

FCC REPORT (UNII)

Applicant: 8devices

Address of Applicant: Gedimino 47, Kaunas, LT-44242, Lithuania

Equipment Under Test (EUT)

Product Name: Broadband Digital Transmission System

Model No.: BLUE bean A, BLUE bean C, RED bean A, RED bean C

FCC ID: Z9W-MB

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

Date of sample receipt: 28. Mar., 2019

Date of Test: 29. Mar., to 26 May, 2019

Date of report issued: 27 May, 2019

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.

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2 Version

Version No.	Date	Description
00	27 May, 2019	Original
01	10 Jun., 2019	Update page 15, 16, 33, 34, 147

Tested by:



Date:

27 May, 2019

Test Engineer

Reviewed by:



Date:

27 May, 2019

Project Engineer

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4 Test Summary

Test Item	Section in CFR 47	Test Result
Antenna requirement	15.203 & 15.407 (a)	Pass
AC Power Line Conducted Emission	15.207	Pass
Conducted Peak Output Power	15.407 (a) (1) (ii) & (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) (ii) & (a) (2)& (a) (3)	Pass
Band Edge	15.407(b)	Pass
Spurious Emission	15.407 (b) & 15.205 & 15.209	Pass
Frequency Stability	15.407(g)	Pass

Pass: The EUT complies with the essential requirements in the standard.
N/A: N/A: Not Applicable.

5 General Information

5.1 Client Information

Applicant:	8devices
Address:	Gedimino 47, Kaunas, LT-44242, Lithuania
Manufacturer/ Factory:	8devices
Address:	Gedimino 47, Kaunas, LT-44242, Lithuania

5.2 General Description of E.U.T.

Product Name:	Broadband Digital Transmission System
Model No.:	BLUE bean A, BLUE bean C, RED bean A, RED bean C
Operation Frequency:	Band 1: 5150MHz-5250MHz, Band 4: 5725MHz-5850MHz,
Channel numbers:	Band 1: 802.11a/802.11n20: 4, 802.11n40: 2, 802.11ac: 1 Band 4: 802.11a/802.11n20: 5, 802.11n40: 2, 802.11ac: 1
Channel separation:	802.11a/802.11n20/802.11ac20: 20MHz, 802.11n40/802.11ac40: 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
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: 150Mbps
Data speed (IEEE 802.11ac):	Up to 433.3Mbps
Antenna Type:	Ceramic Antenna External antenna
Antenna gain:	Ceramic Antenna: 3.0 dBi External antenna A: 4.5 dBi External antenna B: 4.25 dBi
Remarks:	The No.: BLUE bean A and BLUE bean C, RED bean A and RED bean C identical inside, the electrical circuit design, layout, components used and internal wiring up to RF output. with only difference as follow: <ol style="list-style-type: none">1. BLUE bean C and RED bean C RF output is connected to connector Murata HSC, BLUE bean A and RED bean A RF output is connected to connector Murata HSC and connected to antenna, to accommodate antenna PCB length is increased, antenna, antennas passive components and RF probe switch added to PCB.2. Modules use different version of chip BLUE bean Qualcomm QCA9377-7 and RED bean Qualcomm QCA9377-3.3. QCA9377-7 and QCA9377-3 only differs what interface it uses to connect to WIFI and BT.4. BLUE bean QCA9377-7 uses USB2.0 for WIFI and USB1.1 for BT.

	5. RED bean QCA9377-3 uses SDIO3.0 for WIFI and UART/PCM for BT. 6. Circuit design, layout components used and internal wiring for interface connection is different. 7. Pinout for module is different
--	---

Operation Frequency each of channel					
Band 1					
802.11a/ac(HT20)/n(HT20)		802.11n(HT40)/ac(HT40)		802.11ac	
Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180MHz	38	5190MHz	42	5210MHz
40	5200MHz	46	5230MHz		
44	5220MHz				
48	5240MHz				
Band 4					
802.11a/ac(HT20)/n(HT20)		802.11n(HT40)/ac(HT40)		802.11ac	
Channel	Frequency	Channel	Frequency	Channel	Frequency
149	5745MHz	151	5755MHz	155	5775MHz
153	5765MHz	159	5795MHz		
157	5785MHz				
161	5805MHz				
165	5825MHz				

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	5210
Middle channel	5200MHz	Highest channel	5230MHz		
Highest channel	5240MHz				
Band 4					
802.11a/802.11n20		802.11n40		802.11ac	
Channel	Frequency	Channel	Frequency	Channel	Frequency
Lowest channel	5745MHz	Lowest channel	5755MHz	Middle channel	5775MHz
Middle channel	5785MHz	Highest channel	5795MHz		
Highest channel	5825MHz				

5.3 Test environment and test mode

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.
<i>Remarks: During the test, pre-scan BLUE bean A, BLUE bean C, RED bean A, RED bean C, found BLUE bean A, was worse case. The report only reflects the worst case.</i>	
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, and found the follow list were the worst case.	
Mode	
802.11a	
802.11n-HT20	
802.11n-HT40	
802.11ac-HT80	
Data rate	
6 Mbps	
6.5 Mbps	
13 Mbps	
27 Mbps	

5.4 Description of Support Units

Manufacturer	Description	Model	S/N	FCC ID/DoC
LENOVO	Laptop	SL510	2847A65	DoC
ULEFONE	Adapter	HJ-0503000K7-EU	N/A	N/A
baofeng	Test suite	Pi3B+SD	N/A	N/A

5.5 Measurement Uncertainty

Parameters	Expanded Uncertainty
Conducted Emission (9kHz ~ 30MHz)	±2.22 dB (k=2)
Radiated Emission (9kHz ~ 30MHz)	±2.76 dB (k=2)
Radiated Emission (30MHz ~ 1000MHz)	±4.28 dB (k=2)
Radiated Emission (1GHz ~ 18GHz)	±5.72 dB (k=2)
Radiated Emission (18GHz ~ 40GHz)	±2.88 dB (k=2)

5.6 Related Submittal(s) / Grant (s)

This is an original grant, no related submittals and grants.

5.7 Laboratory Facility

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

- **FCC - Registration No.: 727551**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been accredited as a testing laboratory by FCC (Federal Communications Commission). The Registration No. is 727551.

- **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.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <https://portal.a2la.org/scopepdf/4346-01.pdf>

5.8 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

5.9 Test Instruments list

Radiated Emission:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
3m SAC	SAEMC	9m*6m*6m	966	07-22-2017	07-21-2020
Loop Antenna	SCHWARZBECK	FMZB1519B	00044	03-16-2018	03-15-2019
BiConiLog Antenna	SCHWARZBECK	VULB9163	497	03-16-2018	03-15-2019
Horn Antenna	SCHWARZBECK	BBHA9120D	916	03-16-2018	03-15-2019
EMI Test Software	AUDIX	E3	6.110919b	N/A	N/A
Pre-amplifier	HP	8447D	2944A09358	03-07-2018	03-06-2019
Pre-amplifier	CD	PAP-1G18	11804	03-07-2018	03-06-2019
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-07-2018	03-06-2019
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-07-2018	03-06-2019
Cable	ZDECL	Z108-NJ-NJ-81	1608458	03-07-2018	03-06-2019
Cable	MICRO-COAX	MFR64639	K10742-5	03-07-2018	03-06-2019
Cable	SUHNER	SUCOFLEX100	58193/4PE	03-07-2018	03-06-2019

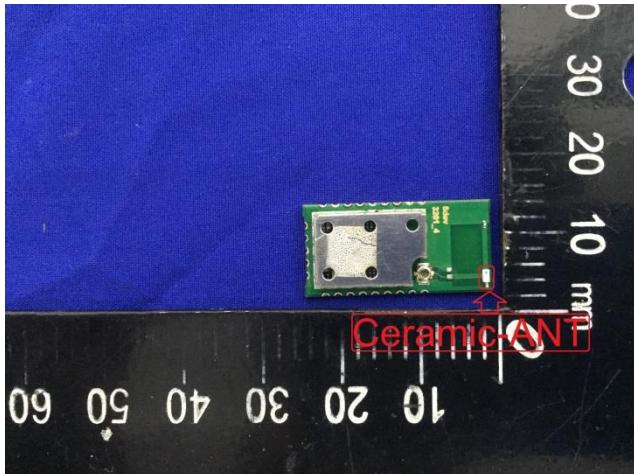
Conducted Emission:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
EMI Test Receiver	Rohde & Schwarz	ESCI	101189	03-07-2018	03-06-2019
Pulse Limiter	SCHWARZBECK	OSRAM 2306	9731	03-07-2018	03-06-2019
LISN	CHASE	MN2050D	1447	03-19-2018	03-18-2019
LISN	Rohde & Schwarz	ESH3-Z5	8438621/010	07-21-2017	07-20-2018
Cable	HP	10503A	N/A	03-07-2018	03-06-2019
EMI Test Software	AUDIX	E3	6.110919b	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 installer 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:	<p>The product is a professionally installed device which has two types of antennas for the application. The antennas information as below table:</p> <table border="1"><thead><tr><th>Antenna Type</th><th>Antenna Gain (dBi)</th></tr></thead><tbody><tr><td>Ceramic Antenna</td><td>Band 1: 3 Band 4: 3</td></tr><tr><td>External Antenna A</td><td>Band 1: 4.5 Band 4: 5</td></tr><tr><td>External Antenna B</td><td>Band 1: 4.25 Band 4: 4.25</td></tr></tbody></table> <p>According to above information, the antennas meet the requirements of this section</p>	Antenna Type	Antenna Gain (dBi)	Ceramic Antenna	Band 1: 3 Band 4: 3	External Antenna A	Band 1: 4.5 Band 4: 5	External Antenna B	Band 1: 4.25 Band 4: 4.25
Antenna Type	Antenna Gain (dBi)								
Ceramic Antenna	Band 1: 3 Band 4: 3								
External Antenna A	Band 1: 4.5 Band 4: 5								
External Antenna B	Band 1: 4.25 Band 4: 4.25								

Ceramic Antenna:



External antenna A:



External antenna B:

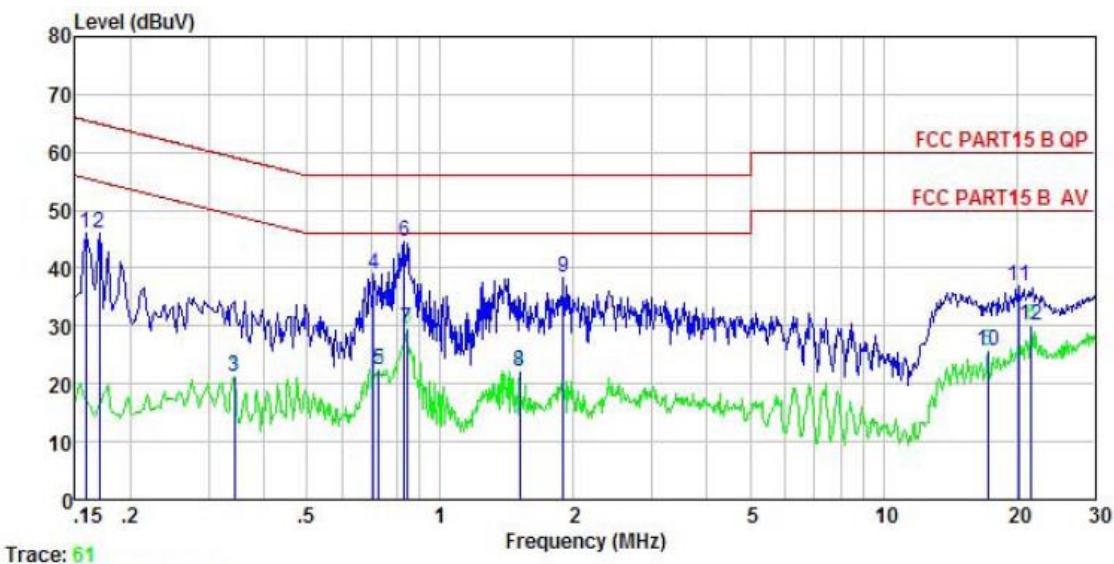


6.2 Conducted Emission

Test Requirement:	FCC Part15 C Section 15.207		
Test Method:	ANSI C63.10: 2013		
Test Frequency Range:	150kHz to 30MHz		
Class / Severity:	Class B		
Receiver setup:	RBW=9kHz, VBW=30kHz		
Limit:	Frequency range (MHz)	Quasi-peak	Limit (dBuV)
	0.15-0.5	66 to 56*	0.15-0.5
	0.5-5	56	0.5-5
	5-30	60	5-30
	* Decreases with the logarithm of the frequency.		
Test procedure	<ol style="list-style-type: none"> The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). It provides a 50ohm/50uH coupling impedance for the measuring equipment. 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). 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. 		
Test setup:	<p style="text-align: center;">Reference Plane</p> <p><i>Remark:</i> E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</p>		
Test Instruments:	Refer to section 5.9 for details		
Test mode:	Refer to section 5.3 for details.		
Test results:	Passed		

Measurement Data:

Product name:	Broadband Digital Transmission System	Product model:	BLUE BEAN A
Test by:	Mike	Test mode:	Wi-Fi Tx mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5°C Huni: 55%

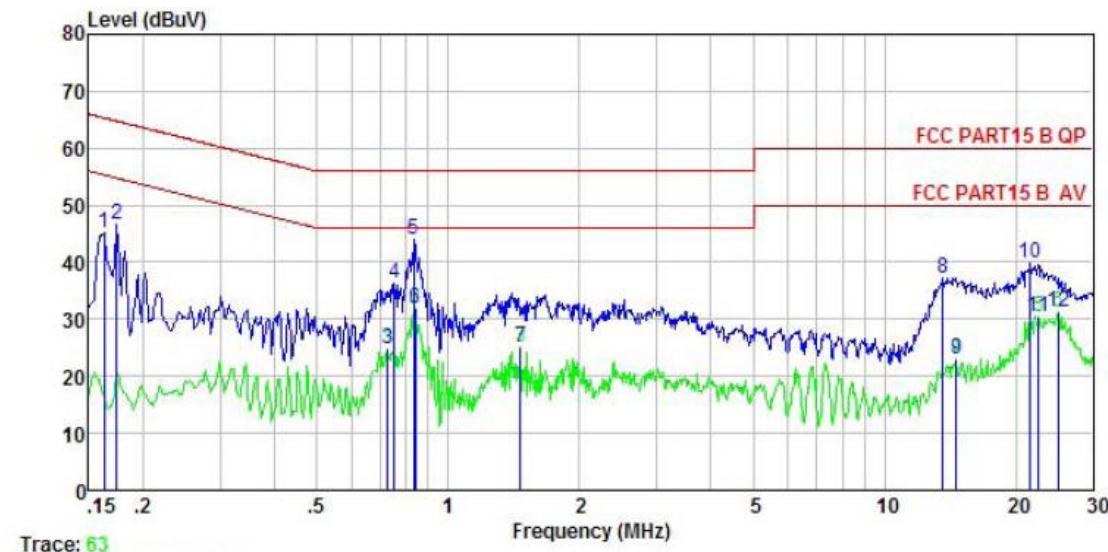


Freq MHz	Read Level dBuV	LISN Factor dB	Cable Loss dB	Level dBuV	Limit Line dBuV	Over Limit dB	Remark
1	0.158	35.85	-0.44	10.77	46.18	65.56	-19.38 QP
2	0.170	35.65	-0.43	10.77	45.99	64.94	-18.95 QP
3	0.343	10.82	-0.38	10.73	21.17	49.13	-27.96 Average
4	0.708	28.69	-0.38	10.77	39.08	56.00	-16.92 QP
5	0.727	12.16	-0.38	10.78	22.56	46.00	-23.44 Average
6	0.830	34.25	-0.38	10.82	44.69	56.00	-11.31 QP
7	0.839	19.10	-0.38	10.82	29.54	46.00	-16.46 Average
8	1.511	11.74	-0.40	10.92	22.26	46.00	-23.74 Average
9	1.898	27.87	-0.41	10.95	38.41	56.00	-17.59 QP
10	17.199	15.61	-0.82	10.91	25.70	50.00	-24.30 Average
11	20.162	26.82	-0.97	10.93	36.78	60.00	-23.22 QP
12	21.600	20.09	-1.00	10.91	30.00	50.00	-20.00 Average

Notes:

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

Product name:	Broadband Digital Transmission System	Product model:	BLUE BEAN A
Test by:	Mike	Test mode:	Wi-Fi Tx mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Neutral
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5°C Huni: 55%

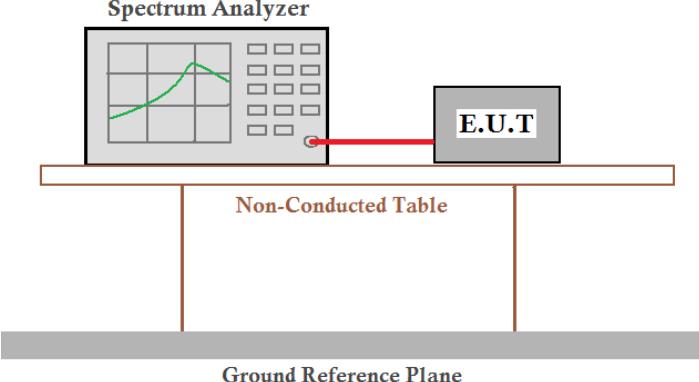


Freq MHz	Read Level dBuV	LISN Factor	Cable Loss dB	Limit Line dBuV	Over Limit dB	Over Limit Remark
1	0.162	34.97	-0.68	10.77	45.06	65.34 -20.28 QP
2	0.174	36.48	-0.69	10.77	46.56	64.77 -18.21 QP
3	0.727	14.65	-0.64	10.78	24.79	46.00 -21.21 Average
4	0.751	26.09	-0.64	10.79	36.24	56.00 -19.76 QP
5	0.835	33.66	-0.64	10.82	43.84	56.00 -12.16 QP
6	0.839	21.63	-0.63	10.82	31.82	46.00 -14.18 Average
7	1.464	14.72	-0.65	10.92	24.99	46.00 -21.01 Average
8	13.623	27.08	-0.81	10.91	37.18	60.00 -22.82 QP
9	14.594	12.89	-0.81	10.90	22.98	50.00 -27.02 Average
10	21.600	30.24	-1.42	10.91	39.73	60.00 -20.27 QP
11	22.535	20.95	-1.43	10.90	30.42	50.00 -19.58 Average
12	24.922	21.81	-1.44	10.87	31.24	50.00 -18.76 Average

Notes:

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

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:	<p>Band 1: For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi.</p> <p>Band 4: 1W (If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.).</p>
Test setup:	 <p>The diagram illustrates the test setup for conducted output power. A Spectrum Analyzer is connected to the European Union Test (E.U.T.) device. The E.U.T. is positioned on a Non-Conducted Table, which is situated above a Ground Reference Plane.</p>
Test Instruments:	Refer to section 5.9 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

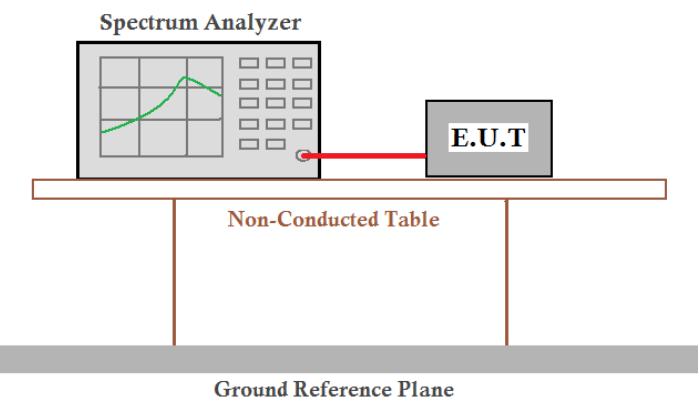
Measurement Data:**Band 1:**

Test CH	Maximum Conducted Output Power (dBm)			Limit(dBm)	Result
	802.11a	802.11n(HT20)	802.11n(HT40)		
Lowest	15.16	14.66	12.90	24.00	Pass
Middle	14.33	14.32	/		
Highest	14.21	14.58	13.96		
Test CH	Maximum Conducted Output Power (dBm)			Limit(dBm)	Result
	802.11ac(HT20)	802.11ac(HT40)	802.11ac(HT80)		
Lowest	15.28	12.66	/	24.00	Pass
Middle	14.55	/	12.31		
Highest	15.04	13.76	/		

Band 4:

Test CH	Maximum Conducted Output Power (dBm)			Limit(dBm)	Result
	802.11a	802.11n(HT20)	802.11n(HT40)		
Lowest	14.85	14.59	14.29	30.00	Pass
Middle	14.32	14.37	/		
Highest	13.28	13.50	14.64		
Test CH	Maximum Conducted Output Power (dBm)			Limit(dBm)	Result
	802.11ac(HT20)	802.11ac(HT40)	802.11ac(HT80)		
Lowest	15.46	13.76	/	30.00	Pass
Middle	14.81	/	13.30		
Highest	14.25	13.84	/		

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:	Band 1: N/A(26dB Emission Bandwidth and 99% Occupy Bandwidth) Band 4: N/A(26dB Emission Bandwidth and 99% Occupy Bandwidth) Band 4: >500kHz(6dB Bandwidth)
Test setup:	
Test Instruments:	Refer to section 5.9 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data:**Band 1:**

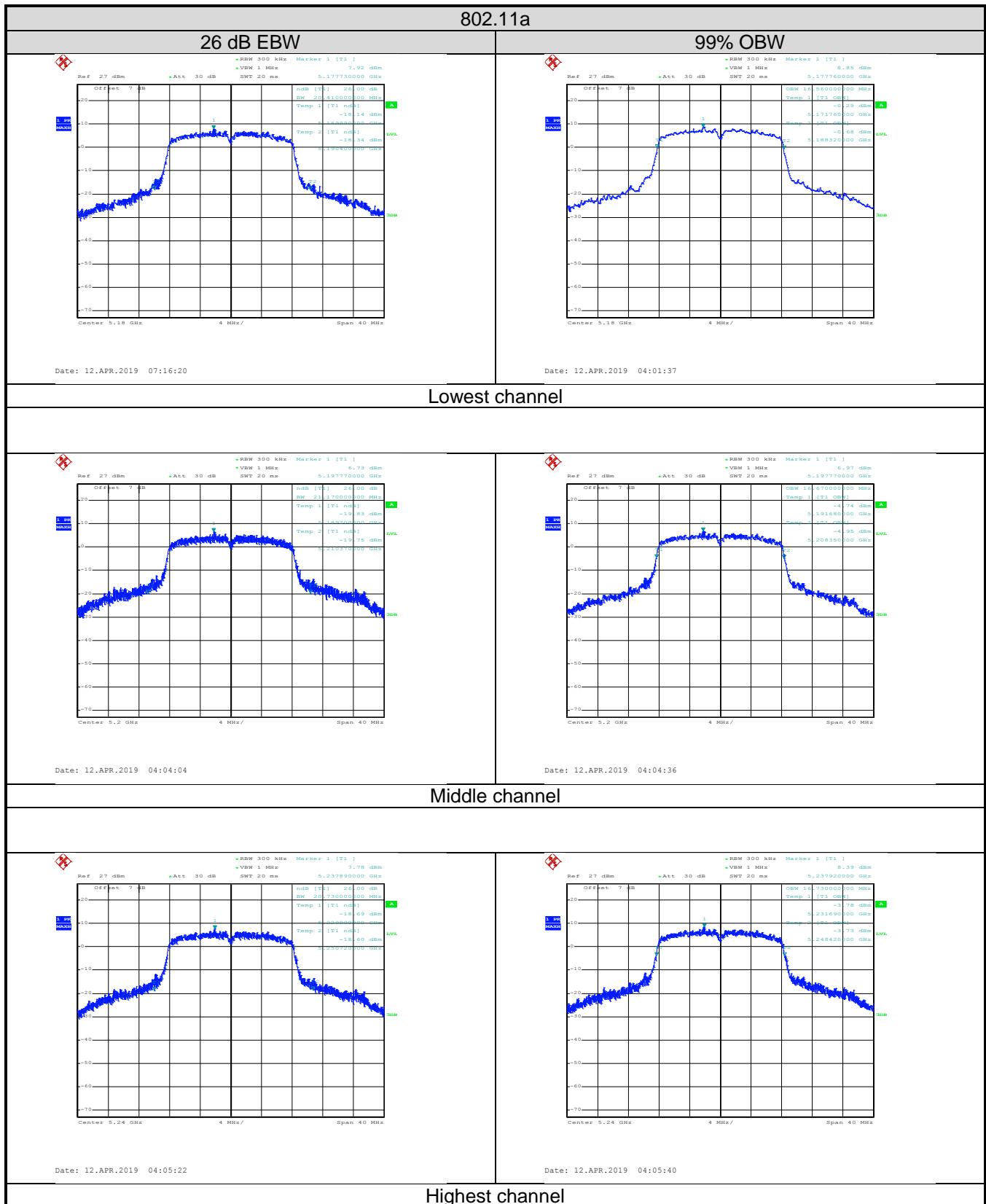
Test Channel	26dB Emission Bandwidth (MHz)			Limit	Result
	802.11a	802.11n(HT20)	802.11n(HT40)		
Lowest	20.41	20.91	39.60	N/A	N/A
Middle	21.17	22.92	/		
Highest	20.73	20.11	39.72		
Test Channel	802.11ac(HT20)	802.11ac(HT40)	802.11ac(HT80)	Limit	Result
Lowest	21.42	40.14	/	N/A	N/A
Middle	21.54	/	79.92		
Highest	20.90	39.78	/		
Test Channel	99% Occupy Bandwidth (MHz)			Limit	Result
	802.11a	802.11n(HT20)	802.11n(HT40)		
Lowest	16.56	17.70	35.85	N/A	N/A
Middle	16.67	17.74	/		
Highest	16.73	17.87	35.85		
Test Channel	802.11ac(HT20)	802.11ac(HT40)	802.11ac(HT80)	Limit	Result
Lowest	17.60	35.86	/	N/A	N/A
Middle	18.01	/	75.00		
Highest	17.52	35.90	/		

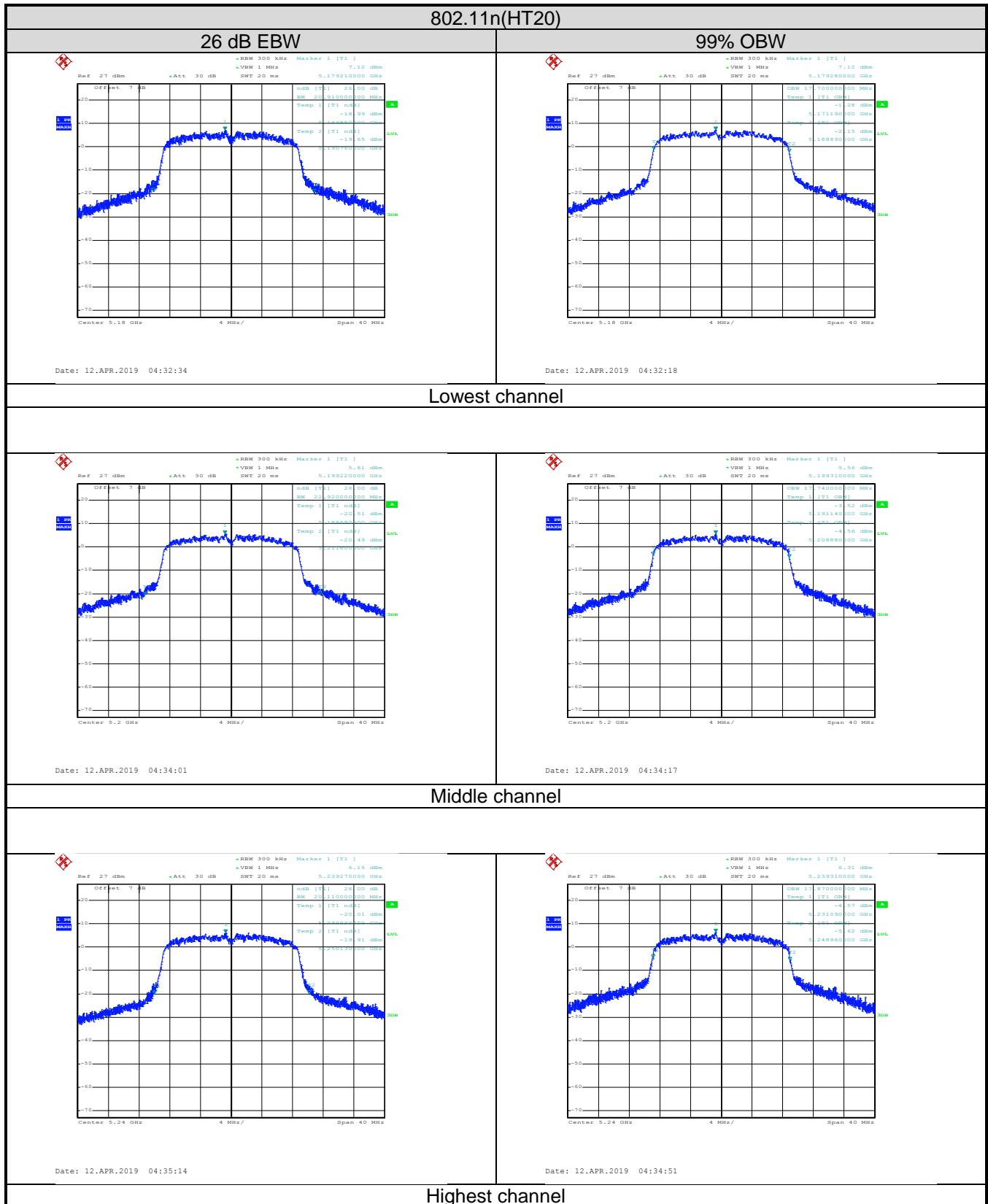
Band 4:

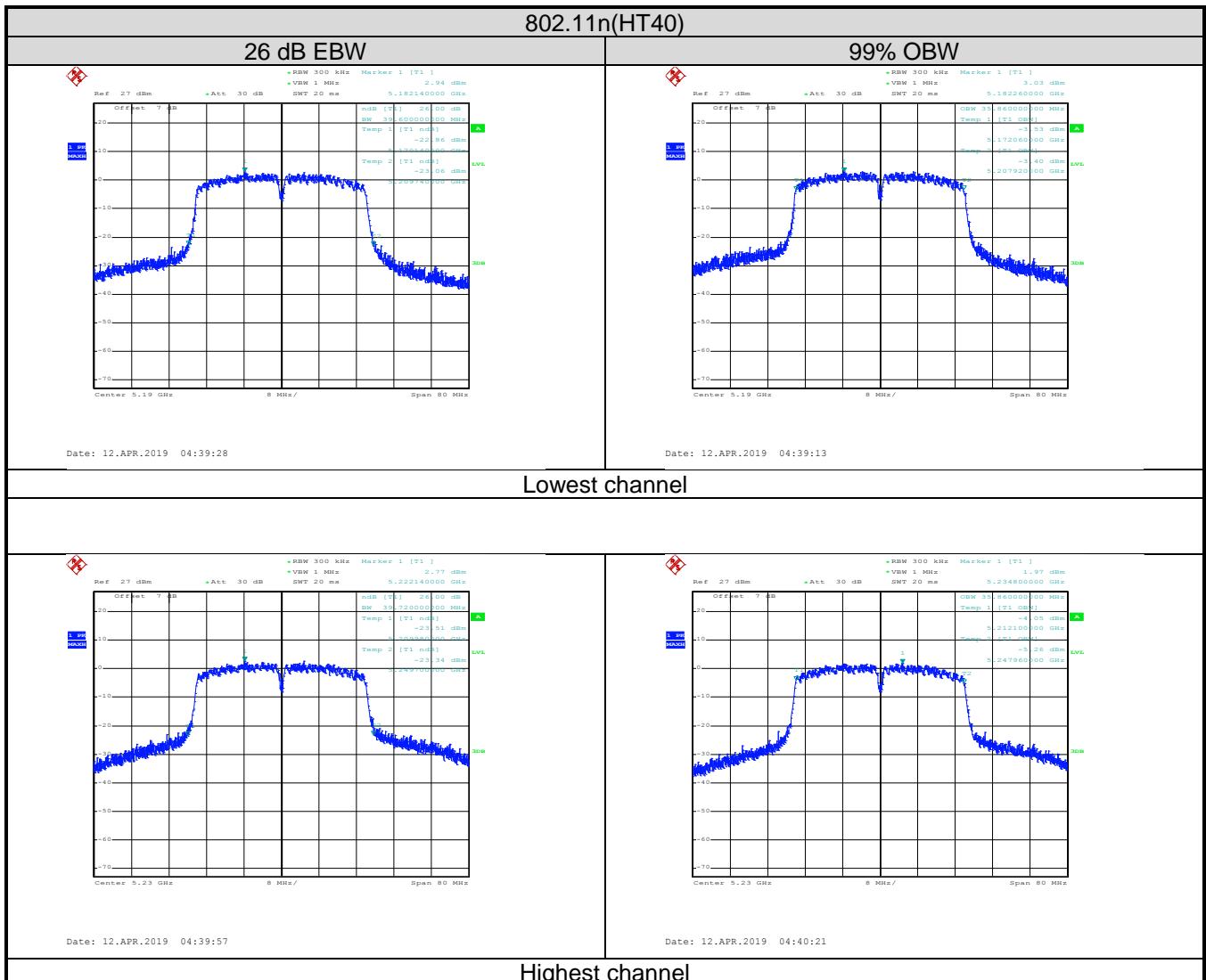
Test Channel	26dB Emission Bandwidth (MHz)			Limit	Result
	802.11a	802.11n(HT20)	802.11n(HT40)		
Lowest	21.62	20.54	40.10	N/A	N/A
Middle	22.68	21.77	/		
Highest	22.39	20.75	40.22		
Test Channel	802.11ac(HT20)	802.11a(HT40)	802.11ac(HT80)	Limit	Result
Lowest	20.74	40.04	/	N/A	N/A
Middle	22.69	/	80.24		
Highest	22.29	40.74	/		
Test Channel	99% Occupy Bandwidth (MHz)			Limit	Result
	802.11a	802.11n(HT20)	802.11n(HT40)		
Lowest	17.58	17.56	36.06	N/A	N/A
Middle	19.63	17.66	/		
Highest	17.10	17.67	35.88		
Test Channel	802.11ac(HT20)	802.11ac(HT40)	802.11ac(HT80)	Limit	Result
Lowest	18.31	35.92	/	N/A	N/A
Middle	17.67	/	75.52		
Highest	17.90	35.94	/		
Test Channel	6dB Emission Bandwidth (MHz)			Limit	Result
	802.11a	802.11n(HT20)	802.11n(HT40)		
Lowest	15.28	15.12	35.36	N/A	N/A
Middle	15.12	15.20	/		
Highest	15.20	15.20	35.36		
Test Channel	802.11ac(HT20)	802.11ac(HT40)	802.11ac(HT80)	Limit	Result
Lowest	15.20	35.36	/	N/A	N/A
Middle	15.28	/	75.20		
Highest	15.20	34.08	/		

Test plot as follows:

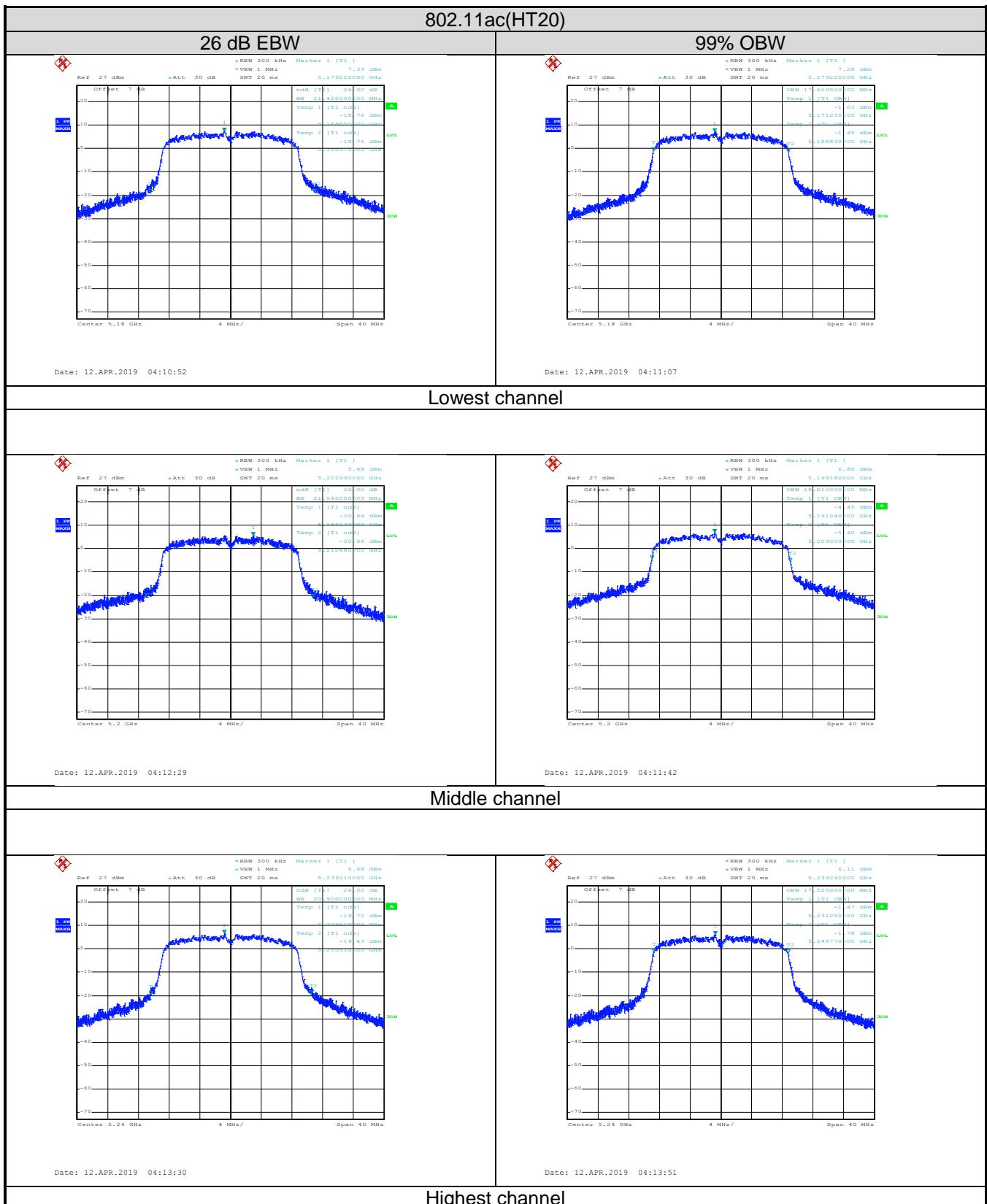
Band 1:

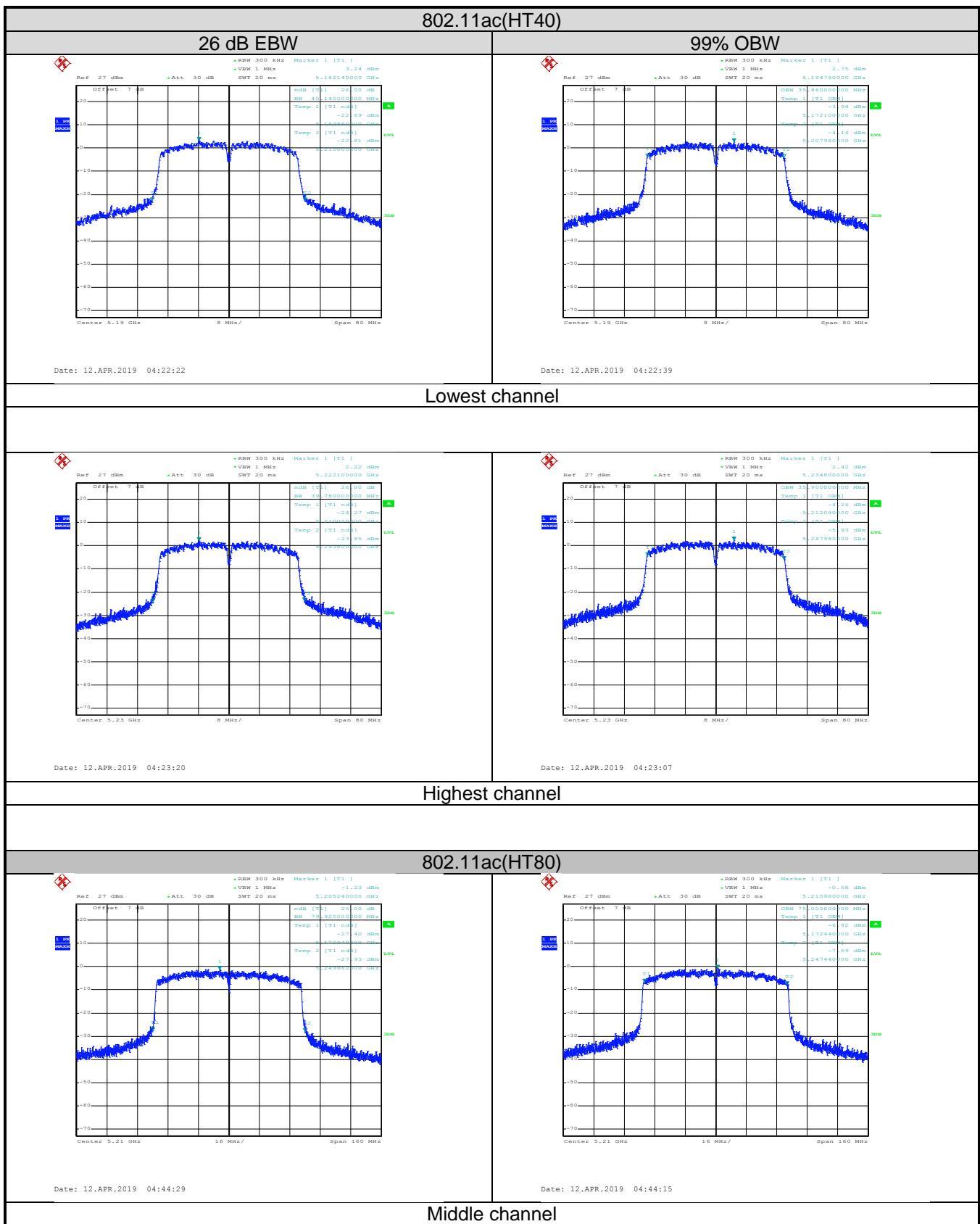




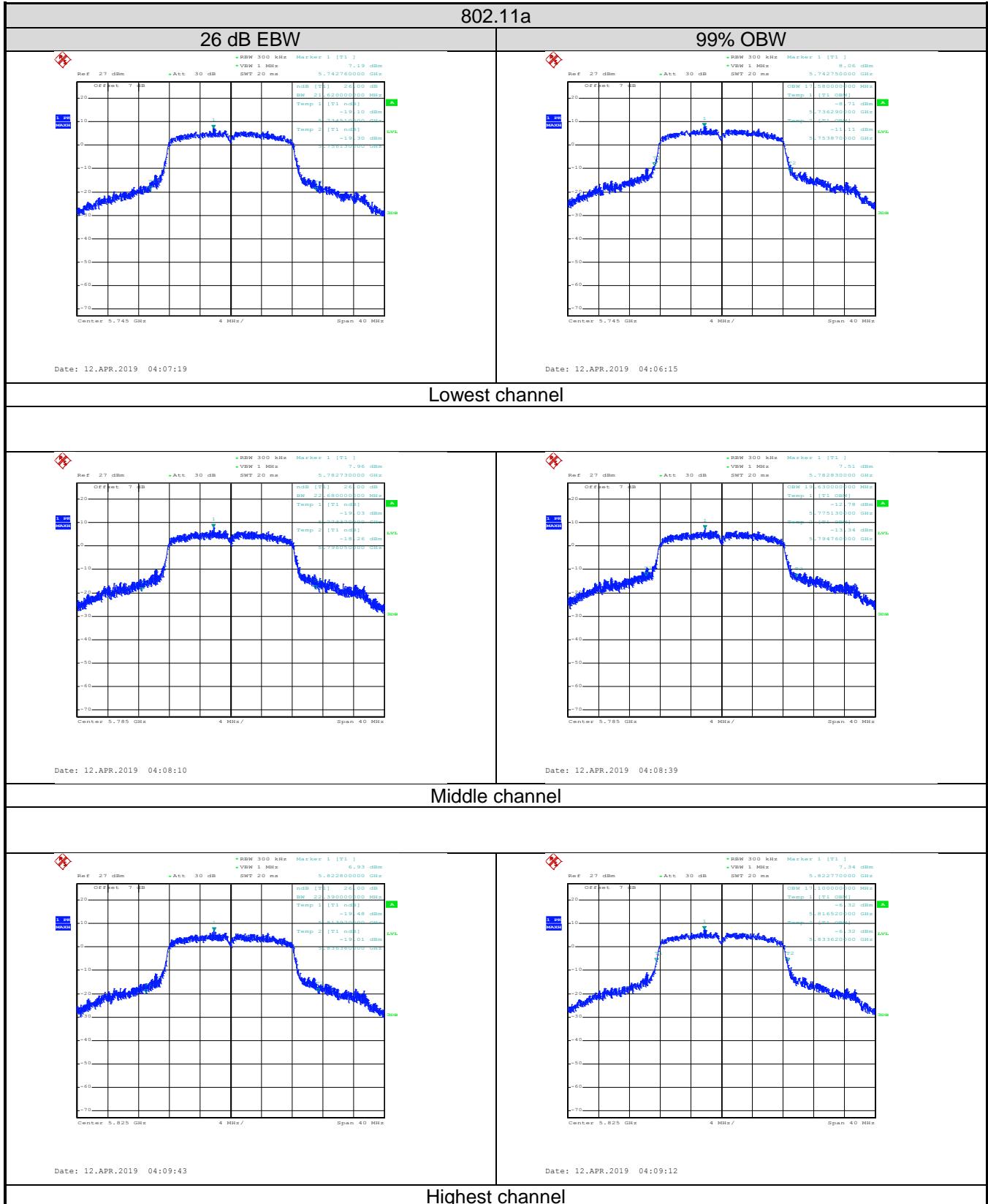


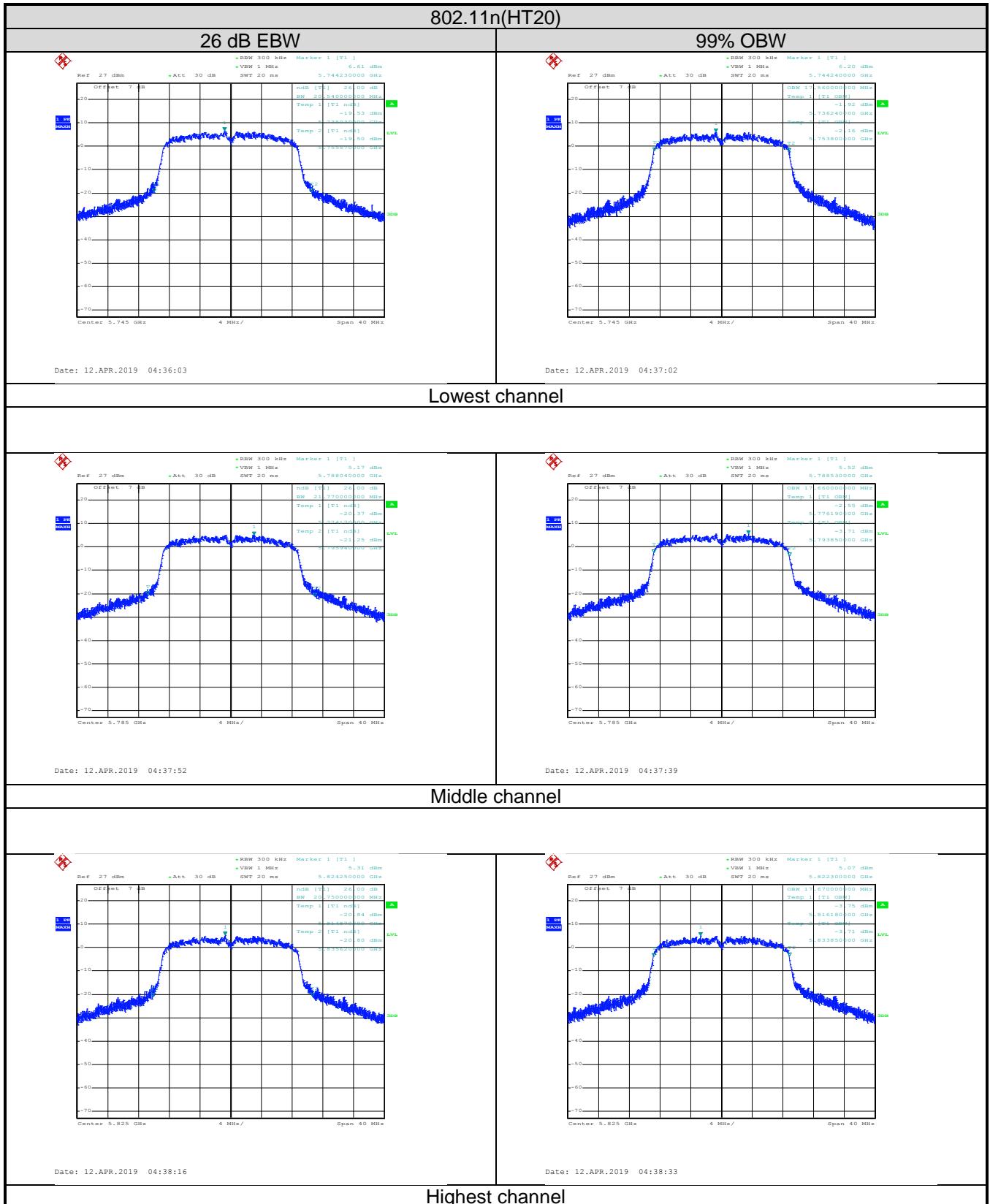
Band 1:

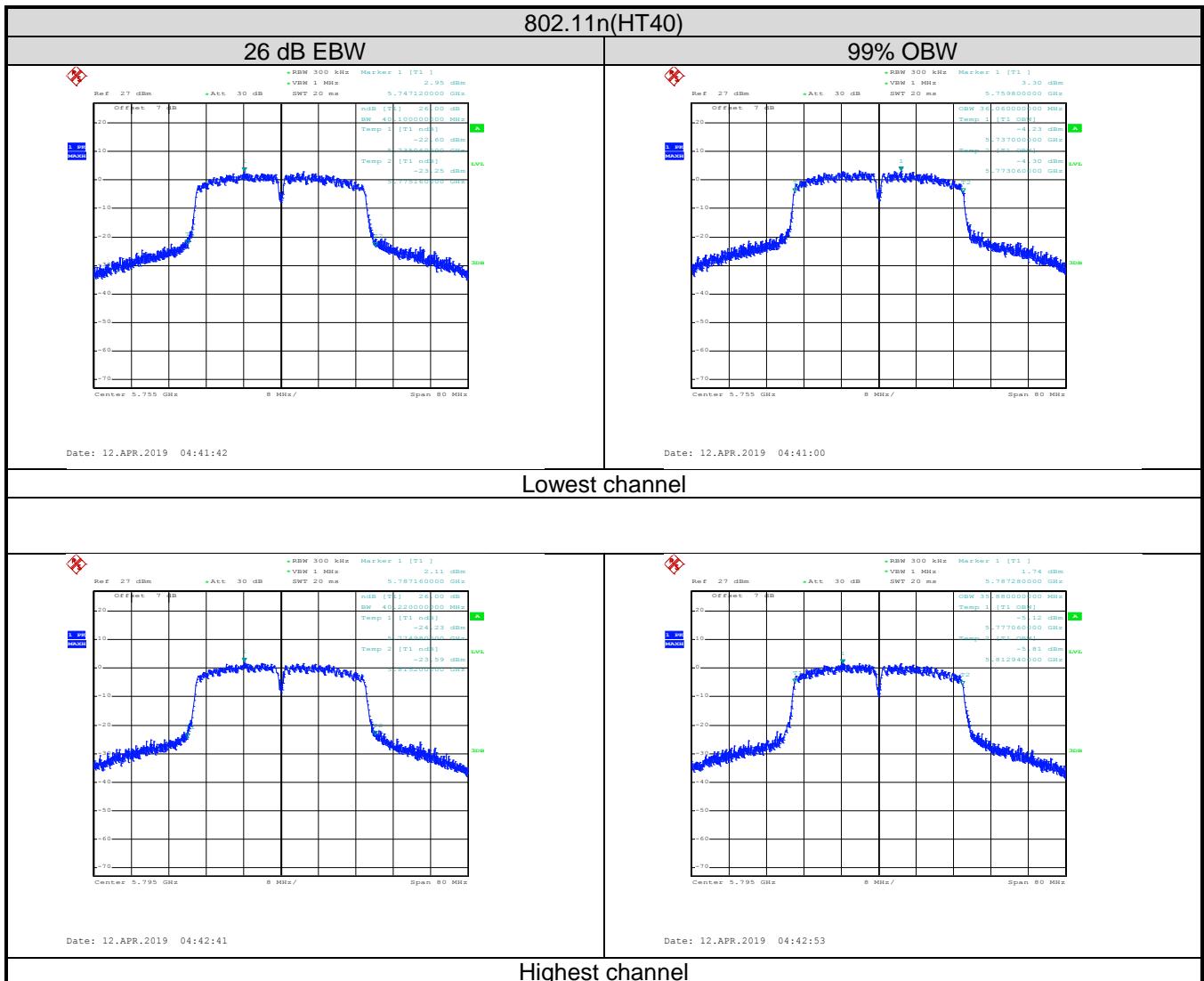




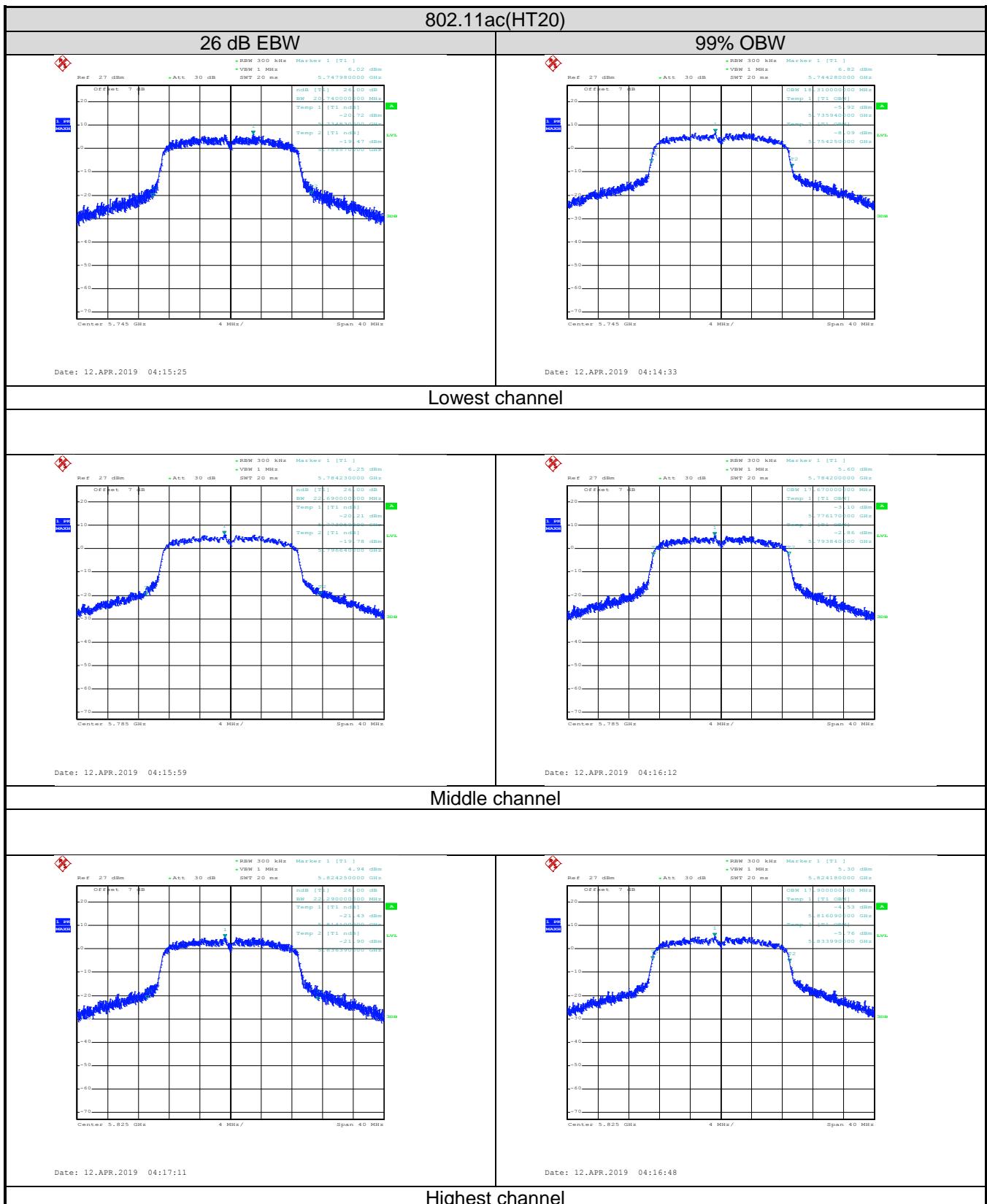
Band 4:

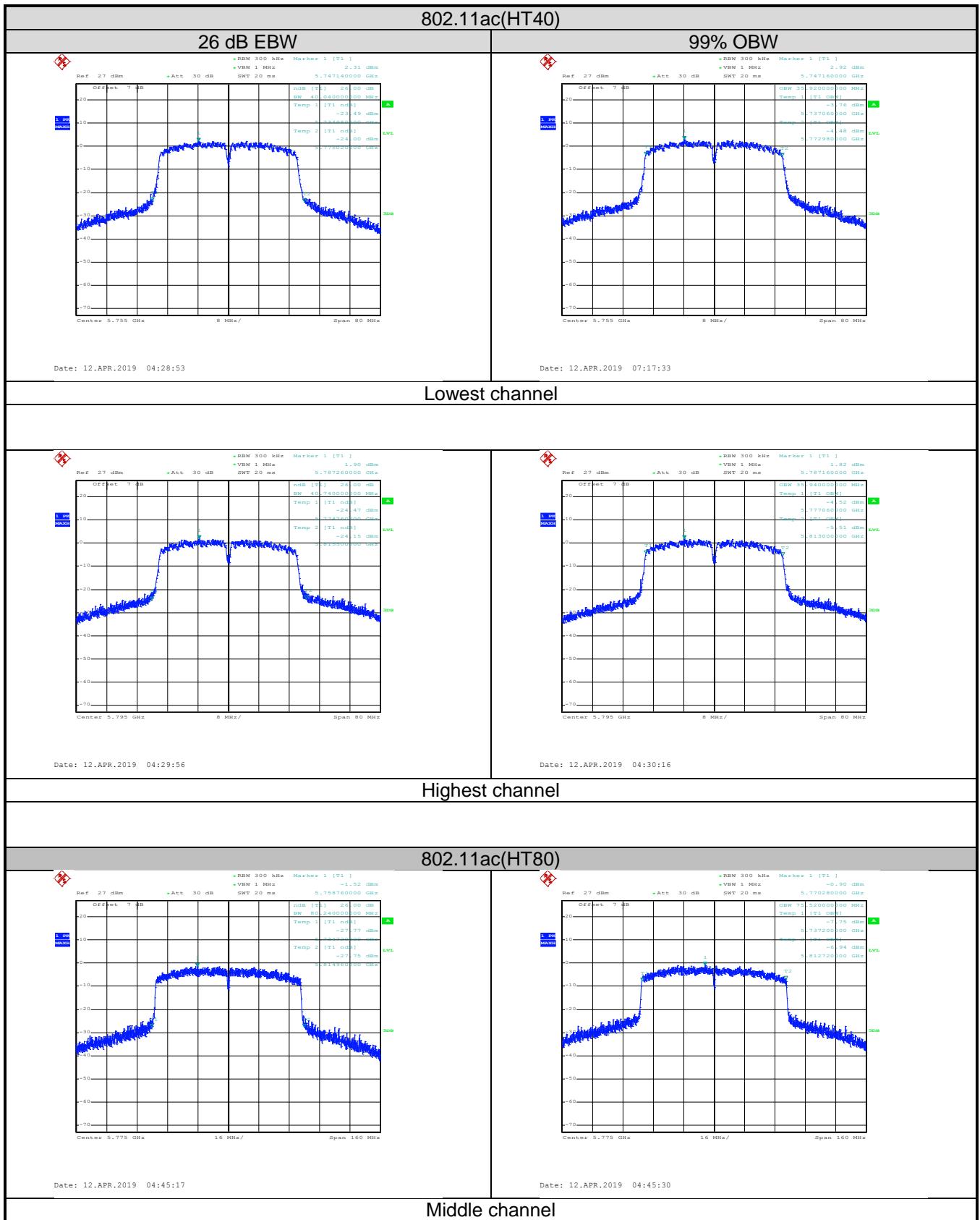




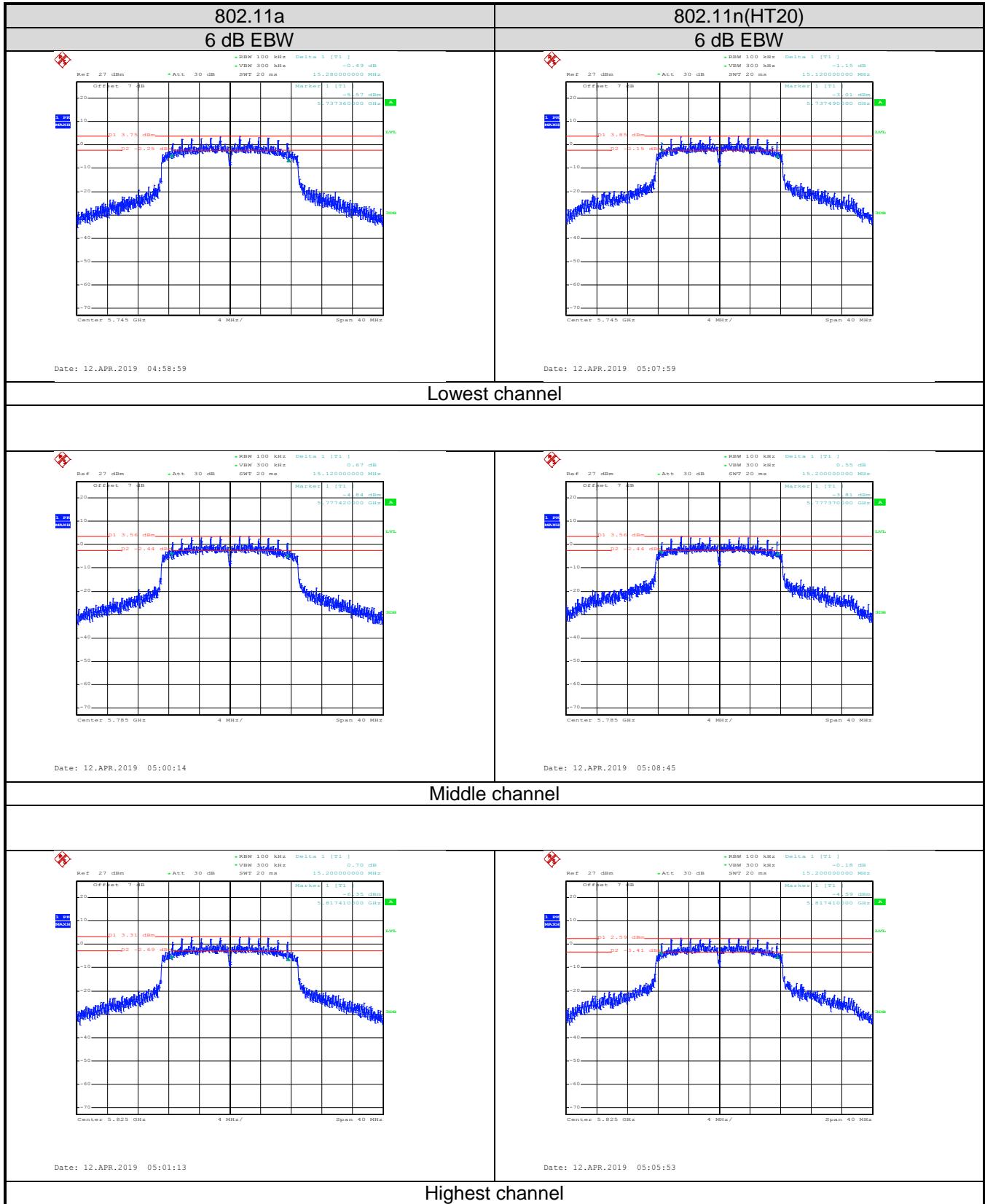


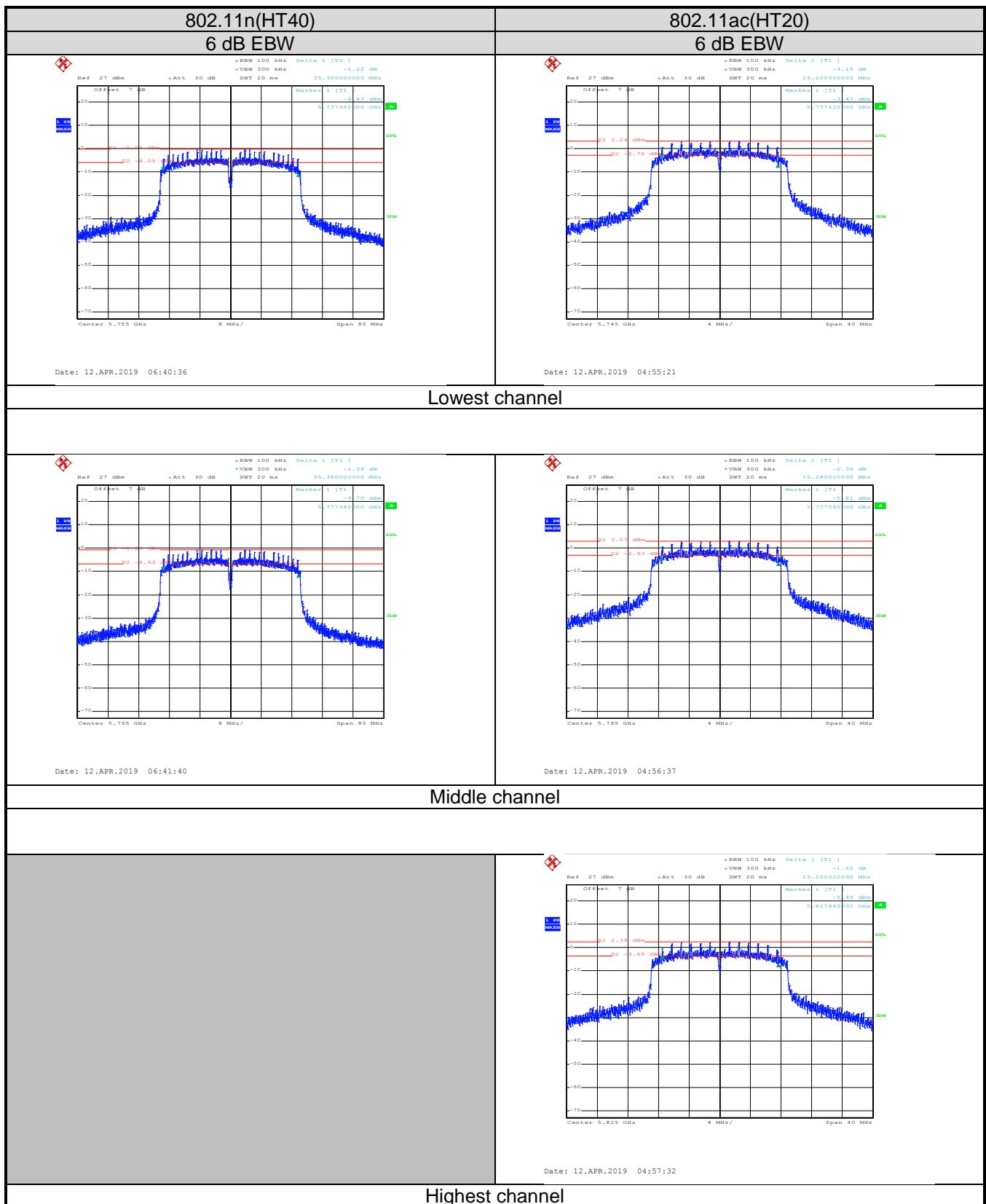
Band 4:

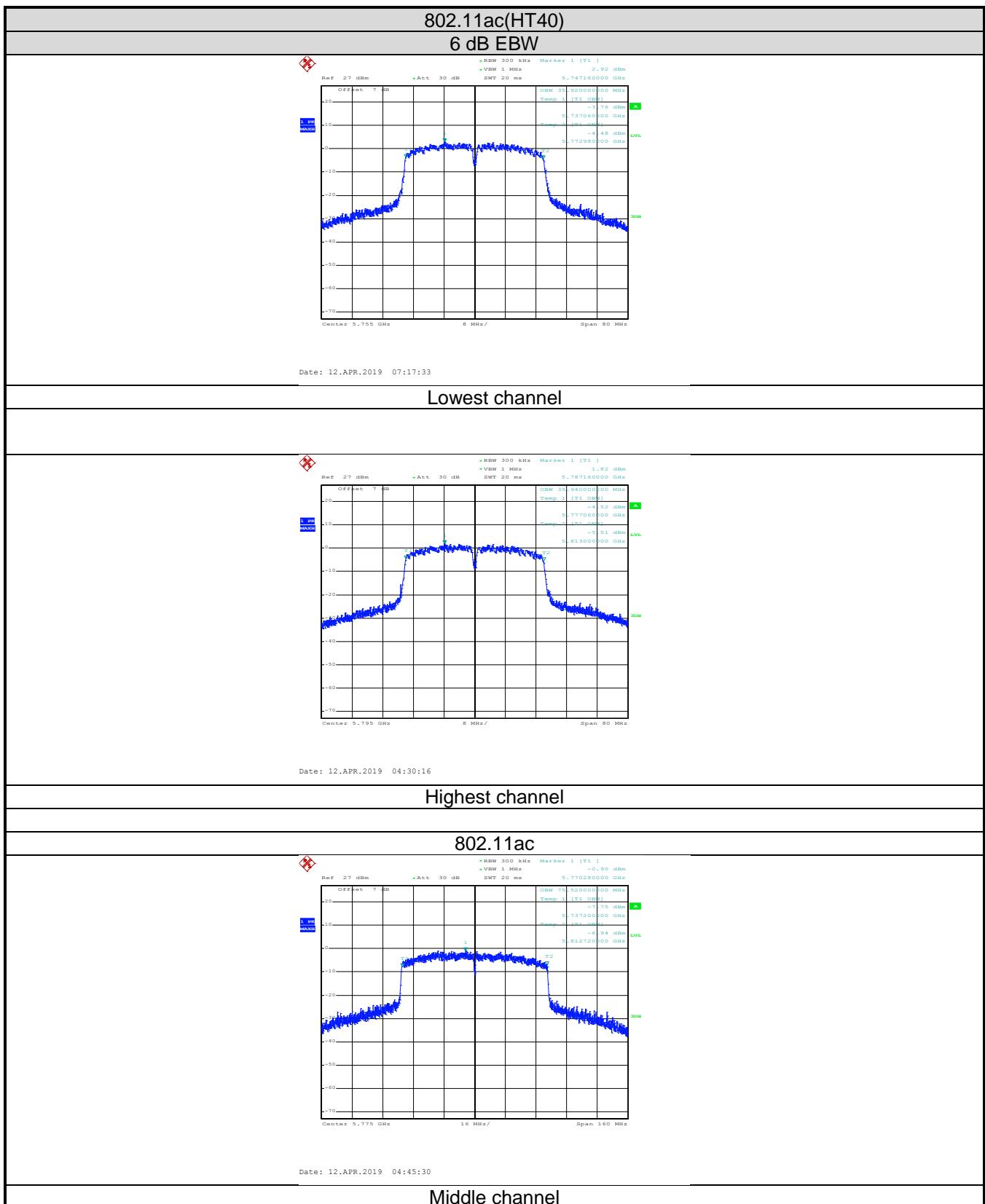




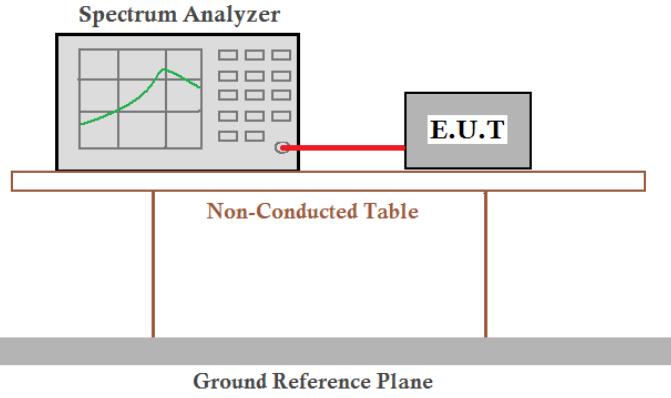
Band 4: 6 dB EBW







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:	<p>Band 1: For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.</p> <p>Band 4: 30dBm/500kHz (The maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.)</p>
Test setup:	 <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected via a cable to the E.U.T (Equipment Under Test). The E.U.T is placed on a Non-Conducted Table which sits above a Ground Reference Plane.</p>
Test Instruments:	Refer to section 5.9 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data:

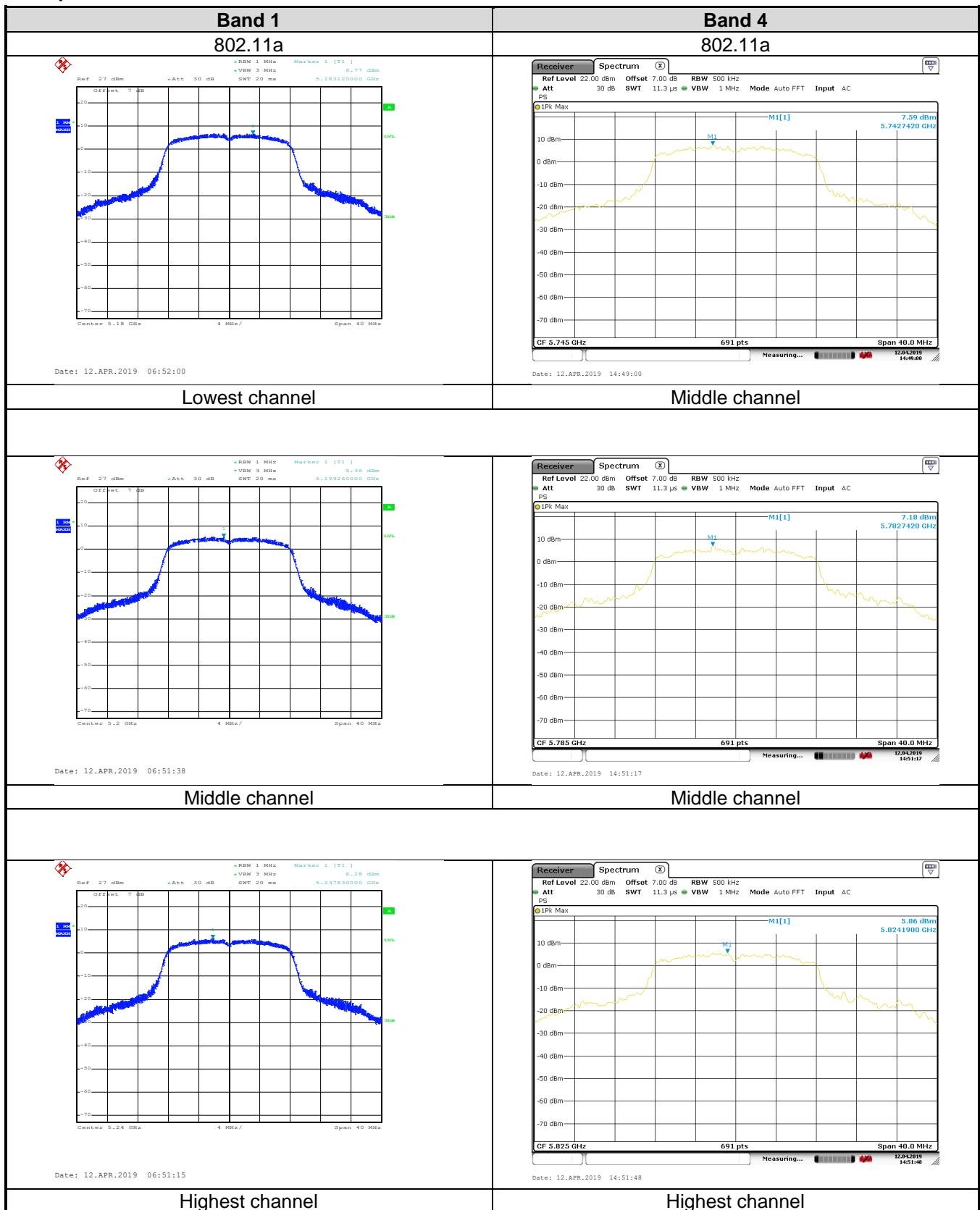
Band 1:

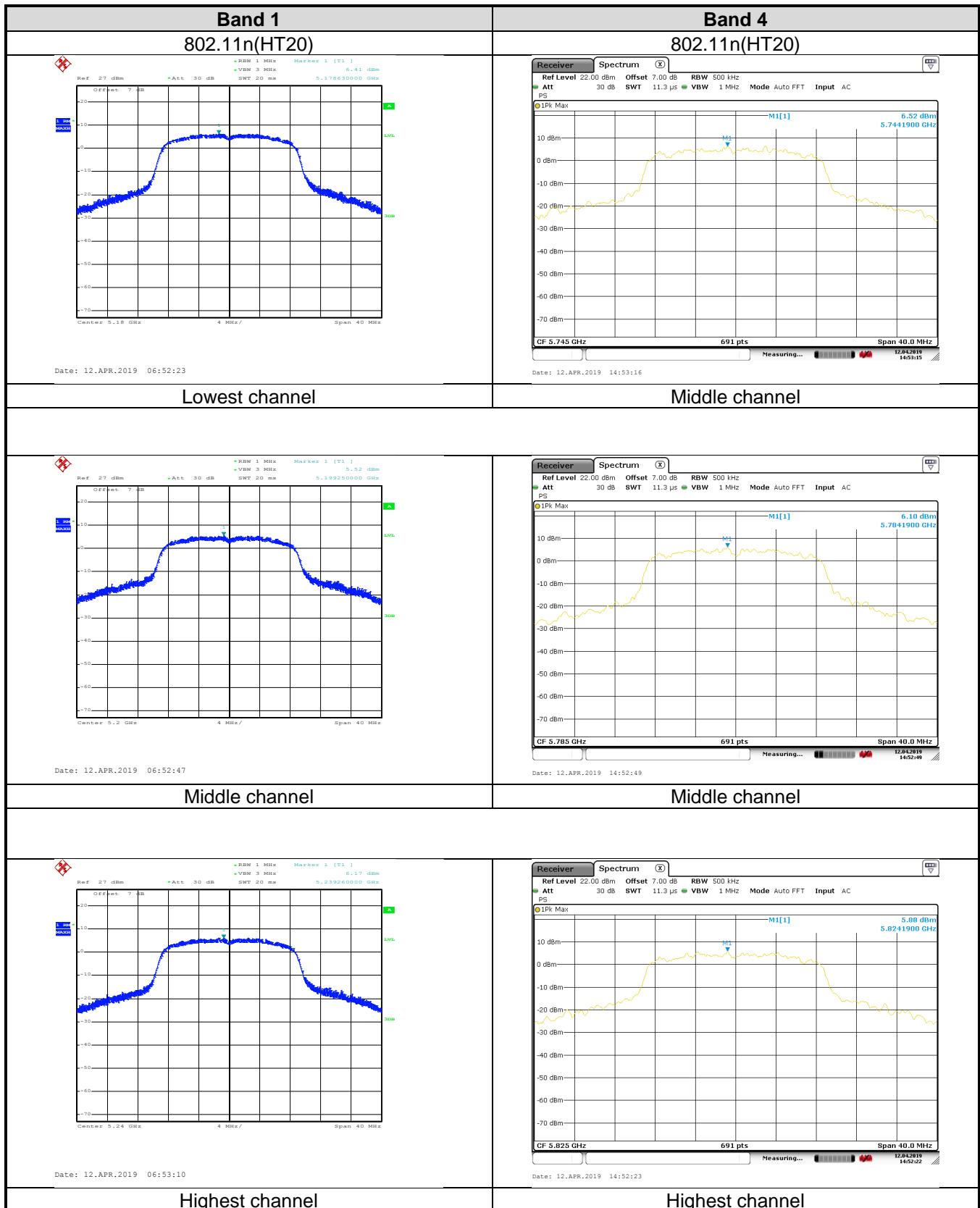
Test CH	Maximum power spectral density (dBm)			Limit(dBm)	Result
	802.11a	802.11n(HT20)	802.11n(HT40)		
Lowest	6.77	6.41	2.91	11.00	Pass
Middle	5.36	5.52	/		
Highest	6.28	6.17	2.60		
Test CH	Maximum Conducted Output Power (dBm)			Limit(dBm)	Result
	802.11ac(HT20)	802.11ac(HT40)	802.11ac(HT80)		
Lowest	6.16	2.11	/	11.00	Pass
Middle	5.10	/	0.20		
Highest	5.53	1.61	/		

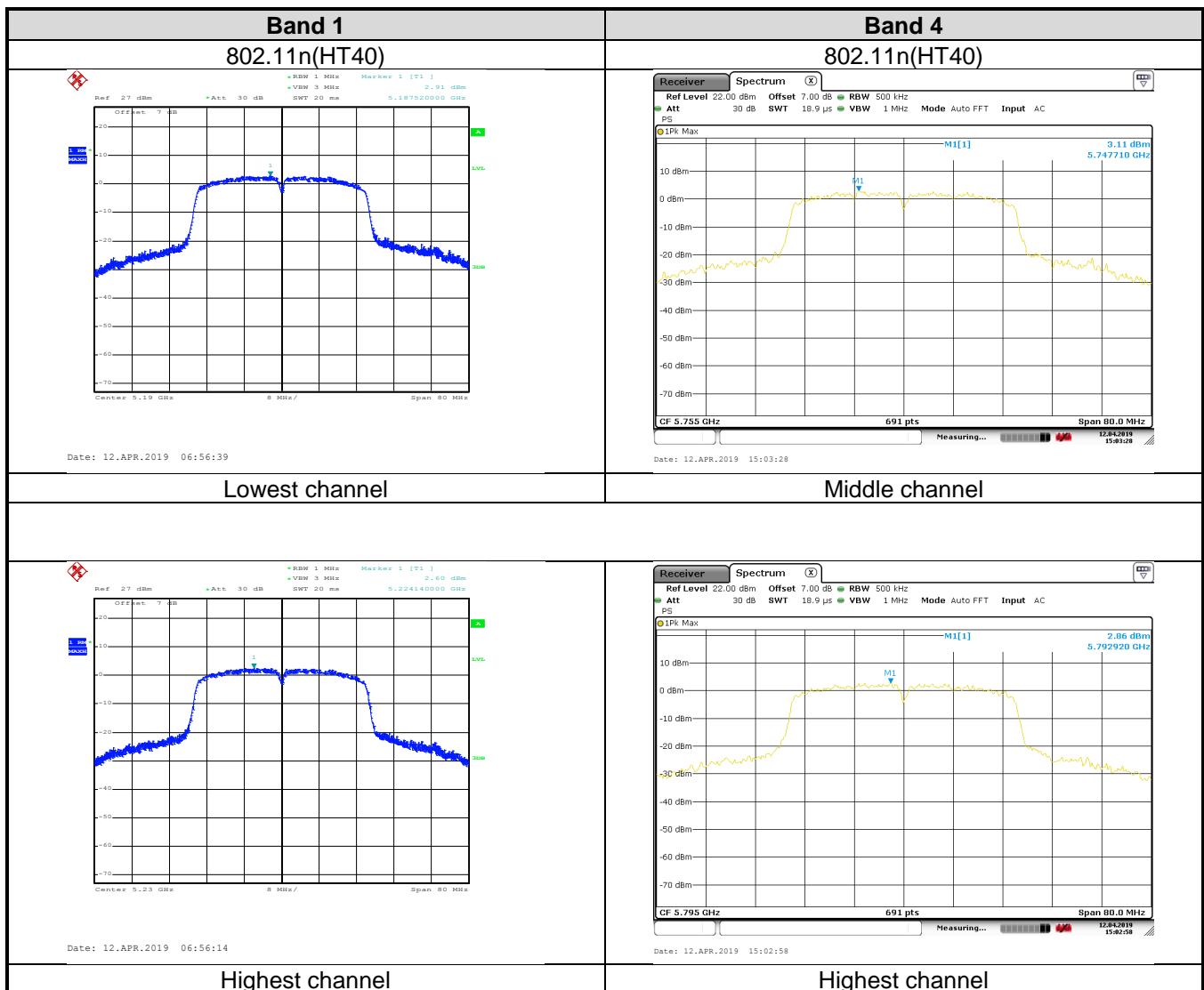
Band 4:

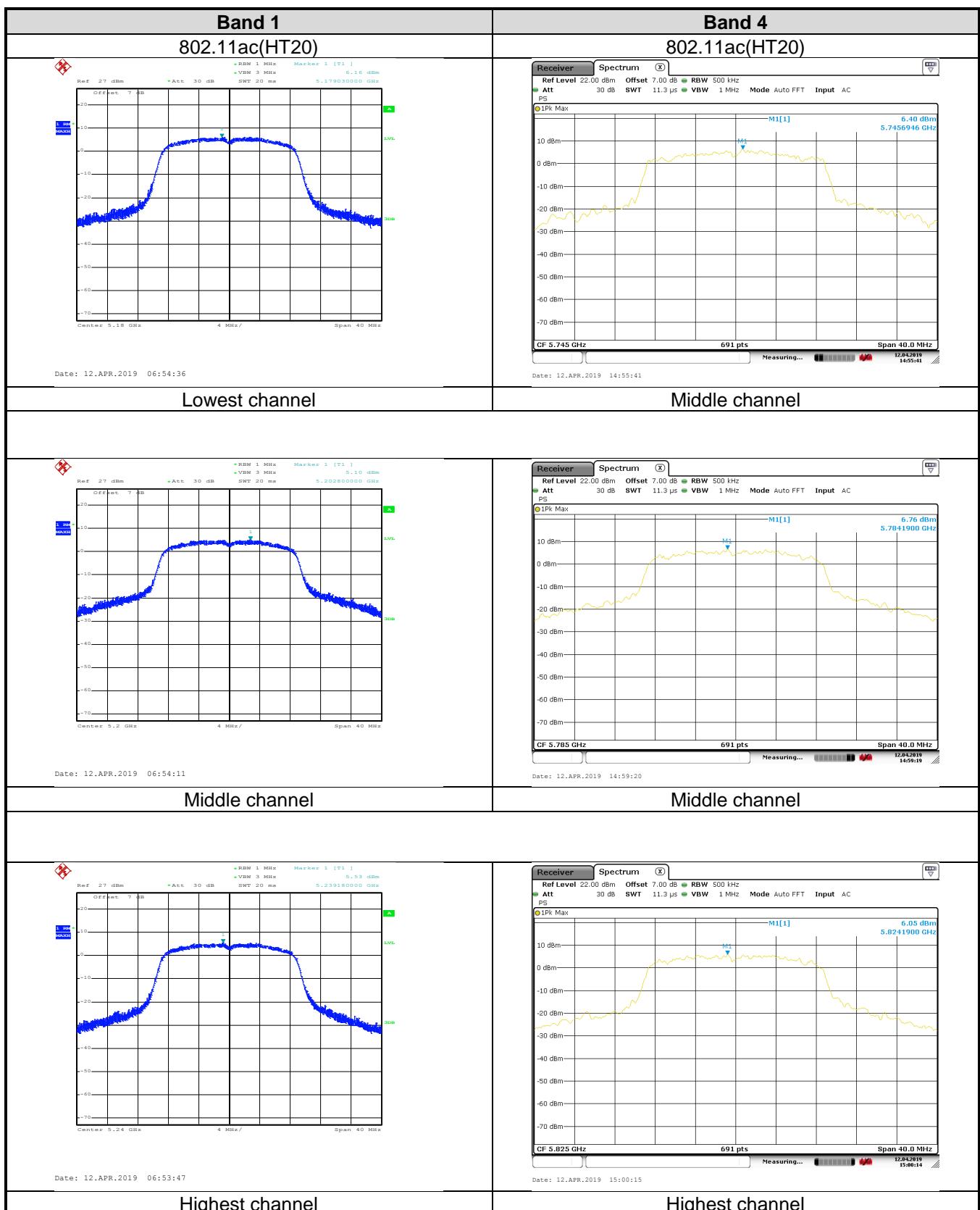
Test CH	Maximum power spectral density (dBm)			Limit(dBm)	Result
	802.11a	802.11n(HT20)	802.11n(HT40)		
Lowest	7.59	6.52	3.11	30.00	Pass
Middle	7.18	6.10	/		
Highest	5.86	5.88	2.86		
Test CH	Maximum Conducted Output Power (dBm)			Limit(dBm)	Result
	802.11ac(HT20)	802.11ac(HT40)	802.11ac(HT80)		
Lowest	6.40	2.98	/	30.00	Pass
Middle	6.76	/	-0.23		
Highest	6.05	2.90	/		

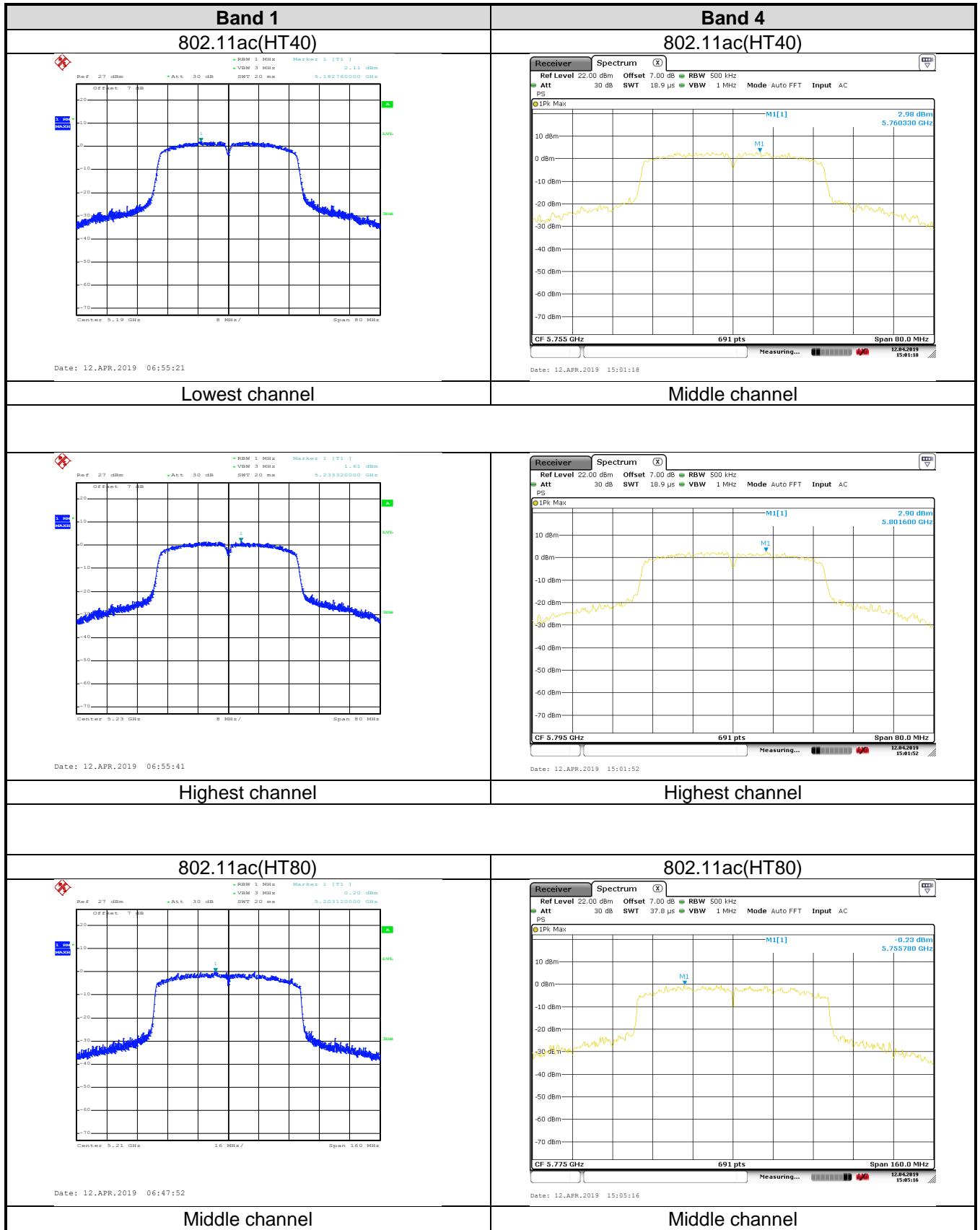
Test plot as follows:





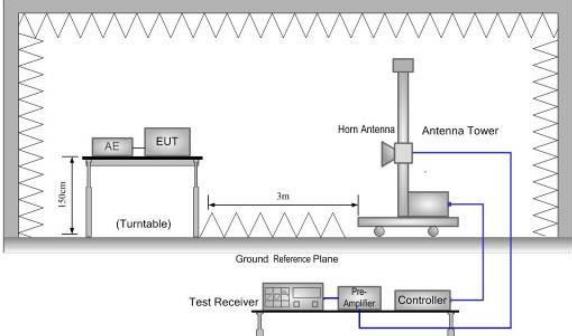






6.6 Band Edge

Test Requirement:	FCC Part 15 E Section 15.407 (b)			
Test Method:	ANSI C63.10:2013 , KDB 789033			
Receiver setup:	Detector	RBW	VBW	Remark
	Quasi-peak	120kHz	300kHz	Quasi-peak Value
	RMS	1MHz	3MHz	Average Value
	<p>Band 1 limit: For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.</p> <p>Band 4 limit: For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.</p> <p>Remark:</p> <ol style="list-style-type: none"> 1. Band 1 limit: $E[\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] + 95.2 = 68.2 \text{ dBuV/m}$, for $\text{EIPR}[\text{dBm}] = -27 \text{ dBm}$. 2. Band 4 limit: $E[\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] + 95.2 = 68.2 \text{ dBuV/m}$, for $\text{EIPR}[\text{dBm}] = -27 \text{ dBm}$. $E[\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] + 95.2 = 105.2 \text{ dBuV/m}$, for $\text{EIPR}[\text{dBm}] = 10 \text{ dBm}$. $E[\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] + 95.2 = 110.8 \text{ dBuV/m}$, for $\text{EIPR}[\text{dBm}] = 15.6 \text{ dBm}$. $E[\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] + 95.2 = 122.2 \text{ dBuV/m}$, for $\text{EIPR}[\text{dBm}] = 27 \text{ dBm}$. 			
Test Procedure:	<ol style="list-style-type: none"> 1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 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. 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. 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 rotatable was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 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. 			

Test setup:	
Test Instruments:	Refer to section 5.9 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data (worst case):**External ANT A:****Band 1:**

Band 1 – 802.11a								
Test channel: Lowest channel								
Detector: Peak Value								
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	64.76	31.77	7.05	41.93	61.65	68.20	-6.55	Horizontal
5150.00	56.18	31.77	7.05	41.93	53.07	68.20	-15.13	Vertical
Detector: Average Value								
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	46.34	31.77	7.05	41.93	43.23	54.00	-10.77	Horizontal
5150.00	53.13	31.77	7.05	41.93	50.02	54.00	-3.98	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.58	31.77	7.11	41.89	45.57	68.20	-22.63	Horizontal
5350.00	48.62	31.77	7.11	41.89	45.61	68.20	-22.59	Vertical
Detector: Average Value								
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	39.24	31.77	7.11	41.89	36.23	54.00	-17.77	Horizontal
5350.00	39.83	31.77	7.11	41.89	36.82	54.00	-17.18	Vertical

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 1 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: 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	67.01	31.77	7.05	41.93	63.90	68.20	-4.30	Horizontal
5150.00	53.91	31.77	7.05	41.93	50.80	68.20	-17.40	Vertical
Detector: 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
5150.00	50.68	31.77	7.05	41.93	47.57	54.00	-6.43	Horizontal
5150.00	44.36	31.77	7.05	41.93	41.25	54.00	-12.75	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.28	31.77	7.11	41.89	45.27	68.20	-22.93	Horizontal
5350.00	48.53	31.77	7.11	41.89	45.52	68.20	-22.68	Vertical
Detector: Average Value								
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	40.55	31.77	7.11	41.89	37.54	54.00	-16.46	Horizontal
5350.00	39.94	31.77	7.11	41.89	36.93	54.00	-17.07	Vertical
<i>Remark:</i>								
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 1 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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	66.42	31.77	7.05	41.93	63.31	68.20	-4.89	Horizontal
5150.00	51.72	31.77	7.05	41.93	48.61	68.20	-19.59	Vertical
Detector: Average Value								
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	50.18	31.77	7.05	41.93	47.07	54.00	-6.93	Horizontal
5150.00	43.99	31.77	7.05	41.93	40.88	54.00	-13.12	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.79	31.77	7.11	41.89	41.89	68.20	-26.31	Horizontal
5350.00	48.91	31.77	7.11	41.89	41.89	68.20	-26.31	Vertical
Detector: Average Value								
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	40.06	31.77	7.11	41.89	37.05	54.00	-16.95	Horizontal
5350.00	39.21	31.77	7.11	41.89	36.20	54.00	-17.80	Vertical
<i>Remark:</i>								
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 1 – 802.11ac(HT20)								
Test channel: Lowest channel								
Detector: Peak Value								
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	61.69	31.77	7.05	41.93	58.58	68.20	-9.62	Horizontal
5150.00	53.05	31.77	7.05	41.93	49.94	68.20	-18.26	Vertical
Detector: Average Value								
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	52.09	31.77	7.05	41.93	48.98	54.00	-5.02	Horizontal
5150.00	44.89	31.77	7.05	41.93	41.78	54.00	-12.22	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.64	31.77	7.11	41.89	45.63	68.20	-22.57	Horizontal
5350.00	48.21	31.77	7.11	41.89	45.20	68.20	-23.00	Vertical
Detector: Average Value								
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	39.59	31.77	7.11	41.89	36.58	54.00	-17.42	Horizontal
5350.00	38.76	31.77	7.11	41.89	35.75	54.00	-18.25	Vertical

Remark:

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

Band 1 – 802.11ac(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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	66.81	31.77	7.05	41.93	63.70	68.20	-4.50	Horizontal
5150.00	53.46	31.77	7.05	41.93	50.35	68.20	-17.85	Vertical
Detector: Average Value								
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	51.61	31.77	7.05	41.93	48.50	54.00	-5.50	Horizontal
5150.00	44.58	31.77	7.05	41.93	41.47	54.00	-12.53	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.74	31.77	7.11	41.89	45.73	68.20	-22.47	Horizontal
5350.00	48.93	31.77	7.11	41.89	45.92	68.20	-22.28	Vertical
Detector: Average Value								
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	39.94	31.77	7.11	41.89	36.93	54.00	-17.07	Horizontal
5350.00	38.73	31.77	7.11	41.89	35.72	54.00	-18.28	Vertical

Remark:

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

Band 1 – 802.11ac(HT80)								
Test channel: Lowest channel								
Detector: Peak Value								
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	63.91	31.77	7.05	41.93	60.80	68.20	-7.40	Horizontal
5150.00	57.63	31.77	7.05	41.93	54.52	68.20	-13.68	Vertical
Detector: Average Value								
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	53.89	31.77	7.05	41.93	50.78	54.00	-3.22	Horizontal
5150.00	47.63	31.77	7.05	41.93	44.52	54.00	-9.48	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	49.12	31.77	7.11	41.89	41.89	68.20	-26.31	Horizontal
5350.00	48.71	31.77	7.11	41.89	41.89	68.20	-26.31	Vertical
Detector: Average Value								
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	40.26	31.77	7.11	41.89	37.25	54.00	-16.75	Horizontal
5350.00	39.87	31.77	7.11	41.89	36.86	54.00	-17.14	Vertical

Remark:

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

Band 4:

Band 4 – 802.11a								
Test channel: Lowest channel								
Detector: Peak Value								
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
5650.00	47.46	32.63	7.45	41.85	45.69	68.20	-22.51	Horizontal
5700.00	48.09	32.64	7.60	41.90	46.43	105.20	-58.77	Horizontal
5720.00	53.69	32.65	7.64	41.92	52.06	110.80	-58.74	Horizontal
5725.00	63.63	32.65	7.69	41.94	62.03	122.20	-60.17	Horizontal
5650.00	48.65	32.63	7.45	41.85	46.88	68.20	-21.32	Vertical
5700.00	48.41	32.64	7.60	41.90	46.75	105.20	-58.45	Vertical
5720.00	48.28	32.65	7.64	41.92	46.65	110.80	-64.15	Vertical
5725.00	47.82	32.65	7.69	41.94	46.22	122.20	-75.98	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5850.00	56.34	32.67	7.90	41.85	55.06	122.20	-67.14	Horizontal
5855.00	54.73	32.67	7.90	41.90	53.40	110.80	-57.40	Horizontal
5875.00	49.24	32.68	7.91	41.92	47.91	105.20	-57.29	Horizontal
5925.00	48.36	32.69	7.92	41.94	47.03	68.20	-21.17	Horizontal
5850.00	55.28	32.67	7.90	41.85	54.00	122.20	-68.20	Vertical
5855.00	53.05	32.67	7.90	41.90	51.72	110.80	-59.08	Vertical
5875.00	48.28	32.68	7.91	41.92	46.95	105.20	-58.25	Vertical
5925.00	48.89	32.69	7.92	41.94	47.56	68.20	-20.64	Vertical

Remark:

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

Band 4 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: Peak Value								
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
5650.00	48.52	32.63	7.45	41.85	46.75	68.20	-21.45	Horizontal
5700.00	49.47	32.64	7.60	41.90	47.81	105.20	-57.39	Horizontal
5720.00	58.06	32.65	7.64	41.92	56.43	110.80	-54.37	Horizontal
5725.00	69.79	32.65	7.69	41.94	68.19	122.20	-54.01	Horizontal
5650.00	48.80	32.63	7.45	41.85	47.03	68.20	-21.17	Vertical
5700.00	52.41	32.64	7.60	41.90	50.75	105.20	-54.45	Vertical
5720.00	61.70	32.65	7.64	41.92	60.07	110.80	-50.73	Vertical
5725.00	69.77	32.65	7.69	41.94	68.17	122.20	-54.03	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5850.00	47.28	32.67	7.90	41.85	46.00	122.20	-76.20	Horizontal
5855.00	48.00	32.67	7.90	41.90	46.67	110.80	-64.13	Horizontal
5875.00	48.89	32.68	7.91	41.92	47.56	105.20	-57.64	Horizontal
5925.00	48.43	32.69	7.92	41.94	47.10	68.20	-21.10	Horizontal
5850.00	49.07	32.67	7.90	41.85	47.79	122.20	-74.41	Vertical
5855.00	48.93	32.67	7.90	41.90	47.60	110.80	-63.20	Vertical
5875.00	48.68	32.68	7.91	41.92	47.35	105.20	-57.85	Vertical
5925.00	47.97	32.69	7.92	41.94	46.64	68.20	-21.56	Vertical

Remark:

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

Band 4 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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
5650.00	53.61	32.63	7.45	41.85	51.84	68.20	-16.36	Horizontal
5700.00	69.94	32.64	7.60	41.90	68.28	105.20	-36.92	Horizontal
5720.00	84.89	32.65	7.64	41.92	83.26	110.80	-27.54	Horizontal
5725.00	86.24	32.65	7.69	41.94	84.64	122.20	-37.56	Horizontal
5650.00	48.20	32.63	7.45	41.85	46.43	68.20	-21.77	Vertical
5700.00	50.91	32.64	7.60	41.90	49.25	105.20	-55.95	Vertical
5720.00	57.86	32.65	7.64	41.92	56.23	110.80	-54.57	Vertical
5725.00	61.60	32.65	7.69	41.94	60.00	122.20	-62.20	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5850.00	58.93	32.67	7.90	41.85	57.65	122.20	-64.55	Horizontal
5855.00	55.72	32.67	7.90	41.90	54.39	110.80	-56.41	Horizontal
5875.00	49.34	32.68	7.91	41.92	48.01	105.20	-57.19	Horizontal
5925.00	48.42	32.69	7.92	41.94	47.09	68.20	-21.11	Horizontal
5850.00	49.89	32.67	7.90	41.85	48.61	122.20	-73.59	Vertical
5855.00	49.80	32.67	7.90	41.90	48.47	110.80	-62.33	Vertical
5875.00	48.99	32.68	7.91	41.92	47.66	105.20	-57.54	Vertical
5925.00	48.98	32.69	7.92	41.94	47.65	68.20	-20.55	Vertical

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 4 – 802.11ac(HT20)								
Test channel: Middle channel								
Detector: Peak Value								
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
5650.00	48.73	32.63	7.45	41.85	46.96	68.20	-21.24	Horizontal
5700.00	49.81	32.64	7.60	41.90	48.15	105.20	-57.05	Horizontal
5720.00	58.34	32.65	7.64	41.92	56.71	110.80	-54.09	Horizontal
5725.00	68.92	32.65	7.69	41.94	67.32	122.20	-54.88	Horizontal
5650.00	48.91	32.63	7.45	41.85	47.14	68.20	-21.06	Vertical
5700.00	52.39	32.64	7.60	41.90	50.73	105.20	-54.47	Vertical
5720.00	60.78	32.65	7.64	41.92	59.15	110.80	-51.65	Vertical
5725.00	69.34	32.65	7.69	41.94	67.74	122.20	-54.46	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5850.00	47.38	32.67	7.90	41.85	46.10	122.20	-76.10	Horizontal
5855.00	48.35	32.67	7.90	41.90	47.02	110.80	-63.78	Horizontal
5875.00	48.56	32.68	7.91	41.92	47.23	105.20	-57.97	Horizontal
5925.00	49.67	32.69	7.92	41.94	48.34	68.20	-19.86	Horizontal
5850.00	50.24	32.67	7.90	41.85	48.96	122.20	-73.24	Vertical
5855.00	49.35	32.67	7.90	41.90	48.02	110.80	-62.78	Vertical
5875.00	48.76	32.68	7.91	41.92	47.43	105.20	-57.77	Vertical
5925.00	48.35	32.69	7.92	41.94	47.02	68.20	-21.18	Vertical

Remark:

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

Band 4 – 802.11ac(HT40)								
Test channel: Middle channel								
Detector: Peak Value								
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
5650.00	53.46	32.63	7.45	41.85	51.69	68.20	-16.51	Horizontal
5700.00	69.34	32.64	7.60	41.90	67.68	105.20	-37.52	Horizontal
5720.00	75.74	32.65	7.64	41.92	74.11	110.80	-36.69	Horizontal
5725.00	85.64	32.65	7.69	41.94	84.04	122.20	-38.16	Horizontal
5650.00	48.53	32.63	7.45	41.85	46.76	68.20	-21.44	Vertical
5700.00	51.24	32.64	7.60	41.90	49.58	105.20	-55.62	Vertical
5720.00	56.67	32.65	7.64	41.92	55.04	110.80	-55.76	Vertical
5725.00	61.39	32.65	7.69	41.94	59.79	122.20	-62.41	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5850.00	47.64	32.67	7.90	41.85	46.36	122.20	-75.84	Horizontal
5855.00	48.86	32.67	7.90	41.90	47.53	110.80	-63.27	Horizontal
5875.00	55.37	32.68	7.91	41.92	54.04	105.20	-51.16	Horizontal
5925.00	59.24	32.69	7.92	41.94	57.91	68.20	-10.29	Horizontal
5850.00	50.31	32.67	7.90	41.85	49.03	122.20	-73.17	Vertical
5855.00	49.67	32.67	7.90	41.90	48.34	110.80	-62.46	Vertical
5875.00	48.56	32.68	7.91	41.92	47.23	105.20	-57.97	Vertical
5925.00	48.23	32.69	7.92	41.94	46.90	68.20	-21.30	Vertical

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 4 – 802.11ac(HT80)								
Test channel: Middle channel								
Detector: Peak Value								
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
5650.00	48.55	32.63	7.45	41.85	46.78	68.20	-21.42	Horizontal
5700.00	56.32	32.64	7.60	41.90	54.66	105.20	-50.54	Horizontal
5720.00	59.94	32.65	7.64	41.92	58.31	110.80	-52.49	Horizontal
5725.00	62.38	32.65	7.69	41.94	60.78	122.20	-61.42	Horizontal
5650.00	48.54	32.63	7.45	41.85	46.77	68.20	-21.43	Vertical
5700.00	61.80	32.64	7.60	41.90	60.14	105.20	-45.06	Vertical
5720.00	61.09	32.65	7.64	41.92	59.46	110.80	-51.34	Vertical
5725.00	63.95	32.65	7.69	41.94	62.35	122.20	-59.85	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5850.00	64.86	32.67	7.90	41.85	63.58	122.20	-58.62	Horizontal
5855.00	49.19	32.67	7.90	41.90	47.86	110.80	-62.94	Horizontal
5875.00	49.20	32.68	7.91	41.92	47.87	105.20	-57.33	Horizontal
5925.00	47.61	32.69	7.92	41.94	46.28	68.20	-21.92	Horizontal
5850.00	58.00	32.67	7.90	41.85	56.72	122.20	-65.48	Vertical
5855.00	54.64	32.67	7.90	41.90	53.31	110.80	-57.49	Vertical
5875.00	48.66	32.68	7.91	41.92	47.33	105.20	-57.87	Vertical
5925.00	48.30	32.69	7.92	41.94	46.97	68.20	-21.23	Vertical

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.

External ANT B:**Band 1:**

Band 1 – 802.11a								
Test channel: Lowest channel								
Detector: Peak Value								
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	63.16	31.77	7.05	41.93	60.05	68.20	-8.15	Horizontal
5150.00	48.74	31.77	7.05	41.93	45.63	68.20	-22.57	Vertical
Detector: Average Value								
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	52.83	31.77	7.05	41.93	49.72	54.00	-4.28	Horizontal
5150.00	41.38	31.77	7.05	41.93	38.27	54.00	-15.73	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.61	31.77	7.11	41.89	45.60	68.20	-22.60	Horizontal
5350.00	48.42	31.77	7.11	41.89	45.41	68.20	-22.79	Vertical
Detector: Average Value								
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	39.53	31.77	7.11	41.89	36.52	54.00	-17.48	Horizontal
5350.00	39.74	31.77	7.11	41.89	36.73	54.00	-17.27	Vertical

Remark:

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

Band 1 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: 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	56.14	31.77	7.05	41.93	53.03	68.20	-15.17	Horizontal
5150.00	51.29	31.77	7.05	41.93	48.18	68.20	-20.02	Vertical
Detector: 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
5150.00	47.67	31.77	7.05	41.93	44.56	54.00	-9.44	Horizontal
5150.00	42.64	31.77	7.05	41.93	39.53	54.00	-14.47	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.47	31.77	7.11	41.89	45.46	68.20	-22.74	Horizontal
5350.00	48.37	31.77	7.11	41.89	45.36	68.20	-22.84	Vertical
Detector: Average Value								
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	40.42	31.77	7.11	41.89	37.41	54.00	-16.59	Horizontal
5350.00	40.06	31.77	7.11	41.89	37.05	54.00	-16.95	Vertical
<i>Remark:</i>								
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 1 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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	62.29	31.77	7.05	41.93	59.18	68.20	-9.02	Horizontal
5150.00	50.75	31.77	7.05	41.93	47.64	68.20	-20.56	Vertical
Detector: Average Value								
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	48.95	31.77	7.05	41.93	45.84	54.00	-8.16	Horizontal
5150.00	41.88	31.77	7.05	41.93	38.77	54.00	-15.23	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.77	31.77	7.11	41.89	41.89	68.20	-26.31	Horizontal
5350.00	48.36	31.77	7.11	41.89	41.89	68.20	-26.31	Vertical
Detector: Average Value								
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	40.25	31.77	7.11	41.89	37.24	54.00	-16.76	Horizontal
5350.00	38.96	31.77	7.11	41.89	35.95	54.00	-18.05	Vertical
<i>Remark:</i>								
3. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.								
4. The emission levels of other frequencies are very lower than the limit and not show in test report.								

Band 1 – 802.11ac(HT20)								
Test channel: Lowest channel								
Detector: Peak Value								
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	63.37	31.77	7.05	41.93	60.26	68.20	-7.94	Horizontal
5150.00	48.92	31.77	7.05	41.93	45.81	68.20	-22.39	Vertical
Detector: Average Value								
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	51.47	31.77	7.05	41.93	48.36	54.00	-5.64	Horizontal
5150.00	40.38	31.77	7.05	41.93	37.27	54.00	-16.73	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.67	31.77	7.11	41.89	45.66	68.20	-22.54	Horizontal
5350.00	48.42	31.77	7.11	41.89	45.41	68.20	-22.79	Vertical
Detector: Average Value								
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	39.68	31.77	7.11	41.89	36.67	54.00	-17.33	Horizontal
5350.00	38.96	31.77	7.11	41.89	35.95	54.00	-18.05	Vertical

Remark:

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

Band 1 – 802.11ac(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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	62.16	31.77	7.05	41.93	59.05	68.20	-9.15	Horizontal
5150.00	51.87	31.77	7.05	41.93	48.76	68.20	-19.44	Vertical
Detector: Average Value								
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	51.76	31.77	7.05	41.93	48.65	54.00	-5.35	Horizontal
5150.00	41.38	31.77	7.05	41.93	38.27	54.00	-15.73	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.96	31.77	7.11	41.89	45.95	68.20	-22.25	Horizontal
5350.00	48.34	31.77	7.11	41.89	45.33	68.20	-22.87	Vertical
Detector: Average Value								
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	39.46	31.77	7.11	41.89	36.45	54.00	-17.55	Horizontal
5350.00	38.25	31.77	7.11	41.89	35.24	54.00	-18.76	Vertical

Remark:

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

Band 1 – 802.11ac(HT80)								
Test channel: Lowest channel								
Detector: Peak Value								
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	67.65	31.77	7.05	41.93	64.54	68.20	-3.66	Horizontal
5150.00	53.05	31.77	7.05	41.93	49.94	68.20	-18.26	Vertical
Detector: Average Value								
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	52.64	31.77	7.05	41.93	49.53	54.00	-4.47	Horizontal
5150.00	44.79	31.77	7.05	41.93	41.68	54.00	-12.32	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.76	31.77	7.11	41.89	41.89	68.20	-26.31	Horizontal
5350.00	48.92	31.77	7.11	41.89	41.89	68.20	-26.31	Vertical
Detector: Average Value								
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	39.64	31.77	7.11	41.89	36.63	54.00	-17.37	Horizontal
5350.00	38.86	31.77	7.11	41.89	35.85	54.00	-18.15	Vertical

Remark:

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

Band 4:

Band 4 – 802.11a								
Test channel: Lowest channel								
Detector: Peak Value								
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
5650.00	47.26	32.63	7.45	41.85	45.49	68.20	-22.71	Horizontal
5700.00	48.34	32.64	7.60	41.90	46.68	105.20	-58.52	Horizontal
5720.00	52.67	32.65	7.64	41.92	51.04	110.80	-59.76	Horizontal
5725.00	61.56	32.65	7.69	41.94	59.96	122.20	-62.24	Horizontal
5650.00	48.76	32.63	7.45	41.85	46.99	68.20	-21.21	Vertical
5700.00	48.34	32.64	7.60	41.90	46.68	105.20	-58.52	Vertical
5720.00	48.26	32.65	7.64	41.92	46.63	110.80	-64.17	Vertical
5725.00	47.67	32.65	7.69	41.94	46.07	122.20	-76.13	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5850.00	55.64	32.67	7.90	41.85	54.36	122.20	-67.84	Horizontal
5855.00	54.86	32.67	7.90	41.90	53.53	110.80	-57.27	Horizontal
5875.00	49.15	32.68	7.91	41.92	47.82	105.20	-57.38	Horizontal
5925.00	48.25	32.69	7.92	41.94	46.92	68.20	-21.28	Horizontal
5850.00	55.63	32.67	7.90	41.85	54.35	122.20	-67.85	Vertical
5855.00	52.68	32.67	7.90	41.90	51.35	110.80	-59.45	Vertical
5875.00	48.36	32.68	7.91	41.92	47.03	105.20	-58.17	Vertical
5925.00	48.12	32.69	7.92	41.94	46.79	68.20	-21.41	Vertical

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 4 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: Peak Value								
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
5650.00	48.66	32.63	7.45	41.85	46.89	68.20	-21.31	Horizontal
5700.00	49.76	32.64	7.60	41.90	48.10	105.20	-57.10	Horizontal
5720.00	58.61	32.65	7.64	41.92	56.98	110.80	-53.82	Horizontal
5725.00	67.43	32.65	7.69	41.94	65.83	122.20	-56.37	Horizontal
5650.00	48.57	32.63	7.45	41.85	46.80	68.20	-21.40	Vertical
5700.00	51.76	32.64	7.60	41.90	50.10	105.20	-55.10	Vertical
5720.00	61.37	32.65	7.64	41.92	59.74	110.80	-51.06	Vertical
5725.00	68.46	32.65	7.69	41.94	66.86	122.20	-55.34	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5850.00	47.33	32.67	7.90	41.85	46.05	122.20	-76.15	Horizontal
5855.00	47.89	32.67	7.90	41.90	46.56	110.80	-64.24	Horizontal
5875.00	48.64	32.68	7.91	41.92	47.31	105.20	-57.89	Horizontal
5925.00	50.06	32.69	7.92	41.94	48.73	68.20	-19.47	Horizontal
5850.00	49.67	32.67	7.90	41.85	48.39	122.20	-73.81	Vertical
5855.00	48.75	32.67	7.90	41.90	47.42	110.80	-63.38	Vertical
5875.00	48.64	32.68	7.91	41.92	47.31	105.20	-57.89	Vertical
5925.00	48.08	32.69	7.92	41.94	46.75	68.20	-21.45	Vertical

Remark:

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

Band 4 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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
5650.00	53.64	32.63	7.45	41.85	51.87	68.20	-16.33	Horizontal
5700.00	65.89	32.64	7.60	41.90	64.23	105.20	-40.97	Horizontal
5720.00	82.76	32.65	7.64	41.92	81.13	110.80	-29.67	Horizontal
5725.00	84.67	32.65	7.69	41.94	83.07	122.20	-39.13	Horizontal
5650.00	48.56	32.63	7.45	41.85	46.79	68.20	-21.41	Vertical
5700.00	50.16	32.64	7.60	41.90	48.50	105.20	-56.70	Vertical
5720.00	57.49	32.65	7.64	41.92	55.86	110.80	-54.94	Vertical
5725.00	60.37	32.65	7.69	41.94	58.77	122.20	-63.43	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5850.00	58.49	32.67	7.90	41.85	57.21	122.20	-64.99	Horizontal
5855.00	54.46	32.67	7.90	41.90	53.13	110.80	-57.67	Horizontal
5875.00	48.96	32.68	7.91	41.92	47.63	105.20	-57.57	Horizontal
5925.00	48.27	32.69	7.92	41.94	46.94	68.20	-21.26	Horizontal
5850.00	49.46	32.67	7.90	41.85	48.18	122.20	-74.02	Vertical
5855.00	49.37	32.67	7.90	41.90	48.04	110.80	-62.76	Vertical
5875.00	49.62	32.68	7.91	41.92	48.29	105.20	-56.91	Vertical
5925.00	48.86	32.69	7.92	41.94	47.53	68.20	-20.67	Vertical

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 4 – 802.11ac(HT20)								
Test channel: Middle channel								
Detector: Peak Value								
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
5650.00	48.67	32.63	7.45	41.85	46.90	68.20	-21.30	Horizontal
5700.00	46.18	32.64	7.60	41.90	44.52	105.20	-60.68	Horizontal
5720.00	57.64	32.65	7.64	41.92	56.01	110.80	-54.79	Horizontal
5725.00	65.86	32.65	7.69	41.94	64.26	122.20	-57.94	Horizontal
5650.00	48.35	32.63	7.45	41.85	46.58	68.20	-21.62	Vertical
5700.00	52.46	32.64	7.60	41.90	50.80	105.20	-54.40	Vertical
5720.00	60.08	32.65	7.64	41.92	58.45	110.80	-52.35	Vertical
5725.00	67.83	32.65	7.69	41.94	66.23	122.20	-55.97	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5850.00	47.09	32.67	7.90	41.85	45.81	122.20	-76.39	Horizontal
5855.00	48.27	32.67	7.90	41.90	46.94	110.80	-63.86	Horizontal
5875.00	48.67	32.68	7.91	41.92	47.34	105.20	-57.86	Horizontal
5925.00	49.53	32.69	7.92	41.94	48.20	68.20	-20.00	Horizontal
5850.00	50.64	32.67	7.90	41.85	49.36	122.20	-72.84	Vertical
5855.00	49.38	32.67	7.90	41.90	48.05	110.80	-62.75	Vertical
5875.00	47.46	32.68	7.91	41.92	46.13	105.20	-59.07	Vertical
5925.00	46.94	32.69	7.92	41.94	45.61	68.20	-22.59	Vertical

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 4 – 802.11ac(HT40)								
Test channel: Middle channel								
Detector: Peak Value								
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
5650.00	50.24	32.63	7.45	41.85	48.47	68.20	-19.73	Horizontal
5700.00	67.49	32.64	7.60	41.90	65.83	105.20	-39.37	Horizontal
5720.00	73.36	32.65	7.64	41.92	71.73	110.80	-39.07	Horizontal
5725.00	81.98	32.65	7.69	41.94	80.38	122.20	-41.82	Horizontal
5650.00	49.42	32.63	7.45	41.85	47.65	68.20	-20.55	Vertical
5700.00	50.89	32.64	7.60	41.90	49.23	105.20	-55.97	Vertical
5720.00	55.94	32.65	7.64	41.92	54.31	110.80	-56.49	Vertical
5725.00	60.78	32.65	7.69	41.94	59.18	122.20	-63.02	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5850.00	47.86	32.67	7.90	41.85	46.58	122.20	-75.62	Horizontal
5855.00	48.37	32.67	7.90	41.90	47.04	110.80	-63.76	Horizontal
5875.00	54.19	32.68	7.91	41.92	52.86	105.20	-52.34	Horizontal
5925.00	57.86	32.69	7.92	41.94	56.53	68.20	-11.67	Horizontal
5850.00	50.19	32.67	7.90	41.85	48.91	122.20	-73.29	Vertical
5855.00	48.97	32.67	7.90	41.90	47.64	110.80	-63.16	Vertical
5875.00	48.26	32.68	7.91	41.92	46.93	105.20	-58.27	Vertical
5925.00	48.03	32.69	7.92	41.94	46.70	68.20	-21.50	Vertical

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 4 – 802.11ac(HT80)								
Test channel: Middle channel								
Detector: Peak Value								
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
5650.00	48.67	32.63	7.45	41.85	46.90	68.20	-21.30	Horizontal
5700.00	55.52	32.64	7.60	41.90	53.86	105.20	-51.34	Horizontal
5720.00	59.37	32.65	7.64	41.92	57.74	110.80	-53.06	Horizontal
5725.00	61.89	32.65	7.69	41.94	60.29	122.20	-61.91	Horizontal
5650.00	48.67	32.63	7.45	41.85	46.90	68.20	-21.30	Vertical
5700.00	60.98	32.64	7.60	41.90	59.32	105.20	-45.88	Vertical
5720.00	60.49	32.65	7.64	41.92	58.86	110.80	-51.94	Vertical
5725.00	62.83	32.65	7.69	41.94	61.23	122.20	-60.97	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5850.00	64.34	32.67	7.90	41.85	63.06	122.20	-59.14	Horizontal
5855.00	49.55	32.67	7.90	41.90	48.22	110.80	-62.58	Horizontal
5875.00	49.96	32.68	7.91	41.92	48.63	105.20	-56.57	Horizontal
5925.00	48.43	32.69	7.92	41.94	47.10	68.20	-21.10	Horizontal
5850.00	57.61	32.67	7.90	41.85	56.33	122.20	-65.87	Vertical
5855.00	54.73	32.67	7.90	41.90	53.40	110.80	-57.40	Vertical
5875.00	48.35	32.68	7.91	41.92	47.02	105.20	-58.18	Vertical
5925.00	48.26	32.69	7.92	41.94	46.93	68.20	-21.27	Vertical

Remark:

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

Ceramic ANT:**Band 1:**

Band 1 – 802.11a								
Test channel: Lowest channel								
Detector: Peak Value								
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	62.38	31.77	7.05	41.93	59.27	68.20	-8.93	Horizontal
5150.00	54.26	31.77	7.05	41.93	51.15	68.20	-17.05	Vertical
Detector: Average Value								
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	53.78	31.77	7.05	41.93	50.67	54.00	-3.33	Horizontal
5150.00	42.86	31.77	7.05	41.93	39.75	54.00	-14.25	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.37	31.77	7.11	41.89	45.36	68.20	-22.84	Horizontal
5350.00	48.16	31.77	7.11	41.89	45.15	68.20	-23.05	Vertical
Detector: Average Value								
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	39.16	31.77	7.11	41.89	36.15	54.00	-17.85	Horizontal
5350.00	38.79	31.77	7.11	41.89	35.78	54.00	-18.22	Vertical
<i>Remark:</i>								
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 1 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: 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	64.30	31.77	7.05	41.93	61.19	68.20	-7.01	Horizontal
5150.00	52.37	31.77	7.05	41.93	49.26	68.20	-18.94	Vertical
Detector: 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
5150.00	53.89	31.77	7.05	41.93	50.78	54.00	-3.22	Horizontal
5150.00	43.67	31.77	7.05	41.93	40.56	54.00	-13.44	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.72	31.77	7.11	41.89	45.71	68.20	-22.49	Horizontal
5350.00	38.46	31.77	7.11	41.89	35.45	68.20	-32.75	Vertical
Detector: Average Value								
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	39.04	31.77	7.11	41.89	36.03	54.00	-17.97	Horizontal
5350.00	39.13	31.77	7.11	41.89	36.12	54.00	-17.88	Vertical
<i>Remark:</i>								
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 1 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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	65.24	31.77	7.05	41.93	62.13	68.20	-6.07	Horizontal
5150.00	48.72	31.77	7.05	41.93	45.61	68.20	-22.59	Vertical
Detector: Average Value								
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	49.64	31.77	7.05	41.93	46.53	54.00	-7.47	Horizontal
5150.00	40.09	31.77	7.05	41.93	36.98	54.00	-17.02	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.35	31.77	7.11	41.89	41.89	68.20	-26.31	Horizontal
5350.00	48.71	31.77	7.11	41.89	41.89	68.20	-26.31	Vertical
Detector: Average Value								
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	38.27	31.77	7.11	41.89	35.26	54.00	-18.75	Horizontal
5350.00	38.94	31.77	7.11	41.89	35.93	54.00	-18.07	Vertical
<i>Remark:</i>								
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 1 – 802.11ac(HT20)								
Test channel: Lowest channel								
Detector: Peak Value								
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	61.27	31.77	7.05	41.93	58.16	68.20	-10.04	Horizontal
5150.00	53.09	31.77	7.05	41.93	49.98	68.20	-18.22	Vertical
Detector: Average Value								
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	52.64	31.77	7.05	41.93	49.53	54.00	-4.47	Horizontal
5150.00	43.65	31.77	7.05	41.93	40.54	54.00	-13.46	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.25	32.25	7.11	41.89	45.72	68.20	-22.48	Horizontal
5350.00	48.73	32.25	7.11	41.89	46.20	68.20	-22.00	Vertical
Detector: Average Value								
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	38.64	32.25	7.11	41.89	36.11	54.00	-17.89	Horizontal
5350.00	38.42	32.25	7.11	41.89	35.89	54.00	-18.11	Vertical

Remark:

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

Band 1 – 802.11ac(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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	65.27	31.77	7.05	41.93	62.16	68.20	-6.04	Horizontal
5150.00	51.79	31.77	7.05	41.93	48.68	68.20	-19.52	Vertical
Detector: Average Value								
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	50.94	31.77	7.05	41.93	47.83	54.00	-6.17	Horizontal
5150.00	42.52	31.77	7.05	41.93	39.41	54.00	-14.59	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.72	31.77	7.11	41.89	45.71	68.20	-22.49	Horizontal
5350.00	48.25	31.77	7.11	41.89	45.24	68.20	-22.96	Vertical
Detector: Average Value								
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	39.03	31.77	7.11	41.89	36.02	54.00	-17.98	Horizontal
5350.00	38.64	31.77	7.11	41.89	35.63	54.00	-18.37	Vertical

Remark:

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

Band 1 – 802.11ac(HT80)								
Test channel: Lowest channel								
Detector: Peak Value								
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	62.47	31.77	7.05	41.93	59.36	68.20	-8.84	Horizontal
5150.00	56.43	31.77	7.05	41.93	53.32	68.20	-14.88	Vertical
Detector: Average Value								
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	52.64	31.77	7.05	41.93	49.53	54.00	-4.47	Horizontal
5150.00	47.05	31.77	7.05	41.93	43.94	54.00	-10.06	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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	48.72	31.77	7.11	41.89	41.89	68.20	-26.31	Horizontal
5350.00	48.31	31.77	7.11	41.89	41.89	68.20	-26.31	Vertical
Detector: Average Value								
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	38.64	31.77	7.11	41.89	35.63	54.00	-18.37	Horizontal
5350.00	38.52	31.77	7.11	41.89	35.51	54.00	-18.49	Vertical

Remark:

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

Band 4:

Band 4 – 802.11a								
Test channel: Lowest channel								
Detector: Peak Value								
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
5650.00	47.61	32.63	7.45	41.85	45.84	68.20	-22.36	Horizontal
5700.00	48.23	32.64	7.60	41.90	46.57	105.20	-58.63	Horizontal
5720.00	53.34	32.65	7.64	41.92	51.71	110.80	-59.09	Horizontal
5725.00	52.59	32.65	7.69	41.94	50.99	122.20	-71.21	Horizontal
5650.00	48.34	32.63	7.45	41.85	46.57	68.20	-21.63	Vertical
5700.00	48.69	32.64	7.60	41.90	47.03	105.20	-58.17	Vertical
5720.00	49.35	32.65	7.64	41.92	47.72	110.80	-63.08	Vertical
5725.00	50.23	32.65	7.69	41.94	48.63	122.20	-73.57	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5850.00	55.84	32.67	7.90	41.85	54.56	122.20	-67.64	Horizontal
5855.00	53.64	32.67	7.90	41.90	52.31	110.80	-58.49	Horizontal
5875.00	50.24	32.68	7.91	41.92	48.91	105.20	-56.29	Horizontal
5925.00	48.73	32.69	7.92	41.94	47.40	68.20	-20.80	Horizontal
5850.00	54.28	32.67	7.90	41.85	53.00	122.20	-69.20	Vertical
5855.00	52.64	32.67	7.90	41.90	51.31	110.80	-59.49	Vertical
5875.00	49.28	32.68	7.91	41.92	47.95	105.20	-57.25	Vertical
5925.00	48.86	32.69	7.92	41.94	47.53	68.20	-20.67	Vertical

Remark:

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

Band 4 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: Peak Value								
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
5650.00	48.35	32.63	7.45	41.85	46.58	68.20	-21.62	Horizontal
5700.00	48.67	32.64	7.60	41.90	47.01	105.20	-58.19	Horizontal
5720.00	57.49	32.65	7.64	41.92	55.86	110.80	-54.94	Horizontal
5725.00	68.59	32.65	7.69	41.94	66.99	122.20	-55.21	Horizontal
5650.00	48.34	32.63	7.45	41.85	46.57	68.20	-21.63	Vertical
5700.00	51.86	32.64	7.60	41.90	50.20	105.20	-55.00	Vertical
5720.00	51.23	32.65	7.64	41.92	49.60	110.80	-61.20	Vertical
5725.00	69.34	32.65	7.69	41.94	67.74	122.20	-54.46	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5850.00	49.35	32.67	7.90	41.85	48.07	122.20	-74.13	Horizontal
5855.00	48.67	32.67	7.90	41.90	47.34	110.80	-63.46	Horizontal
5875.00	48.68	32.68	7.91	41.92	47.35	105.20	-57.85	Horizontal
5925.00	47.64	32.69	7.92	41.94	46.31	68.20	-21.89	Horizontal
5850.00	49.38	32.67	7.90	41.85	48.10	122.20	-74.10	Vertical
5855.00	48.76	32.67	7.90	41.90	47.43	110.80	-63.37	Vertical
5875.00	48.37	32.68	7.91	41.92	47.04	105.20	-58.16	Vertical
5925.00	48.52	32.69	7.92	41.94	47.19	68.20	-21.01	Vertical

Remark:

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

Band 4 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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
5650.00	53.32	32.63	7.45	41.85	51.55	68.20	-16.65	Horizontal
5700.00	68.46	32.64	7.60	41.90	66.80	105.20	-38.40	Horizontal
5720.00	83.64	32.65	7.64	41.92	82.01	110.80	-28.79	Horizontal
5725.00	86.25	32.65	7.69	41.94	84.65	122.20	-37.55	Horizontal
5650.00	48.11	32.63	7.45	41.85	46.34	68.20	-21.86	Vertical
5700.00	40.24	32.64	7.60	41.90	38.58	105.20	-66.62	Vertical
5720.00	57.83	32.65	7.64	41.92	56.20	110.80	-54.60	Vertical
5725.00	61.64	32.65	7.69	41.94	60.04	122.20	-62.16	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5850.00	57.37	32.67	7.90	41.85	56.09	122.20	-66.11	Horizontal
5855.00	55.65	32.67	7.90	41.90	54.32	110.80	-56.49	Horizontal
5875.00	49.62	32.68	7.91	41.92	48.29	105.20	-56.91	Horizontal
5925.00	48.53	32.69	7.92	41.94	47.20	68.20	-21.00	Horizontal
5850.00	49.37	32.67	7.90	41.85	48.09	122.20	-74.11	Vertical
5855.00	48.96	32.67	7.90	41.90	47.63	110.80	-63.17	Vertical
5875.00	48.37	32.68	7.91	41.92	47.04	105.20	-58.16	Vertical
5925.00	48.25	32.69	7.92	41.94	46.92	68.20	-21.28	Vertical

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 4 – 802.11ac(HT20)								
Test channel: Middle channel								
Detector: Peak Value								
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
5650.00	48.67	32.63	7.45	41.85	46.90	68.20	-21.30	Horizontal
5700.00	49.57	32.64	7.60	41.90	47.91	105.20	-57.29	Horizontal
5720.00	57.43	32.65	7.64	41.92	55.80	110.80	-55.00	Horizontal
5725.00	67.64	32.65	7.69	41.94	66.04	122.20	-56.16	Horizontal
5650.00	48.53	32.63	7.45	41.85	46.76	68.20	-21.44	Vertical
5700.00	51.64	32.64	7.60	41.90	49.98	105.20	-55.22	Vertical
5720.00	60.31	32.65	7.64	41.92	58.68	110.80	-52.12	Vertical
5725.00	68.79	32.65	7.69	41.94	67.19	122.20	-55.01	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5850.00	49.54	32.67	7.90	41.85	48.26	122.20	-73.94	Horizontal
5855.00	48.67	32.67	7.90	41.90	47.34	110.80	-63.46	Horizontal
5875.00	48.53	32.68	7.91	41.92	47.20	105.20	-58.00	Horizontal
5925.00	48.57	32.69	7.92	41.94	47.24	68.20	-20.96	Horizontal
5850.00	50.89	32.67	7.90	41.85	49.61	122.20	-72.59	Vertical
5855.00	49.82	32.67	7.90	41.90	48.49	110.80	-62.31	Vertical
5875.00	48.67	32.68	7.91	41.92	47.34	105.20	-57.86	Vertical
5925.00	48.24	32.69	7.92	41.94	46.91	68.20	-21.29	Vertical

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 4 – 802.11ac(HT40)								
Test channel: Middle channel								
Detector: Peak Value								
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
5650.00	53.64	32.63	7.45	41.85	51.87	68.20	-16.33	Horizontal
5700.00	68.48	32.64	7.60	41.90	66.82	105.20	-38.38	Horizontal
5720.00	75.74	32.65	7.64	41.92	74.11	110.80	-36.69	Horizontal
5725.00	84.67	32.65	7.69	41.94	83.07	122.20	-39.13	Horizontal
5650.00	49.82	32.63	7.45	41.85	48.05	68.20	-20.15	Vertical
5700.00	52.34	32.64	7.60	41.90	50.68	105.20	-54.52	Vertical
5720.00	59.64	32.65	7.64	41.92	58.01	110.80	-52.79	Vertical
5725.00	60.24	32.65	7.69	41.94	58.64	122.20	-63.56	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5850.00	59.37	32.67	7.90	41.85	58.09	122.20	-64.11	Horizontal
5855.00	55.76	32.67	7.90	41.90	54.43	110.80	-56.37	Horizontal
5875.00	49.62	32.68	7.91	41.92	48.29	105.20	-56.91	Horizontal
5925.00	48.64	32.69	7.92	41.94	47.31	68.20	-20.89	Horizontal
5850.00	50.78	32.67	7.90	41.85	49.50	122.20	-72.70	Vertical
5855.00	49.64	32.67	7.90	41.90	48.31	110.80	-62.49	Vertical
5875.00	48.73	32.68	7.91	41.92	47.40	105.20	-57.80	Vertical
5925.00	48.67	32.69	7.92	41.94	47.34	68.20	-20.86	Vertical

Remark:

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

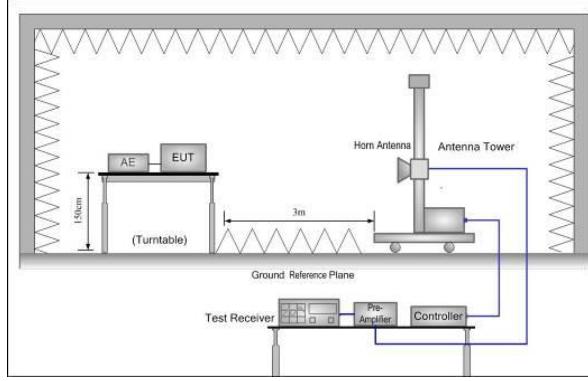
Band 4 – 802.11ac(HT80)								
Test channel: Middle channel								
Detector: Peak Value								
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5650.00	48.67	32.63	7.45	41.85	46.90	68.20	-21.30	Horizontal
5700.00	57.21	32.64	7.60	41.90	55.55	105.20	-49.65	Horizontal
5720.00	58.96	32.65	7.64	41.92	57.33	110.80	-53.47	Horizontal
5725.00	61.78	32.65	7.69	41.94	60.18	122.20	-62.02	Horizontal
5650.00	48.34	32.63	7.45	41.85	46.57	68.20	-21.63	Vertical
5700.00	59.89	32.64	7.60	41.90	58.23	105.20	-46.97	Vertical
5720.00	61.02	32.65	7.64	41.92	59.39	110.80	-51.41	Vertical
5725.00	62.64	32.65	7.69	41.94	61.04	122.20	-61.16	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5850.00	63.37	32.67	7.90	41.85	62.09	122.20	-60.11	Horizontal
5855.00	50.24	32.67	7.90	41.90	48.91	110.80	-61.89	Horizontal
5875.00	49.82	32.68	7.91	41.92	48.49	105.20	-56.71	Horizontal
5925.00	48.53	32.69	7.92	41.94	47.20	68.20	-21.00	Horizontal
5850.00	57.64	32.67	7.90	41.85	56.36	122.20	-65.84	Vertical
5855.00	53.28	32.67	7.90	41.90	51.95	110.80	-58.85	Vertical
5875.00	48.73	32.68	7.91	41.92	47.40	105.20	-57.80	Vertical
5925.00	48.36	32.69	7.92	41.94	47.03	68.20	-21.17	Vertical

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.

6.7 Spurious Emission

6.7.1 Restricted Band

Test Requirement:	FCC Part15 E Section 15.407(b)								
Test Method:	ANSI C63.10: 2013								
Test Frequency Range:	4.5 GHz to 5.15 GHz and 5.35GHz to 5.46GHz								
Test site:	Measurement Distance: 3m								
Receiver setup:	Frequency	Detector	RBW	VBW	Remark				
	Above 1GHz	Peak	1MHz	3MHz	Peak Value				
Limit:	Frequency	Limit (dBuV/m @3m)		Remark					
	Above 1GHz	74.00		Peak Value					
Test Procedure:	<ol style="list-style-type: none"> The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 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. 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. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 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. 								
Test setup:									
Test Instruments:	Refer to section 5.9 for details								
Test mode:	Refer to section 5.3 for details								
Test results:	Passed								

Measurement Data (worst case):**External ANT A:****Band 1:**

Band 1 – 802.11a								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	49.34	34.50	6.80	42.05	48.59	74.00	-25.41	Horizontal
4500.00	49.06	34.50	6.80	42.05	48.31	74.00	-25.69	Vertical
Detector: Average Value								
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
4500.00	40.34	34.50	6.80	42.05	39.59	54.00	-14.41	Horizontal
4500.00	40.53	34.50	6.80	42.05	39.78	54.00	-14.22	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	50.40	34.90	7.18	41.85	50.63	74.00	-23.37	Horizontal
5460.00	50.36	34.90	7.18	41.85	50.59	74.00	-23.41	Vertical
Detector: Average Value								
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
5460.00	41.25	34.90	7.18	41.85	41.48	54.00	-12.52	Horizontal
5460.00	41.43	34.90	7.18	41.85	41.66	54.00	-12.34	Vertical

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 1 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	49.67	34.50	6.80	42.05	48.92	74.00	-25.08	Horizontal
4500.00	49.23	34.50	6.80	42.05	48.48	74.00	-25.52	Vertical
Detector: Average Value								
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
4500.00	41.24	34.50	6.80	42.05	40.49	54.00	-13.51	Horizontal
4500.00	40.85	34.50	6.80	42.05	40.10	54.00	-13.90	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	49.64	34.90	7.18	41.85	49.87	74.00	-24.13	Horizontal
5460.00	48.53	34.90	7.18	41.85	48.76	74.00	-25.24	Vertical
Detector: Average Value								
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
5460.00	40.37	34.90	7.18	41.85	40.60	54.00	-13.40	Horizontal
5460.00	40.73	34.90	7.18	41.85	40.96	54.00	-13.04	Vertical

Remark:

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

Band 1 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	49.24	34.50	6.80	42.05	48.49	74.00	-25.51	Horizontal
4500.00	49.14	34.50	6.80	42.05	48.39	74.00	-25.61	Vertical
Detector: Average Value								
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
4500.00	40.35	34.50	6.80	42.05	39.60	54.00	-14.40	Horizontal
4500.00	40.43	34.50	6.80	42.05	39.68	54.00	-14.32	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	49.26	34.90	7.18	41.85	49.49	74.00	-24.51	Horizontal
5460.00	49.31	34.90	7.18	41.85	49.54	74.00	-24.46	Vertical
Detector: Average Value								
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
5460.00	40.72	34.90	7.18	41.85	40.95	54.00	-13.05	Horizontal
5460.00	40.46	34.90	7.18	41.85	40.69	54.00	-13.31	Vertical

Remark:

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

Band 1 – 802.11ac(HT20)								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	49.25	34.50	6.80	42.05	48.50	74.00	-25.50	Horizontal
4500.00	49.23	34.50	6.80	42.05	48.48	74.00	-25.52	Vertical
Detector: Average Value								
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
4500.00	41.34	34.50	6.80	42.05	40.59	54.00	-13.41	Horizontal
4500.00	41.14	34.50	6.80	42.05	40.39	54.00	-13.61	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	50.40	34.90	7.18	41.85	50.63	74.00	-23.37	Horizontal
5460.00	50.36	34.90	7.18	41.85	50.59	74.00	-23.41	Vertical
Detector: Average Value								
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
5460.00	41.25	34.90	7.18	41.85	41.48	54.00	-12.52	Horizontal
5460.00	41.43	34.90	7.18	41.85	41.66	54.00	-12.34	Vertical

Remark:

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

Band 1 – 802.11ac(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	48.96	34.50	6.80	42.05	48.21	74.00	-25.79	Horizontal
4500.00	49.28	34.50	6.80	42.05	48.53	74.00	-25.47	Vertical
Detector: Average Value								
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
4500.00	40.23	34.50	6.80	42.05	39.48	54.00	-14.52	Horizontal
4500.00	40.74	34.50	6.80	42.05	39.99	54.00	-14.01	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	49.64	34.90	7.18	41.85	49.87	74.00	-24.13	Horizontal
5460.00	48.53	34.90	7.18	41.85	48.76	74.00	-25.24	Vertical
Detector: Average Value								
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
5460.00	40.37	34.90	7.18	41.85	40.60	54.00	-13.40	Horizontal
5460.00	40.73	34.90	7.18	41.85	40.96	54.00	-13.04	Vertical

Remark:

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

Band 1 – 802.11ac(HT80)								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	49.37	34.50	6.80	42.05	48.62	74.00	-25.38	Horizontal
4500.00	49.21	34.50	6.80	42.05	48.46	74.00	-25.54	Vertical
Detector: Average Value								
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
4500.00	40.09	34.50	6.80	42.05	39.34	54.00	-14.66	Horizontal
4500.00	39.97	34.50	6.80	42.05	39.22	54.00	-14.78	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	49.24	34.90	7.18	41.85	49.47	74.00	-24.53	Horizontal
5460.00	49.06	34.90	7.18	41.85	49.29	74.00	-24.71	Vertical
Detector: Average Value								
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
5460.00	40.12	34.90	7.18	41.85	40.35	54.00	-13.65	Horizontal
5460.00	39.89	34.90	7.18	41.85	40.12	54.00	-13.88	Vertical

Remark:

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

Band 4:

Band 4 – 802.11a								
Test channel: Lowest channel								
Detector: Peak Value								
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	49.53	35.37	7.11	41.89	50.12	74.00	-23.88	Horizontal
5350.00	49.35	35.37	7.11	41.89	49.94	74.00	-24.06	Vertical
Detector: Average Value								
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	39.84	35.37	7.11	41.89	40.43	54.00	-13.57	Horizontal
5350.00	39.08	35.37	7.11	41.89	39.67	54.00	-14.33	Vertical
Test channel: Lowest channel								
Detector: Peak Value								
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
5460.00	49.87	34.90	7.18	41.85	50.10	74.00	-23.90	Horizontal
5460.00	49.83	34.90	7.18	41.85	50.06	74.00	-23.94	Vertical
Detector: Average Value								
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
5460.00	40.15	34.90	7.18	41.85	40.38	54.00	-13.62	Horizontal
5460.00	40.24	34.90	7.18	41.85	40.47	54.00	-13.53	Vertical

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 4 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: Peak Value								
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	49.64	35.37	7.11	41.89	50.23	74.00	-23.77	Horizontal
5350.00	49.42	35.37	7.11	41.89	50.01	74.00	-23.99	Vertical
Detector: Average Value								
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	40.24	35.37	7.11	41.89	40.83	54.00	-13.17	Horizontal
5350.00	40.13	35.37	7.11	41.89	40.72	54.00	-13.28	Vertical
Test channel: Lowest channel								
Detector: Peak Value								
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
5460.00	50.24	34.90	7.18	41.85	50.47	74.00	-23.53	Horizontal
5460.00	50.23	34.90	7.18	41.85	50.46	74.00	-23.54	Vertical
Detector: Average Value								
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
5460.00	40.64	34.90	7.18	41.85	40.87	54.00	-13.13	Horizontal
5460.00	40.43	34.90	7.18	41.85	40.66	54.00	-13.34	Vertical
<i>Remark:</i>								
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 4 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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	49.87	35.37	7.11	41.89	50.46	74.00	-23.54	Horizontal
5350.00	49.64	35.37	7.11	41.89	50.23	74.00	-23.77	Vertical
Detector: Average Value								
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	39.46	35.37	7.11	41.89	40.05	54.00	-13.95	Horizontal
5350.00	39.56	35.37	7.11	41.89	40.15	54.00	-13.85	Vertical
Test channel: Lowest channel								
Detector: Peak Value								
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
5460.00	50.64	34.90	7.18	41.85	50.87	74.00	-23.13	Horizontal
5460.00	50.23	34.90	7.18	41.85	50.46	74.00	-23.54	Vertical
Detector: Average Value								
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
5460.00	41.24	34.90	7.18	41.85	41.47	54.00	-12.53	Horizontal
5460.00	40.86	34.90	7.18	41.85	41.09	54.00	-12.91	Vertical
<i>Remark:</i>								
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 4 – 802.11ac(HT20)								
Test channel: Middle channel								
Detector: Peak Value								
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	50.42	35.37	7.11	41.89	51.01	74.00	-22.99	Horizontal
5350.00	50.26	35.37	7.11	41.89	50.85	74.00	-23.15	Vertical
Detector: Average Value								
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	40.87	35.37	7.11	41.89	41.46	54.00	-12.54	Horizontal
5350.00	40.56	35.37	7.11	41.89	41.15	54.00	-12.85	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5460.00	49.37	34.90	7.18	41.85	49.60	74.00	-24.40	Horizontal
5460.00	49.58	34.90	7.18	41.85	49.81	74.00	-24.19	Vertical
Detector: Average Value								
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
5460.00	39.74	34.90	7.18	41.85	39.97	54.00	-14.03	Horizontal
5460.00	39.53	34.90	7.18	41.85	39.76	54.00	-14.24	Vertical

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 4 – 802.11ac(HT40)								
Test channel: Middle channel								
Detector: Peak Value								
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	49.67	35.37	7.11	41.89	50.26	74.00	-23.74	Horizontal
5350.00	49.86	35.37	7.11	41.89	50.45	74.00	-23.55	Vertical
Detector: Average Value								
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	40.67	35.37	7.11	41.89	41.26	54.00	-12.74	Horizontal
5350.00	39.64	35.37	7.11	41.89	40.23	54.00	-13.77	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5460.00	49.87	34.90	7.18	41.85	50.10	74.00	-23.90	Horizontal
5460.00	49.83	34.90	7.18	41.85	50.06	74.00	-23.94	Vertical
Detector: Average Value								
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
5460.00	39.64	34.90	7.18	41.85	39.87	54.00	-14.13	Horizontal
5460.00	39.53	34.90	7.18	41.85	39.76	54.00	-14.24	Vertical

Remark:

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

Band 4 – 802.11ac(HT80)								
Test channel: Middle channel								
Detector: Peak Value								
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	49.67	35.37	7.11	41.89	50.26	74.00	-23.74	Horizontal
5350.00	49.83	35.37	7.11	41.89	50.42	74.00	-23.58	Vertical
Detector: Average Value								
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	39.85	35.37	7.11	41.89	40.44	54.00	-13.56	Horizontal
5350.00	39.46	35.37	7.11	41.89	40.05	54.00	-13.95	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5460.00	49.97	34.90	7.18	41.85	50.20	74.00	-23.80	Horizontal
5460.00	49.86	34.90	7.18	41.85	50.09	74.00	-23.91	Vertical
Detector: Average Value								
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
5460.00	39.87	34.90	7.18	41.85	40.10	54.00	-13.90	Horizontal
5460.00	39.34	34.90	7.18	41.85	39.57	54.00	-14.43	Vertical

Remark:

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

External ANT B:**Band 1:**

Band 1 – 802.11a								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	48.23	34.50	6.80	42.05	47.48	74.00	-26.52	Horizontal
4500.00	48.05	34.50	6.80	42.05	47.30	74.00	-26.70	Vertical
Detector: Average Value								
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
4500.00	40.38	34.50	6.80	42.05	39.63	54.00	-14.37	Horizontal
4500.00	40.43	34.50	6.80	42.05	39.68	54.00	-14.32	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	48.96	34.90	7.18	41.85	49.19	74.00	-24.81	Horizontal
5460.00	48.67	34.90	7.18	41.85	48.90	74.00	-25.10	Vertical
Detector: Average Value								
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
5460.00	41.23	34.90	7.18	41.85	41.46	54.00	-12.54	Horizontal
5460.00	41.08	34.90	7.18	41.85	41.31	54.00	-12.69	Vertical

Remark:

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

Band 1 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	48.67	34.50	6.80	42.05	47.92	74.00	-26.08	Horizontal
4500.00	48.07	34.50	6.80	42.05	47.32	74.00	-26.68	Vertical
Detector: Average Value								
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
4500.00	41.26	34.50	6.80	42.05	40.51	54.00	-13.49	Horizontal
4500.00	40.34	34.50	6.80	42.05	39.59	54.00	-14.41	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	48.76	34.90	7.18	41.85	48.99	74.00	-25.01	Horizontal
5460.00	48.28	34.90	7.18	41.85	48.51	74.00	-25.49	Vertical
Detector: Average Value								
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
5460.00	40.94	34.90	7.18	41.85	41.17	54.00	-12.83	Horizontal
5460.00	40.32	34.90	7.18	41.85	40.55	54.00	-13.45	Vertical

Remark:

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

Band 1 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	49.38	34.50	6.80	42.05	48.63	74.00	-25.37	Horizontal
4500.00	49.43	34.50	6.80	42.05	48.68	74.00	-25.32	Vertical
Detector: Average Value								
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
4500.00	40.32	34.50	6.80	42.05	39.57	54.00	-14.43	Horizontal
4500.00	39.79	34.50	6.80	42.05	39.04	54.00	-14.96	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	49.38	34.90	7.18	41.85	49.61	74.00	-24.39	Horizontal
5460.00	49.27	34.90	7.18	41.85	49.50	74.00	-24.50	Vertical
Detector: Average Value								
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
5460.00	40.89	34.90	7.18	41.85	41.12	54.00	-12.88	Horizontal
5460.00	40.32	34.90	7.18	41.85	40.55	54.00	-13.45	Vertical

Remark:

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

Band 1 – 802.11ac(HT20)								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	49.84	34.50	6.80	42.05	49.09	74.00	-24.91	Horizontal
4500.00	49.43	34.50	6.80	42.05	48.68	74.00	-25.32	Vertical
Detector: Average Value								
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
4500.00	40.35	34.50	6.80	42.05	39.60	54.00	-14.40	Horizontal
4500.00	40.26	34.50	6.80	42.05	39.51	54.00	-14.49	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	49.98	34.90	7.18	41.85	50.21	74.00	-23.79	Horizontal
5460.00	49.87	34.90	7.18	41.85	50.10	74.00	-23.90	Vertical
Detector: Average Value								
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
5460.00	40.86	34.90	7.18	41.85	41.09	54.00	-12.91	Horizontal
5460.00	40.34	34.90	7.18	41.85	40.57	54.00	-13.43	Vertical

Remark:

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

Band 1 – 802.11ac(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	48.97	34.50	6.80	42.05	48.22	74.00	-25.78	Horizontal
4500.00	48.76	34.50	6.80	42.05	48.01	74.00	-25.99	Vertical
Detector: Average Value								
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
4500.00	40.31	34.50	6.80	42.05	39.56	54.00	-14.44	Horizontal
4500.00	40.19	34.50	6.80	42.05	39.44	54.00	-14.56	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	49.06	34.90	7.18	41.85	49.29	74.00	-24.71	Horizontal
5460.00	48.47	34.90	7.18	41.85	48.70	74.00	-25.30	Vertical
Detector: Average Value								
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
5460.00	40.29	34.90	7.18	41.85	40.52	54.00	-13.48	Horizontal
5460.00	40.12	34.90	7.18	41.85	40.35	54.00	-13.65	Vertical

Remark:

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

Band 1 – 802.11ac(HT80)								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	49.38	34.50	6.80	42.05	48.63	74.00	-25.37	Horizontal
4500.00	49.76	34.50	6.80	42.05	49.01	74.00	-24.99	Vertical
Detector: Average Value								
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
4500.00	40.47	34.50	6.80	42.05	39.72	54.00	-14.28	Horizontal
4500.00	40.24	34.50	6.80	42.05	39.49	54.00	-14.51	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	49.52	34.90	7.18	41.85	49.75	74.00	-24.25	Horizontal
5460.00	49.16	34.90	7.18	41.85	49.39	74.00	-24.61	Vertical
Detector: Average Value								
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
5460.00	40.37	34.90	7.18	41.85	40.60	54.00	-13.40	Horizontal
5460.00	40.46	34.90	7.18	41.85	40.69	54.00	-13.31	Vertical

Remark:

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

Band 4:

Band 4 – 802.11a								
Test channel: Lowest channel								
Detector: Peak Value								
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	49.83	35.37	7.11	41.89	50.42	74.00	-23.58	Horizontal
5350.00	49.67	35.37	7.11	41.89	50.26	74.00	-23.74	Vertical
Detector: Average Value								
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	38.94	35.37	7.11	41.89	39.53	54.00	-14.47	Horizontal
5350.00	39.06	35.37	7.11	41.89	39.65	54.00	-14.35	Vertical
Test channel: Lowest channel								
Detector: Peak Value								
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
5460.00	49.80	34.90	7.18	41.85	50.03	74.00	-23.97	Horizontal
5460.00	49.37	34.90	7.18	41.85	49.60	74.00	-24.40	Vertical
Detector: Average Value								
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
5460.00	40.32	34.90	7.18	41.85	40.55	54.00	-13.45	Horizontal
5460.00	40.16	34.90	7.18	41.85	40.39	54.00	-13.61	Vertical

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 4 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: Peak Value								
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	49.78	35.37	7.11	41.89	50.37	74.00	-23.63	Horizontal
5350.00	49.64	35.37	7.11	41.89	50.23	74.00	-23.77	Vertical
Detector: Average Value								
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	40.35	35.37	7.11	41.89	40.94	54.00	-13.06	Horizontal
5350.00	40.29	35.37	7.11	41.89	40.88	54.00	-13.12	Vertical
Test channel: Lowest channel								
Detector: Peak Value								
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
5460.00	50.98	34.90	7.18	41.85	51.21	74.00	-22.79	Horizontal
5460.00	50.79	34.90	7.18	41.85	51.02	74.00	-22.98	Vertical
Detector: Average Value								
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
5460.00	40.36	34.90	7.18	41.85	40.59	54.00	-13.41	Horizontal
5460.00	40.35	34.90	7.18	41.85	40.58	54.00	-13.42	Vertical
<i>Remark:</i>								
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 4 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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	49.87	35.37	7.11	41.89	50.46	74.00	-23.54	Horizontal
5350.00	49.75	35.37	7.11	41.89	50.34	74.00	-23.66	Vertical
Detector: Average Value								
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	39.64	35.37	7.11	41.89	40.23	54.00	-13.77	Horizontal
5350.00	39.43	35.37	7.11	41.89	40.02	54.00	-13.98	Vertical
Test channel: Lowest channel								
Detector: Peak Value								
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
5460.00	49.87	34.90	7.18	41.85	50.10	74.00	-23.90	Horizontal
5460.00	49.53	34.90	7.18	41.85	49.76	74.00	-24.24	Vertical
Detector: Average Value								
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
5460.00	40.36	34.90	7.18	41.85	40.59	54.00	-13.41	Horizontal
5460.00	40.14	34.90	7.18	41.85	40.37	54.00	-13.63	Vertical
<i>Remark:</i>								
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 4 – 802.11ac(HT20)								
Test channel: Middle channel								
Detector: Peak Value								
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	49.98	35.37	7.11	41.89	50.57	74.00	-23.43	Horizontal
5350.00	49.78	35.37	7.11	41.89	50.37	74.00	-23.63	Vertical
Detector: Average Value								
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	40.80	35.37	7.11	41.89	41.39	54.00	-12.61	Horizontal
5350.00	40.26	35.37	7.11	41.89	40.85	54.00	-13.15	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5460.00	49.37	34.90	7.18	41.85	49.60	74.00	-24.40	Horizontal
5460.00	49.52	34.90	7.18	41.85	49.75	74.00	-24.25	Vertical
Detector: Average Value								
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
5460.00	38.94	34.90	7.18	41.85	39.17	54.00	-14.83	Horizontal
5460.00	38.49	34.90	7.18	41.85	38.72	54.00	-15.28	Vertical

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 4 – 802.11ac(HT40)								
Test channel: Middle channel								
Detector: Peak Value								
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	49.75	35.37	7.11	41.89	50.34	74.00	-23.66	Horizontal
5350.00	49.82	35.37	7.11	41.89	50.41	74.00	-23.59	Vertical
Detector: Average Value								
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	40.58	35.37	7.11	41.89	41.17	54.00	-12.83	Horizontal
5350.00	39.46	35.37	7.11	41.89	40.05	54.00	-13.95	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5460.00	49.57	34.90	7.18	41.85	49.80	74.00	-24.20	Horizontal
5460.00	49.86	34.90	7.18	41.85	50.09	74.00	-23.91	Vertical
Detector: Average Value								
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
5460.00	39.79	34.90	7.18	41.85	40.02	54.00	-13.98	Horizontal
5460.00	40.06	34.90	7.18	41.85	40.29	54.00	-13.71	Vertical

Remark:

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

Band 4 – 802.11ac(HT80)								
Test channel: Middle channel								
Detector: Peak Value								
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	49.37	35.37	7.11	41.89	49.96	74.00	-24.04	Horizontal
5350.00	49.52	35.37	7.11	41.89	50.11	74.00	-23.89	Vertical
Detector: Average Value								
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	39.47	35.37	7.11	41.89	40.06	54.00	-13.94	Horizontal
5350.00	39.35	35.37	7.11	41.89	39.94	54.00	-14.06	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5460.00	49.79	34.90	7.18	41.85	50.02	74.00	-23.98	Horizontal
5460.00	49.38	34.90	7.18	41.85	49.61	74.00	-24.39	Vertical
Detector: Average Value								
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
5460.00	39.57	34.90	7.18	41.85	39.80	54.00	-14.20	Horizontal
5460.00	39.46	34.90	7.18	41.85	39.69	54.00	-14.31	Vertical

Remark:

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

Ceramic ANT:**Band 1:**

Band 1 – 802.11a								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	49.74	34.50	6.80	42.05	48.99	74.00	-25.01	Horizontal
4500.00	49.16	34.50	6.80	42.05	48.41	74.00	-25.59	Vertical
Detector: Average Value								
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
4500.00	39.43	34.50	6.80	42.05	38.68	54.00	-15.32	Horizontal
4500.00	39.87	34.50	6.80	42.05	39.12	54.00	-14.88	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	49.54	34.90	7.18	41.85	49.77	74.00	-24.23	Horizontal
5460.00	48.64	34.90	7.18	41.85	48.87	74.00	-25.13	Vertical
Detector: Average Value								
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
5460.00	39.84	34.90	7.18	41.85	40.07	54.00	-13.93	Horizontal
5460.00	39.52	34.90	7.18	41.85	39.75	54.00	-14.25	Vertical

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 1 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	49.73	34.50	6.80	42.05	48.98	74.00	-25.02	Horizontal
4500.00	49.24	34.50	6.80	42.05	48.49	74.00	-25.51	Vertical
Detector: Average Value								
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
4500.00	40.23	34.50	6.80	42.05	39.48	54.00	-14.52	Horizontal
4500.00	39.64	34.50	6.80	42.05	38.89	54.00	-15.11	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	49.86	34.90	7.18	41.85	50.09	74.00	-23.91	Horizontal
5460.00	49.64	34.90	7.18	41.85	49.87	74.00	-24.13	Vertical
Detector: Average Value								
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
5460.00	40.11	34.90	7.18	41.85	40.34	54.00	-13.66	Horizontal
5460.00	40.25	34.90	7.18	41.85	40.48	54.00	-13.52	Vertical

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 1 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	49.22	34.50	6.80	42.05	48.47	74.00	-25.53	Horizontal
4500.00	49.11	34.50	6.80	42.05	48.36	74.00	-25.64	Vertical
Detector: Average Value								
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
4500.00	40.34	34.50	6.80	42.05	39.59	54.00	-14.41	Horizontal
4500.00	39.23	34.50	6.80	42.05	38.48	54.00	-15.52	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	49.21	34.90	7.18	41.85	49.44	74.00	-24.56	Horizontal
5460.00	49.67	34.90	7.18	41.85	49.90	74.00	-24.10	Vertical
Detector: Average Value								
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
5460.00	39.43	34.90	7.18	41.85	39.66	54.00	-14.34	Horizontal
5460.00	39.84	34.90	7.18	41.85	40.07	54.00	-13.93	Vertical

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 1 – 802.11ac(HT20)								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	49.34	34.50	6.80	42.05	48.59	74.00	-25.41	Horizontal
4500.00	49.26	34.50	6.80	42.05	48.51	74.00	-25.49	Vertical
Detector: Average Value								
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
4500.00	40.54	34.50	6.80	42.05	39.79	54.00	-14.21	Horizontal
4500.00	40.37	34.50	6.80	42.05	39.62	54.00	-14.38	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	49.67	34.90	7.18	41.85	49.90	74.00	-24.10	Horizontal
5460.00	49.53	34.90	7.18	41.85	49.76	74.00	-24.24	Vertical
Detector: Average Value								
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
5460.00	39.64	34.90	7.18	41.85	39.87	54.00	-14.13	Horizontal
5460.00	38.86	34.90	7.18	41.85	39.09	54.00	-14.91	Vertical

Remark:

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

Band 1 – 802.11ac(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	48.96	34.50	6.80	42.05	48.21	74.00	-25.79	Horizontal
4500.00	49.28	34.50	6.80	42.05	48.53	74.00	-25.47	Vertical
Detector: Average Value								
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
4500.00	39.64	34.50	6.80	42.05	38.89	54.00	-15.11	Horizontal
4500.00	39.83	34.50	6.80	42.05	39.08	54.00	-14.92	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	49.11	34.90	7.18	41.85	49.34	74.00	-24.66	Horizontal
5460.00	49.34	34.90	7.18	41.85	49.57	74.00	-24.43	Vertical
Detector: Average Value								
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
5460.00	38.91	34.90	7.18	41.85	39.14	54.00	-14.86	Horizontal
5460.00	39.42	34.90	7.18	41.85	39.65	54.00	-14.35	Vertical

Remark:

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

Band 1 – 802.11ac(HT80)								
Test channel: Lowest channel								
Detector: Peak Value								
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
4500.00	49.35	34.50	6.80	42.05	48.60	74.00	-25.40	Horizontal
4500.00	49.53	34.50	6.80	42.05	48.78	74.00	-25.22	Vertical
Detector: Average Value								
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
4500.00	39.64	34.50	6.80	42.05	38.89	54.00	-15.11	Horizontal
4500.00	39.43	34.50	6.80	42.05	38.68	54.00	-15.32	Vertical
Test channel: Highest channel								
Detector: Peak Value								
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
5460.00	49.35	34.90	7.18	41.85	49.58	74.00	-24.42	Horizontal
5460.00	49.24	34.90	7.18	41.85	49.47	74.00	-24.53	Vertical
Detector: Average Value								
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
5460.00	40.43	34.90	7.18	41.85	40.66	54.00	-13.34	Horizontal
5460.00	39.89	34.90	7.18	41.85	40.12	54.00	-13.88	Vertical

Remark:

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

Band 4:

Band 4 – 802.11a								
Test channel: Lowest channel								
Detector: Peak Value								
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	49.59	35.37	7.11	41.89	50.18	74.00	-23.82	Horizontal
5350.00	49.64	35.37	7.11	41.89	50.23	74.00	-23.77	Vertical
Detector: Average Value								
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	39.89	35.37	7.11	41.89	40.48	54.00	-13.52	Horizontal
5350.00	39.25	35.37	7.11	41.89	39.84	54.00	-14.16	Vertical
Test channel: Lowest channel								
Detector: Peak Value								
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
5460.00	49.86	34.90	7.18	41.85	50.09	74.00	-23.91	Horizontal
5460.00	49.94	34.90	7.18	41.85	50.17	74.00	-23.83	Vertical
Detector: Average Value								
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
5460.00	40.26	34.90	7.18	41.85	40.49	54.00	-13.51	Horizontal
5460.00	40.67	34.90	7.18	41.85	40.90	54.00	-13.10	Vertical

Remark:

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

Band 4 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: Peak Value								
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	46.83	35.37	7.11	41.89	47.42	74.00	-26.58	Horizontal
5350.00	49.87	35.37	7.11	41.89	50.46	74.00	-23.54	Vertical
Detector: Average Value								
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	38.86	35.37	7.11	41.89	39.45	54.00	-14.55	Horizontal
5350.00	39.73	35.37	7.11	41.89	40.32	54.00	-13.68	Vertical
Test channel: Lowest channel								
Detector: Peak Value								
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
5460.00	49.68	34.90	7.18	41.85	49.91	74.00	-24.09	Horizontal
5460.00	48.97	34.90	7.18	41.85	49.20	74.00	-24.80	Vertical
Detector: Average Value								
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
5460.00	49.53	34.90	7.18	41.85	49.76	54.00	-4.24	Horizontal
5460.00	48.64	34.90	7.18	41.85	48.87	54.00	-5.13	Vertical

Remark:

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

Band 4 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: Peak Value								
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	49.36	35.37	7.11	41.89	49.95	74.00	-24.05	Horizontal
5350.00	49.97	35.37	7.11	41.89	50.56	74.00	-23.44	Vertical
Detector: Average Value								
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	39.76	35.37	7.11	41.89	40.35	54.00	-13.65	Horizontal
5350.00	39.95	35.37	7.11	41.89	40.54	54.00	-13.46	Vertical
Test channel: Lowest channel								
Detector: Peak Value								
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
5460.00	49.87	34.90	7.18	41.85	50.10	74.00	-23.90	Horizontal
5460.00	49.56	34.90	7.18	41.85	49.79	74.00	-24.21	Vertical
Detector: Average Value								
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
5460.00	39.03	34.90	7.18	41.85	39.26	54.00	-14.74	Horizontal
5460.00	39.47	34.90	7.18	41.85	39.70	54.00	-14.30	Vertical
<i>Remark:</i>								
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 4 – 802.11ac(HT20)								
Test channel: Middle channel								
Detector: Peak Value								
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	50.67	35.37	7.11	41.89	51.26	74.00	-22.74	Horizontal
5350.00	49.89	35.37	7.11	41.89	50.48	74.00	-23.52	Vertical
Detector: Average Value								
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	39.64	35.37	7.11	41.89	40.23	54.00	-13.77	Horizontal
5350.00	39.53	35.37	7.11	41.89	40.12	54.00	-13.88	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5460.00	49.36	34.90	7.18	41.85	49.59	74.00	-24.41	Horizontal
5460.00	49.87	34.90	7.18	41.85	50.10	74.00	-23.90	Vertical
Detector: Average Value								
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
5460.00	39.89	34.90	7.18	41.85	40.12	54.00	-13.88	Horizontal
5460.00	39.97	34.90	7.18	41.85	40.20	54.00	-13.80	Vertical

Remark:

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

Band 4 – 802.11ac(HT40)								
Test channel: Middle channel								
Detector: Peak Value								
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	49.93	35.37	7.11	41.89	50.52	74.00	-23.48	Horizontal
5350.00	49.87	35.37	7.11	41.89	50.46	74.00	-23.54	Vertical
Detector: Average Value								
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	39.64	35.37	7.11	41.89	40.23	54.00	-13.77	Horizontal
5350.00	40.43	35.37	7.11	41.89	41.02	54.00	-12.98	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5460.00	49.94	34.90	7.18	41.85	50.17	74.00	-23.83	Horizontal
5460.00	49.91	34.90	7.18	41.85	50.14	74.00	-23.86	Vertical
Detector: Average Value								
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
5460.00	39.86	34.90	7.18	41.85	40.09	54.00	-13.91	Horizontal
5460.00	39.84	34.90	7.18	41.85	40.07	54.00	-13.93	Vertical

Remark:

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

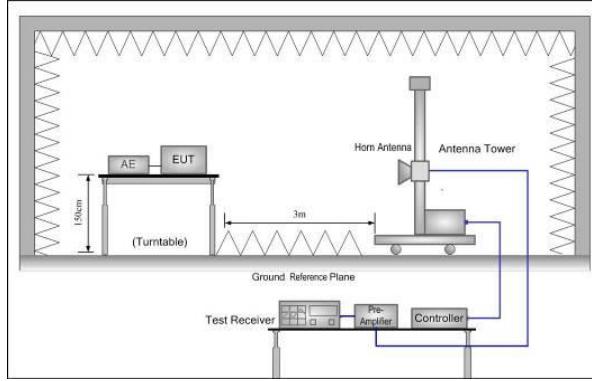
Band 4 – 802.11ac(HT80)								
Test channel: Middle channel								
Detector: Peak Value								
Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	49.66	35.37	7.11	41.89	50.25	74.00	-23.75	Horizontal
5350.00	49.85	35.37	7.11	41.89	50.44	74.00	-23.56	Vertical
Detector: Average Value								
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	39.37	35.37	7.11	41.89	39.96	54.00	-14.04	Horizontal
5350.00	39.70	35.37	7.11	41.89	40.29	54.00	-13.71	Vertical
Test channel: Middle channel								
Detector: Peak Value								
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
5460.00	49.86	34.90	7.18	41.85	50.09	74.00	-23.91	Horizontal
5460.00	49.67	34.90	7.18	41.85	49.90	74.00	-24.10	Vertical
Detector: Average Value								
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
5460.00	39.37	34.90	7.18	41.85	39.60	54.00	-14.40	Horizontal
5460.00	39.46	34.90	7.18	41.85	39.69	54.00	-14.31	Vertical

Remark:

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

6.7.2 Unwanted Emissions out of the Restricted Bands

Test Requirement:	FCC Part15 C Section 15.209 and 15.205								
Test Method:	ANSI C63.10: 2013								
Test Frequency Range:	30MHz to 40GHz								
Test site:	Measurement Distance: 3m								
Receiver setup:	Frequency	Detector	RBW	VBW	Remark				
	30MHz-1GHz	Quasi-peak	100kHz	300kHz	Quasi-peak Value				
	Above 1GHz	Peak	1MHz	3MHz	Peak Value				
	RMS	1MHz	3MHz	Average	Average Value				
Limit:	Frequency	Limit (dB μ V/m @3m)		Remark					
	30MHz-88MHz	40.0		Quasi-peak Value					
	88MHz-216MHz	43.5		Quasi-peak Value					
	216MHz-960MHz	46.0		Quasi-peak Value					
	960MHz-1GHz	54.0		Quasi-peak Value					
	Above 1GHz	68.20		Peak Value					
		54.00		Average Value					
<i>Remark:</i>									
<i>Above 1GHz limit:</i>									
$E[dB\mu V/m] = EIRP[dBm] + 95.2 - 68.2 = 68.2 \text{ dB}\mu V/m, \text{ for } EIPR[dBm] = -27 \text{ dBm}.$									
Test Procedure:	<ol style="list-style-type: none"> 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 table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 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. 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. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 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. 								
Test setup:	Below 1GHz								

	Above 1GHz
	
Test Instruments:	Refer to section 5.9 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

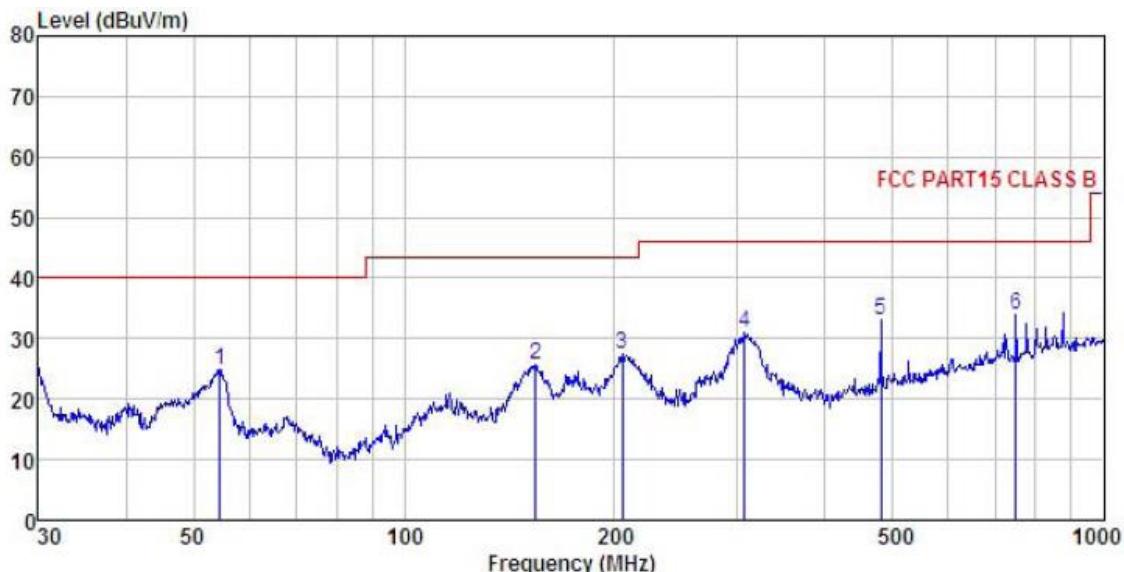
Measurement Data (worst case):**Below 1GHz:**

Product Name:	Broadband Digital Transmission System			Product Model:	BLUE BEAN A			
Test By:	Mike			Test mode:	Wi-Fi Tx mode			
Test Frequency:	30 MHz ~ 1 GHz			Polarization:	Vertical			
Test Voltage:	AC 120/60Hz			Environment:	Temp: 24°C Huni: 57%			
<p>FCC PART15 CLASS B</p>								
Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 46.340	53.70	12.24	1.28	29.85	37.37	40.00	-2.63	QP
2 154.821	46.98	9.10	2.55	29.18	29.45	43.50	-14.05	QP
3 204.955	41.68	10.84	2.86	28.80	26.58	43.50	-16.92	QP
4 314.377	37.25	13.90	2.98	28.48	25.65	46.00	-20.35	QP
5 480.528	37.60	17.52	3.46	28.92	29.66	46.00	-16.34	QP
6 750.108	35.00	20.60	4.36	28.48	31.48	46.00	-14.52	QP

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.

Product Name:	Broadband Digital Transmission System	Product Model:	BLUE BEAN A
Test By:	Mike	Test mode:	Wi-Fi Tx mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%

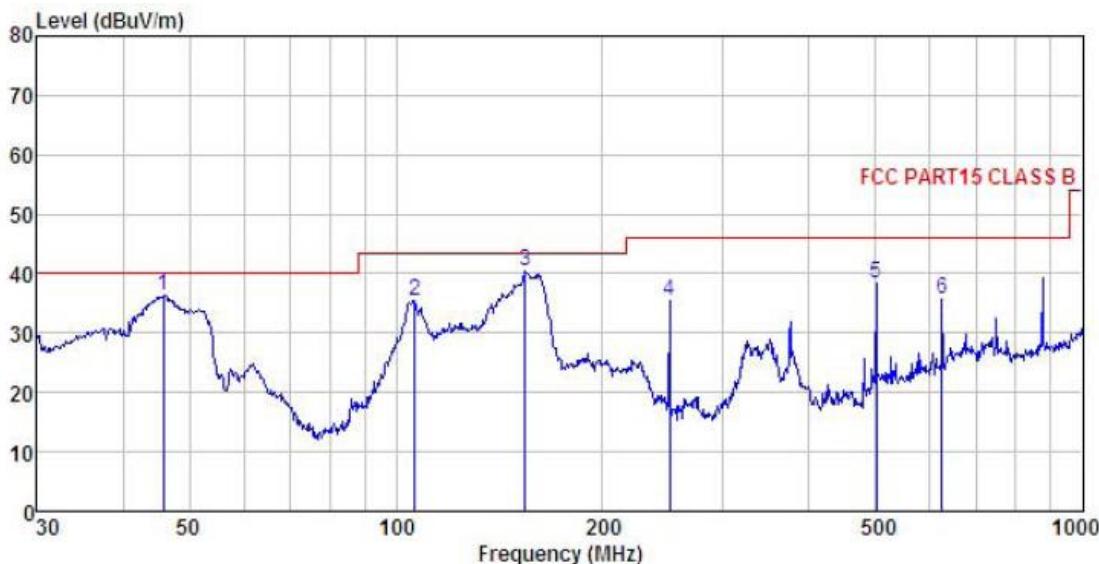


Freq MHz	Read Level dBuV	Antenna Factor dB/m	Cable Loss dB	Preamp Factor dB	Line Level dBuV/m	Limit Line dBuV/m	Over Line dB	Over Limit dB	Remark
	MHz	dBuV	dB/m	dB	dBuV/m	dBuV/m	dB	dB	
1	54.452	41.63	11.65	1.34	29.80	24.82	40.00	-15.18	QP
2	154.279	43.22	9.07	2.55	29.18	25.66	43.50	-17.84	QP
3	204.955	42.47	10.84	2.86	28.80	27.37	43.50	-16.13	QP
4	306.754	42.66	13.76	2.96	28.47	30.91	46.00	-15.09	QP
5	480.528	40.87	17.52	3.46	28.92	32.93	46.00	-13.07	QP
6	750.108	37.43	20.60	4.36	28.48	33.91	46.00	-12.09	QP

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.

Product Name:	Broadband Digital Transmission System	Product Model:	BLUE BEAN C
Test By:	Mike	Test mode:	Wi-Fi Tx mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%

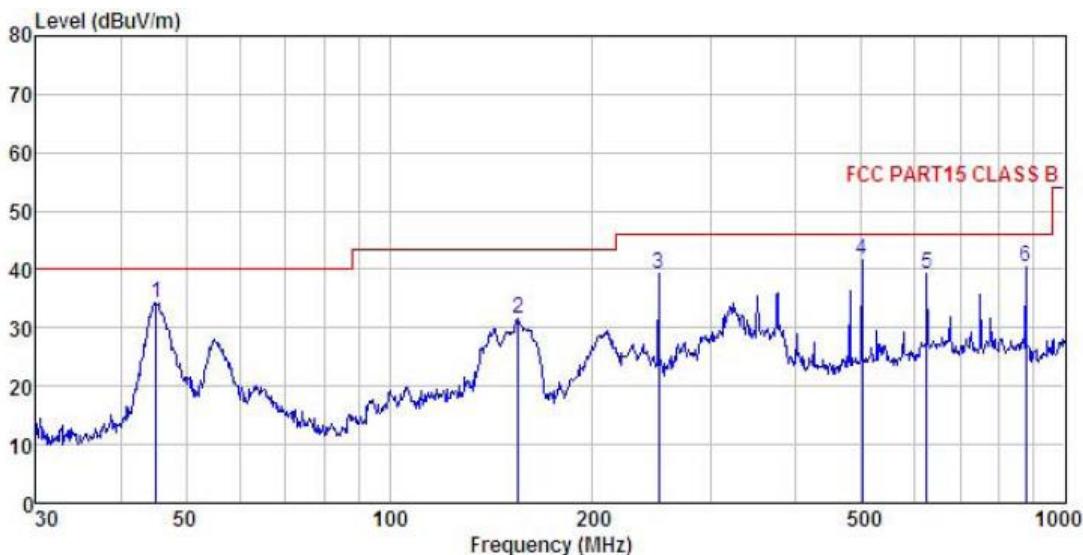


Freq MHz	Read Level dBuV	Antenna Factor dB/m	Cable Loss dB	Preamplifier Factor dB	Limit Line dBuV/m	Over Line dB	Over Limit dB	Remark
	MHz	dBuV	dB/m	dB	dBuV/m	dBuV/m	dB	
1 45.855	52.54	12.27	1.29	29.85	36.25	40.00	-3.75	QP
2 106.385	50.94	11.98	2.01	29.48	35.45	43.50	-8.05	QP
3 154.279	57.94	9.07	2.55	29.18	40.38	43.50	-3.12	QP
4 250.301	48.32	12.70	2.81	28.54	35.29	46.00	-10.71	QP
5 501.179	45.60	18.20	3.63	28.96	38.47	46.00	-7.53	QP
6 625.078	41.15	19.61	3.90	28.86	35.80	46.00	-10.20	QP

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.

Product Name:	Broadband Digital Transmission System	Product Model:	BLUE BEAN C
Test By:	Mike	Test mode:	Wi-Fi Tx mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%

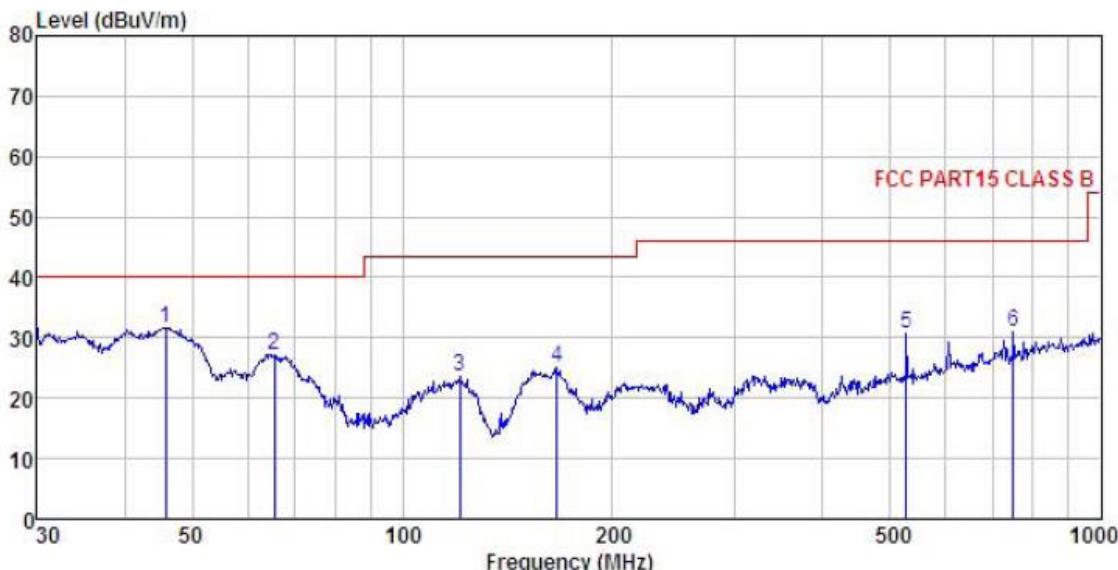


Freq MHz	Read	Antenna	Cable	Preamp	Limit Line dB	Over Line dB	Over Limit Remark
	Freq MHz	Level dBuV	Antenna Factor	Cable Loss			
1 45.217	50.47	12.29	1.29	29.86	34.19	40.00	-5.81 QP
2 155.364	49.10	9.12	2.55	29.17	31.60	43.50	-11.90 QP
3 250.301	52.29	12.70	2.81	28.54	39.26	46.00	-6.74 QP
4 501.179	48.87	18.20	3.63	28.96	41.74	46.00	-4.26 QP
5 625.078	44.63	19.61	3.90	28.86	39.28	46.00	-6.72 QP
6 875.247	41.94	22.55	3.95	27.94	40.50	46.00	-5.50 QP

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.

Product Name:	Broadband Digital Transmission System	Product Model:	RED BEAN A
Test By:	Mike	Test mode:	Wi-Fi Tx mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%

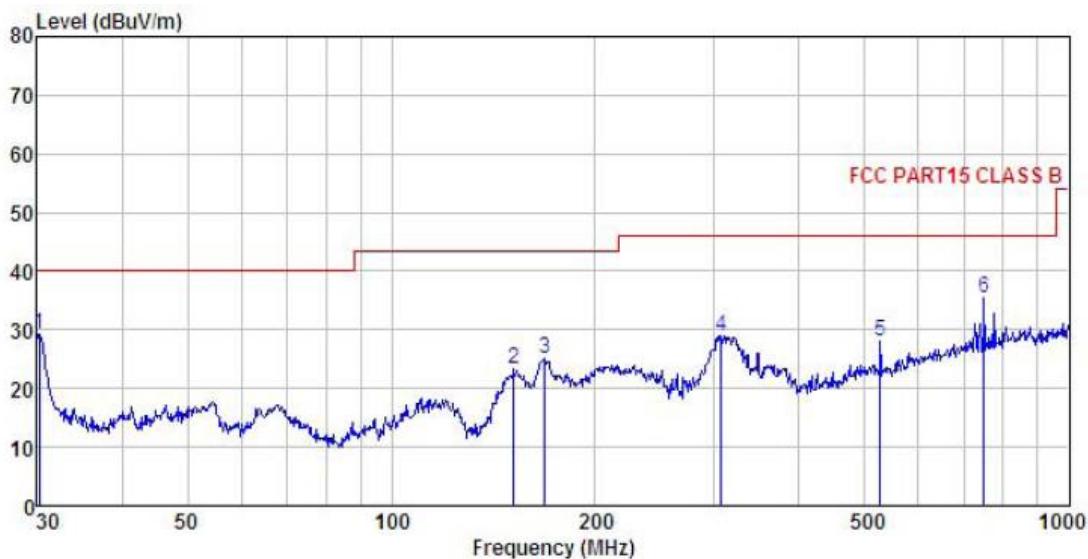


Freq MHz	Read Level dBuV	Antenna Factor dB/m	Cable Loss Factor dB	Preamp Level dB	Limit Line dBuV/m	Over Line dBuV/m	Over Limit dB	Remark
1 45.855	47.97	12.27	1.29	29.85	31.68	40.00	-8.32	QP
2 65.573	46.11	9.48	1.41	29.75	27.25	40.00	-12.75	QP
3 120.699	39.91	10.85	2.18	29.39	23.55	43.50	-19.95	QP
4 166.651	42.13	9.52	2.64	29.08	25.21	43.50	-18.29	QP
5 526.397	37.61	18.30	3.76	29.03	30.64	46.00	-15.36	QP
6 750.108	34.62	20.60	4.36	28.48	31.10	46.00	-14.90	QP

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.

Product Name:	Broadband Digital Transmission System	Product Model:	RED BEAN A
Test By:	Mike	Test mode:	Wi-Fi Tx mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%

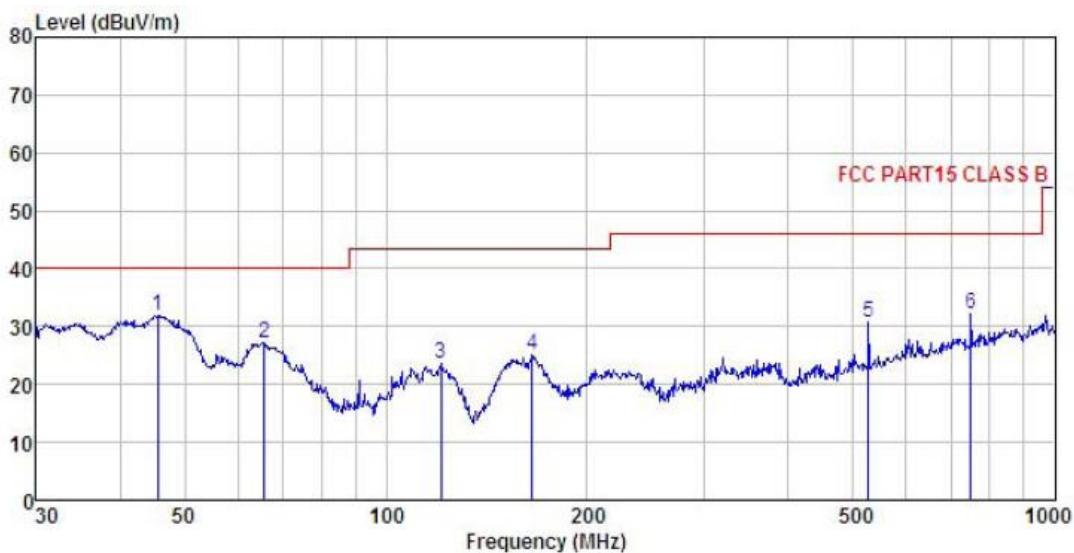


Freq MHz	Read Level dBuV	Antenna Factor dB/m	Cable Loss Factor dB	Preamp Level dB	Line Level dBuV/m	Limit Line Level dBuV/m	Over Line Limit dB	Remark
	MHz	dBuV	dB/m	dB	dBuV/m	dBuV/m	dB	
1	30.211	47.95	10.63	0.72	29.98	29.32	40.00	-10.68 QP
2	151.597	41.09	8.97	2.53	29.21	23.38	43.50	-20.12 QP
3	168.414	42.04	9.59	2.64	29.06	25.21	43.50	-18.29 QP
4	306.754	40.60	13.76	2.96	28.47	28.85	46.00	-17.15 QP
5	526.397	35.15	18.30	3.76	29.03	28.18	46.00	-17.82 QP
6	750.108	38.87	20.60	4.36	28.48	35.35	46.00	-10.65 QP

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.

Product Name:	Broadband Digital Transmission System	Product Model:	BLUE BEAN C
Test By:	Mike	Test mode:	Wi-Fi Tx mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%

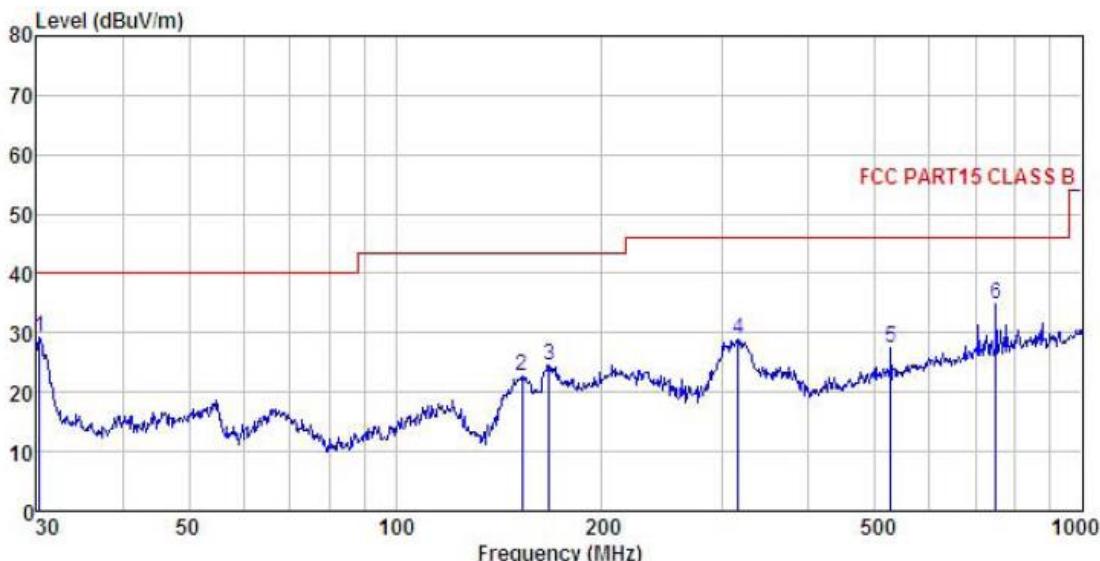


Freq MHz	ReadAntenna Level Factor		Cable Preamp Loss Factor		Limit Line dBuV/m	Over Line dB	Over Limit Remark
	MHz	dBuV	dB/m	dB			
1 45.535	48.24	12.28	1.29	29.86	31.95	40.00	-8.05 QP
2 65.803	46.18	9.42	1.41	29.75	27.26	40.00	-12.74 QP
3 120.699	39.97	10.85	2.18	29.39	23.61	43.50	-19.89 QP
4 165.487	42.08	9.49	2.62	29.09	25.10	43.50	-18.40 QP
5 526.397	37.59	18.30	3.76	29.03	30.62	46.00	-15.38 QP
6 750.108	35.69	20.60	4.36	28.48	32.17	46.00	-13.83 QP

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.

Product Name:	Broadband Digital Transmission System	Product Model:	BLUE BEAN C
Test By:	Mike	Test mode:	Wi-Fi Tx mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%



Freq MHz	Read Level dBuV	Antenna Factor dB/m	Cable Loss dB	Preamp Factor dB	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Remark
	MHz	dBuV	dB/m	dB	dBuV/m	dBuV/m	dB	
1	30.317	47.75	10.65	0.78	29.98	29.20	40.00	-10.80 QP
2	152.664	40.45	9.00	2.53	29.20	22.78	43.50	-20.72 QP
3	167.237	41.45	9.54	2.64	29.07	24.56	43.50	-18.94 QP
4	315.481	40.58	13.92	2.99	28.49	29.00	46.00	-17.00 QP
5	526.397	34.29	18.30	3.76	29.03	27.32	46.00	-18.68 QP
6	750.108	38.36	20.60	4.36	28.48	34.84	46.00	-11.16 QP

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.

Measurement Data (worst case): Above 1GHz:**External ANT A:**

Band 1 – 802.11a								
Test channel: Lowest channel								
Detector: 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	48.36	40.10	9.82	41.97	56.31	68.20	-11.89	Vertical
10360.00	48.34	40.10	9.82	41.97	56.29	68.20	-11.91	Horizontal
Detector: 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	38.75	40.10	9.82	41.97	46.70	54.00	-7.30	Vertical
10360.00	38.94	40.10	9.82	41.97	46.89	54.00	-7.11	Horizontal
Test channel: Middle channel								
Detector: 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	48.47	40.00	9.85	41.95	56.37	68.20	-11.83	Vertical
10400.00	48.31	40.00	9.85	41.95	56.21	68.20	-11.99	Horizontal
Detector: 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	38.46	40.00	9.85	41.95	46.36	54.00	-7.64	Vertical
10400.00	38.37	40.00	9.85	41.95	46.27	54.00	-7.73	Horizontal
Test channel: Highest channel								
Detector: 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
10480.00	48.34	39.70	9.96	41.88	56.12	68.20	-12.08	Vertical
10480.00	48.46	39.70	9.96	41.88	56.24	68.20	-11.96	Horizontal
Detector: 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	38.74	39.70	9.96	41.88	46.52	54.00	-7.48	Vertical
10480.00	38.71	39.70	9.96	41.88	46.49	54.00	-7.51	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 1 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: 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	48.67	40.10	9.82	41.97	56.62	68.20	-11.58	Vertical
10360.00	48.56	40.10	9.82	41.97	56.51	68.20	-11.69	Horizontal
Detector: 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	38.64	40.10	9.82	41.97	46.59	54.00	-7.41	Vertical
10360.00	38.79	40.10	9.82	41.97	46.74	54.00	-7.26	Horizontal
Test channel: Middle channel								
Detector: 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	47.86	40.00	9.85	41.95	55.76	68.20	-12.44	Vertical
10400.00	47.64	40.00	9.85	41.95	55.54	68.20	-12.66	Horizontal
Detector: 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	38.42	40.00	9.85	41.95	46.32	54.00	-7.68	Vertical
10400.00	38.61	40.00	9.85	41.95	46.51	54.00	-7.49	Horizontal
Test channel: Highest channel								
Detector: 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
10480.00	48.89	39.70	9.96	41.88	56.67	68.20	-11.53	Vertical
10480.00	48.37	39.70	9.96	41.88	56.15	68.20	-12.05	Horizontal
Detector: 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	37.62	39.70	9.96	41.88	45.40	54.00	-8.60	Vertical
10480.00	37.89	39.70	9.96	41.88	45.67	54.00	-8.33	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 1 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: 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	48.74	40.00	9.85	41.95	56.64	68.20	-11.56	Vertical
10380.00	48.73	40.00	9.85	41.95	56.63	68.20	-11.57	Horizontal
Detector: 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	38.37	40.00	9.85	41.95	46.27	54.00	-7.73	Vertical
10380.00	38.83	40.00	9.85	41.95	46.73	54.00	-7.27	Horizontal
Test channel: Highest channel								
Detector: 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	48.34	39.80	9.92	41.90	56.16	68.20	-12.04	Vertical
10460.00	47.95	39.80	9.92	41.90	55.77	68.20	-12.43	Horizontal
Detector: 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	38.43	39.80	9.92	41.90	46.25	54.00	-7.75	Vertical
10460.00	38.61	39.80	9.92	41.90	46.43	54.00	-7.57	Horizontal

Remark:

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

Band 1 – 802.11ac(HT20)								
Test channel: Lowest channel								
Detector: 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	49.24	40.10	9.82	41.97	57.19	68.20	-11.01	Vertical
10360.00	48.37	40.10	9.82	41.97	56.32	68.20	-11.88	Horizontal
Detector: 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	39.57	40.10	9.82	41.97	47.52	54.00	-6.48	Vertical
10360.00	38.97	40.10	9.82	41.97	46.92	54.00	-7.08	Horizontal
Test channel: Middle channel								
Detector: 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	48.83	40.00	9.85	41.95	56.73	68.20	-11.47	Vertical
10400.00	48.94	40.00	9.85	41.95	56.84	68.20	-11.36	Horizontal
Detector: 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	38.49	40.00	9.85	41.95	46.39	54.00	-7.61	Vertical
10400.00	38.73	40.00	9.85	41.95	46.63	54.00	-7.37	Horizontal
Test channel: Highest channel								
Detector: 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
10480.00	48.37	39.70	9.96	41.88	56.15	68.20	-12.05	Vertical
10480.00	48.79	39.70	9.96	41.88	56.57	68.20	-11.63	Horizontal
Detector: 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	38.67	39.70	9.96	41.88	46.45	54.00	-7.55	Vertical
10480.00	38.83	39.70	9.96	41.88	46.61	54.00	-7.39	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 1 – 802.11ac(HT40)								
Test channel: Lowest channel								
Detector: 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	49.27	40.10	9.82	41.97	57.22	68.20	-10.98	Vertical
10380.00	48.89	40.10	9.82	41.97	56.84	68.20	-11.36	Horizontal
Detector: 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	38.94	40.10	9.82	41.97	46.89	54.00	-7.11	Vertical
10380.00	38.76	40.10	9.82	41.97	46.71	54.00	-7.29	Horizontal
Test channel: Highest channel								
Detector: 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	48.38	40.00	9.85	41.95	56.28	68.20	-11.92	Vertical
10460.00	48.37	40.00	9.85	41.95	56.27	68.20	-11.93	Horizontal
Detector: 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	38.56	40.00	9.85	41.95	46.46	54.00	-7.54	Vertical
10460.00	38.67	40.00	9.85	41.95	46.57	54.00	-7.43	Horizontal
Band 1 – 802.11ac(HT80)								
Test channel: Middle channel								
Detector: 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	48.74	40.00	9.85	41.95	56.64	68.20	-11.56	Vertical
10420.00	48.73	40.00	9.85	41.95	56.63	68.20	-11.57	Horizontal
Detector: 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
10420.00	38.67	40.00	9.85	41.95	46.57	54.00	-7.43	Vertical
10420.00	38.73	40.00	9.85	41.95	46.63	54.00	-7.37	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 4:

Band 4 – 802.11a								
Test channel: Lowest channel								
Detector: 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
11490.00	48.25	41.50	10.81	42.29	58.27	74.00	-15.73	Vertical
11490.00	47.43	41.50	10.81	42.29	57.45	74.00	-16.55	Horizontal
Detector: 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
11490.00	38.37	41.50	10.81	42.29	48.39	54.00	-5.61	Vertical
11490.00	37.53	41.50	10.81	42.29	47.55	54.00	-6.45	Horizontal
Test channel: Middle channel								
Detector: 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
11570.00	48.67	41.38	10.78	42.27	58.56	74.00	-15.44	Vertical
11570.00	48.53	41.38	10.78	42.27	58.42	74.00	-15.58	Horizontal
Detector: 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
11570.00	37.64	41.38	10.78	42.27	47.53	54.00	-6.47	Vertical
11570.00	37.56	41.38	10.78	42.27	47.45	54.00	-6.55	Horizontal
Test channel: Highest channel								
Detector: 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
11650.00	48.67	41.26	10.76	42.26	58.43	74.00	-15.57	Vertical
11650.00	48.26	41.26	10.76	42.26	58.02	74.00	-15.98	Horizontal
Detector: 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
11650.00	38.37	41.26	10.76	42.26	48.13	54.00	-5.87	Vertical
11650.00	37.86	41.26	10.76	42.26	47.62	54.00	-6.38	Horizontal

Remark:

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

Band 4 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: 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
11490.00	48.91	41.50	10.81	42.29	58.93	74.00	-15.07	Vertical
11490.00	47.89	41.50	10.81	42.29	57.91	74.00	-16.09	Horizontal
Detector: 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
11490.00	37.84	41.50	10.81	42.29	47.86	54.00	-6.14	Vertical
11490.00	38.29	41.50	10.81	42.29	48.31	54.00	-5.69	Horizontal
Test channel: Middle channel								
Detector: 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
11570.00	48.57	41.38	10.78	42.27	58.46	74.00	-15.54	Vertical
11570.00	48.73	41.38	10.78	42.27	58.62	74.00	-15.38	Horizontal
Detector: 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
11570.00	37.89	41.38	10.78	42.27	47.78	54.00	-6.22	Vertical
11570.00	38.31	41.38	10.78	42.27	48.20	54.00	-5.80	Horizontal
Test channel: Highest channel								
Detector: 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
11650.00	48.73	41.26	10.76	42.26	58.49	74.00	-15.51	Vertical
11650.00	48.68	41.26	10.76	42.26	58.44	74.00	-15.56	Horizontal
Detector: 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
11650.00	38.34	41.26	10.76	42.26	48.10	54.00	-5.90	Vertical
11650.00	38.47	41.26	10.76	42.26	48.23	54.00	-5.77	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 4 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: 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
11510.00	47.68	41.50	10.81	42.29	57.70	74.00	-16.30	Vertical
11510.00	48.43	41.50	10.81	42.29	58.45	74.00	-15.55	Horizontal
Detector: 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
11510.00	37.48	41.50	10.81	42.29	47.50	54.00	-6.50	Vertical
11510.00	38.61	41.50	10.81	42.29	48.63	54.00	-5.37	Horizontal
Test channel: Highest channel								
Detector: 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
11590.00	47.86	41.32	10.77	42.27	57.68	74.00	-16.32	Vertical
11590.00	47.64	41.32	10.77	42.27	57.46	74.00	-16.54	Horizontal
Detector: 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
11590.00	37.92	41.32	10.77	42.27	47.74	54.00	-6.26	Vertical
11590.00	37.89	41.32	10.77	42.27	47.71	54.00	-6.29	Horizontal

Remark:

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

Band 4 – 802.11ac(HT20)								
Test channel: Lowest channel								
Detector: 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
11490.00	48.26	41.50	10.81	42.29	58.28	74.00	-15.72	Vertical
11490.00	47.36	41.50	10.81	42.29	57.38	74.00	-16.62	Horizontal
Detector: 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
11490.00	38.47	41.50	10.81	42.29	48.49	54.00	-5.51	Vertical
11490.00	37.56	41.50	10.81	42.29	47.58	54.00	-6.42	Horizontal
Test channel: Middle channel								
Detector: 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
11570.00	48.37	41.38	10.78	42.27	58.26	74.00	-15.74	Vertical
11570.00	48.43	41.38	10.78	42.27	58.32	74.00	-15.68	Horizontal
Detector: 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
11570.00	38.34	41.38	10.78	42.27	48.23	54.00	-5.77	Vertical
11570.00	38.67	41.38	10.78	42.27	48.56	54.00	-5.44	Horizontal
Test channel: Highest channel								
Detector: 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
11650.00	48.76	41.26	10.76	42.26	58.52	74.00	-15.48	Vertical
11650.00	48.67	41.26	10.76	42.26	58.43	74.00	-15.57	Horizontal
Detector: 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
11650.00	38.15	41.26	10.76	42.26	47.91	54.00	-6.09	Vertical
11650.00	38.14	41.26	10.76	42.26	47.90	54.00	-6.10	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 4 – 802.11ac(HT40)								
Test channel: Lowest channel								
Detector: 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
11510.00	48.67	41.50	10.81	42.29	58.69	74.00	-15.31	Vertical
11510.00	48.39	41.50	10.81	42.29	58.41	74.00	-15.59	Horizontal
Detector: 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
11510.00	38.74	41.50	10.81	42.29	48.76	54.00	-5.24	Vertical
11510.00	38.46	41.50	10.81	42.29	48.48	54.00	-5.52	Horizontal
Test channel: Highest channel								
Detector: 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
11590.00	48.75	41.38	10.78	42.27	58.64	74.00	-15.36	Vertical
11590.00	48.84	41.38	10.78	42.27	58.73	74.00	-15.27	Horizontal
Detector: 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
11590.00	38.64	41.38	10.78	42.27	48.53	54.00	-5.47	Vertical
11590.00	38.45	41.38	10.78	42.27	48.34	54.00	-5.66	Horizontal
Band 4 – 802.11ac(HT80)								
Test channel: Middle channel								
Detector: 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
11550.00	48.76	41.50	10.81	42.29	58.78	74.00	-15.22	Vertical
11550.00	48.64	41.50	10.81	42.29	58.66	74.00	-15.34	Horizontal
Detector: 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
11550.00	38.37	41.50	10.81	42.29	48.39	54.00	-5.61	Vertical
11550.00	37.56	41.50	10.81	42.29	47.58	54.00	-6.42	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.

External ANT B:

Band 1 – 802.11a								
Test channel: Lowest channel								
Detector: 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	48.36	40.10	9.82	41.97	56.31	68.20	-11.89	Vertical
10360.00	48.52	40.10	9.82	41.97	56.47	68.20	-11.73	Horizontal
Detector: 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	38.75	40.10	9.82	41.97	46.70	54.00	-7.30	Vertical
10360.00	38.64	40.10	9.82	41.97	46.59	54.00	-7.41	Horizontal
Test channel: Middle channel								
Detector: 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	48.46	40.00	9.85	41.95	56.36	68.20	-11.84	Vertical
10400.00	47.67	40.00	9.85	41.95	55.57	68.20	-12.63	Horizontal
Detector: 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	38.25	40.00	9.85	41.95	46.15	54.00	-7.85	Vertical
10400.00	38.19	40.00	9.85	41.95	46.09	54.00	-7.91	Horizontal
Test channel: Highest channel								
Detector: 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
10480.00	48.56	39.70	9.96	41.88	56.34	68.20	-11.86	Vertical
10480.00	48.37	39.70	9.96	41.88	56.15	68.20	-12.05	Horizontal
Detector: 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	38.76	39.70	9.96	41.88	46.54	54.00	-7.46	Vertical
10480.00	38.35	39.70	9.96	41.88	46.13	54.00	-7.87	Horizontal

Remark:

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

Band 1 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: 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	48.57	40.10	9.82	41.97	56.52	68.20	-11.68	Vertical
10360.00	48.37	40.10	9.82	41.97	56.32	68.20	-11.88	Horizontal
Detector: 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	38.47	40.10	9.82	41.97	46.42	54.00	-7.58	Vertical
10360.00	38.54	40.10	9.82	41.97	46.49	54.00	-7.51	Horizontal
Test channel: Middle channel								
Detector: 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	48.26	40.00	9.85	41.95	56.16	68.20	-12.04	Vertical
10400.00	48.34	40.00	9.85	41.95	56.24	68.20	-11.96	Horizontal
Detector: 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	38.26	40.00	9.85	41.95	46.16	54.00	-7.84	Vertical
10400.00	38.34	40.00	9.85	41.95	46.24	54.00	-7.76	Horizontal
Test channel: Highest channel								
Detector: 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
10480.00	49.85	39.70	9.96	41.88	57.63	68.20	-10.57	Vertical
10480.00	48.38	39.70	9.96	41.88	56.16	68.20	-12.04	Horizontal
Detector: 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	37.59	39.70	9.96	41.88	45.37	54.00	-8.63	Vertical
10480.00	38.31	39.70	9.96	41.88	46.09	54.00	-7.91	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 1 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: 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	48.67	40.00	9.85	41.95	56.57	68.20	-11.63	Vertical
10380.00	48.42	40.00	9.85	41.95	56.32	68.20	-11.88	Horizontal
Detector: 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	38.52	40.00	9.85	41.95	46.42	54.00	-7.58	Vertical
10380.00	38.40	40.00	9.85	41.95	46.30	54.00	-7.70	Horizontal
Test channel: Highest channel								
Detector: 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	48.52	39.80	9.92	41.90	56.34	68.20	-11.86	Vertical
10460.00	48.37	39.80	9.92	41.90	56.19	68.20	-12.01	Horizontal
Detector: 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	38.56	39.80	9.92	41.90	46.38	54.00	-7.62	Vertical
10460.00	38.34	39.80	9.92	41.90	46.16	54.00	-7.84	Horizontal

Remark:

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

Band 1 – 802.11ac(HT20)								
Test channel: Lowest channel								
Detector: 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	49.25	40.10	9.82	41.97	57.20	68.20	-11.00	Vertical
10360.00	48.88	40.10	9.82	41.97	56.83	68.20	-11.37	Horizontal
Detector: 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	39.34	40.10	9.82	41.97	47.29	54.00	-6.71	Vertical
10360.00	38.56	40.10	9.82	41.97	46.51	54.00	-7.49	Horizontal
Test channel: Middle channel								
Detector: 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	49.74	40.00	9.85	41.95	57.64	68.20	-10.56	Vertical
10400.00	48.37	40.00	9.85	41.95	56.27	68.20	-11.93	Horizontal
Detector: 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	39.26	40.00	9.85	41.95	47.16	54.00	-6.84	Vertical
10400.00	38.21	40.00	9.85	41.95	46.11	54.00	-7.89	Horizontal
Test channel: Highest channel								
Detector: 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
10480.00	48.38	39.70	9.96	41.88	56.16	68.20	-12.04	Vertical
10480.00	48.46	39.70	9.96	41.88	56.24	68.20	-11.96	Horizontal
Detector: 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	38.34	39.70	9.96	41.88	46.12	54.00	-7.88	Vertical
10480.00	38.19	39.70	9.96	41.88	45.97	54.00	-8.03	Horizontal

Remark:

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

Band 1 – 802.11ac(HT40)								
Test channel: Lowest channel								
Detector: 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	49.25	40.10	9.82	41.97	57.20	68.20	-11.00	Vertical
10380.00	48.13	40.10	9.82	41.97	56.08	68.20	-12.12	Horizontal
Detector: 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	38.47	40.10	9.82	41.97	46.42	54.00	-7.58	Vertical
10380.00	38.26	40.10	9.82	41.97	46.21	54.00	-7.79	Horizontal
Test channel: Highest channel								
Detector: 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	48.87	40.00	9.85	41.95	56.77	68.20	-11.43	Vertical
10460.00	48.53	40.00	9.85	41.95	56.43	68.20	-11.77	Horizontal
Detector: 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	38.46	40.00	9.85	41.95	46.36	54.00	-7.64	Vertical
10460.00	38.54	40.00	9.85	41.95	46.44	54.00	-7.56	Horizontal
Band 1 – 802.11ac(HT80)								
Test channel: Middle channel								
Detector: 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	48.62	40.00	9.85	41.95	56.52	68.20	-11.68	Vertical
10420.00	48.37	40.00	9.85	41.95	56.27	68.20	-11.93	Horizontal
Detector: 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
10420.00	38.51	40.00	9.85	41.95	46.41	54.00	-7.59	Vertical
10420.00	38.46	40.00	9.85	41.95	46.36	54.00	-7.64	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 4:

Band 4 – 802.11a								
Test channel: Lowest channel								
Detector: 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
11490.00	48.52	41.50	10.81	42.29	58.54	74.00	-15.46	Vertical
11490.00	48.37	41.50	10.81	42.29	58.39	74.00	-15.61	Horizontal
Detector: 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
11490.00	38.46	41.50	10.81	42.29	48.48	54.00	-5.52	Vertical
11490.00	38.47	41.50	10.81	42.29	48.49	54.00	-5.51	Horizontal
Test channel: Middle channel								
Detector: 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
11570.00	48.59	41.38	10.78	42.27	58.48	74.00	-15.52	Vertical
11570.00	48.37	41.38	10.78	42.27	58.26	74.00	-15.74	Horizontal
Detector: 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
11570.00	37.61	41.38	10.78	42.27	47.50	54.00	-6.50	Vertical
11570.00	37.48	41.38	10.78	42.27	47.37	54.00	-6.63	Horizontal
Test channel: Highest channel								
Detector: 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
11650.00	48.74	41.26	10.76	42.26	58.50	74.00	-15.50	Vertical
11650.00	48.37	41.26	10.76	42.26	58.13	74.00	-15.87	Horizontal
Detector: 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
11650.00	38.56	41.26	10.76	42.26	48.32	54.00	-5.68	Vertical
11650.00	38.24	41.26	10.76	42.26	48.00	54.00	-6.00	Horizontal

Remark:

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

Band 4 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: 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
11490.00	48.59	41.50	10.81	42.29	58.61	74.00	-15.39	Vertical
11490.00	48.34	41.50	10.81	42.29	58.36	74.00	-15.64	Horizontal
Detector: 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
11490.00	38.06	41.50	10.81	42.29	48.08	54.00	-5.92	Vertical
11490.00	38.24	41.50	10.81	42.29	48.26	54.00	-5.74	Horizontal
Test channel: Middle channel								
Detector: 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
11570.00	48.56	41.38	10.78	42.27	58.45	74.00	-15.55	Vertical
11570.00	48.67	41.38	10.78	42.27	58.56	74.00	-15.44	Horizontal
Detector: 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
11570.00	38.57	41.38	10.78	42.27	48.46	54.00	-5.54	Vertical
11570.00	38.15	41.38	10.78	42.27	48.04	54.00	-5.96	Horizontal
Test channel: Highest channel								
Detector: 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
11650.00	48.73	41.26	10.76	42.26	58.49	74.00	-15.51	Vertical
11650.00	48.68	41.26	10.76	42.26	58.44	74.00	-15.56	Horizontal
Detector: 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
11650.00	38.79	41.26	10.76	42.26	48.55	54.00	-5.45	Vertical
11650.00	38.64	41.26	10.76	42.26	48.40	54.00	-5.60	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 4 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: 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
11510.00	48.57	41.50	10.81	42.29	58.59	74.00	-15.41	Vertical
11510.00	48.43	41.50	10.81	42.29	58.45	74.00	-15.55	Horizontal
Detector: 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
11510.00	38.27	41.50	10.81	42.29	48.29	54.00	-5.71	Vertical
11510.00	38.45	41.50	10.81	42.29	48.47	54.00	-5.53	Horizontal
Test channel: Highest channel								
Detector: 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
11590.00	48.62	41.32	10.77	42.27	58.44	74.00	-15.56	Vertical
11590.00	48.47	41.32	10.77	42.27	58.29	74.00	-15.71	Horizontal
Detector: 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
11590.00	38.52	41.32	10.77	42.27	48.34	54.00	-5.66	Vertical
11590.00	38.43	41.32	10.77	42.27	48.25	54.00	-5.75	Horizontal

Remark:

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

Band 4 – 802.11ac(HT20)								
Test channel: Lowest channel								
Detector: 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
11490.00	48.52	41.50	10.81	42.29	58.54	74.00	-15.46	Vertical
11490.00	48.37	41.50	10.81	42.29	58.39	74.00	-15.61	Horizontal
Detector: 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
11490.00	38.26	41.50	10.81	42.29	48.28	54.00	-5.72	Vertical
11490.00	38.67	41.50	10.81	42.29	48.69	54.00	-5.31	Horizontal
Test channel: Middle channel								
Detector: 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
11570.00	48.47	41.38	10.78	42.27	58.36	74.00	-15.64	Vertical
11570.00	48.39	41.38	10.78	42.27	58.28	74.00	-15.72	Horizontal
Detector: 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
11570.00	38.74	41.38	10.78	42.27	48.63	54.00	-5.37	Vertical
11570.00	38.46	41.38	10.78	42.27	48.35	54.00	-5.65	Horizontal
Test channel: Highest channel								
Detector: 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
11650.00	48.85	41.26	10.76	42.26	58.61	74.00	-15.39	Vertical
11650.00	48.61	41.26	10.76	42.26	58.37	74.00	-15.63	Horizontal
Detector: 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
11650.00	38.09	41.26	10.76	42.26	47.85	54.00	-6.15	Vertical
11650.00	38.24	41.26	10.76	42.26	48.00	54.00	-6.00	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 4 – 802.11ac(HT40)								
Test channel: Lowest channel								
Detector: 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
11510.00	48.75	41.50	10.81	42.29	58.77	74.00	-15.23	Vertical
11510.00	48.89	41.50	10.81	42.29	58.91	74.00	-15.09	Horizontal
Detector: 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
11510.00	38.64	41.50	10.81	42.29	48.66	54.00	-5.34	Vertical
11510.00	38.59	41.50	10.81	42.29	48.61	54.00	-5.39	Horizontal
Test channel: Highest channel								
Detector: 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
11590.00	48.85	41.38	10.78	42.27	58.74	74.00	-15.26	Vertical
11590.00	48.67	41.38	10.78	42.27	58.56	74.00	-15.44	Horizontal
Detector: 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
11590.00	38.72	41.38	10.78	42.27	48.61	54.00	-5.39	Vertical
11590.00	38.49	41.38	10.78	42.27	48.38	54.00	-5.62	Horizontal
Band 4 – 802.11ac(HT80)								
Test channel: Middle channel								
Detector: 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
11550.00	48.57	41.50	10.81	42.29	58.59	74.00	-15.41	Vertical
11550.00	48.68	41.50	10.81	42.29	58.70	74.00	-15.30	Horizontal
Detector: 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
11550.00	38.55	41.50	10.81	42.29	48.57	54.00	-5.43	Vertical
11550.00	38.46	41.50	10.81	42.29	48.48	54.00	-5.52	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.								

Ceramic ANT:

Band 1 – 802.11a								
Test channel: Lowest channel								
Detector: 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	48.67	40.10	9.82	41.97	56.62	68.20	-11.58	Vertical
10360.00	47.86	40.10	9.82	41.97	55.81	68.20	-12.39	Horizontal
Detector: 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	38.64	40.10	9.82	41.97	46.59	54.00	-7.41	Vertical
10360.00	37.89	40.10	9.82	41.97	45.84	54.00	-8.16	Horizontal
Test channel: Middle channel								
Detector: 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	48.69	40.00	9.85	41.95	56.59	68.20	-11.61	Vertical
10400.00	47.35	40.00	9.85	41.95	55.25	68.20	-12.95	Horizontal
Detector: 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	38.50	40.00	9.85	41.95	46.40	54.00	-7.60	Vertical
10400.00	37.41	40.00	9.85	41.95	45.31	54.00	-8.69	Horizontal
Test channel: Highest channel								
Detector: 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
10480.00	48.92	39.70	9.96	41.88	56.70	68.20	-11.50	Vertical
10480.00	48.32	39.70	9.96	41.88	56.10	68.20	-12.10	Horizontal
Detector: 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	39.02	39.70	9.96	41.88	46.80	54.00	-7.20	Vertical
10480.00	38.34	39.70	9.96	41.88	46.12	54.00	-7.88	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 1 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: 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	48.89	40.10	9.82	41.97	56.84	68.20	-11.36	Vertical
10360.00	48.67	40.10	9.82	41.97	56.62	68.20	-11.58	Horizontal
Detector: 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	38.57	40.10	9.82	41.97	46.52	54.00	-7.48	Vertical
10360.00	38.56	40.10	9.82	41.97	46.51	54.00	-7.49	Horizontal
Test channel: Middle channel								
Detector: 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	48.67	40.00	9.85	41.95	56.57	68.20	-11.63	Vertical
10400.00	47.86	40.00	9.85	41.95	55.76	68.20	-12.44	Horizontal
Detector: 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	38.69	40.00	9.85	41.95	46.59	54.00	-7.41	Vertical
10400.00	37.42	40.00	9.85	41.95	45.32	54.00	-8.68	Horizontal
Test channel: Highest channel								
Detector: 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
10480.00	48.94	39.70	9.96	41.88	56.72	68.20	-11.48	Vertical
10480.00	47.89	39.70	9.96	41.88	55.67	68.20	-12.53	Horizontal
Detector: 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	38.69	39.70	9.96	41.88	46.47	54.00	-7.53	Vertical
10480.00	38.24	39.70	9.96	41.88	46.02	54.00	-7.98	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 1 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: 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	48.74	40.00	9.85	41.95	56.64	68.20	-11.56	Vertical
10380.00	48.96	40.00	9.85	41.95	56.86	68.20	-11.34	Horizontal
Detector: 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	38.64	40.00	9.85	41.95	46.54	54.00	-7.46	Vertical
10380.00	38.45	40.00	9.85	41.95	46.35	54.00	-7.65	Horizontal
Test channel: Highest channel								
Detector: 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	48.19	39.80	9.92	41.90	56.01	68.20	-12.19	Vertical
10460.00	48.32	39.80	9.92	41.90	56.14	68.20	-12.06	Horizontal
Detector: 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	38.30	39.80	9.92	41.90	46.12	54.00	-7.88	Vertical
10460.00	37.89	39.80	9.92	41.90	45.71	54.00	-8.29	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 1 – 802.11ac(HT20)								
Test channel: Lowest channel								
Detector: 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	48.64	40.10	9.82	41.97	56.59	68.20	-11.61	Vertical
10360.00	48.56	40.10	9.82	41.97	56.51	68.20	-11.69	Horizontal
Detector: 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	38.67	40.10	9.82	41.97	46.62	54.00	-7.38	Vertical
10360.00	38.53	40.10	9.82	41.97	46.48	54.00	-7.52	Horizontal
Test channel: Middle channel								
Detector: 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	48.87	40.00	9.85	41.95	56.77	68.20	-11.43	Vertical
10400.00	48.86	40.00	9.85	41.95	56.76	68.20	-11.44	Horizontal
Detector: 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	38.74	40.00	9.85	41.95	46.64	54.00	-7.36	Vertical
10400.00	38.46	40.00	9.85	41.95	46.36	54.00	-7.64	Horizontal
Test channel: Highest channel								
Detector: 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
10480.00	48.74	39.70	9.96	41.88	56.52	68.20	-11.68	Vertical
10480.00	47.68	39.70	9.96	41.88	55.46	68.20	-12.74	Horizontal
Detector: 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	38.54	39.70	9.96	41.88	46.32	54.00	-7.68	Vertical
10480.00	37.59	39.70	9.96	41.88	45.37	54.00	-8.63	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 1 – 802.11ac(HT40)								
Test channel: Lowest channel								
Detector: 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	49.41	40.10	9.82	41.97	57.36	68.20	-10.84	Vertical
10380.00	48.56	40.10	9.82	41.97	56.51	68.20	-11.69	Horizontal
Detector: 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	38.63	40.10	9.82	41.97	46.58	54.00	-7.42	Vertical
10380.00	37.48	40.10	9.82	41.97	45.43	54.00	-8.57	Horizontal
Test channel: Highest channel								
Detector: 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	48.37	40.00	9.85	41.95	56.27	68.20	-11.93	Vertical
10460.00	48.53	40.00	9.85	41.95	56.43	68.20	-11.77	Horizontal
Detector: 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	38.76	40.00	9.85	41.95	46.66	54.00	-7.34	Vertical
10460.00	38.52	40.00	9.85	41.95	46.42	54.00	-7.58	Horizontal
Band 1 – 802.11ac(HT80)								
Test channel: Middle channel								
Detector: 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	48.74	40.00	9.85	41.95	56.64	68.20	-11.56	Vertical
10420.00	48.73	40.00	9.85	41.95	56.63	68.20	-11.57	Horizontal
Detector: 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
10420.00	38.67	40.00	9.85	41.95	46.57	54.00	-7.43	Vertical
10420.00	38.73	40.00	9.85	41.95	46.63	54.00	-7.37	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 4:

Band 4 – 802.11a								
Test channel: Lowest channel								
Detector: 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
11490.00	48.64	41.50	10.81	42.29	58.66	74.00	-15.34	Vertical
11490.00	47.35	41.50	10.81	42.29	57.37	74.00	-16.63	Horizontal
Detector: 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
11490.00	38.76	41.50	10.81	42.29	48.78	54.00	-5.22	Vertical
11490.00	37.68	41.50	10.81	42.29	47.70	54.00	-6.30	Horizontal
Test channel: Middle channel								
Detector: 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
11570.00	47.52	41.38	10.78	42.27	57.41	74.00	-16.59	Vertical
11570.00	48.35	41.38	10.78	42.27	58.24	74.00	-15.76	Horizontal
Detector: 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
11570.00	37.52	41.38	10.78	42.27	47.41	54.00	-6.59	Vertical
11570.00	37.91	41.38	10.78	42.27	47.80	54.00	-6.20	Horizontal
Test channel: Highest channel								
Detector: 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
11650.00	48.75	41.26	10.76	42.26	58.51	74.00	-15.49	Vertical
11650.00	48.73	41.26	10.76	42.26	58.49	74.00	-15.51	Horizontal
Detector: 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
11650.00	37.64	41.26	10.76	42.26	47.40	54.00	-6.60	Vertical
11650.00	37.58	41.26	10.76	42.26	47.34	54.00	-6.66	Horizontal

Remark:

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

Band 4 – 802.11n(HT20)								
Test channel: Lowest channel								
Detector: 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
11490.00	48.92	41.50	10.81	42.29	58.94	74.00	-15.06	Vertical
11490.00	48.32	41.50	10.81	42.29	58.34	74.00	-15.66	Horizontal
Detector: 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
11490.00	38.76	41.50	10.81	42.29	48.78	54.00	-5.22	Vertical
11490.00	37.86	41.50	10.81	42.29	47.88	54.00	-6.12	Horizontal
Test channel: Middle channel								
Detector: 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
11570.00	48.37	41.38	10.78	42.27	58.26	74.00	-15.74	Vertical
11570.00	48.90	41.38	10.78	42.27	58.79	74.00	-15.21	Horizontal
Detector: 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
11570.00	37.89	41.38	10.78	42.27	47.78	54.00	-6.22	Vertical
11570.00	38.64	41.38	10.78	42.27	48.53	54.00	-5.47	Horizontal
Test channel: Highest channel								
Detector: 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
11650.00	48.76	41.26	10.76	42.26	58.52	74.00	-15.48	Vertical
11650.00	48.25	41.26	10.76	42.26	58.01	74.00	-15.99	Horizontal
Detector: 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
11650.00	38.34	41.26	10.76	42.26	48.10	54.00	-5.90	Vertical
11650.00	38.74	41.26	10.76	42.26	48.50	54.00	-5.50	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 4 – 802.11n(HT40)								
Test channel: Lowest channel								
Detector: 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
11510.00	48.58	41.50	10.81	42.29	58.60	74.00	-15.40	Vertical
11510.00	48.37	41.50	10.81	42.29	58.39	74.00	-15.61	Horizontal
Detector: 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
11510.00	38.61	41.50	10.81	42.29	48.63	54.00	-5.37	Vertical
11510.00	38.56	41.50	10.81	42.29	48.58	54.00	-5.42	Horizontal
Test channel: Highest channel								
Detector: 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
11590.00	48.24	41.32	10.77	42.27	58.06	74.00	-15.94	Vertical
11590.00	47.98	41.32	10.77	42.27	57.80	74.00	-16.20	Horizontal
Detector: 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
11590.00	38.02	41.32	10.77	42.27	47.84	54.00	-6.16	Vertical
11590.00	38.27	41.32	10.77	42.27	48.09	54.00	-5.91	Horizontal

Remark:

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

Band 4 – 802.11ac(HT20)								
Test channel: Lowest channel								
Detector: 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
11490.00	48.39	41.50	10.81	42.29	58.41	74.00	-15.59	Vertical
11490.00	48.74	41.50	10.81	42.29	58.76	74.00	-15.24	Horizontal
Detector: 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
11490.00	38.67	41.50	10.81	42.29	48.69	54.00	-5.31	Vertical
11490.00	37.96	41.50	10.81	42.29	47.98	54.00	-6.02	Horizontal
Test channel: Middle channel								
Detector: 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
11570.00	48.67	41.38	10.78	42.27	58.56	74.00	-15.44	Vertical
11570.00	48.59	41.38	10.78	42.27	58.48	74.00	-15.52	Horizontal
Detector: 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
11570.00	38.37	41.38	10.78	42.27	48.26	54.00	-5.74	Vertical
11570.00	37.95	41.38	10.78	42.27	47.84	54.00	-6.16	Horizontal
Test channel: Highest channel								
Detector: 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
11650.00	48.75	41.26	10.76	42.26	58.51	74.00	-15.49	Vertical
11650.00	47.61	41.26	10.76	42.26	57.37	74.00	-16.63	Horizontal
Detector: 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
11650.00	38.67	41.26	10.76	42.26	48.43	54.00	-5.57	Vertical
11650.00	37.56	41.26	10.76	42.26	47.32	54.00	-6.68	Horizontal

Remark:

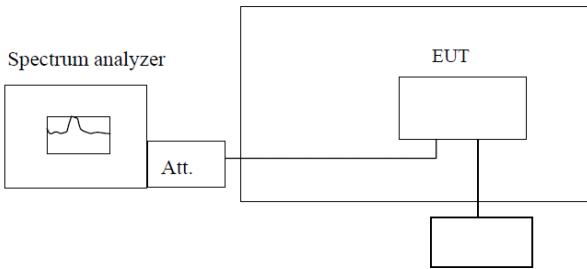
1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Band 4 – 802.11ac(HT40)								
Test channel: Lowest channel								
Detector: 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
11510.00	48.79	41.50	10.81	42.29	58.81	74.00	-15.19	Vertical
11510.00	48.42	41.50	10.81	42.29	58.44	74.00	-15.56	Horizontal
Detector: 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
11510.00	38.67	41.50	10.81	42.29	48.69	54.00	-5.31	Vertical
11510.00	38.39	41.50	10.81	42.29	48.41	54.00	-5.59	Horizontal
Test channel: Highest channel								
Detector: 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
11590.00	48.67	41.38	10.78	42.27	58.56	74.00	-15.44	Vertical
11590.00	48.79	41.38	10.78	42.27	58.68	74.00	-15.32	Horizontal
Detector: 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
11590.00	38.49	41.38	10.78	42.27	48.38	54.00	-5.62	Vertical
11590.00	38.52	41.38	10.78	42.27	48.41	54.00	-5.59	Horizontal
Band 4 – 802.11ac(HT80)								
Test channel: Middle channel								
Detector: 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
11550.00	48.53	41.50	10.81	42.29	58.55	74.00	-15.45	Vertical
11550.00	47.56	41.50	10.81	42.29	57.58	74.00	-16.42	Horizontal
Detector: 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
11550.00	38.22	41.50	10.81	42.29	48.24	54.00	-5.76	Vertical
11550.00	37.69	41.50	10.81	42.29	47.71	54.00	-6.29	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.

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:	<p style="text-align: center;">Temperature Chamber</p>  <p style="text-align: center;">Note : Measurement setup for testing on Antenna connector</p>
Test procedure:	<ol style="list-style-type: none"> 1. The EUT is installed in an environment test chamber with external power source. 2. Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT. 3. A sufficient stabilization period at each temperature is used prior to each frequency measurement. 4. When temperature is stabled, measure the frequency stability. 5. 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 5.9 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data (the worst channel):**Band 1:****Voltage vs. Frequency Stability (Lowest channel=5180MHz)**

Test conditions		Frequency(MHz)	Max. Deviation (ppm)
Temp(°C)	Voltage(dc)		
20	3.456V	5179.996694	0.64
	3.300V	5179.974783	4.87
	3.465V	5179.983979	3.09

Temperature vs. Frequency Stability (Lowest channel=5180MHz)

Test conditions		Frequency(MHz)	Max. Deviation (ppm)
Voltage(dc)	Temp(°C)		
3.3V	-20	5179.987064	2.50
	-10	5179.995349	0.90
	0	5179.978487	4.15
	10	5179.987576	2.40
	20	5179.996664	0.64
	30	5179.974245	4.97
	40	5179.973758	5.07
	50	5179.984948	2.91

Band 4:**Voltage vs. Frequency Stability (Lowest channel=5745MHz)**

Test conditions		Frequency(MHz)	Max. Deviation (ppm)
Temp(°C)	Voltage(dc)		
20	3.456V	5744.984789	2.65
	3.300V	5744.996347	0.64
	3.465V	5744.978556	3.73

Temperature vs. Frequency Stability (Lowest channel=5745MHz)

Test conditions		Frequency(MHz)	Max. Deviation (ppm)
Voltage(dc)	Temp(°C)		
3.3V	-20	5744.996567	0.60
	-10	5744.987656	2.15
	0	5744.996783	5.60
	10	5744.989359	1.85
	20	5744.973864	4.55
	30	5744.984454	2.71
	40	5744.972347	4.81
	50	5744.978432	3.75