

FCC PART 15.407

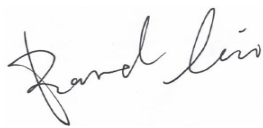
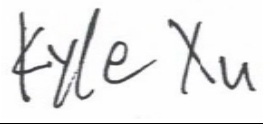
TEST REPORT

For

AgiBot Innovation(Shanghai) Technology Co.,Ltd.

8/F, Building 29, No.2555 Xiupu Road, Pudong New Area, Shanghai, China

FCC ID: 2BTPT-ZYCXD105U

Report Type: Original Report	Product Name: Quadruped Robot
Report Number: RBJ251015001-00C	
Report Date: 2026-03-17	
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	

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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	RBJ251015001-00C	R1V1	2026-03-17	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	AgiBot Innovation(Shanghai) Technology Co.,Ltd.				
Tested Model:	ZYCXD105U				
Series Model:	ZYXG02, ZYCXD105P				
Model Difference:	Shell and Communication Board, see the declaration letter for details				
Product Name:	Quadruped Robot				
Power Supply:	DC 43.2V from battery				
Operating Frequency:	B1: 5150-5250 MHz, B2: 5250-5350 MHz, B3: 5470-5725 MHz, B4: 5725-5850 MHz				
Maximum Output Power:	Mode:	5G Wi-Fi Band 1:	Band 2:	Band 3:	Band 4:
	802.11a:	10.19 dBm	10.40 dBm	10.30 dBm	10.57 dBm
	802.11ac20:	11.61 dBm	12.17 dBm	12.21 dBm	12.36 dBm
	802.11ac40:	11.86 dBm	12.29 dBm	12.32 dBm	12.59 dBm
	802.11ac80:	11.66dBm	11.66 dBm	12.01 dBm	12.33 dBm
Channel Number:	B1:7; B2: 7; B3: 21; B4: 8				
Channel Separation	802.11a/ac20: 20 MHz, 802.11ac40: 40 MHz, , 802.11ac80: 80 MHz				
Modulation Type:	OFDM				
Antenna Type:	FPC antenna				
★Maximum Antenna Gain:	Chain 0: Band 1: 3.79 dBi; Band 2: 3.85 dBi; Band 3: 3.53 dBi; Band 4: 3.72 dBi; Chain 1: Band 1: 3.90 dBi; Band 2: 3.98 dBi; Band 3: 3.94 dBi; Band 4: 3.87 dBi;				
Sample/EUT Status	Good condition				

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

All measurement and test data in this report was gathered from production sample serial number: RBJ251015001-1 (ZYCXD105U), RBJ251015001-2 (ZYCXD105P). Based on the above differences, we choose ZYCXD105U for full test and ZYCXD105P for "SPURIOUS EMISSIONS (below 1GHz)". (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2025-10-15.)

Objective

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

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

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024+Errata to C63.10a-2024[▲], American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

Measurement Uncertainty

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

The system support 802.11a/n20/n40/ac20/ac40/ ac80, the 802.11 n20/n40 were reduced since the identical parameters with 802.11ac20 and ac40.

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

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

802.11ac40 mode Channel 38, 46 were tested.

802.11ac80 mode Channel 42 was tested.

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

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

802.11a/ac20 mode Channel 52, 60, 64 were tested.

802.11ac40 mode Channel 54, 62 were tested.

802.11ac80 mode Channel 58 was tested.

Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
54	5270	62	5310
56	5280	64	5320
58	5290	/	/

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

802.11a/ac20 mode Channel 100, 116, 140, 144 were tested, Cross channel 144.

802.11ac40 mode Channel 102, 110, 134, 142 were tested, Cross channel 142.

802.11ac80 mode Channel 106, 122, 138 was tested, Cross channel 138.

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	118	5590	136	5680
102	5510	120	5600	138	5690
104	5520	122	5610	140	5700
106	5530	124	5620	142	5710
108	5540	126	5630	144	5720
110	5550	128	5640	/	/
112	5560	132	5660	/	/
116	5580	134	5670	/	/

For **5725~5850 MHz** band,

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

802.11ac40 mode Channel 151, 159 were tested.

802.11ac80 mode Channel 155 was tested.

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

EUT Exercise Software

The system was configured for testing in an engineering mode, which was provided by manufacturer

Test software: sscom

Pre-scan with all the data rates, and the worst case was performed as below:

U-NII	Mode	Data Rate	Channel	★Power Level	
				Chain 0	Chain 1
5150-5250MHz:	802.11a	6 Mbps	5180	10	10
			5200	10	10
			5240	10	10
	802.11ac-VHT20	MCS0	5180	10	10
			5200	10	10
			5240	10	10
	802.11ac-VHT40	MCS0	5190	10	10
			5230	10	10
	802.11ac-VHT80	MCS0	5210	10	10

U-NII	Mode	Data Rate	Channel	★Power Level	
				Chain 0	Chain 1
5250~5350MHz	802.11a	6 Mbps	5260	9	10
			5280	9	10
			5320	9	10
	802.11ac-VHT20	MCS0	5260	9	10
			5280	9	10
			5320	9	10
	802.11ac-VHT40	MCS0	5270	9	10
			5310	9	10
	802.11ac-VHT80	MCS0	5290	9	10

U-NII	Mode	Data Rate	Channel	★Power Level	
				Chain 0	Chain 1
5470~5725MHz	802.11a	6 Mbps	5500	10	10
			5580	10	10
			5700	10	10
			5720	10	10
	802.11ac20	MCS0	5500	10	10
			5580	10	10
			5700	10	10
			5720	10	10
	802.11ac40	MCS0	5510	10	10
			5550	10	10
			5670	10	10
			5710	10	10
	802.11ac80	MCS0	5530	10	10
			5610	10	10
			5690	10	10

U-NII	Mode	Data Rate	Channel	★Power Level	
				Chain 0	Chain 1
5725~5850MHz	802.11a	6 Mbps	5745	10	10
			5785	10	10
			5825	10	10
	802.11ac20	MCS0	5745	10	10
			5785	10	10
			5825	10	10
	802.11ac40	MCS0	5755	10	10
			5795	10	10
	802.11ac80	MCS0	5775	10	10

Note: The power level was declared by the applicant.

802.11a supports SISO mode, 802.11 ac20/ac40/ ac80 supports SISO and MIMO mode.

For Radiated Emission, according to pretest, the worst case for 802.11 ac20/ac40/ ac80 is MIMO mode.

So 802.11 ac20/ac40/ ac80 MIMO mode test data were recorded in the report.

For RF Conducted Test:

802.11 a/ac20/ac40/ ac80: each transmit chains were tested.

For Radiated Test:

802.11a, SISO for each transmit chain

802.11 ac20/ac40/ ac80: MIMO for two transmit chains

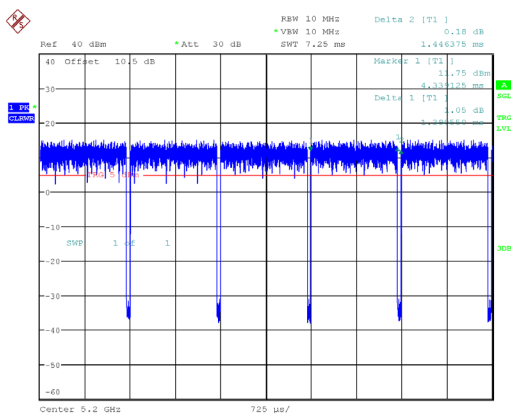
Duty Cycle:

Environmental Conditions & Test Information

Test Date:	2025-12-12 to 2025-12-15
Temperature:	22.1-23.2 °C
Relative Humidity:	47-50 %
ATM Pressure:	101.1-101.7 kPa
Test Engineer:	Neil Zhou

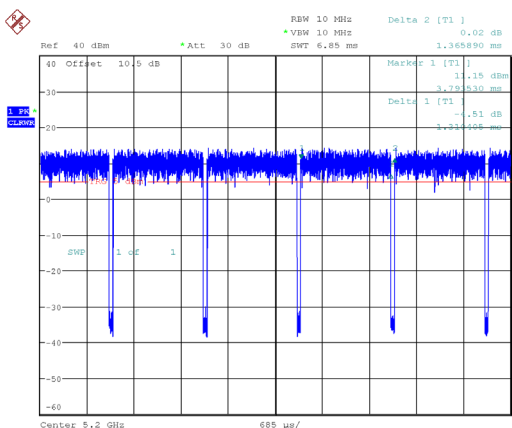
5150MHz-5250MHz Band:
Chain 0

802.11a mode



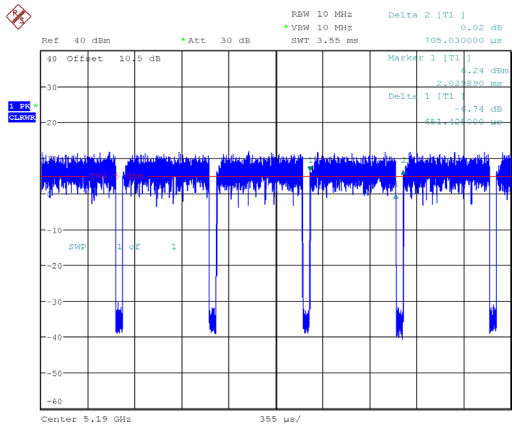
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802.11ac20 mode



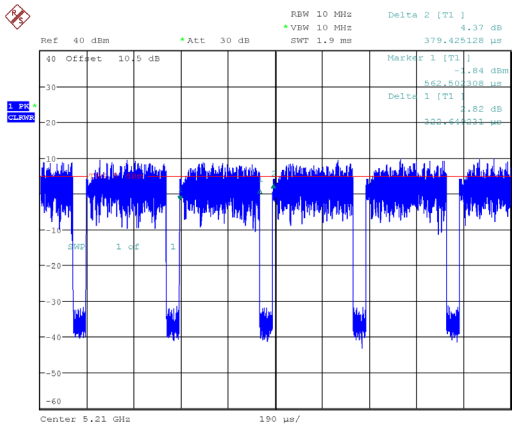
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802.11ac40 mode



ProjectNo.:RBJ251015001 Tester:Neil Zhou
Date: 12.DEC.2025 10:57:39

802.11ac80 mode



ProjectNo.:RBJ251015001 Tester:Neil Zhou
Date: 12.DEC.2025 11:10:55

802.11a mode



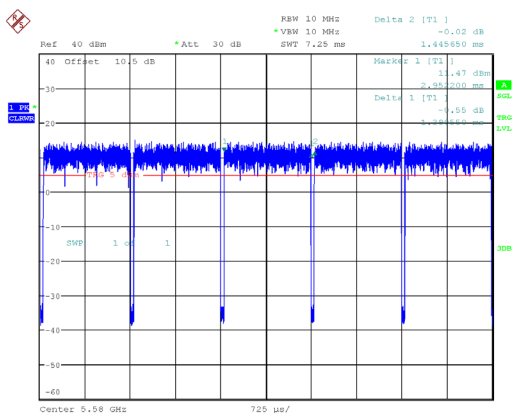
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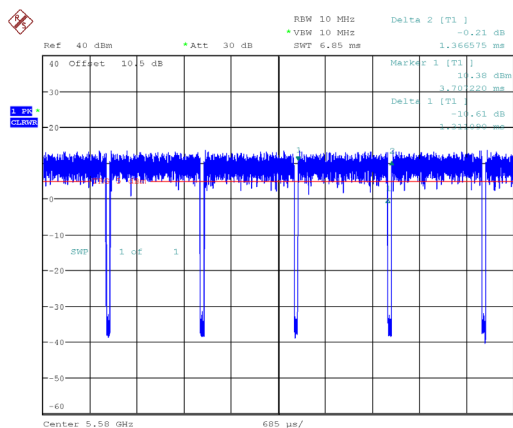
5470MHz-5725MHz Band:

802.11a mode



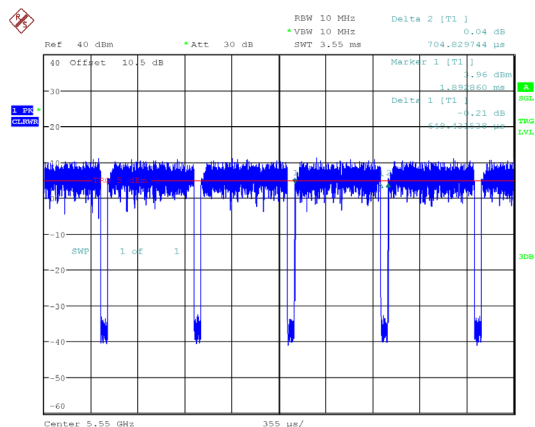
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802.11ac20 mode



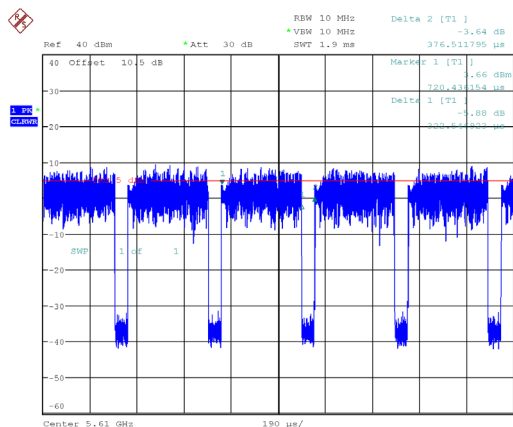
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802.11ac40 mode



ProjectNo.:RBJ251015001 Tester:Neil Zhou
Date: 12.DEC.2025 13:57:35

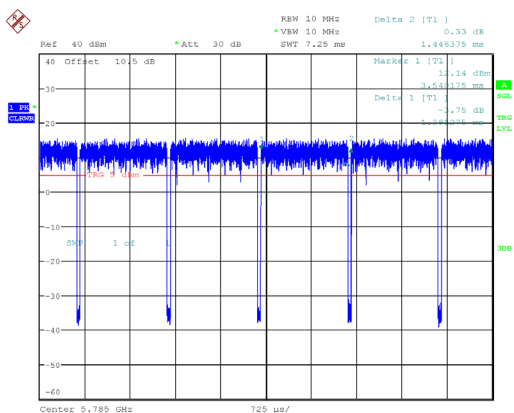
802.11ac80 mode



ProjectNo.:RBJ251015001 Tester:Neil Zhou
Date: 12.DEC.2025 14:22:35

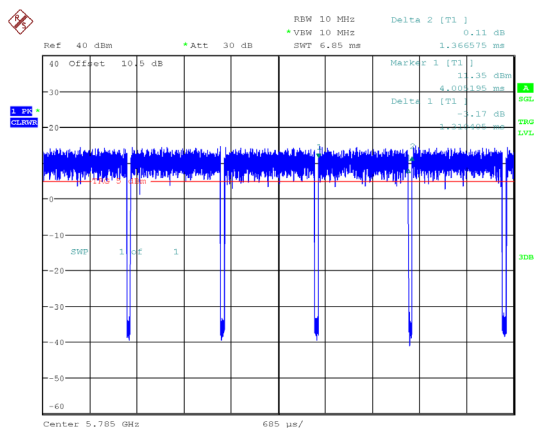
5725MHz-5850MHz Band:

802.11a mode



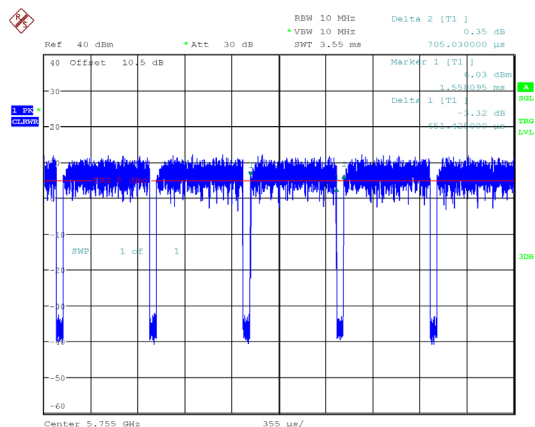
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802.11ac20 mode



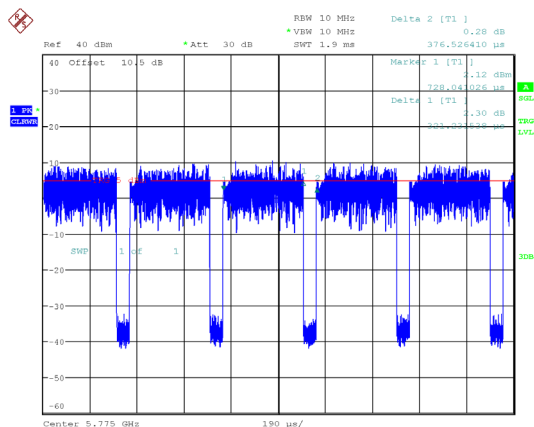
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802.11ac40 mode



ProjectNo.:RBJ251015001 Tester:Neil Zhou
 Date: 12.DEC.2025 14:59:25

802.11ac80 mode

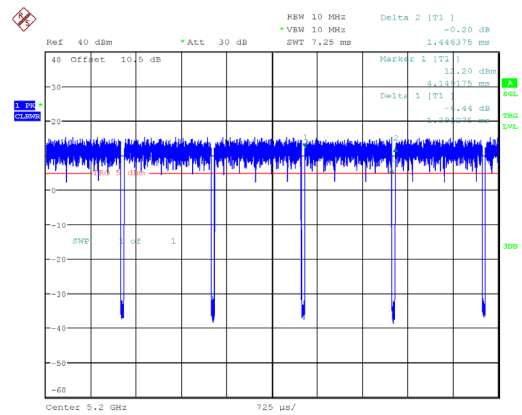


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Note: Offset (10.5dB) = Attenuator (10dB) + Cable Loss (0.5dB)

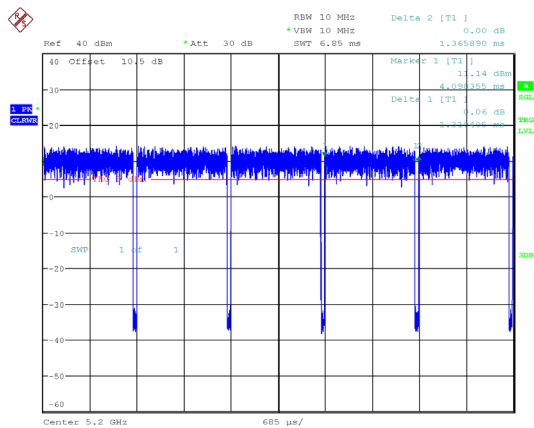
Chain 1

802.11a mode



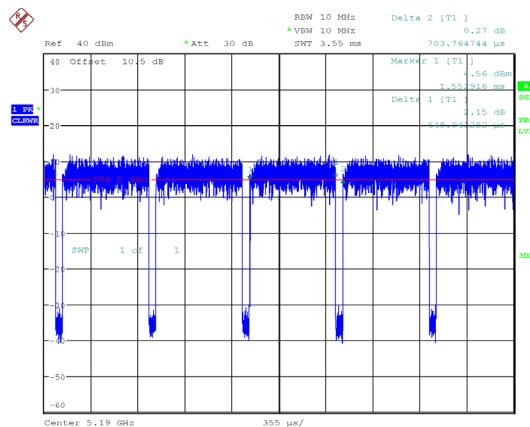
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802.11ac20 mode



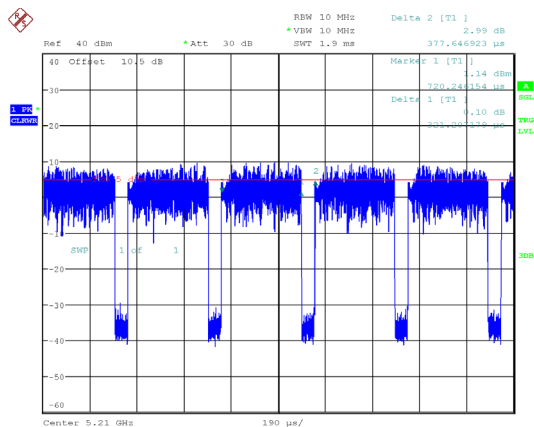
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802.11ac40 mode



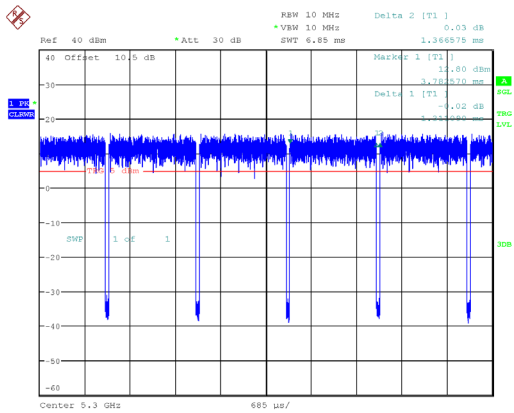
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802.11ac80 mode



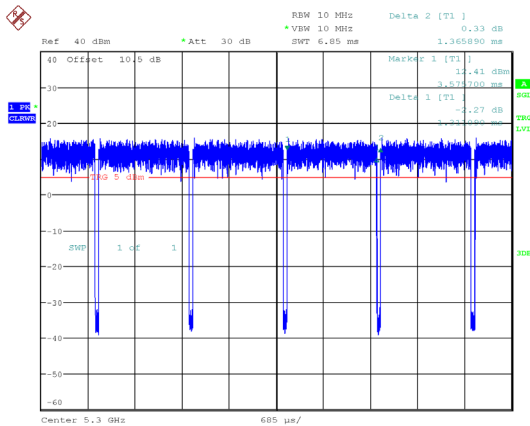
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5250MHz-5350MHz Band:
802.11a mode



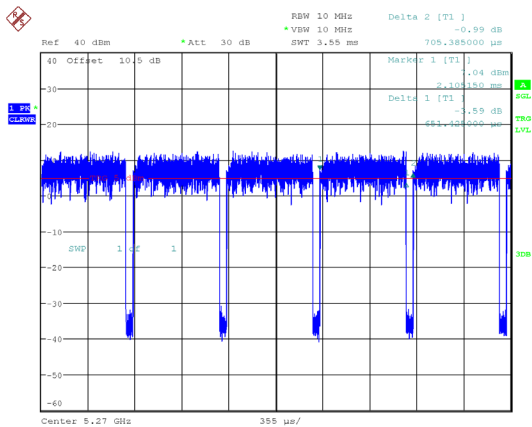
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802.11ac20 mode



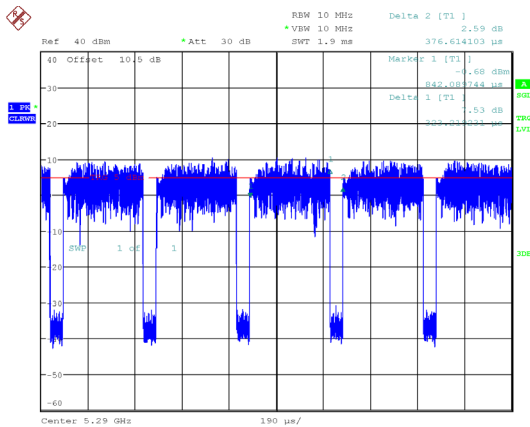
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802.11ac40 mode

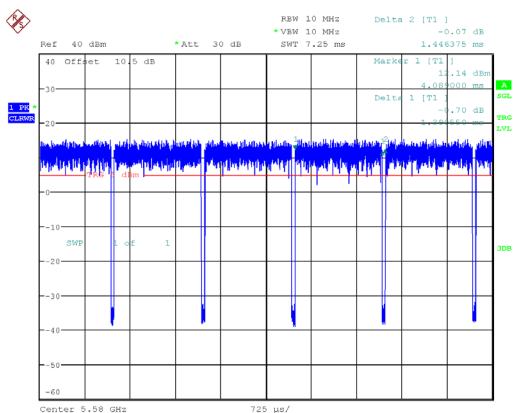


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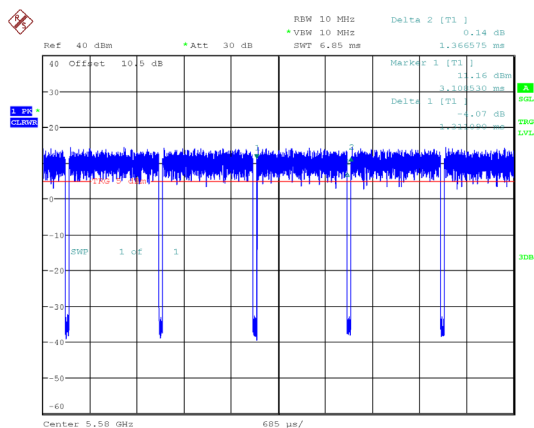
802.11ac80 mode



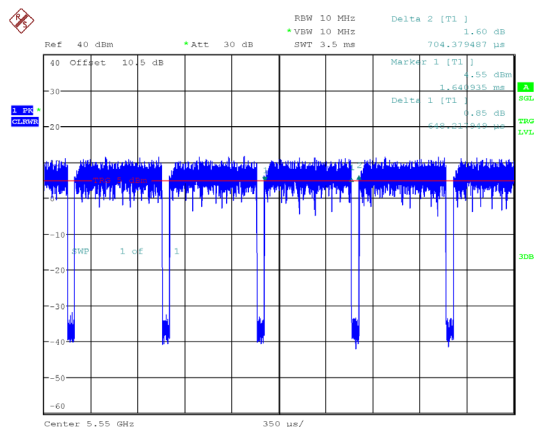
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5470MHz-5725MHz Band:**802.11a mode**

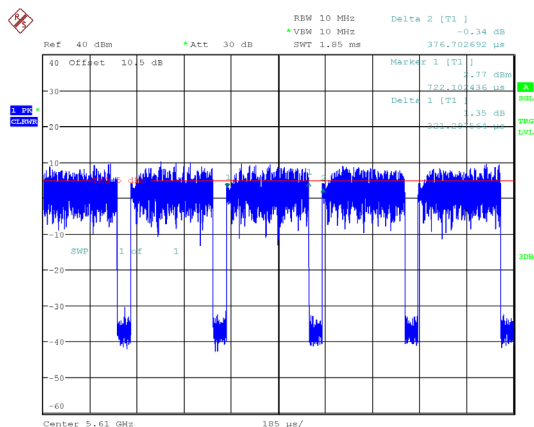
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802.11ac20 mode

ProjectNo.:RBJ251015001 Tester:Neil Zhou
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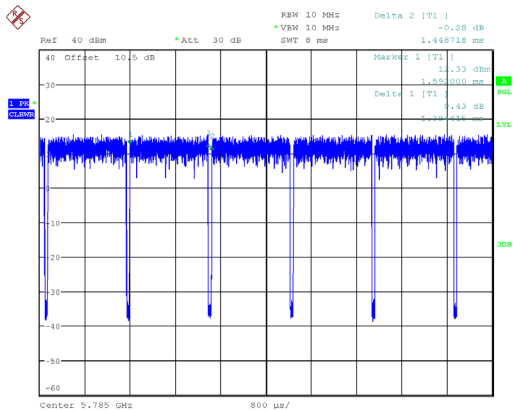
802.11ac40 mode

ProjectNo.:RBJ251015001 Tester:Neil Zhou
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802.11ac80 mode

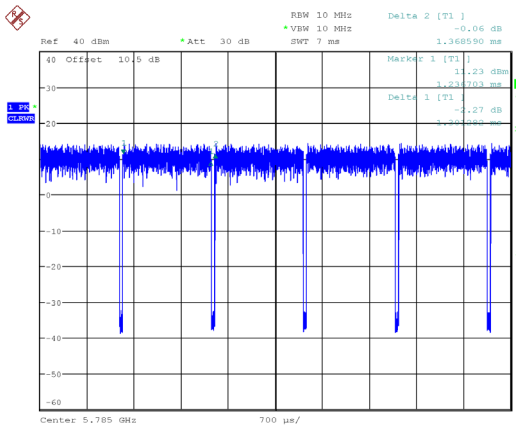
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5725MHz-5850MHz Band:
802.11a mode



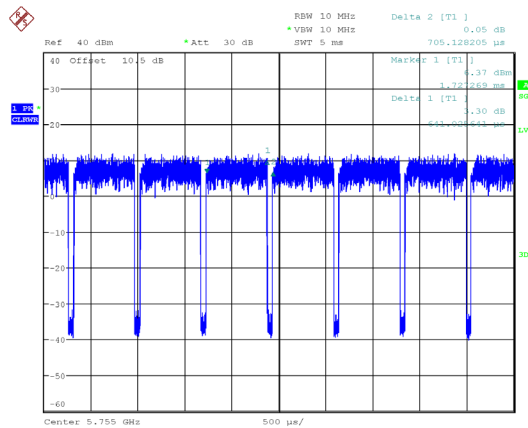
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802.11ac20 mode



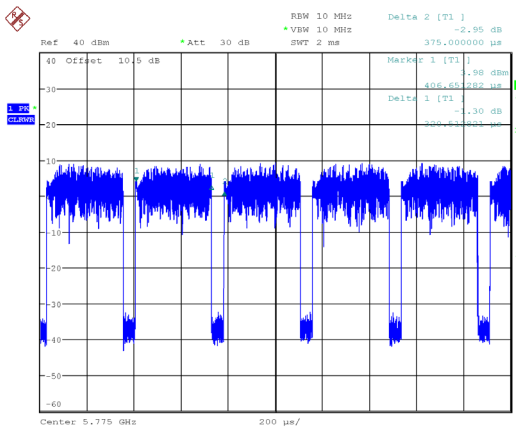
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Date: 15.DEC.2025 14:51:54

802.11ac40 mode



ProjectNo.:RBJ251015001 Tester:Neil Zhou
Date: 15.DEC.2025 15:00:35

802.11ac80 mode



ProjectNo.:RBJ251015001 Tester:Neil Zhou
Date: 15.DEC.2025 15:14:22

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

5150MHz-5250MHz:

Mode	Frequency (MHz)	Chain 0				Chain1			
		Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)
802.11a	5200	1.39	1.45	95.86	0.18	1.39	1.45	95.86	0.18
802.11ac20	5200	1.31	1.37	95.62	0.19	1.31	1.37	95.62	0.19
802.11ac40	5190	0.65	0.71	91.55	0.38	0.65	0.7	92.86	0.32
802.11ac80	5210	0.32	0.38	84.21	0.75	0.32	0.38	84.21	0.75

5250MHz-5350MHz:

Mode	Frequency (MHz)	Chain 0				Chain1			
		Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)
802.11a	5300	1.39	1.45	95.86	0.18	1.31	1.37	95.62	0.19
802.11ac20	5300	1.32	1.37	96.35	0.16	1.31	1.37	95.62	0.19
802.11ac40	5270	0.65	0.7	92.86	0.32	0.65	0.71	91.55	0.38
802.11ac80	5290	0.32	0.38	84.21	0.75	0.32	0.38	84.21	0.75

5470MHz-5725MHz:

Mode	Frequency (MHz)	Chain 0				Chain1			
		Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)
802.11a	5580	1.39	1.45	95.86	0.18	1.39	1.45	95.86	0.18
802.11ac20	5580	1.31	1.37	95.62	0.19	1.31	1.37	95.62	0.19
802.11ac40	5550	0.65	0.7	92.86	0.32	0.65	0.7	92.86	0.32
802.11ac80	5610	0.32	0.38	84.21	0.75	0.32	0.38	84.21	0.75

5725MHz-5850MHz:

Mode	Frequency (MHz)	Chain 0				Chain1			
		Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)
802.11a	5785	1.39	1.45	95.86	0.18	1.38	1.45	95.17	0.21
802.11ac20	5785	1.31	1.37	95.62	0.19	1.3	1.37	94.89	0.23
802.11ac40	5755	0.65	0.71	91.55	0.38	0.64	0.71	90.14	0.45
802.11ac80	5775	0.32	0.38	84.21	0.75	0.32	0.38	84.21	0.75

Equipment Modifications

No modification was made to the EUT.

Support Equipment List and Details

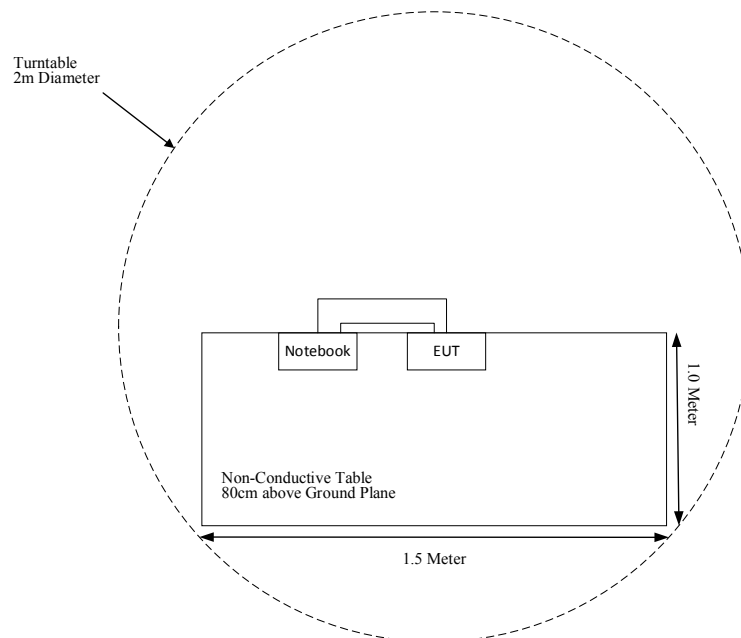
Manufacturer	Description	Model	Serial Number
Lenovo	Notebook	Y700P	PF2B7PL5

External I/O Cable

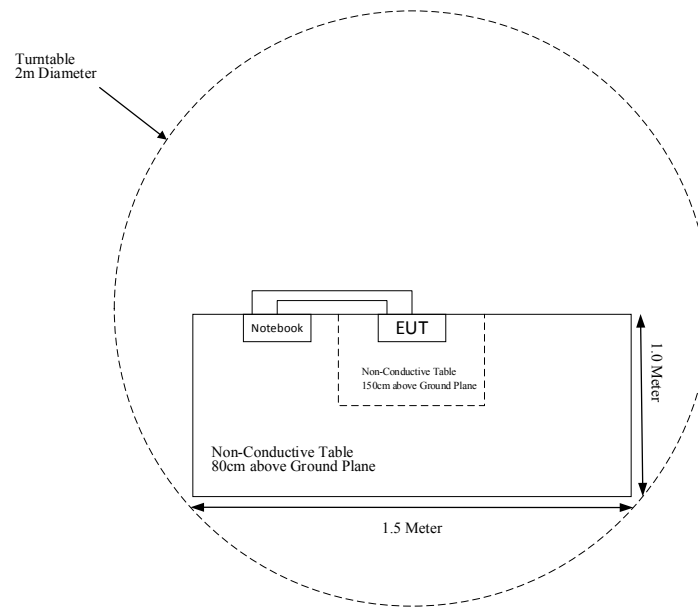
Cable Description	Length (m)	From Port	To Port
RJ45 Cable	1.0	EUT	Notebook
Serial Cable	1.0	Notebook	EUT

Block Diagram of Test Setup

For Radiated Emissions (Below 1GHz):



For Radiated Emissions (Above 1 GHz):



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliant
§15.207 & §15.407(b) (9)	AC Power Line Conducted Emissions	Not Applicable (See Note)
§ 15.205 & §15.209 & §15.407(b)	Undesirable Emission & Restricted Bands	Compliant
§§15.407(a) & §15.407(e)	Emission Bandwidth	Compliant
§15.407(a)	Conducted Transmitter Output Power	Compliant
§15.407(a)	Power Spectral Density	Compliant
§1.1310 & §2.1091	MAXIMUM PERMISSIBLE EXPOSURE (MPE)	Compliant

Note: The EUT is powered by battery.

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	2025-04-09	2026-04-08
Sunol Sciences	Broadband Antenna	JB3	A090314-1	2024-11-08	2027-11-07
Narda	6dB Attenuator	773-6	10690812-2-1	2024-11-08	2027-11-07
BACL	Active Loop Antenna	1313-1A	4041511	2024-11-22	2027-11-21
Sonoma Instrument	Pre-amplifier	310N	171205	2025-04-09	2026-04-08
Rohde & Schwarz	Auto Test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-8	008	2025-04-09	2026-04-08
MICRO-COAX	Coaxial Cable	Cable-9	009	2025-04-09	2026-04-08
MICRO-COAX	Coaxial Cable	Cable-10	010	2025-04-09	2026-04-08
Radiated Emission Test (Chamber #2)					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2025-04-09	2026-04-08
ETS-LINDGREN	Horn Antenna	3115	9311-4159	2024-11-03	2027-11-02
ETS-LINDGREN	Horn Antenna	3116	2516	2024-12-12	2027-12-11
A.H.Systems, inc	Amplifier	PAM-0118P	512	2025-04-09	2026-04-08
SELECTOR	Amplifier	EM18G40G	060726	2025-04-09	2026-04-08
MICRO-TRONICS	Band Reject Filter	BRM50716	G059	2025-04-08	2026-04-07
Narda	Attenuator	10dB	010	2025-04-08	2026-04-07
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	2025-04-09	2026-04-08
MICRO-COAX	Coaxial Cable	Cable-11	011	2025-04-09	2026-04-08
MICRO-COAX	Coaxial Cable	Cable-12	012	2025-04-09	2026-04-08
MICRO-COAX	Coaxial Cable	Cable-13	013	2025-04-09	2026-04-08
RF Conducted Test					
Rohde & Schwarz	Spectrum Analyzer	FSU26	200103	2025-04-09	2026-04-08
Narda	Attenuator	10dB	010	2025-04-08	2026-04-07
Anritsu	Power Sensor	MA24418A	12621	2025-04-09	2026-04-08
XHFDZ	RG316 Coaxial Cable	SMA-316	XHF-1175	Each time	N/A

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

FCC §1.1310 & §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart §2.1091 and subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm²)	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;

According to §1.1310 and §2.1091 RF exposure is calculated.

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)	Maximum Antenna Gain		★Tune-up Output Power		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)	MPE ratio
		(dBi)	(numeric)	(dBm)	(mW)				
2.4G Wi-Fi	2412-2462	3.98	2.50	24.0	251.19	20	0.1249	1.0	0.1249
BLE	2402-2480	3.0	2.00	2.0	1.58	20	0.0006	1.0	0.0006
5G Wi-Fi	5150-5250	3.9	2.45	12.0	15.85	20	0.0077	1.0	0.0077
	5250-5350	3.98	2.50	12.5	17.78	20	0.0088	1.0	0.0088
	5470-5725	3.94	2.48	12.5	17.78	20	0.0088	1.0	0.0088
	5725-5850	3.87	2.44	13.0	19.95	20	0.0097	1.0	0.0097

Note:

1. For the above tune up power were declared by the manufacturer.
2. The BLE and 2.4G Wi-Fi /5G Wi-Fi can be transmitting simultaneously, So

$$\sum_i \frac{S_i}{S_{Limit,i}} = 0.0006 + 0.1249 = 0.1255 \leq 1.0$$

Result: The device meet FCC MPE at 20 cm distance.

FCC §15.203 – ANTENNA REQUIREMENT

Applicable Standard

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

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

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

Antenna Connector Construction

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

Antenna Type	Frequency Range	Max. Antenna Gain	Input impedance
FPC	5150~5250 MHz	3.90 dBi	50Ω
	5250~5350 MHz	3.98 dBi	50Ω
	5470~5725 MHz	3.94 dBi	50Ω
	5725~5850 MHz	3.87 dBi	50Ω

Result: Compliant.

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

Applicable Standard

FCC §15.407 (b); §15.209; §15.205;

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

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

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

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

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

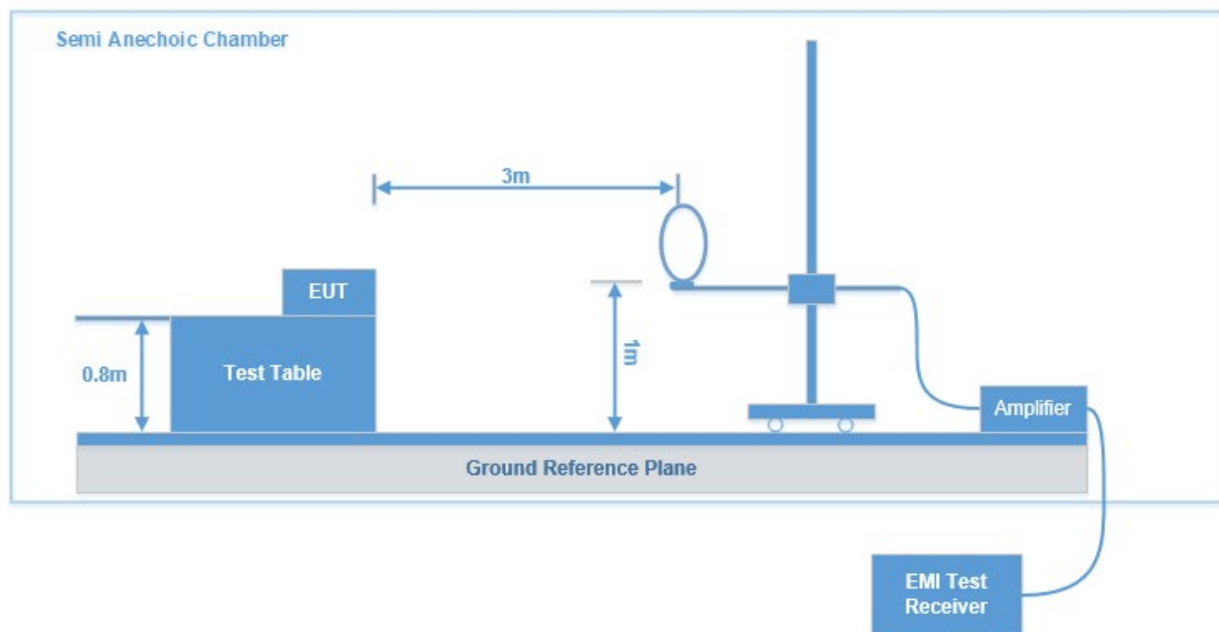
(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the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

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

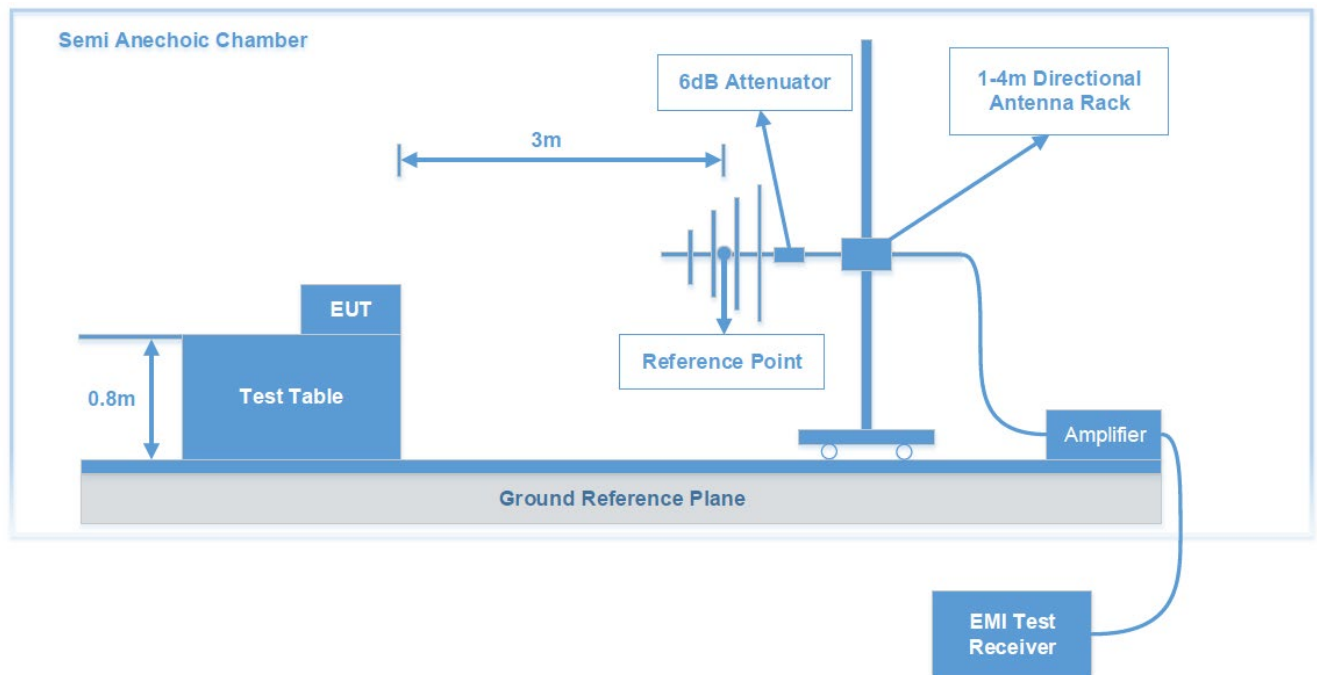
According to 789033 D02 General UNII Test Procedures New Rules v02r01, emission shall be computed as: $E \text{ [dB}\mu\text{V/m]} = \text{EIRP [dBm]} + 95.2$, for $d = 3$ meters.

Test System Setup

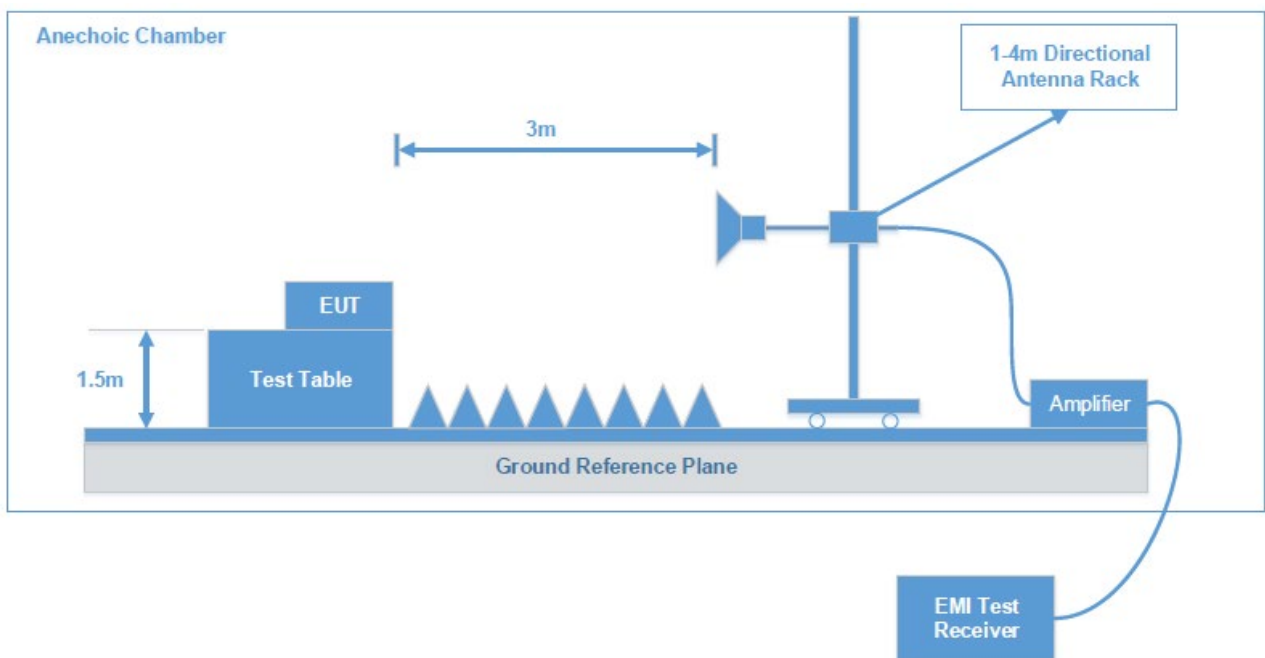
9kHz-30 MHz:



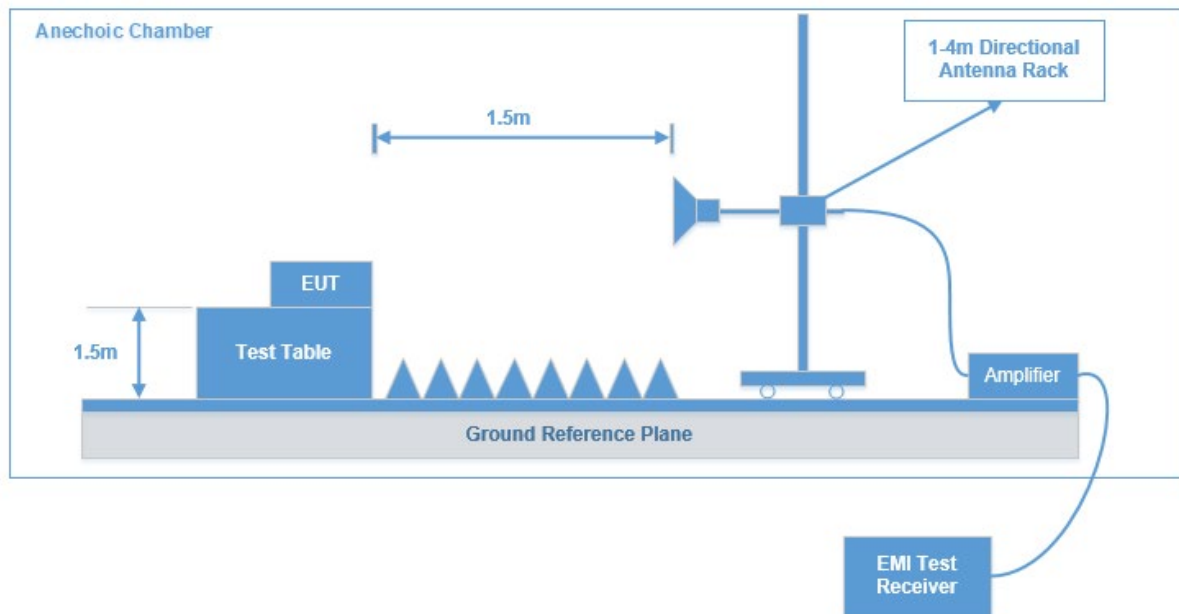
30MHz-1GHz:



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 C63.10-2020. 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 C63.10-2020. The specification used was the FCC 15.209 and FCC 15.407 limits.

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

The spacing between the peripherals was 10 cm.

EMI Test Receiver & Spectrum Analyzer Setup

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

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

$$\text{Corrected Amplitude (dB}\mu\text{V/m)} = \text{Meter Reading (dB}\mu\text{V)} + \text{Corrected factor (dB/m)}$$

$$\text{Corrected factor (dB/m)} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Amplifier Gain (dB)}$$

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:

$$\text{Margin (dB)} = \text{Limit (dB}\mu\text{V/m)} - \text{Corrected Amplitude (dB}\mu\text{V/m)}$$

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

Test Data: See Appendix

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

Applicable Standard

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

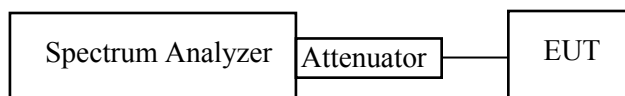
1. Emission Bandwidth (EBW)

- Set RBW = shall be in the range of 1% to 5% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = peak.
- Trace mode = max-hold.
- Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is in the range of 1% to 5%.

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:

- Set RBW = 100 kHz.
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Allow the trace to stabilize.
- 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.



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

Test Data: See Appendix

FCC §15.407(a) – CONDUCTED TRANSMITTER OUTPUT POWER

Applicable Standard

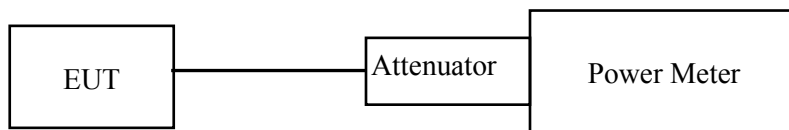
For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting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

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

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

Test Procedure

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



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

Test Data: See Appendix

FCC §15.407(a) - POWER SPECTRAL DENSITY

Applicable Standard

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

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

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

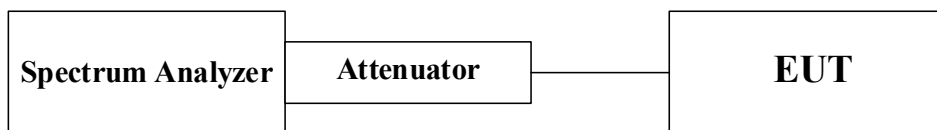
Test Procedure

The measurements are base on C63.10:2020

Duty cycle $\geq 98\%$,Method SA-1 should be applied.

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

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



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

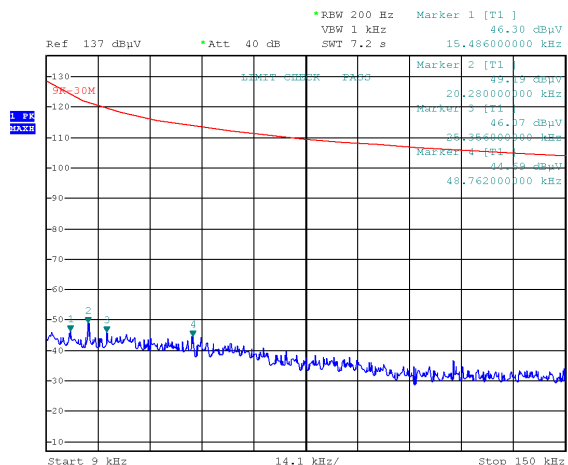
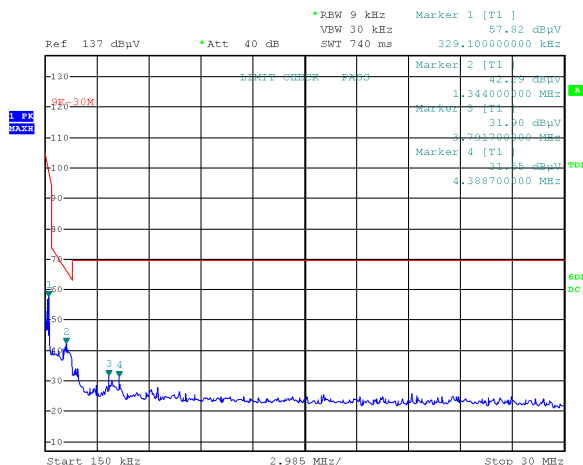
Test Data: See Appendix

APPENDIX - TEST DATA**TRANSMITTER UNWANTED EMISSIONS & RESTRICTED FREQUENCY BANDS****Environmental Conditions & Test Information**

Test Item:	SPURIOUS EMISSIONS			
	9kHz – 30MHz	30MHz - 1GHz	1 GHz - 18 GHz	18 GHz - 40 GHz
Test Date:	2025-11-05 to 2026-01-23	2025-11-05 to 2025-11-23	2025-12-08 to 2025-12-23	2025-12-15
Temperature:	16.1-19.0 °C	16.1-19.0 °C	16.5-17.2 °C	23.2 °C
Relative Humidity:	49-54 %	49-54 %	40-43 %	50 %
ATM Pressure:	101.7-103.0 kPa	101.7-103.0 kPa	101.7-103.0 kPa	101.7 kPa
Test Result:	Pass	Pass	Pass	Pass
Test Engineer:	Scarf Yang	Scarf Yang	Destine Hu	Hugh Wu

Model: ZYCXD105U

**9 kHz-30 MHz: Transmitting in 802.11ac40 mode 5755MHz (maximum output power)
Parallel(worst case)**

9kHz-150kHz**150kHz-30MHz**

Project No.RBJ251015001
Date: 5.NOV.2025 14:38:24

Tester:Scarf Yang

Project No.RBJ251015001
Date: 5.NOV.2025 14:44:53

Tester:Scarf Yang

9kHz-150kHz

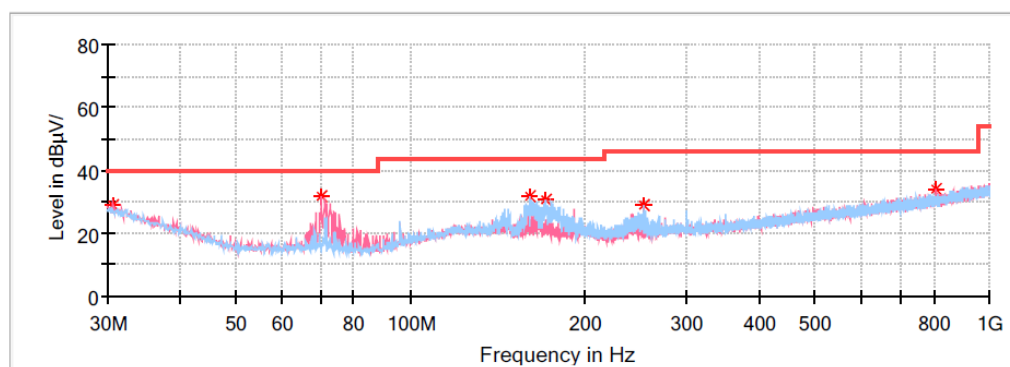
Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.015486	46.30	PK	-0.54	123.81	77.51
0.020280	49.19	PK	-0.56	121.46	72.27
0.025356	46.07	PK	-0.59	119.52	73.45
0.048762	44.69	PK	-3.61	113.84	69.15

150kHz-30MHz

Frequency (MHz)	Corrected Amplitude (dBμV/m) @3m	Detector PK/QP/Ave.	Corrected Factor (dB/m)	Limit (dBμV/m) @3m	Margin (dB)
0.329100	57.82	PK	-18.39	97.26	39.44
1.344000	42.29	PK	-28.75	65.04	22.75
3.791700	31.90	PK	-31.81	69.54	37.64
4.388700	31.55	PK	-31.97	69.54	37.99

30MHz-1GHz: Transmitting in 802.11ac40 mode 5755MHz (maximum output power)**Common Information**

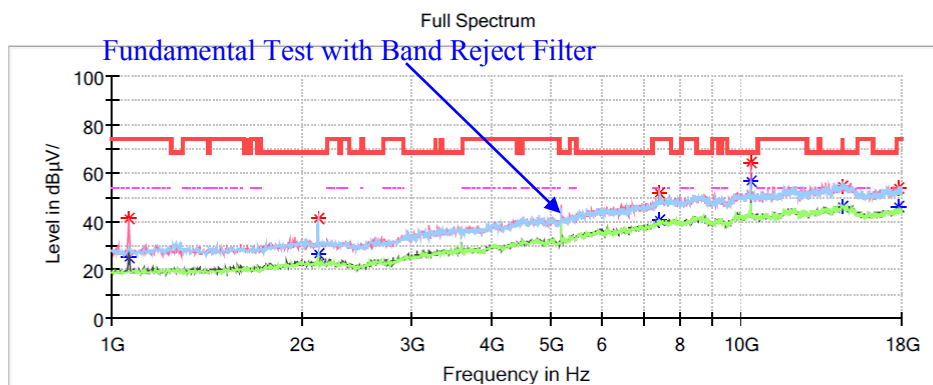
Project No: RBJ251015001
EUT Model: ZYCXD105U
Test Mode: 5G WIFI
Standard: FCC Part 15.205 & FCC Part 15.209 & FCC Part 15.407
Test Equipment: ESCI, JB3, 310N
Receiver Setting: RBW: 100 kHz, VBW: 300 kHz, Sweep Time: Auto
Temperature: 19.0°C
Humidity: 54%
Barometric Pressure: 102.5kPa
Test Engineer: Scarf Yang
Test Date: 2025/11/05

**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
30.727500	28.98	40.00	11.02	V	-5.2
70.133750	32.00	40.00	8.00	V	-16.6
161.192500	31.63	43.50	11.87	H	-12.2
170.771250	30.59	43.50	12.91	H	-12.6
252.615000	28.67	46.00	17.33	H	-12.1
810.607500	33.77	46.00	12.23	V	-0.6

1GHz-18GHz (5150-5250MHz Band):*Chain 0***802.11a Mode:****Low Channel: 5180MHz****Common Information**

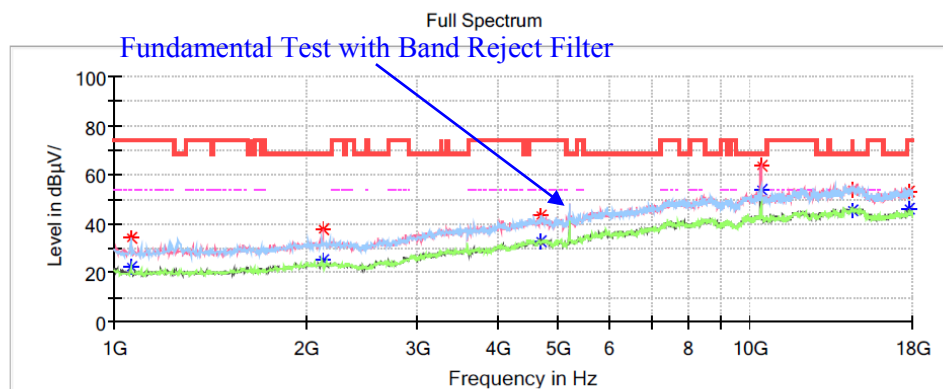
Project No.: RBJ251015001
EUT Model: ZYCXD105U
Test Mode: 5G WIFI 802.11a mode Low Channel
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 17.2°C
Humidity: 43%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/12/8

**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)
1061.200000	41.25	---	74.00	32.75	V	-15.0
1061.200000	---	25.36	54.00	28.64	V	-15.0
2125.400000	40.91	---	68.20	27.29	H	-9.9
7436.200000	52.02	---	74.00	21.98	H	2.8
7436.200000	---	40.38	54.00	13.62	H	2.8
10356.800000	64.01	---	68.20	4.19	V	6.6
14498.000000	54.34	---	74.00	19.66	V	12.0
14498.000000	---	46.28	54.00	7.72	V	12.0
17785.800000	54.08	---	74.00	19.92	V	11.2
17785.800000	---	46.02	54.00	7.98	V	11.2

Middle Channel: 5200MHz**Common Information**

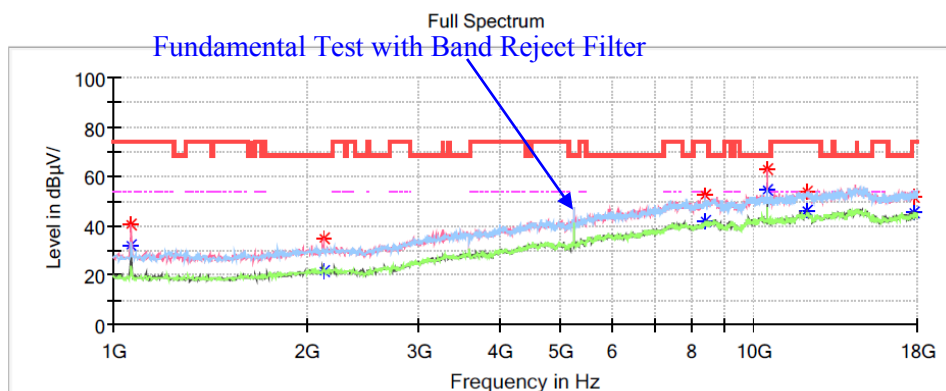
Project No.: RBJ251015001
EUT Model: ZYCXD105U
Test Mode: 5G WIFI 802.11a mode Middle Channel
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 17.2℃
Humidity: 43%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/12/8

**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)
1061.200000	33.98	---	74.00	40.02	H	-15.0
1061.200000	---	22.57	54.00	31.43	H	-15.0
2128.800000	37.62	---	68.20	30.58	V	-9.9
4675.400000	---	33.11	54.00	20.89	H	-3.7
4675.400000	43.59	---	74.00	30.41	H	-3.7
10397.600000	63.55	---	68.20	4.65	V	6.7
14498.000000	53.66	---	74.00	20.34	V	12.0
14498.000000	---	45.75	54.00	8.25	V	12.0
17816.400000	---	45.99	54.00	8.01	V	11.3
17816.400000	52.94	---	74.00	21.06	V	11.3

High Channel: 5240MHz**Common Information**

Project No.: RBJ251015001
 EUT Model: ZYCXD105U
 Test Mode: 5G WIFI 802.11a mode High Channel
 Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
 Test Equipment: ESU40,3115,PAM-0118P
 Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
 Temperature: 17.2℃
 Humidity: 43%
 Atmospheric Pressure: 103.0kPa
 Test Engineer: Destine Hu
 Test Date: 2025/12/8

**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)
1064.600000	---	32.37	54.00	21.63	V	-15.0
1064.600000	40.80	---	74.00	33.20	V	-15.0
2128.800000	34.77	---	68.20	33.43	V	-9.9
8398.400000	---	41.63	54.00	12.37	V	4.4
8398.400000	52.38	---	74.00	21.62	V	4.4
10482.600000	62.97	---	68.20	5.23	V	6.7
12131.600000	53.70	---	74.00	20.30	V	9.0
12131.600000	---	45.90	54.00	8.10	V	9.0
17830.000000	52.10	---	74.00	21.90	V	11.3
17830.000000	---	45.51	54.00	8.49	V	11.3

Chain 1

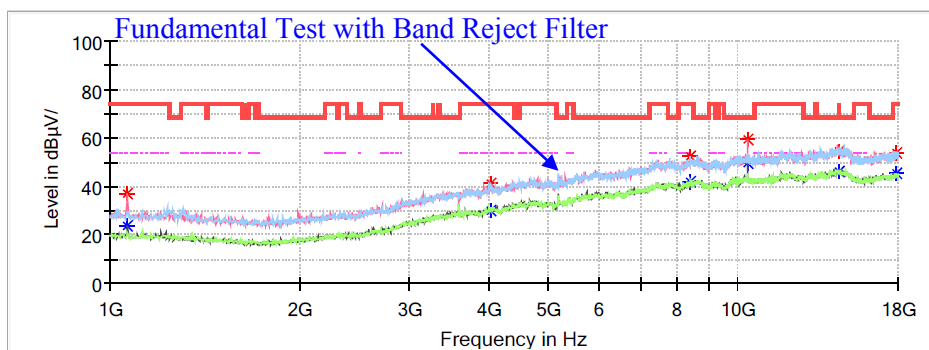
802.11a Mode:

Low Channel: 5180MHz

Common Information

Project No.: RBJ251015001
EUT Model: ZYCXD105U
Test Mode: 5G WIFI 802.11a mode Low Channel
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 17.4°C
Humidity: 44%
Atmospheric Pressure: 102.5kPa
Test Engineer: Destine Hu
Test Date: 2025/12/10

Full Spectrum

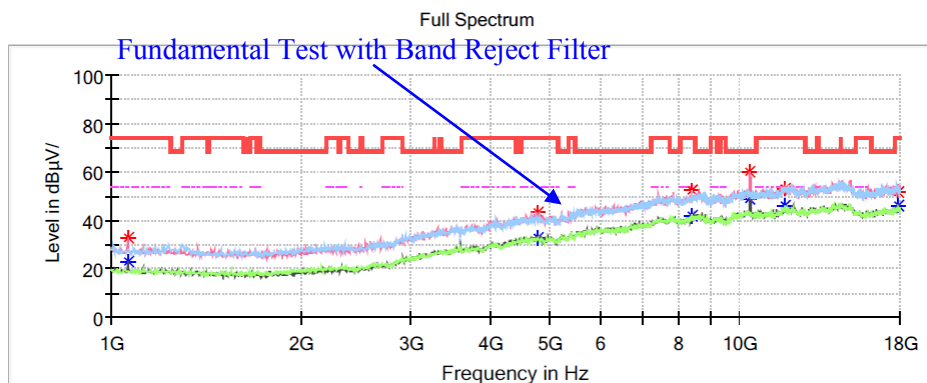


Critical Freqs

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1064.600000	---	23.55	54.00	30.45	V	-15.0
1064.600000	36.76	---	74.00	37.24	V	-15.0
4036.200000	---	30.26	54.00	23.74	V	-4.9
4036.200000	41.35	---	74.00	32.65	V	-4.9
8415.400000	---	42.21	54.00	11.79	V	4.5
8415.400000	52.60	---	74.00	21.40	V	4.5
10356.800000	59.27	---	68.20	8.93	V	6.6
14494.600000	---	46.21	54.00	7.79	H	12.0
14494.600000	54.59	---	74.00	19.41	H	12.0
17894.600000	53.76	---	74.00	20.24	H	11.5
17894.600000	---	45.71	54.00	8.29	H	11.5

Middle Channel: 5200MHz**Common Information**

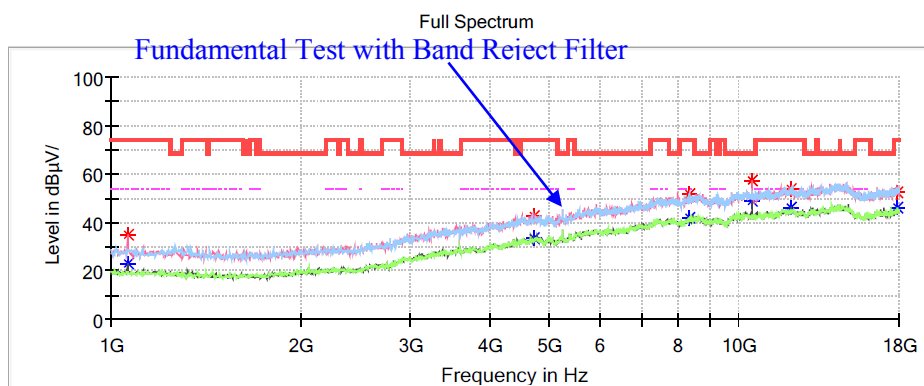
Project No.: RBJ251015001
EUT Model: ZYCXD105U
Test Mode: 5G WIFI 802.11a mode Middle Channel
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 17.4℃
Humidity: 44%
Atmospheric Pressure: 102.5kPa
Test Engineer: Destine Hu
Test Date: 2025/12/10

**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)
1061.200000	---	23.28	54.00	30.72	V	-15.0
1061.200000	32.79	---	74.00	41.21	V	-15.0
4763.800000	---	32.89	54.00	21.11	V	-3.5
4763.800000	43.29	---	74.00	30.71	V	-3.5
8415.400000	---	41.85	54.00	12.15	V	4.5
8415.400000	52.30	---	74.00	21.70	V	4.5
10394.200000	59.80	---	68.20	8.40	V	6.6
11805.200000	53.49	---	74.00	20.51	H	8.7
11805.200000	---	46.07	54.00	7.93	H	8.7
17833.400000	52.06	---	74.00	21.94	H	11.3
17833.400000	---	45.94	54.00	8.06	H	11.3

High Channel: 5240MHz**Common Information**

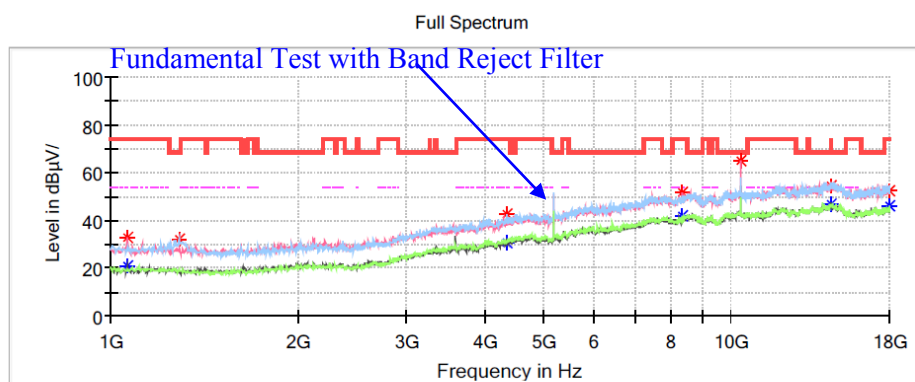
Project No.: RBJ251015001
EUT Model: ZYCXD105U
Test Mode: 5G WIFI 802.11a mode High Channel
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 17.4℃
Humidity: 44%
Atmospheric Pressure: 102.5kPa
Test Engineer: Destine Hu
Test Date: 2025/12/10

**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)
1061.200000	34.82	---	74.00	39.18	V	-15.0
1061.200000	---	23.28	54.00	30.72	V	-15.0
4726.400000	---	33.79	54.00	20.21	V	-3.6
4726.400000	42.65	---	74.00	31.35	V	-3.6
8337.200000	---	41.76	54.00	12.24	V	4.2
8337.200000	51.66	---	74.00	22.34	V	4.2
10479.200000	57.35	---	68.20	10.85	V	6.7
12087.400000	53.99	---	74.00	20.01	V	9.0
12087.400000	---	45.84	54.00	8.16	V	9.0
17870.800000	---	46.02	54.00	7.98	H	11.4
17870.800000	52.36	---	74.00	21.64	H	11.4

**MIMO (Chain 0+Chain 1):
802.11ac20 Mode:****Low Channel: 5180MHz****Common Information**

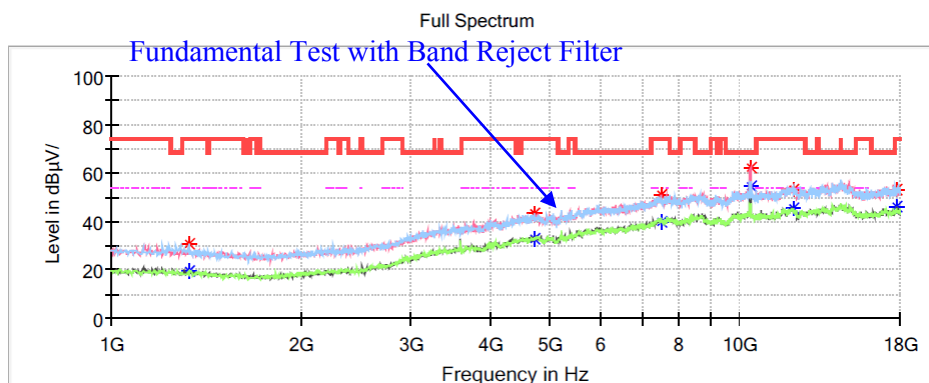
Project No.:	RBJ251015001
EUT Model:	ZYCXD105U
Test Mode:	5G WIFI 802.11ac20 mode Low Channel
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Equipment:	ESU40,3115,PAM-0118P
Receiver Setting:	RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature:	16.5°C
Humidity:	40%
Atmospheric Pressure:	102.3kPa
Test Engineer:	Destine Hu
Test Date:	2025/12/23

**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)
1061.200000	32.85	---	74.00	41.15	V	-15.0
1061.200000	---	20.91	54.00	33.09	V	-15.0
1285.600000	32.31	---	68.20	35.89	H	-14.2
4355.800000	42.88	---	74.00	31.12	H	-4.4
4355.800000	---	30.74	54.00	23.26	H	-4.4
8344.000000	51.53	---	74.00	22.47	H	4.3
8344.000000	---	41.71	54.00	12.29	H	4.3
10360.200000	64.78	---	68.20	3.42	V	6.6
14494.600000	---	46.81	54.00	7.19	H	12.0
14494.600000	54.87	---	74.00	19.13	H	12.0
17972.800000	52.79	---	74.00	21.21	H	11.7
17972.800000	---	45.87	54.00	8.13	H	11.7

Middle Channel: 5200MHz**Common Information**

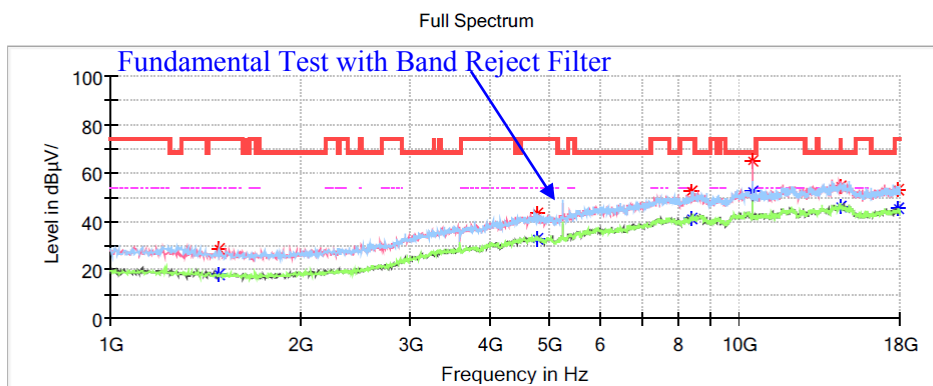
Project No.: RBJ251015001
 EUT Model: ZYCXD105U
 Test Mode: 5G WIFI 802.11ac20 mode Middle Channel
 Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
 Test Equipment: ESU40,3115,PAM-0118P
 Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
 Temperature: 16.5°C
 Humidity: 40%
 Atmospheric Pressure: 102.3kPa
 Test Engineer: Destine Hu
 Test Date: 2025/12/23

**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1326.400000	30.87	---	74.00	43.13	H	-14.0
1326.400000	---	19.25	54.00	34.75	H	-14.0
4712.800000	---	32.56	54.00	21.44	H	-3.6
4712.800000	43.22	---	74.00	30.78	H	-3.6
7511.000000	50.77	---	74.00	23.23	V	3.0
7511.000000	---	40.20	54.00	13.80	V	3.0
10401.000000	62.59	---	68.20	5.61	V	6.7
12165.600000	---	45.71	54.00	8.29	H	9.0
12165.600000	53.03	---	74.00	20.97	H	9.0
17768.800000	---	45.85	54.00	8.15	V	11.1
17768.800000	52.88	---	74.00	21.12	V	11.1

High Channel: 5240MHz**Common Information**

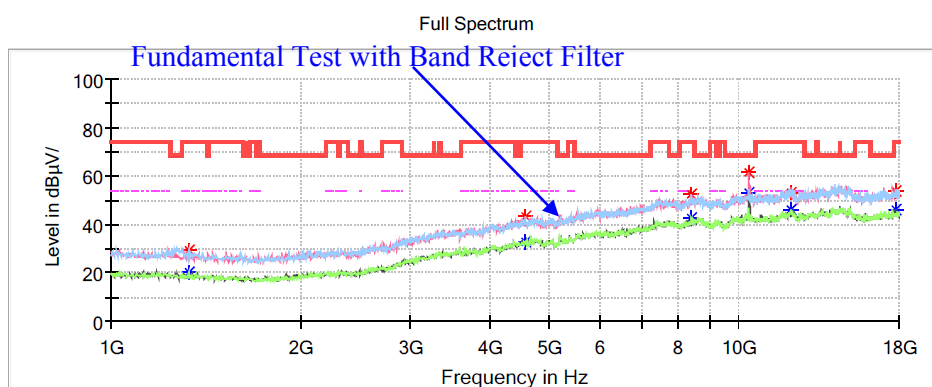
Project No.: RBJ251015001
EUT Model: ZYCXD105U
Test Mode: 5G WIFI 802.11ac20 mode High Channel
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 16.5°C
Humidity: 40%
Atmospheric Pressure: 102.3kPa
Test Engineer: Destine Hu
Test Date: 2025/12/23

**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)
1482.800000	---	18.49	54.00	35.51	H	-13.5
1482.800000	28.70	---	74.00	45.30	H	-13.5
4777.400000	---	32.69	54.00	21.31	H	-3.5
4777.400000	43.24	---	74.00	30.76	H	-3.5
8398.400000	52.40	---	74.00	21.60	H	4.4
8398.400000	---	41.41	54.00	12.59	H	4.4
10479.200000	64.96	---	68.20	3.24	V	6.7
14491.200000	---	46.32	54.00	7.68	V	12.0
14491.200000	54.56	---	74.00	19.44	V	12.0
17870.800000	---	45.52	54.00	8.48	H	11.4
17870.800000	53.25	---	74.00	20.75	H	11.4

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

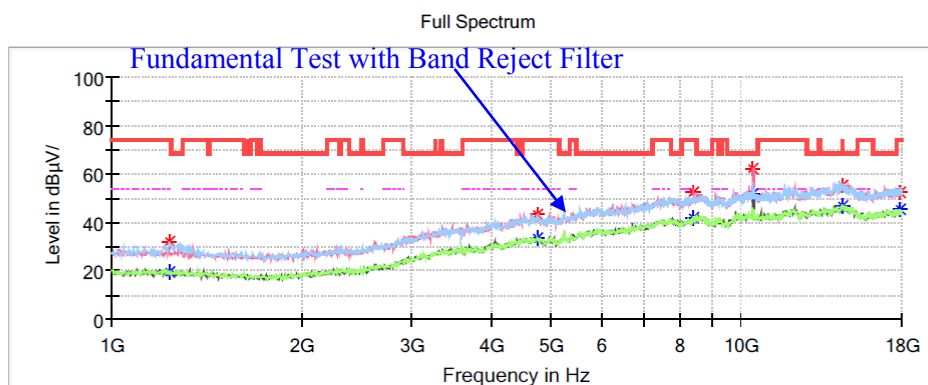
Project No.: RBJ251015001
EUT Model: ZYCXD105U
Test Mode: 5G WIFI 802.11ac40 mode Low Channel
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 16.5°C
Humidity: 40%
Atmospheric Pressure: 102.3kPa
Test Engineer: Destine Hu
Test Date: 2025/12/23

**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1326.400000	---	20.30	54.00	33.70	H	-14.0
1326.400000	29.45	---	74.00	44.55	H	-14.0
4563.200000	---	32.90	54.00	21.10	H	-4.0
4563.200000	43.42	---	74.00	30.58	H	-4.0
8415.400000	---	42.39	54.00	11.61	V	4.5
8415.400000	52.36	---	74.00	21.64	V	4.5
10380.600000	61.83	---	68.20	6.37	V	6.6
12080.600000	---	46.22	54.00	7.78	H	9.0
12080.600000	52.96	---	74.00	21.04	H	9.0
17806.200000	53.71	---	74.00	20.29	V	11.2
17806.200000	---	45.89	54.00	8.11	V	11.2

Channel: 5230MHz**Common Information**

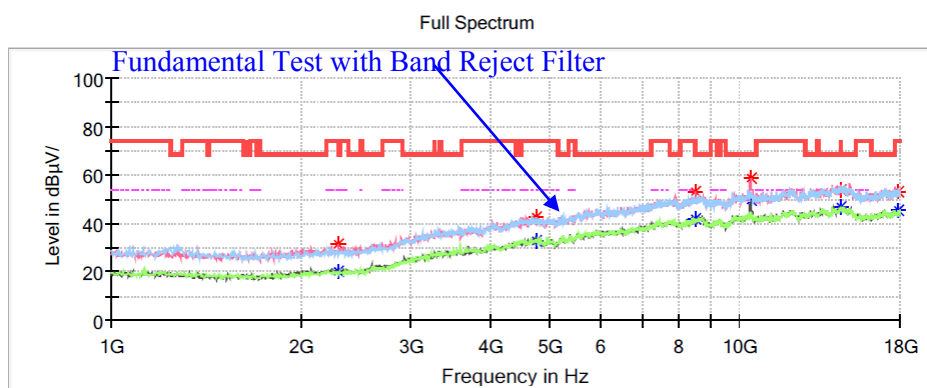
Project No.: RBJ251015001
EUT Model: ZYCXD105U
Test Mode: 5G WIFI 802.11ac40 mode High Channel
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 16.5°C
Humidity: 40%
Atmospheric Pressure: 102.3kPa
Test Engineer: Destine Hu
Test Date: 2025/12/23

**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)
1234.600000	---	19.44	54.00	34.56	H	-14.4
1234.600000	31.94	---	74.00	42.06	H	-14.4
4746.800000	---	33.79	54.00	20.21	H	-3.6
4746.800000	43.06	---	74.00	30.94	H	-3.6
8418.800000	---	42.21	54.00	11.79	V	4.5
8418.800000	52.16	---	74.00	21.84	V	4.5
10458.800000	62.34	---	68.20	5.86	V	6.7
14484.400000	55.41	---	74.00	18.59	V	11.9
14484.400000	---	46.77	54.00	7.23	V	11.9
17870.800000	52.21	---	74.00	21.79	V	11.4
17870.800000	---	45.63	54.00	8.37	V	11.4

802.11ac80 Mode:**Channel: 5210MHz****Common Information**

Project No.: RBJ251015001
EUT Model: ZYCXD105U
Test Mode: 5G WIFI 802.11ac80
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 16.5℃
Humidity: 40%
Atmospheric Pressure: 102.3kPa
Test Engineer: Destine Hu
Test Date: 2025/12/23

**Critical Freqs**

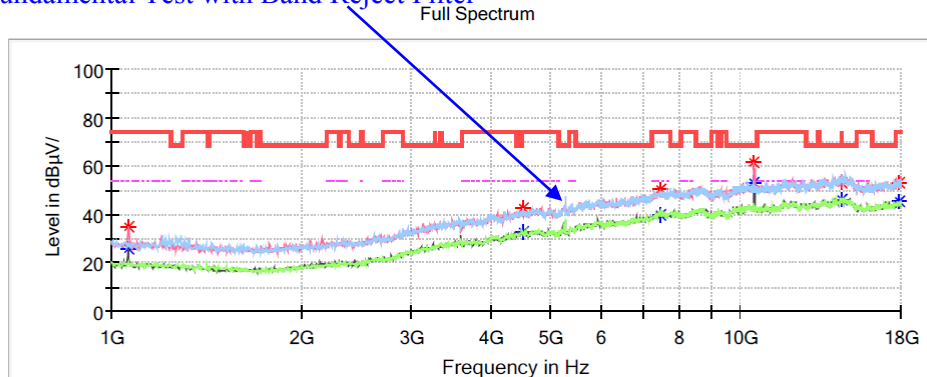
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2295.400000	---	20.36	54.00	33.64	H	-9.7
2295.400000	31.23	---	74.00	42.77	H	-9.7
4750.200000	---	33.02	54.00	20.98	H	-3.5
4750.200000	42.73	---	74.00	31.27	H	-3.5
8486.800000	53.14	---	74.00	20.86	H	4.7
8486.800000	---	42.03	54.00	11.97	H	4.7
10421.400000	58.98	---	68.20	9.22	V	6.7
14498.000000	54.03	---	74.00	19.97	V	12.0
14498.000000	---	46.99	54.00	7.01	V	12.0
17918.400000	---	45.18	54.00	8.82	V	11.5
17918.400000	52.97	---	74.00	21.03	V	11.5

1GHz-18GHz(5250-5350MHz Band):

Chain 0:

802.11a Mode:**Low Channel: 5260MHz****Common Information**

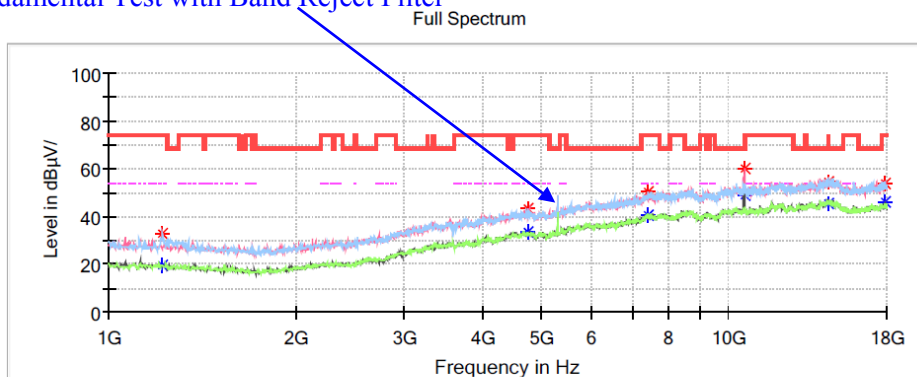
Project No.: RBJ251015001
EUT Model: ZYCXD105U
Test Mode: 5G WIFI 802.11a mode Low Channel
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 17.2℃
Humidity: 43%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/12/8

Fundamental Test with Band Reject Filter**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1061.200000	34.83	---	74.00	39.17	V	-15.0
1061.200000	---	25.86	54.00	28.14	V	-15.0
4508.800000	---	32.69	54.00	21.31	H	-4.2
4508.800000	43.00	---	74.00	31.00	H	-4.2
7443.000000	---	40.18	54.00	13.82	V	2.8
7443.000000	50.54	---	74.00	23.46	V	2.8
10520.000000	61.42	---	68.20	6.78	V	6.7
14491.200000	53.05	---	74.00	20.95	V	12.0
14491.200000	---	46.07	54.00	7.93	V	12.0
17864.000000	53.11	---	74.00	20.89	V	11.4
17864.000000	---	45.58	54.00	8.42	V	11.4

Middle Channel: 5300MHz**Common Information**

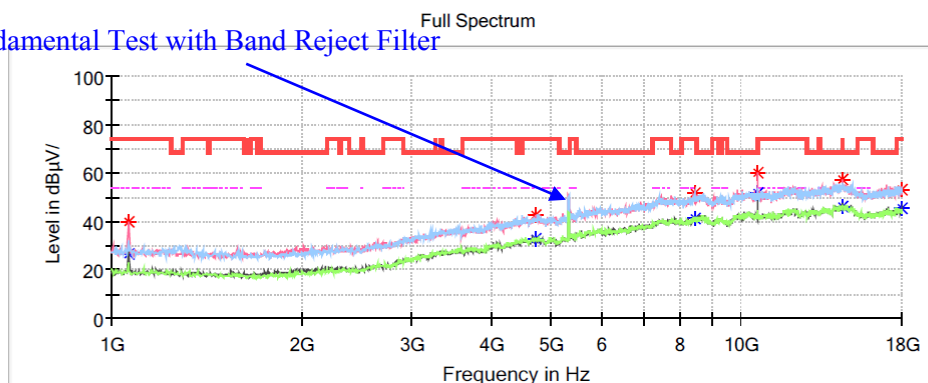
Project No.: RBJ251015001
EUT Model: ZYCXD105U
Test Mode: 5G WIFI 802.11a mode Middle Channel
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 17.2℃
Humidity: 43%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/12/8

Fundamental Test with Band Reject Filter**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1221.000000	---	19.54	54.00	34.46	H	-14.4
1221.000000	33.11	---	74.00	40.89	H	-14.4
4753.600000	---	33.31	54.00	20.69	H	-3.5
4753.600000	43.14	---	74.00	30.86	H	-3.5
7405.600000	---	40.31	54.00	13.69	H	2.7
7405.600000	50.44	---	74.00	23.56	H	2.7
10601.600000	---	49.13	54.00	4.87	V	6.7
10601.600000	60.36	---	74.00	13.64	V	6.7
14498.000000	54.79	---	74.00	19.21	V	12.0
14498.000000	---	45.51	54.00	8.49	V	12.0
17840.200000	---	45.97	54.00	8.03	V	11.3
17840.200000	53.51	---	74.00	20.49	V	11.3

High Channel: 5320MHz**Common Information**

Project No.: RBJ251015001
EUT Model: ZYCXD105U
Test Mode: 5G WIFI 802.11a mode High Channel
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 17.2℃
Humidity: 43%
Atmospheric Pressure: 103.0kPa
Test Engineer: Destine Hu
Test Date: 2025/12/8

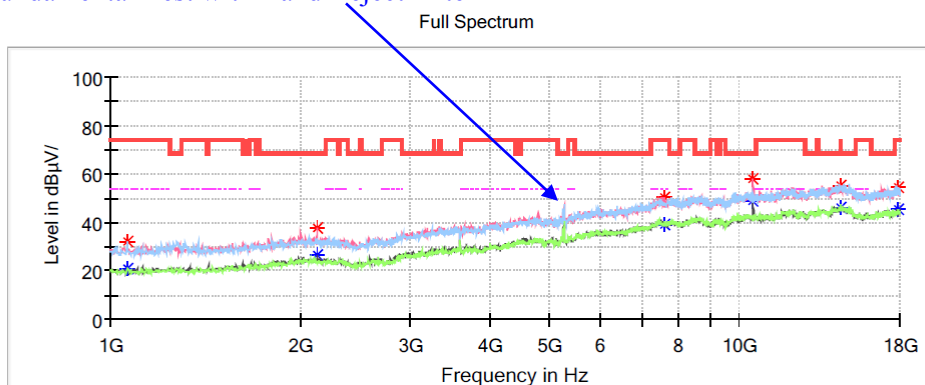
Fundamental Test with Band Reject Filter**Critical Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1064.600000	39.56	---	74.00	34.44	V	-15.0
1064.600000	---	26.47	54.00	27.53	V	-15.0
4712.800000	---	32.69	54.00	21.31	V	-3.6
4712.800000	42.64	---	74.00	31.36	V	-3.6
8422.200000	51.67	---	74.00	22.33	H	4.5
8422.200000	---	40.92	54.00	13.08	H	4.5
10642.400000	---	51.81	54.00	2.19	V	6.7
10642.400000	59.92	---	74.00	14.08	V	6.7
14501.400000	57.02	---	68.20	11.18	V	12.0
17945.600000	---	45.55	54.00	8.45	H	11.6
17945.600000	52.99	---	74.00	21.01	H	11.6

Chain 1:

802.11a Mode:**Low Channel: 5260MHz****Common Information**

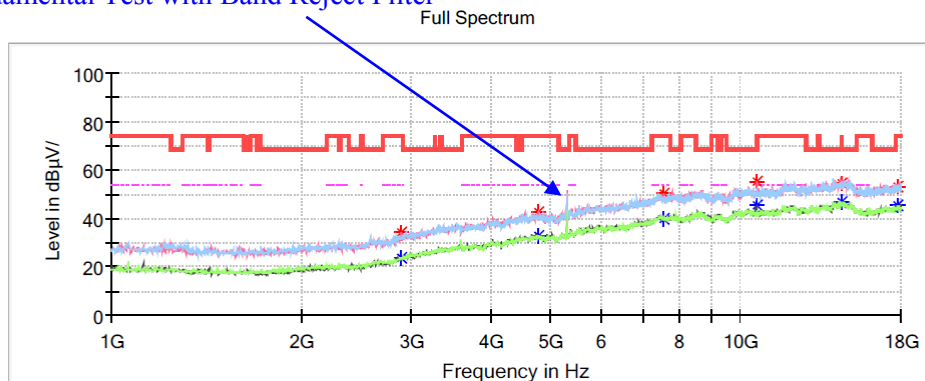
Project No.: RBJ251015001
EUT Model: ZYCXD105U
Test Mode: 5G WIFI 802.11a mode Low Channel
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 17.4℃
Humidity: 44%
Atmospheric Pressure: 102.5kPa
Test Engineer: Destine Hu
Test Date: 2025/12/10

Fundamental Test with Band Reject Filter**Critical Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1061.200000	---	20.83	54.00	33.17	H	-15.0
1061.200000	32.40	---	74.00	41.60	H	-15.0
2128.800000	37.55	---	68.20	30.65	V	-9.9
7606.200000	---	39.21	54.00	14.79	V	3.0
7606.200000	50.35	---	74.00	23.65	V	3.0
10520.000000	58.12	---	68.20	10.08	V	6.7
14494.600000	55.16	---	74.00	18.84	V	12.0
14494.600000	---	45.85	54.00	8.15	V	12.0
17925.200000	54.44	---	74.00	19.56	H	11.6
17925.200000	---	45.29	54.00	8.71	H	11.6

Middle Channel: 5300MHz**Common Information**

Project No.: RBJ251015001
EUT Model: ZYCXD105U
Test Mode: 5G WIFI 802.11a mode Middle Channel
Standard: FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Equipment: ESU40,3115,PAM-0118P
Receiver Setting: RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature: 17.4℃
Humidity: 44%
Atmospheric Pressure: 102.5kPa
Test Engineer: Destine Hu
Test Date: 2025/12/10

Fundamental Test with Band Reject Filter**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
2880.200000	---	24.03	54.00	29.97	V	-8.4
2880.200000	34.31	---	74.00	39.69	V	-8.4
4763.800000	---	32.73	54.00	21.27	V	-3.5
4763.800000	42.97	---	74.00	31.03	V	-3.5
7534.800000	---	39.57	54.00	14.43	H	3.0
7534.800000	50.03	---	74.00	23.97	H	3.0
10598.200000	55.02	---	68.20	13.18	V	6.7
14498.000000	54.44	---	74.00	19.56	H	12.0
14498.000000	---	46.55	54.00	7.45	H	12.0
17755.200000	---	45.56	54.00	8.44	V	11.1
17755.200000	53.32	---	74.00	20.68	V	11.1

High Channel: 5320MHz

Common Information

Project No.:

RBJ251015001

EUT Model:

ZYCXD105U

Test Mode:

5G WIFI 802.11a mode High Channel

Standard:

FCC Part 15.407& FCC Part 15.205& FCC Part 15.209

Test Equipment:

ESU40,3115,PAM-0118P

Receiver Setting:

RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto

Temperature:

17.4℃

Humidity:

44%

Atmospheric Pressure:

102.5kPa

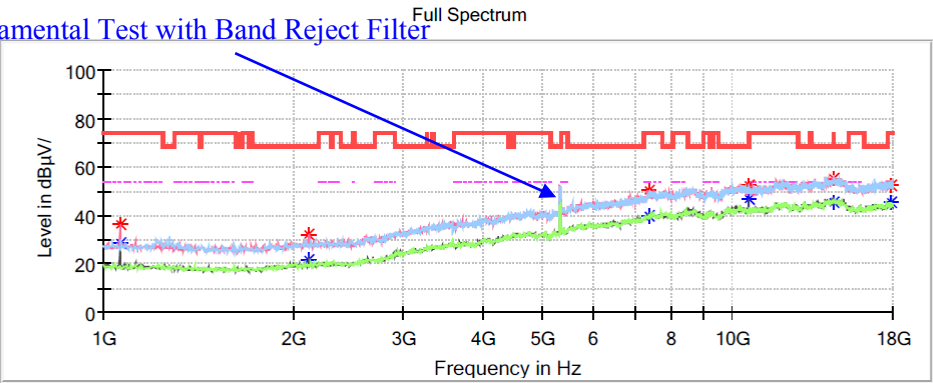
Test Engineer:

Destine Hu

Test Date:

2025/12/10

Fundamental Test with Band Reject Filter

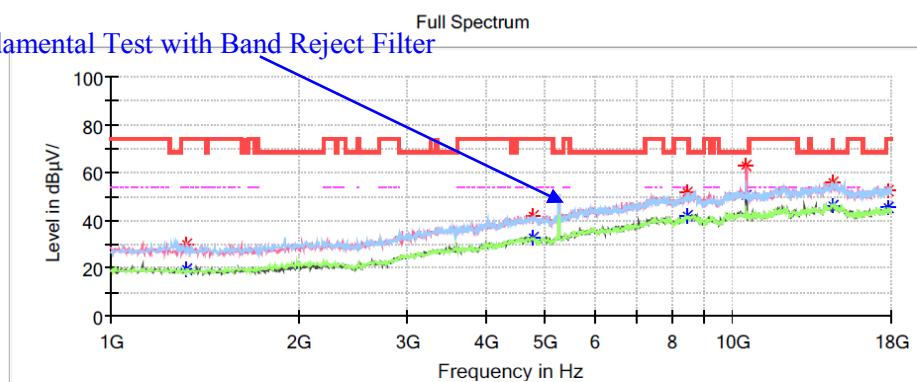


Critical_Freqs

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1061.200000	36.56	---	74.00	37.44	V	-15.0
1061.200000	---	28.51	54.00	25.49	V	-15.0
2122.000000	32.48	---	68.20	35.72	V	-9.9
7358.000000	50.39	---	74.00	23.61	V	2.6
7358.000000	---	39.52	54.00	14.48	V	2.6
10639.000000	52.23	---	74.00	21.77	V	6.7
10639.000000	---	46.93	54.00	7.07	V	6.7
14498.000000	55.41	---	74.00	18.59	H	12.0
14498.000000	---	45.60	54.00	8.40	H	12.0
17877.600000	---	45.39	54.00	8.61	H	11.4
17877.600000	52.62	---	74.00	21.38	H	11.4

**MIMO(Chain 0+Chain 1):
802.11ac 20 Mode:****Low Channel: 5260MHz****Common Information**

Project No.:	RBJ251015001
EUT Model:	ZYCXD105U
Test Mode:	5G WIFI 802.11ac20 mode Low Channel
Standard:	FCC Part 15.407& FCC Part 15.205& FCC Part 15.209
Test Equipment:	ESU40,3115,PAM-0118P
Receiver Setting:	RBW: 1MHz, VBW: 3MHz, Sweep Time: Auto
Temperature:	16.5°C
Humidity:	40%
Atmospheric Pressure:	102.3kPa
Test Engineer:	Destine Hu
Test Date:	2025/12/23

Fundamental Test with Band Reject Filter**Critical_Freqs**

Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Pol	Corr. (dB/m)
1323.000000	---	19.24	54.00	34.76	H	-14.1
1323.000000	30.20	---	74.00	43.80	H	-14.1
4784.200000	42.29	---	74.00	31.71	H	-3.5
4784.200000	---	32.73	54.00	21.27	H	-3.5
8429.000000	---	41.62	54.00	12.38	H	4.5
8429.000000	51.77	---	74.00	22.23	H	4.5
10513.200000	63.07	---	68.20	5.13	V	6.7
14498.000000	---	46.27	54.00	7.73	V	12.0
14498.000000	55.97	---	74.00	18.03	V	12.0
17755.200000	---	45.27	54.00	8.73	V	11.1
17755.200000	52.18	---	74.00	21.82	V	11.1