

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Report No: CCIS15070060003

FCC REPORT (WIFI)

Applicant: HUNG WAI PRODUCTS LIMITED

Address of Applicant: Unit 11, 12/F., New Commerce Centre, 19 On Sum Street,

Shatin, Hong Kong

Equipment Under Test (EUT)

Product Name: 10.1" Android non-touch LCD Media

Model No.: DT101-AS4-720, 502-1019ATM

FCC ID: 2AB6Z-DT101-AS4

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247

Date of sample receipt: 23 Jul., 2015

Date of Test: 23 Jul., to 24 Aug., 2015

Date of report issued: 24 Aug., 2015

Test Result: PASS*

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

Authorized Signature:



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.

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Version

Version No.	Date	Description
00	24 Aug., 2015	Android player Main board with wireless module (FCC ID: 2AB6Z-1859ATMB) and same antenna were used by the device, only conducted emission and Radiated emission were re-tested.

_una Gao Report Clerk Prepared by: Date: 24 Aug., 2015

Date: Reviewed by: 24 Aug., 2015

Project Engineer





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4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	15.207	Pass
Conducted Peak Output Power	15.247 (b)(3)	Pass*
6dB Emission Bandwidth 99% Occupied Bandwidth	15.247 (a)(2)	Pass*
Power Spectral Density	15.247 (e)	Pass*
Band Edge	15.247(d)	Pass*
Spurious Emission	15.205/15.209	Pass

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

Pass*: The test data refer to FCC ID: 2AB6Z-1859ATMB.





5 General Information

5.1 Client Information

Applicant:	HUNG WAI PRODUCTS LIMITED
Address of Applicant:	Unit 11, 12/F., New Commerce Centre, 19 On Sum Street, Shatin, Hong Kong
Manufacturer:	HUNG WAI ELECTRONICS (HUIZHOU) LTD.
Address of Manufacturer:	3 rd floor, NO. 3, Minfeng Road, Huinan High and New Technology Industry Park, Huiao Avenue, Huizhou City, Guangdong, China

5.2 General Description of E.U.T.

Draduat Name	10.1" Android non tough LCD Modio
Product Name:	10.1" Android non-touch LCD Media
Model No.:	DT101-AS4-720, 502-1019ATM
Operation Frequency:	2412MHz~2462MHz (802.11b/802.11g/802.11n(H20)) 2422MHz~2452MHz (802.11n(H40))
Channel numbers:	11 for 802.11b/802.11g/802.11(H20) 7 for 802.11n(H40)
Channel separation:	5MHz
Modulation technology: (IEEE 802.11b)	Direct Sequence Spread Spectrum (DSSS)
Modulation technology: (IEEE 802.11g/802.11n)	Orthogonal Frequency Division Multiplexing(OFDM)
Data speed (IEEE 802.11b):	1Mbps, 2Mbps, 5.5Mbps, 11Mbps
Data speed (IEEE 802.11g):	6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps,54Mbps
Data speed (IEEE 802.11n):	Up to 150Mbps
Antenna Type:	Omni-directional
Antenna gain:	2.5 dBi
AC Adapter:	MODEL: PS24A120K2000UD Input: AC 100-240V 50/60Hz 1.0A Output: DC 12V, 2000mA
Remark:	Model No.: DT101-AS4-720, 502-1019ATM were identical inside, the electrical circuit design, layout, components used and internal wiring, with only difference being different model number for customer and for HUNG WAI.





Operation Frequency each of channel For 802.11b/g/n(H20)							
Channel Frequency Channel Frequency Channel Frequency Channel Frequency							
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		

Operation Frequency each of channel For 802.11n(H40)									
Channel	Channel Frequency Channel Frequency Channel Frequency Channel Frequency								
		4	2427MHz	7	2442MHz				
		5	2432MHz	8	2447MHz				
3	2422MHz	6	2437MHz	9	2452MHz				

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:

802.11b/802.11g/802.11n (H20)

Channel	Frequency
The lowest channel	2412MHz
The middle channel	2437MHz
The Highest channel	2462MHz

802.11n (H40)

Channel	Frequency
The lowest channel	2422MHz
The middle channel	2437MHz
The Highest channel	2452MHz



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5.3 Test environment and mode

Operating Environment:				
Temperature:	24.0 °C			
Humidity:	54 % RH			
Atmospheric Pressure:	1010 mbar			
Test mode:				
Operation mode	Keep the EUT in continuous transmitting with modulation			

The sample was placed 0.8m above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

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	
802.11b	1Mbps	
802.11g	6Mbps	
802.11n(H20)	6.5Mbps	
802.11n(H40)	13.5Mbps	

Final Test Mode:

According to ANSI C63.4 standards, the test results are both the "worst case" and "worst setup" 1Mbps for 802.11b, 6Mbps for 802.11p, 6.5Mbps for 802.11n(H20) and 13.5 Mbps for 802.11n(H40). Duty cycle setting during the transmission is 100% with maximum power setting for all modulations.



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5.4 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 and fully 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.

5.5 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

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5.6 Test Instruments list

Radiated Emission:							
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)	
1	3m Semi- Anechoic Chamber	SAEMC	9(L)*6(W)* 6(H)	CCIS0001	08-23-2014	08-22-2017	
2	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	CCIS0005	03-28-2015	03-28-2016	
3	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	CCIS0006	03-28-2015	03-28-2016	
4	EMI Test Software	AUDIX	E3	N/A	N/A	N/A	
5	Amplifier (10kHz-1.3GHz)	HP	8447D	CCIS0003	04-01-2015	03-31-2016	
6	Amplifier (1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	04-01-2015	03-31-2016	
7	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	04-01-2015	03-31-2016	
8	Horn Antenna	ETS-LINDGREN	3160	GTS217	04-01-2015	03-31-2016	
9	Printer	HP	HP LaserJet P1007	N/A	N/A	N/A	
10	Positioning Controller	UC	UC3000	CCIS0015	N/A	N/A	
11	Spectrum analyzer 9k-30GHz	Rohde & Schwarz	FSP	CCIS0023	03-28-2015	03-28-2016	
12	EMI Test Receiver	Rohde & Schwarz	ESPI	CCIS0022	03-28-2015	03-28-2016	
13	Loop antenna	Laplace instrument	RF300	EMC0701	04-01-2015	03-31-2016	
14	Universal radio communication tester	Rhode & Schwarz	CMU200	CCIS0069	03-28-2015	03-28-2016	
15	Signal Analyzer	Rohde & Schwarz	FSIQ3	CCIS0088	04-08-2015	04-08-2016	

Cond	Conducted 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	11-10-2012	11-09-2015					
2	EMI Test Receiver	Rohde & Schwarz	ESCI	CCIS0002	03-28-2015	03-28-2016					
3	LISN	CHASE	MN2050D	CCIS0074	03-28-2015	03-28-2016					
4	Coaxial Cable	CCIS	N/A	CCIS0086	04-01-2015	03-31-2016					
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 F

FCC Part 15 C Section 15.203 /247(c)

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.

15.247(c) (1)(i) requirement:

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

E.U.T Antenna:

The antenna of EUT is a reverse-SMA connector, which cannot be replaced by end-user. And the antenna gain is 2.5 dBi.



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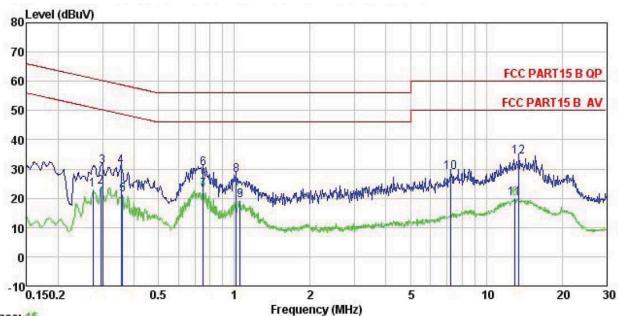
6.2 Conducted Emission

Test Requirement:	FCC Part 15 C Section 15.207	7							
Test Method:	ANSI C63.10: 2009	ANSI C63.10: 2009							
Test Frequency Range:	150 kHz to 30 MHz	150 kHz to 30 MHz							
Class / Severity:	Class B								
Receiver setup:	RBW=9 kHz, VBW=30 kHz								
Limit:	Limit (dRu\/)								
	Frequency range (MHz) Quasi-peak Average								
	0.15-0.5	66 to 56*	56 to 46*						
	0.5-5	56	46						
	5-30	60	50						
Test procedure	* Decreases with the logarithn1. The E.U.T and simulators								
	a line impedance stabiliza 50ohm/50uH coupling im 2. The peripheral devices at through a LISN that provi with 50ohm termination. (test setup and photograp 3. Both sides of A.C. line an interference. In order to fi positions of equipment ar changed according to AN measurement.	pedance for the measure also connected to the des a 500hm/50uH con (Please refer to the blowns). The checked for maximum and the maximum emisted all of the interface of the content of the content of the content of the maximum emisted all of the interface of the content of th	uring equipment. ne main power upling impedance ock diagram of the m conducted sion, the relative ables must be						
Test setup:	Refere	ence Plane	 						
	Test table/Insulation pla	U.T EMI Receiver	er — AC power						
	E.U.T: Equipment Under Test LISN: Line Impedence Stabilizatio Test table height=0.8m								
Test Instruments:	Refer to section 5.6 for details								
Test mode:	Refer to section 5.3 for details	3							
Test results:	Passed								

Measurement Data



Neutral:



Trace: 15

Site

: CCIS Shielding Room : FCC PART15 B QP LISN NEUTRAL : 10.1" Android non-touch LCD Media : DT101- AS4-720 Condition EUT

Model Test Mode : WIFI mode

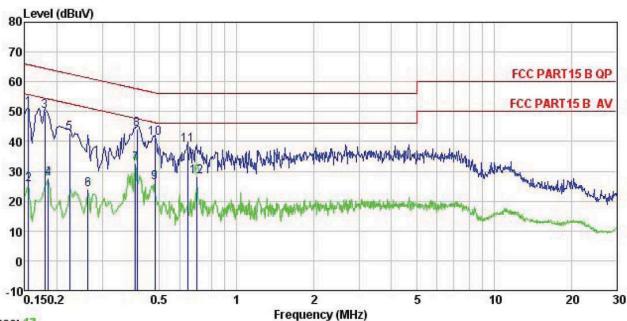
Power Rating: AC120V/60Hz
Environment: Temp: 23 °C Huni:56% Atmos:101KPa
Test Engineer: Viki
Remark:

	Read	LISN	Cable		Limit	Over	
Freq	Level	Factor	Loss	Level	Line	Limit	Remark
MHz	dBu∀	<u>dB</u>	₫B	dBu₹	dBu√	<u>dB</u>	
0.274	11.98	0.26	10.74	22.98	50.98	-28.00	Average
0.296	12.99	0.26	10.74	23.99	50.37	-26.38	Average
0.300	19.90	0.26	10.74	30.90	60.24	-29.34	QP
0.356	19.81	0.25	10.73	30.79	58.83	-28.04	QP
0.360	10.32	0.25	10.73	21.30	48.74	-27.44	Average
0.751	19.06	0.19	10.79	30.04	56.00	-25.96	QP
0.751	11.94	0.19	10.79	22.92	46.00	-23.08	Average
1.016	16.92	0.22	10.87	28.01	56.00	-27.99	QP
1.054	8.15	0.22	10.88	19.25	46.00	-26.75	Average
7.252	17.86	0.26	10.81	28.93	60.00	-31.07	QP
12.988	8.75	0.25	10.91	19.91	50.00	-30.09	Average
13.479	22.85	0.25	10.91	34.01	60.00	-25.99	QP
	MHz 0. 274 0. 296 0. 300 0. 356 0. 360 0. 751 0. 751 1. 016 1. 054 7. 252 12. 988	Freq Level MHz dBuV 0.274 11.98 0.296 12.99 0.300 19.90 0.356 19.81 0.360 10.32 0.751 19.06 0.751 11.94 1.016 16.92 1.054 8.15 7.252 17.86 12.988 8.75	Freq Level Factor MHz dBuV dB 0.274 11.98 0.26 0.296 12.99 0.26 0.300 19.90 0.26 0.356 19.81 0.25 0.360 10.32 0.25 0.751 19.06 0.19 0.751 11.94 0.19 1.016 16.92 0.22 1.054 8.15 0.22 7.252 17.86 0.26 12.988 8.75 0.25	Freq Level Factor Loss MHz dBuV dB dB	MHz dBuV dB dB dBuV 0.274 11.98 0.26 10.74 22.98 0.296 12.99 0.26 10.74 23.99 0.300 19.90 0.26 10.74 30.90 0.356 19.81 0.25 10.73 30.79 0.360 10.32 0.25 10.73 21.30 0.751 19.06 0.19 10.79 30.04 0.751 11.94 0.19 10.79 22.92 1.016 16.92 0.22 10.87 28.01 1.054 8.15 0.22 10.88 19.25 7.252 17.86 0.26 10.81 28.93 12.988 8.75 0.25 10.91 19.91	Freq Level Factor Loss Level Line MHz dBuV dB dB dBuV dBuV	MHz dBuV dB dB dBuV dBuV dB 0.274 11.98 0.26 10.74 22.98 50.98 -28.00 0.296 12.99 0.26 10.74 23.99 50.37 -26.38 0.300 19.90 0.26 10.74 30.90 60.24 -29.34 0.356 19.81 0.25 10.73 30.79 58.83 -28.04 0.360 10.32 0.25 10.73 21.30 48.74 -27.44 0.751 19.06 0.19 10.79 30.04 56.00 -25.96 0.751 11.94 0.19 10.79 22.92 46.00 -23.08 1.016 16.92 0.22 10.87 28.01 56.00 -27.99 1.054 8.15 0.22 10.88 19.25 46.00 -26.75 7.252 17.86 0.26 10.81 28.93 60.00 -31.07 12.988 8.75 0.25





Line:



Trace: 13

: CCIS Shielding Room

Site Condition

: FCC PART15 B QP LISN LINE : 10.1" Android non-touch LCD Media : DT101- AS4-720 EUT

Model Test Mode : WIFI mode

Power Rating : AC120V/60Hz Environment : Temp: 23 °C Huni: 56% Atmos: 101KPa

Test Engineer: Viki

чешагк	Freq	Read Level	LISN Factor	Cable Loss		Limit Line	Over Limit	Remark
-	MHz	dBu₹	₫B	₫B	dBu∀	dBu₹	dB	
1	0.155	39.98	0.27	10.78	51.03	65.74	-14.71	QP
2	0.155	14.53	0.27	10.78	25.58	55.74	-30.16	Average
2	0.180	39.14	0.28	10.77	50.19	64.50	-14.31	QP
4 5 6 7 8 9	0.185	16.32	0.28	10.77	27.37	54.24	-26.87	Average
5	0.224	31.90	0.27	10.75	42.92	62.66	-19.74	QP
6	0.264	12.91	0.27	10.75	23.93	51.29	-27.36	Average
7	0.404	21.38	0.28	10.72	32.38	47.77	-15.39	Average
8	0.410	33.01	0.28	10.72	44.01	57.64	-13.63	QP
9	0.481	15.21	0.29	10.75	26.25	46.32	-20.07	Average
10	0.484	30.04	0.29	10.75	41.08	56.27	-15.19	QP
11	0.644	27.91	0.24	10.77	38.92	56.00	-17.08	QP
12	0.701	17.11	0.22	10.77	28.10	46.00	-17.90	Average

Notes:

- 1. An initial pre-scan was performed on the live and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level =Receiver Read level + LISN Factor + Cable Loss



6.3 Conducted Output Power

Test Requirement:	FCC Part 15 C Section 15.247 (b)(3)
Test Method:	ANSI C63.10: 2009and KDB558074
Limit:	30dBm
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane
Test Instruments:	Refer to section 5.6 for details
Test mode:	Refer to section 5.3 for details
Test results:	Refer to FCC ID: 2AB6Z-1859ATMB
Remark:	Test method refer to KDB558074 (DTS Measure Guidance) section 8.2, option 1.



6.4 Occupy Bandwidth

Test Requirement:	FCC Part 15 C Section 15.247 (a)(2)
Test Method:	ANSI C63.10: 2009and KDB558074
Limit:	>500kHz
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane
Test Instruments:	Refer to section 5.6 for details
Test mode:	Refer to section 5.3 for details
Test results:	Refer to FCC ID: 2AB6Z-1859ATMB



6.5 Power Spectral Density

Test Requirement:	FCC Part 15 C Section 15.247 (e)
Test Method:	ANSI C63.10: 2009and KDB558074
Limit:	8dBm
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane
Test Instruments:	Refer to section 5.6 for details
Test mode:	Refer to section 5.3 for details
Test results:	Refer to FCC ID: 2AB6Z-1859ATMB



6.6 Band Edge

6.6.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)				
Test Method:	ANSI C63.10: 2009and KDB558074				
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.				
Test setup:					
	Spectrum Analyzer				
	E.U.T				
	Non-Conducted Table				
	Ground Reference Plane				
Test Instruments:	Refer to section 5.6 for details				
Test mode:	Refer to section 5.3 for details				
Test results:	Refer to FCC ID: 2AB6Z-1859ATMB				





6.6.2 Radiated Emission Method

Test Requirement:	FCC Part 15 C	Section 15 209	and 15 205					
Test Method:	ANSI C63.10: 20		una 10.200					
	2.3GHz to 2.5GHz							
Test Frequency Range:								
Test site:	Measurement Distance: 3m							
Receiver setup:	Frequency Detector RBW VBW Remark Above 1GHz Peak 1MHz 3MHz Peak Value RMS 1MHz 3MHz Average Value							
Limit:		TAIVIO	11111112	OWITE	7 (Voluge Value			
Lilling.	Freque	ency	Limit (dBuV/	/m @3m)	Remark			
	Above 1		54.0		Average Value			
			74.0		Peak Value			
Test Procedure:	the ground to determin 2. The EUT wantenna, watower. 3. The antenrathe ground Both horizon make the numbers and to find the state of the limit spof the EUT have 10dB	at a 3 meter cane the position of the position of the position of the position of the position and height is varied to determine the postal and vertical and vertical easurement. The postal and vertical the rota table maximum readiceiver system of the position level of the ecified, then test would be reported.	amber. The of the highest saway from the don the to ed from one maximum al polarization was turned from the ed fro	table was rest radiation. The interfer op of a variate meter to for a value of the ons of the automosphere at Detect old Mode. The stopped arise the emione by one	our meters above e field strength. Intenna are set to aged to its worst from 1 meter to 4 ees to 360 degrees			
Test setup:	EUT → 3m Turn Table 0.8m A	4m 1m 2m	Antenna Horn Ante Spectrum Analyzer Amplif	enna				
Test Instruments:	Refer to section	5.6 for details						
Test mode:	Refer to section		ANSI C63.	.4: 2009				
Test results:	Passed							





Measurement Data:

Test mode: 80		Test channel: Lowest			Remark: Peak			
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)	Polar.
2390.00	22.36	27.58	6.63	0.00	56.57	74.00	-17.43	Vertical
2390.00	22.05	27.58	6.63	0.00	56.26	74.00	-17.74	Horizontal
Test mode: 80	02.11b		Test channel: Lowest			Remark: Average		
Frequency (MHz)	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit	Polar.
(1711 12)	(dBuV)	(dB/m)	(dB)	(dB)	((' ' ' ' '	(dB)	
2390.00	(dBuV) 10.32	(dB/m) 27.58	(dB) 6.63	0.00	44.53	54.00	-9.47	Vertical

Test mode: 802.11b			Test channel: Highest			Remark: Peak		
Frequency (MHz)	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit	Polar.
` '	(dBuV)	(dB/m)	(dB)	(dB)	,	, ,	(dB)	
2483.50	22.87	27.52	6.85	0.00	57.24	74.00	-16.76	Vertical
2483.50	22.67	27.52	6.85	0.00	57.04	74.00	-16.96	Horizontal
Test mode: 802.11b								
Test mode: 80)2.11b		Test chan	nel: Highest		Remark: Ave	erage	
Test mode: 80 Frequency (MHz)	02.11b Read Level (dBuV)	Antenna Factor (dB/m)	Test chan Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Remark: Ave Limit Line (dBuV/m)	Over Limit (dB)	Polar.
Frequency	Read Level	Factor	Cable Loss	Preamp Factor		Limit Line	Over Limit	Polar.

Test mode: 80		Test channel: Lowest			Remark: Peak			
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)	Polar.
2390.00	29.79	27.58	6.63	0.00	64.00	74.00	-10.00	Vertical
2390.00	28.63	27.58	6.63	0.00	62.84	74.00	-11.16	Horizontal
Test mode: 80)2.11g		Test channel: Lowest			Remark: Ave	erage	
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)	Polar.
2390.00	12.65	27.58	6.63	0.00	46.86	54.00	-7.14	Vertical
2390.00	11.88	27.58	6.63	0.00	46.09	54.00	-7.91	Horizontal

Test mode: 80	02.11g		Test channel: Highest			Remark: Peak			
Frequency	Read	Antenna	Cable	Preamp	Level	Limit Line	Over		
(MHz)	Level	Factor	Loss	Factor	(dBuV/m)	(dBuV/m)	Limit	Polar.	
(1011 12)	(dBuV)	(dB/m)	(dB)	(dB)	(abav/III)	(abav/iii)	(dB)		
2483.50	22.56	27.52	6.85	0.00	56.93	74.00	-17.07	Vertical	
2483.50	22.31	27.52	6.85	0.00	56.68	74.00	-17.32	Horizontal	
Test mode: 80)2.11g		Test char	nnel: Highest		Remark: Ave	erage		
Eroguenov	Read	Antenna	Cable	Preamp	Level	Limit Line	Over		
Frequency (MHz)	Level	Factor	Loss	Factor	(dBuV/m)	(dBuV/m)	Limit	Polar.	
(1011 12)	(dBuV)	(dB/m)	(dB)	(dB)	(ubuv/III)	(ubuv/III)	(dB)		
2483.50	10.53	27.52	6.85	0.00	44.90	54.00	-9.10	Vertical	
2483.50	10.78	27.52	6.85	0.00	45.15	54.00	-8.85	Horizontal	

Remark:

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^{1.} Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor





Test mode: 80	02.11n-HT20)	Test chan	nnel: Lowest		Remark: Pea		
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)	Polar.
2390.00	30.55	27.58	6.63	0.00	64.76	74.00	-9.24	Vertical
2390.00	29.13	27.58	6.63	0.00	63.34	74.00	-10.66	Horizontal
						Remark: Average		
Test mode: 80	02.11n-HT20)	Test chan	nnel: Lowest		Remark: Ave	erage	
Test mode: 80 Frequency (MHz)	02.11n-HT20 Read Level (dBuV)	Antenna Factor (dB/m)	Test chan Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Remark: Ave Limit Line (dBuV/m)	Over Limit (dB)	Polar.
Frequency	Read Level	Antenna Factor	Cable Loss	Preamp Factor		Limit Line	Over Limit	Polar.

Test mode: 80	Test mode: 802.11n-HT20			Test channel: Highest			Remark: Peak			
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)	Polar.		
2483.50	22.96	27.52	6.85	0.00	57.33	74.00	-16.67	Vertical		
2483.50	21.63	27.52	6.85	0.00	56.00	74.00	-18.00	Horizontal		
Test mode: 80	02.11n -HT2	0	Test chan	nel: Highest		Remark: Ave	erage			
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)	Polar.		
2483.50	10.36	27.52	6.85	0.00	44.73	54.00	-9.27	Vertical		
2483.50	10.91	27.52	6.85	0.00	45.28	54.00	-8.72	Horizontal		

Test mode: 80	Test mode: 802.11n -HT40			nel: Lowest		Remark: Peak			
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)	Polar.	
2390.00	22.65	27.58	6.63	0.00	56.86	74.00	-17.14	Vertical	
2390.00	22.39	27.58	6.63	0.00	56.60	74.00	-17.40	Horizontal	
Test mode: 80)2.11n -HT4	0	Test chan	nel: Lowest		Remark: Ave	erage		
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)	Polar.	
2390.00	10.82	27.58	6.63	0.00	45.03	54.00	-8.97	Vertical	
2390.00	10.59	27.58	6.63	0.00	44.80	54.00	-9.20	Horizontal	

Test mode: 802.11n -HT40			Test channel: Highest			Remark: Peak			
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)	Polar.	
2483.50	22.36	27.52	6.85	0.00	56.73	74.00	-17.27	Vertical	
2483.50	23.91	27.52	6.85	0.00	58.28	74.00	-15.72	Horizontal	
Test mode: 80)2.11n -HT4	0	Test chan	nel: Highest		Remark: Ave	erage		
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)	Polar.	
2483.50	10.23	27.52	6.85	0.00	44.60	54.00	-9.40	Vertical	
2483.50	10.63	27.52	6.85	0.00	45.00	54.00	-9.00	Horizontal	

Remark

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^{1.} Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor



6.7 Spurious Emission

6.7.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)						
Test Method:	ANSI C63.10: 2009and KDB558074						
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.						
Test setup:							
	Spectrum Analyzer						
	Non-Conducted Table						
	Ground Reference Plane						
Test Instruments:	Refer to section 5.6 for details						
Test mode:	Refer to section 5.3 for details						
Test results:	Refer to FCC ID: 2AB6Z-1859ATMB						



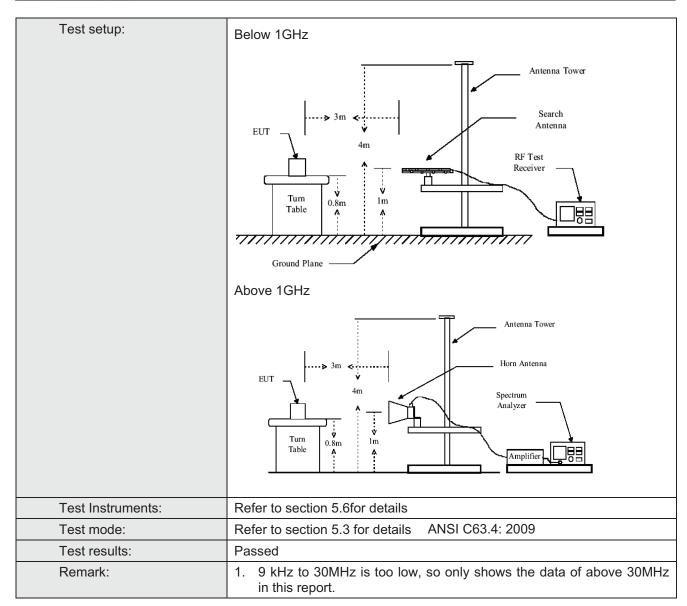


6.7.2 Radiated Emission Method

Test Requirement:	FCC Part 15 C	Section 15.20	9 and 15.205	ı				
Test Method:	ANSI C63.10: 20	009						
Test Frequency Range:	9KHz to 25GHz							
Test site:	Measurement D	istance: 3m						
Receiver setup:								
	Frequency Detector RBW VBW Remark							
	30MHz-1GHz Quasi-peak 120KHz 300KHz Quasi-peak							
	Above 1GHz	Peak	1MHz	3MHz	Peak Value			
	ABOVE TOTIZ	RMS	1MHz	3MHz	Average Value			
Limit:								
	Freque		Limit (dBuV		Remark			
	30MHz-88 88MHz-21		40.0 43.5		Quasi-peak Value Quasi-peak Value			
	216MHz-21		46.0		Quasi-peak Value			
	960MHz-	1	54.0		Quasi-peak Value			
			54.0		Average Value			
	Above 1	GHz	74.0)	Peak Value			
Test Procedure:	the ground degrees to 2. The EUT wantenna, wantenna, wantenna, wantenna degrees 3. The antennathe ground Both horizon make the make the make the maters and to find the material base of the test-respective B. 6. If the emission of the EUT have 10dB	at a 3 meter of determine the ras set 3 meter hich was mount a height is vant to determine ontal and vertice neasurement. Uspected emisten the antenion the rota table maximum reacceiver system and width with sion level of the coffied, then to would be reported the rotal and would be reported and would be reported to the reported to	chamber. The position of the position of the rested on the tried from one the maximum cal polarization was turned was turned was turned was set to Paramas and polarization. Was set to Paramas set to Paramas set to Paramas could be celling could be positioned. Otherway be re-tested	e table was the highest r the interfer op of a varia e meter to for a value of the ons of the ar T was arran to heights to from 0 degr eak Detect old Mode. ak mode wa oe stopped a vise the emi one by one	radiation. rence-receiving able-height antenna our meters above re field strength. Intenna are set to reged to its worst from 1 meter to 4 rees to 360 degrees			





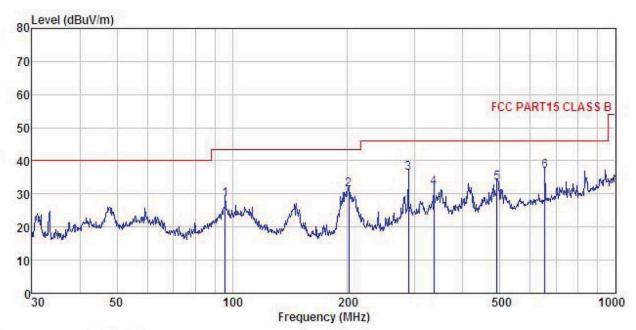






Below 1GHz

Horizontal:



Site

: 3m chamber : FCC PART15 CLASS B 3m VULB9163(30M1G) HORIZONTAL : 10.1" Android non-touch LCD Media Player : DT101-AS4-720 Condition

EUT

Model Test mode : WIFI mode Power Rating : AC120V/60Hz

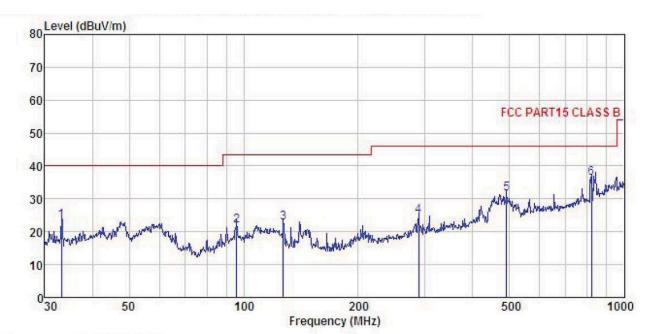
Environment: Temp: 25.5°C Huni: 55% 101KPa Test Engineer: Viki REMARK:

Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
MHz	dBu∇	<u>dB</u> /π		<u>ab</u>	$\overline{dBuV/m}$	$\overline{dBuV/m}$	<u>dB</u>	
95.762	44.18	12.90	0.93	29.55	28.46	43.50	-15.04	QP
201.393	48.08	10.60	1.39	28.82	31.25	43.50	-12.25	QP
287.990	50.08	12.84	1.74	28.47	36.19	46.00	-9.81	QP
336.035	44.67	13.99	1.89	28.53	32.02	46.00	-13.98	QP
490.745	43.43	16.39	2.38	28.94	33.26	46.00	-12.74	QP
654.232	44.12	18.65	2.80	28.77	36.80	46.00	-9.20	QP
	MHz 95.762 201.393 287.990 336.035 490.745	Freq Level MHz dBuV 95.762 44.18 201.393 48.08 287.990 50.08 336.035 44.67 490.745 43.43	Freq Level Factor MHz dBuV dB/m 95.762 44.18 12.90 201.393 48.08 10.60 287.990 50.08 12.84 336.035 44.67 13.99 490.745 43.43 16.39	Freq Level Factor Loss MHz dBuV dB/m dB 95.762 44.18 12.90 0.93 201.393 48.08 10.60 1.39 287.990 50.08 12.84 1.74 336.035 44.67 13.99 1.89 490.745 43.43 16.39 2.38	MHz dBuV dB/m dB dB 95.762 44.18 12.90 0.93 29.55 201.393 48.08 10.60 1.39 28.82 287.990 50.08 12.84 1.74 28.47 336.035 44.67 13.99 1.89 28.53 490.745 43.43 16.39 2.38 28.94	Freq Level Factor Loss Factor Level MHz dBuV dB/m dB dB dB dBuV/m 95.762 44.18 12.90 0.93 29.55 28.46 201.393 48.08 10.60 1.39 28.82 31.25 287.990 50.08 12.84 1.74 28.47 36.19 336.035 44.67 13.99 1.89 28.53 32.02 490.745 43.43 16.39 2.38 28.94 33.26	MHz dBuV dB/m dB dB dBuV/m dBuV/m dBuV/m 95.762 44.18 12.90 0.93 29.55 28.46 43.50 201.393 48.08 10.60 1.39 28.82 31.25 43.50 287.990 50.08 12.84 1.74 28.47 36.19 46.00 336.035 44.67 13.99 1.89 28.53 32.02 46.00 490.745 43.43 16.39 2.38 28.94 33.26 46.00	Freq Level Factor Loss Factor Level Line Limit MHz dBuV dB/m dB dB dBuV/m dBuV/m dB 95.762 44.18 12.90 0.93 29.55 28.46 43.50 -15.04 201.393 48.08 10.60 1.39 28.82 31.25 43.50 -12.25 287.990 50.08 12.84 1.74 28.47 36.19 46.00 -9.81 336.035 44.67 13.99 1.89 28.53 32.02 46.00 -13.98 490.745 43.43 16.39 2.38 28.94 33.26 46.00 -12.74





Vertical:



Site

: 3m chamber : FCC PART15 CLASS B 3m VULB9163(30M1G) VERTICAL : 10.1" Android non-touch LCD Media Player : DT101-AS4-720 Condition

EUT

Model Test mode : WIFI mode Power Rating : AC120V/60Hz

Environment : Temp: 25.5°C Huni: 55% 101KPa

Test Engineer: Viki REMARK :

minim									
	Freq		Antenna Factor				Limit Line		Remark
-	MHz	dBu∇	$-\overline{dB}/\overline{m}$	₫B	dB	dBuV/m	dBuV/m	<u>dB</u>	
1	33.211	40.40	12.31	0.46	29.96	23. 21	40.00	-16.79	QP
2	95.762	37.59	12.90	0.93	29.55	21.87	43.50	-21.63	QP
3	127.218	41.63	9.32	1.17	29.35	22.77	43.50	-20.73	QP
4	287.990	38.67	12.84	1.74	28.47	24.78	46.00	-21.22	QP
5	490.745	41.73	16.39	2.38	28.94	31.56	46.00	-14.44	QP
6	821.710	40.80	20.28	3.21	28.11	36.18	46.00	-9.82	QP





Above 1GHz

Test mode: 8	Test mode: 802.11b			nnel: Lowest		Remark: Peak			
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)	Polar.	
4824.00	45.76	31.54	10.58	40.22	47.66	74.00	-26.34	Vertical	
4824.00	44.39	31.54	10.58	40.22	46.29	74.00	-27.71	Horizontal	
Test mode: 8	02.11b		Test char	nnel: Lowest		Remark: Ave	erage		
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)	Polar.	
4824.00	36.87	31.54	10.58	40.22	38.77	54.00	-15.23	Vertical	
4824.00	35.36	31.54	10.58	40.22	37.26	54.00	-16.74	Horizontal	

Test mode: 802.11b			Test channel: Middle			Remark: Peak			
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)	Polar.	
4874.00	46.02	31.57	10.64	40.15	48.08	74.00	-25.92	Vertical	
4874.00	46.13	31.57	10.64	40.15	48.19	74.00	-25.81	Horizontal	
Test mode: 80	02.11b		Test char	nnel: Middle		Remark: Ave	rage		
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)	Polar.	
4874.00	37.25	31.57	10.64	40.15	39.31	54.00	-14.69	Vertical	
4874.00	37.16	31.57	10.64	40.15	39.22	54.00	-14.78	Horizontal	

Test mode: 8	Test mode: 802.11b			nnel: Highest		Remark: Peak			
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)	Polar.	
4924.00	44.56	31.61	10.70	40.08	46.79	74.00	-27.21	Vertical	
4924.00	44.31	31.61	10.70	40.08	46.54	74.00	-27.46	Horizontal	
Test mode: 8	02.11b		Test char	nnel: Highest		Remark: Ave	rage		
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)	Polar.	
4924.00	32.69	31.61	10.70	40.08	34.92	54.00	-19.08	Vertical	
4924.00	32.12	31.61	10.70	40.08	34.35	54.00	-19.65	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.





Test mode: 80	02.11g		Test chan	nel: Lowest		Remark: Pea		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4824.00	45.32	31.54	10.58	40.22	47.22	74.00	-26.78	Vertical
4824.00	44.87	31.54	10.58	40.22	46.77	74.00	-27.23	Horizontal
Test mode: 80	02.11g		Test chan	inel: Lowest		Remark: Ave	rage	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4824.00	35.23	31.54	10.58	40.22	37.13	54.00	-16.87	Vertical
4824.00	35.69	31.54	10.58	40.22	37.59	54.00	-16.41	Horizontal

Test mode: 80	02.11g		Test chan	nel: Middle		Remark: Pea		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4874.00	45.87	31.57	10.64	40.15	47.93	74.00	-26.07	Vertical
4874.00	46.78	31.57	10.64	40.15	48.84	74.00	-25.16	Horizontal
Test mode: 80	02.11g		Test chan	nel: Middle		Remark: Ave	rage	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.
4874.00	36.87	31.57	10.64	40.15	38.93	54.00	-15.07	Vertical
4874.00	36.23	31.57	10.64	40.15	38.29	54.00	-15.71	Horizontal

Test mode: 8	02.11g		Test char	nnel: Highest		Remark: Pea		
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)	Polar.
4924.00	44.54	31.61	10.70	40.08	46.77	74.00	-27.23	Vertical
4924.00	44.32	31.61	10.70	40.08	46.55	74.00	-27.45	Horizontal
Test mode: 8	02.11g		Test channel: Highest			Remark: Average		
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)	Polar.
4924.00	34.87	31.61	10.70	40.08	37.10	54.00	-16.90	Vertical
4924.00	34.25	31.61	10.70	40.08	36.48	54.00	-17.52	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.





Test mode: 8	02.11n(H20))	Test char	nnel: Lowest		Remark: Pea		
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)	Polar.
4824.00	45.54	31.54	10.58	40.22	47.44	74.00	-26.56	Vertical
4824.00	45.63	31.54	10.58	40.22	47.53	74.00	-26.47	Horizontal
Test mode: 8	02.11n(H20)		Test channel: Lowest			Remark: Average		
Frequency	Read	Antenna	Cable	Preamp	Level	Limit Line	Over	
(MHz)	Level (dBuV)	Factor (dB/m)	Loss (dB)	Factor (dB)	(dBuV/m)	(dBuV/m)	Limit (dB)	Polar.
								Polar. Vertical

Test mode: 8	02.11n(H20)		Test char	nnel: Middle		Remark: Pea		
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)	Polar.
4874.00	45.25	31.57	10.64	40.15	47.31	74.00	-26.69	Vertical
4874.00	45.53	31.57	10.64	40.15	47.59	74.00	-26.41	Horizontal
Test mode: 80	02.11n(H20)		Test channel: Middle			Remark: Average		
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)	Polar.
4874.00	36.62	31.57	10.64	40.15	38.68	54.00	-15.32	Vertical
4874.00	36.31	31.57	10.64	40.15	38.37	54.00	-15.63	Horizontal

Test mode: 80	02.11n(H20)		Test char	nnel: Highest		Remark: Peak			
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)	Polar.	
4924.00	45.82	31.61	10.70	40.08	48.05	74.00	-25.95	Vertical	
4924.00	45.73	31.61	10.70	40.08	47.96	74.00	-26.04	Horizontal	
Test mode: 80	02.11n(H20)		Test char	Test channel: Highest			Remark: Average		
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)	Polar.	
4924.00	36.57	31.61	10.70	40.08	38.80	54.00	-15.20	Vertical	
4924.00	36.12	31.61	10.70	40.08	38.35	54.00	-15.65	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.





Test mode: 80	02.11n(H40)		Test char	nnel: Lowest		Remark: Pea		
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)	Polar.
4844.00	45.28	31.55	10.61	40.19	47.25	74.00	-26.75	Vertical
4844.00	45.39	31.55	10.61	40.19	47.36	74.00	-26.64	Horizontal
Test mode: 80	02.11n(H40)		Test channel: Lowest			Remark: Average		
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)	Polar.
4844.00	34.87	31.55	10.61	40.19	36.84	54.00	-17.16	Vertical
4844.00	36.51	31.55	10.61	40.19	38.48	54.00	-15.52	Horizontal

Test mode: 80	02.11n(H40)		Test char	nnel: Middle		Remark: Pea		
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)	Polar.
4874.00	45.33	31.57	10.64	40.15	47.39	74.00	-26.61	Vertical
4874.00	46.23	31.57	10.64	40.15	48.29	74.00	-25.71	Horizontal
Test mode: 80	02.11n(H40))	Test char	nnel: Middle		Remark: Ave	rage	
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)	Polar.
4874.00	35.28	31.57	10.64	40.15	37.34	54.00	-16.66	Vertical
4874.00	35.93	31.57	10.64	40.15	37.99	54.00	-16.01	Horizontal

Test mode: 80	02.11n(H40)		Test char	nel: Highest		Remark: Peak		
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)	Polar.
4904.00	45.67	31.59	10.67	40.10	47.83	74.00	-26.17	Vertical
4904.00	45.36	31.59	10.67	40.10	47.52	74.00	-26.48	Horizontal
Test mode: 80	02.11n(H40)		Test channel: Highest			Remark: Average		
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)	Polar.
4904.00	35.63	31.59	10.67	40.10	37.79	54.00	-16.21	Vertical
4904.00	35.28	31.59	10.67	40.10	37.44	54.00	-16.56	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.