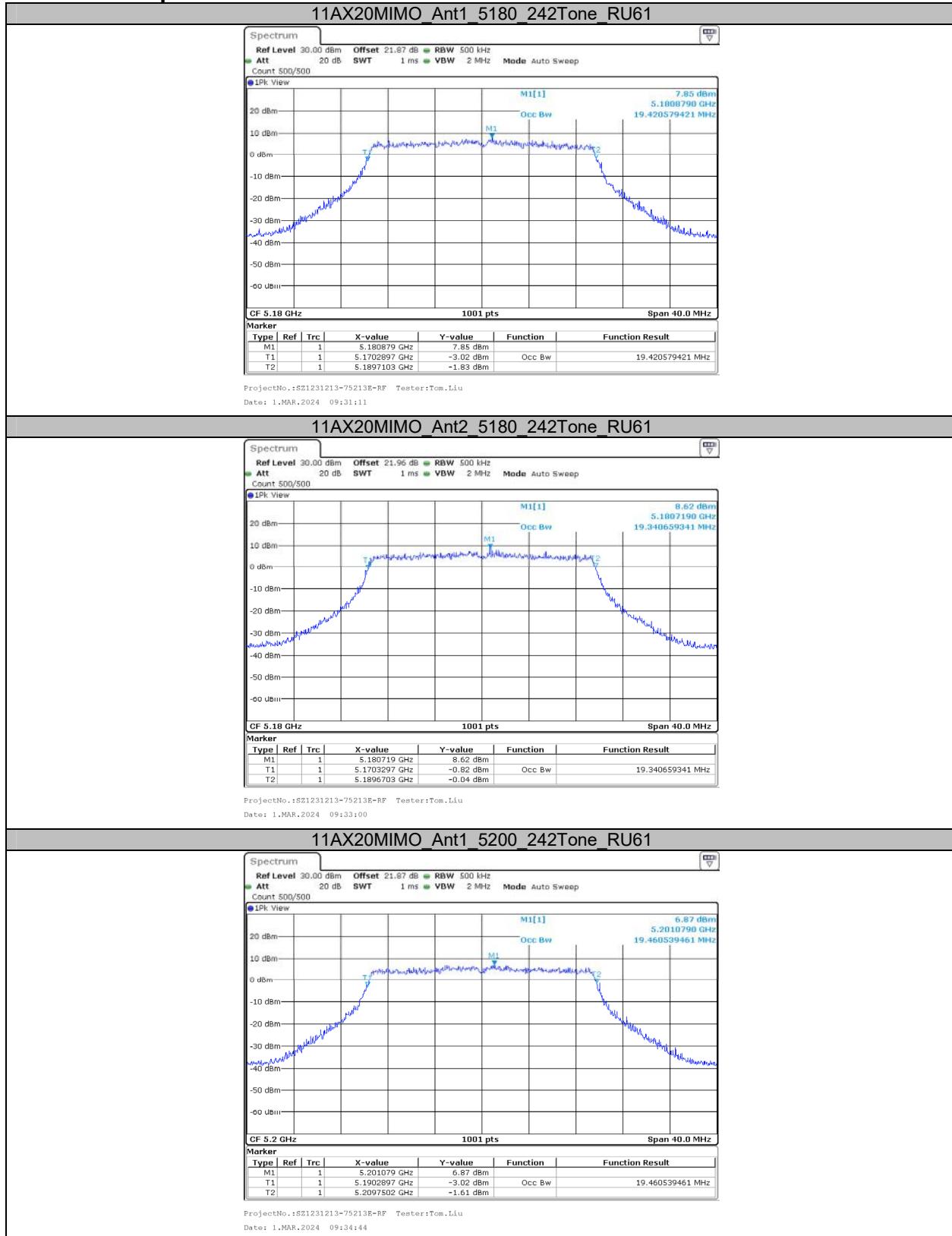


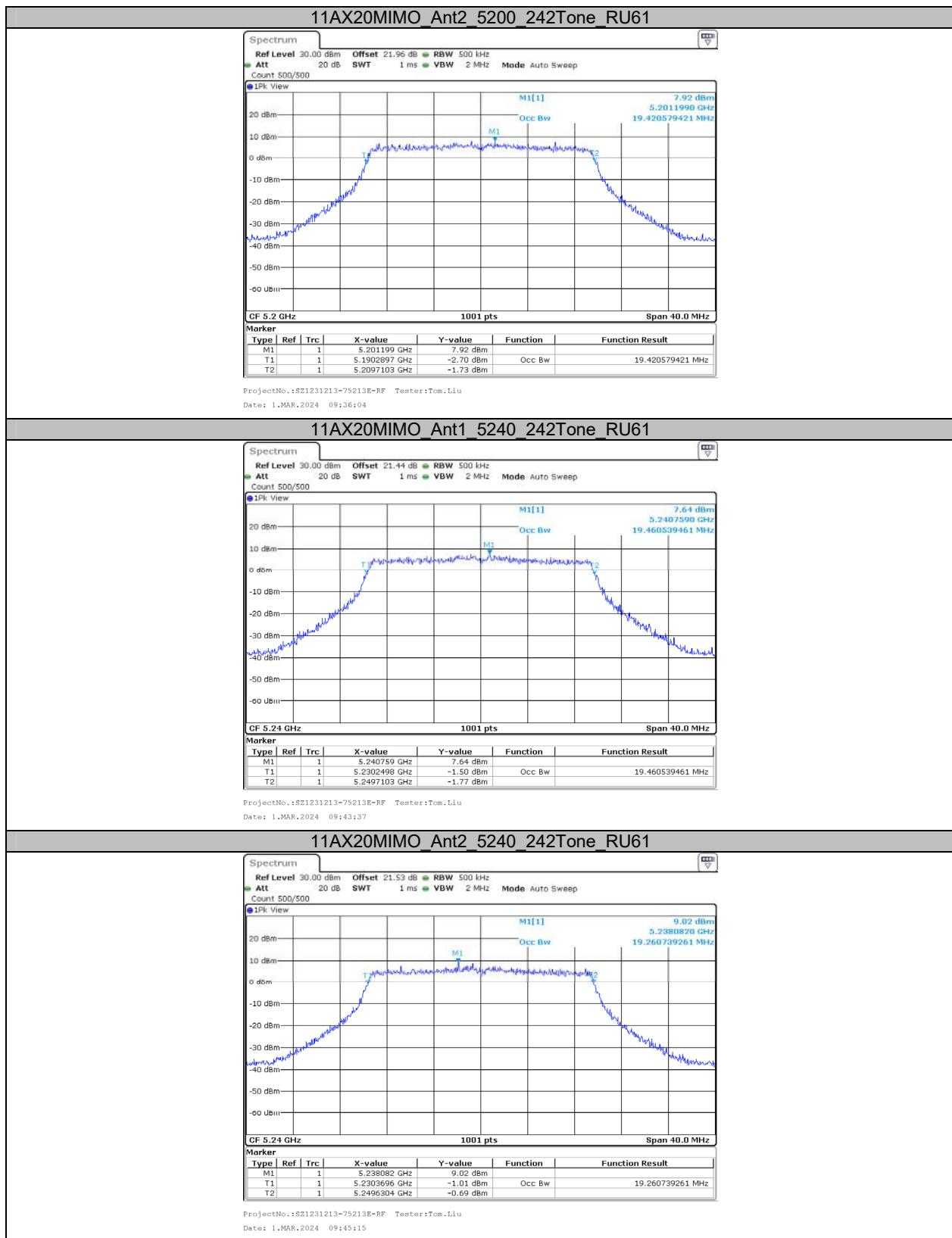
Appendix A2: Occupied channel bandwidth

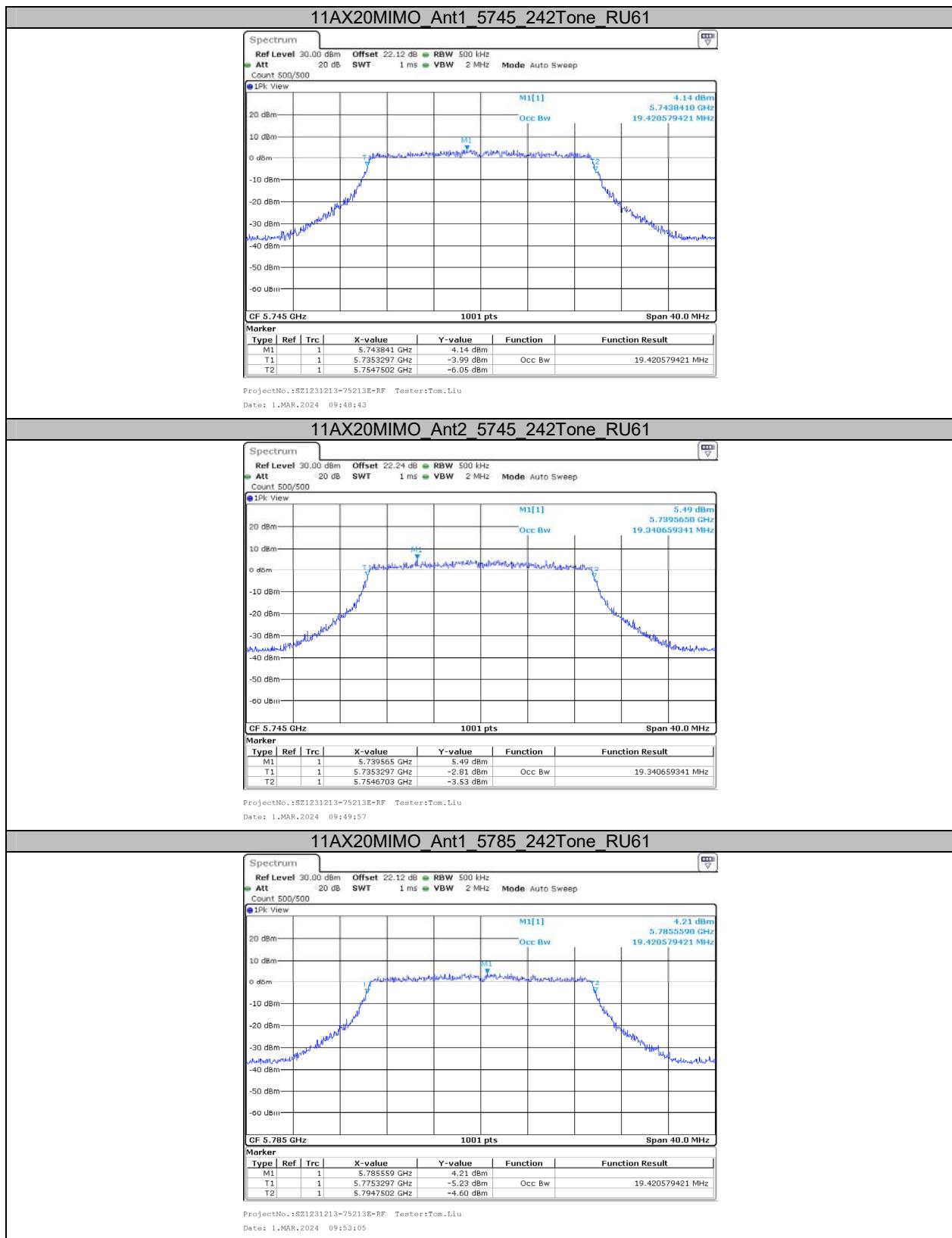
Test Result

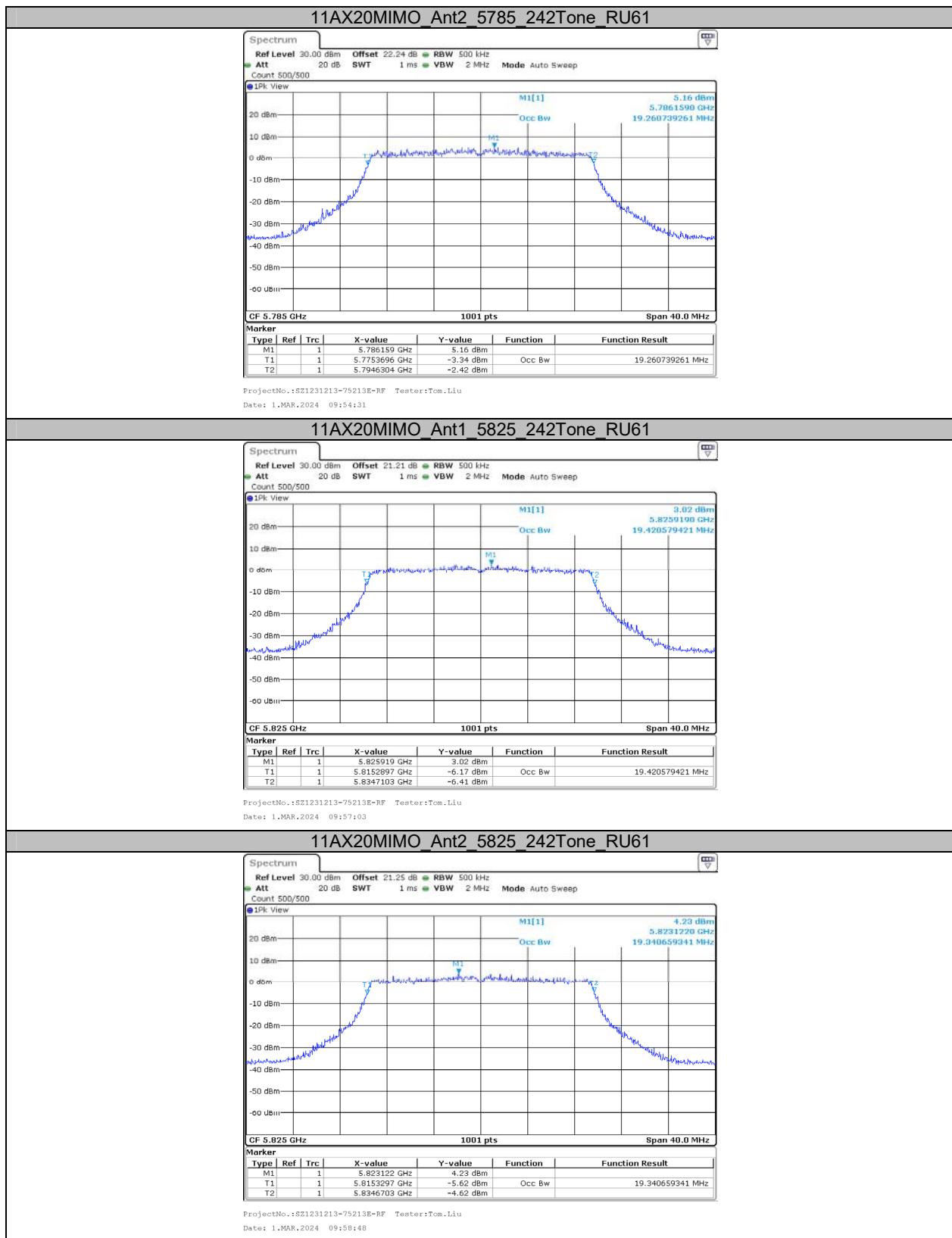
Test Mode	Antenna	Frequency [MHz]	Ru Size	Ru Index	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11AX20M IMO	Ant1	5180	242Tone	RU61	19.421	5170.2897	5189.7103	---	---
	Ant2	5180	242Tone	RU61	19.341	5170.3297	5189.6703	---	---
	Ant1	5200	242Tone	RU61	19.461	5190.2897	5209.7502	---	---
	Ant2	5200	242Tone	RU61	19.421	5190.2897	5209.7103	---	---
	Ant1	5240	242Tone	RU61	19.461	5230.2498	5249.7103	---	---
	Ant2	5240	242Tone	RU61	19.261	5230.3696	5249.6304	---	---
	Ant1	5745	242Tone	RU61	19.421	5735.3297	5754.7502	---	---
	Ant2	5745	242Tone	RU61	19.341	5735.3297	5754.6703	---	---
	Ant1	5785	242Tone	RU61	19.421	5775.3297	5794.7502	---	---
	Ant2	5785	242Tone	RU61	19.261	5775.3696	5794.6304	---	---
	Ant1	5825	242Tone	RU61	19.421	5815.2897	5834.7103	---	---
	Ant2	5825	242Tone	RU61	19.341	5815.3297	5834.6703	---	---
11AX40M IMO	Ant1	5190	484Tone	RU65	37.802	5171.1389	5208.9411	---	---
	Ant2	5190	484Tone	RU65	37.722	5171.1389	5208.8611	---	---
	Ant1	5230	484Tone	RU65	37.802	5211.1389	5248.9411	---	---
	Ant2	5230	484Tone	RU65	37.483	5211.2987	5248.7812	---	---
	Ant1	5755	484Tone	RU65	37.722	5736.2188	5773.9411	---	---
	Ant2	5755	484Tone	RU65	37.642	5736.2188	5773.8611	---	---
	Ant1	5795	484Tone	RU65	37.802	5776.1389	5813.9411	---	---
11AX80M IMO	Ant2	5795	484Tone	RU65	37.562	5776.2188	5813.7812	---	---
	Ant1	5210	996Tone	RU67	77.682	5171.1588	5248.8412	---	---
	Ant2	5210	996Tone	RU67	77.522	5171.1588	5248.6813	---	---
	Ant1	5775	996Tone	RU67	77.842	5736.1588	5814.0010	---	---
	Ant2	5775	996Tone	RU67	77.522	5736.3187	5813.8412	---	---

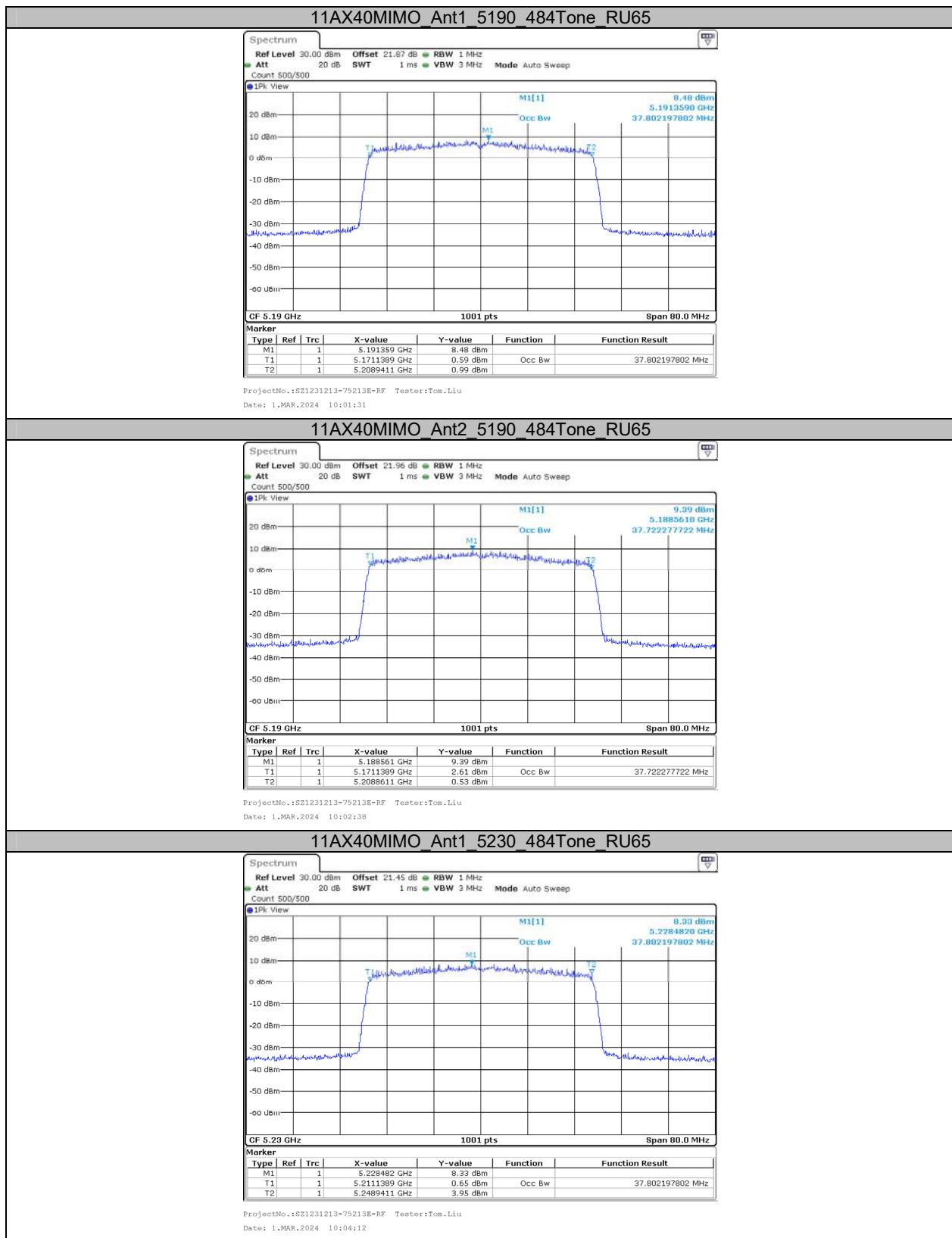
Test Graphs

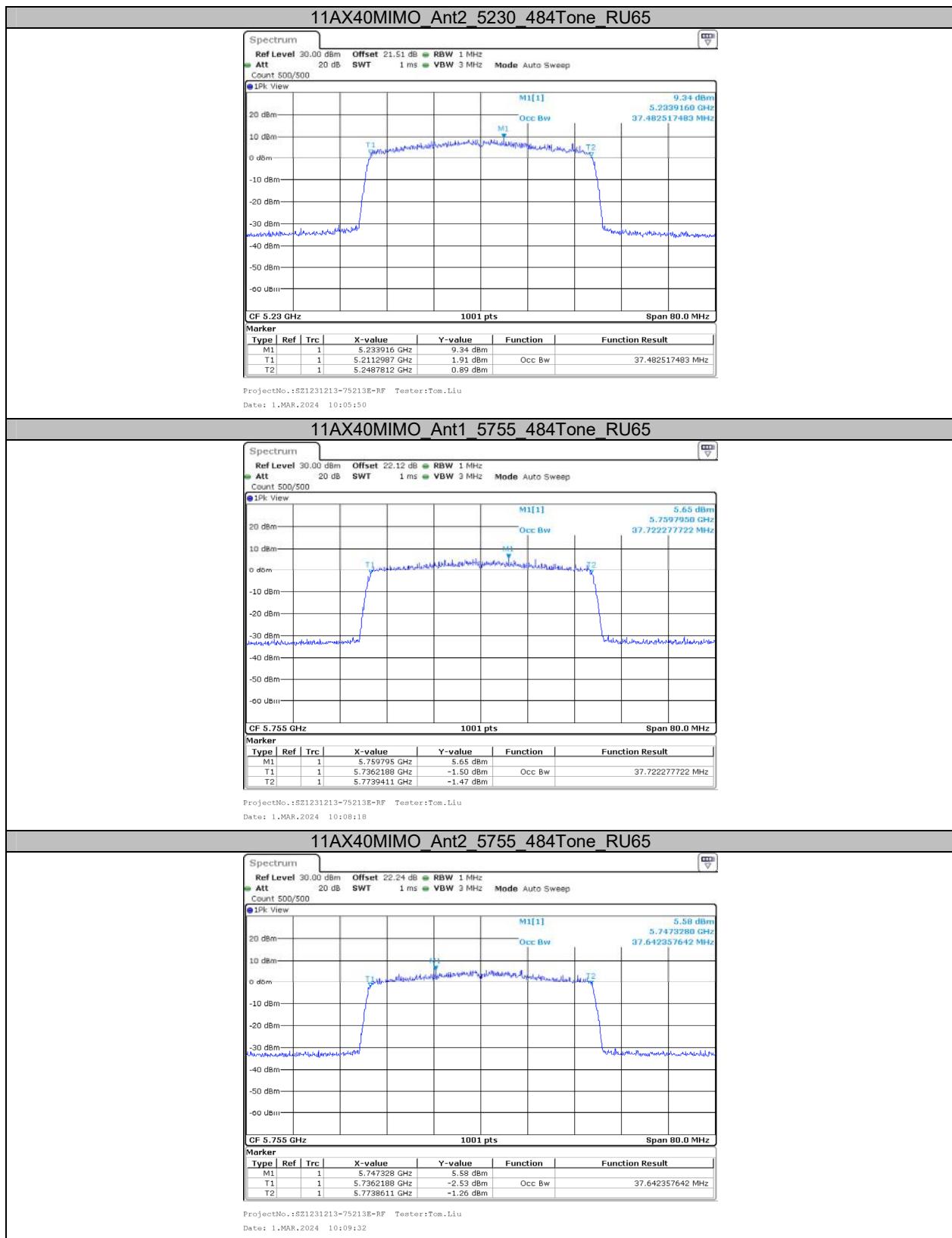


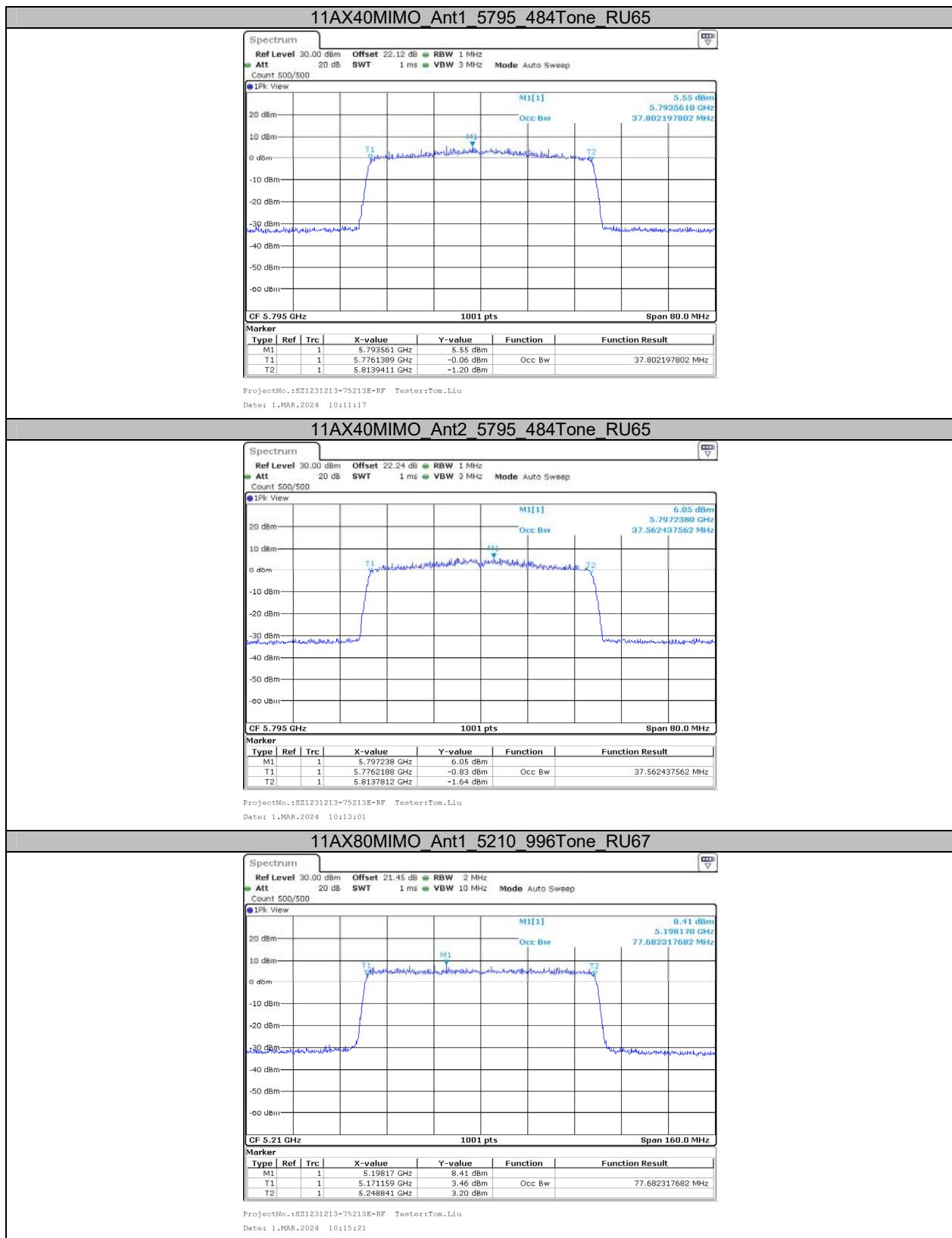


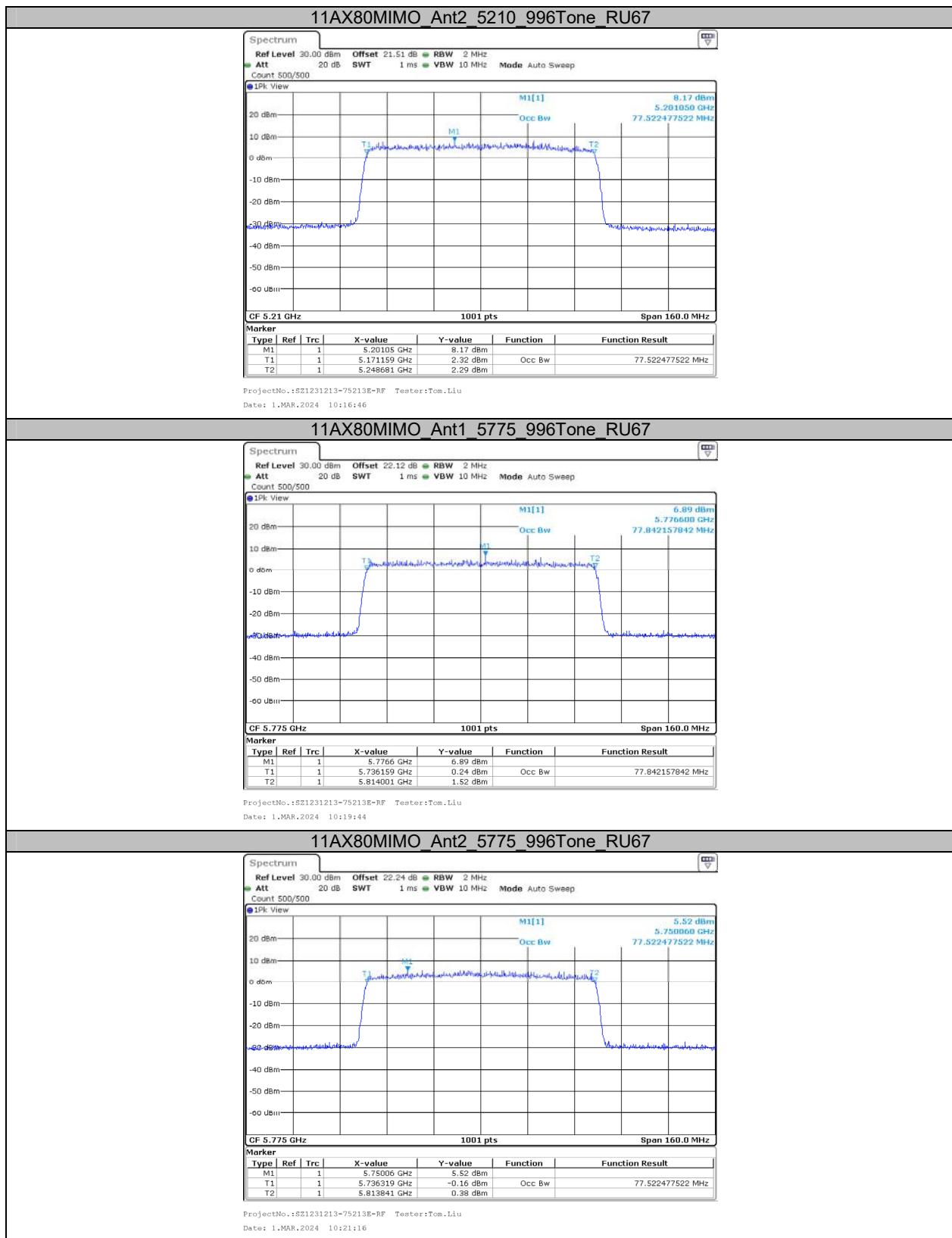










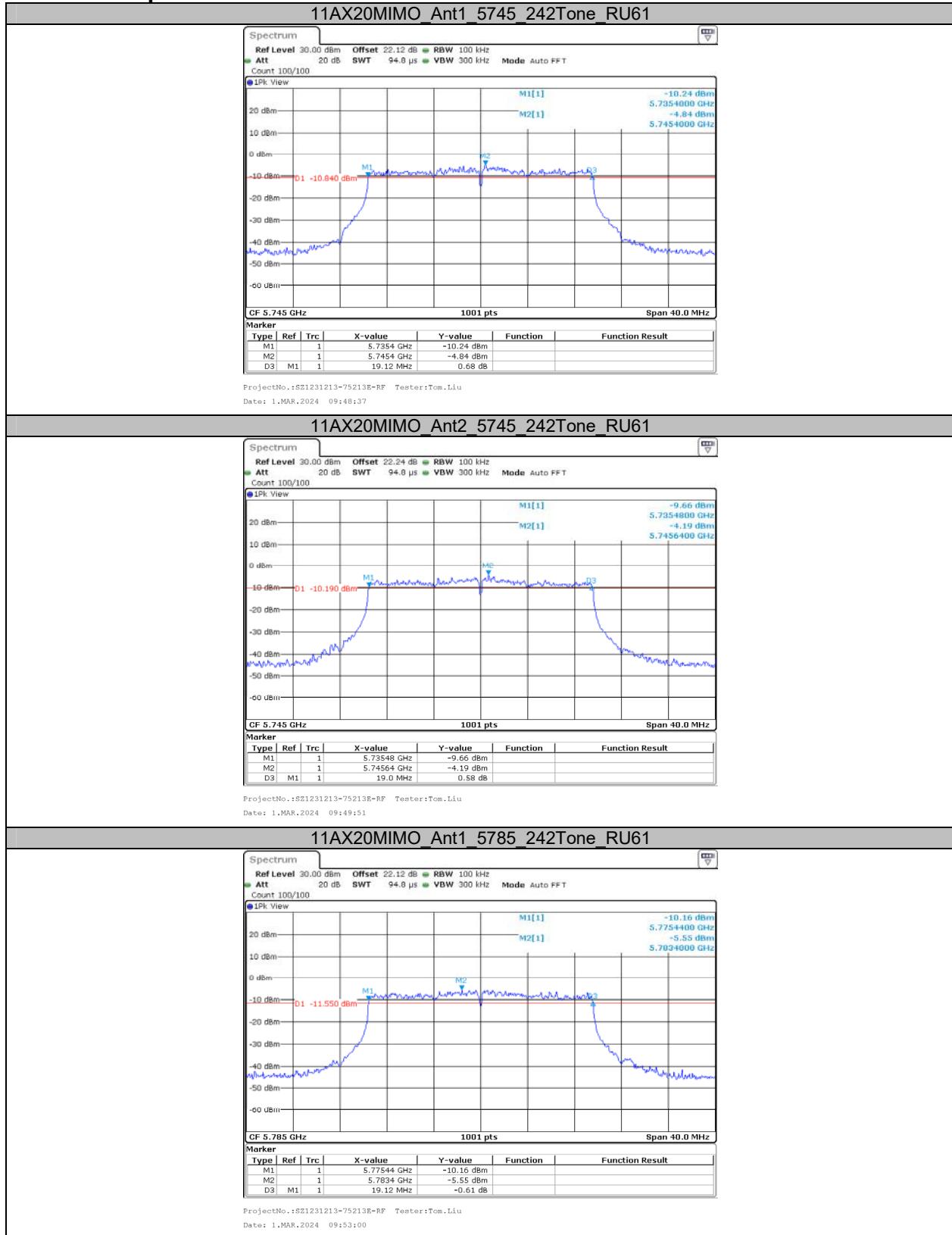


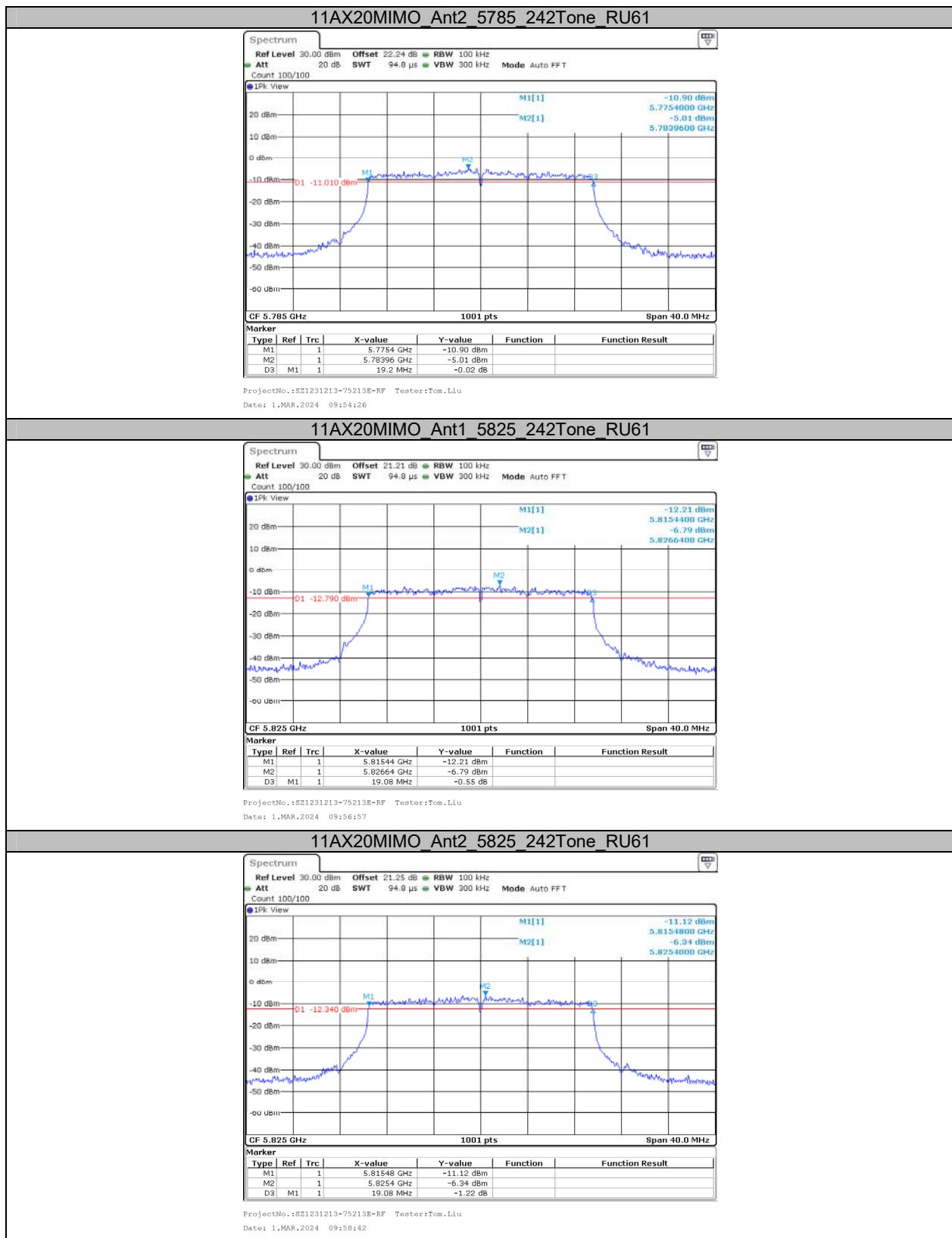
Appendix A3: Min emission bandwidth (for Band 4)

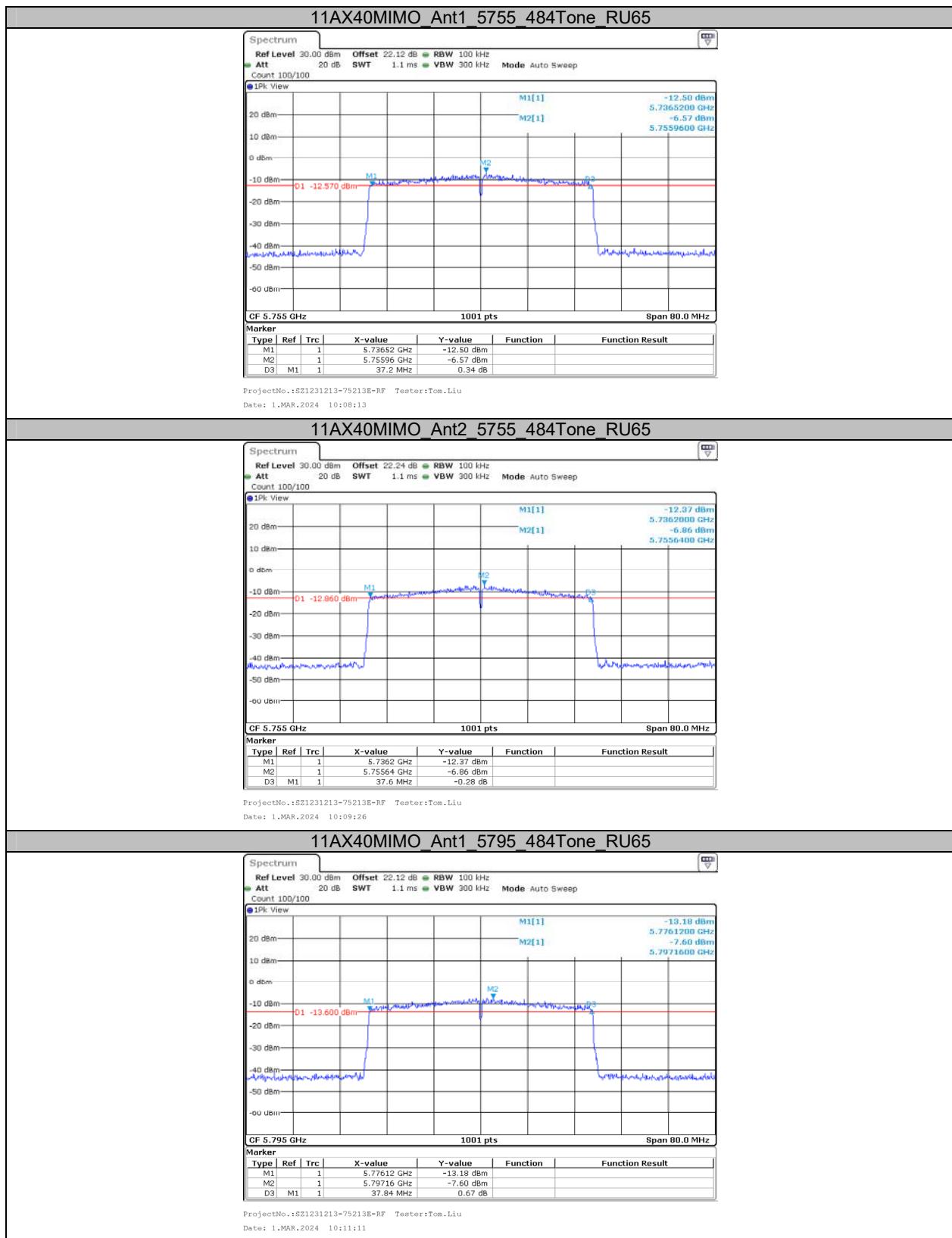
Test Result

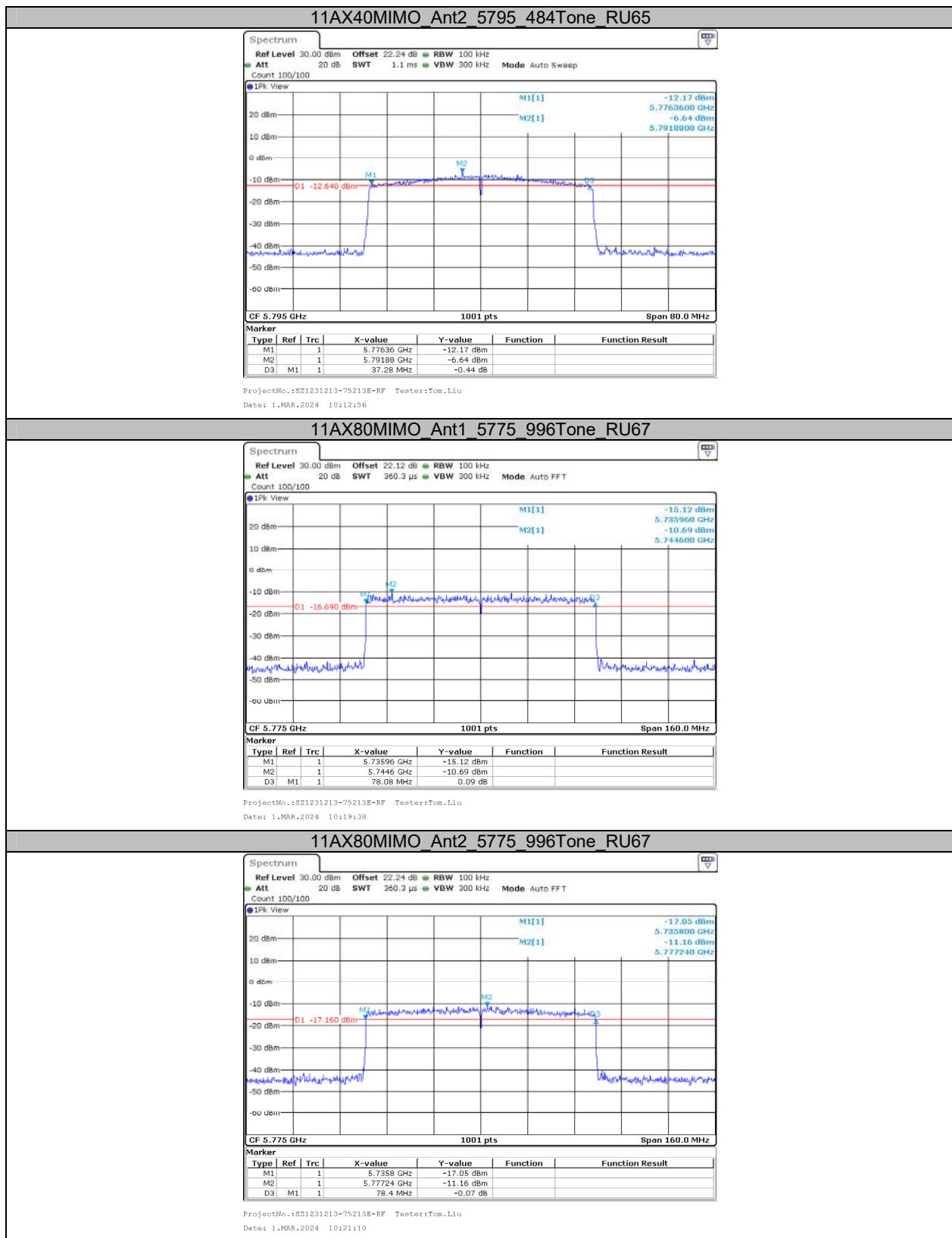
Test Mode	Antenna	Frequency[MHz]	Ru Size	Ru Index	6db BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11AX20M IMO	Ant1	5745	242Tone	RU61	19.12	5735.40	5754.52	0.5	PASS
	Ant2	5745	242Tone	RU61	19.00	5735.48	5754.48	0.5	PASS
	Ant1	5785	242Tone	RU61	19.12	5775.44	5794.56	0.5	PASS
	Ant2	5785	242Tone	RU61	19.20	5775.40	5794.60	0.5	PASS
	Ant1	5825	242Tone	RU61	19.08	5815.44	5834.52	0.5	PASS
	Ant2	5825	242Tone	RU61	19.08	5815.48	5834.56	0.5	PASS
11AX40M IMO	Ant1	5755	484Tone	RU65	37.20	5736.52	5773.72	0.5	PASS
	Ant2	5755	484Tone	RU65	37.60	5736.20	5773.80	0.5	PASS
	Ant1	5795	484Tone	RU65	37.84	5776.12	5813.96	0.5	PASS
	Ant2	5795	484Tone	RU65	37.28	5776.36	5813.64	0.5	PASS
11AX80M IMO	Ant1	5775	996Tone	RU67	78.08	5735.96	5814.04	0.5	PASS
	Ant2	5775	996Tone	RU67	78.40	5735.80	5814.20	0.5	PASS

Test Graphs









Appendix B: Maximum conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Ru Size	Ru Index	Result [dBm]	Limit [dBm]	Verdict
11AX20MIMO	Ant1	5180	26Tone	RU0	8.15	≤23.98	PASS
				RU8	7.29	≤23.98	PASS
			52Tone	RU37	9.15	≤23.98	PASS
				RU40	7.98	≤23.98	PASS
			106Tone	RU53	10.07	≤23.98	PASS
				RU54	9.90	≤23.98	PASS
			242Tone	RU61	11.76	≤23.98	PASS
	Ant2	5180	26Tone	RU0	8.41	≤23.98	PASS
				RU8	7.98	≤23.98	PASS
			52Tone	RU37	9.62	≤23.98	PASS
				RU40	8.46	≤23.98	PASS
			106Tone	RU53	10.01	≤23.98	PASS
				RU54	10.32	≤23.98	PASS
			242Tone	RU61	12.20	≤23.98	PASS
	total	5180	26Tone	RU0	11.29	≤23.98	PASS
				RU8	10.66	≤23.98	PASS
			52Tone	RU37	12.40	≤23.98	PASS
				RU40	11.24	≤23.98	PASS
			106Tone	RU53	13.05	≤23.98	PASS
				RU54	13.13	≤23.98	PASS
			242Tone	RU61	15.00	≤23.98	PASS
	Ant1	5200	26Tone	RU0	7.42	≤23.98	PASS
				RU8	7.58	≤23.98	PASS
			52Tone	RU37	7.95	≤23.98	PASS
				RU40	8.17	≤23.98	PASS
			106Tone	RU53	9.04	≤23.98	PASS
				RU54	8.98	≤23.98	PASS
			242Tone	RU61	11.07	≤23.98	PASS
	Ant2	5200	26Tone	RU0	8.03	≤23.98	PASS
				RU8	8.27	≤23.98	PASS
			52Tone	RU37	8.43	≤23.98	PASS
				RU40	8.54	≤23.98	PASS
			106Tone	RU53	9.50	≤23.98	PASS
				RU54	9.48	≤23.98	PASS
			242Tone	RU61	11.68	≤23.98	PASS
	total	5200	26Tone	RU0	10.75	≤23.98	PASS
				RU8	10.95	≤23.98	PASS
			52Tone	RU37	11.21	≤23.98	PASS
				RU40	11.37	≤23.98	PASS
			106Tone	RU53	12.29	≤23.98	PASS
				RU54	12.25	≤23.98	PASS
			242Tone	RU61	14.40	≤23.98	PASS
	Ant1	5240	26Tone	RU0	7.01	≤23.98	PASS
				RU8	7.10	≤23.98	PASS
			52Tone	RU37	7.25	≤23.98	PASS
				RU40	7.37	≤23.98	PASS
			106Tone	RU53	8.64	≤23.98	PASS
				RU54	8.57	≤23.98	PASS
			242Tone	RU61	10.98	≤23.98	PASS
	Ant2	5240	26Tone	RU0	8.06	≤23.98	PASS
				RU8	7.90	≤23.98	PASS

			52Tone	RU37	7.99	≤ 23.98	PASS
				RU40	8.22	≤ 23.98	PASS
			106Tone	RU53	9.28	≤ 23.98	PASS
				RU54	8.97	≤ 23.98	PASS
			242Tone	RU61	11.33	≤ 23.98	PASS
		5240	26Tone	RU0	10.58	≤ 23.98	PASS
				RU8	10.53	≤ 23.98	PASS
			52Tone	RU37	10.65	≤ 23.98	PASS
				RU40	10.83	≤ 23.98	PASS
			106Tone	RU53	11.98	≤ 23.98	PASS
				RU54	11.78	≤ 23.98	PASS
			242Tone	RU61	14.17	≤ 23.98	PASS
			26Tone	RU0	5.95	≤ 30.00	PASS
		5745		RU8	5.31	≤ 30.00	PASS
		52Tone	RU37	5.69	≤ 30.00	PASS	
			RU40	5.70	≤ 30.00	PASS	
		106Tone	RU53	6.08	≤ 30.00	PASS	
			RU54	6.00	≤ 30.00	PASS	
		242Tone	RU61	8.04	≤ 30.00	PASS	
		26Tone	RU0	6.27	≤ 30.00	PASS	
			RU8	5.84	≤ 30.00	PASS	
		5745	52Tone	RU37	6.14	≤ 30.00	PASS
				RU40	6.06	≤ 30.00	PASS
			106Tone	RU53	6.39	≤ 30.00	PASS
				RU54	6.34	≤ 30.00	PASS
			242Tone	RU61	8.62	≤ 30.00	PASS
			26Tone	RU0	9.12	≤ 30.00	PASS
				RU8	8.59	≤ 30.00	PASS
		5745	52Tone	RU37	8.93	≤ 30.00	PASS
				RU40	8.89	≤ 30.00	PASS
			106Tone	RU53	9.25	≤ 30.00	PASS
				RU54	9.18	≤ 30.00	PASS
			242Tone	RU61	11.35	≤ 30.00	PASS
			26Tone	RU0	6.07	≤ 30.00	PASS
				RU8	5.29	≤ 30.00	PASS
		5785	52Tone	RU37	6.16	≤ 30.00	PASS
				RU40	5.52	≤ 30.00	PASS
			106Tone	RU53	6.47	≤ 30.00	PASS
				RU54	6.14	≤ 30.00	PASS
			242Tone	RU61	8.13	≤ 30.00	PASS
			26Tone	RU0	6.99	≤ 30.00	PASS
				RU8	6.13	≤ 30.00	PASS
		5785	52Tone	RU37	6.91	≤ 30.00	PASS
				RU40	6.30	≤ 30.00	PASS
			106Tone	RU53	7.10	≤ 30.00	PASS
				RU54	6.78	≤ 30.00	PASS
			242Tone	RU61	8.69	≤ 30.00	PASS
			26Tone	RU0	9.56	≤ 30.00	PASS
				RU8	8.74	≤ 30.00	PASS
		5785	52Tone	RU37	9.56	≤ 30.00	PASS
				RU40	8.94	≤ 30.00	PASS
			106Tone	RU53	9.81	≤ 30.00	PASS
				RU54	9.48	≤ 30.00	PASS
			242Tone	RU61	11.43	≤ 30.00	PASS
			26Tone	RU0	4.88	≤ 30.00	PASS
				RU8	4.46	≤ 30.00	PASS
		5825	52Tone	RU37	5.28	≤ 30.00	PASS
				RU40	4.92	≤ 30.00	PASS

			106Tone	RU53	5.33	≤ 30.00	PASS	
				RU54	5.23	≤ 30.00	PASS	
				RU61	6.29	≤ 30.00	PASS	
			Ant2 5825	26Tone	RU0	5.94	≤ 30.00	PASS
				RU8	5.91	≤ 30.00	PASS	
				52Tone	RU37	6.31	≤ 30.00	PASS
				RU40	6.19	≤ 30.00	PASS	
				106Tone	RU53	6.51	≤ 30.00	PASS
				RU54	6.37	≤ 30.00	PASS	
				242Tone	RU61	7.43	≤ 30.00	PASS
				26Tone	RU0	8.45	≤ 30.00	PASS
				RU8	8.26	≤ 30.00	PASS	
11AX40MIMO			total 5825	52Tone	RU37	8.84	≤ 30.00	PASS
				RU40	8.61	≤ 30.00	PASS	
				106Tone	RU53	8.97	≤ 30.00	PASS
				RU54	8.85	≤ 30.00	PASS	
				242Tone	RU61	9.91	≤ 30.00	PASS
				26Tone	RU0	4.86	≤ 23.98	PASS
				RU17	4.55	≤ 23.98	PASS	
				52Tone	RU37	6.15	≤ 23.98	PASS
				RU44	5.58	≤ 23.98	PASS	
				106Tone	RU53	6.73	≤ 23.98	PASS
			Ant1 5190	RU56	6.33	≤ 23.98	PASS	
				242Tone	RU61	8.17	≤ 23.98	PASS
				RU62	8.20	≤ 23.98	PASS	
				484Tone	RU65	11.15	≤ 23.98	PASS
				26Tone	RU0	5.31	≤ 23.98	PASS
				RU17	4.83	≤ 23.98	PASS	
				52Tone	RU37	6.26	≤ 23.98	PASS
				RU44	5.69	≤ 23.98	PASS	
				106Tone	RU53	7.09	≤ 23.98	PASS
				RU56	6.58	≤ 23.98	PASS	
			Ant2 5190	242Tone	RU61	8.37	≤ 23.98	PASS
				RU62	8.39	≤ 23.98	PASS	
				484Tone	RU65	11.44	≤ 23.98	PASS
				26Tone	RU0	8.10	≤ 23.98	PASS
				RU17	7.70	≤ 23.98	PASS	
				52Tone	RU37	9.22	≤ 23.98	PASS
				RU44	8.65	≤ 23.98	PASS	
				106Tone	RU53	9.92	≤ 23.98	PASS
				RU56	9.47	≤ 23.98	PASS	
				242Tone	RU61	11.28	≤ 23.98	PASS
			total 5190	RU62	11.31	≤ 23.98	PASS	
				484Tone	RU65	14.31	≤ 23.98	PASS
				26Tone	RU0	4.49	≤ 23.98	PASS
				RU17	4.32	≤ 23.98	PASS	
				52Tone	RU37	5.47	≤ 23.98	PASS
				RU44	5.11	≤ 23.98	PASS	
				106Tone	RU53	6.24	≤ 23.98	PASS
				RU56	6.03	≤ 23.98	PASS	
				242Tone	RU61	7.96	≤ 23.98	PASS
				RU62	7.43	≤ 23.98	PASS	
			Ant1 5230	484Tone	RU65	11.15	≤ 23.98	PASS
				26Tone	RU0	4.82	≤ 23.98	PASS
				RU17	4.63	≤ 23.98	PASS	
				52Tone	RU37	5.56	≤ 23.98	PASS
				RU44	5.41	≤ 23.98	PASS	
				106Tone	RU53	6.35	≤ 23.98	PASS
				26Tone	RU0	4.82	≤ 23.98	PASS
				RU17	4.63	≤ 23.98	PASS	
				52Tone	RU37	5.56	≤ 23.98	PASS
				106Tone	RU53	6.35	≤ 23.98	PASS

				RU56	6.19	≤ 23.98	PASS		
242Tone	total	5230	242Tone	RU61	8.14	≤ 23.98	PASS		
				RU62	7.93	≤ 23.98	PASS		
				484Tone	RU65	11.25	≤ 23.98	PASS	
Ant1			26Tone	RU0	7.67	≤ 23.98	PASS		
				RU17	7.49	≤ 23.98	PASS		
			52Tone	RU37	8.53	≤ 23.98	PASS		
				RU44	8.27	≤ 23.98	PASS		
			106Tone	RU53	9.31	≤ 23.98	PASS		
				RU56	9.12	≤ 23.98	PASS		
			242Tone	RU61	11.06	≤ 23.98	PASS		
				RU62	10.70	≤ 23.98	PASS		
			484Tone	RU65	14.21	≤ 23.98	PASS		
			26Tone	RU0	4.54	≤ 30.00	PASS		
				RU17	4.42	≤ 30.00	PASS		
Ant2	5755	5755	52Tone	RU37	4.56	≤ 30.00	PASS		
				RU44	4.55	≤ 30.00	PASS		
			106Tone	RU53	5.04	≤ 30.00	PASS		
				RU56	5.15	≤ 30.00	PASS		
			242Tone	RU61	6.41	≤ 30.00	PASS		
				RU62	6.06	≤ 30.00	PASS		
			484Tone	RU65	7.94	≤ 30.00	PASS		
			26Tone	RU0	4.60	≤ 30.00	PASS		
				RU17	4.21	≤ 30.00	PASS		
			52Tone	RU37	4.63	≤ 30.00	PASS		
				RU44	4.88	≤ 30.00	PASS		
Ant1	5795	5795	106Tone	RU53	5.19	≤ 30.00	PASS		
				RU56	5.52	≤ 30.00	PASS		
			242Tone	RU61	6.61	≤ 30.00	PASS		
				RU62	6.36	≤ 30.00	PASS		
			484Tone	RU65	8.24	≤ 30.00	PASS		
			26Tone	RU0	7.58	≤ 30.00	PASS		
				RU17	7.33	≤ 30.00	PASS		
			52Tone	RU37	7.61	≤ 30.00	PASS		
				RU44	7.73	≤ 30.00	PASS		
Ant2	5795	5795	106Tone	RU53	8.13	≤ 30.00	PASS		
				RU56	8.35	≤ 30.00	PASS		
			242Tone	RU61	9.52	≤ 30.00	PASS		
				RU62	9.22	≤ 30.00	PASS		
			484Tone	RU65	11.10	≤ 30.00	PASS		
			26Tone	RU0	4.19	≤ 30.00	PASS		
				RU17	3.99	≤ 30.00	PASS		
			52Tone	RU37	4.43	≤ 30.00	PASS		
				RU44	4.31	≤ 30.00	PASS		
Ant1	5795	5795	106Tone	RU53	5.21	≤ 30.00	PASS		
				RU56	4.77	≤ 30.00	PASS		
			242Tone	RU61	5.86	≤ 30.00	PASS		
				RU62	5.30	≤ 30.00	PASS		
			484Tone	RU65	7.67	≤ 30.00	PASS		
			26Tone	RU0	4.40	≤ 30.00	PASS		
				RU17	4.08	≤ 30.00	PASS		
			52Tone	RU37	5.03	≤ 30.00	PASS		
				RU44	4.72	≤ 30.00	PASS		
Ant2	5795	5795	106Tone	RU53	5.65	≤ 30.00	PASS		
				RU56	5.26	≤ 30.00	PASS		
			242Tone	RU61	6.51	≤ 30.00	PASS		
				RU62	5.97	≤ 30.00	PASS		
			484Tone	RU65	8.16	≤ 30.00	PASS		

	total	5795	26Tone	RU0	7.31	≤ 30.00	PASS
				RU17	7.05	≤ 30.00	PASS
			52Tone	RU37	7.75	≤ 30.00	PASS
				RU44	7.53	≤ 30.00	PASS
			106Tone	RU53	8.45	≤ 30.00	PASS
				RU56	8.03	≤ 30.00	PASS
			242Tone	RU61	9.21	≤ 30.00	PASS
				RU62	8.66	≤ 30.00	PASS
			484Tone	RU65	10.93	≤ 30.00	PASS
11AX80MIMO	Ant1	5210	26Tone	RU0	4.11	≤ 23.98	PASS
				RU36	3.76	≤ 23.98	PASS
			52Tone	RU37	4.87	≤ 23.98	PASS
				RU52	4.38	≤ 23.98	PASS
			106Tone	RU53	5.18	≤ 23.98	PASS
				RU60	5.14	≤ 23.98	PASS
			242Tone	RU61	6.11	≤ 23.98	PASS
				RU64	6.06	≤ 23.98	PASS
			484Tone	RU65	7.63	≤ 23.98	PASS
				RU66	7.71	≤ 23.98	PASS
			996Tone	RU67	10.87	≤ 23.98	PASS
	Ant2	5210	26Tone	RU0	4.00	≤ 23.98	PASS
				RU36	3.45	≤ 23.98	PASS
			52Tone	RU37	4.68	≤ 23.98	PASS
				RU52	4.12	≤ 23.98	PASS
			106Tone	RU53	4.90	≤ 23.98	PASS
				RU60	4.89	≤ 23.98	PASS
			242Tone	RU61	5.99	≤ 23.98	PASS
				RU64	5.87	≤ 23.98	PASS
			484Tone	RU65	7.92	≤ 23.98	PASS
				RU66	8.18	≤ 23.98	PASS
			996Tone	RU67	10.86	≤ 23.98	PASS
	total	5210	26Tone	RU0	7.07	≤ 23.98	PASS
				RU36	6.62	≤ 23.98	PASS
			52Tone	RU37	7.79	≤ 23.98	PASS
				RU52	7.26	≤ 23.98	PASS
			106Tone	RU53	8.05	≤ 23.98	PASS
				RU60	8.03	≤ 23.98	PASS
			242Tone	RU61	9.06	≤ 23.98	PASS
				RU64	8.98	≤ 23.98	PASS
			484Tone	RU65	10.79	≤ 23.98	PASS
				RU66	10.96	≤ 23.98	PASS
			996Tone	RU67	13.88	≤ 23.98	PASS
	Ant1	5775	26Tone	RU0	4.39	≤ 30.00	PASS
				RU36	4.27	≤ 30.00	PASS
			52Tone	RU37	4.60	≤ 30.00	PASS
				RU52	4.55	≤ 30.00	PASS
			106Tone	RU53	5.18	≤ 30.00	PASS
				RU60	5.05	≤ 30.00	PASS
			242Tone	RU61	5.79	≤ 30.00	PASS
				RU64	5.82	≤ 30.00	PASS
			484Tone	RU65	6.80	≤ 30.00	PASS
				RU66	6.86	≤ 30.00	PASS
			996Tone	RU67	8.97	≤ 30.00	PASS
	Ant2	5775	26Tone	RU0	4.06	≤ 30.00	PASS
				RU36	3.92	≤ 30.00	PASS
			52Tone	RU37	4.62	≤ 30.00	PASS
				RU52	4.49	≤ 30.00	PASS
			106Tone	RU53	5.17	≤ 30.00	PASS

				RU60	5.01	≤ 30.00	PASS
242Tone				RU61	5.93	≤ 30.00	PASS
				RU64	5.96	≤ 30.00	PASS
				RU65	7.17	≤ 30.00	PASS
484Tone				RU66	7.09	≤ 30.00	PASS
				RU67	9.02	≤ 30.00	PASS
total	5775	26Tone		RU0	7.24	≤ 30.00	PASS
				RU36	7.11	≤ 30.00	PASS
		52Tone		RU37	7.62	≤ 30.00	PASS
				RU52	7.53	≤ 30.00	PASS
		106Tone		RU53	8.19	≤ 30.00	PASS
				RU60	8.04	≤ 30.00	PASS
		242Tone		RU61	8.87	≤ 30.00	PASS
				RU64	8.90	≤ 30.00	PASS
		484Tone		RU65	10.00	≤ 30.00	PASS
				RU66	9.99	≤ 30.00	PASS
		996Tone		RU67	12.01	≤ 30.00	PASS

Note: The Duty Cycle Factor is compensated in the graph.

Appendix C: Maximum power spectral density

Test Result

Test Mode	Antenna	Frequency[MHz]	Ru Size	Ru Index	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11AX20MIMO	Ant1	5180	26Tone	RU0	5.52	≤11.00	PASS
				RU8	4.64	≤11.00	PASS
			52Tone	RU37	3.95	≤11.00	PASS
				RU40	2.73	≤11.00	PASS
			106Tone	RU53	2.23	≤11.00	PASS
				RU54	2.09	≤11.00	PASS
			242Tone	RU61	0.35	≤11.00	PASS
	Ant2	5180	26Tone	RU0	5.86	≤11.00	PASS
				RU8	5.34	≤11.00	PASS
			52Tone	RU37	4.58	≤11.00	PASS
				RU40	3.2	≤11.00	PASS
			106Tone	RU53	2.46	≤11.00	PASS
				RU54	2.46	≤11.00	PASS
			242Tone	RU61	0.89	≤11.00	PASS
	total	5180	26Tone	RU0	8.70	≤11.00	PASS
				RU8	8.01	≤11.00	PASS
			52Tone	RU37	7.29	≤11.00	PASS
				RU40	5.98	≤11.00	PASS
			106Tone	RU53	5.36	≤11.00	PASS
				RU54	5.29	≤11.00	PASS
			242Tone	RU61	3.64	≤11.00	PASS
	Ant1	5200	26Tone	RU0	4.82	≤11.00	PASS
				RU8	5.07	≤11.00	PASS
			52Tone	RU37	2.65	≤11.00	PASS
				RU40	3.15	≤11.00	PASS
			106Tone	RU53	1.72	≤11.00	PASS
				RU54	1.62	≤11.00	PASS
			242Tone	RU61	-0.22	≤11.00	PASS
	Ant2	5200	26Tone	RU0	5.4	≤11.00	PASS
				RU8	5.63	≤11.00	PASS
			52Tone	RU37	3.26	≤11.00	PASS
				RU40	3.46	≤11.00	PASS
			106Tone	RU53	1.91	≤11.00	PASS
				RU54	2.03	≤11.00	PASS
			242Tone	RU61	0.32	≤11.00	PASS
	total	5200	26Tone	RU0	8.13	≤11.00	PASS
				RU8	8.37	≤11.00	PASS
			52Tone	RU37	5.98	≤11.00	PASS
				RU40	6.32	≤11.00	PASS
			106Tone	RU53	4.83	≤11.00	PASS
				RU54	4.84	≤11.00	PASS
			242Tone	RU61	3.07	≤11.00	PASS
	Ant1	5240	26Tone	RU0	4.29	≤11.00	PASS
				RU8	4.54	≤11.00	PASS
			52Tone	RU37	2.18	≤11.00	PASS
				RU40	2.33	≤11.00	PASS
			106Tone	RU53	1.13	≤11.00	PASS
				RU54	1.1	≤11.00	PASS
			242Tone	RU61	-0.26	≤11.00	PASS
	Ant2	5240	26Tone	RU0	5.37	≤11.00	PASS
				RU8	5.13	≤11.00	PASS

			52Tone	RU37	2.84	≤ 11.00	PASS
			RU40	3.1	≤ 11.00	PASS	
			106Tone	RU53	1.57	≤ 11.00	PASS
			RU54	1.62	≤ 11.00	PASS	
			242Tone	RU61	0.11	≤ 11.00	PASS
		5240	26Tone	RU0	7.87	≤ 11.00	PASS
				RU8	7.86	≤ 11.00	PASS
			52Tone	RU37	5.53	≤ 11.00	PASS
				RU40	5.74	≤ 11.00	PASS
			106Tone	RU53	4.37	≤ 11.00	PASS
				RU54	4.38	≤ 11.00	PASS
			242Tone	RU61	2.94	≤ 11.00	PASS
			26Tone	RU0	0.76	≤ 30.00	PASS
		5745		RU8	-0.1	≤ 30.00	PASS
		52Tone	RU37	-2.24	≤ 30.00	PASS	
			RU40	-2.04	≤ 30.00	PASS	
		106Tone	RU53	-4.15	≤ 30.00	PASS	
			RU54	-4.3	≤ 30.00	PASS	
		242Tone	RU61	-6.15	≤ 30.00	PASS	
		26Tone	RU0	1.01	≤ 30.00	PASS	
			RU8	0.34	≤ 30.00	PASS	
		5745	52Tone	RU37	-1.53	≤ 30.00	PASS
				RU40	-1.94	≤ 30.00	PASS
			106Tone	RU53	-3.85	≤ 30.00	PASS
				RU54	-3.9	≤ 30.00	PASS
			242Tone	RU61	-5.46	≤ 30.00	PASS
			26Tone	RU0	3.90	≤ 30.00	PASS
				RU8	3.14	≤ 30.00	PASS
		5745	52Tone	RU37	1.14	≤ 30.00	PASS
				RU40	1.02	≤ 30.00	PASS
			106Tone	RU53	-0.99	≤ 30.00	PASS
				RU54	-1.09	≤ 30.00	PASS
			242Tone	RU61	-2.78	≤ 30.00	PASS
			26Tone	RU0	0.96	≤ 30.00	PASS
				RU8	0.07	≤ 30.00	PASS
		5785	52Tone	RU37	-1.53	≤ 30.00	PASS
				RU40	-2.46	≤ 30.00	PASS
			106Tone	RU53	-3.77	≤ 30.00	PASS
				RU54	-4.37	≤ 30.00	PASS
			242Tone	RU61	-6.05	≤ 30.00	PASS
			26Tone	RU0	1.74	≤ 30.00	PASS
				RU8	0.69	≤ 30.00	PASS
		5785	52Tone	RU37	-1.07	≤ 30.00	PASS
				RU40	-1.66	≤ 30.00	PASS
			106Tone	RU53	-3.16	≤ 30.00	PASS
				RU54	-3.52	≤ 30.00	PASS
			242Tone	RU61	-5.41	≤ 30.00	PASS
			26Tone	RU0	4.38	≤ 30.00	PASS
				RU8	3.40	≤ 30.00	PASS
		5785	52Tone	RU37	1.72	≤ 30.00	PASS
				RU40	0.97	≤ 30.00	PASS
			106Tone	RU53	-0.44	≤ 30.00	PASS
				RU54	-0.91	≤ 30.00	PASS
			242Tone	RU61	-2.71	≤ 30.00	PASS
			26Tone	RU0	-0.64	≤ 30.00	PASS
				RU8	-0.93	≤ 30.00	PASS
		5825	52Tone	RU37	-2.57	≤ 30.00	PASS
				RU40	-3.08	≤ 30.00	PASS

	Ant2	5825	106Tone	RU53	-5.05	≤ 30.00	PASS
				RU54	-5.22	≤ 30.00	PASS
			242Tone	RU61	-7.91	≤ 30.00	PASS
			26Tone	RU0	0.74	≤ 30.00	PASS
				RU8	0.65	≤ 30.00	PASS
			52Tone	RU37	-1.54	≤ 30.00	PASS
				RU40	-1.79	≤ 30.00	PASS
			106Tone	RU53	-3.65	≤ 30.00	PASS
				RU54	-3.97	≤ 30.00	PASS
			242Tone	RU61	-6.49	≤ 30.00	PASS
	total	5825	26Tone	RU0	3.11	≤ 30.00	PASS
				RU8	2.94	≤ 30.00	PASS
			52Tone	RU37	0.99	≤ 30.00	PASS
				RU40	0.62	≤ 30.00	PASS
			106Tone	RU53	-1.28	≤ 30.00	PASS
				RU54	-1.54	≤ 30.00	PASS
			242Tone	RU61	-4.13	≤ 30.00	PASS
			26Tone	RU0	2.01	≤ 11.00	PASS
				RU17	1.85	≤ 11.00	PASS
	Ant1	5190	52Tone	RU37	0.75	≤ 11.00	PASS
				RU44	0.01	≤ 11.00	PASS
			106Tone	RU53	-1.71	≤ 11.00	PASS
				RU56	-1.99	≤ 11.00	PASS
			242Tone	RU61	-3.61	≤ 11.00	PASS
				RU62	-3.71	≤ 11.00	PASS
			484Tone	RU65	-2.34	≤ 11.00	PASS
			26Tone	RU0	2.69	≤ 11.00	PASS
				RU17	2.12	≤ 11.00	PASS
	Ant2	5190	52Tone	RU37	0.78	≤ 11.00	PASS
				RU44	0.13	≤ 11.00	PASS
			106Tone	RU53	-1.32	≤ 11.00	PASS
				RU56	-1.83	≤ 11.00	PASS
			242Tone	RU61	-3.48	≤ 11.00	PASS
				RU62	-3.72	≤ 11.00	PASS
			484Tone	RU65	-1.99	≤ 11.00	PASS
			26Tone	RU0	5.37	≤ 11.00	PASS
				RU17	5.00	≤ 11.00	PASS
11AX40MIMO	total	5190	52Tone	RU37	3.78	≤ 11.00	PASS
				RU44	3.08	≤ 11.00	PASS
			106Tone	RU53	1.50	≤ 11.00	PASS
				RU56	1.10	≤ 11.00	PASS
			242Tone	RU61	-0.53	≤ 11.00	PASS
				RU62	-0.70	≤ 11.00	PASS
			484Tone	RU65	0.85	≤ 11.00	PASS
			26Tone	RU0	1.73	≤ 11.00	PASS
				RU17	1.47	≤ 11.00	PASS
	Ant1	5230	52Tone	RU37	-0.23	≤ 11.00	PASS
				RU44	-0.41	≤ 11.00	PASS
			106Tone	RU53	-2.11	≤ 11.00	PASS
				RU56	-2.5	≤ 11.00	PASS
			242Tone	RU61	-4.05	≤ 11.00	PASS
				RU62	-4.42	≤ 11.00	PASS
			484Tone	RU65	-2.29	≤ 11.00	PASS
			26Tone	RU0	1.92	≤ 11.00	PASS
				RU17	1.81	≤ 11.00	PASS
	Ant2	5230	52Tone	RU37	0.14	≤ 11.00	PASS
				RU44	-0.08	≤ 11.00	PASS
			106Tone	RU53	-1.92	≤ 11.00	PASS

				RU56	-2.35	≤ 11.00	PASS
			242Tone	RU61	-3.72	≤ 11.00	PASS
				RU62	-3.91	≤ 11.00	PASS
				484Tone	RU65	-2.1	≤ 11.00
	total	5230	26Tone	RU0	4.84	≤ 11.00	PASS
				RU17	4.65	≤ 11.00	PASS
			52Tone	RU37	2.97	≤ 11.00	PASS
				RU44	2.77	≤ 11.00	PASS
			106Tone	RU53	1.00	≤ 11.00	PASS
				RU56	0.59	≤ 11.00	PASS
			242Tone	RU61	-0.87	≤ 11.00	PASS
				RU62	-1.15	≤ 11.00	PASS
			484Tone	RU65	0.82	≤ 11.00	PASS
			26Tone	RU0	-0.82	≤ 30.00	PASS
	Ant1	5755	RU17	-1.27	≤ 30.00	PASS	
			52Tone	RU37	-3.69	≤ 30.00	PASS
				RU44	-3.94	≤ 30.00	PASS
			106Tone	RU53	-6.31	≤ 30.00	PASS
				RU56	-6.05	≤ 30.00	PASS
			242Tone	RU61	-8.5	≤ 30.00	PASS
				RU62	-8.57	≤ 30.00	PASS
			484Tone	RU65	-8.42	≤ 30.00	PASS
			26Tone	RU0	-0.82	≤ 30.00	PASS
			RU17	-1.22	≤ 30.00	PASS	
	Ant2	5755	52Tone	RU37	-3.55	≤ 30.00	PASS
				RU44	-3.5	≤ 30.00	PASS
			106Tone	RU53	-6.06	≤ 30.00	PASS
				RU56	-5.98	≤ 30.00	PASS
			242Tone	RU61	-8.1	≤ 30.00	PASS
				RU62	-8.61	≤ 30.00	PASS
			484Tone	RU65	-7.94	≤ 30.00	PASS
			26Tone	RU0	2.19	≤ 30.00	PASS
			RU17	1.77	≤ 30.00	PASS	
			52Tone	RU37	-0.61	≤ 30.00	PASS
	total	5755		RU44	-0.70	≤ 30.00	PASS
		106Tone	RU53	-3.17	≤ 30.00	PASS	
			RU56	-3.00	≤ 30.00	PASS	
		242Tone	RU61	-5.29	≤ 30.00	PASS	
			RU62	-5.58	≤ 30.00	PASS	
		484Tone	RU65	-5.16	≤ 30.00	PASS	
		26Tone	RU0	-1.27	≤ 30.00	PASS	
		RU17	-1.36	≤ 30.00	PASS		
		52Tone	RU37	-3.96	≤ 30.00	PASS	
			RU44	-4.18	≤ 30.00	PASS	
	Ant1	5795	106Tone	RU53	-6.13	≤ 30.00	PASS
				RU56	-6.56	≤ 30.00	PASS
			242Tone	RU61	-8.74	≤ 30.00	PASS
				RU62	-9.26	≤ 30.00	PASS
			484Tone	RU65	-8.47	≤ 30.00	PASS
			26Tone	RU0	-0.97	≤ 30.00	PASS
			RU17	-1.31	≤ 30.00	PASS	
			52Tone	RU37	-3.45	≤ 30.00	PASS
				RU44	-3.71	≤ 30.00	PASS
	Ant2	5795	106Tone	RU53	-5.75	≤ 30.00	PASS
				RU56	-5.57	≤ 30.00	PASS
			242Tone	RU61	-8.4	≤ 30.00	PASS
				RU62	-8.73	≤ 30.00	PASS
			484Tone	RU65	-8.07	≤ 30.00	PASS

	total	5795	26Tone	RU0	1.89	≤ 30.00	PASS
				RU17	1.68	≤ 30.00	PASS
			52Tone	RU37	-0.69	≤ 30.00	PASS
				RU44	-0.93	≤ 30.00	PASS
			106Tone	RU53	-2.93	≤ 30.00	PASS
				RU56	-3.03	≤ 30.00	PASS
			242Tone	RU61	-5.56	≤ 30.00	PASS
				RU62	-5.98	≤ 30.00	PASS
			484Tone	RU65	-5.26	≤ 30.00	PASS
			Ant1	RU0	1.17	≤ 11.00	PASS
				RU36	1.14	≤ 11.00	PASS
				RU37	-0.62	≤ 11.00	PASS
				RU52	-1.23	≤ 11.00	PASS
				RU53	-3.4	≤ 11.00	PASS
				RU60	-3.3	≤ 11.00	PASS
				RU61	-5.68	≤ 11.00	PASS
				RU64	-5.86	≤ 11.00	PASS
				RU65	-6.72	≤ 11.00	PASS
				RU66	-7.18	≤ 11.00	PASS
				RU67	-7.2	≤ 11.00	PASS
11AX80MIMO	Ant2	5210	26Tone	RU0	1.14	≤ 11.00	PASS
				RU36	0.47	≤ 11.00	PASS
			52Tone	RU37	-0.8	≤ 11.00	PASS
				RU52	-1.46	≤ 11.00	PASS
			106Tone	RU53	-3.61	≤ 11.00	PASS
				RU60	-3.64	≤ 11.00	PASS
			242Tone	RU61	-6.06	≤ 11.00	PASS
				RU64	-6.22	≤ 11.00	PASS
			484Tone	RU65	-6.68	≤ 11.00	PASS
				RU66	-6.59	≤ 11.00	PASS
				RU67	-6.93	≤ 11.00	PASS
	total	5210	26Tone	RU0	4.17	≤ 11.00	PASS
				RU36	3.83	≤ 11.00	PASS
			52Tone	RU37	2.30	≤ 11.00	PASS
				RU52	1.67	≤ 11.00	PASS
			106Tone	RU53	-0.49	≤ 11.00	PASS
				RU60	-0.46	≤ 11.00	PASS
			242Tone	RU61	-2.86	≤ 11.00	PASS
				RU64	-3.03	≤ 11.00	PASS
	Ant1	5775	484Tone	RU65	-3.69	≤ 11.00	PASS
				RU66	-3.86	≤ 11.00	PASS
				RU67	-4.05	≤ 11.00	PASS
			26Tone	RU0	-1.3	≤ 30.00	PASS
				RU36	-0.93	≤ 30.00	PASS
			52Tone	RU37	-3.77	≤ 30.00	PASS
				RU52	-3.79	≤ 30.00	PASS
			106Tone	RU53	-6.34	≤ 30.00	PASS
				RU60	-6.29	≤ 30.00	PASS
			242Tone	RU61	-8.85	≤ 30.00	PASS
				RU64	-8.8	≤ 30.00	PASS
	Ant2	5775	484Tone	RU65	-10.25	≤ 30.00	PASS
				RU66	-10.47	≤ 30.00	PASS
				RU67	-11.85	≤ 30.00	PASS
			26Tone	RU0	-1.46	≤ 30.00	PASS
				RU36	-1.52	≤ 30.00	PASS
			52Tone	RU37	-4.02	≤ 30.00	PASS
				RU52	-3.94	≤ 30.00	PASS
			106Tone	RU53	-6.34	≤ 30.00	PASS

				RU60	-6.4	≤ 30.00	PASS
			242Tone	RU61	-8.84	≤ 30.00	PASS
				RU64	-8.96	≤ 30.00	PASS
				RU65	-10.59	≤ 30.00	PASS
		5775	484Tone	RU66	-10.55	≤ 30.00	PASS
				996Tone	RU67	-11.44	≤ 30.00
			26Tone	RU0	1.63	≤ 30.00	PASS
			52Tone	RU36	1.80	≤ 30.00	PASS
				RU37	-0.88	≤ 30.00	PASS
			106Tone	RU52	-0.85	≤ 30.00	PASS
			242Tone	RU53	-3.33	≤ 30.00	PASS
				RU60	-3.33	≤ 30.00	PASS
			484Tone	RU61	-5.83	≤ 30.00	PASS
			996Tone	RU64	-5.87	≤ 30.00	PASS
				RU65	-7.41	≤ 30.00	PASS
			996Tone	RU66	-7.50	≤ 30.00	PASS
				RU67	-8.63	≤ 30.00	PASS

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2.The Duty Cycle Factor is compensated in the graph.

Test Graphs

