

FCC PART 15.407

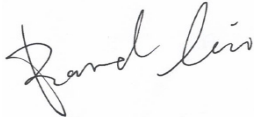

TEST REPORT

For

Neuracle Technology (Changzhou) Co., Ltd.

6-B602 R&D HUB Changzhou Science and Education Town No.18 Changwu RD, Wujin District,
Changzhou City, Jiangsu Province, China

FCC ID: 2BGXN-NRW01

Report Type: Original Report	Product Name: Mindful Mobile
Report Number:	RSHA240124001-00B
Report Date:	2024-10-18
Reviewed By:	Bard Liu 
Approved By:	Kyle Xu 
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	RSHA240124001-00B	R1 V1	2024-10-18	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Neuracle Technology (Changzhou) Co., Ltd.				
Tested Model:	NRW364				
Series Model:	NRW308, NRW316, NRW332				
Model Difference:	Effective channels, internal acquisition modules, see the declaration letter for details				
Product Name:	Mindful Mobile				
Power Supply:	DC 3.6V from battery				
RF Function	5G Wi-Fi				
Operating Frequency	5G Wi-Fi B1: 5180-5240 MHz, B2: 5260~5320 MHz, B3: 5500~5700 MHz, B4: 5745-5825 MHz				
Maximum Average Output Power	Mode	5G Wi-Fi B1:	5G Wi-Fi B2:	5G Wi-Fi B3:	5G Wi-Fi B4:
	802.11a	11.51 dBm	11.18 dBm	7.96 dBm	12.63 dBm
	802.11n-HT20	11.52 dBm	11.27 dBm	5.79 dBm	12.68 dBm
	802.11n-HT40	11.21 dBm	10.83 dBm	5.16 dBm	12.01 dBm
Channel Number	5G Wi-Fi B1: 6, B2: 6, B3: 16, B4: 7				
Channel Separation	5G Wi-Fi: a/n20: 20 MHz, n40: 40 MHz				
Modulation Type	OFDM				
Antenna Type	Ceramic antenna				
★Maximum Antenna Gain	2.2 dBi				

Note: 1. The maximum antenna gain was declared by the manufacturer.

2. According the different, We choose NRW364 for full test and Series Models for Radiated Emissions below 1GHz test.

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

RSHA240124001-1(Model: NRW364), RSHA240124001-2(Model: NRW308), RSHA240124001-3(Model: NRW316), RSHA240124001-4(Model: NRW332) (Assigned by BACL (Kunshan). The EUT supplied by the applicant was received on 2024-01-24.)

Objective

This type approval report is prepared for *Neuracle Technology (Changzhou) Co., 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, 15.209 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°C
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/n20 mode Channel 36, 40, 48 were tested.

802.11n40 mode Channel 38, 46 were tested.

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

For **5250~5350 MHz** band, test channel list is as below,

802.11a/n20 mode Channel 52, 56, 64 were tested.

802.11n40 mode Channel 54, 62 were tested.

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

For **5470~5725 MHz** band, test channel list is as below,

802.11a/n20 mode Channel 100, 116, 140 were tested.

802.11n40 mode Channel 102, 110, 134 were tested.

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	116	5580	132	5660
102	5510	118	5590	134	5670
104	5520	120	5600	136	5680
108	5540	124	5620	140	5700
110	5550	126	5630	/	/
112	5560	128	5640	/	/

For **5725~5850 MHz** band,

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

802.11n40 mode Channel 151, 159 were tested.

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

EUT Exercise Software

RF test tool: QRCT 4

The worst case was performed under:

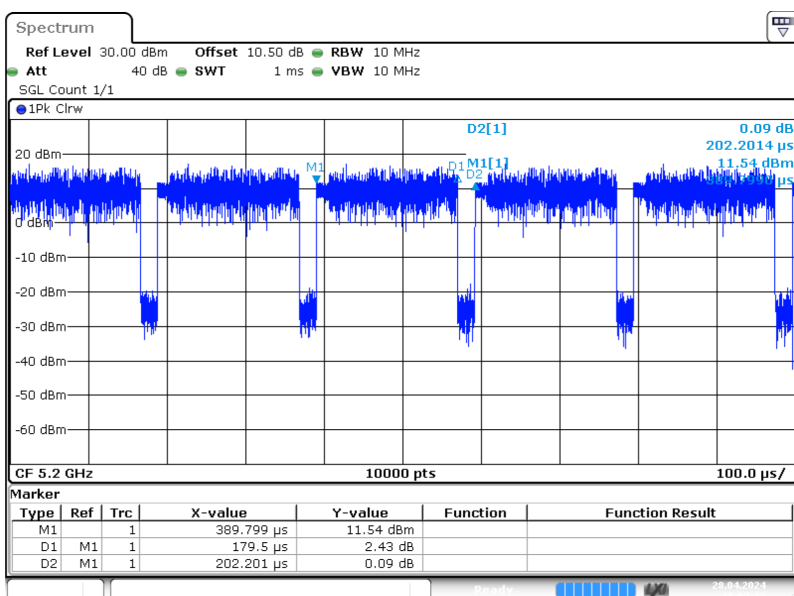
U-NII	Mode	Data rate	★Power Level		
			Low Channel	Middle Channel	High Channel
5150~5250MHz	802.11a	6Mbps	12	12	14
	802.11n-HT20	MCS0	11	12	14
	802.11n-HT40	MCS0	8	/	14

U-NII	Mode	Data rate	★Power Level		
			Low Channel	Middle Channel	High Channel
5250~5350MHz	802.11a	6Mbps	14	12	10
	802.11n-HT20	MCS0	14	12	10
	802.11n-HT40	MCS0	14	/	8

U-NII	Mode	Data rate	★Power Level		
			Low Channel	Middle Channel	High Channel
5470~5725MHz	802.11a	6Mbps	14	12	14
	802.11n-HT20	MCS0	14	12	14
	802.11n-HT40	MCS0	11	12	14

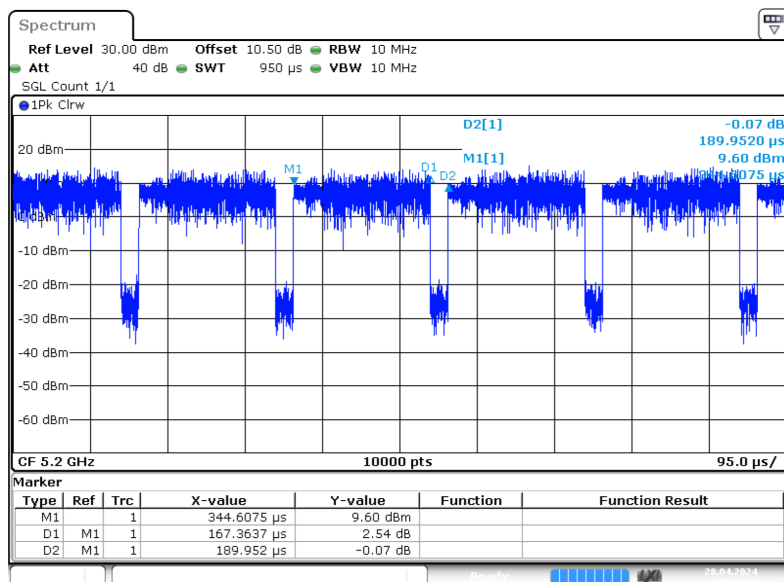
U-NII	Mode	Data rate	★Power Level		
			Low Channel	Middle Channel	High Channel
5725~5850MHz	802.11a	6Mbps	14	12	14
	802.11n-HT20	MCS0	14	12	14
	802.11n-HT40	MCS0	11	/	14

Note: The power level was declared by the applicant.

Duty Cycle**5150MHz-5250MHz Band:****802.11a mode 5200 MHz**

ProjectNo.: RSHA240124001 Tester: Bard Liu

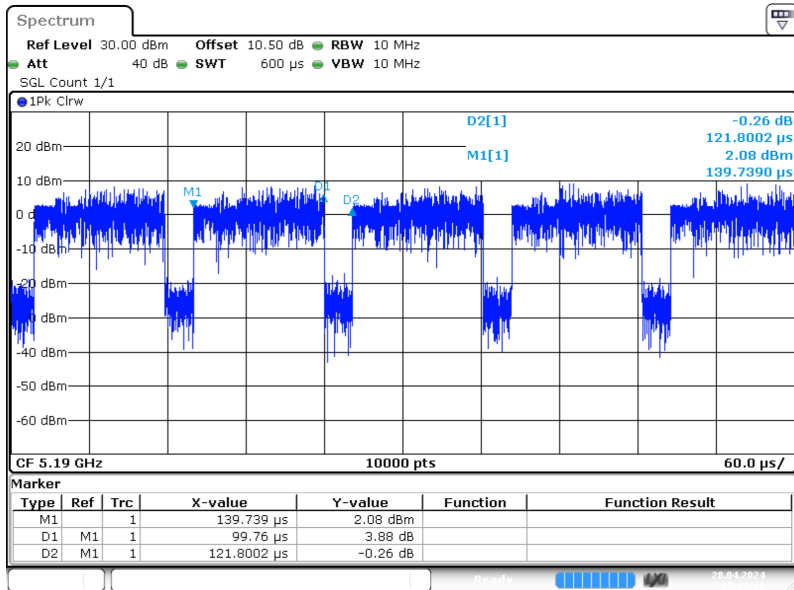
Date: 28 APR 2024 15:02:22

802.11n-HT20 mode 5200 MHz

ProjectNo.: RSHA240124001 Tester: Bard Liu

Date: 28 APR 2024 15:12:30

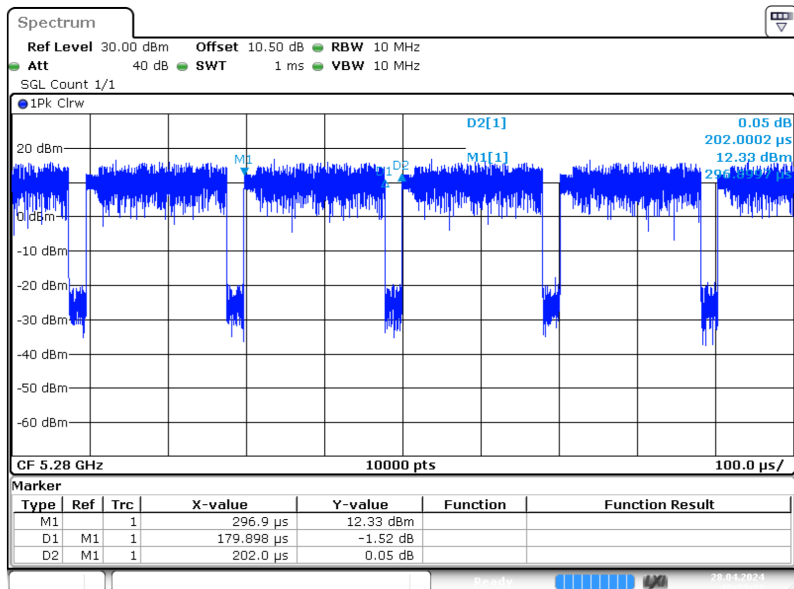
802.11n-HT40 mode 5190 MHz



ProjectNo.: RSHA240124001 Tester: Bard Liu
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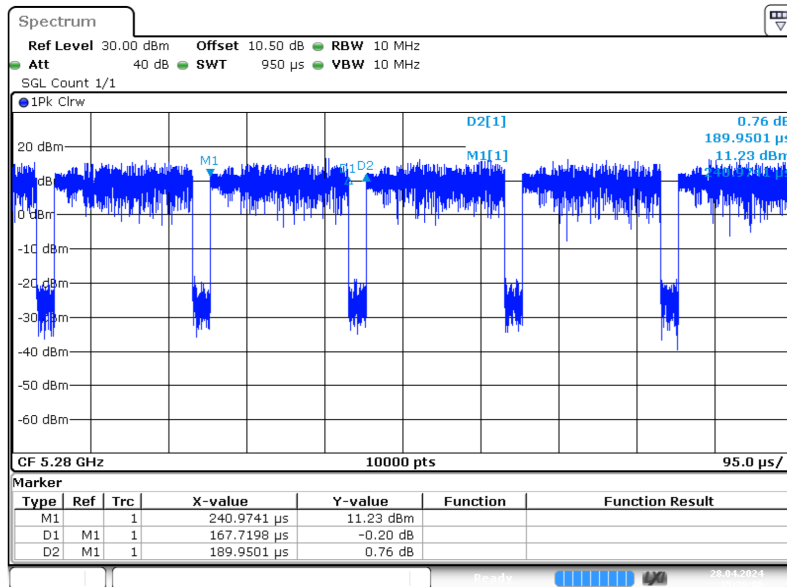
5250MHz-5350MHz Band:

802.11a mode 5280 MHz



ProjectNo.: RSHA240124001 Tester: Bard Liu
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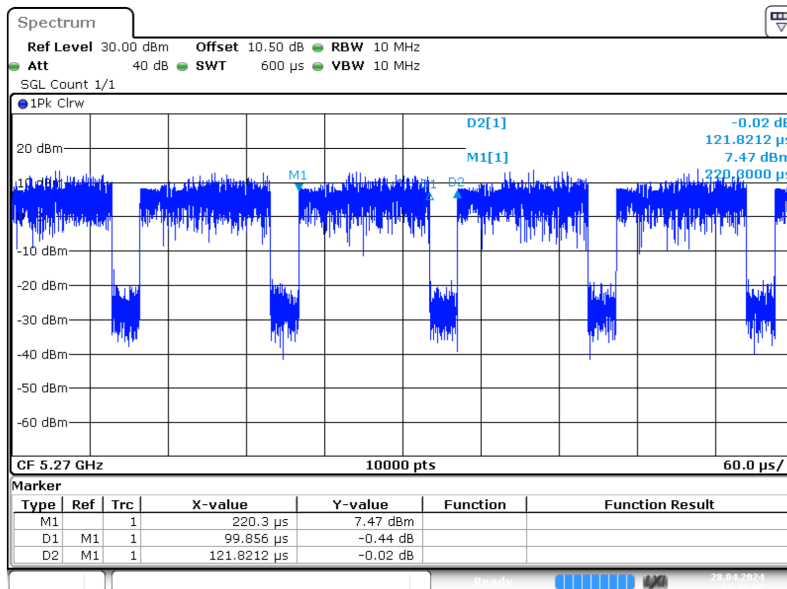
802.11n-HT20 mode 5280 MHz



ProjectNo.: RSHA240124001 Tester: Bard Liu

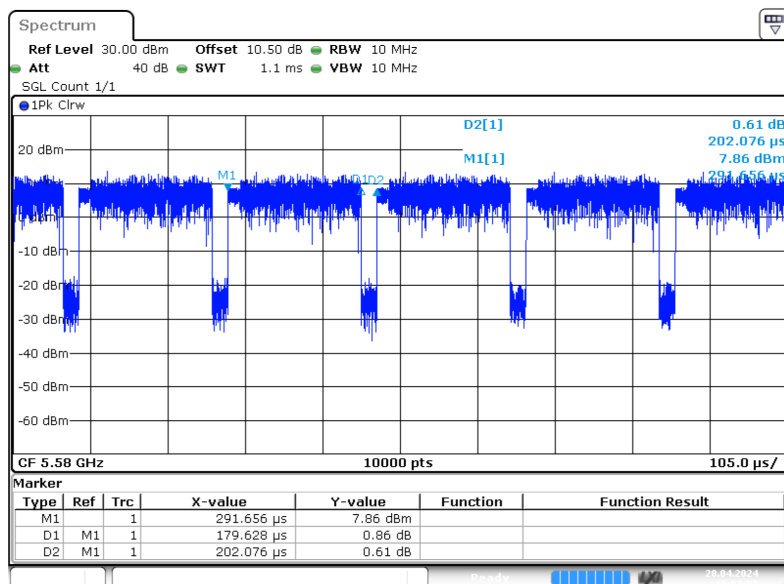
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802.11n-HT40 mode 5270 MHz



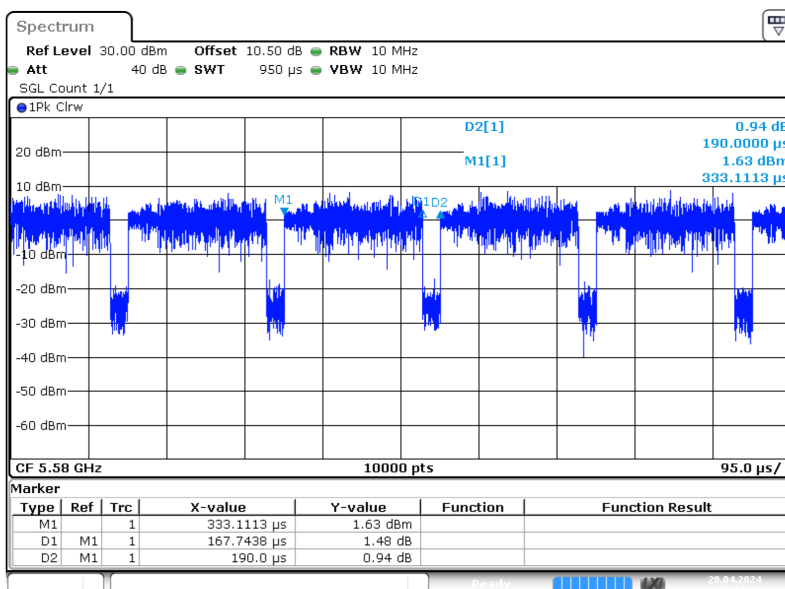
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5470MHz-5725MHz Band:**802.11a mode 5580 MHz**

ProjectNo.:RSHA240124001 Tester:Bard Liu

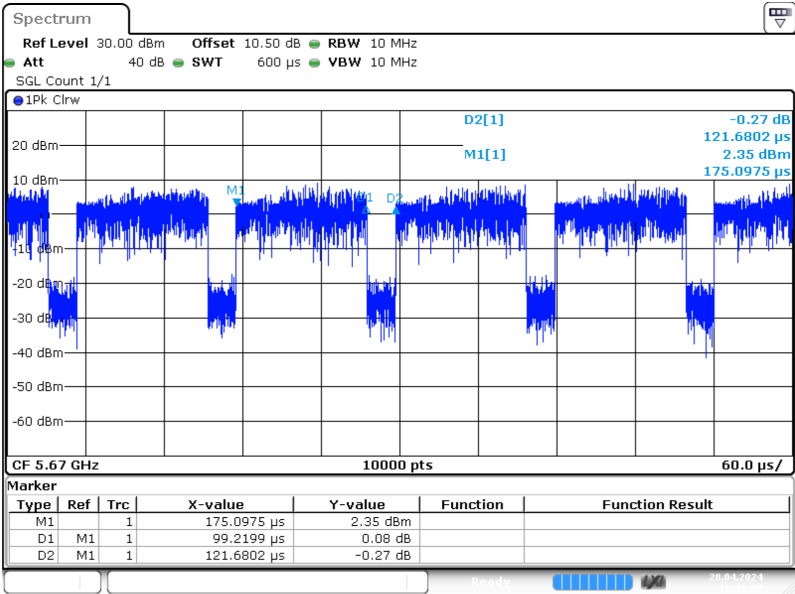
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802.11n-HT20 mode 5580 MHZ

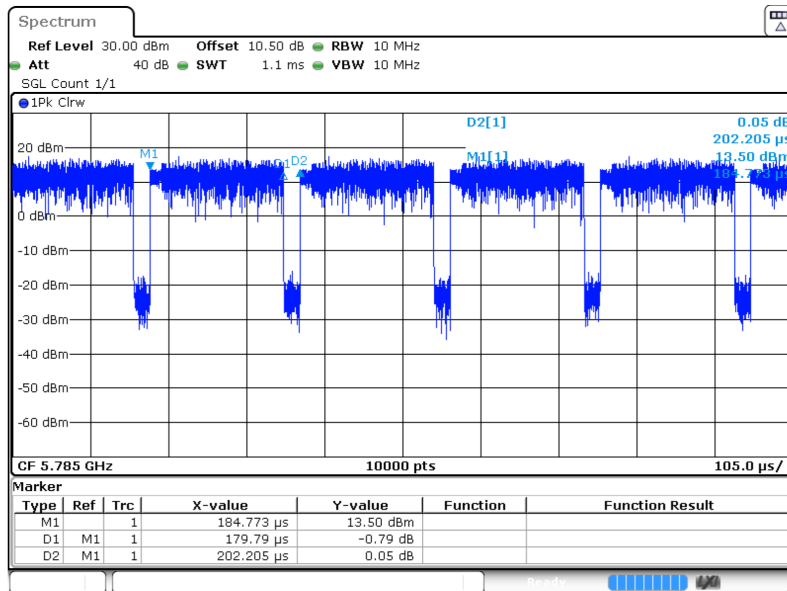
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Date: 28.APR.2024 16:13:40

802.11n-HT40 mode 5670 MHz

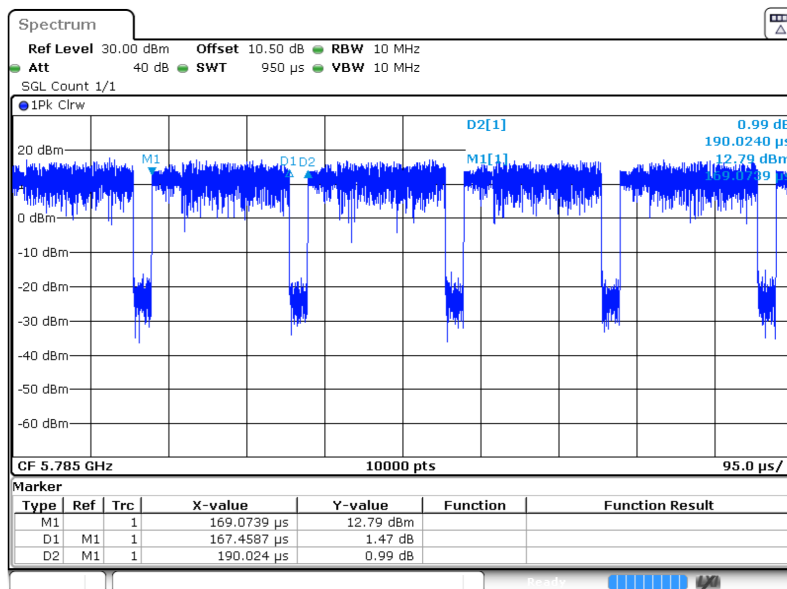


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Date: 28 APR 2024 16:31:02

5725MHz-5850MHz Band:**802.11a mode 5785 MHz**

ProjectNo.: RSHA240124001 Tester: Bard Liu

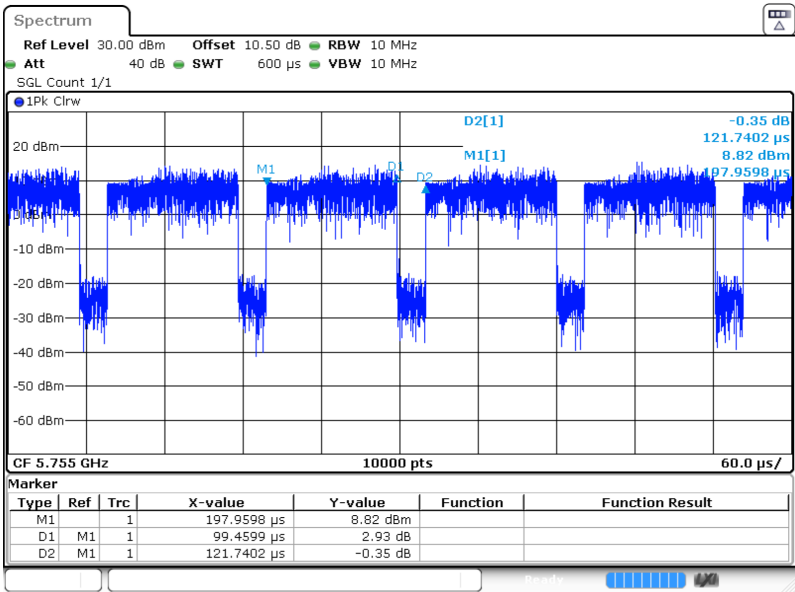
Date: 1.MAY.2024 13:15:36

802.11n-HT20 mode 5785 MHz

ProjectNo.: RSHA240124001 Tester: Bard Liu

Date: 1.MAY.2024 13:24:24

802.11n-HT40 mode 5755 MHz



ProjectNo.: RSHA240124001 Tester: Bard Liu
Date: 1 MAY 2024 13:32:37

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)
a_5200MHz	0.180	0.202	89.11	0.50
n20_5200MHz	0.167	0.190	87.89	0.56
n40_5190MHz	0.100	0.122	81.97	0.86
a_5280MHz	0.180	0.202	89.11	0.50
n20_5280MHz	0.168	0.190	88.42	0.53
n40_5270MHz	0.100	0.122	81.97	0.86
a_5580MHz	0.180	0.202	89.11	0.50
n20_5580MHz	0.168	0.190	88.42	0.53
n40_5670MHz	0.099	0.122	81.15	0.91
a_5785MHz	0.180	0.202	89.11	0.50
n20_5785MHz	0.167	0.190	87.89	0.56
n40_5755MHz	0.099	0.122	81.15	0.91

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

Equipment Modifications

No modification was made to the EUT.

Support Equipment List and Details

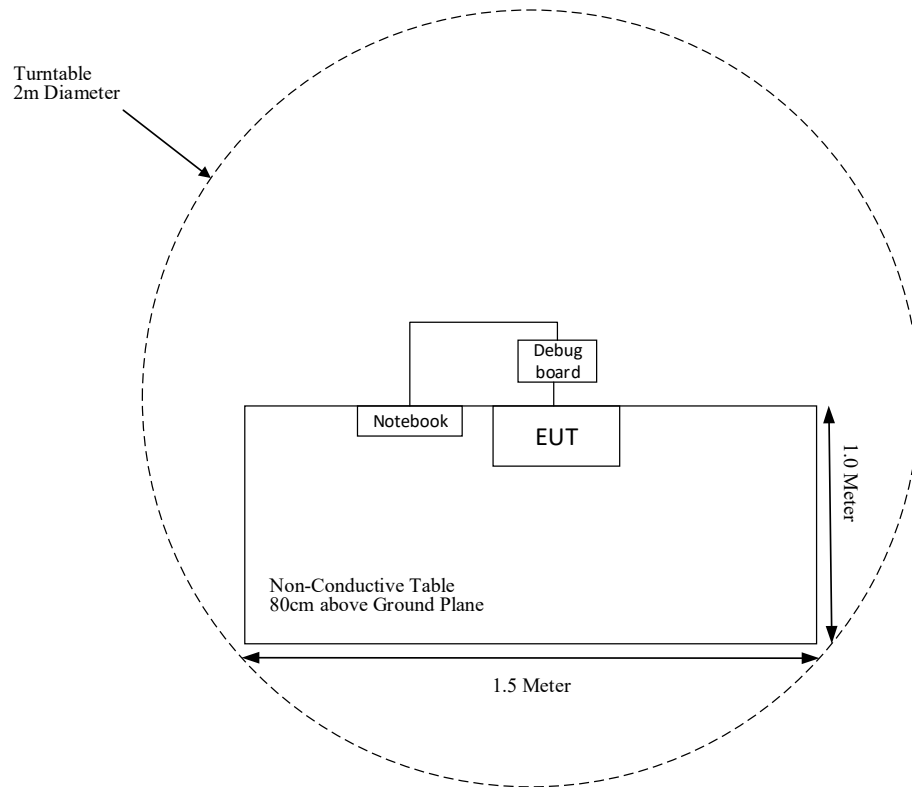
Manufacturer	Description	Model	Serial Number
Lenovo	Notebook	Y700P	PF2B7PL5
Unknown	Debug board	Unknown	Unknown

External I/O Cable

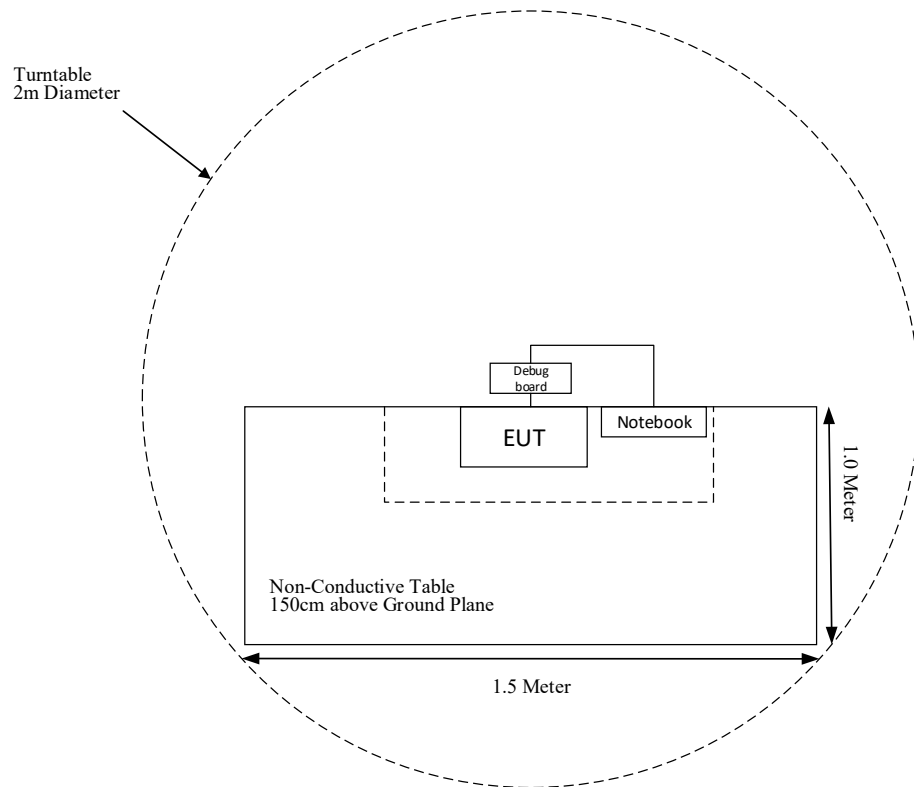
Cable Description	Length (m)	From Port	To
USB Cable 1	0.1	Debug board	EUT
USB Cable 2	1.0	Notebook	Debug board

Block Diagram of Test Setup

For Radiated Emissions (Below 1GHz):



For Radiated Emissions (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	2024-04-23	2025-04-22
Sunol Sciences	Hybrid Antenna	JB3	A090314-1	2023-11-11	2024-11-10
ETS-LINDGREN	Loop Antenna	6512	108100	2023-11-09	2024-11-08
Sonoma Instrument	Amplifier	310N	171205	2024-04-23	2025-04-22
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-8	008	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-9	009	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-10	010	2024-04-23	2025-04-22
Narda	6dB Attenuator	773-6	10690812-2-1	2023-11-11	2024-11-10
Radiated Emission Test (Chamber #2)					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2024-04-25	2025-04-24
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	PAM-0118P	512	2024-04-25	2025-04-24
EM Electronics Corporation	Amplifier	EM18G40G	060726	2024-04-23	2025-04-22
MICRO-TRONICS	Band Reject Filter	BRC50703	G094	2024-04-23	2025-04-22
MICRO-TRONICS	Band Reject Filter	BRC50704	84	2024-04-23	2025-04-22
MICRO-TRONICS	Band Reject Filter	BRC50705	G085	2024-04-23	2025-04-22
Narda	Attenuator	10dB	010	2024-04-23	2025-04-22
Narda	Attenuator	6dB	006	2024-04-23	2025-04-22
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-11	011	2024-04-25	2025-04-24
MICRO-COAX	Coaxial Cable	Cable-12	012	2024-04-25	2025-04-24
RF Conducted Test					
Rohde & Schwarz	Signal Analyzer	FSV40-N	103298	2024-04-24	2025-04-23
R&S	Spectrum Analyzer	FSU26	100147	2024-04-01	2025-03-31
Anritsu	Power Sensor	MA24418A	12621	2024-04-23	2025-04-22
Narda	Attenuator	10dB	010	2024-04-23	2025-04-22
XHFDZ	RG316 Coaxial Cable	SMA-316	XHF-1175	Each time	N/A

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	Not Applicable (See Note)
§ 15.205 & §15.209 & §15.407(b)	Undesirable Emission & Restricted Bands	Compliant
§§15.407(a) & §15.407(e)	Emission Bandwidth	Compliant
§15.407(a)	Conducted Transmitter Output Power	Compliant
§15.407(a)	Power Spectral Density	Compliant

Note: The EUT powered by battery.

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
Ceramic antenna	5150~5250 MHz	2.2 dBi	50Ω
	5250~5350 MHz	2.2 dBi	50Ω
	5470~5725 MHz	2.2 dBi	50Ω
	5725~5850 MHz	2.2 dBi	50Ω

Result: Compliant.

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

Applicable Standard

FCC §15.407 (b); §15.209; §15.205;

(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:

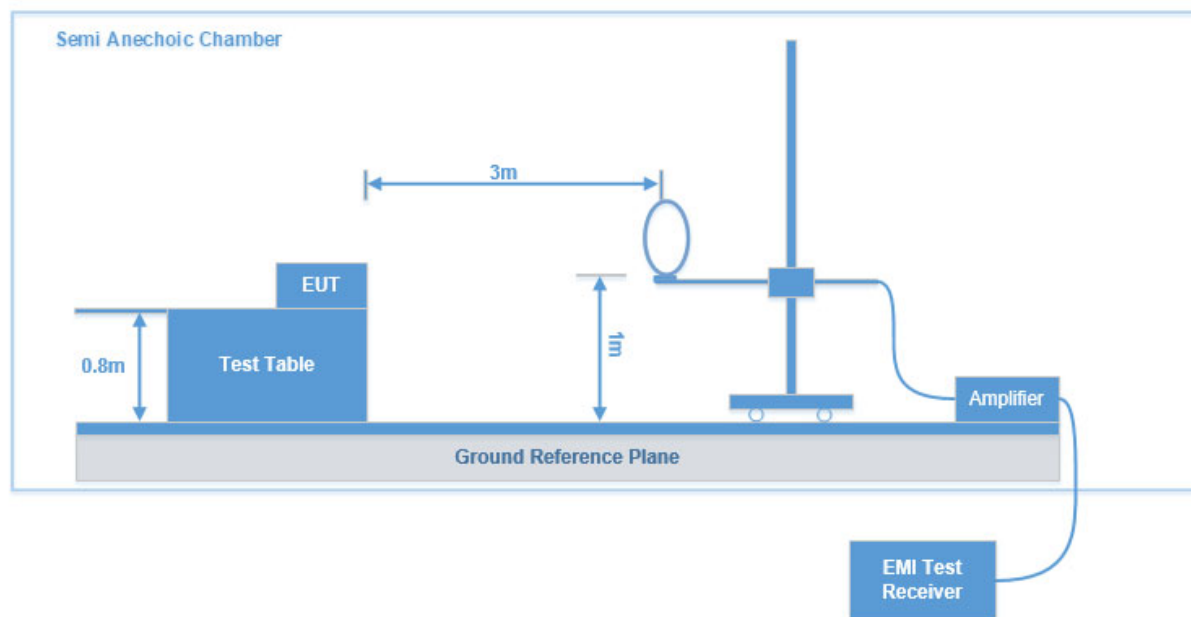
(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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.

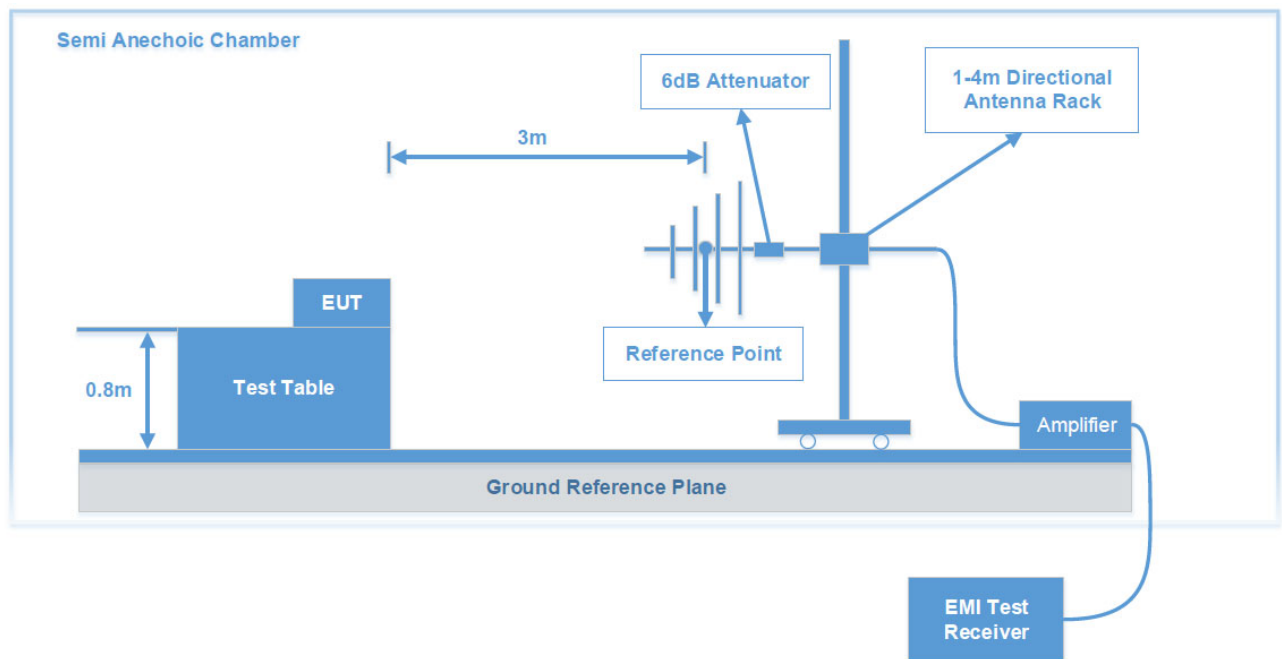
ANSI C63.10-2013, emission shall be computed as: $E [dB\mu V/m] = EIRP [dBm] + 95.2$, for $d = 3$ meters.

Test System Setup

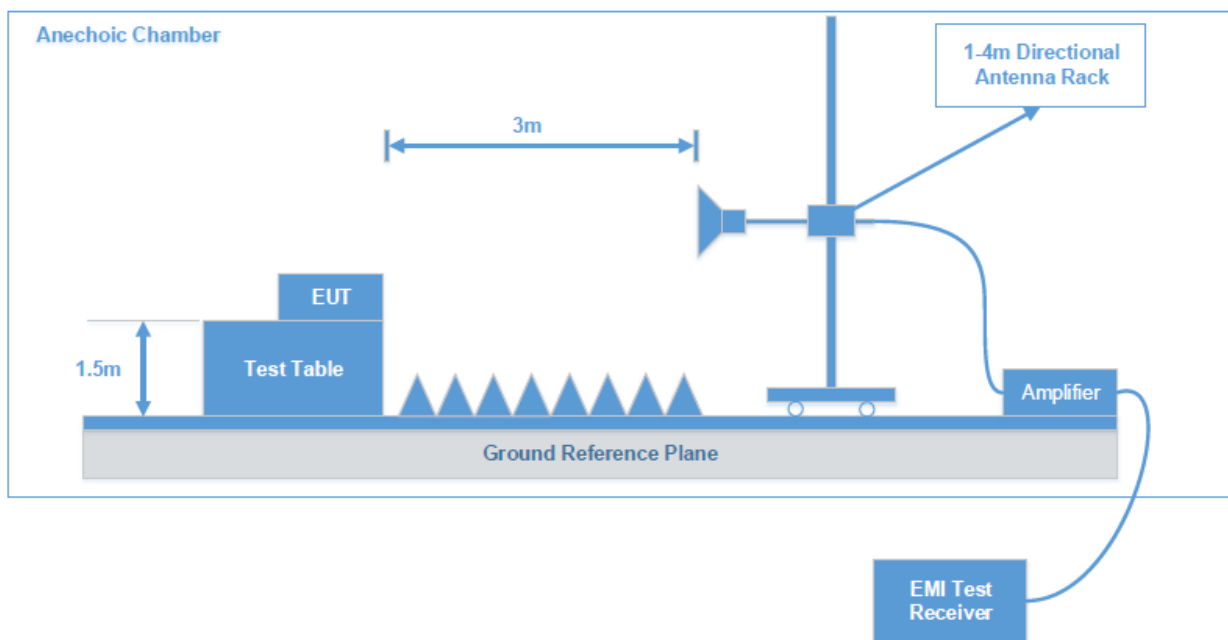
9 kHz–30 MHz:



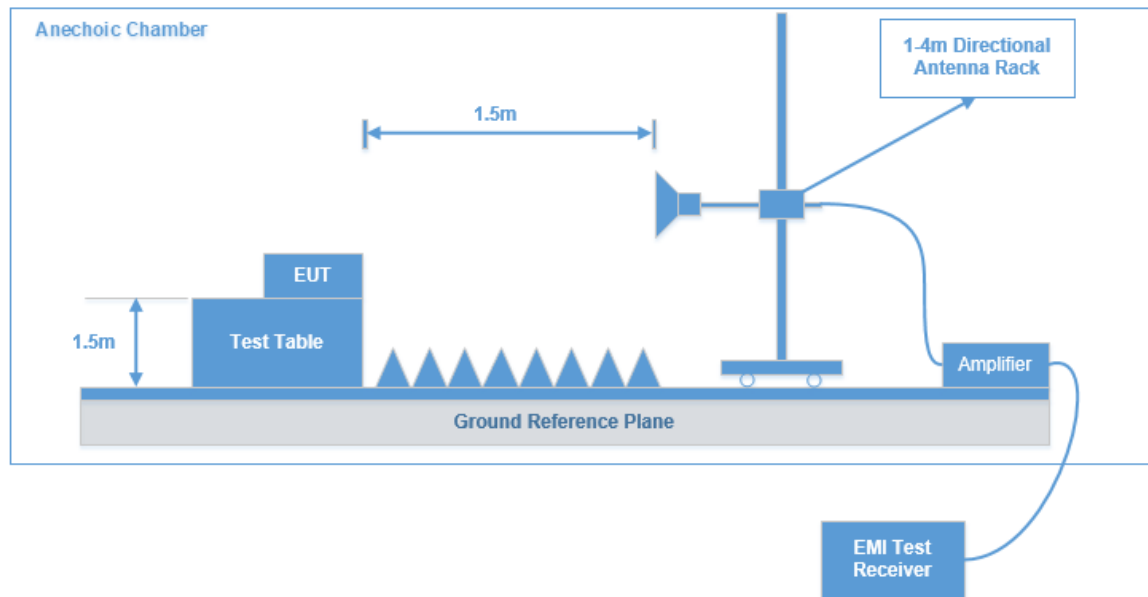
30MHz-1GHz:



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	Measurement
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

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.

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.

If the measured peak level of the emissions that the measuring receiver reading level plus corrected factor is at least 6 dB below the QP emission limit, there's no need to record the measured QP level of the emissions in the report.

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 (dB μ V/m) = Meter Reading (dB μ V) + 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 (dB μ V/m) – Corrected Amplitude (dB μ V/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, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

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

Test Procedure

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:

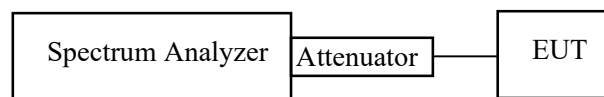
- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two 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 $[10 \log (\text{OBW}/\text{RBW})]$ 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) – CONDUCTED TRANSMITTER OUTPUT POWER

Applicable Standard

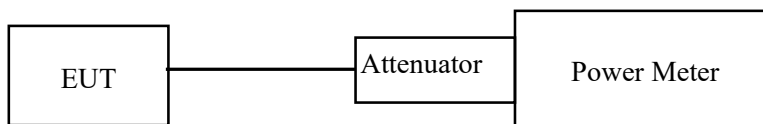
For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting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

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

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Test Procedure

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) - POWER SPECTRAL DENSITY

Applicable Standard

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

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

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Test Procedure

According to ANSI C63.10-2013: method SA-2 used

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 C - TEST SETUP PHOTOGRAPHS.

Appendix - TEST DATA

Environmental Conditions & Test Information

Test Item:	UNWANTED EMISSIONS & BAND EDGE EMISSIONS			Duty Cycle
	9kHz - 1GHz	1 GHz - 18 GHz	18 GHz - 40 GHz	
Test Date:	2024-05-01	2024-05-05	2024-05-06	2024-04-28 to 2024-05-01
Temperature:	22.2 °C	22.3 °C	21.5 °C	20.5-22.2 °C
Relative Humidity:	57 %	52 %	45 %	50-57 %
ATM Pressure:	100.9 kPa	100.8kPa	101.0 kPa	100.9-101.0 kPa
Test Result:	Pass	Pass	Pass	Pass
Test Engineer:	Leah Li	Peter Wang & Destine Hu	Peter Wang	Bard Liu

Test Item:	Emission Bandwidth	Conducted Transmitter Output Power	Power Spectral Density
Test Date:	2024-04-28 to 2024-07-02	2024-05-14	2024-04-28 to 2024-09-03
Temperature:	20.5-23.7 °C	20.5 °C	20.5-25.7 °C
Relative Humidity:	50-57 %	50 %	50-57 %
ATM Pressure:	100.4-100.9 kPa	100.9 kPa	100.4-100.6 kPa
Test Result:	Pass	Pass	Pass
Test Engineer:	Bard Liu	Bard Liu	Bard Liu

Transmitter Unwanted Emissions & Band Edge Emission

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

9 kHz-30 MHz: (Maximum output power 802.11n20 mode low channel 5725-5850 MHz)

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

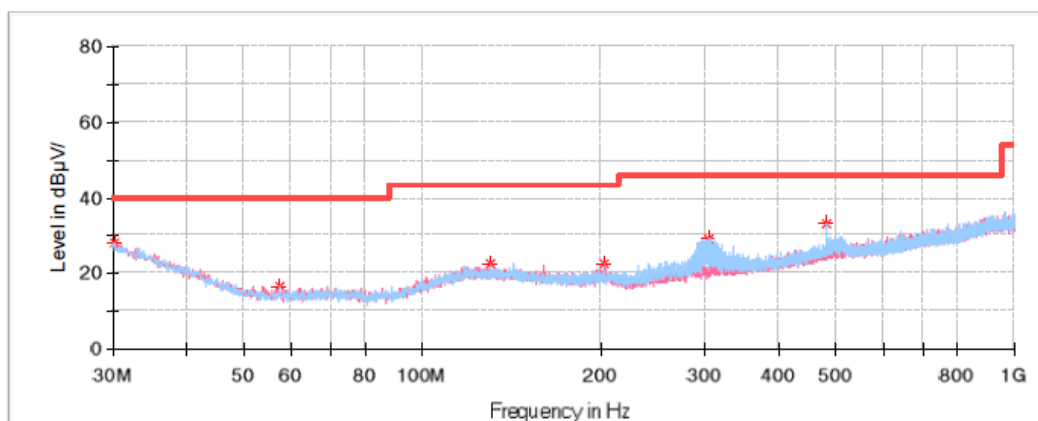
30MHz-1GHz(5725-5850 MHz Band): 802.11n20 (worst case)

Model: NRW364

Low Channel: 5745 MHz

Common Information

Project No:	RSHA240124001
Test Mode:	5G WIFI Transmitting in 802.11n20 mode low channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Leah Li

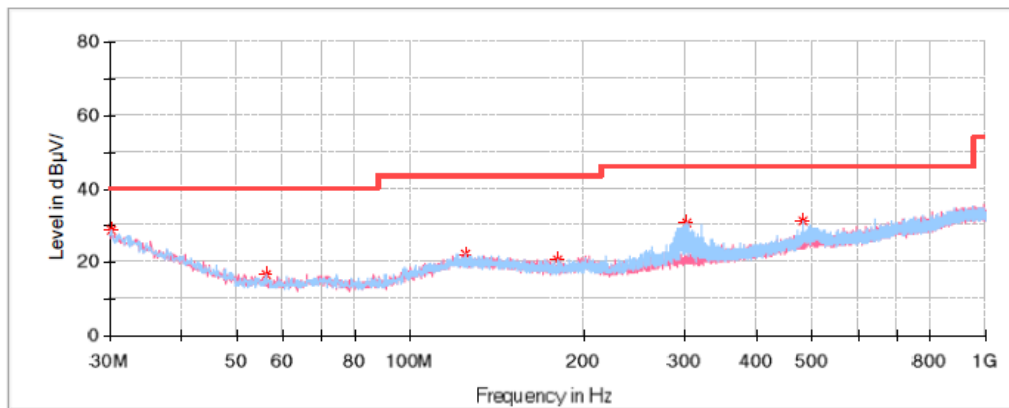


Critical Freqs

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.121250	27.97	40.00	12.03	H	-4.5
57.523750	16.62	40.00	23.38	H	-17.3
130.395000	22.58	43.50	20.92	V	-11.4
203.630000	22.42	43.50	21.08	V	-12.8
304.873750	29.35	46.00	16.65	H	-10.9
480.080000	33.12	46.00	12.88	H	-6.3

Middle Channel: 5785 MHz**Common Information**

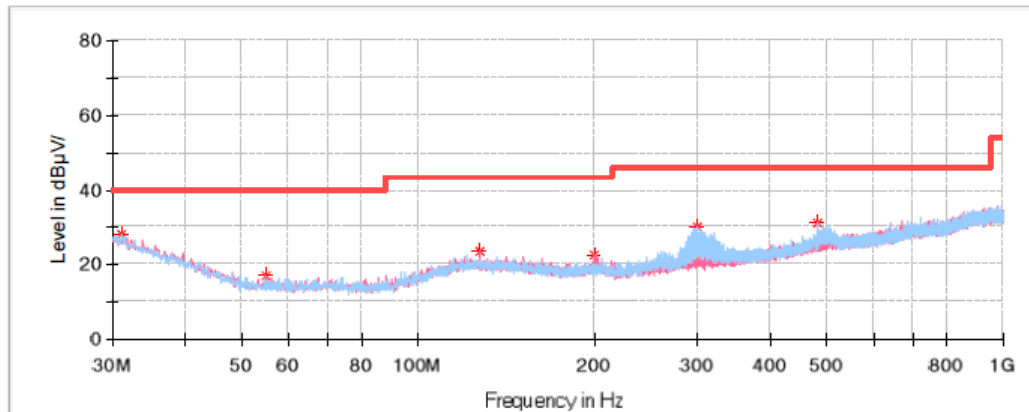
Project No: RSHA240124001
Test Mode: 5G WIFI Transmitting in 802.11n20 mode middle channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Leah Li

**Critical Freqs**

Frequency (MHz)	MaxPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.121250	28.84	40.00	11.16	H	-4.5
56.068750	16.71	40.00	23.29	H	-17.2
124.696250	22.38	43.50	21.12	H	-11.3
180.835000	20.66	43.50	22.84	H	-13.2
302.448750	30.60	46.00	15.40	H	-11.0
480.080000	30.97	46.00	15.03	H	-6.3

High Channel: 5825 MHz**Common Information**

Project No:	RSHA240124001
Test Mode:	5G WIFI Transmitting in 802.11n20 mode high channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Leah Li

**Critical Freqs**

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
31.212500	28.11	40.00	11.89	H	-5.3
55.098750	16.98	40.00	23.02	V	-17.1
127.363750	23.50	43.50	20.00	V	-11.3
200.235000	22.54	43.50	20.96	V	-12.5
300.993750	30.42	46.00	15.58	H	-11.0
480.080000	31.44	46.00	14.56	H	-6.3

Model: NRW308**Low Channel: 5745 MHz**

Common Information

Project No:

RSHA240124001

Test Mode:

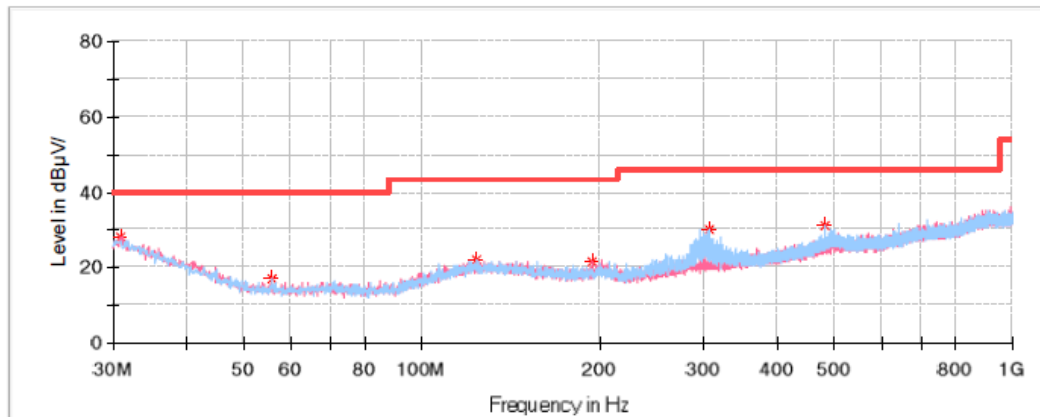
5G WIFI Transmitting in 802.11n20 mode low channel

Standard:

FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407

Test Engineer:

Leah Li

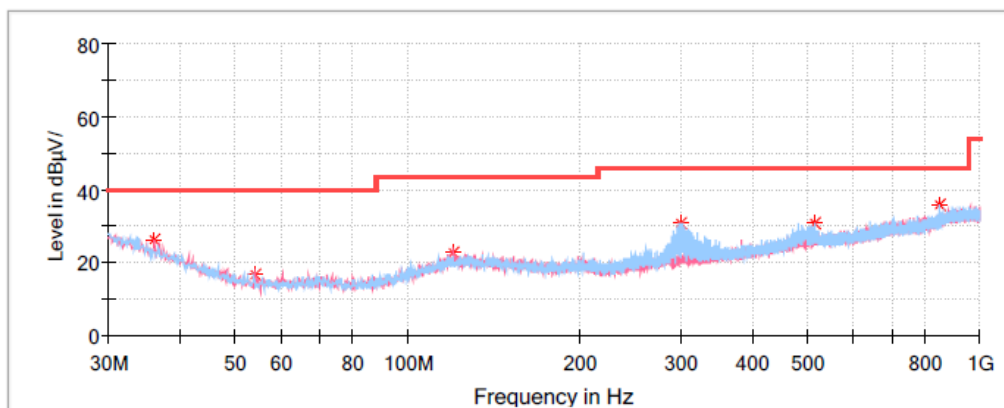


Critical Freqs

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.848750	28.03	40.00	11.97	V	-5.0
55.705000	16.88	40.00	23.12	H	-17.1
124.090000	22.21	43.50	21.29	H	-11.3
193.687500	21.78	43.50	21.72	V	-12.8
307.056250	30.14	46.00	15.86	H	-10.9
480.080000	31.31	46.00	14.69	H	-6.3

Middle Channel: 5785 MHz**Common Information**

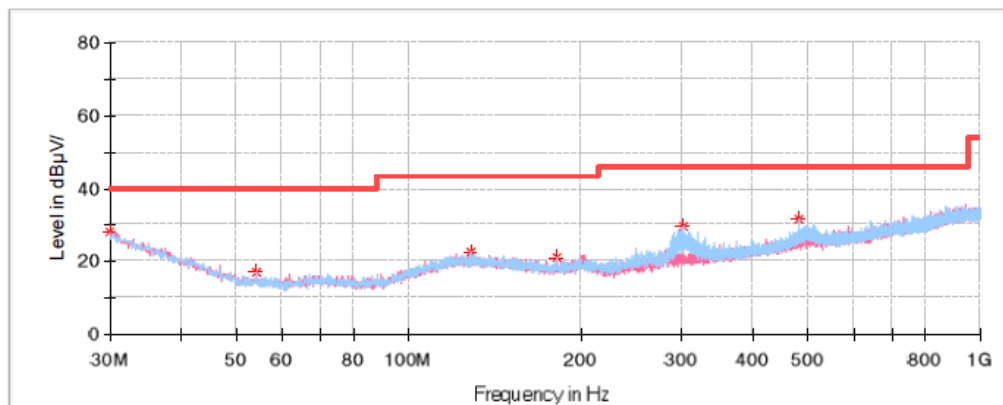
Project No:	RSHA240124001
Test Mode:	5G WIFI Transmitting in 802.11n20 mode middle channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Leah Li

**Critical Freqs**

Frequency (MHz)	MaxPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
36.183750	26.08	40.00	13.92	V	-8.7
54.250000	16.77	40.00	23.23	V	-17.0
120.573750	22.43	43.50	21.07	V	-11.2
300.508750	30.67	46.00	15.33	H	-11.0
515.000000	30.91	46.00	15.09	H	-5.6
850.013750	35.82	46.00	10.18	H	0.0

High Channel: 5825 MHz**Common Information**

Project No: RSHA240124001
Test Mode: 5G WIFI Transmitting in 802.11n20 mode high channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Leah Li

**Critical Freqs**

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.000000	28.43	40.00	11.57	V	-4.4
54.007500	17.04	40.00	22.96	H	-17.0
128.091250	22.46	43.50	21.04	H	-11.3
181.926250	21.01	43.50	22.49	H	-13.2
303.055000	29.80	46.00	16.20	H	-11.0
480.080000	31.85	46.00	14.15	H	-6.3

Model: NRW316**Low Channel: 5745 MHz**

Common Information

Project No:

RSHA240124001

Test Mode:

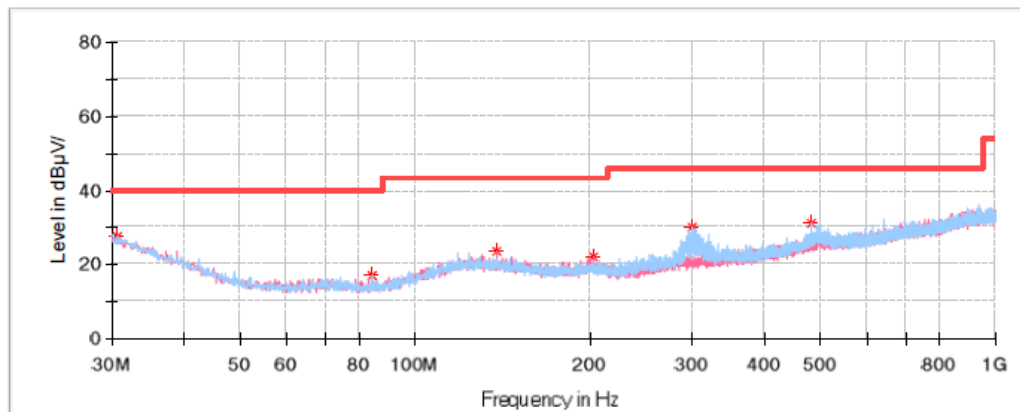
5G WIFI Transmitting in 802.11n20 mode low channel

Standard:

FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407

Test Engineer:

Leah Li

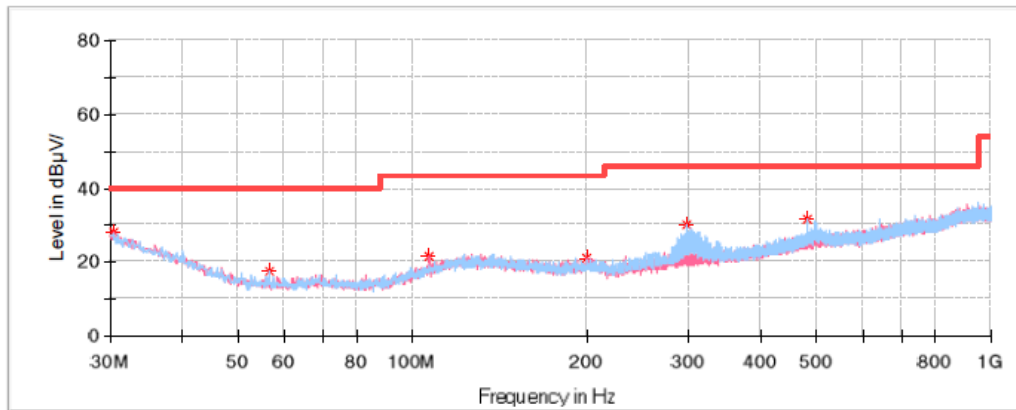


Critical Freqs

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.727500	27.72	40.00	12.28	H	-4.9
84.077500	16.94	40.00	23.06	H	-17.4
138.033750	23.62	43.50	19.88	V	-11.5
203.387500	22.04	43.50	21.46	V	-12.7
300.751250	30.34	46.00	15.66	H	-11.0
480.080000	31.26	46.00	14.74	H	-6.3

Middle Channel: 5785 MHz**Common Information**

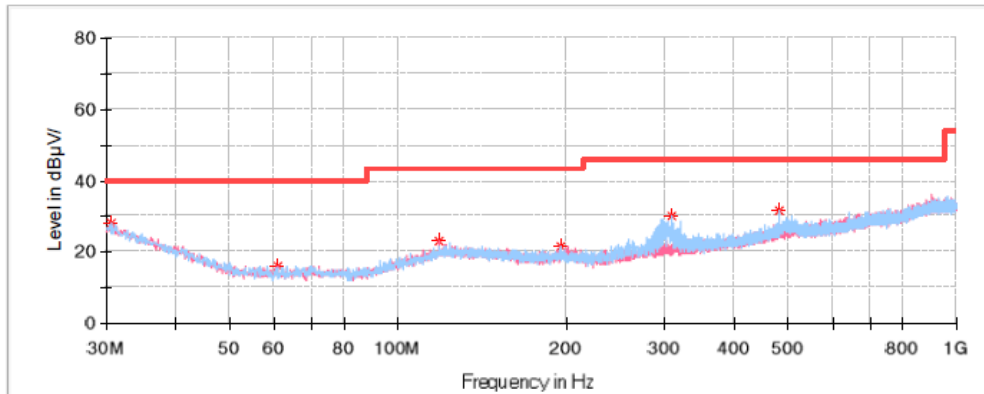
Project No: RSHA240124001
Test Mode: 5G WIFI Transmitting in 802.11n20 mode middle channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Leah Li

**Critical Freqs**

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB /m)
30.363750	28.25	40.00	11.75	V	-4.7
56.553750	17.59	40.00	22.41	H	-17.2
107.115000	21.48	43.50	22.02	V	-13.5
199.750000	21.32	43.50	22.18	V	-12.5
298.326250	30.36	46.00	15.64	H	-11.0
480.080000	31.71	46.00	14.29	H	-6.3

High Channel: 5825 MHz**Common Information**

Project No: RSHA240124001
Test Mode: 5G WIFI Transmitting in 802.11n20 mode high channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Leah Li

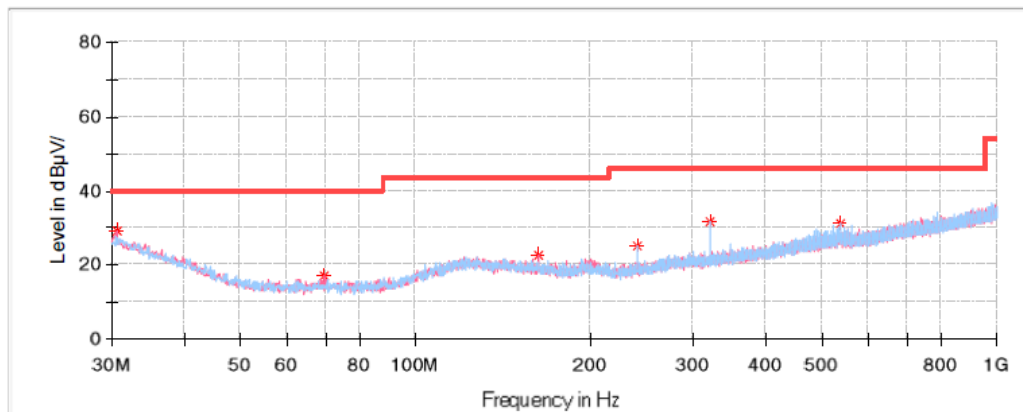
**Critical Freqs**

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.727500	28.42	40.00	11.58	H	-4.9
60.918750	16.30	40.00	23.70	V	-17.4
118.270000	23.03	43.50	20.47	V	-11.5
195.021250	21.64	43.50	21.86	H	-12.7
309.117500	30.03	46.00	15.97	H	-10.8
480.080000	31.55	46.00	14.45	H	-6.3

Model: NRW332**Low Channel: 5745 MHz**

Common Information

Project No:	RSHA240124001
Test Mode:	5G WIFI Transmitting in 802.11n20 mode low channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Leah Li

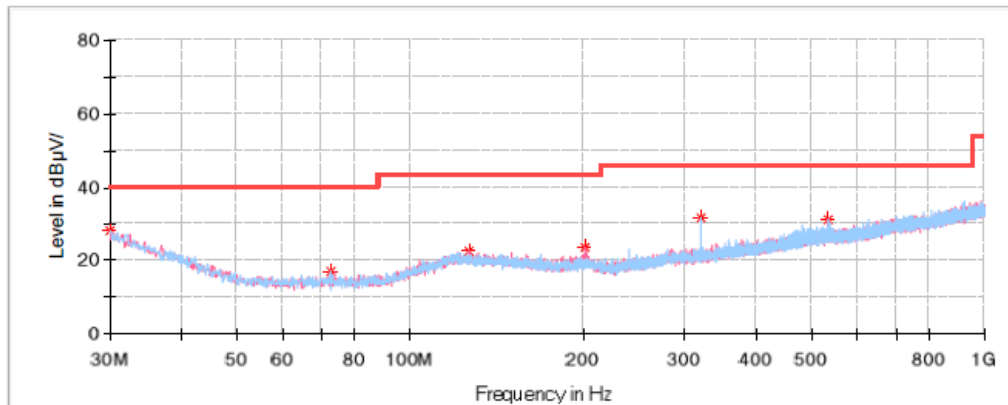


Critical_Freqs

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.606250	28.98	40.00	11.02	V	-5.1
69.770000	16.87	40.00	23.13	V	-17.1
162.526250	22.53	43.50	20.97	V	-12.3
240.005000	25.08	46.00	20.92	H	-12.6
320.030000	31.51	46.00	14.49	H	-10.0
538.643750	31.05	46.00	14.95	H	-5.0

Middle Channel: 5785 MHz**Common Information**

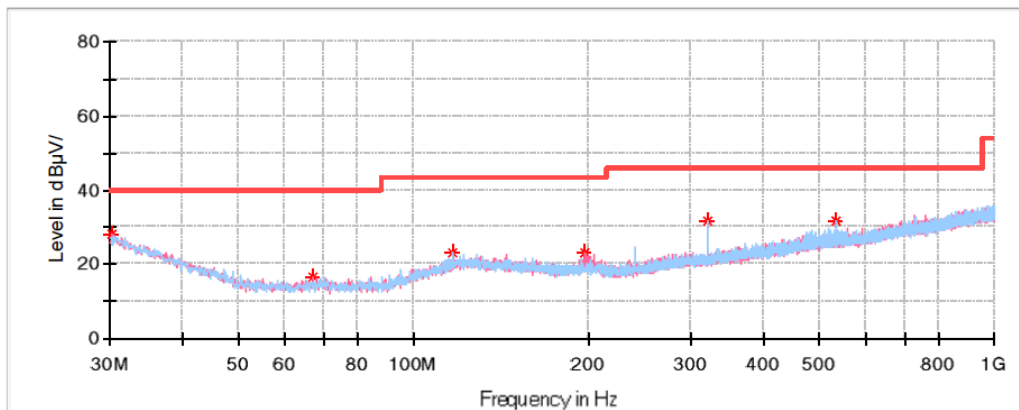
Project No:	RSHA240124001
Test Mode:	5G WIFI Transmitting in 802.11n20 mode middle channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Leah Li

**Critical Freqs**

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.000000	28.00	40.00	12.00	H	-4.7
72.558750	17.03	40.00	22.97	H	-17.1
126.878750	22.60	43.50	20.90	V	-11.1
201.205000	23.71	43.50	19.79	V	-12.3
320.030000	31.67	46.00	14.33	H	-10.0
534.157500	31.44	46.00	14.56	H	-5.0

High Channel: 5825 MHz**Common Information**

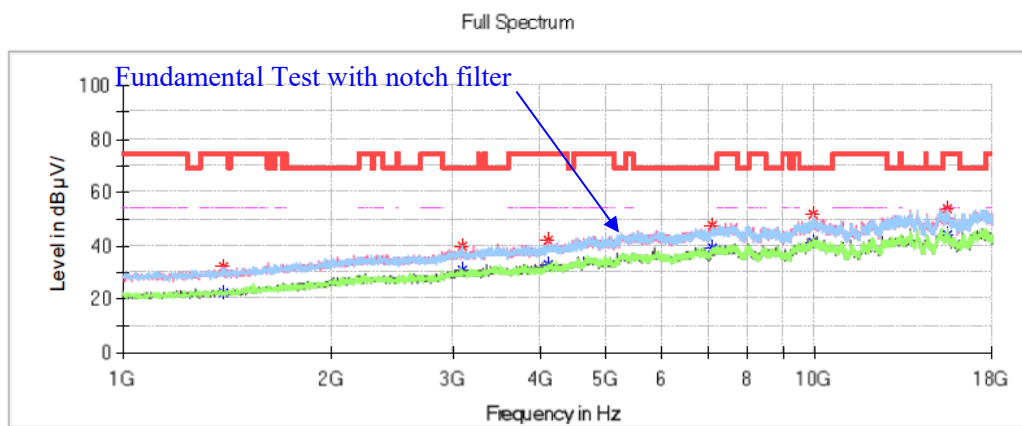
Project No: RSHA240124001
Test Mode: 5G WIFI Transmitting in 802.11n20 mode high channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Leah Li

**Critical Freqs**

Frequency (MHz)	MaxPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.242500	28.43	40.00	11.57	V	-4.9
66.981250	16.62	40.00	23.38	V	-17.2
116.451250	22.96	43.50	20.54	H	-11.5
197.810000	23.06	43.50	20.44	V	-12.3
320.030000	31.77	46.00	14.23	H	-10.0
533.793750	31.77	46.00	14.23	H	-5.0

1GHz-18GHz(5150-5250MHz Band):**802.11a Mode:****Low Channel: 5180MHz****Common Information**

Project No.:	RSHA240124001
Test Mode:	5G WIFI Transmitting in 802.11a mode low channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Peter Wang

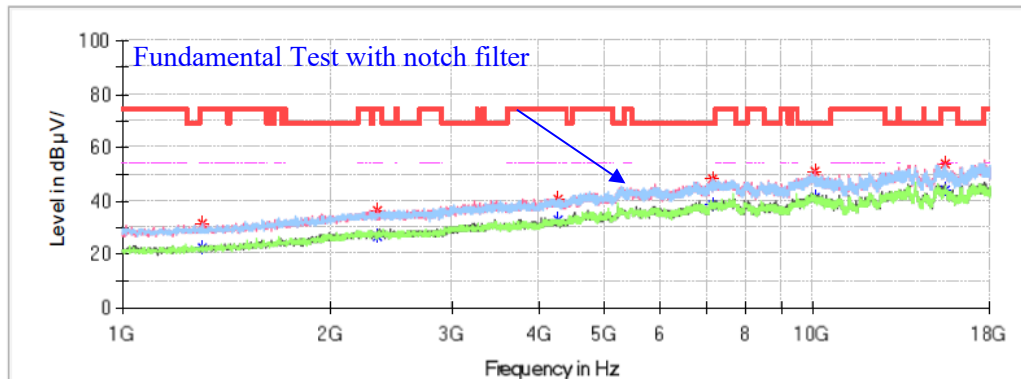
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1394.400000	---	22.23	54.00	31.77	H	-14.3
1394.400000	31.99	---	74.00	42.01	H	-14.3
3089.300000	---	30.53	---	---	V	-7.7
3089.300000	39.89	---	68.20	28.31	V	-7.7
4107.600000	---	33.07	54.00	20.93	H	-4.8
4107.600000	41.94	---	74.00	32.06	H	-4.8
7086.000000	---	38.88	---	---	V	3.9
7086.000000	47.64	---	68.20	20.56	V	3.9
9916.500000	---	41.59	---	---	V	7.5
9916.500000	51.62	---	68.20	16.58	V	7.5
15518.000000	---	44.19	54.00	9.81	H	11.7
15518.000000	54.00	---	74.00	20.00	H	11.7

Middle Channel: 5200MHz**Common Information**

Project No.: RSHA240124001
 Test Mode: 5G WIFI Transmitting in 802.11a mode middle channel
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Engineer: Peter Wang

Full Spectrum

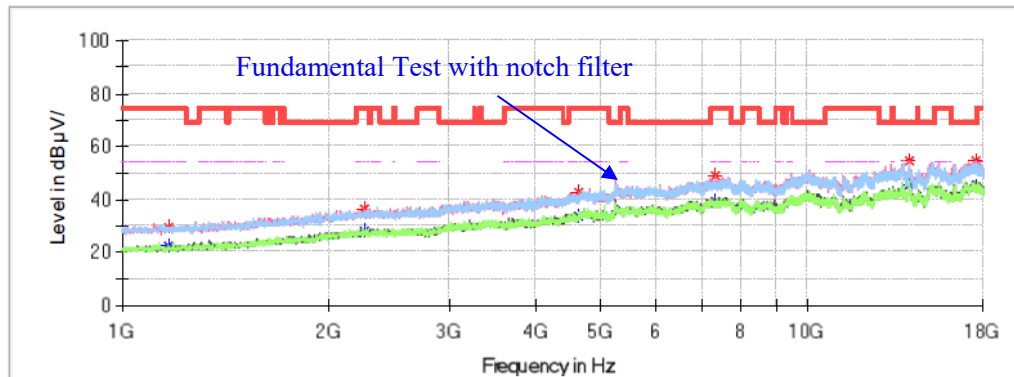
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1306.000000	---	22.29	54.00	31.71	V	-14.5
1306.000000	31.66	---	74.00	42.34	V	-14.5
2336.200000	---	26.62	54.00	27.38	V	-10.0
2336.200000	36.09	---	74.00	37.91	V	-10.0
4275.900000	---	32.88	54.00	21.12	H	-4.4
4275.900000	40.49	---	74.00	33.51	H	-4.4
7155.700000	---	38.27	---	---	V	3.9
7155.700000	48.45	---	68.20	19.75	V	3.9
10035.500000	---	41.14	---	---	V	7.8
10035.500000	50.98	---	68.20	17.22	V	7.8
15463.600000	---	43.81	54.00	10.19	H	11.6
15463.600000	53.71	---	74.00	20.29	H	11.6

High Channel: 5240MHz**Common Information**

Project No.: RSHA240124001
Test Mode: 5G WIFI Transmitting in 802.11a mode high channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

Full Spectrum

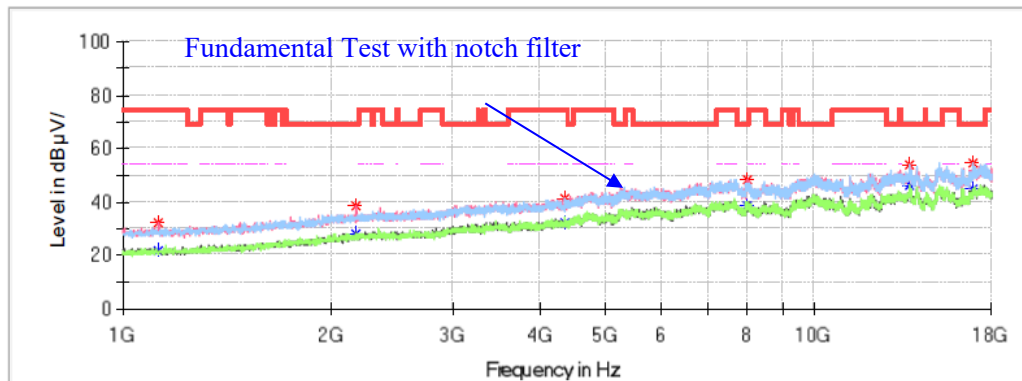
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1166.600000	---	22.60	54.00	31.40	H	-15.0
1166.600000	29.43	---	74.00	44.57	H	-15.0
2249.500000	---	27.99	54.00	26.01	V	-10.2
2249.500000	36.15	---	74.00	37.85	V	-10.2
4617.600000	---	33.90	54.00	20.10	V	-3.2
4617.600000	42.68	---	74.00	31.32	V	-3.2
7303.600000	---	39.21	54.00	14.79	V	4.0
7303.600000	48.91	---	74.00	25.09	V	4.0
14013.500000	---	45.77	---	---	H	10.5
14013.500000	54.62	---	68.20	13.58	H	10.5
17551.200000	---	44.88	---	---	V	13.4
17551.200000	54.81	---	68.20	13.39	V	13.4

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

Project No.: RSHA240124001
 Test Mode: 5G WIFI Transmitting in 802.11n20 mode low channel
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Engineer: Peter Wang

Full Spectrum

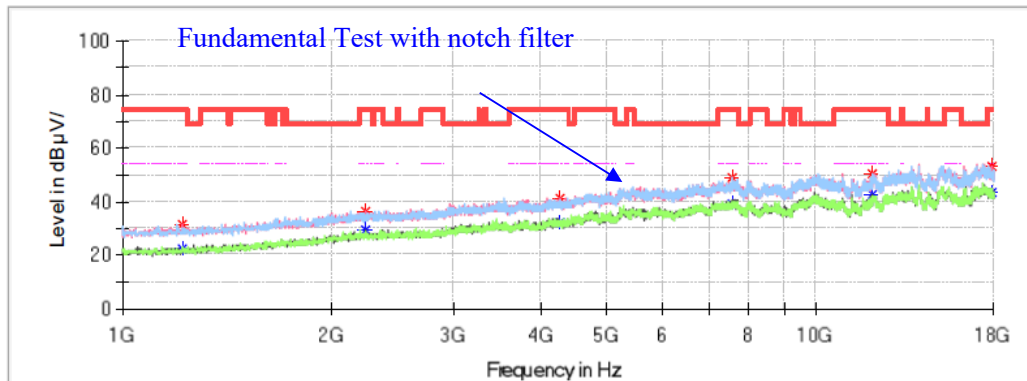
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1127.500000	32.08	---	74.00	41.92	V	-15.1
1127.500000	---	21.78	54.00	32.22	V	-15.1
2176.400000	38.45	---	68.20	29.75	V	-10.3
2176.400000	---	28.14	---	---	V	-10.3
4340.500000	40.95	---	74.00	33.05	H	-4.2
4340.500000	---	32.02	54.00	21.98	H	-4.2
8000.600000	---	38.62	---	---	H	3.8
8000.600000	48.29	---	68.20	19.91	H	3.8
13680.300000	---	46.46	---	---	H	10.8
13680.300000	54.12	---	68.20	14.08	H	10.8
16957.900000	---	44.92	---	---	H	12.2
16957.900000	54.40	---	68.20	13.80	H	12.2

Middle Channel: 5200MHz**Common Information**

Project No.: RSHA240124001
 Test Mode: 5G WIFI Transmitting in 802.11n20 mode middle channel
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Engineer: Peter Wang

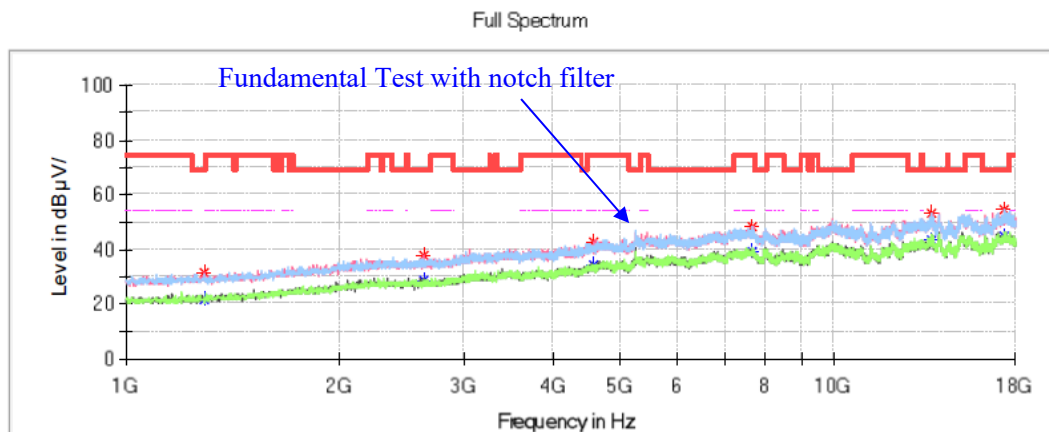
Full Spectrum

**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)
1217.600000	---	22.46	54.00	31.54	V	-14.8
1217.600000	31.41	---	74.00	42.59	V	-14.8
2242.700000	---	29.08	54.00	24.92	V	-10.2
2242.700000	36.46	---	74.00	37.54	V	-10.2
4277.600000	---	32.01	54.00	21.99	V	-4.4
4277.600000	40.96	---	74.00	33.04	V	-4.4
7562.000000	---	39.06	54.00	14.94	H	4.1
7562.000000	48.94	---	74.00	25.06	H	4.1
12055.100000	---	42.36	54.00	11.64	H	7.0
12055.100000	50.32	---	74.00	23.68	H	7.0
17845.300000	---	43.54	54.00	10.46	V	12.2
17845.300000	53.29	---	74.00	20.71	V	12.2

High Channel: 5240MHz**Common Information**

Project No.:	RSHA240124001
Test Mode:	5G WIFI Transmitting in 802.11n20 mode high channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Peter Wang

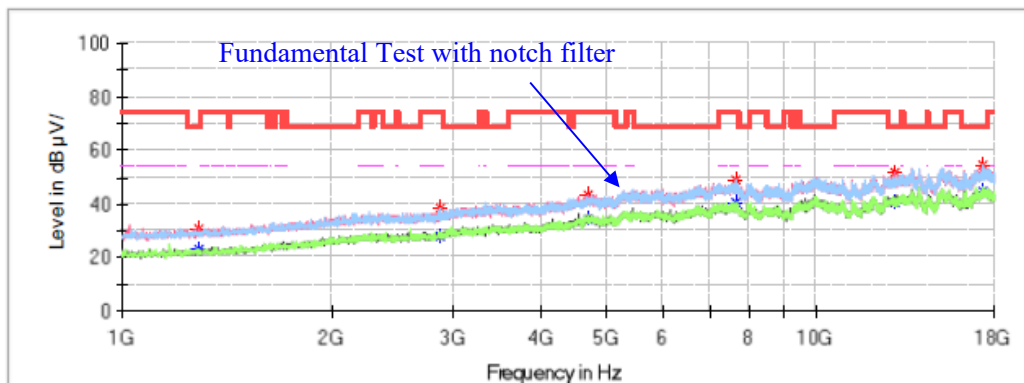
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1292.400000	---	21.59	---	---	V	-14.6
1292.400000	31.16	---	68.20	37.04	V	-14.6
2633.700000	---	28.44	---	---	H	-9.3
2633.700000	37.67	---	68.20	30.53	H	-9.3
4558.100000	---	34.06	54.00	19.94	V	-3.5
4558.100000	42.75	---	74.00	31.25	V	-3.5
7638.500000	---	38.89	54.00	15.11	V	4.1
7638.500000	48.59	---	74.00	25.41	V	4.1
13712.600000	---	43.43	---	---	H	10.8
13712.600000	53.30	---	68.20	14.90	H	10.8
17394.800000	---	44.81	---	---	H	13.4
17394.800000	54.50	---	68.20	13.70	H	13.4

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

Project No.: RSHA240124001
Test Mode: 5G WIFI Transmitting in 802.11n40 mode low channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

Full Spectrum

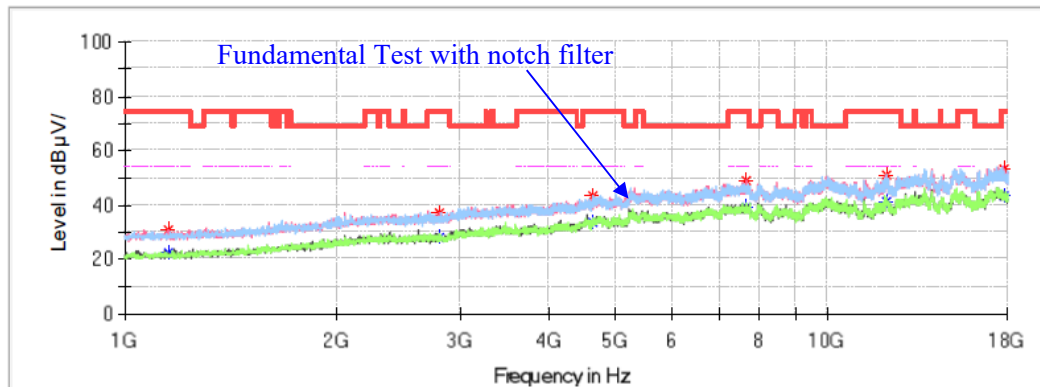
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1285.600000	---	22.82	---	---	H	-14.6
1285.600000	31.00	---	68.20	37.20	H	-14.6
2861.500000	---	28.19	54.00	25.81	H	-8.5
2861.500000	38.13	---	74.00	35.87	H	-8.5
4678.800000	---	34.14	54.00	19.86	V	-2.9
4678.800000	43.38	---	74.00	30.62	V	-2.9
7647.000000	48.92	---	74.00	25.08	H	4.1
7647.000000	---	40.50	54.00	13.50	H	4.1
12939.100000	---	40.59	---	---	V	9.0
12939.100000	51.47	---	68.20	16.73	V	9.0
17337.000000	---	44.57	---	---	V	13.2
17337.000000	54.23	---	68.20	13.97	V	13.2

High Channel: 5230MHz**Common Information**

Project No.: RSHA240124001
Test Mode: 5G WIFI Transmitting in 802.11n40 mode high channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

Full Spectrum

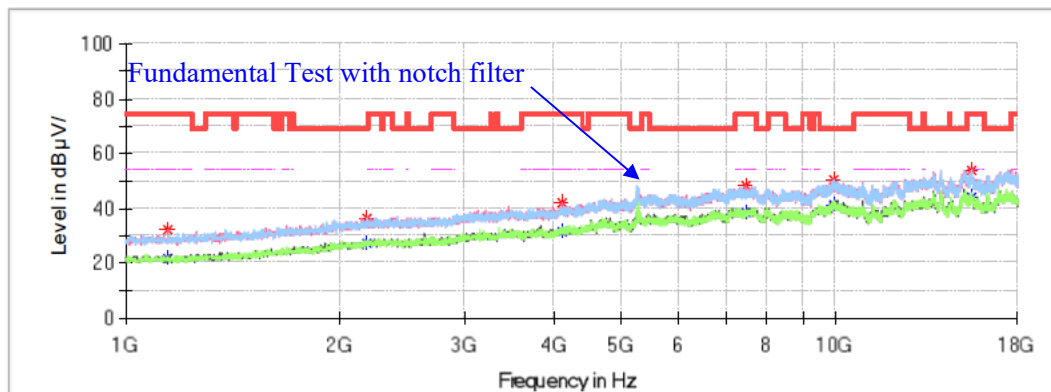
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1151.300000	---	22.04	54.00	31.96	V	-15.0
1151.300000	31.01	---	74.00	42.99	V	-15.0
2795.200000	---	27.80	54.00	26.20	H	-8.7
2795.200000	37.37	---	74.00	36.63	H	-8.7
4636.300000	---	33.40	54.00	20.60	H	-3.1
4636.300000	43.03	---	74.00	30.97	H	-3.1
7638.500000	---	39.28	54.00	14.72	V	4.1
7638.500000	48.98	---	74.00	25.02	V	4.1
12078.900000	---	41.57	54.00	12.43	V	7.1
12078.900000	50.81	---	74.00	23.19	V	7.1
17731.400000	---	43.46	54.00	10.54	V	12.7
17731.400000	52.86	---	74.00	21.14	V	12.7

1GHz-18GHz(5250-5350MHz Band):**802.11a Mode:****Low Channel: 5260MHz****Common Information**

Project No.:	RSHA240124001
Test Mode:	5G WIFI Transmitting in 802.11a mode low channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Peter Wang

Full Spectrum

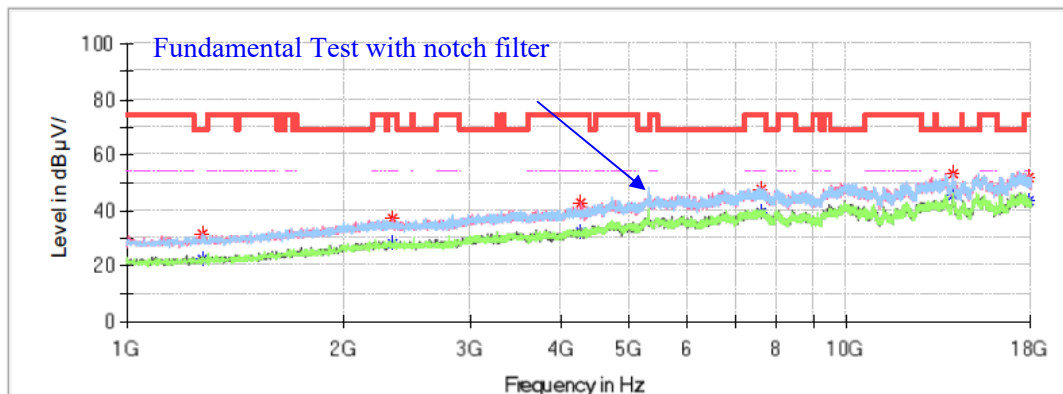
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1146.200000	---	21.43	54.00	32.57	V	-15.1
1146.200000	32.05	---	74.00	41.95	V	-15.1
2190.000000	---	27.07	---	---	V	-10.3
2190.000000	36.33	---	68.20	31.87	V	-10.3
4111.000000	---	31.56	54.00	22.44	V	-4.8
4111.000000	41.86	---	74.00	32.14	V	-4.8
7453.200000	---	38.75	54.00	15.25	V	4.2
7453.200000	47.96	---	74.00	26.04	V	4.2
9945.400000	---	41.44	---	---	H	7.6
9945.400000	50.09	---	68.20	18.11	H	7.6
15495.900000	---	43.73	54.00	10.27	H	11.7
15495.900000	53.52	---	74.00	20.48	H	11.7

Middle Channel: 5280MHz**Common Information**

Project No.: RSHA240124001
 Test Mode: 5G WIFI Transmitting in 802.11a mode middle channel
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Engineer: Peter Wang

Full Spectrum

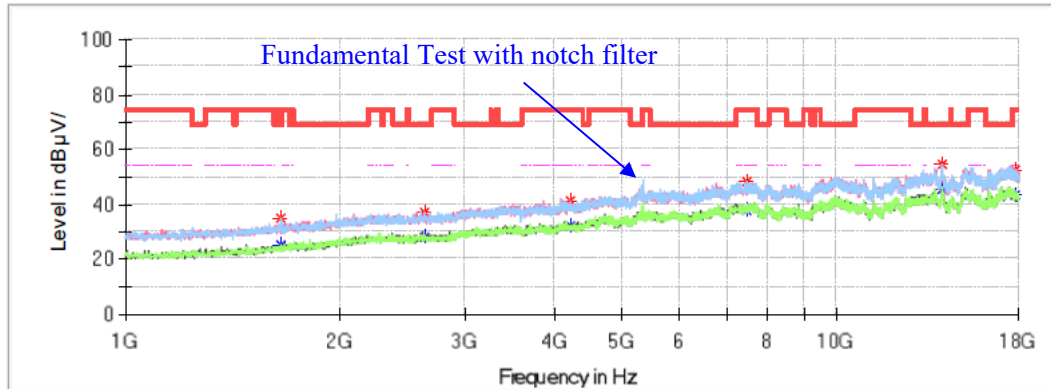
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1277.100000	---	22.54	---	---	H	-14.6
1277.100000	31.74	---	68.20	36.46	H	-14.6
2343.000000	---	27.81	54.00	26.19	H	-10.0
2343.000000	37.25	---	74.00	36.75	H	-10.0
4264.000000	---	32.17	54.00	21.83	V	-4.4
4264.000000	42.60	---	74.00	31.40	V	-4.4
7606.200000	---	38.94	54.00	15.06	H	4.1
7606.200000	47.75	---	74.00	26.25	H	4.1
14001.600000	---	45.28	---	---	H	10.5
14001.600000	53.30	---	68.20	14.90	H	10.5
17865.700000	---	43.66	54.00	10.34	H	12.1
17865.700000	51.83	---	74.00	22.17	H	12.1

High Channel: 5320MHz**Common Information**

Project No.: RSHA240124001
 Test Mode: 5G WIFI Transmitting in 802.11a mode high channel
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Engineer: Peter Wang

Full Spectrum

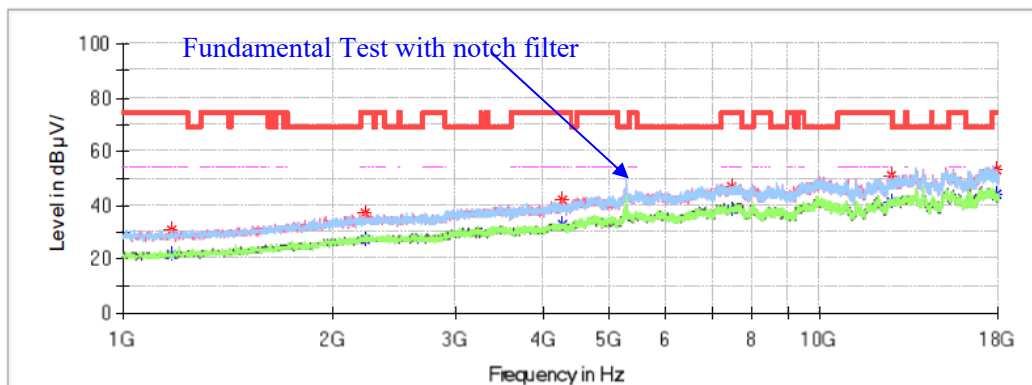
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1656.200000	---	25.11	---	---	H	-12.9
1656.200000	34.87	---	68.20	33.33	H	-12.9
2628.600000	---	27.99	---	---	H	-9.3
2628.600000	37.20	---	68.20	31.00	H	-9.3
4223.200000	---	32.27	54.00	21.73	V	-4.5
4223.200000	41.59	---	74.00	32.41	V	-4.5
7460.000000	---	38.02	54.00	15.98	H	4.2
7460.000000	48.37	---	74.00	25.63	H	4.2
14001.600000	---	45.80	---	---	H	10.5
14001.600000	54.37	---	68.20	13.83	H	10.5
17756.900000	---	43.01	54.00	10.99	V	12.5
17756.900000	52.78	---	74.00	21.22	V	12.5

802.11n-HT20 Mode:**Low Channel: 5260MHz****Common Information**

Project No.: RSHA240124001
Test Mode: 5G WIFI Transmitting in 802.11n20 mode low channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

Full Spectrum

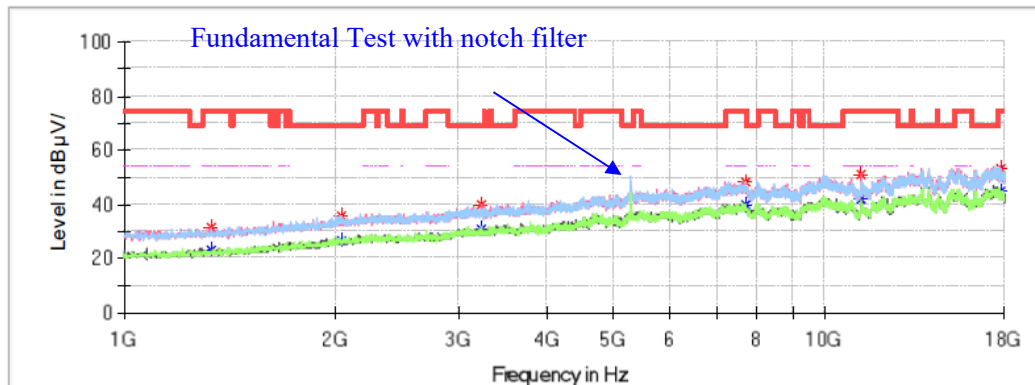
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1171.700000	---	21.93	54.00	32.07	H	-15.0
1171.700000	30.72	---	74.00	43.28	H	-15.0
2230.800000	---	27.36	54.00	26.64	H	-10.2
2230.800000	37.26	---	74.00	36.74	H	-10.2
4262.300000	---	32.61	54.00	21.39	H	-4.4
4262.300000	41.86	---	74.00	32.14	H	-4.4
7468.500000	---	38.76	54.00	15.24	V	4.2
7468.500000	46.55	---	74.00	27.45	V	4.2
12645.000000	---	41.02	54.00	12.98	H	8.6
12645.000000	50.95	---	74.00	23.05	H	8.6
17918.400000	---	43.97	54.00	10.03	H	11.9
17918.400000	53.30	---	74.00	20.70	H	11.9

Middle Channel: 5280MHz**Common Information**

Project No.: RSHA240124001
 Test Mode: 5G WIFI Transmitting in 802.11n20 mode middle channel
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Engineer: Peter Wang

Full Spectrum

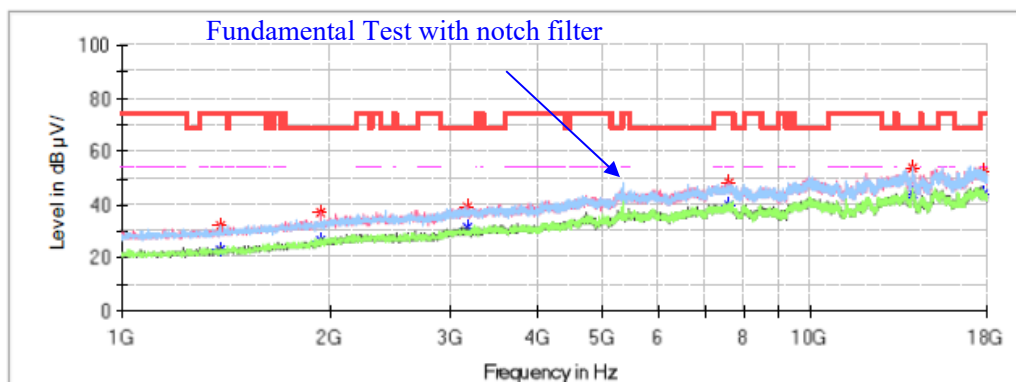
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1329.800000	---	22.79	54.00	31.21	V	-14.5
1329.800000	31.67	---	74.00	42.33	V	-14.5
2045.500000	---	26.29	---	---	H	-10.5
2045.500000	35.85	---	68.20	32.35	H	-10.5
3238.900000	---	30.59	---	---	V	-7.1
3238.900000	39.69	---	68.20	28.51	V	-7.1
7699.700000	---	39.71	54.00	14.29	H	4.0
7699.700000	48.40	---	74.00	25.60	H	4.0
11203.400000	---	42.11	54.00	11.89	V	6.7
11203.400000	50.89	---	74.00	23.11	V	6.7
17760.300000	---	44.50	54.00	9.50	H	12.5
17760.300000	52.88	---	74.00	21.12	H	12.5

High Channel: 5320MHz**Common Information**

Project No.: RSHA240124001
 Test Mode: 5G WIFI Transmitting in 802.11n20 mode high channel
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Engineer: Peter Wang

Full Spectrum

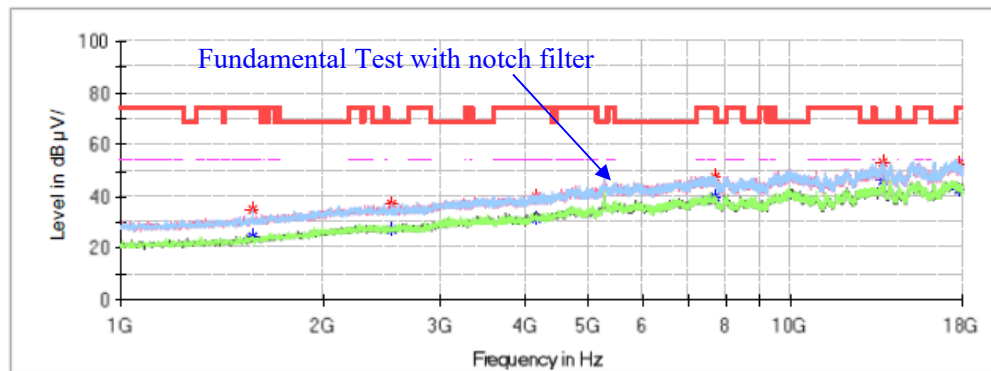
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1385.900000	---	22.90	54.00	31.10	H	-14.3
1385.900000	31.94	---	74.00	42.06	H	-14.3
1945.200000	36.80	---	68.20	31.40	V	-10.9
1945.200000	---	26.56	---	---	V	-10.9
3165.800000	---	31.27	---	---	V	-7.4
3165.800000	39.39	---	68.20	28.81	V	-7.4
7609.600000	48.06	---	74.00	25.94	V	4.1
7609.600000	---	39.57	54.00	14.43	V	4.1
14027.100000	---	43.93	---	---	H	10.4
14027.100000	53.77	---	68.20	14.43	H	10.4
17804.500000	---	43.93	54.00	10.07	H	12.3
17804.500000	52.58	---	74.00	21.42	H	12.3

802.11n-HT40 Mode:**Low Channel: 5270MHz****Common Information**

Project No.: RSHA240124001
 Test Mode: 5G WIFI Transmitting in 802.11n40 mode low channel
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Engineer: Peter Wang

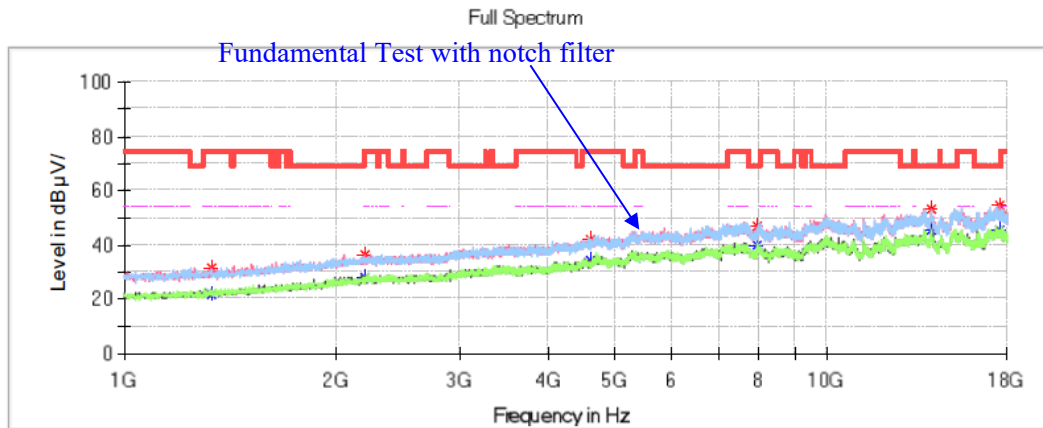
Full Spectrum

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μV/m)	Average (dB μV/m)	Limit (dB μV/m)	Margin (dB)	Pol	Corr. (dB/m)
1574.600000	---	24.19	54.00	29.81	H	-13.4
1574.600000	35.07	---	74.00	38.93	H	-13.4
2535.100000	---	27.38	---	---	H	-9.6
2535.100000	37.09	---	68.20	31.11	H	-9.6
4158.600000	---	31.15	54.00	22.85	V	-4.7
4158.600000	40.11	---	74.00	33.89	V	-4.7
7692.900000	---	39.87	54.00	14.13	H	4.0
7692.900000	47.58	---	74.00	26.42	H	4.0
13680.300000	---	45.87	---	---	V	10.8
13680.300000	53.40	---	68.20	14.80	V	10.8
17753.500000	---	42.99	54.00	11.01	H	12.6
17753.500000	52.42	---	74.00	21.58	H	12.6

High Channel: 5310MHz**Common Information**

Project No.: RSHA240124001
 Test Mode: 5G WIFI Transmitting in 802.11n40 mode high channel
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Engineer: Peter Wang

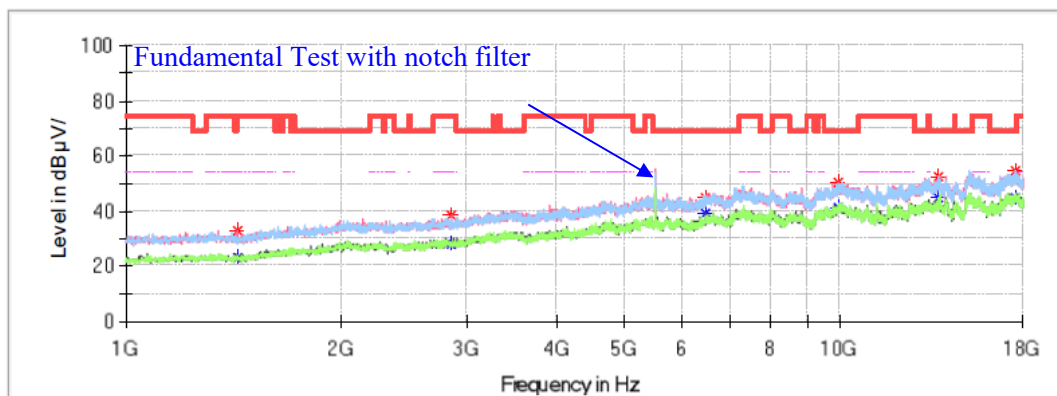
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1326.400000	---	21.68	54.00	32.32	H	-14.5
1326.400000	31.71	---	74.00	42.29	H	-14.5
2200.200000	---	27.98	54.00	26.02	V	-10.2
2200.200000	36.58	---	74.00	37.42	V	-10.2
4602.300000	---	34.34	54.00	19.66	H	-3.3
4602.300000	42.01	---	74.00	31.99	H	-3.3
7953.000000	---	39.51	---	---	V	3.9
7953.000000	47.18	---	68.20	21.02	V	3.9
14001.600000	---	45.67	---	---	V	10.5
14001.600000	52.85	---	68.20	15.35	V	10.5
17597.100000	---	45.29	---	---	V	13.2
17597.100000	54.32	---	68.20	13.88	V	13.2

1GHz-18GHz(5470-5725MHz Band):**802.11a Mode:****Low Channel: 5500MHz****Common Information**

Project No.:	RSHA240124001
Test Mode:	5G WIFI Transmitting in 802.11a mode low channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Peter Wang

Full Spectrum

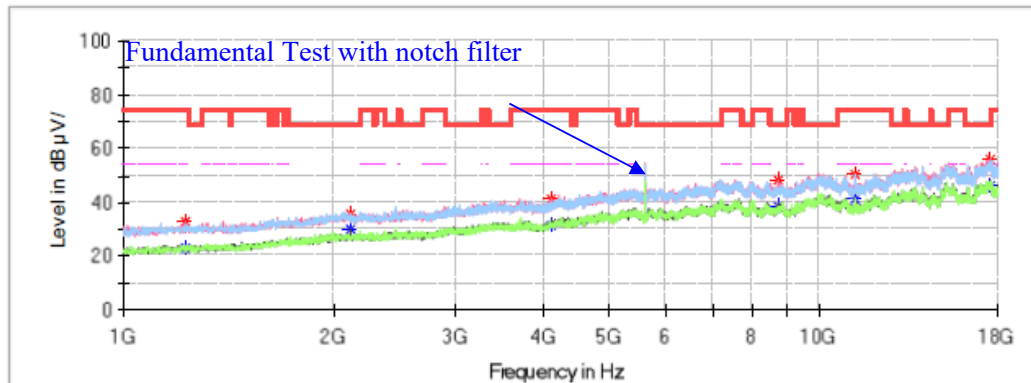
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1433.500000	---	23.20	---	---	V	-14.1
1433.500000	32.81	---	68.20	35.39	V	-14.1
2854.700000	---	28.27	54.00	25.73	V	-8.5
2854.700000	38.21	---	74.00	35.79	V	-8.5
6470.600000	---	39.19	---	---	V	0.8
6470.600000	44.49	---	68.20	23.71	V	0.8
9904.600000	---	41.13	---	---	H	7.5
9904.600000	50.27	---	68.20	17.93	H	7.5
13685.400000	---	44.80	---	---	V	10.8
13685.400000	52.48	---	68.20	15.72	V	10.8
17566.500000	---	44.97	---	---	H	13.3
17566.500000	54.22	---	68.20	13.98	H	13.3

Middle Channel: 5580MHz**Common Information**

Project No.: RSHA240124001
 Test Mode: 5G WIFI Transmitting in 802.11a mode middle channel
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Engineer: Peter Wang

Full Spectrum

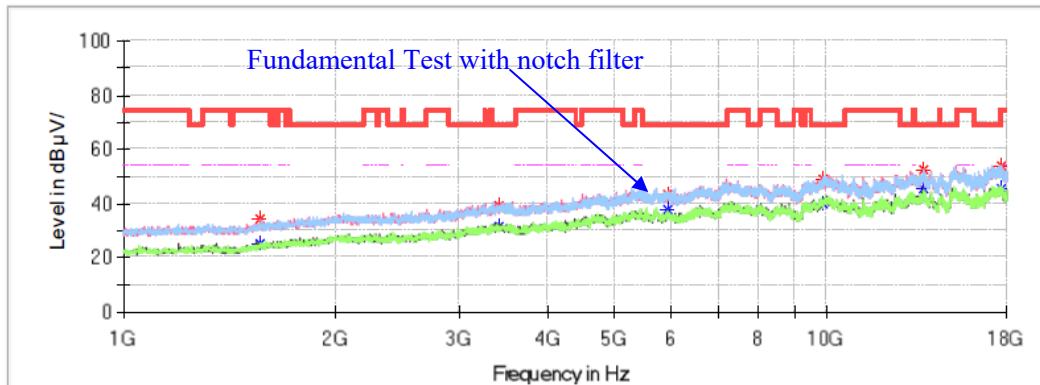
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1226.100000	---	22.79	54.00	31.21	V	-14.8
1226.100000	32.55	---	74.00	41.45	V	-14.8
2116.900000	---	29.74	---	---	V	-10.4
2116.900000	35.93	---	68.20	32.27	V	-10.4
4111.000000	---	31.67	54.00	22.33	V	-4.8
4111.000000	41.23	---	74.00	32.77	V	-4.8
8721.400000	---	38.52	---	---	H	3.8
8721.400000	47.98	---	68.20	20.22	H	3.8
11206.800000	---	41.24	54.00	12.76	V	6.7
11206.800000	50.15	---	74.00	23.85	V	6.7
17535.900000	---	45.90	---	---	V	13.5
17535.900000	56.07	---	68.20	12.13	V	13.5

High Channel: 5700MHz**Common Information**

Project No.: RSHA240124001
Test Mode: 5G WIFI Transmitting in 802.11a mode high channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Peter Wang

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)
1564.400000	---	24.90	54.00	29.10	H	-13.5
1564.400000	34.14	---	74.00	39.86	H	-13.5
3410.600000	---	31.48	---	---	H	-6.5
3410.600000	39.44	---	68.20	28.76	H	-6.5
5928.300000	---	38.11	---	---	V	0.3
5928.300000	43.23	---	68.20	24.97	V	0.3
9877.400000	---	39.95	---	---	V	7.4
9877.400000	48.85	---	68.20	19.35	V	7.4
13678.600000	---	45.46	---	---	H	10.8
13678.600000	52.46	---	68.20	15.74	H	10.8
17692.300000	---	45.68	---	---	H	12.8
17692.300000	53.82	---	68.20	14.38	H	12.8

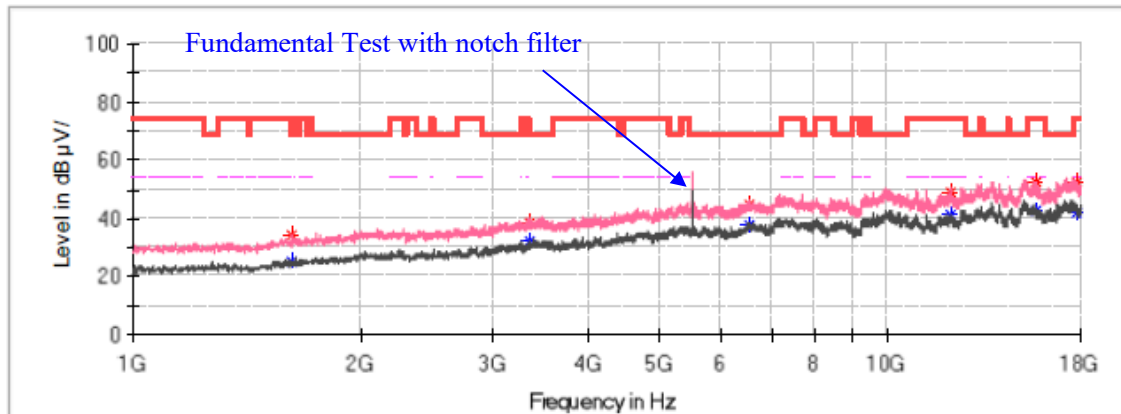
802.11n-HT20 Mode:

Low channel: 5500 MHz

Common Information

Project No.:	RSHA240124001
Test Mode:	5G WIFI Transmitting in 802.11n20 mode low channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Peter Wang

Full Spectrum



Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
Low channel: 5500 MHz						
1620.500000	---	25.27	54.00	28.73	V	-13.1
1620.500000	34.36	---	74.00	39.64	V	-13.1
3357.900000	---	32.29	54.00	21.71	V	-6.7
3357.900000	38.22	---	74.00	35.78	V	-6.7
6543.700000	44.93	---	68.20	23.27	V	1.1
12085.700000	---	41.23	54.00	12.77	V	7.1
12085.700000	49.05	---	74.00	24.95	V	7.1
15660.800000	---	43.01	54.00	10.99	V	10.8
15660.800000	52.64	---	74.00	21.36	V	10.8
17823.200000	---	41.66	54.00	12.34	V	12.3
17823.200000	52.52	---	74.00	21.48	V	12.3
15660.800000	---	42.87	54.00	11.13	H	10.8
15660.800000	51.46	---	74.00	22.54	H	10.8
Middle channel: 5580 MHz						
1294.100000	32.44	---	68.20	35.76	H	-14.6
2451.800000	37.17	---	68.20	31.03	V	-9.8
4716.200000	---	34.62	54.00	19.38	H	-2.7
4716.200000	42.38	---	74.00	31.62	H	-2.7
7505.900000	---	39.24	54.00	14.76	V	4.2
7505.900000	47.36	---	74.00	26.64	V	4.2
11203.400000	---	41.63	54.00	12.37	V	6.7
11203.400000	49.60	---	74.00	24.40	V	6.7
17433.900000	54.62	---	68.20	13.58	V	13.5
High channel: 5700 MHz						
1181.900000	---	22.93	54.00	31.07	V	-14.9
1181.900000	32.64	---	74.00	41.36	V	-14.9
2703.400000	---	30.21	54.00	23.79	V	-9.1
2703.400000	37.14	---	74.00	36.86	V	-9.1
5022.200000	---	34.33	54.00	19.67	H	-1.1
5022.200000	44.55	---	74.00	29.45	H	-1.1
8587.100000	44.93	---	68.20	23.27	V	3.9
12111.200000	---	41.48	54.00	12.52	V	7.2
12111.200000	50.25	---	74.00	23.75	V	7.2
17620.900000	52.03	---	68.20	16.17	H	13.1

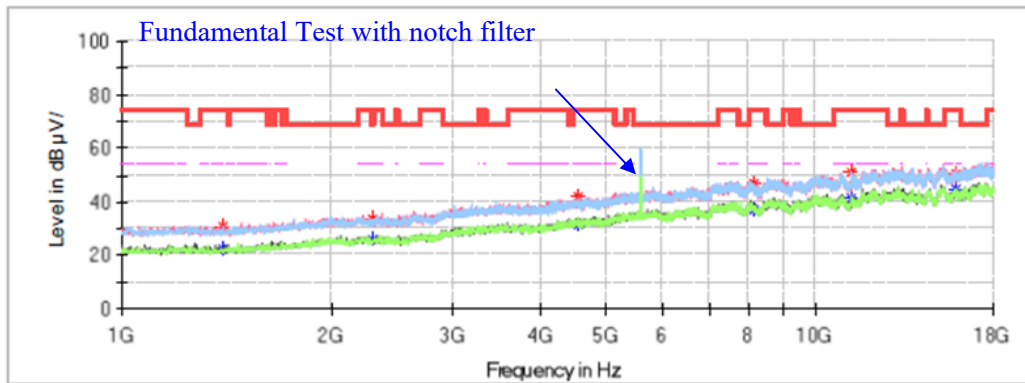
802.11n-HT40 Mode:

Middle channel: 5550 MHz

Common Information

Project No.:	RSHA240124001
Test Mode:	5G WIFI Transmitting in 802.11n40 mode middle channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Peter Wang

Full Spectrum

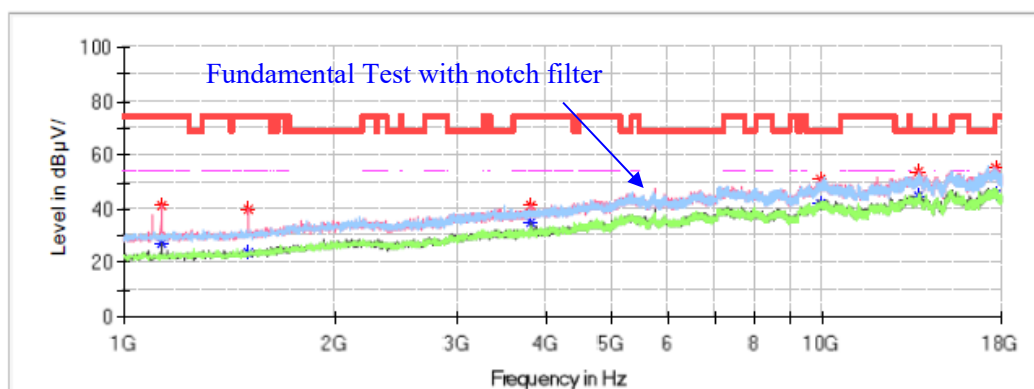


Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
Low channel: 5510 MHz						
1185.300000	---	22.90	54.00	31.10	H	-14.9
1185.300000	31.29	---	74.00	42.71	H	-14.9
2601.400000	36.68	---	68.20	31.52	V	-9.4
4706.000000	---	34.17	54.00	19.83	H	-2.7
4706.000000	41.84	---	74.00	32.16	H	-2.7
9780.500000	49.40	---	68.20	18.80	V	7.1
13680.300000	53.49	---	68.20	14.71	V	10.8
17396.500000	51.79	---	68.20	16.41	H	13.4
Middle channel: 5550 MHz						
1397.800000	30.94	---	74.00	43.06	H	-14.9
1397.800000	---	22.56	54.00	31.44	H	-14.9
2290.300000	33.58	---	74.00	40.42	V	-10.8
2290.300000	---	25.99	54.00	28.01	V	-10.8
4544.500000	42.11	---	74.00	31.89	V	-4.1
4544.500000	---	31.74	54.00	22.26	V	-4.1
8148.500000	46.66	---	74.00	27.34	V	4.4
8148.500000	---	37.29	54.00	16.71	V	4.4
11208.500000	---	41.26	54.00	12.74	H	8.0
11208.500000	50.87	---	74.00	23.13	H	8.0
15914.100000	50.01	---	74.00	23.99	V	9.5
15914.100000	---	44.66	54.00	9.34	V	9.5
High channel: 5670 MHz						
1219.300000	---	22.79	54.00	31.21	V	-14.8
1219.300000	31.57	---	74.00	42.43	V	-14.8
2268.200000	---	26.99	54.00	27.01	H	-10.1
2268.200000	37.96	---	74.00	36.04	H	-10.1
4632.900000	---	33.35	54.00	20.65	V	-3.1
4632.900000	42.71	---	74.00	31.29	V	-3.1
8818.300000	47.51	---	68.20	20.69	H	3.7
12565.100000	---	40.15	54.00	13.85	V	8.5
12565.100000	50.50	---	74.00	23.50	V	8.5
15750.900000	---	40.94	54.00	13.06	V	10.3
15750.900000	51.49	---	74.00	22.51	V	10.3

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

Project No.:	RSHA240124001
Test Mode:	5G WIFI Transmitting in 802.11a mode low channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Peter Wang

Full Spectrum

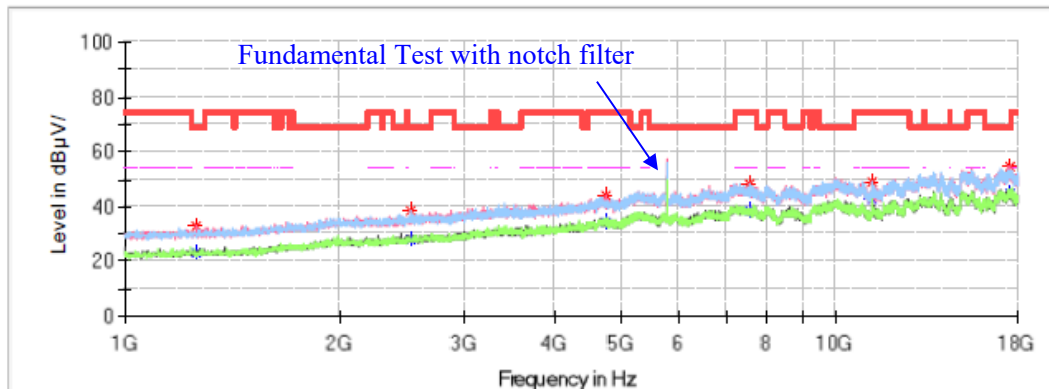
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1132.600000	---	27.32	54.00	26.68	V	-15.1
1132.600000	41.26	---	74.00	32.74	V	-15.1
1503.200000	---	23.80	54.00	30.20	V	-13.9
1503.200000	40.21	---	74.00	33.79	V	-13.9
3828.800000	---	34.88	54.00	19.12	V	-5.4
3828.800000	41.43	---	74.00	32.57	V	-5.4
9938.600000	---	41.66	---	---	V	7.6
9938.600000	51.06	---	68.20	17.14	V	7.6
13733.000000	---	44.72	---	---	H	10.8
13733.000000	54.11	---	68.20	14.09	H	10.8
17631.100000	---	45.33	---	---	V	13.1
17631.100000	55.26	---	68.20	12.94	V	13.1

Middle Channel: 5785MHz**Common Information**

Project No.: RSHA240124001
 Test Mode: 5G WIFI Transmitting in 802.11a mode middle channel
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Engineer: Peter Wang

Full Spectrum

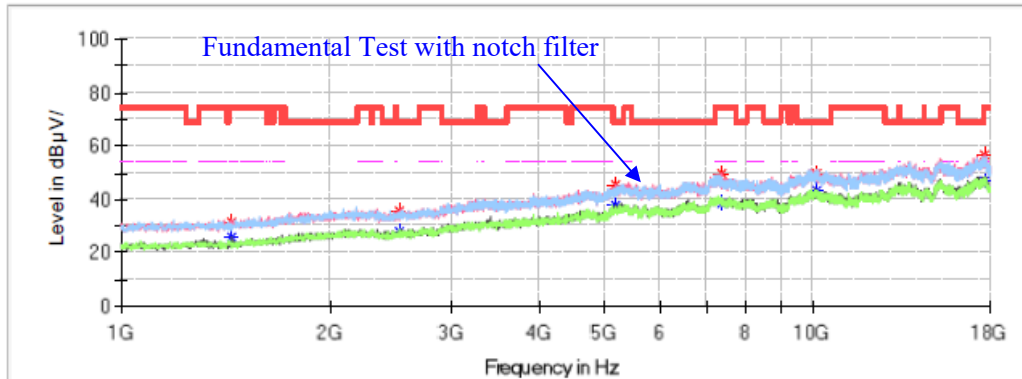
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1261.800000	---	22.98	---	---	V	-14.7
1261.800000	33.08	---	68.20	35.12	V	-14.7
2518.100000	---	27.71	---	---	H	-9.7
2518.100000	38.27	---	68.20	29.93	H	-9.7
4736.600000	---	33.92	54.00	20.08	H	-2.6
4736.600000	43.91	---	74.00	30.09	H	-2.6
7562.000000	---	38.72	54.00	15.28	H	4.1
7562.000000	48.58	---	74.00	25.42	H	4.1
11203.400000	---	42.78	54.00	11.22	H	6.7
11203.400000	48.96	---	74.00	25.04	H	6.7
17541.000000	---	45.10	---	---	V	13.4
17541.000000	54.67	---	68.20	13.53	V	13.4

High Channel: 5825MHz**Common Information**

Project No.: RSHA240124001
 Test Mode: 5G WIFI Transmitting in 802.11a mode high channel
 Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
 Test Engineer: Peter Wang

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)
1442.000000	---	25.71	54.00	28.29	V	-14.1
1442.000000	31.32	---	74.00	42.68	V	-14.1
2518.100000	35.95	---	68.20	32.25	H	-9.7
2518.100000	---	28.02	---	---	H	-9.7
5178.600000	---	37.85	---	---	V	-0.5
5178.600000	45.14	---	68.20	23.06	V	-0.5
7351.200000	---	38.54	54.00	15.46	V	4.1
7351.200000	49.57	---	74.00	24.43	V	4.1
10140.900000	---	43.29	---	---	V	7.7
10140.900000	50.00	---	68.20	18.20	V	7.7
17688.900000	---	46.59	---	---	V	12.8
17688.900000	56.43	---	68.20	11.77	V	12.8

802.11n-HT20 Mode: (worst case)

High channel: 5825 MHz

Common Information

Project No.:

RSHA240124001

Test Mode:

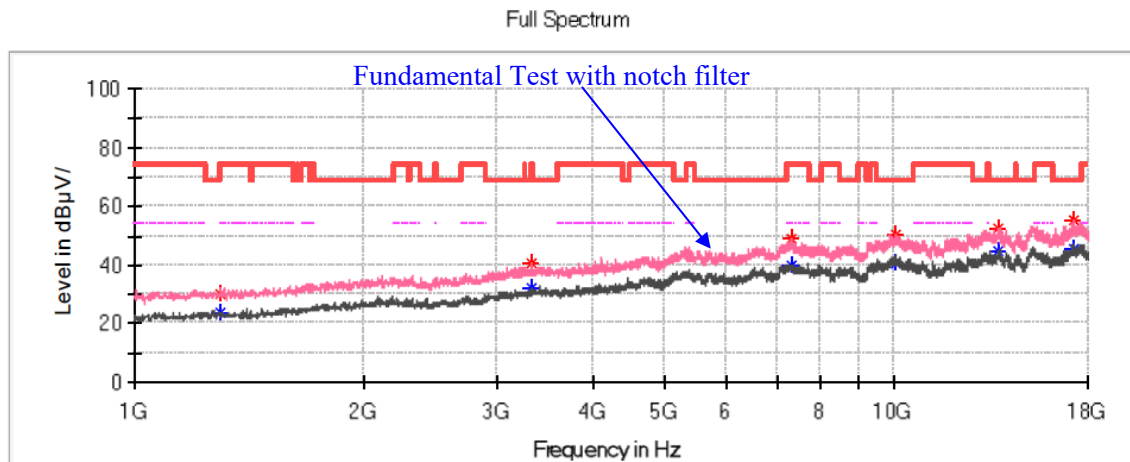
5G Wi-Fi

Standard:

FCC Part 15.205 & FCC 15.209 & FCC 15.407

Test Engineer:

Peter Wang



Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
Low channel: 5745 MHz						
1246.500000	31.91	---	68.20	36.29	V	-14.7
3828.800000	---	35.42	54.00	18.58	H	-5.4
3828.800000	42.68	---	74.00	31.32	H	-5.4
7092.800000	48.22	---	68.20	19.98	V	3.9
9998.100000	50.79	---	68.20	17.41	V	7.8
13760.200000	52.83	---	68.20	15.37	V	10.8
17185.700000	52.32	---	68.20	15.88	V	12.8
Middle channel: 5785 MHz						
1312.800000	32.13	---	74.00	41.87	H	-14.5
1312.800000	---	24.16	54.00	29.84	H	-14.5
2626.900000	37.77	---	68.20	30.43	V	-9.3
4796.100000	44.82	---	74.00	29.18	V	-2.3
4796.100000	---	33.66	54.00	20.34	V	-2.3
7082.600000	49.05	---	68.20	19.15	V	3.9
13122.700000	52.24	---	68.20	15.96	V	9.5
17631.100000	54.06	---	68.20	14.14	V	13.1
High channel: 5825 MHz						
1299.200000	30.23	---	68.20	37.97	V	-14.6
3339.200000	40.46	---	68.20	27.74	V	-6.7
7303.600000	---	39.93	54.00	14.07	V	4.0
7303.600000	48.91	---	74.00	25.09	V	4.0
10044.000000	50.19	---	68.20	18.01	V	7.8
13741.500000	52.72	---	68.20	15.48	V	10.8
17202.700000	55.12	---	68.20	13.08	V	12.9
13741.500000	51.27	---	68.20	16.93	H	10.8
17202.700000	54.21	---	68.20	13.99	H	12.9

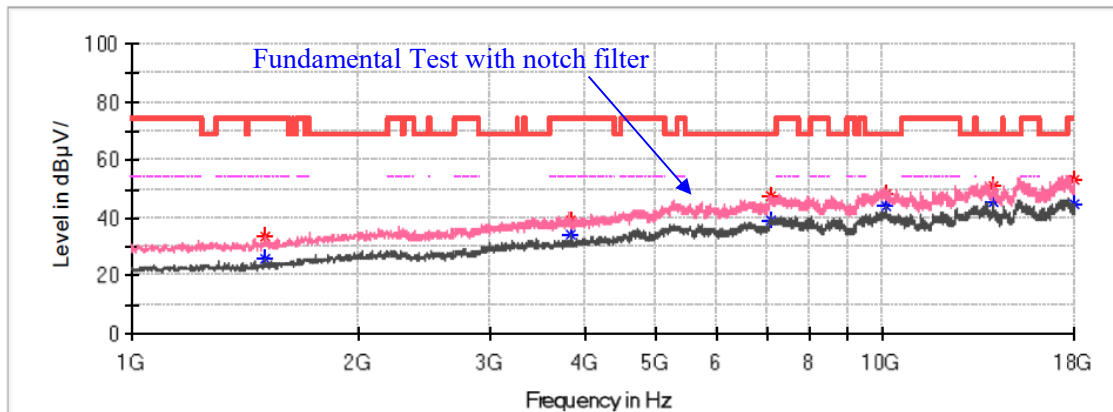
802.11n-HT40 Mode: (worst case)

Low channel: 5755 MHz

Common Information

Project No.:	RSHA240124001
Test Mode:	5G Wi-Fi
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Peter Wang

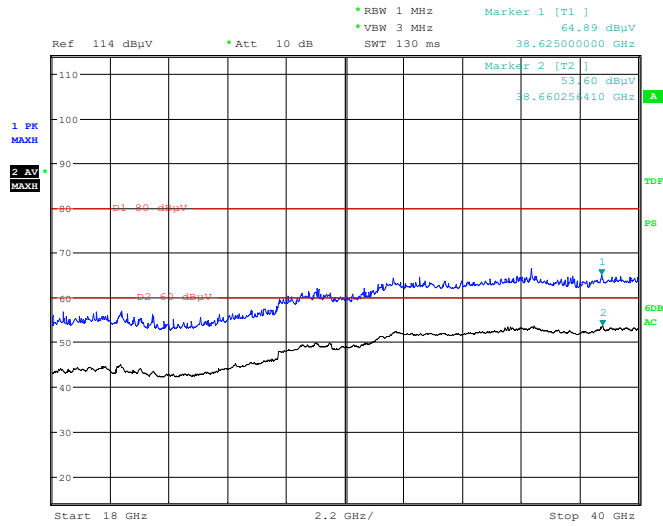
Full Spectrum



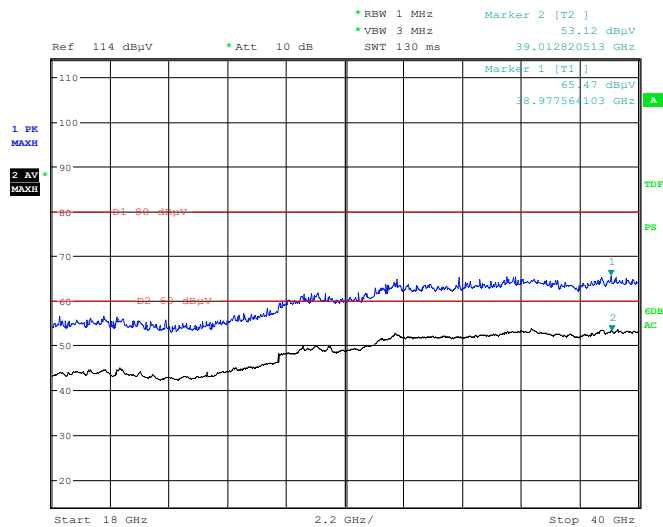
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
Low channel: 5755 MHz						
1504.900000	---	26.20	54.00	27.80	V	-13.9
1504.900000	33.69	---	74.00	40.31	V	-13.9
3835.600000	---	34.01	54.00	19.99	V	-5.4
3835.600000	39.13	---	74.00	34.87	V	-5.4
7106.400000	47.71	---	68.20	20.49	V	3.9
10117.100000	48.37	---	68.20	19.83	V	7.7
14001.600000	51.11	---	68.20	17.09	V	10.5
17998.300000	---	44.66	54.00	9.34	V	11.5
17998.300000	53.47	---	74.00	20.53	V	11.5
17998.300000	---	43.45	54.00	10.55	H	11.5
17998.300000	52.74	---	74.00	21.26	H	11.5
High channel: 5795 MHz						
1328.100000	---	24.36	54.00	29.64	V	-14.5
1328.100000	31.36	---	74.00	42.64	V	-14.5
2380.400000	---	27.25	54.00	26.75	V	-10.0
2380.400000	35.84	---	74.00	38.16	V	-10.0
3827.100000	---	31.67	54.00	22.33	V	-5.4
3827.100000	42.27	---	74.00	31.73	H	-5.4
7266.200000	---	39.53	54.00	14.47	V	4.0
7266.200000	46.17	---	74.00	27.83	V	4.0
12510.700000	---	41.70	54.00	12.30	H	8.5
12510.700000	50.32	---	74.00	23.68	V	8.5
17245.200000	53.51	---	68.20	14.69	V	13.0

18GHz-40GHz:

Pre-scan with 802.11a, 802.11n-HT20, 802.11n-HT40 modes of operation in the X,Y and Z axes of orientation, the worst case **802.11n20 mode (5745 MHz)** was recorded

Horizontal

Project No.RSHA240124001 Tester: Peter Wang
Date: 6.MAY.2024 19:58:52

Vertical

Project No.RSHA240124001 Tester: Peter Wang
Date: 6.MAY.2024 20:18:22

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

Band Edge Emissions Test (5150-5250MHz Band):

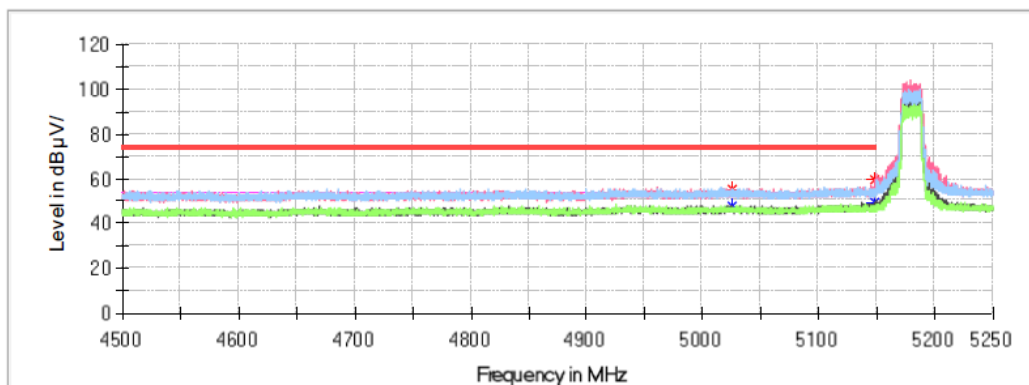
Note:

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.:	RSHA240124001
Test Mode:	5G WIFI Transmitting in 802.11a mode low channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Destine Hu

Full Spectrum

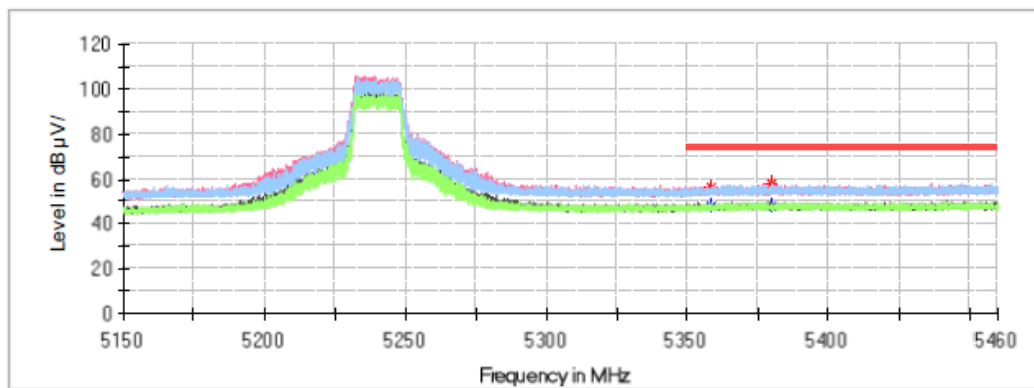
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5024.775000	---	47.81	54.00	6.19	H	7.9
5024.775000	55.27	---	74.00	18.73	H	7.9
5148.675000	---	49.33	54.00	4.67	V	8.2
5148.675000	59.31	---	74.00	14.69	V	8.2

Common Information

Project No.: RSHA240124001
Test Mode: 5G WIFI Transmitting in 802.11a mode high channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Destine Hu

Full Spectrum



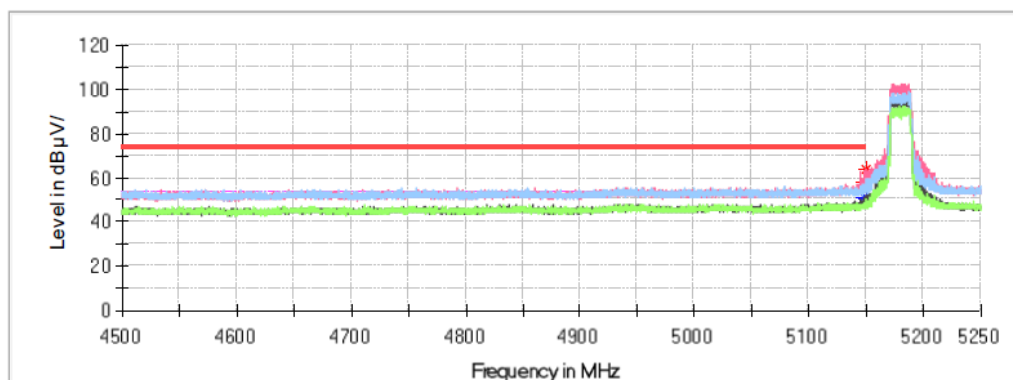
Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5358.661000	---	47.84	54.00	6.16	V	8.8
5358.661000	56.53	---	74.00	17.47	V	8.8
5379.834000	---	47.43	54.00	6.57	H	8.8
5379.834000	58.22	---	74.00	15.78	H	8.8

802.11n-HT20 Mode:**Common Information**

Project No.:	RSHA240124001
Test Mode:	5G WIFI Transmitting in 802.11n20 mode low channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Destine Hu

Full Spectrum

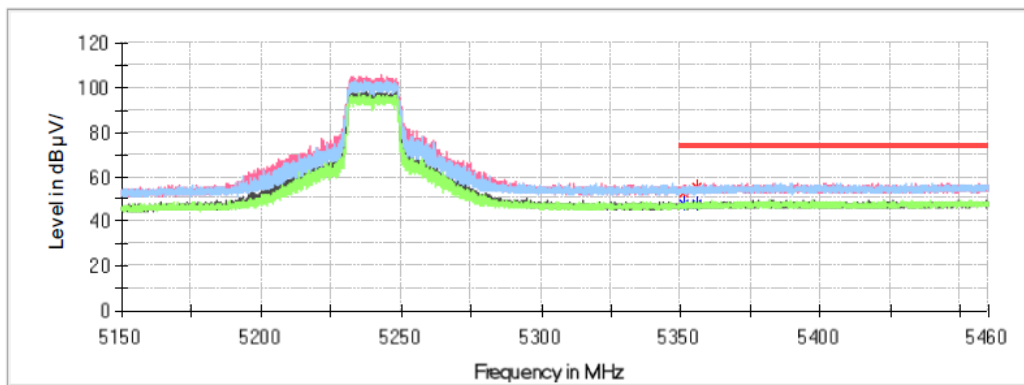
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	PoI	Corr. (dB/m)
5147.400000	---	50.90	54.00	3.10	V	8.2
5147.400000	58.26	---	74.00	15.74	V	8.2
5149.425000	---	50.28	54.00	3.72	H	8.2
5149.425000	64.13	---	74.00	9.87	H	8.2

Common Information

Project No.: RSHA240124001
Test Mode: 5G WIFI Transmitting in 802.11n20 mode high channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Destine Hu

Full Spectrum



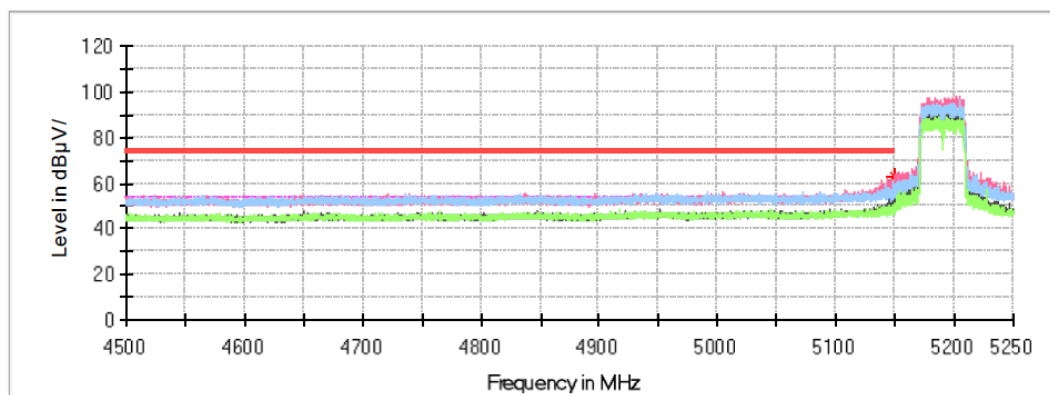
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5351.252000	---	47.64	54.00	6.36	V	8.7
5351.252000	53.21	---	74.00	20.79	V	8.7
5356.057000	55.01	---	74.00	18.99	H	8.7
5356.057000	---	47.61	54.00	6.39	H	8.7

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

Project No.: RSHA240124001
Test Mode: 5G WIFI Transmitting in 802.11n40 mode low channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Destine Hu

Full Spectrum

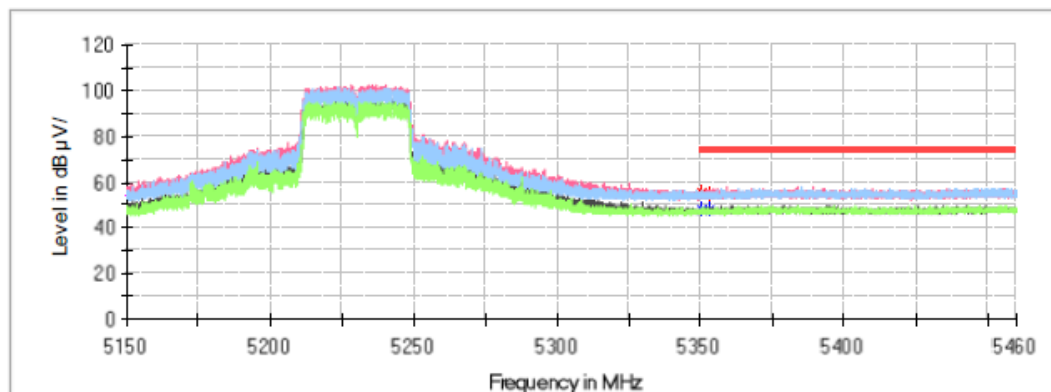
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5148.675000	59.76	---	74.00	14.24	V	8.2
5148.675000	---	53.93	54.00	0.07	V	8.2
5149.800000	62.84	---	74.00	11.16	H	8.2
5149.800000	---	52.50	54.00	1.50	H	8.2

Common Information

Project No.: RSHA240124001
Test Mode: 5G WIFI Transmitting in 802.11n40 mode high channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Destine Hu

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)
5350.725000	---	47.48	54.00	6.52	V	8.7
5350.725000	55.39	---	74.00	18.61	V	8.7
5353.205000	54.15	---	74.00	19.85	H	8.7
5353.205000	---	47.82	54.00	6.18	H	8.7

Band Edge Emissions Test (5250-5350MHz Band):

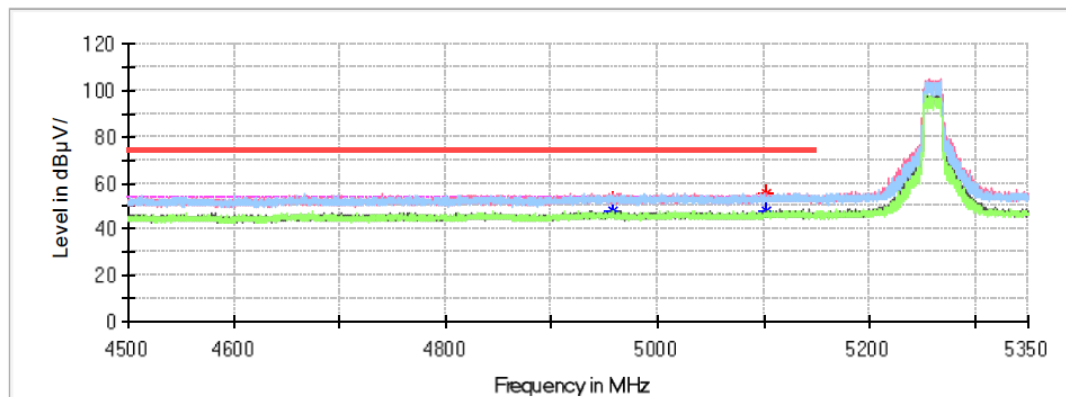
Note:

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.:	RSHA240124001
Test Mode:	5G WIFI Transmitting in 802.11a mode low channel
Standard:	FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer:	Destine Hu

Full Spectrum

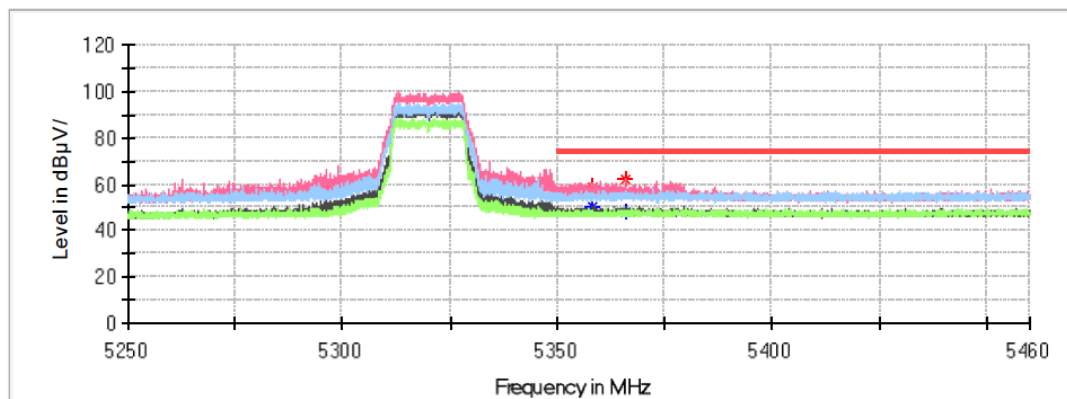
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
4957.470000	52.95	---	74.00	21.05	V	7.7
4957.470000	---	47.80	54.00	6.20	V	7.7
5102.905000	---	47.70	54.00	6.30	H	8.1
5102.905000	55.75	---	74.00	18.25	H	8.1

Common Information

Project No.: RSHA240124001
Test Mode: 5G WIFI Transmitting in 802.11a mode high channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Destine Hu

Full Spectrum



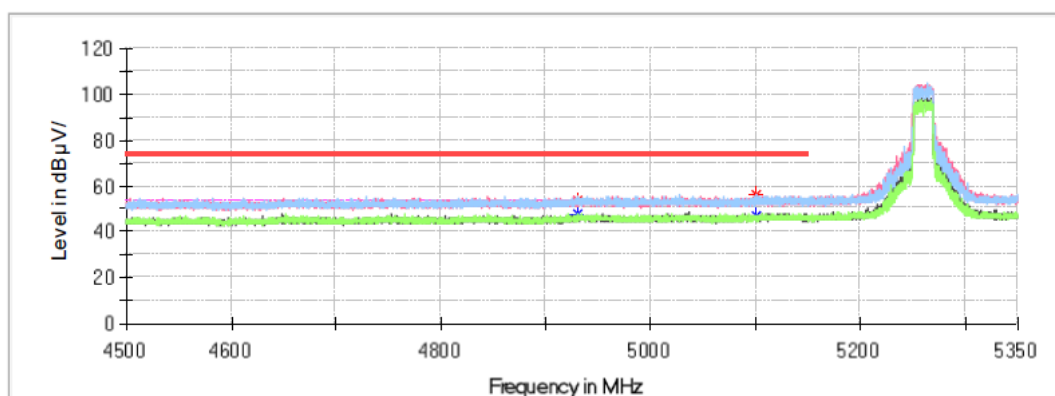
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5358.192000	---	50.63	54.00	3.37	V	8.8
5358.192000	58.53	---	74.00	15.47	V	8.8
5365.962000	---	47.84	54.00	6.16	H	8.8
5365.962000	61.77	---	74.00	12.23	H	8.8

802.11n-HT20 Mode:**Common Information**

Project No.: RSHA240124001
Test Mode: 5G WIFI Transmitting in 802.11n20 mode low channel
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Engineer: Destine Hu

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)
4931.375000	53.44	---	74.00	20.56	H	7.6
4931.375000	---	47.80	54.00	6.20	H	7.6
5101.120000	---	47.37	54.00	6.63	V	8.1
5101.120000	55.89	---	74.00	18.11	V	8.1