

FCC PART 15.407

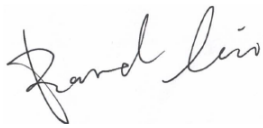
TEST REPORT

For

Miura Systems Ltd

Unit 3, Cliveden Office Village, Lancaster Road, Cressex Industrial Estate, High Wycombe,
United Kingdom

FCC ID: 2AO4FMASP01

Report Type: Original Report	Product Name: MASP01
Report Number:	<u>RKSA231206001-00D</u>
Report Date:	<u>2024-07-09</u>
Reviewed By:	<u>Bard Liu</u> 
Approved By:	<u>Kyle Xu</u> 
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Kunshan) No.248 Chenghu Road, Kunshan, Jiangsu Province, China Tel: +86-512-86175000 Fax: +86-512-88934268 www.baclcorp.com.cn

Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Kunshan). This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, or any agency of the U.S.Government.

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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	RKSA231206001-00D	R1V1	2024-07-09	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Miura Systems Ltd	
Product Name:	MASP01	
Tested Model	MASP01	
HVIN:	MASP01-1, MASP01-2	
Power Supply:	DC 5V charging (USB-C or POGO Pins port) or DC 7.4V battery	
Maximum Average Output Power:	5G Wi-Fi B1:	5G Wi-Fi B4:
	802.11a: 16.98 dBm	12.35 dBm
	802.11ac20: 14.75 dBm	12.27 dBm
	802.11n-HT20: 14.45 dBm	12.28 dBm
	802.11ac40: 15.96 dBm	11.18 dBm
	802.11n-HT40: 15.92 dBm	12.16 dBm
	802.11ac80: 12.84 dBm	11.24 dBm
RF Function	5G Wi-Fi	
Operating Band/Frequency:	Band 1: 5150~5250 MHz; Band 4: 5725~5850 MHz	
Channel Number:	Band 1: 7, Band 4: 8	
Channel Separation:	802.11a/802.11ac20/802.11n20: 20MHz; 802.11n40/802.11ac40: 40 MHz, 802.11ac80: 80 MHz	
Modulation Type	OFDM	
Antenna Type:	FPC antenna	
★Maximum Antenna Gain:	Band 1: -0.96 dBi Band 4: -1.86 dBi	

Adapter Information:

Model: ASSA107w-050500

Input: 100-240V~50/60Hz, 0.45A

Output: 5.0V, 2.0A, 10.0W

Note: The maximum antenna gain is provided by the applicant.

All measurement and test data in this report was gathered from production sample serial number:

RKSA231206001-1(HVIN: MASP01-1)(Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2023-12-06.)

Objective

This type approval report is prepared for *Miura Systems Ltd* 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.

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Kunshan).

Measurement Uncertainty

Item		Uncertainty
AC Power Lines Conducted Emissions		3.19 dB
RF conducted test with spectrum		0.9dB
RF Output Power with Power meter		0.5dB
Radiated emission	9 kHz~150 kHz	3.8dB
	150 kHz~30 MHz	3.4dB
	30MHz~1GHz	6.11dB
	1GHz~6GHz	4.45dB
	6GHz~18GHz	5.23dB
	18GHz~40GHz	5.65dB
Occupied Bandwidth		0.5kHz
Temperature		1.0℃
Humidity		6%

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu Province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) is accredited in accordance with ISO/IEC 17025:2017 by NVLAP (Lab code: 600338-0), and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No. : CN5055.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The EUT was configured for testing in an engineering mode which was provided by the manufacturer.

For **5150~5250 MHz** band, test channel list is as below,

802.11a/ac20/n20 mode Channel 36, 40, 48 were tested.

802.11n40/ac40 mode Channel 38, 46 were tested.

802.11ac80 mode Channel 42 was tested.

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

For **5725~5850 MHz** band,

802.11a/ac20/n20 mode Channel 149, 157, 165 were tested.

802.11n40/ac40 mode Channel 151, 159 were tested.

802.11ac80 mode Channel 155 was tested.

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

EUT Exercise Software

RF test tool: QRCT

The worst case was performed under:

5150MHz-5250MHz Band:

Mode	Data rate	Frequency (MHz)	★Power Level
802.11a	6 Mbps	5180	15
		5200	15
		5240	15
802.11ac20	MCS0	5180	13
		5200	13
		5240	13
802.11n-HT20	MCS0	5180	13
		5200	13
		5240	13
802.11ac40	MCS0	5190	13
		5230	13
802.11n-HT40	MCS0	5190	13
		5230	13
802.11ac80	MCS0	5210	13

Note:

1. The power level was declared by the applicant.

5725MHz-5850MHz Band:

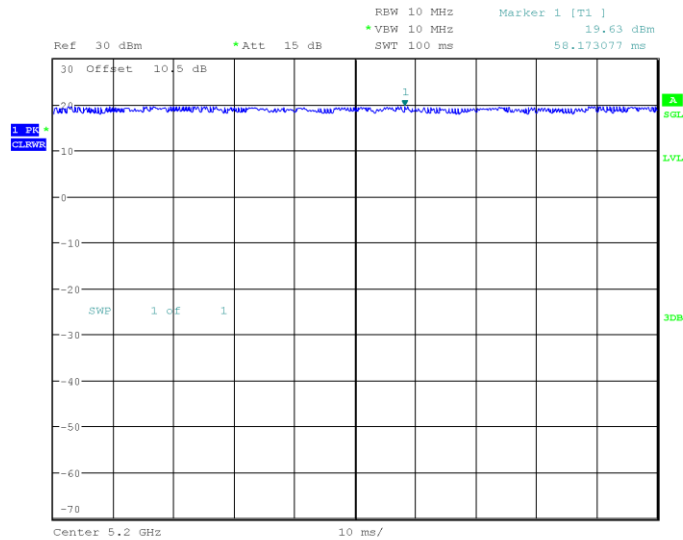
Mode	Data rate	Channel	★Power Level
802.11a	6 Mbps	5745	8
		5785	8
		5825	8
802.11ac20	MCS0	5745	8
		5785	8
		5825	8
802.11n-HT20	MCS0	5745	8
		5785	8
		5825	8
802.11ac40	MCS0	5755	7
		5795	7
802.11n-HT40	MCS0	5755	8
		5795	8
802.11ac80	MCS0	5775	7

Note: The power level was declared by the applicant.

Duty Cycle

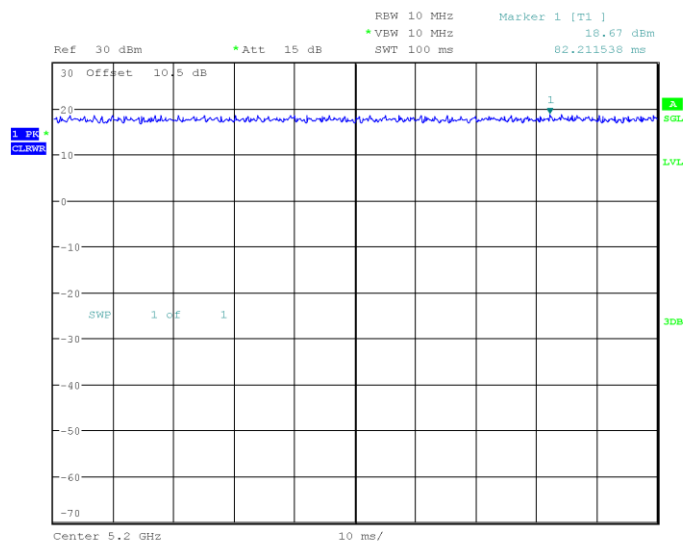
5150MHz-5250MHz Band:

802.11a mode



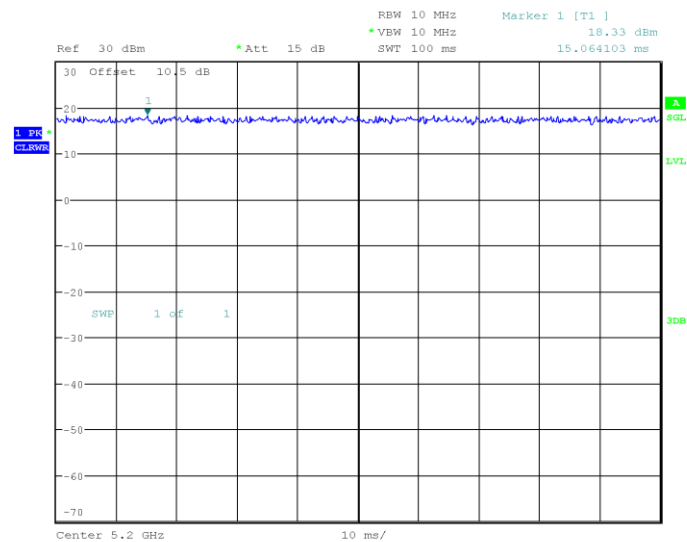
ProjectNo.: RKSA231206001 Tester:Bard Liu
 Date: 25.JUN.2024 16:37:18

802.11ac20 mode



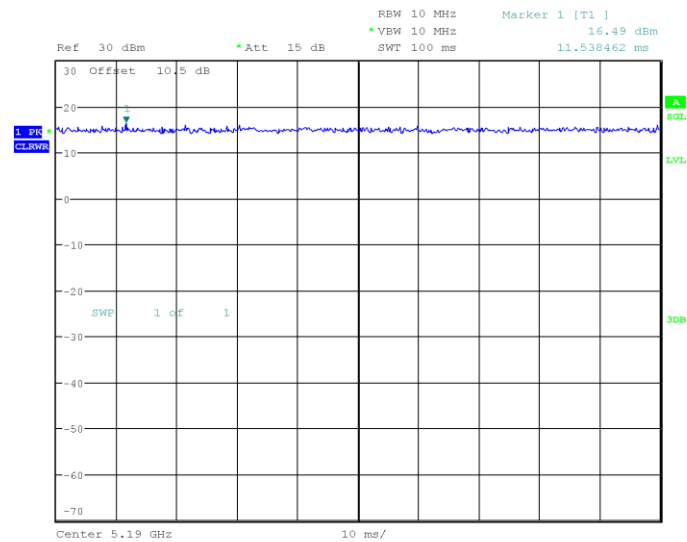
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 Date: 25.JUN.2024 16:47:00

802.11n-HT20 mode



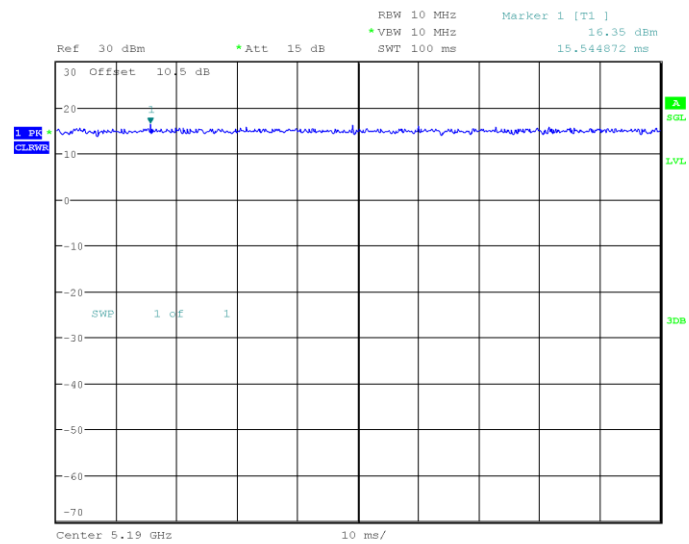
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Date: 25.JUN.2024 17:07:51

802.11 ac40 mode



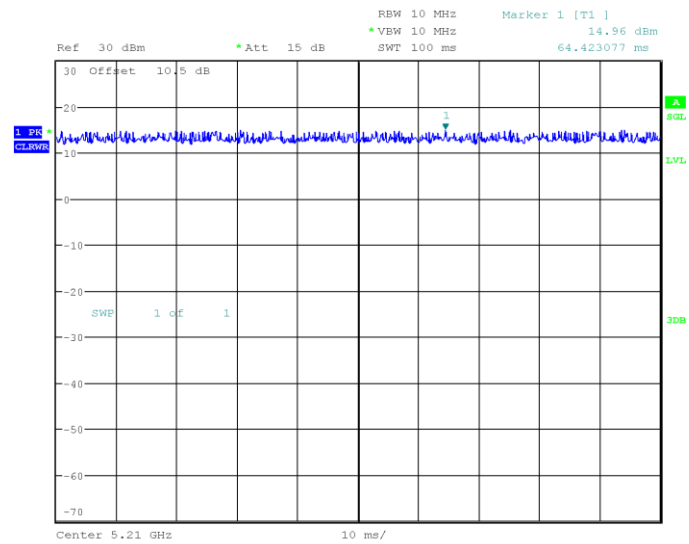
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Date: 25.JUN.2024 16:59:30

802.11n-HT40 mode

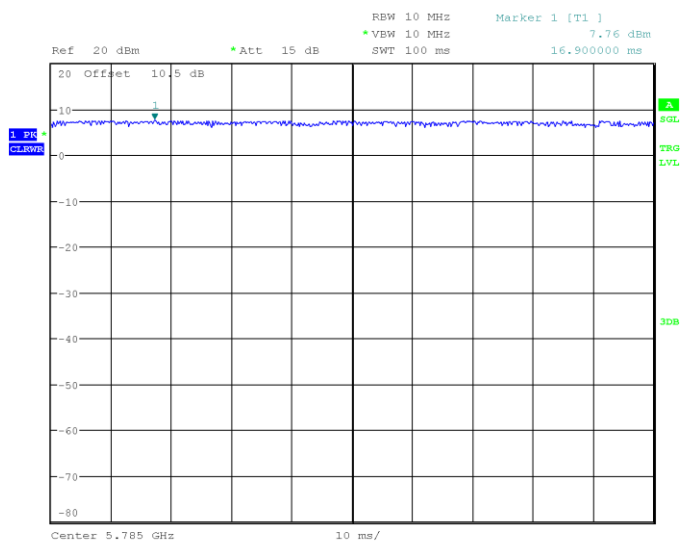


ProjectNo.: RKSA231206001 Tester:Bard Liu
Date: 25.JUN.2024 17:14:47

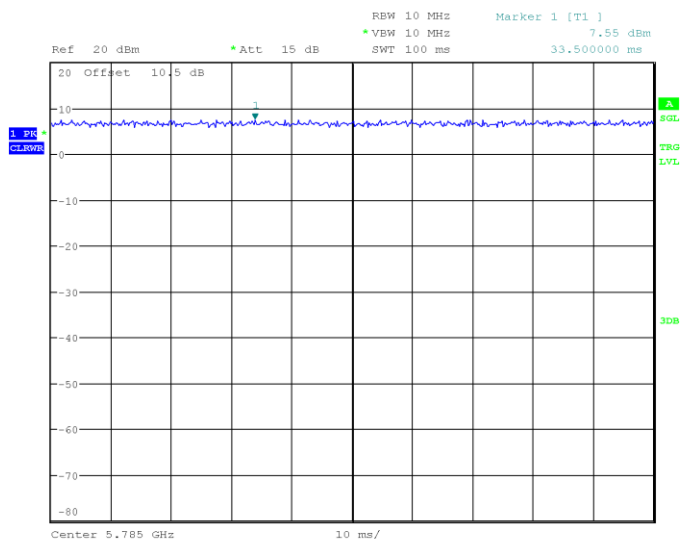
802.11 ac80 mode



ProjectNo.: RKSA231206001 Tester:Bard Liu
Date: 25.JUN.2024 17:04:42

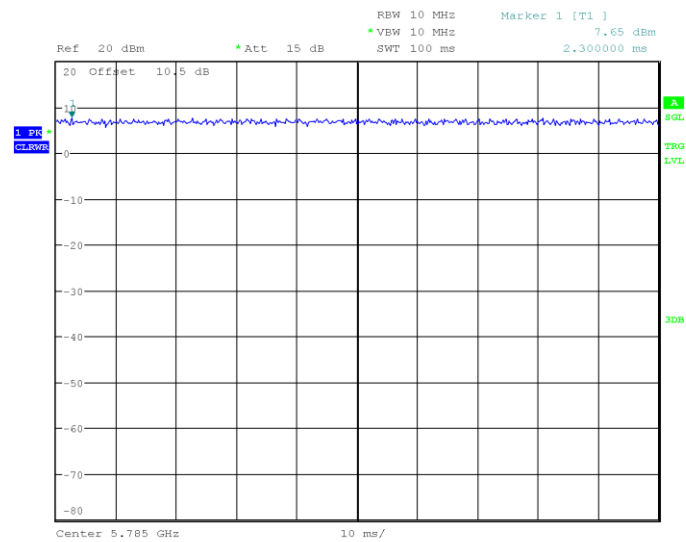
5725MHz-5850MHz Band:**802.11a mode**

ProjectNo.:RKSA231206001 Tester:Bard Liu
Date: 14.MAR.2024 11:09:51

802.11ac20 mode

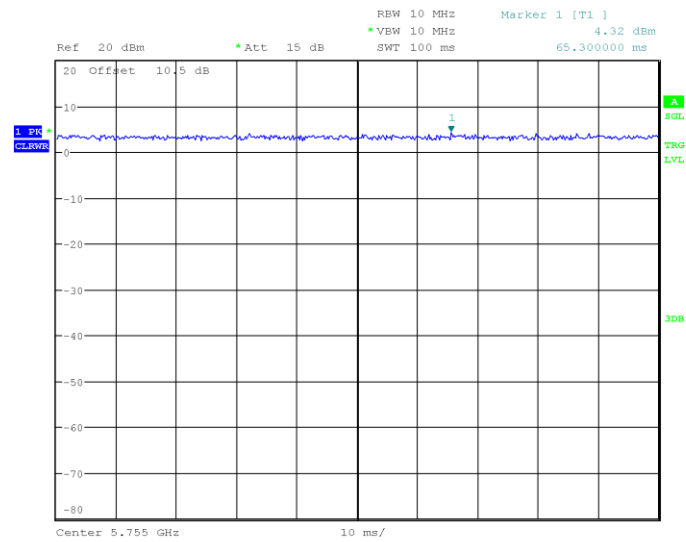
ProjectNo.:RKSA231206001 Tester:Bard Liu
Date: 14.MAR.2024 11:14:35

802.11n-HT20 mode



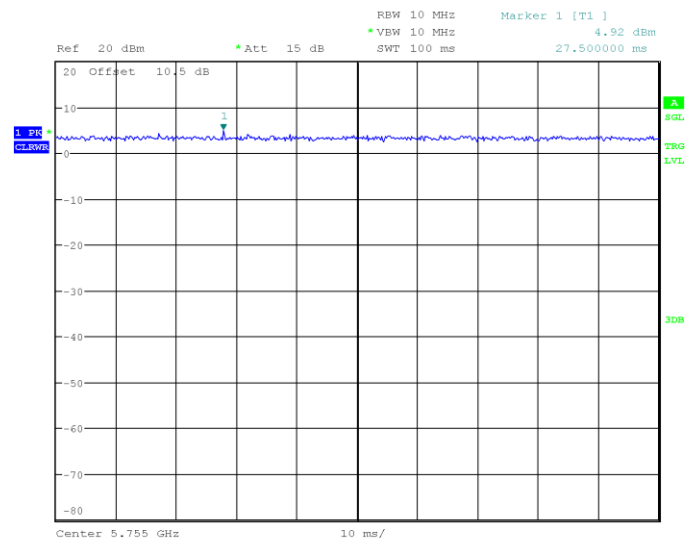
ProjectNo.:RKSA231206001 Tester:Bard Liu
Date: 14.MAR.2024 11:10:34

802.11 ac40 mode



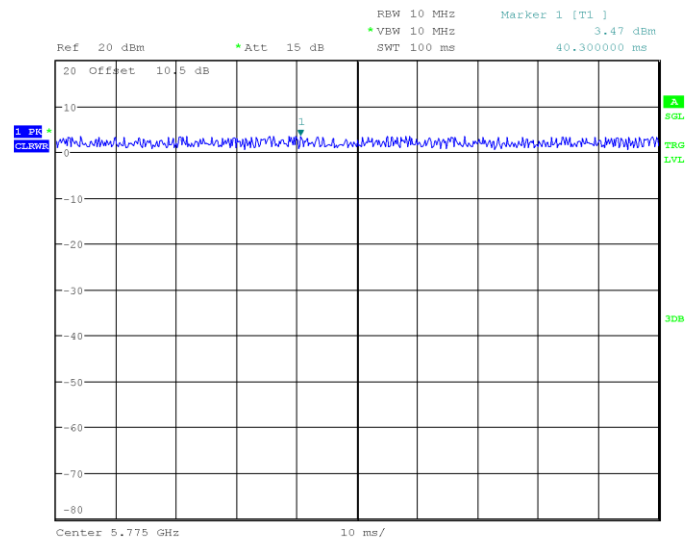
ProjectNo.:RKSA231206001 Tester:Bard Liu
Date: 14.MAR.2024 11:15:23

802.11n-HT40 mode



ProjectNo.:RKSA231206001 Tester:Bard Liu
Date: 14.MAR.2024 11:12:42

802.11n-ac80 mode



ProjectNo.:RKSA231206001 Tester:Bard Liu
Date: 14.MAR.2024 11:17:04

Test Mode	Channel (MHz)	Transmission Duration (ms)	Transmission Period	Duty Cycle (%)
802.11a	5200	100	100.00	100.00
	5785	100	100.00	100.00
802.11n-HT20	5200	100	100.00	100.00
	5785	100	100.00	100.00
802.11n-HT40	5190	100	100.00	100.00
	5755	100	100.00	100.00
802.11ac-VHT20	5200	100	100.00	100.00
	5785	100	100.00	100.00
802.11ac-VHT40	5190	100	100.00	100.00
	5755	100	100.00	100.00
802.11ac-VHT80	5210	100	100.00	100.00
	5775	100	100.00	100.00

Equipment Modifications

No modification was made to the EUT.

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
/	/	/	/

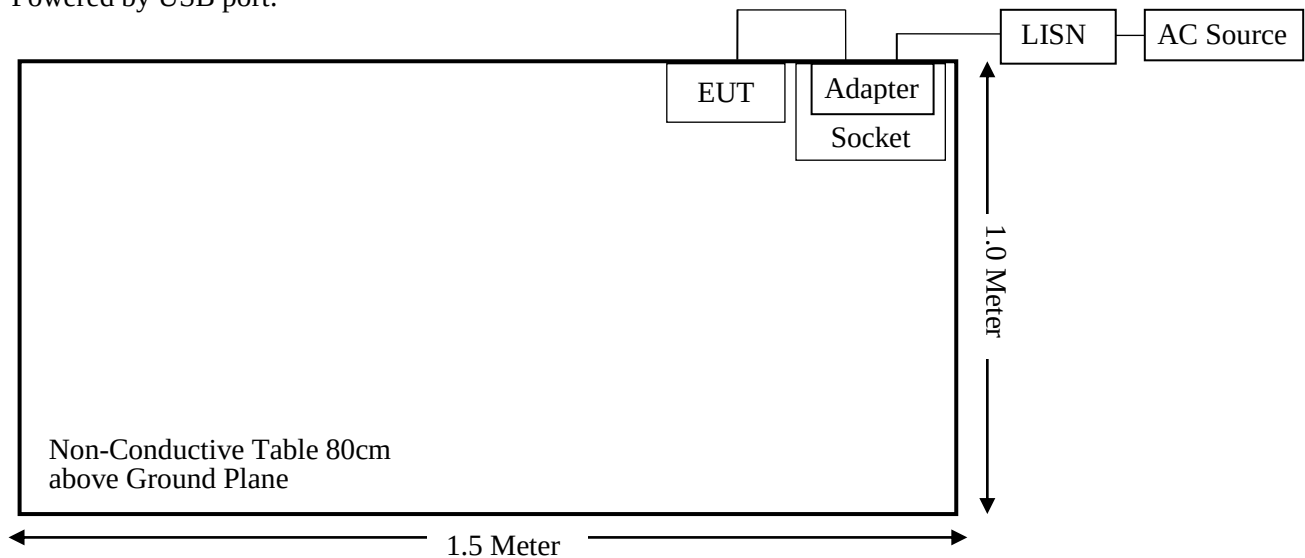
External I/O Cable

Cable Description	Length (m)	From Port	To
USB Cable	1.0	EUT/BASE	Adapter
Power Cable	1.0	Adapter	LISN/AC Source

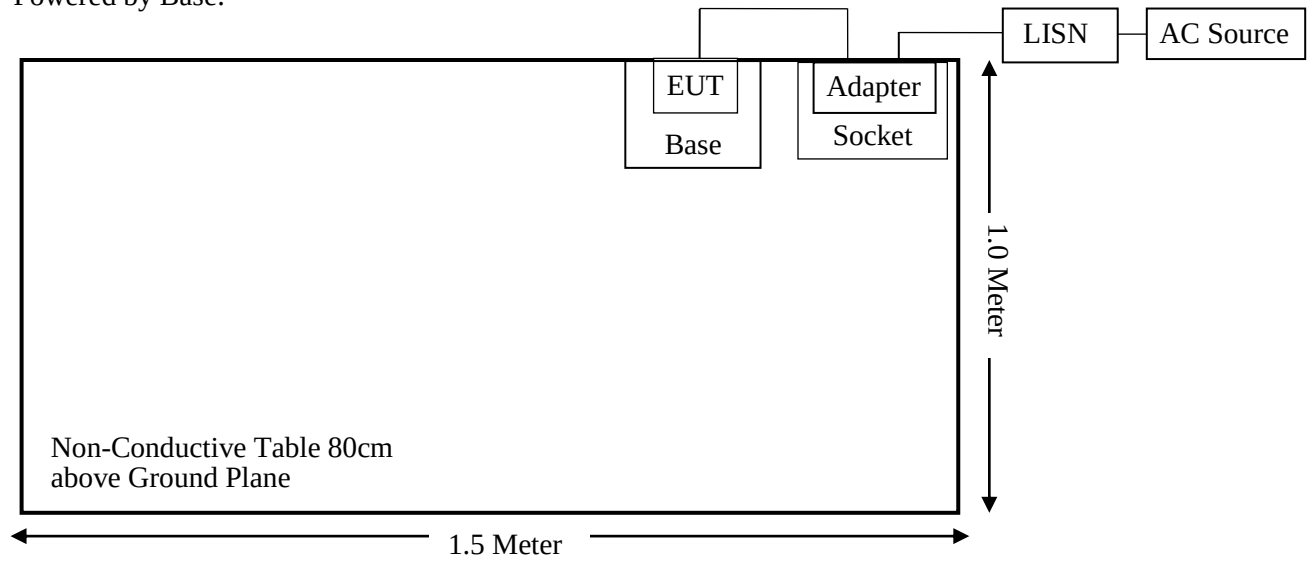
Block Diagram of Test Setup

For Conducted Emissions:

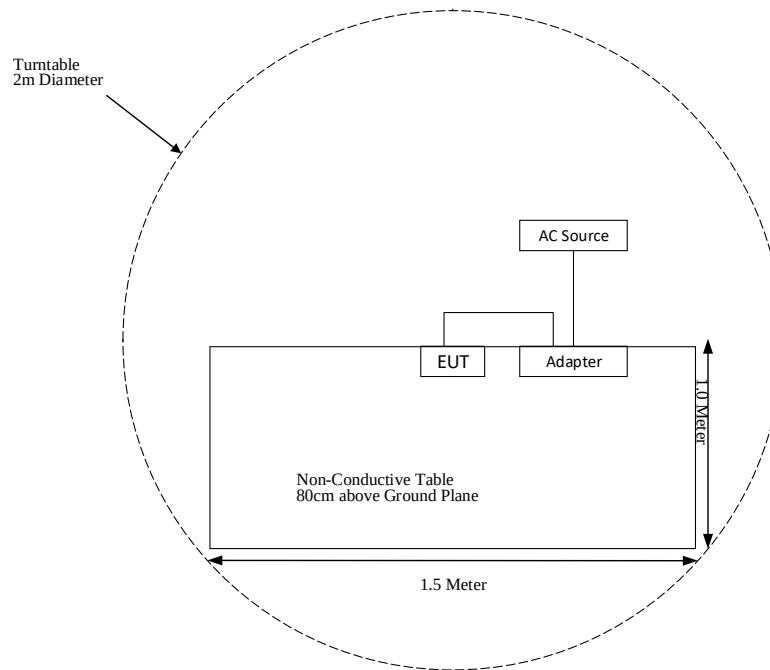
Powered by USB port:



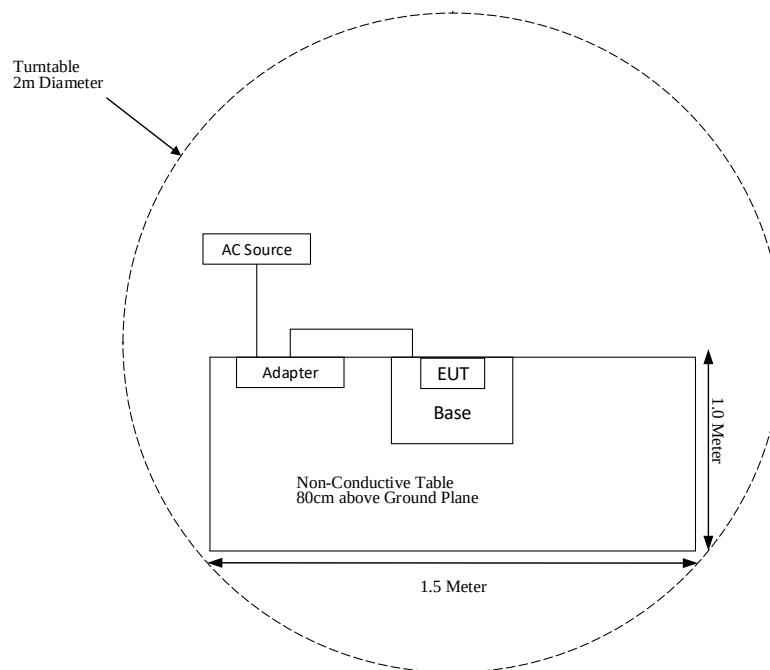
Powered by Base:



For Radiated Emissions (Below 1GHz):
Powered by USB port:

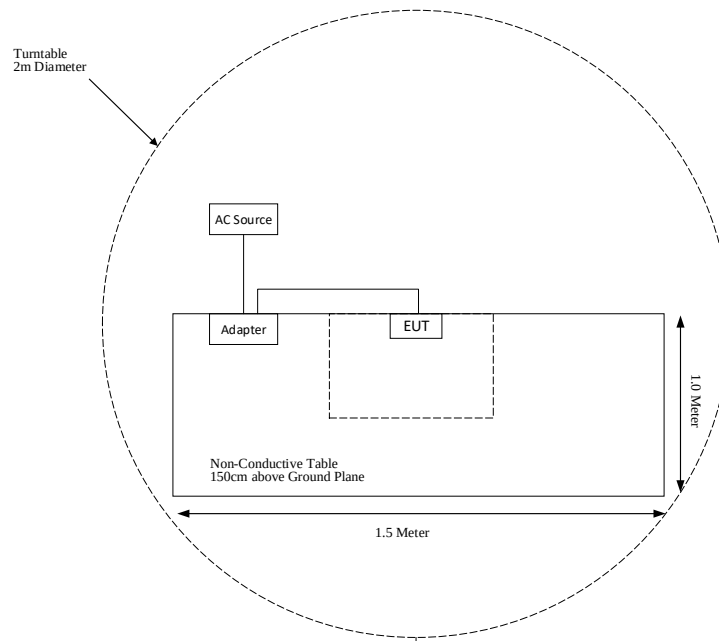


Powered by Base:



Powered by USB port:

For Radiated Emissions (Above 1 GHz):



Note: The product can be charged via two different ports, USB-C or POGO Pins. Both configurations be evaluated AC Power Line Conducted Emissions and Undesirable Emission for below 1GHz. Two configurations are basically the same. Therefore, only Powered by USB port mode to be assessed for above 1GHz.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test (Chamber #1)					
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2023-05-23	2024-05-22
Sunol Sciences	Hybrid Antenna	JB3	A090314-1	2023-11-11	2024-11-10
Sonoma Instrument	Amplifier	310N	171205	2023-05-23	2024-05-22
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
Narda	6 dB Attenuator	773-6	10690812-2-1	2023-11-11	2024-11-10
ETS-LINDGREN	Loop Antenna	6512	108100	2023-11-09	2024-11-08
MICRO-COAX	Coaxial Cable	Cable-8	008	2023-05-23	2024-05-22
MICRO-COAX	Coaxial Cable	Cable-9	009	2023-05-23	2024-05-22
MICRO-COAX	Coaxial Cable	Cable-10	010	2023-05-23	2024-05-22
Radiated Emission Test (Chamber #2)					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2023-05-19	2024-05-18
ETS-LINDGREN	Horn Antenna	3115	9311-4159	2023-12-02	2024-12-01
ETS-LINDGREN	Horn Antenna	3116	84159	2023-12-07	2024-12-06
A.H.Systems,inc	Amplifier	2641-1 (PAM-0118P)	512	2023-05-23	2024-05-22
EM Electronics Corporation	Amplifier	EM18G40G	060726	2023-05-23	2024-05-22
MICRO-TRONICS	Band Reject Filter	BRC50703	G094	2023-05-23	2024-05-22
MICRO-TRONICS	Band Reject Filter	BRC50705	G085	2023-05-23	2024-05-22
Narda	Attenuator	10dB	010	2023-05-23	2024-05-22
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-11	011	2023-05-23	2024-05-22
MICRO-COAX	Coaxial Cable	Cable-12	012	2023-05-23	2024-05-22
MICRO-COAX	Coaxial Cable	Cable-13	013	2023-05-23	2024-05-22
RF Conducted Test					
Rohde & Schwarz	Signal Analyzer	FSV40	101116	2023-05-23	2024-05-22
Rohde & Schwarz	Signal Analyzer	FSV40	101116	2024-04-24	2025-04-23
Rohde & Schwarz	Spectrum Analyzer	FSU26	200103	2023-05-23	2024-05-22
Rohde & Schwarz	Spectrum Analyzer	FSU26	200103	2024-04-24	2024-04-23
Anritsu	Power Sensor	MA24418A	12621	2023-09-27	2024-09-26
Narda	Attenuator	10dB	010	2023-05-23	2024-05-22
Narda	Attenuator	10dB	010	2024-04-24	2025-04-23
XHFDZ	RG316 Coaxial Cable	SMA-316	XHF-1175	Each time	N/A
Conducted Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR	101746	2023-05-23	2024-05-22
Rohde & Schwarz	LISN	ENV216	101115	2023-05-23	2024-05-22
Audix	Test Software	e3	V9	N/A	N/A
Rohde & Schwarz	Pulse Limiter	ESH3-Z2	0357.8810.54	2023-05-23	2024-05-22
MICRO-COAX	Coaxial Cable	Cable-15	015	2023-05-23	2024-05-22

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

SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliant
§15.207 & §15.407(b) (9)	AC Power Line Conducted Emissions	Compliant
§ 15.205 & §15.209 & §15.407(b)	Undesirable Emission & Restricted Bands	Compliant
§§15.407(a) & §15.407(e)	Emission Bandwidth	Compliant
§15.407(a) (1) (3)	Conducted Transmitter Output Power	Compliant
§15.407(a) (1) (3)	Power Spectral Density	Compliant

FCC §15.203 – ANTENNA REQUIREMENT

Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

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

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

Antenna Connector Construction

Antenna permanently attached to the unit. fulfill the requirement of this section. Please refer to the EUT photos.

Antenna Type	Frequency Range	Max. Antenna Gain	Input impedance
FPC	5150~5250 MHz	-0.96 dBi	50Ω
	5725~5850 MHz	-1.86 dBi	50Ω

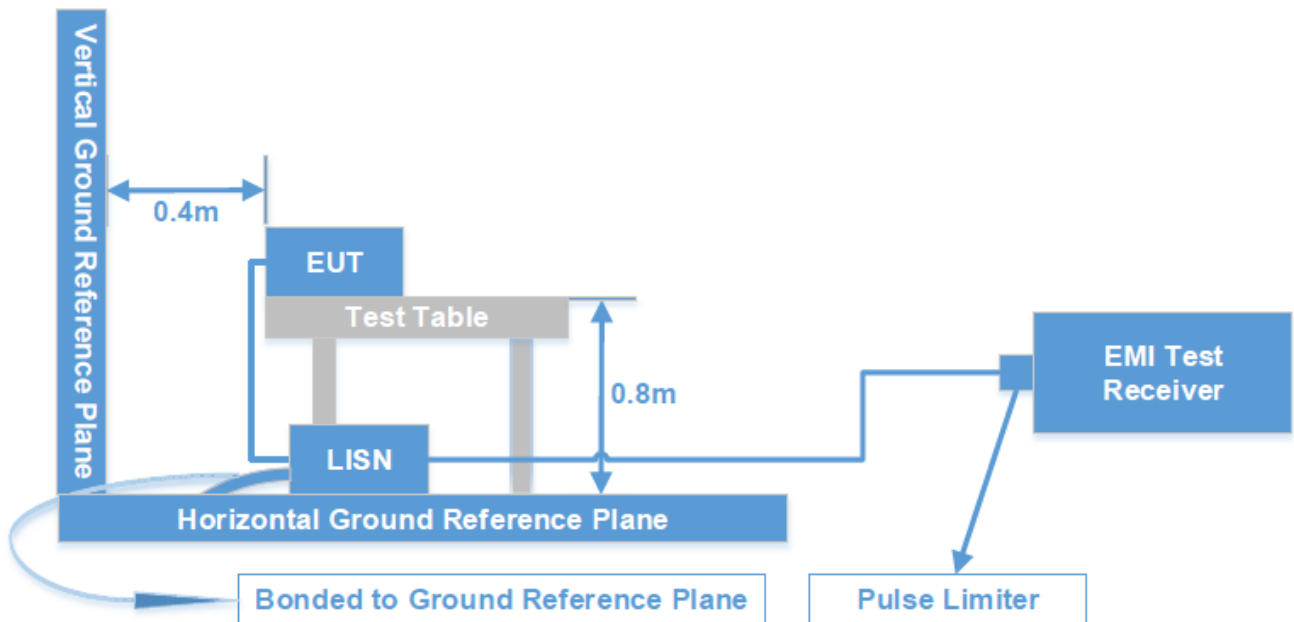
Result: Compliant.

FCC §15.407 (b) (9) §15.207 (a) – AC POWER LINE CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207(a), §15.407(b) (9)

Test System Setup



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

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	RBW	VBW
150 kHz - 30 MHz	9 kHz	30 kHz

Test Procedure

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

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

If the maximum peak value of the emissions is below the average limit, the QP value and average value measurement will not need to be performed and only record the maximum peak measured value to meet the requirements.

Level & Over Limit Calculation

The Level is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation from the Meter Reading. The basic equation is as follows:

$$\begin{aligned}\text{Factor (dB)} &= \text{LISN VDF (dB)} + \text{Cable Loss (dB)} + \text{Transient Limiter Attenuation (dB)} \\ \text{Level (dB}\mu\text{V)} &= \text{Read level (dB}\mu\text{V)} + \text{Factor (dB)}\end{aligned}$$

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 above the limit. The equation for Over Limit calculation is as follows:

$$\text{Over Limit (dB)} = \text{Level (dB}\mu\text{V)} - \text{Limit (dB}\mu\text{V)}$$

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207.

Test Data: See Appendix

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

Applicable Standard

FCC §15.407 (b); §15.209; §15.205;

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.

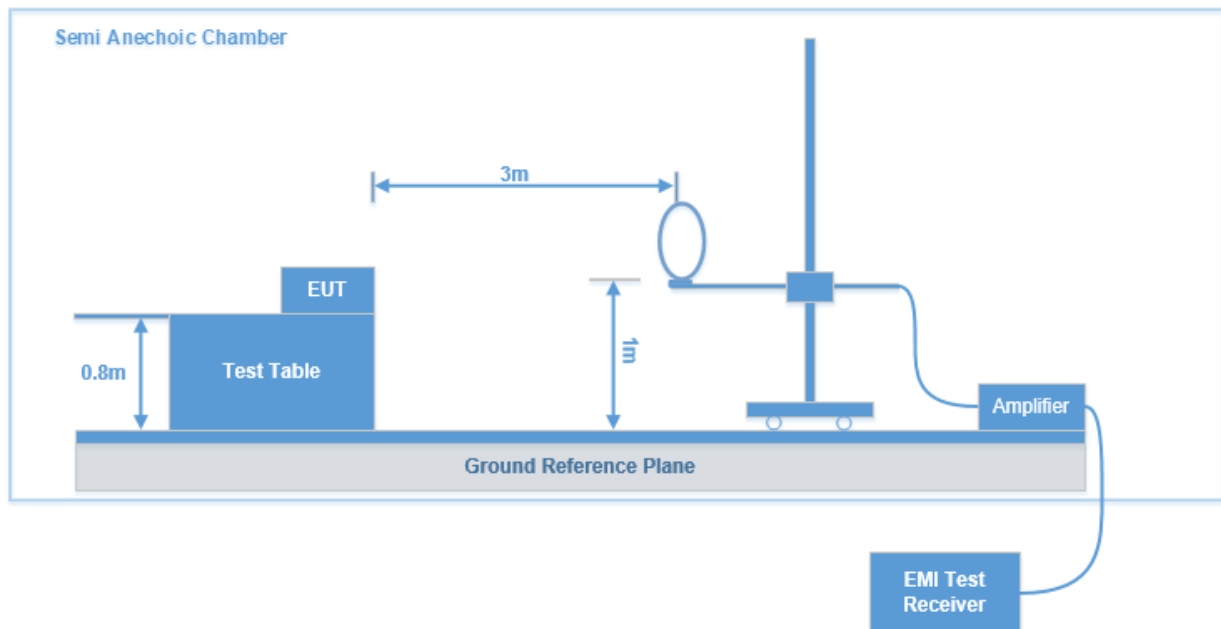
For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to 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.

As per FCC §15.35(d): Unless otherwise specified, on any frequency or frequencies above 1000MHz, the radiated emission limits are based on the use of measurement instrumentation employing an average detector function. Unless otherwise specified, measurements above 1000MHz shall be performed using a minimum resolution bandwidth of 1MHz.

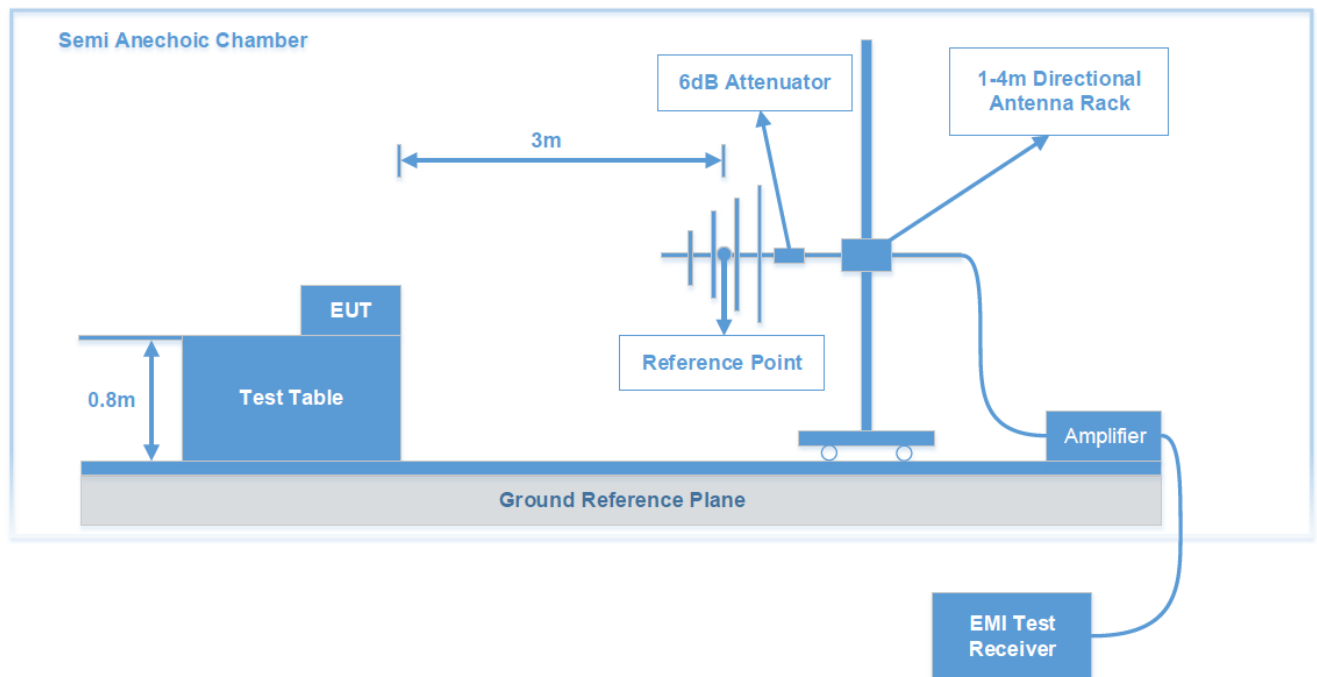
According to 789033 D02 General UNII Test Procedures New Rules v02r01, emission shall be computed as: $E \text{ [dB}\mu\text{V/m]} = \text{EIRP [dBm]} + 95.2$, for $d = 3$ meters.

Test System Setup

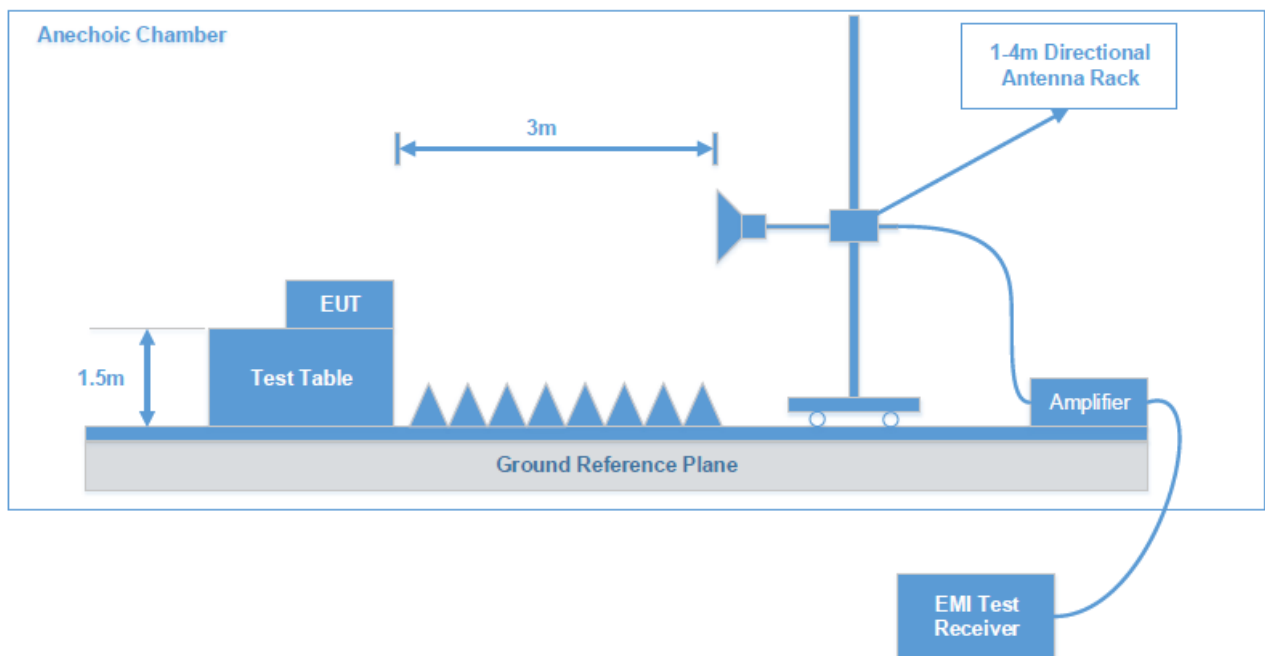
9kHz-30MHz:



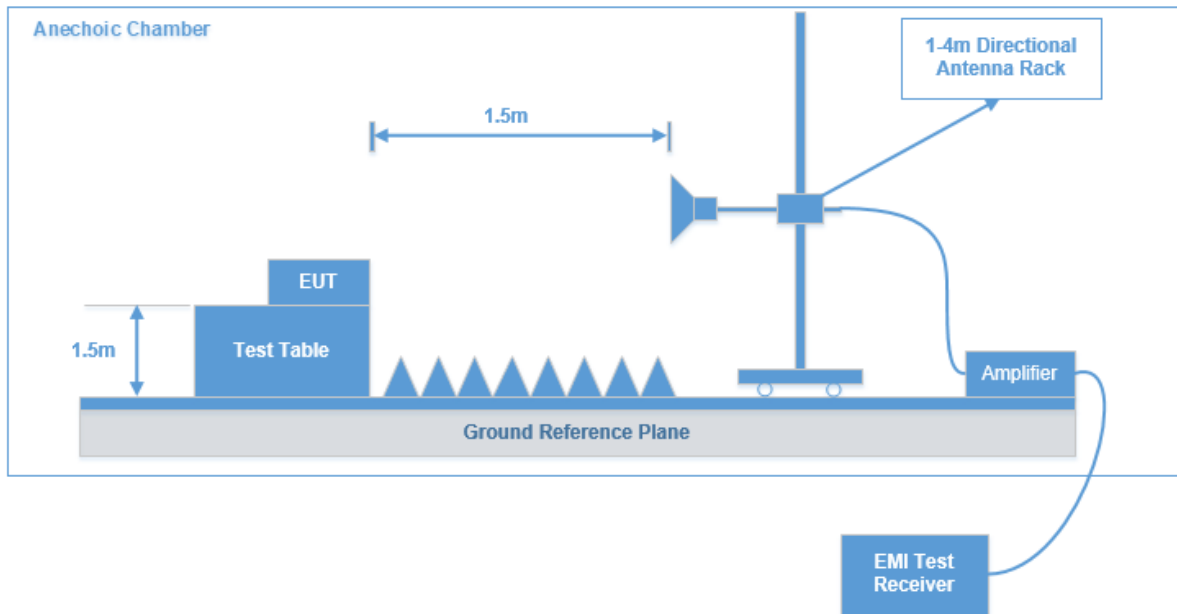
30MHz-1GHz:



1 GHz-18GHz:



18-40GHz:



The radiated emission tests were performed in the 3 meters test site for below 18GHz and 1.5m for 18-40 GHz, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209 and FCC 15.407 limits. The limit at 1.5m for 18-40 GHz is 80dB μ V/m (Peak) and 60dB μ V/m (Average)

The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.10-2013. The specification used was 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.

The spacing between the peripherals was 10 cm.

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 Setup was set with the following configurations:

Frequency Range	RBW	VBW	IF B/W	Detector
9 kHz - 150 kHz	200 Hz	1 kHz	200 Hz	QP/Average
150 kHz - 30 MHz	9 kHz	30 kHz	9 kHz	QP/ Average
30 MHz - 1000 MHz	100 kHz	300 kHz	/	Peak
	/	/	120 kHz	QP
Above 1GHz	1MHz	3 MHz	/	Peak
	1MHz	3 MHz	/	Average

Test Procedure

During the radiated emission test, the adapter was connected to AC floor outlet. Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

For 9 kHz-30MHz test, the lowest height of the magnetic antenna shall be 1 m above the ground and three antenna orientations (parallel, perpendicular, and ground-parallel) shall be measured.

Corrected Amplitude & Margin Calculation

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

Corrected Amplitude (dBμV/m) = Meter Reading (dBμV) + Corrected factor (dB/m)

Corrected factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB)

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

Test Data: See Appendix

FCC §15.407(a) & §15.407(e)–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 band is 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

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.

3. Occupied bandwidth

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

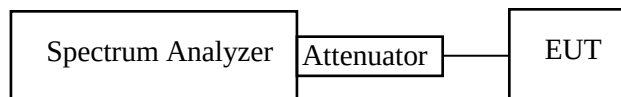
- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode

shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.

f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.

g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.

h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).



Test Data: See Appendix

FCC §15.407(a) (1) (3) – CONDUCTED TRANSMITTER OUTPUT POWER

Applicable Standard

According to §15.407(a)(1)

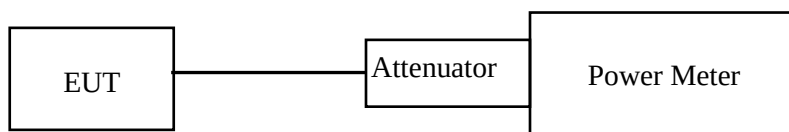
(iv) For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

According to §15.407(a) (3)

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

1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
3. Add a correction factor to the display.



Test Data: See Appendix

FCC §15.407(a) (1) (3) - POWER SPECTRAL DENSITY

Applicable Standard

According to §15.407(a) (1)

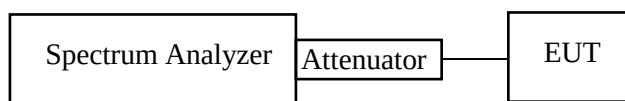
(iv) For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

According to §15.407(a) (3)

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

The measurements are base on FCC KDB 789033 D02 General UNII Test Proceidyres New Rules v02r01: Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices section F: Maximum power spectral density (PPSD) and method SA-1



Test Data: See Appendix

EUT PHOTOGRAPHS

Please refer to the attachment EXHIBIT A-EUT EXTERNAL PHOTOGRAPHS and EXHIBIT B-EUT INTERNAL PHOTOGRAPHS.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment EXHIBIT F-TEST SETUP PHOTOGRAPHS.

Appendix - TEST DATA

Environmental Conditions & Test Information

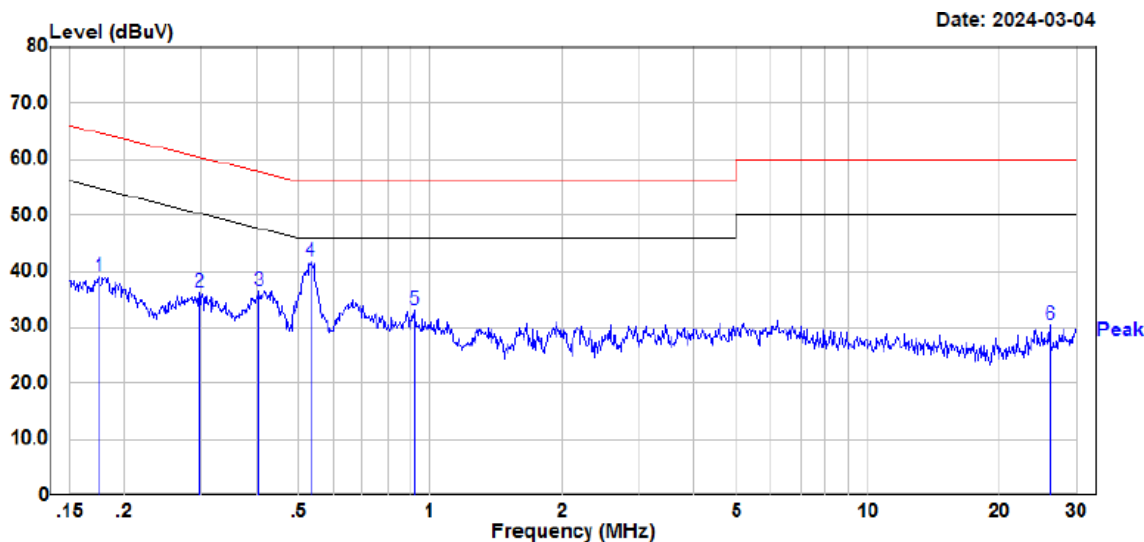
Test Item:	AC power-line conducted emissions limits	UNWANTED EMISSIONS & RESTRICTED FREQUENCY BANDS		
		9kHz - 1GHz	1 GHz - 18 GHz	18 GHz - 40 GHz
Test Date:	2024-03-04 to 2024-04-01	2024-04-19 to 2024-04-26	2024-02-29 to 2024-03-01	2024-03-28
Temperature:	15.9-18.8 °C	19.2-21.5 °C	16.0-20.3 °C	20.3 °C
Relative Humidity:	45-57 %	52-57 %	48-52 %	52 %
ATM Pressure:	101.5-101.6 kPa	100.7-101.1 kPa	100.8-101.5kPa	101.0 kPa
Test Result:	Pass	Pass	Pass	Pass
Test Engineer:	Joe Zhang&Frank Liu	Leah Li	Peter Wang	Peter Wang

Test Item:	Emission Bandwidth	Conducted Transmitter Output Power	Power Spectral Density	Duty cycle
Test Date:	2024-02-26 to 2024-03-28	2024-02-26	2024-04-03 to 2024-07-09	2024-03-14&2024-06-25
Temperature:	16.0-20.3 °C	16.0 °C	22.0-23.5 °C	21.5 °C~23.6°C
Relative Humidity:	48-52 %	48 %	47-50 %	47 %~51%
ATM Pressure:	101.0-102.5kPa	102.5kPa	100.4-102.5kPa	102.2kPa
Test Result:	Pass	Pass	Pass	/
Test Engineer:	Bard Liu	Bard Liu	Bard Liu & Neil Zhou	Bard Liu

EUT operation mode: Transmitting in 802.11a mode middle channel of 5725~5850MHz (maximum output power)

Powered by USB port:

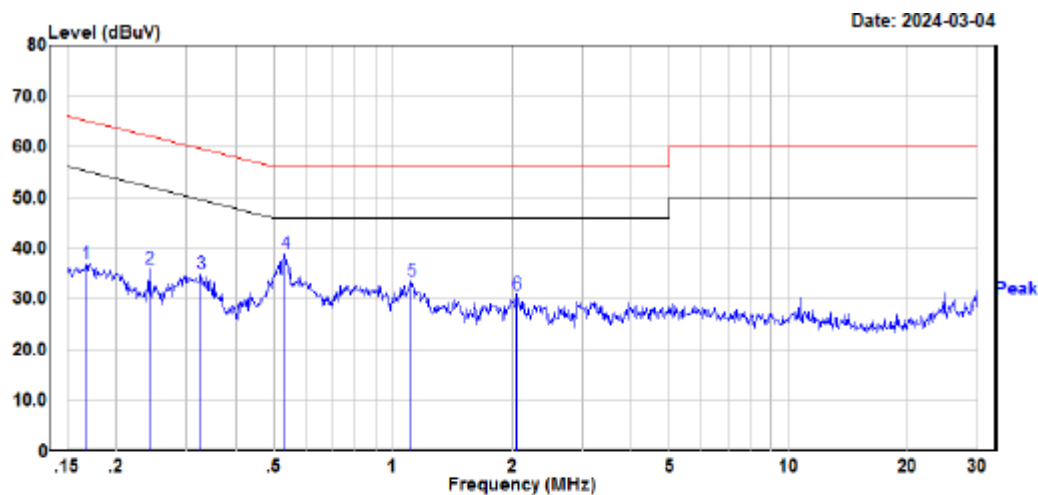
AC 120V/60 Hz, Line



Site : CE
Condition : FCC Part 15.207
: DET:Peak
Project No. : RKSA231206001
Model : MASP01
Phase : L
Voltage : 120V/60Hz
Mode : 5G WIFI
Test Equipment : ENV216, ESR
Temperature : 15.9℃
Humidity : 45%
Atmospheric pressure: 101.6kPa
Test Engineer : Joe Zhang

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.175	19.13	19.92	39.05	64.72	-25.67	Peak
2	0.297	16.36	20.01	36.37	60.33	-23.96	Peak
3	0.404	16.51	20.07	36.58	57.76	-21.18	Peak
4	0.532	21.72	20.10	41.82	56.00	-14.18	Peak
5	0.921	13.26	19.82	33.08	56.00	-22.92	Peak
6	26.092	10.54	19.97	30.51	60.00	-29.49	Peak

AC 120V/60 Hz, Neutral

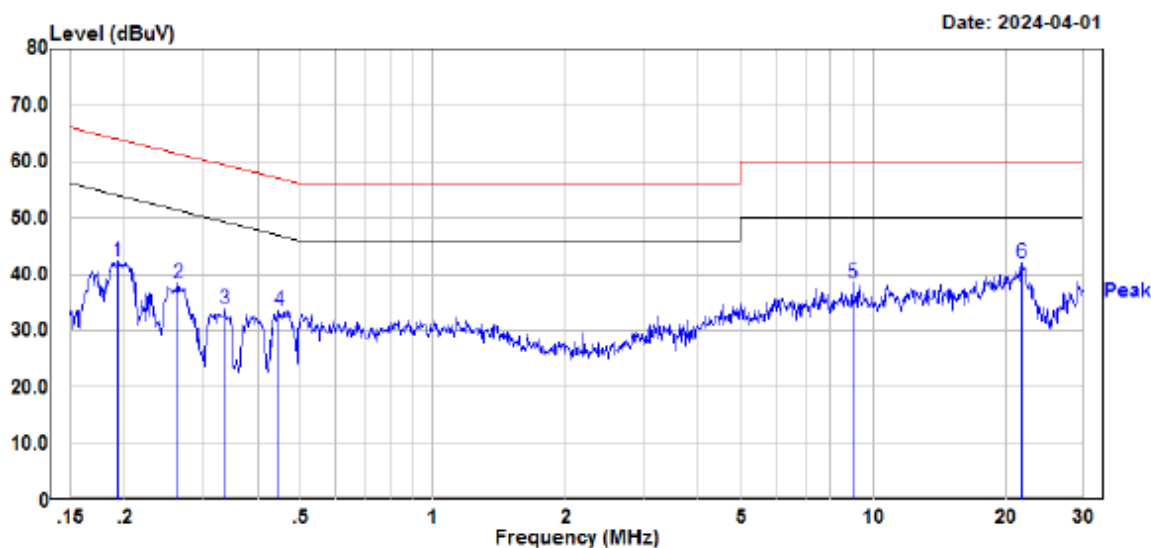


Site : CE
Condition : FCC Part15.207
Project No. : RKSA231206001
Model : MASP01
Phase : N
Voltage : 120V/60Hz
Mode : 5G WIFI
Test Equipment : ENV216,ESR
Temperature : 15.9℃
Humidity : 45%
Atmospheric pressure: 101.6kPa
Test Engineer : Joe Zhang

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.167	17.20	19.91	37.11	65.09	-27.98	Peak
2	0.242	16.10	19.98	36.08	62.03	-25.95	Peak
3	0.326	14.93	20.03	34.96	59.54	-24.58	Peak
4	0.535	18.82	20.10	38.92	56.00	-17.08	Peak
5	1.112	13.82	19.81	33.63	56.00	-22.37	Peak
6	2.054	10.74	20.21	30.95	56.00	-25.05	Peak

Powered by Base:

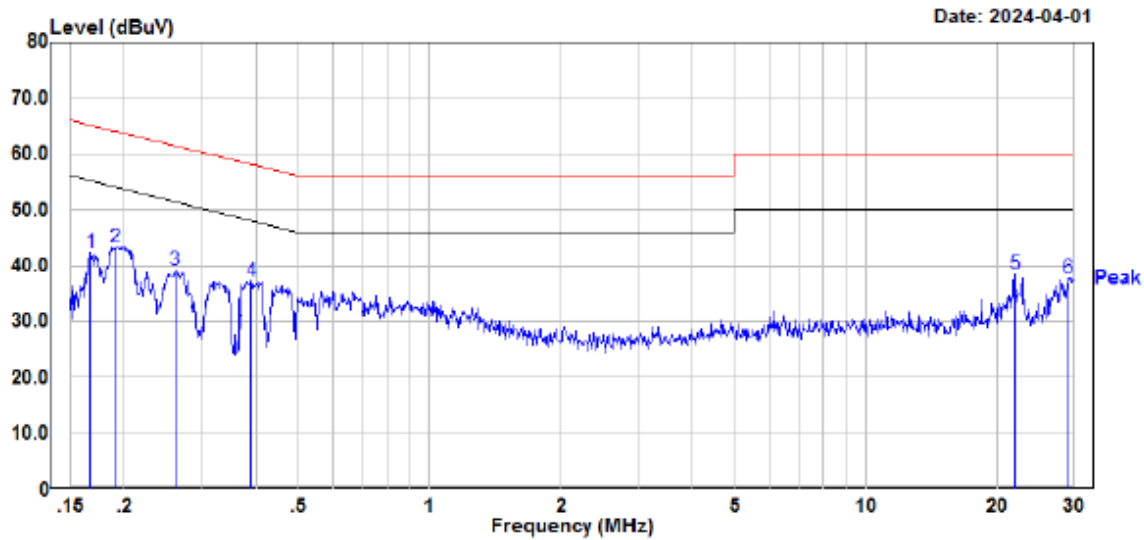
AC 120V/60 Hz, Line



Site : CE
Condition : FCC part15.207
Project No. : RKSA231206001
Model : MASP01
Phase : L
Voltage : 120V/60Hz
Mode : 5G WIFI
Test Equipment : ENV216,ESR
Temperature : 18.8℃
Humidity : 57%
Atmospheric pressure: 101.5kPa
Test Engineer : Frank Liu

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.192	22.38	19.94	42.32	63.93	-21.61	Peak
2	0.263	18.34	19.99	38.33	61.32	-22.99	Peak
3	0.336	13.75	20.04	33.79	59.29	-25.50	Peak
4	0.447	13.52	20.09	33.61	56.93	-23.32	Peak
5	8.980	18.27	20.10	38.37	60.00	-21.63	Peak
6	21.698	22.28	19.87	42.15	60.00	-17.85	Peak

AC 120V/60 Hz, Neutral



Site : CE
Condition : FCC part15.207
: DET:Peak
Project No. : RKSA231206001
Model : MASP01
Phase : N
Voltage : 120V/60Hz
Mode : 5G WIFI
Test Equipment : ENV216,ESR
Temperature : 18.8°C
Humidity : 57%
Atmospheric pressure: 101.5kPa
Test Engineer : Frank Liu

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.167	22.38	19.91	42.29	65.09	-22.80	Peak
2	0.191	23.45	19.94	43.39	64.01	-20.62	Peak
3	0.261	19.26	19.99	39.25	61.40	-22.15	Peak
4	0.391	17.05	20.06	37.11	58.05	-20.94	Peak
5	21.915	18.59	19.88	38.47	60.00	-21.53	Peak
6	29.116	17.78	20.00	37.78	60.00	-22.22	Peak

Transmitter Unwanted Emissions & Restricted frequency bands

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

9 kHz-30 MHz: (Transmitting in maximum output power mode and channel)

The amplitude of spurious emissions attenuated more than 20 dB below the limit was not be recorded.

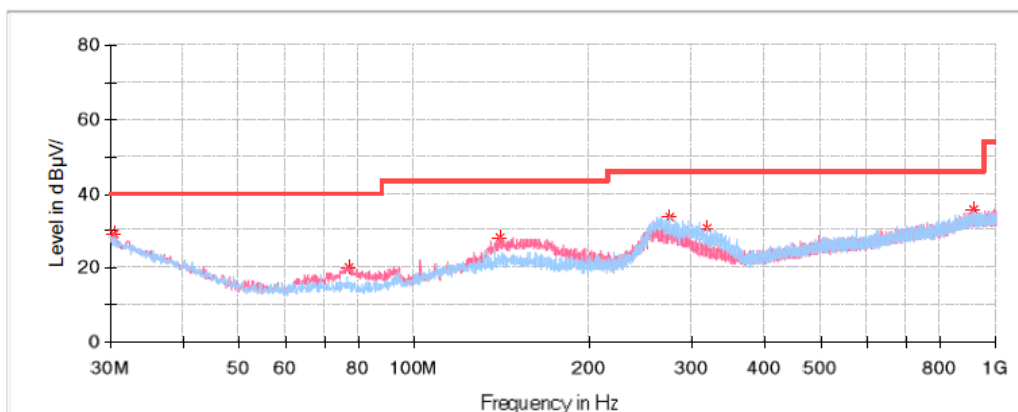
30MHz-1GHz(5150-5250MHz Band): 802.11a (worst case)

Powered by USB port:

Low Channel: 5180 MHz

Common Information

Project No:	RKSA231206001
EUT Model:	MASP01
Test Mode:	5G WIFI
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESCI、JB3、310N
Temperature:	19.2℃
Humidity:	57%
Barometric Pressure:	101.1kPa
Test Engineer:	Leah Li
Test Date:	2024/4/19

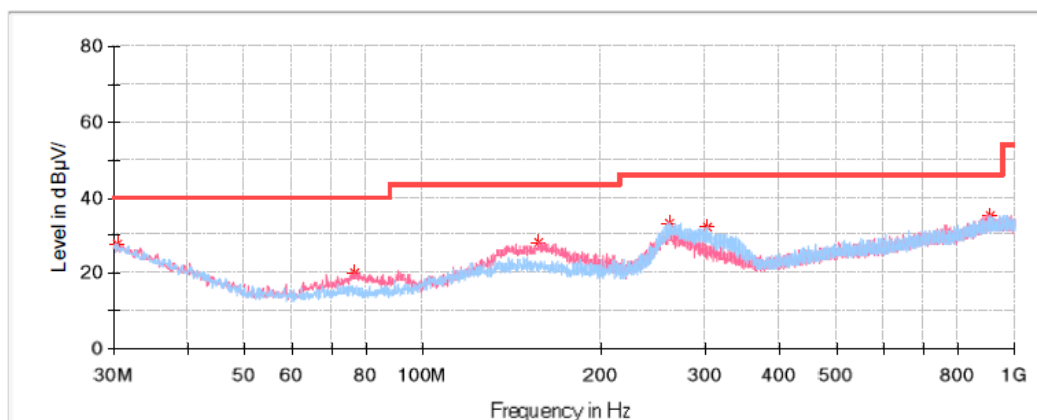
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.363750	29.12	40.00	10.88	V	-4.7
77.045000	20.20	40.00	19.80	V	-17.3
139.852500	28.20	43.50	15.30	V	-11.5
274.925000	33.89	46.00	12.11	H	-11.4
319.423750	30.52	46.00	15.48	H	-10.5
918.398750	35.86	46.00	10.14	V	1.4

Middle Channel: 5200 MHz

Common Information

Project No: RKSA231206001
EUT Model: MASP01
Test Mode: 5G WIFI
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESCI、JB3、310N
Temperature: 19.2℃
Humidity: 57%
Barometric Pressure: 101.1kPa
Test Engineer: Leah Li
Test Date: 2024/4/19

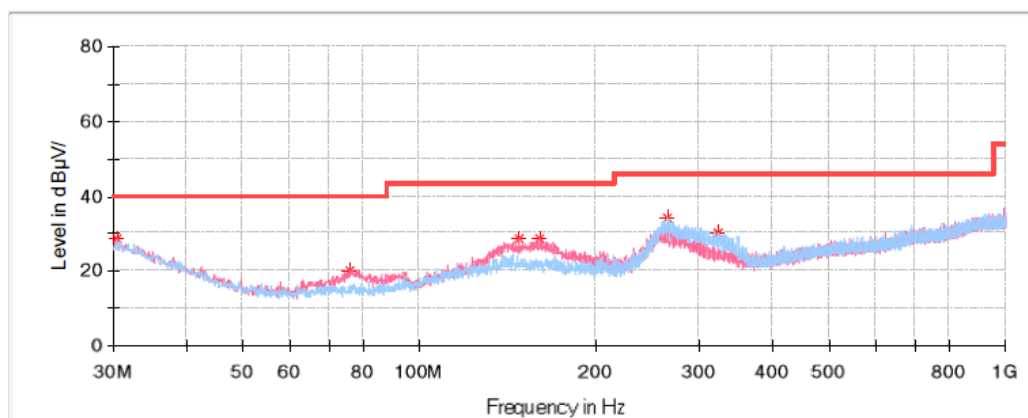


Critical_Freqs

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.485000	27.58	40.00	12.42	H	-4.8
76.681250	20.16	40.00	19.84	V	-17.3
156.827500	28.13	43.50	15.37	V	-12.4
260.253750	33.31	46.00	12.69	H	-12.3
302.691250	32.05	46.00	13.95	H	-11.0
910.275000	35.24	46.00	10.76	H	1.4

High Channel: 5240 MHz**Common Information**

Project No: RKSA231206001
EUT Model: MASP01
Test Mode: 5G WIFI
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESCI, JB3, 310N
Temperature: 19.2°C
Humidity: 57%
Barometric Pressure: 101.1kPa
Test Engineer: Leah Li
Test Date: 2024/4/19

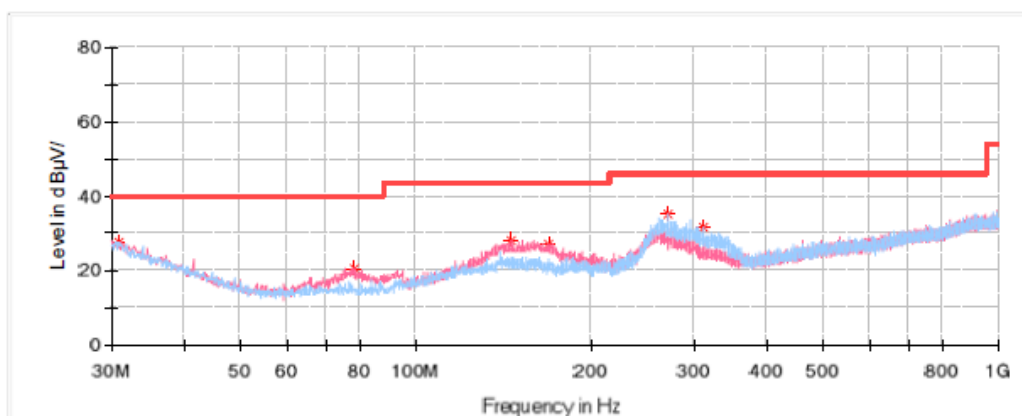
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.485000	28.74	40.00	11.26	V	-4.8
76.075000	20.36	40.00	19.64	V	-17.3
147.612500	28.61	43.50	14.89	V	-11.9
160.101250	28.71	43.50	14.79	V	-12.6
264.133750	34.40	46.00	11.60	H	-12.1
324.395000	30.39	46.00	15.61	H	-10.4

30MHz-1GHz(5725-5850MHz Band): 802.11a (worst case)**Powered by USB port:****Low Channel: 5745 MHz**

Common Information

Project No:	RKSA231206001
EUT Model:	MASP01
Test Mode:	5G WIFI
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESCI, JB3, 310N
Temperature:	19.2°C
Humidity:	57%
Barometric Pressure:	101.1kPa
Test Engineer:	Leah Li
Test Date:	2024/4/19

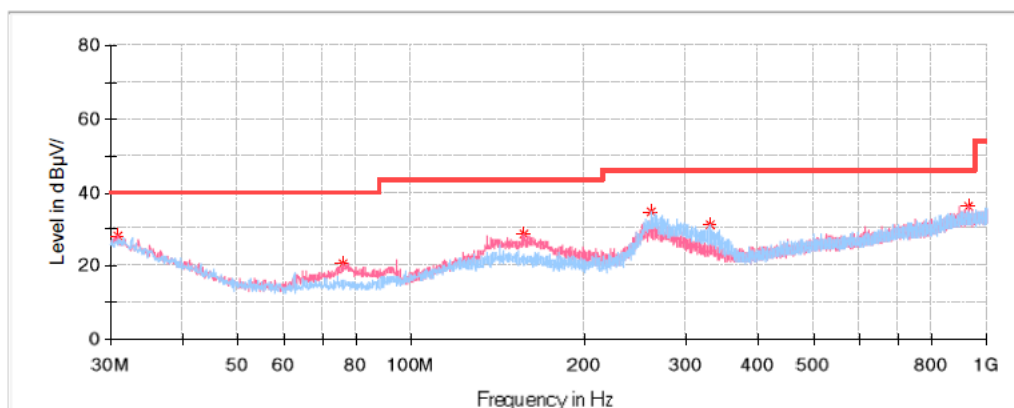


Critical_Freqs

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.848750	27.89	40.00	12.11	H	-5.0
78.500000	20.66	40.00	19.34	V	-17.5
145.793750	28.08	43.50	15.42	V	-11.8
169.073750	27.25	43.50	16.25	V	-12.9
270.923750	35.04	46.00	10.96	H	-11.6
312.148750	31.92	46.00	14.08	H	-10.7

Middle Channel: 5785 MHz**Common Information**

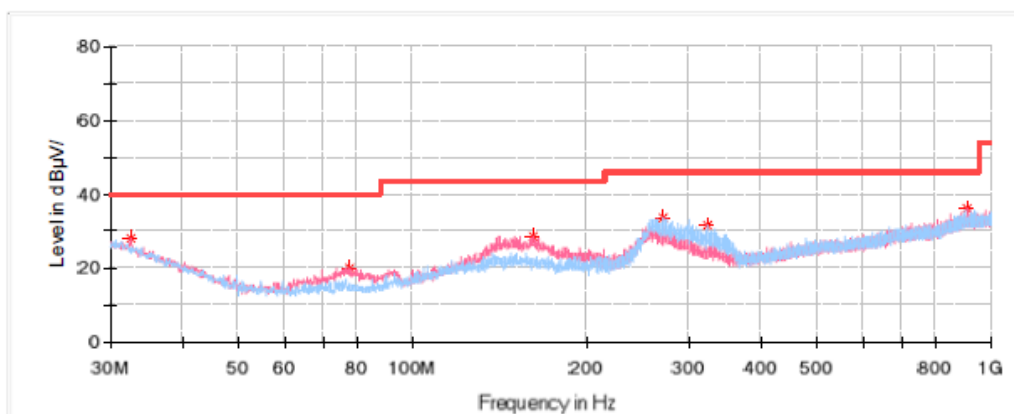
Project No: RKSA231206001
EUT Model: MASP01
Test Mode: 5G WIFI
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESCI, JB3, 310N
Temperature: 19.2°C
Humidity: 57%
Barometric Pressure: 101.1kPa
Test Engineer: Leah Li
Test Date: 2024/4/19

**Critical_Freqs**

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.848750	28.18	40.00	11.82	V	-5.0
76.075000	20.52	40.00	19.48	V	-17.3
156.342500	28.78	43.50	14.72	V	-12.4
260.496250	34.59	46.00	11.41	H	-12.3
330.093750	31.05	46.00	14.95	H	-10.3
930.160000	36.18	46.00	9.82	V	1.4

High Channel: 5825 MHz**Common Information**

Project No: RKSA231206001
EUT Model: MASP01
Test Mode: 5G WIFI
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESCI, JB3, 310N
Temperature: 19.2°C
Humidity: 57%
Barometric Pressure: 101.1kPa
Test Engineer: Leah Li
Test Date: 2024/4/19

**Critical_Freqs**

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
32.425000	28.29	40.00	11.71	V	-6.1
77.651250	20.12	40.00	19.88	V	-17.4
161.071250	28.69	43.50	14.81	V	-12.6
271.530000	33.63	46.00	12.37	H	-11.6
323.425000	31.63	46.00	14.37	H	-10.4
909.790000	36.14	46.00	9.86	V	1.4

30MHz-1GHz(5150-5250MHz Band): 802.11a (worst case)
Powered by Base:

Low Channel: 5180 MHz

Common Information

Project No:

EUT Model:

Test Mode:

Standard:

Test Equipment:

Temperature:

Humidity:

Barometric Pressure:

Test Engineer:

Test Date:

RKSA231206001

MASP01

5G WIFI

FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407

ESCI, JB3, 310N

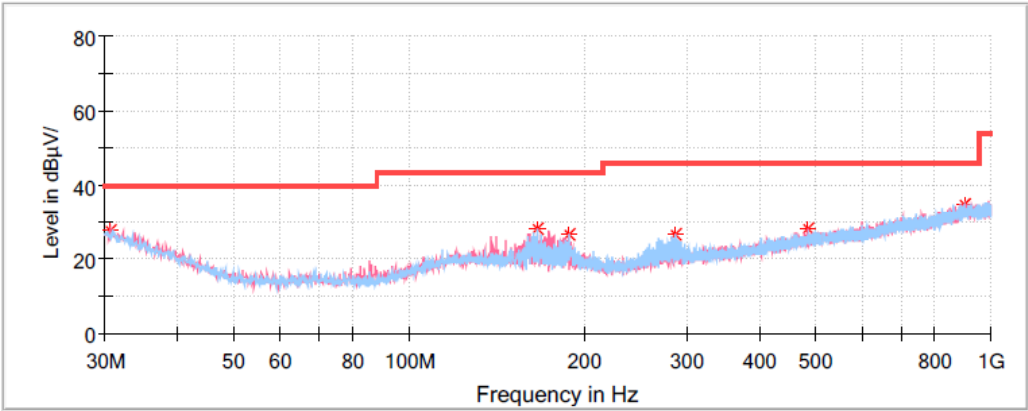
21.5°C

52%

100.7kPa

Leah Li

2024/4/26



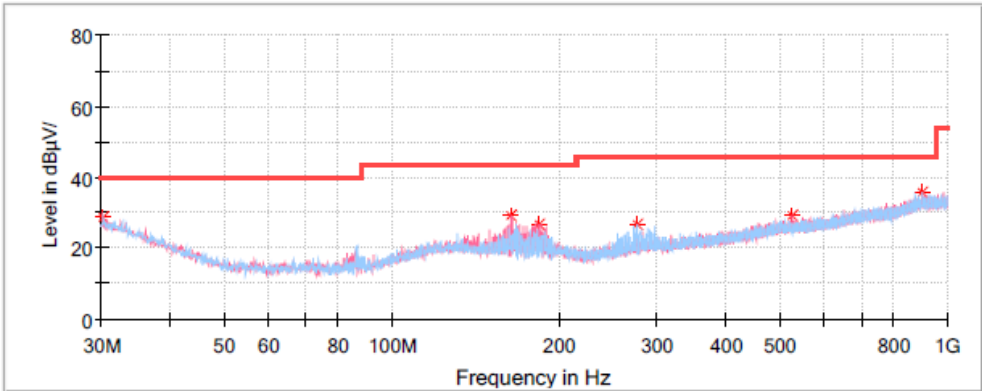
Critical Freqs

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.606250	27.45	40.00	12.55	V	-4.9
165.921250	28.33	43.50	15.17	H	-12.8
188.473750	26.45	43.50	17.05	H	-12.9
286.443750	26.70	46.00	19.30	H	-11.1
485.900000	28.25	46.00	17.75	V	-6.2
902.878750	34.97	46.00	11.03	V	1.3

Middle Channel: 5200 MHz

Common Information

Project No:	RKSA231206001
EUT Model:	MASP01
Test Mode:	5G WIFI
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESCI, JB3, 310N
Temperature:	21.5°C
Humidity:	52%
Barometric Pressure:	100.7kPa
Test Engineer:	Leah Li
Test Date:	2024/4/26

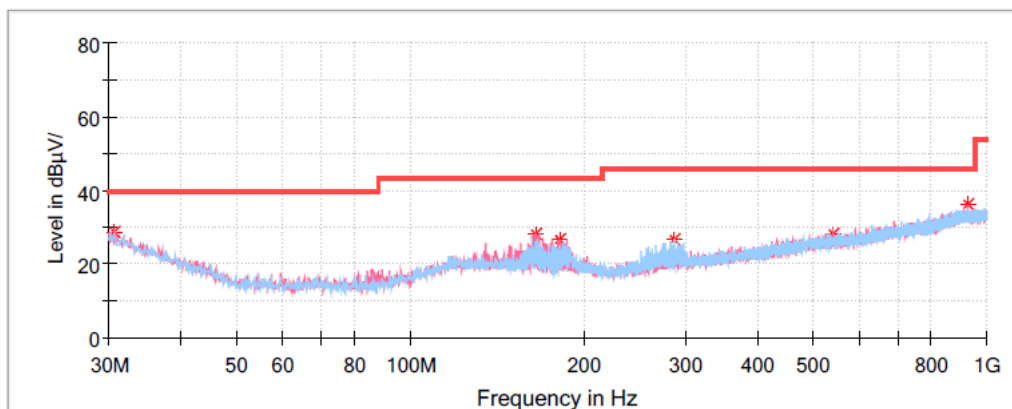


Critical Freqs

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.242500	28.73	40.00	11.27	H	-4.6
163.860000	29.36	43.50	14.14	V	-12.7
184.351250	26.91	43.50	16.59	V	-13.1
276.137500	26.59	46.00	19.41	H	-11.3
525.185000	29.07	46.00	16.93	V	-5.5
900.453750	35.48	46.00	10.52	H	1.3

High Channel: 5240 MHz**Common Information**

Project No:	RKSA231206001
EUT Model:	MASP01
Test Mode:	5G WIFI
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESCI, JB3, 310N
Temperature:	21.5°C
Humidity:	52%
Barometric Pressure:	100.7kPa
Test Engineer:	Leah Li
Test Date:	2024/4/26

**Critical Freqs**

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.606250	28.83	40.00	11.17	V	-4.9
164.587500	28.18	43.50	15.32	V	-12.7
181.683750	26.73	43.50	16.77	V	-13.2
286.322500	26.71	46.00	19.29	H	-11.1
543.857500	28.39	46.00	17.61	V	-5.3
925.552500	36.14	46.00	9.86	V	1.4

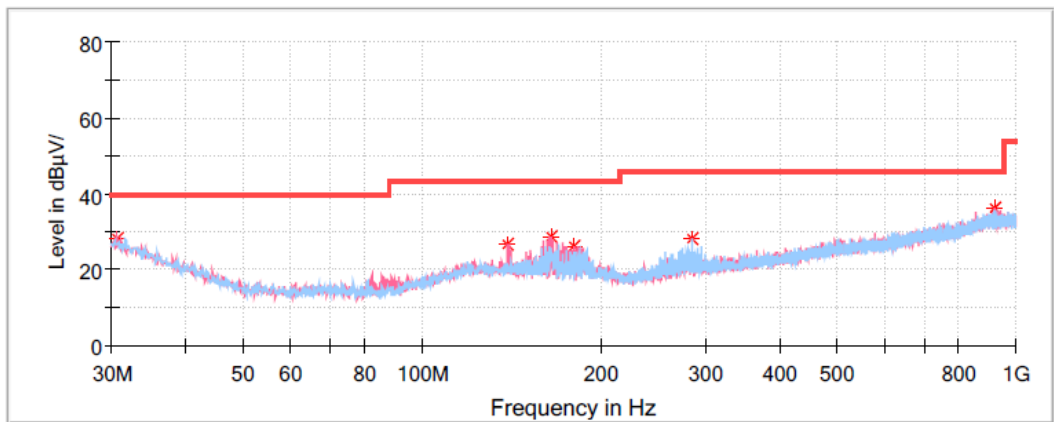
30MHz-1GHz(5725-5850MHz Band): 802.11a (worst case)

Powered by Base:

Low Channel: 5745 MHz

Common Information

Project No:	RKSA231206001
EUT Model:	MASP01
Test Mode:	5G WIFI
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESCI, JB3, 310N
Temperature:	21.5°C
Humidity:	52%
Barometric Pressure:	100.7kPa
Test Engineer:	Leah Li
Test Date:	2024/4/26



Critical Freqs

Frequency (MHz)	MaxPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.727500	28.36	40.00	11.64	V	-4.9
139.367500	26.51	43.50	16.99	V	-11.5
165.678750	28.87	43.50	14.63	V	-12.8
180.956250	26.35	43.50	17.15	V	-13.2
284.625000	28.19	46.00	17.81	H	-11.1
920.217500	36.47	46.00	9.53	V	1.4

Middle Channel: 5785 MHz

Common Information

Project No:

EUT Model:

Test Mode:

Standard:

Test Equipment:

Temperature:

Humidity:

Barometric Pressure:

Test Engineer:

Test Date:

RKSA231206001

MASP01

5G WIFI

FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407

ESCI、JB3、310N

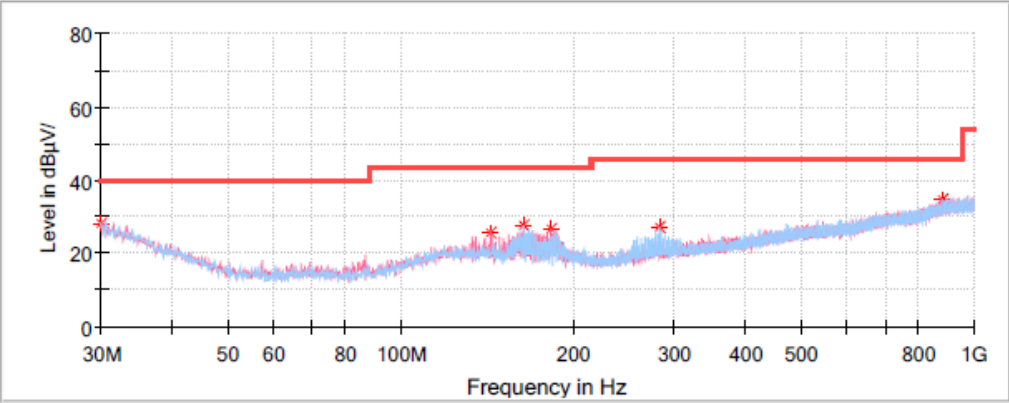
21.5℃

52%

100.7kPa

Leah Li

2024/4/26



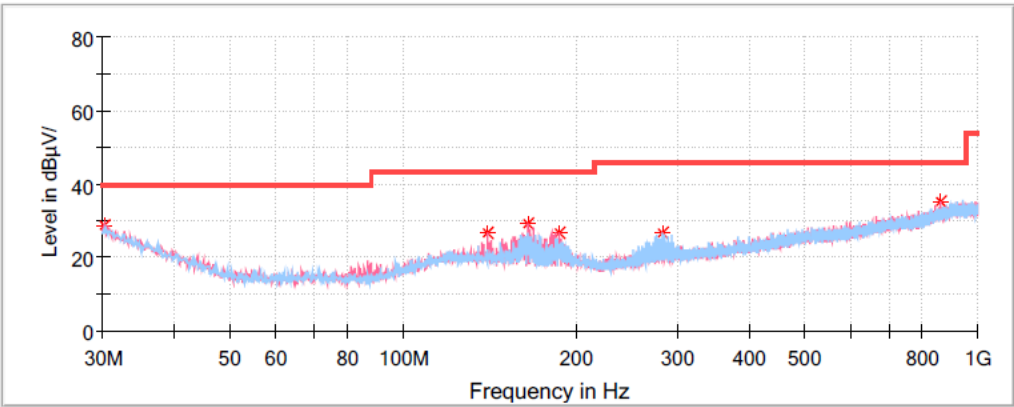
Critical Freqs

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.000000	28.05	40.00	11.95	H	-4.4
143.611250	25.71	43.50	17.79	V	-11.7
163.738750	27.77	43.50	15.73	V	-12.7
183.138750	26.54	43.50	16.96	V	-13.1
283.897500	26.96	46.00	19.04	H	-11.1
882.993750	34.89	46.00	11.11	H	0.9

High Channel: 5825 MHz

Common Information

Project No:	RKSA231206001
EUT Model:	MASP01
Test Mode:	5G WIFI
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESCI, JB3, 310N
Temperature:	21.5°C
Humidity:	52%
Barometric Pressure:	100.7kPa
Test Engineer:	Leah Li
Test Date:	2024/4/26



Critical Freqs

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB /m)
30.121250	28.65	40.00	11.35	V	-4.5
140.458750	26.82	43.50	16.68	V	-11.6
165.557500	29.02	43.50	14.48	V	-12.8
187.018750	26.78	43.50	16.72	V	-13.0
283.655000	26.58	46.00	19.42	H	-11.1
860.926250	35.36	46.00	10.64	V	0.3

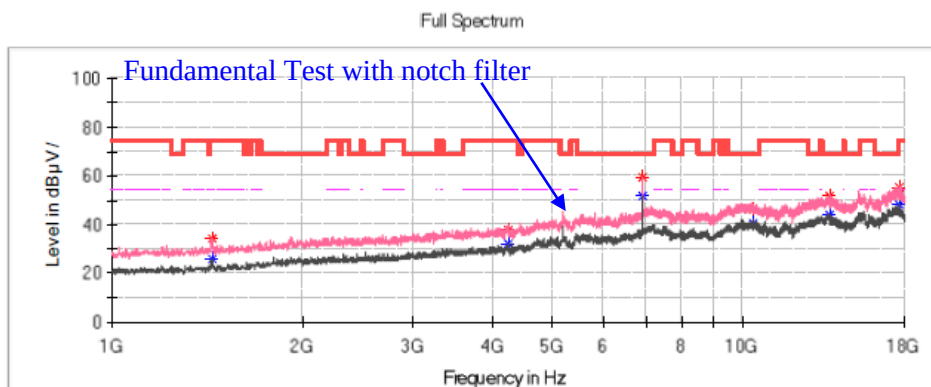
Powered by USB port:
1GHz-18GHz(5150-5250MHz Band):

802.11a Mode:

Low Channel: 5180MHz

Common Information

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	802.11a Mode of Low Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date	2024/2/29



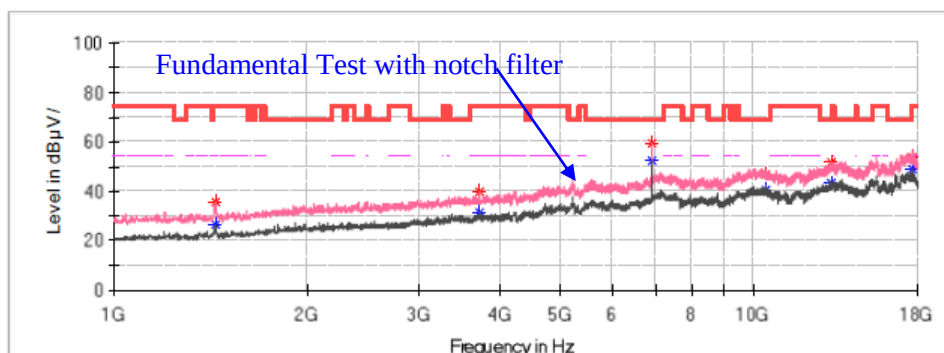
Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1440.300000	34.45	---	74.00	39.55	V	-14.1
1440.300000	---	25.81	54.00	28.19	V	-14.1
4240.200000	37.82	---	74.00	36.18	H	-4.4
4240.200000	---	32.30	54.00	21.70	H	-4.4
6907.500000	59.67	---	68.20	8.53	V	3.2
6907.500000	---	51.69	---	---	V	3.2
10360.200000	46.02	---	68.20	22.18	V	7.4
10360.200000	---	40.37	---	---	V	7.4
13671.800000	51.71	---	68.20	16.49	V	10.8
13671.800000	---	44.29	---	---	V	10.8
17639.600000	55.24	---	68.20	12.96	V	13.0
17639.600000	---	48.50	---	---	V	13.0

Middle Channel: 5200MHz**Common Information**

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	802.11a Mode of Middle Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3°C
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date	2024/2/29

Full Spectrum

**Critical Freqs**

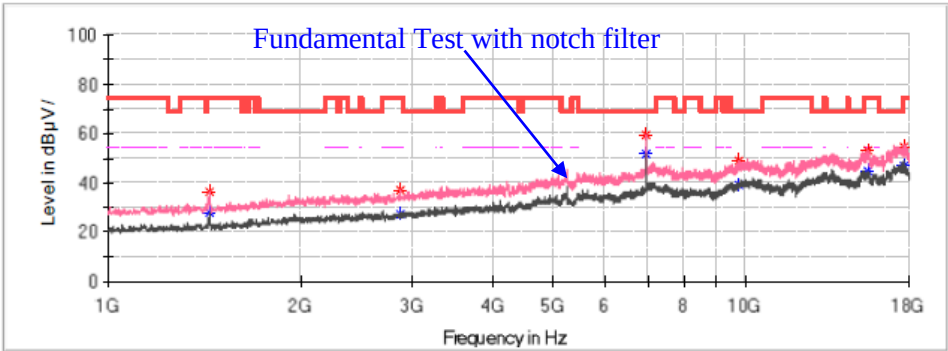
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1440.300000	35.33	---	74.00	38.67	V	-14.1
1440.300000	---	26.35	54.00	27.65	V	-14.1
3731.900000	---	31.47	54.00	22.53	H	-5.6
3731.900000	39.72	---	74.00	34.28	H	-5.6
6933.000000	59.75	---	68.20	8.45	V	3.4
6933.000000	---	52.45	---	---	V	3.4
10401.000000	---	40.91	---	---	V	7.4
10402.700000	47.17	---	68.20	21.03	V	7.4
13172.000000	52.02	---	68.20	16.18	V	9.7
13172.000000	---	43.52	---	---	V	9.7
17632.800000	53.63	---	68.20	14.57	V	13.1
17632.800000	---	48.87	---	---	V	13.1

High Channel: 5240MHz

Common Information

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	802.11a Mode of High Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date	2024/2/29

Full Spectrum



Critical_Freqs

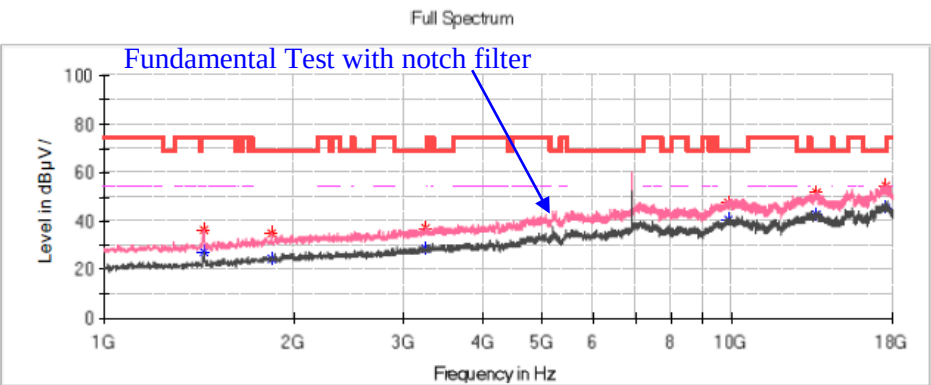
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1440.300000	36.06	---	74.00	37.94	V	-14.1
1440.300000	---	27.94	54.00	26.06	V	-14.1
2868.300000	---	27.28	54.00	26.72	H	-8.5
2868.300000	36.95	---	74.00	37.05	H	-8.5
6987.400000	59.18	---	68.20	9.02	V	3.7
6987.400000	---	51.83	---	---	V	3.7
9749.900000	---	39.11	---	---	V	7.0
9749.900000	48.90	---	68.20	19.30	V	7.0
15516.300000	---	44.90	54.00	9.10	V	11.7
15516.300000	52.92	---	74.00	21.08	V	11.7
17615.800000	---	46.58	---	---	V	13.1
17615.800000	54.40	---	68.20	13.80	V	13.1

802.11ac20 Mode:

Low Channel: 5180MHz

Common Information

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	802.11ac20 Mode of Low Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date	2024/2/29



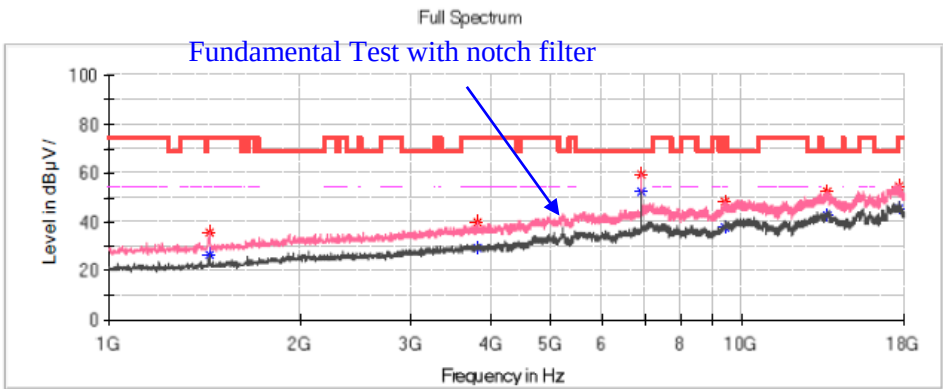
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1440.300000	36.42	---	74.00	37.58	V	-14.1
1440.300000	---	27.36	54.00	26.64	V	-14.1
1850.000000	---	24.23	---	---	H	-11.6
1850.000000	34.92	---	68.20	33.28	H	-11.6
3247.400000	---	28.62	---	---	V	-7.1
3247.400000	37.37	---	68.20	30.83	V	-7.1
9884.200000	---	40.90	---	---	V	7.4
9884.200000	47.64	---	68.20	20.56	V	7.4
13641.200000	---	43.00	---	---	V	10.9
13641.200000	51.92	---	68.20	16.28	V	10.9
17537.600000	---	45.34	---	---	V	13.5
17537.600000	54.68	---	68.20	13.52	V	13.5

Middle Channel: 5200MHz

Common Information

Project No.: RKSA231206001
 EUT Model: MAPSP01
 Test Mode: 802.11ac20 Mode of Middle Channel
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Equipment: ESU40,3115, 2641-1
 Temperature: 20.3℃
 Humidity: 52%
 Atmospheric pressure: 102.8kPa
 Test Engineer: Peter Wang
 Test Date: 2024/2/29



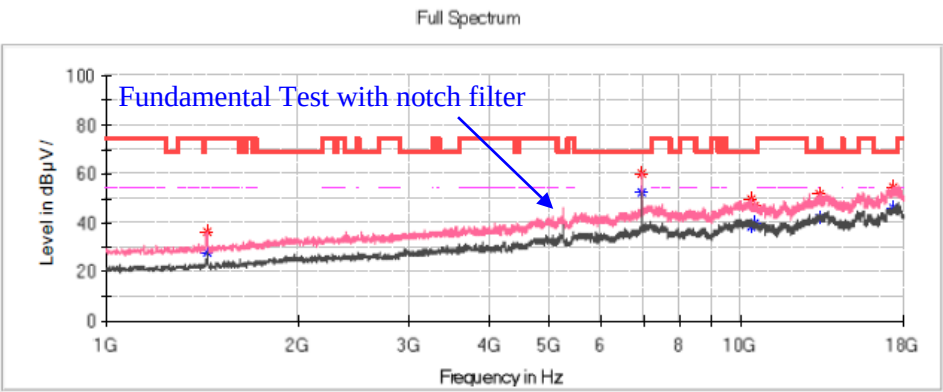
Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1440.300000	36.01	---	74.00	37.99	V	-14.1
1440.300000	---	26.41	54.00	27.59	V	-14.1
3813.500000	---	29.32	54.00	24.68	H	-5.4
3813.500000	39.56	---	74.00	34.44	H	-5.4
6933.000000	---	52.46	---	---	V	3.4
6933.000000	59.20	---	68.20	9.00	V	3.4
9409.900000	---	37.77	54.00	16.23	V	5.8
9409.900000	48.20	---	74.00	25.80	V	5.8
13600.400000	---	42.67	---	---	V	10.9
13600.400000	52.66	---	68.20	15.54	V	10.9
17614.100000	---	45.57	---	---	V	13.1
17614.100000	54.77	---	68.20	13.43	V	13.1

High Channel: 5240MHz

Common Information

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	802.11ac20 Mode of High Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date	2024/2/29

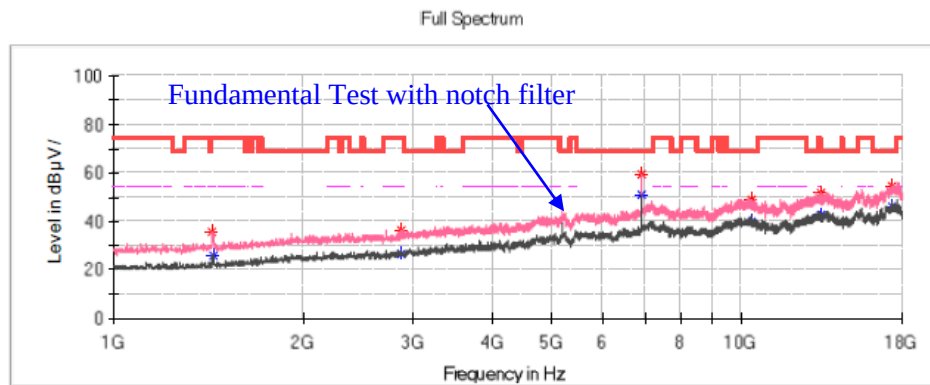


Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1440.300000	36.58	---	74.00	37.42	V	-14.1
1440.300000	---	27.89	54.00	26.11	V	-14.1
6987.400000	---	52.19	---	---	H	3.7
6987.400000	59.83	---	68.20	8.37	H	3.7
10346.600000	---	38.30	---	---	V	7.4
10346.600000	49.54	---	68.20	18.66	V	7.4
10480.900000	46.62	---	68.20	21.58	V	7.3
10480.900000	---	39.93	---	---	V	7.3
13289.300000	---	41.76	54.00	12.24	V	10.2
13289.300000	52.01	---	74.00	21.99	V	10.2
17355.700000	---	45.85	---	---	V	13.3
17355.700000	54.72	---	68.20	13.48	V	13.3

802.11n-HT20 Mode:**Low Channel: 5180MHz****Common Information**

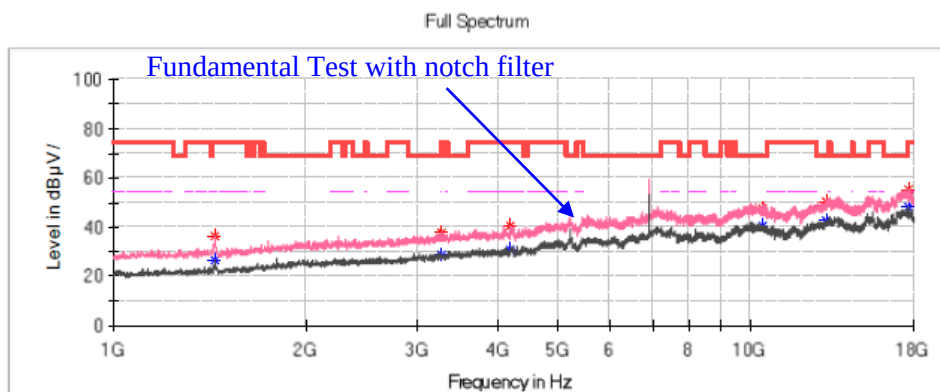
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EUT Model:	MAPSP01
Test Mode:	802.11n20 Mode of Low Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3°C
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date	2024/2/29

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µV/m)	Average (dB µV/m)	Limit (dB µV/m)	Margin (dB)	Pol	Corr. (dB/m)
1436.900000	35.89	---	74.00	38.11	V	-14.1
1438.600000	---	25.72	54.00	28.28	V	-14.1
2866.600000	---	26.58	54.00	27.42	H	-8.5
2866.600000	36.16	---	74.00	37.84	H	-8.5
6907.500000	---	51.33	---	---	V	3.2
6907.500000	59.40	---	68.20	8.80	V	3.2
10365.300000	---	40.16	---	---	V	7.4
10365.300000	48.77	---	68.20	19.43	V	7.4
13343.700000	---	42.60	54.00	11.40	V	10.4
13343.700000	51.60	---	74.00	22.40	V	10.4
17306.400000	---	45.82	---	---	V	13.1
17306.400000	54.81	---	68.20	13.39	V	13.1

Middle Channel: 5200MHz**Common Information**

Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11n20 Mode of Middle Channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESU40,3115, 2641-1
Temperature: 20.3°C
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/2/29

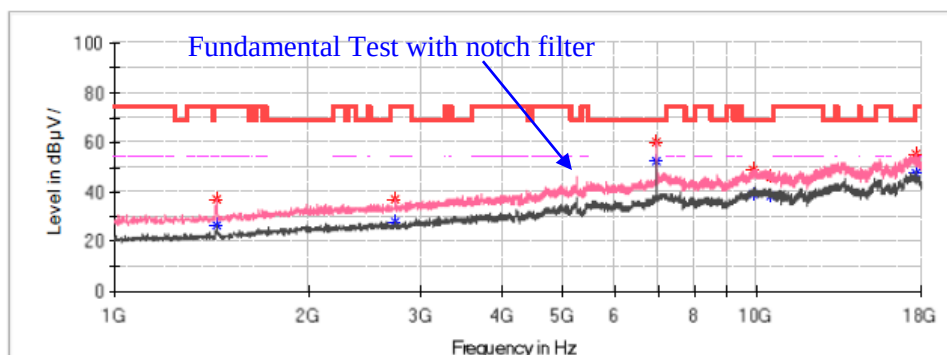
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1440.300000	36.29	---	74.00	37.71	V	-14.1
1440.300000	---	26.89	54.00	27.11	V	-14.1
3267.800000	---	28.37	---	---	H	-7.0
3267.800000	37.69	---	68.20	30.51	H	-7.0
4202.800000	---	30.71	54.00	23.29	V	-4.5
4202.800000	40.49	---	74.00	33.51	V	-4.5
10399.300000	47.55	---	68.20	20.65	V	7.4
10401.000000	---	40.88	---	---	V	7.4
13104.000000	---	42.65	---	---	V	9.4
13104.000000	50.49	---	68.20	17.71	V	9.4
17644.700000	---	48.34	---	---	V	13.0
17644.700000	55.46	---	68.20	12.74	V	13.0

High Channel: 5240MHz**Common Information**

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	802.11n20 Mode of High Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date	2024/2/29

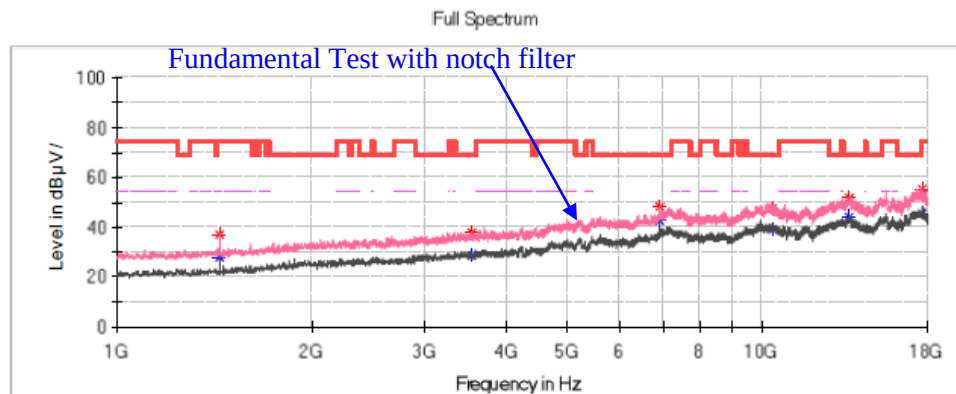
Full Spectrum

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1440.300000	---	26.30	54.00	27.70	V	-14.1
1440.300000	36.89	---	74.00	37.11	V	-14.1
2739.100000	36.74	---	74.00	37.26	H	-8.9
2739.100000	---	28.15	54.00	25.85	H	-8.9
6987.400000	---	52.35	---	---	V	3.7
6987.400000	59.98	---	68.20	8.22	V	3.7
9845.100000	---	39.30	---	---	V	7.3
9845.100000	48.90	---	68.20	19.30	V	7.3
10480.900000	---	38.54	---	---	V	7.3
10480.900000	46.40	---	68.20	21.80	V	7.3
17629.400000	---	47.31	---	---	V	13.1
17629.400000	55.05	---	68.20	13.15	V	13.1

802.11ac40 Mode:**Low Channel: 5190MHz****Common Information**

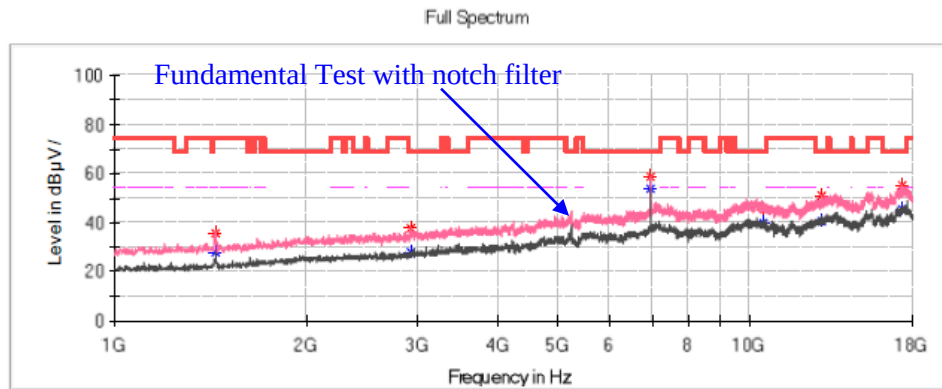
Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11ac40 Mode of Low Channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESU40,3115, 2641-1
Temperature: 20.3°C
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/2/29

**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1440.300000	---	27.80	54.00	26.20	V	-14.1
1440.300000	36.83	---	74.00	37.17	V	-14.1
3539.800000	---	28.77	---	---	H	-6.0
3539.800000	37.73	---	68.20	30.47	H	-6.0
6919.400000	48.50	---	68.20	19.70	V	3.3
6919.400000	---	42.44	---	---	V	3.3
10382.300000	---	39.06	---	---	V	7.4
10382.300000	47.56	---	68.20	20.64	V	7.4
13629.300000	---	44.08	---	---	V	10.9
13629.300000	52.01	---	68.20	16.19	V	10.9
17624.300000	---	45.54	---	---	V	13.1
17624.300000	55.03	---	68.20	13.17	V	13.1

High Channel: 5230MHz**Common Information**

Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11ac40 Mode of High Channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESU40,3115, 2641-1
Temperature: 20.3℃
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/2/29

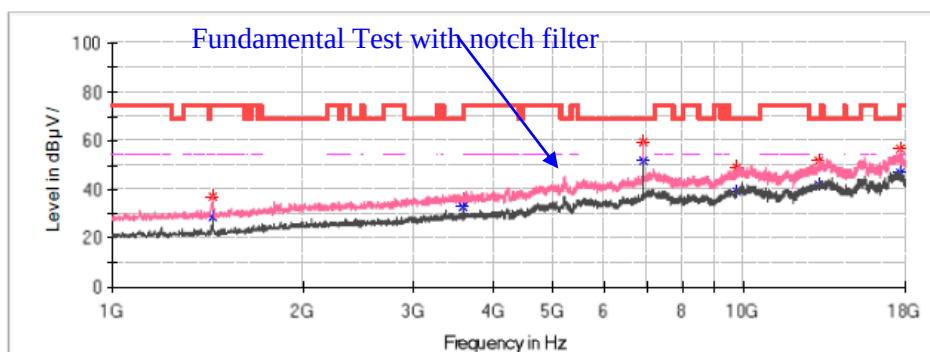
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1440.300000	---	27.64	54.00	26.36	V	-14.1
1440.300000	35.49	---	74.00	38.51	V	-14.1
2921.000000	37.69	---	68.20	30.51	H	-8.3
2921.000000	---	27.73	---	---	H	-8.3
6973.800000	---	53.73	---	---	V	3.6
6973.800000	58.83	---	68.20	9.37	V	3.6
10463.900000	45.53	---	68.20	22.67	V	7.3
10463.900000	---	40.00	---	---	V	7.3
12962.900000	---	40.63	---	---	V	9.0
12962.900000	51.22	---	68.20	16.98	V	9.0
17389.700000	---	45.46	---	---	V	13.3
17389.700000	55.09	---	68.20	13.11	V	13.3

802.11n-HT40 Mode:**Low Channel: 5190MHz****Common Information**

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	802.11n40 Mode of Low Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date	2024/2/29

Full Spectrum

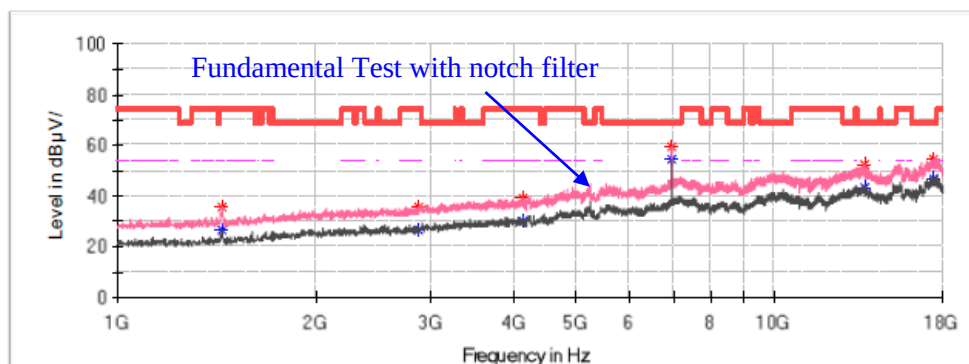
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1440.300000	36.85	---	74.00	37.15	V	-14.1
1440.300000	---	28.68	54.00	25.32	V	-14.1
3599.300000	35.59	---	68.20	32.61	H	-5.9
3599.300000	---	32.84	---	---	H	-5.9
6919.400000	59.37	---	68.20	8.83	V	3.3
6919.400000	---	51.89	---	---	V	3.3
9744.800000	---	39.25	---	---	V	7.0
9744.800000	48.88	---	68.20	19.32	V	7.0
13141.400000	---	42.26	---	---	V	9.6
13141.400000	51.59	---	68.20	16.61	V	9.6
17646.400000	56.86	---	68.20	11.34	V	13.0
17646.400000	---	46.95	---	---	V	13.0

High Channel: 5230MHz**Common Information**

Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11n40 Mode of High Channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESU40,3115, 2641-1
Temperature: 20.3°C
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/2/29

Full Spectrum

**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1440.300000	---	26.23	54.00	27.77	V	-14.1
1440.300000	35.35	---	74.00	38.65	V	-14.1
2873.400000	---	26.70	54.00	27.30	H	-8.5
2873.400000	35.61	---	74.00	38.39	H	-8.5
4139.900000	---	30.36	54.00	23.64	V	-4.7
4139.900000	39.36	---	74.00	34.64	V	-4.7
6973.800000	59.73	---	68.20	8.47	V	3.6
6973.800000	---	54.52	---	---	V	3.6
13676.900000	---	43.51	---	---	V	10.8
13676.900000	52.58	---	68.20	15.62	V	10.8
17432.200000	54.68	---	68.20	13.52	V	13.4
17432.200000	---	46.55	---	---	V	13.4

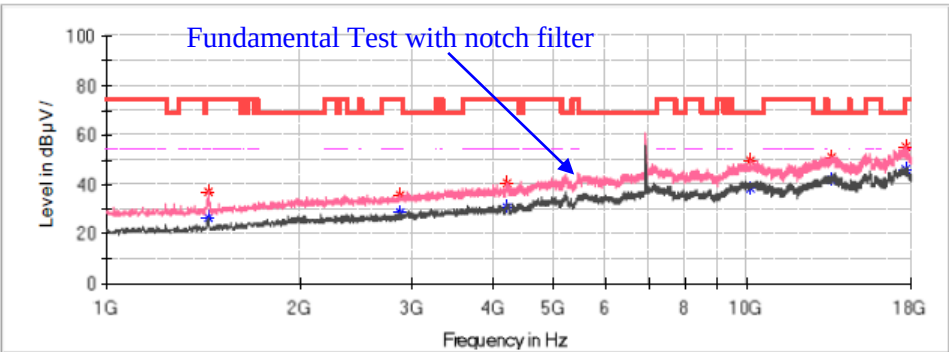
802.11ac80 Mode:

5210MHz

Common Information

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	802.11ac80 Mode
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date	2024/2/29

Full Spectrum

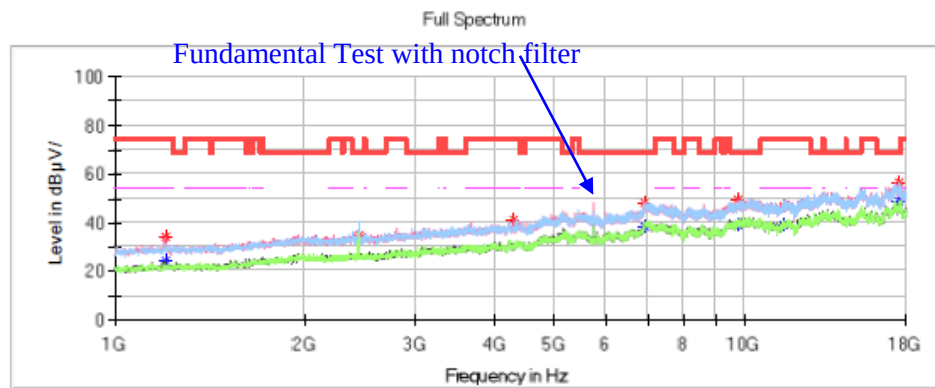


Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1440.300000	36.79	---	74.00	37.21	V	-14.1
1440.300000	---	26.66	54.00	27.34	V	-14.1
2861.500000	---	28.77	54.00	25.23	H	-8.5
2861.500000	35.90	---	74.00	38.10	H	-8.5
4204.500000	---	30.84	54.00	23.16	V	-4.5
4204.500000	40.24	---	74.00	33.76	V	-4.5
10091.600000	---	38.81	---	---	V	7.7
10091.600000	49.62	---	68.20	18.58	V	7.7
13534.100000	---	42.08	---	---	V	11.0
13534.100000	50.94	---	68.20	17.26	V	11.0
17639.600000	---	46.24	---	---	V	13.0
17639.600000	55.50	---	68.20	12.70	V	13.0

1GHz-18GHz(5725-5850MHz Band):**802.11a Mode:****Low Channel: 5745MHz****Common Information**

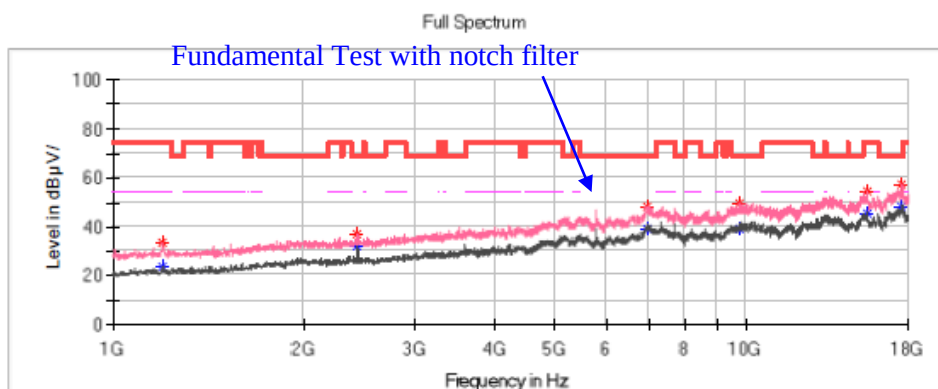
Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	802.11a Mode of Low Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date:	2024/3/1

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1202.300000	---	24.33	54.00	29.67	V	-14.9
1202.300000	34.21	---	74.00	39.79	V	-14.9
2439.900000	35.25	---	68.20	32.95	V	-9.9
4292.900000	40.95	---	74.00	33.05	V	-4.3
6917.700000	---	38.51	---	---	V	3.3
6917.700000	48.46	---	68.20	19.74	V	3.3
9726.100000	---	39.47	---	---	H	6.9
9726.100000	49.77	---	68.20	18.43	V	6.9
11490.700000	47.05	---	74.00	26.95	H	7.3
11490.700000	---	38.86	54.00	15.14	V	7.3
17573.300000	---	49.25	---	---	H	13.3
17573.300000	56.62	---	68.20	11.58	H	13.3

Middle Channel: 5785MHz**Common Information**

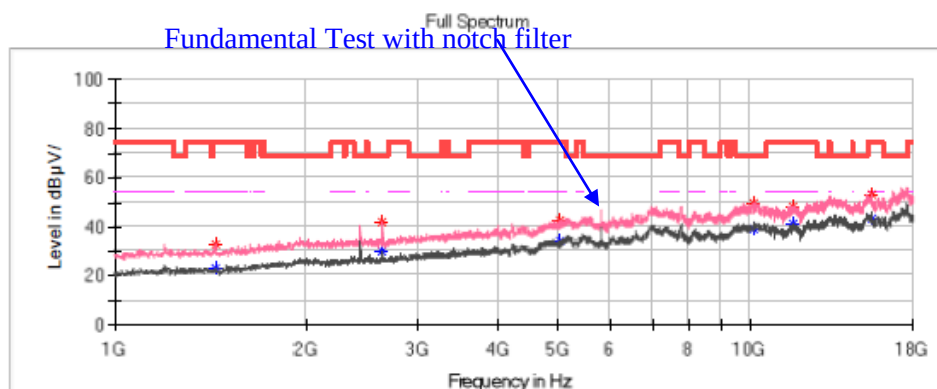
Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	802.11a Mode of Middle Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date	2024/3/1

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1198.900000	---	23.50	54.00	30.50	V	-14.9
1198.900000	33.26	---	74.00	40.74	V	-14.9
2434.800000	37.28	---	68.20	30.92	V	-9.9
2434.800000	---	31.84	---	---	V	-9.9
6965.300000	---	38.89	---	---	V	3.6
6965.300000	48.34	---	68.20	19.86	V	3.6
9749.900000	---	39.42	---	---	V	7.0
9749.900000	49.62	---	68.20	18.58	V	7.0
15499.300000	---	45.73	54.00	8.27	V	11.8
15499.300000	54.71	---	74.00	19.29	V	11.8
17593.700000	---	48.01	---	---	V	13.2
17593.700000	57.57	---	68.20	10.63	V	13.2

High Channel: 5825MHz**Common Information**

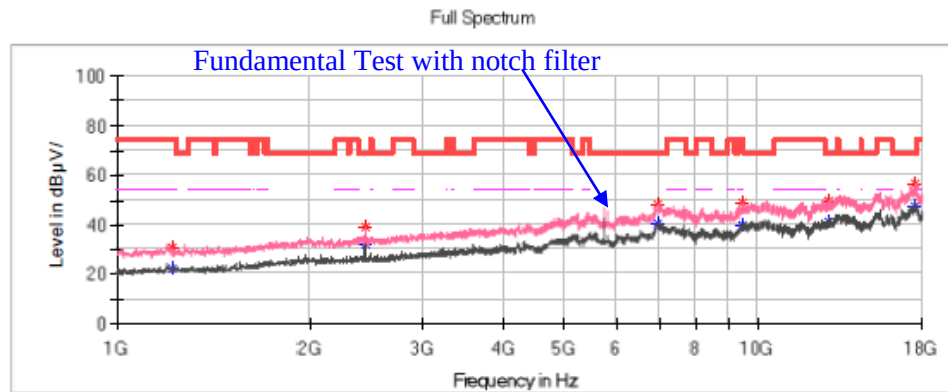
Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11a Mode of High Channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESU40,3115, 2641-1
Temperature: 20.3°C
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/3/1

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1440.300000	---	23.03	54.00	30.97	V	-14.1
1440.300000	33.13	---	74.00	40.87	V	-14.1
2638.800000	---	30.03	---	---	V	-9.3
2638.800000	41.80	---	68.20	26.40	V	-9.3
5006.900000	---	34.10	54.00	19.90	V	-1.2
5006.900000	42.82	---	74.00	31.18	V	-1.2
10079.700000	---	39.42	---	---	V	7.7
10079.700000	49.95	---	68.20	18.25	V	7.7
11652.200000	---	41.11	54.00	12.89	V	7.2
11652.200000	48.24	---	74.00	25.76	V	7.2
15480.600000	---	43.17	54.00	10.83	V	11.7
15480.600000	53.26	---	74.00	20.74	V	11.7

802.11ac20 Mode:**Low Channel: 5745MHz****Common Information**

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	802.11ac20 Mode of Low Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3°C
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date:	2024/3/1

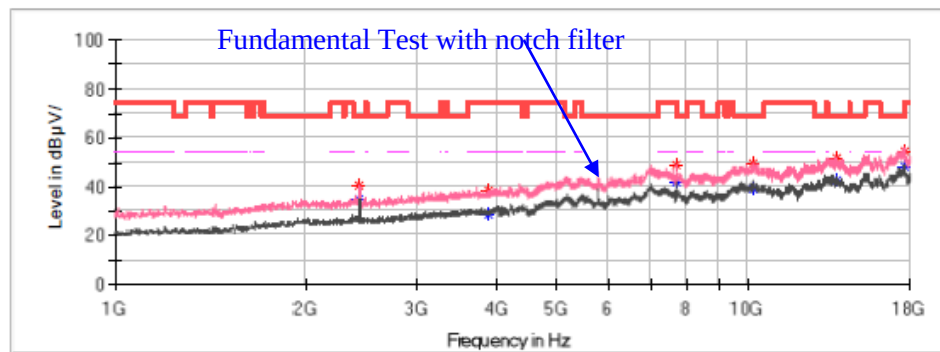
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1222.700000	---	22.25	54.00	31.75	V	-14.8
1222.700000	30.64	---	74.00	43.36	V	-14.8
2438.200000	38.87	---	68.20	29.33	V	-9.9
2438.200000	---	32.25	---	---	V	-9.9
6968.700000	48.17	---	68.20	20.03	V	3.6
6968.700000	---	40.27	---	---	V	3.6
9455.800000	48.69	---	74.00	25.31	V	6.0
9457.500000	---	39.73	54.00	14.27	V	6.0
12893.200000	---	41.25	---	---	V	8.9
12893.200000	49.85	---	68.20	18.35	V	8.9
17610.700000	---	47.32	---	---	V	13.2
17610.700000	56.49	---	68.20	11.71	V	13.2

Middle Channel: 5785MHz**Common Information**

Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11ac20 Mode of Middle Channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESU40,3115, 2641-1
Temperature: 20.3°C
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/3/1

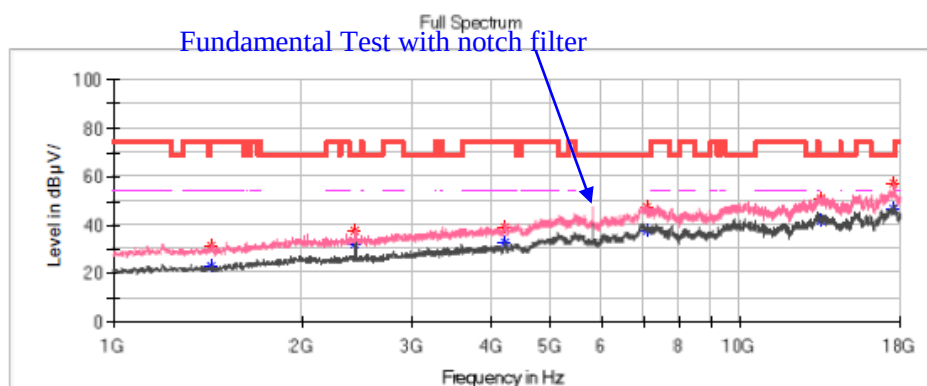
Full Spectrum

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2434.800000	40.23	---	68.20	27.97	V	-9.9
2434.800000	---	35.29	---	---	V	-9.9
3878.100000	---	28.70	54.00	25.30	V	-5.3
3878.100000	38.66	---	74.00	35.34	V	-5.3
7713.300000	---	41.96	54.00	12.04	V	4.0
7713.300000	48.86	---	74.00	25.14	V	4.0
10176.600000	---	39.49	---	---	V	7.6
10176.600000	49.85	---	68.20	18.35	V	7.6
13760.200000	---	42.52	---	---	V	10.8
13760.200000	51.87	---	68.20	16.33	V	10.8
17619.200000	54.65	---	68.20	13.55	V	13.1
17619.200000	---	48.09	---	---	V	13.1

High Channel: 5825MHz**Common Information**

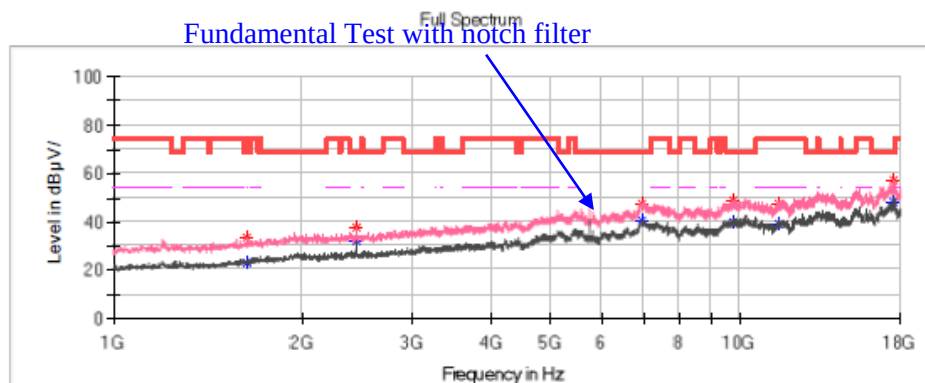
Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11ac20 Mode of High Channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESU40,3115, 2641-1
Temperature: 20.3℃
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/3/1

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1436.900000	31.67	---	74.00	42.33	V	-14.1
1436.900000	---	23.27	54.00	30.73	V	-14.1
2434.800000	37.70	---	68.20	30.50	V	-9.9
2434.800000	---	32.19	---	---	V	-9.9
4218.100000	39.34	---	74.00	34.66	V	-4.5
4218.100000	---	33.21	54.00	20.79	V	-4.5
7097.900000	---	37.82	---	---	V	3.9
7097.900000	47.53	---	68.20	20.67	V	3.9
13420.200000	51.29	---	68.20	16.91	V	10.7
13421.900000	---	42.09	---	---	V	10.7
17578.400000	57.17	---	68.20	11.03	V	13.3
17580.100000	---	47.04	---	---	V	13.3

802.11n-HT20 Mode:**Low Channel: 5745MHz****Common Information**

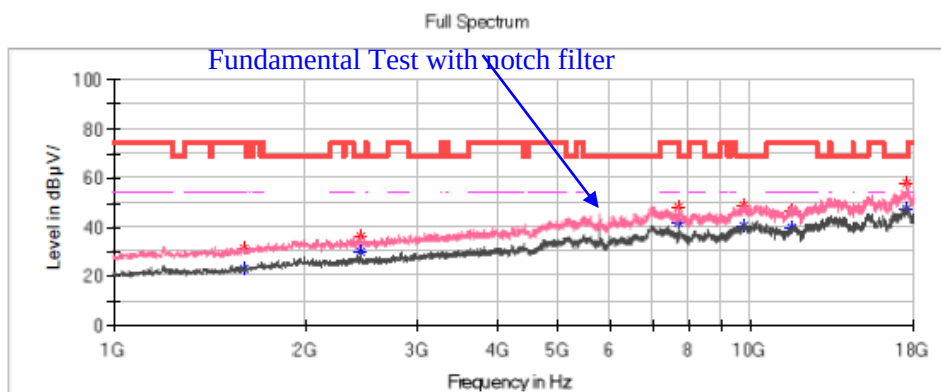
Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11n20 Mode of Low Channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESU40,3115, 2641-1
Temperature: 20.3°C
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/3/1

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µV/m)	Average (dB µV/m)	Limit (dB µV/m)	Margin (dB)	Pol	Corr. (dB/m)
1630.700000	---	22.97	---	---	V	-13.1
1630.700000	33.64	---	68.20	34.56	V	-13.1
2438.200000	38.00	---	68.20	30.20	V	-9.9
2438.200000	---	32.32	---	---	V	-9.9
6965.300000	---	40.42	---	---	V	3.6
6965.300000	47.43	---	68.20	20.77	V	3.6
9734.600000	---	39.81	---	---	V	7.0
9734.600000	49.08	---	68.20	19.12	V	7.0
11490.700000	---	39.24	54.00	14.76	V	7.3
11490.700000	47.58	---	74.00	26.42	V	7.3
17535.900000	---	48.03	---	---	V	13.5
17535.900000	57.16	---	68.20	11.04	V	13.5

Middle Channel: 5785MHz**Common Information**

Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11n20 Mode of Middle Channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESU40,3115, 2641-1
Temperature: 20.3℃
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/3/1

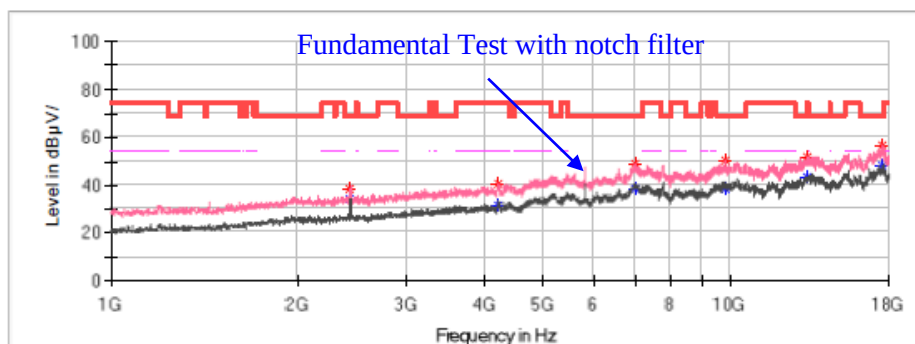
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µV/m)	Average (dB µV/m)	Limit (dB µV/m)	Margin (dB)	Pol	Corr. (dB/m)
1606.900000	---	23.19	54.00	30.81	V	-13.2
1606.900000	31.44	---	74.00	42.56	V	-13.2
2439.900000	36.27	---	68.20	31.93	V	-9.9
2439.900000	---	30.06	---	---	V	-9.9
7713.300000	---	42.04	54.00	11.96	V	4.0
7713.300000	48.00	---	74.00	26.00	V	4.0
9744.800000	---	40.42	---	---	V	7.0
9744.800000	49.13	---	68.20	19.07	V	7.0
11570.600000	---	39.99	54.00	14.01	V	7.2
11570.600000	46.51	---	74.00	27.49	V	7.2
17609.000000	---	47.82	---	---	V	13.2
17609.000000	57.84	---	68.20	10.36	V	13.2

High Channel: 5825MHz**Common Information**

Project No.:	RKSA231206001
EUT Model:	802.11n20 Mode of Low Channel
Test Mode:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Standard:	ICES-003
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3°C
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date:	2024/3/1

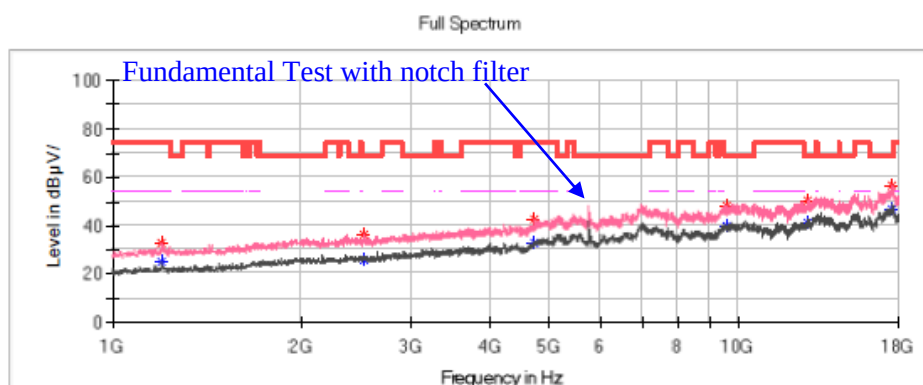
Full Spectrum

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2434.800000	38.62	---	68.20	29.58	V	-9.9
2434.800000	---	34.41	---	---	V	-9.9
4221.500000	---	31.41	54.00	22.59	V	-4.5
4221.500000	40.36	---	74.00	33.64	V	-4.5
6995.900000	---	38.70	---	---	V	3.8
6995.900000	48.90	---	68.20	19.30	V	3.8
9829.800000	---	38.69	---	---	V	7.3
9829.800000	50.11	---	68.20	18.09	V	7.3
13309.700000	---	43.49	54.00	10.51	V	10.3
13309.700000	51.97	---	74.00	22.03	V	10.3
17598.800000	---	48.48	---	---	V	13.2
17598.800000	56.89	---	68.20	11.31	V	13.2

802.11ac40 Mode:**Low Channel: 5755MHz****Common Information**

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	802.11ac40 Mode of Low Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3°C
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date	2024/3/1

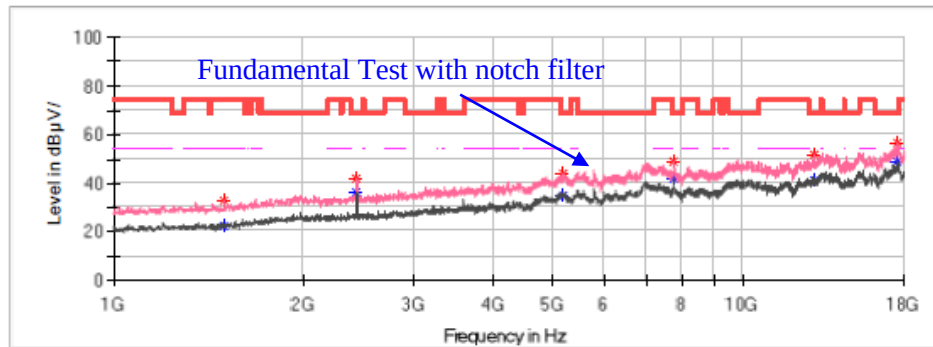
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1198.900000	33.17	---	74.00	40.83	V	-14.9
1198.900000	---	24.94	54.00	29.06	V	-14.9
2526.600000	---	25.97	---	---	V	-9.7
2526.600000	36.19	---	68.20	32.01	V	-9.7
4712.800000	---	32.84	54.00	21.16	V	-2.7
4712.800000	42.46	---	74.00	31.54	V	-2.7
9535.700000	---	40.14	---	---	V	6.3
9535.700000	48.54	---	68.20	19.66	V	6.3
12893.200000	---	41.59	---	---	V	8.9
12893.200000	50.40	---	68.20	17.80	V	8.9
17564.800000	---	46.94	---	---	V	13.3
17564.800000	56.30	---	68.20	11.90	V	13.3

High Channel: 5795MHz**Common Information**

Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11ac40 Mode of High Channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESU40,3115, 2641-1
Temperature: 20.3°C
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/3/1

Full Spectrum

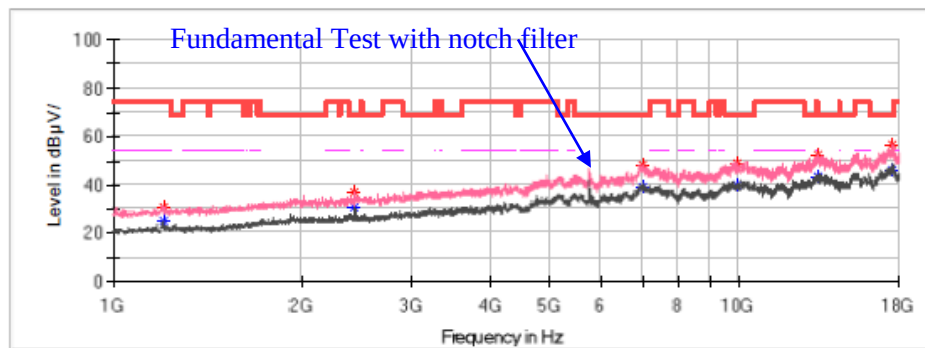
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μV/m)	Average (dB μV/m)	Limit (dB μV/m)	Margin (dB)	Pol	Corr. (dB/m)
1494.700000	---	22.47	54.00	31.53	V	-13.9
1494.700000	32.74	---	74.00	41.26	V	-13.9
2434.800000	---	36.27	---	---	V	-9.9
2434.800000	42.14	---	68.20	26.06	V	-9.9
5175.200000	---	34.76	---	---	V	-0.5
5175.200000	44.09	---	68.20	24.11	V	-0.5
7726.900000	---	41.74	54.00	12.26	V	4.0
7726.900000	48.78	---	74.00	25.22	V	4.0
12954.400000	---	41.28	---	---	V	9.0
12954.400000	51.49	---	68.20	16.71	V	9.0
17603.900000	---	49.12	---	---	V	13.2
17603.900000	56.97	---	68.20	11.23	V	13.2

802.11n-HT40 Mode:**Low Channel: 5755MHz****Common Information**

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	802.11n40 Mode of Low Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date:	2024/3/1

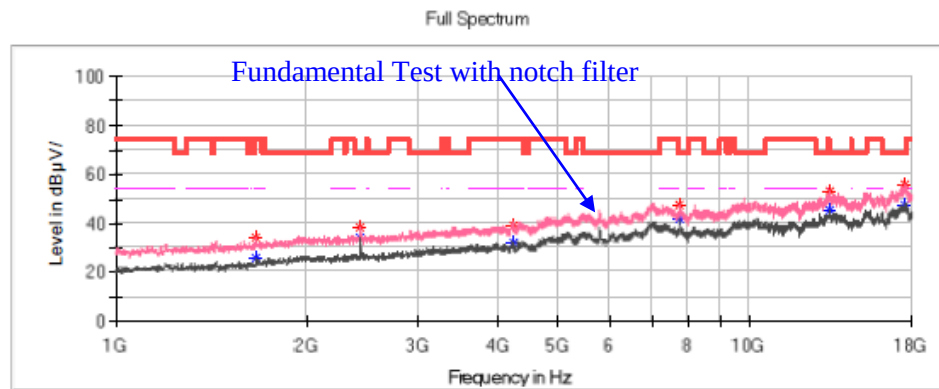
Full Spectrum

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1202.300000	30.84	---	74.00	43.16	V	-14.9
1202.300000	---	25.05	54.00	28.95	V	-14.9
2433.100000	37.15	---	68.20	31.05	V	-9.9
2433.100000	---	30.93	---	---	V	-9.9
6997.600000	---	39.13	---	---	V	3.8
6997.600000	48.17	---	68.20	20.03	V	3.8
9943.700000	---	39.92	---	---	V	7.6
9943.700000	48.74	---	68.20	19.46	V	7.6
13338.600000	---	43.48	54.00	10.52	V	10.4
13338.600000	52.22	---	74.00	21.78	V	10.4
17525.700000	---	46.45	---	---	V	13.5
17525.700000	56.32	---	68.20	11.88	V	13.5

High Channel: 5795MHz**Common Information**

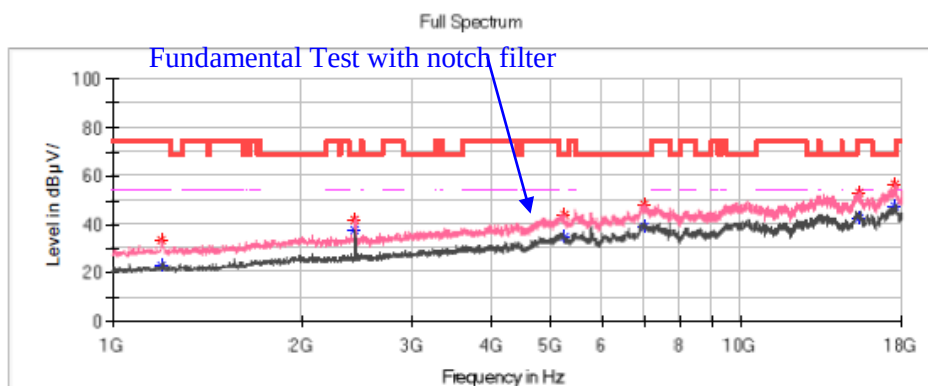
Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11n40 Mode of High Channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESU40,3115, 2641-1
Temperature: 20.3°C
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/3/1

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1663.000000	---	25.77	54.00	28.23	V	-12.8
1663.000000	33.93	---	74.00	40.07	V	-12.8
2434.800000	---	34.23	---	---	V	-9.9
2434.800000	38.56	---	68.20	29.64	V	-9.9
4240.200000	---	32.32	54.00	21.68	V	-4.4
4240.200000	39.05	---	74.00	34.95	V	-4.4
7726.900000	---	42.08	54.00	11.92	V	4.0
7726.900000	47.86	---	74.00	26.14	V	4.0
13393.000000	---	45.32	54.00	8.68	V	10.6
13393.000000	53.00	---	74.00	21.00	V	10.6
17598.800000	---	47.68	---	---	V	13.2
17598.800000	56.02	---	68.20	12.18	V	13.2

802.11ac80 Mode:**Middle channel: 5775MHz****Common Information**

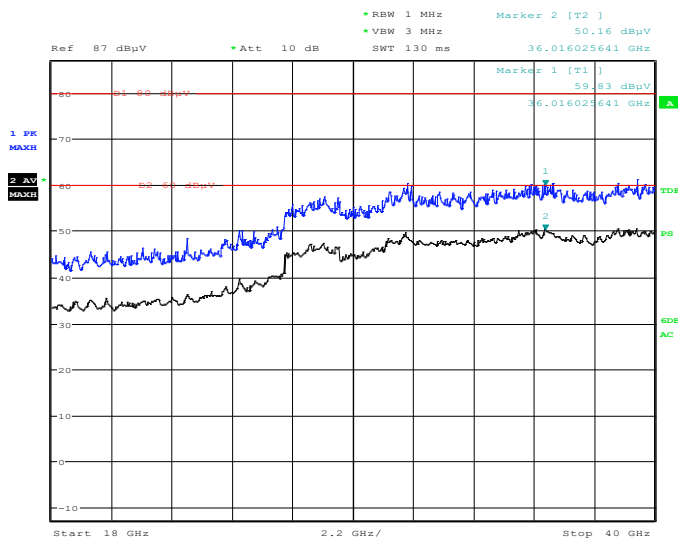
Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11ac80 Mode
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESU40,3115, 2641-1
Temperature: 20.3℃
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/3/1

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1197.200000	33.77	---	74.00	40.23	V	-14.9
1197.200000	---	23.25	54.00	30.75	V	-14.9
2434.800000	42.12	---	68.20	26.08	V	-9.9
2434.800000	---	37.51	---	---	V	-9.9
5227.900000	---	35.30	---	---	V	-0.3
5227.900000	44.23	---	68.20	23.97	V	-0.3
6994.200000	---	39.31	---	---	V	3.8
6994.200000	48.04	---	68.20	20.16	V	3.8
15382.000000	---	42.66	54.00	11.34	V	11.4
15382.000000	53.23	---	74.00	20.77	V	11.4
17595.400000	---	47.62	---	---	V	13.2
17595.400000	56.82	---	68.20	11.38	V	13.2

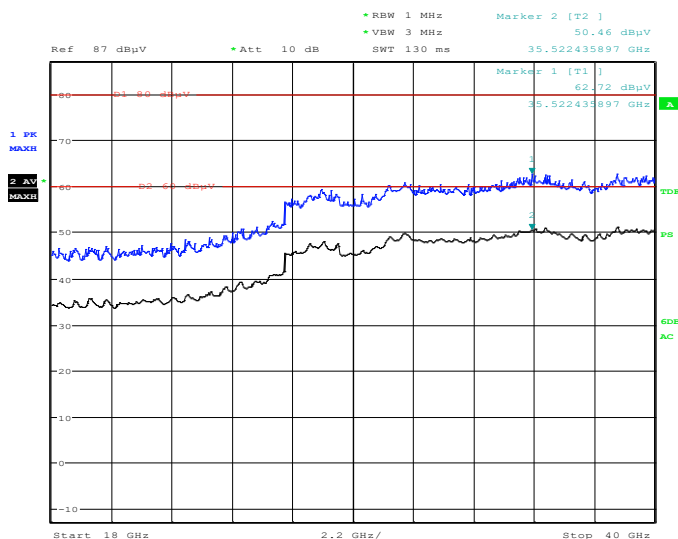
18GHz-40GHz:

Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40, 802.11 ac80 modes of operation in the X,Y and Z axes of orientation, the worst case **802.11a mode (5785MHz)** was recorded

Horizontal

Project No.: RKSA231206001
Date: 28.MAR.2024 23:19:53

Tester: Peter Wang

Vertical

Project No.: RKSA231206001
Date: 28.MAR.2024 23:48:52

Tester: Peter Wang

Note: The test distance is 1.5m. The limit is 80dBμV/m(Peak) and 60dBμV/m(Average).

Restricted Bands Emissions Test (5150-5250MHz Band):

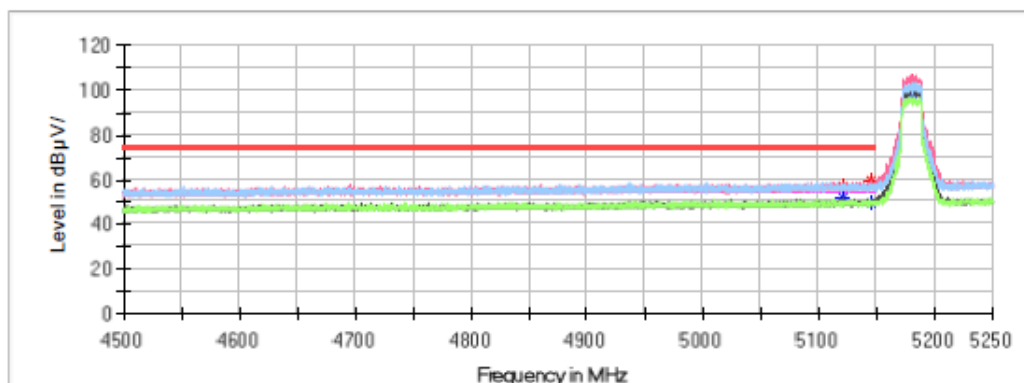
Note:

1. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
2. Corrected Amplitude = Corrected Factor + Reading
3. Margin = Limit - Corrected. Amplitude

802.11a Mode:**Common Information**

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	5G Wifi 802.11a Mode of Low Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	101.0kPa
Test Engineer:	Peter Wang
Test Date	2024/3/28

Full Spectrum

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5120.775000	56.96	---	74.00	17.04	H	9.3
5120.775000	---	51.89	54.00	2.11	H	9.3
5145.525000	---	49.15	54.00	4.85	H	9.4
5145.525000	59.43	---	74.00	14.57	H	9.4
5179.950000	---	97.92	---	---	V	9.5
5179.950000	103.48	---	---	---	V	9.5

Common Information

Project No.:

EUT Model:

Test Mode:

Standard:

Test Equipment:

Temperature:

Humidity:

Atmospheric pressure:

Test Engineer:

Test Date

RKSA231206001

MAPSP01

5G Wifi 802.11a Mode of High Channel

FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407

ESU40,3115, 2641-1

20.3℃

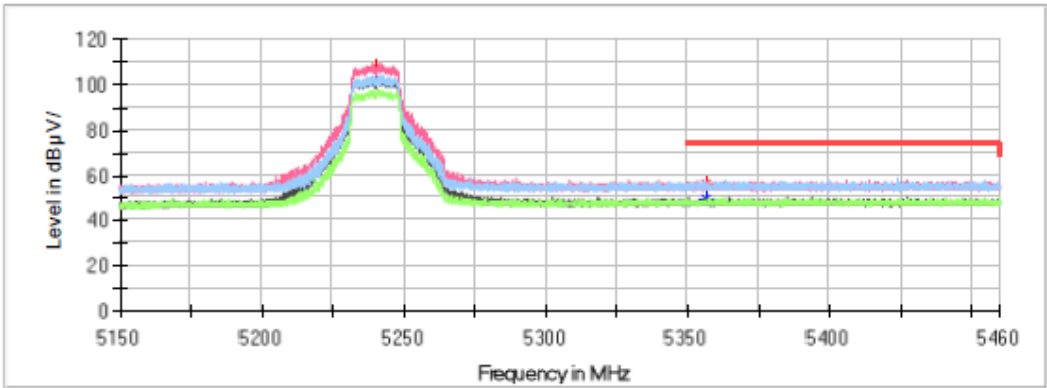
52%

101.0kPa

Peter Wang

2024/3/28

Full Spectrum



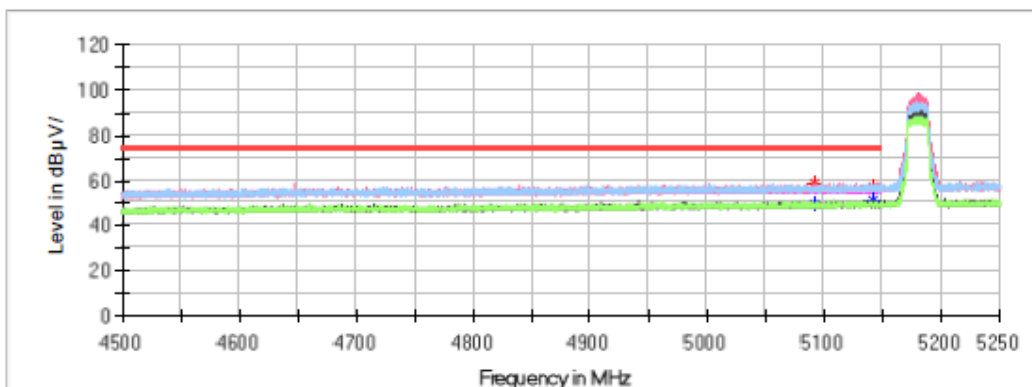
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5240.489000	---	101.52	---	---	V	9.8
5240.489000	107.56	---	---	---	V	9.8
5356.553000	---	49.87	54.00	4.13	V	10.3
5356.553000	56.20	---	74.00	17.80	V	10.3

802.11ac20 Mode:**Common Information**

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	5G Wifi 802.11ac20 Mode of Low Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	101.0kPa
Test Engineer:	Peter Wang
Test Date	2024/3/28

Full Spectrum

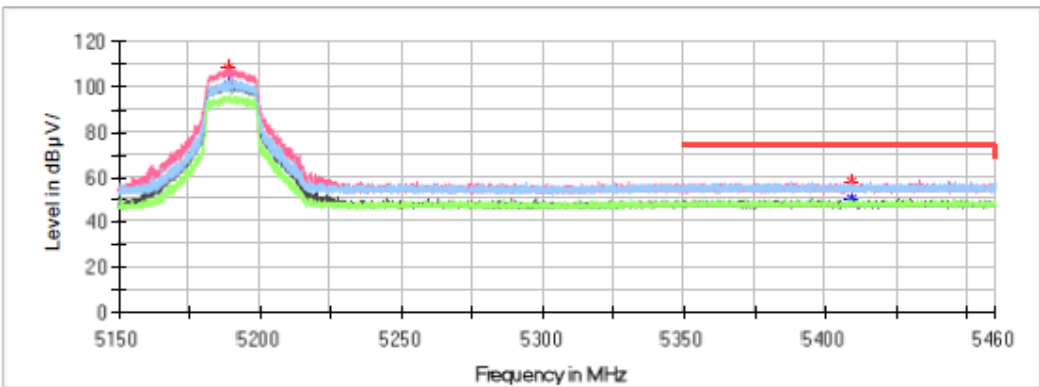
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5092.200000	58.65	---	74.00	15.35	V	9.2
5092.200000	---	49.66	54.00	4.34	V	9.2
5141.700000	57.18	---	74.00	16.82	V	9.4
5141.700000	---	51.30	54.00	2.70	V	9.4
5180.025000	---	89.20	---	---	V	9.5
5180.025000	94.41	---	---	---	V	9.5

Common Information

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	5G Wifi 802.11ac20 Mode of High Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	101.0kPa
Test Engineer:	Peter Wang
Test Date	2024/3/28

Full Spectrum



Critical Freqs

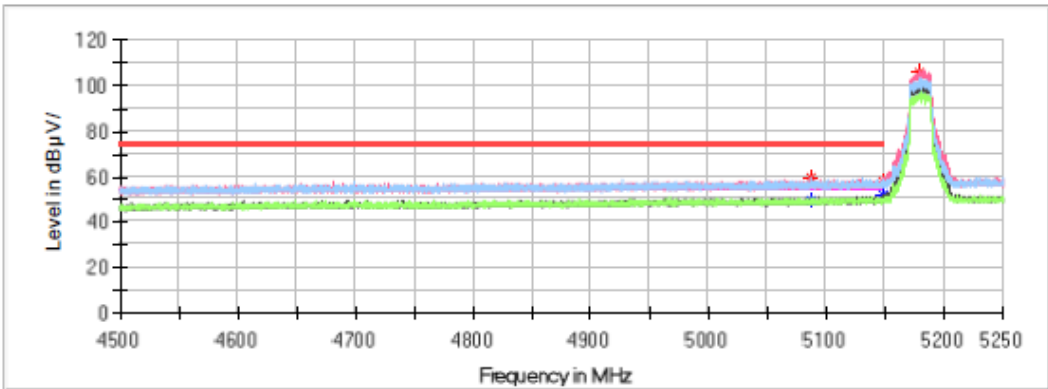
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5188.564000	---	100.53	---	---	V	9.6
5188.564000	107.89	---	---	---	V	9.6
5409.129000	---	49.95	54.00	4.05	V	10.5
5409.129000	57.73	---	74.00	16.27	V	10.5

802.11n-HT20 Mode:

Common Information

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	5G Wifi 802.11n20 Mode of Low Channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment:	ESU40,3115, 2641-1
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	101.0kPa
Test Engineer:	Peter Wang
Test Date	2024/3/28

Full Spectrum



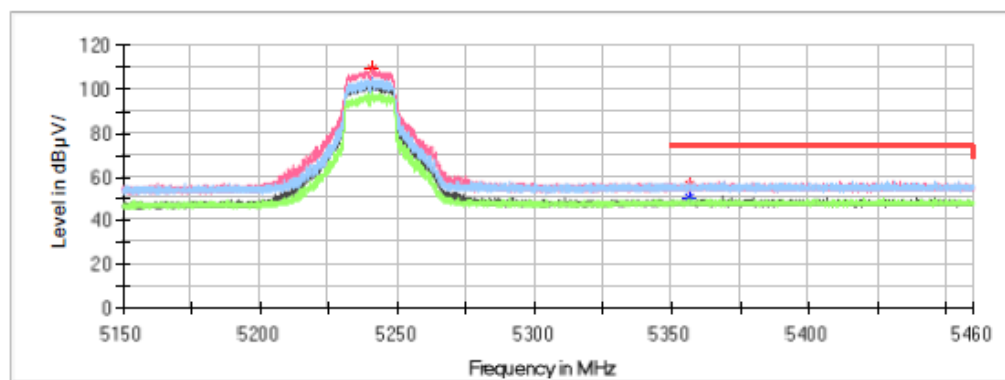
Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5086.275000	59.66	---	74.00	14.34	H	9.1
5086.275000	---	49.67	54.00	4.33	H	9.1
5148.675000	58.30	---	74.00	15.70	V	9.4
5148.675000	---	52.33	54.00	1.67	V	9.4
5179.500000	---	98.23	---	---	V	9.5
5179.500000	105.88	---	---	---	V	9.5

Common Information

Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 5G Wifi 802.11n20 Mode of High Channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESU40,3115, 2641-1
Temperature: 20.3°C
Humidity: 52%
Atmospheric pressure: 101.0kPa
Test Engineer: Peter Wang
Test Date: 2024/3/28

Full Spectrum



Critical Freqs

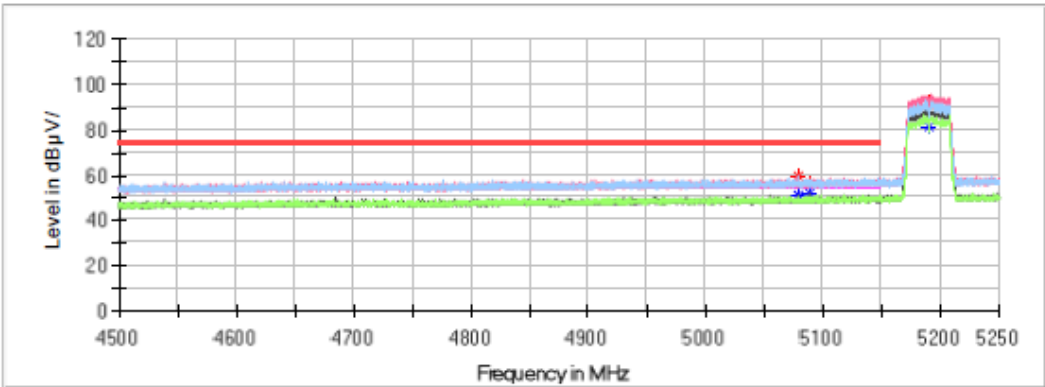
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5240.923000	---	101.81	---	---	V	9.8
5240.923000	108.81	---	---	---	V	9.8
5356.398000	---	50.56	54.00	3.44	V	10.3
5356.398000	56.24	---	74.00	17.76	V	10.3

802.11ac40 Mode:

Common Information

Project No.: RKSA231206001
 EUT Model: MAPSP01
 Test Mode: 5G Wifi 802.11ac40 Mode of Low Channel
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Equipment: ESU40,3115, 2641-1
 Temperature: 20.3℃
 Humidity: 52%
 Atmospheric pressure: 101.0kPa
 Test Engineer: Peter Wang
 Test Date: 2024/3/28

Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5079.300000	---	50.92	54.00	3.08	H	9.1
5079.300000	59.24	---	74.00	14.76	H	9.1
5088.600000	---	51.79	54.00	2.21	V	9.2
5088.600000	55.99	---	74.00	18.01	V	9.2
5190.150000	---	81.17	---	---	V	9.6
5190.150000	91.34	---	---	---	V	9.6

Common Information

Project No.:

EUT Model:

Test Mode:

Standard:

Test Equipment:

Temperature:

Humidity:

Atmospheric pressure:

Test Engineer:

Test Date

RKSA231206001

MAPSP01

5G Wifi 802.11ac40 Mode of High Channel

FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407

ESU40,3115, 2641-1

20.3℃

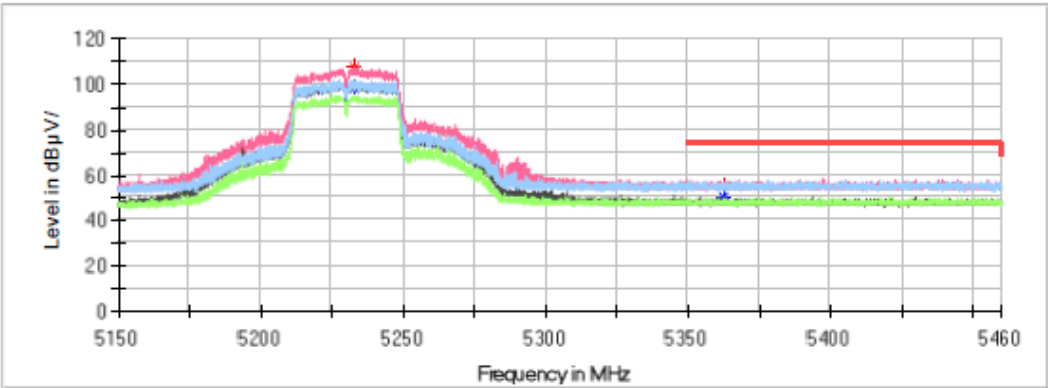
52%

101.0kPa

Peter Wang

2024/3/28

Full Spectrum



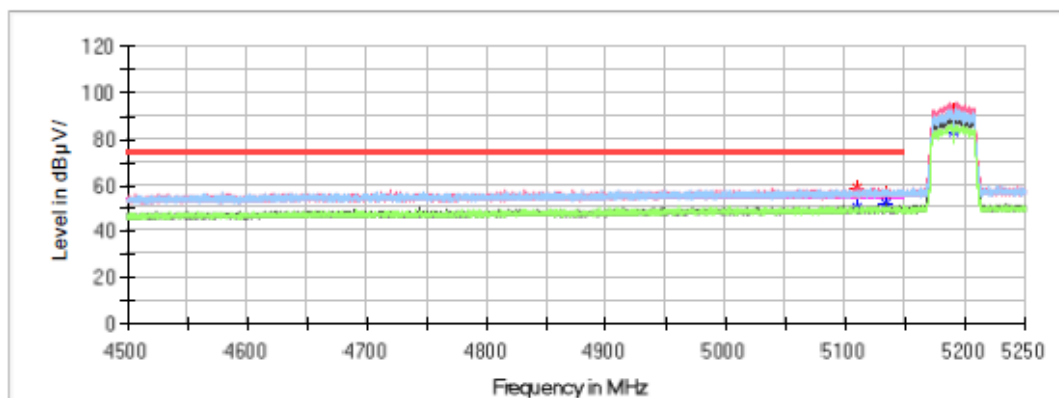
Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5232.584000	---	98.57	---	---	V	9.7
5232.584000	107.25	---	---	---	V	9.7
5362.629000	---	50.41	54.00	3.59	V	10.3
5362.629000	55.74	---	74.00	18.26	V	10.3

802.11n-HT40 Mode:**Common Information**

Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 5G Wifi 802.11n40 Mode of Low Channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESU40,3115, 2641-1
Temperature: 20.3°C
Humidity: 52%
Atmospheric pressure: 101.0kPa
Test Engineer: Peter Wang
Test Date: 2024/3/28

Full Spectrum

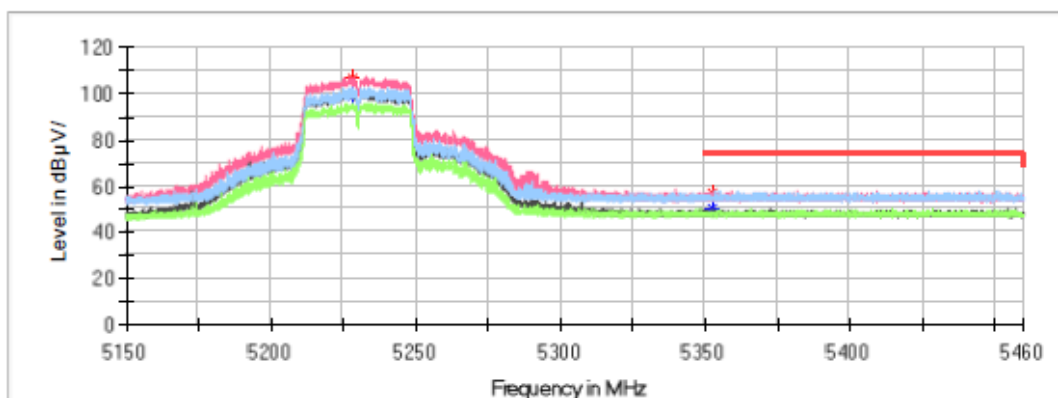
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5108.925000	59.04	---	74.00	14.96	V	9.2
5108.925000	---	50.10	54.00	3.90	V	9.2
5133.150000	56.20	---	74.00	17.80	V	9.3
5133.150000	---	51.70	54.00	2.30	V	9.3
5190.075000	---	82.88	---	---	V	9.6
5190.075000	91.16	---	---	---	V	9.6

Common Information

Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 5G Wifi 802.11n40 Mode of High Channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESU40,3115, 2641-1
Temperature: 20.3°C
Humidity: 52%
Atmospheric pressure: 101.0kPa
Test Engineer: Peter Wang
Test Date: 2024/3/28

Full Spectrum



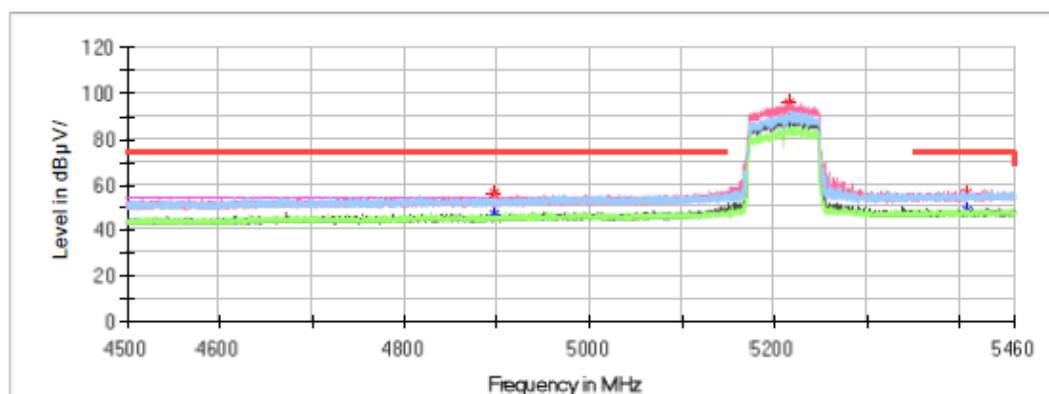
Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5228.430000	---	98.78	---	---	V	9.7
5228.430000	106.91	---	---	---	V	9.7
5352.120000	56.83	---	74.00	17.17	V	10.2
5352.120000	---	50.61	54.00	3.39	V	10.2

802.11ac80 Mode:**Common Information**

Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11ac80 Mode
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESU40,3115, 2641-1
Temperature: 20.3℃
Humidity: 52%
Atmospheric pressure: 100.2kPa
Test Engineer: Peter Wang
Test Date: 2024/4/2

Full Spectrum

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
4897.344000	---	47.36	54.00	6.64	V	8.3
4897.344000	56.27	---	74.00	17.73	V	8.3
5216.640000	---	87.86	---	---	V	9.7
5216.640000	96.06	---	---	---	V	9.7
5408.832000	---	48.42	54.00	5.58	H	10.5
5408.832000	55.90	---	74.00	18.10	V	10.5

Bandedge Emissions Test (5725-5850MHz Band):

802.11a Mode:

Test Report

Common Information

Project No.:

EUT Model:

Test Mode:

Test Equipment:

Temperature:

Humidity:

Atmospheric pressure:

Test Engineer:

Test Date

RKSA231206001

MAPSP01

802.11a Mode of Low Channel

ESU40,3115,PAM-0118P

20.3℃

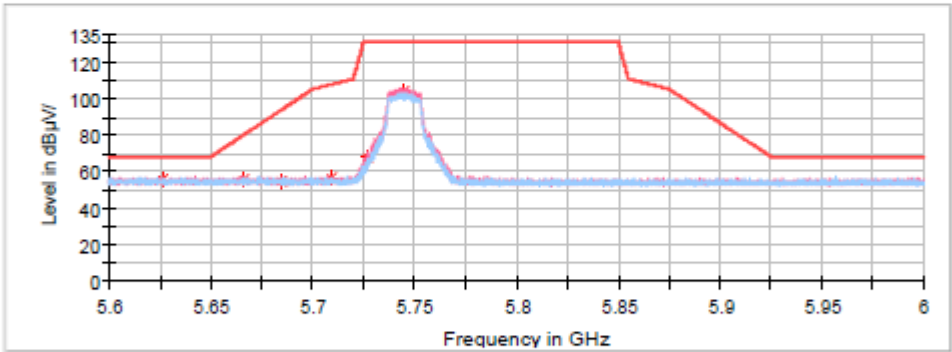
52%

102.8kPa

Peter Wang

2024/3/1

Full Spectrum



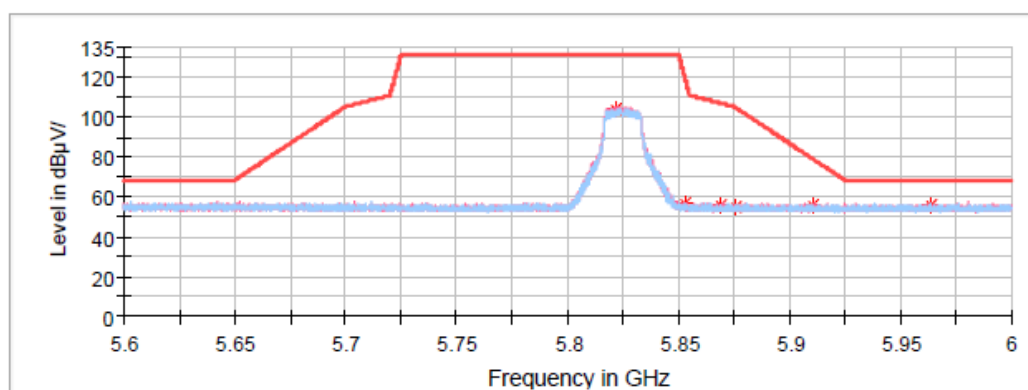
Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5625.800000	55.66	---	68.20	12.54	V	10.7
5666.160000	55.39	---	80.16	24.77	H	10.6
5684.840000	55.18	---	93.98	38.80	V	10.6
5709.360000	56.38	---	107.82	51.44	V	10.6

Common Information

Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11a Mode of High Channel
Test Equipment: ESU40,3115,PAM-0118P
Temperature: 20.3℃
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/3/1

Full Spectrum



Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5852.640000	56.79	---	120.43	63.64	H	10.4
5868.760000	55.43	---	106.95	51.51	V	10.4
5875.680000	55.00	---	104.70	49.70	H	10.4
5910.160000	55.60	---	79.18	23.58	H	10.3
5963.680000	55.43	---	68.20	12.77	V	10.2

802.11ac20 Mode:

Common Information

Project No.:

EUT Model:

Test Mode:

Test Equipment:

Temperature:

Humidity:

Atmospheric pressure:

Test Engineer:

Test Date

RKSA231206001

MAPSP01

802.11ac20 Mode of Low Channel

ESU40,3115,PAM-0118P

20.3℃

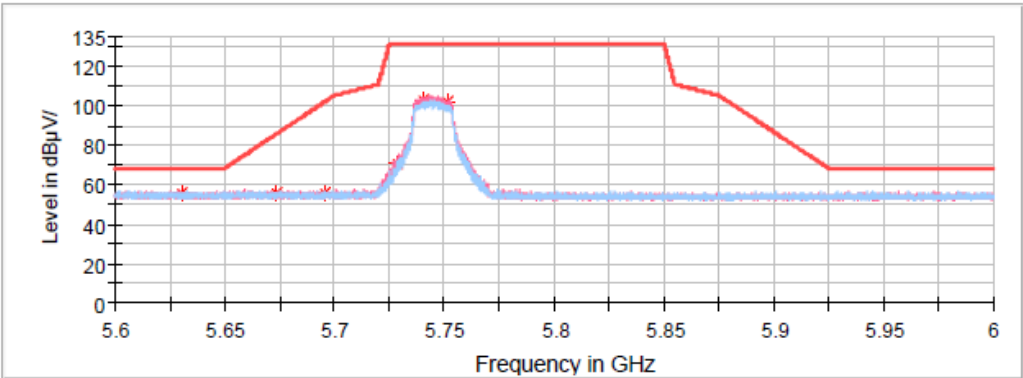
52%

102.8kPa

Peter Wang

2024/3/1

Full Spectrum



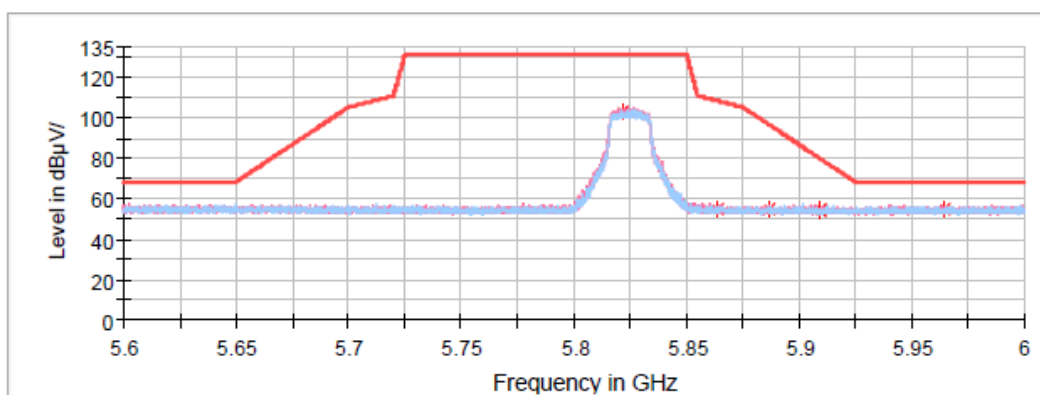
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5630.520000	55.93	---	68.20	12.27	H	10.7
5673.360000	55.29	---	85.49	30.19	V	10.6
5695.240000	55.45	---	101.68	46.22	H	10.6

Common Information

Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11ac20 Mode of High Channel
Test Equipment: ESU40,3115,PAM-0118P
Temperature: 20.3°C
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/3/1

Full Spectrum



Critical_Freqs

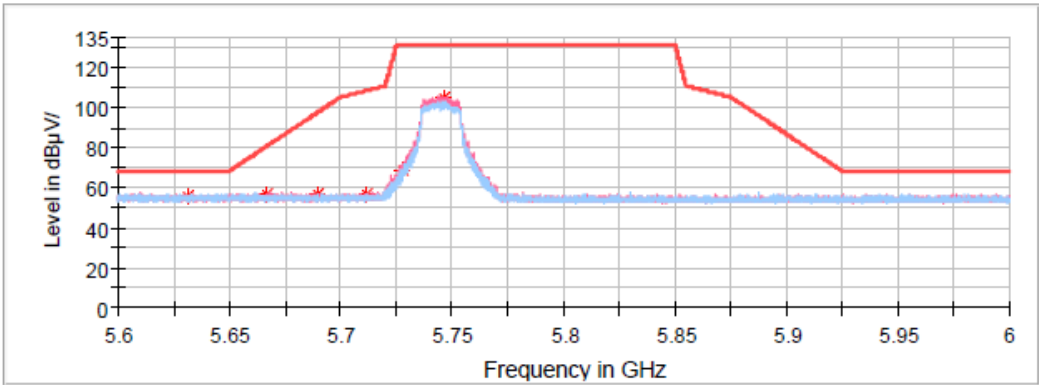
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5864.080000	54.91	---	108.26	53.35	V	10.4
5886.680000	55.21	---	96.56	41.34	V	10.3
5909.400000	53.94	---	79.74	25.80	V	10.3
5909.840000	55.13	---	79.42	24.28	H	10.3
5964.600000	54.82	---	68.20	13.38	V	10.2

802.11n-HT20 Mode:

Common Information

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	802.11n20 Mode of Low Channel
Test Equipment:	ESU40,3115,PAM-0118P
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date	2024/3/1

Full Spectrum



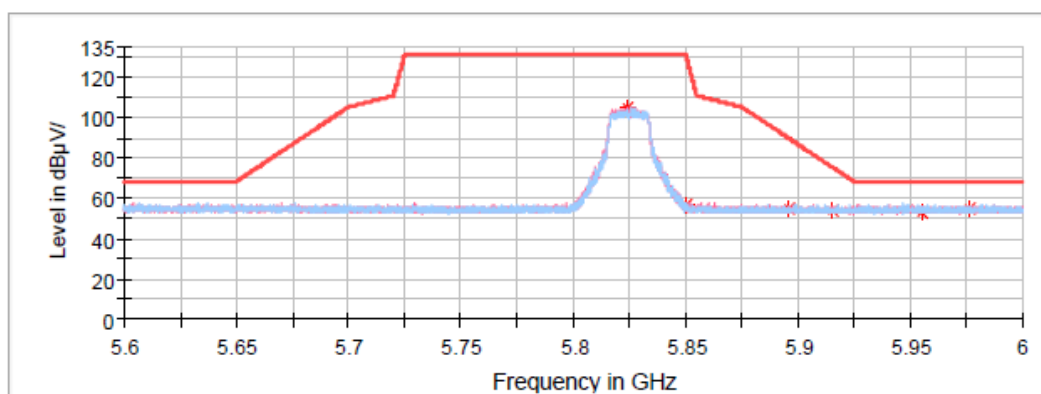
Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5631.480000	55.80	---	68.20	12.40	H	10.7
5666.400000	56.21	---	80.34	24.13	V	10.6
5689.920000	56.53	---	97.74	41.21	H	10.6
5711.320000	56.33	---	108.37	52.04	H	10.6

Common Information

Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11n20 Mode of High Channel
Test Equipment: ESU40,3115,PAM-0118P
Temperature: 20.3°C
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/3/1

Full Spectrum



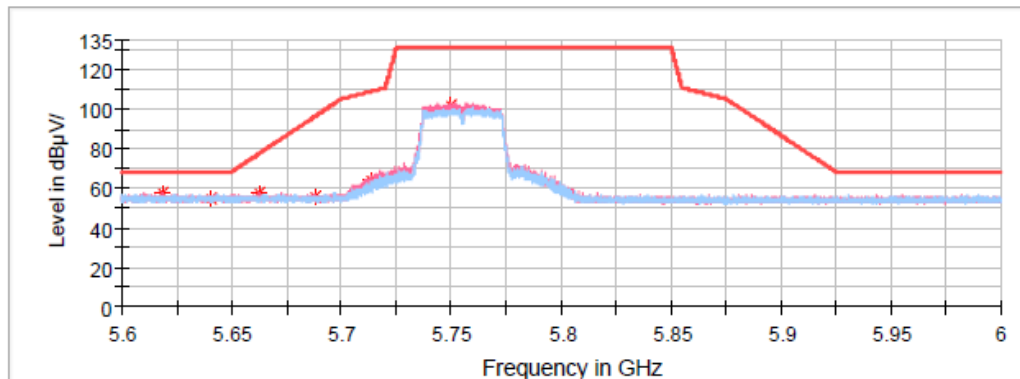
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5850.520000	56.66	---	129.08	72.42	V	10.4
5895.600000	54.98	---	89.96	34.98	V	10.3
5915.560000	53.85	---	75.19	21.33	H	10.3
5955.040000	53.16	---	68.20	15.04	V	10.2
5975.960000	54.66	---	68.20	13.54	V	10.2

802.11ac40 Mode:**Common Information**

Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11ac40 Mode of Low Channel
Test Equipment: ESU40,3115,PAM-0118P
Temperature: 20.3℃
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/3/1

Full Spectrum

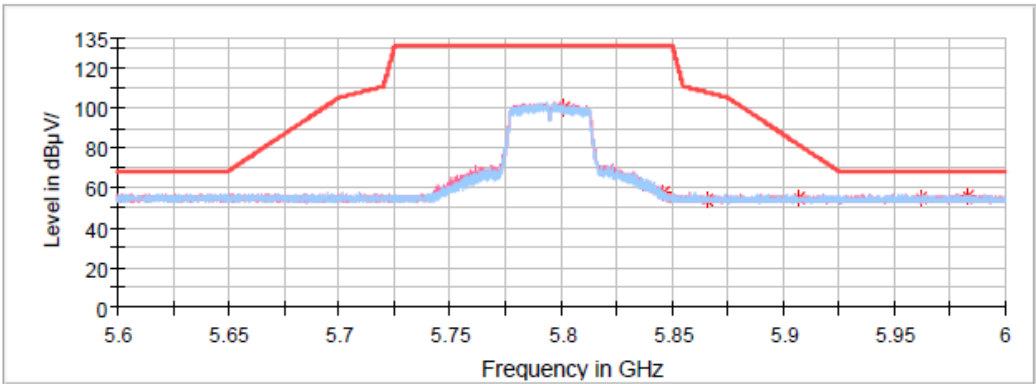
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5618.560000	57.52	---	68.20	10.68	V	10.7
5640.520000	55.20	---	68.20	13.00	V	10.7
5662.880000	57.43	---	77.73	20.30	V	10.6
5687.960000	55.64	---	96.29	40.65	H	10.6
5713.400000	64.31	---	108.95	44.65	V	10.6

Common Information

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	802.11ac40 Mode of High Channel
Test Equipment:	ESU40,3115,PAM-0118P
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date	2024/3/1

Full Spectrum



Critical_Freqs

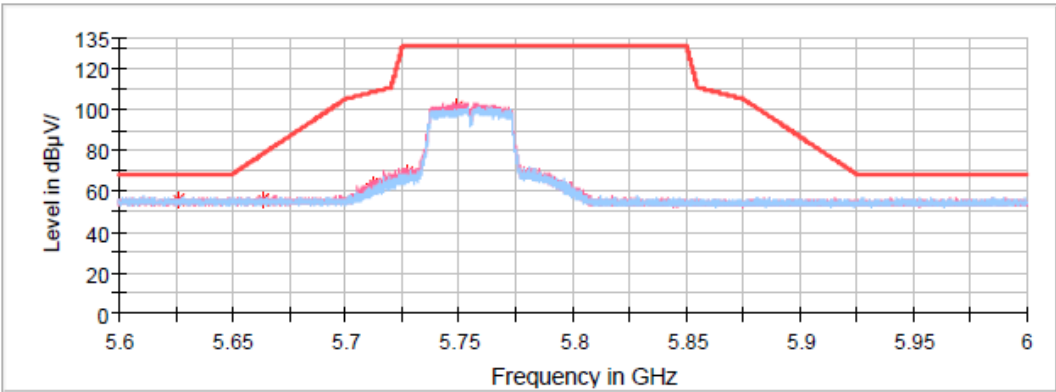
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5865.600000	54.13	---	107.83	53.70	V	10.4
5906.920000	54.45	---	81.58	27.13	V	10.3
5962.240000	54.87	---	68.20	13.33	V	10.2
5983.440000	55.76	---	68.20	12.44	H	10.2

802.11n-HT40 Mode:

Common Information

Project No.:	RKSA231206001
EUT Model:	MAPSP01
Test Mode:	802.11n40 Mode of Low Channel
Test Equipment:	ESU40,3115,PAM-0118P
Temperature:	20.3℃
Humidity:	52%
Atmospheric pressure:	102.8kPa
Test Engineer:	Peter Wang
Test Date	2024/3/1

Full Spectrum



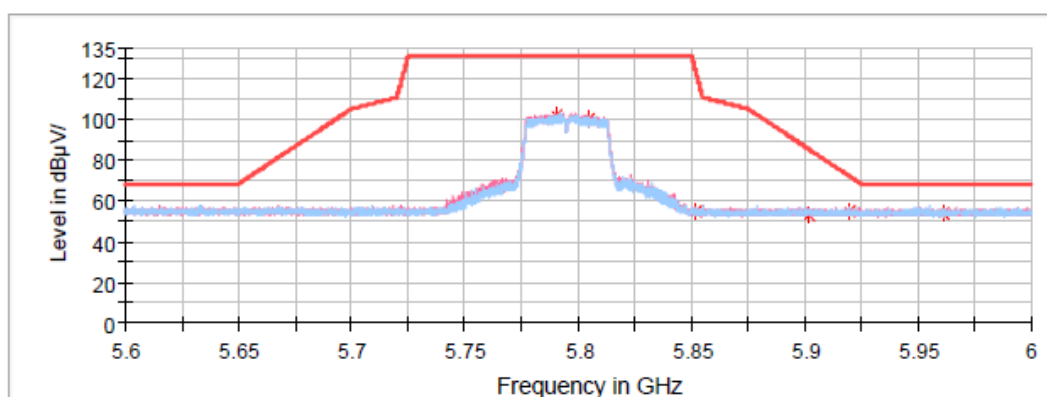
Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5626.360000	55.34	---	68.20	12.86	H	10.7
5663.080000	55.31	---	77.88	22.57	V	10.6
5712.200000	62.87	---	108.62	45.75	V	10.6
5713.400000	62.78	---	108.95	46.18	V	10.6

Common Information

Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11n40 Mode of High Channel
Test Equipment: ESU40,3115,PAM-0118P
Temperature: 20.3℃
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/3/1

Full Spectrum



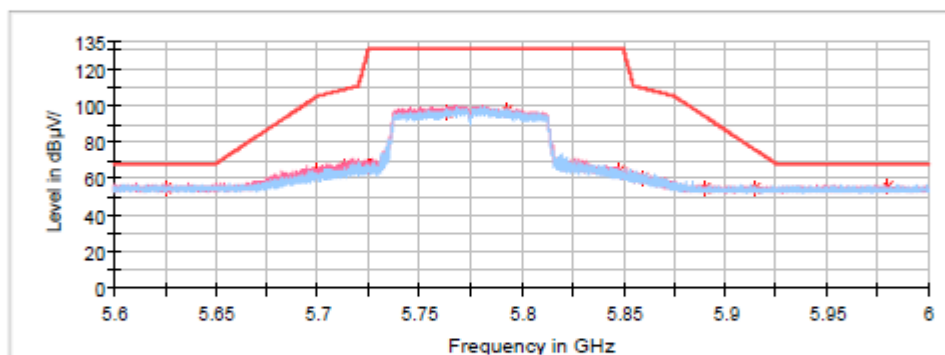
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5851.840000	55.19	---	123.69	68.50	V	10.4
5901.560000	53.17	---	85.55	32.38	V	10.3
5920.040000	55.03	---	71.87	16.84	V	10.3
5960.840000	54.18	---	68.20	14.02	V	10.2

802.11ac80 Mode:**Common Information**

Project No.: RKSA231206001
EUT Model: MAPSP01
Test Mode: 802.11ac80 Mode
Test Equipment: ESU40,3115,PAM-0118P
Temperature: 20.3℃
Humidity: 52%
Atmospheric pressure: 102.8kPa
Test Engineer: Peter Wang
Test Date: 2024/3/1

Full Spectrum

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μV/m)	Average (dB μV/m)	Limit (dB μV/m)	Margin (dB)	Pol	Corr. (dB/m)
5625.120000	54.42	—	68.20	13.78	V	10.7
5700.160000	63.83	—	105.24	41.42	V	10.6
5713.400000	67.20	—	108.95	41.76	V	10.6
5859.760000	60.54	—	109.47	48.93	V	10.4
5890.040000	54.67	—	94.07	39.40	H	10.3
5914.280000	54.52	—	76.13	21.62	V	10.3
5979.960000	55.31	—	68.20	12.89	V	10.2

EMISSION BANDWIDTH**Test Result:** Compliant

5150-5250 MHz:

Test mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
802.11 a	Low	5180	24.560	16.766
	Middle	5200	24.800	16.926
	High	5240	24.480	16.846
802.11 n20	Low	5180	25.280	18.044
	Middle	5200	24.960	18.044
	High	5240	25.920	17.964
802.11 n40	Low	5190	42.050	36.567
	High	5230	42.400	36.886
802.11 ac20	Low	5180	25.760	17.964
	Middle	5200	25.200	18.044
	High	5240	25.760	17.964
802.11 ac40	Low	5190	42.310	36.727
	High	5230	42.340	36.567
802.11 ac80	Middle	5210	85.760	75.689

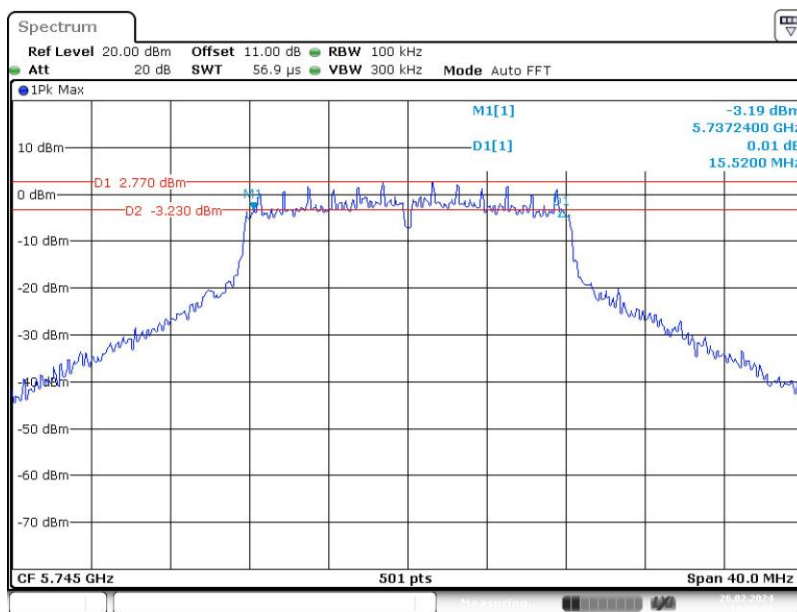
Note: the 99% Occupied Bandwidth have not fall into the band 5250-5350MHz.

5725-5850MHz:

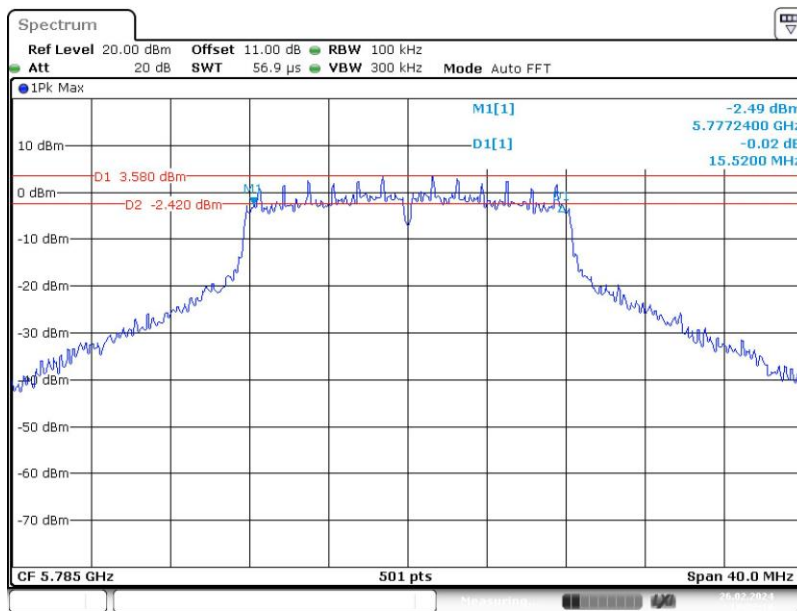
Test mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
802.11 a	Low	5745	24.320	16.926
	Middle	5785	24.640	16.926
	High	5825	24.640	17.006
802.11 n20	Low	5745	24.960	18.044
	Middle	5785	24.880	18.044
	High	5825	25.360	18.044
802.11 n40	Low	5755	42.600	36.727
	High	5795	42.750	36.727
802.11 ac20	Low	5745	23.760	17.964
	Middle	5785	25.600	18.044
	High	5825	25.840	18.044
802.11 ac40	Low	5755	42.820	36.407
	High	5795	43.050	36.727
802.11 ac80	Middle	5775	88.960	75.689

Note: the 99% Occupied Bandwidth have not fall into the band 5470-5725MHz.

Test mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
802.11 a	Low	5745	15.52	0.5
	Middle	5785	15.52	
	High	5825	15.52	
802.11 n20	Low	5745	16.16	
	Middle	5785	16.00	
	High	5825	16.16	
802.11 n40	Low	5755	35.68	
	High	5795	35.52	
802.11 ac20	Low	5745	16.16	
	Middle	5785	16.16	
	High	5825	16.16	
802.11 ac40	Low	5755	35.52	
	High	5795	35.68	
802.11 ac80	Middle	5775	75.52	

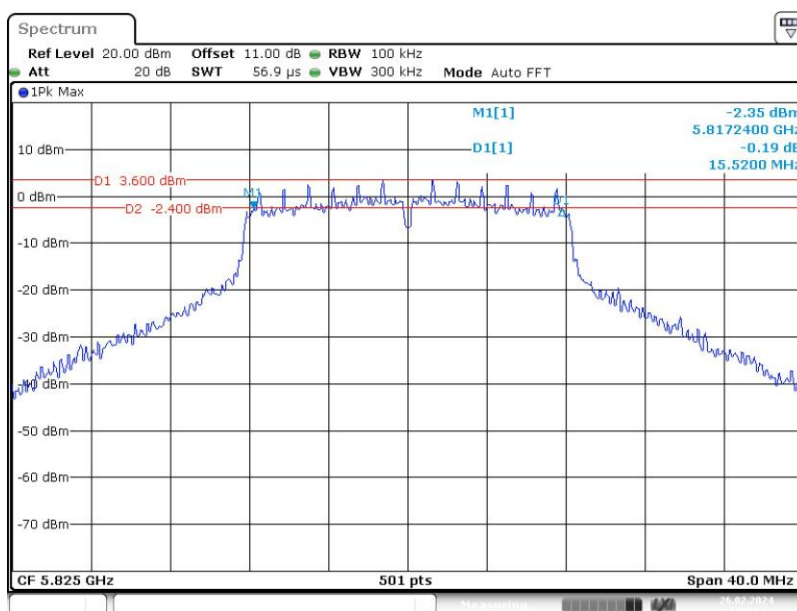
**6dB Bandwidth
5725-5850 MHz Band****802.11a mode, 5745MHz**

ProjectNo.: RSHA231206001 Tester: Bard Liu
Date: 26.FEB.2024 18:20:36

802.11a mode, 5785MHz

ProjectNo.: RSHA231206001 Tester: Bard Liu
Date: 26.FEB.2024 18:22:11

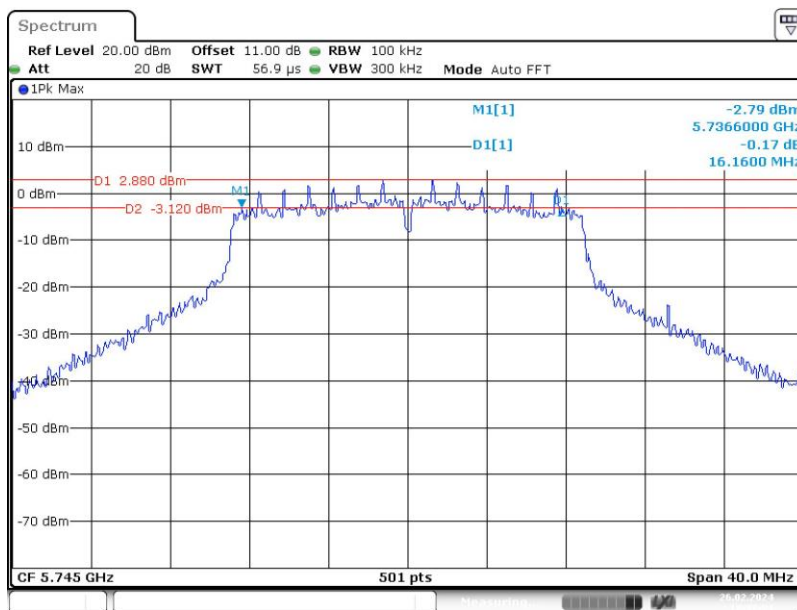
802.11a mode, 5825MHz



ProjectNo.: RSHA231206001 Tester: Bard Liu

Date: 26.FEB.2024 18:24:12

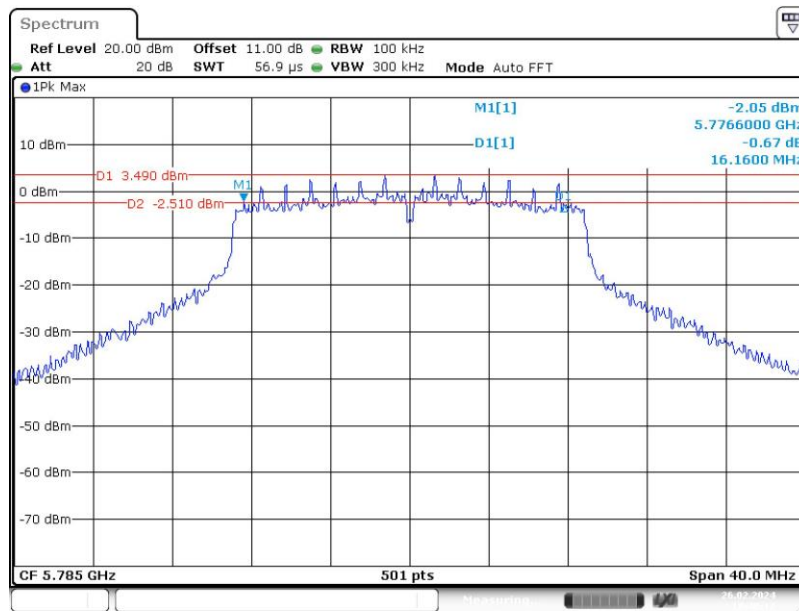
802.11ac20 mode, 5745MHz



ProjectNo.: RSHA231206001 Tester: Bard Liu

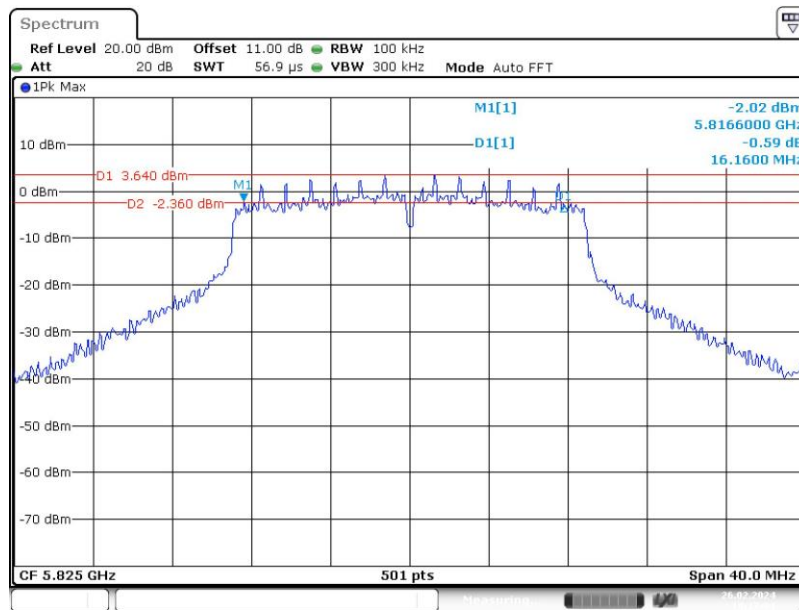
Date: 26.FEB.2024 18:37:53

802.11 ac20 mode, 5785MHz



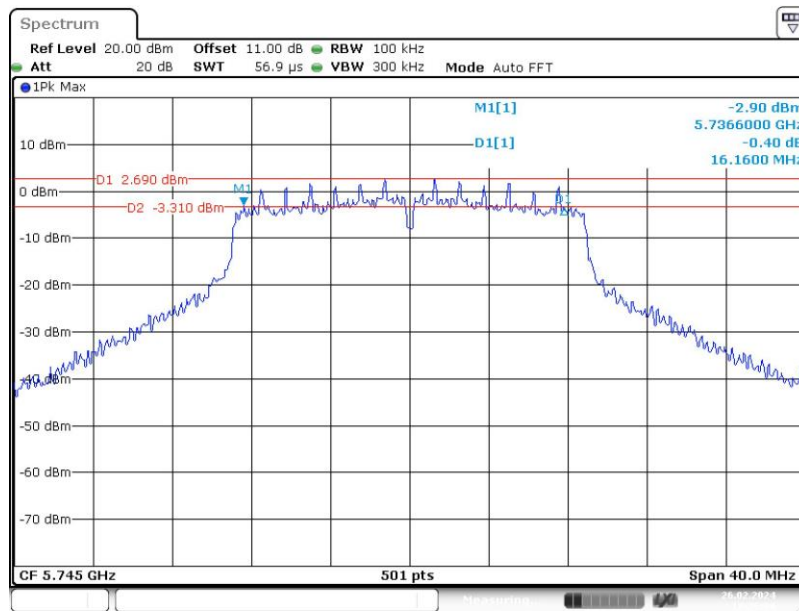
ProjectNo.: RSHA231206001 Tester: Bard Liu
Date: 26.FEB.2024 18:40:12

802.11 ac20 mode, 5825MHz



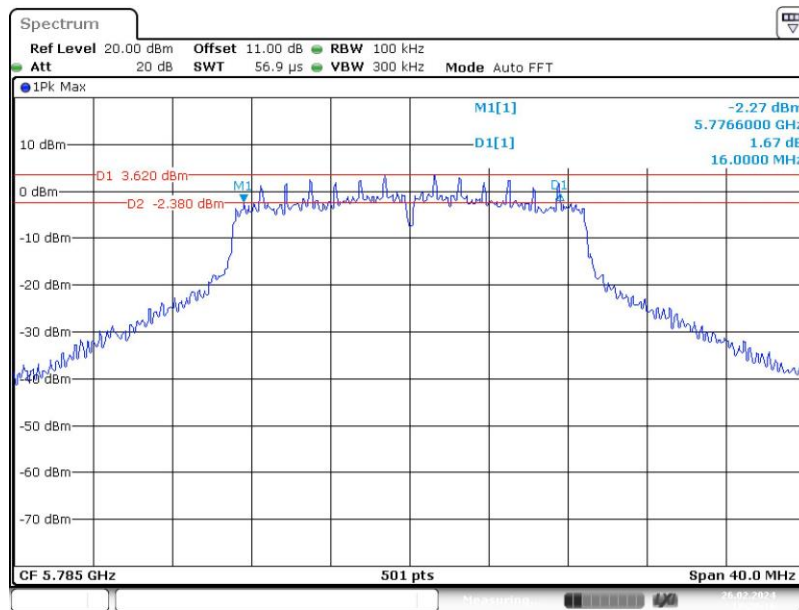
ProjectNo.: RSHA231206001 Tester: Bard Liu
Date: 26.FEB.2024 19:17:03

802.11n-HT20 mode, 5745MHz



ProjectNo.: RSHA231206001 Tester: Bard Liu
Date: 26.FEB.2024 18:26:09

802.11n-HT20 mode, 5785MHz



ProjectNo.: RSHA231206001 Tester: Bard Liu
Date: 26.FEB.2024 18:28:17