

# TEST REPORT

**Applicant:** KONKA GROUP CO., LTD.  
**Address of Applicant:** No. 28 Keji South 12th Road, Nanshan District. Shenzhen Guangdong China  
**Manufacturer:** KONKA GROUP CO., LTD.  
**Address of Manufacturer:** No. 28 Keji South 12th Road, Nanshan District. Shenzhen Guangdong China  
**Factory:** Dongguan Konka Electronic Co., Ltd  
**Address of Factory:** No.5 Konka Road, Fenggang Town, Dongguan, Guangdong, China.

## Equipment Under Test (EUT)

**Product Name:** 60 ULTRA HD SMART TV(ATSC TUNER)  
**Model No.:** UDZ60NR556UN, RWOSU6054、RWOSU6052、RWOSU6047、RXXXX60YY(X is 0-9, Y is A-Z)、PXXXX60YY(X is 0-9, Y is A-Z)  
**Trade Mark:** RCA、PROSCAN  
**FCC ID:** 2AQX7-RWOSU6054  
**Applicable standards:** FCC CFR Title 47 Part 15 Subpart C Section 15.247  
**Date of sample receipt:** April 13, 2023  
**Date of Test:** April 13~ May 17, 2023  
**Date of report issued:** May 19, 2023  
**Test Result :** PASS \*

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

Authorized Signature:



深圳市环球众一科技有限公司  
Global United Technology Services Co., Ltd.  
检验检测专用章  
Inspection/Testing Services

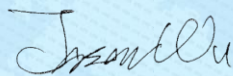
**Robinson Luo**  
**Laboratory Manager**

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

## 2 Version

Version No.	Date	Description
00	May 19, 2023	Original

Prepared By:

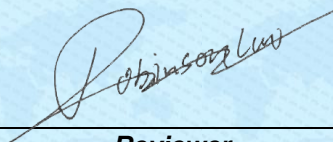


Date:

May 19, 2023

Project Engineer

Check By:



Date:

May 19, 2023

Reviewer

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## 4 Test Summary

Test Item	Section	Result
Antenna requirement	FCC part 15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	FCC part 15.207	Pass
Conducted Peak Output Power	FCC part 15.247 (b)(3)	Pass
Channel Bandwidth & 99% OCB	FCC part 15.247 (a)(2)	Pass
Power Spectral Density	FCC part 15.247 (e)	Pass
Band Edge	FCC part 15.247(d)	Pass
Spurious Emission	FCC part 15.205/15.209	Pass

*Remark: Test according to ANSI C63.10:2013 and RSS-Gen*

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

### Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	9kHz-30MHz	3.1dB	(1)
Radiated Emission	30MHz-200MHz	3.8039dB	(1)
Radiated Emission	200MHz-1GHz	3.9679dB	(1)
Radiated Emission	1GHz-18GHz	4.29dB	(1)
Radiated Emission	18GHz-40GHz	3.30dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	3.44dB	(1)

Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

## 5 General Information

### 5.1 General Description of EUT

Product Name:	60 ULTRA HD SMART TV(ATSC TUNER)
Model No.:	UDZ60NR556UN, RWOSU6054、RWOSU6052、RWOSU6047、 RXXXX60YY(X is 0-9, Y is A-Z) 、PXXXX60YY(X is 0-9, Y is A-Z)
Test Model No.:	UDZ60NR556UN
Remark:All above models are identical in the same PCB layout, interior structure and electrical circuits. The differences are appearance color and model name for commercial purpose.	
Test sample(s) ID:	GTSL2023060387-1
Sample(s) Status	Engineer sample
S/N:	N/A
Operation Frequency:	802.11b/802.11g/802.11n(HT20): 2412MHz~2462MHz 802.11n(HT40): 2422MHz~2452MHz
Channel numbers:	802.11b/802.11g /802.11n(HT20): 11 802.11n(HT40):7
Channel separation:	5MHz
Modulation technology:	802.11b: Direct Sequence Spread Spectrum (DSSS) 802.11g/802.11n(HT20) /802.11n(HT40): Orthogonal Frequency Division Multiplexing (OFDM)
Antenna Type:	IPEX
Antenna gain:	2.32dBi
Power supply:	AC 120V, 50/60Hz

Note:

1. Antenna gain information provided by the customer
2. The relevant information of the sample is provided by the entrusting company, and the laboratory is not responsible for its authenticity.

Operation Frequency each of channel							
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	X	

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:

Test channel	Frequency (MHz)	
	802.11b/802.11g/802.11n(HT20)	802.11n(HT40)
Lowest channel	2412MHz	2422MHz
Middle channel	2437MHz	2437MHz
Highest channel	2462MHz	2452MHz

## 5.2 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode
-------------------	--

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:

Pre-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)
Data rate	1Mbps	6Mbps	6.5Mbps	13Mbps

## 5.3 Description of Support Units

None
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## 5.4 Deviation from Standards

None.
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## 5.5 Abnormalities from Standard Conditions

None.
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## 5.6 Test Facility

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

- **FCC —Registration No.: 381383**

Designation Number: CN5029

Global United Technology Services Co., Ltd., Shenzhen 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 files.

- **ISED—Registration No.: 9079A**

CAB identifier: CN0091

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of ISED for radio equipment testing.

- **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

## 5.7 Test Location

All tests were performed at:
Global United Technology Services Co., Ltd. Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Tel: 0755-27798480 Fax: 0755-27798960

## 5.8 Additional Instructions

Test Software	Special test software provided by manufacturer
Power level setup	Default

## 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	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July 02, 2020	July 01, 2025
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	April 21, 2023	April 20, 2024
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	GTS640	March 20, 2023	March 19, 2025
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	June 12, 2022	June 11, 2023
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June 23, 2022	June 22, 2023
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	April 21, 2023	April 20, 2024
9	Coaxial Cable	GTS	N/A	GTS211	April 21, 2023	April 20, 2024
10	Coaxial cable	GTS	N/A	GTS210	April 21, 2023	April 20, 2024
11	Coaxial Cable	GTS	N/A	GTS212	April 21, 2023	April 20, 2024
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	April 21, 2023	April 20, 2024
13	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 23, 2022	June 22, 2023
14	Band filter	Amindeon	82346	GTS219	June 23, 2022	June 22, 2023
15	Power Meter	Anritsu	ML2495A	GTS540	June 23, 2022	June 22, 2023
16	Power Sensor	Anritsu	MA2411B	GTS541	June 23, 2022	June 22, 2023
17	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	April 21, 2023	April 20, 2024
18	Splitter	Agilent	11636B	GTS237	June 23, 2022	June 22, 2023
19	Loop Antenna	ZHINAN	ZN30900A	GTS534	Nov. 29, 2022	Nov. 28, 2023
20	Broadband Preamplifier	SCHWARZBECK	BBV9718	GTS535	April 21, 2023	April 20, 2024
21	Breitband hornantenna	SCHWARZBECK	BBHA 9170	GTS579	Oct. 16, 2022	Oct. 15, 2023
22	Amplifier	TDK	PA-02-02	GTS574	Oct. 16, 2022	Oct. 15, 2023
23	Amplifier	TDK	PA-02-03	GTS576	Oct. 16, 2022	Oct. 15, 2023
24	PSA Series Spectrum Analyzer	Rohde & Schwarz	FSP	GTS578	June 23, 2022	June 22, 2023
25	Amplifier(1GHz-26.5GHz)	HP	8449B	GTS601	April 21, 2023	April 20, 2024



Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	May 14, 2022	May 13, 2025
2	EMI Test Receiver	R&S	ESCI 7	GTS552	April 23, 2023	April 22, 2024
3	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	June 23, 2022	June 22, 2023
4	ENV216 2-L-V-NETZNACHB.DE	ROHDE&SCHWARZ	ENV216	GTS226	April 21, 2023	April 20, 2024
5	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
7	Thermo meter	JINCHUANG	GSP-8A	GTS639	April 27, 2023	April 26, 2024
8	Absorbing clamp	Elektronik-Feinmechanik	MDS21	GTS229	April 14, 2023	April 13, 2024
9	ISN	SCHWARZBECK	NTFM 8158	GTS565	April 21, 2023	April 20, 2024
10	High voltage probe	SCHWARZBECK	TK9420	GTS537	April 21, 2023	April 20, 2024

RF Conducted Test:						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	MXA Signal Analyzer	Agilent	N9020A	GTS566	April 21, 2023	April 20, 2024
2	EMI Test Receiver	R&S	ESCI 7	GTS552	April 21, 2023	April 20, 2024
3	Spectrum Analyzer	Agilent	E4440A	GTS536	April 21, 2023	April 20, 2024
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	April 21, 2023	April 20, 2024
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	April 21, 2023	April 20, 2024
6	USB RF Power Sensor	DARE	RPR3006W	GTS569	April 21, 2023	April 20, 2024
7	RF Switch Box	Shongyi	RFSW3003328	GTS571	April 21, 2023	April 20, 2024
8	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	April 21, 2023	April 20, 2024

General used equipment:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Humidity/ Temperature Indicator	KTJ	TA328	GTS243	April 23, 2023	April 22, 2024
2	Barometer	KUMAO	SF132	GTS647	July 26, 2022	July 25, 2023

## 7 Test results and Measurement Data

### 7.1 Antenna requirement

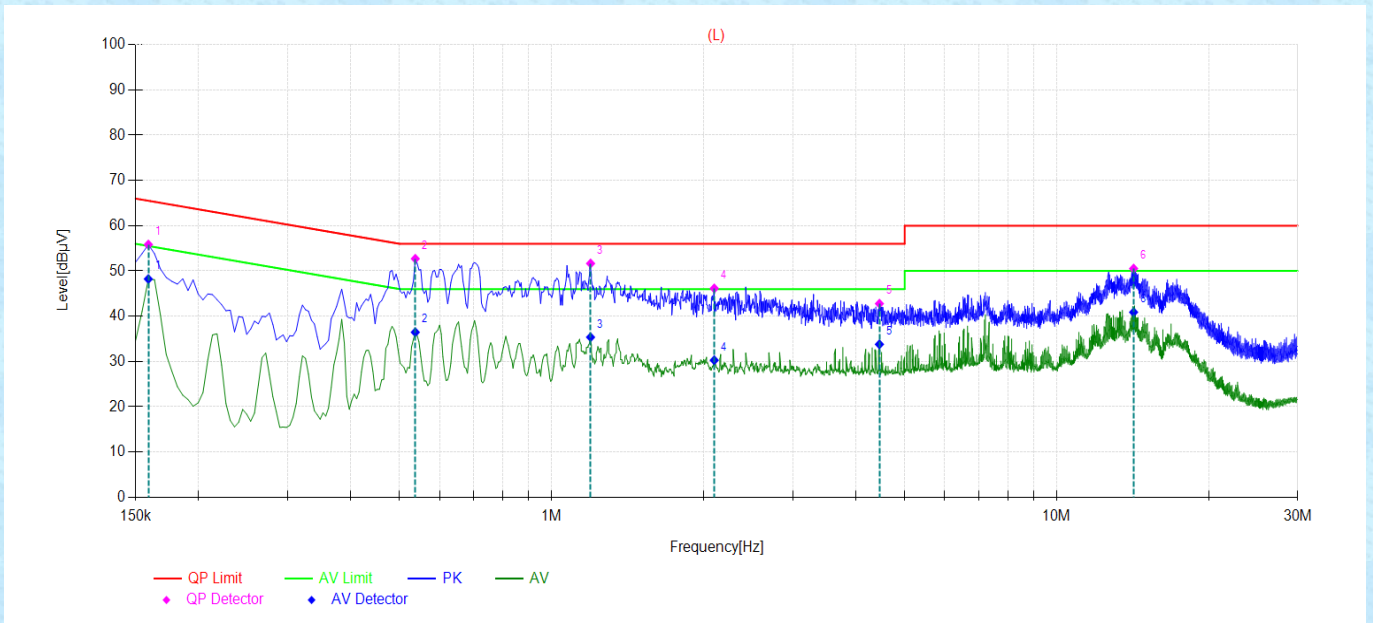
<b>Standard requirement:</b>	FCC Part15 C Section 15.203 /247(c)
<p><b>15.203 requirement:</b></p> <p>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an 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.</p> <p><b>15.247(c) (1)(i) requirement:</b></p> <p>(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.</p>	
<b>EUT Antenna:</b>	
The antenna type is IPEX, reference to the appendix II for details.	

## 7.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207					
Test Method:	ANSI C63.10:2013					
Test Frequency Range:	150KHz to 30MHz					
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto					
Limit:	Frequency range (MHz)		Limit (dBuV)			
			Quasi-peak		Average	
	0.15-0.5		66 to 56*		56 to 46*	
	0.5-5		56		46	
5-30		60		50		
* Decreases with the logarithm of the frequency.						
Test setup:	<p>Remark:  E.U.T: Equipment Under Test  LISN: Line Impedance Stabilization Network  Test table height=0.8m</p>					
Test procedure:	<ol style="list-style-type: none"> <li>1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).</li> <li>3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.</li> </ol>					
Test Instruments:	Refer to section 6.0 for details					
Test mode:	Refer to section 5.2 for details					
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar
Test voltage:	AC 120V, 60Hz					
Test results:	Pass					

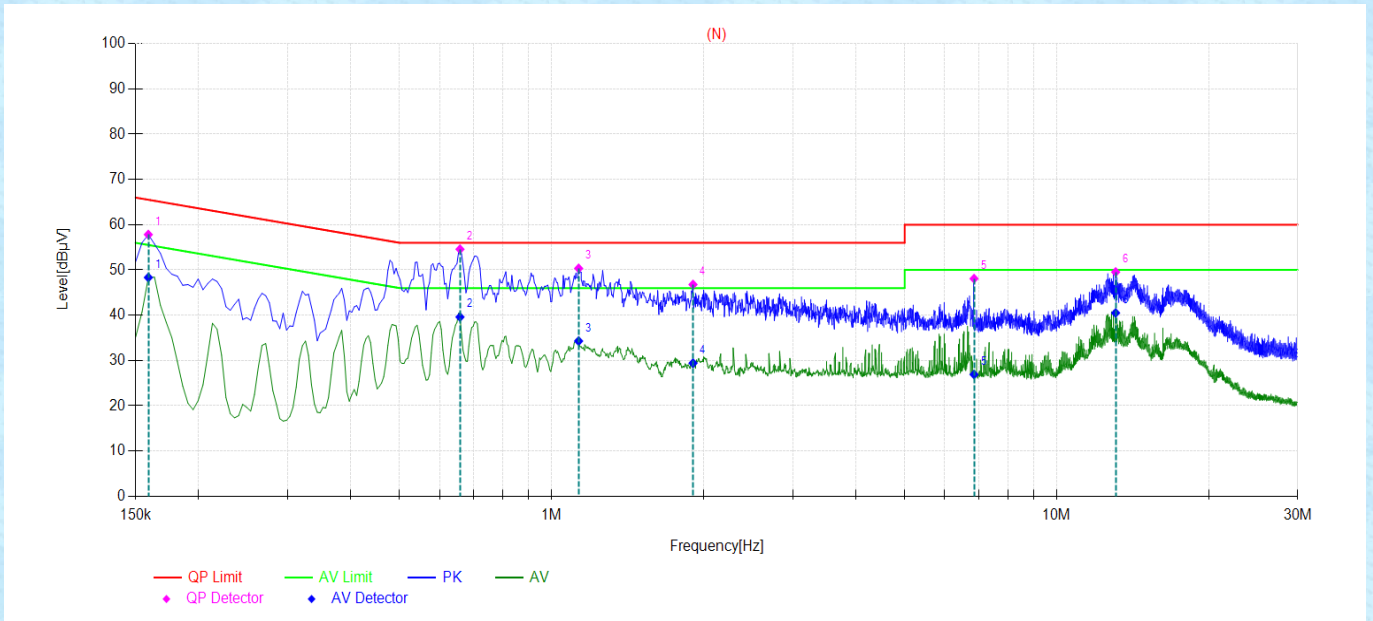
## Measurement data

Pre-scan all test modes, found worst case at ANT 1 802.11b 2462MHz, and so only show the test result of it  
**Line:**



Final Data List									
NO.	Freq. [MHz]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict	Type
1	0.159	55.83	65.52	9.69	48.22	55.52	7.30	PASS	L1
2	0.537	52.70	56.00	3.30	36.45	46.00	9.55	PASS	L1
3	1.194	51.65	56.00	4.35	35.36	46.00	10.64	PASS	L1
4	2.0985	46.14	56.00	9.86	30.28	46.00	15.72	PASS	L1
5	4.4565	42.78	56.00	13.22	33.79	46.00	12.21	PASS	L1
6	14.199	50.53	60.00	9.47	40.88	50.00	9.12	PASS	L1

**Neutral:**



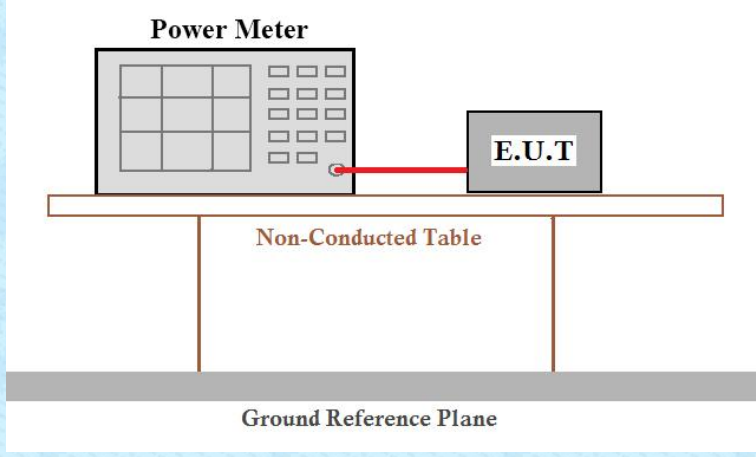
## Final Data List

NO.	Freq. [MHz]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict	Type
1	0.159	57.82	65.52	7.70	48.33	55.52	7.19	PASS	N
2	0.6585	54.58	56.00	1.42	39.60	46.00	6.40	PASS	N
3	1.131	50.35	56.00	5.65	34.29	46.00	11.71	PASS	N
4	1.905	46.78	56.00	9.22	29.41	46.00	16.59	PASS	N
5	6.8595	48.08	60.00	11.92	26.90	50.00	23.10	PASS	N
6	13.083	49.54	60.00	10.46	40.50	50.00	9.50	PASS	N

**Notes:**

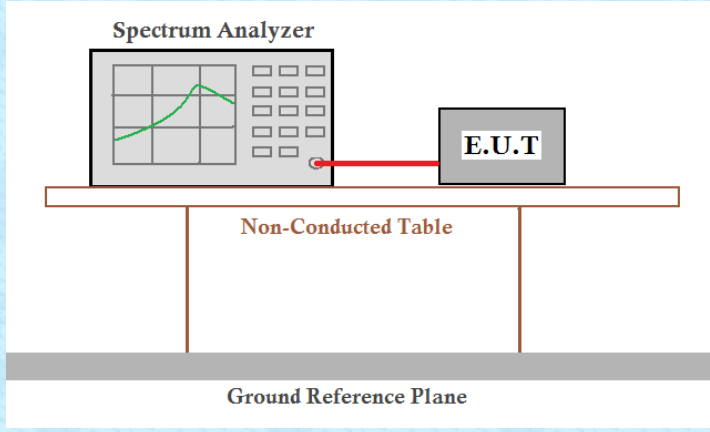
1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Receiver Read level + LISN Factor + Cable Loss
4. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits and measurement with the average detector receiver is unnecessary.

## 7.3 Conducted Output Power

Test Requirement :	FCC Part15 C Section 15.247 (b)(3)
Test Method :	KDB558074 D01 15.247 Meas Guidance v05r02
Limit:	30dBm
Test setup:	 <p>The diagram illustrates the test setup. A Power Meter and an E.U.T (Equipment Under Test) are connected by a red cable and placed on a Non-Conducted Table. Below the table is a Ground Reference Plane.</p>
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

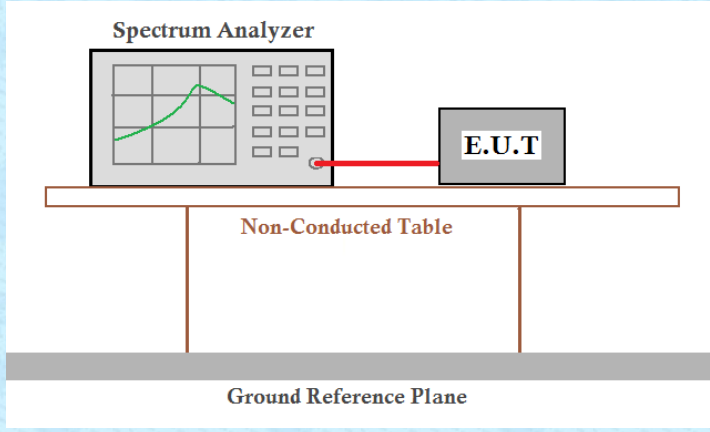
**Measurement Data:** The detailed test data see Appendix for WIFI 2.4G.

## 7.4 Channel Bandwidth

Test Requirement :	FCC Part15 C Section 15.247 (a)(2)
Test Method :	KDB558074 D01 15.247 Meas Guidance v05r02
Limit:	>500KHz
Test setup:	 <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both are placed on a Non-Conducted Table, which sits on a Ground Reference Plane.</p>
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

**Measurement Data:** The detailed test data see Appendix for WIFI 2.4G.

## 7.5 Power Spectral Density

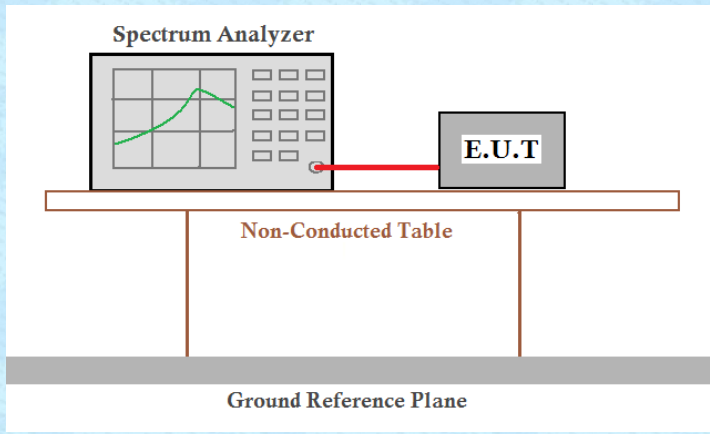
Test Requirement:	FCC Part15 C Section 15.247 (e)
Test Method:	KDB558074 D01 15.247 Meas Guidance v05r02
Limit:	8dBm/3kHz
Test setup:	 <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both are placed on a Non-Conducted Table, which sits on a Ground Reference Plane.</p>
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

**Measurement Data:** The detailed test data see Appendix for WIFI 2.4G.



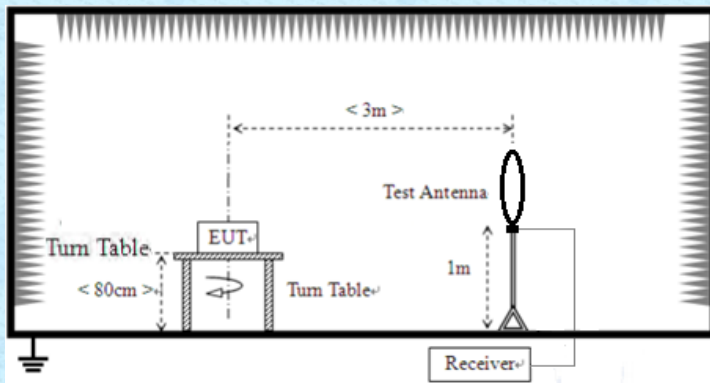
## 7.6 Spurious Emission in Non-restricted & restricted Bands

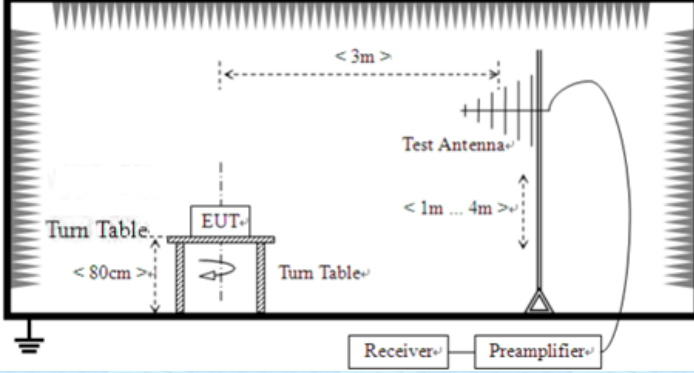
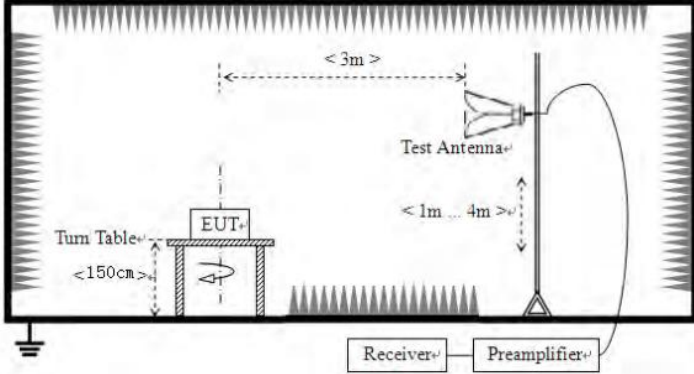
### 7.6.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	KDB558074 D01 15.247 Meas Guidance v05r02
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:	 <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both are placed on a Non-Conducted Table, which sits on a Ground Reference Plane.</p>
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

**Measurement Data:** The detailed test data see Appendix for WIFI 2.4G.

## 7.6.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209				
Test Method:	ANSI C63.10:2013				
Test Frequency Range:	9kHz to 25GHz				
Test site:	Measurement Distance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Value
	9KHz-150KHz	Quasi-peak	200Hz	600Hz	Quasi-peak
	150KHz-30MHz	Quasi-peak	9KHz	30KHz	Quasi-peak
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
		Peak	1MHz	10Hz	Average
Note: For Duty cycle $\geq 98\%$ , average detector set as above For Duty cycle $< 98\%$ , average detector set as below: $VBW \geq 1 / T$					
Limit:	Frequency	Limit (uV/m)	Value	Measurement Distance	
	0.009MHz-0.490MHz	2400/F(KHz)	PK/QP/A V	300m	
	0.490MHz-1.705MHz	24000/F(KHz)	QP	30m	
	1.705MHz-30MHz	30	QP	30m	
	30MHz-88MHz	100	QP	3m	
	88MHz-216MHz	150	QP		
	216MHz-960MHz	200	QP		
	960MHz-1GHz	500	QP		
	Above 1GHz	500	Average		
		5000	Peak		
Test setup:	For radiated emissions from 9kHz to 30MHz				
	 <p>The diagram illustrates the test setup for radiated emissions from 9kHz to 30MHz. It shows an Equipment Under Test (EUT) placed on a turn table. A test antenna is positioned 3m away from the EUT. The antenna is mounted on a stand that is 1m high. A receiver is connected to the antenna. The turn table has a diameter of 80cm.</p>				
For radiated emissions from 30MHz to 1GHz					

	 <p>For radiated emissions above 1GHz</p> 
<p>Test Procedure:</p>	<ol style="list-style-type: none"> <li>1. The EUT was placed on the top of a rotating table (0.8m for below 1G and 1.5m for above 1G) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li> <li>4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</li> </ol>
<p>Test Instruments:</p>	<p>Refer to section 6.0 for details</p>

Test mode:	Refer to section 5.2 for details					
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar
Test voltage:	AC 120V, 60Hz					
Test results:	Pass					

*Remarks:*

1. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

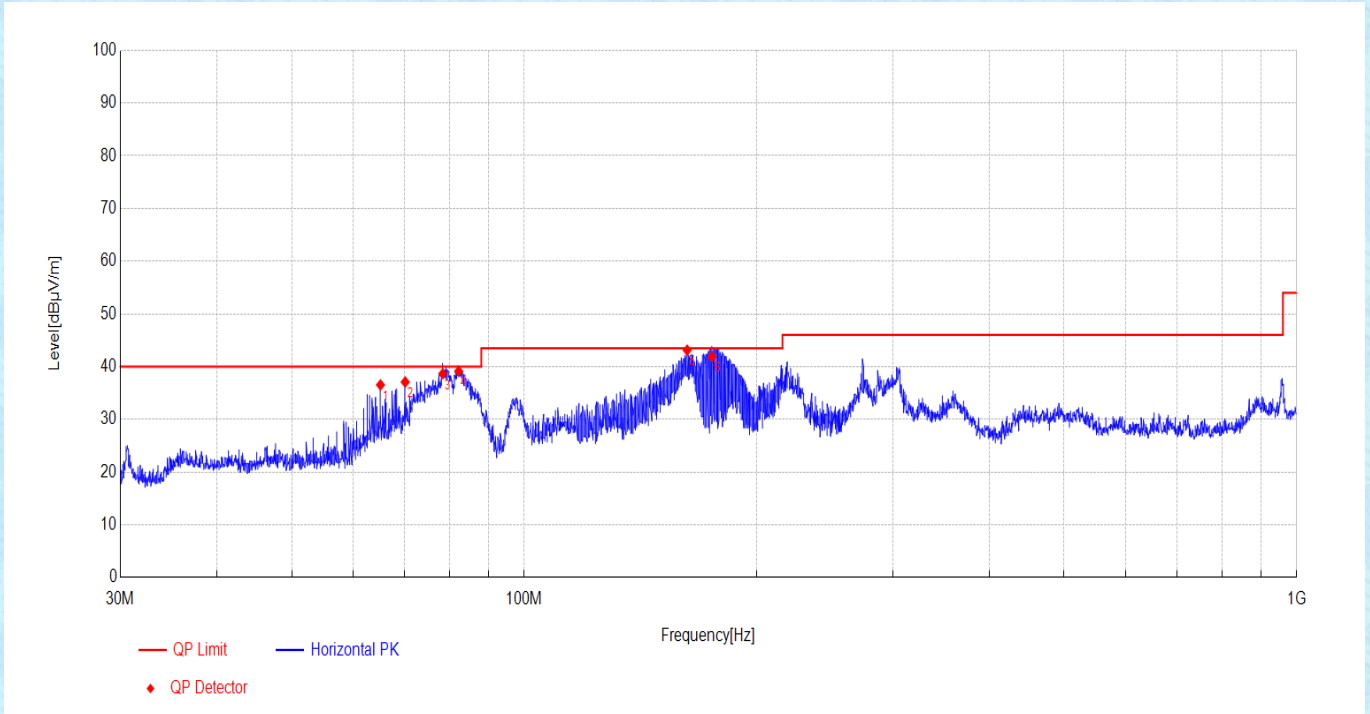
**Measurement data:**

■ **9kHz~30MHz**

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o), the test result no need to reported.

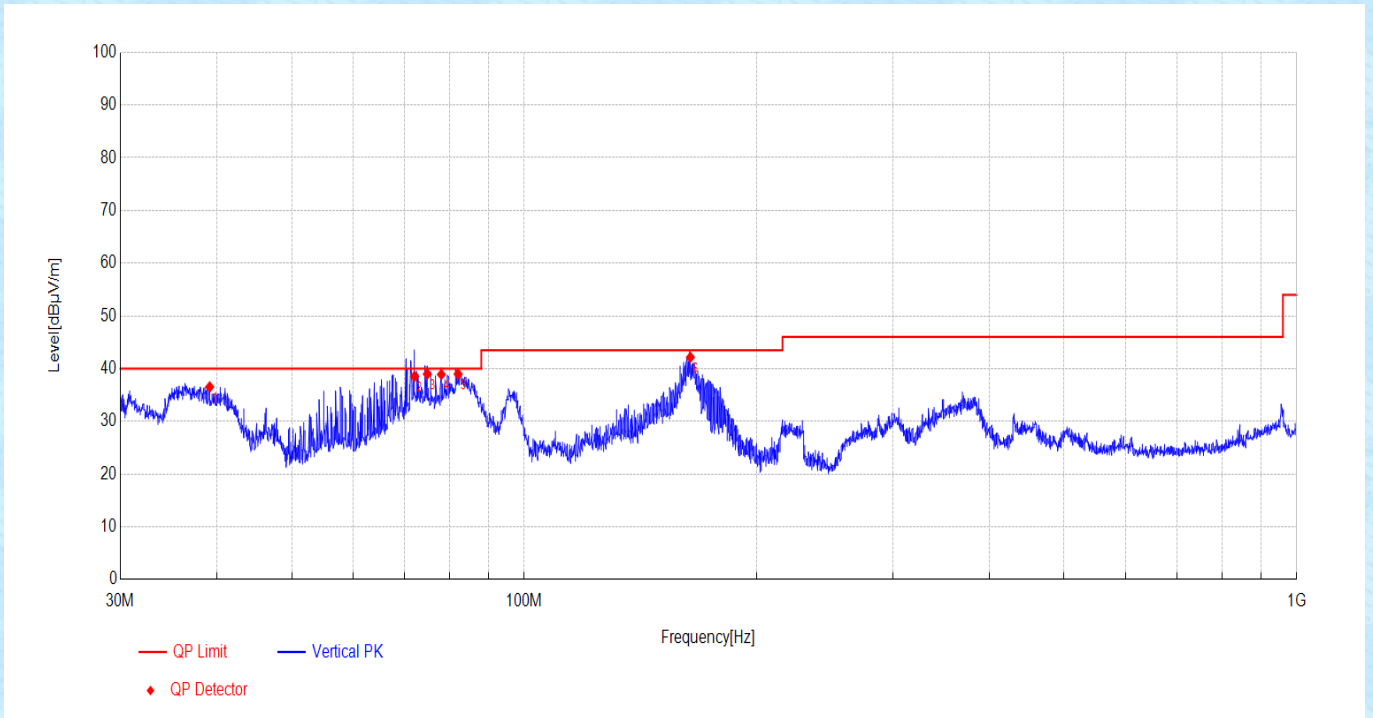
## Below 1GHz

Pre-scan all test modes, found worst case at ANT 1 802.11b 2462MHz, and so only show the test result of it  
**Horizontal:**



Final Data List									
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	65.1589	-18.21	36.54	40.00	3.46	100	102	Horizontal	PASS
2	70.1369	-19.70	37.10	40.00	2.90	100	134	Horizontal	PASS
3	78.4633	-20.55	38.66	40.00	1.34	100	32	Horizontal	PASS
4	82.2659	-20.78	39.11	40.00	0.89	100	51	Horizontal	PASS
5	162.5419	-20.53	43.14	43.50	0.36	100	305	Horizontal	PASS
6	175.113	-19.09	41.88	43.50	1.62	100	19	Horizontal	PASS

**Vertical:**



Final Data List									
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	39.159	-17.63	36.53	40.00	3.47	100	229	Vertical	PASS
2	72.1317	-19.89	38.56	40.00	1.44	100	347	Vertical	PASS
3	74.902	-20.18	38.99	40.00	1.01	100	19	Vertical	PASS
4	78.1202	-20.51	38.91	40.00	1.09	100	341	Vertical	PASS
5	82.1219	-20.77	38.98	40.00	1.02	100	260	Vertical	PASS
6	164.1165	-20.41	42.16	43.50	1.34	100	278	Vertical	PASS

## Unwanted Emissions in non-restricted Frequency Bands

### ■ Above 1GHz

Test mode:	802.11b	Test channel:	Lowest
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#### 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
4824	51.51	33.41	7.72	53.72	38.92	74	-35.08	Vertical
7236	48.41	36.55	9.58	53.25	41.29	74	-32.71	Vertical
9648	53.99	39.06	11.32	53.27	51.1	74	-22.9	Vertical
4824	48.77	33.41	7.72	53.72	36.18	74	-37.82	Horizontal
7236	52.31	36.55	9.58	53.25	45.19	74	-28.81	Horizontal
9648	46.51	39.06	11.32	53.27	43.62	74	-30.38	Horizontal

#### 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
4824	39.25	33.41	7.72	53.72	26.66	54	-27.34	Vertical
7236	38.62	36.55	9.58	53.25	31.5	54	-22.5	Vertical
9648	42.6	39.06	11.32	53.27	39.71	54	-14.29	Vertical
4824	38.34	33.41	7.72	53.72	25.75	54	-28.25	Horizontal
7236	37.68	36.55	9.58	53.25	30.56	54	-23.44	Horizontal
9648	39.74	39.06	11.32	53.27	36.85	54	-17.15	Horizontal

Test mode:	802.11b	Test channel:	Middle
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#### 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
4874	53.39	33.55	7.76	53.71	40.99	74	-33.01	Vertical
7311	46.37	36.56	9.63	53.26	39.3	74	-34.7	Vertical
9748	50.63	39.1	11.38	53.25	47.86	74	-26.14	Vertical
4874	48.38	33.55	7.76	53.71	35.98	74	-38.02	Horizontal
7311	46.72	36.56	9.63	53.26	39.65	74	-34.35	Horizontal
9748	53.19	39.1	11.38	53.25	50.42	74	-23.58	Horizontal

#### 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
4874	38.73	33.55	7.76	53.71	26.33	54	-27.67	Vertical
7311	42.06	36.56	9.63	53.26	34.99	54	-19.01	Vertical
9748	40.75	39.1	11.38	53.25	37.98	54	-16.02	Vertical
4874	37.82	33.55	7.76	53.71	25.42	54	-28.58	Horizontal
7311	41.57	36.56	9.63	53.26	34.5	54	-19.5	Horizontal
9748	38.4	39.1	11.38	53.25	35.63	54	-18.37	Horizontal

Test mode:	802.11b	Test channel:	Highest
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**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
4924	53.24	33.69	7.8	53.71	41.02	74	-32.98	Vertical
7386	48.37	36.58	9.68	53.28	41.35	74	-32.65	Vertical
9848	49.85	39.14	11.44	53.23	47.2	74	-26.8	Vertical
4924	48.17	33.69	7.8	53.71	35.95	74	-38.05	Horizontal
7386	49.91	36.58	9.68	53.28	42.89	74	-31.11	Horizontal
9848	46.06	39.14	11.44	53.23	43.41	74	-30.59	Horizontal

**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
4924	40.95	33.69	7.8	53.71	28.73	54	-25.27	Vertical
7386	41.7	36.58	9.68	53.28	34.68	54	-19.32	Vertical
9848	41.53	39.14	11.44	53.23	38.88	54	-15.12	Vertical
4924	42.48	33.69	7.8	53.71	30.26	54	-23.74	Horizontal
7386	42.75	36.58	9.68	53.28	35.73	54	-18.27	Horizontal
9848	39.5	39.14	11.44	53.23	36.85	54	-17.15	Horizontal

Test mode:	802.11g	Test channel:	lowest
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**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
4824	53.36	33.41	7.72	53.72	40.77	74	-33.23	Vertical
7236	52.37	36.55	9.58	53.25	45.25	74	-28.75	Vertical
9648	50.31	39.06	11.32	53.27	47.42	74	-26.58	Vertical
4824	50.36	33.41	7.72	53.72	37.77	74	-36.23	Horizontal
7236	46.92	36.55	9.58	53.25	39.8	74	-34.2	Horizontal
9648	50.01	39.06	11.32	53.27	47.12	74	-26.88	Horizontal

**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
4824	37.83	33.41	7.72	53.72	25.24	54	-28.76	Vertical
7236	39.34	36.55	9.58	53.25	32.22	54	-21.78	Vertical
9648	41.08	39.06	11.32	53.27	38.19	54	-15.81	Vertical
4824	39.42	33.41	7.72	53.72	26.83	54	-27.17	Horizontal
7236	42.34	36.55	9.58	53.25	35.22	54	-18.78	Horizontal
9648	40.29	39.06	11.32	53.27	37.4	54	-16.6	Horizontal



Test mode:	802.11g	Test channel:	Middle
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**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
4874	46.79	33.55	7.76	53.71	34.39	74	-39.61	Vertical
7311	53.91	36.56	9.63	53.26	46.84	74	-27.16	Vertical
9748	50.93	39.1	11.38	53.25	48.16	74	-25.84	Vertical
4874	51.37	33.55	7.76	53.71	38.97	74	-35.03	Horizontal
7311	51.33	36.56	9.63	53.26	44.26	74	-29.74	Horizontal
9748	48.16	39.1	11.38	53.25	45.39	74	-28.61	Horizontal

**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
4874	41.2	33.55	7.76	53.71	28.8	54	-25.2	Vertical
7311	40.01	36.56	9.63	53.26	32.94	54	-21.06	Vertical
9748	37.01	39.1	11.38	53.25	34.24	54	-19.76	Vertical
4874	42.5	33.55	7.76	53.71	30.1	54	-23.9	Horizontal
7311	41.42	36.56	9.63	53.26	34.35	54	-19.65	Horizontal
9748	42.86	39.1	11.38	53.25	40.09	54	-13.91	Horizontal

Test mode:	802.11g	Test channel:	Highest
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**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
4924	52.96	33.69	7.8	53.71	40.74	74	-33.26	Vertical
7386	53.35	36.58	9.68	53.28	46.33	74	-27.67	Vertical
9848	47.7	39.14	11.44	53.23	45.05	74	-28.95	Vertical
4924	47	33.69	7.8	53.71	34.78	74	-39.22	Horizontal
7386	52.54	36.58	9.68	53.28	45.52	74	-28.48	Horizontal
9848	47.45	39.14	11.44	53.23	44.8	74	-29.2	Horizontal

**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
4924	41.68	33.69	7.8	53.71	29.46	54	-24.54	Vertical
7386	38.61	36.58	9.68	53.28	31.59	54	-22.41	Vertical
9848	42.18	39.14	11.44	53.23	39.53	54	-14.47	Vertical
4924	37.44	33.69	7.8	53.71	25.22	54	-28.78	Horizontal
7386	37.85	36.58	9.68	53.28	30.83	54	-23.17	Horizontal
9848	37.58	39.14	11.44	53.23	34.93	54	-19.07	Horizontal

Test mode:	802.11n(HT20)	Test channel:	Lowest
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**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
4824	52.14	33.41	7.72	53.72	39.55	74	-34.45	Vertical
7236	46.3	36.55	9.58	53.25	39.18	74	-34.82	Vertical
9648	47.52	39.06	11.32	53.27	44.63	74	-29.37	Vertical
4824	53.95	33.41	7.72	53.72	41.36	74	-32.64	Horizontal
7236	52.48	36.55	9.58	53.25	45.36	74	-28.64	Horizontal
9648	47.14	39.06	11.32	53.27	44.25	74	-29.75	Horizontal

**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
4824	42.88	33.41	7.72	53.72	30.29	54	-23.71	Vertical
7236	42.82	36.55	9.58	53.25	35.7	54	-18.3	Vertical
9648	42.24	39.06	11.32	53.27	39.35	54	-14.65	Vertical
4824	39.71	33.41	7.72	53.72	27.12	54	-26.88	Horizontal
7236	39.64	36.55	9.58	53.25	32.52	54	-21.48	Horizontal
9648	41.67	39.06	11.32	53.27	38.78	54	-15.22	Horizontal

Test mode:	802.11n(HT20)	Test channel:	Middle
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**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
4874	46.52	33.55	7.76	53.71	34.12	74	-39.88	Vertical
7311	47.98	36.56	9.63	53.26	40.91	74	-33.09	Vertical
9748	52.21	39.1	11.38	53.25	49.44	74	-24.56	Vertical
4874	48.02	33.55	7.76	53.71	35.62	74	-38.38	Horizontal
7311	47.71	36.56	9.63	53.26	40.64	74	-33.36	Horizontal
9748	46.4	39.1	11.38	53.25	43.63	74	-30.37	Horizontal

**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
4874	38	33.55	7.76	53.71	25.6	54	-28.4	Vertical
7311	39.02	36.56	9.63	53.26	31.95	54	-22.05	Vertical
9748	41.38	39.1	11.38	53.25	38.61	54	-15.39	Vertical
4874	42	33.55	7.76	53.71	29.6	54	-24.4	Horizontal
7311	40.01	36.56	9.63	53.26	32.94	54	-21.06	Horizontal
9748	39.66	39.1	11.38	53.25	36.89	54	-17.11	Horizontal

Test mode:	802.11n(HT20)	Test channel:	Highest
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**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
4924	53.7	33.69	7.8	53.71	41.48	74	-32.52	Vertical
7386	47.28	36.58	9.68	53.28	40.26	74	-33.74	Vertical
9848	46.35	39.14	11.44	53.23	43.7	74	-30.3	Vertical
4924	48.45	33.69	7.8	53.71	36.23	74	-37.77	Horizontal
7386	49.53	36.58	9.68	53.28	42.51	74	-31.49	Horizontal
9848	47.37	39.14	11.44	53.23	44.72	74	-29.28	Horizontal

**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
4924	41.18	33.69	7.8	53.71	28.96	54	-25.04	Vertical
7386	39.74	36.58	9.68	53.28	32.72	54	-21.28	Vertical
9848	41.63	39.14	11.44	53.23	38.98	54	-15.02	Vertical
4924	42.33	33.69	7.8	53.71	30.11	54	-23.89	Horizontal
7386	41.83	36.58	9.68	53.28	34.81	54	-19.19	Horizontal
9848	40.03	39.14	11.44	53.23	37.38	54	-16.62	Horizontal

Test mode:	802.11n(HT40)	Test channel:	Lowest
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**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
4844	47.47	33.46	7.74	53.72	34.95	74	-39.05	Vertical
7266	52.63	36.55	9.6	53.25	45.53	74	-28.47	Vertical
9688	46.8	39.08	11.34	53.26	43.96	74	-30.04	Vertical
4844	50.36	33.46	7.74	53.72	37.84	74	-36.16	Horizontal
7266	46.25	36.55	9.6	53.25	39.15	74	-34.85	Horizontal
9688	50.04	39.08	11.34	53.26	47.2	74	-26.8	Horizontal

**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
4844	38.59	33.46	7.74	53.72	26.07	54	-27.93	Vertical
7266	38.64	36.55	9.6	53.25	31.54	54	-22.46	Vertical
9688	39.9	39.08	11.34	53.26	37.06	54	-16.94	Vertical
4844	37.32	33.46	7.74	53.72	24.8	54	-29.2	Horizontal
7266	39.49	36.55	9.6	53.25	32.39	54	-21.61	Horizontal
9688	41.1	39.08	11.34	53.26	38.26	54	-15.74	Horizontal

Test mode:	802.11n(HT40)	Test channel:	Middle
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**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
4874	52.39	33.55	7.76	53.71	39.99	74	-34.01	Vertical
7311	48.58	36.56	9.63	53.26	41.51	74	-32.49	Vertical
9748	49.53	39.1	11.38	53.25	46.76	74	-27.24	Vertical
4874	53.68	33.55	7.76	53.71	41.28	74	-32.72	Horizontal
7311	52.28	36.56	9.63	53.26	45.21	74	-28.79	Horizontal
9748	47.69	39.1	11.38	53.25	44.92	74	-29.08	Horizontal

**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
4874	40.49	33.55	7.76	53.71	28.09	54	-25.91	Vertical
7311	38.07	36.56	9.63	53.26	31	54	-23	Vertical
9748	39.38	39.1	11.38	53.25	36.61	54	-17.39	Vertical
4874	40.71	33.55	7.76	53.71	28.31	54	-25.69	Horizontal
7311	38.75	36.56	9.63	53.26	31.68	54	-22.32	Horizontal
9748	42.23	39.1	11.38	53.25	39.46	54	-14.54	Horizontal

Test mode:	802.11n(HT40)	Test channel:	Highest
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**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
4904	51.26	33.63	7.78	53.71	38.96	74	-35.04	Vertical
7356	49.82	36.57	9.66	53.27	42.78	74	-31.22	Vertical
9808	50.85	39.12	11.41	53.24	48.14	74	-25.86	Vertical
4904	49.38	33.63	7.78	53.71	37.08	74	-36.92	Horizontal
7356	50.74	36.57	9.66	53.27	43.7	74	-30.3	Horizontal
9808	51.61	39.12	11.41	53.24	48.9	74	-25.1	Horizontal

**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
4904	40.34	33.63	7.78	53.71	28.04	54	-25.96	Vertical
7356	41.86	36.57	9.66	53.27	34.82	54	-19.18	Vertical
9808	38.84	39.12	11.41	53.24	36.13	54	-17.87	Vertical
4904	40.77	33.63	7.78	53.71	28.47	54	-25.53	Horizontal
7356	41.29	36.57	9.66	53.27	34.25	54	-19.75	Horizontal
9808	37.38	39.12	11.41	53.24	34.67	54	-19.33	Horizontal

Notes:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.
3. Both 2 antennas were tested and compliance, only worst condition (ANT 1) report

■ **Unwanted Emissions in restricted Frequency Bands**

Test mode:	802.11b	Test channel:	Lowest
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**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
2310	47.96	27.71	5.3	53.84	27.13	74	-46.87	Horizontal
2390	47.69	27.91	5.4	53.82	27.18	74	-46.82	Horizontal
2310	46.86	27.71	5.3	53.84	26.03	74	-47.97	Vertical
2390	49.58	27.91	5.4	53.82	29.07	74	-44.93	Vertical

**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
2310	38.87	27.71	5.3	53.84	18.04	54	-35.96	Horizontal
2390	38.08	27.91	5.4	53.82	17.57	54	-36.43	Horizontal
2310	39.27	27.71	5.3	53.84	18.44	54	-35.56	Vertical
2390	39.78	27.91	5.4	53.82	19.27	54	-34.73	Vertical

Test mode:	802.11b	Test channel:	Highest
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**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
2483.5	48.84	28.16	5.51	53.8	28.71	74	-45.29	Horizontal
2500	47.45	22.8	5.53	53.8	21.98	74	-52.02	Horizontal
2483.5	50.73	28.16	5.51	53.8	30.6	74	-43.4	Vertical
2500	49	22.8	5.53	53.8	23.53	74	-50.47	Vertical

**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
2483.5	39.04	28.16	5.51	53.8	18.91	54	-35.09	Horizontal
2500	38.21	22.8	5.53	53.8	12.74	54	-41.26	Horizontal
2483.5	39.33	28.16	5.51	53.8	19.2	54	-34.8	Vertical
2500	37.56	22.8	5.53	53.8	12.09	54	-41.91	Vertical

Test mode:	802.11g	Test channel:	Lowest
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**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
2310	50.32	27.71	5.3	53.84	29.49	74	-44.51	Horizontal
2390	48.97	27.91	5.4	53.82	28.46	74	-45.54	Horizontal
2310	47.27	27.71	5.3	53.84	26.44	74	-47.56	Vertical
2390	48.27	27.91	5.4	53.82	27.76	74	-46.24	Vertical

**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
2310	37.93	27.71	5.3	53.84	17.1	54	-36.9	Horizontal
2390	40.21	27.91	5.4	53.82	19.7	54	-34.3	Horizontal
2310	39.38	27.71	5.3	53.84	18.55	54	-35.45	Vertical
2390	37.84	27.91	5.4	53.82	17.33	54	-36.67	Vertical

Test mode:	802.11g	Test channel:	Highest
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**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
2483.5	47.43	28.16	5.51	53.8	27.3	74	-46.7	Horizontal
2500	47.78	22.8	5.53	53.8	22.31	74	-51.69	Horizontal
2483.5	49.47	28.16	5.51	53.8	29.34	74	-44.66	Vertical
2500	49.25	22.8	5.53	53.8	23.78	74	-50.22	Vertical

**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
2483.5	39.83	28.16	5.51	53.8	19.7	54	-34.3	Horizontal
2500	39.15	22.8	5.53	53.8	13.68	54	-40.32	Horizontal
2483.5	39.11	28.16	5.51	53.8	18.98	54	-35.02	Vertical
2500	38.3	22.8	5.53	53.8	12.83	54	-41.17	Vertical

Test mode:	802.11n(HT20)	Test channel:	Lowest
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**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
2310	50.41	27.71	5.3	53.84	29.58	74	-44.42	Horizontal
2390	48.2	27.91	5.4	53.82	27.69	74	-46.31	Horizontal
2310	49.24	27.71	5.3	53.84	28.41	74	-45.59	Vertical
2390	47.46	27.91	5.4	53.82	26.95	74	-47.05	Vertical

**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
2310	37.58	27.71	5.3	53.84	16.75	54	-37.25	Horizontal
2390	40.81	27.91	5.4	53.82	20.3	54	-33.7	Horizontal
2310	39.98	27.71	5.3	53.84	19.15	54	-34.85	Vertical
2390	40.27	27.91	5.4	53.82	19.76	54	-34.24	Vertical

Test mode:	802.11n(HT20)	Test channel:	Highest
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**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
2483.5	47.84	28.16	5.51	53.8	27.71	74	-46.29	Horizontal
2500	50.48	22.8	5.53	53.8	25.01	74	-48.99	Horizontal
2483.5	48.78	28.16	5.51	53.8	28.65	74	-45.35	Vertical
2500	48.43	22.8	5.53	53.8	22.96	74	-51.04	Vertical

**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
2483.5	37.44	28.16	5.51	53.8	17.31	54	-36.69	Horizontal
2500	38.99	22.8	5.53	53.8	13.52	54	-40.48	Horizontal
2483.5	39.38	28.16	5.51	53.8	19.25	54	-34.75	Vertical
2500	38.42	22.8	5.53	53.8	12.95	54	-41.05	Vertical

Test mode:	802.11n(HT40)	Test channel:	Lowest
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**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
2310	49.93	27.71	5.3	53.84	29.1	74	-44.9	Horizontal
2390	47.58	27.91	5.4	53.82	27.07	74	-46.93	Horizontal
2310	47.66	27.71	5.3	53.84	26.83	74	-47.17	Vertical
2390	50.23	27.91	5.4	53.82	29.72	74	-44.28	Vertical

**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
2310	38.18	27.71	5.3	53.84	17.35	54	-36.65	Horizontal
2390	39.5	27.91	5.4	53.82	18.99	54	-35.01	Horizontal
2310	39.74	27.71	5.3	53.84	18.91	54	-35.09	Vertical
2390	39.22	27.91	5.4	53.82	18.71	54	-35.29	Vertical

Test mode:	802.11n(HT40)	Test channel:	Highest
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**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
2483.5	48.46	28.16	5.51	53.8	28.33	74	-45.67	Horizontal
2500	47.71	22.8	5.53	53.8	22.24	74	-51.76	Horizontal
2483.5	49.35	28.16	5.51	53.8	29.22	74	-44.78	Vertical
2500	48.08	22.8	5.53	53.8	22.61	74	-51.39	Vertical

**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
2483.5	39.1	28.16	5.51	53.8	18.97	54	-35.03	Horizontal
2500	38.34	22.8	5.53	53.8	12.87	54	-41.13	Horizontal
2483.5	37.97	28.16	5.51	53.8	17.84	54	-36.16	Vertical
2500	38.74	22.8	5.53	53.8	13.27	54	-40.73	Vertical

**Remarks:**

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.
3. Both 2 antennas were tested and compliance, only worst condition (ANT 1) report



## **8 Test Setup Photo**

Reference to the **appendix I** for details.

## **9 EUT Constructional Details**

Reference to the **appendix II** for details.

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