Prüfbericht-Nr.: *Test report no.:*	**CN22J98Z 003**	**Auftrags-Nr.:** *Order no.:*	**168349697**	**Seite 1 von 22** *Page 1 of 22*
Kunden-Referenz-Nr.: *Client reference no.:*	**N/A**	**Auftragsdatum:** *Order date:*	2021-12-29	
Auftraggeber: *Client:*	ZTE Corporation ZTE Plaza, Hi-Tech Park, Nanshan District, Shenzhen, Guangdong, P.R.China			
Prüfgegenstand: *Test item:*	RichMedia Box			
Bezeichnung / Typ-Nr.: *Identification / Type no.:*	ZXV10 B866V2-H, ZXV10 B866V6-H, ZXV10 B866V2-H1, ZXV10 B866V2HA, ZXV10 B866V2J, ZXV10 B866V6, ZXV10 B866V6-H1, ZXV10 B866V6HA, ZXV10 B860H V6.1, ZXV10 B860H V6.0, ZXV10 B867V2, ZXV10 B867V2Hi, ZXV10 B870V2H, ZXV10 B870V6H, ZXV10 B870V2J (Trademark: ZTE)			
Auftrags-Inhalt: *Order content*:	Test Report			
Prüfgrundlage: *Test specification:*	CFR47 FCC Part15: Subpart E Section 15.407 FCC KDB 662911 D01 Multiple Transmitter Output v02r01 FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01 ANSI C63.10:2013			
Wareneingangsdatum: *Date of sample receipt:*	2022-01-05	Please refer to Photo Document		
Prüfmuster-Nr.: *Test sample no:*	A003194305-001 A003194305-004~005			
Prüfzeitraum: *Testing period:*	2022-01-06 - 2022-01-21			
Ort der Prüfung: *Place of testing:*	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: *Test result*:*	Pass			

geprüft von: *tested by:*	X Tim.zhang Signed by: Tim Zhang	**genehmigt von:** *authorized by:*	X Lin Lin Signed by: Lin Lin
Datum: *Date:* 2022-01-25		**Ausstellungsdatum:** *Issue date:* 2022-01-25	
Stellung */ Position:*	Project Manager	**Stellung** */ Position:*	Reviewer
Sonstiges */ Other:*	FCC ID: Q78-ZXV10905X4		

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt
Condition of the test item at delivery: *Test item complete and undamaged*

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
** Legend:*	*1 = very good*	*2 = good*	*3 = satisfactory*	*4 = sufficient*	*5 = poor*
	P(ass) = passed a.m. test specification(s)		*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

Test Summary

5.1.1 ANTENNA REQUIREMENT
RESULT: Pass

5.1.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER
RESULT: Pass

5.1.3 CONDUCTED POWER SPECTRAL DENSITY
RESULT: Pass

5.1.4 FREQUENCY STABILITY
RESULT: Pass

5.1.5 26DB BANDWIDTH AND 99% BANDWIDTH
RESULT: Pass

5.1.6 6DB BANDWIDTH
RESULT: Pass

5.1.7 RADIATED SPURIOUS EMISSION
RESULT: Pass

5.1.8 DYNAMIC FREQUENCY SELECTION (DFS)
RESULT: Pass

5.1.9 CONDUCTED EMISSION ON AC MAINS
RESULT: Pass

Contents

1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of 5GHz Wi-Fi

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.
No. 362 Huanguan Road Middle, Longhua District, 518110, Shenzhen, P. R. China.

FCC Accreditation Designation No.: 694916
ISED wireless device testing laboratory: 25069

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing (SRD-Tonscend)				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. until**
EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY60241175	2022-09-28
MXG X-Series RF Vector Signal Generator	Keysight	N5182B	MY61250137	2022-09-28
EXG X-Series Microwave Analog Signal Generator	Keysight	N5173B	MY61250141	2022-09-28
DC power supply	Keysight	E3642A	MY61276100	2022-09-28
Power Control Unit	Tonscend	JS0806-4ADC	N/A	2022-09-28
Automation Control Unit	Tonscend	JS0806-2	21C8060396	2022-09-28
Test Software	Tonscend	JS1120-3	N/A	N/A
Control PC	Lenovo	TianYi510S-071MB	YLX23JMF	N/A
Shielding Room 8#	Albatross	SR8	APC17151-SR8	2024-06-22
Unwanted Emission Testing (TS9975)				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. until**
EMI Test Receiver	R&S	ESR 7	102021	2022-08-10
Signal Analyzer	R&S	FSV 40	101439	2022-08-09
System Controller Interface	R&S	SCI-100	S10010038	N/A
Filterbank	R&S	Wlan	100759	2022-08-09
OSP	R&S	OSP 120	102040	N/A
Pre-amplifier	R&S	SCU08F1	08320031	2022-08-09
Amplifier	R&S	SCU-18F	180070	2022-08-09
Amplifier	R&S	SCU40A	100475	2022-08-09
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	2022-08-08
Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	2022-08-08
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	2022-08-08
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	2022-09-13
Test software	R&S	EMC32 (V10.60.10)	N/A	N/A
Control PC	Dell	OptiPlex 7050	36NV9P2	N/A
3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	2024-06-22

Conducted Emission				
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Until**
EMI Test Receiver	R&S	ESR3	102428	2022-08-10
Artificial Mains Network	R&S	ENV216	102333	2022-08-10
Artificial Mains Network	R&S	ENV432	101411	2022-08-10
EMC32 test software	R&S	EMC32(Ver.10.50.00)	N/A	N/A

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

Parameter	Uncertainty
Radio Frequency	±1 x 10-7
RF Power (conducted)	±2.5 dB
Radiated Emission of Transmitter, valid up to 26.5 GHz	±6 dB
Radiated Emission of Receiver, valid up to 26.5 GHz	±6 dB
Conducted Emission, (9kHz to 150kHz)/(150kHz to 30MHz)	± 3.70 dB / ± 3.30 dB
Temperature	±1 °C
Humidity	±5 %
Voltage (DC)	±1 %
Voltage (AC, <10kHz)	±2 %

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. File for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at No. 362 Huanguan Road Middle, Longhua District, 518110, Shenzhen, P. R. China. is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The EUT is a RichMedia Box, which supports Bluetooth(dual mode), 2.4GHz Wi-Fi 802.11 b/g/n and 5GHz Wi-Fi 802.11a/n/ac wireless technology.

The basic model and all the series models' circuit theory, electrical design and the key components are the same, but the configuration maybe varies with different requirements which is Flash capacity for all models.
The EUT have four adapters, details as below table:

Description	Model	Rating	Manufacturer
Adapter 1#	UWP-12W-1210S	Input: 100-240V, 50/60Hz, 0.6A Output: 12.0V, 1.0A	I.T.E&AV POWER SUPPLY
Adapter 2#	KL-WA120100-B	Input: 100-240V, 50/60Hz, 0.6A Output: 12.0V, 1.0A	XIAMEN KELI ELECTRONIC CO., LTD
Adapter 3#	MN012E-L120100	Input: 100-240V, 50/60Hz, 0.6A Output: 12.0V, 1.0A	XIAMEN CASTEC ELECTRONIC INDUSTRY CO., LTD
Adapter 4#	RD1201000-C55-35MGD	Input: 100-240V, 50/60Hz, 0.6A Output: 12.0V, 1.0A	Shenzhen Ruide electronic industrial Co., Ltd.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment:	RichMedia Box
Type Designation:	ZXV10 B866V2-H, ZXV10 B866V6-H, ZXV10 B866V2-H1, ZXV10 B866V2HA, ZXV10 B866V2J, ZXV10 B866V6, ZXV10 B866V6-H1, ZXV10 B866V6HA, ZXV10 B860H V6.1, ZXV10 B860H V6.0, ZXV10 B867V2, ZXV10 B867V2Hi, ZXV10 B870V2H, ZXV10 B870V6H, ZXV10 B870V2J
Trademark:	ZTE
FCC ID:	Q78-ZXV10905X4
Operating Voltage:	AC 120~240V, 50/60Hz input via adapter
Testing Voltage:	AC 120V, 60Hz
Technical Specification of Bluetooth (dual mode)	
Operating Frequency:	2402 MHz to 2480 MHz
Type of Modulation:	GFSK, π/4-DQPSK, 8DPSK
Channel Number:	BDR & EDR mode:79 channels, Low Energy mode:40 channels
Channel Separation:	BDR & EDR mode: 1MHz, Low Energy mode: 2MHz
Data Rate:	BDR & EDR mode: 1Mbps, 3Mbps Low Energy mode: 1Mbps
Antenna Type:	Integral Antenna
Antenna Gain of Bluetooth:	3.0 dBi
Technical Specification of Wi-Fi 802.11 b/g/n	
Operating Frequency:	2412 - 2462 MHz for 802.11b/g/n(HT20) 2422 - 2452 MHz for 802.11n(HT40)
Type of Modulation:	DSSS(DBPSK/DQPSK/CCK)

	OFDM(BPSK/QPSK/16QAM/64QAM)
Data Rate:	6/9/12/18/24/36/48/54 Mbps for 802.11g MCS0 ~ MCS7 for 802.11n
Channel Number:	11 channels for 802.11b/g/n(HT20) 7 channels for 802.11n(HT40)
Channel Separation:	5 MHz
Antenna Type:	Integral Antenna
Number of Antenna:	2
Antenna Gain 1:	3.0 dBi
Antenna Gain 2:	3.0 dBi
Technical Specification of Wi-Fi 802.11 a/n/ac	
Operating Frequency:	5180-5320MHz, 5500-5700MHz, 5745-5825MHz
Type of Modulation:	OFDM(BPSK/QPSK/16QAM/64QAM/256QAM)
Channel Number:	5180-5320MHz, 14CHs, 802.11 a/n20/n40/ac20/ac40/ac80 5500-5700MHz, 12CHs, 802.11 a/n20/n40/ac20/ac40/ac80 5745-5825MHz, 8CHs, 802.11 a/n20/n40/ac20/ac40/ac80
Channel Separation	5 MHz
Antenna Type:	Integral Antenna
Number of Antenna:	2
Antenna Gain 1:	3.5 dBi
Antenna Gain 2:	3.5 dBi
Note: The EUT supports MIMO 2*2, any transmit signals are correlated with each other, so Directional gain = G_{ANT} + 10 log(N_{ANT}) dBi=6.51dBi; The limit of output power = each band power limit-0.51 The limit of power spectral density = each band PSD limit -0.51.	

3.3 Independent Operation Modes

The basic operation modes are:

A. On, Wi-Fi 802.11 a/n/ac wireless transmitting mode
    1. Low channel
    2. Middle channel
    3. High channel

B. On, Normal Operation (Wi-Fi Link)

C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Application Form
- Operation Description
- Schematics
- PCB Layout
- User Manual
- Block Diagram
- Rating Label
- Parts List

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10: 2013.

According to clause 3.1, all tests were performed on model ZXV10 B866V2-H in this report.

Table 3: Test channel and frequency

Mode	Test Channels
802.11 a/n-HT20/ac20	L: 5180MHz; 5260MHz; 5500MHz; 5745MHz M: MHz; 5200MHz;5280MHz; 5580MHz; 5785MHz H: 5240MHz;5320MHz; 5700MHz; 5825MHz
802.11 n-HT40/ac40	L/M: 5190MHz; 5270MHz; 5510MHz; 5510MHz; 5755MHz H: 5230MHz; 5310MHz; 5670MHz; 5795MHz
802.11 ac80	L/M/H: 5210MHz; 5290MHz; 5530MHz; 5610MHz; 5775MHz

4.3 Special Accessories and Auxiliary Equipment

Table 4: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N
Laptop	Lenovo	T480	PF-16A6N8
Portable Laptop	Lenovo	ThinkPad T480	10Q67059
LCD 4K Color Display	PHILIPS	272P7V	AUCA1833000075472
Soundbar	Fenda	NS-HTSB22	/
RJ45 cable	/	/	/
AV cable	/	/	/
HDMI cable	/	/	/
Optical fiber cable	/	/	/

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

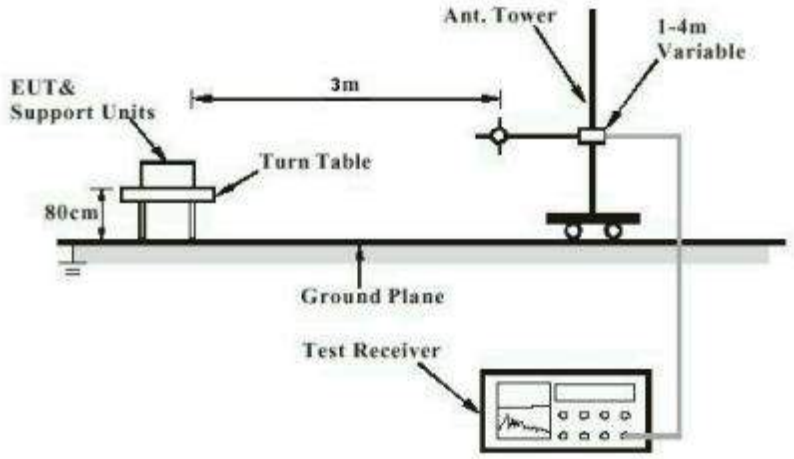


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

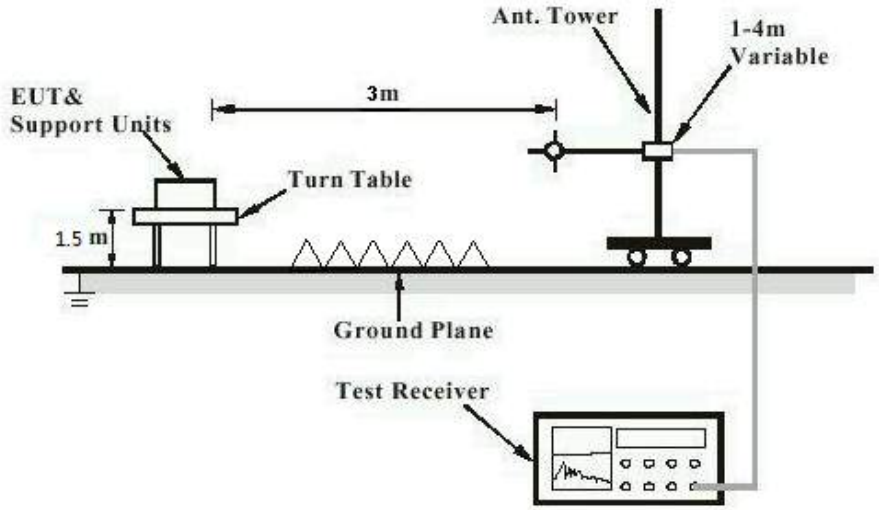


Diagram of Measurement Configuration for Mains Conduction Measurement

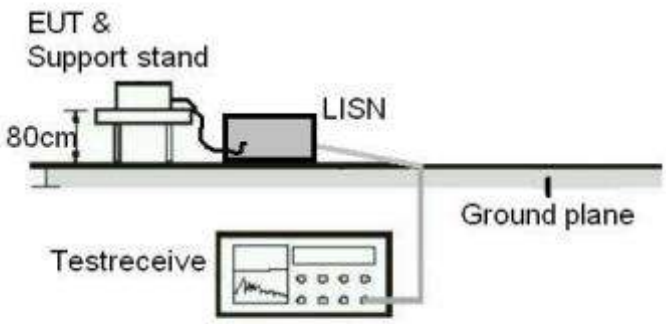


Diagram of Measurement Configuration for Conducted Transmitter Measurement

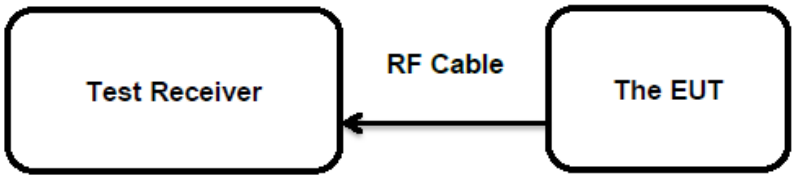
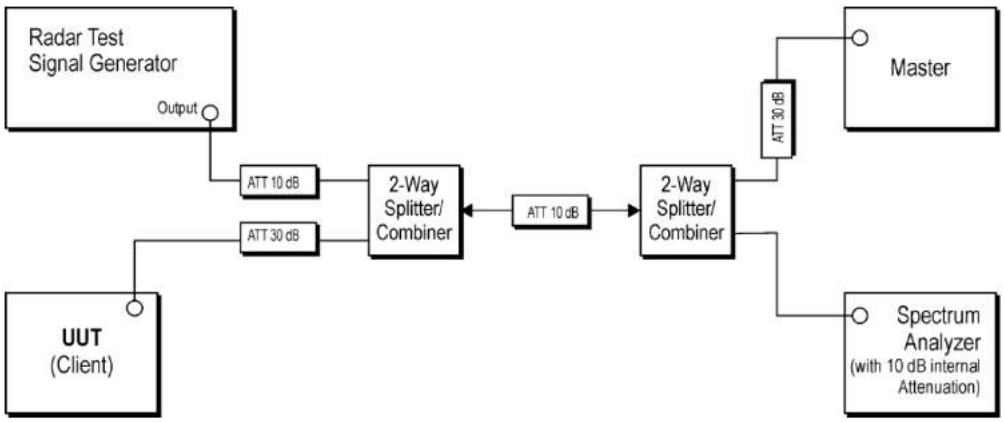


Diagram of Measurement Configuration for Dynamic Frequency Selection (DFS)



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT: **Pass**

Test Specification
Test standard : FCC Part 15.203

According to the manufacturer declared, the EUT have two internal antennas, Each antenna has a Max. antenna gain of 3.5 dBi , and the antenna connector is designed with permanent attachment and no consideration of replacement.

Therefore, the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

5.1.2 Maximum Peak Conducted Output Power

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.407(a)(1)&(2)&(4)
Basic standard	:	ANSI C63.10: 2013
Limits	:	<250mW (24dBm) (5150-5250MHz) *<250mW (24dBm) (5250-5350MHz, 5470-5725MHz) *250 mW (24dBm) or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz, where is lesser. <1W (30dBm) (5725-5850MHz)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-01-11
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24.8 ℃
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.3 Conducted Power Spectral Density

RESULT: **Pass**

Test Specification

Test standard	:	FCC part 15.407(a)
Basic standard	:	ANSI C63.10: 2013 KDB 789033 D02 v01r03
Limits	:	<11dBm/MHz (5150-5250MHz 5250-5350MHz, 5470-5725MHz) <30dBm/500kHz (5725-5850MHz)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-01-11
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24.8 ℃
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.4 Frequency Stability

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.407(g)
Basic standard	:	ANSI C63.10: 2013
Limits	:	Within assigned bands
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-01-11
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24.8 ℃
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.5 26dB Bandwidth and 99% Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.407(e)
Basic standard	:	ANSI C63.10: 2013
Limits	:	N/A
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-01-11
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24.8 ℃
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.6 6dB Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.407(e)
Basic standard	:	ANSI C63.10: 2013
Limits	:	At least 500kHz (5725-5850MHz)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-01-11
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24.8 ℃
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.7 Radiated Spurious Emission

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.407(b) & FCC Part 15.205 & FCC Part 15.209
Basic standard	:	ANSI C63.10: 2013 KDB 789033 D02 v01r03
Limits	:	• For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz. • For transmitters operating in the 5.25-5.35 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. • 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. Emissions outside the band 5470-5600 MHz and 5650-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p. • For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. Restricted Bands meet the requirement of 15.209 limit
Kind of test site	:	3m Semi-anechoic Chamber

Test Setup

Date of testing	:	2022-01-18 to 2022-01-20
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	Refer to test result
Relative humidity	:	Refer to test result
Atmospheric pressure	:	101 kPa

Remark:
Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst case spurious emissions configuration of the each mode were reported.

For the measurement records, refer to the appendix A.

5.1.8 Dynamic Frequency Selection (DFS)

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.407(h)
Basic standard	:	ANSI C63.10: 2013
Limits	:	5250-5350MHz, 5470-5725MHz Channel Move Time: Within 10 seconds. Channel Closing Transmission Time: 200ms+aggregate of 60ms over remaining 10s period; Non-Occupancy Period: at least 30 minutes.
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-01-21
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	CH 58, CH 106
Ambient temperature	:	24.8 ℃
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.9 Conducted Emission on AC Mains

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.207(a)
Basic standard	:	ANSI C63.10: 2013
Frequency range	:	0.15 – 30MHz
Limits	:	FCC Part 15.207(a)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-01-13
Input voltage	:	AC 120V, 60Hz
Operation mode	:	B
Earthing	:	Not connected
Ambient temperature	:	23.1 ℃
Relative humidity	:	52 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

6 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the separate test photo file.

7 List of Tables

Appendix A: Test Results of 5GHz Wi-Fi

Appendix A.1: Test Results of Maximum Conducted output power

TestMode	Channel	Result[dBm]			Limit[dBm]	Verdict
		Ant1	Ant2	MIMO		
11A-SISO	5180	13.30	12.45	-	≤24	PASS
	5200	13.12	11.88	-	≤24	PASS
	5240	13.35	11.97	-	≤24	PASS
	5260	12.94	13.21	-	≤24	PASS
	5280	12.89	13.08	-	≤24	PASS
	5320	12.97	12.05	-	≤24	PASS
	5500	13.17	12.65	-	≤24	PASS
	5580	13.02	12.33	-	≤24	PASS
	5700	12.63	12.02	-	≤24	PASS
	5745	12.50	12.20	-	≤30	PASS
	5785	12.67	12.38	-	≤30	PASS
	5825	12.52	12.41	-	≤30	PASS
11N20MIMO	5180	12.63	11.81	15.25	≤23.49	PASS
	5200	12.52	11.87	15.22	≤23.49	PASS
	5240	12.72	11.93	15.35	≤23.49	PASS
	5260	12.70	11.84	15.30	≤23.49	PASS
	5280	12.89	11.82	15.40	≤23.49	PASS
	5320	12.54	11.55	15.08	≤23.49	PASS
	5500	12.63	12.06	15.36	≤23.49	PASS
	5580	12.50	12.00	15.27	≤23.49	PASS
	5700	12.54	11.97	15.27	≤23.49	PASS
	5745	12.42	12.18	15.31	≤29.49	PASS
	5785	12.70	12.54	15.64	≤29.49	PASS
	5825	12.54	12.55	15.56	≤29.49	PASS
11N40MIMO	5190	13.10	11.56	15.41	≤23.49	PASS
	5230	12.60	11.67	15.17	≤23.49	PASS
	5270	12.55	11.57	15.10	≤23.49	PASS
	5310	12.87	11.83	15.39	≤23.49	PASS
	5510	12.73	11.66	15.24	≤23.49	PASS
	5550	12.73	12.08	15.43	≤23.49	PASS
	5670	12.49	12.17	15.34	≤23.49	PASS
	5755	13.17	13.05	16.12	≤29.49	PASS
	5795	13.39	13.27	16.34	≤29.49	PASS
11AC20MIMO	5180	12.90	11.73	15.36	≤23.49	PASS
	5200	12.89	11.81	15.39	≤23.49	PASS
	5240	13.11	11.41	15.35	≤23.49	PASS
	5260	12.86	11.74	15.53	≤23.49	PASS
	5280	12.65	11.64	15.18	≤23.49	PASS
	5320	12.85	11.65	15.30	≤23.49	PASS
	5500	12.50	11.85	15.20	≤23.49	PASS
	5580	12.77	12.21	15.51	≤23.49	PASS
	5700	12.36	11.94	15.17	≤23.49	PASS
	5745	12.78	12.56	15.68	≤29.49	PASS
	5785	12.44	12.66	15.56	≤29.49	PASS
	5825	12.36	12.43	15.41	≤29.49	PASS
11AC40MIMO	5190	12.08	12.26	15.18	≤23.49	PASS
	5230	12.34	12.39	15.38	≤23.49	PASS
	5270	12.63	12.82	15.74	≤23.49	PASS
	5310	12.53	12.90	15.73	≤23.49	PASS
	5510	12.43	12.58	15.52	≤23.49	PASS
	5550	12.35	12.81	15.60	≤23.49	PASS
	5670	12.08	12.38	15.24	≤23.49	PASS
	5755	12.27	12.77	15.54	≤23.49	PASS
	5795	12.47	12.88	15.69	≤23.49	PASS
11ac80MIMO	5210	12.08	12.30	15.20	≤23.49	PASS
	5290	12.28	12.31	15.31	≤23.49	PASS

	5530	12.32	12.54	15.44	≤23.49	PASS
	5610	12.43	12.74	15.60	≤23.49	PASS
	5775	12.29	12.49	15.40	≤29.49	PASS

Appendix A.2: Test Results of Conducted Power Spectral Density

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A-SISO	Ant1	5180	3.61	≤11	PASS
	Ant2	5180	3.80	≤11	PASS
	total	5180	--	--	--
	Ant1	5200	2.81	≤11	PASS
	Ant2	5200	3.59	≤11	PASS
	total	5200	--	--	--
	Ant1	5240	4.14	≤11	PASS
	Ant2	5240	3.00	≤11	PASS
	total	5240	--	--	--
	Ant1	5260	3.27	≤11	PASS
	Ant2	5260	2.93	≤11	PASS
	total	5260	--	--	--
	Ant1	5280	3.18	≤11	PASS
	Ant2	5280	2.62	≤11	PASS
	total	5280	--	--	--
	Ant1	5320	3.69	≤11	PASS
	Ant2	5320	3.08	≤11	PASS
	total	5320	--	--	--
	Ant1	5500	2.92	≤11	PASS
	Ant2	5500	1.43	≤11	PASS
	total	5500	--	--	--
	Ant1	5580	3.07	≤11	PASS
	Ant2	5580	2.01	≤11	PASS
	total	5580	--	--	--
	Ant1	5700	2.63	≤11	PASS
	Ant2	5700	2.64	≤11	PASS
	total	5700	--	--	--
	Ant1	5745	3.14	≤30	PASS
	Ant2	5745	3.32	≤30	PASS
	total	5745	--	--	--
	Ant1	5785	2.72	≤30	PASS
	Ant2	5785	2.87	≤30	PASS
	total	5785	--	--	--
	Ant1	5825	3.65	≤30	PASS
	Ant2	5825	4.13	≤30	PASS
	total	5825	--	--	--
11N20MIMO	Ant1	5180	3.19	≤10.49	PASS
	Ant2	5180	2.64	≤10.49	PASS
	total	5180	5.93	≤10.49	PASS
	Ant1	5200	1.84	≤10.49	PASS
	Ant2	5200	2.48	≤10.49	PASS
	total	5200	5.18	≤10.49	PASS
	Ant1	5240	3.75	≤10.49	PASS
	Ant2	5240	3.62	≤10.49	PASS
	total	5240	6.70	≤10.49	PASS
	Ant1	5260	3.12	≤10.49	PASS
	Ant2	5260	3.11	≤10.49	PASS
	total	5260	6.13	≤10.49	PASS
	Ant1	5280	2.78	≤10.49	PASS
	Ant2	5280	2.96	≤10.49	PASS
	total	5280	5.88	≤10.49	PASS
	Ant1	5320	2.70	≤10.49	PASS
	Ant2	5320	3.86	≤10.49	PASS
	total	5320	6.33	≤10.49	PASS
	Ant1	5500	2.08	≤10.49	PASS
	Ant2	5500	1.62	≤10.49	PASS
	total	5500	4.87	≤10.49	PASS
	Ant1	5580	3.29	≤10.49	PASS

	Ant2	5580	3.08	≤10.49	PASS
	total	5580	6.20	≤10.49	PASS
	Ant1	5700	2.01	≤10.49	PASS
	Ant2	5700	1.87	≤10.49	PASS
	total	5700	4.95	≤10.49	PASS
	Ant1	5745	2.88	≤29.49	PASS
	Ant2	5745	2.67	≤29.49	PASS
	total	5745	5.79	≤29.49	PASS
	Ant1	5785	2.18	≤29.49	PASS
	Ant2	5785	3.08	≤29.49	PASS
	total	5785	5.66	≤29.49	PASS
	Ant1	5825	2.66	≤29.49	PASS
	Ant2	5825	3.33	≤29.49	PASS
	total	5825	6.02	≤29.49	PASS
11N40MIMO	Ant1	5190	0.66	≤10.49	PASS
	Ant2	5190	1.36	≤10.49	PASS
	total	5190	4.03	≤10.49	PASS
	Ant1	5230	1.47	≤10.49	PASS
	Ant2	5230	-0.02	≤10.49	PASS
	total	5230	3.80	≤10.49	PASS
	Ant1	5270	-0.36	≤10.49	PASS
	Ant2	5270	1.05	≤10.49	PASS
	total	5270	3.41	≤10.49	PASS
	Ant1	5310	0.72	≤10.49	PASS
	Ant2	5310	-0.39	≤10.49	PASS
	total	5310	3.21	≤10.49	PASS
	Ant1	5510	-0.46	≤10.49	PASS
	Ant2	5510	-0.53	≤10.49	PASS
	total	5510	2.52	≤10.49	PASS
	Ant1	5550	-0.38	≤10.49	PASS
	Ant2	5550	-0.09	≤10.49	PASS
	total	5550	2.78	≤10.49	PASS
	Ant1	5670	-0.51	≤10.49	PASS
	Ant2	5670	-0.00	≤10.49	PASS
	total	5670	2.76	≤10.49	PASS
	Ant1	5755	-0.26	≤29.49	PASS
	Ant2	5755	0.35	≤29.49	PASS
	total	5755	3.07	≤29.49	PASS
	Ant1	5795	-1.11	≤29.49	PASS
	Ant2	5795	1.11	≤29.49	PASS
	total	5795	3.15	≤29.49	PASS
11AC20MIMO	Ant1	5180	3.51	≤10.49	PASS
	Ant2	5180	3.07	≤10.49	PASS
	total	5180	6.31	≤10.49	PASS
	Ant1	5200	2.79	≤10.49	PASS
	Ant2	5200	3.20	≤10.49	PASS
	total	5200	6.01	≤10.49	PASS
	Ant1	5240	4.09	≤10.49	PASS
	Ant2	5240	3.86	≤10.49	PASS
	total	5240	6.99	≤10.49	PASS
	Ant1	5260	2.66	≤10.49	PASS
	Ant2	5260	3.15	≤10.49	PASS
	total	5260	5.92	≤10.49	PASS
	Ant1	5280	2.66	≤10.49	PASS
	Ant2	5280	2.56	≤10.49	PASS
	total	5280	5.62	≤10.49	PASS
	Ant1	5320	3.35	≤10.49	PASS
	Ant2	5320	2.44	≤10.49	PASS
	total	5320	5.93	≤10.49	PASS
	Ant1	5500	2.46	≤10.49	PASS
	Ant2	5500	1.58	≤10.49	PASS
	total	5500	5.05	≤10.49	PASS
	Ant1	5580	1.85	≤10.49	PASS

	Ant2	5580	3.07	≤10.49	PASS
	total	5580	5.51	≤10.49	PASS
	Ant1	5700	1.35	≤10.49	PASS
	Ant2	5700	3.03	≤10.49	PASS
	total	5700	5.28	≤10.49	PASS
	Ant1	5745	1.74	≤29.49	PASS
	Ant2	5745	2.36	≤29.49	PASS
	total	5745	5.07	≤29.49	PASS
	Ant1	5785	1.52	≤29.49	PASS
	Ant2	5785	2.83	≤29.49	PASS
	total	5785	5.23	≤29.49	PASS
	Ant1	5825	2.85	≤29.49	PASS
	Ant2	5825	3.65	≤29.49	PASS
	total	5825	6.28	≤29.49	PASS
11AC40MIMO	Ant1	5190	0.53	≤10.49	PASS
	Ant2	5190	1.50	≤10.49	PASS
	total	5190	4.05	≤10.49	PASS
	Ant1	5230	1.25	≤10.49	PASS
	Ant2	5230	1.15	≤10.49	PASS
	total	5230	4.21	≤10.49	PASS
	Ant1	5270	-0.71	≤10.49	PASS
	Ant2	5270	0.20	≤10.49	PASS
	total	5270	2.78	≤10.49	PASS
	Ant1	5310	0.42	≤10.49	PASS
	Ant2	5310	0.55	≤10.49	PASS
	total	5310	3.50	≤10.49	PASS
	Ant1	5510	0.36	≤10.49	PASS
	Ant2	5510	0.48	≤10.49	PASS
	total	5510	3.43	≤10.49	PASS
	Ant1	5550	-0.41	≤10.49	PASS
	Ant2	5550	1.42	≤10.49	PASS
	total	5550	3.61	≤10.49	PASS
	Ant1	5670	0.32	≤10.49	PASS
	Ant2	5670	1.33	≤10.49	PASS
	total	5670	3.86	≤10.49	PASS
	Ant1	5755	-0.65	≤29.49	PASS
	Ant2	5755	1.39	≤29.49	PASS
	total	5755	3.50	≤29.49	PASS
	Ant1	5795	-1.25	≤29.49	PASS
	Ant2	5795	0.67	≤29.49	PASS
	total	5795	2.83	≤29.49	PASS
11AC80MIMO	Ant1	5210	-1.62	≤10.49	PASS
	Ant2	5210	-0.87	≤10.49	PASS
	total	5210	1.78	≤10.49	PASS
	Ant1	5290	-2.27	≤10.49	PASS
	Ant2	5290	-1.36	≤10.49	PASS
	total	5290	1.22	≤10.49	PASS
	Ant1	5530	-2.80	≤10.49	PASS
	Ant2	5530	-2.70	≤10.49	PASS
	total	5530	0.26	≤10.49	PASS
	Ant1	5610	-2.41	≤10.49	PASS
	Ant2	5610	-2.17	≤10.49	PASS
	total	5610	0.72	≤10.49	PASS
	Ant1	5775	-2.81	≤29.49	PASS
	Ant2	5775	-0.46	≤29.49	PASS
	total	5775	1.53	≤29.49	PASS

Appendix A.3: Test Results of Frequency Stability

Voltage Temperature								
TestMode	Antenna	Channel	Voltage (Vdc)	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20	Ant1	5180	NV	NT	-51000	-9.81	±20	PASS
	Ant1	5200	NV	NT	-50000	-9.62	±20	PASS
	Ant1	5240	NV	NT	-50000	-9.54	±20	PASS
	Ant1	5260	NV	NT	-46000	-8.74	±20	PASS
	Ant1	5280	NV	NT	-43000	-8.14	±20	PASS
	Ant1	5320	NV	NT	-44000	-8.27	±20	PASS
	Ant1	5500	NV	NT	-51000	-9.27	±20	PASS
	Ant1	5580	NV	NT	-53000	-9.50	±20	PASS
	Ant1	5700	NV	NT	-55000	-9.65	±20	PASS
	Ant1	5745	NV	NT	-55000	-9.57	±20	PASS
	Ant1	5785	NV	NT	-56000	-9.68	±20	PASS
	Ant1	5825	NV	NT	-56000	-9.61	±20	PASS
11AC40	Ant1	5190	NV	NT	-50000	-9.63	±20	PASS
	Ant1	5230	NV	NT	-51000	-9.75	±20	PASS
	Ant1	5270	NV	NT	-51000	-9.68	±20	PASS
	Ant1	5310	NV	NT	-52000	-9.79	±20	PASS
	Ant1	5510	NV	NT	-54000	-9.80	±20	PASS
	Ant1	5550	NV	NT	-54000	-9.73	±20	PASS
	Ant1	5670	NV	NT	-55000	-9.70	±20	PASS
	Ant1	5755	NV	NT	-56000	-9.73	±20	PASS
	Ant1	5795	NV	NT	-56000	-9.66	±20	PASS
11AC80	Ant1	5210	NV	NT	-51000	-9.79	±20	PASS
	Ant1	5290	NV	NT	-51000	-9.64	±20	PASS
	Ant1	5530	NV	NT	-53000	-9.58	±20	PASS
	Ant1	5610	NV	NT	-54000	-9.63	±20	PASS
	Ant1	5775	NV	NT	-55000	-9.52	±20	PASS

Appendix A.4: Test Results of 26dB Bandwidth

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A-SISO	Ant1	5180	19.680	5170.240	5189.920	---	PASS
		5200	20.000	5190.080	5210.080	---	PASS
		5240	19.960	5229.960	5249.920	---	PASS
		5260	19.680	5250.200	5269.880	---	PASS
		5280	19.920	5270.120	5290.040	---	PASS
		5320	20.280	5309.760	5330.040	---	PASS
		5500	20.360	5489.800	5510.160	---	PASS
		5580	20.280	5569.800	5590.080	---	PASS
		5700	19.840	5690.040	5709.880	---	PASS
		5745	20.280	5734.800	5755.080	---	PASS
		5785	20.080	5774.920	5795.000	---	PASS
		5825	20.480	5814.680	5835.160	---	PASS
11N20MIMO	Ant1	5180	20.520	5169.760	5190.280	---	PASS
		5200	20.240	5189.800	5210.040	---	PASS
		5240	19.920	5229.960	5249.880	---	PASS
		5260	20.000	5249.880	5269.880	---	PASS
		5280	20.160	5269.800	5289.960	---	PASS
		5320	20.000	5310.080	5330.080	---	PASS
		5500	20.160	5489.960	5510.120	---	PASS
		5580	20.480	5569.880	5590.360	---	PASS
		5700	20.160	5690.000	5710.160	---	PASS
		5745	20.320	5734.880	5755.200	---	PASS
		5785	20.320	5774.920	5795.240	---	PASS
		5825	20.280	5814.800	5835.080	---	PASS
11N40MIMO	Ant1	5190	40.720	5169.440	5210.160	---	PASS
		5230	40.480	5209.520	5250.000	---	PASS
		5270	40.480	5249.600	5290.080	---	PASS
		5310	40.800	5289.440	5330.240	---	PASS
		5510	40.160	5490.160	5530.320	---	PASS
		5550	40.160	5530.160	5570.320	---	PASS
		5670	40.480	5649.440	5689.920	---	PASS
		5755	40.080	5735.000	5775.080	---	PASS
		5795	40.400	5774.840	5815.240	---	PASS
11AC20MIMO	Ant1	5180	19.960	5169.880	5189.840	---	PASS
		5200	19.960	5189.960	5209.920	---	PASS
		5240	20.000	5229.960	5249.960	---	PASS
		5260	20.040	5249.800	5269.840	---	PASS
		5280	20.200	5269.960	5290.160	---	PASS
		5320	19.880	5310.280	5330.160	---	PASS
		5500	20.320	5489.800	5510.120	---	PASS
		5580	20.840	5569.480	5590.320	---	PASS
		5700	19.880	5690.040	5709.920	---	PASS
		5745	20.560	5734.800	5755.360	---	PASS
		5785	20.000	5774.880	5794.880	---	PASS
		5825	20.480	5814.600	5835.080	---	PASS
11AC40MIMO	Ant1	5190	40.080	5169.680	5209.760	---	PASS
		5230	40.240	5209.680	5249.920	---	PASS
		5270	40.240	5249.840	5290.080	---	PASS
		5310	39.920	5290.080	5330.000	---	PASS
		5510	39.920	5490.000	5529.920	---	PASS
		5550	40.320	5529.600	5569.920	---	PASS
		5670	41.440	5649.360	5690.800	---	PASS
		5755	40.640	5734.600	5775.240	---	PASS
		5795	40.480	5774.520	5815.000	---	PASS
11AC80MIMO	Ant1	5210	80.960	5169.520	5250.480	---	PASS
		5290	81.280	5249.360	5330.640	---	PASS
		5530	80.320	5489.680	5570.000	---	PASS
		5610	80.320	5570.000	5650.320	---	PASS
		5775	80.160	5735.000	5815.160	---	PASS

11A-SISO_Ant1_5180

11A-SISO_Ant1_5200

11A-SISO_Ant1_5240

11A-SISO_Ant1_5260

11A-SISO_Ant1_5280

11A-SISO_Ant1_5320

11A-SISO_Ant1_5500

11A-SISO_Ant1_5580

11A-SISO_Ant1_5700

11A-SISO_Ant1_5745

11A-SISO_Ant1_5785

11A-SISO_Ant1_5825

11N20MIMO_Ant1_5180

11N20MIMO_Ant1_5200

11N20MIMO_Ant1_5240


11N20MIMO_Ant1_5260

11N20MIMO_Ant1_5280

11N20MIMO_Ant1_5320

11N20MIMO_Ant1_5500

11N20MIMO_Ant1_5580

11N20MIMO_Ant1_5700


11N20MIMO_Ant1_5745

11N20MIMO_Ant1_5785

11N20MIMO_Ant1_5825

11N40MIMO_Ant1_5190

11N40MIMO_Ant1_5230

11N40MIMO_Ant1_5270

11N40MIMO_Ant1_5310

11N40MIMO_Ant1_5510

11N40MIMO_Ant1_5550


11N40MIMO_Ant1_5670

11N40MIMO_Ant1_5755

11N40MIMO_Ant1_5795

11AC20MIMO_Ant1_5180

11AC20MIMO_Ant1_5200

11AC20MIMO_Ant1_5240

11AC20MIMO_Ant1_5260

11AC20MIMO_Ant1_5280

11AC20MIMO_Ant1_5320

11AC20MIMO_Ant1_5500

11AC20MIMO_Ant1_5580

11AC20MIMO_Ant1_5700

11AC20MIMO_Ant1_5745

11AC20MIMO_Ant1_5785

11AC20MIMO_Ant1_5825

11AC40MIMO_Ant1_5190

11AC40MIMO_Ant1_5230

11AC40MIMO_Ant1_5270

11AC40MIMO_Ant1_5310

11AC40MIMO_Ant1_5510

11AC40MIMO_Ant1_5550

11AC40MIMO_Ant1_5670

11AC40MIMO_Ant1_5755

11AC40MIMO_Ant1_5795

11AC80MIMO_Ant1_5210

11AC80MIMO_Ant1_5290

11AC80MIMO_Ant1_5530

11AC80MIMO_Ant1_5610

11AC80MIMO_Ant1_5775

Appendix A.5: Test Results of 99% Bandwidth

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A-SISO	Ant1	5180	16.875	5171.505	5188.380	---	PASS
		5200	16.851	5191.466	5208.317	---	PASS
		5240	16.689	5231.605	5248.294	---	PASS
		5260	16.962	5251.449	5268.411	---	PASS
		5280	17.045	5271.478	5288.523	---	PASS
		5320	17.762	5311.095	5328.857	---	PASS
		5500	17.874	5491.100	5508.974	---	PASS
		5580	17.948	5570.986	5588.934	---	PASS
		5700	17.810	5691.070	5708.880	---	PASS
		5745	17.886	5736.059	5753.945	---	PASS
		5785	17.856	5776.015	5793.871	---	PASS
		5825	17.868	5816.049	5833.917	---	PASS
11N20MIMO	Ant1	5180	17.746	5171.100	5188.846	---	PASS
		5200	17.862	5190.998	5208.860	---	PASS
		5240	17.742	5231.080	5248.822	---	PASS
		5260	17.915	5250.956	5268.871	---	PASS
		5280	17.915	5271.024	5288.939	---	PASS
		5320	17.798	5311.126	5328.924	---	PASS
		5500	17.773	5491.136	5508.909	---	PASS
		5580	17.936	5571.003	5588.939	---	PASS
		5700	17.820	5691.048	5708.868	---	PASS
		5745	17.876	5736.045	5753.921	---	PASS
		5785	17.802	5776.089	5793.891	---	PASS
		5825	17.836	5816.026	5833.862	---	PASS
11N40MIMO	Ant1	5190	36.029	5171.922	5207.951	---	PASS
		5230	36.058	5211.993	5248.051	---	PASS
		5270	36.348	5251.811	5288.159	---	PASS
		5310	36.254	5291.830	5328.084	---	PASS
		5510	36.007	5492.093	5528.100	---	PASS
		5550	36.292	5531.849	5568.141	---	PASS
		5670	36.267	5651.791	5688.058	---	PASS
		5755	36.116	5736.925	5773.041	---	PASS
		5795	36.284	5776.829	5813.113	---	PASS
11AC20MIMO	Ant1	5180	17.793	5171.090	5188.883	---	PASS
		5200	17.899	5190.990	5208.889	---	PASS
		5240	17.692	5231.099	5248.791	---	PASS
		5260	17.831	5250.984	5268.815	---	PASS
		5280	17.872	5271.075	5288.947	---	PASS
		5320	17.803	5311.062	5328.865	---	PASS
		5500	17.739	5491.138	5508.877	---	PASS
		5580	17.937	5571.040	5588.977	---	PASS
		5700	17.806	5691.098	5708.904	---	PASS
		5745	17.883	5736.091	5753.974	---	PASS
		5785	17.884	5776.021	5793.905	---	PASS
		5825	17.887	5816.028	5833.915	---	PASS
11AC40MIMO	Ant1	5190	36.003	5171.920	5207.923	---	PASS
		5230	36.107	5211.971	5248.078	---	PASS
		5270	36.173	5251.825	5287.998	---	PASS
		5310	36.106	5291.921	5328.027	---	PASS
		5510	36.032	5492.045	5528.077	---	PASS
		5550	36.425	5531.763	5568.188	---	PASS
		5670	36.336	5651.785	5688.121	---	PASS
		5755	36.078	5736.942	5773.020	---	PASS
		5795	36.190	5776.915	5813.105	---	PASS
11AC80MIMO	Ant1	5210	75.467	5172.248	5247.715	---	PASS
		5290	75.654	5252.173	5327.827	---	PASS
		5530	75.270	5492.481	5567.751	---	PASS
		5610	75.587	5572.265	5647.852	---	PASS
		5775	75.522	5737.179	5812.701	---	PASS

11A-SISO_Ant1_5180

11A-SISO_Ant1_5200

11A-SISO_Ant1_5240

11A-SISO_Ant1_5260

11A-SISO_Ant1_5280

11A-SISO_Ant1_5320

11A-SISO_Ant1_5500

11A-SISO_Ant1_5580

11A-SISO_Ant1_5700

11A-SISO_Ant1_5745

11A-SISO_Ant1_5785

11A-SISO_Ant1_5825

11N20MIMO_Ant1_5180

11N20MIMO_Ant1_5200

11N20MIMO_Ant1_5240

11N20MIMO_Ant1_5260

11N20MIMO_Ant1_5280

11N20MIMO_Ant1_5320


11N20MIMO_Ant1_5500

11N20MIMO_Ant1_5580

11N20MIMO_Ant1_5700


11N20MIMO_Ant1_5745

11N20MIMO_Ant1_5785

11N20MIMO_Ant1_5825

11N40MIMO_Ant1_5190

11N40MIMO_Ant1_5230

11N40MIMO_Ant1_5270

11N40MIMO_Ant1_5310

11N40MIMO_Ant1_5510

11N40MIMO_Ant1_5550

11N40MIMO_Ant1_5670

11N40MIMO_Ant1_5755

11N40MIMO_Ant1_5795

11AC20MIMO_Ant1_5180

11AC20MIMO_Ant1_5200

11AC20MIMO_Ant1_5240

11AC20MIMO_Ant1_5260

11AC20MIMO_Ant1_5280

11AC20MIMO_Ant1_5320

11AC20MIMO_Ant1_5500

11AC20MIMO_Ant1_5580

11AC20MIMO_Ant1_5700

11AC20MIMO_Ant1_5745

11AC20MIMO_Ant1_5785

11AC20MIMO_Ant1_5825

11AC40MIMO_Ant1_5190

11AC40MIMO_Ant1_5230

11AC40MIMO_Ant1_5270

11AC40MIMO_Ant1_5310

11AC40MIMO_Ant1_5510

11AC40MIMO_Ant1_5550

11AC40MIMO_Ant1_5670

11AC40MIMO_Ant1_5755

11AC40MIMO_Ant1_5795

11AC80MIMO_Ant1_5210

11AC80MIMO_Ant1_5290

11AC80MIMO_Ant1_5530

11AC80MIMO_Ant1_5610

11AC80MIMO_Ant1_5775


Appendix A.6: Test Results of 6dB Bandwidth

TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A-SISO	Ant1	5745	17.200	5736.160	5753.360	0.5	PASS
		5785	13.760	5778.320	5792.080	0.5	PASS
		5825	13.160	5817.680	5830.840	0.5	PASS
11N20MIMO	Ant1	5745	15.360	5737.720	5753.080	0.5	PASS
		5785	16.880	5776.840	5793.720	0.5	PASS
		5825	17.560	5816.200	5833.760	0.5	PASS
11N40MIMO	Ant1	5755	31.360	5739.880	5771.240	0.5	PASS
		5795	33.840	5778.600	5812.440	0.5	PASS
11AC20MIMO	Ant1	5745	15.000	5737.480	5752.480	0.5	PASS
		5785	14.400	5778.080	5792.480	0.5	PASS
		5825	16.040	5816.800	5832.840	0.5	PASS
11AC40MIMO	Ant1	5755	32.560	5738.680	5771.240	0.5	PASS
		5795	31.280	5777.480	5808.760	0.5	PASS
11AC80MIMO	Ant1	5775	75.040	5737.400	5812.440	0.5	PASS

11A-SISO_Ant1_5745

11A-SISO_Ant1_5785

11A-SISO_Ant1_5825

11N20MIMO_Ant1_5745

11N20MIMO_Ant1_5785

11N20MIMO_Ant1_5825

11N40MIMO_Ant1_5755

11N40MIMO_Ant1_5795

11AC20MIMO_Ant1_5745


11AC20MIMO_Ant1_5785

11AC20MIMO_Ant1_5825

11AC40MIMO_Ant1_5755

11AC40MIMO_Ant1_5795


11AC80MIMO_Ant1_5775


Note: 1. Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and above 18GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported. 2. This testing was carried out on different modulations, but only the worst case was presented in this report. 3. We tested four adapter and recorded the wose case data in the report.

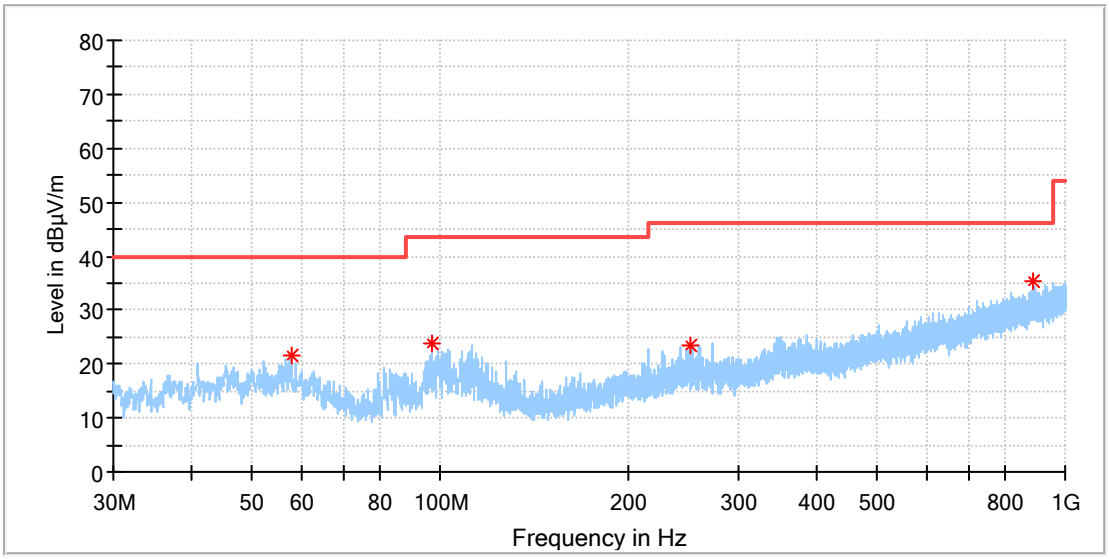
Appendix A.7: Test Results of Radiated Spurious Emissions

30MHz - 1GHz (Worst case)

Test Report

EUT Information

EUT Name:	RichMedia Box
Model:	ZXV10 B866V2-H
Test Mode:	WIFI 5G_11a_Ch36
Order No/Sample No:	168349697/A003194305-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
57.887500	21.53	40.00	18.47	100.0	H	348.0	-18.8
97.027000	23.98	43.50	19.52	100.0	H	219.0	-19.5
252.324000	23.45	46.00	22.55	100.0	H	315.0	-17.3
889.856500	35.17	46.00	10.83	100.0	H	340.0	-5.1

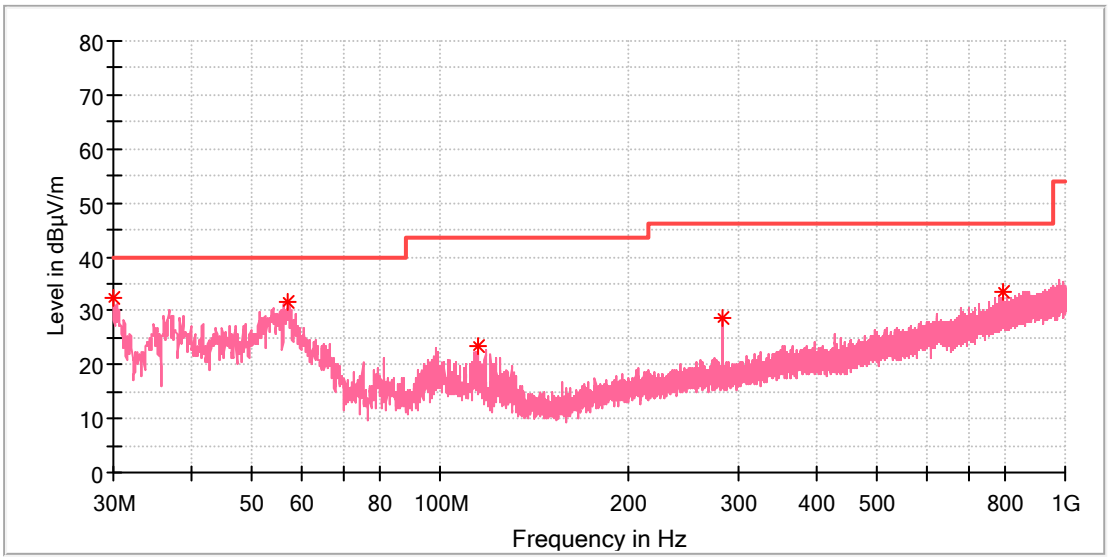
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Test Report

EUT Information

EUT Name:	RichMedia Box
Model:	ZXV10 B866V2-H
Test Mode:	WIFI 5G_11a_Ch36
Order No/Sample No:	168349697/A003194305-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
30.000000	32.29	40.00	7.71	100.0	V	0.0	-23.0
57.208500	31.65	40.00	8.35	100.0	V	96.0	-18.7
114.632500	23.32	43.50	20.18	100.0	V	244.0	-19.7
283.800500	28.72	46.00	17.28	100.0	V	223.0	-16.6
795.815000	33.54	46.00	12.46	100.0	V	111.0	-6.4

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

1GHz - 18GHz

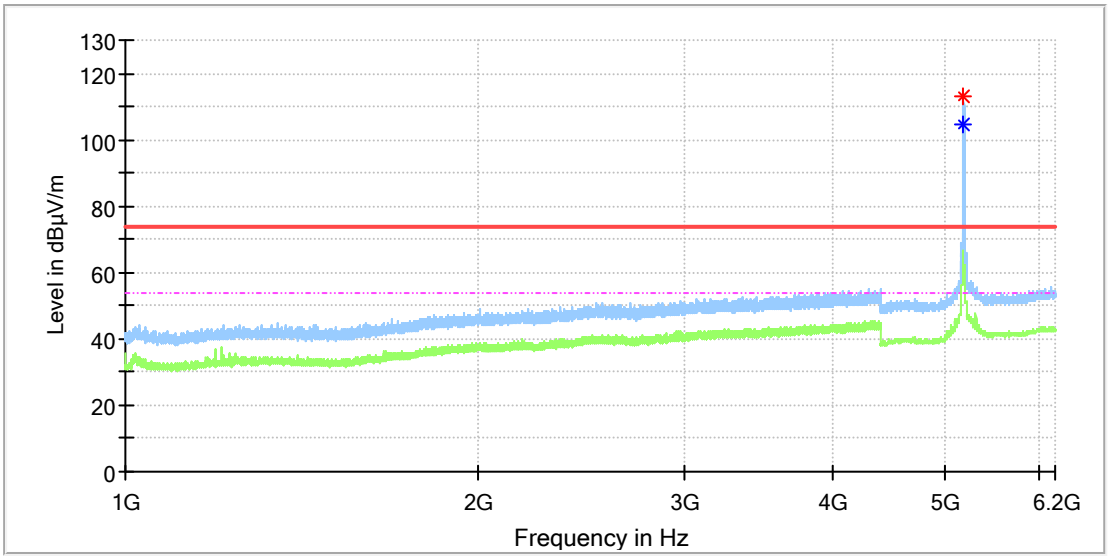
Note: The highest waveform in the figure is 5GHz Wi-Fi Fundamental.

U-NII-1 Band

Test Report

EUT Information

EUT Name:	RichMedia Box
Model:	ZXV10 B866V2-H
Test Mode:	WIFI 5G_11a_Ch36
Order No/Sample No:	168349697/A003194305-001
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5179.000000	---	104.48	---	---	100.0	H	189.0	12.6
5179.000000	113.00	---	---	---	100.0	H	189.0	12.6

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---