

Report No: CCISE181109004

FCC REPORT

(UNII)

Applicant: Libre Wireless Technologies Inc.

Address of Applicant: 2100 Geng Road, Suite 210 Palo Alto, CA 94303, USA

Equipment Under Test (EUT)

Product Name: WiFi Media Streaming Module

Model No.: LS9AD-AC11DBT

Trade mark: LIBRE

FCC ID: 2ADBM-LS9ADAC11DBT

Applicable standards: FCC CFR Title 47 Part 15 Subpart E Section 15.407

Date of sample receipt: 19 Nov., 2018

Date of Test: 20 Nov., to 05 Dec., 2018

Date of report issued: 06 Dec., 2018

Test Result: PASS*

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Bruce Zhang Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.





2 Version

Version No.	Date	Description		
		This report was amended on FCC ID:		
		2ADBM-LS9ADAC11DBT follow FCC		
		Class II Permissive Change. The		
		differences between them are below:		
00	06 Dec., 2018	Manufacturer, manufacturer address,		
		factory, factory address and add a rod		
		antenna.		
		Base on the differences description, the		
		Radiation method were re-tested.		

Tested by: Date: 06 Dec., 2018

Test Engineer

Reviewed by: 06 Dec., 2018

Project Engineer



3 Contents

			Page
1	CO	/ER PAGE	1
2	VER	RSION	2
3	CON	NTENTS	3
4	TES	T SUMMARY	4
5	GEN	NERAL INFORMATION	5
	5.1	CLIENT INFORMATION	5
	5.2		
	5.3		
	5.4		
	5.5	LABORATORY FACILITY	7
	5.6	LABORATORY LOCATION	8
	5.7	MEASUREMENT UNCERTAINTY	8
	5.8	TEST INSTRUMENTS LIST	8
6	TES	T RESULTS AND MEASUREMENT DATA	9
	6.1	ANTENNA REQUIREMENT	9
	6.2	CONDUCTED EMISSION	10
	6.3	CONDUCTED OUTPUT POWER	11
	6.4	OCCUPY BANDWIDTH	12
	6.5	POWER SPECTRAL DENSITY	13
	6.6	BAND EDGE	14
	6.7	Spurious Emission	39
	6.7.	1 Restricted Band	39
	6.7.2	2 Unwanted Emissions out of the Restricted Bands	40
	6.8	FREQUENCY STABILITY	63
7	TES	ST SETUP PHOTO	64
4 TEST SUMMARY		65	





4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203/15.407 (g)	Pass
AC Power Line Conducted Emission	15.207	Pass*
Conducted Peak Output Power	15.407 (a) (1) (iv) & (a) (3)	Pass*
26dB Occupied Bandwidth	15.407 (a) (5)	Pass*
6dB Emission Bandwidth	15.407(e)	Pass*
Power Spectral Density	15.407 (a) (1) (iv) &(a) (3)	Pass*
Band Edge	15.407(b)	Pass
Spurious Emission	15.205/15.209	Pass
Frequency Stability	15.407(g)	Pass*

Pass: The EUT complies with the essential requirements in the standard.

Pass*: Please refer to the FCC ID: 2ADBM-LS9ADAC11DBT



5 General Information

5.1 Client Information

Applicant:	Libre Wireless Technologies Inc.		
Address of Applicant:	2100 Geng Road, Suite 210 Palo Alto, CA 94303, USA		
Manufacturer:	Shenzhen Zowee Technology Co., Ltd.		
Address :	NO.5 Zowee technology building ,Science & Technology industrial park of privately owned enterprises, Pingshan, Xili, Nanshan district, Shenzhen.		
Factory	Hansong (Nanjing) Technology Ltd.		
Address :	8th Kangping Road, Jiangning Economy and Technology Development Zone, Nanjing, 211106, China.		

5.2 General Description of E.U.T.

Product Name:	WiFi Media Streaming Module		
Model No.:	LS9AD-AC11DBT		
Operation Frequency:	Band 1: 5150MHz-5250MHz Band 2: 5250MHz-5350MHz Band 3: 5470MHz-5725MHz		
Channel numbers:	Band 1: 802.11a/802.11n20: 4,802.11n40: 2,802.11ac:1 Band 2: 802.11a/802.11n20: 4,802.11n40: 2,802.11ac:1 Band 3: 802.11a/802.11n20: 11,802.11n40: 5,802.11ac:2		
Channel separation:	802.11a/802.11n20:20MHz, 802.11n40:40MHz, 802.11ac : 80MHz		
Modulation technology: (IEEE 802.11a)	BPSK, QPSK, 16-QAM, 64-QAM		
Modulation technology: (IEEE 802.11n)	BPSK, QPSK, 16-QAM, 64-QAM		
Modulation technology: (IEEE 802.11ac)	BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM		
Data speed(IEEE 802.11a)	6Mbps, 9Mbps,12Mbps,18Mbps,24Mbps,36Mbps,48Mbps,54Mbps		
Data speed (IEEE 802.11n20):	MCS0: 6.5Mbps,MCS1:13Mbps,MCS2:19.5Mbps,MCS3:26Mbps, MCS4:39Mbps,MCS5:52Mbps,MCS6:58.5Mbps,MCS7:65Mbps		
Data speed (IEEE 802.11n40):	MCS0:15Mbps,MCS1:30Mbps,MCS2:45Mbps,MCS3:60Mbps, MCS4:90Mbps,MCS5:120Mbps,MCS6:135Mbps,MCS7:150Mb ps		
Data speed (IEEE 802.11ac):	Up to 433.3Mbps		
Antenna Type:	Internal Antenna		
Antenna gain:	2.0 dBi		
Power supply:	DC 3.3V		





Operation Frequency each of channel

	Band 1					
802.11a	802.11a/802.11n20		802.11n40		.11ac	
Channel	Frequency	Channel	Frequency	Channel	Frequency	
36	5180MHz	38	5190MHz	42	5210MHz	
40	5200MHz	46	5230MHz			
44	5220MHz					
48	5240MHz					
		Band 2				
	/802.11n20	802.	11n40	802	.11ac	
Channel	Frequency	Channel	Frequency	Channel	Frequency	
52	5260MHz	54	5270MHz	58	5290MHz	
56	5280MHz	62	5310MHz			
60	5300MHz					
64	5320MHz					
		Band 3				
	/802.11n20	802.11n40		802	.11ac	
Channel	Frequency	Channel	Frequency	Channel	Frequency	
100	5500MHz	102	5510MHz	114	5530MHz	
104	5520MHz	110	5550MHz	114	5610MHz	
108	5540MHz	118	5590MHz			
112	5560MHz	126	5630MHz			
116	5580MHz	134	5670MHz			
120	5600MHz					
124	5620MHz					
128	5640MHz					
132	5660MHz					
136	5680MHz					
140	5700MHz					

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Band 1					
802.11a/802.11n20		802.11n40		802.11ac	
Channel	Frequency	Channel	Frequency	Channel	Frequency
Lowest channel	5180MHz	Lowest channel	5190MHz	Middle channel	5210MHz
Middle channel	5200MHz	Highest channel	5230MHz		
Highest channel	5240MHz				
		Band 2			
802.11a/80)2.11n20	802.111	n40	802.11ac	
Channel	Frequency	Channel	Frequency	Channel	Frequency
Lowest channel	5260MHz	Lowest channel	5270MHz	Middle channel	5290MHz
Middle channel	5280MHz	Highest channel	5310MHz		
Highest channel	5320MHz				
		Band 3			
802.11a/80)2.11n20	802.11n40		802.11ac	
Channel	Frequency	Channel	Frequency	Channel	Frequency
Lowest channel	5500MHz	Lowest channel	5510MHz	Lowest channel	5530MHz
Middle channel	5600MHz	Middle channel	5590MHz	Highest channel	5610MHz
Highest channel	5700MHz	Highest channel	5670MHz		

Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366 Page 6 of 65

Report No: CCISE181109004

5.3 Test environment and mode

Operating Environment:	Operating Environment:				
Temperature:	24.0 °C				
Humidity:	54 % RH				
Atmospheric Pressure:	1010 mbar				
Test mode:					
Continuously transmitting mode	Keep the EUT in 100% duty cycle transmitting with modulation.				
Remark:	The EUT have two chains, but cannot transmit Simultaneously, so all test items performed on each chain respectively.				

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.			
Mode	Data rate		
802.11a	6 Mbps		
802.11n20	6.5 Mbps		
802.11n40	13 Mbps		
802.11ac	29.3 Mbps		

Final Test Mode:

According to ANSI C63.4 standards, the test results are both the "worst case" and "worst setup" 6 Mbps for 802.11a, 6.5 Mbps for 802.11n20, 13 Mbps for 802.11n40 and 29.3 Mbps for 802.11ac. All test items for 802.11a, 802.11ac and 802.11n were performed with duty cycle above 98%, meet the requirements of KDB789033.

5.4 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC ID/DoC
DELL	PC	OPTIPLEX745	N/A	DoC
DELL	MONITOR	E178FPC	N/A	DoC
DELL	KEYBOARD	SK-8115	N/A	DoC
DELL	MOUSE	MOC5UO	N/A	DoC
FLY POWER	Switching Adapter	PS24A120K2000UD	N/A	N/A

5.5 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

●FCC- Registration No.: 817957

Shenzhen Zhongjian Nanfang Testing Co., Ltd. EMC Laboratory has been registered andfully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in out files. Registration 817957, February 27, 2012.

●IC - Registration No.: 10106A-1

The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

● CNAS - Registration No.: CNAS L6048

Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.

Shenzhen Zhongjian Nanfang Testing Co., Ltd.
No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,
Bao'an District, Shenzhen, Guangdong, China
Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366



Report No: CCISE181109004

5.6 Laboratory Location

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Address: No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,

Bao'an District, Shenzhen, Guangdong, China Tel: +86-755-23118282, Fax: +86-755-23116366

Email: info@ccis-cb.com, Website: http://www.ccis-cb.com

5.7 Measurement Uncertainty

Items	Expanded Uncertainty (Confidence of 95%)		
Conducted Emission (9kHz ~ 30MHz)	2.14 dB (k=2)		
Radiated Emission (9kHz ~ 30MHz)	4.24 dB (k=2)		
Radiated Emission (30MHz ~ 1000MHz)	4.35 dB (k=2)		
Radiated Emission (1GHz ~ 18GHz)	4.44 dB (k=2)		
Radiated Emission (18GHz ~ 40GHz)	4.56 dB (k=2)		

5.8 Test Instruments list

Radi	ated Emission:					
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
1	3m SAC	SAEMC	9(L)*6(W)* 6(H)	CCIS0001	07-22-2017	07-21-2020
2	BiConiLog Antenna	SCHWARZBECK	VULB9163	CCIS0005	03-16-2018	03-15-2019
3	Horn Antenna	SCHWARZBECK	BBHA9120D	CCIS0006	03-16-2018	03-15-2019
4	Pre-amplifier (10kHz-1.3GHz)	HP	8447D	CCIS0003	03-16-2018	03-15-2019
5	Pre-amplifier (1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	06-22-2017	06-21-2020
6	Pre-amplifier	Rohde & Schwarz	AFS33-18002	GTS218	11-21-2017	11-20-2018
	(18-26GHz)	Ronac a conwarz	650-30-8P-44	010210	11-21-2018	11-20-2019
7	Horn Antenna	ETS-LINDGREN	3160	GTS217	11-21-2018	11-20-2019
8	Spectrum analyzer 9k-30GHz	Rohde & Schwarz	FSP30	CCIS0023	03-07-2018	03-06-2019
9	EMI Test Receiver	Rohde & Schwarz	ESRP7	CCIS0167	03-07-2018	03-06-2019
10	Loop antenna	Laplace instrument	RF300	EMC0701	03-07-2018	03-06-2019
11	EMI Test Software	AUDIX	E3	N/A	N/A	N/A

Con	ducted Emission:					
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
1	Shielding Room	ZhongShuo Electron	11.0(L)x4.0(W)x3.0(H)	CCIS0061	03-07-2018	03-06-2019
2	EMI Test Receiver	Rohde & Schwarz	ESCI	CCIS0002	03-07-2018	03-06-2019
3	LISN	CHASE	MN2050D	CCIS0074	03-19-2018	03-18-2019
4	Coaxial Cable	CCIS	N/A	CCIS0086	07-21-2018	07-20-2019
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A



6 Test results and Measurement Data

6.1 Antenna requirement

Standard requirement:

FCC Part15 E Section 15.203 /407(a)

15.203 requirement:

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, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, § 15.213,§ 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the in staller shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

E.U.T Antenna:

The WiFi antenna is an internal antenna which cannot replace by end-user, the best case gain of the antenna is 2.0 dBi.







6.2 Conducted Emission

Test Requireme	nt: FC	C Part15 C Section 1	5.207						
Test Method:	AN	ISI C63.10: 2013							
Test Frequency	Range: 150	150kHz to 30MHz							
Class / Severity:	Cla	Class B							
Receiver setup:	RB	3W=9kHz, VBW=30kH	Z						
Limit:		Frequency range	Limit (dBuV)					
		(MHz)	Quasi-peak						
		0.15-0.5	66 to 56*	0.15-0.5					
		0.5-5	56	0.5-5					
		5-30	60	5-30					
	* D		arithm of the frequency.						
Test procedure	1. 2. 3.	line impedance s 500hm/50uH coupling The peripheral device a LISN that provide termination. (Please photographs). Both sides of A.C. light interference. In order positions of equipment	ulators are connected to the stabilization network (L. ang impedance for the mean ces are also connected to a 500hm/50uH coupling a refer to the block diagrate are checked for maximum error to find the maximum ement and all of the interface 263.10: 2013 on conducted	I.S.N.). It provides a suring equipment. the main power through impedance with 50ohm am of the test setup and um conducted ission, the relative cables must be changed					
Test setup:			Reference Plane						
		AUX Equipment Test table/Insula Remark: E.U.T. Equipment Under LISN: Line Impedence State Test table height=0.8m	E.U.T EMI Receive	ilter — AC power					
Test Instruments	s: Re	fer to section 5.8 for d	letails						
Test mode:	Re	fer to section 5.3 for d	letails.						
Test results:	Ple	ease refer to the FCC	ID: 2ADBM-LS9ADAC11D	BT					



6.3 Conducted Output Power

Test Requirement:	FCC Part15 E Section 15.407 (a) (1) (ii) & (a) (3)
Test Method:	ANSI C63.10: 2013, KDB789033
Limit:	24dBm
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Please refer to the FCC ID: 2ADBM-LS9ADAC11DBT





6.4 Occupy Bandwidth

Test Requirement:	FCC Part15 E Section 15.407 (a) (5) and Section 15.407 (e)						
Test Method:	ANSI C63.10:2013 and KDB 789033						
Limit:	N/A (26dB Emission Bandwidth and 99% Occupy Bandwidth)						
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane						
Test Instruments:	Refer to section 5.8 for details						
Test mode:	Refer to section 5.3 for details						
Test results:	Please refer to the FCC ID: 2ADBM-LS9ADAC11DBT						



6.5 Power Spectral Density

Test Requirement:	FCC Part15 E Section 15.407 (a) (1) (ii) &(a) (3)
Test Method:	ANSI C63.10:2013, KDB 789033
Limit:	11 dBm/MHz
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Please refer to the FCC ID: 2ADBM-LS9ADAC11DBT





6.6 Band Edge

0.0 Band Luge										
Test Requirement:	FCC Part15 E Section 15.407 (b)									
Test Method:	ANSI C63.10:2013, I	KDB 789033								
Receiver setup:	Detector	RBW	VBW	Remark						
	Quasi-peak	120kHz	300kHz	Quasi-peak Value						
	RMS	1MHz	3MHz	Average Value						
Limit:	Band		V/m @3m)	Remark						
	Band 1/2/3		.20	Peak Value						
	Remark:	54	.00	Average Value						
	E[dBµV/m] = EIRP[dBr	[dBm]=-27dBm.								
Test Procedure: Test setup:	 The EUT was per the ground at a to determine the second and a to determine the second and an area and an area and an area and an area and the second and the s	aced on the top 3 meter camber is position of the let 3 meters away was mounted or ight is varied from termine the maximum reading. It is a serviced emission, the antenna was rotatable was turnum reading. It is respectively of the EUT and then testing cold be reported. Cogin would be re-termine reamber.	of a rotating to The table was highest radiation of the interest of the intere	able 0.8 meters above s rotated 360 degrees on. rference-receiving variable-height antenna of four meters above of the field strength. The antenna are set to the from 1 meter to 4 egrees to 360 degrees ect Function and						
Test Instruments:	Refer to section 5.8 f	for details								
Test mode:	Refer to section 5.3									
Test results:	Passed	o. dotalio								
	. 2000									





Rod Antenna: TX1

Band 1

				802.11a				
Test ch	nannel		Lowest		Le	vel	F	Peak
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	54.15	36.23	10.96	40.06	61.28	68.20	-6.92	Horizontal
5150.00	53.95	36.23	10.96	40.06	61.08	68.20	-7.12	Vertical
				802.11a				
Test ch	nannel		Lowest		Le	vel	Αv	rerage
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	42.21	36.23	10.96	40.06	49.34	54.00	-4.66	Horizontal
5150.00	39.59	36.23	10.96	40.06	46.72	54.00	-7.28	Vertical
				802.11a				
Test cl	nannel	Highest			Le	vel	F	Peak
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	46.92	35.37	11.19	40.18	53.30	68.20	-14.90	Horizontal
5350.00	49.87	35.37	11.19	40.18	56.25	68.20	-11.95	Vertical
				802.11a				
Test cl	hannel		Highest		Le	vel	Av	rerage
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	41.15	35.37	11.19	40.18	47.53	54.00	-6.47	Horizontal
5350.00	39.52	35.37	11.19	40.18	45.90	54.00	-8.10	Vertical





	802.11n-HT20								
Test ch	nannel		Lowest		Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5150.00	55.51	36.23	10.96	40.06	62.64	68.20	-5.56	Horizontal	
5150.00	53.96	36.23	10.96	40.06	61.09	68.20	-7.11	Vertical	
			3	302.11n-HT20)				
Test cl	nannel		Lowest		Le	vel	A۷	verage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5150.00	41.21	36.23	10.96	40.06	48.34	54.00	-5.66	Horizontal	
5150.00	39.59	36.23	10.96	40.06	46.72	54.00	-7.28	Vertical	
			8	302.11n-HT20)				
Test cl	nannel	Highest			Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	48.62	35.37	11.19	40.18	55.00	68.20	-13.20	Horizontal	
5350.00	52.19	35.37	11.19	40.18	58.57	68.20	-9.63	Vertical	
			3	302.11n-HT20)				
Test cl	nannel		Highest		Le	vel	Av	verage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	40.21	35.37	11.19	40.18	46.59	54.00	-7.41	Horizontal	
5350.00	39.68	35.37	11.19	40.18	46.06	54.00	-7.94	Vertical	





	802.11n-HT40								
Test cl	nannel		Lowest		Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5150.00	55.62	36.23	10.96	40.06	62.75	68.20	-5.45	Horizontal	
5150.00	55.49	36.23	10.96	40.06	62.62	68.20	-5.58	Vertical	
			8	02.11n-HT40)				
Test cl	hannel		Lowest		Le	vel	Αv	rerage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5150.00	42.19	36.23	10.96	40.06	49.32	54.00	-4.68	Horizontal	
5150.00	41.53	36.23	10.96	40.06	48.66	54.00	-5.34	Vertical	
			8	02.11n-HT40)				
Test cl	hannel	Highest			Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	48.62	35.37	11.19	40.18	55.00	68.20	-13.20	Horizontal	
5350.00	51.29	35.37	11.19	40.18	57.67	68.20	-10.53	Vertical	
			8	02.11n-HT40)				
Test cl	hannel		Highest		Le	vel	A۷	rerage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	41.15	35.37	11.19	40.18	47.53	54.00	-6.47	Horizontal	
5350.00	40.21	35.37	11.19	40.18	46.59	54.00	-7.41	Vertical	





	802.11ac-HT80								
Test ch	nannel		Lowest		Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5150.00	55.62	36.23	10.96	40.06	62.75	68.20	-5.45	Horizontal	
5150.00	54.95	36.23	10.96	40.06	62.08	68.20	-6.12	Vertical	
			8	02.11ac-HT8	0				
Test cl	nannel		Lowest		Le	vel	Αν	rerage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5150.00	39.62	36.23	10.96	40.06	46.75	54.00	-7.25	Horizontal	
5150.00	40.02	36.23	10.96	40.06	47.15	54.00	-6.85	Vertical	
			8	02.11ac-HT8	0				
Test cl	nannel	Highest			Le	vel	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	47.62	35.37	11.19	40.18	54.00	68.20	-14.20	Horizontal	
5350.00	49.86	35.37	11.19	40.18	56.24	68.20	-11.96	Vertical	
			8	02.11ac-HT8	0				
Test cl	nannel		Highest		Le	vel	Αν	rerage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	39.62	35.37	11.19	40.18	46.00	54.00	-8.00	Horizontal	
5350.00	40.55	35.37	11.19	40.18	46.93	54.00	-7.07	Vertical	





Band 2

002 11c									
802.11a									
Test cl			Lowest		Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5250.00	56.69	36.14	11.12	40.11	63.84	68.20	-4.36	Horizontal	
5250.00	56.31	36.14	11.12	40.11	63.46	68.20	-4.74	Vertical	
				802.11a					
Test cl	nannel		Lowest		Le	vel	Av	rerage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5250.00	39.62	36.14	11.12	40.11	46.77	54.00	-7.23	Horizontal	
5250.00	40.15	36.14	11.12	40.11	47.30	54.00	-6.70	Vertical	
				802.11a					
Test cl	nannel	Highest			Level		F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	49.62	35.37	11.19	40.18	56.00	68.20	-12.20	Horizontal	
5350.00	50.27	35.37	11.19	40.18	56.65	68.20	-11.55	Vertical	
				802.11a					
Test cl	nannel		Highest		Le	vel	Av	rerage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	41.15	35.37	11.19	40.18	47.53	54.00	-6.47	Horizontal	
5350.00	40.69	35.37	11.19	40.18	47.07	54.00	-6.93	Vertical	





	802.11n-HT20									
Test ch	nannel		Lowest		Le	vel	F	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5250.00	56.62	36.14	11.12	40.11	63.77	68.20	-4.43	Horizontal		
5250.00	53.44	36.14	11.12	40.11	60.59	68.20	-7.61	Vertical		
			8	02.11n-HT20)					
Test cl	hannel		Lowest		Le	vel	A۷	verage		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5250.00	41.01	36.14	11.12	40.11	48.16	54.00	-5.84	Horizontal		
5250.00	42.23	36.14	11.12	40.11	49.38	54.00	-4.62	Vertical		
			8	02.11n-HT20)					
Test cl	hannel	Highest			Le	vel	F	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5350.00	59.62	35.37	11.19	40.18	66.00	68.20	-2.20	Horizontal		
5350.00	51.14	35.37	11.19	40.18	57.52	68.20	-10.68	Vertical		
			8	02.11n-HT20)					
Test cl	hannel		Highest		Le	vel	Αν	verage		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5350.00	41.00	35.37	11.19	40.18	47.38	54.00	-6.62	Horizontal		
5350.00	39.62	35.37	11.19	40.18	46.00	54.00	-8.00	Vertical		





			8	02.11n-HT40)			
Test cl	nannel		Lowest		Le	vel	F	Peak
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5250.00	56.62	36.14	11.12	40.11	63.77	68.20	-4.43	Horizontal
5250.00	57.19	36.14	11.12	40.11	64.34	68.20	-3.86	Vertical
802.11n-HT40								
Test cl	hannel		Lowest		Le	vel	Av	erage
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5250.00	39.62	36.14	11.12	40.11	46.77	54.00	-7.23	Horizontal
5250.00	40.25	36.14	11.12	40.11	47.40	54.00	-6.60	Vertical
			8	02.11n-HT40)			
Test cl	hannel		Highest		Le	vel	F	Peak
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	49.62	35.37	11.19	40.18	56.00	68.20	-12.20	Horizontal
5350.00	50.02	35.37	11.19	40.18	56.40	68.20	-11.80	Vertical
			8	02.11n-HT40)			
Test cl	hannel		Highest		Le	vel	A۷	rerage
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	40.02	35.37	11.19	40.18	46.40	54.00	-7.60	Horizontal
5350.00	39.67	35.37	11.19	40.18	46.05	54.00	-7.95	Vertical





	802.11ac-HT80									
Test cl	nannel		Lowest		Le	vel	F	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5250.00	56.62	36.14	11.12	40.11	63.77	68.20	-4.43	Horizontal		
5250.00	55.19	36.14	11.12	40.11	62.34	68.20	-5.86	Vertical		
802.11ac-HT80										
Test cl	nannel	Lowest		Le	vel	Αν	rerage			
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5250.00	40.13	36.14	11.12	40.11	47.28	54.00	-6.72	Horizontal		
5250.00	39.62	36.14	11.12	40.11	46.77	54.00	-7.23	Vertical		
			8	02.11ac-HT8	0					
Test cl	hannel		Highest		Le	vel	F	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5350.00	49.62	35.37	11.19	40.18	56.00	68.20	-12.20	Horizontal		
5350.00	50.01	35.37	11.19	40.18	56.39	68.20	-11.81	Vertical		
			8	02.11ac-HT8	0					
Test cl	nannel		Highest		Le	vel	A۷	rerage		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5350.00	39.62	35.37	11.19	40.18	46.00	54.00	-8.00	Horizontal		
5350.00	40.02	35.37	11.19	40.18	46.40	54.00	-7.60	Vertical		





Band 3

	802.11a									
Test cl	nannel		Lowest		Le	vel	F	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5470.00	49.62	34.58	11.58	40.41	55.37	78.20	-22.83	Horizontal		
5470.00	48.52	34.58	11.58	40.41	54.27	78.20	-23.93	Vertical		
802.11a										
Test cl	nannel		Lowest		Le	vel	Av	rerage		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5470.00	40.21	34.58	11.58	40.41	45.96	54.00	-8.04	Horizontal		
5470.00	39.98	34.58	11.58	40.41	45.73	54.00	-8.27	Vertical		
802.11a										
Test cl	nannel		Highest		Le	vel	F	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5725.00	46.69	34.61	11.68	40.63	52.35	78.20	-25.85	Horizontal		
5725.00	47.81	34.61	11.68	40.63	53.47	78.20	-24.73	Vertical		
				802.11a						
Test cl	hannel		Highest		Le	vel	Av	rerage		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5725.00	40.19	34.61	11.68	40.63	45.85	54.00	-8.15	Horizontal		
5725.00	41.62	34.61	11.68	40.63	47.28	54.00	-6.72	Vertical		





802.11n-HT20									
Test cl	nannel		Lowest		Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5470.00	46.62	34.58	11.58	40.41	52.37	78.20	-25.83	Horizontal	
5470.00	47.81	34.58	11.58	40.41	53.56	78.20	-24.64	Vertical	
802.11n-HT20									
Test cl	nannel		Lowest		Le	vel	Av	rerage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5470.00	41.16	34.58	11.58	40.41	46.91	54.00	-7.09	Horizontal	
5470.00	39.98	34.58	11.58	40.41	45.73	54.00	-8.27	Vertical	
			3	02.11n-HT20)				
Test cl	hannel		Highest		Le	vel	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5725.00	46.62	34.61	11.68	40.63	52.28	78.20	-25.92	Horizontal	
5725.00	47.51	34.61	11.68	40.63	53.17	78.20	-25.03	Vertical	
			8	02.11n-HT20)				
Test cl	nannel		Highest		Le	vel	Av	rerage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5725.00	41.95	34.61	11.68	40.63	47.61	54.00	-6.39	Horizontal	
5725.00	42.21	34.61	11.68	40.63	47.87	54.00	-6.13	Vertical	





802.11n-HT40									
Test cl	nannel		Lowest		Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5470.00	47.85	34.58	11.58	40.41	53.60	78.20	-24.60	Horizontal	
5470.00	46.69	34.58	11.58	40.41	52.44	78.20	-25.76	Vertical	
802.11n-HT40									
Test cl	nannel		Lowest		Le	vel	A۷	verage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5470.00	39.62	34.58	11.58	40.41	45.37	54.00	-8.63	Horizontal	
5470.00	38.51	34.58	11.58	40.41	44.26	54.00	-9.74	Vertical	
			3	02.11n-HT40)				
Test cl	hannel		Highest		Le	vel	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5725.00	49.62	34.61	11.68	40.63	55.28	78.20	-22.92	Horizontal	
5725.00	46.57	34.61	11.68	40.63	52.23	78.20	-25.97	Vertical	
			8	02.11n-HT40)				
Test cl	nannel		Highest		Le	vel	Αν	verage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5725.00	41.10	34.61	11.68	40.63	46.76	54.00	-7.24	Horizontal	
5725.00	38.57	34.61	11.68	40.63	44.23	54.00	-9.77	Vertical	





	802.11ac-HT80									
Test cl	hannel		Lowest		Le	vel	F	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5470.00	46.62	34.58	11.58	40.41	52.37	78.20	-25.83	Horizontal		
5470.00	47.81	34.58	11.58	40.41	53.56	78.20	-24.64	Vertical		
802.11ac-HT80										
Test cl	hannel		Lowest		Le	vel	Av	rerage		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5470.00	39.65	34.58	11.58	40.41	45.40	54.00	-8.60	Horizontal		
5470.00	38.21	34.58	11.58	40.41	43.96	54.00	-10.04	Vertical		
	802.11ac-HT80									
Test cl	hannel		Highest		Le	vel	F	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5725.00	46.62	34.61	11.68	40.63	52.28	78.20	-25.92	Horizontal		
5725.00	47.13	34.61	11.68	40.63	52.79	78.20	-25.41	Vertical		
			8	02.11ac-HT8	0					
Test cl	hannel		Highest		Le	vel	Αv	rerage		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5725.00	39.62	34.61	11.68	40.63	45.28	54.00	-8.72	Horizontal		
5725.00	40.02	34.61	11.68	40.63	45.68	54.00	-8.32	Vertical		





Rod Antenna: TX2 Band 1

Band 1									
				802.11a					
Test cl	nannel		Lowest		Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5150.00	54.15	36.23	10.96	40.06	61.28	68.20	-6.92	Horizontal	
5150.00	55.26	36.23	10.96	40.06	62.39	68.20	-5.81	Vertical	
802.11a									
Test cl	nannel		Lowest		Le	Limit Over		rerage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5150.00	31.20	36.23	10.96	40.06	38.33	54.00	-15.67	Horizontal	
5150.00	30.59	36.23	10.96	40.06	37.72	54.00	-16.28	Vertical	
				802.11a					
Test cl	nannel		Highest		Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	45.26	35.37	11.19	40.18	51.64	68.20	-16.56	Horizontal	
5350.00	49.62	35.37	11.19	40.18	56.00	68.20	-12.20	Vertical	
				802.11a					
Test cl	nannel		Highest		Le	vel	Av	rerage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	36.32	35.37	11.19	40.18	42.70	54.00	-11.30	Horizontal	
5350.00	39.84	35.37	11.19	40.18	46.22	54.00	-7.78	Vertical	





802.11n-HT20									
Test cl	nannel		Lowest		Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5150.00	55.23	36.23	10.96	40.06	62.36	68.20	-5.84	Horizontal	
5150.00	54.62	36.23	10.96	40.06	61.75	68.20	-6.45	Vertical	
802.11n-HT20									
Test cl	nannel	Lowest		Le	vel	A۷	rerage		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5150.00	33.23	36.23	10.96	40.06	40.36	54.00	-13.64	Horizontal	
5150.00	32.15	36.23	10.96	40.06	39.28	54.00	-14.72	Vertical	
			3	302.11n-HT20)				
Test cl	nannel		Highest		Le	vel	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	49.62	35.37	11.19	40.18	56.00	68.20	-12.20	Horizontal	
5350.00	51.24	35.37	11.19	40.18	57.62	68.20	-10.58	Vertical	
			8	302.11n-HT20)				
Test cl	nannel		Highest		Le	vel	Αν	rerage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	36.26	35.37	11.19	40.18	42.64	54.00	-11.36	Horizontal	
5350.00	38.59	35.37	11.19	40.18	44.97	54.00	-9.03	Vertical	





802.11n-HT40									
Test ch	nannel		Lowest		Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5150.00	56.26	36.23	10.96	40.06	63.39	68.20	-4.81	Horizontal	
5150.00	55.15	36.23	10.96	40.06	62.28	68.20	-5.92	Vertical	
802.11n-HT40									
Test cl	hannel		Lowest		Le	vel	A۷	verage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5150.00	31.45	36.23	10.96	40.06	38.58	54.00	-15.42	Horizontal	
5150.00	32.26	36.23	10.96	40.06	39.39	54.00	-14.61	Vertical	
			8	302.11n-HT40)				
Test cl	hannel		Highest		Le	vel			
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	47.95	35.37	11.19	40.18	54.33	68.20	-13.87	Horizontal	
5350.00	49.51	35.37	11.19	40.18	55.89	68.20	-12.31	Vertical	
			3	302.11n-HT40)				
Test cl	hannel		Highest		Le	vel	Av	verage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	36.32	35.37	11.19	40.18	42.70	54.00	-11.30	Horizontal	
5350.00	37.98	35.37	11.19	40.18	44.36	54.00	-9.64	Vertical	





	802.11ac-HT80								
Test ch	nannel		Lowest		Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5150.00	55.95	36.23	10.96	40.06	63.08	68.20	-5.12	Horizontal	
5150.00	54.23	36.23	10.96	40.06	61.36	68.20	-6.84	Vertical	
802.11ac-HT80									
Test cl	nannel		Lowest		Le	vel	Av	erage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5150.00	32.16	36.23	10.96	40.06	39.29	54.00	-14.71	Horizontal	
5150.00	33.42	36.23	10.96	40.06	40.55	54.00	-13.45	Vertical	
	802.11ac-HT80								
Test cl	nannel		Highest		Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	47.95	35.37	11.19	40.18	54.33	68.20	-13.87	Horizontal	
5350.00	48.62	35.37	11.19	40.18	55.00	68.20	-13.20	Vertical	
			8	02.11ac-HT8	0				
Test cl	nannel		Highest		Le	vel	Αv	rerage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	35.26	35.37	11.19	40.18	41.64	54.00	-12.36	Horizontal	
5350.00	34.55	35.37	11.19	40.18	40.93	54.00	-13.07	Vertical	





Band 2:

802.11a									
Test cl	nannel		Lowest		Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5250.00	56.32	36.14	11.12	40.11	63.47	68.20	-4.73	Horizontal	
5250.00	54.15	36.14	11.12	40.11	61.30	68.20	-6.90	Vertical	
802.11a									
Test ch	nannel		Lowest		Le	vel	Av	rerage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5250.00	32.59	36.14	11.12	40.11	39.74	54.00	-14.26	Horizontal	
5250.00	32.66	36.14	11.12	40.11	39.81	54.00	-14.19	Vertical	
802.11a									
Test cl	nannel		Highest		Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	49.62	35.37	11.19	40.18	56.00	68.20	-12.20	Horizontal	
5350.00	52.12	35.37	11.19	40.18	58.50	68.20	-9.70	Vertical	
				802.11a					
Test cl	nannel		Highest		Le	vel	Av	erage	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	38.62	35.37	11.19	40.18	45.00	54.00	-9.00	Horizontal	
5350.00	39.74	35.37	11.19	40.18	46.12	54.00	-7.88	Vertical	





802.11n-HT20								
Test cl	nannel		Lowest		Le	vel	F	Peak
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5250.00	56.32	36.14	11.12	40.11	63.47	68.20	-4.73	Horizontal
5250.00	55.49	36.14	11.12	40.11	62.64	68.20	-5.56	Vertical
802.11n-HT20								
Test cl	hannel		Lowest		Le	vel	A۷	verage
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5250.00	33.26	36.14	11.12	40.11	40.41	54.00	-13.59	Horizontal
5250.00	32.54	36.14	11.12	40.11	39.69	54.00	-14.31	Vertical
			8	02.11n-HT20)			
Test cl	hannel		Highest		Le	vel	F	Peak
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	49.62	35.37	11.19	40.18	56.00	68.20	-12.20	Horizontal
5350.00	48.15	35.37	11.19	40.18	54.53	68.20	-13.67	Vertical
			8	02.11n-HT20)			
Test cl	hannel		Highest		Le	vel	Αν	verage
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	39.62	35.37	11.19	40.18	46.00	54.00	-8.00	Horizontal
5350.00	40.01	35.37	11.19	40.18	46.39	54.00	-7.61	Vertical





802.11n-HT40										
Test channel		Lowest			Level		Peak			
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5250.00	56.32	36.14	11.12	40.11	63.47	68.20	-4.73	Horizontal		
5250.00	54.19	36.14	11.12	40.11	61.34	68.20	-6.86	Vertical		
802.11n-HT40										
Test cl	hannel	Lowest			Level		Average			
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5250.00	33.56	36.14	11.12	40.11	40.71	54.00	-13.29	Horizontal		
5250.00	32.25	36.14	11.12	40.11	39.40	54.00	-14.60	Vertical		
	802.11n-HT40									
Test channel		Highest			Level		Peak			
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5350.00	49.62	35.37	11.19	40.18	56.00	68.20	-12.20	Horizontal		
5350.00	48.51	35.37	11.19	40.18	54.89	68.20	-13.31	Vertical		
	802.11n-HT40									
Test channel		Highest			Level		Average			
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5350.00	36.32	35.37	11.19	40.18	42.70	54.00	-11.30	Horizontal		
5350.00	35.15	35.37	11.19	40.18	41.53	54.00	-12.47	Vertical		





802.11ac-HT80									
Test channel		Lowest			Level		Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5250.00	56.21	36.14	11.12	40.11	63.36	68.20	-4.84	Horizontal	
5250.00	55.89	36.14	11.12	40.11	63.04	68.20	-5.16	Vertical	
802.11ac-HT80									
Test channel		Lowest			Level		Average		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5250.00	32.15	36.14	11.12	40.11	39.30	54.00	-14.70	Horizontal	
5250.00	31.49	36.14	11.12	40.11	38.64	54.00	-15.36	Vertical	
			8	02.11ac-HT8	0				
Test cl	hannel	Highest			Level		Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	49.62	35.37	11.19	40.18	56.00	68.20	-12.20	Horizontal	
5350.00	48.55	35.37	11.19	40.18	54.93	68.20	-13.27	Vertical	
			8	02.11ac-HT8	0				
Test channel		Highest			Level		Average		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	39.62	35.37	11.19	40.18	46.00	54.00	-8.00	Horizontal	
5350.00	38.54	35.37	11.19	40.18	44.92	54.00	-9.08	Vertical	





Band 3:

Danu J.								
802.11a								
Test channel		Lowest			Level		Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5470.00	47.52	34.58	11.58	40.41	53.27	78.20	-24.93	Horizontal
5470.00	46.36	34.58	11.58	40.41	52.11	78.20	-26.09	Vertical
802.11a								
Test cl	nannel	Lowest			Level		Average	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5470.00	40.12	34.58	11.58	40.41	45.87	54.00	-8.13	Horizontal
5470.00	39.62	34.58	11.58	40.41	45.37	54.00	-8.63	Vertical
				802.11a				
Test channel		Highest			Level		Peak	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725.00	46.62	34.61	11.68	40.63	52.28	78.20	-25.92	Horizontal
5725.00	47.52	34.61	11.68	40.63	53.18	78.20	-25.02	Vertical
				802.11a				
Test channel		Highest			Level		Average	
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725.00	40.15	34.61	11.68	40.63	45.81	54.00	-8.19	Horizontal
5725.00	39.56	34.61	11.68	40.63	45.22	54.00	-8.78	Vertical





802.11n-HT20										
Test channel		Lowest			Level		Peak			
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5470.00	47.52	34.58	11.58	40.41	53.27	78.20	-24.93	Horizontal		
5470.00	46.22	34.58	11.58	40.41	51.97	78.20	-26.23	Vertical		
802.11n-HT20										
Test cl	hannel	Lowest			Level		Average			
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5470.00	40.03	34.58	11.58	40.41	45.78	54.00	-8.22	Horizontal		
5470.00	39.61	34.58	11.58	40.41	45.36	54.00	-8.64	Vertical		
	802.11n-HT20									
Test channel		Highest			Level		Peak			
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5725.00	46.25	34.61	11.68	40.63	51.91	78.20	-26.29	Horizontal		
5725.00	48.15	34.61	11.68	40.63	53.81	78.20	-24.39	Vertical		
802.11n-HT20										
Test channel		Highest			Level		Average			
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5725.00	37.15	34.61	11.68	40.63	42.81	54.00	-11.19	Horizontal		
5725.00	39.54	34.61	11.68	40.63	45.20	54.00	-8.80	Vertical		





			8	302.11n-HT40)					
Test ch	nannel		Lowest		Le	vel	F	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5470.00	46.62	34.58	11.58	40.41	52.37	78.20	-25.83	Horizontal		
5470.00	47.81	34.58	11.58	40.41	53.56	78.20	-24.64	Vertical		
	802.11n-HT40									
Test cl	nannel		Lowest		Le	vel	Av	verage		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5470.00	39.62	34.58	11.58	40.41	45.37	54.00	-8.63	Horizontal		
5470.00	38.55	34.58	11.58	40.41	44.30	54.00	-9.70	Vertical		
			8	302.11n-HT40)					
Test cl	nannel		Highest		Le	vel	F	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5725.00	47.15	34.61	11.68	40.63	52.81	78.20	-25.39	Horizontal		
5725.00	49.89	34.61	11.68	40.63	55.55	78.20	-22.65	Vertical		
			8	302.11n-HT40)					
Test cl	hannel		Highest		Le	vel	A۷	verage		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5725.00	40.15	34.61	11.68	40.63	45.81	54.00	-8.19	Horizontal		
5725.00	39.65	34.61	11.68	40.63	45.31	54.00	-8.69	Vertical		





			8	02.11ac-HT8	0					
Test cl	hannel		Lowest		Le	vel	F	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5470.00	46.95	34.58	11.58	40.41	52.70	78.20	-25.50	Horizontal		
5470.00	45.52	34.58	11.58	40.41	51.27	78.20	-26.93	Vertical		
	802.11ac-HT80									
Test cl	hannel		Lowest		Le	vel	Av	erage		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5470.00	39.62	34.58	11.58	40.41	45.37	54.00	-8.63	Horizontal		
5470.00	38.41	34.58	11.58	40.41	44.16	54.00	-9.84	Vertical		
	802.11ac-HT80									
Test cl	hannel		Highest		Level		F	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5725.00	46.25	34.61	11.68	40.63	51.91	78.20	-26.29	Horizontal		
5725.00	49.51	34.61	11.68	40.63	55.17	78.20	-23.03	Vertical		
			8	02.11ac-HT8	0					
Test cl	hannel		Highest		Le	vel	Αv	rerage		
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5725.00	33.26	34.61	11.68	40.63	38.92	54.00	-15.08	Horizontal		
5725.00	35.10	34.61	11.68	40.63	40.76	54.00	-13.24	Vertical		



6.7 Spurious Emission

6.7.1 Restricted Band

<u>6.7.1</u>	7.1 Restricted Band									
	Test Requirement:	FCC Part15 E S	FCC Part15 E Section 15.407(b)							
	Test Method:	ANSI C63.10: 20)13							
	Test Frequency Range:	4.5 GHz to 5.15	GHz and	5.35 b	GHz to 5.46G	Ηz				
	Test site:	Measurement Di	stance:	3m						
	Receiver setup:	Frequency	Detec	ctor	RBW		3W	Remark		
		Above 1GHz	Pea		1MHz		Hz	Peak Value		
	Limit	Frequency	RM ,		1MHz t (dBuV/m @:		Hz	Average Value Remark		
	Limit:	-		LIIIII	74.00	5111)		Peak Value		
		Above 1GH			54.00			verage Value		
	Test Procedure:	the ground a to determine 2. The EUT was antenna, who tower. 3. The antennathe ground a Both horizon make the m 4. For each such case and the meters and to find the m 5. The test-reconspecified Base of the EUT whave 10dB in the model of the EUT whave 10dB in the model in the model in the EUT whave 10dB in the EUT was antennal to the EUT whave 10dB in the EUT was antennal to th	at a 3 me e the pose as set 3 nich was a height to deterrental and easurent the rota and the rota maximum beiver sy and width ion level ecified, the would be margin v	eter casition of meters mount is varioned in the meters of the meters of the menters of the ment	amber. The taper the highest is away from the top the don't he top ed from one remaximum valued from the EUT is a was turned from the ed f	able war radiat he interpreted in the interpreted i	as rotation. erferent variable to four of the factoring the front degree tect Fuller was 1 and the emissione units one units one units front degree tect fuller was 1 and the emissione units front degree tect fuller was 1 and 1 a	r meters above field strength. enna are set to ed to its worst m 1 meter to 4 s to 360 degrees		
	Test setup:		AE (Turn	EUT table)	Hom Ar Ground Reference Plane Receiver Anguli	Antena Antena Anterior	enna Tower			
	Test Instruments:	Refer to section 5.8 for details								
	Test mode:	Refer to section 5.3 for details								
	Test results:	Please refer to the	ne FCC	ID: 2A	DBM-LS9AD	AC11E	DBT			



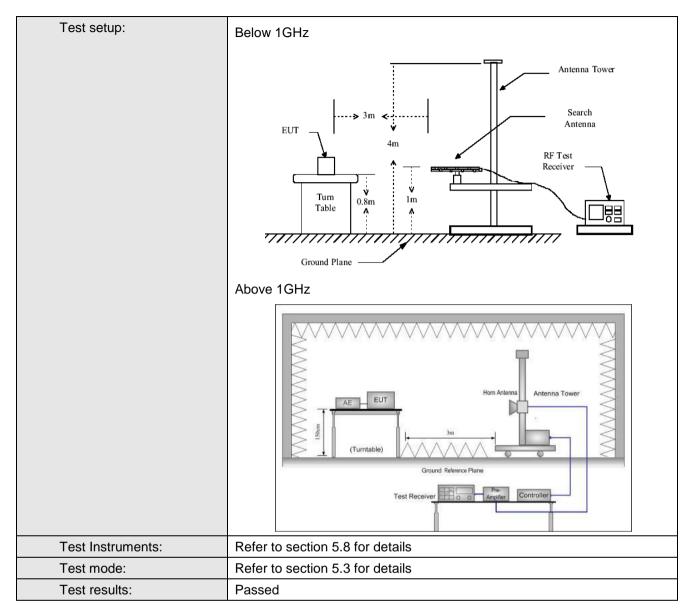


6.7.2 Unwanted Emissions out of the Restricted Bands

Test Requirement:	FCC Part15 C S	FCC Part15 C Section 15.209 and 15.205							
Test Method:	ANSI C63.10:20	ANSI C63.10:2013							
Test Frequency Range:	30MHz to 40GH	Z							
Test site:	Measurement Di	stance: 3m							
Receiver setup:	Frequency	Detector	RBW	VBW	V	Remark			
·	30MHz-1GHz	Quasi-peak	100kHz	300kH	Ηz	Quasi-peak Value			
	Above 1GHz	Peak	1MHz	3MHz		Peak Value			
		RMS	1MHz	3MHz					
Limit:	Frequency			Remark					
	30MHz-88MHz 40.0 Quasi-peak V				•				
	88MHz-216W		43.5			uasi-peak Value			
	216MHz-960N		46.0			uasi-peak Value			
	960MHz-1GI	Hz	54.0		Q	uasi-peak Value			
	Above 1GH	lz 🖳	68.20			Peak Value			
			54.00			Average Value			
Test Procedure:	Remark: Above 1GHz limit: E[dBµV/m] = EIRP[dBm] + 95.2=68.2 dBuV/m,for EIPR[dBm]=-27dBm. 1. The EUT was placed on the top of a rotating table 0.8m(below 1GHz)/1.5m(above 1GHz) above the ground at a 3 meter camber. The								
	radiation. 2. The EUT wa antenna, wh tower. 3. The antenna ground to de horizontal a measuremed. 4. For each su and then the and the rota maximum results. 5. The test-recursive Specified Baselimit specified baselimit specified the EUT wo 10dB marginal services.	as set 3 meters nich was mount a height is varietermine the modernt. Is pected emisse antenna was a table was turned and width with I ion level of the ed, then testing all de reported	s away from the ted on the top ed from one maximum value arizations of the tion, the EUT valued to heigh ned from 0 degrees set to Peal Maximum Hold EUT in peak recould be stop d. Otherwise the tested one by the tested one by the tested one by the tested one by the set one by the tested one by the t	e interfer of a varium eter to for the fire antennates from prees to 3 k Detect I Mode. In Mode was and and e emissione usin	erence iable- four mield sona are 1 me 360 constitutions as 10 distinctions ag per	neters above the trength. Both e set to make the to its worst case eter to 4 meters degrees to find the ction and dB lower than the peak values of that did not have ak, quasi-peak or			









Report No: CCISE181109004

Below 1GHz

Please refer to the FCC ID: 2ADBM-LS9ADAC11DBT



Report No: CCISE181109004

Above 1GHz:

Rod Ant: TX1 Band 1

Band 1									
		802.1	1a mode Lov	west chann	el (Peak Va	lue)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10360.00	42.26	40.10	15.37	41.34	56.39	68.20	-11.81	Vertical	
10360.00	43.95	40.10	15.37	41.34	58.08	68.20	-10.12	Horizontal	
		802.11a	a mode Lowe	est channe	(Average V	'alue)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10360.00	32.26	40.10	15.37	41.34	46.39	54.00	-7.61	Vertical	
10360.00	33.15	40.10	15.37	41.34	47.28	54.00	-6.72	Horizontal	
		802.1	1a mode Mid	ddle chann	el (Peak Val	ue)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10400.00	42.26	40.00	15.42	41.27	56.41	68.20	-11.79	Vertical	
10400.00	43.59	40.00	15.42	41.27	57.74	68.20	-10.46	Horizontal	
802.11a mode Middle channel (Average Value)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10400.00	33.62	40.00	15.42	41.27	47.77	54.00	-6.23	Vertical	
10400.00	33.44	40.00	15.42	41.27	47.59	54.00	-6.41	Horizontal	
		802.1	1a mode Hig	hest chanr	el (Peak Va	lue)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10480.00	42.21	39.70	15.55	41.10	56.36	68.20	-11.84	Vertical	
10480.00	43.69	39.70	15.55	41.10	57.84	68.20	-10.36	Horizontal	
		802.11a	mode Highe	est channe	I (Average V	/alue)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10480.00	32.15	39.70	15.55	41.10	46.30	54.00	-7.70	Vertical	
10480.00	33.02	39.70	15.55	41.10	47.17	54.00	-6.83	Horizontal	

Remark:

¹ Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

² The emission levels of other frequencies are very lower than the limit and not show in test report.





		802.11	n20 mode Lo	owest char	nel (Peak V	alue)				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10360.00	42.59	40.10	15.37	41.34	56.72	68.20	-11.48	Vertical		
10360.00	41.12	40.10	15.37	41.34	55.25	68.20	-12.95	Horizontal		
		802.11n2	20 mode Low	est chann	el (Average	Value)				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10360.00	33.32	40.10	15.37	41.34	47.45	54.00	-6.55	Vertical		
10360.00	32.26	40.10	15.37	41.34	46.39	54.00	-7.61	Horizontal		
	802.11n20 mode Middle channel (Peak Value)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10400.00	43.26	40.00	15.42	41.27	57.41	68.20	-10.79	Vertical		
10400.00	42.51	40.00	15.42	41.27	56.66	68.20	-11.54	Horizontal		
802.11n20 mode Middle channel (Average Value)										
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10400.00	31.26	40.00	15.42	41.27	45.41	54.00	-8.59	Vertical		
10400.00	32.95	40.00	15.42	41.27	47.10	54.00	-6.90	Horizontal		
		802.11r	20 mode Hi	ghest chan	nel (Peak V	alue)				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10480.00	43.25	39.70	15.55	41.10	57.40	68.20	-10.80	Vertical		
10480.00	42.16	39.70	15.55	41.10	56.31	68.20	-11.89	Horizontal		
		802.11n2	0 mode High	nest chann	el (Average	Value)				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10480.00	33.26	39.70	15.55	41.10	47.41	54.00	-6.59	Vertical		
10480.00	32.59	39.70	15.55	41.10	46.74	54.00	-7.26	Horizontal		

¹ Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

² The emission levels of other frequencies are very lower than the limit and not show in test report





	802.11n40 mode Lowest channel (Peak Value)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10380.00	42.26	40.00	15.42	41.31	56.37	68.20	-11.83	Vertical		
10380.00	41.19	40.00	15.42	41.31	55.30	68.20	-12.90	Horizontal		
	802.11n40 mode Lowest channel (Average Value)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10380.00	32.20	40.00	15.42	41.31	46.31	54.00	-7.69	Vertical		
10380.00	31.69	40.00	15.42	41.31	45.80	54.00	-8.20	Horizontal		
	802.11n40 mode Highest channel (Peak Value)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10460.00	41.56	39.80	15.51	41.17	55.70	68.20	-12.50	Vertical		
10460.00	42.53	39.80	15.51	41.17	56.67	68.20	-11.53	Horizontal		
		802.11n4	0 mode High	nest chann	el (Average	Value)				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10460.00	33.23	39.80	15.51	41.17	47.37	54.00	-6.63	Vertical		
10460.00	31.25	39.80	15.51	41.17	45.39	54.00	-8.61	Horizontal		

- 1 Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2 The emission levels of other frequencies are very lower than the limit and not show in test report

	802.11ac-HT80 mode Middle channel (Peak Value)										
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10420.00	43.62	39.90	15.46	41.24	57.74	68.20	-10.46	Vertical			
10420.00	42.59	39.90	15.46	41.24	56.71	68.20	-11.49	Horizontal			
		802.11ac-H	IT80 mode N	/liddle char	nnel (Averag	e Value)					
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10420.00	33.20	39.90	15.46	41.24	47.32	54.00	-6.68	Vertical			
10420.00	31.12	39.90	15.46	41.24	45.24	54.00	-8.76	Horizontal			

Remark:

- 1 Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2 The emission levels of other frequencies are very lower than the limit and not show in test report





Band 2

Band 2									
		802.1	1a mode Lo	west chann	nel (Peak Va	lue)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10520.00	51.15	40.10	9.82	41.97	59.10	68.20	-9.10	Vertical	
10520.00	49.56	40.10	9.82	41.97	57.51	68.20	-10.69	Horizontal	
		802.118	a mode Lowe	est channe	(Average V	′alue)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10520.00	41.26	40.10	9.82	41.97	49.21	54.00	-4.79	Vertical	
10520.00	40.29	40.10	9.82	41.97	48.24	54.00	-5.76	Horizontal	
		802.1	1a mode Mid	ddle chann	el (Peak Val	ue)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10560.00	49.86	40.00	9.85	41.95	57.76	68.20	-10.44	Vertical	
10560.00	52.46	40.00	9.85	41.95	60.36	68.20	-7.84	Horizontal	
802.11a mode Middle channel (Average Value)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10560.00	41.69	40.00	9.85	41.95	49.59	54.00	-4.41	Vertical	
10560.00	42.58	40.00	9.85	41.95	50.48	54.00	-3.52	Horizontal	
		802.1°	1a mode Hig	hest chanr	nel (Peak Va	lue)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10640.00	49.98	39.70	9.96	41.88	57.76	68.20	-10.44	Vertical	
10640.00	47.82	39.70	9.96	41.88	55.60	68.20	-12.60	Horizontal	
		802.11a	a mode High	est channe	I (Average \	/alue)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10640.00	42.26	39.70	9.96	41.88	50.04	54.00	-3.96	Vertical	
10640.00	41.69	39.70	9.96	41.88	49.47	54.00	-4.53	Horizontal	
Pomark:									

Remark:

¹ Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

² The emission levels of other frequencies are very lower than the limit and not show in test report





		802.11	n20 mode Lo	owest char	nel (Peak V	alue)				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10520.00	48.92	40.10	9.82	41.97	56.87	68.20	-11.33	Vertical		
10520.00	49.63	40.10	9.82	41.97	57.58	68.20	-10.62	Horizontal		
		802.11n2	20 mode Low	est chann	el (Average	Value)				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10520.00	39.52	40.10	9.82	41.97	47.47	54.00	-6.53	Vertical		
10520.00	40.17	40.10	9.82	41.97	48.12	54.00	-5.88	Horizontal		
	802.11n20 mode Middle channel (Peak Value)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10560.00	49.58	40.00	9.85	41.95	57.48	68.20	-10.72	Vertical		
10560.00	47.86	40.00	9.85	41.95	55.76	68.20	-12.44	Horizontal		
	802.11n20 mode Middle channel (Average Value)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10560.00	41.53	40.00	9.85	41.95	49.43	54.00	-4.57	Vertical		
10560.00	39.78	40.00	9.85	41.95	47.68	54.00	-6.32	Horizontal		
		802.11r	n20 mode Hi	ghest chan	nel (Peak V	alue)				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10640.00	49.68	39.70	9.96	41.88	57.46	68.20	-10.74	Vertical		
10640.00	48.57	39.70	9.96	41.88	56.35	68.20	-11.85	Horizontal		
		802.11n2	0 mode High	nest chann	el (Average	Value)				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10640.00	41.26	39.70	9.96	41.88	49.04	54.00	-4.96	Vertical		
10640.00	42.69	39.70	9.96	41.88	50.47	54.00	-3.53	Horizontal		

¹ Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

² The emission levels of other frequencies are very lower than the limit and not show in test report





	802.11n40 mode Lowest channel (Peak Value)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10540.00	49.89	39.64	10.05	41.89	57.69	68.20	-10.51	Vertical		
10540.00	47.56	39.64	10.05	41.89	55.36	68.20	-12.84	Horizontal		
	802.11n40 mode Lowest channel (Average Value)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10540.00	39.62	39.64	10.05	41.89	47.42	54.00	-6.58	Vertical		
10540.00	41.15	39.64	10.05	41.89	48.95	54.00	-5.05	Horizontal		
		802.11r	n40 mode Hi	ghest chan	nel (Peak V	alue)				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10620.00	49.98	39.73	10.16	41.95	57.92	68.20	-10.28	Vertical		
10620.00	48.73	39.73	10.16	41.95	56.67	68.20	-11.53	Horizontal		
		802.11n4	0 mode High	nest chann	el (Average	Value)				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10620.00	41.19	39.73	10.16	41.95	49.13	54.00	-4.87	Vertical		
10620.00	42.29	39.73	10.16	41.95	50.23	54.00	-3.77	Horizontal		

- 1 Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2 The emission levels of other frequencies are very lower than the limit and not show in test report

	802.11ac-HT80 mode Middle channel (Peak Value)										
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10580.00	49.62	39.90	15.46	41.24	63.74	68.20	-4.46	Vertical			
10580.00	48.55	39.90	15.46	41.24	62.67	68.20	-5.53	Horizontal			
		802.11ac-H	IT80 mode N	/liddle char	nnel (Averag	e Value)					
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10580.00	36.26	39.90	15.46	41.24	50.38	54.00	-3.62	Vertical			
10580.00	35.11	39.90	15.46	41.24	49.23	54.00	-4.77	Horizontal			

Remark:

- 1 Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2 The emission levels of other frequencies are very lower than the limit and not show in test report





Band 3

Frequency (MHz) Read Level (dBuV) Read	polarization Vertical Horizontal							
Frequency (MHz)	Vertical							
11000.00 42.59 40.10 15.37 41.34 56.72 68.20 -11.48								
	Horizontal							
802.11a mode Lowest channel (Average Value)								
Frequency (MHz) Read Level (dBuV) Antenna Factor (dB/m) Cable Loss (dB) Preamp Factor (dBuV/m) Level (dBuV/m) Limit Line (dBuV/m) Cimit (dB)	polarization							
11000.00 31.41 40.10 15.37 41.34 45.54 54.00 -8.46	Vertical							
11000.00 31.29 40.10 15.37 41.34 45.42 54.00 -8.58	Horizontal							
802.11a mode Middle channel (Peak Value)								
Frequency (MHz) Read Level (dBuV) Antenna Factor (dB/m) Cable Loss (dB) Preamp Factor (dB) Level (dBuV/m) Limit Line (dBuV/m) (dB)	polarization							
11200.00 43.62 40.00 15.42 41.27 57.77 68.20 -10.43	Vertical							
11200.00 42.98 40.00 15.42 41.27 57.13 68.20 -11.07	Horizontal							
802.11a mode Middle channel (Average Value)								
Frequency (MHz) Read Level (dBuV) Antenna Factor (dB/m) Cable Loss (dB) Preamp Factor (dB) Level (dBuV/m) Limit Line (dBuV/m) (dB)	polarization							
11200.00 31.26 40.00 15.42 41.27 45.41 54.00 -8.59	Vertical							
11200.00 33.32 40.00 15.42 41.27 47.47 54.00 -6.53	Horizontal							
802.11a mode Highest channel (Peak Value)								
Frequency (MHz) Read Level (dBuV) Read Level (dB/m) Cable Factor (dB/m) Cable Factor (dB) Preamp Factor (dB) Level (dBuV/m) Limit Line (dBuV/m) (dB)	polarization							
11400.00 42.59 39.70 15.55 41.10 56.74 68.20 -11.46	Vertical							
11400.00 41.66 39.70 15.55 41.10 55.81 68.20 -12.39	Horizontal							
802.11a mode Highest channel (Average Value)								
Frequency (MHz) Read Level Factor (dBuV) Read Level Factor (dB/m) Cable Factor (dB/m) Cable Factor (dB) Factor (dB) Cable Factor (dB) Cable Factor (dB) Cable Factor (dB) Cable Factor (dBuV/m) Factor (dBuV/m) Cable Factor (dBuV/m)	polarization							
11400.00 32.31 39.70 15.55 41.10 46.46 54.00 -7.54	Vertical							
11400.00 31.54 39.70 15.55 41.10 45.69 54.00 -8.31	Horizontal							

Remark:

¹ Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

² The emission levels of other frequencies are very lower than the limit and not show in test report





		802.11	n20 mode Lo	owest char	nel (Peak V	alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11000.00	43.59	40.10	15.37	41.34	57.72	68.20	-10.48	Vertical
11000.00	42.11	40.10	15.37	41.34	56.24	68.20	-11.96	Horizontal
		802.11n2	20 mode Low	est chann	el (Average	Value)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11000.00	33.26	40.10	15.37	41.34	47.39	54.00	-6.61	Vertical
11000.00	33.11	40.10	15.37	41.34	47.24	54.00	-6.76	Horizontal
		802.11	n20 mode M	iddle chan	nel (Peak Va	alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11200.00	42.56	40.00	15.42	41.27	56.71	68.20	-11.49	Vertical
11200.00	43.62	40.00	15.42	41.27	57.77	68.20	-10.43	Horizontal
		802.11n2	20 mode Mid	ldle channe	el (Average '	√alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11200.00	33.22	40.00	15.42	41.27	47.37	54.00	-6.63	Vertical
11200.00	31.48	40.00	15.42	41.27	45.63	54.00	-8.37	Horizontal
		802.11r	20 mode Hi	ghest chan	nel (Peak V	alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11400.00	42.56	39.70	15.55	41.10	56.71	68.20	-11.49	Vertical
11400.00	43.19	39.70	15.55	41.10	57.34	68.20	-10.86	Horizontal
		802.11n2	0 mode High	nest chann	el (Average	Value)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11400.00	33.26	39.70	15.55	41.10	47.41	54.00	-6.59	Vertical
11400.00	32.14	39.70	15.55	41.10	46.29	54.00	-7.71	Horizontal

¹ Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

² The emission levels of other frequencies are very lower than the limit and not show in test report





		802.11	n40 mode Lo	owest char	nel (Peak V	alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11020.00	46.95	40.00	15.42	41.31	61.06	68.20	-7.14	Vertical
11020.00	43.62	40.00	15.42	41.31	57.73	68.20	-10.47	Horizontal
		802.11n4	10 mode Low	est chann	el (Average	Value)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11020.00	33.21	40.00	15.42	41.31	47.32	54.00	-6.68	Vertical
11020.00	31.54	40.00	15.42	41.31	45.65	54.00	-8.35	Horizontal
		802.11	n40 mode M	iddle chan	nel (Peak Va	alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11180.00	43.62	39.87	15.48	41.22	57.75	68.20	-10.45	Vertical
11180.00	42.51	39.87	15.48	41.22	56.64	68.20	-11.56	Horizontal
		802.11n4	40 mode Mid	dle channe	el (Average '	√alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11180.00	33.32	39.87	15.48	41.22	47.45	54.00	-6.55	Vertical
11180.00	32.19	39.87	15.48	41.22	46.32	54.00	-7.68	Horizontal
		802.11r	n40 mode Hi	ghest chan	nel (Peak V	alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11340.00	42.26	39.80	15.51	41.17	56.40	68.20	-11.80	Vertical
11340.00	41.40	39.80	15.51	41.17	55.54	68.20	-12.66	Horizontal
		802.11n4	0 mode High	nest chann	el (Average	Value)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11340.00	32.24	39.80	15.51	41.17	46.38	54.00	-7.62	Vertical
11340.00	33.16	39.80	15.51	41.17	47.30	54.00	-6.70	Horizontal

¹ Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

² The emission levels of other frequencies are very lower than the limit and not show in test report





	802.11ac-HT80 mode Middle channel (Peak Value)										
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
11060.00	43.19	39.90	15.46	41.24	57.31	68.20	-10.89	Vertical			
11060.00	42.59	39.90	15.46	41.24	56.71	68.20	-11.49	Horizontal			
		802.11ac-H	IT80 mode N	/liddle char	nnel (Averag	e Value)					
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
11060.00	33.21	39.90	15.46	41.24	47.33	54.00	-6.67	Vertical			
11060.00	32.29	39.90	15.46	41.24	46.41	54.00	-7.59	Horizontal			

- 1 Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2 The emission levels of other frequencies are very lower than the limit and not show in test report





Rod Ant TX2 Band 1

Band 1											
	802.11a mode Lowest channel (Peak Value)										
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10360.00	41.63	40.10	15.37	41.34	55.76	68.20	-12.44	Vertical			
10360.00	42.27	40.10	15.37	41.34	56.40	68.20	-11.80	Horizontal			
		802.11a	a mode Lowe	est channe	l (Average V	'alue)					
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10360.00	31.58	40.10	15.37	41.34	45.71	54.00	-8.29	Vertical			
10360.00	32.15	40.10	15.37	41.34	46.28	54.00	-7.72	Horizontal			
		802.1	1a mode Mid	ddle chann	el (Peak Val	ue)					
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10400.00	42.62	40.00	15.42	41.27	56.77	68.20	-11.43	Vertical			
10400.00	43.59	40.00	15.42	41.27	57.74	68.20	-10.46	Horizontal			
		802.11	a mode Mido	lle channel	(Average V	alue)					
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10400.00	33.65	40.00	15.42	41.27	47.80	54.00	-6.20	Vertical			
10400.00	34.15	40.00	15.42	41.27	48.30	54.00	-5.70	Horizontal			
		802.1	1a mode Hig	hest chanr	nel (Peak Va	lue)					
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10480.00	42.66	39.70	15.55	41.10	56.81	68.20	-11.39	Vertical			
10480.00	43.51	39.70	15.55	41.10	57.66	68.20	-10.54	Horizontal			
		802.11a	mode Highe	est channe	I (Average V	/alue)					
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10480.00	32.20	39.70	15.55	41.10	46.35	54.00	-7.65	Vertical			
10480.00	31.49	39.70	15.55	41.10	45.64	54.00	-8.36	Horizontal			

Remark:

¹ Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

² The emission levels of other frequencies are very lower than the limit and not show in test report





		802.11	n20 mode Lo	owest chan	nel (Peak V	alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.00	43.32	40.10	15.37	41.34	57.45	68.20	-10.75	Vertical
10360.00	41.26	40.10	15.37	41.34	55.39	68.20	-12.81	Horizontal
		802.11n2	20 mode Low	est channe	el (Average	Value)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.00	33.23	40.10	15.37	41.34	47.36	54.00	-6.64	Vertical
10360.00	32.16	40.10	15.37	41.34	46.29	54.00	-7.71	Horizontal
		802.11	n20 mode M	iddle chan	nel (Peak Va	alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10400.00	43.62	40.00	15.42	41.27	57.77	68.20	-10.43	Vertical
10400.00	42.59	40.00	15.42	41.27	56.74	68.20	-11.46	Horizontal
		802.11n2	20 mode Mid	dle channe	el (Average '	√alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10400.00	31.51	40.00	15.42	41.27	45.66	54.00	-8.34	Vertical
10400.00	32.02	40.00	15.42	41.27	46.17	54.00	-7.83	Horizontal
		802.11r	20 mode Hi	ghest chan	nel (Peak V	alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10480.00	43.52	39.70	15.55	41.10	57.67	68.20	-10.53	Vertical
10480.00	42.19	39.70	15.55	41.10	56.34	68.20	-11.86	Horizontal
		802.11n2	0 mode High	nest chann	el (Average	Value)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10480.00	31.65	39.70	15.55	41.10	45.80	54.00	-8.20	Vertical
10480.00	32.47	39.70	15.55	41.10	46.62	54.00	-7.38	Horizontal

¹ Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

² The emission levels of other frequencies are very lower than the limit and not show in test report





	802.11n40 mode Lowest channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10380.00	42.56	40.00	15.42	41.31	56.67	68.20	-11.53	Vertical	
10380.00	41.23	40.00	15.42	41.31	55.34	68.20	-12.86	Horizontal	
		802.11n4	10 mode Low	est chann	el (Average	Value)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10380.00	32.32	40.00	15.42	41.31	46.43	54.00	-7.57	Vertical	
10380.00	31.20	40.00	15.42	41.31	45.31	54.00	-8.69	Horizontal	
		802.11r	n40 mode Hi	ghest chan	nel (Peak V	alue)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10460.00	42.26	39.80	15.51	41.17	56.40	68.20	-11.80	Vertical	
10460.00	43.95	39.80	15.51	41.17	58.09	68.20	-10.11	Horizontal	
		802.11n4	0 mode High	nest chann	el (Average	Value)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10460.00	31.56	39.80	15.51	41.17	45.70	54.00	-8.30	Vertical	
10460.00	32.10	39.80	15.51	41.17	46.24	54.00	-7.76	Horizontal	

- 1 Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2 The emission levels of other frequencies are very lower than the limit and not show in test report

	802.11ac-HT80 mode Middle channel (Peak Value)										
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10420.00	42.69	39.90	15.46	41.24	56.81	68.20	-11.39	Vertical			
10420.00	41.56	39.90	15.46	41.24	55.68	68.20	-12.52	Horizontal			
		802.11ac-H	IT80 mode N	/liddle char	nnel (Averag	e Value)					
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10420.00	33.32	39.90	15.46	41.24	47.44	54.00	-6.56	Vertical			
10420.00	31.26	39.90	15.46	41.24	45.38	54.00	-8.62	Horizontal			

Remark:

- 1 Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2 The emission levels of other frequencies are very lower than the limit and not show in test report





Band 2

Band 2									
		802.1	1a mode Lov	west chanr	nel (Peak Va	lue)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10520.00	51.26	40.10	9.82	41.97	59.21	68.20	-8.99	Vertical	
10520.00	49.56	40.10	9.82	41.97	57.51	68.20	-10.69	Horizontal	
	802.11a mode Lowest channel (Average Value)								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10520.00	43.23	40.10	9.82	41.97	51.18	54.00	-2.82	Vertical	
10520.00	41.55	40.10	9.82	41.97	49.50	54.00	-4.50	Horizontal	
		802.1	1a mode Mid	ddle chann	el (Peak Val	ue)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10560.00	49.62	40.00	9.85	41.95	57.52	68.20	-10.68	Vertical	
10560.00	52.24	40.00	9.85	41.95	60.14	68.20	-8.06	Horizontal	
		802.11	a mode Mido	lle channel	(Average V	alue)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10560.00	43.32	40.00	9.85	41.95	51.22	54.00	-2.78	Vertical	
10560.00	42.19	40.00	9.85	41.95	50.09	54.00	-3.91	Horizontal	
		802.1	1a mode Hig	hest chanr	nel (Peak Va	lue)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10640.00	49.62	39.70	9.96	41.88	57.40	68.20	-10.80	Vertical	
10640.00	48.72	39.70	9.96	41.88	56.50	68.20	-11.70	Horizontal	
		802.11a	a mode Highe	est channe	I (Average \	/alue)			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10640.00	42.13	39.70	9.96	41.88	49.91	54.00	-4.09	Vertical	
10640.00	41.01	39.70	9.96	41.88	48.79	54.00	-5.21	Horizontal	
Pomark:	· · · · · · · · · · · · · · · · · · ·	·	·	·	· · · · · · · · · · · · · · · · · · ·	·	·	· · · · · · · · · · · · · · · · · · ·	

Remark:

¹ Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

² The emission levels of other frequencies are very lower than the limit and not show in test report





		802.11	n20 mode Lo	owest char	nel (Peak V	alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10520.00	48.62	40.10	9.82	41.97	56.57	68.20	-11.63	Vertical
10520.00	47.16	40.10	9.82	41.97	55.11	68.20	-13.09	Horizontal
		802.11n2	20 mode Low	est chann	el (Average	Value)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10520.00	39.62	40.10	9.82	41.97	47.57	54.00	-6.43	Vertical
10520.00	38.55	40.10	9.82	41.97	46.50	54.00	-7.50	Horizontal
		802.11	n20 mode M	iddle chan	nel (Peak Va	alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10560.00	48.16	40.00	9.85	41.95	56.06	68.20	-12.14	Vertical
10560.00	47.29	40.00	9.85	41.95	55.19	68.20	-13.01	Horizontal
		802.11n2	20 mode Mid	dle channe	el (Average '	√alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10560.00	39.62	40.00	9.85	41.95	47.52	54.00	-6.48	Vertical
10560.00	38.51	40.00	9.85	41.95	46.41	54.00	-7.59	Horizontal
		802.11r	20 mode Hi	ghest chan	nel (Peak V	alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10640.00	51.12	39.70	9.96	41.88	58.90	68.20	-9.30	Vertical
10640.00	50.98	39.70	9.96	41.88	58.76	68.20	-9.44	Horizontal
		802.11n2	0 mode High	nest chann	el (Average	Value)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10640.00	41.15	39.70	9.96	41.88	48.93	54.00	-5.07	Vertical
10640.00	39.62	39.70	9.96	41.88	47.40	54.00	-6.60	Horizontal

¹ Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

² The emission levels of other frequencies are very lower than the limit and not show in test report





	802.11n40 mode Lowest channel (Peak Value)									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10540.00	50.12	39.64	10.05	41.89	57.92	68.20	-10.28	Vertical		
10540.00	48.62	39.64	10.05	41.89	56.42	68.20	-11.78	Horizontal		
		802.11n4	0 mode Low	est channe	el (Average	Value)				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10540.00	41.32	39.64	10.05	41.89	49.12	54.00	-4.88	Vertical		
10540.00	40.59	39.64	10.05	41.89	48.39	54.00	-5.61	Horizontal		
		802.11r	140 mode Hi	ghest chan	nel (Peak V	alue)				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10620.00	51.26	39.73	10.16	41.95	59.20	68.20	-9.00	Vertical		
10620.00	49.38	39.73	10.16	41.95	57.32	68.20	-10.88	Horizontal		
		802.11n4	0 mode High	nest chann	el (Average	Value)				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10620.00	41.26	39.73	10.16	41.95	49.20	54.00	-4.80	Vertical		
10620.00	42.02	39.73	10.16	41.95	49.96	54.00	-4.04	Horizontal		

- 1 Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2 The emission levels of other frequencies are very lower than the limit and not show in test report

	802.11ac-HT80 mode Middle channel (Peak Value)										
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10580.00	49.62	39.90	15.46	41.24	63.74	68.20	-4.46	Vertical			
10580.00	48.17	39.90	15.46	41.24	62.29	68.20	-5.91	Horizontal			
		802.11ac-⊢	IT80 mode N	/liddle char	nnel (Averag	e Value)					
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10580.00	35.59	39.90	15.46	41.24	49.71	54.00	-4.29	Vertical			
10580.00	34.59	39.90	15.46	41.24	48.71	54.00	-5.29	Horizontal			

Remark:

- 1 Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2 The emission levels of other frequencies are very lower than the limit and not show in test report





Band 3

802.11a mode Lowest channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11000.00	43.62	40.10	15.37	41.34	57.75	68.20	-10.45	Vertical
11000.00	42.51	40.10	15.37	41.34	56.64	68.20	-11.56	Horizontal
	802.11a mode Lowest channel (Average Value)							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11000.00	33.23	40.10	15.37	41.34	47.36	54.00	-6.64	Vertical
11000.00	32.62	40.10	15.37	41.34	46.75	54.00	-7.25	Horizontal
802.11a mode Middle channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11200.00	43.51	40.00	15.42	41.27	57.66	68.20	-10.54	Vertical
11200.00	41.59	40.00	15.42	41.27	55.74	68.20	-12.46	Horizontal
	802.11a mode Middle channel (Average Value)							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11200.00	33.23	40.00	15.42	41.27	47.38	54.00	-6.62	Vertical
11200.00	32.12	40.00	15.42	41.27	46.27	54.00	-7.73	Horizontal
		802.11	1a mode Hig	hest chanr	nel (Peak Va	lue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11400.00	42.56	39.70	15.55	41.10	56.71	68.20	-11.49	Vertical
11400.00	41.52	39.70	15.55	41.10	55.67	68.20	-12.53	Horizontal
802.11a mode Highest channel (Average Value)								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11400.00	33.23	39.70	15.55	41.10	47.38	54.00	-6.62	Vertical
11400.00	32.15	39.70	15.55	41.10	46.30	54.00	-7.70	Horizontal

Remark:

¹ Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

² The emission levels of other frequencies are very lower than the limit and not show in test report





802.11n20 mode Lowest channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11000.00	41.59	40.10	15.37	41.34	55.72	68.20	-12.48	Vertical
11000.00	43.62	40.10	15.37	41.34	57.75	68.20	-10.45	Horizontal
802.11n20 mode Lowest channel (Average Value)								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11000.00	32.62	40.10	15.37	41.34	46.75	54.00	-7.25	Vertical
11000.00	33.45	40.10	15.37	41.34	47.58	54.00	-6.42	Horizontal
		802.11	n20 mode M	iddle chan	nel (Peak Va	alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11200.00	43.25	40.00	15.42	41.27	57.40	68.20	-10.80	Vertical
11200.00	39.62	40.00	15.42	41.27	53.77	68.20	-14.43	Horizontal
	802.11n20 mode Middle channel (Average Value)							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11200.00	32.02	40.00	15.42	41.27	46.17	54.00	-7.83	Vertical
11200.00	31.01	40.00	15.42	41.27	45.16	54.00	-8.84	Horizontal
		802.11r	20 mode Hi	ghest chan	nel (Peak V	alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11400.00	43.62	39.70	15.55	41.10	57.77	68.20	-10.43	Vertical
11400.00	42.59	39.70	15.55	41.10	56.74	68.20	-11.46	Horizontal
802.11n20 mode Highest channel (Average Value)								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11400.00	32.23	39.70	15.55	41.10	46.38	54.00	-7.62	Vertical
11400.00	33.14	39.70	15.55	41.10	47.29	54.00	-6.71	Horizontal

¹ Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

² The emission levels of other frequencies are very lower than the limit and not show in test report





802.11n40 mode Lowest channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11020.00	46.59	40.00	15.42	41.31	60.70	68.20	-7.50	Vertical
11020.00	41.52	40.00	15.42	41.31	55.63	68.20	-12.57	Horizontal
802.11n40 mode Lowest channel (Average Value)								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11020.00	33.32	40.00	15.42	41.31	47.43	54.00	-6.57	Vertical
11020.00	32.20	40.00	15.42	41.31	46.31	54.00	-7.69	Horizontal
		802.11	n40 mode M	iddle chan	nel (Peak Va	alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11180.00	41.56	39.87	15.48	41.22	55.69	68.20	-12.51	Vertical
11180.00	42.98	39.87	15.48	41.22	57.11	68.20	-11.09	Horizontal
802.11n40 mode Middle channel (Average Value)								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11180.00	33.15	39.87	15.48	41.22	47.28	54.00	-6.72	Vertical
11180.00	32.46	39.87	15.48	41.22	46.59	54.00	-7.41	Horizontal
		802.11r	140 mode Hi	ghest chan	nel (Peak V	alue)		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11340.00	43.56	39.80	15.51	41.17	57.70	68.20	-10.50	Vertical
11340.00	42.51	39.80	15.51	41.17	56.65	68.20	-11.55	Horizontal
802.11n40 mode Highest channel (Average Value)								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11340.00	33.16	39.80	15.51	41.17	47.30	54.00	-6.70	Vertical
11340.00	32.59	39.80	15.51	41.17	46.73	54.00	-7.27	Horizontal

¹ Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

² The emission levels of other frequencies are very lower than the limit and not show in test report





802.11ac-HT80 mode Middle channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11060.00	43.26	39.90	15.46	41.24	57.38	68.20	-10.82	Vertical
11060.00	42.56	39.90	15.46	41.24	56.68	68.20	-11.52	Horizontal
802.11ac-HT80 mode Middle channel (Average Value)								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11060.00	31.23	39.90	15.46	41.24	45.35	54.00	-8.65	Vertical
11060.00	32.00	39.90	15.46	41.24	46.12	54.00	-7.88	Horizontal

- 1 Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2 The emission levels of other frequencies are very lower than the limit and not show in test report





6.8 Frequency stability

Test Requirement:	FCC Part15 E Section 15.407 (g)				
Limit:	Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.				
Test setup:	Temperature Chamber				
	Spectrum analyzer EUT Att. Variable Power Supply Note: Measurement setup for testing on Antenna connector				
Test procedure:	The EUT is installed in an environment test chamber with external				
	 Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT. A sufficient stabilization period at each temperature is used prior to each frequency measurement. When temperature is stabled, measure the frequency stability. The test shall be performed under -30 to 50 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions. 				
Test Instruments:	Refer to section 5.8 for details				
Test mode:	Refer to section 5.3 for details, and all channels have been tested, only shows the worst channel data in this report.				
Test results:	Please refer to the FCC ID: 2ADBM-LS9ADAC11DBT				