

FCC PART 15.407

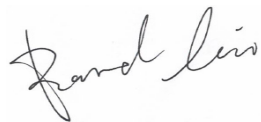
TEST REPORT

For

Neuracle Technology (Changzhou) Co., Ltd.

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

FCC ID: 2BGXN-MTB04

Report Type: Original Report	Product Name: Triggerbox
Report Number:	RSHA240717002-00A
Report Date:	2025-02-26
Reviewed By:	Bard Liu 
Approved By:	Kyle Xu 
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Kunshan) No.248 Chenghu Road, Kunshan, Jiangsu province, China Tel: +86-512-86175000 Fax: +86-512-88934268 www.baclcorp.com.cn

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

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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	RSHA240717002-00A	R1V1	2025-02-26	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Neuracle Technology (Changzhou) Co., Ltd.				
Product Name:	Triggerbox				
Tested Model:	MTB2				
Power Supply:	DC 5V from adapter				
RF Function:	5G Wi-Fi				
Operating Frequency	5G Wi-Fi B1: 5150-5250 MHz, B2: 5250-5350 MHz, B3: 5470-5725 MHz, B4: 5725-5850 MHz				
Maximum Average Output Power	Mode:	5G Wi-Fi B1:	5G Wi-Fi B2:	5G Wi-Fi B3:	5G Wi-Fi B4:
	802.11a:	9.32dBm	6.64 dBm	6.26 dBm	9.64 dBm
	802.11n-HT20:	9.38 dBm	6.53 dBm	6.29 dBm	9.83 dBm
	802.11n-HT40:	7.91dBm	6.06 dBm	6.69 dBm	9.27 dBm
Channel Number	5G Wi-Fi B1: 6, B2: 6, B3: 16, B4: 7				
Channel Separation	5G Wi-Fi: a/n20: 20 MHz, n40: 40 MHz				
Modulation Type	OFDM				
Antenna Type	PCB antenna				
★Maximum Antenna Gain	Band 1: 2.72 dBi Band 2: 0.26 dBi Band 3: 2.69 dBi Band 4: 3.06 dBi				

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

All measurement and test data in this report was gathered from production sample serial number: RSHA240717002-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2024-07-17.)

Objective

This type approval report is prepared for *Neuracle Technology (Changzhou) Co., Ltd.* in accordance with Part 2-Subpart J, Part 15-Subparts A and E of the Federal Communication Commissions' rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

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

Measurement Uncertainty

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

Test Facility

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

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

SYSTEM TEST CONFIGURATION

Description of Test Configuration

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

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

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

802.11n40 mode Channel 38, 46 were tested.

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

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

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

802.11n40 mode Channel 54, 62 were tested.

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

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

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

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

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

For **5725~5850 MHz** band,

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

802.11n40 mode Channel 151, 159 were tested.

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

EUT Exercise Software

No exercise software was used to test.

The worst case was performed under:

U-NII	Mode	Data rate	★Power Level		
			Low Channel	Middle Channel	High Channel
5150~5250MHz	802.11a	6Mbps	13	15	15
	802.11n-HT20	MCS0	13	15	15
	802.11n-HT40	MCS0	12	/	15

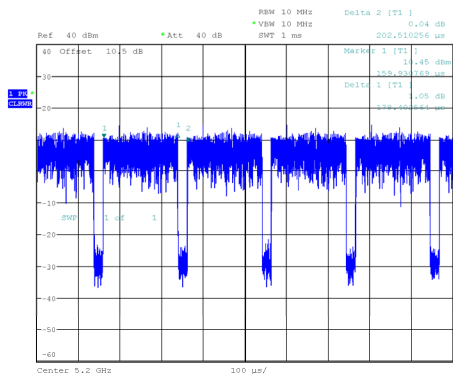
U-NII	Mode	Data rate	★Power Level		
			Low Channel	Middle Channel	High Channel
5250~5350MHz	802.11a	6Mbps	15	15	15
	802.11n-HT20	MCS0	15	13	14
	802.11n-HT40	MCS0	15	/	11

U-NII	Mode	Data rate	★Power Level		
			Low Channel	Middle Channel	High Channel
5470~5725MHz	802.11a	6Mbps	15	15	15
	802.11n-HT20	MCS0	15	15	15
	802.11n-HT40	MCS0	11	15	15

U-NII	Mode	Data rate	★Power Level		
			Low Channel	Middle Channel	High Channel
5725~5850MHz	802.11a	6Mbps	15	15	15
	802.11n-HT20	MCS0	15	15	15
	802.11n-HT40	MCS0	15	15	15

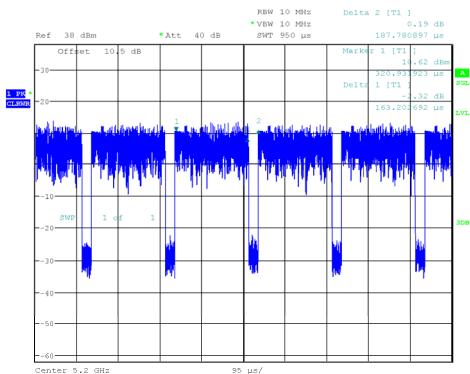
Note: The power level was declared by the applicant.

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



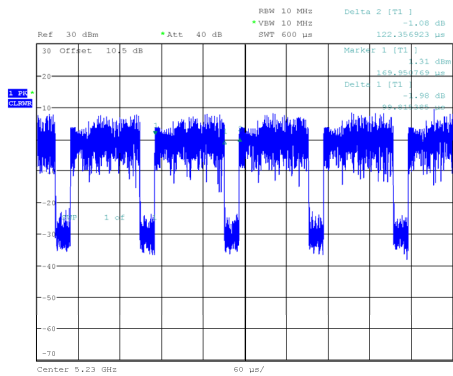
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802.11n-HT20 mode



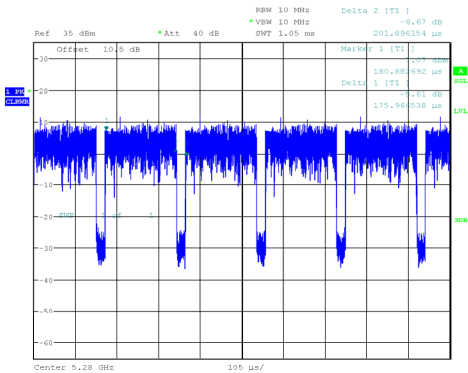
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802.11n-HT40 mode



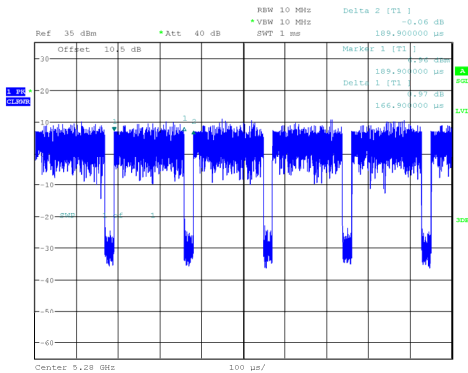
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5250MHz-5350MHz Band:
802.11a mode



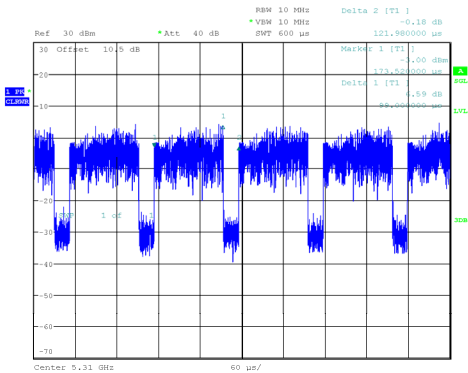
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802.11n-HT20 mode



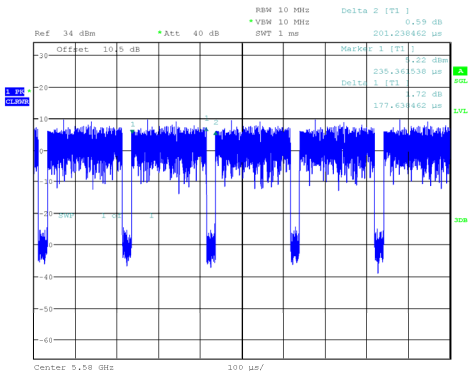
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Date: 30.AUG.2024 14:39:49

802.11n-HT40 mode



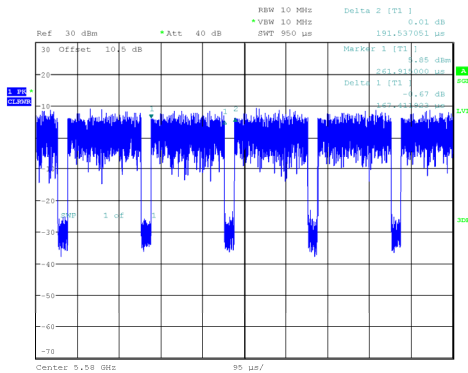
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5470MHz-5725MHz Band:
802.11a mode



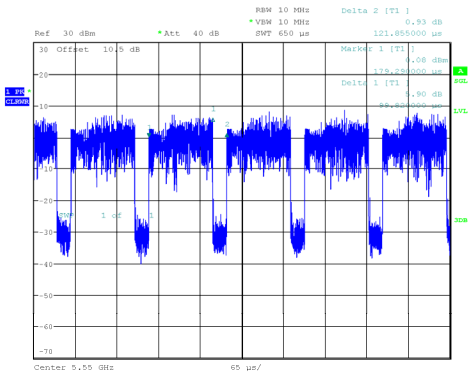
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802.11n-HT20 mode



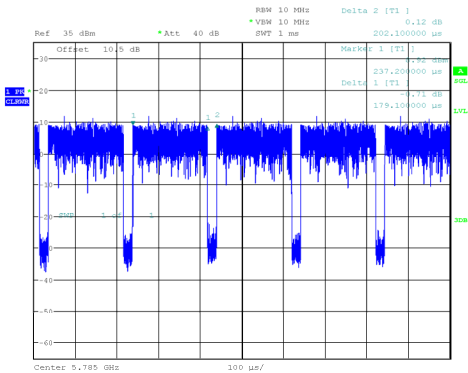
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Date: 30.AUG.2024 16:14:40

802.11n-HT40 mode



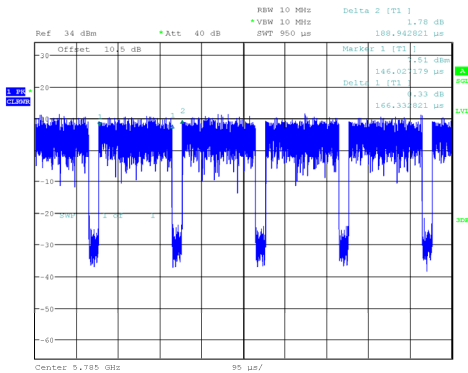
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5725MHz-5850MHz Band:
802.11a mode



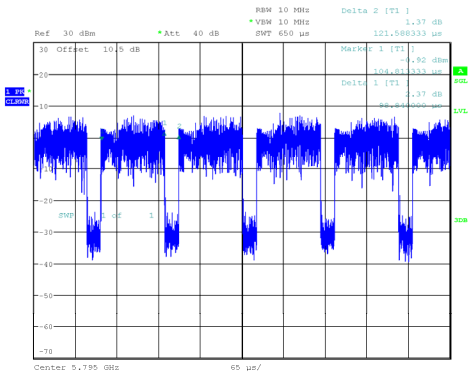
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802.11n-HT20 mode



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 17:43:36

802.11n-HT40 mode



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 18:00:07

5.2G

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)	1/Ton (Hz)
a_5200MHz_Chain 0	0.178	0.203	87.68	0.57	5618
n20_5200MHz_Chain 0	0.163	0.188	86.70	0.62	6135
n40_5230MHz_Chain 0	0.100	0.122	81.97	0.86	10000

5.3G

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)	1/Ton (Hz)
a_5280MHz_Chain 0	0.176	0.202	87.13	0.60	5682
n20_5280MHz_Chain 0	0.167	0.190	87.89	0.56	5988
n40_5310MHz_Chain 0	0.099	0.122	81.15	0.91	10101

5.6G

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)	1/Ton (Hz)
a_5580MHz_Chain 0	0.178	0.201	88.56	0.53	5618
n20_5580MHz_Chain 0	0.167	0.192	86.98	0.61	5988
n40_5550MHz_Chain 0	0.100	0.122	81.97	0.86	10000

5.8G

Mode	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)	1/Ton (Hz)
a_5785MHz_Chain 0	0.179	0.202	88.61	0.52	5587
n20_5785MHz_Chain 0	0.166	0.189	87.83	0.56	6024
n40_5795MHz_Chain 0	0.099	0.122	81.15	0.91	10101

Equipment Modifications

No modification was made to the EUT.

Support Equipment List and Details

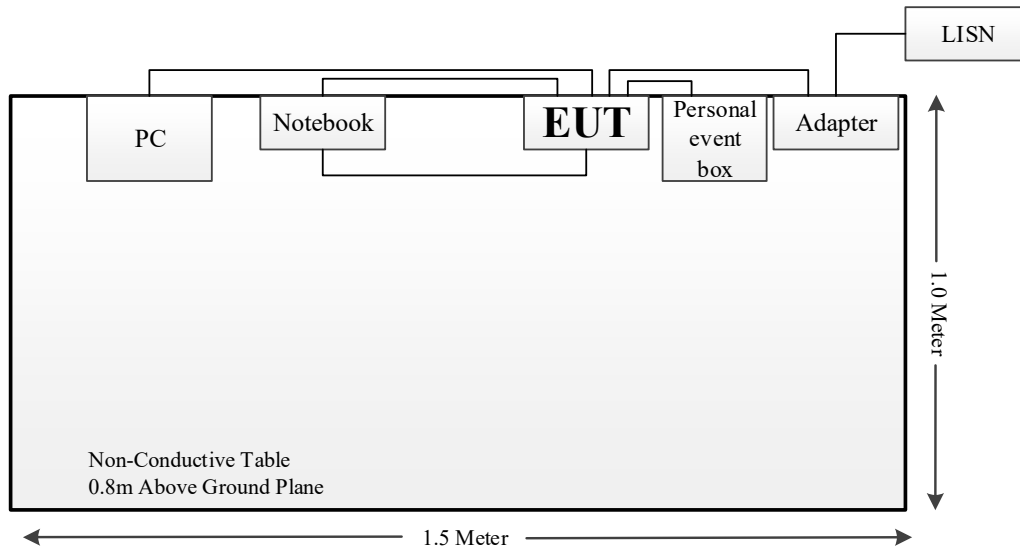
Manufacturer	Description	Model	Serial Number
Lenovo	Notebook	Thinkpad T470S	R9-0FYHD4 15/05
/	Adapter	GSM12U05	/
/	Forwarder	/	/
DELL	PC	JSD2	/
Neuracle Technology (Changzhou) Co., Ltd.	Personal event box	/	/

External I/O Cable

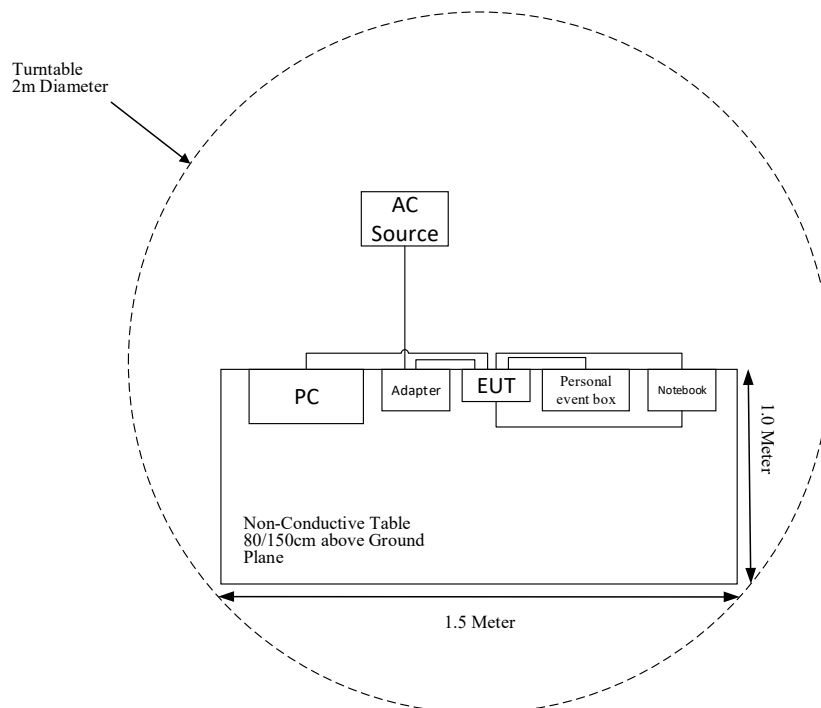
Cable Description	Length (m)	From Port	To
Power Cable 1	1.0	EUT	Adapter
Power Cable 2	1.2	EUT	LISN/AC Source
RJ45 Cable	1.2	EUT	Notebook
USB Cable	1.2	EUT	Notebook
Trigger Cable	1.0	EUT	PC
Data Cable	1.0	EUT	Personal event box

Block Diagram of Test Setup

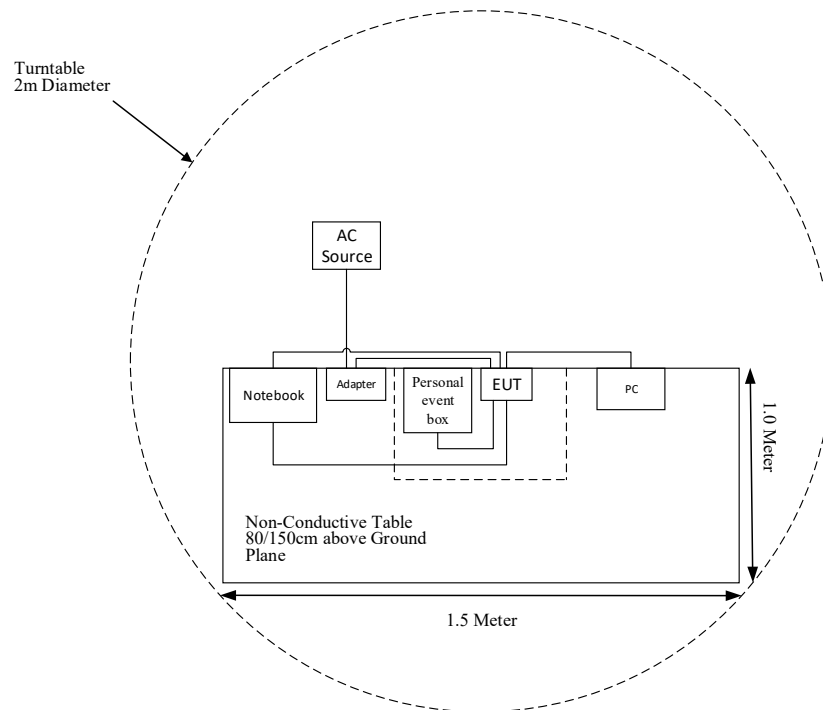
For Conducted Emissions:



For Radiated Emissions (Below 1GHz):



For Radiated Emissions (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	Hybrid Antenna	JB3	A090314-1	2023-11-11	2024-11-10
ETS-LINDGREN	Loop Antenna	6512	108100	2023-11-09	2024-11-08
Sonoma Instrument	Amplifier	310N	171205	2024-04-23	2025-04-22
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-8	008	2024-04-25	2025-04-24
MICRO-COAX	Coaxial Cable	Cable-9	009	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-10	010	2024-04-23	2025-04-22
Narda	6dB Attenuator	773-6	10690812-2-1	2023-11-11	2024-11-10
Radiated Emission Test (Chamber #2)					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2024-04-25	2025-04-24
ETS-LINDGREN	Horn Antenna	3115	9311-4159	2023-12-02	2024-12-01
ETS-LINDGREN	Horn Antenna	3116	84159	2023-12-07	2024-12-06
A.H.Systems,inc	Amplifier	PAM-0118P	512	2024-04-25	2025-04-24
EM Electronics Corporation	Amplifier	EM18G40G	060726	2024-04-25	2025-04-24
MICRO-TRONICS	Band Reject Filter	BRM50716	G059	2024-05-23	2025-05-22
Narda	Attenuator	10dB	010	2024-04-23	2025-04-22
Narda	Attenuator	6dB	006	2024-04-23	2025-04-22
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	2024-04-23	2025-04-22
MICRO-COAX	Coaxial Cable	Cable-11	011	2024-04-25	2025-04-24
MICRO-COAX	Coaxial Cable	Cable-12	012	2024-04-25	2025-04-24
RF Conducted Test					
Rohde & Schwarz	Signal Analyzer	FSV40-N	103298	2024-04-24	2025-04-23
Rohde & Schwarz	Spectrum Analyzer	FSU26	200103	2024-04-24	2025-04-23
Anritsu	Power Sensor	MA24418A	12621	2024-04-23	2025-04-22
N/A	Attenuator	10 dB	N/A	2024-04-23	2025-04-22
XHFDZ	RG316 Coaxial Cable	SMA-316	XHF-1175	Each time	N/A
Conducted Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR	101746	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
Rohde & Schwarz	Pulse Limiter	ESH3-Z2	0357.8810.54	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
§ 1.1307 (b) (3) & §2.1091	MAXIMUM PERMISSIBLE EXPOSURE (MPE)	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

The EUT has a PCB antenna which was permanently attached, fulfill the requirement of this section. Please refer to the EUT photos.

Antenna Type	Frequency Range	Max. Antenna Gain	Input impedance
PCB	5150~5250 MHz	2.72 dBi	50Ω
	5250~5350 MHz	0.26 dBi	50Ω
	5470~5725 MHz	2.69 dBi	50Ω
	5725~5850 MHz	3.06 dBi	50Ω

Result: Compliant.

§1.1307 (b) (3) & §2.1091 –MAXIMUM PERMISSIBLE EXPOSURE (MPE)**Applicable Standard**

According to subpart 1.1310, 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density

Calculated Formulary:

Predication of MPE limit at a given distance

$S = PG/4 \pi R^2$ = power density (in appropriate units, e.g. mW/cm²);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

Calculated Data:

Mode	Frequency Range (MHz)	Antenna Gain		Tune-up Output Power★		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
		(dBi)	(numeric)	(dBm)	(mW)			
SRD	433.42	/	/	-22	0.01	20	<0.0001	0.3
5G Wi-Fi	5150-5250	2.72	1.87	9.5	8.91	20	0.0033	1.0
	5250-5350	0.26	1.06	7.0	5.01	20	0.0011	1.0
	5470-5725	2.69	1.86	7.0	5.01	20	0.0019	1.0
	5725-5850	3.06	2.02	10.0	10.0	20	0.0040	1.0

Note:

1. For the above tune up power were declared by the manufacturer.
2. The SRD EIRP = 72.81 dBμV/m -95.2 = -22.39dBm.
3. The worst condition of transmit simultaneously (WiFi&SRD) is as below:

$$\sum_i \frac{S_i}{S_{Limit,i}} = 0.0001/0.3 + 0.004/1 = 0.0003 + 0.0040 = 0.0043 < 1.0$$

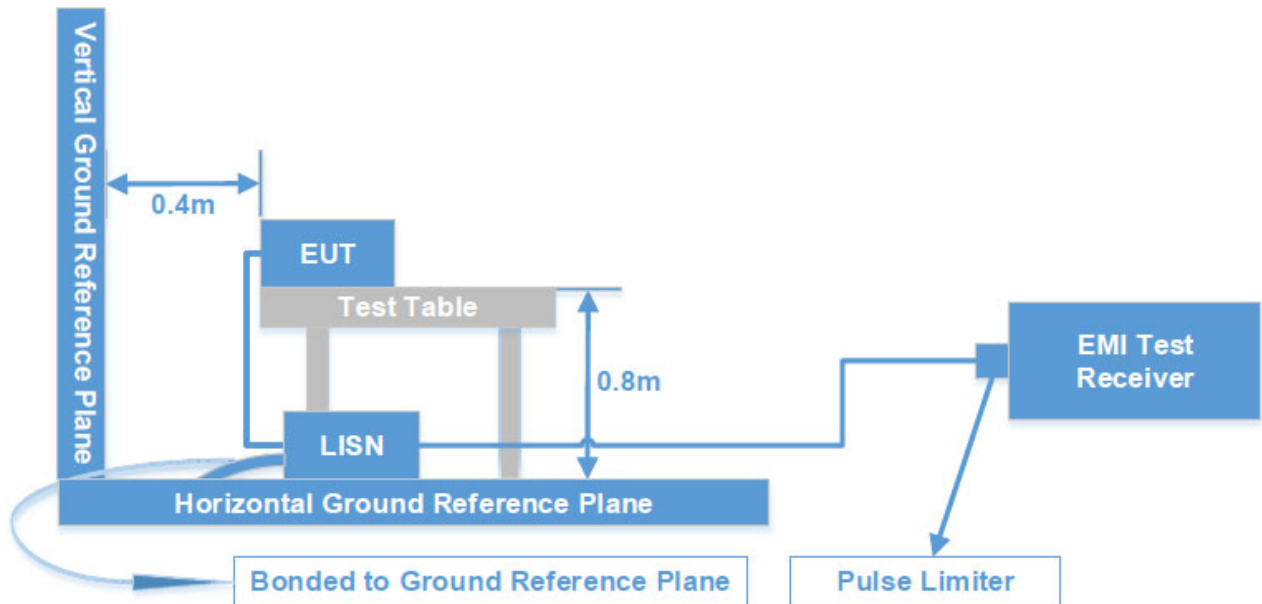
Conclusion: The device meets MPE at distance 20cm.

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

Applicable Standard

FCC §15.207(a), §15.407(b) (9)

Test System Setup



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

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

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

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

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

Test Procedure

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

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

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

Level & Over Limit Calculation

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

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

The “**Over Limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit of 7 dB means the emission is 7 dB above the limit. The equation for Over Limit calculation is as follows:

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

Test Results Summary

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

Test Data: See Appendix

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

Applicable Standard

FCC §15.407 (b); §15.209; §15.205;

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

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

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

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

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

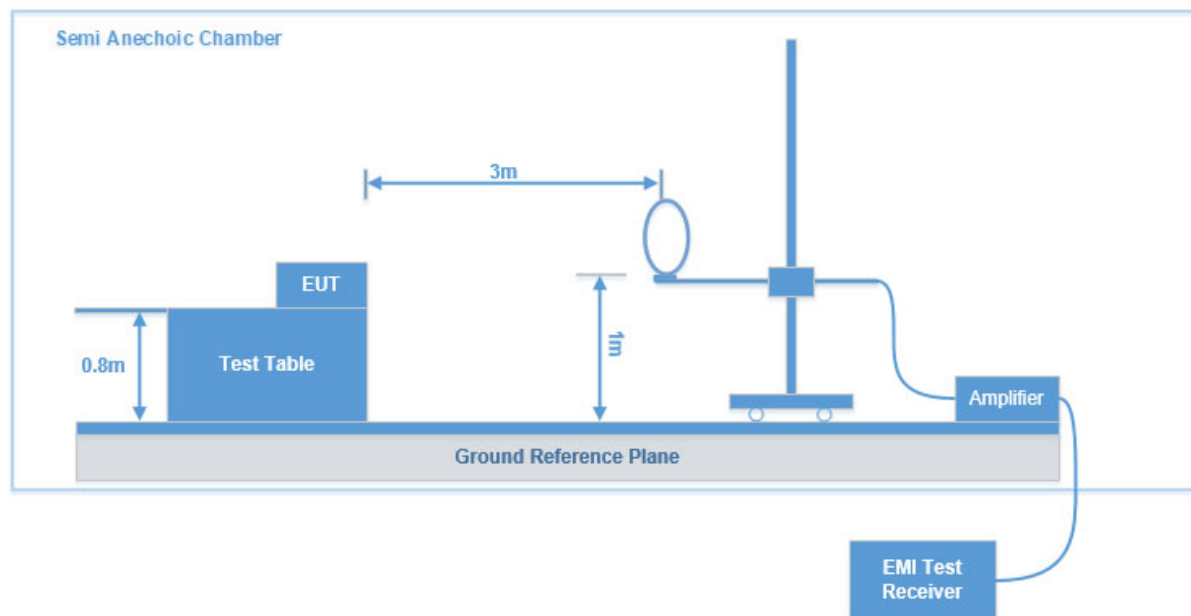
(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the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

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

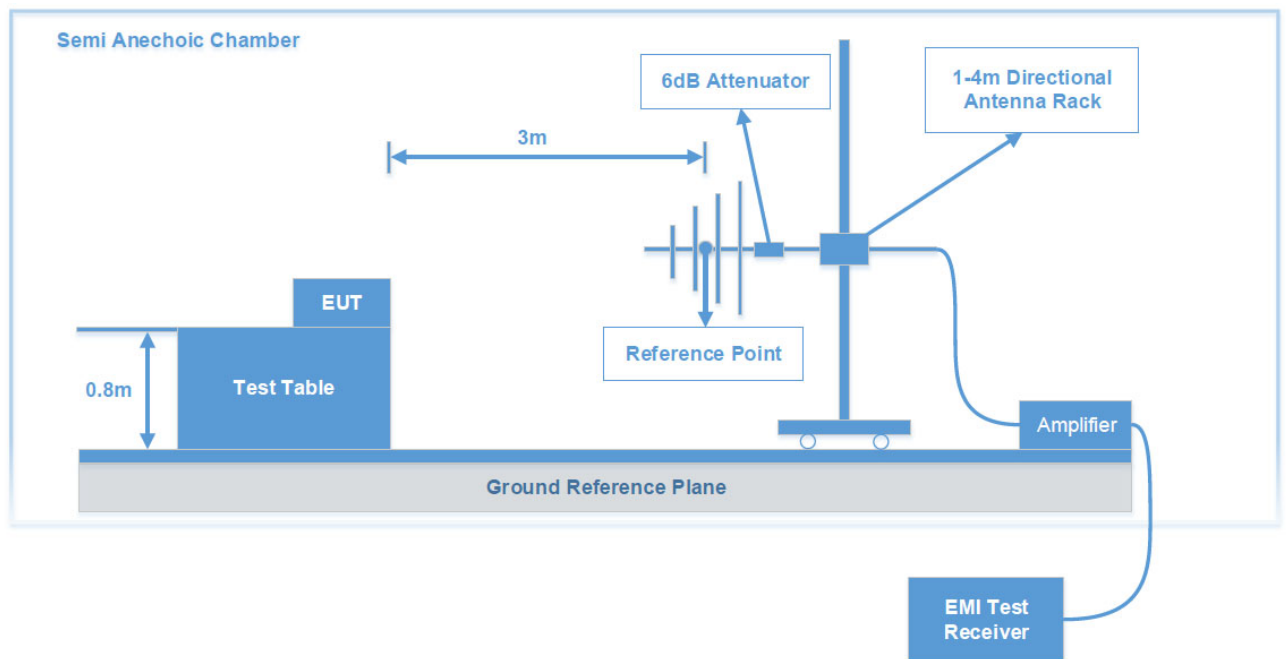
According to C63.10, emission shall be computed as: $E [dB\mu V/m] = EIRP [dBm] + 95.2$, for $d = 3$ meters.

Test System Setup

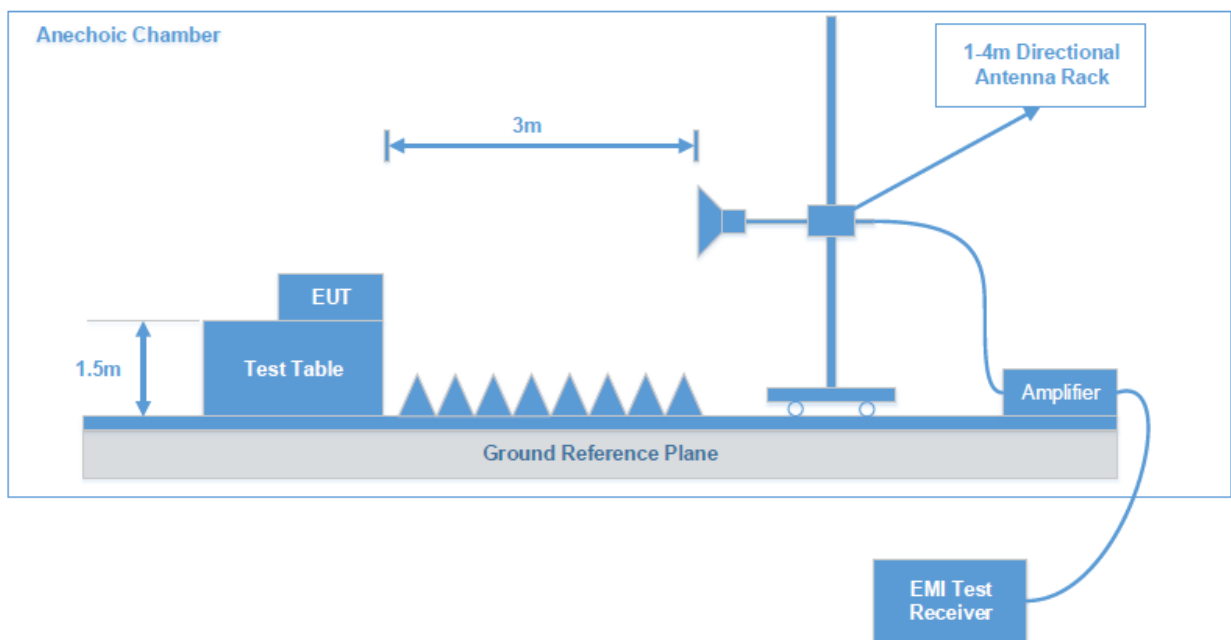
9 kHz–30 MHz:



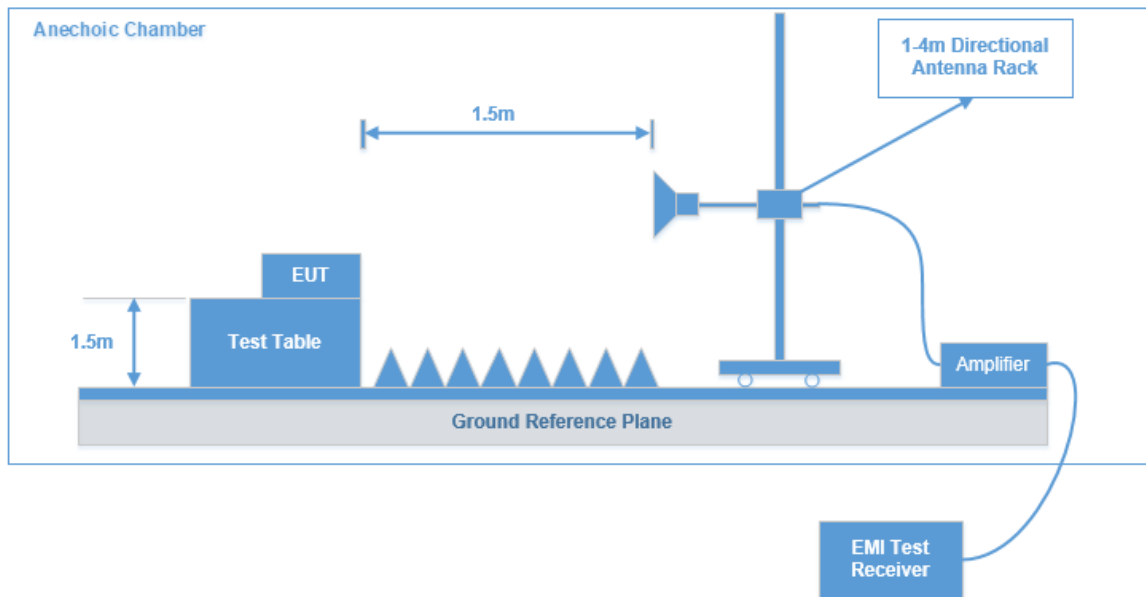
30MHz-1GHz:



1 GHz-18GHz:



18-40GHz:



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

The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209 and FCC 15.407 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9 kHz to 40 GHz.

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

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

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

Test Procedure

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

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

Corrected Amplitude & Margin Calculation

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

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

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

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

Margin (dB) = Limit (dB μ V/m) – Corrected Amplitude (dB μ V/m)

Test Data: See Appendix

FCC §15.407(a) & §15.407(e)–EMISSION BANDWIDTH

Applicable Standard

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

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

Test Procedure

1. Emission Bandwidth (EBW)

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

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

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

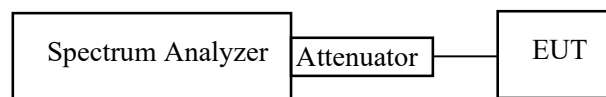
- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

3. Occupied bandwidth

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

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (\text{OBW}/\text{RBW})]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.

- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).



FCC §15.407(a) – CONDUCTED TRANSMITTER OUTPUT POWER

Applicable Standard

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

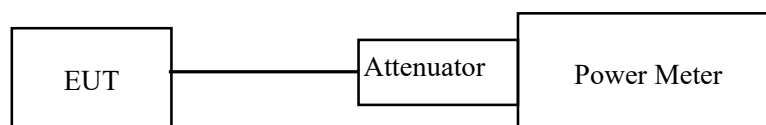
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not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

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

Test Procedure

According to C63.10:2013 clause 12.3.3.1 Measurement using an RF average power meter.

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.



FCC §15.407(a) - POWER SPECTRAL DENSITY

Applicable Standard

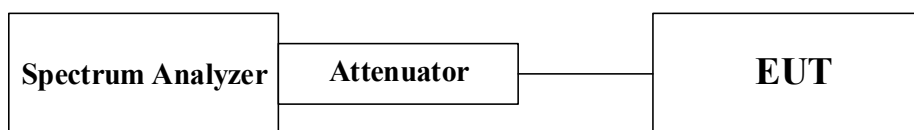
For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting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

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

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

Test Procedure

The measurements are based on C63.10:2013 Clause 12.5: method SA-2 used



EUT PHOTOGRAPHS

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

TEST SETUP PHOTOGRAPHS

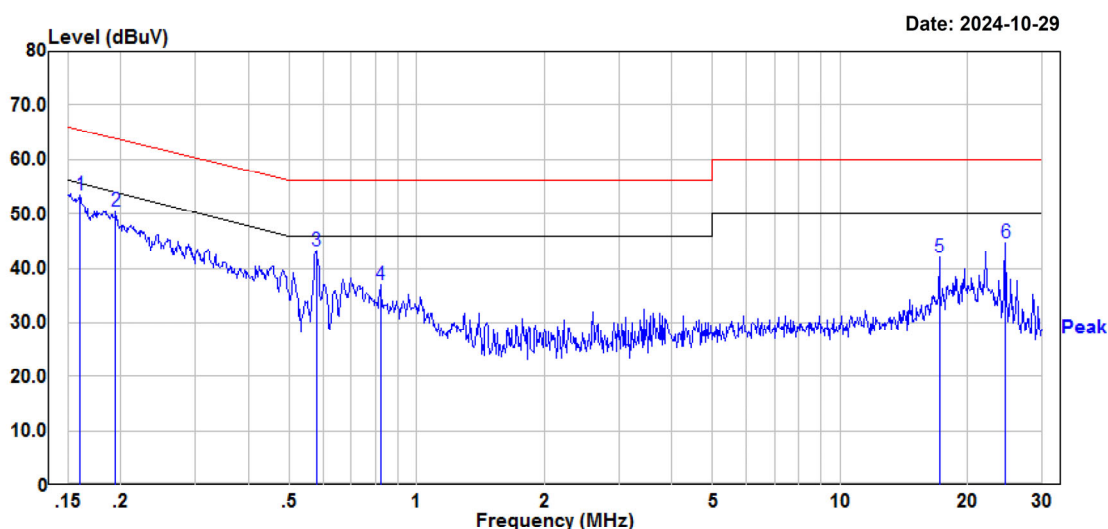
Please refer to the attachment EXHIBIT C - TEST SETUP PHOTOGRAPHS.

APPENDIX - TEST DATA

Environmental Conditions & Test Information

Test Item:	AC power-line conducted emissions limits	UNWANTED EMISSIONS & BAND EDGE EMISSIONS		
		9 kHz - 1GHz	1 GHz - 18 GHz	18 GHz - 40 GHz
Test Date:	2024-10-29	2024-08-19 to 2024-08-20	2024-08-19 to 2024-08-20	2024-11-06
Temperature:	21.3 °C	25.4 °C - 26.2 °C	25.4 °C - 26.2 °C	24.1°C
Relative Humidity:	60 %	42 % - 57 %	42 % - 57 %	53 %
ATM Pressure:	102.0 kPa	100.5 kPa - 100.6 kPa	100.5 kPa - 100.6 kPa	100.9 kPa
Test Result:	Pass	Pass	Pass	Pass
Test Engineer:	Myles Miao	Grace Luo	Hugh Wu	Hugh Wu

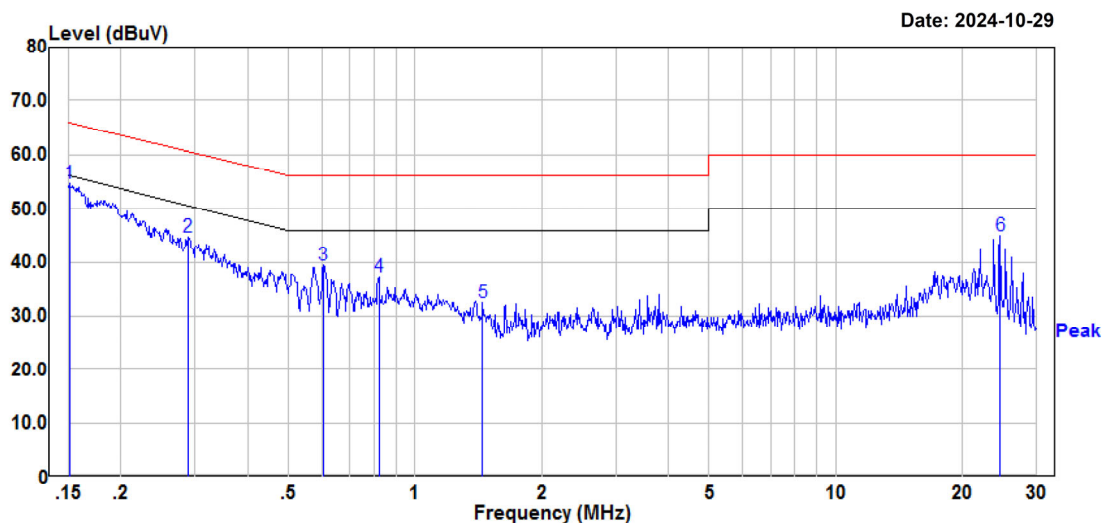
Test Item:	Emission Bandwidth	Conducted Transmitter Output Power	Power Spectral Density	Duty Cycle
Test Date:	2024-08-30	2024-08-19 to 2024-08-20	2024-08-30	2024-08-30
Temperature:	22.3°C	25.4 °C - 26.2 °C	22.3°C	22.3°C
Relative Humidity:	48 %	42 % - 57 %	48 %	48 %
ATM Pressure:	101.9 kPa	100.5 kPa - 100.6 kPa	101.9 kPa	101.9 kPa
Test Result:	Pass	Pass	Pass	/
Test Engineer:	Neil Zhou	Bard Liu	Neil Zhou	Neil Zhou

AC POWER LINE CONDUCTED EMISSIONS*EUT operation mode: Transmitting in 802.11n-HT20 mode middle channel of 5745MHz (maximum output power)***AC 120V/60 Hz, Line**

Site : CE
Condition : limit\FCC PART 15.207
: DET:Peak
Project No. : RSHA240717002
Model : MTB2
Phase : L
Voltage : 120V/60Hz
Mode : 5G WIFI
Test Equipment : ENV216,ESR
Temperature : 21.3℃
Humidity : 60%
Atmospheric pressure: 102.0kPa
Test Engineer : Myles Miao

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.160	33.23	20.11	53.34	65.46	-12.12	Peak
2	0.194	30.39	20.11	50.50	63.85	-13.35	Peak
3	0.579	23.17	20.11	43.28	56.00	-12.72	Peak
4	0.821	16.98	19.91	36.89	56.00	-19.11	Peak
5	17.166	22.42	19.71	42.13	60.00	-17.87	Peak
6	24.577	24.94	19.81	44.75	60.00	-15.25	Peak

AC 120V/60 Hz, Neutral



Site : CE
Condition : limit\FCC PART 15.207
DET:Peak
Project No. : RSHA240717002
Model : MTB2
Phase : N
Voltage : 120V/60Hz
Mode : 5G WIFI
Test Equipment : ENV216,ESR
Temperature : 21.3℃
Humidity : 60%
Atmospheric pressure: 102.0kPa
Test Engineer : Myles Miao

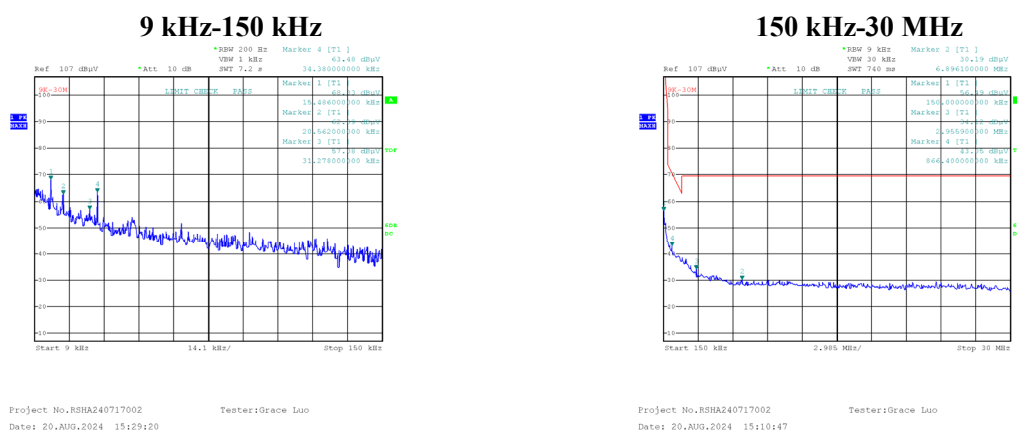
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.151	34.45	20.12	54.57	65.96	-11.39	Peak
2	0.288	24.48	20.16	44.64	60.58	-15.94	Peak
3	0.606	19.40	20.09	39.49	56.00	-16.51	Peak
4	0.821	17.28	19.91	37.19	56.00	-18.81	Peak
5	1.449	12.47	19.95	32.42	56.00	-23.58	Peak
6	24.577	25.24	19.81	45.05	60.00	-14.95	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:

EUT operation mode: Transmitting

9kHz~30MHz: Transmitting in maximum output power channel 802.11n-HT20 mode middle channel of 5745MHz



9 kHz-150 kHz

Frequency (kHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
15.486	68.33	PK	52.88	123.81	55.48
20.562	62.89	PK	49.84	121.34	58.45
31.278	57.08	PK	46.87	117.70	60.62
34.38	63.48	PK	46.06	116.88	53.40

150 kHz-30 MHz

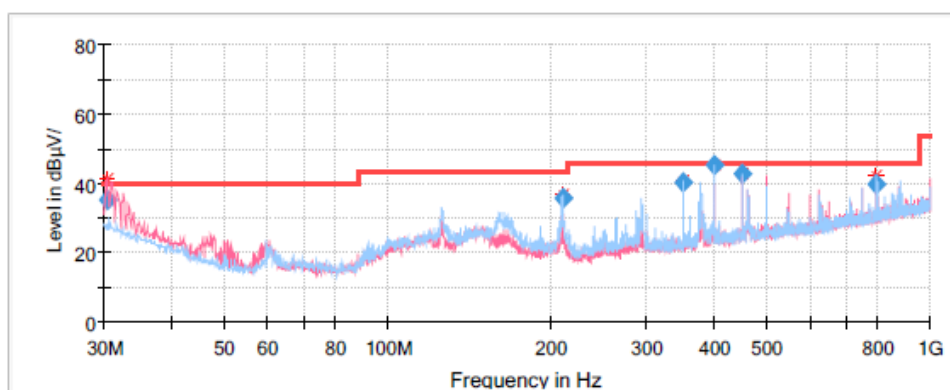
Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.15000	56.49	PK	50.90	104.08	47.59
6.89610	30.19	PK	6.84	69.54	39.35
2.95590	34.12	PK	10.39	69.54	35.42
0.86640	43.05	PK	18.88	68.85	25.80

30MHz-1GHz(5150-5250MHz Band): Transmitting in maximum output power 802.11n-HT20 mode middle channel

Middle Channel: 5200 MHz

Common Information

Project No:	RSHA240717002
EUT Model:	MTB2
Test Mode:	Transmitting in 802.11n-HT20 mode middle channel
Standard:	FCC Part 15.407
Test Equipment:	ESCI, JB3, 310N
Temperature:	25.4℃
Humidity:	57%
Barometric Pressure:	100.6kPa
Test Engineer:	Grace Luo
Test Date:	2024/8/19



Final Result

Frequency (MHz)	QuasiPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.363000	35.09	40.00	4.91	V	-5.5
210.024400	35.75	43.50	7.75	H	-12.8
350.008450	40.46	46.00	5.54	H	-9.3
399.995850	45.13	46.00	0.87	H	-8.0
449.998300	42.71	46.00	3.29	H	-6.7
798.070450	39.65	46.00	6.35	H	-0.8

30MHz-1GHz(5250-5350MHz Band): Transmitting in maximum output power 802.11a mode high channel

High Channel: 5320 MHz

Common Information

Project No:

EUT Model:

Test Mode:

Standard:

Test Equipment:

Temperature:

Humidity:

Barometric Pressure:

Test Engineer:

Test Date:

RSHA240717002

MTB2

Transmitting in 802.11a mode high channel

FCC Part 15.407

ESCI, JB3, 310N

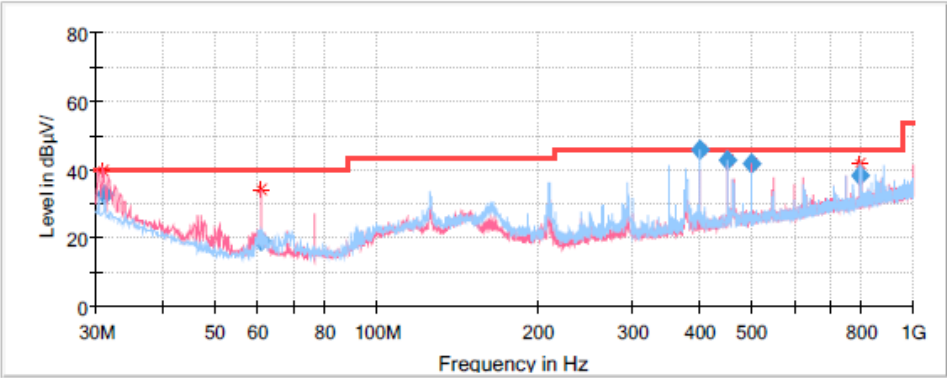
25.4℃

57%

100.6kPa

Grace Luo

2024/8/19



Final Result

Frequency (MHz)	QuasiPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
31.048110	32.47	40.00	7.53	V	-5.4
61.030950	19.15	40.00	20.85	V	-17.5
399.991050	45.65	46.00	0.35	H	-8.0
449.986600	42.97	46.00	3.03	H	-6.7
499.987200	42.00	46.00	4.00	V	-5.4
798.281950	38.38	46.00	7.62	H	-0.8

30MHz-1GHz(5470-5725MHz Band): Transmitting in maximum output power 802.11n-HT40 mode middle channel

Middle Channel: 5550 MHz

Common Information

Project No:

EUT Model:

Test Mode:

Standard:

Test Equipment:

Temperature:

Humidity:

Barometric Pressure:

Test Engineer:

Test Date:

RSHA240717002

MTB2

Transmitting in 802.11n-HT40 mode middle channel

FCC Part 15.407

ESCI, JB3, 310N

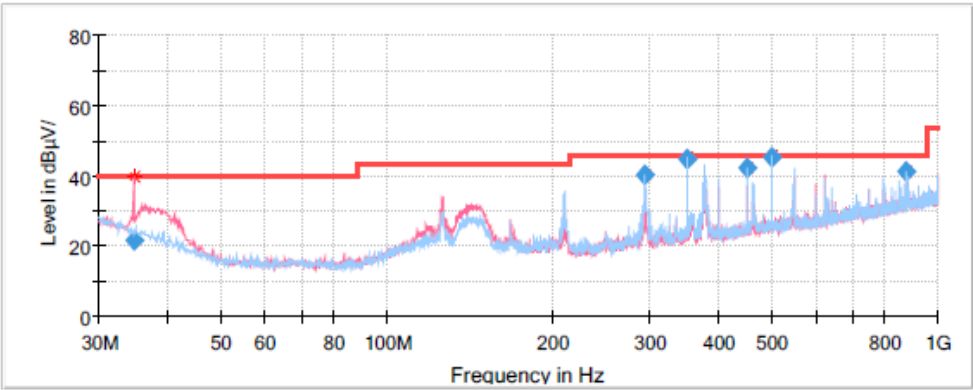
26.2°C

42%

100.5kPa

Grace Luo

2024/8/20

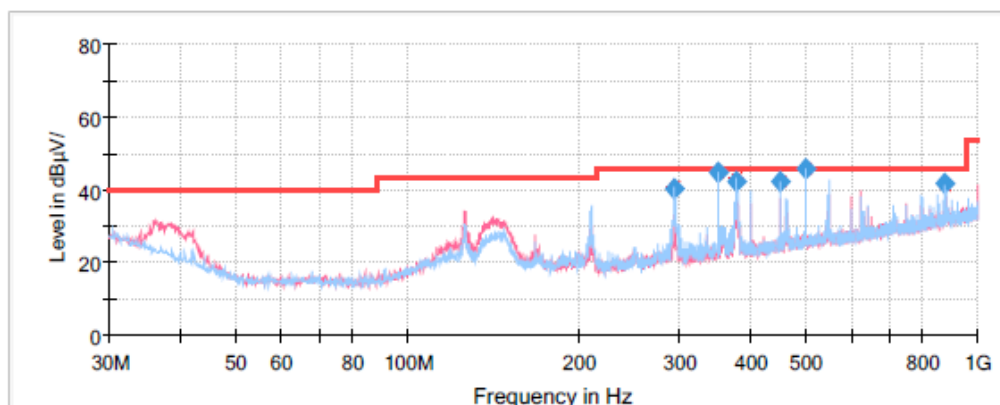


Final Result

Frequency (MHz)	QuasiPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Pol	Corr. (dB/m)
34.728000	21.81	40.00	18.19	V	-8.5
293.985250	40.16	46.00	5.84	H	-10.5
350.000350	44.83	46.00	1.17	H	-9.3
449.997100	42.14	46.00	3.86	H	-6.7
499.990200	45.32	46.00	0.68	H	-5.4
874.969400	41.50	46.00	4.50	H	0.5

30MHz-1GHz(5725-5850MHz Band): Transmitting in maximum output power 802.11n-HT20 mode low channel**Low Channel: 5745 MHz****Common Information**

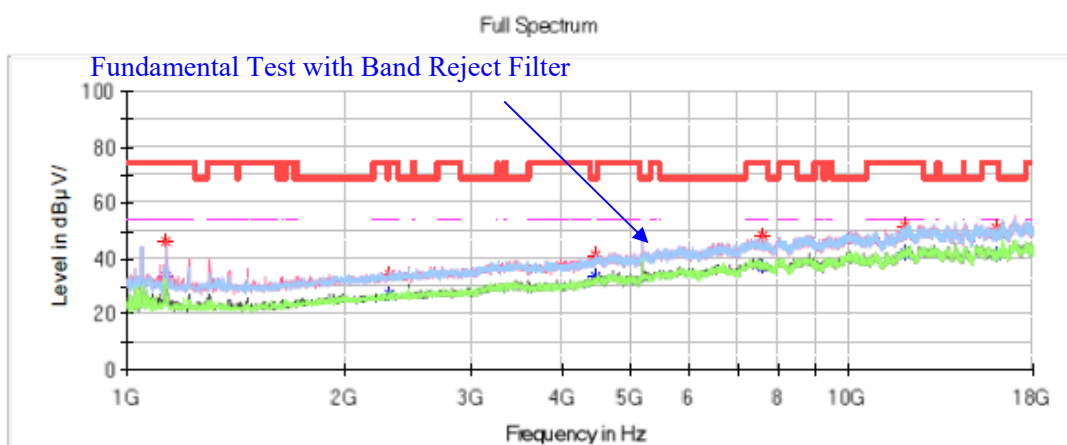
Project No: RSHA240717002
EUT Model: MTB2
Test Mode: Transmitting in 802.11n-HT20mode low channel
Standard: FCC Part 15.407
Test Equipment: ESCI, JB3, 310N
Temperature: 26.2°C
Humidity: 42%
Barometric Pressure: 100.5kPa
Test Engineer: Grace Luo
Test Date: 2024/8/20

**Final Result**

Frequency (MHz)	QuasiPeak (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Pol	Corr. (dB/m)
294.009400	40.06	46.00	5.94	H	-10.5
349.994950	44.86	46.00	1.14	H	-9.3
377.977000	42.35	46.00	3.65	H	-8.5
449.982100	42.21	46.00	3.79	H	-6.7
499.992300	45.57	46.00	0.43	H	-5.4
874.966100	41.67	46.00	4.33	H	0.5

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

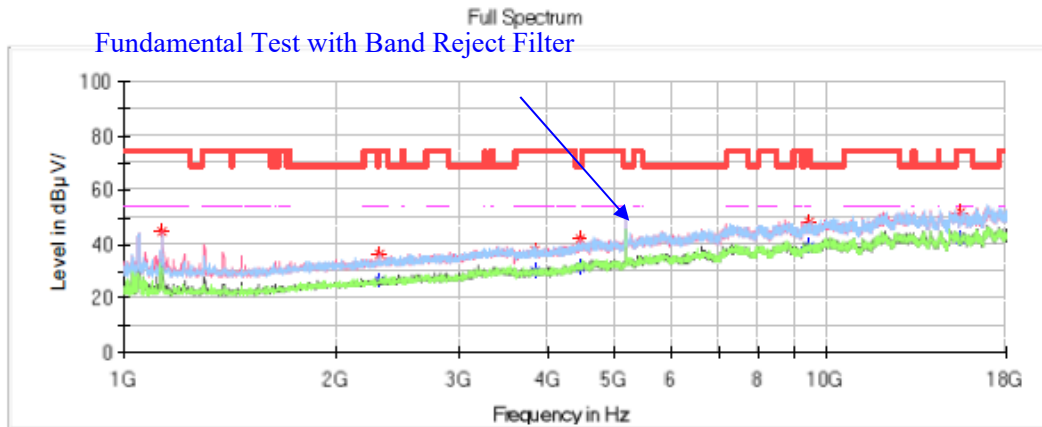
Project No.: RSHA240717002
Test Mode: Transmitting in 802.11a mode 5180 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1132.600000	46.20	---	74.00	27.80	V	-15.3
1132.600000	---	33.73	54.00	20.27	V	-15.3
2303.900000	34.48	---	68.20	33.72	V	-10.8
4457.800000	41.14	---	68.20	27.06	V	-4.4
7599.400000	---	36.79	54.00	17.21	V	3.9
7599.400000	48.01	---	74.00	25.99	V	3.9
11946.300000	---	42.11	54.00	11.89	V	9.0
11946.300000	51.97	---	74.00	22.03	V	9.0
15965.100000	---	41.20	54.00	12.80	H	9.4
15965.100000	51.18	---	74.00	22.82	H	9.4

Middle Channel: 5200MHz**Common Information**

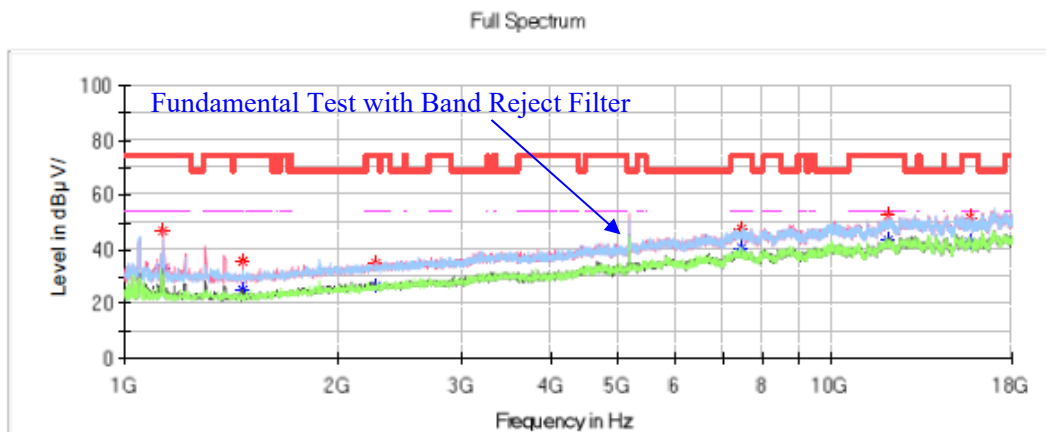
Project No.: RSHA240717002
Test Mode: Transmitting in 802.11a mode 5200 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1132.600000	---	31.81	54.00	22.19	V	-15.3
1132.600000	45.01	---	74.00	28.99	V	-15.3
2309.000000	36.05	---	68.20	32.15	V	-10.8
3830.500000	37.81	---	74.00	36.19	H	-6.1
3830.500000	---	30.19	54.00	23.81	H	-6.1
4457.800000	41.76	---	68.20	26.44	H	-4.4
9432.000000	---	38.93	54.00	15.07	V	5.4
9432.000000	48.20	---	74.00	25.80	V	5.4
15528.200000	---	41.73	54.00	12.27	V	9.8
15528.200000	51.64	---	74.00	22.36	V	9.8

High Channel: 5240MHz**Common Information**

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11a mode 5240 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1132.600000	47.16	---	74.00	26.84	V	-15.3
1132.600000	---	33.03	54.00	20.97	V	-15.3
1469.200000	35.94	---	74.00	38.06	V	-14.8
1469.200000	---	25.34	54.00	28.66	V	-14.8
2273.300000	---	26.58	54.00	27.42	H	-10.9
2273.300000	34.94	---	74.00	39.06	H	-10.9
7451.500000	---	40.27	54.00	13.73	H	3.8
7451.500000	47.41	---	74.00	26.59	H	3.8
12063.600000	---	43.50	54.00	10.50	V	9.1
12063.600000	52.28	---	74.00	21.72	V	9.1
15682.900000	---	42.99	54.00	11.01	V	9.7
15682.900000	51.53	---	74.00	22.47	V	9.7

802.11n-HT20 Mode:

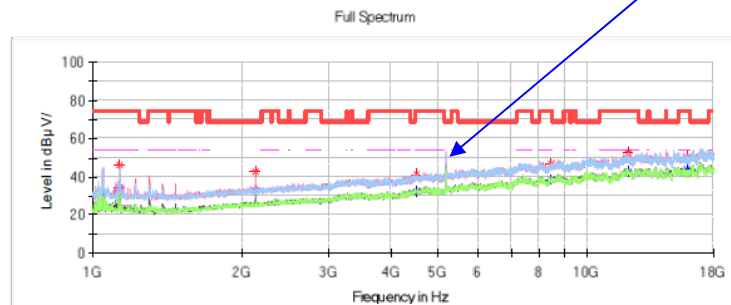
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
Low Channel: 5180MHz						
1132.600000	47.44	---	74.00	26.56	V	-15.3
1132.600000	---	34.28	54.00	19.72	V	-15.3
2251.200000	---	25.94	54.00	28.06	H	-10.9
2251.200000	35.64	---	74.00	38.36	H	-10.9
4420.400000	41.83	---	68.20	26.37	V	-4.5
7417.500000	---	39.57	54.00	14.43	H	3.7
7417.500000	47.96	---	74.00	26.04	H	3.7
12128.200000	---	42.98	54.00	11.02	H	9.1
12128.200000	52.39	---	74.00	21.61	H	9.1
15747.500000	---	43.11	54.00	10.89	H	9.6
15747.500000	51.13	---	74.00	22.87	H	9.6

Middle Channel: 5200MHz**Common Information**

Project No.:
Test Mode:
Standard:
Test Engineer:

RSHA240717002
Transmitting in 802.11n20 mode 5200 channel
FCC Part 15.407
Hugh Wu

Fundamental Test with Band Reject Filter



1132.600000	46.02	---	74.00	27.98	V	-15.3
1132.600000	---	34.28	54.00	19.72	V	-15.3
2127.100000	42.60	---	68.20	25.60	V	-11.3
4520.700000	---	31.96	54.00	22.04	V	-4.2
4520.700000	40.95	---	74.00	33.05	V	-4.2
8449.400000	---	38.22	54.00	15.78	H	5.3
8449.400000	46.98	---	74.00	27.02	H	5.3
12102.700000	---	42.95	54.00	11.05	H	9.1
12102.700000	52.39	---	74.00	21.61	H	9.1
15931.100000	50.23	---	74.00	23.77	V	9.5
15931.100000	---	43.83	54.00	10.17	V	9.5

High Channel: 5240MHz

1132.600000	45.52	---	74.00	28.48	V	-15.3
1132.600000	---	34.01	54.00	19.99	V	-15.3
2290.300000	33.33	---	74.00	40.67	V	-10.8
2290.300000	---	27.34	54.00	26.66	V	-10.8
4474.800000	41.87	---	68.20	26.33	H	-4.3
7454.900000	---	37.92	54.00	16.08	H	3.8
7454.900000	47.52	---	74.00	26.48	H	3.8
10914.400000	---	42.08	54.00	11.92	H	7.3
10914.400000	50.16	---	74.00	23.84	H	7.3
15897.100000	---	42.35	54.00	11.65	V	9.5
15897.100000	51.51	---	74.00	22.49	V	9.5

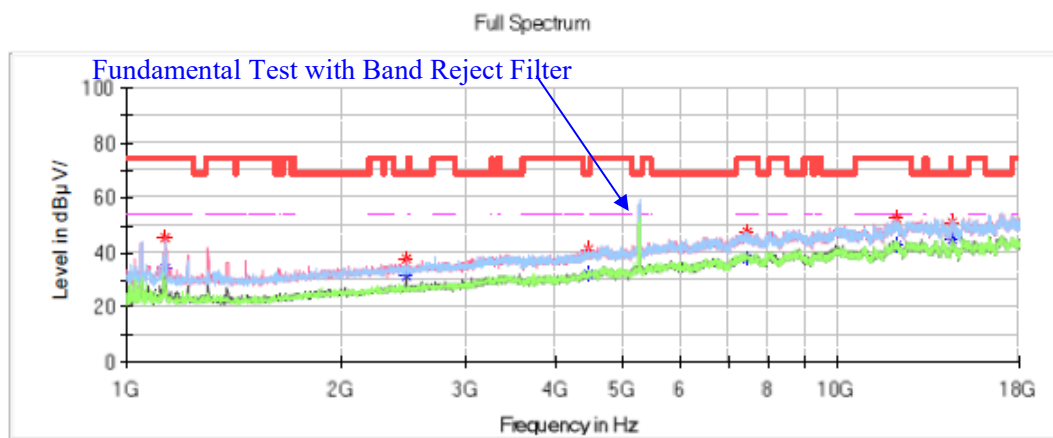
802.11n-HT40 Mode:

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
Low Channel: 5190MHz						
Common Information Project No.: RSHA240717002 Test Mode: Transmitting in 802.11n40 mode 5190 channel Standard: FCC Part 15.407 Test Engineer: Hugh Wu Fundamental Test with Band Reject Filter						
1132.600000	47.06	---	74.00	26.94	V	-15.3
1132.600000	---	34.92	54.00	19.08	V	-15.3
2242.700000	---	26.00	54.00	28.00	V	-11.0
2242.700000	34.20	---	74.00	39.80	V	-11.0
4321.800000	---	31.42	54.00	22.58	V	-4.8
4321.800000	39.39	---	74.00	34.61	V	-4.8
7393.700000	45.18	---	74.00	28.82	V	3.6
7393.700000	---	39.45	54.00	14.55	V	3.6
11205.100000	49.95	---	74.00	24.05	V	7.9
11205.100000	---	43.11	54.00	10.89	V	7.9
15686.300000	---	42.44	54.00	11.56	H	9.7
15686.300000	51.68	---	74.00	22.32	H	9.7
High Channel: 5230MHz						
1132.600000	47.38	---	74.00	26.62	V	-15.3
1132.600000	---	35.17	54.00	18.83	V	-15.3
2774.800000	---	27.61	54.00	26.39	V	-9.2
2774.800000	36.11	---	74.00	37.89	V	-9.2
4828.400000	---	34.58	54.00	19.42	H	-3.1
4828.400000	42.78	---	74.00	31.22	H	-3.1
8422.200000	45.79	---	74.00	28.21	V	5.2
8422.200000	---	39.53	54.00	14.47	V	5.2
12070.400000	---	42.64	54.00	11.36	V	9.1
12070.400000	51.42	---	74.00	22.58	V	9.1

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

Common Information

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11a mode 5260 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu



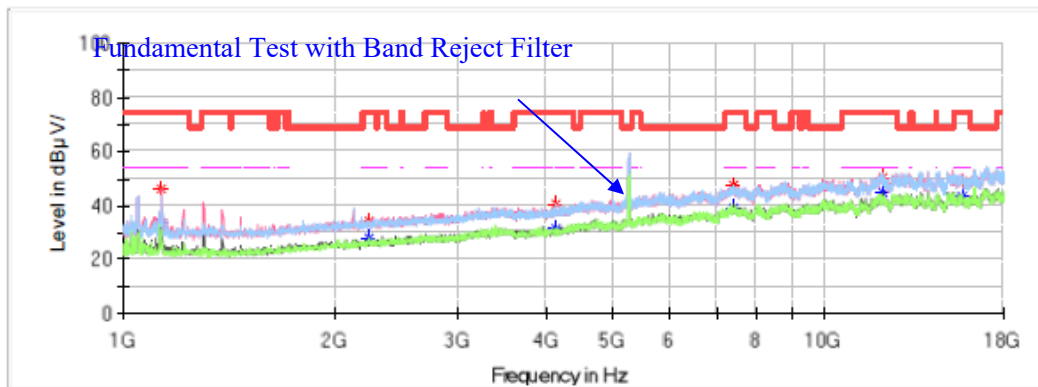
Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1132.600000	---	34.61	54.00	19.39	V	-15.3
1132.600000	45.24	---	74.00	28.76	V	-15.3
2467.100000	37.74	---	68.20	30.46	V	-10.3
4466.300000	41.15	---	68.20	27.05	V	-4.4
7443.000000	47.27	---	74.00	26.73	H	3.7
7443.000000	---	37.95	54.00	16.05	H	3.7
12089.100000	52.25	---	74.00	21.75	H	9.1
12089.100000	---	42.53	54.00	11.47	H	9.1
14494.600000	50.90	---	74.00	23.10	V	9.4
14494.600000	---	44.81	54.00	9.19	V	9.4

Middle Channel: 5300MHz**Common Information**

Project No.: RSHA240717002
 Test Mode: Transmitting in 802.11a mode 5300 channel
 Standard: FCC Part 15.407
 Test Engineer: Hugh Wu

Full Spectrum

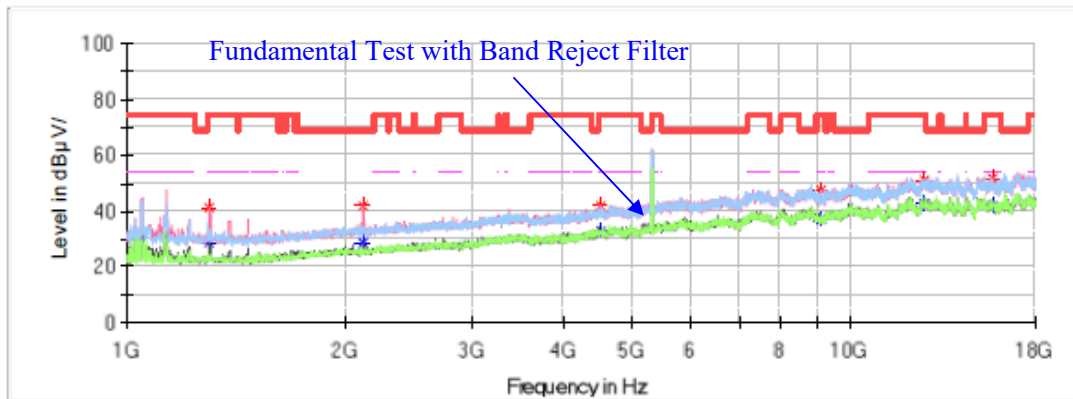
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1132.600000	---	33.59	54.00	20.41	V	-15.3
1132.600000	46.46	---	74.00	27.54	V	-15.3
2235.900000	---	28.09	54.00	25.91	V	-11.0
2235.900000	34.03	---	74.00	39.97	V	-11.0
4134.800000	40.45	---	74.00	33.55	H	-5.5
4134.800000	---	31.55	54.00	22.45	H	-5.5
7424.300000	47.50	---	74.00	26.50	V	3.7
7424.300000	---	38.98	54.00	15.02	V	3.7
12067.000000	50.57	---	74.00	23.43	H	9.1
12067.000000	---	44.57	54.00	9.43	H	9.1
15669.300000	49.25	---	74.00	24.75	H	9.7
15669.300000	---	43.45	54.00	10.55	H	9.7

High Channel: 5320MHz**Common Information**

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11a mode 5320 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum

**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1300.900000	41.02	---	74.00	32.98	V	-15.0
1300.900000	---	28.79	54.00	25.21	V	-15.0
2123.700000	41.62	---	68.20	26.58	V	-11.3
4510.500000	---	32.72	54.00	21.28	V	-4.2
4510.500000	41.93	---	74.00	32.07	V	-4.2
9098.800000	---	37.18	54.00	16.82	H	5.4
9098.800000	47.46	---	74.00	26.54	H	5.4
12673.900000	---	42.35	54.00	11.65	V	9.7
12673.900000	50.91	---	74.00	23.09	V	9.7
15744.100000	---	42.18	54.00	11.82	V	9.6
15744.100000	51.47	---	74.00	22.53	V	9.6

802.11n-HT20 Mode:

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
Low Channel: 5260MHz						
1132.600000	---	33.41	54.00	20.59	H	-15.3
1132.600000	45.40	---	74.00	28.60	H	-15.3
2320.900000	34.71	---	74.00	39.29	H	-10.7
2320.900000	---	26.72	54.00	27.28	H	-10.7
4024.300000	38.92	---	74.00	35.08	V	-5.8
4024.300000	---	30.91	54.00	23.09	V	-5.8
7402.200000	47.49	---	74.00	26.51	V	3.6
7402.200000	---	38.69	54.00	15.31	V	3.6
12089.100000	52.28	---	74.00	21.72	H	9.1
12089.100000	---	42.98	54.00	11.02	H	9.1
14486.100000	50.55	---	74.00	23.45	H	9.4
14486.100000	---	44.81	54.00	9.19	H	9.4
Middle Channel: 5280MHz						
1132.600000	---	31.22	54.00	22.78	H	-15.3
1132.600000	45.35	---	74.00	28.65	H	-15.3
2266.500000	35.83	---	74.00	38.17	H	-10.9
2266.500000	---	26.99	54.00	27.01	H	-10.9
4694.100000	41.97	---	74.00	32.03	V	-3.6
4694.100000	---	33.92	54.00	20.08	V	-3.6
8410.300000	47.35	---	74.00	26.65	V	5.2
8410.300000	---	37.97	54.00	16.03	V	5.2
12665.400000	50.73	---	74.00	23.27	V	9.7
12665.400000	---	42.62	54.00	11.38	V	9.7
14486.100000	51.22	---	74.00	22.78	V	9.4
14486.100000	---	44.42	54.00	9.58	V	9.4
High Channel: 5320MHz						

Common Information

Project No.:

RSHA240717002

Test Mode:

Transmitting in 802.11n20 mode 5320 channel

Standard:

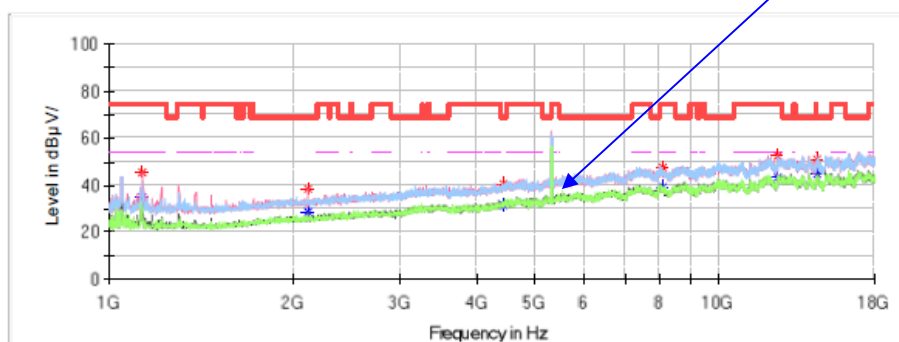
FCC Part 15.407

Test Engineer:

Hugh Wu

Fundamental Test with Band Reject Filter

Full Spectrum



1132.600000	---	34.77	54.00	19.23	V	-15.3
1132.600000	45.66	---	74.00	28.34	V	-15.3
2122.000000	38.51	---	68.20	29.69	V	-11.4
4435.700000	40.84	---	68.20	27.36	V	-4.5
8065.200000	47.23	---	74.00	26.77	H	4.1
8065.200000	---	39.08	54.00	14.92	H	4.1
12502.200000	52.15	---	74.00	21.85	V	9.7
12502.200000	---	43.61	54.00	10.39	V	9.7
14494.600000	50.83	---	74.00	23.17	V	9.4
14494.600000	---	44.83	54.00	9.17	V	9.4

802.11n-HT40 Mode:

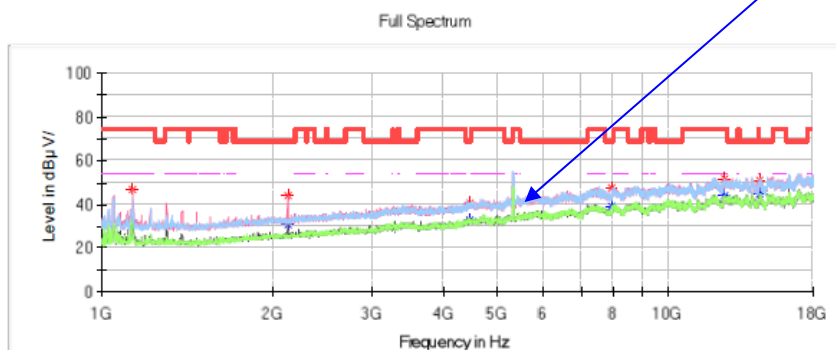
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
Low Channel: 5270MHz						
1132.600000	---	33.42	54.00	20.58	V	-15.3
1132.600000	47.24	---	74.00	26.76	V	-15.3
2725.500000	36.98	---	74.00	37.02	V	-9.4
2725.500000	---	27.57	54.00	26.43	V	-9.4
4417.000000	40.67	---	68.20	27.53	H	-4.5
7330.800000	45.80	---	74.00	28.20	V	3.5
7330.800000	---	38.62	54.00	15.38	V	3.5
12061.900000	50.40	---	74.00	23.60	V	9.1
12061.900000	---	44.21	54.00	9.79	V	9.1
15745.800000	---	42.46	54.00	11.54	V	9.6
15745.800000	52.34	---	74.00	21.66	V	9.6

High Channel: 5310MHz**Common Information**

Project No.:
Test Mode:
Standard:
Test Engineer:

RSHA240717002
Transmitting in 802.11n40 mode 5310 channel
FCC Part 15.407
Hugh Wu

Fundamental Test with Band Reject Filter



1132.600000	---	31.64	54.00	22.36	V	-15.3
1132.600000	46.52	---	74.00	27.48	V	-15.3
2125.400000	44.31	---	68.20	23.89	V	-11.3
4449.300000	40.62	---	68.20	27.58	V	-4.4
7953.000000	47.45	---	68.20	20.75	V	3.9
12529.400000	51.70	---	74.00	22.30	H	9.7
12529.400000	---	43.71	54.00	10.29	H	9.7
14486.100000	51.36	---	74.00	22.64	H	9.4
14486.100000	---	44.69	54.00	9.31	H	9.4

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

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11a mode 5500 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

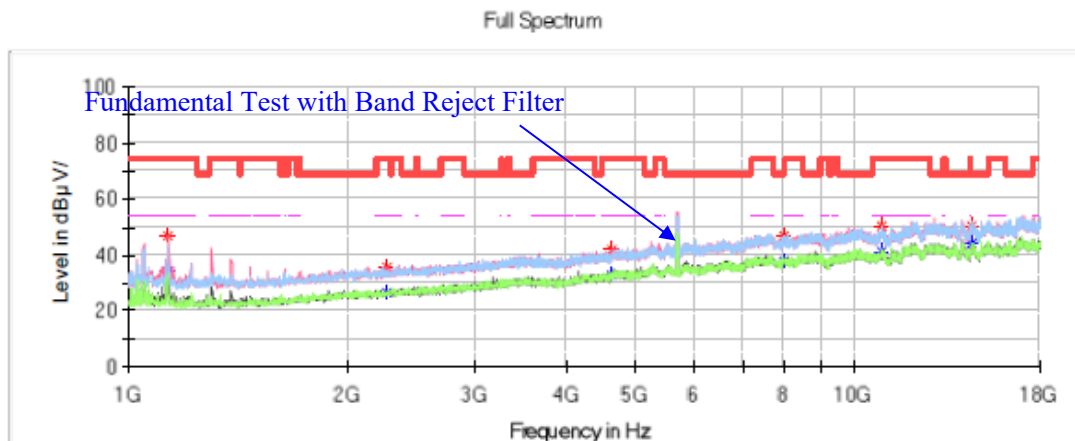
Full Spectrum

**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1132.600000	---	33.30	54.00	20.70	V	-15.3
1132.600000	46.13	---	74.00	27.87	V	-15.3
2251.200000	35.79	---	74.00	38.21	H	-10.9
2251.200000	---	27.21	54.00	26.79	H	-10.9
4269.100000	41.63	---	74.00	32.37	H	-5.0
4269.100000	---	31.39	54.00	22.61	H	-5.0
7434.500000	47.39	---	74.00	26.61	H	3.7
7434.500000	---	37.88	54.00	16.12	H	3.7
12055.100000	52.07	---	74.00	21.93	H	9.0
12055.100000	---	44.07	54.00	9.93	H	9.0
14489.500000	50.53	---	74.00	23.47	H	9.4
14489.500000	---	44.34	54.00	9.66	H	9.4

Middle Channel: 5600MHz**Common Information**

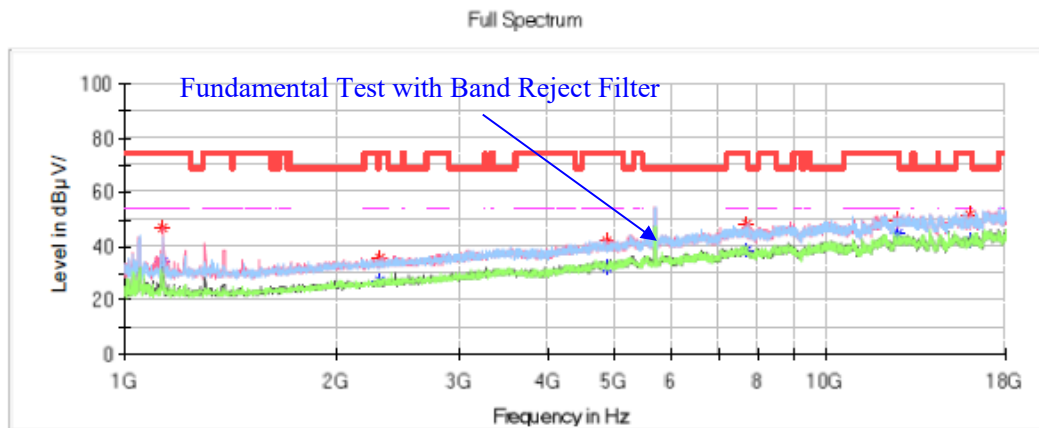
Project No.: RSHA240717002
 Test Mode: Transmitting in 802.11a mode 5600 channel
 Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
 Test Engineer: Hugh Wu

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μV/m)	Average (dB μV/m)	Limit (dB μV/m)	Margin (dB)	Pol	Corr. (dB/m)
1132.600000	---	34.14	54.00	19.86	V	-15.3
1132.600000	47.01	---	74.00	26.99	V	-15.3
2271.600000	35.62	---	74.00	38.38	V	-10.9
2271.600000	---	26.36	54.00	27.64	V	-10.9
4621.000000	42.04	---	74.00	31.96	V	-3.8
4621.000000	---	32.53	54.00	21.47	V	-3.8
8009.100000	47.18	---	68.20	21.02	H	3.9
10863.400000	50.53	---	74.00	23.47	H	7.3
10863.400000	---	41.50	54.00	12.50	H	7.3
14492.900000	50.42	---	74.00	23.58	H	9.4
14492.900000	---	44.38	54.00	9.62	H	9.4

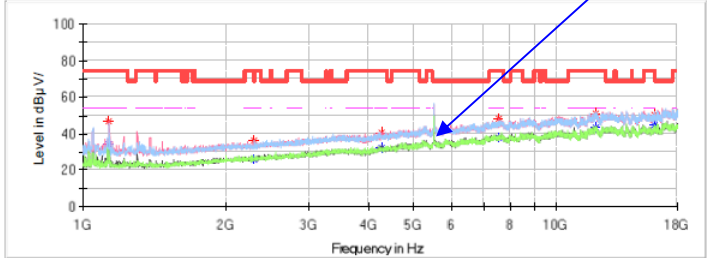
High Channel: 5700MHz**Common Information**

Project No.: RSHA240717002
 Test Mode: Transmitting in 802.11a mode 5700 channel
 Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
 Test Engineer: Hugh Wu

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µV/m)	Average (dB µV/m)	Limit (dB µV/m)	Margin (dB)	Pol	Corr. (dB/m)
1132.600000	---	34.46	54.00	19.54	V	-15.3
1132.600000	47.10	---	74.00	26.90	V	-15.3
2309.000000	35.61	---	68.20	32.59	V	-10.8
4867.500000	41.79	---	74.00	32.21	V	-2.9
4867.500000	---	32.50	54.00	21.50	V	-2.9
7696.300000	47.94	---	74.00	26.06	V	3.9
7696.300000	---	38.76	54.00	15.24	V	3.9
12626.300000	49.43	---	74.00	24.57	H	9.7
12626.300000	---	45.05	54.00	8.95	H	9.7
16034.800000	---	41.76	54.00	12.24	V	9.5
16034.800000	51.75	---	74.00	22.25	V	9.5

802.11n-HT20 Mode:

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
Low Channel: 5500MHz						
Common Information Project No.: RSHA240717002 Test Mode: Transmitting in 802.11n20 mode 5500 channel Standard: FCC Part 15.407 Test Engineer: Hugh Wu Fundamental Test with Band Reject Filter 						
1134.300000	---	34.01	54.00	19.99	V	-15.3
1134.300000	46.64	---	74.00	27.36	V	-15.3
2292.000000	36.55	---	74.00	37.45	V	-10.8
2292.000000	---	26.20	54.00	27.80	V	-10.8
4270.800000	40.40	---	74.00	33.60	V	-5.0
4270.800000	---	32.04	54.00	21.96	V	-5.0
7573.900000	47.97	---	74.00	26.03	V	3.9
7573.900000	---	37.99	54.00	16.01	V	3.9
12080.600000	50.78	---	74.00	23.22	H	9.1
12080.600000	---	43.42	54.00	10.58	H	9.1
16107.900000	50.04	---	74.00	23.96	H	9.7
16107.900000	---	44.82	54.00	9.18	H	9.7
Middle Channel: 5580MHz						
1132.600000	---	34.71	54.00	19.29	V	-15.3
1132.600000	47.14	---	74.00	26.86	V	-15.3
2275.000000	35.35	---	74.00	38.65	V	-10.9
2275.000000	---	26.03	54.00	27.97	V	-10.9
4541.100000	40.70	---	74.00	33.30	H	-4.1
4541.100000	---	32.09	54.00	21.91	H	-4.1
7511.000000	47.43	---	74.00	26.57	H	3.9
7511.000000	---	38.16	54.00	15.84	H	3.9
12182.600000	52.09	---	74.00	21.91	V	9.2
12182.600000	---	43.02	54.00	10.98	V	9.2
14489.500000	50.31	---	74.00	23.69	V	9.4
14489.500000	---	44.71	54.00	9.29	V	9.4
High Channel: 5700MHz						
1132.600000	---	34.50	54.00	19.50	V	-15.3
1132.600000	48.00	---	74.00	26.00	V	-15.3
2123.700000	41.84	---	68.20	26.36	V	-11.3
4500.300000	---	32.64	54.00	21.36	V	-4.3
4500.300000	42.35	---	74.00	31.65	V	-4.3
7777.900000	46.36	---	68.20	21.84	V	3.9
10890.600000	---	40.93	54.00	13.07	H	7.3
10890.600000	50.50	---	74.00	23.50	H	7.3
15708.400000	---	42.21	54.00	11.79	H	9.7
15708.400000	51.03	---	74.00	22.97	H	9.7

802.11n-HT40 Mode:

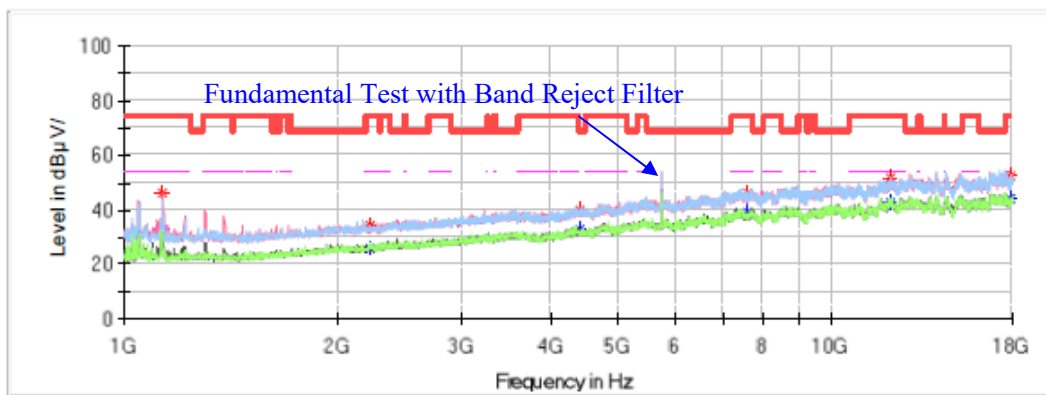
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
Low Channel: 5510MHz						
Common Information Project No.: RSHA240717002 Test Mode: Transmitting in 802.11n40 mode 5510 channel Standard: FCC Part 15.407 Test Engineer: Hugh Wu Full Spectrum 						
1300.900000	42.39	---	74.00	31.61	V	-15.0
1300.900000	---	31.08	54.00	22.92	V	-15.0
2246.100000	---	27.23	54.00	26.77	H	-11.0
2246.100000	35.76	---	74.00	38.24	H	-11.0
4456.100000	39.25	---	68.20	28.95	V	-4.4
7614.700000	46.89	---	74.00	27.11	V	3.9
7614.700000	---	39.67	54.00	14.33	V	3.9
12070.400000	---	42.46	54.00	11.54	V	9.1
12070.400000	51.84	---	74.00	22.16	V	9.1
16079.000000	---	43.66	54.00	10.34	V	9.6
16079.000000	52.34	---	74.00	21.66	V	9.6
Middle Channel: 5550MHz						
1132.600000	47.46	---	74.00	26.54	V	-15.3
1132.600000	---	35.36	54.00	18.64	V	-15.3
2460.300000	37.00	---	68.20	31.20	V	-10.3
4830.100000	---	34.14	54.00	19.86	H	-3.1
4830.100000	42.32	---	74.00	31.68	H	-3.1
7648.700000	---	38.56	54.00	15.44	H	3.9
7648.700000	47.65	---	74.00	26.35	H	3.9
12175.800000	---	41.87	54.00	12.13	H	9.2
12175.800000	51.47	---	74.00	22.53	H	9.2
15667.600000	---	42.01	54.00	11.99	H	9.7
15667.600000	50.53	---	74.00	23.47	H	9.7
High Channel: 5670MHz						
1132.600000	48.08	---	74.00	25.92	V	-15.3
1132.600000	---	36.01	54.00	17.99	V	-15.3
2819.000000	---	28.71	54.00	25.29	V	-9.1
2819.000000	37.25	---	74.00	36.75	V	-9.1
4896.400000	---	33.05	54.00	20.95	V	-2.8
4896.400000	41.56	---	74.00	32.44	V	-2.8
7477.000000	---	37.62	54.00	16.38	V	3.8
7477.000000	46.09	---	74.00	27.91	V	3.8
12078.900000	---	42.10	54.00	11.90	V	9.1
12078.900000	51.99	---	74.00	22.01	V	9.1
15652.300000	---	41.44	54.00	12.56	H	9.7
15652.300000	50.71	---	74.00	23.29	H	9.7

Fundamental Test with Band Reject Filter

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

Project No.:	RSHA240717002
Test Mode:	Transmitting in 802.11a mode 5745 channel
Standard:	FCC Part 15.205&FCC Part 15.209&FCC Part 15.407
Test Engineer:	Hugh Wu

Full Spectrum

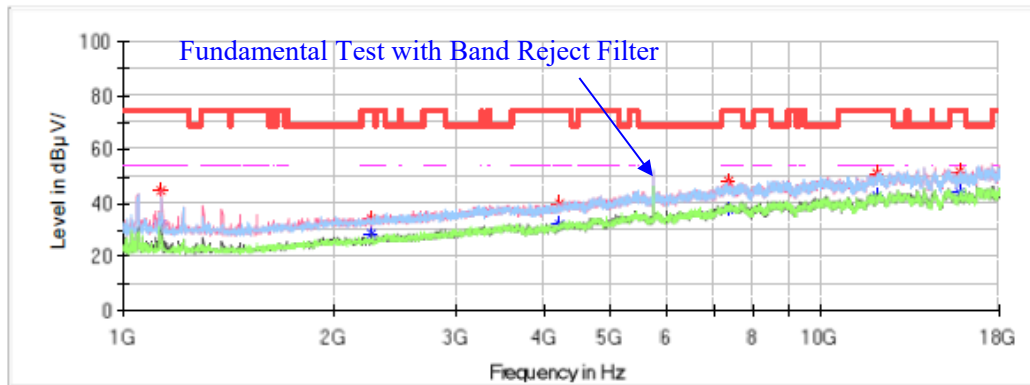
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1132.600000	46.29	---	74.00	27.71	V	-15.3
1132.600000	---	32.78	54.00	21.22	V	-15.3
2224.000000	---	26.17	54.00	27.83	V	-11.0
2224.000000	34.52	---	74.00	39.48	V	-11.0
4417.000000	40.16	---	68.20	28.04	V	-4.5
7601.100000	---	38.89	54.00	15.11	V	3.9
7601.100000	46.07	---	74.00	27.93	V	3.9
12126.500000	---	42.35	54.00	11.65	V	9.1
12126.500000	51.82	---	74.00	22.18	V	9.1
17921.800000	---	44.17	54.00	9.83	H	11.9
17921.800000	52.75	---	74.00	21.25	H	11.9

Middle Channel: 5785MHz**Common Information**

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11a mode 5785 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

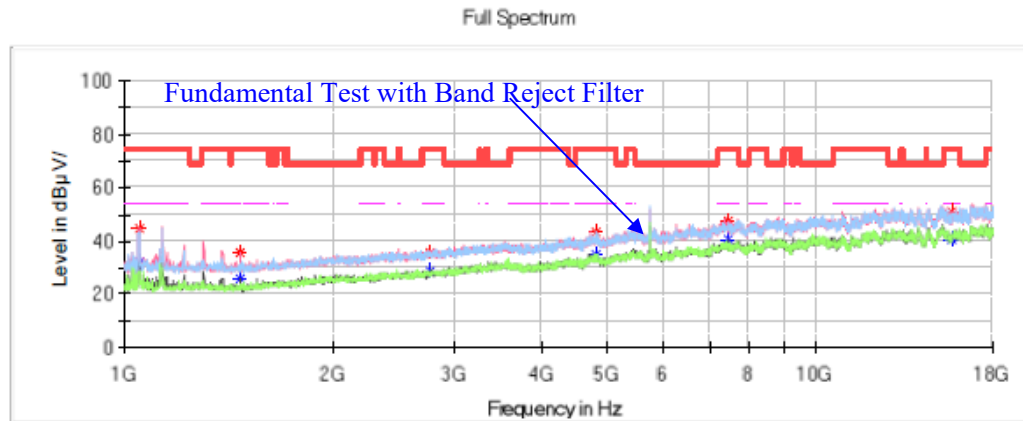
Full Spectrum

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1132.600000	45.03	---	74.00	28.97	V	-15.3
1132.600000	---	32.08	54.00	21.92	V	-15.3
2266.500000	---	28.46	54.00	25.54	V	-10.9
2266.500000	34.04	---	74.00	39.96	V	-10.9
4221.500000	---	31.99	54.00	22.01	V	-5.2
4221.500000	39.66	---	74.00	34.34	V	-5.2
7352.900000	---	38.02	54.00	15.98	V	3.5
7352.900000	48.21	---	74.00	25.79	V	3.5
12000.700000	---	42.43	54.00	11.57	V	9.0
12000.700000	50.76	---	74.00	23.24	V	9.0
15846.100000	---	43.73	54.00	10.27	H	9.5
15846.100000	51.93	---	74.00	22.07	H	9.5

High Channel: 5825MHz**Common Information**

Project No.:	RSHA240717002
Test Mode:	Transmitting in 802.11a mode 5825 channel
Standard:	FCC Part 15.407
Test Engineer:	Hugh Wu

**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µV/m)	Average (dB µV/m)	Limit (dB µV/m)	Margin (dB)	Pol	Corr. (dB/m)
1049.300000	44.46	---	74.00	29.54	V	-15.4
1049.300000	---	32.48	54.00	21.52	V	-15.4
1469.200000	35.69	---	74.00	38.31	V	-14.8
1469.200000	---	25.80	54.00	28.20	V	-14.8
2773.100000	35.62	---	74.00	38.38	V	-9.2
2773.100000	---	28.88	54.00	25.12	V	-9.2
4814.800000	---	34.86	54.00	19.14	H	-3.1
4814.800000	43.66	---	74.00	30.34	H	-3.1
7463.400000	---	40.37	54.00	13.63	V	3.8
7463.400000	47.55	---	74.00	26.45	V	3.8
15693.100000	---	40.33	54.00	13.67	V	9.7
15693.100000	51.05	---	74.00	22.95	V	9.7

802.11n-HT20 Mode:

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
Low Channel: 5745MHz						
1130.900000	45.61	---	74.00	28.39	V	-15.3
1130.900000	---	30.44	54.00	23.56	V	-15.3
1467.500000	---	23.63	54.00	30.37	V	-14.8
1467.500000	35.78	---	74.00	38.22	V	-14.8
2781.600000	36.18	---	74.00	37.82	V	-9.2
2781.600000	---	29.50	54.00	24.50	V	-9.2
4823.300000	---	34.48	54.00	19.52	H	-3.1
4823.300000	43.31	---	74.00	30.69	H	-3.1
7546.700000	---	37.47	54.00	16.53	V	3.9
7546.700000	47.58	---	74.00	26.42	V	3.9
11657.300000	---	42.74	54.00	11.26	V	8.9
11657.300000	52.65	---	74.00	21.35	V	8.9
Middle Channel: 5785MHz						
1132.600000	47.43	---	74.00	26.57	V	-15.3
1132.600000	---	33.12	54.00	20.88	V	-15.3
2128.800000	39.82	---	68.20	28.38	V	-11.3
4758.700000	41.13	---	74.00	32.87	V	-3.3
4758.700000	---	35.46	54.00	18.54	V	-3.3
7715.000000	---	39.14	54.00	14.86	V	3.9
7715.000000	48.17	---	74.00	25.83	V	3.9
12510.700000	---	43.02	54.00	10.98	V	9.7
12510.700000	51.87	---	74.00	22.13	V	9.7
15847.800000	---	43.27	54.00	10.73	H	9.5
15847.800000	52.27	---	74.00	21.73	H	9.5

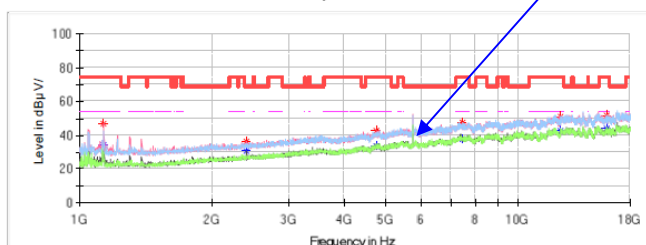
High Channel: 5825MHz

Fundamental Test with Band Reject Filter

Common Information

Project No.: RSHA240717002
 Test Mode: Transmitting in 802.11n20 mode 5825 channel
 Standard: FCC Part 15.407
 Test Engineer: Hugh Wu

Full Spectrum



1132.600000	46.79	---	74.00	27.21	V	-15.3
1132.600000	---	33.94	54.00	20.06	V	-15.3
2404.200000	36.69	---	68.20	31.51	V	-10.5
4738.300000	---	33.61	54.00	20.39	V	-3.4
4738.300000	42.40	---	74.00	31.60	V	-3.4
7448.100000	---	38.03	54.00	15.97	H	3.8
7448.100000	47.74	---	74.00	26.26	H	3.8
12515.800000	---	42.48	54.00	11.52	H	9.7
12515.800000	51.29	---	74.00	22.71	H	9.7
15885.200000	---	43.83	54.00	10.17	H	9.5
15885.200000	51.87	---	74.00	22.13	H	9.5

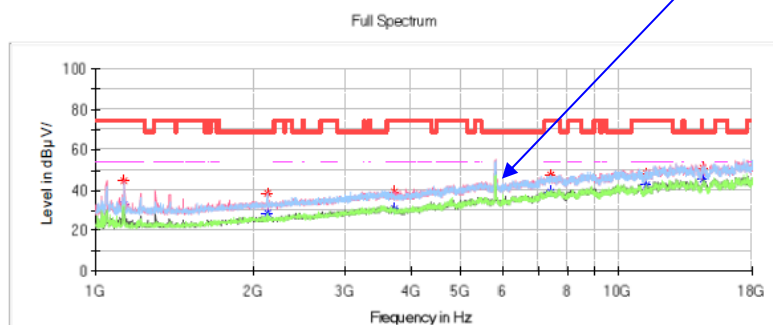
802.11n-HT40 Mode:

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
Low Channel: 5755MHz						
1132.600000	44.47	---	74.00	29.53	V	-15.3
1132.600000	---	30.53	54.00	23.47	V	-15.3
1467.500000	35.45	---	74.00	38.55	V	-14.8
1467.500000	---	24.81	54.00	29.19	V	-14.8
2327.700000	---	26.13	54.00	27.87	H	-10.7
2327.700000	35.95	---	74.00	38.05	H	-10.7
3808.400000	36.48	---	74.00	37.52	H	-6.1
3808.400000	---	31.63	54.00	22.37	H	-6.1
8209.700000	---	38.02	54.00	15.98	V	4.5
8209.700000	48.28	---	74.00	25.72	V	4.5
12444.400000	47.73	---	74.00	26.27	V	9.6
12444.400000	---	42.84	54.00	11.16	V	9.6

High Channel: 5795MHz**Common Information**

Project No.: RSHA240717002
 Test Mode: Transmitting in 802.11n40 mode 5795 channel
 Standard: FCC Part 15.407
 Test Engineer: Hugh Wu

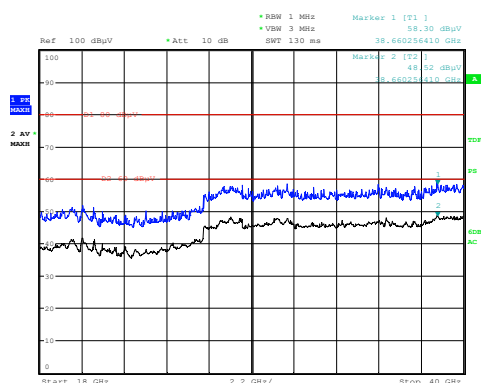
Fundamental Test with Band Reject Filter



1132.600000	---	32.78	54.00	21.22	V	-15.3
1132.600000	44.67	---	74.00	29.33	V	-15.3
2125.400000	38.77	---	68.20	29.43	V	-11.3
3713.200000	38.88	---	74.00	35.12	V	-6.2
3713.200000	---	30.42	54.00	23.58	V	-6.2
7400.500000	47.46	---	74.00	26.54	V	3.6
7400.500000	---	39.50	54.00	14.50	V	3.6
11271.400000	---	42.68	54.00	11.32	H	8.1
11271.400000	48.15	---	74.00	25.85	H	8.1
14499.700000	50.80	---	74.00	23.20	V	9.4
14499.700000	---	45.29	54.00	8.71	V	9.4

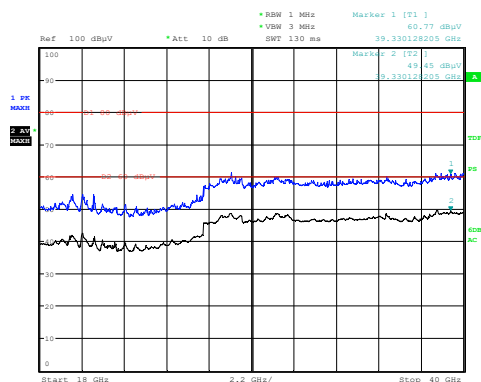
18GHz-40GHz:

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

Horizontal

Project No :RSHA240717002
Date: 6.NOV.2024 13:10:41

Tester :Hugh Wu

Vertical

Project No :RSHA240717002
Date: 6.NOV.2024 13:28:12

Tester :Hugh Wu

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

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB/m)
39330.13	60.77	---	80	19.23	V	20.02
39330.13	---	49.45	60	10.55	V	20.02
38660.26	58.3	---	80	21.7	H	17.45
38660.26	---	48.52	60	11.48	H	17.45

Band Edge Emissions (5150-5250MHz Band):

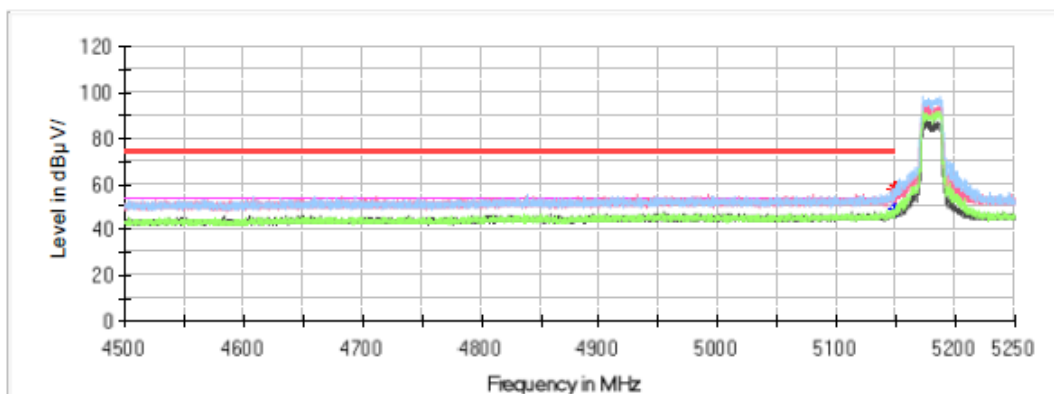
Note:

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.:	RSHA240717002
Test Mode:	Transmitting in 802.11a mode 5180 channel
Standard:	FCC Part 15.407
Test Engineer:	Hugh Wu

Full Spectrum

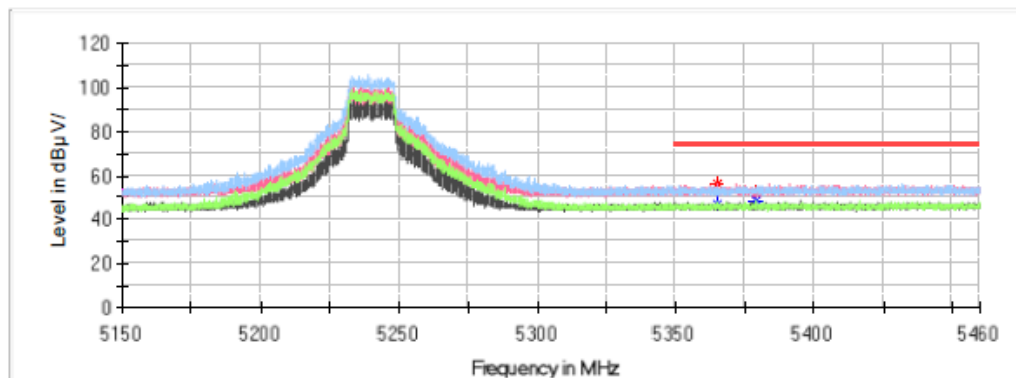
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5147.925000	58.14	---	74.00	15.86	H	8.2
5147.925000	---	47.49	54.00	6.51	H	8.2
5149.425000	58.13	---	74.00	15.87	H	8.2
5149.425000	---	49.54	54.00	4.46	H	8.2

Common Information

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11a mode 5240 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum



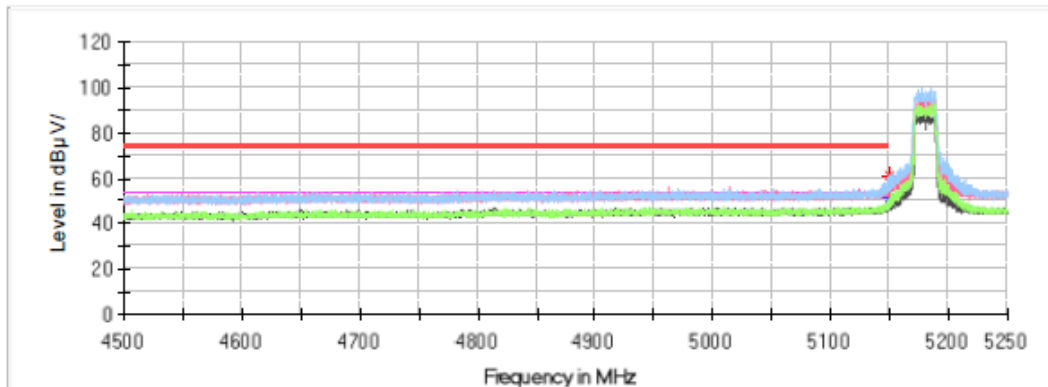
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5365.202000	---	46.62	54.00	7.38	V	8.8
5365.202000	55.80	---	74.00	18.20	V	8.8
5378.842000	52.31	---	74.00	21.69	H	8.8
5378.842000	---	48.40	54.00	5.60	H	8.8

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

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11n20 mode 5180 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum

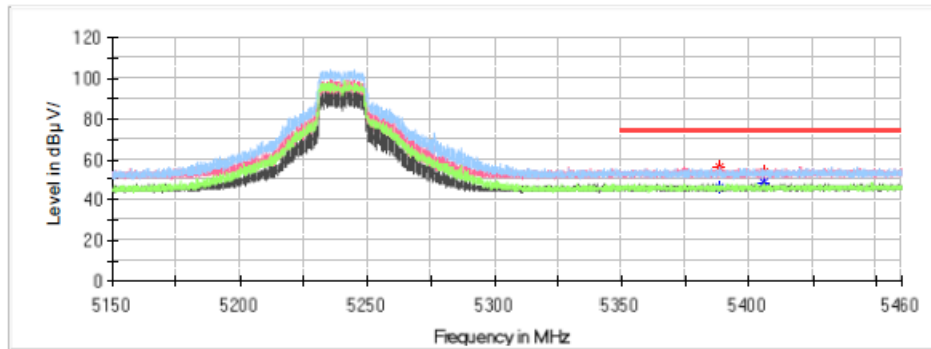
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5149.500000	---	51.36	54.00	2.64	H	8.2
5149.500000	61.22	---	74.00	12.78	H	8.2

Common Information

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11n20 mode 5240 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum



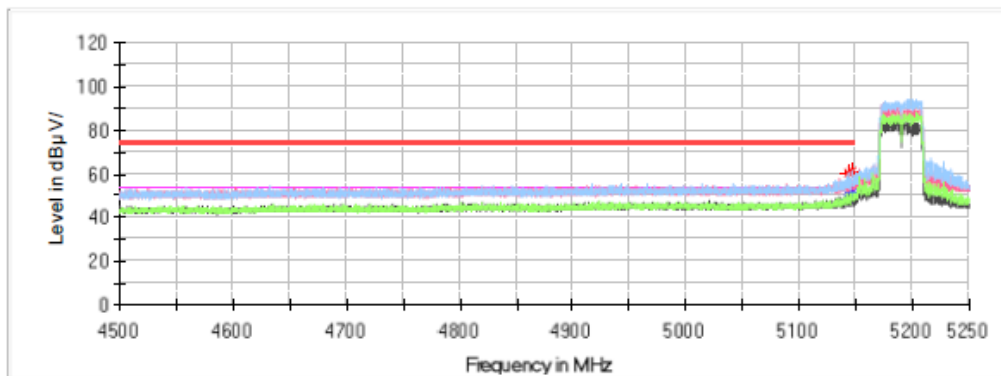
Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5388.793000	---	46.07	54.00	7.93	H	8.8
5388.793000	55.90	---	74.00	18.10	H	8.8
5405.688000	53.36	---	74.00	20.64	V	8.9
5405.688000	---	48.71	54.00	5.29	V	8.9

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

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11n40 mode 5190 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum

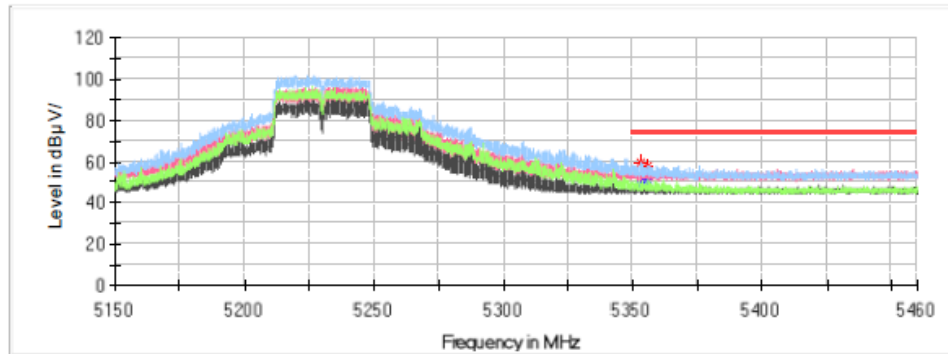
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5143.125000	---	48.69	54.00	5.31	H	8.2
5143.125000	60.20	---	74.00	13.80	H	8.2
5146.725000	---	51.45	54.00	2.55	H	8.2
5146.725000	60.91	---	74.00	13.09	H	8.2

Common Information

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11n40 mode 5230 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5353.081000	---	48.79	54.00	5.21	H	8.7
5353.081000	59.28	---	74.00	14.72	H	8.7
5355.902000	58.12	---	74.00	15.88	H	8.7
5355.902000	---	51.15	54.00	2.85	H	8.7

Band Edge Emissions (5250-5350MHz Band):

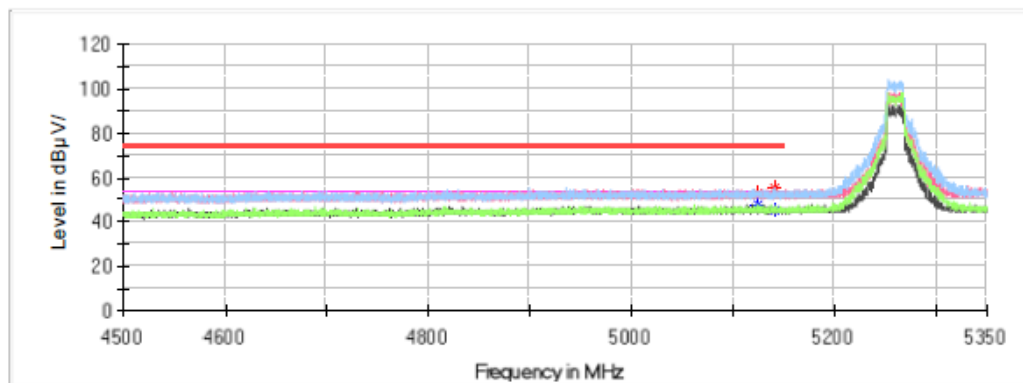
Note:

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

802.11a Mode:**Common Information**

Project No.:	RSHA240717002
Test Mode:	Transmitting in 802.11a mode 5260 channel
Standard:	FCC Part 15.407
Test Engineer:	Hugh Wu

Full Spectrum

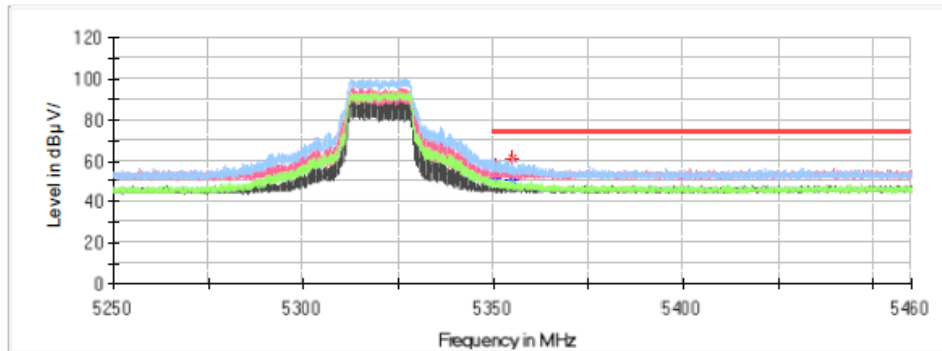
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5124.495000	---	48.01	54.00	5.99	H	8.2
5124.495000	52.76	---	74.00	21.24	H	8.2
5141.410000	---	45.61	54.00	8.39	H	8.2
5141.410000	55.19	---	74.00	18.81	H	8.2

Common Information

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11a mode 5320 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum



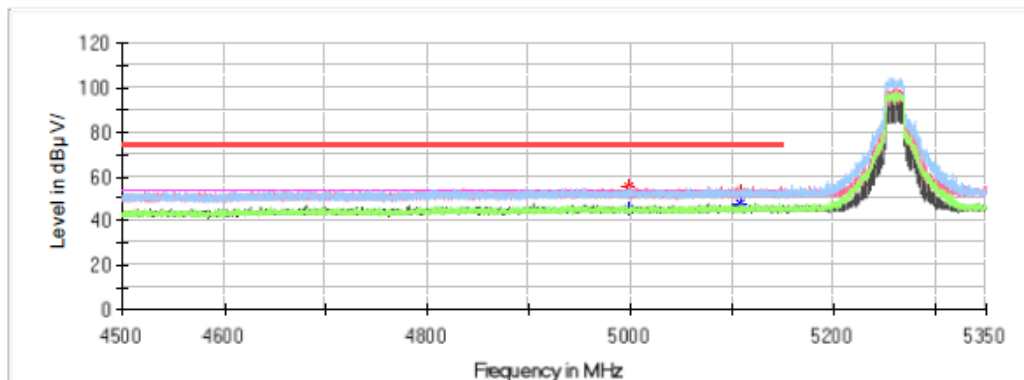
Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5350.254000	---	51.08	54.00	2.92	H	8.7
5350.254000	58.21	---	74.00	15.79	H	8.7
5354.811000	---	50.67	54.00	3.33	H	8.7
5354.811000	61.28	---	74.00	12.72	H	8.7

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

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11n20 mode 5260 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum

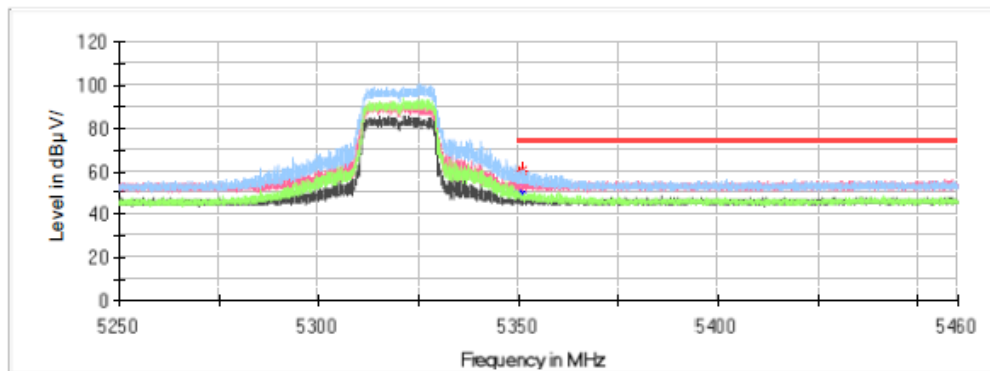
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
4997.675000	55.73	---	74.00	18.27	H	7.8
4997.675000	---	45.36	54.00	8.64	V	7.8
5108.345000	53.05	---	74.00	20.95	V	8.1
5108.345000	---	47.90	54.00	6.10	V	8.1

Common Information

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11n20 mode 5320 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum



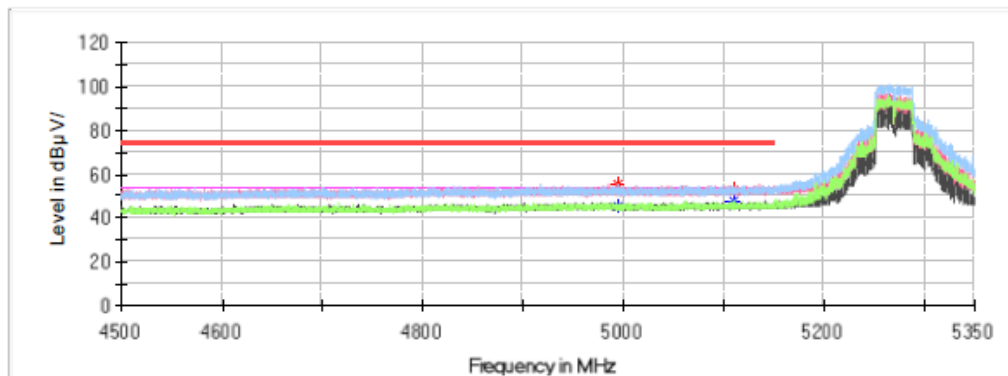
Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5350.149000	---	50.50	54.00	3.50	H	8.7
5350.149000	58.43	---	74.00	15.57	H	8.7
5350.884000	---	48.62	54.00	5.38	H	8.7
5350.884000	60.50	---	74.00	13.50	H	8.7

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

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11n40 mode 5270 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum

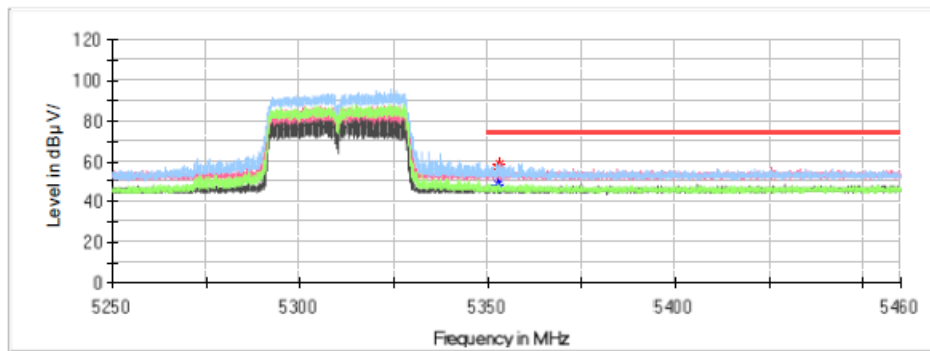
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
4994.615000	55.30	---	74.00	18.70	H	7.8
4994.615000	---	45.69	54.00	8.31	H	7.8
5110.045000	52.94	---	74.00	21.06	H	8.1
5110.045000	---	47.76	54.00	6.24	H	8.1

Common Information

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11n40 mode 5310 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5352.585000	---	48.74	54.00	5.26	H	8.7
5352.585000	56.61	---	74.00	17.39	H	8.7
5352.984000	---	46.81	54.00	7.19	H	8.7
5352.984000	59.14	---	74.00	14.86	H	8.7

Band Edge Emissions (5470-5725MHz Band):

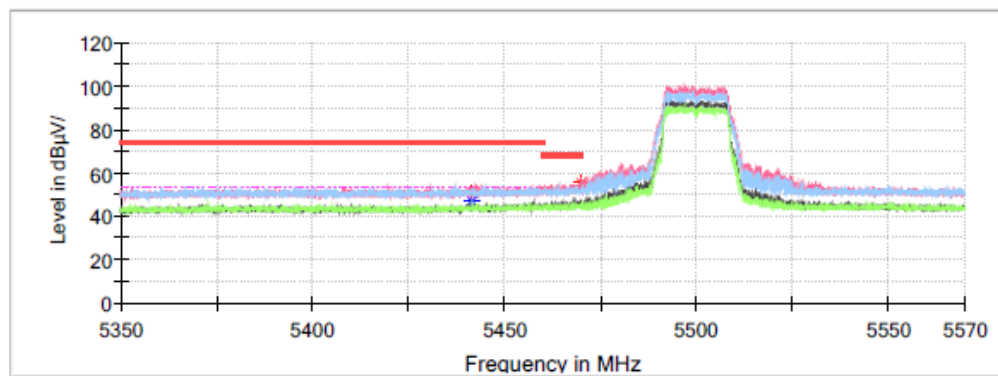
Note:

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.: RSHA240717002
Test Mode: Transmitting in 802.11a mode 5500 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum

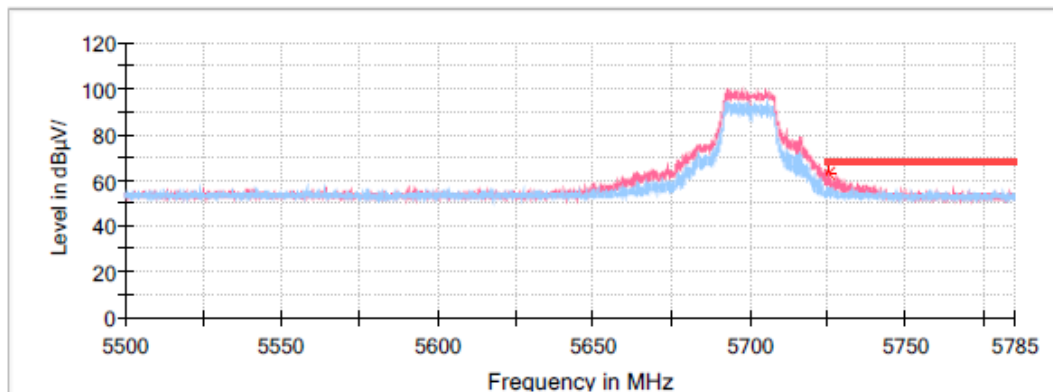
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5441.542000	51.33	---	74.00	22.67	H	5.0
5441.542000	---	46.75	54.00	7.25	H	5.0
5469.812000	55.15	---	68.20	13.05	V	5.0

Common Information

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11a mode 5700 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum



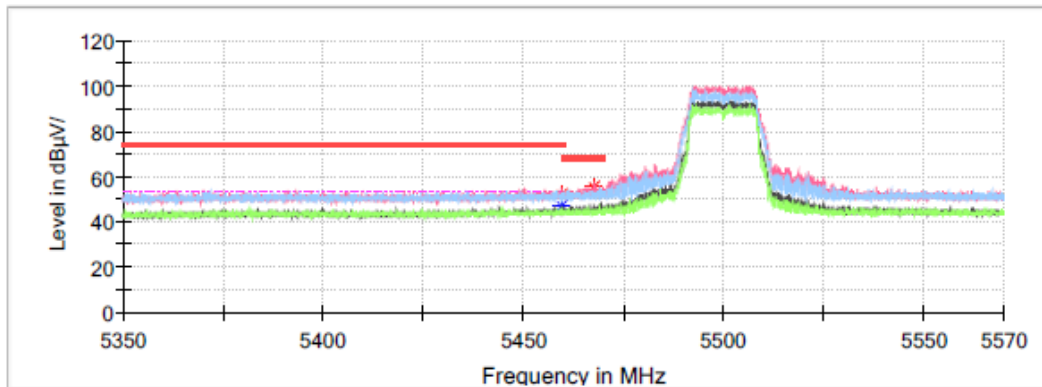
Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5725.463500	62.65	---	68.20	5.55	V	8.9

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

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11n20 mode 5500 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum

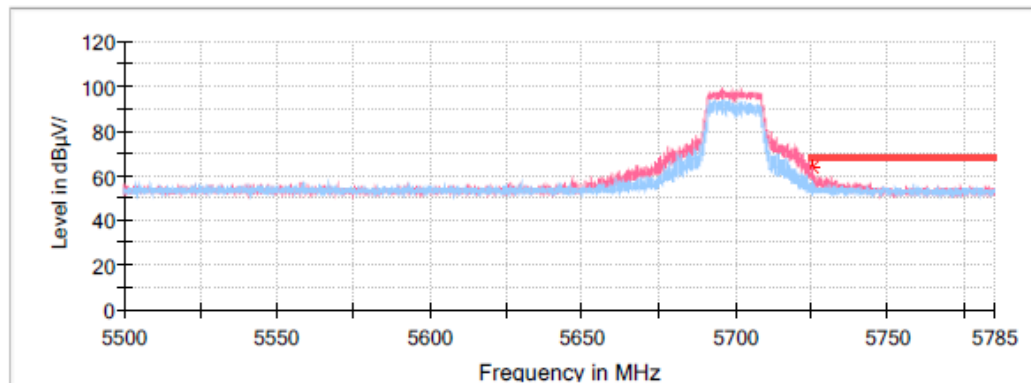
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5459.406000	52.35	---	74.00	21.65	V	5.0
5459.406000	---	46.70	54.00	7.30	V	5.0
5467.370000	55.75	---	68.20	12.45	V	5.0

Common Information

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11n20 mode 5700 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum



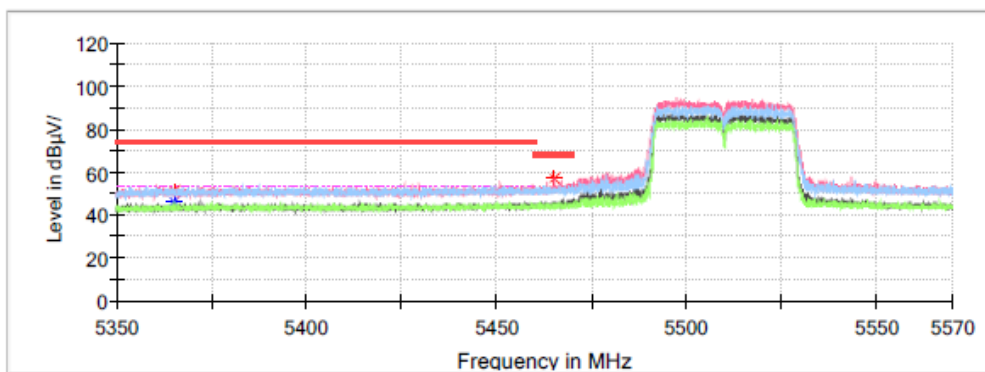
Critical Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5725.207000	63.58	---	68.20	4.62	V	8.9

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

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11n40 mode 5510 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum

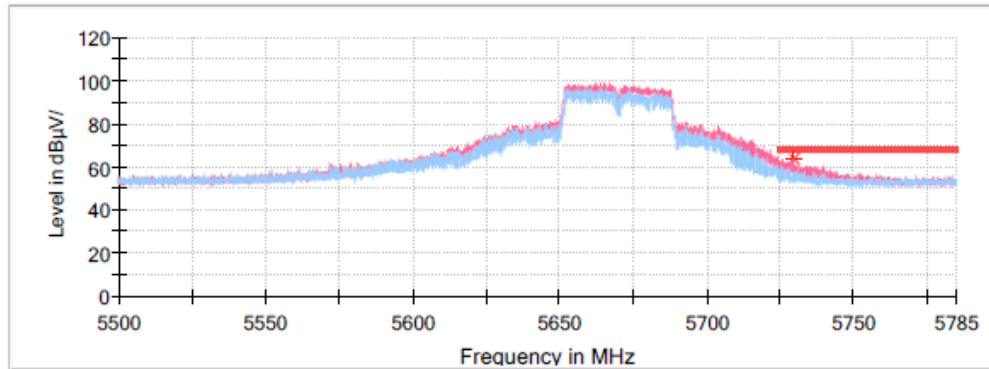
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5365.378000	51.03	---	74.00	22.97	H	4.8
5365.378000	---	46.12	54.00	7.88	H	4.8
5465.324000	57.08	---	68.20	11.12	V	5.0

Common Information

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11n40 mode 5670 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum



Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5729.425000	64.07	---	68.20	4.13	V	8.9

Bandedge Emissions Test (5725-5850MHz Band):

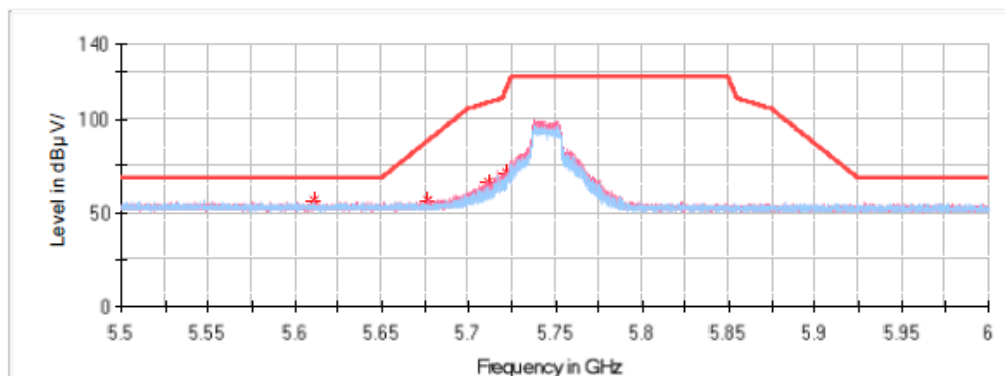
Note:

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.: RSHA240717002
Test Mode: Transmitting in 802.11a mode 5745 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum

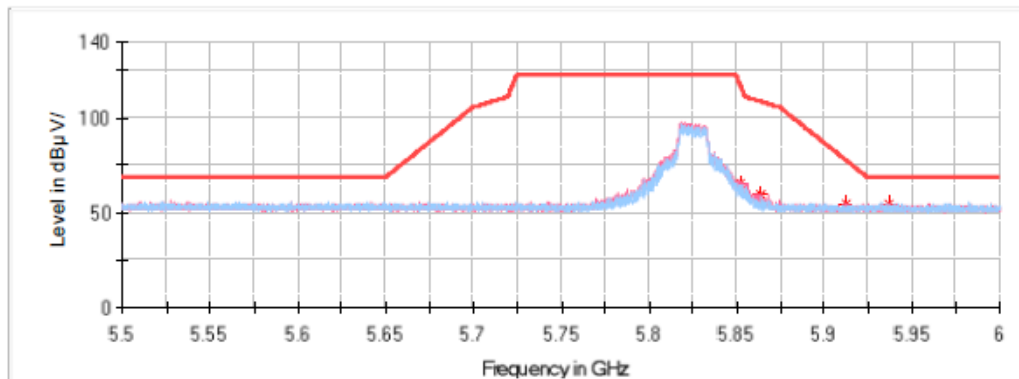
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5611.250000	56.45	---	68.20	11.75	V	9.0
5676.300000	56.49	---	87.66	31.17	V	8.9
5711.550000	66.30	---	108.43	42.13	V	8.9
5721.550000	71.80	---	114.33	42.53	V	8.9

Common Information

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11a mode 5825 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum

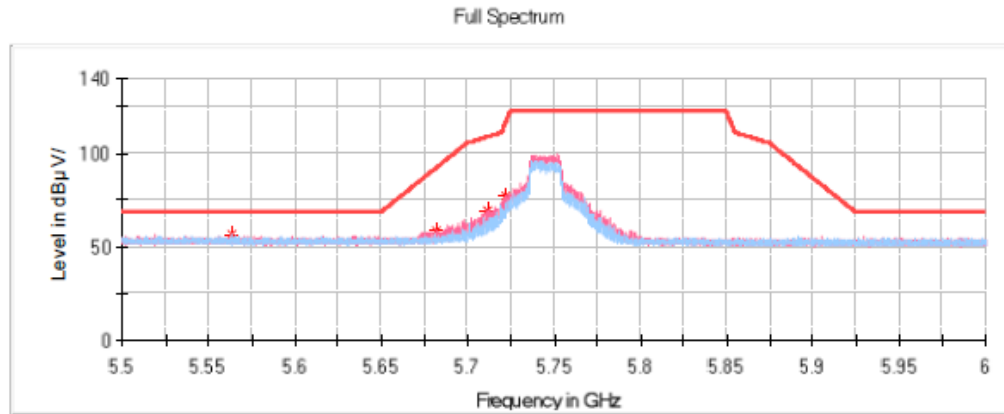


Critical Freqs

Frequency (MHz)	MaxPeak (dB µV/m)	Average (dB µV/m)	Limit (dB µV/m)	Margin (dB)	Pol	Corr. (dB/m)
5852.250000	66.02	---	117.07	51.05	V	8.7
5864.050000	59.56	---	108.27	48.71	V	8.7
5911.750000	54.44	---	78.01	23.56	V	8.7
5936.900000	54.76	---	68.20	13.44	V	8.6

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

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11n20 mode 5745 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

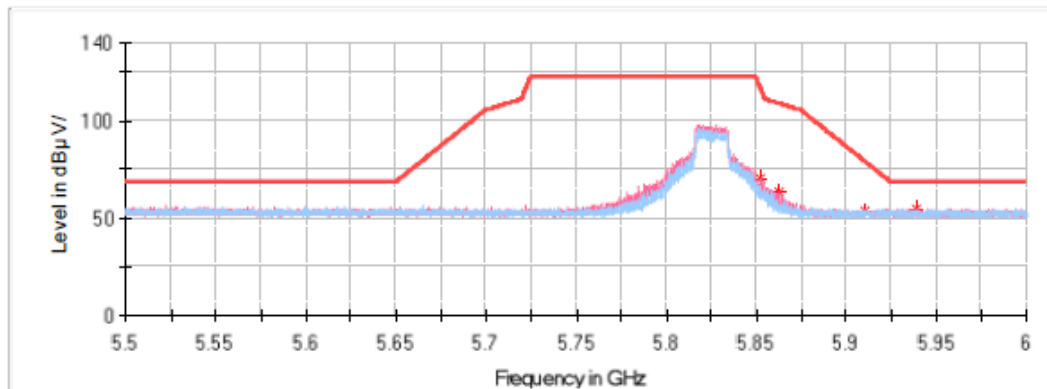
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5563.600000	56.59	---	68.20	11.61	V	9.0
5681.400000	58.52	---	91.44	32.92	V	8.9
5711.000000	69.95	---	108.28	38.33	V	8.9
5722.400000	77.09	---	116.27	39.19	V	8.9

Common Information

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11n20 mode 5825 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum



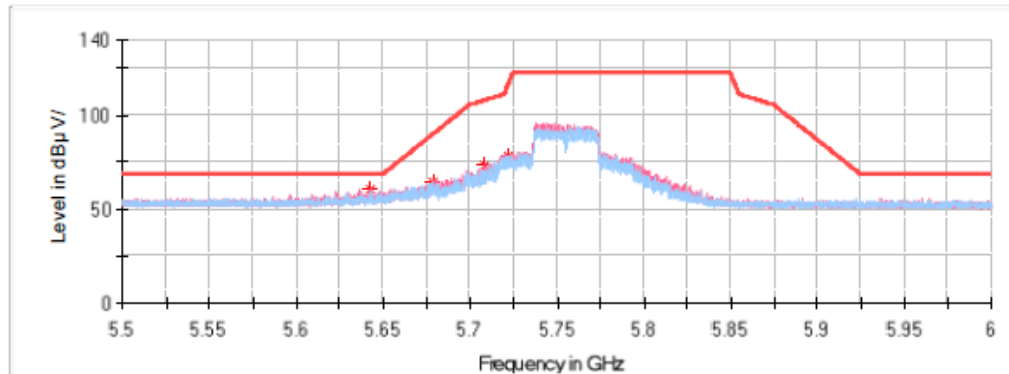
Critical_Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
5851.800000	70.07	---	118.10	48.03	V	8.7
5862.950000	63.16	---	108.57	45.41	V	8.7
5910.250000	53.90	---	79.12	25.21	V	8.7
5938.800000	54.45	---	68.20	13.75	V	8.6

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

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11n40 mode 5755 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum

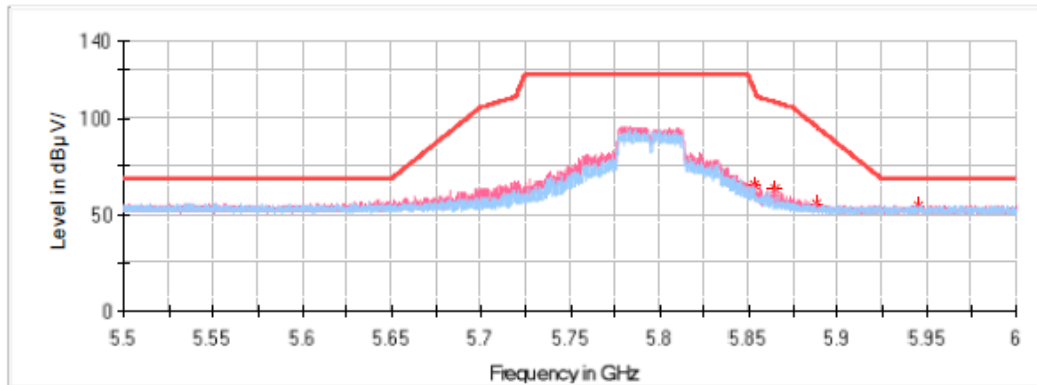
**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µV/m)	Average (dB µV/m)	Limit (dB µV/m)	Margin (dB)	Pol	Corr. (dB/m)
5642.800000	61.02	---	68.20	7.18	V	9.0
5678.150000	64.86	---	89.03	24.17	V	8.9
5708.550000	73.16	---	107.59	34.43	V	8.9
5721.800000	77.94	---	114.90	36.96	V	8.9

Common Information

Project No.: RSHA240717002
Test Mode: Transmitting in 802.11n40 mode 5795 channel
Standard: FCC Part 15.407
Test Engineer: Hugh Wu

Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dB μV/m)	Average (dB μV/m)	Limit (dB μV/m)	Margin (dB)	Pol	Corr. (dB/m)
5852.700000	65.63	---	116.04	50.42	V	8.7
5864.550000	63.24	---	108.13	44.89	V	8.7
5887.750000	55.96	---	95.76	39.80	V	8.7
5945.500000	54.85	---	68.20	13.35	V	8.6

EMISSION BANDWIDTH**Test Result:** Compliant*5150-5250 MHz:*

Test mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
802.11 a	Low	5180	21.617	16.650
	Middle	5200	23.576	16.850
	High	5240	27.476	16.850
802.11 n20	Low	5180	22.618	18.000
	Middle	5200	41.514	18.150
	High	5240	41.490	18.250
802.11 n40	Low	5190	40.300	36.500
	High	5230	78.532	36.900

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

5250-5350 MHz:

Test mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
802.11 a	Low	5260	27.437	16.900
	Middle	5280	27.706	16.900
	High	5320	27.778	16.850
802.11 n20	Low	5260	41.219	18.250
	Middle	5280	41.211	18.200
	High	5320	23.408	18.050
802.11 n40	Low	5270	69.826	37.000
	High	5310	40.300	36.500

5470-5725 MHz:

Test mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
802.11 a	Low	5500	27.402	16.800
	Middle	5580	22.010	16.750
	High	5700	24.863	16.700
802.11 n20	Low	5500	28.272	18.200
	Middle	5580	27.995	18.050
	High	5700	27.236	18.150
802.11 n40	Low	5510	40.000	36.600
	Middle	5550	49.800	36.700
	High	5670	70.994	36.900

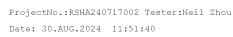
5725-5850MHz:

Test mode	Channel	Frequency (MHz)	99% Bandwidth (MHz)
802.11 a	Low	5745	16.800
	Middle	5785	16.900
	High	5825	16.950
802.11 n20	Low	5745	18.150
	Middle	5785	18.300
	High	5825	18.300
802.11 n40	Low	5755	36.700
	High	5795	37.200

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	16.400	0.5
	Middle	5785	16.200	
	High	5825	16.400	
802.11 n20	Low	5745	17.800	
	Middle	5785	17.800	
	High	5825	17.850	
802.11 n40	Low	5755	36.600	
	High	5795	36.000	

802.11a mode, 5180MHz



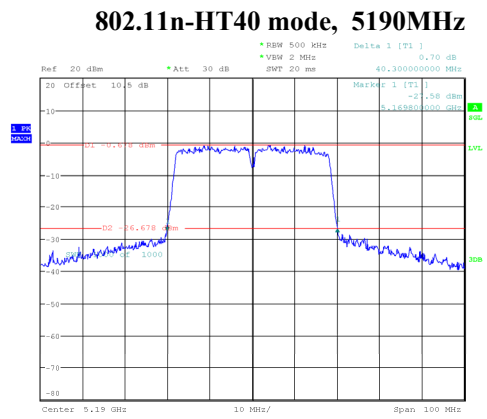
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:15:23

ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:23:42

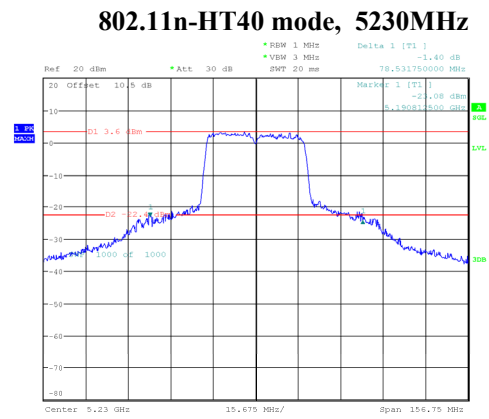
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:36:21

ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:45:25

ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:52:44

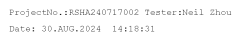


ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:59:54



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:08:09

802.11a mode, 5260MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:23:38

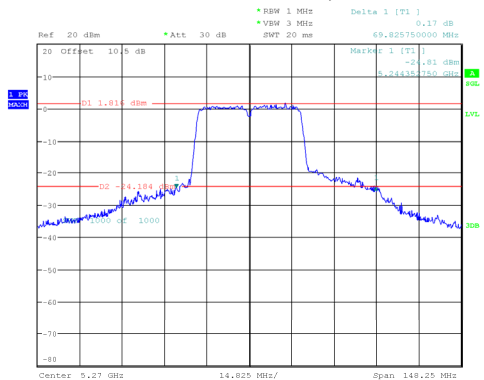
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:29:07

ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:36:21

ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:42:39

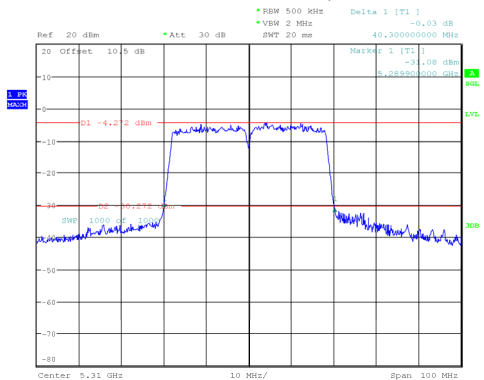
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:50:54

802.11n-HT40 mode, 5270MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:59:13

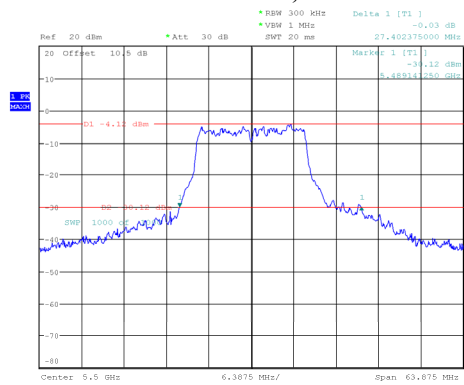
802.11n-HT40 mode, 5310MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 15:06:43

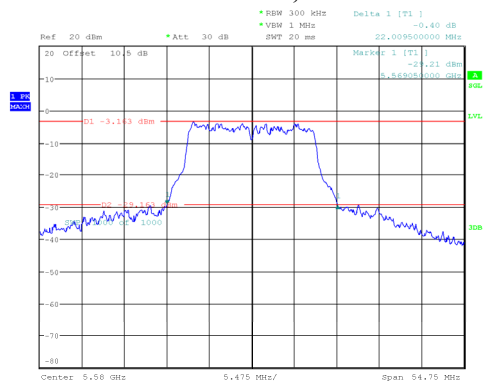
5470-5725 MHz Band:

802.11a mode, 5500MHz



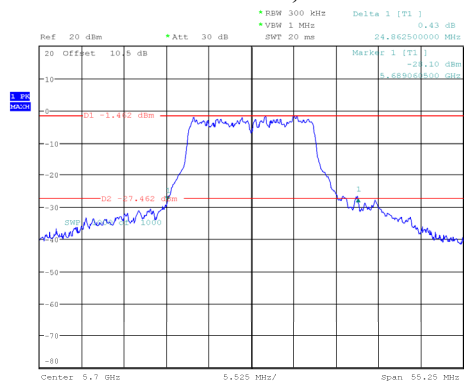
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 15:16:30

802.11a mode, 5580MHz



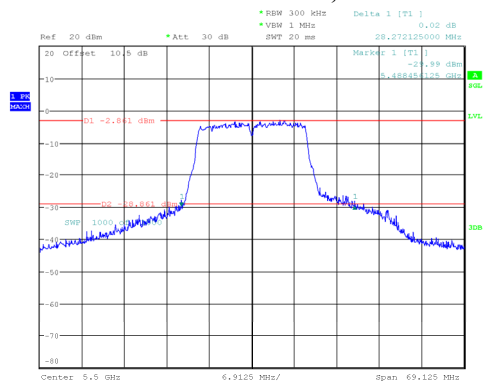
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 15:23:16

802.11a mode, 5700MHz



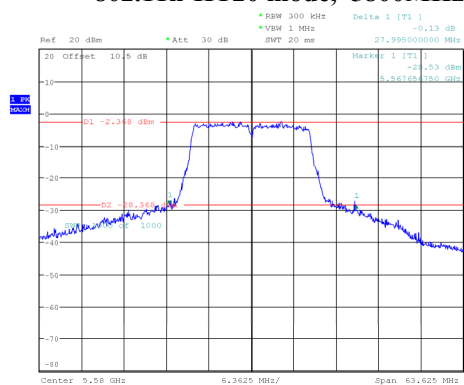
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 15:30:45

802.11n-HT20 mode, 5500MHz



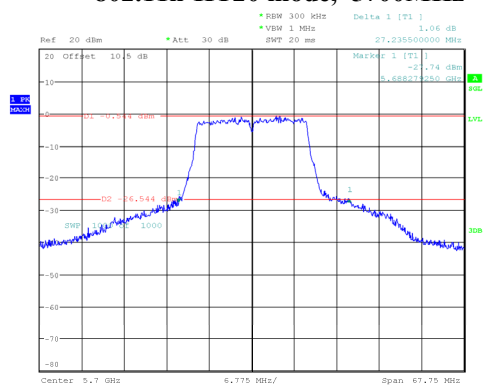
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 16:06:46

802.11n-HT20 mode, 5800MHz



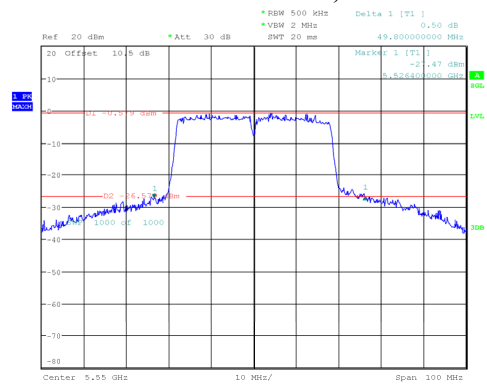
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 16:16:35

802.11n-HT20 mode, 5700MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 16:22:44

802.11n-HT40 mode, 5550MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 16:34:59

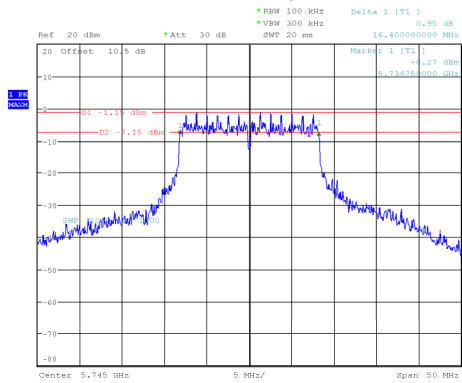
Ref 20 dBm Att 30 dB RBW 1 MHz VBW 3 MHz SMT 20 ns Delta 1 [71] -0.67 dB 70.99425000 MHz

Marked 1 [71] -25.96 dBm 8.64293250 GHz 1

Center 5.67 GHz 1.7025 GHz/ Span 170.25 MHz

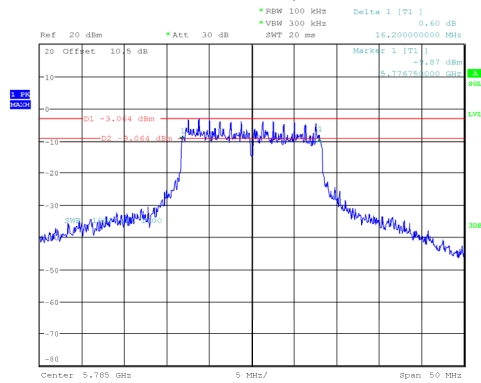
5725-5850 MHz Band:

802.11a mode, 5745MHz



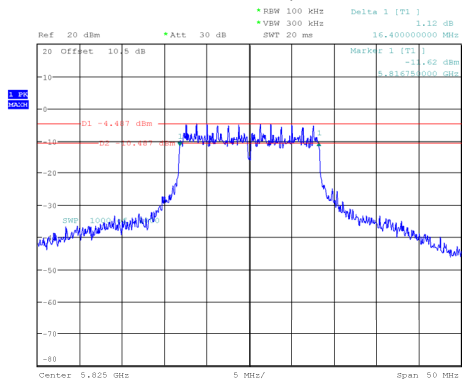
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 17:00:21

802.11a mode, 5785MHz



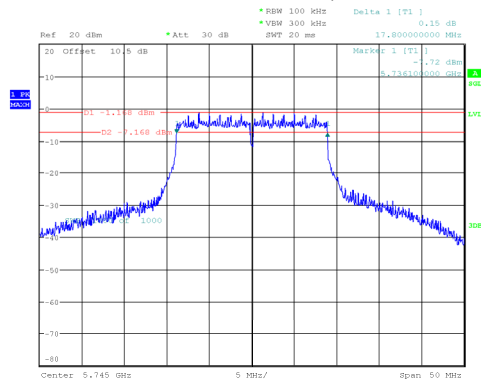
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 17:05:39

802.11a mode, 5825MHz



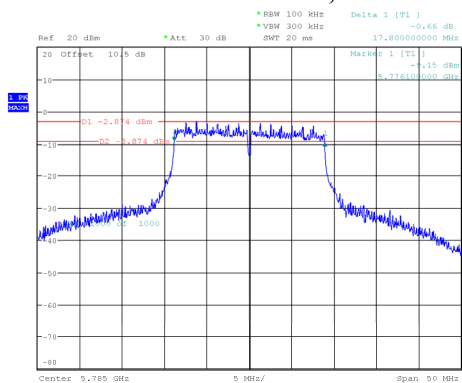
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 17:11:45

802.11n-HT20 mode, 5745MHz



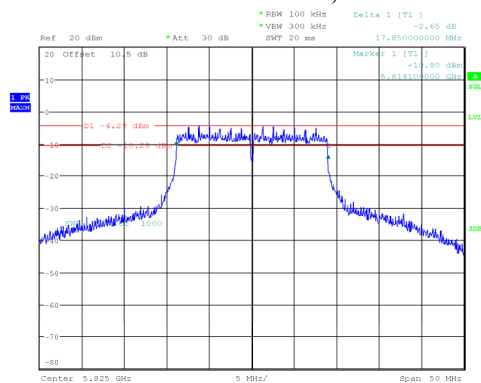
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Date: 30.AUG.2024 17:35:43

802.11n-HT20 mode, 5785MHz



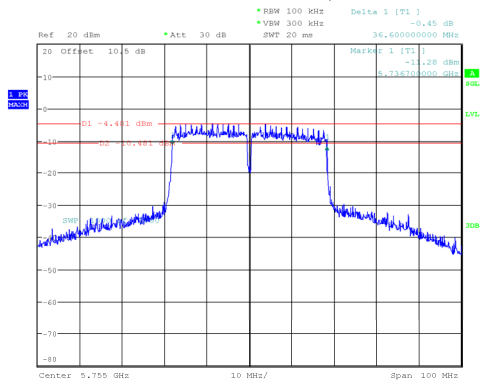
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Date: 30.AUG.2024 17:44:36

802.11n-HT20 mode, 5825MHz



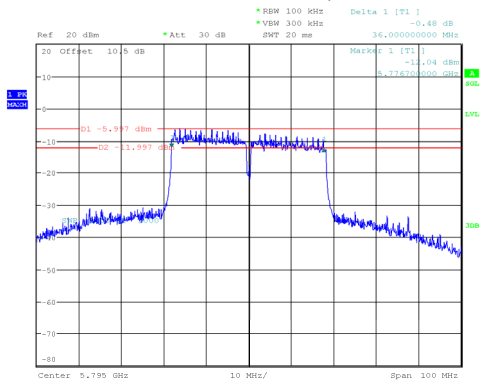
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 17:48:52

802.11n-HT40 mode, 5755MHz

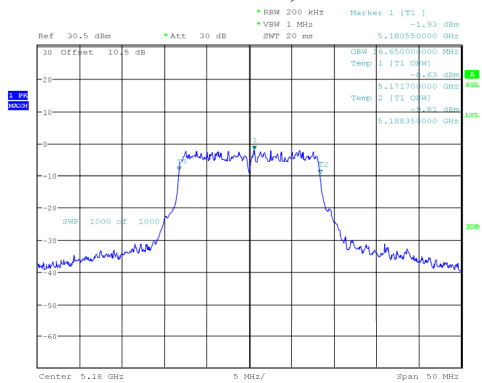


ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 17:55:14

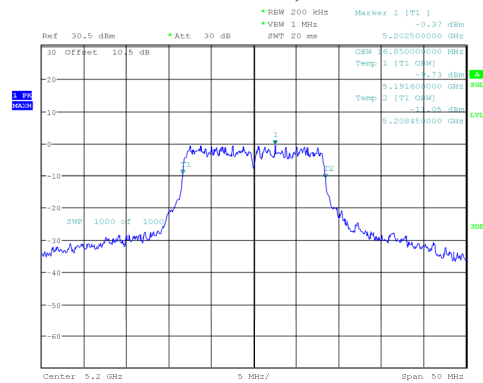
802.11n-HT40 mode, 5795MHz



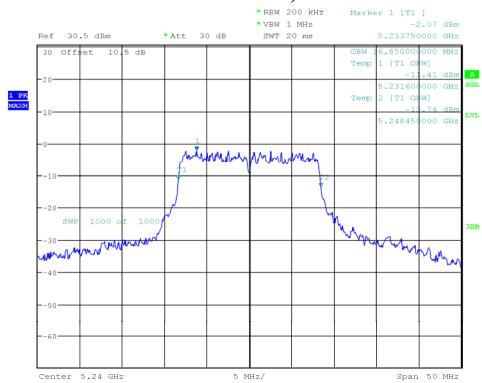
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 18:01:46

**99% Occupied Bandwidth
5150-5250 MHz Band:****802.11a mode, 5180MHz**

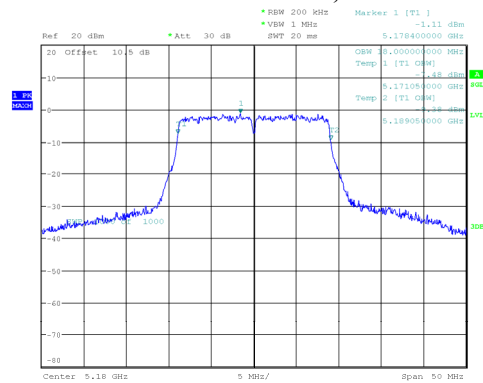
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 11:47:26

802.11a mode, 5200MHz

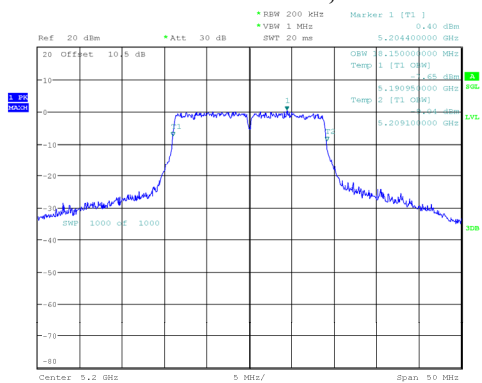
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:12:35

802.11a mode, 5240MHz

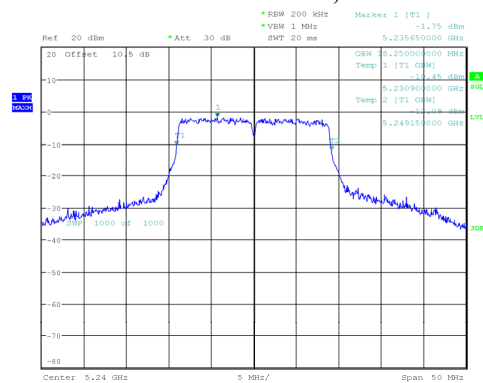
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:20:35

802.11n-HT20 mode, 5180MHz

ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:33:29

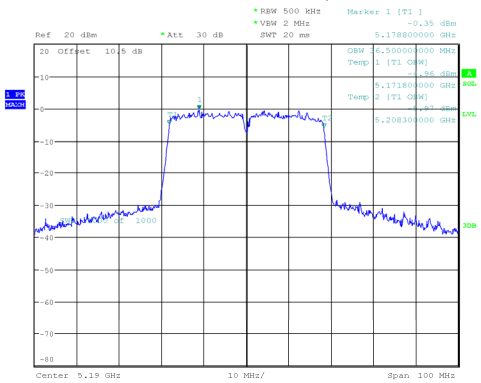
802.11n-HT20 mode, 5200MHz

ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:40:50

802.11n-HT20 mode, 5240MHz

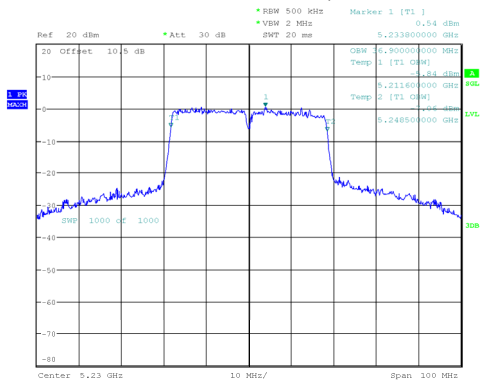
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Date: 30.AUG.2024 13:46:22

802.11n-HT40 mode, 5190MHz



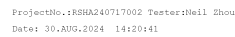
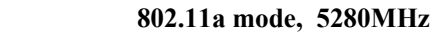
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:57:14

802.11n-HT40 mode, 5230MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:03:59

802.11a mode, 5260MHz



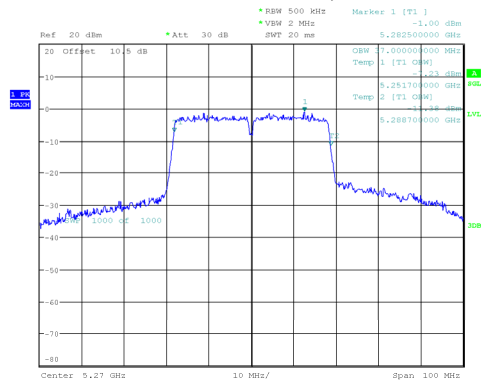
802.11n-HT20 mode, 5260MHz



802.11n-HT20 mode, 5320MHz

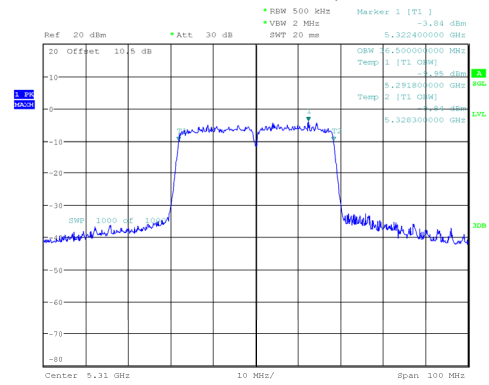


802.11n-HT40 mode, 5270MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:54:15

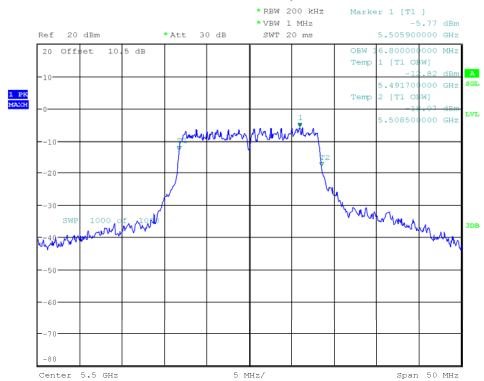
802.11n-HT40 mode, 5310MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 15:03:22

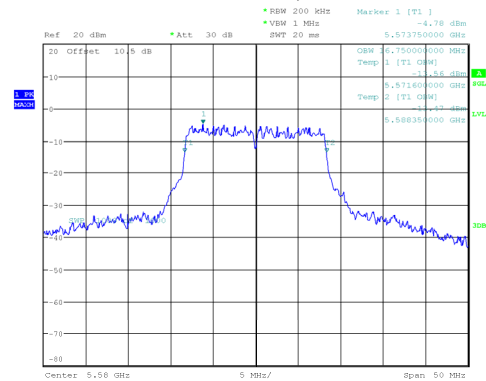
5470-5725 MHz Band:

802.11a mode, 5500MHz



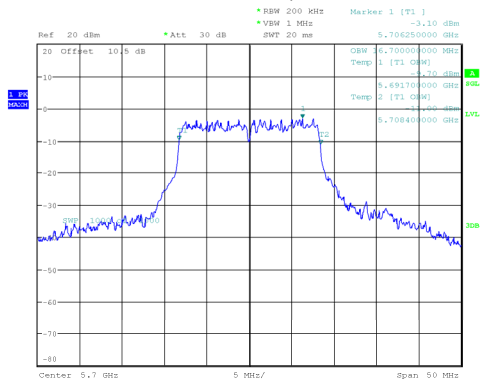
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 15:13:18

802.11a mode, 5580MHz



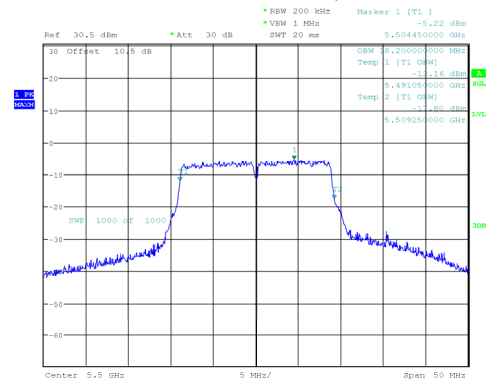
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 15:20:17

802.11a mode, 5700MHz



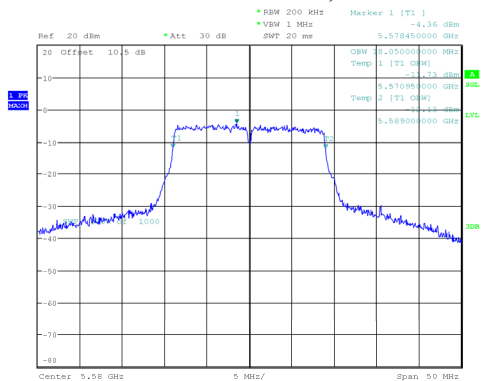
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 15:12:42

802.11n-HT20 mode, 5500MHz



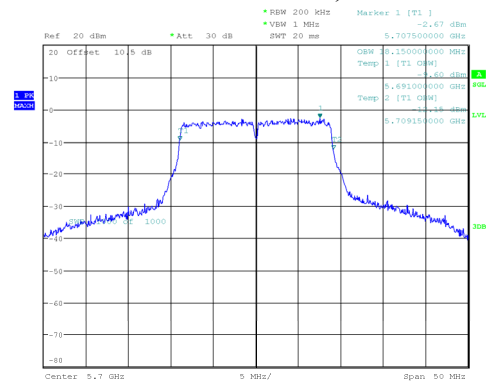
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 16:03:26

802.11n-HT20 mode, 5800MHz



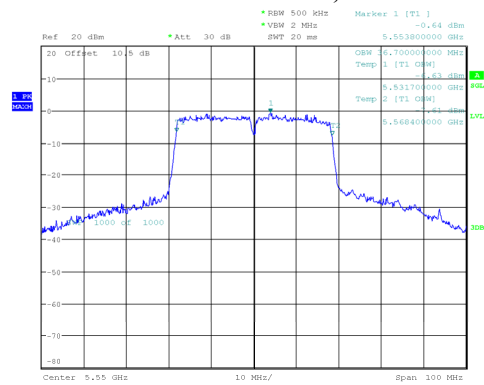
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 16:12:44

802.11n-HT20 mode, 5700MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 16:18:51

802.11n-HT40 mode, 5550MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 16:31:55

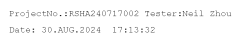
802.11a mode, 5745MHz



```
*RBW 200 kHz      Marker 1 [T1 ]
*VBW 1 MHz        -1.45 dBm
```



* RBW 200 kHz Marker 1 (T1)
* VRES 1.00 mV -3.04 dBm



* RBW 200 kHz Marker 1 [T1]



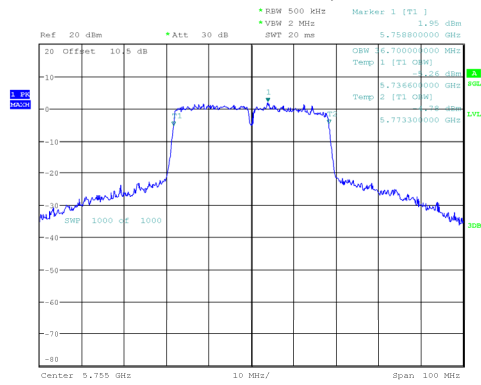
* RBW 200 kHz Marker 1 (T1)



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*RBW 200 kHz      Marker 1 [T1 ]
*VDDM 1.001V      0.03 dB
```

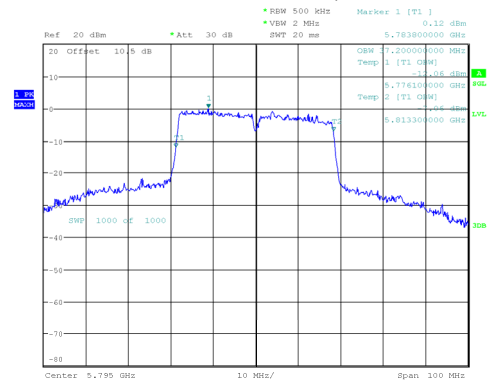


802.11n-HT40 mode, 5755MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 17:52:31

802.11n-HT40 mode, 5795MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 17:58:39

CONDUCTED TRANSMITTER OUTPUT POWER*Test Mode: Transmitting*

Band	Mode	Frequency (MHz)	Conducted average power (dBm)	Limit (dBm)
5150-5250 MHz	802.11 a	5180	7.92	24
		5200	9.32	
		5240	8.41	
	802.11 n20	5180	7.84	
		5200	9.38	
		5240	7.55	
	802.11 n40	5190	6.77	
		5230	7.91	

Note: The EUT is client devices

Band	Mode	Frequency (MHz)	Conducted average power (dBm)	Limit (dBm)
5250-5350 MHz	802.11 a	5260	6.42	24
		5280	6.01	
		5320	6.64	
	802.11 n20	5260	6.53	
		5280	6.09	
		5320	5.99	
	802.11 n40	5270	6.06	
		5310	2.54	

Band	Mode	Frequency (MHz)	Conducted average power (dBm)	Limit (dBm)
5470-5725 MHz	802.11 a	5500	3.73	24
		5580	4.63	
		5700	6.26	
	802.11 n20	5500	3.81	
		5580	4.76	
		5700	6.29	
	802.11 n40	5510	1.63	
		5550	6.69	
		5670	4.46	

Band	Mode	Frequency (MHz)	Conducted average power (dBm)	Limit (dBm)
5725-5850 MHz	802.11 a	5745	9.64	30
		5785	7.47	
		5825	6.32	
	802.11 n20	5745	9.83	
		5785	7.75	
		5825	6.36	
	802.11 n40	5755	9.27	
		5795	6.95	

POWER SPECTRAL DENSITY*Test Mode: Transmitting*

Band	Mode	Channel	Frequency (MHz)	Result (dBm/MHz)	Duty Cycle Factor (dB)	PSD (dBm/MHz)	Limit (dBm/MHz)
5150-5250 MHz	802.11 a	Low	5180	-3.68	0.57	-3.11	11
		Middle	5200	-2.00	0.57	-1.43	
		High	5240	-3.95	0.57	-3.38	
	802.11 n20	Low	5180	-4.04	0.62	-3.42	
		Middle	5200	-2.53	0.62	-1.91	
		High	5240	-4.22	0.62	-3.6	
	802.11 n40	Low	5190	-8.31	0.86	-7.45	
		High	5230	-6.65	0.86	-5.79	

Band	Mode	Channel	Frequency (MHz)	Result (dBm/MHz)	Duty Cycle Factor (dB)	PSD (dBm/MHz)	Limit (dBm/MHz)
5250-5350 MHz	802.11 a	Low	5260	-5.17	0.60	-4.57	11
		Middle	5280	-5.55	0.60	-4.95	
		High	5320	-4.85	0.60	-4.25	
	802.11 n20	Low	5260	-5.50	0.56	-4.94	
		Middle	5280	-5.87	0.56	-5.31	
		High	5320	-6.18	0.56	-5.62	
	802.11 n40	Low	5270	-8.96	0.91	-8.05	
		High	5310	-12.18	0.91	-11.27	

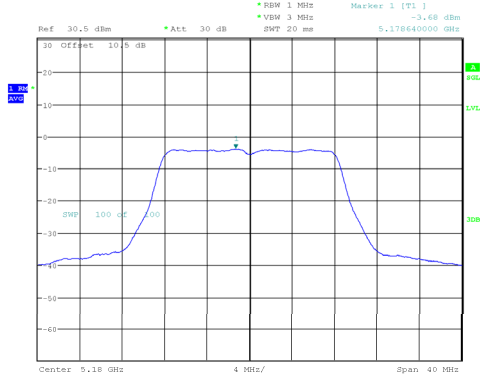
Band	Mode	Channel	Frequency (MHz)	Result (dBm/MHz)	Duty Cycle Factor (dB)	PSD (dBm/MHz)	Limit (dBm/MHz)
5470-5725 MHz	802.11 a	Low	5500	-7.51	0.53	-6.98	11
		Middle	5580	-6.71	0.53	-6.18	
		High	5700	-5.11	0.53	-4.58	
	802.11 n20	Low	5500	-7.89	0.61	-7.28	
		Middle	5580	-6.95	0.61	-6.34	
		High	5700	-5.42	0.61	-4.81	
	802.11 n40	Low	5510	-12.71	0.86	-11.85	
		Middle	5550	-8.21	0.86	-7.35	
		High	5670	-10.22	0.86	-9.36	

Band	Mode	Channel	Frequency (MHz)	Result (dBm/500kHz)	Duty Cycle Factor (dB)	PSD (dBm/500kHz)	Limit (dBm/500kHz)
5725-5850 MHz	802.11 a	Low	5745	-4.60	0.52	-4.08	30
		Middle	5785	-6.44	0.52	-5.92	
		High	5825	-7.91	0.52	-7.39	
	802.11 n20	Low	5745	-4.75	0.56	-4.19	
		Middle	5785	-6.63	0.56	-6.07	
		High	5825	-8.17	0.56	-7.61	
	802.11 n40	Low	5755	-7.87	0.91	-6.96	
		High	5795	-9.64	0.91	-8.73	

Note: PSD= Result+duty cycle factor

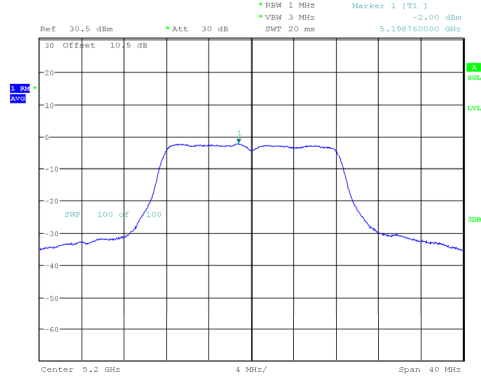
5150MHz-5250 MHz Band:

802.11a mode, Power spectral density-5180MHz



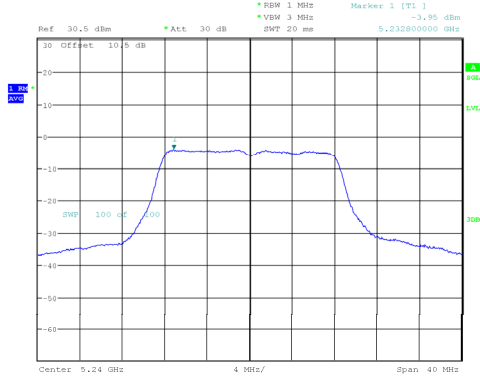
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:52:12

802.11a mode, Power spectral density-5200MHz



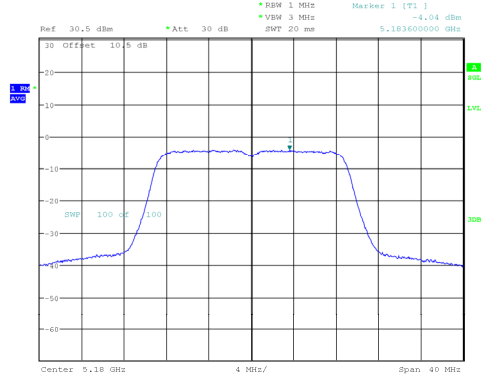
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:15:55

802.11a mode, Power spectral density-5240MHz



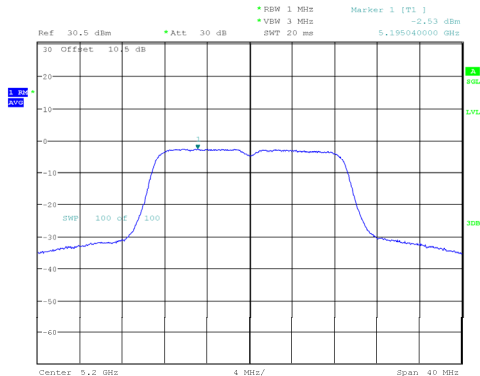
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:24:04

802.11n-HT20 mode, Power spectral density-5180MHz



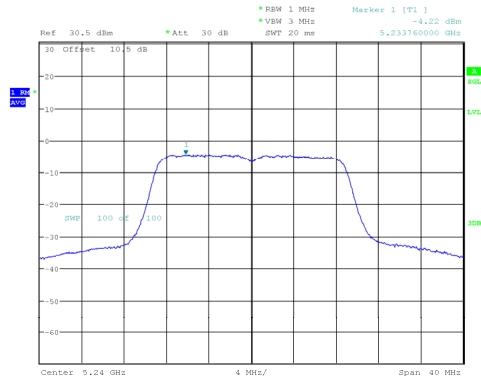
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:36:52

802.11n-HT20 mode, Power spectral density-5200MHz



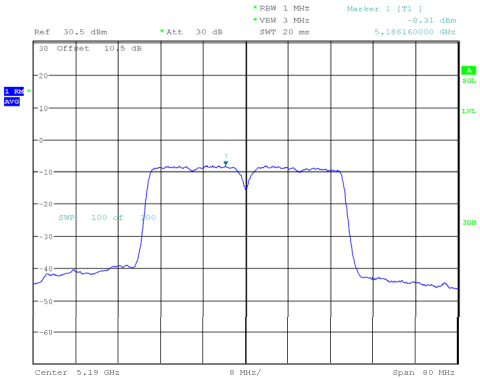
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:45:57

802.11n-HT20 mode, Power spectral density-5240MHz



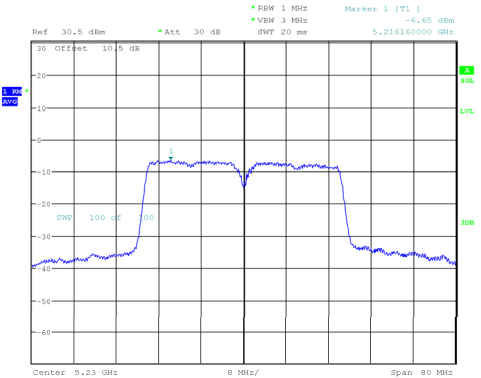
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 13:53:18

802.11n-HT40 mode, Power spectral density-5190MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:00:27

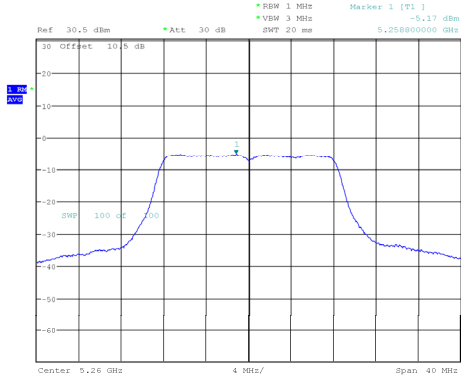
802.11n-HT40 mode, Power spectral density-5230MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:08:46

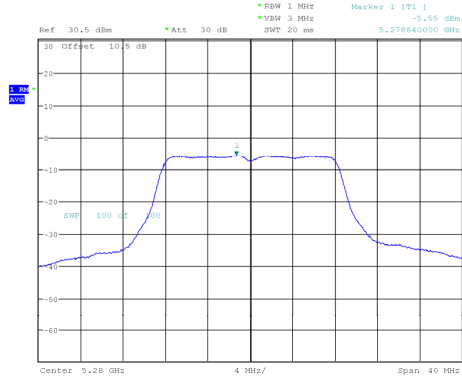
5250MHz-5350 MHz Band:

802.11a mode, Power spectral density-5260MHz



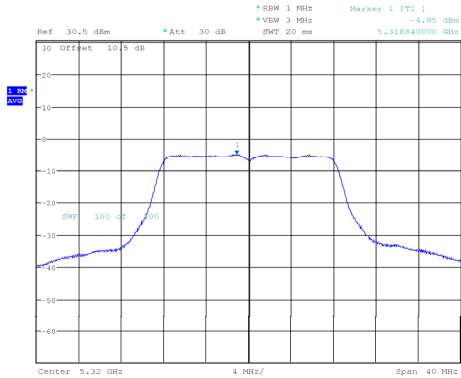
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:19:04

802.11a mode, Power spectral density-5280MHz



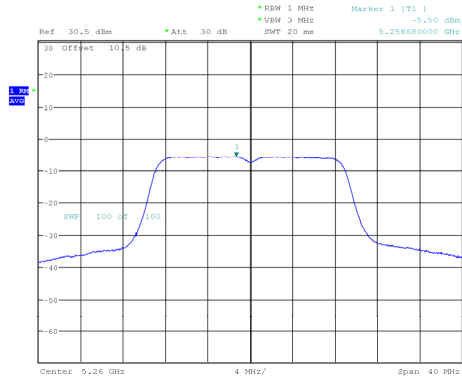
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:24:11

802.11a mode, Power spectral density-5320MHz



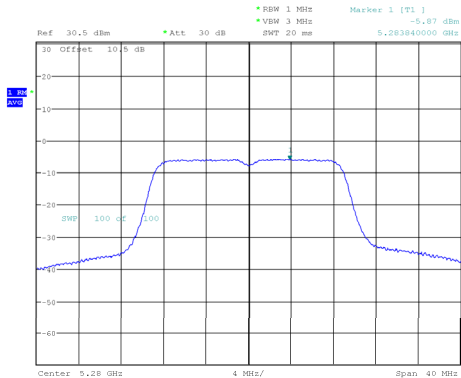
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Date: 30.AUG.2024 14:29:40

802.11n-HT20 mode, Power spectral density-5260MHz



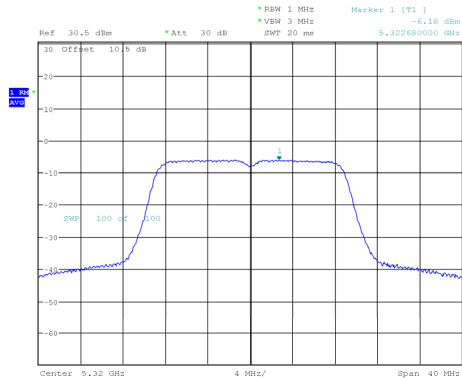
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:36:56

802.11n-HT20 mode, Power spectral density-5280MHz



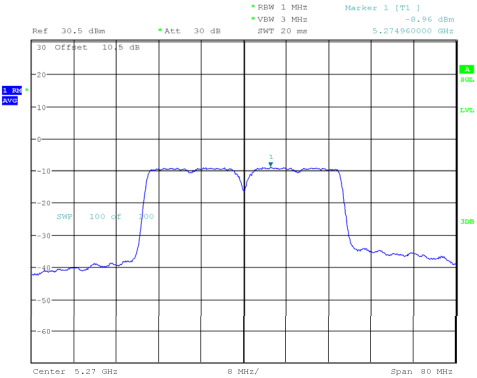
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:43:12

802.11n-HT20 mode, Power spectral density-5320MHz



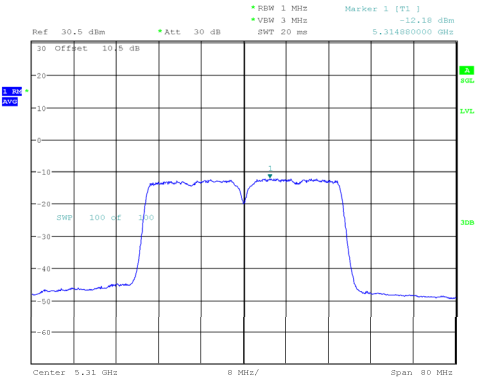
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:51:29

802.11n-HT40 mode, Power spectral density-5270MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 14:59:50

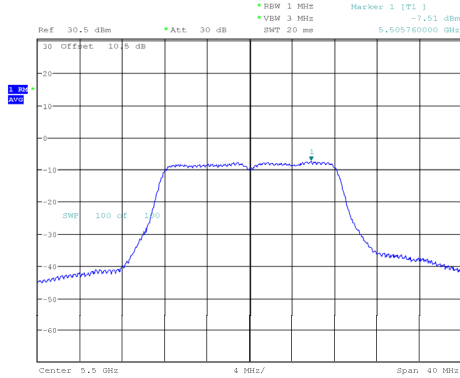
802.11n-HT40 mode, Power spectral density-5310MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 15:07:17

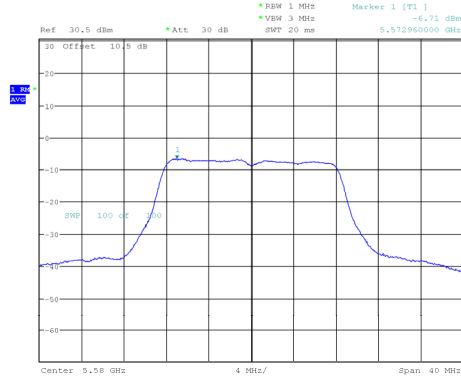
5470MHz-5725 MHz Band:

802.11a mode, Power spectral density-5500MHz



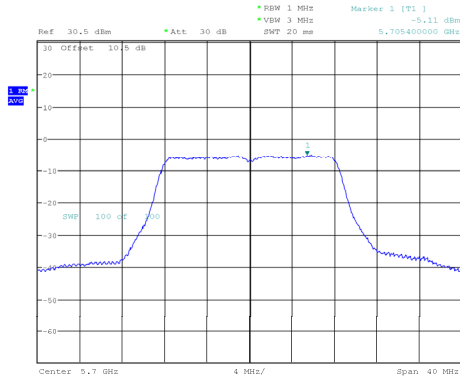
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 15:17:04

802.11a mode, Power spectral density-5580MHz



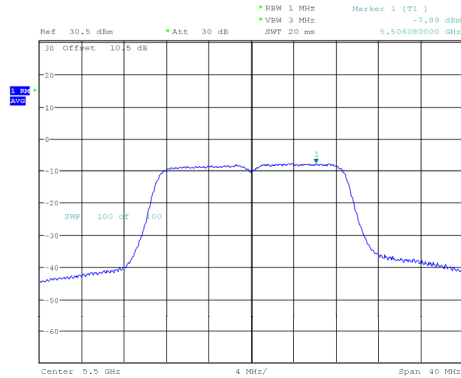
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 15:23:51

802.11a mode, Power spectral density-5700MHz



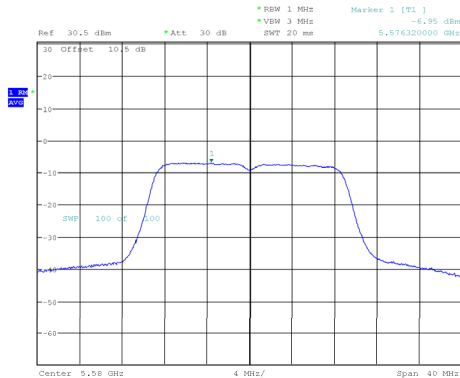
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 15:31:19

802.11n-HT20 mode, Power spectral density-5500MHz



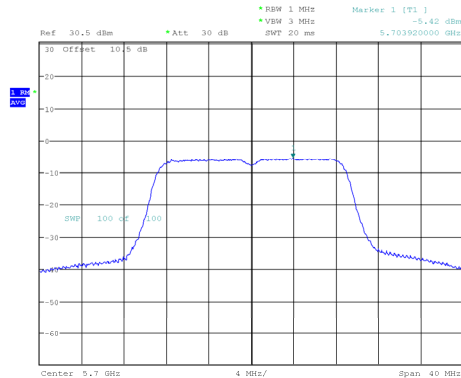
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 16:07:18

802.11n-HT20 mode, Power spectral density-5580MHz



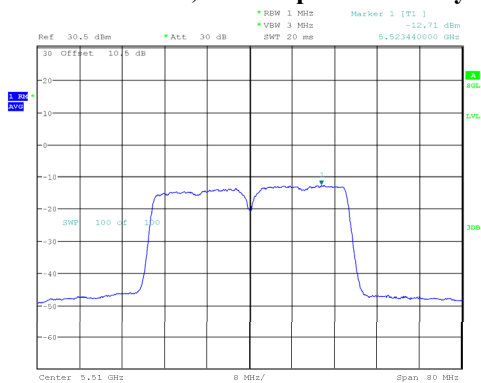
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 16:17:07

802.11n-HT20 mode, Power spectral density-5700MHz



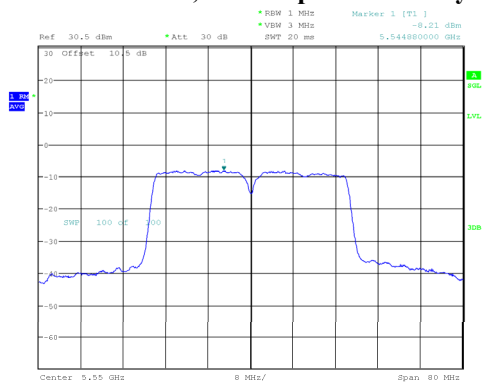
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 16:23:17

802.11n-HT40 mode, Power spectral density-5510MHz



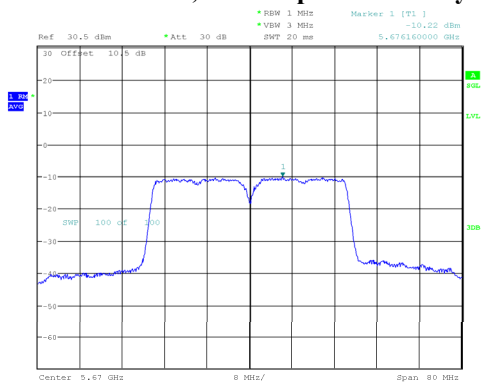
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 16:29:10

802.11n-HT40 mode, Power spectral density-5550MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 16:35:35

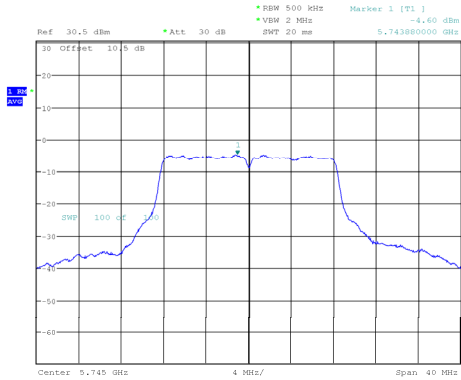
802.11n-HT40 mode, Power spectral density-5670MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 16:44:29

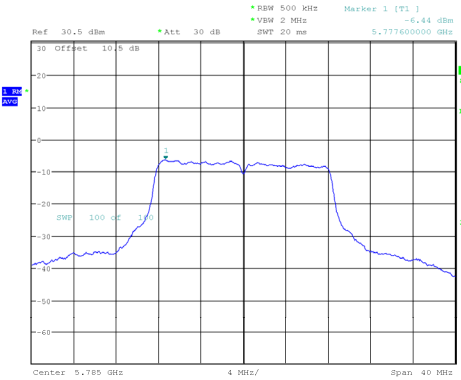
5725MHz-5850 MHz Band:

802.11a mode, Power spectral density-5745MHz



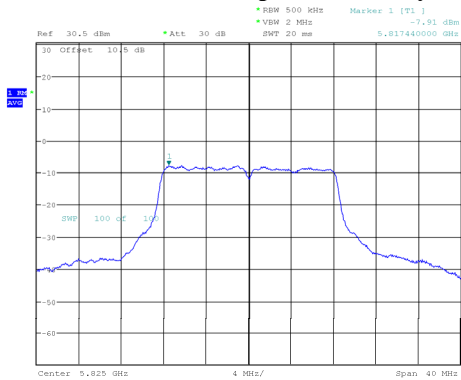
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 17:00:57

802.11a mode, Power spectral density-5785MHz



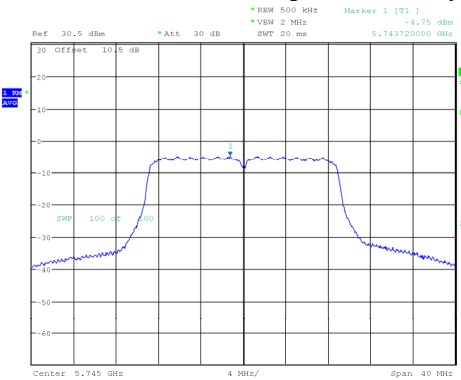
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 17:06:16

802.11a mode, Power spectral density-5825MHz



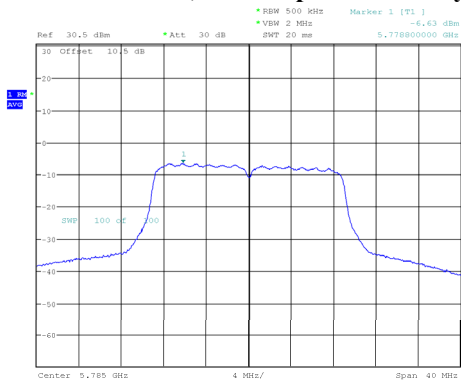
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 17:18:22

802.11n-HT20 mode, Power spectral density-5745MHz



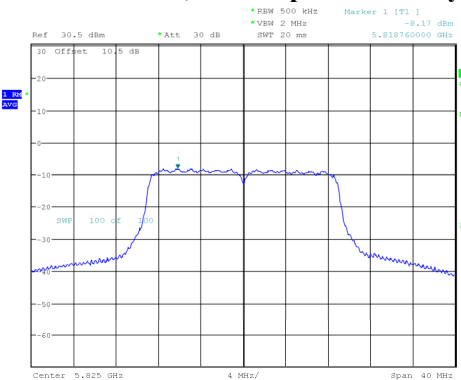
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 17:36:18

802.11n-HT20 mode, Power spectral density-5785MHz



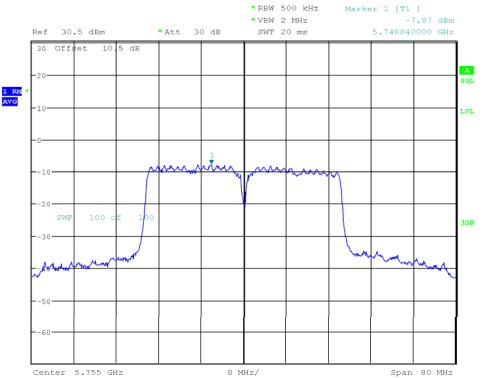
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 17:45:13

802.11n-HT20 mode, Power spectral density-5825MHz



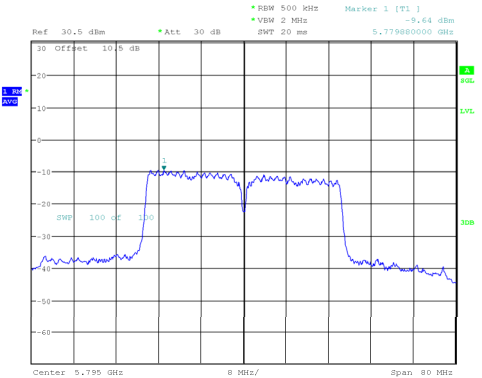
ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 17:49:29

802.11n-HT40 mode, Power spectral density-5755MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 17:55:52

802.11n-HT40 mode, Power spectral density-5795MHz



ProjectNo.:RSHA240717002 Tester:Neil Zhou
Date: 30.AUG.2024 18:02:24

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*******