FCC PART 15.407

TEST REPORT

For

Heilongjiang Huida Technology Co., Ltd

Building 1, Science and Technology Innovation Headquarters, Shenzhen (Harbin) Industrial Park, No. 288, Zhigu Street, Songbei District, Harbin, China

FCC ID: 2BBNT-HD402

Report Type:	**Product Name:**
Original Report	Intelligent Remote Control

Report Number:	RSHA240322001-00C
Report Date:	2024-12-20
Reviewed By:	Jenny Yang
Approved By:	Oscar Ye
Prepared By:	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

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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	RSHA240322001-00C	R1V1	2024-12-20	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Heilongjiang Huida Technology Co., Ltd		
Tested Model:	HD402		
Product Name:	Intelligent Remote Control		
Power Supply:	DC 7.4V from battery and charging by DC 7.3V battery		
Operating Frequency:	B1: 5150-5250 MHz, B4: 5725-5850 MHz		
Maximum Average Output Power:	Mode:	5G Wi-Fi Band 1:	Band 4:
	802.11a:	7.37 dBm	7.36 dBm
	802.11n20:	7.09 dBm	7.07 dBm
	802.11n40:	7.89 dBm	6.92 dBm
	802.11ac20:	7.10 dBm	7.03 dBm
	802.11ac40:	7.97 dBm	7.36 dBm
	802.11ac80:	7.40 dBm	6.96 dBm
Channel Number:	B1: 7, B4: 8		
Channel Separation:	802.11a/ac/n20: 20 MHz, 802.11ac/n40: 40 MHz, 802.11ac80: 80 MHz		
Modulation Type:	OFDM		
Antenna Type:	PCB Antenna		
★Maximum Antenna Gain:	Band 1: 3.63 dBi Band 4: 2.48 dBi		

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: RSHA240322001-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2024-03-22.)

Objective

This type approval report is prepared for *Heilongjiang Huida Technology 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, 15.207, 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.

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/ac 20/n20 mode Channel 36, 40, 48 were tested.
802.11ac40/n40 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.
802.11ac40/n40 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: QRCT3

The worst case was performed under:

5150-5250 MHz:

Mode	Data Rate	Frequency (MHz)	★Power Level
802.11a	6 Mbps	5180	10
		5200	10
		5240	10
802.11ac20	MCS0	5180	10
		5200	10
		5240	10
802.11ac40	MCS0	5190	10
		5230	10
802.11ac80	MCS0	5210	10
802.11n20	MCS0	5180	10
		5200	10
		5240	10
802.11n40	MCS0	5190	10
		5230	10

5725-5850 MHz:

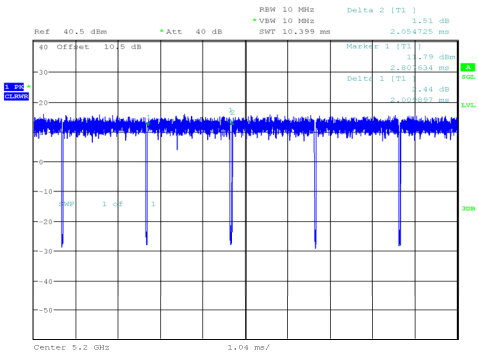
Mode	Data Rate	Frequency (MHz)	★Power Level
802.11a	6 Mbps	5745	13
		5785	12
		5825	11
802.11ac20	MCS0	5745	13
		5785	12
		5825	11
802.11ac40	MCS0	5755	13
		5795	12
802.11ac80	MCS0	5775	11
802.11n20	MCS0	5745	13
		5785	12
		5825	11
802.11n40	MCS0	5755	13
		5795	12

Note: The power level was declared by the applicant.

Duty Cycle

5150MHz-5250MHz Band:

802.11a mode



ProjectNo.:RSHA240322001 Tester:Neil Zhou
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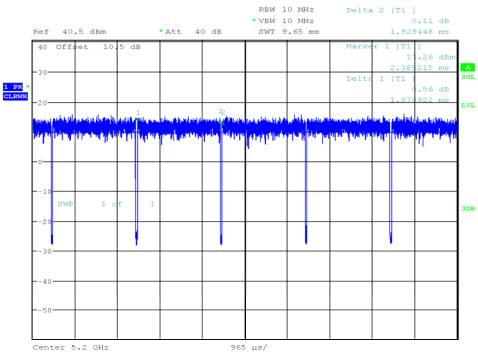
802.11n20 mode



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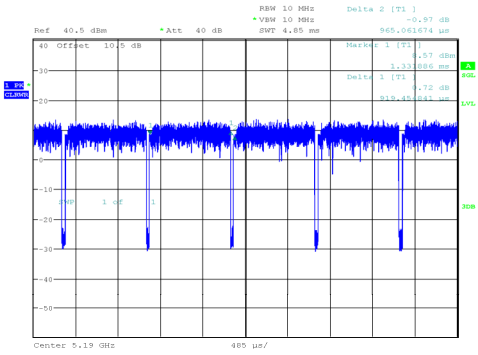
802.11n40 mode



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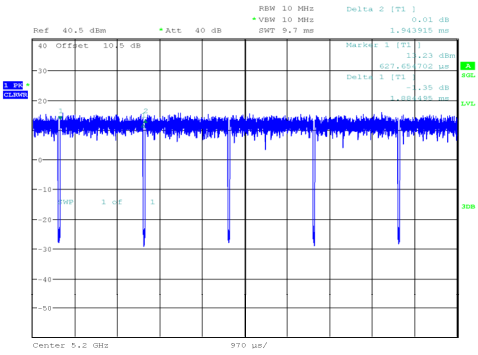
802.11ac20 mode



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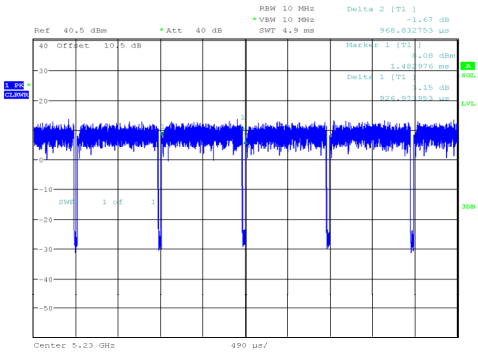
802.11ac40 mode



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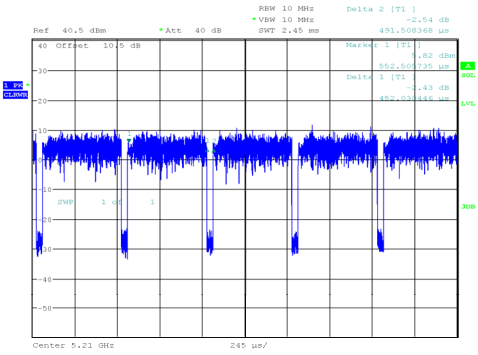
802.11ac80 mode



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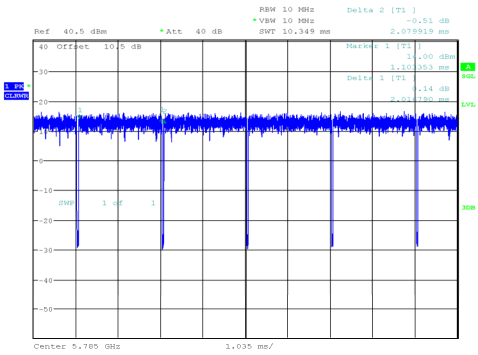
Note： Offset（10.5dB）= Attenuator(10dB)+Cable loss(0.5dB)

5725MHz-5850MHz Band:

802.11a mode



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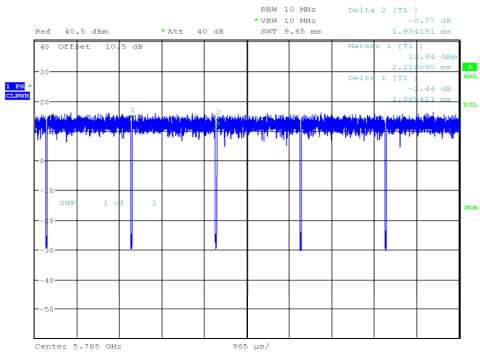
802.11n20 mode



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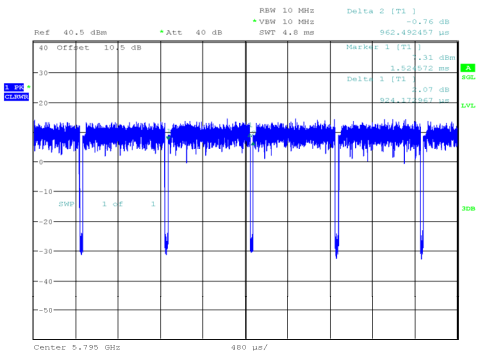
802.11n40 mode



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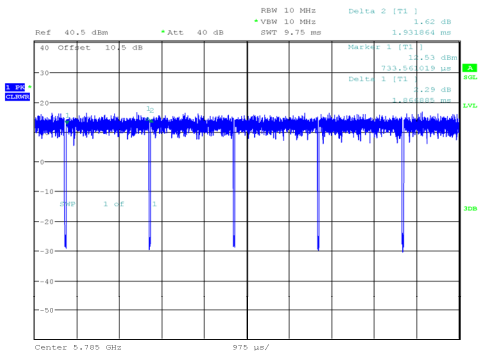
802.11ac20 mode



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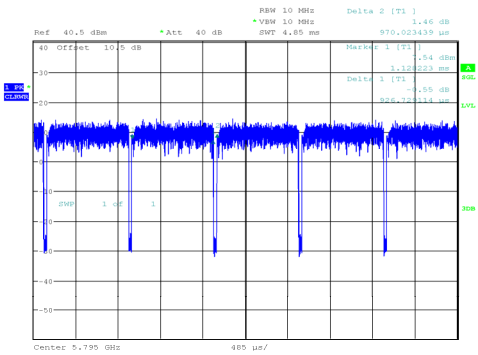
802.11ac40 mode



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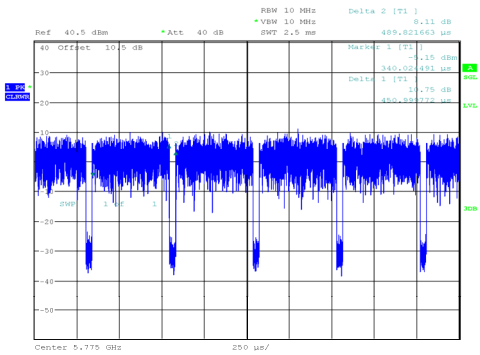
802.11ac80 mode



ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 4.JUL.2024 11:20:13

Note： Offset（10.5dB）= Attenuator(10dB)+Cable loss(0.5dB)

5.2G

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)
a_5200MHz_Chain 0	2.010	2.055	97.81	0.10
n20_5200MHz_Chain 0	1.871	1.929	96.99	0.13
n40_5190MHz_Chain 0	0.919	0.965	95.23	0.21
ac20_5200MHz_Chain 0	1.884	1.944	96.91	0.14
ac40_5230MHz_Chain 0	0.932	0.975	95.59	0.20
ac80_5210MHz_Chain 0	0.452	0.492	91.87	0.37

5.8G

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)
a_5785MHz_Chain 0	2.017	2.080	96.97	0.13
n20_5785MHz_Chain 0	1.885	1.934	97.47	0.11
n40_5795MHz_Chain 0	0.920	0.957	96.13	0.17
ac20_5785MHz_Chain 0	1.867	1.932	96.64	0.15
ac40_5795MHz_Chain 0	0.927	0.974	95.17	0.21
ac80_5775MHz_Chain 0	0.451	0.490	92.04	0.36

Equipment Modifications

No modification was made to the EUT.

Support Equipment List and Details

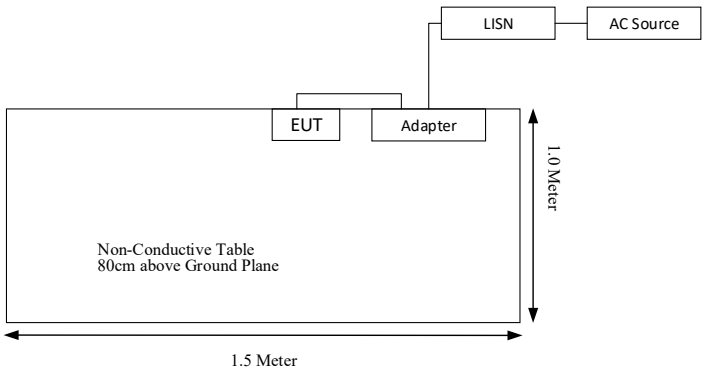
Manufacturer	Description	Model	Serial Number
Huntkey	Adapter	HK06520033-0C1	/

External I/O Cable

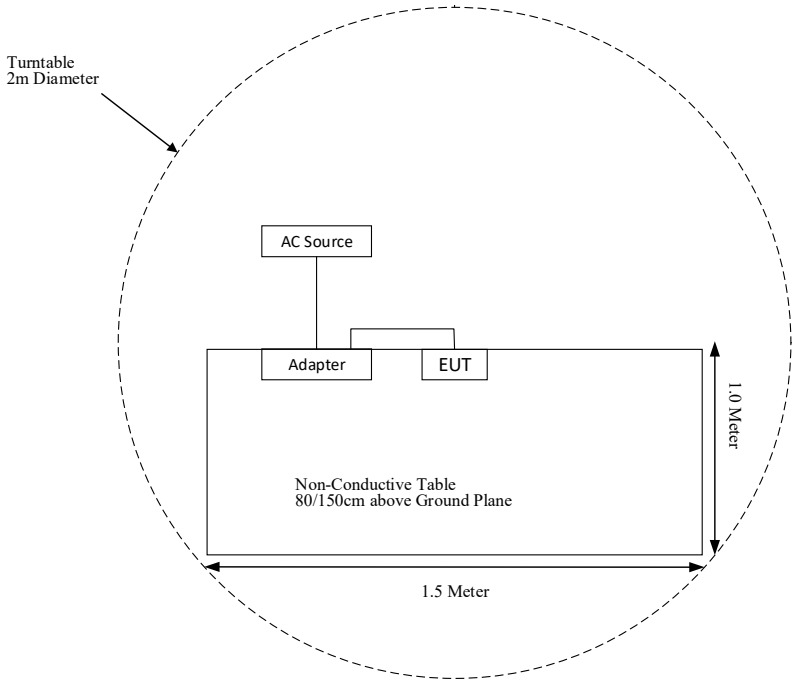
Cable Description	Length (m)	From Port	To
Power Cable	1.0	LISN/AC Source	Adapter
USB Cable	1.0	Adapter	EUT

Block Diagram of Test Setup

For Conducted Emissions:



For Radiated Emissions(Below 1GHz & Above 1 GHz):



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	Broadband Antenna	JB3	A090314-1	2023-11-11	2024-11-10
Narda	6dB Attenuator	773-6	10690812-2-1	2023-11-11	2024-11-10
ETS-LINDGREN	Loop Antenna	6512	108100	2023-11-09	2024-11-08
Sonoma Instrument	Pre-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
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	2516	2023-12-08	2024-12-07
A.H.Systems, inc	Amplifier	PAM-0118P	512	2024-04-25	2025-04-24
SELECTOR	Amplifier	EM18G40G	060726	2024-04-25	2025-04-24
A.H.Systems,inc	Amplifier	PAM-0118P	512	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	2023-08-15	2024-08-14
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	2024-04-25	2025-04-24
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
MICRO-COAX	Coaxial Cable	Cable-13	013	2024-04-25	2025-04-24
RF Conducted Test					
Rohde & Schwarz	Spectrum Analyzer	FSU26	200103	2024-04-24	2025-04-23
Narda	Attenuator	10dB	010	2024-04-23	2025-04-22
Anritsu	Power Sensor	MA24418A	12621	2023-09-27	2024-09-26
Conducted Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR3	102154	2024-04-23	2025-04-22
Rohde & Schwarz	LISN	ENV216	101115	2024-04-23	2025-04-22
Audix	Test Software	e3	V9	N/A	N/A
Narda	Attenuator	10 dB	N/A	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-15	015	2024-04-23	2025-04-22

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)	Conducted Transmitter Output Power	Compliant
§15.407(a)	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
PCB Antenna	5150~5250 MHz	3.63 dBi	50Ω
	5725~5850 MHz	2.48 dBi	50Ω

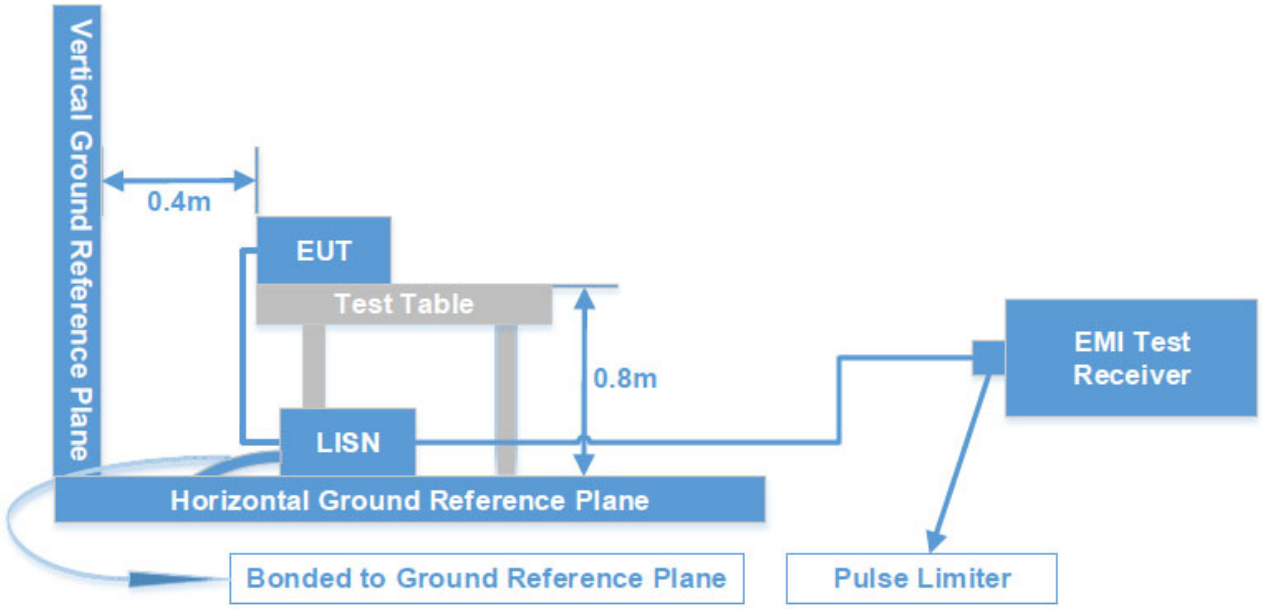
Result: Compliant.

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

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 or adapte Injector 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:

Factor (dB) = LISN VDF (dB) + Cable Loss (dB) + Transient Limiter Attenuation (dB)
Level (dBμV) = Read level (dBμV) + Factor (dB)

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:

Over Limit (dB) = Level (dBμV) - Limit (dBμV)

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.

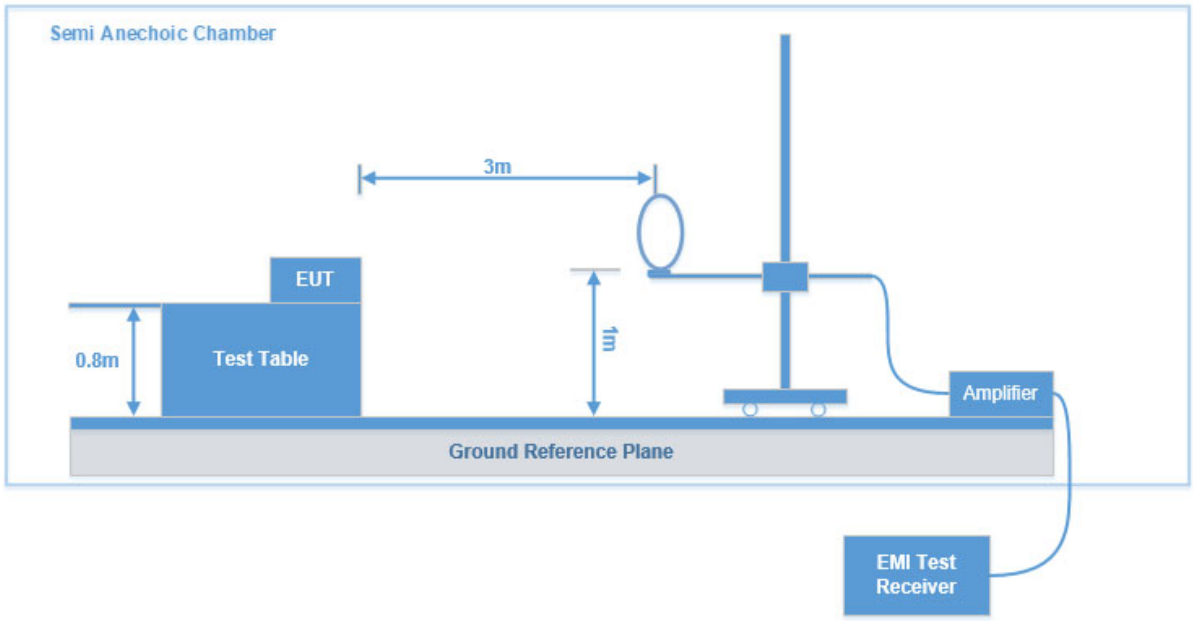
For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of –27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to 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 frenquency or frequencies above 1000MHz,the radiated emission limits are based on the use of measurement instrunmentation employing an average detector function. Unless otherwise specified, measurements above 1000MHz shall be performed using a minimum resolution bandwidth of 1MHz.

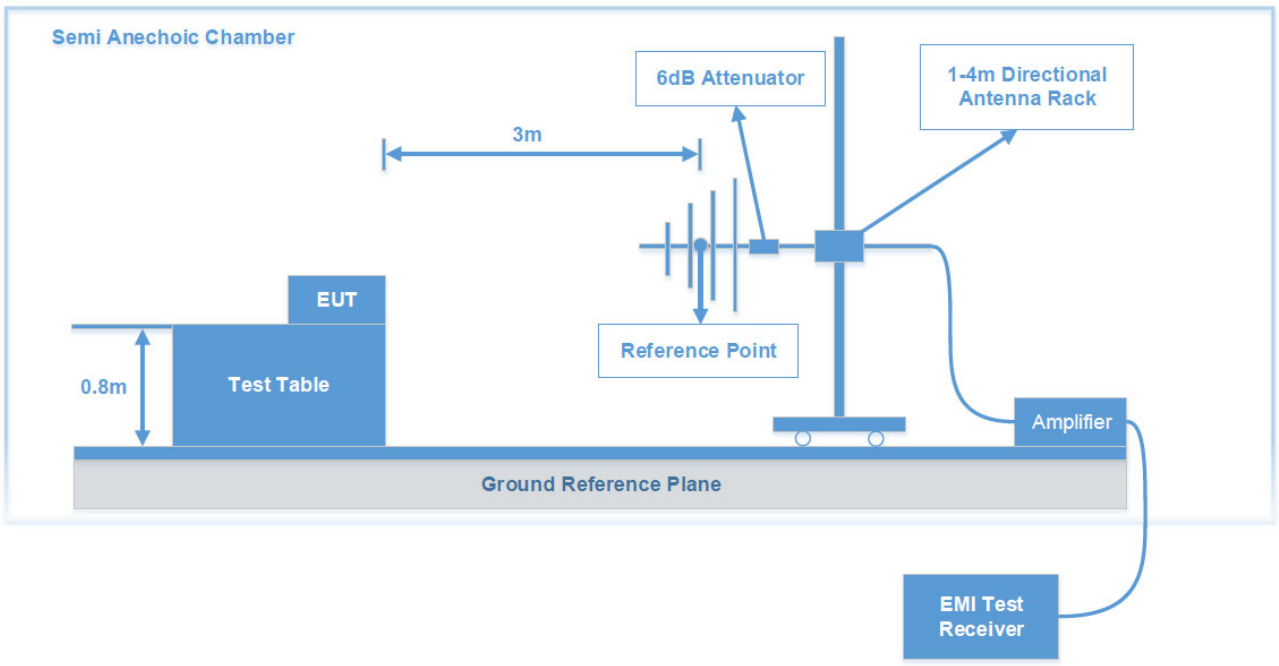
According to 789033 D02 General UNII Test Procedures New Rules v02r01, emission shall be computed as: E [dBµV/m] = EIRP [dBm] + 95.2, for d = 3 meters.

Test System Setup

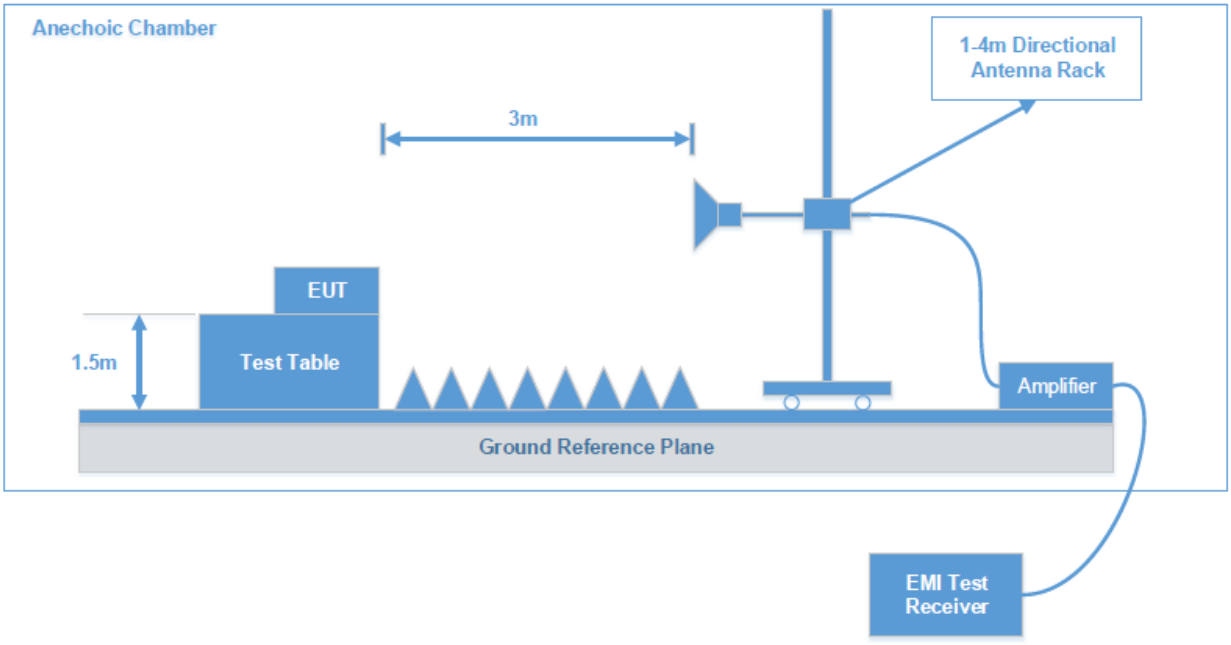
9 kHz - 30 MHz:



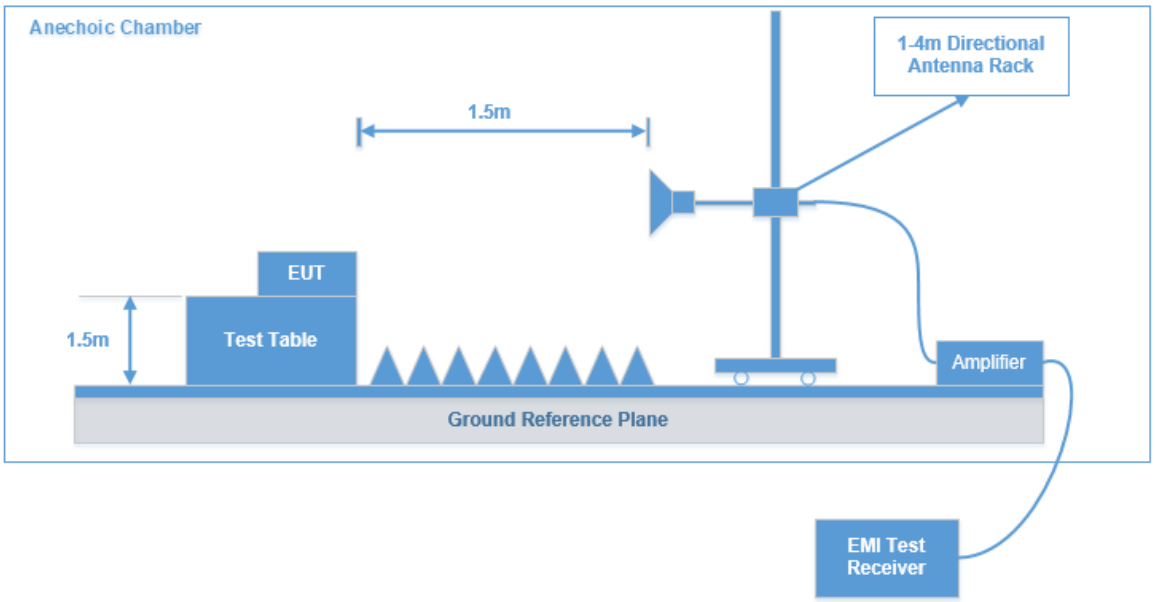
30 MHz - 1 GHz:



1 GHz - 18 GHz:



18 GHz - 40 GHz:



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 80dBμV/m（Peak）and 60dBμV/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

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 (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)

Note: The QuasiPeak (dBμV/m), MaxPeak (dBμV/m), Average (dBμV/m) which shown in the data table are all Corrected Amplitude.

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

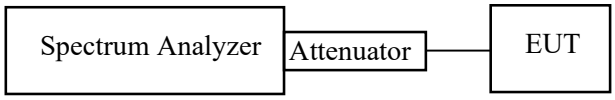
1. Emission Bandwidth (EBW)
a) Set RBW = approximately 1% of the emission bandwidth.
b) Set the VBW > RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. 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) ≥ 3 × RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.

g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

3. 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).



Note： Offset（10.5dB）= Attenuator(10dB)+Cable loss(0.5dB)

Test Data: See Appendix

FCC §15.407(a) – CONDUCTED TRANSMITTER OUTPUT POWER

Applicable Standard

According to §15.407(a)(1)

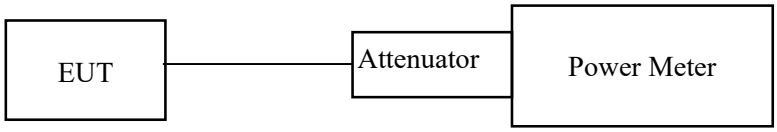
(iv) For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. 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) - 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.

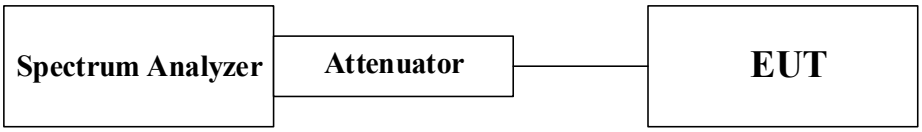
Test Procedure

The measurements are base on C63.10:2013

Duty cycle ≥98% ,Method SA-1 should be applied.

Duty cycle <98%, duty cycle variations are less than ±2%,Method SA-2 should be applied.

Duty cycle <98%, duty cycle variations exceed ±2%,Method SA-3 should be applied.



Note： Offset（10.5dB）= Attenuator(10dB)+Cable loss(0.5dB)

Test Data: See Appendix

EUT PHOTOGRAPHS

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

TEST SETUP PHOTOGRAPHS

Please refer to the attachment APPENDIX D - TEST SETUP PHOTOGRAPHS.

APPENDIX - TEST DATA

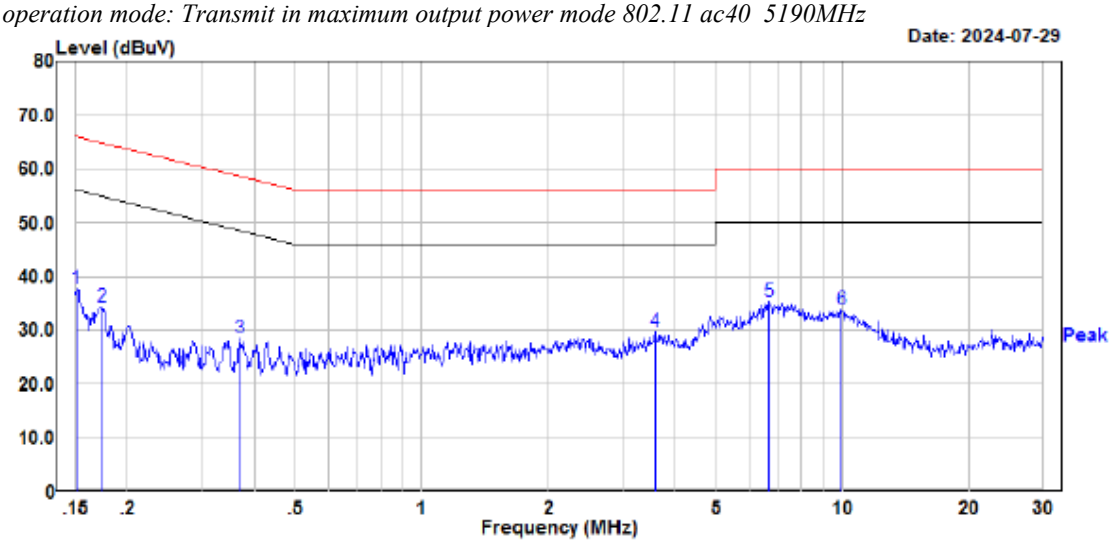
Environmental Conditions & Test Information

Test Item:	UNWANTED EMISSIONS & RESTRICTED FREQUENCY BANDS			Duty Cycle	AC LINE CONDUCTED EMISSIONS
	9 kHz - 1GHz	1 GHz – 18 GHz	18 GHz - 40 GHz		
Test Date:	2024-04-29 & 2024-07-13	2024-07-13	2024-07-13	2024-07-03 to 2024-07-04	2024-07-29
Temperature:	25.5 ℃ - 26 ℃	25.5 ℃	25.5 ℃	24.9 - 25 ℃	28.1 ℃
Relative Humidity:	52 % - 55 %	52 %	52 %	42 - 53 %	56 %
ATM Pressure:	100.5kPa – 101.0kPa	100.5kPa	100.5kPa	100.0 - 100.6 kPa	101.1kPa
Test Result:	Pass	Pass	Pass	/	Pass
Test Engineer:	Leah Li	Klein Zhu & Peter Wang	Hugh Wu	Neil Zhou	Leah Li

Test Item:	EMISSION BANDWIDTH	CONDUCTED TRANSMITTER OUTPUT POWER	POWER SPECTRAL DENSITY
Test Date:	2024-08-27	2024-08-27	2024-08-27
Temperature:	23.4 ℃	23.4 ℃	23.4 ℃
Relative Humidity:	38 %	38 %	38 %
ATM Pressure:	100.2 kPa	100.2 kPa	100.2 kPa
Test Result:	Pass	Pass	Pass
Test Engineer:	Neil Zhou	Neil Zhou	Neil Zhou

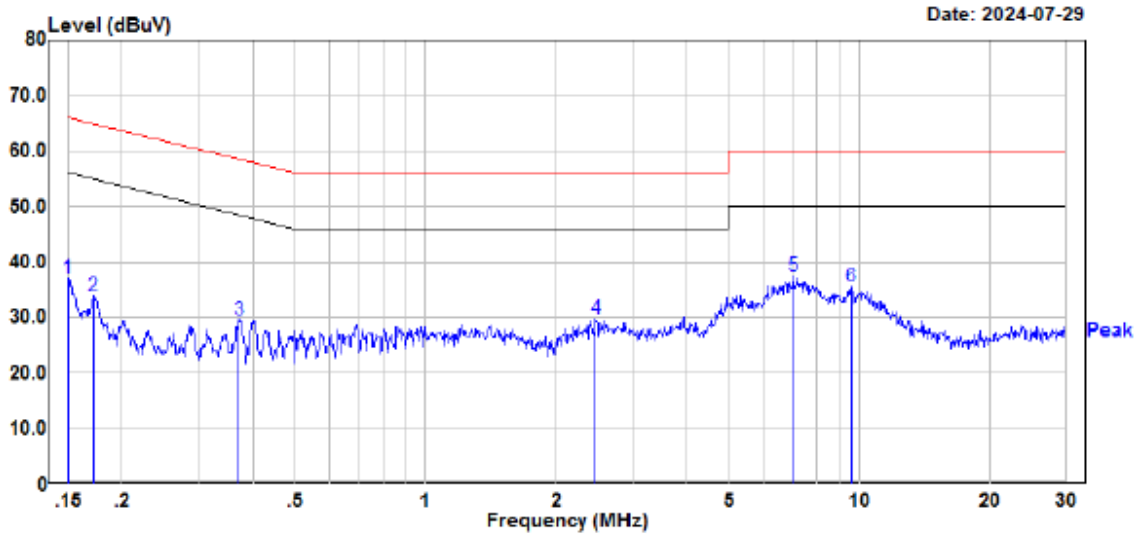
AC LINE CONDUCTED EMISSIONS

EUT operation mode: Transmit in maximum output power mode 802.11 ac40 5190MHz



Site : CE
Condition : limit\FCC PART 15.207
: DET:Peak
Project No. : RSHA240322001
Model : HD402
Phase : L
Voltage : 120V/60Hz
Mode : Transmit in 802.11 ac40 5190MHz
Test Equipment : ENV216,ESR
Temperature : 28.1℃
Humidity : 56%
Atmospheric pressure: 101.1kPa
Test Engineer : Leah Li

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.151	17.61	20.12	37.73	65.96	-28.23	Peak
2	0.173	14.13	20.11	34.24	64.80	-30.56	Peak
3	0.370	8.21	20.20	28.41	58.51	-30.10	Peak
4	3.589	9.57	20.24	29.81	56.00	-26.19	Peak
5	6.692	15.01	20.19	35.20	60.00	-24.80	Peak
6	9.971	13.90	20.01	33.91	60.00	-26.09	Peak



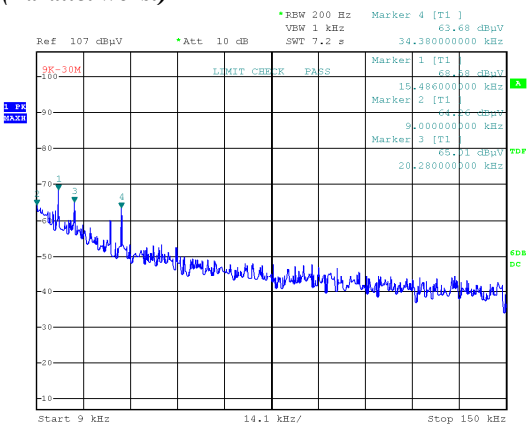
Site : CE
Condition : limit\FCC PART 15.207
: DET:Peak
Project No. : RSHA240322001
Model : HD402
Phase : N
Voltage : 120V/60Hz
Mode : Transmit in 802.11 ac40 5190MHz
Test Equipment : ENV216,ESR
Temperature : 28.1℃
Humidity : 56%
Atmospheric pressure: 101.1kPa
Test Engineer : Leah Li

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.150	16.80	20.12	36.92	66.00	-29.08	Peak
2	0.172	13.63	20.11	33.74	64.88	-31.14	Peak
3	0.372	9.28	20.20	29.48	58.47	-28.99	Peak
4	2.470	9.45	20.19	29.64	56.00	-26.36	Peak
5	7.034	17.32	20.18	37.50	60.00	-22.50	Peak
6	9.581	15.40	20.03	35.43	60.00	-24.57	Peak

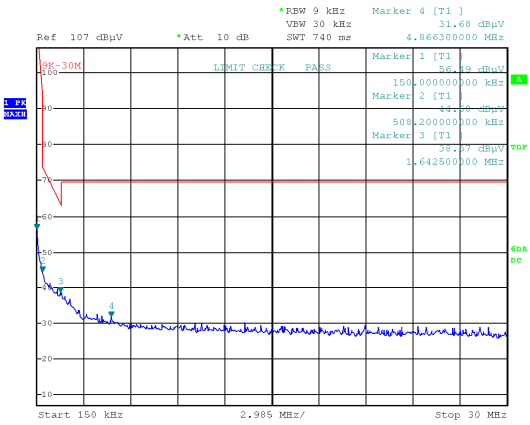
TRANSMITTER UNWANTED EMISSIONS & RESTRICTED FREQUENCY BANDS

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: *transmit in maximum output power mode 802.11ac40 5190MHz*
(Parallel worst)



Project No.RSHA240322001 Tester:Leah Li
Date: 29.APR.2024 14:38:51



Project No.RSHA240322001 Tester:Leah Li
Date: 29.APR.2024 14:44:05

9 kHz - 150 kHz

Frequency (MHz)	Corrected Amplitude (dBµV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBµV/m) @3m	Margin (dB)
0.009000	64.26	PK	57.00	128.52	64.26
0.015486	68.68	PK	52.87	123.81	55.13
0.020280	65.01	PK	49.92	121.46	56.45
0.034380	63.68	PK	46.06	116.88	53.20

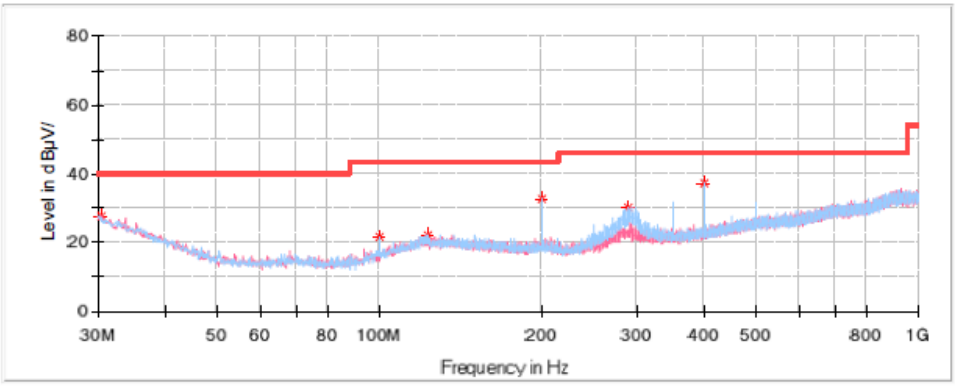
150 kHz - 30 MHz

Frequency (MHz)	Corrected Amplitude (dBµV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBµV/m) @3m	Margin (dB)
0.15000	56.49	PK	50.90	104.08	47.59
0.50820	44.60	PK	23.00	73.48	28.88
1.64250	38.57	PK	9.75	63.29	24.72
4.86630	31.68	PK	9.73	69.54	37.86

30MHz-1GHz(5150-5250MHz Band): 802.11ac40 (worst case)
Low Channel: 5190 MHz

Common Information

Project No:	RSHA240322001
Test Mode:	Transmitting in 802.11ac40 mode 5190 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Leah Li



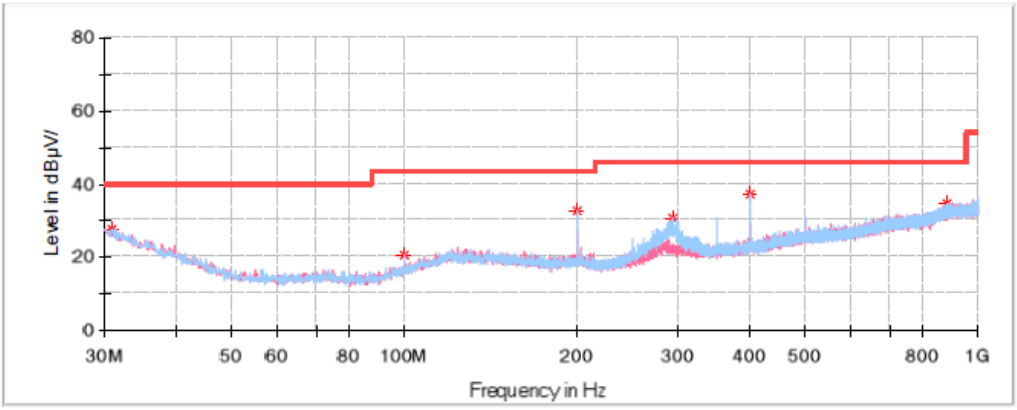
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.485000	27.78	40.00	12.22	V	-4.8
99.961250	21.57	43.50	21.93	H	-14.8
122.998750	21.97	43.50	21.53	H	-11.3
199.992500	32.82	43.50	10.68	H	-12.5
289.596250	30.21	46.00	15.79	H	-11.0
400.055000	37.26	46.00	8.74	H	-8.6

High Channel: 5230 MHz

Common Information

Project No:	RSHA240322001
Test Mode:	Transmitting in 802.11ac40 mode 5230 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Leah Li



Critical_Freqs

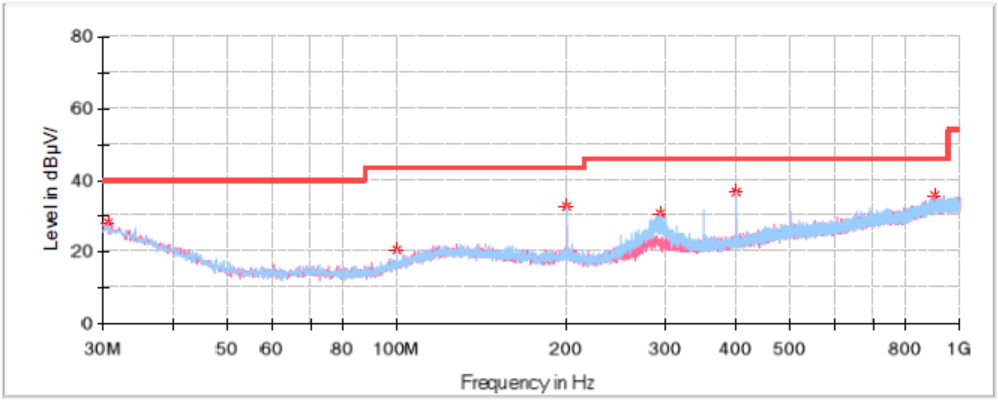
Frequency (MHz)	MaxPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.970000	27.77	40.00	12.23	H	-5.1
99.961250	20.72	43.50	22.78	H	-14.8
199.992500	32.93	43.50	10.57	H	-12.5
292.627500	30.84	46.00	15.16	H	-11.0
400.055000	37.13	46.00	8.87	H	-8.6
880.568750	34.80	46.00	11.20	H	0.8

30MHz-1GHz(5725-5850MHz Band): 802.11n40 (worst case)

Low Channel: 5755 MHz

Common Information

Project No:	RSHA240322001
Test Mode:	Transmitting in 802.11ac40 mode 5755 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Leah Li



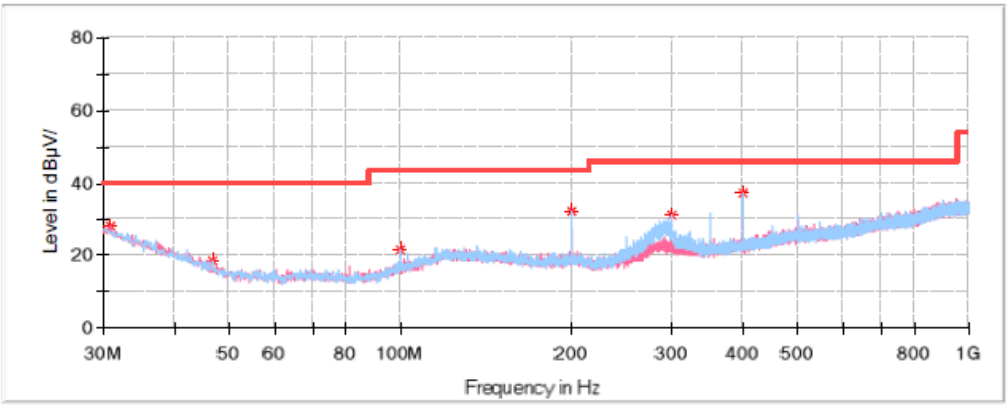
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.606250	28.20	40.00	11.80	V	-4.9
99.961250	20.51	43.50	22.99	H	-14.8
199.992500	32.70	43.50	10.80	H	-12.5
293.233750	30.67	46.00	15.33	H	-11.0
399.933750	36.87	46.00	9.13	H	-8.6
899.241250	35.54	46.00	10.46	V	1.3

High Channel: 5795 MHz

Common Information

Project No:	RSHA240322001
Test Mode:	Transmitting in 802.11ac40 mode 5795 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)
30.970000	28.04	40.00	11.96	V	-5.1
46.853750	18.51	40.00	21.49	H	-15.0
99.961250	21.81	43.50	21.69	H	-14.8
199.992500	32.41	43.50	11.09	H	-12.5
300.023750	30.95	46.00	15.05	H	-11.0
400.055000	37.17	46.00	8.83	H	-8.6

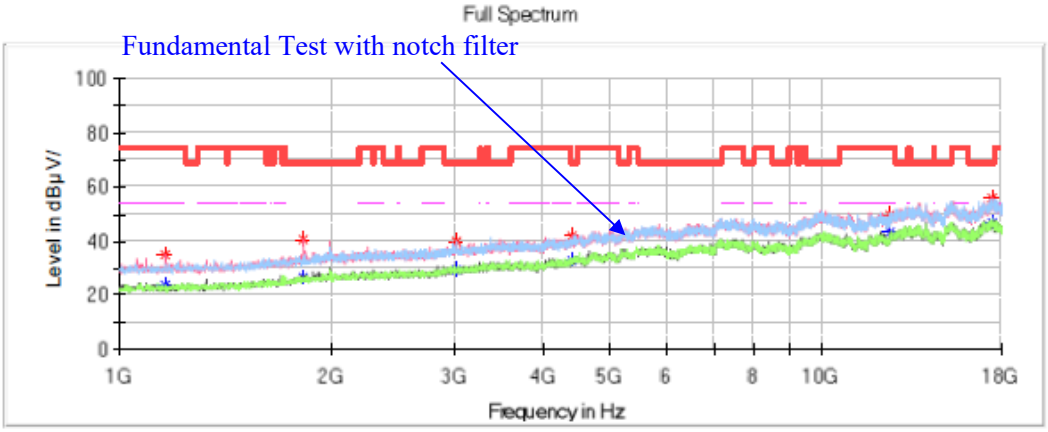
1GHz - 18GHz(5150-5250MHz Band):

802.11a Mode:

Low Channel: 5180MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11a mode 5180 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Peter Wang



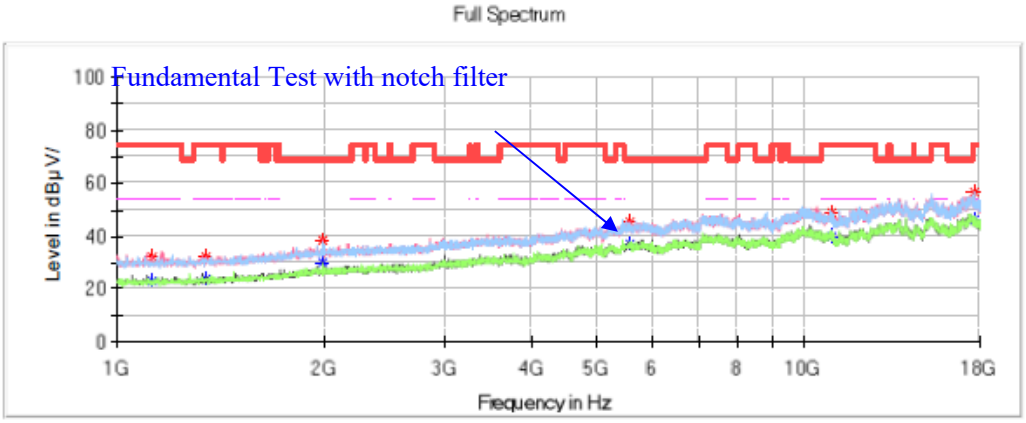
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1161.500000	---	23.70	54.00	30.30	V	-15.0
1161.500000	34.99	---	74.00	39.01	V	-15.0
1827.900000	40.27	---	68.20	27.93	V	-11.7
3017.900000	39.77	---	68.20	28.43	H	-8.0
4415.300000	41.81	---	68.20	26.39	V	-4.0
12493.700000	49.97	---	74.00	24.03	V	8.4
12493.700000	---	43.52	54.00	10.48	V	8.4
17439.000000	55.62	---	68.20	12.58	V	13.5

Middle Channel: 5200MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11a mode 5200 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Peter Wang



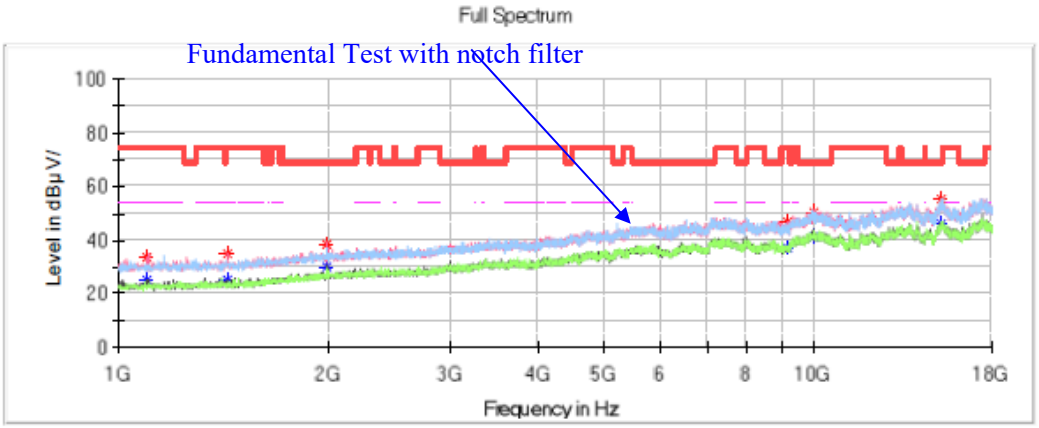
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1125.800000	---	22.96	54.00	31.04	V	-15.1
1125.800000	32.35	---	74.00	41.65	V	-15.1
1350.200000	---	23.81	54.00	30.19	V	-14.4
1350.200000	32.21	---	74.00	41.79	V	-14.4
1992.800000	38.19	---	68.20	30.01	V	-10.6
5576.400000	45.18	---	68.20	23.02	V	0.7
10938.200000	---	39.97	54.00	14.03	V	6.4
10938.200000	49.15	---	74.00	24.85	V	6.4
17639.600000	56.84	---	68.20	11.36	H	13.0

High Channel: 5240MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11a mode 5240 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)
1096.900000	---	25.06	54.00	28.94	V	-15.2
1096.900000	33.75	---	74.00	40.25	V	-15.2
1433.500000	34.69	---	68.20	33.51	V	-14.1
1991.100000	38.30	---	68.20	29.90	V	-10.6
9154.900000	---	37.17	54.00	16.83	V	4.4
9154.900000	46.94	---	74.00	27.06	V	4.4
10001.500000	50.24	---	68.20	17.96	V	7.8
15240.900000	55.45	---	68.20	12.75	H	10.9

802.11n20 Mode:

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
Low Channel: 5180MHz						
1997.900000	39.89	---	68.20	28.31	V	-10.6
4357.500000	---	33.37	54.00	20.63	V	-4.2
4357.500000	40.55	---	74.00	33.45	V	-4.2
7140.400000	49.09	---	68.20	19.11	H	3.9
9974.300000	51.15	---	68.20	17.05	H	7.7
12412.100000	---	39.92	54.00	14.08	H	8.2
12412.100000	47.64	---	74.00	26.36	H	8.2
17408.400000	55.38	---	68.20	12.82	V	13.4
Middle Channel: 5200MHz						
1329.800000	---	24.87	54.00	29.13	V	-14.5
1329.800000	33.65	---	74.00	40.35	V	-14.5
1996.200000	39.51	---	68.20	28.69	V	-10.6
3172.600000	38.43	---	68.20	29.77	V	-7.4
7155.700000	48.88	---	68.20	19.32	V	3.9
14001.600000	51.60	---	68.20	16.60	V	10.5
High Channel: 5240MHz						
1598.400000	37.02	---	74.00	36.98	V	-13.3
1598.400000	---	30.86	54.00	23.14	V	-13.3
2278.400000	36.14	---	74.00	37.86	V	-10.1
2278.400000	---	27.97	54.00	26.03	V	-10.1
3723.400000	39.50	---	74.00	34.50	V	-5.6
3723.400000	---	31.75	54.00	22.25	H	-5.6
6145.900000	43.80	---	68.20	24.40	H	0.4
12492.000000	49.84	---	74.00	24.16	H	8.4
12492.000000	---	43.65	54.00	10.35	H	8.4
17639.600000	56.09	---	68.20	12.11	V	13.0

802.11n40 Mode:

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
Low Channel: 5190MHz						
1091.800000	34.38	---	74.00	39.62	V	-15.2
1091.800000	---	24.83	54.00	29.17	V	-15.2
1598.400000	36.58	---	74.00	37.42	V	-13.3
1598.400000	---	29.99	54.00	24.01	V	-13.3
2990.700000	40.13	---	68.20	28.07	V	-8.1
8021.000000	47.88	---	68.20	20.32	V	3.8
13360.700000	48.70	---	74.00	25.30	V	10.5
13360.700000	---	43.86	54.00	10.14	V	10.5
17636.200000	55.52	---	68.20	12.68	V	13.1
High Channel: 5230MHz						
1324.700000	34.10	---	74.00	39.90	V	-14.5
1324.700000	---	24.27	54.00	29.73	V	-14.5
1994.500000	37.68	---	68.20	30.52	V	-10.6
3798.200000	38.97	---	74.00	35.03	V	-5.5
3798.200000	---	30.62	54.00	23.38	V	-5.5
7123.400000	48.35	---	68.20	19.85	H	3.9
9940.300000	50.56	---	68.20	17.64	V	7.6
12498.800000	49.56	---	74.00	24.44	V	8.4
12498.800000	---	43.68	54.00	10.32	H	8.4

802.11ac20 Mode:

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
Low Channel: 5180MHz						
1992.800000	39.62	---	68.20	28.58	V	-10.6
2535.100000	36.66	---	68.20	31.54	V	-9.6
4831.800000	---	34.43	54.00	19.57	H	-2.1
4831.800000	43.18	---	74.00	30.82	H	-2.1
7667.400000	---	39.39	54.00	14.61	H	4.1
7667.400000	47.49	---	74.00	26.51	V	4.1
10270.100000	50.83	---	68.20	17.37	V	7.5
15297.000000	54.66	---	68.20	13.54	H	11.1
Middle Channel: 5200MHz						
1328.100000	---	25.75	54.00	28.25	H	-14.5
1328.100000	35.13	---	74.00	38.87	H	-14.5
1918.000000	35.96	---	68.20	32.24	V	-11.1
3386.800000	39.74	---	68.20	28.46	H	-6.5
5720.900000	44.99	---	68.20	23.21	H	0.6
13382.800000	---	44.58	54.00	9.42	V	10.5
13382.800000	50.10	---	74.00	23.90	V	10.5
16974.900000	56.01	---	68.20	12.19	H	12.2
High Channel: 5240MHz						
1280.500000	31.34	---	68.20	36.86	H	-14.6
1991.100000	36.99	---	68.20	31.21	V	-10.6
2992.400000	39.06	---	68.20	29.14	V	-8.0
7951.300000	48.93	---	68.20	19.27	H	3.9
11703.200000	---	41.71	54.00	12.29	H	7.1
11703.200000	50.90	---	74.00	23.10	H	7.1
17326.800000	55.24	---	68.20	12.96	V	13.2
15096.400000	51.18	---	68.20	17.02	V	10.5

802.11ac40 Mode:

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
Low Channel: 5190MHz						
1484.500000	---	22.75	54.00	31.25	V	-14.0
1484.500000	31.81	---	74.00	42.19	V	-14.0
1994.500000	36.99	---	68.20	31.21	V	-10.6
7573.900000	---	39.66	54.00	14.34	V	4.1
7573.900000	50.24	---	74.00	23.76	V	4.1
11648.800000	---	41.44	54.00	12.56	V	7.2
11648.800000	51.82	---	74.00	22.18	V	7.2
14499.700000	---	43.83	54.00	10.17	V	8.1
14499.700000	49.65	---	74.00	24.35	V	8.1
17335.300000	55.47	---	68.20	12.73	H	13.2
High Channel: 5230MHz						
1202.300000	31.98	---	74.00	42.02	H	-14.9
1202.300000	---	23.08	54.00	30.92	H	-14.9
1991.100000	37.55	---	68.20	30.65	V	-10.6
3252.500000	38.32	---	68.20	29.88	H	-7.1
6769.800000	46.33	---	68.20	21.87	V	2.4
14496.300000	49.80	---	74.00	24.20	H	8.2
14496.300000	---	43.99	54.00	10.01	H	8.2
17643.000000	55.54	---	68.20	12.66	H	13.0

802.11ac80 Mode:

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
Channel: 5210MHz						
1273.700000	33.89	---	68.20	34.31	H	-14.6
1992.800000	41.31	---	68.20	26.89	V	-10.6
3703.000000	---	31.43	54.00	22.57	V	-5.7
3703.000000	40.04	---	74.00	33.96	V	-5.7
7443.000000	---	40.46	54.00	13.54	V	4.1
7443.000000	48.38	---	74.00	25.62	V	4.1
14005.000000	51.90	---	68.20	16.30	V	10.5
17734.800000	---	44.89	54.00	9.11	H	12.6
17734.800000	54.25	---	74.00	19.75	H	12.6

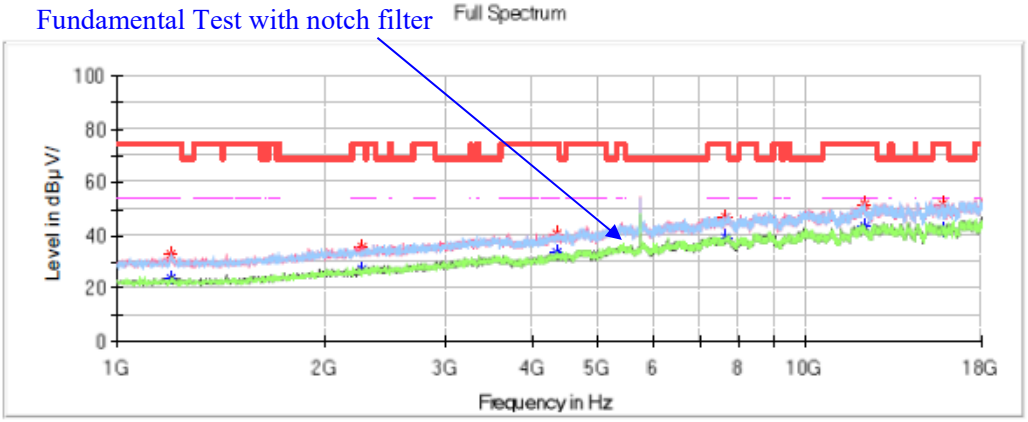
1GHz-18GHz(5725-5850MHz Band):
802.11a Mode:

Low Channel: 5745MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11a mode 5745 channel
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

Fundamental Test with notch filter



Critical_Freqs

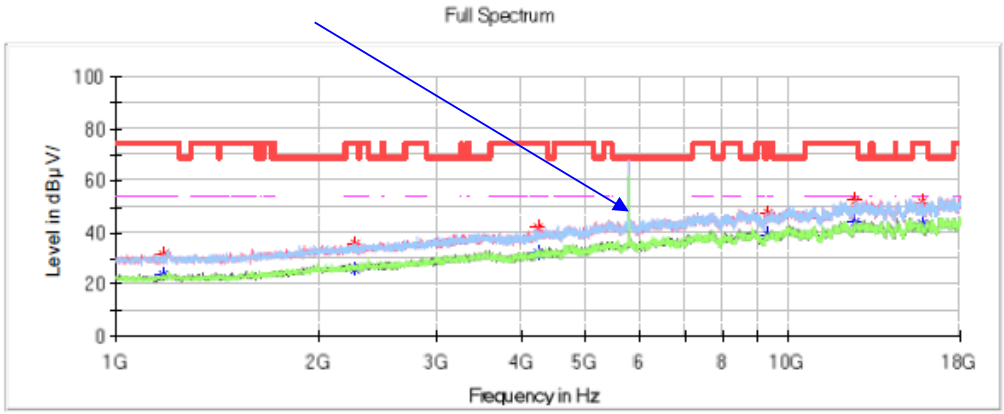
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1193.800000	---	23.51	54.00	30.49	H	-15.2
1193.800000	32.85	---	74.00	41.15	H	-15.2
2263.100000	---	27.61	54.00	26.39	V	-10.9
2263.100000	35.55	---	74.00	38.45	V	-10.9
4359.200000	---	33.67	54.00	20.33	V	-4.7
4359.200000	40.42	---	74.00	33.58	V	-4.7
7658.900000	---	38.98	54.00	15.02	H	3.9
7658.900000	47.17	---	74.00	26.83	H	3.9
12165.600000	---	43.20	54.00	10.80	H	9.2
12165.600000	52.08	---	74.00	21.92	H	9.2
15815.500000	---	41.97	54.00	12.03	H	9.6
15815.500000	51.76	---	74.00	22.24	H	9.6

Middle Channel: 5785MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11a mode 5785 channel
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

Fundamental Test with notch filter



Critical_Freqs

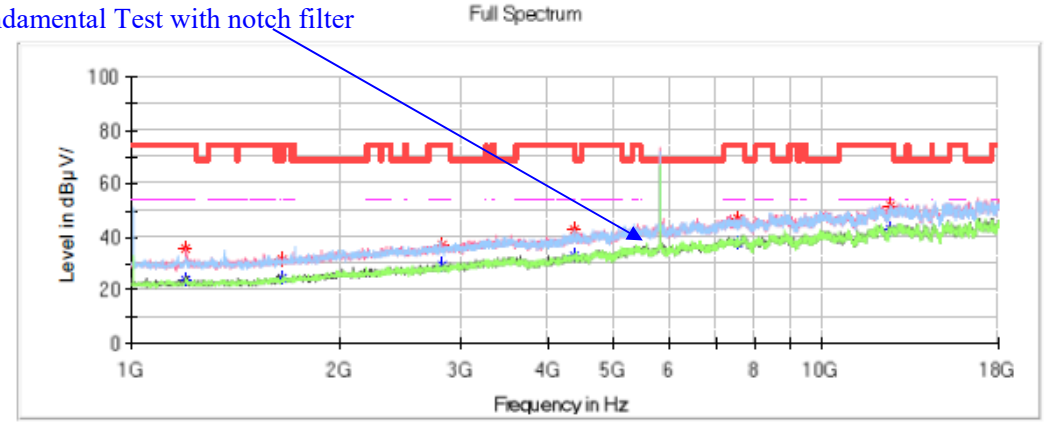
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1171.700000	---	24.08	54.00	29.92	H	-15.2
1171.700000	31.74	---	74.00	42.26	H	-15.2
2271.600000	---	26.20	54.00	27.80	V	-10.9
2271.600000	35.35	---	74.00	38.65	V	-10.9
4235.100000	---	32.35	54.00	21.65	V	-5.1
4235.100000	41.73	---	74.00	32.27	V	-5.1
9353.800000	---	39.01	54.00	14.99	V	5.4
9353.800000	47.22	---	74.00	26.78	V	5.4
12592.300000	---	43.80	54.00	10.20	V	9.7
12592.300000	52.48	---	74.00	21.52	V	9.7
15807.000000	---	43.11	54.00	10.89	H	9.6
15807.000000	51.53	---	74.00	22.47	H	9.6

High Channel: 5825MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11a mode 5825 channel
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

Fundamental Test with notch filter



Critical_Freqs

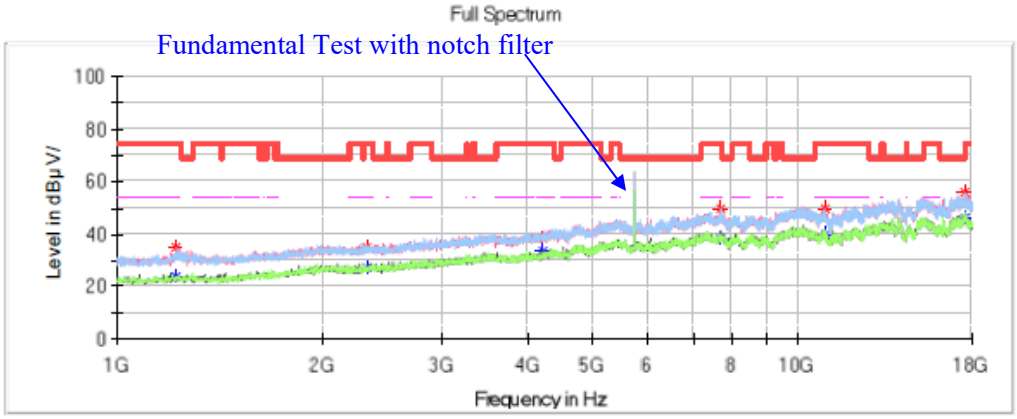
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1197.200000	---	23.45	54.00	30.55	H	-15.2
1197.200000	35.44	---	74.00	38.56	H	-15.2
1654.500000	31.76	---	68.20	36.44	V	-13.8
2813.900000	---	29.09	54.00	24.91	V	-9.1
2813.900000	36.90	---	74.00	37.10	V	-9.1
4379.600000	---	32.76	54.00	21.24	H	-4.7
4379.600000	42.72	---	74.00	31.28	H	-4.7
7553.500000	---	37.56	54.00	16.44	H	3.9
7553.500000	46.87	---	74.00	27.13	H	3.9
12563.400000	---	42.76	54.00	11.24	V	9.7
12563.400000	51.82	---	74.00	22.18	V	9.7

802.11n20 Mode:

Low Channel: 5745MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11n20 mode 5745 channel
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu



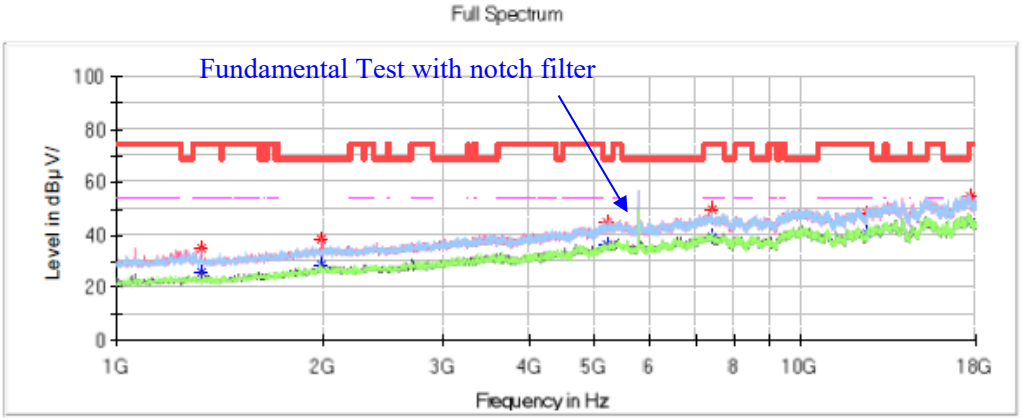
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1219.300000	---	23.90	54.00	30.10	V	-14.8
1219.300000	35.11	---	74.00	38.89	V	-14.8
2319.200000	---	27.55	54.00	26.45	V	-10.1
2319.200000	35.06	---	74.00	38.94	V	-10.1
4209.600000	38.39	---	74.00	35.61	V	-4.5
4209.600000	---	33.53	54.00	20.47	V	-4.5
7716.700000	---	38.81	54.00	15.19	H	4.0
7716.700000	49.53	---	74.00	24.47	H	4.0
10955.200000	---	39.92	54.00	14.08	V	6.4
10955.200000	49.56	---	74.00	24.44	V	6.4
17610.700000	56.12	---	68.20	12.08	V	13.2

Middle Channel: 5785MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11n20 mode 5785 channel
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu



Critical_Freqs

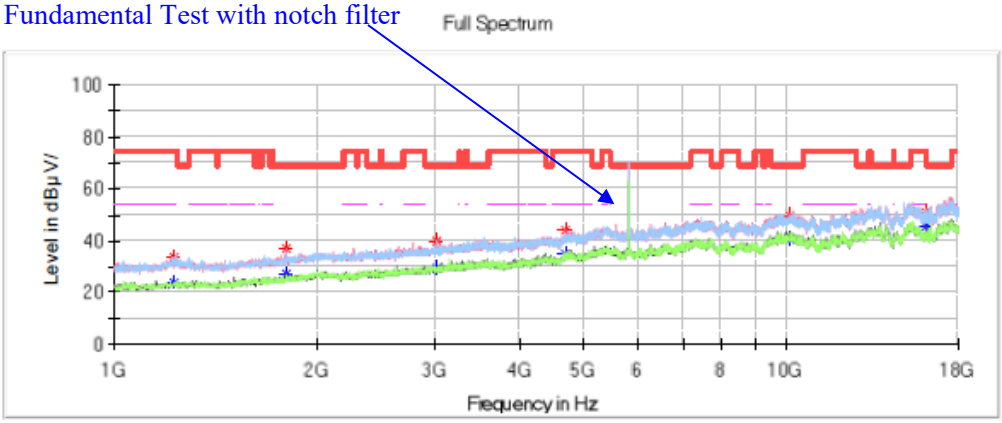
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1329.800000	---	25.56	54.00	28.44	V	-14.5
1329.800000	34.92	---	74.00	39.08	V	-14.5
1992.800000	38.37	---	68.20	29.83	V	-10.6
5190.500000	44.79	---	68.20	23.41	V	-0.4
7405.600000	---	38.87	54.00	15.13	V	4.1
7405.600000	49.59	---	74.00	24.41	V	4.1
12449.500000	---	40.25	54.00	13.75	H	8.3
12449.500000	48.44	---	74.00	25.56	H	8.3
17682.100000	54.60	---	68.20	13.60	H	12.9

High Channel: 5825MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11n20 mode 5825 channel
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

Fundamental Test with notch filter



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)
1229.500000	33.67	---	74.00	40.33	V	-14.8
1229.500000	---	23.74	54.00	30.26	V	-14.8
1797.300000	37.29	---	68.20	30.91	V	-11.9
3019.600000	39.63	---	68.20	28.57	H	-7.9
4694.100000	44.01	---	74.00	29.99	V	-2.8
4694.100000	---	35.02	54.00	18.98	V	-2.8
10110.300000	49.39	---	68.20	18.81	V	7.7
16114.700000	51.12	---	74.00	22.88	V	9.1
16114.700000	---	45.30	54.00	8.70	V	9.1

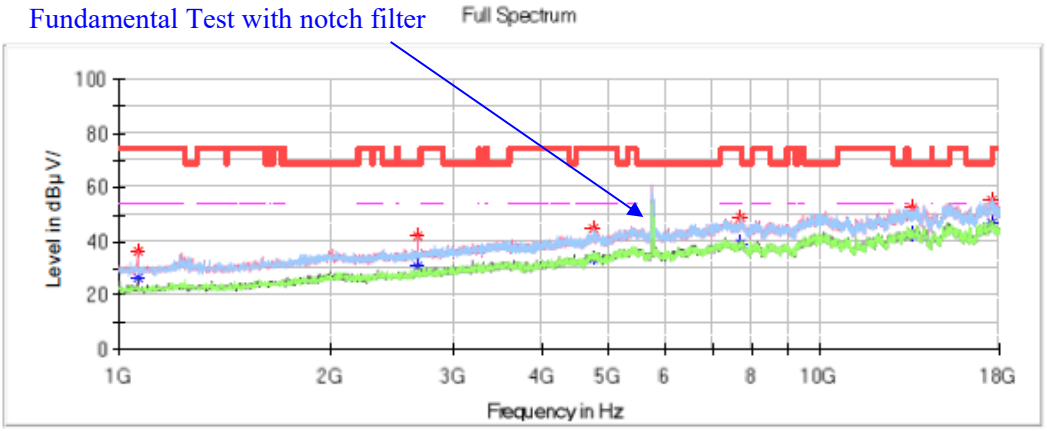
802.11n40 Mode:

Low Channel: 5755MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11n40 mode 5755 channel
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

Fundamental Test with notch filter



Critical_Freqs

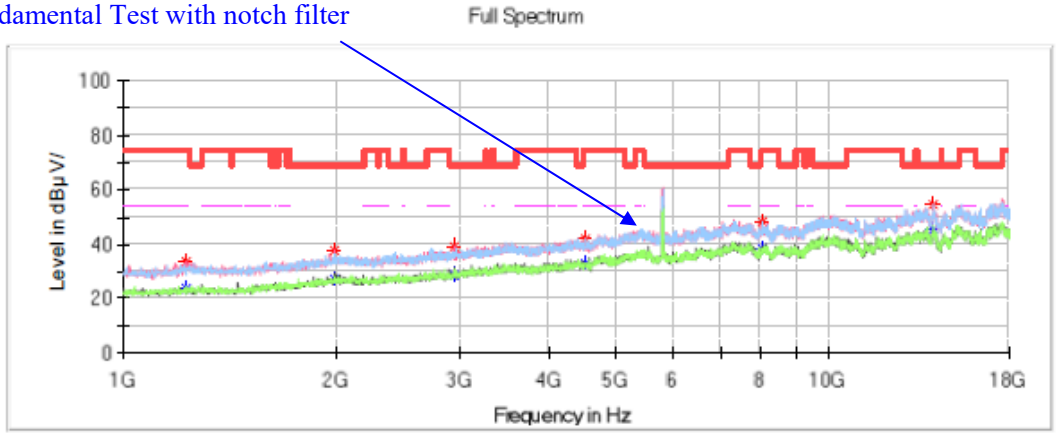
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1062.900000	36.38	---	74.00	37.62	V	-15.3
1062.900000	---	26.75	54.00	27.25	V	-15.3
2664.300000	41.64	---	68.20	26.56	V	-9.2
4734.900000	---	33.72	54.00	20.28	H	-2.6
4734.900000	44.59	---	74.00	29.41	H	-2.6
7682.700000	---	39.15	54.00	14.85	H	4.1
7682.700000	49.12	---	74.00	24.88	H	4.1
13512.000000	52.36	---	68.20	15.84	V	11.0
17569.900000	55.54	---	68.20	12.66	H	13.3

High Channel: 5795MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11n40 mode 5795 channel
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

Fundamental Test with notch filter



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)
1229.500000	---	23.75	54.00	30.25	V	-14.8
1229.500000	33.58	---	74.00	40.42	V	-14.8
1992.800000	37.91	---	68.20	30.29	H	-10.6
2936.300000	38.95	---	68.20	29.25	V	-8.2
4519.000000	---	32.79	54.00	21.21	H	-3.7
4519.000000	42.22	---	74.00	31.78	H	-3.7
8021.000000	47.94	---	68.20	20.26	H	3.8
14003.300000	54.57	---	68.20	13.63	V	10.5

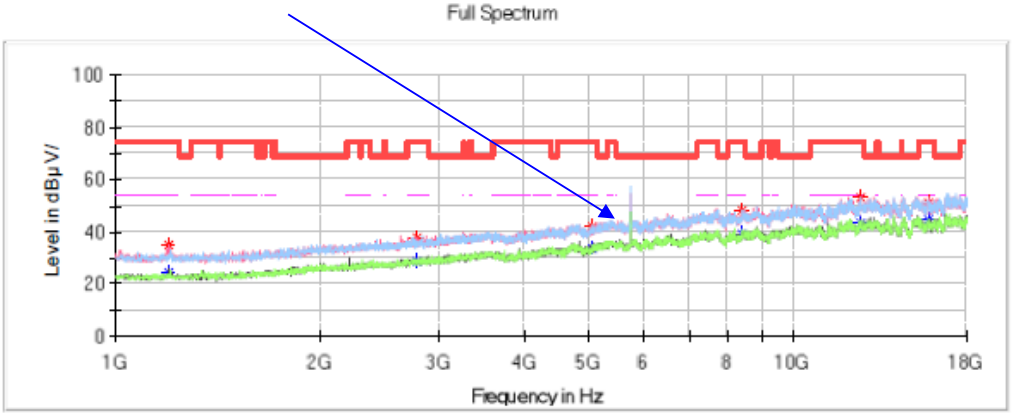
802.11ac20 Mode:

Low Channel: 5745MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11ac20 mode 5745 channel
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

Fundamental Test with notch filter



Critical_Freqs

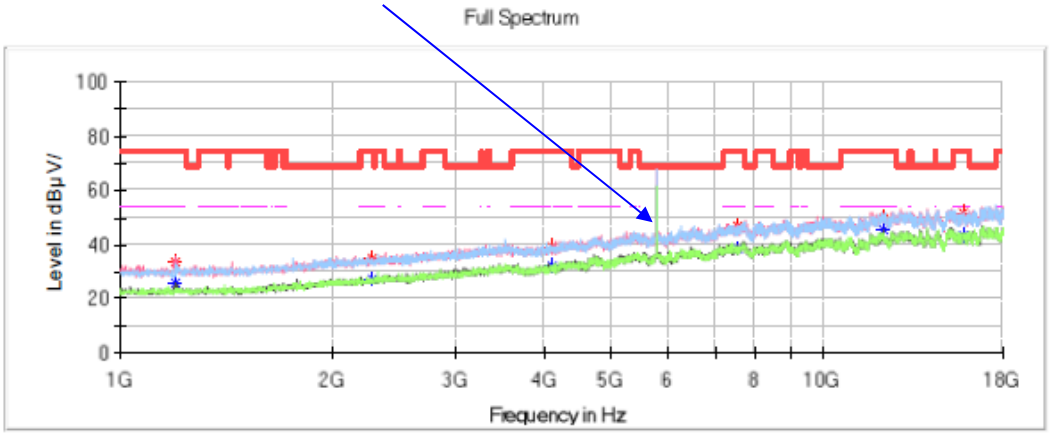
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1197.200000	---	24.36	54.00	29.64	V	-15.2
1197.200000	34.71	---	74.00	39.29	V	-15.2
2786.700000	---	28.95	54.00	25.05	H	-9.2
2786.700000	37.73	---	74.00	36.27	H	-9.2
5047.700000	---	33.70	54.00	20.30	H	-2.2
5047.700000	41.68	---	74.00	32.32	H	-2.2
8403.500000	---	39.39	54.00	14.61	V	5.1
8403.500000	47.98	---	74.00	26.02	V	5.1
12549.800000	---	43.64	54.00	10.36	H	9.7
12549.800000	52.82	---	74.00	21.18	H	9.7
15801.900000	---	44.73	54.00	9.27	V	9.6
15801.900000	51.15	---	74.00	22.85	V	9.6

Middle Channel: 5785MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11ac20 mode 5785 channel
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

Fundamental Test with notch filter



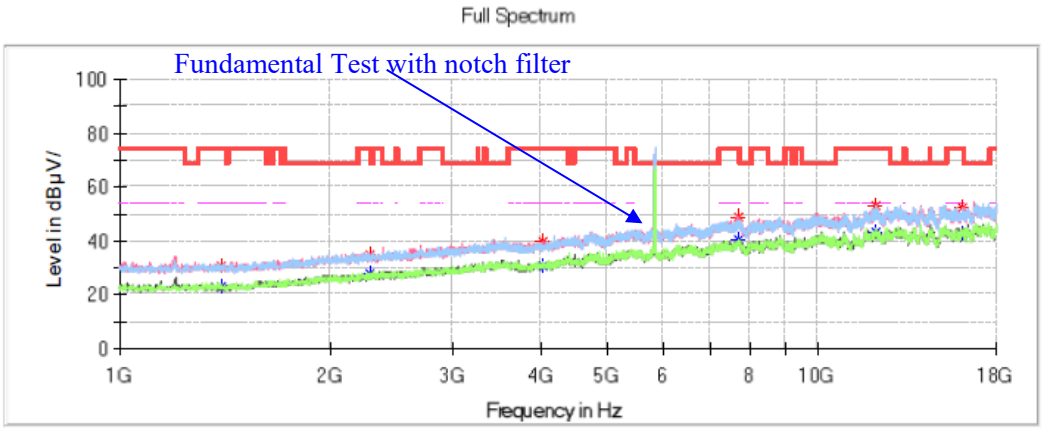
Critical_Freqs

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	---	26.06	54.00	27.94	V	-15.2
1198.900000	33.75	---	74.00	40.25	V	-15.2
2280.100000	34.73	---	74.00	39.27	H	-10.9
2280.100000	---	27.03	54.00	26.97	H	-10.9
4107.600000	39.24	---	74.00	34.76	V	-5.6
4107.600000	---	31.89	54.00	22.11	V	-5.6
7567.100000	47.02	---	74.00	26.98	V	3.9
7567.100000	---	38.14	54.00	15.86	V	3.9
12150.300000	49.97	---	74.00	24.03	V	9.2
12150.300000	---	45.19	54.00	8.81	V	9.2
15788.300000	---	43.66	54.00	10.34	V	9.6
15788.300000	51.86	---	74.00	22.14	V	9.6

High Channel: 5825MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11ac20 mode 5825 channel
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu



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))
1401.200000	---	22.77	54.00	31.23	V	-14.9
1401.200000	31.07	---	74.00	42.93	V	-14.9
2285.200000	---	27.66	54.00	26.34	H	-10.8
2285.200000	35.21	---	74.00	38.79	H	-10.8
4041.300000	---	31.02	54.00	22.98	H	-5.8
4041.300000	39.88	---	74.00	34.12	H	-5.8
7691.200000	---	40.39	54.00	13.61	V	3.9
7691.200000	48.63	---	74.00	25.37	V	3.9
12131.600000	---	43.40	54.00	10.60	H	9.2
12131.600000	52.83	---	74.00	21.17	H	9.2
16111.300000	---	42.91	54.00	11.09	V	9.7
16111.300000	52.58	---	74.00	21.42	V	9.7

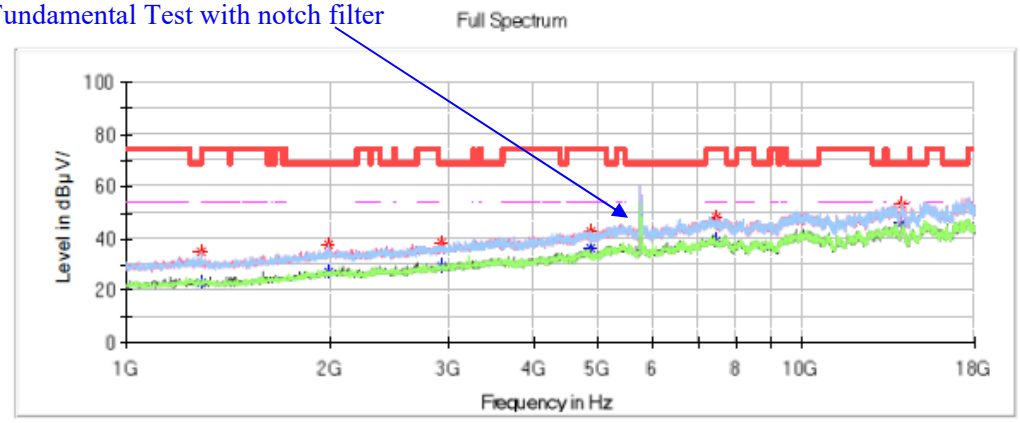
802.11ac40 Mode:

Low Channel: 5755MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11ac40 mode 5755 channel
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

Fundamental Test with notch filter



Critical_Freqs

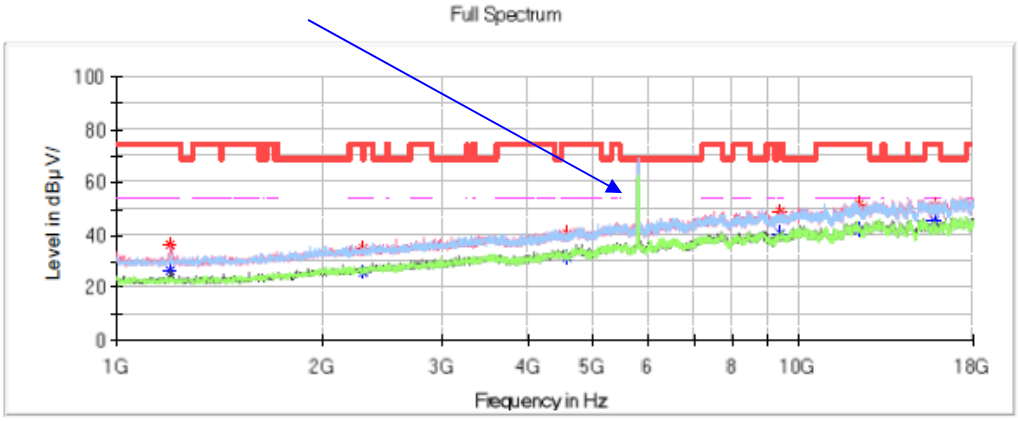
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1290.700000	34.75	---	68.20	33.45	H	-14.6
1994.500000	37.63	---	68.20	30.57	H	-10.6
2927.800000	38.35	---	68.20	29.85	V	-8.3
4864.100000	---	36.34	54.00	17.66	V	-1.9
4864.100000	42.78	---	74.00	31.22	V	-1.9
7439.600000	---	39.35	54.00	14.65	H	4.1
7439.600000	48.05	---	74.00	25.95	H	4.1
14003.300000	53.39	---	68.20	14.81	V	10.5

High Channel: 5795MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11ac40 mode 5795 channel
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

Fundamental Test with notch filter



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	---	26.89	54.00	27.11	V	-15.2
1198.900000	36.04	---	74.00	37.96	V	-15.2
2290.300000	---	26.04	54.00	27.96	H	-10.8
2290.300000	34.67	---	74.00	39.33	H	-10.8
4575.100000	---	31.50	54.00	22.50	H	-4.0
4575.100000	40.42	---	74.00	33.58	H	-4.0
9375.900000	---	40.43	54.00	13.57	V	5.4
9375.900000	49.30	---	74.00	24.70	V	5.4
12231.900000	---	41.77	54.00	12.23	V	9.3
12231.900000	51.84	---	74.00	22.16	V	9.3
15764.500000	50.92	---	74.00	23.08	V	9.6
15764.500000		45.69	54.00	8.31	V	9.6

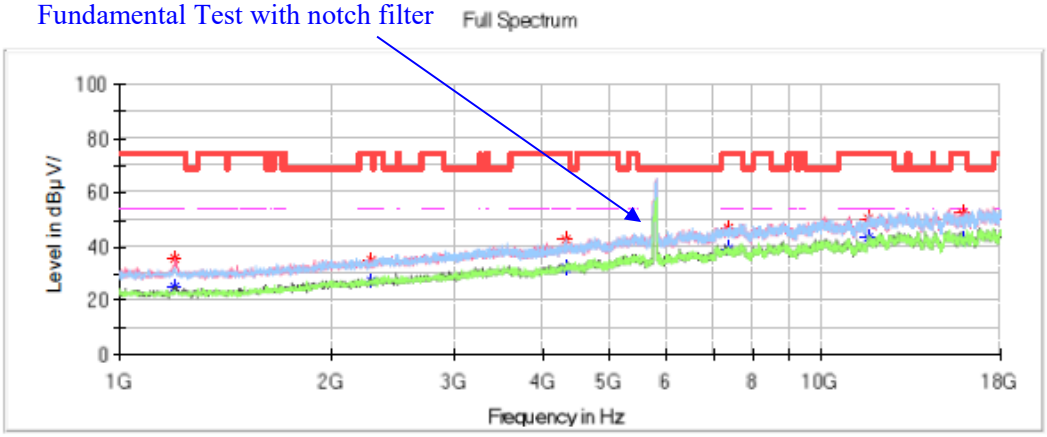
802.11ac80 Mode:

Channel: 5775MHz

Common Information

Project No.:	RSHA240322001
Test Mode:	Transmitting in 802.11ac80 mode 5775 channel
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

Fundamental Test with notch filter



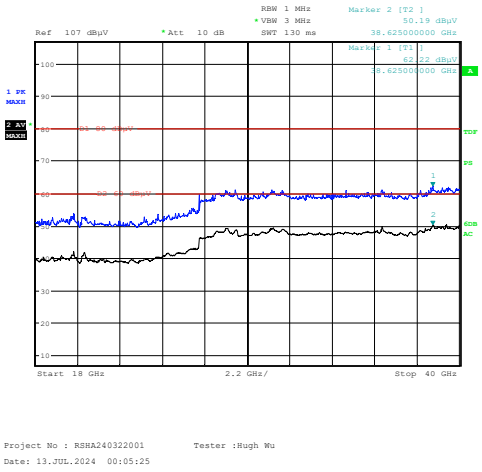
Critical_Freqs

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	---	25.49	54.00	28.51	V	-15.2
1197.200000	35.78	---	74.00	38.22	V	-15.2
2281.800000	---	27.12	54.00	26.88	H	-10.8
2281.800000	34.92	---	74.00	39.08	H	-10.8
4323.500000	---	32.02	54.00	21.98	V	-4.8
4323.500000	42.66	---	74.00	31.34	V	-4.8
7369.900000	---	39.24	54.00	14.76	V	3.6
7369.900000	47.16	---	74.00	26.84	V	3.6
11659.000000	---	43.01	54.00	10.99	V	8.9
11659.000000	50.50	---	74.00	23.50	V	8.9
15878.400000	---	43.00	54.00	11.00	V	9.5
15878.400000	52.37	---	74.00	21.63	V	9.5

18GHz-40GHz:

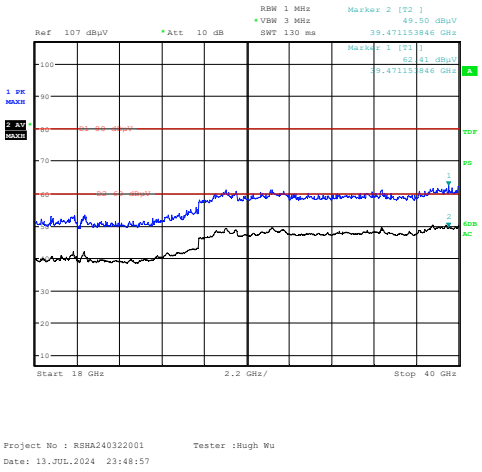
Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40, 802.11 ac80 modes of operation in the X,Y and Z axes of orientation, the worst case ***802.11ac40 mode (5190MHz)*** *was recorded*

Horizontal



Project No : RSHA240322001 Tester :Hugh Wu
Date: 13.JUL.2024 00:05:25

Vertical



Project No : RSHA240322001 Tester :Hugh Wu
Date: 13.JUL.2024 23:48:57

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
39471.15	---	49.5	60	10.5	V	19.53
39471.15	62.41	---	80	17.59	V	19.53
38625.00	---	50.19	60	9.81	H	16.95
38625.00	62.22	---	80	17.78	H	16.95

Note: The test distance is 1.5m.

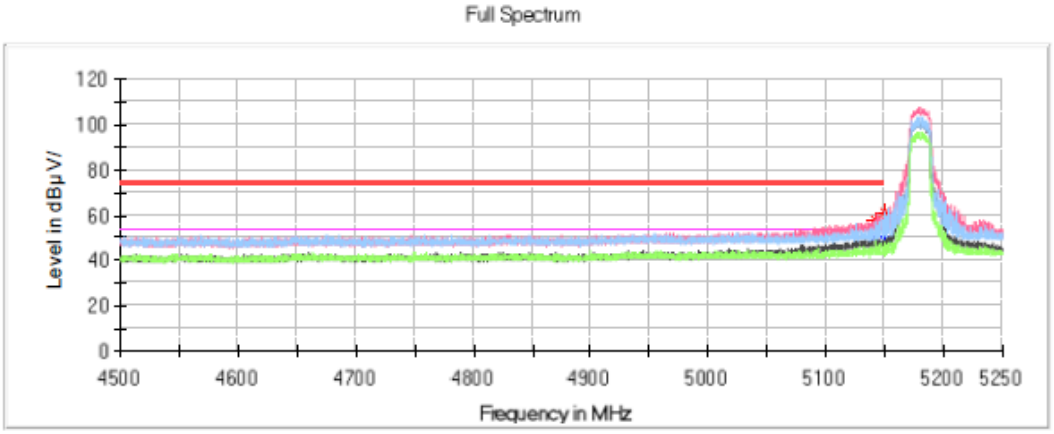
Restricted Bands Emissions Test (5150-5250MHz Band):

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.:	RSHA240322001
Test Mode:	5G WIFI 802.11a low channel
Standard:	FCC Part 15.205& FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu

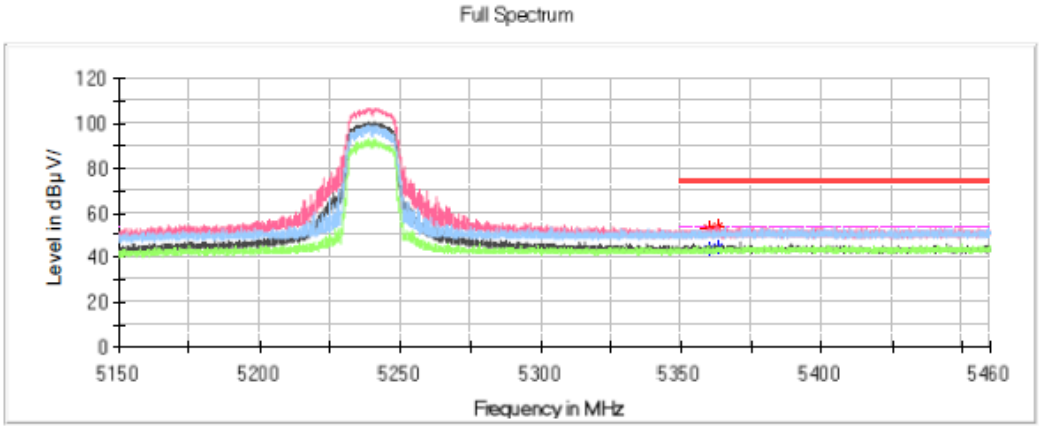


Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5142.300000	---	49.95	54.00	4.05	V	4.2
5142.300000	57.56	---	74.00	16.44	V	4.2
5149.125000	---	48.57	54.00	5.43	H	4.2
5149.125000	61.65	---	74.00	12.35	H	4.2

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI 802.11a high channel
Standard:	FCC Part 15.205& FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu



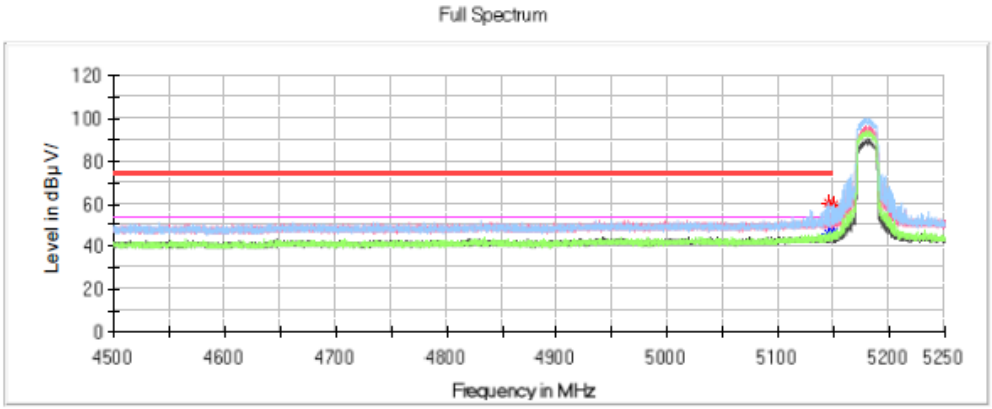
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5360.087000	---	43.77	54.00	10.23	V	4.8
5360.087000	53.08	---	74.00	20.92	V	4.8
5363.218000	---	44.54	54.00	9.46	V	4.8
5363.218000	53.31	---	74.00	20.69	V	4.8

802.11n20 Mode:

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI 802.11n20 low channel
Standard:	FCC Part 15.205& FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu

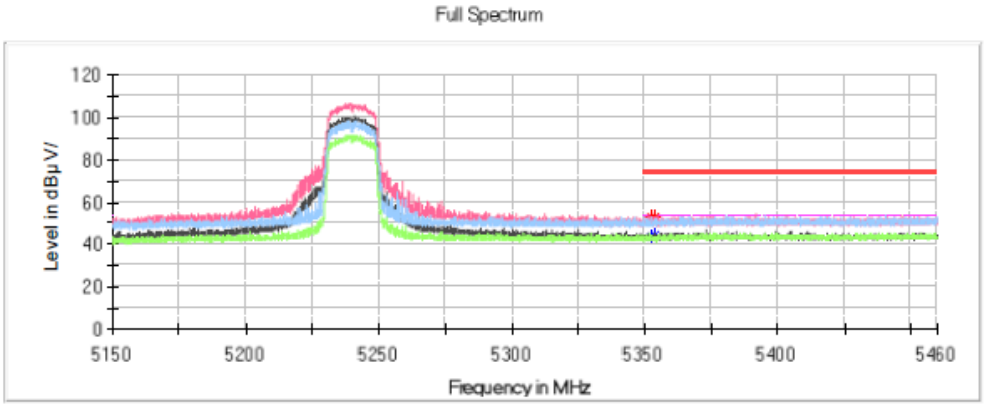


Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5144.475000	60.09	---	74.00	13.91	H	4.2
5144.475000	---	46.51	54.00	7.49	H	4.2
5149.275000	59.39	---	74.00	14.61	H	4.2
5149.275000	---	47.03	54.00	6.97	H	4.2

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI 802.11n20 high channel
Standard:	FCC Part 15.205& FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu



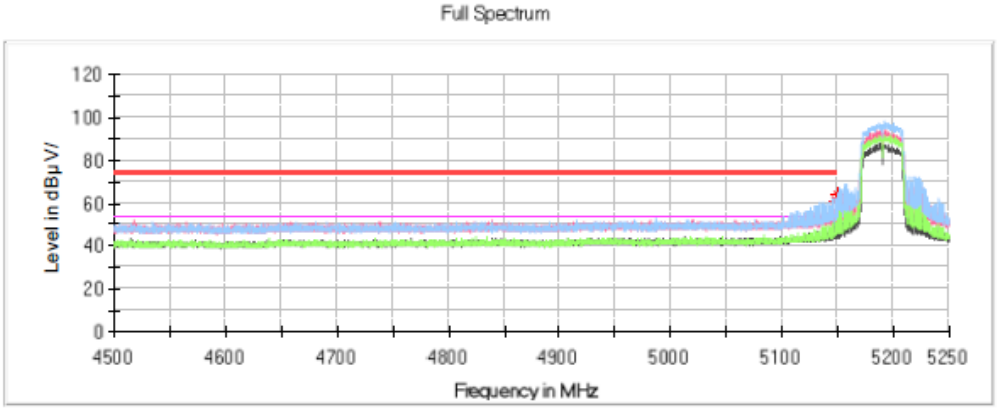
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5352.430000	---	43.44	54.00	10.56	V	4.7
5352.430000	53.08	---	74.00	20.92	V	4.7
5353.608000	---	44.88	54.00	9.12	V	4.7
5353.608000	52.86	---	74.00	21.14	V	4.7

802.11n40 Mode:

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI 802.11n40 low channel
Standard:	FCC Part 15.205& FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu

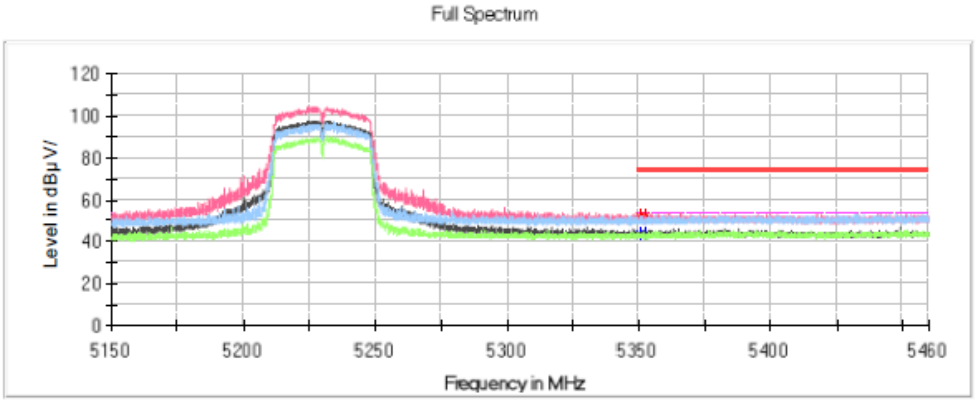


Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5147.850000	---	51.37	54.00	2.63	H	4.2
5147.850000	61.03	---	74.00	12.97	H	4.2
5149.575000	---	50.31	54.00	3.69	H	4.2
5149.575000	63.37	---	74.00	10.63	H	4.2

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI 802.11n40 high channel
Standard:	FCC Part 15.205& FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu



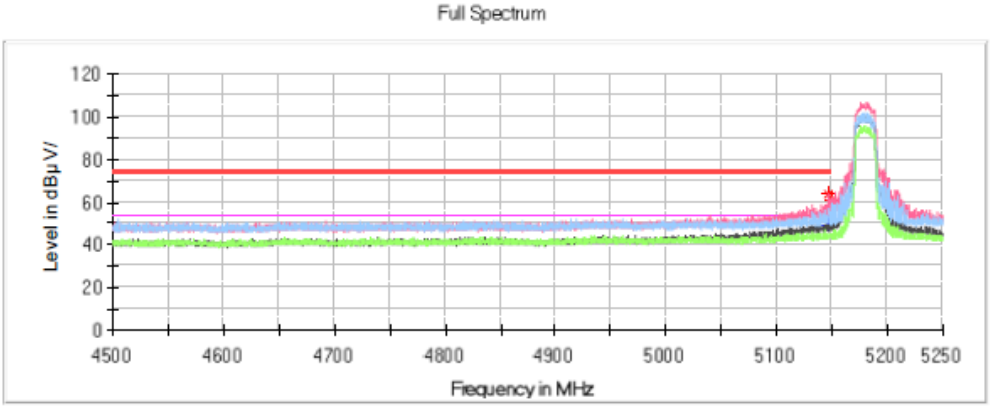
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5350.663000	---	43.51	54.00	10.49	V	4.7
5350.663000	51.81	---	74.00	22.19	V	4.7
5352.430000	---	43.43	54.00	10.57	H	4.7
5352.430000	51.94	---	74.00	22.06	H	4.7

802.11ac20 Mode:

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI 802.11ac20 low channel
Standard:	FCC Part 15.205& FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu

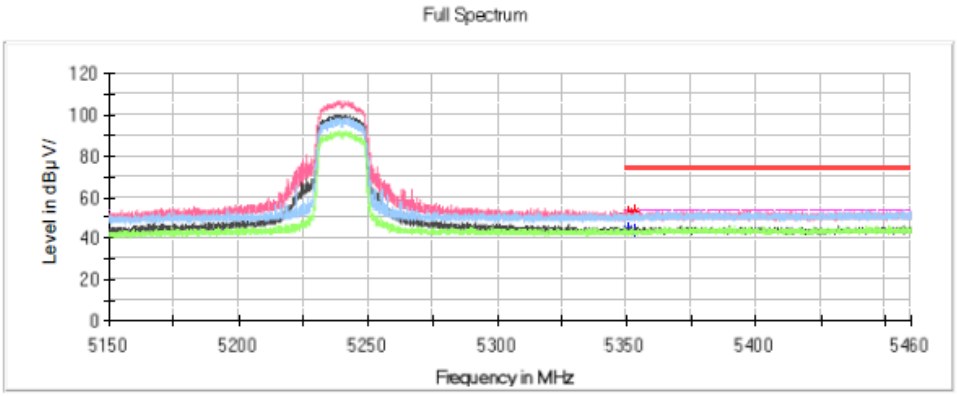


Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5145.900000	---	49.78	54.00	4.22	V	4.2
5145.900000	63.39	---	74.00	10.61	V	4.2
5149.800000	---	51.91	54.00	2.09	V	4.2
5149.800000	61.46	---	74.00	12.54	V	4.2

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI 802.11ac20 high channel
Standard:	FCC Part 15.205& FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu



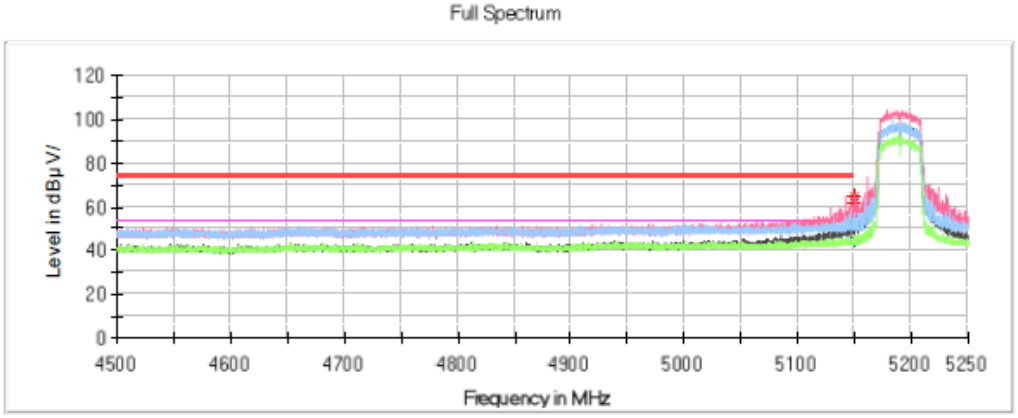
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5350.694000	---	44.25	54.00	9.75	H	4.7
5350.694000	52.27	---	74.00	21.73	H	4.7
5352.957000	---	43.87	54.00	10.13	V	4.7
5352.957000	52.76	---	74.00	21.24	V	4.7

802.11ac40 Mode:

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI 802.11ac40 low channel
Standard:	FCC Part 15.205& FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu

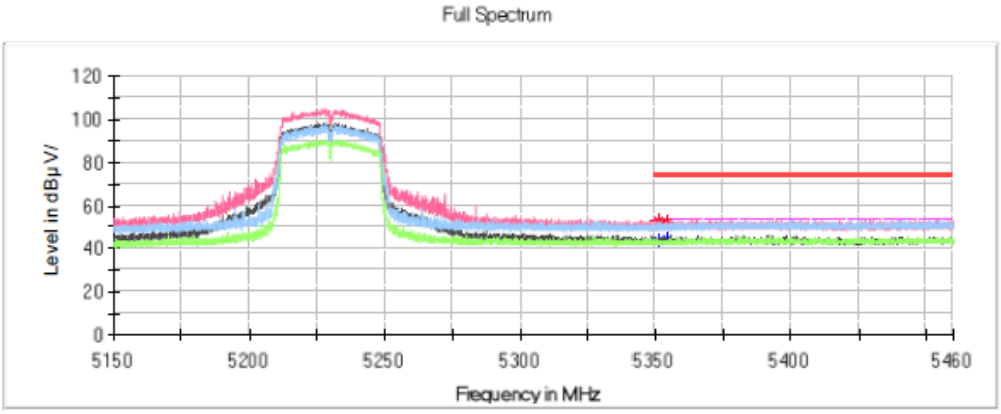


Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5149.575000	---	44.10	54.00	9.90	H	4.2
5149.575000	62.19	---	74.00	11.81	H	4.2
5149.950000	---	50.98	54.00	3.02	V	4.2
5149.950000	65.02	---	74.00	8.98	V	4.2

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI 802.11ac40 high channel
Standard:	FCC Part 15.205& FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu



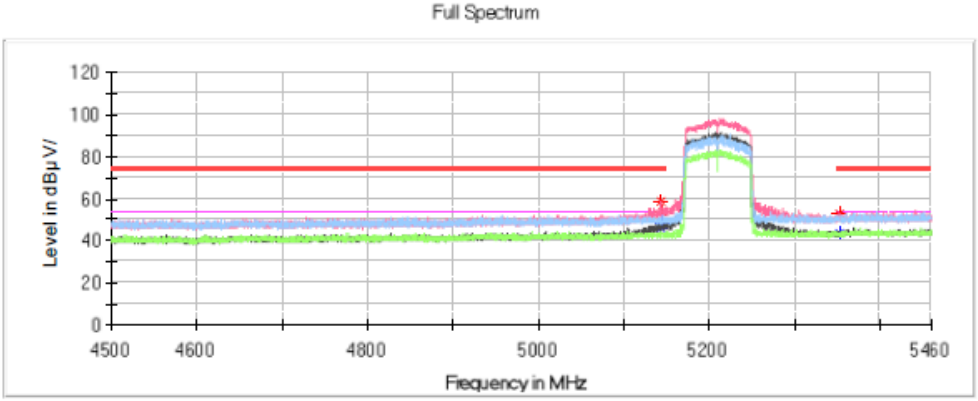
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5351.035000	---	43.73	54.00	10.27	V	4.7
5351.035000	53.20	---	74.00	20.80	V	4.7
5354.135000	---	44.31	54.00	9.69	V	4.7
5354.135000	52.23	---	74.00	21.77	V	4.7

802.11ac80 Mode:

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI 802.11ac80
Standard:	FCC Part 15.205& FCC Part 15.209&FCC Part 15.407
Test Engineer:	Klein Zhu



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)
5142.432000	58.95	---	74.00	15.05	V	4.2
5142.432000	---	46.37	54.00	7.63	V	4.2
5145.504000	53.99	---	74.00	20.01	V	4.2
5145.504000	---	48.66	54.00	5.34	V	4.2
5351.616000	---	43.38	54.00	10.62	H	4.7
5351.616000	52.52	---	74.00	21.48	H	4.7

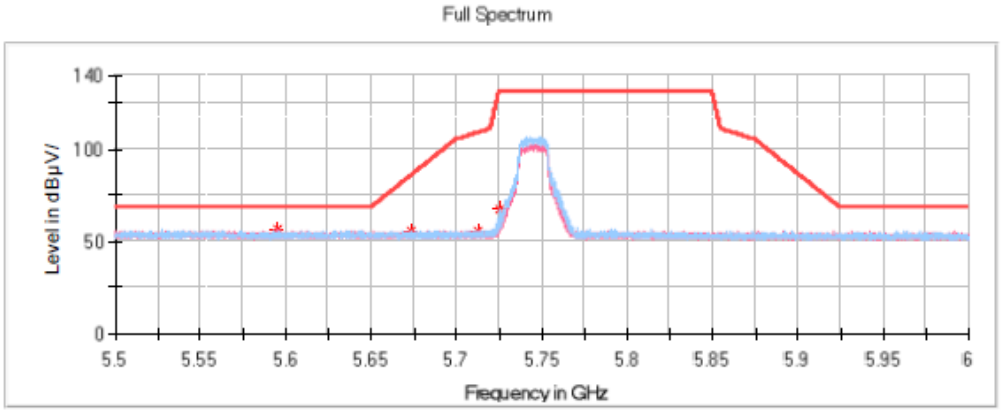
Restricted Bands Emissions Test (5725-5850MHz Band):

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.:	RSHA240322001
Test Mode:	5G WIFI
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

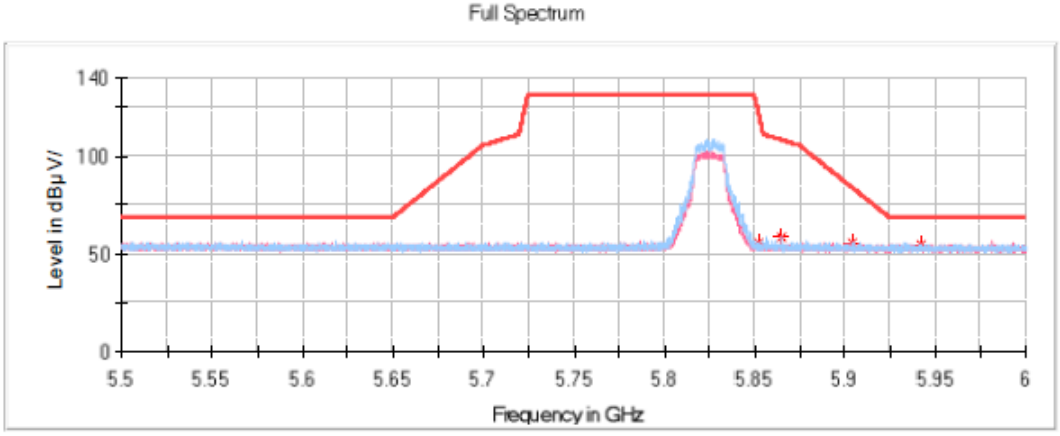


Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5594.650000	56.62	---	68.20	11.58	V	9.0
5673.750000	55.98	---	85.78	29.80	H	8.9
5712.750000	55.70	---	108.77	53.07	H	8.9

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu



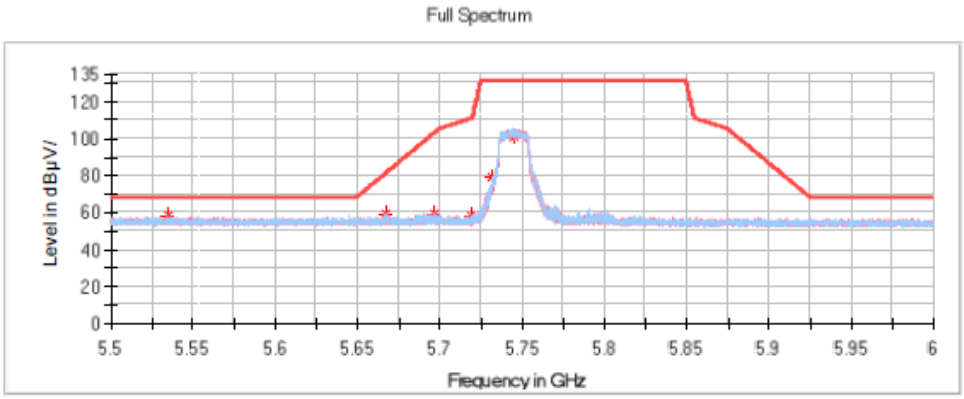
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5864.450000	58.59	---	108.15	49.56	H	8.7
5903.850000	55.34	---	83.85	28.52	H	8.7
5942.300000	54.66	---	68.20	13.54	V	8.6

802.11n20 Mode:

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

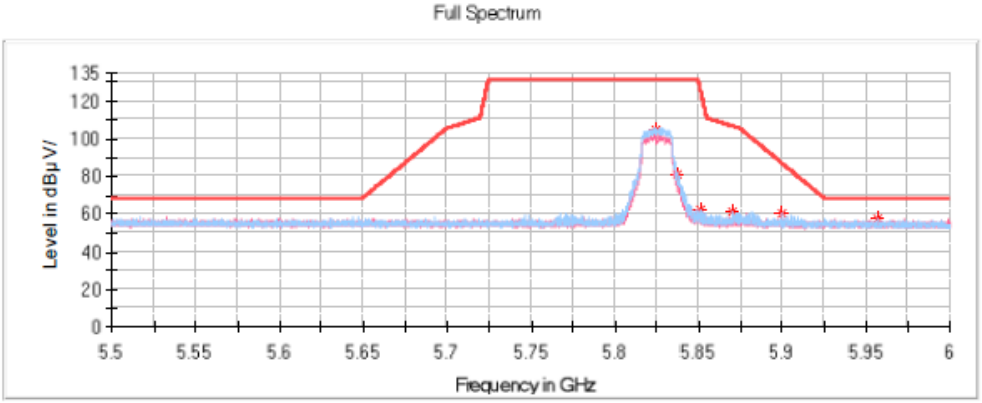


Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5534.600000	58.22	---	68.20	9.98	V	10.8
5667.450000	59.21	---	81.11	21.90	H	10.6
5696.350000	59.59	---	102.50	42.91	H	10.6
5718.650000	58.26	---	110.42	52.16	H	10.6

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu



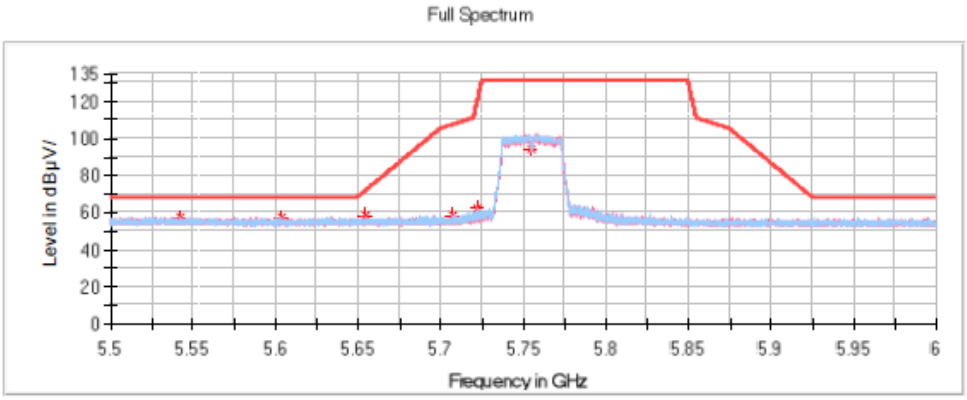
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5870.150000	61.10	---	106.56	45.46	H	10.4
5900.000000	60.41	---	86.70	26.29	H	10.3
5956.650000	57.40	---	68.20	10.80	H	10.2

802.11n40 Mode:

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

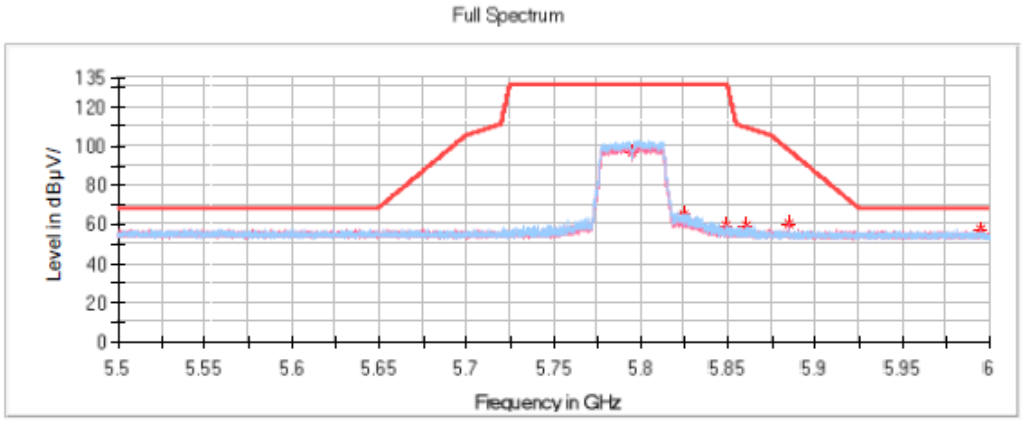


Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5542.350000	58.04	---	68.20	10.16	H	10.8
5604.050000	57.82	---	68.20	10.38	V	10.7
5654.100000	58.25	---	71.23	12.99	V	10.6
5706.750000	58.38	---	107.09	48.71	H	10.6
5721.900000	62.12	---	118.55	56.43	H	10.6

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu



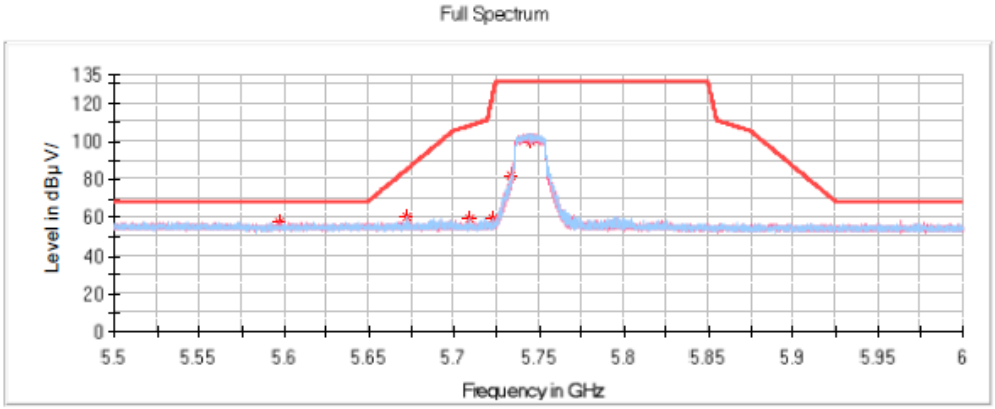
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5859.950000	59.87	---	109.41	49.54	V	10.4
5885.000000	60.47	---	97.80	37.33	V	10.3
5994.450000	57.72	---	68.20	10.48	V	10.2

802.11ac20 Mode:

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

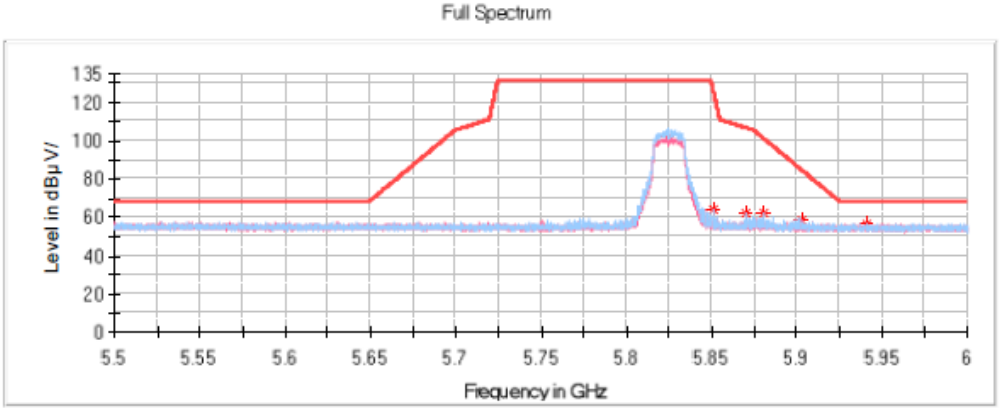


Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5597.550000	57.91	---	68.20	10.29	V	10.7
5672.350000	60.39	---	84.74	24.35	H	10.6
5709.650000	59.20	---	107.90	48.70	H	10.6

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu



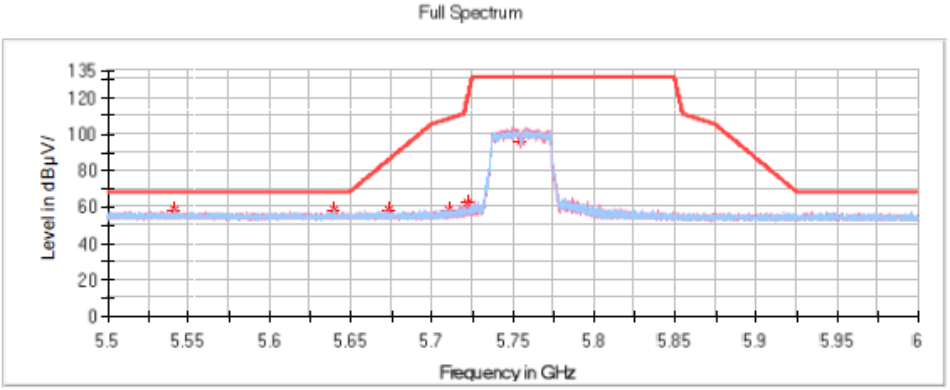
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5869.850000	62.72	---	106.64	43.92	H	10.4
5880.200000	62.01	---	101.35	39.34	H	10.3
5902.300000	58.99	---	85.00	26.01	V	10.3
5941.250000	57.05	---	68.20	11.15	H	10.3

802.11ac40 Mode:

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu

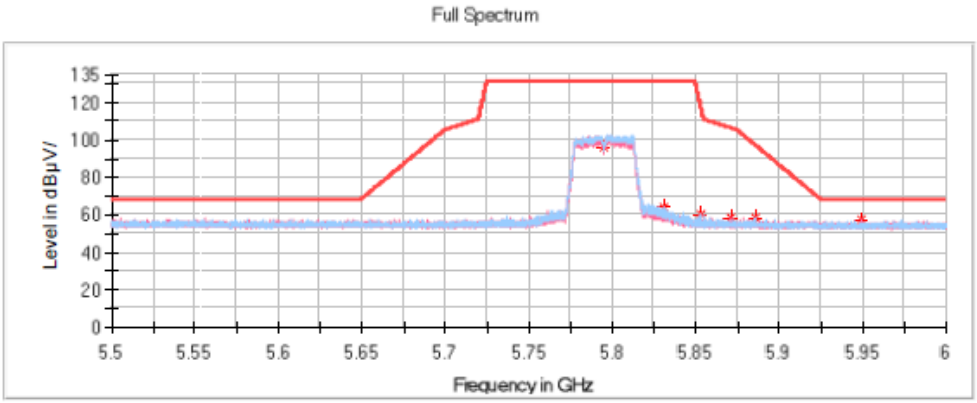


Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5541.650000	58.53	---	68.20	9.67	H	10.8
5639.050000	58.21	---	68.20	9.99	H	10.7
5673.500000	58.20	---	85.59	27.39	V	10.6
5710.500000	58.63	---	108.14	49.51	H	10.6
5721.850000	62.50	---	118.35	55.85	V	10.6

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu



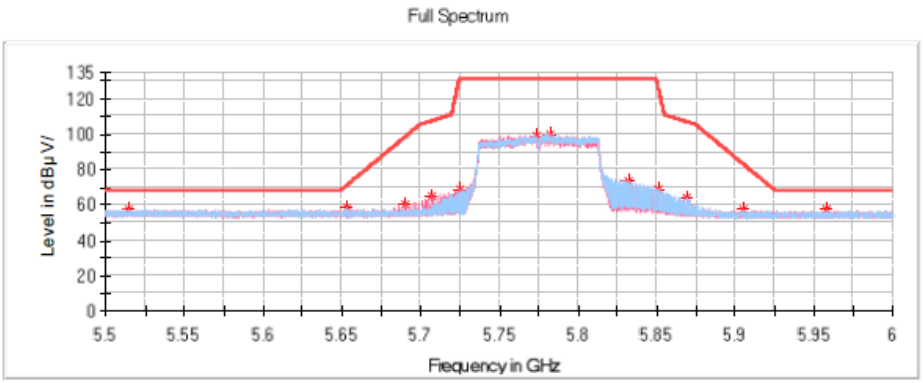
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5853.300000	60.51	---	117.74	57.22	H	10.4
5871.100000	58.10	---	106.29	48.19	V	10.4
5885.350000	58.49	---	97.54	39.05	H	10.3
5949.350000	57.45	---	68.20	10.75	V	10.3

802.11ac80 Mode:

Common Information

Project No.:	RSHA240322001
Test Mode:	5G WIFI
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Engineer:	Klein Zhu



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)
5514.800000	57.83	---	68.20	10.37	V	10.8
5652.850000	58.24	---	70.31	12.07	H	10.6
5690.450000	60.54	---	98.13	37.59	V	10.6
5707.400000	65.39	---	107.27	41.89	V	10.6
5868.750000	63.96	---	106.95	42.99	H	10.4
5905.000000	57.47	---	83.00	25.53	V	10.3
5957.650000	57.46	---	68.20	10.74	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	23.735	16.750
	Middle	5200	23.919	16.750
	High	5240	23.970	16.750
802.11 n20	Low	5180	25.769	17.850
	Middle	5200	25.925	17.850
	High	5240	25.637	17.850
802.11 n40	Low	5190	42.300	36.400
	High	5230	42.300	36.500
802.11 ac20	Low	5180	25.213	17.850
	Middle	5200	25.175	17.850
	High	5240	25.385	17.850
802.11 ac40	Low	5190	42.200	36.400
	High	5230	42.100	36.500
802.11 ac80	Middle	5210	86.400	76.000

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

5725-5850MHz:

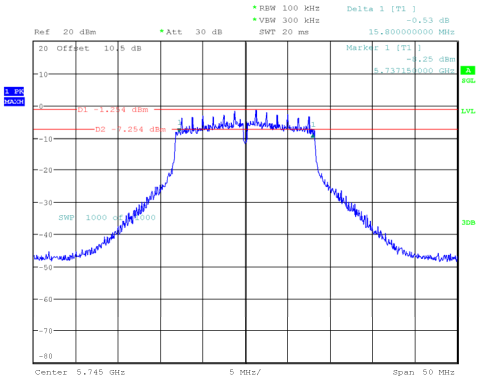
Test mode	Channel	Frequency (MHz)	99% Bandwidth (MHz)
802.11 a	Low	5745	16.750
	Middle	5785	16.700
	High	5825	16.700
802.11 n20	Low	5745	17.900
	Middle	5785	17.850
	High	5825	17.850
802.11 n40	Low	5755	36.400
	High	5795	36.400
802.11 ac20	Low	5745	17.900
	Middle	5785	17.850
	High	5825	17.900
802.11 ac40	Low	5755	36.400
	High	5795	36.500
802.11 ac80	Middle	5775	75.800

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	15.800	0.5
	Middle	5785	16.150	
	High	5825	16.150	
802.11 n20	Low	5745	15.450	
	Middle	5785	15.450	
	High	5825	16.600	
802.11 n40	Low	5755	36.100	
	High	5795	36.100	
802.11 ac20	Low	5745	15.800	
	Middle	5785	15.450	
	High	5825	16.050	
802.11 ac40	Low	5755	35.900	
	High	5795	36.100	
802.11 ac80	Middle	5775	75.800	

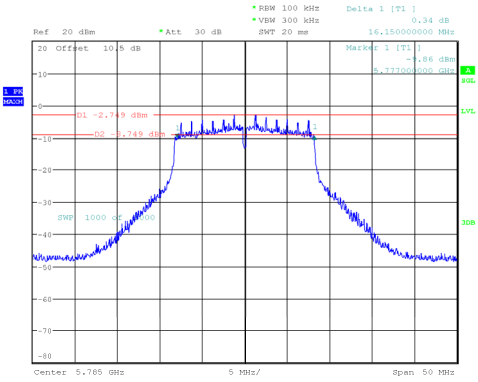
6dB Bandwidth
5725-5850 MHz Band

802.11a mode, 5745MHz



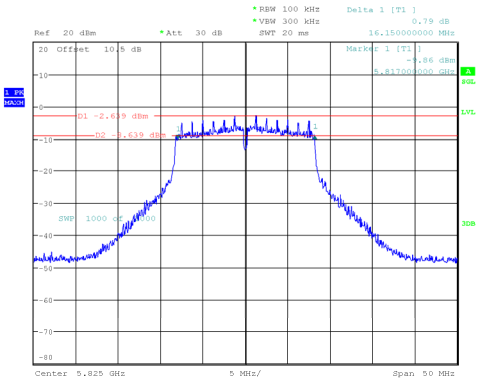
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:19:07

802.11a mode, 5785MHz



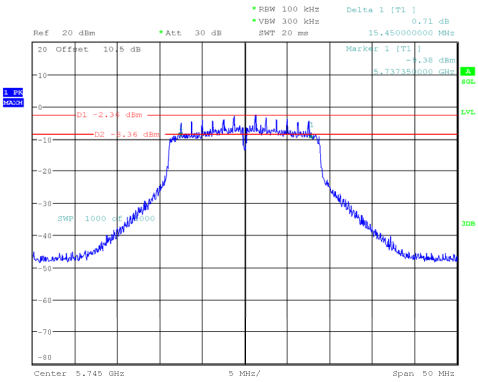
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:27:00

802.11a mode, 5825MHz



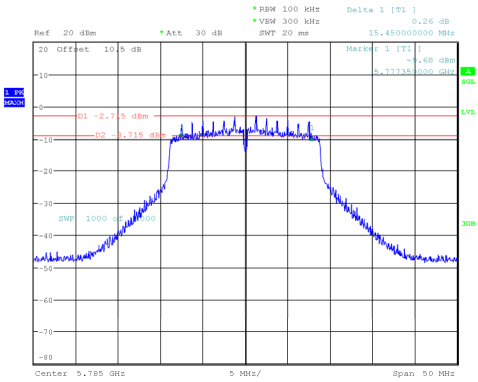
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:32:13

802.11n20 mode, 5745MHz



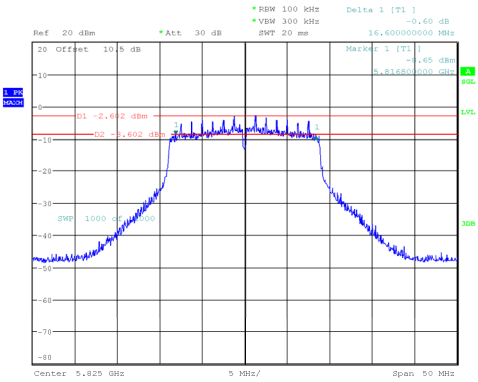
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:36:32

802.11 n20 mode, 5785MHz



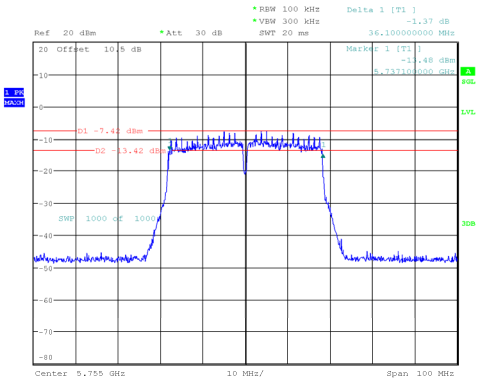
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:40:41

802.11 n20 mode, 5825MHz



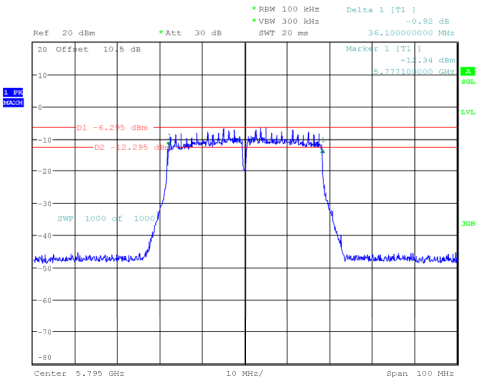
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:44:50

802.11n40 mode, 5755MHz



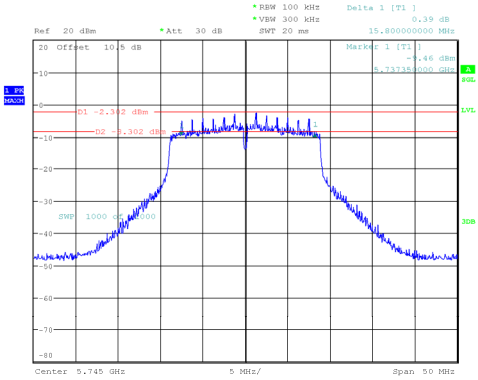
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:50:45

802.11n40 mode, 5795MHz



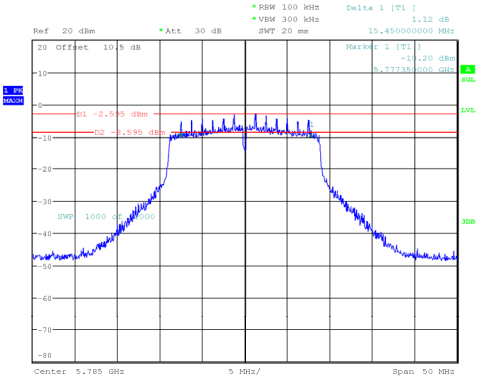
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:59:42

802.11ac20 mode, 5745MHz



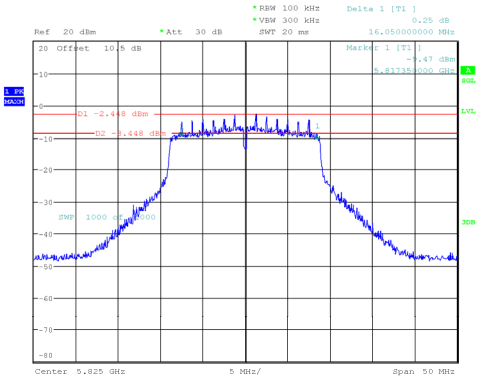
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 18:04:07

802.11ac20 mode, 5785MHz



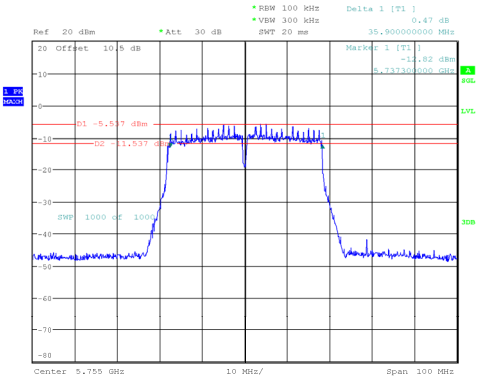
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 18:10:14

802.11 ac20 mode, 5825MHz



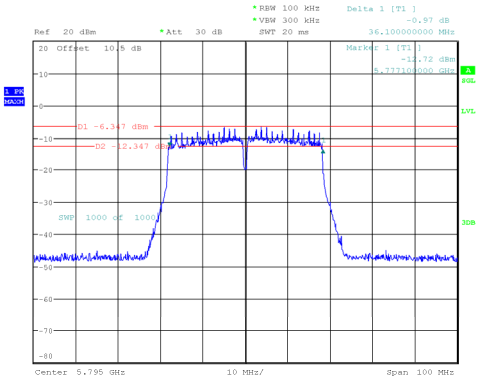
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 18:14:08

802.11ac40 mode, 5755MHz



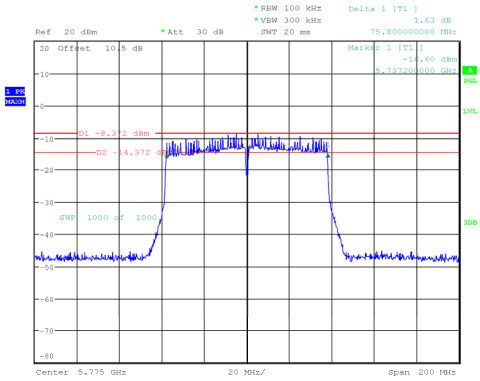
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 18:23:35

802.11ac40 mode, 5795MHz



ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 18:37:15

802.11ac80 mode, 5775MHz

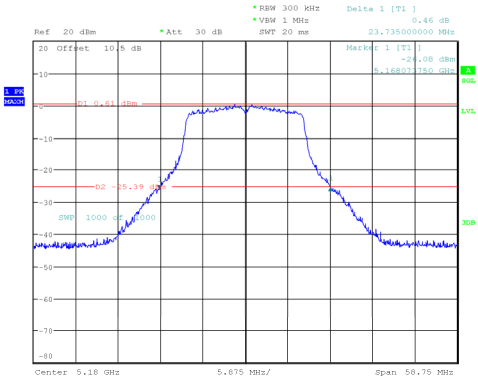


ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 18:53:10

26 Bandwidth

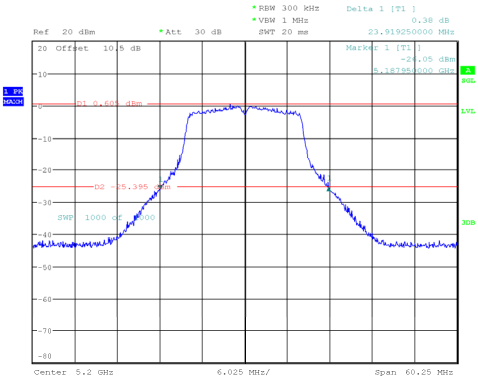
5150-5250 MHz Band:

802.11a mode, 5180MHz



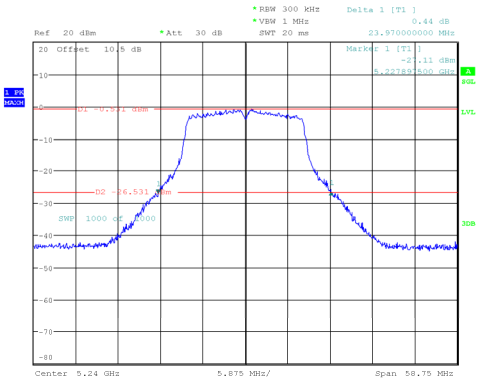
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 15:58:56

802.11a mode, 5200MHz



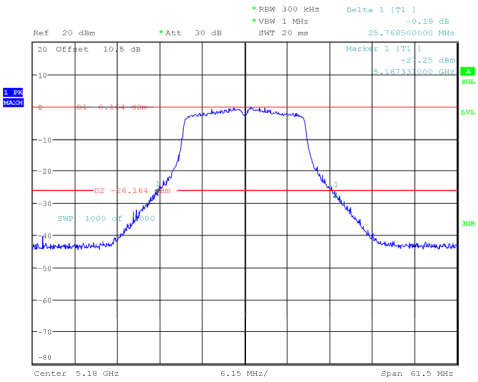
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:03:47

802.11a mode, 5240MHz



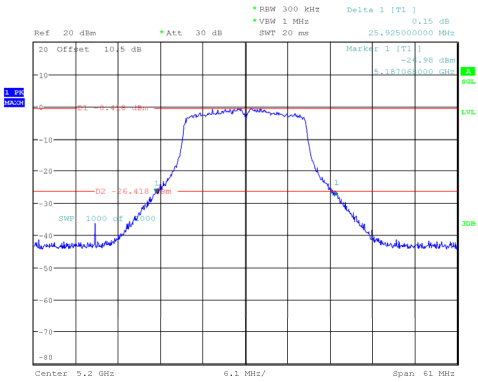
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:09:16

802.11n20 mode, 5180MHz



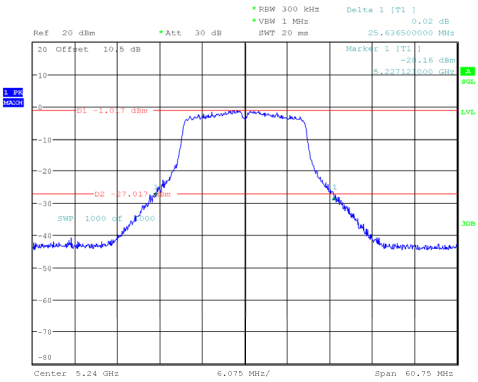
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:14:16

802.11 n20 mode, 5200MHz



ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:19:37

802.11 n20 mode, 5240MHz



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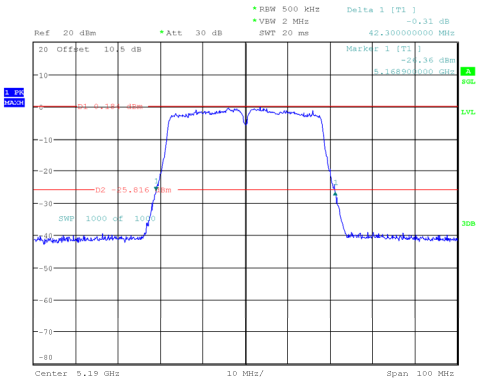
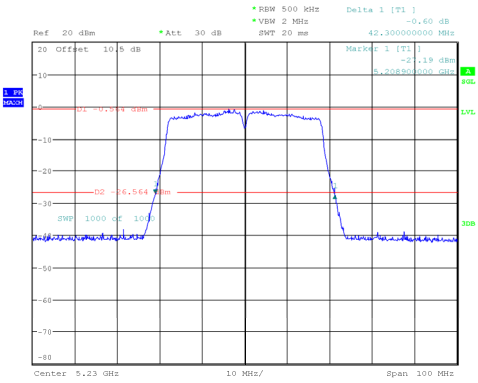
Date: 27.AUG.2024 16:24:40

802.11n40 mode, 5190MHz



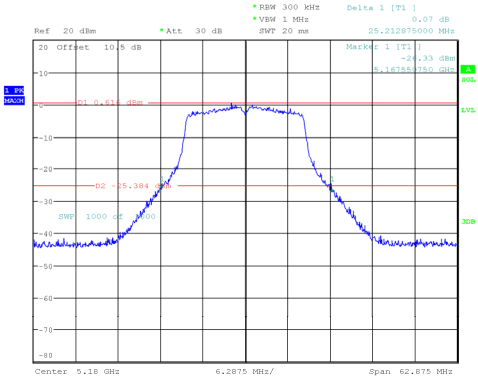
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:30:37

802.11n40 mode, 5230MHz



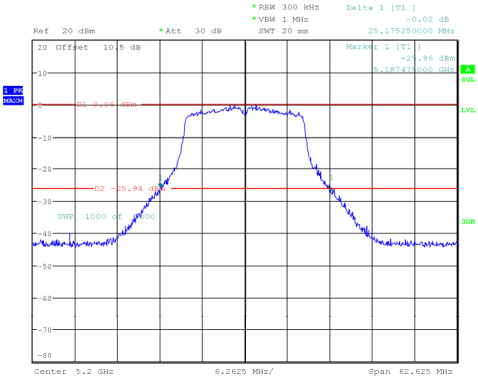
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:38:20

802.11ac20 mode, 5180MHz



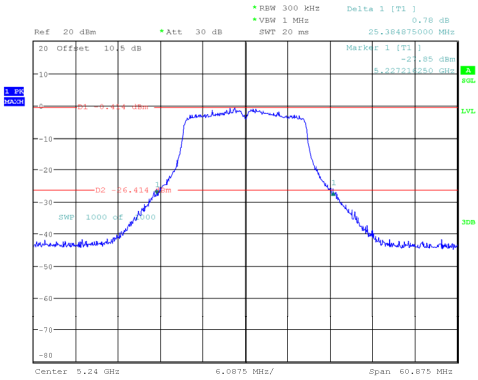
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:45:46

802.11ac20 mode, 5200MHz



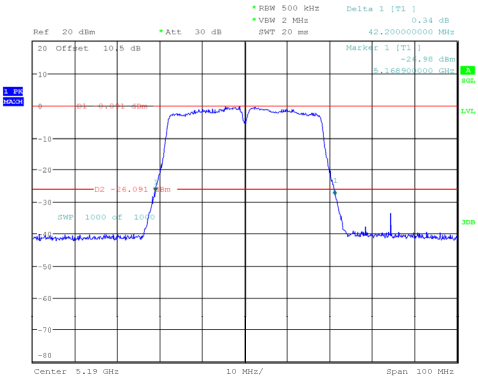
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:50:58

802.11 ac20 mode, 5240MHz



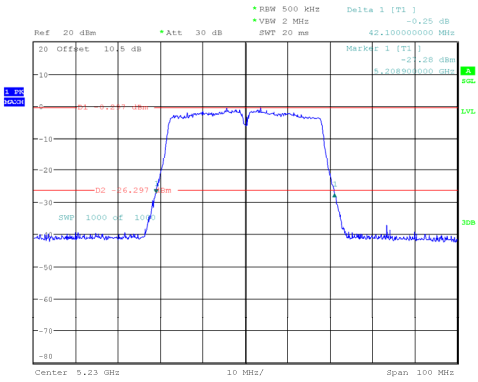
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:56:04

802.11ac40 mode, 5190MHz



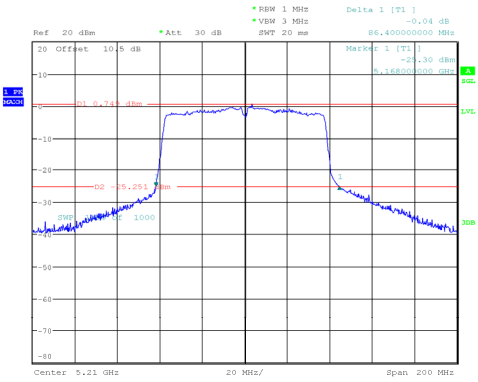
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:04:10

802.11ac40 mode, 5230MHz



ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:09:24

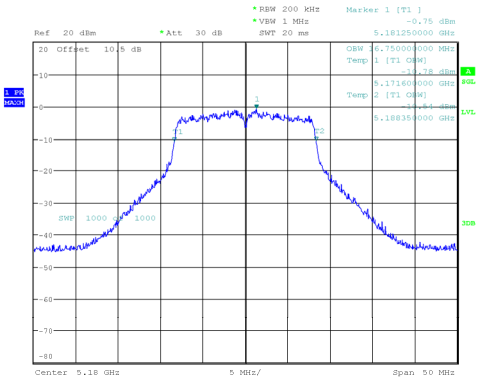
802.11ac80 mode, 5210MHz



ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:14:33

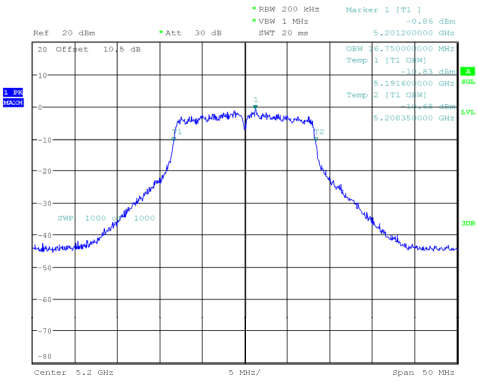
99% Occupied Bandwidth
5150-5250 MHz Band:

802.11a mode, 5180MHz



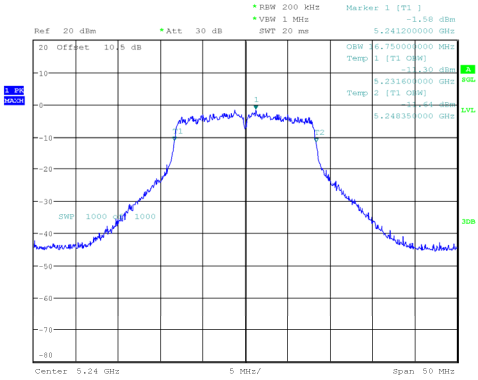
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 15:55:56

802.11a mode, 5200MHz



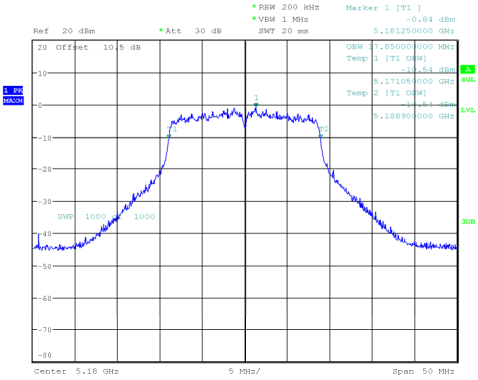
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:00:40

802.11a mode, 5240MHz



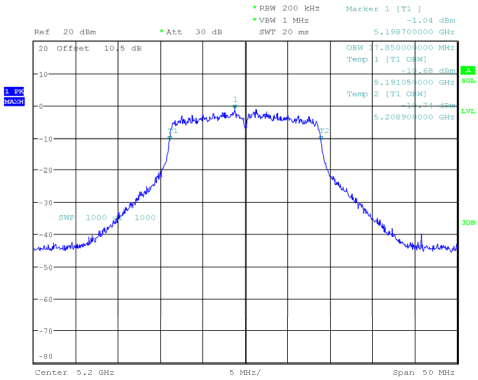
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:06:17

802.11n20 mode, 5180MHz



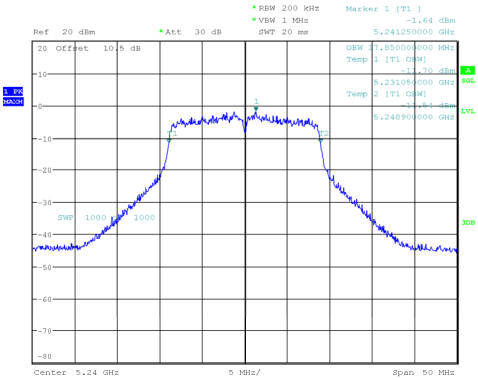
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:11:22

802.11 n20 mode, 5200MHz



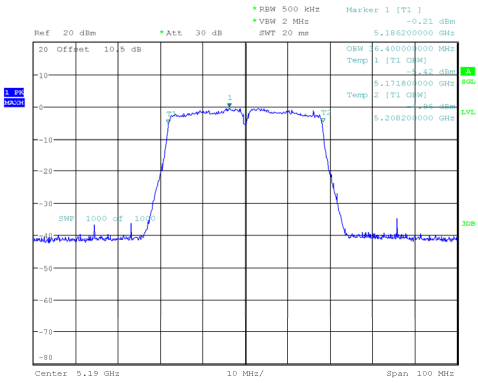
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:16:25

802.11 n20 mode, 5240MHz



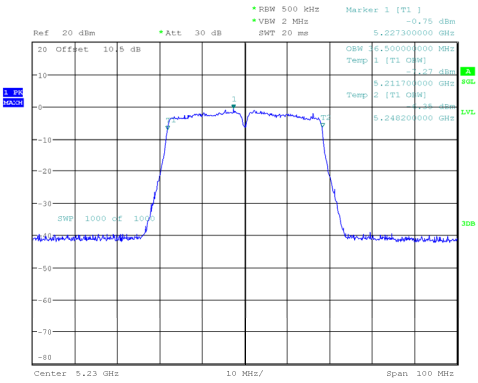
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:21:31

802.11n40 mode, 5190MHz



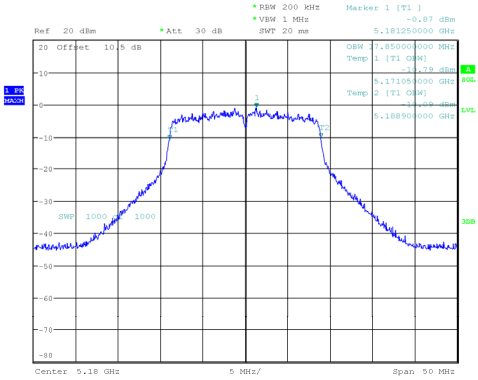
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:27:44

802.11n40 mode, 5230MHz



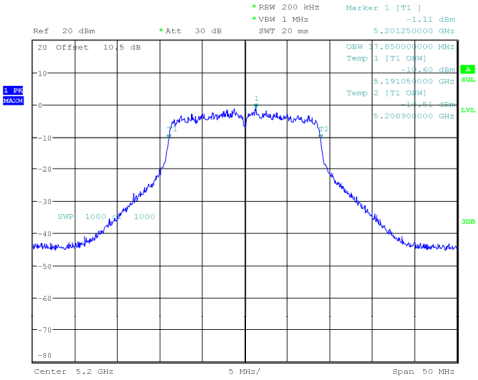
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:35:16

802.11ac20 mode, 5180MHz



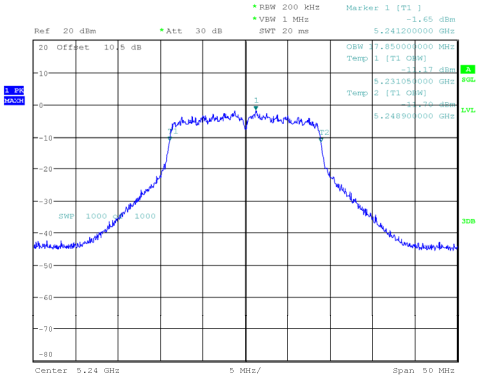
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:40:31

802.11ac20 mode, 5200MHz



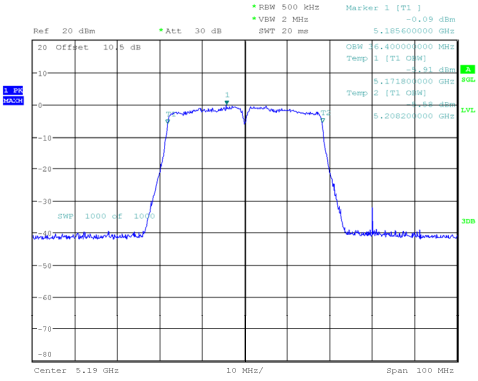
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:47:50

802.11 ac20 mode, 5240MHz



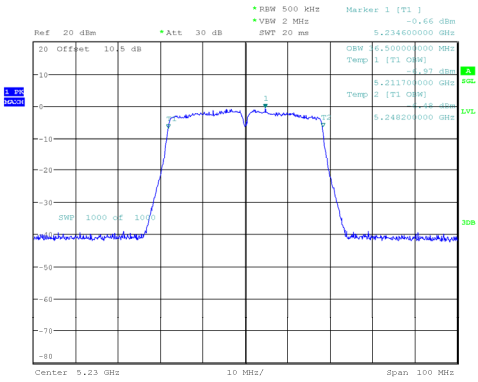
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:53:14

802.11ac40 mode, 5190MHz



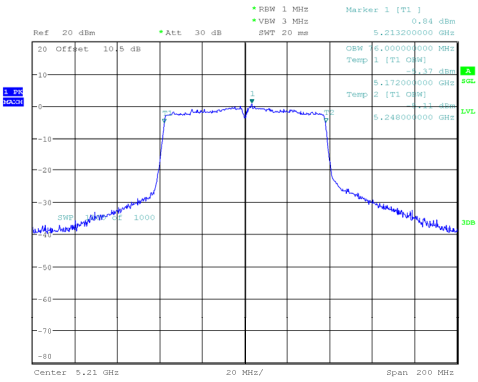
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 16:59:08

802.11ac40 mode, 5230MHz



ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:06:43

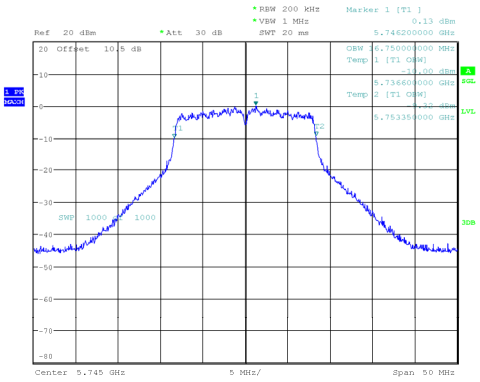
802.11ac80 mode, 5210MHz



ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:11:55

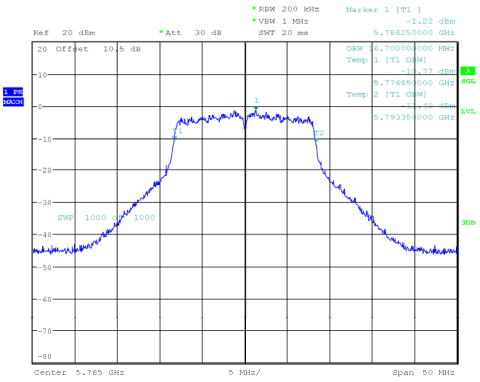
5725-5850 MHz Band:

802.11a mode, 5745MHz



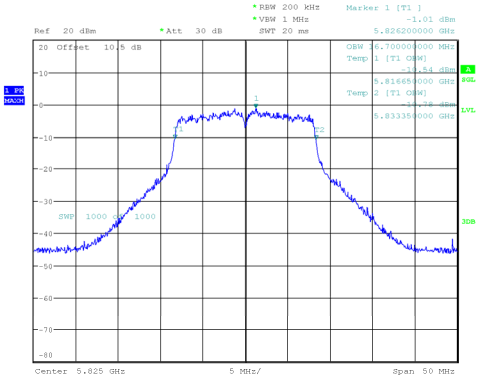
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:17:04

802.11a mode, 5785MHz



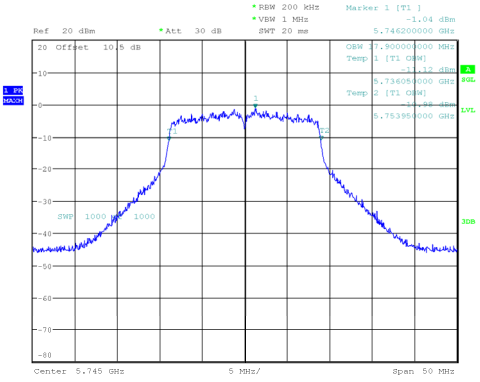
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:22:30

802.11a mode, 5825MHz



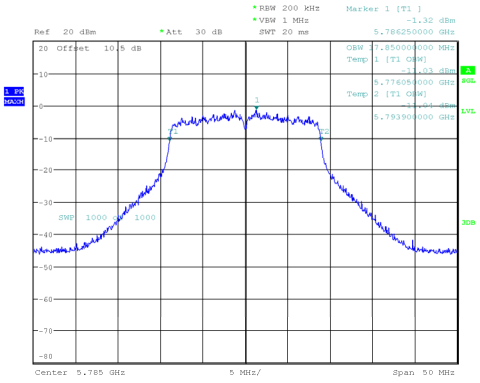
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:30:16

802.11n20 mode, 5745MHz



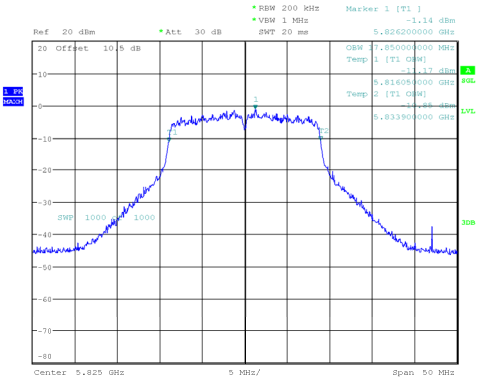
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:34:29

802.11 n20 mode, 5785MHz



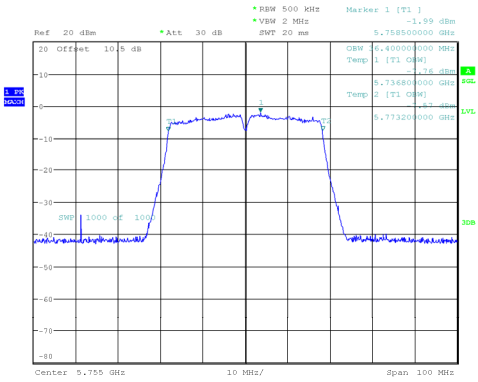
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:38:41

802.11 n20 mode, 5825MHz



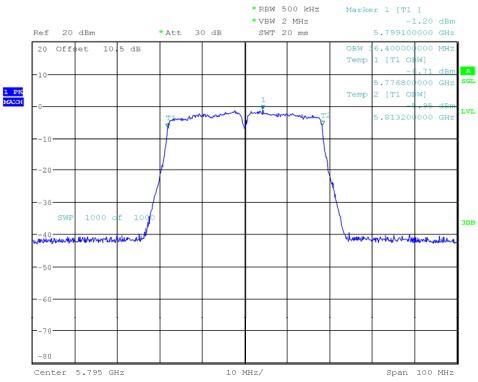
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:42:47

802.11n40 mode, 5755MHz



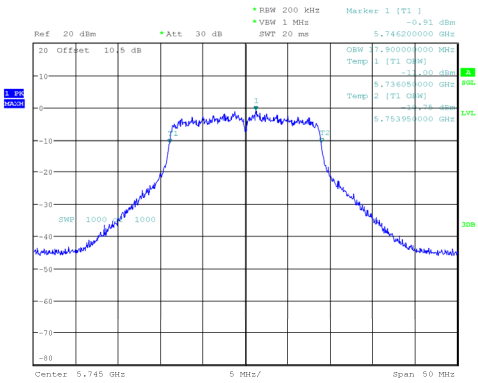
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:47:51

802.11n40 mode, 5795MHz



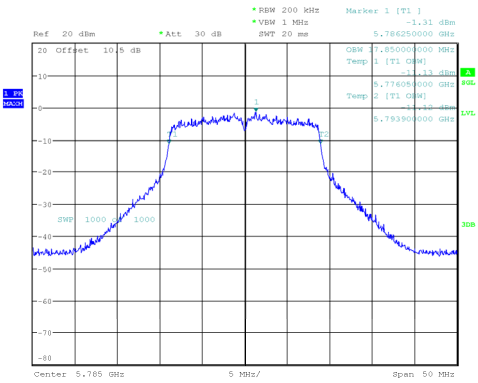
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 17:56:31

802.11ac20 mode, 5745MHz



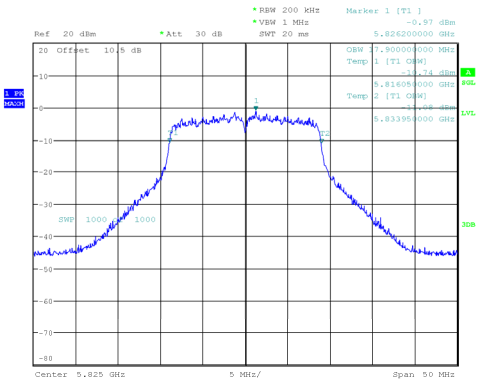
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 18:01:56

802.11ac20 mode, 5785MHz



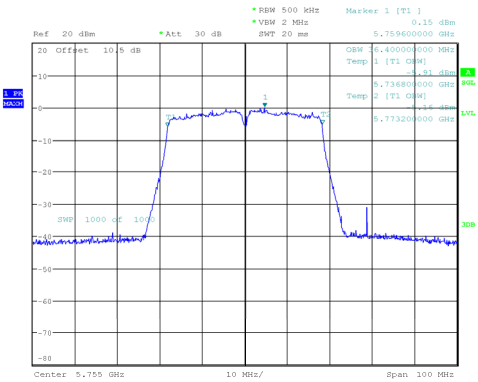
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 18:07:45

802.11 ac20 mode, 5825MHz



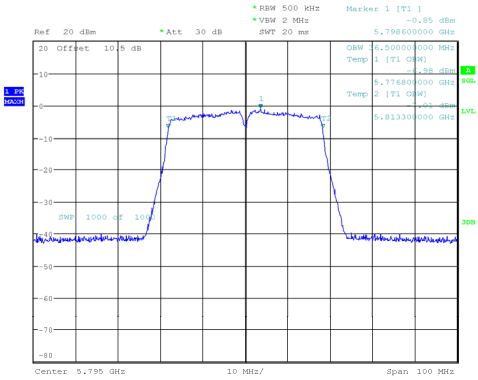
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 18:12:20

802.11ac40 mode, 5755MHz



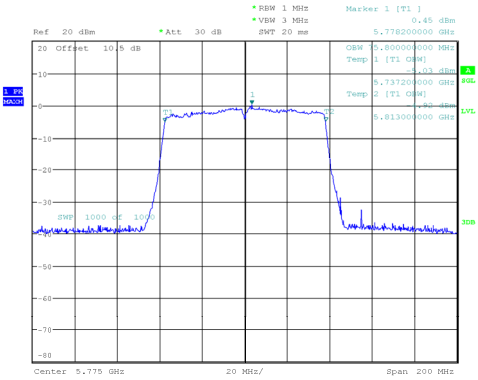
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 18:17:18

802.11ac40 mode, 5795MHz



ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 18:34:43

802.11ac80 mode, 5775MHz



ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 18:50:41

CONDUCTED TRANSMITTER OUTPUT POWER

Test Mode: Transmitting

Band	Mode	Frequency (MHz)	Maximum Average Output Power (dBm)	Limit (dBm)
5150-5250 MHz	802.11 a	5180	7.37	24
		5200	7.24	
		5240	6.42	
	802.11 n20	5180	7.09	
		5200	6.88	
		5240	6.21	
	802.11 n40	5190	7.89	
		5230	7.13	
	802.11 ac20	5180	7.1	
		5200	6.9	
		5240	6.21	
	802.11 ac40	5190	7.97	
		5230	7.04	
	802.11 ac80	5210	7.4	

Note： the equipment is client device

Band	Mode	Frequency (MHz)	Maximum Average Output Power (dBm)	Limit (dBm)
5725-5850 MHz	802.11 a	5745	7.36	30
		5785	6.96	
		5825	7.12	
	802.11 n20	5745	7.07	
		5785	6.71	
		5825	6.91	
	802.11 n40	5755	6.91	
		5795	6.92	
	802.11 ac20	5745	7.03	
		5785	6.74	
		5825	6.94	
	802.11 ac40	5755	6.54	
		5795	7.36	
	802.11 ac80	5775	6.96	

POWER SPECTRAL DENSITY

Test Mode: Transmitting

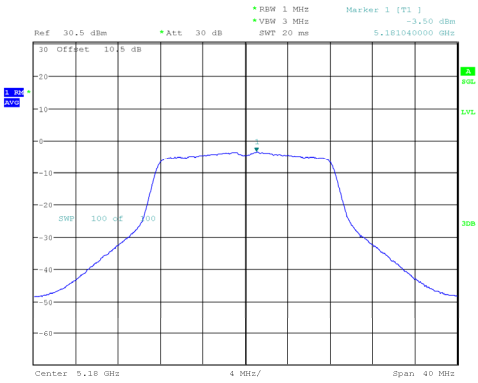
Band	Mode	Channel	Frequency (MHz)	Value (dBm/MHz)	Duty Cycle Factor (dB)	PSD (dBm/MHz)	Limit (dBm/MHz)
5150-5250 MHz	802.11 a	Low	5180	-3.50	0.10	-3.40	11
		Middle	5200	-3.73	0.10	-3.63	
		High	5240	-4.39	0.10	-4.29	
	802.11n20	Low	5180	-3.89	0.13	-3.76	
		Middle	5200	-4.14	0.13	-4.01	
		High	5240	-4.79	0.13	-4.66	
	802.11n40	Low	5190	-6.11	0.21	-5.90	
		High	5230	-6.89	0.21	-6.68	
	802.11ac20	Low	5180	-3.85	0.14	-3.71	
		Middle	5200	-4.11	0.14	-3.97	
		High	5240	-4.79	0.14	-4.65	
	802.11ac40	Low	5190	-6.06	0.20	-5.86	
		High	5230	-6.84	0.20	-6.64	
	802.11ac80	Middle	5210	-9.95	0.37	-9.58	

Note： the equipment is client device

Band	Mode	Channel	Frequency (MHz)	Value (dBm/500kHz)	Duty Cycle Factor (dB)	PSD (dBm/500kHz)	Limit (dBm/500kHz)
5725-5850 MHz	802.11 a	Low	5745	-6.27	0.13	-6.14	30
		Middle	5785	-6.38	0.13	-6.25	
		High	5825	-6.37	0.13	-6.24	
	802.11n20	Low	5745	-6.63	0.11	-6.52	
		Middle	5785	-6.81	0.11	-6.7	
		High	5825	-6.66	0.11	-6.55	
	802.11n40	Low	5755	-10.02	0.17	-9.85	
		High	5795	-9.59	0.17	-9.42	
	802.11ac20	Low	5745	-6.58	0.15	-6.43	
		Middle	5785	-6.79	0.15	-6.64	
		High	5825	-6.72	0.15	-6.57	
	802.11ac40	Low	5755	-9.91	0.21	-9.7	
		High	5795	-9.68	0.21	-9.47	
	802.11ac80	Middle	5775	-12.77	0.36	-12.41	

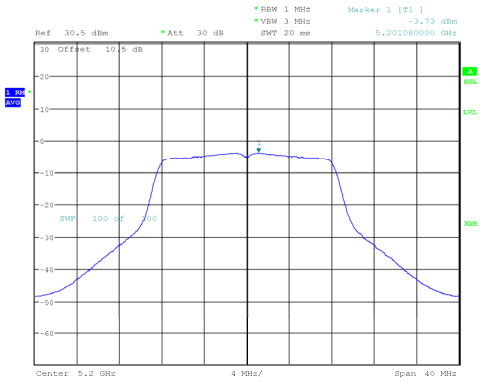
5150-5250 MHz Band:

802.11a mode, 5180MHz



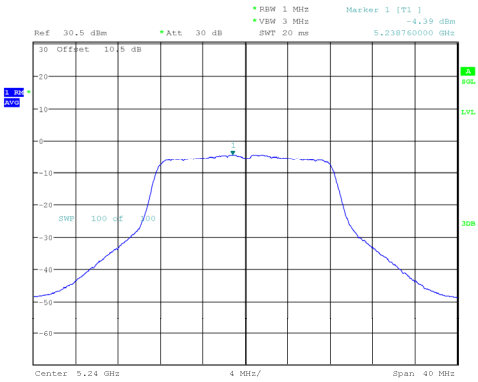
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:19:25

802.11a mode, 5200MHz



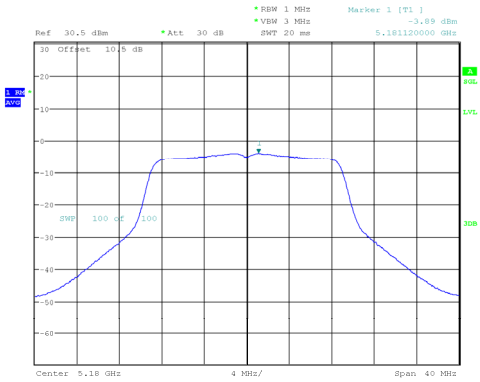
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:20:14

802.11a mode, 5240MHz



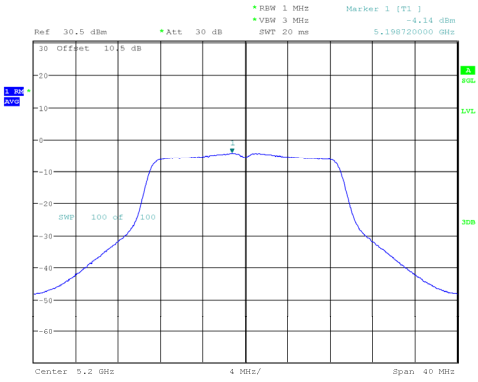
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:21:09

802.11n20 mode, 5180MHz



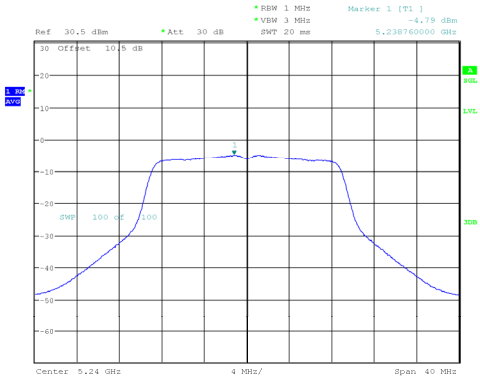
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:22:53

802.11 n20 mode, 5200MHz



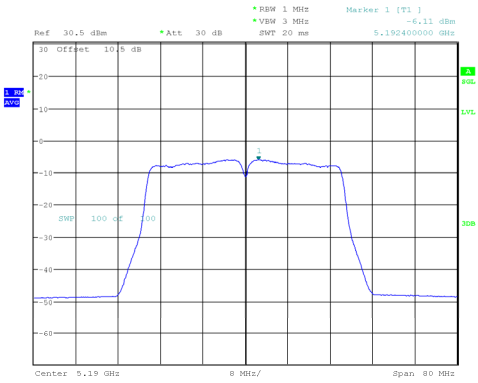
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:23:33

802.11 n20 mode, 5240MHz



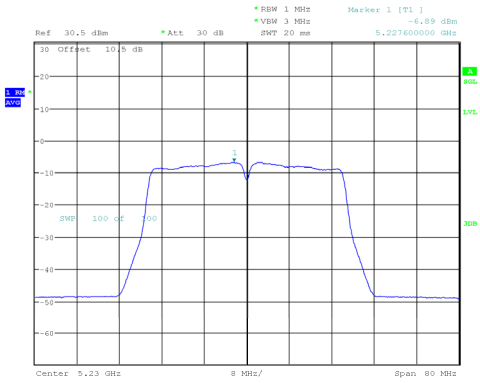
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:24:07

802.11n40 mode, 5190MHz



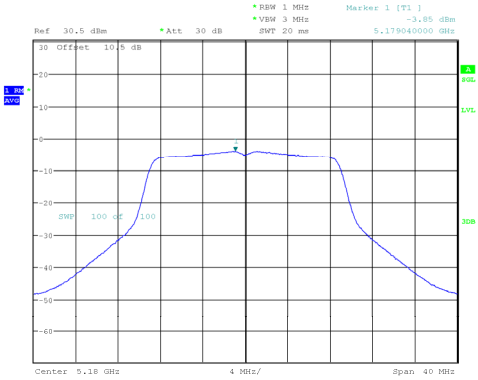
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:24:50

802.11n40 mode, 5230MHz



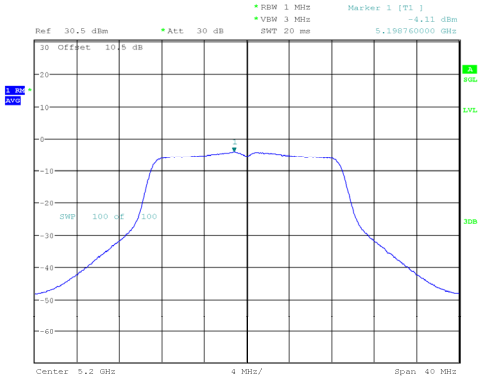
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:25:51

802.11ac20 mode, 5180MHz



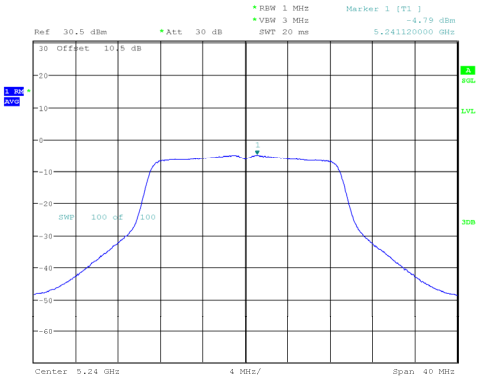
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:26:32

802.11ac20 mode, 5200MHz



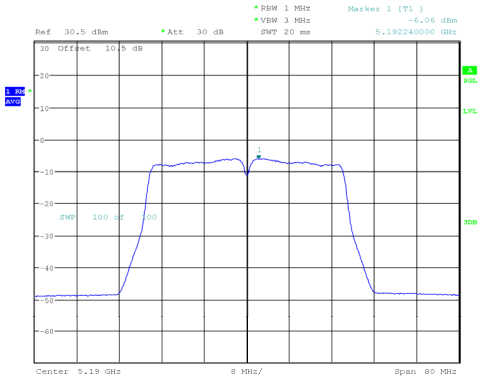
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:27:04

802.11 ac20 mode, 5240MHz



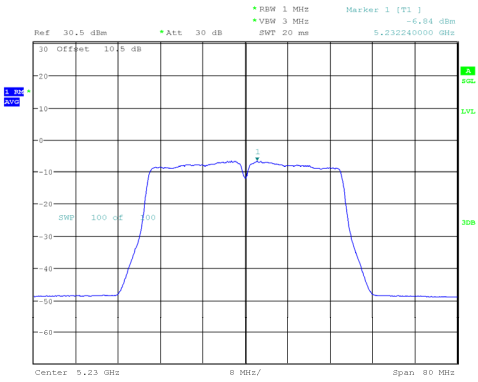
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:27:37

802.11ac40 mode, 5190MHz



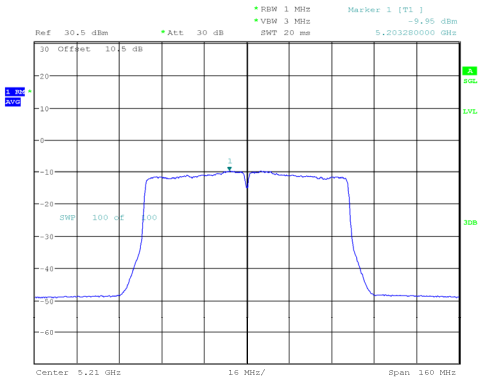
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:28:27

802.11ac40 mode, 5230MHz



ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:29:06

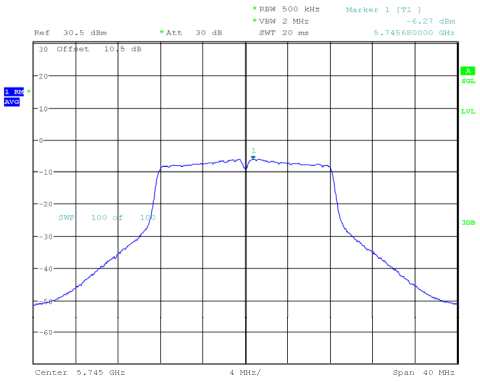
802.11ac80 mode, 5210MHz



ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:30:02

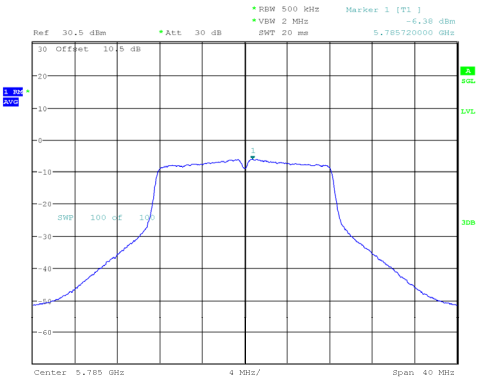
5725-5850 MHz Band:

802.11a mode, 5745MHz



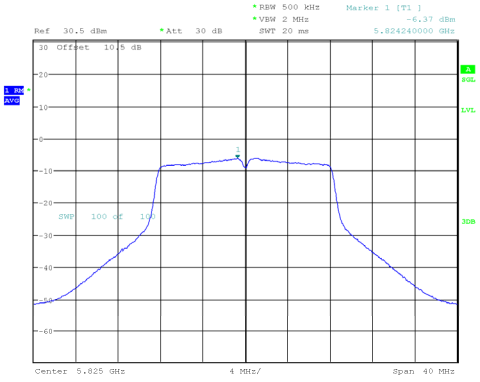
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:12:12

802.11a mode, 5785MHz



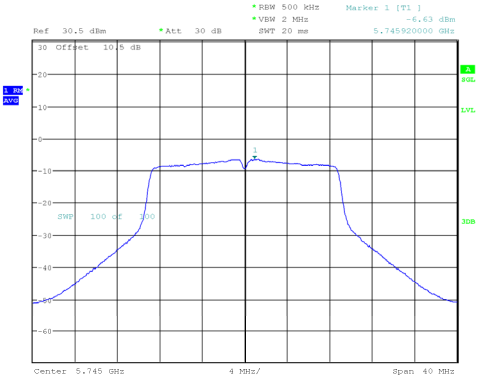
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:45:25

802.11a mode, 5825MHz



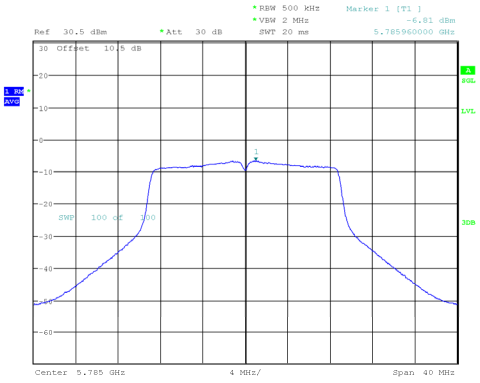
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:31:50

802.11n20 mode, 5745MHz



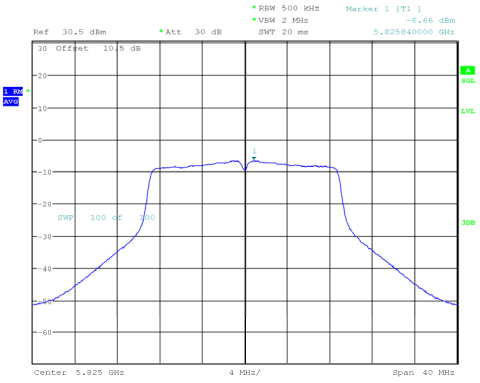
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:35:37

802.11 n20 mode, 5785MHz



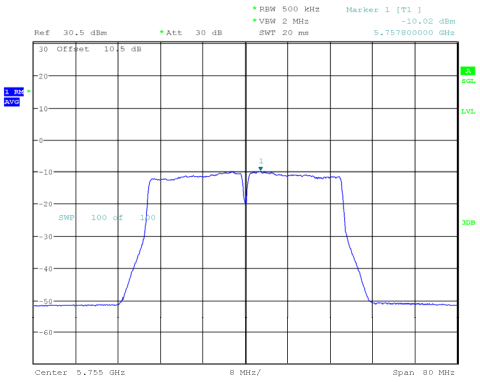
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:36:15

802.11 n20 mode, 5825MHz



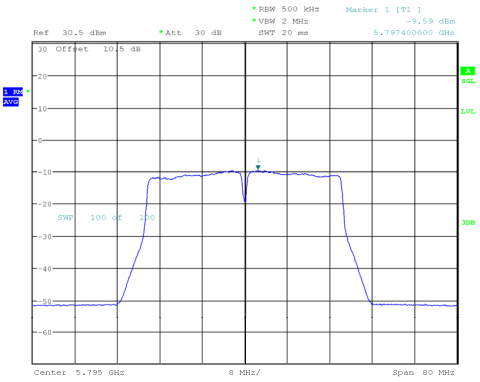
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:36:52

802.11n40 mode, 5755MHz



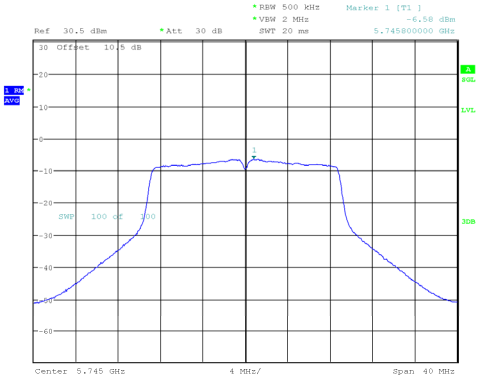
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:14:18

802.11n40 mode, 5795MHz



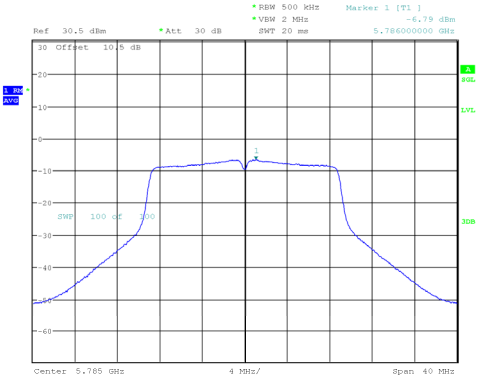
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:38:00

802.11ac20 mode, 5745MHz



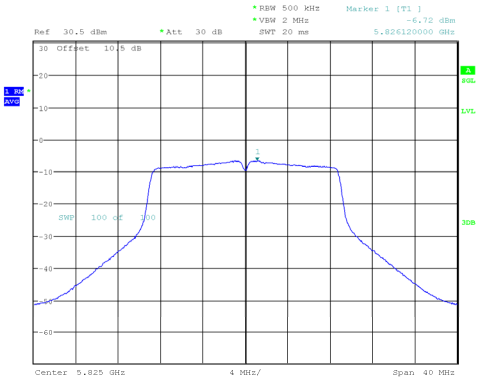
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:38:58

802.11ac20 mode, 5785MHz



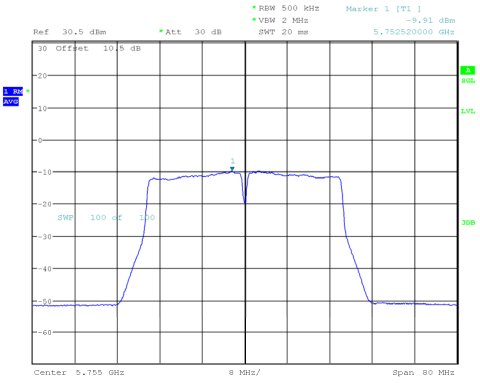
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:46:27

802.11 ac20 mode, 5825MHz



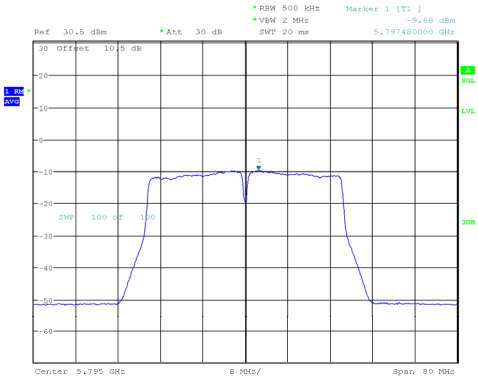
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:40:51

802.11ac40 mode, 5755MHz



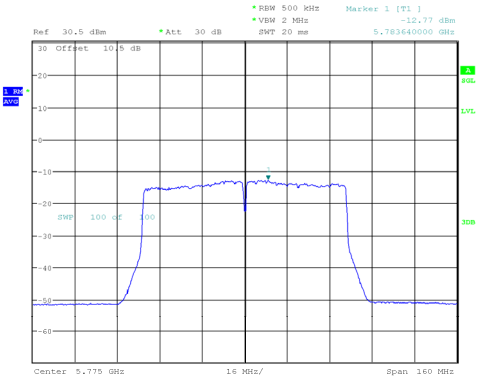
ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:16:08

802.11ac40 mode, 5795MHz



ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:41:48

802.11ac80 mode, 5775MHz



ProjectNo.:RSHA240322001 Tester:Neil Zhou
Date: 27.AUG.2024 19:43:26

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 D - TEST SETUP PHOTOGRAPHS.

Declarations

1. The laboratory is not responsible for the authenticity of any information provided by the applicant. Information from the applicant that may affect test results is marked with "★".

2. The test data was only valid for the test sample(s).

3. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

4. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

5. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor k=2 with the 95.45% confidence interval.

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