FCC Test Report

Report No.:	2405V85580EE
Applicant:	SHEN ZHEN XIN SHENG SHANG TECHNOLOGY CO.,LTD
Address:	Room 303, Building 9, No. 54-6, Guanlan Avenue, Xinhe Community, Fucheng Street, Longhua District, Shenzhen City, Guangdong Province, 518110 China
Product Name:	Tablet
Product Model:	N02 Pro
Multiple Models:	Q16, Q17,N02, N04, N05, N06, T702 Pro
Trade Mark:	N/A
FCC ID:	2BDRG-T0012407
Standards:	FCC CFR Title 47 Part 15E (§15.407)
Test Date:	2024-07-17 to 2024-08-13
Test Result:	Complied
Issue Date:	2024-08-16

Reviewed by: Abel Chen **Approved by:** Jacob Kong

Abel Chen
Project Engineer

Jacob Kong
Manager

Prepared by:

World Alliance Testing & Certification (Shenzhen) Co., Ltd

No. 1002, East Block, Laobing Building, Xingye Road 3012, Xixiang street, Bao'an District, Shenzhen, Guangdong, People's Republic of China

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Announcement

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2. The results in this report apply only to the sample tested.

3. This sample tested is in compliance with the limits of the above regulation.

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5. 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.

Revision History

Version No.	Issued Date	Description
00	*2024-08-16*	*Original*

Contents

1 General Information

1.1 Client Information

Applicant:	SHEN ZHEN XIN SHENG SHANG TECHNOLOGY CO.,LTD
Address:	Room 303, Building 9, No. 54-6, Guanlan Avenue, Xinhe Community, Fucheng Street, Longhua District, Shenzhen City, Guangdong Province, 518110 China
Manufacturer:	SHEN ZHEN XIN SHENG SHANG TECHNOLOGY CO.,LTD
Address:	Room 303, Building 9, No. 54-6, Guanlan Avenue, Xinhe Community, Fucheng Street, Longhua District, Shenzhen City, Guangdong Province, 518110 China

1.2 Product Description of EUT

The EUT is Tablet that contains Classic Bluetooth(BDR/EDR), BLE, 2.4G and 5G WLAN radios, this report covers the full testing of the 5G WLAN radio.

Sample Serial number	2ODG-4for CE test, 2ODG-1 for RE and RF test (assigned by WATC)
Sample Received Date	2024-07-12
Sample Status	Good Condition
Frequency Range	5150 MHz - 5250MHz(a/n20/n40/ac20/ac40/ac80/ax20/ax40/ax80)
Maximum Conducted Output Power	5150 MHz - 5250MHz: 13.61dBm
Modulation Technology	OFDM, OFDMA
Spatial Streams	SISO (1TX, 1RX)
Antenna Gain#	0.28dBi
Power Supply	DC 5V from adapter or DC 3.8V from battery
Adapter Information	Model: FX2U-050200U Input: AC100-240V, 50/60Hz, 0.4A Output: DC 5V/2A
Modification	Sample No Modification by the test lab

1.3 Antenna information

15.203 requirement:

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, 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.

Device Antenna information:	

The Wi-Fi antenna is an internal antenna which cannot replace by end-user. Please see the product internal photos for details.

1.4 Related Submittal(s)/Grant(s)

FCC Part 15, Subpart C, Equipment Class: DSS, FCC ID: 2BDRG-T0012407

FCC Part 15, Subpart E, Equipment Class: DTS, FCC ID: 2BDRG-T0012407

1.5 Measurement Uncertainty

Parameter		Expanded Uncertainty (Confidence of 95%(U = 2Uc(y)))
AC Power Lines Conducted Emissions		±3.14dB
Emissions, Radiated	Below 30MHz	±2.78dB
	Below 1GHz	±4.84dB
	Above 1GHz	±5.44dB
Emissions, Conducted		1.75dB
Conducted Power		0.74dB
Frequency Error		150Hz
Bandwidth		0.34%
Power Spectral Density		0.74dB

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.*

1.6 Laboratory Location

World Alliance Testing & Certification (Shenzhen) Co., Ltd

No. 1002, East Block, Laobing Building, Xingye Road 3012, Xixiang street, Bao'an District, Shenzhen, Guangdong, People's Republic of China

Tel: +86-755-29691511, Email: qa@watc.com.cn

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. : 463912, the FCC Designation No. : CN5040.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0160.

1.7 Test Methodology

FCC CFR 47 Part 2

FCC CFR 47 Part 15

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

ANSI C63.10-2013

2 Description of Measurement

2.1 Test Configuration

Operating channels: (5150-5250MHz)					
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
36	5180	42	5210	48	5240
38	5190	44	5220	/	/
40	5200	46	5230	/	/
According to ANSI C63.10-2013 chapter 5.6.1 Table 11 requirement, select lowest channel, middle channel, and highest channel in the frequency range in which device operates for testing. The detailed frequency points are as follows:					
802.11a, 802.11n-HT20, 802.11ac-VHT20, 802.11ax-HE20					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
36	5180	40	5200	48	5240
802.11n-HT40, 802.11ac-VHT40, 802.11ax-HE40					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
38	5190	/	/	46	5230
802.11ac-VHT80, 802.11ax-HE80					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
/	/	42	5210	/	/

Test Mode:	
Transmitting mode:	Keep the EUT in continuous transmitting with modulation
Exercise software[#]:	Engineer mode

Mode	**Data rate**	**Power Level Setting[#]**		
		Low Channel	**Middle Channel**	**High Channel**
802.11a	6Mbps	15	15	15
802.11n-HT20	MCS0	15	15	15
802.11n-HT40	MCS0	12	/	12
802.11ac-VHT80	MCS0	/	12	/
802.11ax-HE20	MCS0	15	15	15
802.11ax-HE40	MCS0	12	/	12
802.11ax-HE80	MCS0	/	12	/
The exercise software and the maximum power setting that provided by manufacturer.				

Worst-Case Configuration:
For radiated emissions, EUT was investigated in three orthogonal orientation, the worst-case orientation was recorded in report For AC power line conducted emission and radiated emission 9kHz-1GHz and above 18GHz were performed with the EUT transmits at the channel with highest output power as worst-case scenario. The ac vht20/ac vht40 were reduced test since the identical parameters with n-ht20/n-ht40. For 802.11ax mode, the device only support full RU mode.

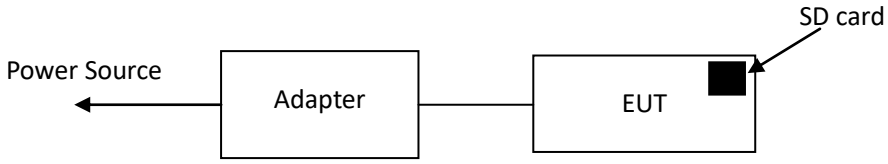
2.2 Test Auxiliary Equipment

Manufacturer	Description	Model	Serial Number
HIKVISION	SD card	32GB	unknown

2.3 Interconnecting Cables

Manufacturer	Description	Length(m)	From	To
Unknown	USB Cable	1.0	Adapter	EUT

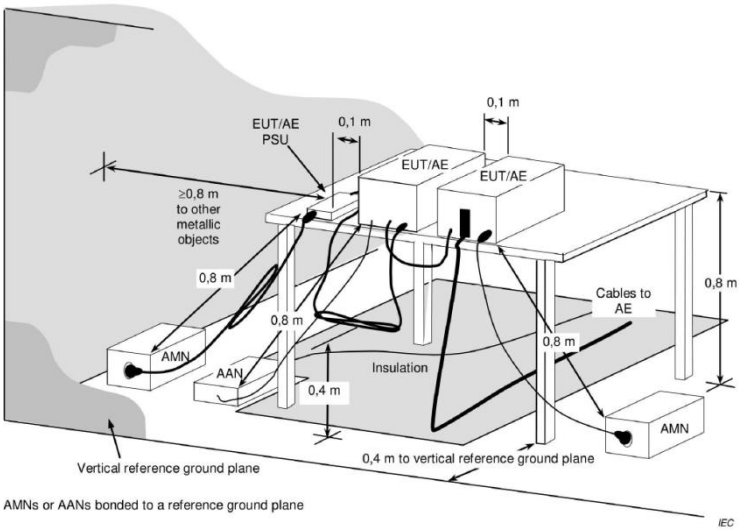
2.4 Block Diagram of Connection between EUT and AE



Note: for reference only, the actual connection setup used for testing please refer to the test photos.

2.5 Test Setup

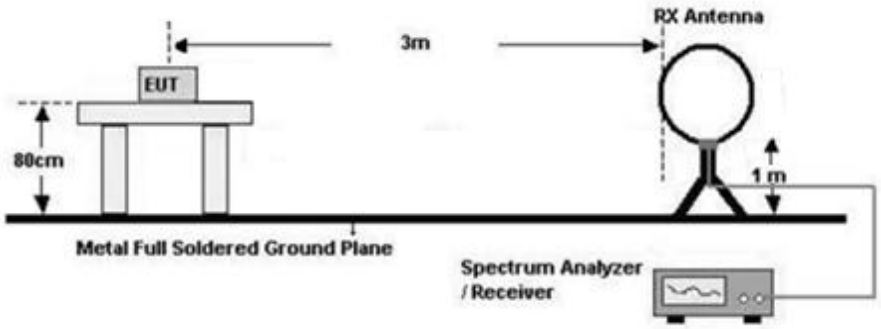
1) Conducted emission measurement:



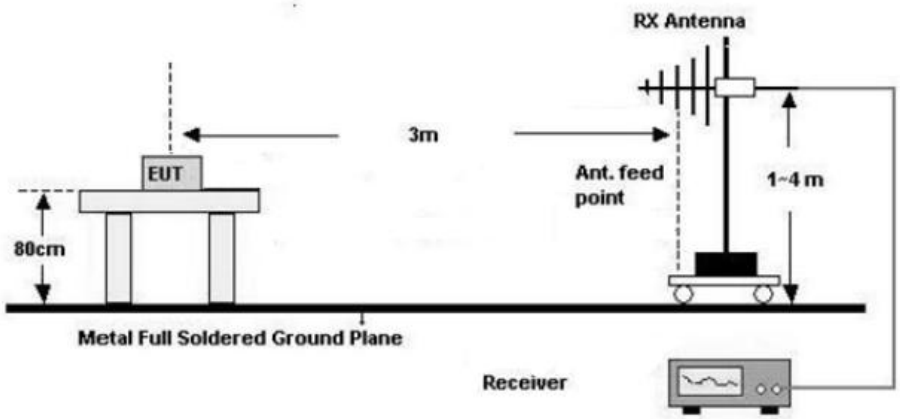
Note: The 0.8 m distance specified between EUT/AE/PSU and AMN/AAN, is applicable only to the EUT being measured. If the device is AE then it shall be >0.8 m.

2) Radiated emission measurement:

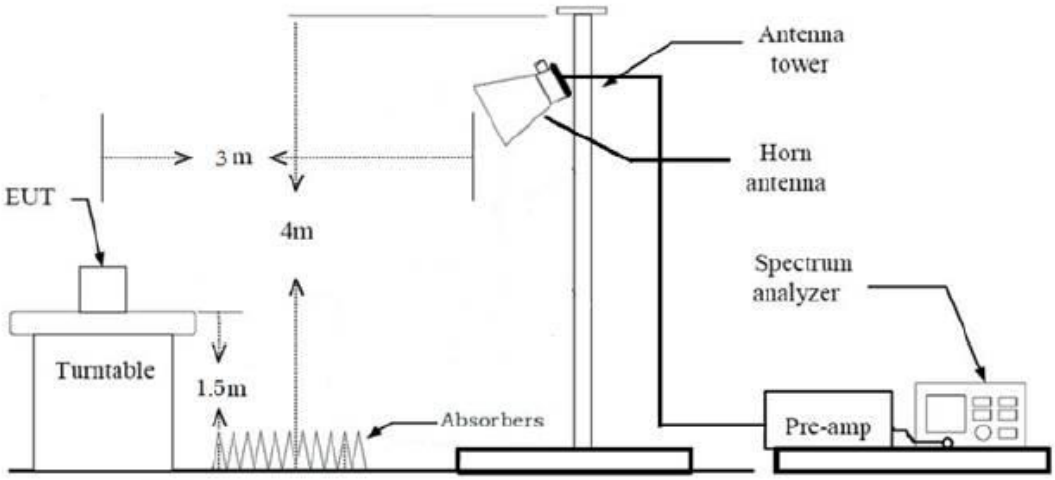
Below 30MHz (3m SAC)



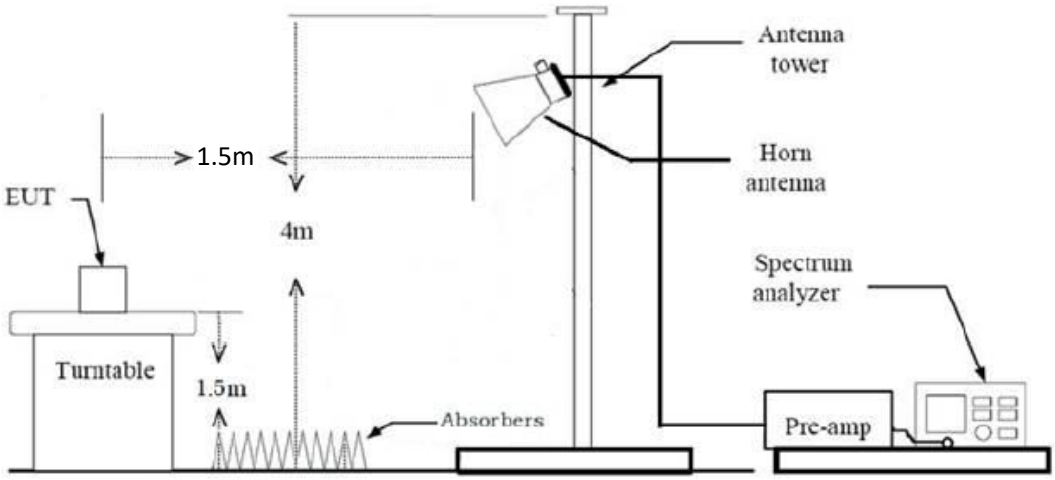
30MHz-1GHz (3m SAC)



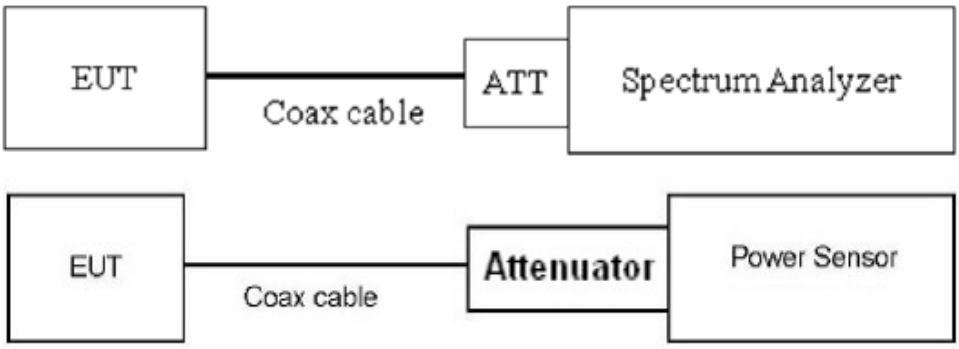
1GHz-18GHz(3m FAC)



Above 18GHz (3m FAC)



3) RF Conducted Test



2.6 Test Procedure

Conducted emission:

1. The E.U.T is placed on a non-conducting table 40cm from the vertical ground plane and 80cm above the horizontal ground plane (Please refer to the block diagram of the test setup and photographs).
2. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.
3. The receiver is set to 9kHz resolution bandwidth, final data was recorded in the Quasi-peak and average detection mode.
4. Line conducted data is recorded for both Line and Neutral

Radiated Emission Procedure:

a) For below 30MHz

1. All measurements were made at a test distance of 3 m. The measured data was extrapolated from the test distance (3m) to the specification distance (300 m from 9-490 kHz and 30 m from 490 kHz- 30 MHz) to clearly show the relative levels of fundamental and spurious emissions and demonstrate compliance with the requirement that the level of any spurious emissions be below the level of the intentionally transmitted signal. The extrapolation factor for the limits were 40*Log (test distance / specification distance).
2. Loop antenna use, investigation was done on the three antenna orientations (parallel, perpendicular, gound-parallel)
3. The RBW/VBW of receiver is set to 300Hz/1kHz for 9kHz to 150kHz range, to 10kHz/30kHz for 150kHz to 30MHz range for scan Peak emission, 200Hz/9kHz IF BW was used for final measurement in the Quasi-peak or average detection mode for frequency range 9~150kHz/150kHz~30MHz respectively.
4. If the Peak emission complies with the QP limit, then perform final measurement is optional.

b) For 30MHz-1GHz:

1. The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 3 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 3 m.
2. EUT works in each mode of operation that needs to be tested. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.
3. The RBW/VBW of receiver is set to 100kHz/300kHz for scan Peak emission, 120kHz IF BW was used for final measurement in the Quasi-peak detection mode.
4. If the Peak emission complies with the QP limit, then perform final measurement is optional.

c) For above 1GHz:

1. The EUT was placed on the tabletop of a rotating table 1.5 m the ground at a 3 m fully anechoic room. The measurement distance from the EUT to the receiving antenna is 3 m (1-18GHz) and 1.5 m (above 18GHz).
2. EUT works in each mode of operation that needs to be tested，and having the EUT continuously

working. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.

3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.
4. Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.
5. The RBW/VBW of spectrum analyzer is set to 1MHz/3MHz for scan Peak emission, for measured average emission, reduce the VBW to 10Hz(for duty cycle≥98%), or ≥1/T(for duty cycle<98%). T is minimum transmission duration.
6. If the Peak emission complies with the Average limit, then perform average measurement is optional.

RF Conducted Test:

1. The antenna port of EUT was connected to the RF port of the test equipment (Power Meter or Spectrum analyzer) through Attenuator and RF cable.
2. The cable assembly insertion loss of 6.5dB (including 6.0dB Attenuator and 0.5dB cable) was entered as an offset in the power meter. Note: Actual cable loss was unavailable at the time of testing, therefore a loss of 0.5dB was assumed as worst case. This was later verified to be true by laboratory. (if the RF cable provided by client, the cable loss declared by client)
3. The EUT is keeping in continuous transmission mode and tested in all modulation modes.

2.7 Measurement Method

Description of Test	Measurement Method
AC Line Conducted Emissions	ANSI C63.10-2013 Section 6.2
Maximum Conducted Output Power	KDB 789033 D02 v02r01 section E.3. b)
Power Spectral Density	KDB 789033 D02 v02r01 section F
26 dB Emission Bandwidth	KDB 789033 D02 v02r01 section C.1
99% Occupied Bandwidth	KDB 789033 D02 v02r01 section D.
Unwanted Emissions	KDB 789033 D02 v02r01 section G.
Duty Cycle	KDB 789033 D02 v02r01 section B.

2.8 Measurement Equipment

Manufacturer	Description	Model	Management No.	Calibration Date	Calibration Due Date
AC Line Conducted Emission Test					
ROHDE& SCHWARZ	EMI TEST RECEIVER	ESR	101817	2024/6/4	2025/6/3
R&S	LISN	ENV216	101748	2024/6/4	2025/6/3
N/A	Coaxial Cable	NO.12	N/A	2024/6/4	2025/6/3
Farad	Test Software	EZ-EMC	Ver. EMEC-3A1	/	/
Radiated Emission Test (below 1GHz)					
R&S	EMI test receiver	ESR3	102758	2024/6/4	2025/6/3
SONOMA INSTRUMENT	Low frequency amplifier	310	186014	2024/6/4	2025/6/3
BACL	Loop Antenna	1313-1A	4010611	2024/2/7	2027/2/6
SCHWARZBECK	Log - periodic wideband antenna	VULB 9163	9163-872	2023/7/7	2026/7/6
Audix	Test Software	E3	191218 V9	/	/
N/A	Coaxial Cable	NO.14	N/A	2024/6/4	2025/6/3
N/A	Coaxial Cable	NO.16	N/A	2024/6/4	2025/6/3
Radiated Emission Test (above 1GHz)					
ROHDE& SCHWARZ	SPECTRUM ANALYZER	FSV40-N	101608	2024/6/4	2025/6/3
COM-POWER	preamplifier	PAM-118A	18040152	2024/6/4	2025/6/3
COM-POWER	Amplifier	PAM-840A	461306	2023/8/8	2024/8/7
Astro Antenna Ltd	Horn antenna	AHA-118S	3015	2023/7/6	2026/7/5
Ducommun technologies	Horn Antenna	ARH-4223-02	1007726-03	2023/7/10	2026/7/9
Ducommun technologies	Horn Antenna	ARH-2823-02	1007726-03	2023/7/10	2026/7/9
Oulitong	Band Reject Filter	OBSF-5150-5850-S	OE02104371	2024/6/4	2025/6/3
N/A	Coaxial Cable	NO.9	N/A	2024/6/4	2025/6/3
N/A	Coaxial Cable	NO.13	N/A	2023/8/8	2024/8/7
N/A	Coaxial Cable	NO.15	N/A	2024/6/4	2025/6/3
N/A	Coaxial Cable	NO.17	N/A	2024/6/4	2025/6/3
Audix	Test Software	E3	191218 V9	/	/
RF Conducted Test					
ROHDE& SCHWARZ	SPECTRUM ANALYZER	FSU-26	200680/026	2024/6/4	2025/6/3
ANRITSU	USB Power Sensor	MA24418A	12620	2024/6/4	2025/6/3
narda	6dB attenuator	603-06-1	N/A	2024/6/4	2025/6/3

Note: All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or International standards.

3 Test Results

3.1 Test Summary

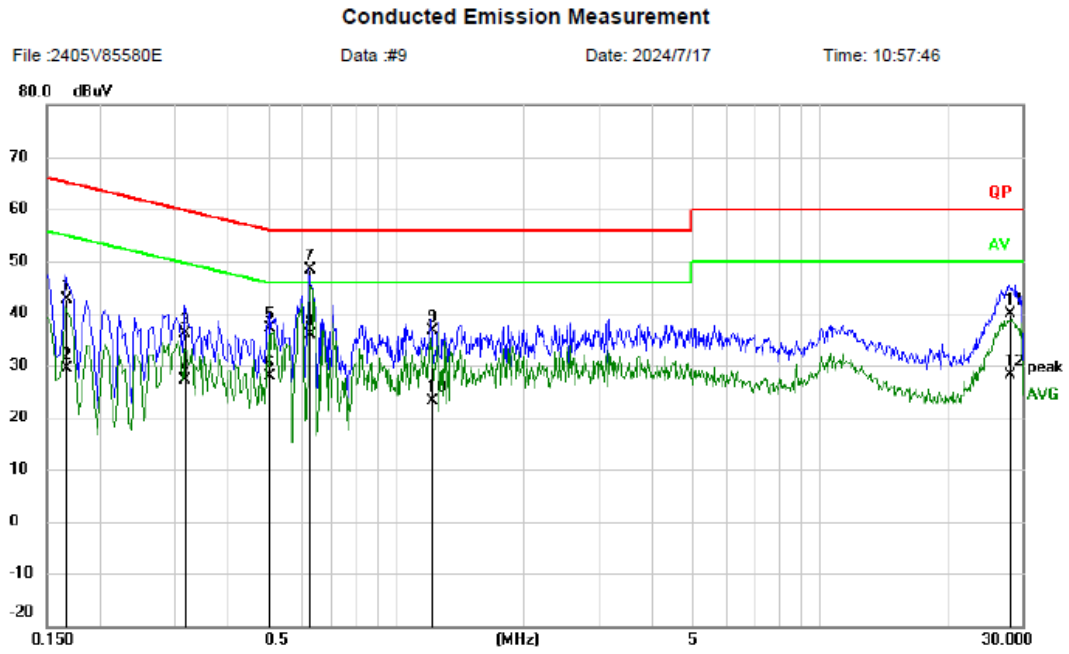
FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliance
§15.207 (a) §15.407 (b)(9)	AC Line Conducted Emissions	Compliance
§15.407 (a)(1)(iv),(3)(i)	Maximum Conducted Output Power Power Spectral Density	Compliance
§15.407 (a)(12)	99% Occupied Bandwidth	Compliance
§15.407 (a)	26 dB Emission Bandwidth	Compliance
§15.205, §15.209, §15.407 (b)(1), (4), (9), (10)	Unwanted Emissions	Compliance
/	Duty Cycle	Report only

3.2 Limit

Test items	Limit
AC Power Line Conducted Emission	See details §15.207 (a)
Conducted Output Power Power Spectral Density	**For the band 5.150-5.250 GHz:** 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 band 5.725-5.850 GHz:** For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas ofdirectional 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 withoutany corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipointsystems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. Theoperator 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.
26dB Emission Bandwidth 99% Occupied Bandwidth	N/A
6dB Emission Bandwidth	Within the 5.725-5.850 GHz and 5.850-5.895 GHz bands, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.
Unwanted Emissions	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. 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. 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. For transmitters operating solely in the 5.725–5.850 GHz band: 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. The provisions of § 15.205 apply to intentional radiators operating under this section.

3.3 AC Line Conducted Emissions Test Data

Test Date:	2024-07-17	Test By:	Lirou Li
Environment condition:	Temperature: 23.9°C; Relative Humidity:57%; ATM Pressure: 101.4kPa		



Limit: QP
Mode:transmitting
Note: WIFI 5G

Phase: L1
Power: DC 5V

Temperature: 23.9 ℃
Humidity: 57 %
Air Pressure: 1014 hpa

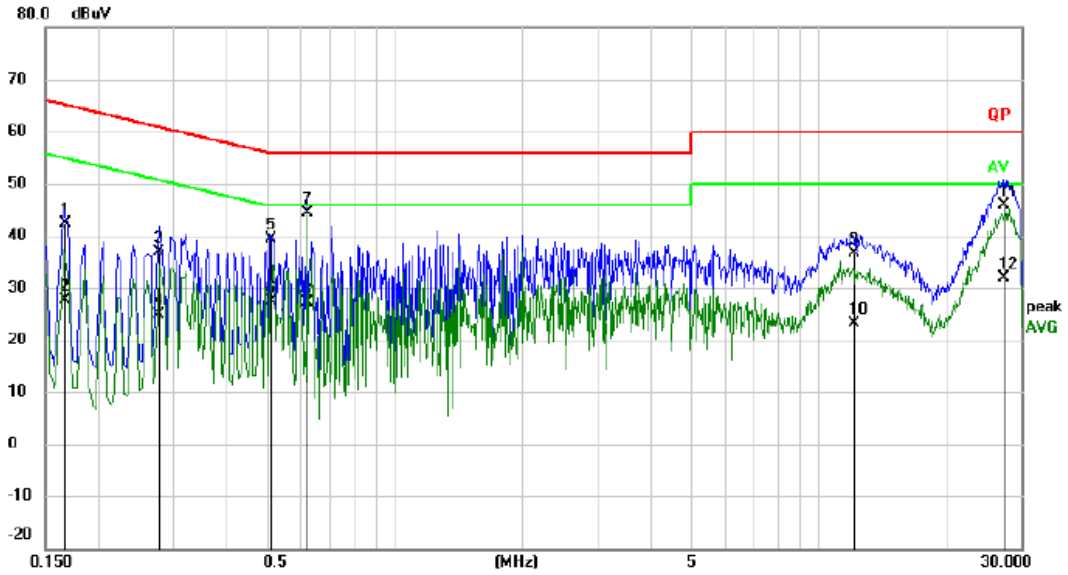
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over Limit		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1660	31.85	10.75	42.60	65.16	-22.56	QP	
2		0.1660	18.56	10.75	29.31	55.16	-25.85	AVG	
3		0.3180	25.46	10.72	36.18	59.76	-23.58	QP	
4		0.3180	16.53	10.72	27.25	49.76	-22.51	AVG	
5		0.5020	26.40	10.81	37.21	56.00	-18.79	QP	
6		0.5020	17.01	10.81	27.82	46.00	-18.18	AVG	
7	*	0.6260	37.55	10.84	48.39	56.00	-7.61	QP	
8		0.6260	25.00	10.84	35.84	46.00	-10.16	AVG	
9		1.2100	25.71	10.94	36.65	56.00	-19.35	QP	
10		1.2100	12.18	10.94	23.12	46.00	-22.88	AVG	
11		27.9060	29.50	10.42	39.92	60.00	-20.08	QP	
12		27.9060	17.81	10.42	28.23	50.00	-21.77	AVG	

*:Maximum data x:Over limit !:over margin

Engineer Signature: Lirou

Conducted Emission Measurement

File :2405V85580E Data :#10 Date: 2024/7/17 Time: 11:08:30



Limit: QP
Mode:transmitting
Note: WIFI 5G

Phase: N
Power: DC 5V

Temperature: 23.9 ℃
Humidity: 57 %
Air Pressure: 1014 hpa

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over Limit		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1660	31.77	10.55	42.32	65.16	-22.84	QP	
2		0.1660	17.11	10.55	27.66	55.16	-27.50	AVG	
3		0.2779	26.33	10.51	36.84	60.88	-24.04	QP	
4		0.2779	14.45	10.51	24.96	50.88	-25.92	AVG	
5		0.5100	28.72	10.70	39.42	56.00	-16.58	QP	
6		0.5100	16.60	10.70	27.30	46.00	-18.70	AVG	
7	*	0.6220	33.84	10.62	44.46	56.00	-11.54	QP	
8		0.6220	16.51	10.62	27.13	46.00	-18.87	AVG	
9		12.0380	25.86	10.79	36.65	60.00	-23.35	QP	
10		12.0380	12.42	10.79	23.21	50.00	-26.79	AVG	
11		27.2020	35.03	10.76	45.79	60.00	-14.21	QP	
12		27.2020	21.18	10.76	31.94	50.00	-18.06	AVG	

*:Maximum data x:Over limit !:over margin

Engineer Signature: Lirou

Remark:

Measurement (dBuV)= Reading Level (dBuV) + Correct Factor(dB)

Correct Factor(dB)= LISN Voltage Division Factor (dB)+ Cable loss(dB)

Over Limit = Measurement – Limit

3.4 Radiated emission Test Data

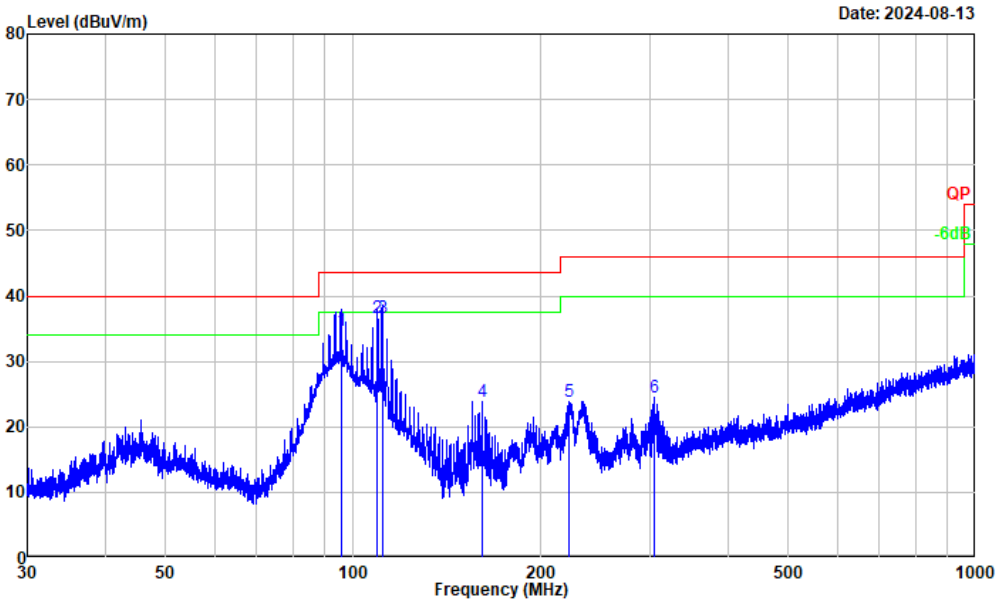
9 kHz-30MHz:

Test Date:	2024-08-13	**Test By:**	Bard Huang
Environment condition:	Temperature: 23.1°C; Relative Humidity:70%; ATM Pressure: 100.0kPa		

For radiated emissions below 30MHz, there were no emissions found within 20dB of limit.

30MHz-1GHz:

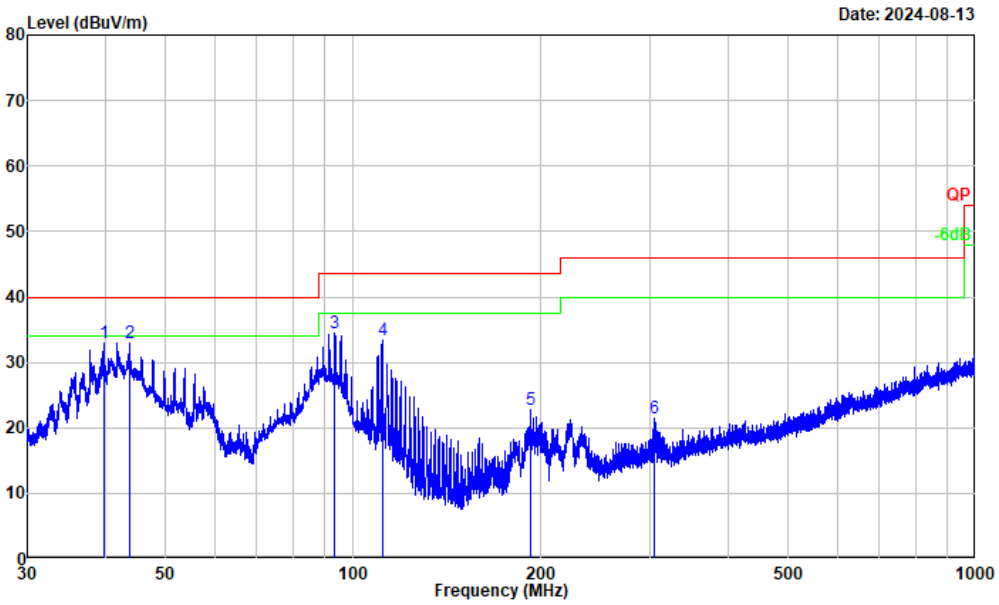
Test Date:	2024-08-13	Test By:	Bard Huang
Environment condition:	Temperature: 23.1°C; Relative Humidity:70%; ATM Pressure: 100.0kPa		



Project No. : 2405V85580E
Test Mode : Transmitting
Test Voltage : DC 5V
Environment : 23.1℃/70%R.H./100.0kPa
Tested by : Bard Huang
Polarization : horizontal
Remark : 5GWIfi

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	95.650	49.10	-14.38	34.72	43.50	-8.78	QP
2	109.573	50.30	-13.63	36.67	43.50	-6.83	QP
3	111.512	50.60	-13.89	36.71	43.50	-6.79	QP
4	161.367	40.31	-16.37	23.94	43.50	-19.56	Peak
5	222.908	36.68	-12.73	23.95	46.00	-22.05	Peak
6	304.298	34.89	-10.29	24.60	46.00	-21.40	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain



Project No. : 2405V85580E
Test Mode : Transmitting
Test Voltage : DC 5V
Environment : 23.1℃/70%R.H./100.0kPa
Tested by : Bard Huang
Polarization : vertical
Remark : 5GWIfi

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	39.838	46.59	-13.55	33.04	40.00	-6.96	Peak
2	43.833	45.36	-12.51	32.85	40.00	-7.15	Peak
3	93.618	49.18	-14.69	34.49	43.50	-9.01	Peak
4	111.463	47.32	-13.89	33.43	43.50	-10.07	Peak
5	192.801	36.54	-13.73	22.81	43.50	-20.69	Peak
6	304.966	31.67	-10.28	21.39	46.00	-24.61	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain

Remark:

Result = Reading + Factor

Factor = Antenna factor + Cable loss – Amplifier gain

Margin = Result – Limit

Above 1GHz:

Test Date:	2024-07-22	Test By:	Bard Huang
Environment condition:	Temperature: 23.9°C; Relative Humidity:65%; ATM Pressure: 100.3kPa		

Frequency (MHz)	Reading level (dBμV)	Polar (H/V)	Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
802.11a							
Low Channel							
5147.474	38.08	horizontal	10.80	48.88	54.00	-5.12	Average
5147.474	53.36	horizontal	10.80	64.16	74.00	-9.84	Peak
5150.000	38.65	vertical	10.81	49.46	54.00	-4.54	Average
5150.000	54.85	vertical	10.81	65.66	74.00	-8.34	Peak
15540.000	35.84	horizontal	8.99	44.83	54.00	-9.17	Average
15540.000	47.15	horizontal	8.99	56.14	74.00	-17.86	Peak
15540.000	35.76	vertical	8.99	44.75	54.00	-9.25	Average
15540.000	46.45	vertical	8.99	55.44	74.00	-18.56	Peak
Middle Channel							
15600.000	35.55	horizontal	8.81	44.36	54.00	-9.64	Average
15600.000	47.55	horizontal	8.81	56.36	74.00	-17.64	Peak
15600.000	35.03	vertical	8.81	43.84	54.00	-10.16	Average
15600.000	46.46	vertical	8.81	55.27	74.00	-18.73	Peak
High Channel							
5350.000	37.27	horizontal	10.66	47.93	54.00	-6.07	Average
5350.000	46.32	horizontal	10.66	56.98	74.00	-17.02	Peak
5350.000	37.17	vertical	10.66	47.83	54.00	-6.17	Average
5350.000	46.52	vertical	10.66	57.18	74.00	-16.82	Peak
15720.000	44.91	horizontal	8.07	52.98	74.00	-21.02	Peak
15720.000	44.07	vertical	8.07	52.14	74.00	-21.86	Peak
802.11n20							
Low Channel							
5148.174	38.39	horizontal	10.80	49.19	54.00	-4.81	Average
5148.174	52.19	horizontal	10.80	62.99	74.00	-11.01	Peak
5150.000	39.11	vertical	10.81	49.92	54.00	-4.08	Average
5150.000	55.37	vertical	10.81	66.18	74.00	-7.82	Peak
15540.000	35.65	horizontal	8.99	44.64	54.00	-9.36	Average
15540.000	46.78	horizontal	8.99	55.77	74.00	-18.23	Peak

15540.000	35.61	vertical	8.99	44.60	54.00	-9.40	Average
15540.000	46.92	vertical	8.99	55.91	74.00	-18.09	Peak
Middle Channel							
15600.000	35.14	horizontal	8.81	43.95	54.00	-10.05	Average
15600.000	45.62	horizontal	8.81	54.43	74.00	-19.57	Peak
15600.000	35.49	vertical	8.81	44.30	54.00	-9.70	Average
15600.000	46.68	vertical	8.81	55.49	74.00	-18.51	Peak
High Channel							
5350.000	36.54	horizontal	10.66	47.20	54.00	-6.80	Average
5350.000	46.99	horizontal	10.66	57.65	74.00	-16.35	Peak
5350.000	36.35	vertical	10.66	47.01	54.00	-6.99	Average
5350.000	46.86	vertical	10.66	57.52	74.00	-16.48	Peak
15720.000	44.80	horizontal	8.07	52.87	74.00	-21.13	Peak
15720.000	44.82	vertical	8.07	52.89	74.00	-21.11	Peak
802.11n40							
Low Channel							
5150.000	37.19	horizontal	10.81	48.00	54.00	-6.00	Average
5150.000	55.72	horizontal	10.81	66.53	74.00	-7.47	Peak
5150.000	37.51	vertical	10.81	48.32	54.00	-5.68	Average
5150.000	56.88	vertical	10.81	67.69	74.00	-6.31	Peak
15570.000	35.96	horizontal	8.90	44.86	54.00	-9.14	Average
15570.000	47.57	horizontal	8.90	56.47	74.00	-17.53	Peak
15570.000	35.20	vertical	8.90	44.10	54.00	-9.90	Average
15570.000	47.08	vertical	8.90	55.98	74.00	-18.02	Peak
High Channel							
5350.000	36.07	horizontal	10.66	46.73	54.00	-7.27	Average
5350.000	46.78	horizontal	10.66	57.44	74.00	-16.56	Peak
5350.000	36.36	vertical	10.66	47.02	54.00	-6.98	Average
5350.000	47.39	vertical	10.66	58.05	74.00	-15.95	Peak
15690.000	35.29	horizontal	8.14	43.43	54.00	-10.57	Average
15690.000	46.26	horizontal	8.14	54.40	74.00	-19.60	Peak
15690.000	45.26	vertical	8.14	53.40	74.00	-20.60	Peak
802.11ac80							
5146.883	39.78	horizontal	10.79	50.57	54.00	-3.43	Average
5146.883	54.51	horizontal	10.79	65.30	74.00	-8.70	Peak
5350.000	37.36	horizontal	10.66	48.02	54.00	-5.98	Average
5350.000	46.55	horizontal	10.66	57.21	74.00	-16.79	Peak
5150.000	39.93	vertical	10.81	50.74	54.00	-3.26	Average

5150.000	54.74	vertical	10.81	65.55	74.00	-8.45	Peak
5350.000	36.56	vertical	10.66	47.22	54.00	-6.78	Average
5350.000	47.01	vertical	10.66	57.67	74.00	-16.33	Peak
15630.000	35.74	horizontal	8.59	44.33	54.00	-9.67	Average
15630.000	46.91	horizontal	8.59	55.50	74.00	-18.50	Peak
15630.000	35.94	vertical	8.59	44.53	54.00	-9.47	Average
15630.000	45.63	vertical	8.59	54.22	74.00	-19.78	Peak
802.11ax20							
Low Channel							
5139.770	37.75	horizontal	10.75	48.50	54.00	-5.50	Average
5139.770	54.60	horizontal	10.75	65.35	74.00	-8.65	Peak
5150.000	37.59	vertical	10.81	48.40	54.00	-5.60	Average
5150.000	55.40	vertical	10.81	66.21	74.00	-7.79	Peak
15540.000	35.05	horizontal	8.99	44.04	54.00	-9.96	Average
15540.000	46.52	horizontal	8.99	55.51	74.00	-18.49	Peak
15540.000	35.14	vertical	8.99	44.13	54.00	-9.87	Average
15540.000	45.88	vertical	8.99	54.87	74.00	-19.13	Peak
Middle Channel							
15600.000	35.05	horizontal	8.81	43.86	54.00	-10.14	Average
15600.000	46.17	horizontal	8.81	54.98	74.00	-19.02	Peak
15600.000	35.24	vertical	8.81	44.05	54.00	-9.95	Average
15600.000	46.41	vertical	8.81	55.22	74.00	-18.78	Peak
High Channel							
5350.000	36.14	horizontal	10.66	46.80	54.00	-7.20	Average
5350.000	46.84	horizontal	10.66	57.50	74.00	-16.50	Peak
5350.000	36.91	vertical	10.66	47.57	54.00	-6.43	Average
5350.000	46.06	vertical	10.66	56.72	74.00	-17.28	Peak
15720.000	44.26	horizontal	8.07	52.33	74.00	-21.67	Peak
15720.000	44.77	vertical	8.07	52.84	74.00	-21.16	Peak
802.11ax40							
Low Channel							
5142.562	37.78	horizontal	10.77	48.55	54.00	-5.45	Average
5142.562	54.59	horizontal	10.77	65.36	74.00	-8.64	Peak
5145.443	37.92	vertical	10.79	48.71	54.00	-5.29	Average
5145.443	54.21	vertical	10.79	65.00	74.00	-9.00	Peak
15570.000	35.77	horizontal	8.90	44.67	54.00	-9.33	Average
15570.000	46.72	horizontal	8.90	55.62	74.00	-18.38	Peak
15570.000	35.77	vertical	8.90	44.67	54.00	-9.33	Average

15570.000	47.68	vertical	8.90	56.58	74.00	-17.42	Peak
High Channel							
5350.000	36.17	horizontal	10.66	46.83	54.00	-7.17	Average
5350.000	46.27	horizontal	10.66	56.93	74.00	-17.07	Peak
5350.000	36.73	vertical	10.66	47.39	54.00	-6.61	Average
5350.000	46.65	vertical	10.66	57.31	74.00	-16.69	Peak
15690.000	44.94	horizontal	8.14	53.08	74.00	-20.92	Peak
15690.000	44.46	vertical	8.14	52.60	74.00	-21.40	Peak
802.11ax80							
5146.883	39.62	horizontal	10.79	50.41	54.00	-3.59	Average
5146.883	54.51	horizontal	10.79	65.30	74.00	-8.70	Peak
5350.000	36.14	horizontal	10.66	46.80	54.00	-7.20	Average
5350.000	46.59	horizontal	10.66	57.25	74.00	-16.75	Peak
5150.000	39.58	vertical	10.81	50.39	54.00	-3.61	Average
5150.000	54.72	vertical	10.81	65.53	74.00	-8.47	Peak
5350.000	36.23	vertical	10.66	46.89	54.00	-7.11	Average
5350.000	46.61	vertical	10.66	57.27	74.00	-16.73	Peak
15630.000	35.38	horizontal	8.59	43.97	54.00	-10.03	Average
15630.000	46.05	horizontal	8.59	54.64	74.00	-19.36	Peak
15630.000	35.33	vertical	8.59	43.92	54.00	-10.08	Average
15630.000	45.69	vertical	8.59	54.28	74.00	-19.72	Peak

Remark:

Corrected Amplitude= Reading level + corrected Factor

Corrected Factor = Antenna factor + Cable loss – Amplifier gain

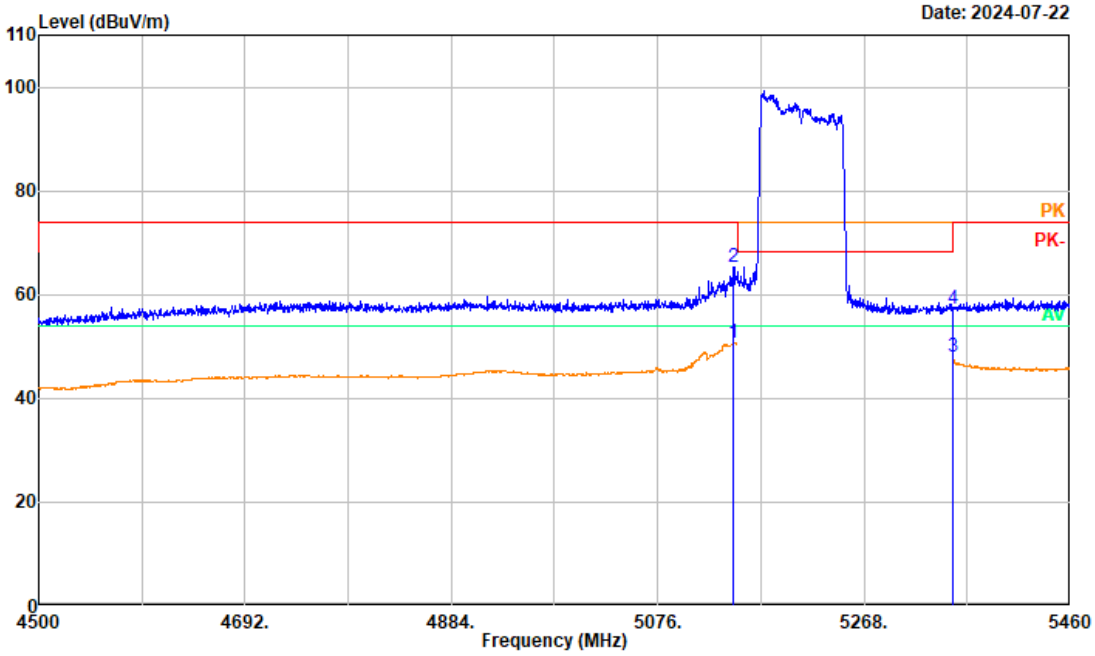
Margin = Corrected Amplitude – Limit

The emission levels of other frequencies that were lower than the limit 20dB, not show in test report.

For emissions in 18GHz-40GHz range, all emissions were investigated and in the noise floor level.

Test plot for example as below:

Mode:	802.11ac80	Channel:	5210MHz

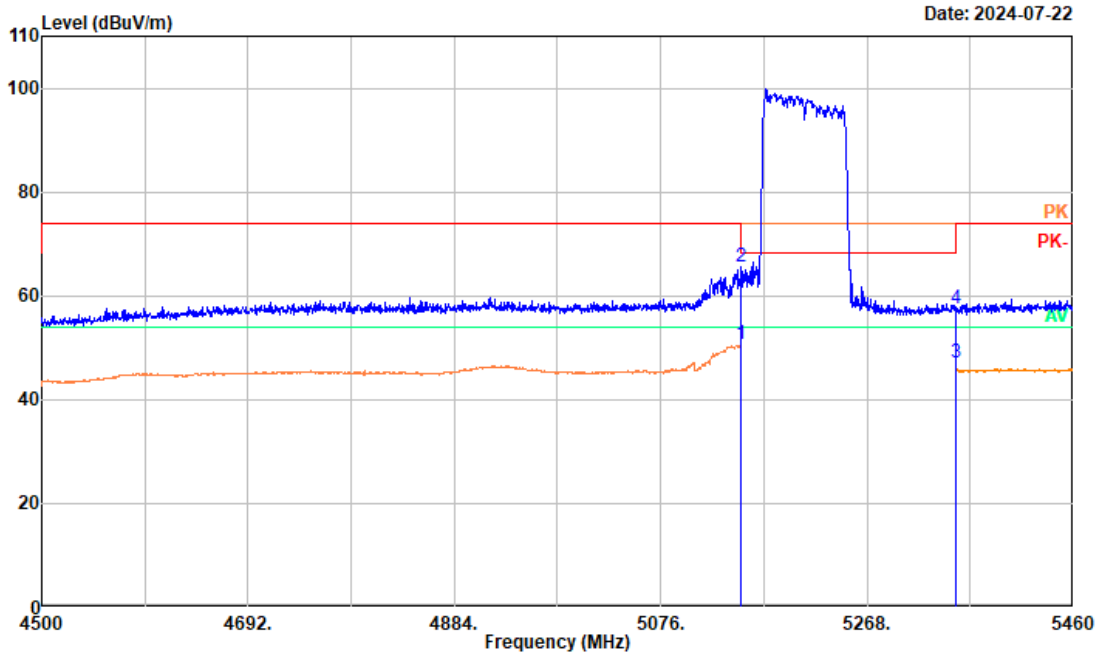


Project No. : 2405V85580E
Test Mode : Transmitting
Test Voltage : DC 5V
Environment : 23.9℃/65%R.H./100.3kPa
Tested by : Bard Huang
Polarization : horizontal
Remark : 802.11ac80 channel

--No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Detector
1	5146.883	39.78	10.79	50.57	54.00	-3.43	Average
2	5146.883	54.51	10.79	65.30	74.00	-8.70	Peak
3	5350.000	37.36	10.66	48.02	54.00	-5.98	Average
4	5350.000	46.55	10.66	57.21	74.00	-16.79	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit

Mode:	802.11ac80	Channel:	5210MHz

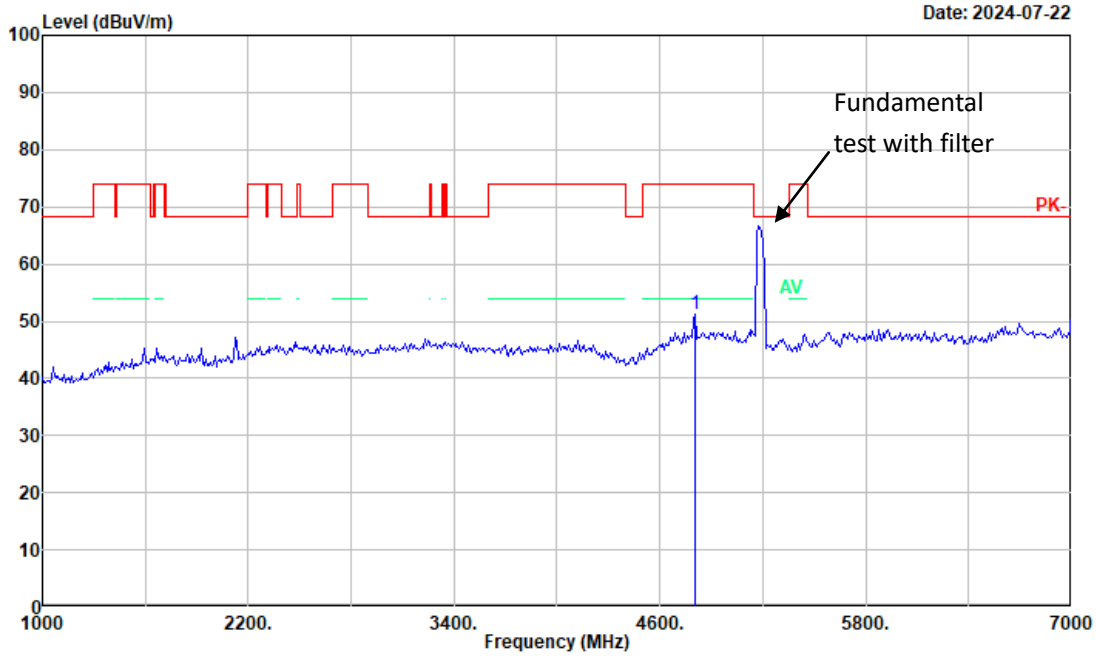


Project No. : 2405V85580E
Test Mode : Transmitting
Test Voltage : DC 5V
Environment : 23.9℃/65%R.H./100.3kPa
Tested by : Bard Huang
Polarization : vertical
Remark : 802.11ac80 channel

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	5150.000	39.93	10.81	50.74	54.00	-3.26	Average
2	5150.000	54.74	10.81	65.55	74.00	-8.45	Peak
3	5350.000	36.56	10.66	47.22	54.00	-6.78	Average
4	5350.000	47.01	10.66	57.67	74.00	-16.33	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit

Mode:	802.11 n40	Channel:	5190MHz

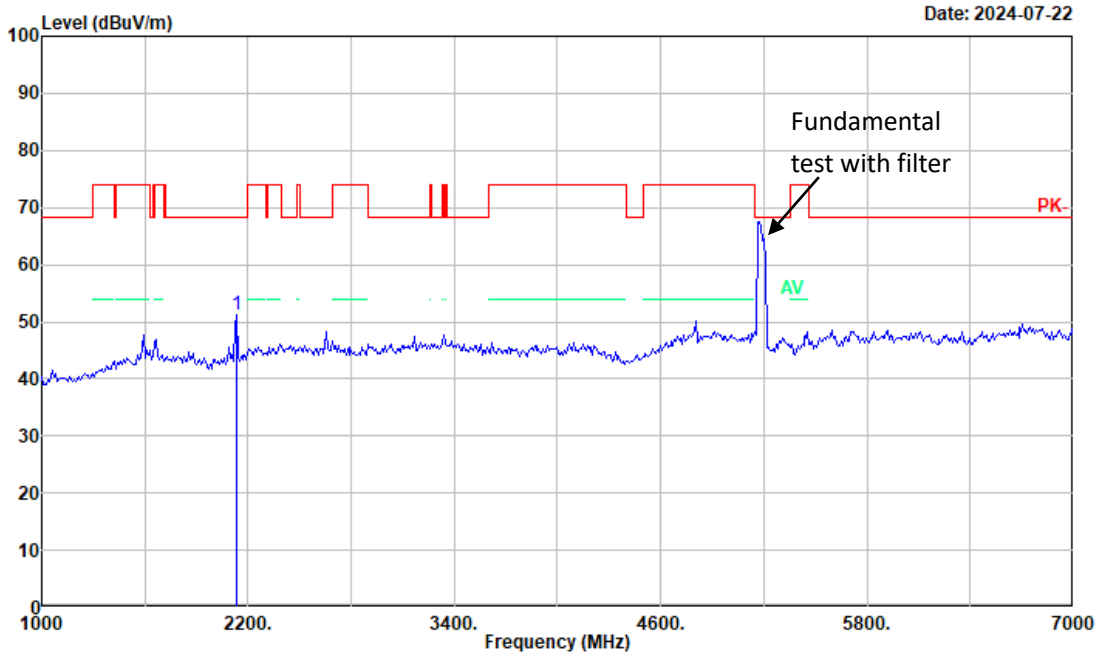


Project No. : 2405V85580E
Test Mode : Transmitting
Test Voltage : DC 5V
Environment : 23.9℃/65%R.H./100.3kPa
Tested by : Bard Huang
Polarization : horizontal
Remark : 802.11n40 low channel

--No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Detector
1	4801.401	51.33	-0.22	51.11	74.00	-22.89	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit

Mode:	802.11 n40	Channel:	5190MHz

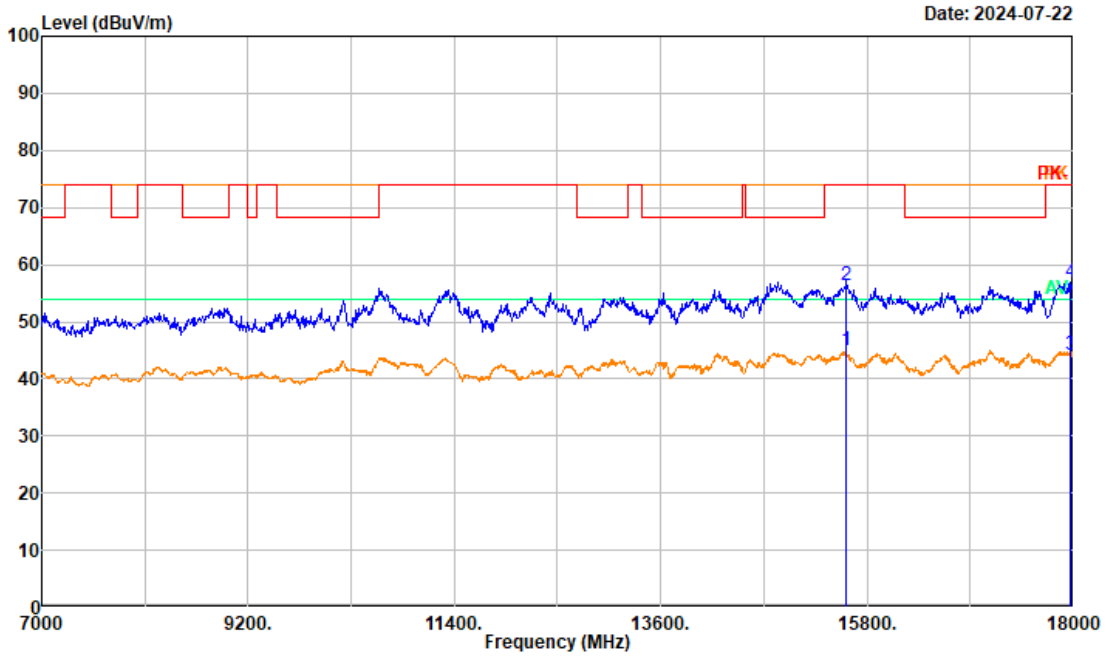


Project No. : 2405V85580E
Test Mode : Transmitting
Test Voltage : DC 5V
Environment : 23.9℃/65%R.H./100.3kPa
Tested by : Bard Huang
Polarization : vertical
Remark : 802.11n40 low channel

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	2131.065	54.92	-3.57	51.35	68.20	-16.85	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit

Mode:	802.11 n40	Channel:	5190MHz

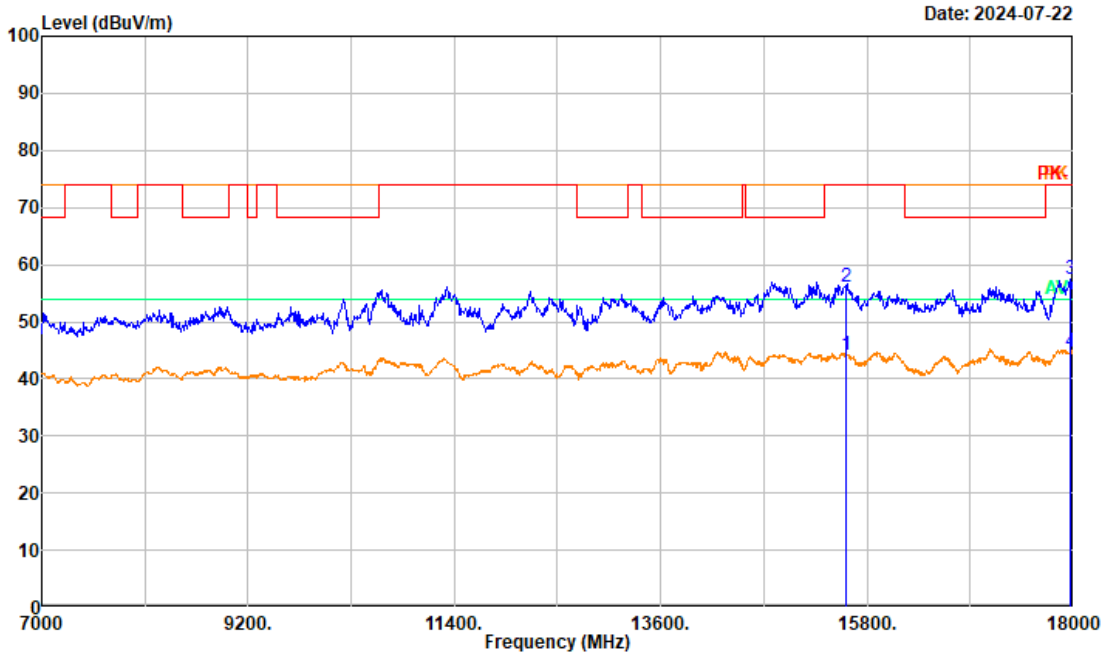


Project No. : 2405V85580E
Test Mode : Transmitting
Test Voltage : DC 5V
Environment : 23.9℃/65%R.H./100.3kPa
Tested by : Bard Huang
Polarization : horizontal
Remark : 802.11n40 low channel

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	15570.000	35.96	8.90	44.86	54.00	-9.14	Average
2	15570.000	47.57	8.90	56.47	74.00	-17.53	Peak
3	17965.980	36.31	7.91	44.22	54.00	-9.78	Average
4	17965.980	49.09	7.91	57.00	74.00	-17.00	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit

Mode:	802.11 n40	Channel:	5190MHz

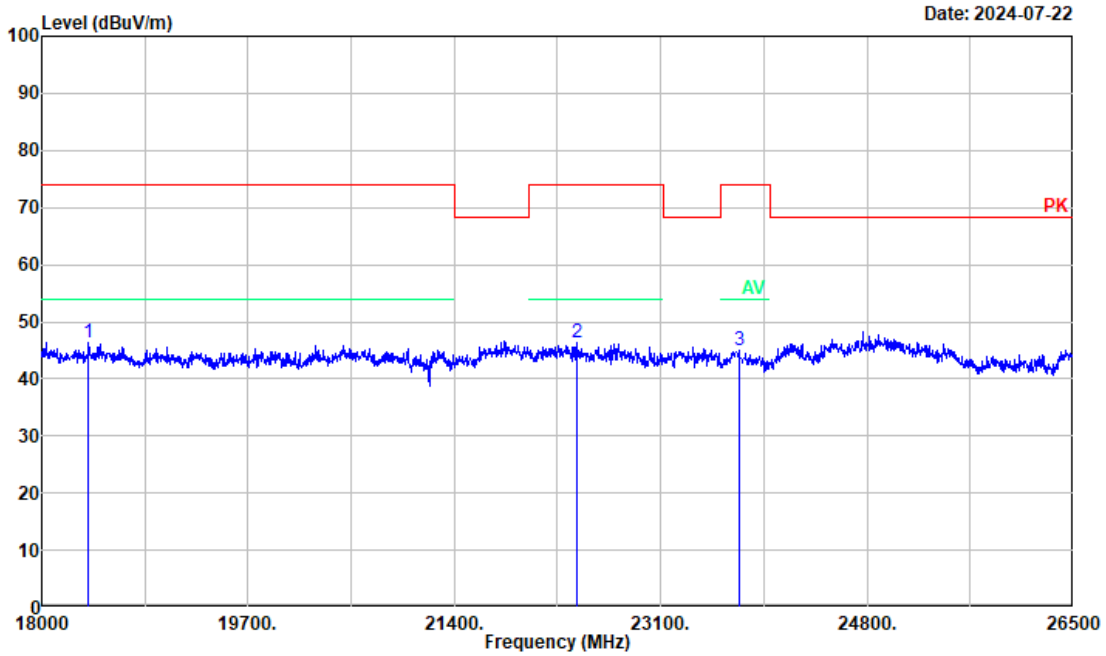


Project No. : 2405V85580E
Test Mode : Transmitting
Test Voltage : DC 5V
Environment : 23.9℃/65%R.H./100.3kPa
Tested by : Bard Huang
Polarization : vertical
Remark : 802.11n40 low channel

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	15570.000	35.20	8.90	44.10	54.00	-9.90	Average
2	15570.000	47.08	8.90	55.98	74.00	-18.02	Peak
3	17974.490	49.54	7.87	57.41	74.00	-16.59	Peak
4	17974.490	36.85	7.87	44.72	54.00	-9.28	Average

Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit

Mode:	802.11 ax20	Channel:	5180MHz

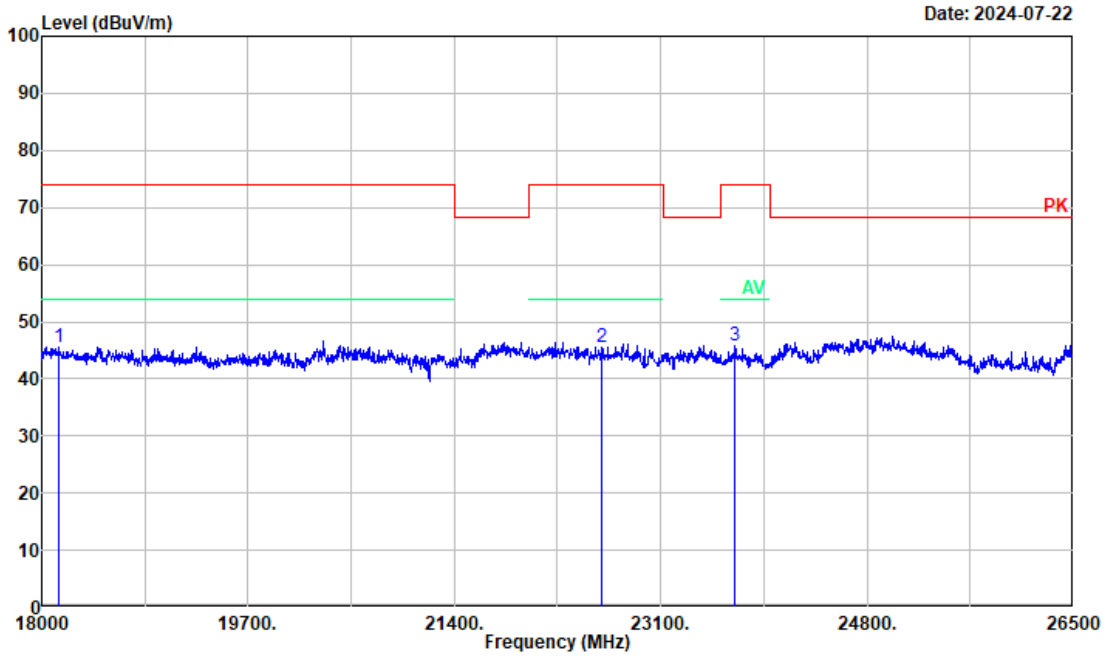


Project No. : 2405V85580E
Test Mode : Transmitting
Test Voltage : DC 5V
Environment : 23.9℃/65%R.H./100.3kPa
Tested by : Bard Huang
Polarization : horizontal
Remark : 802.11ax20 low channel

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	18386.940	52.21	-6.00	46.21	74.00	-27.79	Peak
2	22405.200	53.39	-7.11	46.28	74.00	-27.72	Peak
3	23744.620	51.37	-6.45	44.92	74.00	-29.08	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain - Distance extrapolate factor
Distance extrapolate factor = 20*log(specified distance/measured distance)
Specified distance = 3 meters, measured distance = 1.5 meters
Result = Reading + Factor
Over Limit = Result - Limit

Mode:	802.11 ax20	Channel:	5180MHz

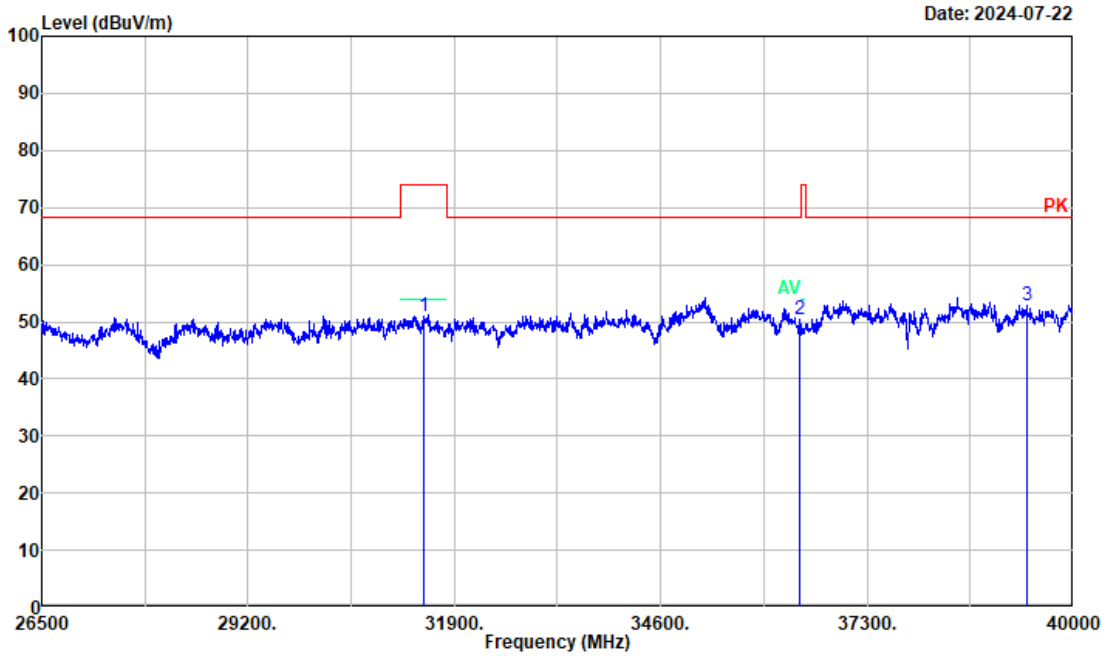


Project No. : 2405V85580E
Test Mode : Transmitting
Test Voltage : DC 5V
Environment : 23.9℃/65%R.H./100.3kPa
Tested by : Bard Huang
Polarization : vertical
Remark : 802.11ax20 low channel

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	18136.070	51.24	-5.62	45.62	74.00	-28.38	Peak
2	22617.810	52.67	-7.06	45.61	74.00	-28.39	Peak
3	23714.860	52.21	-6.49	45.72	74.00	-28.28	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain - Distance extrapolate factor
Distance extrapolate factor = 20*log(specified distance/measured distance)
Specified distance = 3 meters, measured distance = 1.5 meters
Result = Reading + Factor
Over Limit = Result - Limit

Mode:	802.11 ax20	Channel:	5180MHz

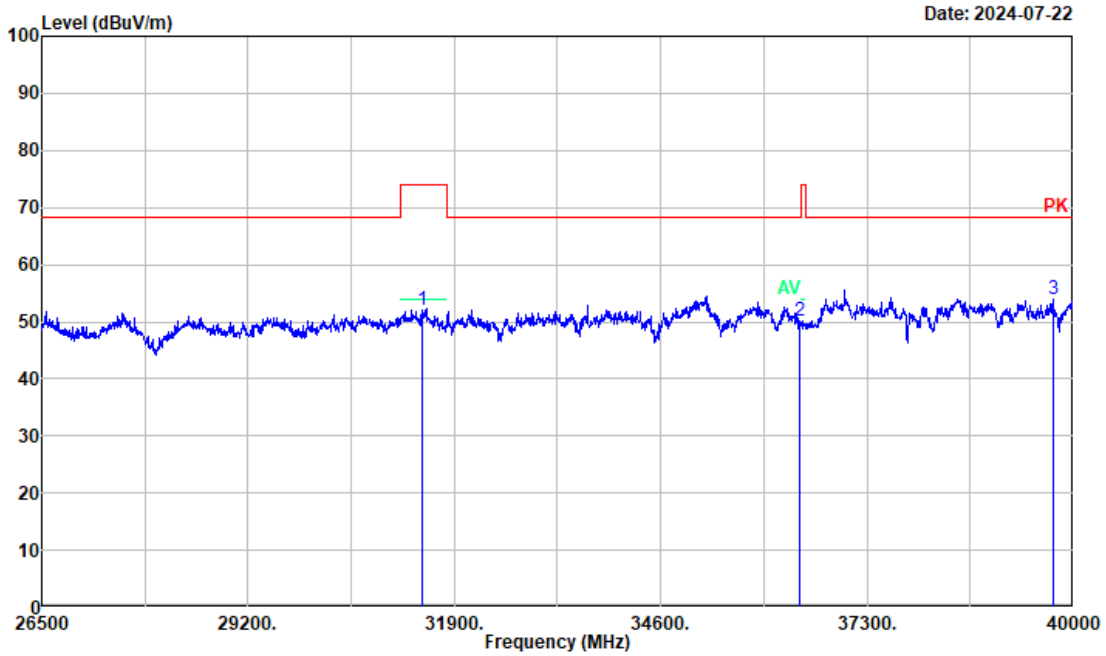


Project No. : 2405V85580E
Test Mode : Transmitting
Test Voltage : DC 5V
Environment : 23.9℃/65%R.H./100.3kPa
Tested by : Bard Huang
Polarization : horizontal
Remark : 802.11ax20 low channel

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	31504.250	48.62	2.44	51.06	74.00	-22.94	Peak
2	36427.460	45.09	5.28	50.37	68.20	-17.83	Peak
3	39385.440	48.18	4.68	52.86	68.20	-15.34	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain - Distance extrapolate factor
Distance extrapolate factor = 20*log(specified distance/measured distance)
Specified distance = 3 meters, measured distance = 1.5 meters
Result = Reading + Factor
Over Limit = Result - Limit

Mode:	802.11 ax20	Channel:	5180MHz



Project No. : 2405V85580E
Test Mode : Transmitting
Test Voltage : DC 5V
Environment : 23.9℃/65%R.H./100.3kPa
Tested by : Bard Huang
Polarization : vertical
Remark : 802.11ax20 low channel

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	31470.480	49.58	2.43	52.01	74.00	-21.99	Peak
2	36413.960	44.91	5.26	50.17	68.20	-18.03	Peak
3	39736.620	49.65	4.28	53.93	68.20	-14.27	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain - Distance extrapolate factor
Distance extrapolate factor = 20*log(specified distance/measured distance)
Specified distance = 3 meters, measured distance = 1.5 meters
Result = Reading + Factor
Over Limit = Result - Limit

3.5 RF Conducted Test Data

Test Date:	2024-07-24~2024-07-29	Test By:	Ryan Zhang
Environment condition:	Temperature: 23.8~25.2°C; Relative Humidity:44~55%; ATM Pressure: 100.2~100.6kPa		

3.5.1 26dB Emission Bandwidth

Mode	Value (MHz)
a_5180MHz_Chain 0	22.601
a_5200MHz_Chain 0	22.491
a_5240MHz_Chain 0	22.502
n20_5180MHz_Chain 0	22.579
n20_5200MHz_Chain 0	22.648
n20_5240MHz_Chain 0	22.593
n40_5190MHz_Chain 0	41.300
n40_5230MHz_Chain 0	41.700
ac80_5210MHz_Chain 0	81.400
ax20_5180MHz_ Chain 0	23.119
ax20_5200MHz_ Chain 0	22.820
ax20_5240MHz_ Chain 0	22.776
ax40_5190MHz_ Chain 0	41.600
ax40_5230MHz_ Chain 0	41.500
ax80_5210MHz_ Chain 0	83.600

3.5.2 99% Occupied Bandwidth

Mode	99% OBW (MHz)
a_5180MHz_Chain 0	17.150
a_5200MHz_Chain 0	17.150
a_5240MHz_Chain 0	17.150
n20_5180MHz_Chain 0	18.150
n20_5200MHz_Chain 0	18.100
n20_5240MHz_Chain 0	18.100
n40_5190MHz_Chain 0	36.800
n40_5230MHz_Chain 0	36.900
ac80_5210MHz_Chain 0	75.800
ax20_5180MHz_ Chain 0	19.250
ax20_5200MHz_ Chain 0	19.250
ax20_5240MHz_ Chain 0	19.200
ax40_5190MHz_ Chain 0	38.000
ax40_5230MHz_ Chain 0	38.100
ax80_5210MHz_Chain 0	77.600

Note:

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

3.5.3 Maximum conducted output power

Mode	Average Output Power (dBm)	Limit (dBm)	Result
a_5180MHz_Chain 0	13.41	24	Pass
a_5200MHz_Chain 0	12.64	24	Pass
a_5240MHz_Chain 0	11.91	24	Pass
n20_5180MHz_Chain 0	10.42	24	Pass
n20_5200MHz_Chain 0	9.65	24	Pass
n20_5240MHz_Chain 0	8.83	24	Pass
n40_5190MHz_Chain 0	9.96	24	Pass
n40_5230MHz_Chain 0	8.80	24	Pass
ac80_5210MHz_Chain 0	9.53	24	Pass
ax20_5180MHz_ Chain 0	13.61	24	Pass
ax20_5200MHz_ Chain 0	12.82	24	Pass
ax20_5240MHz_ Chain 0	12.13	24	Pass
ax40_5190MHz_Chain 0	10.10	24	Pass
ax40_5230MHz_ Chain 0	8.92	24	Pass
ax80_5210MHz_ Chain 0	9.44	24	Pass

3.5.4 Power Spectral Density

Mode	Value (dBm/MHz)	Duty Cycly Factor (dB)	PSD (dBm/MHz)	Limit (dBm/MHz)	Result
a_5180MHz_Chain 0	0.98	0.67	1.65	11	Pass
a_5200MHz_Chain 0	0.36	0.70	1.06	11	Pass
a_5240MHz_Chain 0	0.19	0.71	0.90	11	Pass
n20_5180MHz_Chain 0	-3.33	2.86	-0.47	11	Pass
n20_5200MHz_Chain 0	-3.64	2.85	-0.79	11	Pass
n20_5240MHz_Chain 0	-5.13	2.85	-2.28	11	Pass
n40_5190MHz_Chain 0	-6.35	3.04	-3.31	11	Pass
n40_5230MHz_Chain 0	-7.51	3.04	-4.47	11	Pass
ac80_5210MHz_Chain 0	-9.57	3.39	-6.18	11	Pass
ax20_5180MHz_Chain 0	-0.83	3.47	2.64	11	Pass
ax20_5200MHz_Chain 0	-1.80	3.48	1.68	11	Pass
ax20_5240MHz_Chain 0	-2.60	3.47	0.87	11	Pass
ax40_5190MHz_Chain 0	-7.16	3.49	-3.67	11	Pass
ax40_5230MHz_Chain 0	-8.05	3.49	-4.56	11	Pass
ax80_5210MHz_Chain 0	-10.47	3.70	-6.77	11	Pass

3.5.5 Duty Cycle

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)	1/Ton (Hz)	VBW Setting* (kHz)
a_5180MHz_Chain 0	0.700	0.816	85.78	0.67	1429	2.000
a_5200MHz_Chain 0	0.701	0.823	85.18	0.70	1427	2.000
a_5240MHz_Chain 0	0.699	0.823	84.93	0.71	1431	2.000
n20_5180MHz_Chain 0	5.360	10.352	51.78	2.86	187	0.200
n20_5200MHz_Chain 0	5.365	10.352	51.83	2.85	186	0.200
n20_5240MHz_Chain 0	5.365	10.352	51.83	2.85	186	0.200
n40_5190MHz_Chain 0	5.142	10.347	49.70	3.04	194	0.200
n40_5230MHz_Chain 0	5.143	10.347	49.71	3.04	194	0.200
ac80_5210MHz_Chain 0	4.748	10.352	45.87	3.39	211	0.300
ax20_5180MHz_Chain 0	4.650	10.347	44.94	3.47	215	0.300
ax20_5200MHz_Chain 0	4.649	10.357	44.89	3.48	215	0.300
ax20_5240MHz_Chain 0	4.649	10.347	44.93	3.47	215	0.300
ax40_5190MHz_Chain 0	4.634	10.358	44.74	3.49	216	0.300
ax40_5230MHz_Chain 0	4.634	10.352	44.76	3.49	216	0.300
ax80_5210MHz_Chain 0	4.416	10.352	42.66	3.70	226	0.300

Duty Cycle = Ton/(Ton+Toff)*100%

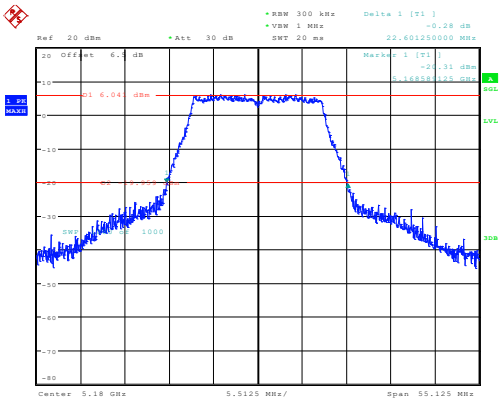
Note*: Radiated emission test with average value, the Spectrum analyzer VBW setting information.

Test Plots:

26dB Emission Bandwidth

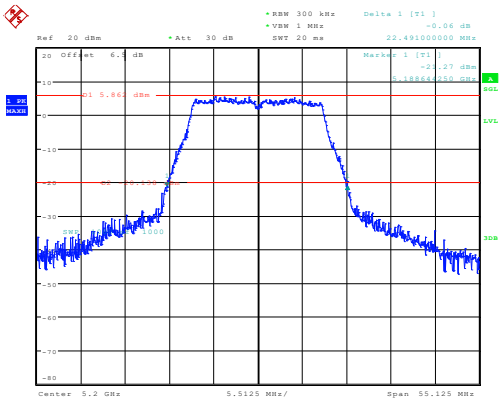
5.2G

a_5180MHz_Chain 0 22.601MHz



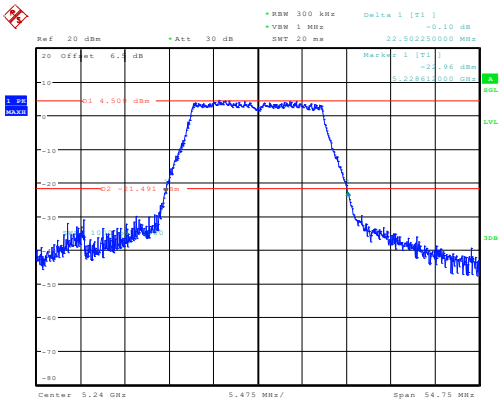
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 11:37:39

a_5200MHz_Chain 0 22.491MHz



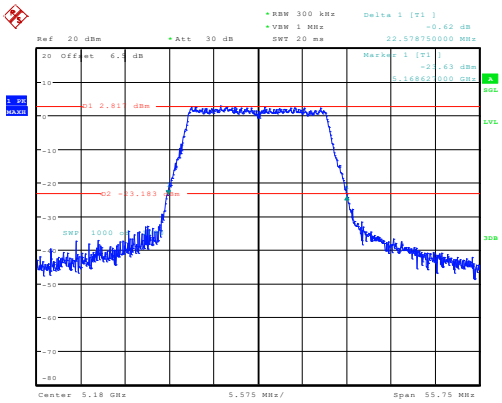
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 11:40:07

a_5240MHz_Chain 0 22.502MHz



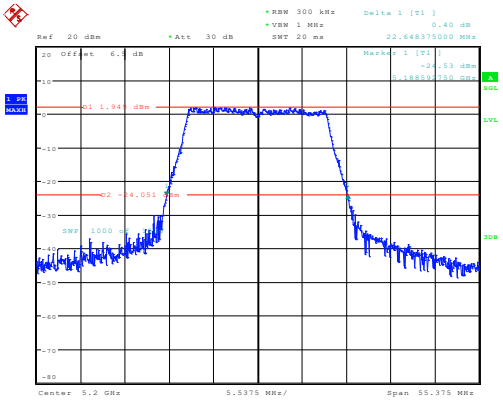
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 11:42:49

n20_5180MHz_Chain 0 22.579MHz



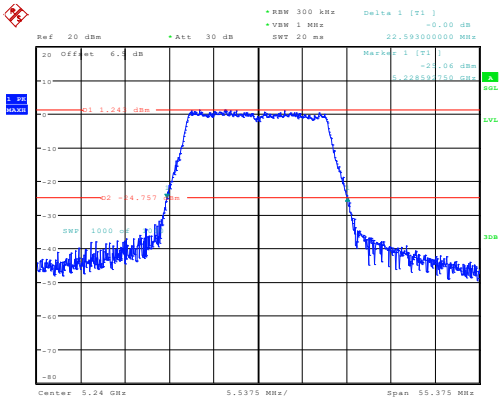
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 11:46:11

n20_5200MHz_Chain 0 22.648MHz



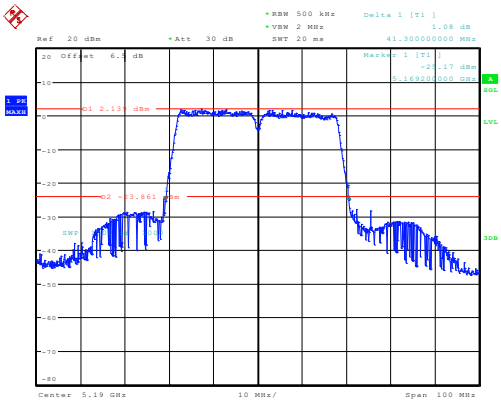
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:23:36

n20_5240MHz_Chain 0 22.593MHz



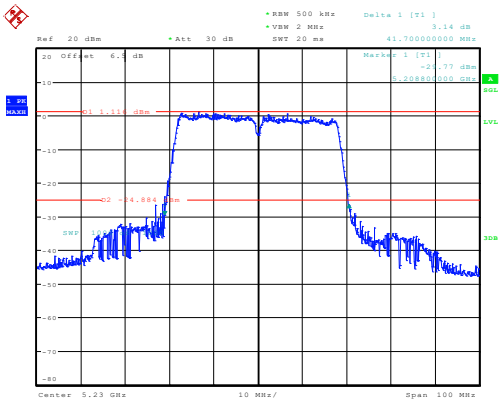
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:26:08

n40_5190MHz_Chain 0 41.300MHz



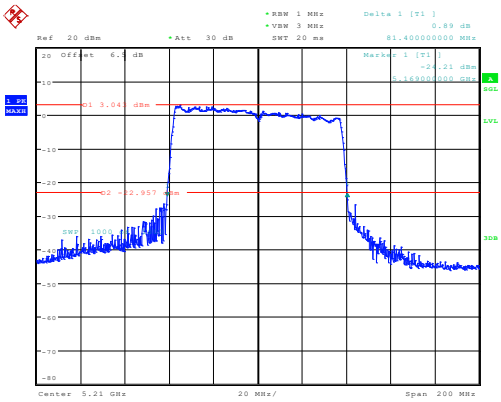
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:29:12

n40_5230MHz_Chain 0 41.700MHz



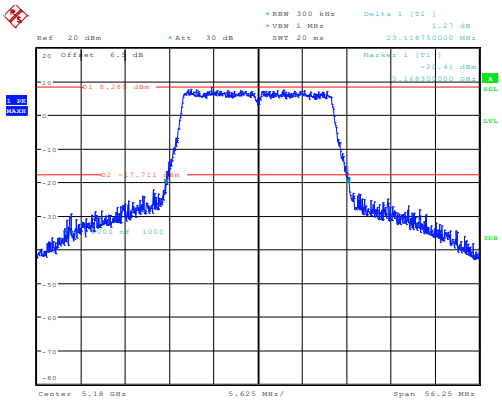
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:32:56

ac80_5210MHz_Chain 0 81.400MHz



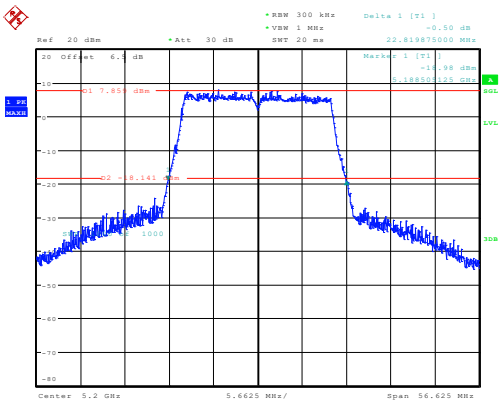
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:36:23

ax20_5180MHz_ Chain 0 23.119MHz



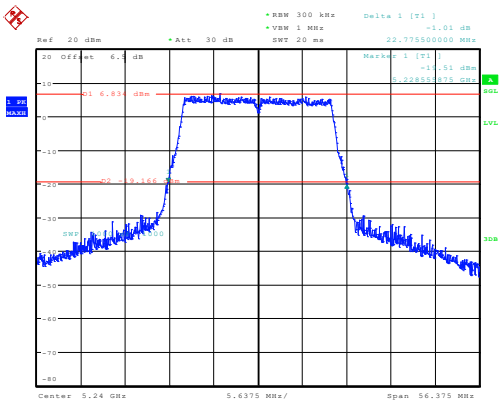
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:42:11

ax20_5200MHz_ Chain 0 22.820MHz



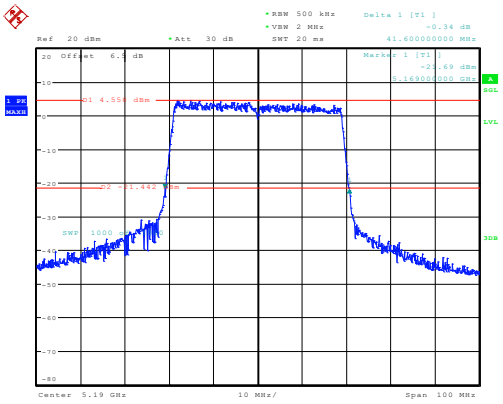
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:44:54

ax20_5240MHz_ Chain 0 22.776MHz



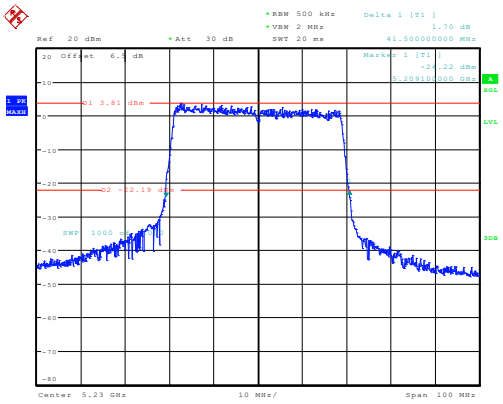
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:48:03

ax40_5190MHz_ Chain 0 41.600MHz



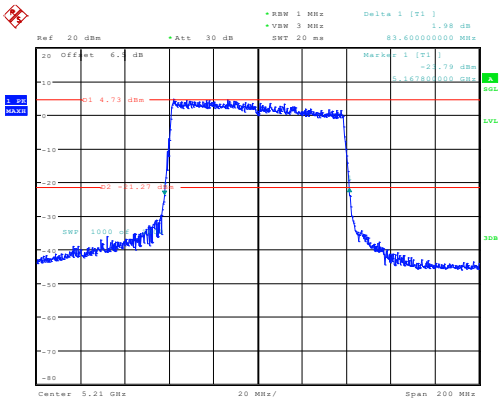
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:51:33

ax40_5230MHz_ Chain 0 41.500MHz



ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:58:25

ax80_5210MHz_ Chain 0 83.600MHz

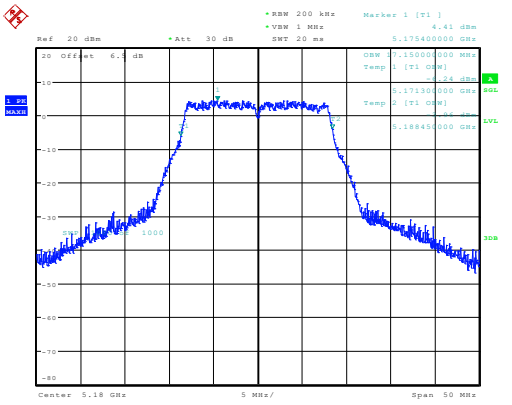


ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:01:29

99% Occupied Bandwidth

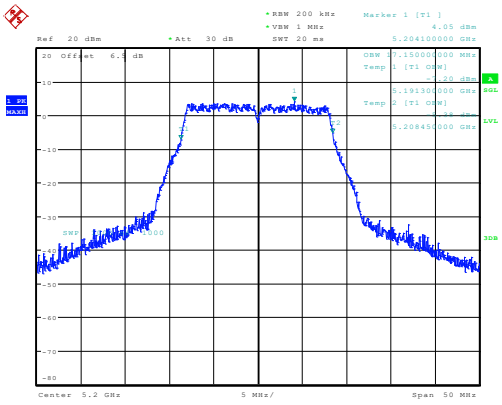
5.2G

a_5180MHz_Chain 0 17.150MHz



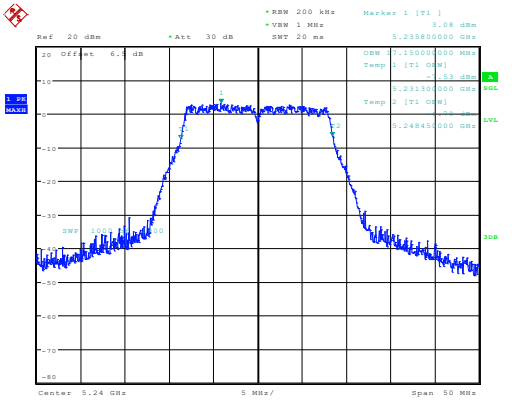
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:21:22

a_5200MHz_Chain 0 17.150MHz



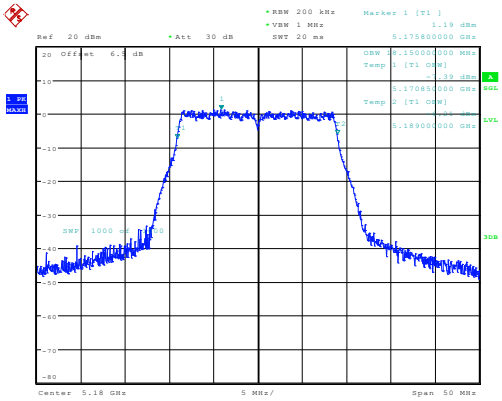
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:22:23

a_5240MHz_Chain 0 17.150MHz



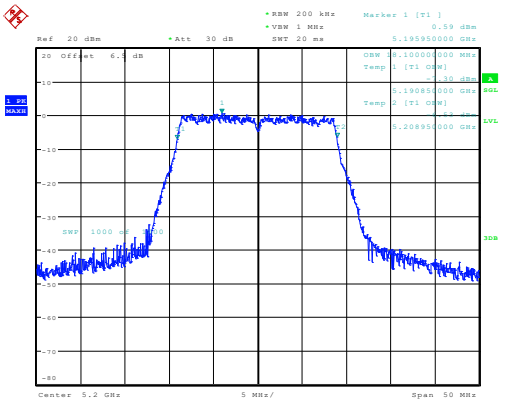
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:23:27

n20_5180MHz_Chain 0 18.150MHz



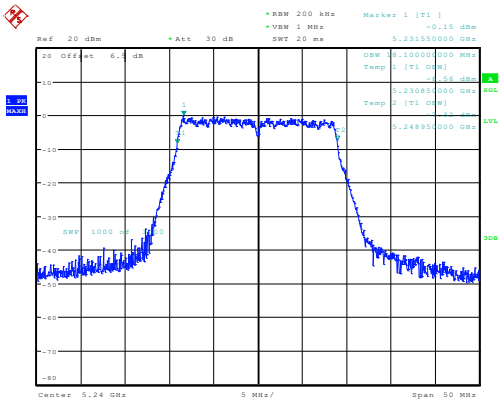
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:25:18

n20_5200MHz_Chain 0 18.100MHz



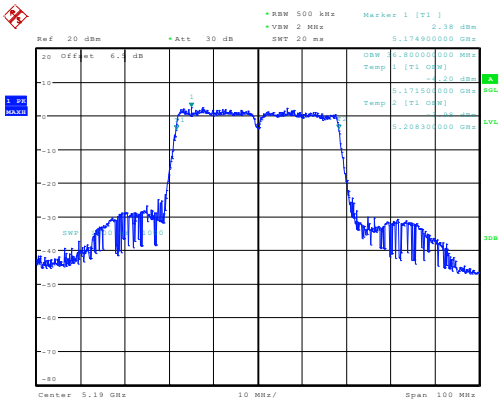
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:26:19

n20_5240MHz_Chain 0 18.100MHz



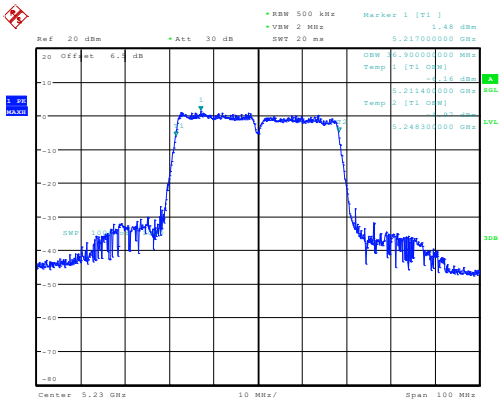
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:29:15

n40_5190MHz_Chain 0 36.800MHz



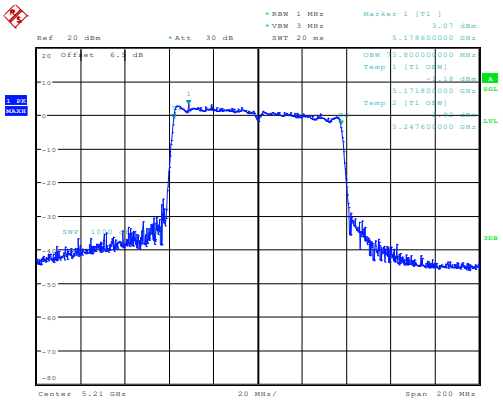
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:32:22

n40_5230MHz_Chain 0 36.900MHz



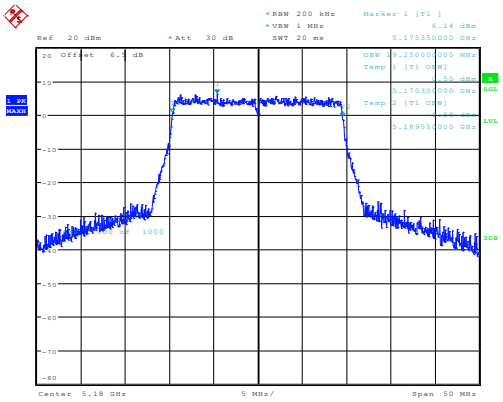
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:34:48

ac80_5210MHz_Chain 0 75.800MHz



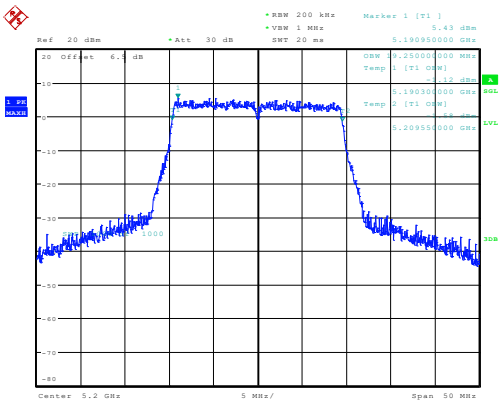
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:36:41

ax20_5180MHz_ Chain 0 19.250MHz



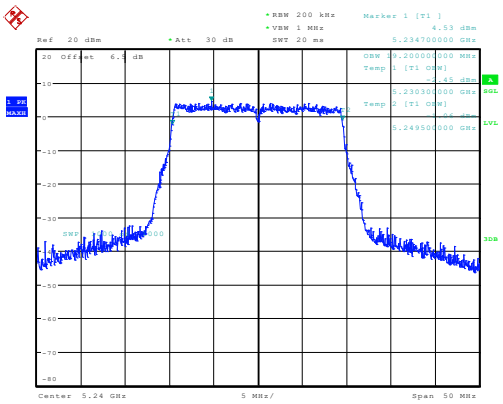
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:38:22

ax20_5200MHz_ Chain 0 19.250MHz



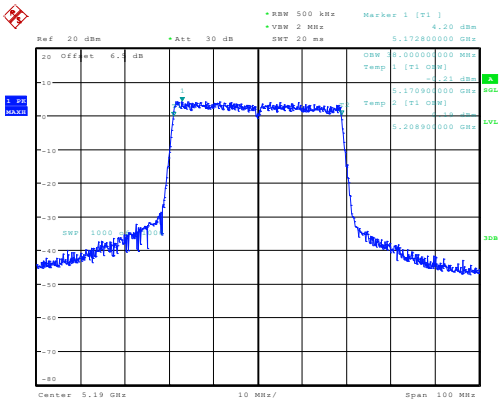
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:39:35

ax20_5240MHz_ Chain 0 19.200MHz



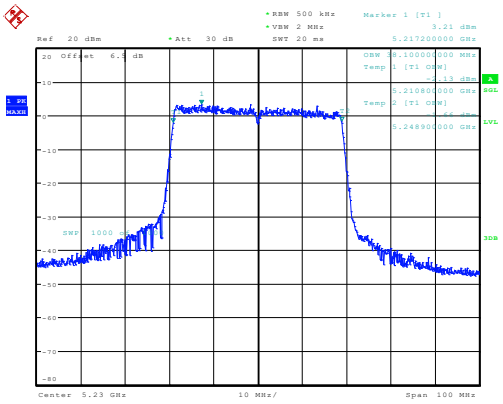
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:40:45

ax40_5190MHz_ Chain 0 38.000MHz



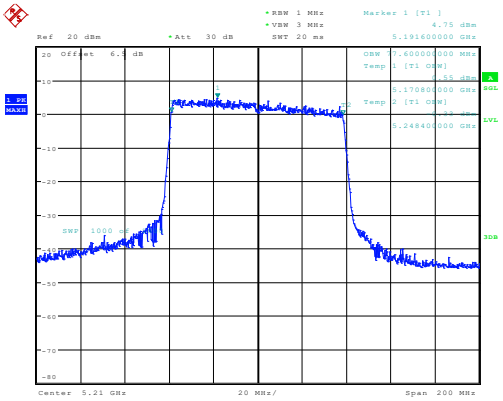
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:43:10

ax40_5230MHz_ Chain 0 38.100MHz



ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:44:51

ax80_5210MHz_ Chain 0 77.600MHz

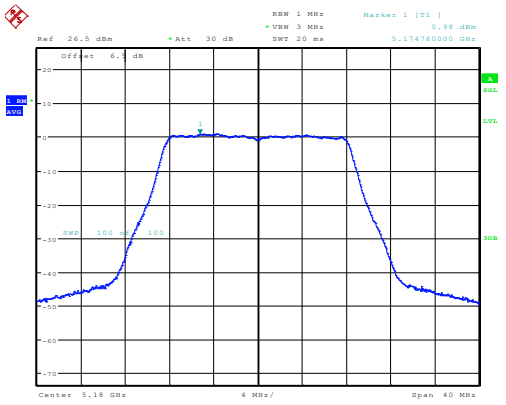


ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:46:36

Power Spectral Density

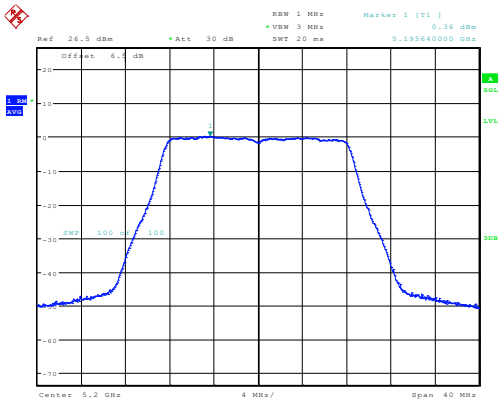
5.2G

a_5180MHz_Chain 0 0.98dBm/MHz



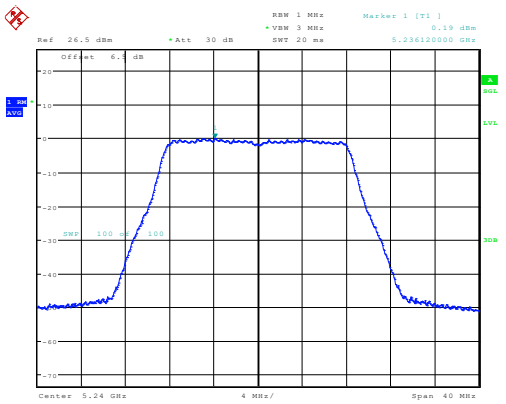
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 29.JUL.2024 18:14:25

a_5200MHz_Chain 0 0.36dBm/MHz



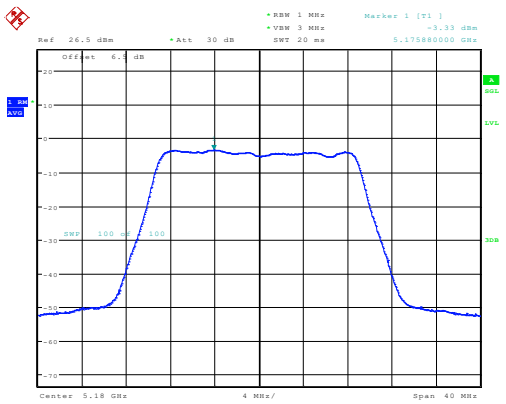
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 29.JUL.2024 18:14:51

a_5240MHz_Chain 0 0.19dBm/MHz



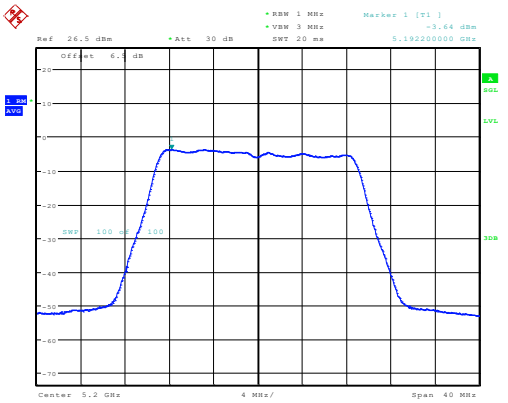
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 29.JUL.2024 18:15:14

n20_5180MHz_Chain 0 -3.33dBm/MHz



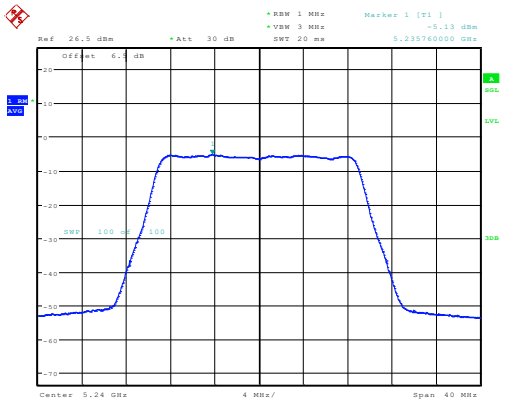
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 11:46:24

n20_5200MHz_Chain 0 -3.64dBm/MHz



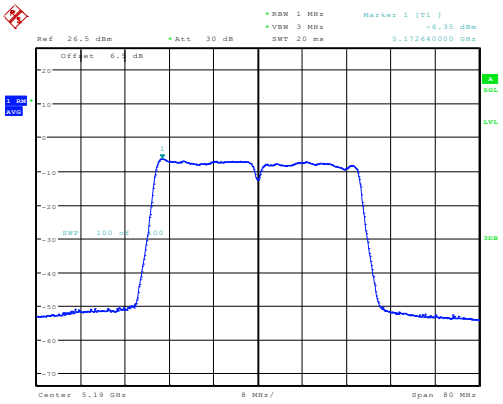
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:23:50

n20_5240MHz_Chain 0 -5.13dBm/MHz



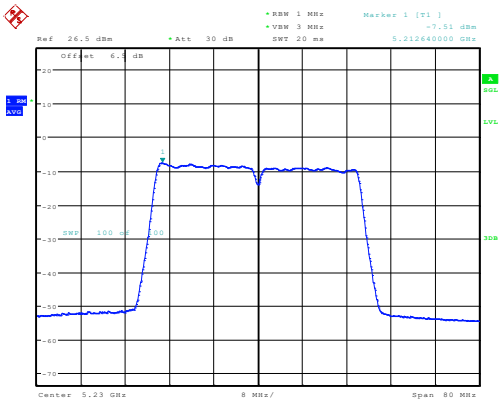
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:26:22

n40_5190MHz_Chain 0 -6.35dBm/MHz



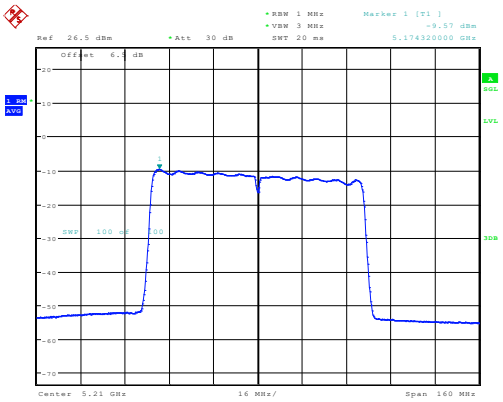
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:29:26

n40_5230MHz_Chain 0 -7.51dBm/MHz



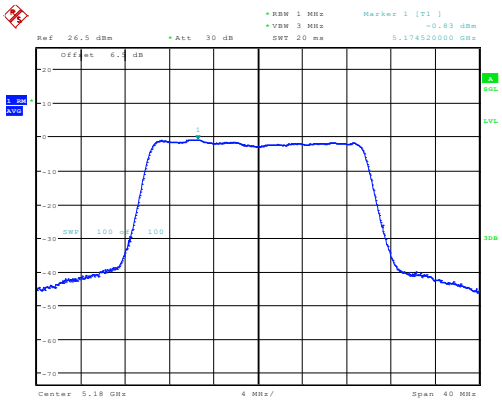
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:33:11

ac80_5210MHz_Chain 0 -9.57dBm/MHz



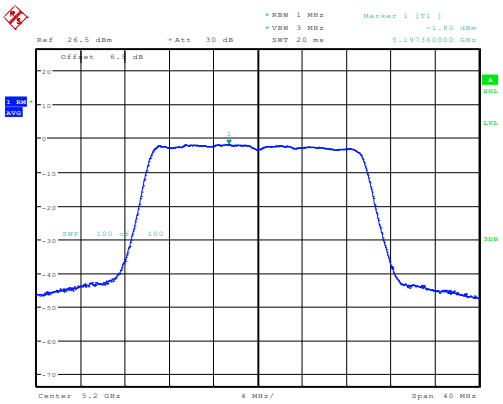
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:36:41

ax20_5180MHz_ Chain 0 -0.83dBm/MHz



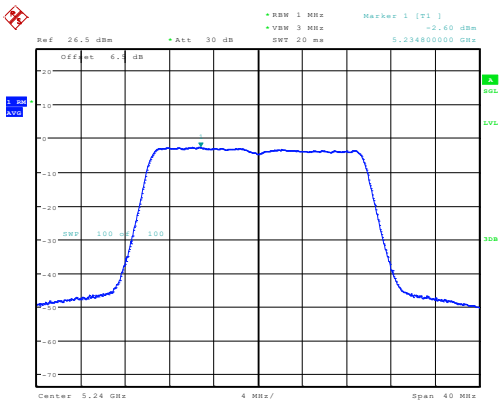
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:42:25

ax20_5200MHz_ Chain 0 -1.80dBm/MHz



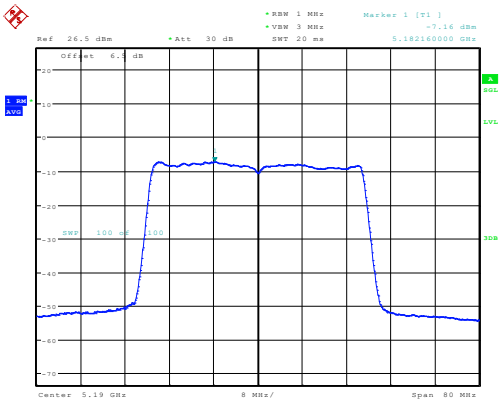
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:45:07

ax20_5240MHz_ Chain 0 -2.60dBm/MHz



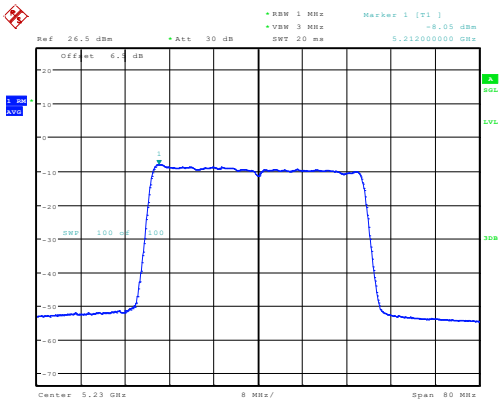
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:48:17

ax40_5190MHz_ Chain 0 -7.16dBm/MHz



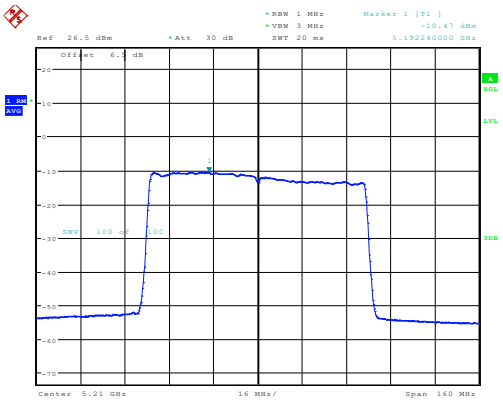
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:51:47

ax40_5230MHz_ Chain 0 -8.05dBm/MHz



ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:58:39

ax80_5210MHz_ Chain 0 -10.47dBm/MHz



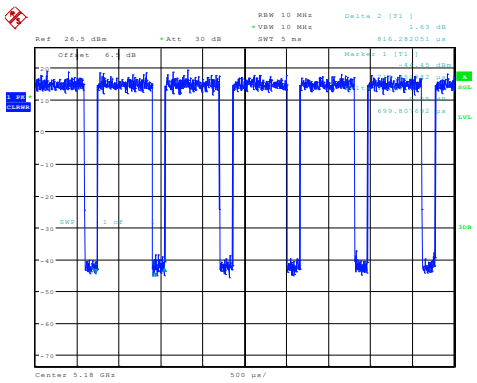
ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 14:01:47

Duty Cycle

5.2G

a_5180MHz_Chain 0

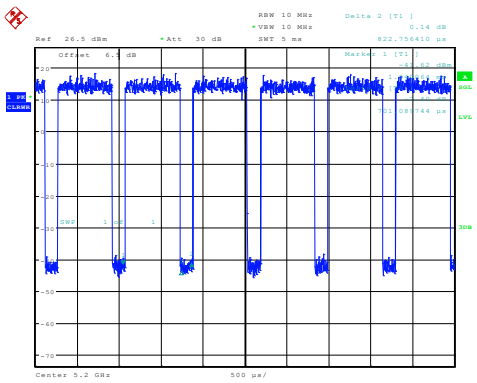
0.700ms,0.816ms



ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 29.JUL.2024 18:21:33

a_5200MHz_Chain 0

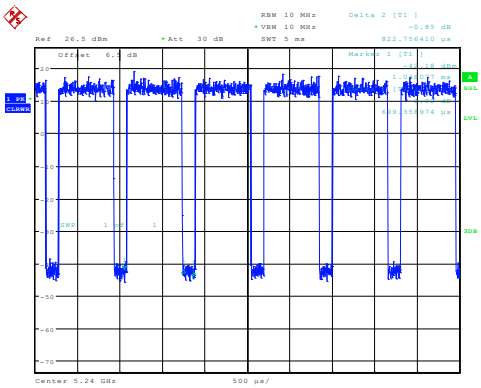
0.701ms,0.823ms



ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 29.JUL.2024 18:18:31

a_5240MHz_Chain 0

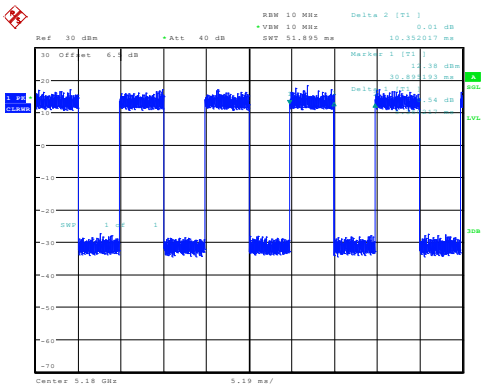
0.699ms,0.823ms



ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 29.JUL.2024 18:17:46

n20_5180MHz_Chain 0

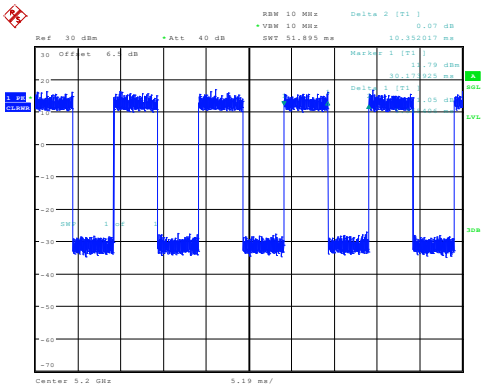
5.360ms,10.352ms



ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 11:44:31

n20_5200MHz_Chain 0

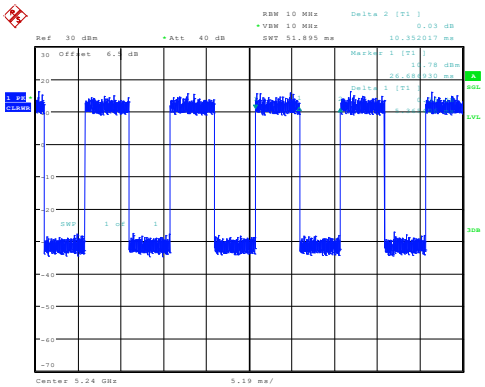
5.365ms,10.352ms



ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:21:52

n20_5240MHz_Chain 0

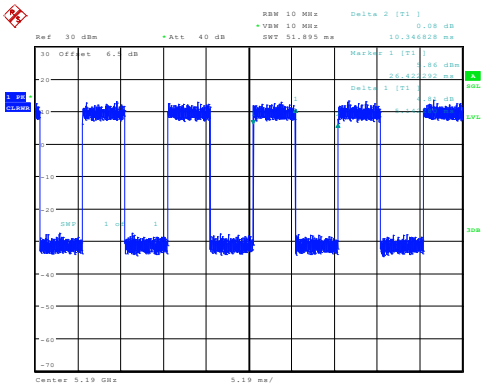
5.365ms,10.352ms



ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:24:23

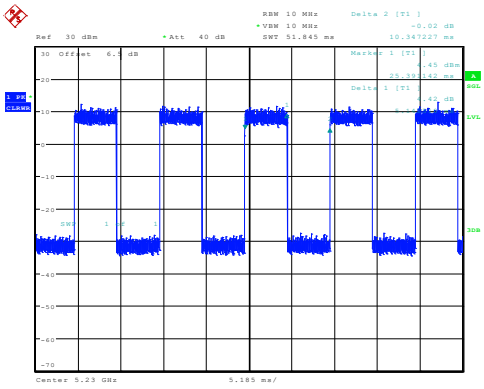
n40_5190MHz_Chain 0

5.142ms,10.347ms



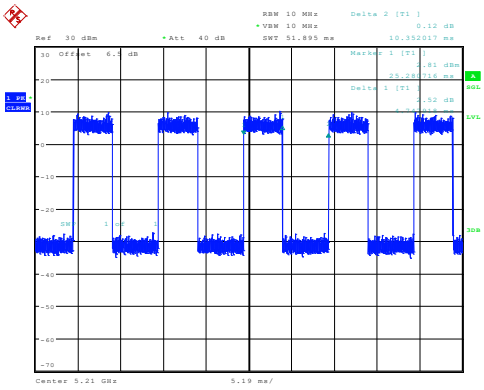
n40_5230MHz_Chain 0

5.143ms,10.347ms



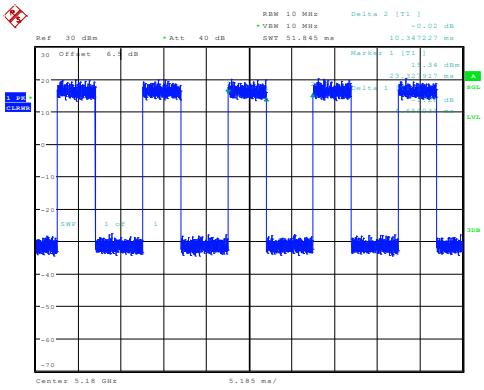
ac80_5210MHz_Chain 0

4.748ms,10.352ms



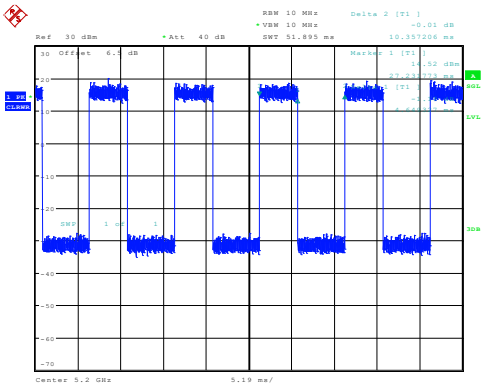
ax20_5180MHz_ Chain 0

4.650ms,10.347ms



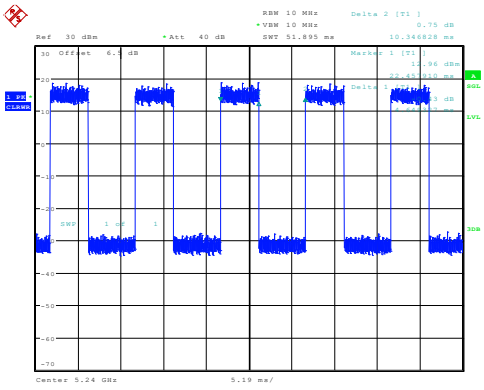
ax20_5200MHz_ Chain 0

4.649ms,10.357ms



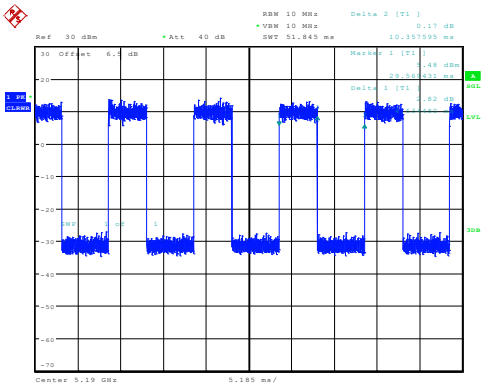
ax20_5240MHz_ Chain 0

4.649ms,10.347ms



ax40_5190MHz_ Chain 0

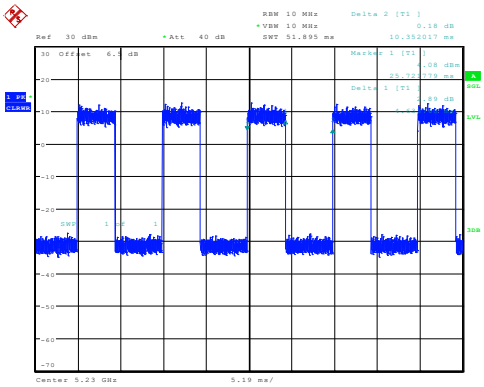
4.634ms,10.358ms



ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:50:01

ax40_5230MHz_ Chain 0

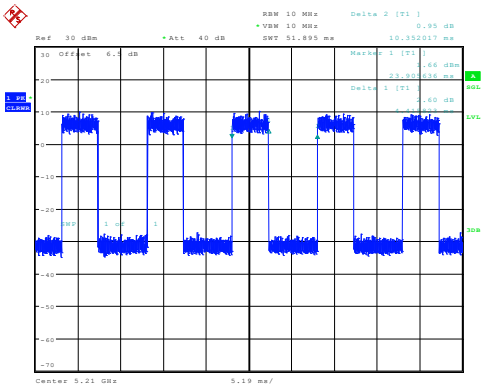
4.634ms,10.352ms



ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:56:54

ax80_5210MHz_ Chain 0

4.416ms,10.352ms



ProjectNo.:2405V85580E-RF Tester:Ryan Zhang
Date: 24.JUL.2024 13:59:58

4 Test Setup Photo

Please refer to the attachment 2405V85580EE Test Setup photo.

5 E.U.T Photo

Please refer to the attachment 2405V85580E External photo and 2405V85580E Internal photo.

---End of Report---