



FCC Part 15C Test Report

FCC ID: 2ADGH-6311

Applicant: Ralinwi Nanjing Electronic Technology Co., Ltd.

Address: 3rd Floor,Building B,R&D Block 3, Xuzhuang Software Park, Nanjing City, China.

Manufacturer: Ralinwi Nanjing Electronic Technology Co., Ltd.

Address: 3rd Floor,Building B,R&D Block 3, Xuzhuang Software Park, Nanjing City, China.

EUT: M.2 WIFI Network Card

Trade Mark: N/A

Model Number: Hicon6310, Nic3552e, Nic3562e

Date of Receipt: Dec. 01, 2022

Test Date: Dec. 01, 2022 – Dec. 13, 2022

Date of Report: Dec. 13, 2022

Prepared By: Shenzhen LGT Test Service Co., Ltd.

Address: Room 205, Building 13, Zone B, Chen Hsong Industrial Park, No.177 Renmin West Road, Jinsha Community, Kengzi Street, Pingshan New District, Shenzhen, China
FCC PART 15 C 15.407

Applicable Standards: ANSI C63.10:2013
KDB 789033 D02 v01r02
KDB 905462 D03 v01r02
KDB 662911 D01 Multiple Transmitter Output v02r01

Test Result: Pass

Report Number: DL-20220526017-3E

Prepared by:

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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.407) , Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207 15.407 (b)	Conducted Emission	PASS	
15.407(b), 15.209	Radiated Spurious Emission	PASS	
15.407 (b)	Band Edge Emission	PASS	
15.407 (a)	Peak Output Power	PASS	
15.407 (a)	Power Spectral Density	PASS	
15.407(a) 15.407(h)	26dB bandwidth and 99%dB Bandwidth 6dB bandwidth and 99%dB Bandwidth	PASS	
15.407(g)	Frequency Stability	PASS	
15.407(h)	Transmission in case of Absence of Information	PASS	
15.203	Antenna Requirement	PASS	

NOTE:

(1) "N/A" denotes test is not applicable in this Test Report

(2) Test lab: Shenzhen LGT Test Service Co., Ltd.

Address: Room 205, Building 13, Zone B, Chen Hsong Industrial Park, No.177 Renmin West Road, Jinsha Community, Kengzi Street, Pingshan New District, Shenzhen, China

FCC Registration No.: 746540

A2LA Certificate No.: 6727.01

1.1 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$ providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	Conducted Emission Test	$\pm 2.56\text{dB}$
2	RF power,conducted	$\pm 0.42\text{dB}$
3	Spurious emissions,conducted	$\pm 2.76\text{dB}$
4	All emissions,radiated(30MHz-1G)	$\pm 3.65\text{dB}$
5	All emissions,radiated(9kHz-30MHz)	$\pm 3.66\text{dB}$
6	All emissions,radiated(>1G)	$\pm 4.89\text{dB}$
7	Temperature	$\pm 0.5^{\circ}\text{C}$
8	Humidity	$\pm 2\%$
9	Frequency	$\pm 20\text{Hz}$



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Product Name:	M.2 WIFI Network Card
Trademark	N/A
Model No.:	Hicon6310, Nic3552e, Nic3562e
Model Difference	All samples are the same except the model number, so we prepare " Hicon6310" for test only.
Operation Frequency:	5250-5350, 5470-5725MHz(802.11a/ac/ax/n(HT20)) 5260-5320, 5500-5700MHz(802.11ac/ax/n(HT40)) 5290MHz, 5530MHz(802.11ac/ax80)
Channel numbers:	See channel list
Channel separation:	20MHz for 802.11a/ac/ax/n(HT20) 40MHz for 802.11ac/ax/n(HT40) 80MHz for 802.11ac/ax80
Modulation technology:	802.11a/n:OFDM(64QAM, 16QAM, QPSK, BPSK) 802.11ac: OFDM(256QAM, 64QAM, 16QAM, QPSK, BPSK) 802.11ax(20/40)OFDMA(QPSK, BPSK, 16QAM, 64QAM, 256QAM, 1024QAM)
Rate of Transmitter	802.11a: 6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps,54Mbps 802.11n: Up to 300Mbps 802.11ac: up to 867Mbps 802.11ax: up to 1200Mbps
Antenna Type:	External antenna*2
Antenna gain:	2dBi MIMO Gain=2dBi+10log(2)=5.01dBi
Power supply:	DC 3.3V from host

Note:

- 1.For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- 2.The EUT's all information provided by client.
3. The MIMO mode is only used for 802.11 ac/ax/n mode.
4. This product's 802.11ax only support SU mode.



2. Channel List

U-NII-2A

802.11a/ac/ax/n(HT20)			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
56	5280	64	5320

802.11ac/ax/n(HT40)				802.11ac/ax 80	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
54	5270	62	5310	58	5290

U-NII-2C

802.11a/ac/ax/n(HT20)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	112	5560	124	5620	136	5680
104	5520	116	5580	128	5640	140	5700
108	5540	120	5600	132	5660		

802.11 ac/ax/ (HT40)				802.11ac/ax 80	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
102	5510	126	5630	106	5530
110	5550	134	5670	122	5610
118	5590				



2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Description			
Pretest Mode	Channel	Band 2	Band 3
Mode 1	802.11a /ac/ax/n HT20	CH52, CH56, CH64	CH100, CH120, CH140
Mode 2	802.11n/ac/ax HT40	CH54, CH62	CH102, CH110, CH134
Mode 3	802.11ac/ax HT80	CH58	CH106
Mode 4	Other	Link Mode	

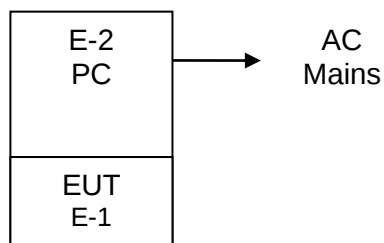
For Radiated Emission			
Pretest Mode	Channel	Band 2	Band 3
Mode 1	802.11a/n/acHT20	CH52, CH56, CH64	CH100, CH120, CH140
Mode 2	802.11n/acHT40	CH54, CH62	CH102, CH110, CH134
Mode 3	802.11ac/ax HT80	CH58	CH106
Mode 4	Other	Link Mode	

Note: 1. The measurements are performed at the highest, middle, lowest available channels.



2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Emission Test



2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Model/Type No.	Series No.	Note
E-1	M.2 WIFI Network Card	Hicon6310	N/A	EUT
E-2	PC	WKY-0502000DM	N/A	Provide by test lab.

Item	Shielded Type	Ferrite Core	Length	Note

Note:

- (1) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

2.5 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING

During testing, channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the end product.

Max output power Setting			
Test software Version	Test program: AXDN-0002.0		
Mode	802.11a/ac/ax	802.11n HT20	802.11n HT40
Data Rate	MCS0	MSC0	MSC0
Power Setting of Softwave	45	45	45



2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation test, Band-edge test and 6db bandwidth test equipment

Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Signal Analyzer 9kHz-26.5GHz	Agilent	N9010B	MY60242508	2022.04.29	2023.04.28
2	Test Receiver 20kHz-40GHz	R&S	ESU 40	100372	2022.04.12	2023.04.11
3	Bilog Antenna (30MHz-1GHz)	SCHAFFNER	CBL6112B	2705	2022.06.05	2023.06.04
4	Horn Antenna (1GHz-18GHz)	Schwarzbeck	3115	10SL0060	2022.06.02	2023.06.01
5	Horn Antenna (18GHz-40GHz)	A.H. Systems	SAS-574	545	2022.04.11	2023.04.10
6	Amplifier (9KHz-6GHz)	HP	8447D	2727A05655	2022.04.11	2023.04.10
7	Amplifier (1GHz-26GHz)	Agilent	8449B	3008A4722	2022.04.13	2023.04.12
8	Amplifier (18GHz-40GHz)	Agilent	N/A	97	2022.04.13	2023.04.12
9	Loop Antenna (9KHz-30MHz)	R&S	HFH2-Z2	POS871398181	2022.06.02	2023.06.01
10	RF cables1 (9kHz-1GHz)	N/A	R01	N/A	2022.05.05	2023.05.04
11	RF cables2 (1GHz-40GHz)	N/A	R02	N/A	2022.05.05	2023.05.04
12	D.C. Power Supply	LongWei	PS-305	010964123	2022.04.12	2023.04.11

Conduction Test equipment

Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Shielded Room	FAZENG	844	844	2022.02.11	2025.02.10
2	EMI Receiver	R&S	ESU8	100372	2022.04.12	2023.04.11
3	LISN	Schwarzbeck	NNLK 8121	00847 7	2022.08.19	2023.08.18
4	843 Cable 1#	N/A	C01	N/A	2022.05.05	2023.05.05

Other

Item	Name	Manufacturer	Model	Software version
1	EMC Conduction Test System	FALA	EZ_EMCC	EMC-CON 3A1.1
2	EMC radiation test system	FALA	EZ_EMCC	FA-03A2
3	RF test system	MAIWEI	MTS8310	2.0.0.0
4	RF communication test system	MAIWEI	MTS8200	2.0.0.0



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Limit (dBuV)		Standard
	Quasi-peak	Average	
0.15 -0.5	66 - 56 *	56 - 46 *	FCC
0.5 -5.0	56.00	46.00	FCC
5.0 -30.0	60.00	50.00	FCC

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

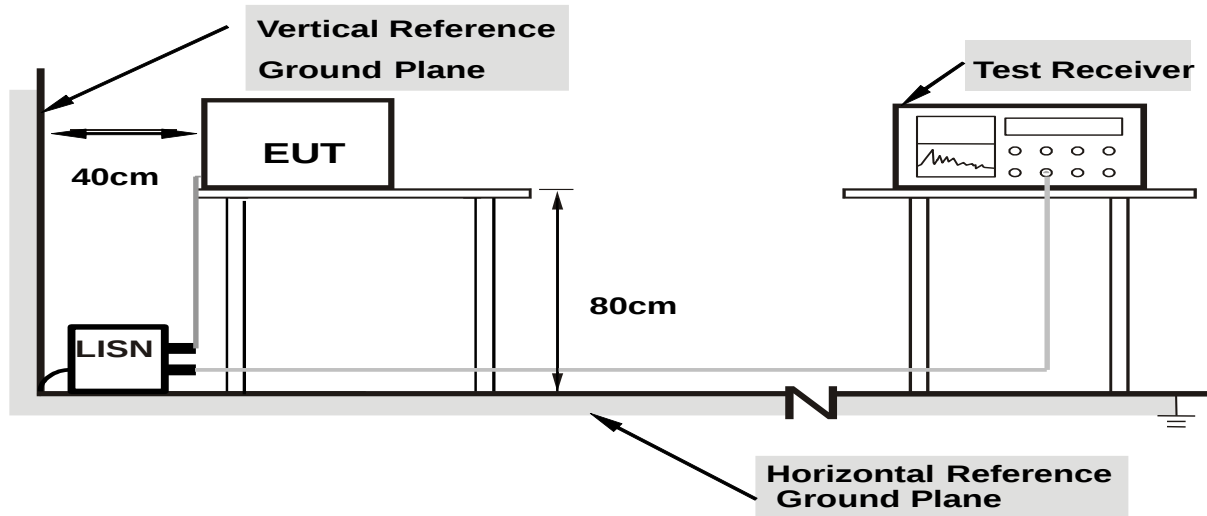
3.1.2 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP



- Note:**
1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.1.5 EUT OPERATING CONDITIONS

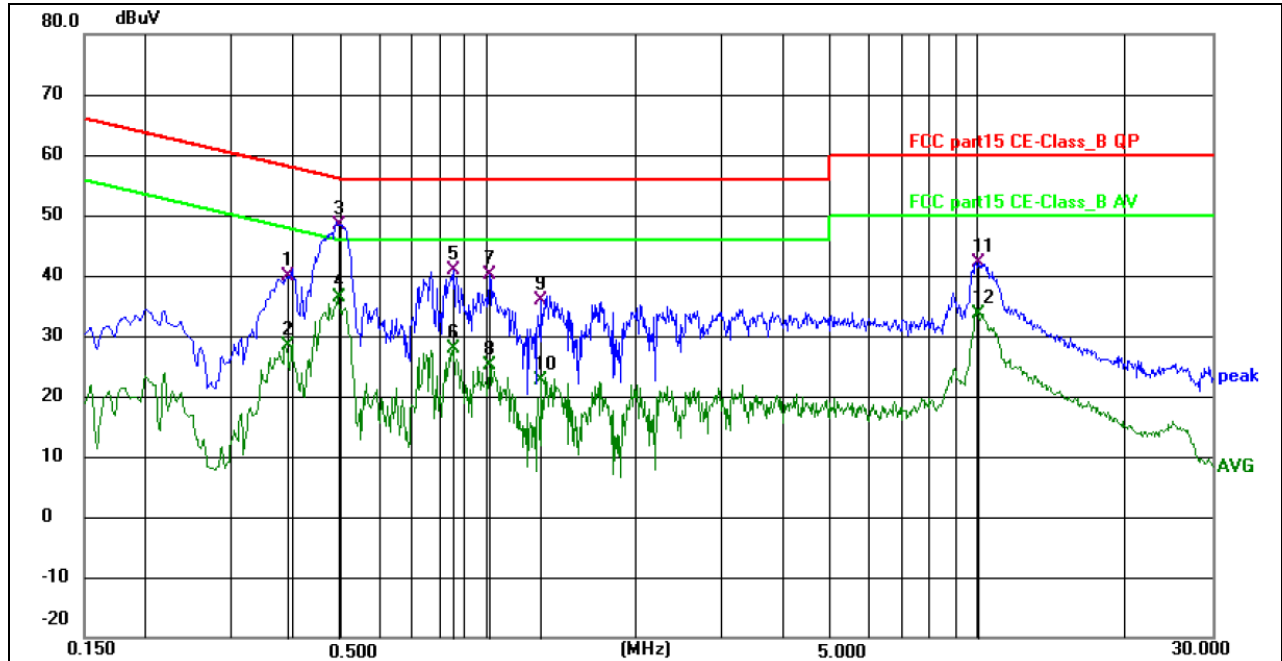
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

We pretest AC 120V and AC 230V, the worst voltage was AC 120V and the data recording in the report.

3.1.6 TEST RESULTS



Temperature:	25 °C	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	L
Test Voltage :	DC 3.3V from host(AC 120V/60Hz)	Test Mode:	Mode 4



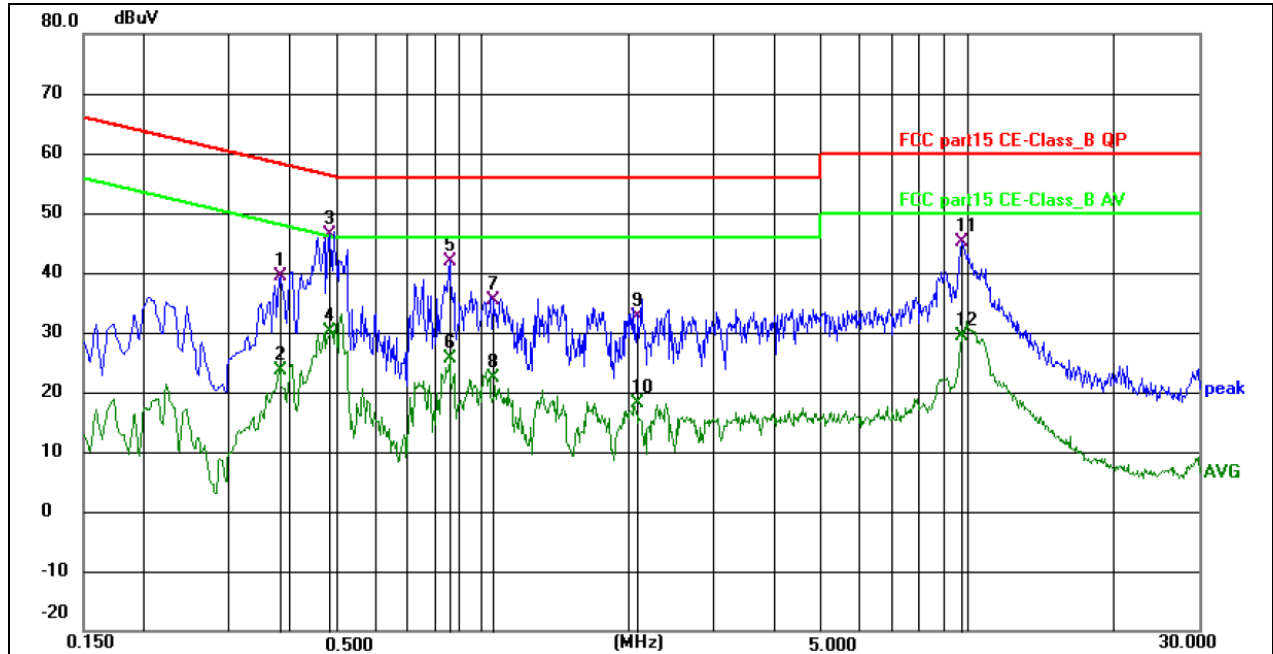
Remark:

Margin = Limit – Level, Correct Factor = Cable lose + LISN insertion loss, Level= Reading + Correct factor

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.388500	30.67	9.21	39.88	58.10	-18.22	QP	P	
2	0.388500	19.22	9.21	28.43	48.10	-19.67	AVG	P	
3 *	0.496400	39.13	9.37	48.50	56.06	-7.56	QP	P	
4	0.496400	26.99	9.37	36.36	46.06	-9.70	AVG	P	
5	0.851900	31.60	9.30	40.90	56.00	-15.10	QP	P	
6	0.851900	18.46	9.30	27.76	46.00	-18.24	AVG	P	
7	1.009500	30.70	9.41	40.11	56.00	-15.89	QP	P	
8	1.009500	15.63	9.41	25.04	46.00	-20.96	AVG	P	
9	1.283900	26.34	9.53	35.87	56.00	-20.13	QP	P	
10	1.283900	13.19	9.53	22.72	46.00	-23.28	AVG	P	
11	10.027400	32.04	10.07	42.11	60.00	-17.89	QP	P	
12	10.027400	23.63	10.07	33.70	50.00	-16.30	AVG	P	



Temperature:	25 °C	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	N
Test Voltage :	DC 3.3V from host(AC 120V/60Hz)	Test Mode:	Mode 4



Remark:

Margin = Limit – Level, Correct Factor = Cable lose + LISN insertion loss, Level= Reading + Correct factor

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.379500	30.28	9.10	39.38	58.29	-18.91	QP	P	
2	0.379500	14.63	9.10	23.73	48.29	-24.56	AVG	P	
3 *	0.483000	37.25	9.17	46.42	56.29	-9.87	QP	P	
4	0.483000	20.87	9.17	30.04	46.29	-16.25	AVG	P	
5	0.856500	32.49	9.33	41.82	56.00	-14.18	QP	P	
6	0.856500	16.28	9.33	25.61	46.00	-20.39	AVG	P	
7	1.050000	26.00	9.31	35.31	56.00	-20.69	QP	P	
8	1.050000	12.96	9.31	22.27	46.00	-23.73	AVG	P	
9	2.098500	23.01	9.74	32.75	56.00	-23.25	QP	P	
10	2.098500	8.31	9.74	18.05	46.00	-27.95	AVG	P	
11	9.753000	35.37	9.87	45.24	60.00	-14.76	QP	P	
12	9.753000	19.55	9.87	29.42	50.00	-20.58	AVG	P	



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	Limit (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	25GHz
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

Below 1GHz test procedure as below:

- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. 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.

- c. 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.
- d. 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 (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. 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.

Above 1GHz test procedure as below:

- g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre).
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel

Note:

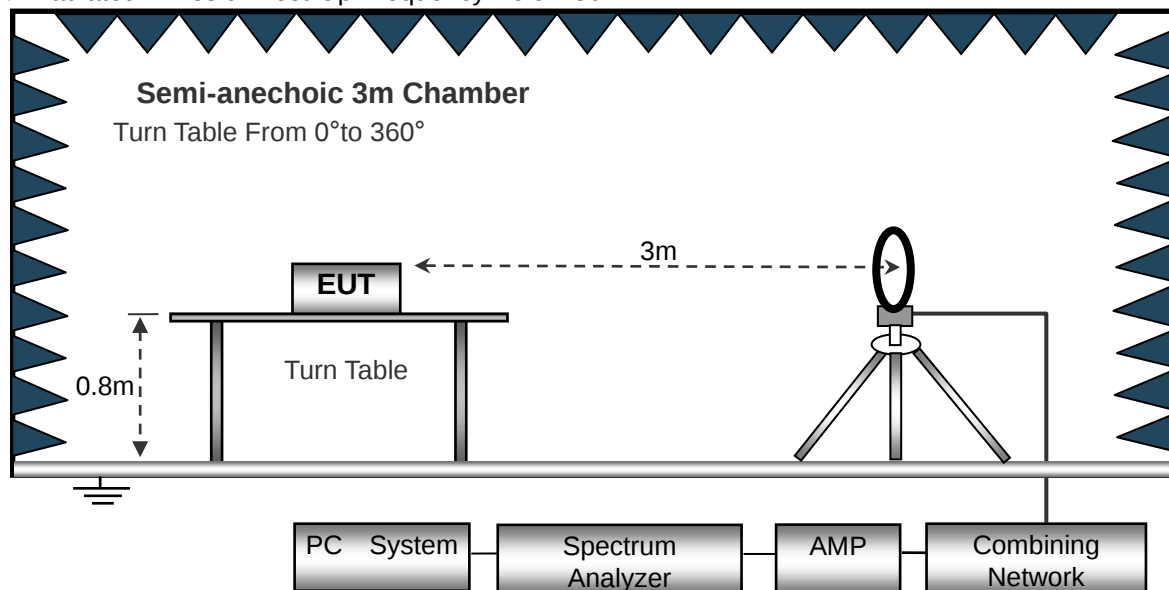
Both horizontal and vertical antenna polarities were tested and performed pretest to all antenna,. The worst case was antenna 1 and emissions were reported

3.2.3 DEVIATION FROM TEST STANDARD

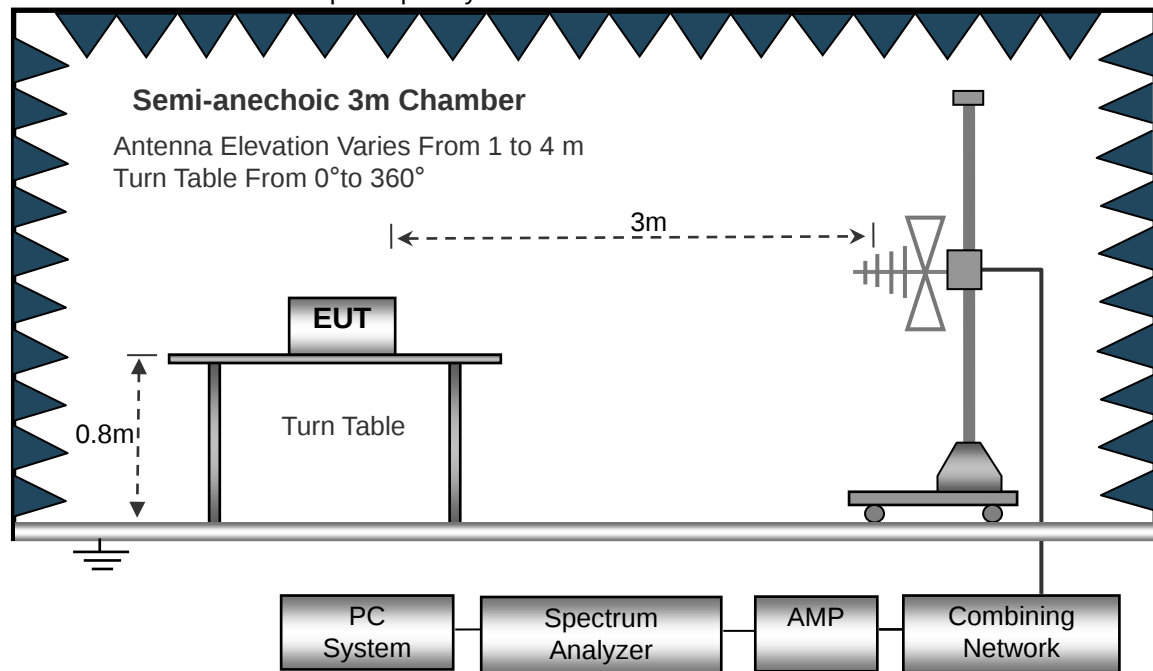
No deviation

3.2.4 TEST SETUP

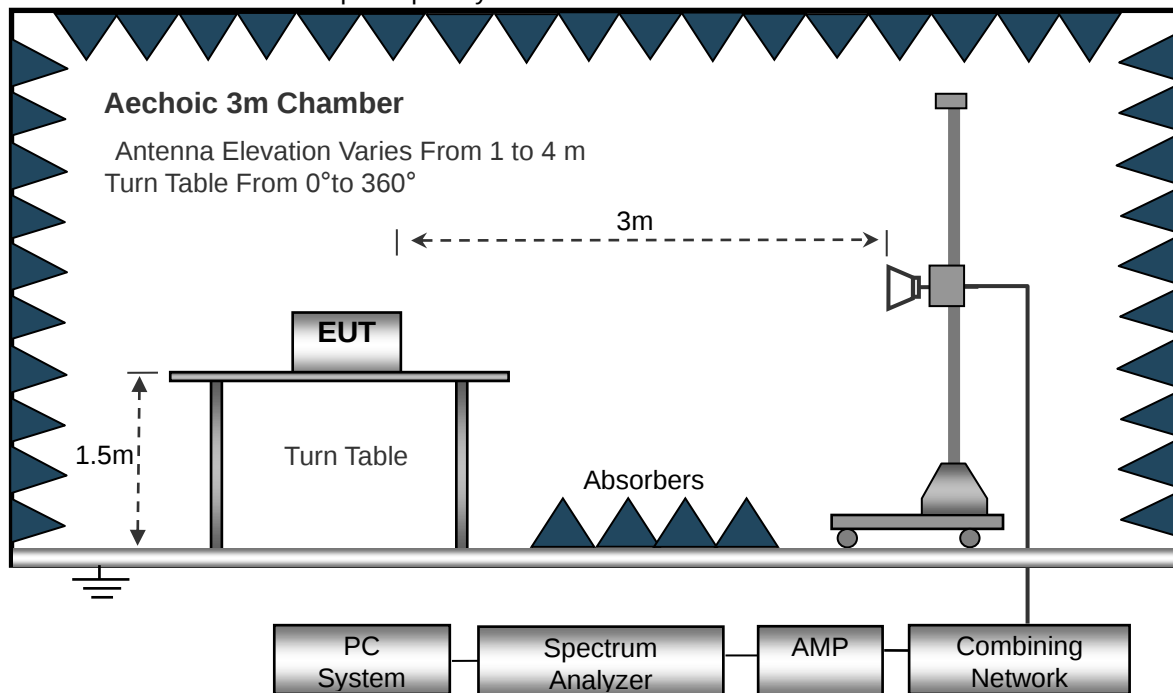
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.



3.2.6 TEST RESULTS (Between 9KHz – 30 MHz)

Temperature:	20°C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.3V from host(AC 120V/60Hz)
Test Mode :	Mode 4	Polarization :	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

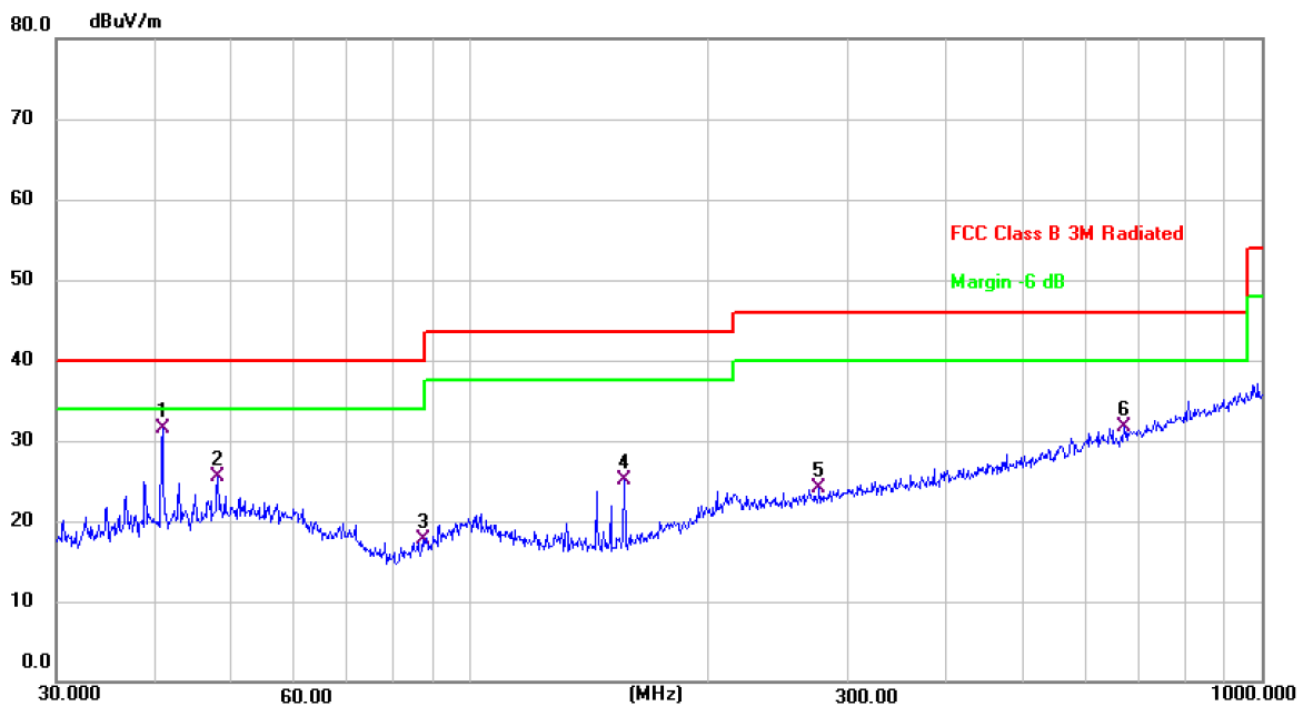
Distance extrapolation factor = $40 \log (\text{specific distance/test distance})$ (dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.



3.2.7 TEST RESULTS (Between 30MHz – 1GHz)

Temperature:	26°C	Relative Humidity:	54%
Pressure:	1010 hPa	Polarization :	Horizontal
Test Voltage :	DC 3.3V from host(AC 120V/60Hz)		
Test Mode :	Mode 4		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1 *	40.8446	44.24	-12.68	31.56	40.00	-8.44
2	47.9940	37.16	-11.68	25.48	40.00	-14.52
3	87.1117	33.62	-15.99	17.63	40.00	-22.37
4	156.4578	41.16	-16.01	25.15	43.50	-18.35
5	276.1235	34.80	-10.60	24.20	46.00	-21.80
6	670.4893	35.29	-3.50	31.79	46.00	-14.21

Remark:

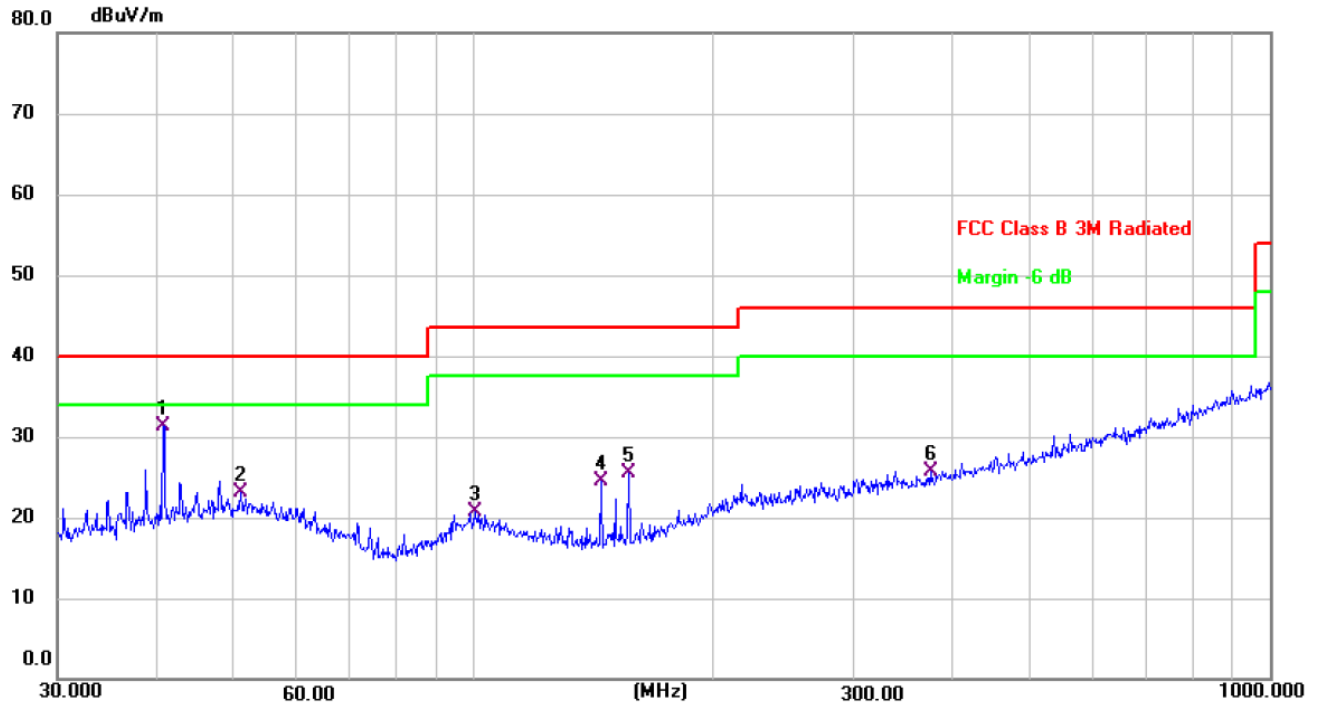
Correct Factor = Cable loss + Antenna factor – Preamplifier;

Level = Reading Level + Correct Factor; Margin = Limit – Level;

Temperature:	26°C	Relative Humidity:	54%
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Pressure:	1010 hPa	Polarization :	Vertical
test voltage :	DC 3.3V from host(AC 120V/60Hz)		
Test Mode :	Mode 4		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1 *	40.7016	44.06	-12.70	31.36	40.00	-8.64
2	50.9420	34.66	-11.51	23.15	40.00	-16.85
3	100.2286	34.25	-13.52	20.73	43.50	-22.77
4	144.3348	40.71	-16.22	24.49	43.50	-19.01
5	156.4578	41.43	-16.01	25.42	43.50	-18.08
6	374.6225	34.42	-8.76	25.66	46.00	-20.34

Remark:

Correct Factor = Cable loss + Antenna factor – Preamplifier;

Level = Reading Level + Correct Factor; Margin = Limit – Level;



3.2.8 TEST RESULTS (1ghz~40ghZ)

We pretest all antenna, the worst mode was antenna 1 and the data show in the report.

BAND 2

ANTENNA 1

802.11a

Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
operation frequency:5260									
V	10520	57.55	49.07	15.31	37.41	61.20	74	-12.80	PK
V	10520	46.12	49.07	15.31	37.41	49.77	54	-4.23	AV
V	15780	57.74	49.18	15.26	40.43	64.25	74	-9.75	PK
V	15780	44.39	49.18	15.26	40.43	50.90	54	-3.10	AV
H	10520	57.17	49.07	15.31	37.41	60.82	74	-13.18	PK
H	10520	46.28	49.07	15.31	37.41	49.93	54	-4.07	AV
H	15780	60.27	49.18	15.26	40.43	66.78	74	-7.22	PK
H	15780	43.90	49.18	15.26	40.43	50.41	54	-3.59	AV
operation frequency:5280									
V	10560	58.57	49.10	15.35	37.44	62.26	74	-11.74	PK
V	10560	46.18	49.10	15.35	37.44	49.87	54	-4.13	AV
V	15840	60.57	49.19	15.31	40.49	67.18	74	-6.82	PK
V	15840	43.94	49.19	15.31	40.49	50.55	54	-3.45	AV
H	10560	57.79	49.10	15.35	37.44	61.48	74	-12.52	PK
H	10560	46.62	49.10	15.35	37.44	50.31	54	-3.69	AV
H	15840	60.57	49.19	15.31	40.49	67.18	74	-6.82	PK
H	15840	44.18	49.19	15.31	40.49	50.79	54	-3.21	AV
operation frequency:5320									
V	10640	59.65	49.13	15.39	37.48	63.39	74	-10.61	PK
V	10640	46.20	49.13	15.39	37.48	49.94	54	-4.06	AV
V	15960	60.29	49.23	15.36	40.54	66.96	74	-7.04	PK
V	15960	44.19	49.23	15.36	40.54	50.86	54	-3.14	AV
H	10640	58.11	49.13	15.39	37.48	61.85	74	-12.15	PK
H	10640	46.42	49.13	15.39	37.48	50.16	54	-3.84	AV
H	15960	58.55	49.23	15.36	40.54	65.22	74	-8.78	PK
H	15960	43.37	49.23	15.36	40.54	50.04	54	-3.96	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



802.11ac20

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5260									
V	10520	57.10	49.07	15.31	37.41	60.75	74	-13.25	PK
V	10520	45.76	49.07	15.31	37.41	49.41	54	-4.59	AV
V	15780	57.28	49.18	15.26	40.43	63.79	74	-10.21	PK
V	15780	44.04	49.18	15.26	40.43	50.55	54	-3.45	AV
H	10520	56.72	49.07	15.31	37.41	60.37	74	-13.63	PK
H	10520	45.92	49.07	15.31	37.41	49.57	54	-4.43	AV
H	15780	59.80	49.18	15.26	40.43	66.31	74	-7.69	PK
H	15780	43.56	49.18	15.26	40.43	50.07	54	-3.93	AV
operation frequency:5280									
V	10560	58.11	49.10	15.35	37.44	61.80	74	-12.20	PK
V	10560	45.82	49.10	15.35	37.44	49.51	54	-4.49	AV
V	15840	60.10	49.19	15.31	40.49	66.71	74	-7.29	PK
V	15840	43.60	49.19	15.31	40.49	50.21	54	-3.79	AV
H	10560	57.33	49.10	15.35	37.44	61.02	74	-12.98	PK
H	10560	46.26	49.10	15.35	37.44	49.95	54	-4.05	AV
H	15840	60.10	49.19	15.31	40.49	66.71	74	-7.29	PK
H	15840	43.84	49.19	15.31	40.49	50.45	54	-3.55	AV
operation frequency:5320									
V	10640	59.18	49.13	15.39	37.48	62.92	74	-11.08	PK
V	10640	45.84	49.13	15.39	37.48	49.58	54	-4.42	AV
V	15960	59.82	49.23	15.36	40.54	66.49	74	-7.51	PK
V	15960	43.85	49.23	15.36	40.54	50.52	54	-3.48	AV
H	10640	57.67	49.13	15.39	37.48	61.41	74	-12.59	PK
H	10640	46.05	49.13	15.39	37.48	49.79	54	-4.21	AV
H	15960	58.09	49.23	15.36	40.54	64.76	74	-9.24	PK
H	15960	43.03	49.23	15.36	40.54	49.70	54	-4.30	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



802.11ax20

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5260									
V	10520	56.76	49.07	15.31	37.41	60.41	74	-13.59	PK
V	10520	45.50	49.07	15.31	37.41	49.15	54	-4.85	AV
V	15780	56.94	49.18	15.26	40.43	63.45	74	-10.55	PK
V	15780	43.78	49.18	15.26	40.43	50.29	54	-3.71	AV
H	10520	56.39	49.07	15.31	37.41	60.04	74	-13.96	PK
H	10520	45.66	49.07	15.31	37.41	49.31	54	-4.69	AV
H	15780	59.45	49.18	15.26	40.43	65.96	74	-8.04	PK
H	15780	43.30	49.18	15.26	40.43	49.81	54	-4.19	AV
operation frequency:5280									
V	10560	57.77	49.10	15.35	37.44	61.46	74	-12.54	PK
V	10560	45.56	49.10	15.35	37.44	49.25	54	-4.75	AV
V	15840	59.75	49.19	15.31	40.49	66.36	74	-7.64	PK
V	15840	43.34	49.19	15.31	40.49	49.95	54	-4.05	AV
H	10560	56.99	49.10	15.35	37.44	60.68	74	-13.32	PK
H	10560	45.98	49.10	15.35	37.44	49.67	54	-4.33	AV
H	15840	59.75	49.19	15.31	40.49	66.36	74	-7.64	PK
H	15840	43.59	49.19	15.31	40.49	50.20	54	-3.80	AV
operation frequency:5320									
V	10640	58.83	49.13	15.39	37.48	62.57	74	-11.43	PK
V	10640	45.58	49.13	15.39	37.48	49.32	54	-4.68	AV
V	15960	59.47	49.23	15.36	40.54	66.14	74	-7.86	PK
V	15960	43.60	49.23	15.36	40.54	50.27	54	-3.73	AV
H	10640	57.33	49.13	15.39	37.48	61.07	74	-12.93	PK
H	10640	45.78	49.13	15.39	37.48	49.52	54	-4.48	AV
H	15960	57.75	49.23	15.36	40.54	64.42	74	-9.58	PK
H	15960	42.78	49.23	15.36	40.54	49.45	54	-4.55	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5260									
V	10520	57.03	49.07	15.31	37.41	60.68	74	-13.32	PK
V	10520	45.91	49.07	15.31	37.41	49.56	54	-4.44	AV
V	15780	56.55	49.18	15.26	40.43	63.06	74	-10.94	PK
V	15780	43.57	49.18	15.26	40.43	50.08	54	-3.92	AV
H	10520	56.95	49.07	15.31	37.41	60.60	74	-13.40	PK
H	10520	45.56	49.07	15.31	37.41	49.21	54	-4.79	AV
H	15780	54.43	49.18	15.26	40.43	60.94	74	-13.06	PK
H	15780	44.58	49.18	15.26	40.43	51.09	54	-2.91	AV
operation frequency:5280									
V	10560	56.56	49.10	15.35	37.44	60.25	74	-13.75	PK
V	10560	45.01	49.10	15.35	37.44	48.70	54	-5.30	AV
V	15840	55.65	49.19	15.31	40.49	62.26	74	-11.74	PK
V	15840	43.66	49.19	15.31	40.49	50.27	54	-3.73	AV
H	10560	55.85	49.10	15.35	37.44	59.54	74	-14.46	PK
H	10560	43.56	49.10	15.35	37.44	47.25	54	-6.75	AV
H	15840	55.36	49.19	15.31	40.49	61.97	74	-12.03	PK
H	15840	43.44	49.19	15.31	40.49	50.05	54	-3.95	AV
operation frequency:5320									
V	10640	56.84	49.13	15.39	37.48	60.58	74	-13.42	PK
V	10640	44.87	49.13	15.39	37.48	48.61	54	-5.39	AV
V	15960	54.65	49.23	15.36	40.54	61.32	74	-12.68	PK
V	15960	43.70	49.23	15.36	40.54	50.37	54	-3.63	AV
H	10640	56.88	49.13	15.39	37.48	60.62	74	-13.38	PK
H	10640	44.88	49.13	15.39	37.48	48.62	54	-5.38	AV
H	15960	55.64	49.23	15.36	40.54	62.31	74	-11.69	PK
H	15960	44.48	49.23	15.36	40.54	51.15	54	-2.85	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
operation frequency:5270									
V	10540	58.03	49.07	15.31	37.41	61.68	74	-12.32	PK
V	10540	46.26	49.07	15.31	37.41	49.91	54	-4.09	AV
V	15810	57.50	49.18	15.26	40.43	64.01	74	-9.99	PK
V	15810	44.34	49.18	15.26	40.43	50.85	54	-3.15	AV
H	10540	57.89	49.07	15.31	37.41	61.54	74	-12.46	PK
H	10540	46.32	49.07	15.31	37.41	49.97	54	-4.03	AV
H	15810	55.86	49.18	15.26	40.43	62.37	74	-11.63	PK
H	15810	44.22	49.18	15.26	40.43	50.73	54	-3.27	AV
operation frequency:5310									
V	10620	58.46	49.13	15.39	37.48	62.20	74	-11.80	PK
V	10620	45.45	49.13	15.39	37.48	49.19	54	-4.81	AV
V	15930	55.63	49.23	15.36	40.54	62.30	74	-11.70	PK
V	15930	44.29	49.23	15.36	40.54	50.96	54	-3.04	AV
H	10620	58.63	49.13	15.39	37.48	62.37	74	-11.63	PK
H	10620	45.80	49.13	15.39	37.48	49.54	54	-4.46	AV
H	15930	56.60	49.23	15.36	40.54	63.27	74	-10.73	PK
H	15930	44.03	49.23	15.36	40.54	50.70	54	-3.30	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:5270									
V	10540	57.64	49.07	15.31	37.41	61.29	74	-12.71	PK
V	10540	45.94	49.07	15.31	37.41	49.59	54	-4.41	AV
V	15810	57.11	49.18	15.26	40.43	63.62	74	-10.38	PK
V	15810	44.04	49.18	15.26	40.43	50.55	54	-3.45	AV
H	10540	57.51	49.07	15.31	37.41	61.16	74	-12.84	PK
H	10540	46.00	49.07	15.31	37.41	49.65	54	-4.35	AV
H	15810	55.49	49.18	15.26	40.43	62.00	74	-12.00	PK
H	15810	44.91	49.18	15.26	40.43	51.42	54	-2.58	AV
operation frequency:5310									
V	10620	58.06	49.13	15.39	37.48	61.80	74	-12.20	PK
V	10620	45.14	49.13	15.39	37.48	48.88	54	-5.12	AV
V	15930	55.25	49.23	15.36	40.54	61.92	74	-12.08	PK
V	15930	43.99	49.23	15.36	40.54	50.66	54	-3.34	AV
H	10620	58.23	49.13	15.39	37.48	61.97	74	-12.03	PK
H	10620	45.50	49.13	15.39	37.48	49.24	54	-4.76	AV
H	15930	56.21	49.23	15.36	40.54	62.88	74	-11.12	PK
H	15930	44.72	49.23	15.36	40.54	51.39	54	-2.61	AV
Remark:									
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit									
2. If peak below the average limit, the average emission was no test.									
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



802.11n HT40

Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
operation frequency:5270									
V	10540	57.36	49.07	15.31	37.41	61.01	74	-12.99	PK
V	10540	45.71	49.07	15.31	37.41	49.36	54	-4.64	AV
V	15810	56.83	49.18	15.26	40.43	63.34	74	-10.66	PK
V	15810	43.82	49.18	15.26	40.43	50.33	54	-3.67	AV
H	10540	57.23	49.07	15.31	37.41	60.88	74	-13.12	PK
H	10540	45.77	49.07	15.31	37.41	49.42	54	-4.58	AV
H	15810	55.21	49.18	15.26	40.43	61.72	74	-12.28	PK
H	15810	44.69	49.18	15.26	40.43	51.20	54	-2.80	AV
operation frequency:5310									
V	10620	57.78	49.13	15.39	37.48	61.52	74	-12.48	PK
V	10620	44.92	49.13	15.39	37.48	48.66	54	-5.34	AV
V	15930	54.98	49.23	15.36	40.54	61.65	74	-12.35	PK
V	15930	43.77	49.23	15.36	40.54	50.44	54	-3.56	AV
H	10620	57.95	49.13	15.39	37.48	61.69	74	-12.31	PK
H	10620	45.28	49.13	15.39	37.48	49.02	54	-4.98	AV
H	15930	55.94	49.23	15.36	40.54	62.61	74	-11.39	PK
H	15930	44.50	49.23	15.36	40.54	51.17	54	-2.83	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:5290									
V	10580	57.32	49.09	15.34	37.42	60.99	74	-13.01	PK
V	10580	46.54	49.09	15.34	37.42	50.21	54	-3.79	AV
V	15870	57.18	49.18	15.29	40.47	63.76	74	-10.24	PK
V	15870	44.36	49.18	15.29	40.47	50.94	54	-3.06	AV
H	10580	57.76	49.09	15.34	37.42	61.43	74	-12.57	PK
H	10580	46.66	49.09	15.34	37.42	50.33	54	-3.67	AV
H	15870	55.87	49.18	15.29	40.47	62.45	74	-11.55	PK
H	15870	45.34	49.18	15.29	40.47	51.92	54	-2.08	AV

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operation frequency:5290									
V	10580	58.76	49.09	15.34	37.42	62.43	74	-11.57	PK
V	10580	47.00	49.09	15.34	37.42	50.67	54	-3.33	AV
V	15870	58.31	49.18	15.29	40.47	64.89	74	-9.11	PK
V	15870	45.02	49.18	15.29	40.47	51.60	54	-2.40	AV
H	10580	58.42	49.09	15.34	37.42	62.09	74	-11.91	PK
H	10580	47.29	49.09	15.34	37.42	50.96	54	-3.04	AV
H	15870	56.48	49.18	15.29	40.47	63.06	74	-10.94	PK
H	15870	44.94	49.18	15.29	40.47	51.52	54	-2.48	AV

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



For MIMO mode band 2

802.11ac20

Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
operation frequency:5260									
V	10520	57.67	49.07	15.31	37.41	61.32	74	-12.68	PK
V	10520	46.22	49.07	15.31	37.41	49.87	54	-4.13	AV
V	15780	57.85	49.18	15.26	40.43	64.36	74	-9.64	PK
V	15780	44.48	49.18	15.26	40.43	50.99	54	-3.01	AV
H	10520	57.28	49.07	15.31	37.41	60.93	74	-13.07	PK
H	10520	46.38	49.07	15.31	37.41	50.03	54	-3.97	AV
H	15780	60.38	49.18	15.26	40.43	66.89	74	-7.11	PK
H	15780	43.98	49.18	15.26	40.43	50.49	54	-3.51	AV
operation frequency:5280									
V	10560	58.69	49.10	15.35	37.44	62.38	74	-11.62	PK
V	10560	46.28	49.10	15.35	37.44	49.97	54	-4.03	AV
V	15840	60.70	49.19	15.31	40.49	67.31	74	-6.69	PK
V	15840	44.02	49.19	15.31	40.49	50.63	54	-3.37	AV
H	10560	57.89	49.10	15.35	37.44	61.58	74	-12.42	PK
H	10560	46.72	49.10	15.35	37.44	50.41	54	-3.59	AV
H	15840	60.70	49.19	15.31	40.49	67.31	74	-6.69	PK
H	15840	44.28	49.19	15.31	40.49	50.89	54	-3.11	AV
operation frequency:5320									
V	10640	59.77	49.13	15.39	37.48	63.51	74	-10.49	PK
V	10640	46.30	49.13	15.39	37.48	50.04	54	-3.96	AV
V	15960	60.41	49.23	15.36	40.54	67.08	74	-6.92	PK
V	15960	44.29	49.23	15.36	40.54	50.96	54	-3.04	AV
H	10640	58.23	49.13	15.39	37.48	61.97	74	-12.03	PK
H	10640	46.51	49.13	15.39	37.48	50.25	54	-3.75	AV
H	15960	58.67	49.23	15.36	40.54	65.34	74	-8.66	PK
H	15960	43.46	49.23	15.36	40.54	50.13	54	-3.87	AV

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5260									
V	10520	57.32	49.07	15.31	37.41	60.97	74	-13.03	PK
V	10520	45.94	49.07	15.31	37.41	49.59	54	-4.41	AV
V	15780	57.51	49.18	15.26	40.43	64.02	74	-9.98	PK
V	15780	44.22	49.18	15.26	40.43	50.73	54	-3.27	AV
H	10520	56.95	49.07	15.31	37.41	60.60	74	-13.40	PK
H	10520	46.10	49.07	15.31	37.41	49.75	54	-4.25	AV
H	15780	60.03	49.18	15.26	40.43	66.54	74	-7.46	PK
H	15780	43.72	49.18	15.26	40.43	50.23	54	-3.77	AV
operation frequency:5280									
V	10560	58.33	49.10	15.35	37.44	62.02	74	-11.98	PK
V	10560	46.00	49.10	15.35	37.44	49.69	54	-4.31	AV
V	15840	60.33	49.19	15.31	40.49	66.94	74	-7.06	PK
V	15840	43.76	49.19	15.31	40.49	50.37	54	-3.63	AV
H	10560	57.56	49.10	15.35	37.44	61.25	74	-12.75	PK
H	10560	46.44	49.10	15.35	37.44	50.13	54	-3.87	AV
H	15840	60.33	49.19	15.31	40.49	66.94	74	-7.06	PK
H	15840	44.01	49.19	15.31	40.49	50.62	54	-3.38	AV
operation frequency:5320									
V	10640	59.42	49.13	15.39	37.48	63.16	74	-10.84	PK
V	10640	46.02	49.13	15.39	37.48	49.76	54	-4.24	AV
V	15960	60.05	49.23	15.36	40.54	66.72	74	-7.28	PK
V	15960	44.02	49.23	15.36	40.54	50.69	54	-3.31	AV
H	10640	57.89	49.13	15.39	37.48	61.63	74	-12.37	PK
H	10640	46.24	49.13	15.39	37.48	49.98	54	-4.02	AV
H	15960	58.31	49.23	15.36	40.54	64.98	74	-9.02	PK
H	15960	43.21	49.23	15.36	40.54	49.88	54	-4.12	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5260									
V	10520	57.60	49.07	15.31	37.41	61.25	74	-12.75	PK
V	10520	46.37	49.07	15.31	37.41	50.02	54	-3.98	AV
V	15780	57.11	49.18	15.26	40.43	63.62	74	-10.38	PK
V	15780	43.99	49.18	15.26	40.43	50.50	54	-3.50	AV
H	10520	57.52	49.07	15.31	37.41	61.17	74	-12.83	PK
H	10520	46.00	49.07	15.31	37.41	49.65	54	-4.35	AV
H	15780	54.97	49.18	15.26	40.43	61.48	74	-12.52	PK
H	15780	44.02	49.18	15.26	40.43	50.53	54	-3.47	AV
operation frequency:5280									
V	10560	57.12	49.10	15.35	37.44	60.81	74	-13.19	PK
V	10560	45.46	49.10	15.35	37.44	49.15	54	-4.85	AV
V	15840	56.19	49.19	15.31	40.49	62.80	74	-11.20	PK
V	15840	44.09	49.19	15.31	40.49	50.70	54	-3.30	AV
H	10560	56.41	49.10	15.35	37.44	60.10	74	-13.90	PK
H	10560	43.98	49.10	15.35	37.44	47.67	54	-6.33	AV
H	15840	55.90	49.19	15.31	40.49	62.51	74	-11.49	PK
H	15840	44.06	49.19	15.31	40.49	50.67	54	-3.33	AV
operation frequency:5320									
V	10640	57.41	49.13	15.39	37.48	61.15	74	-12.85	PK
V	10640	45.32	49.13	15.39	37.48	49.06	54	-4.94	AV
V	15960	55.19	49.23	15.36	40.54	61.86	74	-12.14	PK
V	15960	44.13	49.23	15.36	40.54	50.80	54	-3.20	AV
H	10640	57.45	49.13	15.39	37.48	61.19	74	-12.81	PK
H	10640	45.33	49.13	15.39	37.48	49.07	54	-4.93	AV
H	15960	56.18	49.23	15.36	40.54	62.85	74	-11.15	PK
H	15960	43.92	49.23	15.36	40.54	50.59	54	-3.41	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
operation frequency:5270									
V	10540	58.61	49.07	15.31	37.41	62.26	74	-11.74	PK
V	10540	46.72	49.07	15.31	37.41	50.37	54	-3.63	AV
V	15810	58.06	49.18	15.26	40.43	64.57	74	-9.43	PK
V	15810	44.78	49.18	15.26	40.43	51.29	54	-2.71	AV
H	10540	58.47	49.07	15.31	37.41	62.12	74	-11.88	PK
H	10540	46.78	49.07	15.31	37.41	50.43	54	-3.57	AV
H	15810	56.42	49.18	15.26	40.43	62.93	74	-11.07	PK
H	15810	44.16	49.18	15.26	40.43	50.67	54	-3.33	AV
operation frequency:5310									
V	10620	59.04	49.13	15.39	37.48	62.78	74	-11.22	PK
V	10620	45.89	49.13	15.39	37.48	49.63	54	-4.37	AV
V	15930	56.17	49.23	15.36	40.54	62.84	74	-11.16	PK
V	15930	44.73	49.23	15.36	40.54	51.40	54	-2.60	AV
H	10620	59.21	49.13	15.39	37.48	62.95	74	-11.05	PK
H	10620	46.26	49.13	15.39	37.48	50.00	54	-4.00	AV
H	15930	57.16	49.23	15.36	40.54	63.83	74	-10.17	PK
H	15930	44.27	49.23	15.36	40.54	50.94	54	-3.06	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:5270									
V	10540	58.20	49.07	15.31	37.41	61.85	74	-12.15	PK
V	10540	46.40	49.07	15.31	37.41	50.05	54	-3.95	AV
V	15810	57.68	49.18	15.26	40.43	64.19	74	-9.81	PK
V	15810	44.48	49.18	15.26	40.43	50.99	54	-3.01	AV
H	10540	58.07	49.07	15.31	37.41	61.72	74	-12.28	PK
H	10540	46.46	49.07	15.31	37.41	50.11	54	-3.89	AV
H	15810	56.03	49.18	15.26	40.43	62.54	74	-11.46	PK
H	15810	44.36	49.18	15.26	40.43	50.87	54	-3.13	AV
operation frequency:5310									
V	10620	58.64	49.13	15.39	37.48	62.38	74	-11.62	PK
V	10620	45.59	49.13	15.39	37.48	49.33	54	-4.67	AV
V	15930	55.80	49.23	15.36	40.54	62.47	74	-11.53	PK
V	15930	44.43	49.23	15.36	40.54	51.10	54	-2.90	AV
H	10620	58.81	49.13	15.39	37.48	62.55	74	-11.45	PK
H	10620	45.94	49.13	15.39	37.48	49.68	54	-4.32	AV
H	15930	56.77	49.23	15.36	40.54	63.44	74	-10.56	PK
H	15930	44.16	49.23	15.36	40.54	50.83	54	-3.17	AV
Remark:									
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit									
2. If peak below the average limit, the average emission was no test.									
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



802.11n HT40

Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
operation frequency:5270									
V	10540	57.92	49.07	15.31	37.41	61.57	74	-12.43	PK
V	10540	46.16	49.07	15.31	37.41	49.81	54	-4.19	AV
V	15810	57.40	49.18	15.26	40.43	63.91	74	-10.09	PK
V	15810	44.26	49.18	15.26	40.43	50.77	54	-3.23	AV
H	10540	57.80	49.07	15.31	37.41	61.45	74	-12.55	PK
H	10540	46.23	49.07	15.31	37.41	49.88	54	-4.12	AV
H	15810	55.76	49.18	15.26	40.43	62.27	74	-11.73	PK
H	15810	44.13	49.18	15.26	40.43	50.64	54	-3.36	AV
operation frequency:5310									
V	10620	58.34	49.13	15.39	37.48	62.08	74	-11.92	PK
V	10620	45.37	49.13	15.39	37.48	49.11	54	-4.89	AV
V	15930	55.53	49.23	15.36	40.54	62.20	74	-11.80	PK
V	15930	44.21	49.23	15.36	40.54	50.88	54	-3.12	AV
H	10620	58.53	49.13	15.39	37.48	62.27	74	-11.73	PK
H	10620	45.72	49.13	15.39	37.48	49.46	54	-4.54	AV
H	15930	56.50	49.23	15.36	40.54	63.17	74	-10.83	PK
H	15930	44.34	49.23	15.36	40.54	51.01	54	-2.99	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
operation frequency:5290									
V	10580	57.67	49.09	15.34	37.42	61.34	74	-12.66	PK
V	10580	46.12	49.09	15.34	37.42	49.79	54	-4.21	AV
V	15870	57.23	49.18	15.29	40.47	63.81	74	-10.19	PK
V	15870	44.18	49.18	15.29	40.47	50.76	54	-3.24	AV
H	10580	57.33	49.09	15.34	37.42	61.00	74	-13.00	PK
H	10580	46.40	49.09	15.34	37.42	50.07	54	-3.93	AV
H	15870	55.43	49.18	15.29	40.47	62.01	74	-11.99	PK
H	15870	45.09	49.18	15.29	40.47	51.67	54	-2.33	AV

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operation frequency:5290									
V	10580	58.76	49.09	15.34	37.42	62.43	74	-11.57	PK
V	10580	47.00	49.09	15.34	37.42	50.67	54	-3.33	AV
V	15870	58.31	49.18	15.29	40.47	64.89	74	-9.11	PK
V	15870	45.02	49.18	15.29	40.47	51.60	54	-2.40	AV
H	10580	58.42	49.09	15.34	37.42	62.09	74	-11.91	PK
H	10580	47.29	49.09	15.34	37.42	50.96	54	-3.04	AV
H	15870	56.48	49.18	15.29	40.47	63.06	74	-10.94	PK
H	15870	44.94	49.18	15.29	40.47	51.52	54	-2.48	AV

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



Band 3
Antenna 1
802.11a

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5500									
V	11000	58.86	49.08	15.27	37.33	62.38	74	-11.62	PK
V	11000	46.42	49.08	15.27	37.33	49.94	54	-4.06	AV
V	16500	57.67	49.13	15.29	40.49	64.32	74	-9.68	PK
V	16500	43.92	49.13	15.29	40.49	50.57	54	-3.43	AV
H	11000	57.22	49.08	15.27	37.33	60.74	74	-13.26	PK
H	11000	46.65	49.08	15.27	37.33	50.17	54	-3.83	AV
H	16500	60.90	49.13	15.29	40.49	67.55	74	-6.45	PK
H	16500	44.38	49.13	15.29	40.49	51.03	54	-2.97	AV
operation frequency:5600									
V	11200	59.05	49.11	15.32	37.45	62.71	74	-11.29	PK
V	11200	46.44	49.11	15.32	37.45	50.10	54	-3.90	AV
V	16800	61.00	49.19	15.30	40.48	67.59	74	-6.41	PK
V	16800	44.19	49.19	15.30	40.48	50.78	54	-3.22	AV
H	11200	58.14	49.11	15.32	37.45	61.80	74	-12.20	PK
H	11200	46.50	49.11	15.32	37.45	50.16	54	-3.84	AV
H	16800	53.53	49.19	15.30	40.48	60.12	74	-13.88	PK
H	16800	44.79	49.19	15.30	40.48	51.38	54	-2.62	AV
operation frequency:5700									
V	11400	59.72	49.14	15.38	37.49	63.45	74	-10.55	PK
V	11400	46.75	49.14	15.38	37.49	50.48	54	-3.52	AV
V	17100	61.02	49.23	15.36	40.55	67.70	74	-6.30	PK
V	17100	44.48	49.23	15.36	40.55	51.16	54	-2.84	AV
H	11400	58.62	49.14	15.38	37.49	62.35	74	-11.65	PK
H	11400	46.75	49.14	15.38	37.49	50.48	54	-3.52	AV
H	17100	58.85	49.23	15.36	40.55	65.53	74	-8.47	PK
H	17100	43.47	49.23	15.36	40.55	50.15	54	-3.85	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:5500									
V	11000	58.63	49.08	15.27	37.33	62.15	74	-11.85	PK
V	11000	46.24	49.08	15.27	37.33	49.76	54	-4.24	AV
V	16500	57.44	49.13	15.29	40.49	64.09	74	-9.91	PK
V	16500	44.74	49.13	15.29	40.49	51.39	54	-2.61	AV
H	11000	57.00	49.08	15.27	37.33	60.52	74	-13.48	PK
H	11000	46.47	49.08	15.27	37.33	49.99	54	-4.01	AV
H	16500	60.66	49.13	15.29	40.49	67.31	74	-6.69	PK
H	16500	44.21	49.13	15.29	40.49	50.86	54	-3.14	AV
operation frequency:5600									
V	11200	58.82	49.11	15.32	37.45	62.48	74	-11.52	PK
V	11200	46.26	49.11	15.32	37.45	49.92	54	-4.08	AV
V	16800	60.76	49.19	15.30	40.48	67.35	74	-6.65	PK
V	16800	44.01	49.19	15.30	40.48	50.60	54	-3.40	AV
H	11200	57.92	49.11	15.32	37.45	61.58	74	-12.42	PK
H	11200	46.32	49.11	15.32	37.45	49.98	54	-4.02	AV
H	16800	53.32	49.19	15.30	40.48	59.91	74	-14.09	PK
H	16800	44.61	49.19	15.30	40.48	51.20	54	-2.80	AV
operation frequency:5700									
V	11400	59.49	49.14	15.38	37.49	63.22	74	-10.78	PK
V	11400	46.56	49.14	15.38	37.49	50.29	54	-3.71	AV
V	17100	60.78	49.23	15.36	40.55	67.46	74	-6.54	PK
V	17100	44.30	49.23	15.36	40.55	50.98	54	-3.02	AV
H	11400	58.39	49.14	15.38	37.49	62.12	74	-11.88	PK
H	11400	46.56	49.14	15.38	37.49	50.29	54	-3.71	AV
H	17100	58.62	49.23	15.36	40.55	65.30	74	-8.70	PK
H	17100	43.31	49.23	15.36	40.55	49.99	54	-4.01	AV
Remark:									
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit									
2. If peak below the average limit, the average emission was no test.									
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5500									
V	11000	58.23	49.08	15.27	37.33	61.75	74	-12.25	PK
V	11000	45.92	49.08	15.27	37.33	49.44	54	-4.56	AV
V	16500	57.05	49.13	15.29	40.49	63.70	74	-10.30	PK
V	16500	44.44	49.13	15.29	40.49	51.09	54	-2.91	AV
H	11000	56.61	49.08	15.27	37.33	60.13	74	-13.87	PK
H	11000	46.15	49.08	15.27	37.33	49.67	54	-4.33	AV
H	16500	60.25	49.13	15.29	40.49	66.90	74	-7.10	PK
H	16500	43.91	49.13	15.29	40.49	50.56	54	-3.44	AV
operation frequency:5600									
V	11200	58.42	49.11	15.32	37.45	62.08	74	-11.92	PK
V	11200	45.94	49.11	15.32	37.45	49.60	54	-4.40	AV
V	16800	60.35	49.19	15.30	40.48	66.94	74	-7.06	PK
V	16800	43.71	49.19	15.30	40.48	50.30	54	-3.70	AV
H	11200	57.53	49.11	15.32	37.45	61.19	74	-12.81	PK
H	11200	46.00	49.11	15.32	37.45	49.66	54	-4.34	AV
H	16800	52.95	49.19	15.30	40.48	59.54	74	-14.46	PK
H	16800	44.31	49.19	15.30	40.48	50.90	54	-3.10	AV
operation frequency:5700									
V	11400	59.08	49.14	15.38	37.49	62.81	74	-11.19	PK
V	11400	46.25	49.14	15.38	37.49	49.98	54	-4.02	AV
V	17100	60.37	49.23	15.36	40.55	67.05	74	-6.95	PK
V	17100	44.00	49.23	15.36	40.55	50.68	54	-3.32	AV
H	11400	57.99	49.14	15.38	37.49	61.72	74	-12.28	PK
H	11400	46.25	49.14	15.38	37.49	49.98	54	-4.02	AV
H	17100	58.22	49.23	15.36	40.55	64.90	74	-9.10	PK
H	17100	43.01	49.23	15.36	40.55	49.69	54	-4.31	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5500									
V	11000	57.49	49.08	15.27	37.33	61.01	74	-12.99	PK
V	11000	46.30	49.08	15.27	37.33	49.82	54	-4.18	AV
V	16500	56.86	49.13	15.29	40.49	63.51	74	-10.49	PK
V	16500	43.88	49.13	15.29	40.49	50.53	54	-3.47	AV
H	11000	57.14	49.08	15.27	37.33	60.66	74	-13.34	PK
H	11000	46.23	49.08	15.27	37.33	49.75	54	-4.25	AV
H	16500	55.03	49.13	15.29	40.49	61.68	74	-12.32	PK
H	16500	44.69	49.13	15.29	40.49	51.34	54	-2.66	AV
operation frequency:5600									
V	11200	57.44	49.11	15.32	37.45	61.10	74	-12.90	PK
V	11200	45.39	49.11	15.32	37.45	49.05	54	-4.95	AV
V	16800	56.04	49.19	15.30	40.48	62.63	74	-11.37	PK
V	16800	43.88	49.19	15.30	40.48	50.47	54	-3.53	AV
H	11200	55.92	49.11	15.32	37.45	59.58	74	-14.42	PK
H	11200	44.08	49.11	15.32	37.45	47.74	54	-6.26	AV
H	16800	55.70	49.19	15.30	40.48	62.29	74	-11.71	PK
H	16800	43.76	49.19	15.30	40.48	50.35	54	-3.65	AV
operation frequency:5700									
V	11400	57.95	49.14	15.38	37.49	61.68	74	-12.32	PK
V	11400	44.90	49.14	15.38	37.49	48.63	54	-5.37	AV
V	17100	55.11	49.23	15.36	40.55	61.79	74	-12.21	PK
V	17100	43.71	49.23	15.36	40.55	50.39	54	-3.61	AV
H	11400	58.18	49.14	15.38	37.49	61.91	74	-12.09	PK
H	11400	45.26	49.14	15.38	37.49	48.99	54	-5.01	AV
H	17100	55.82	49.23	15.36	40.55	62.50	74	-11.50	PK
H	17100	44.59	49.23	15.36	40.55	51.27	54	-2.73	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:5510									
V	11020	57.84	49.08	15.27	37.33	61.36	74	-12.64	PK
V	11020	46.26	49.08	15.27	37.33	49.78	54	-4.22	AV
V	16530	57.40	49.13	15.29	40.49	64.05	74	-9.95	PK
V	16530	44.31	49.13	15.29	40.49	50.96	54	-3.04	AV
H	11020	57.49	49.08	15.27	37.33	61.01	74	-12.99	PK
H	11020	46.53	49.08	15.27	37.33	50.05	54	-3.95	AV
H	16530	55.59	49.13	15.29	40.49	62.24	74	-11.76	PK
H	16530	44.22	49.13	15.29	40.49	50.87	54	-3.13	AV
operation frequency:5550									
V	11100	58.94	49.11	15.32	37.45	62.60	74	-11.40	PK
V	11100	45.23	49.11	15.32	37.45	48.89	54	-5.11	AV
V	16650	56.06	49.19	15.30	40.48	62.65	74	-11.35	PK
V	16650	43.90	49.19	15.30	40.48	50.49	54	-3.51	AV
H	11100	59.38	49.11	15.32	37.45	63.04	74	-10.96	PK
H	11100	45.23	49.11	15.32	37.45	48.89	54	-5.11	AV
H	16650	56.39	49.19	15.30	40.48	62.98	74	-11.02	PK
H	16650	44.21	49.19	15.30	40.48	50.80	54	-3.20	AV
operation frequency:5670									
V	11340	58.83	49.14	15.38	37.49	62.56	74	-11.44	PK
V	11340	45.66	49.14	15.38	37.49	49.39	54	-4.61	AV
V	17010	55.77	49.23	15.36	40.55	62.45	74	-11.55	PK
V	17010	44.22	49.23	15.36	40.55	50.90	54	-3.10	AV
H	11340	58.85	49.14	15.38	37.49	62.58	74	-11.42	PK
H	11340	45.71	49.14	15.38	37.49	49.44	54	-4.56	AV
H	17010	56.47	49.23	15.36	40.55	63.15	74	-10.85	PK
H	17010	43.99	49.23	15.36	40.55	50.67	54	-3.33	AV
Remark:									
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit									
2. If peak below the average limit, the average emission was no test.									
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:5510									
V	11020	57.45	49.08	15.27	37.33	60.97	74	-13.03	PK
V	11020	45.94	49.08	15.27	37.33	49.46	54	-4.54	AV
V	16530	57.01	49.13	15.29	40.49	63.66	74	-10.34	PK
V	16530	44.01	49.13	15.29	40.49	50.66	54	-3.34	AV
H	11020	57.10	49.08	15.27	37.33	60.62	74	-13.38	PK
H	11020	46.22	49.08	15.27	37.33	49.74	54	-4.26	AV
H	16530	55.21	49.13	15.29	40.49	61.86	74	-12.14	PK
H	16530	44.91	49.13	15.29	40.49	51.56	54	-2.44	AV
operation frequency:5550									
V	11100	58.26	49.11	15.32	37.45	61.92	74	-12.08	PK
V	11100	45.12	49.11	15.32	37.45	48.78	54	-5.22	AV
V	16650	54.85	49.19	15.30	40.48	61.44	74	-12.56	PK
V	16650	44.23	49.19	15.30	40.48	50.82	54	-3.18	AV
H	11100	58.38	49.11	15.32	37.45	62.04	74	-11.96	PK
H	11100	44.96	49.11	15.32	37.45	48.62	54	-5.38	AV
H	16650	56.24	49.19	15.30	40.48	62.83	74	-11.17	PK
H	16650	44.01	49.19	15.30	40.48	50.60	54	-3.40	AV
operation frequency:5670									
V	11340	58.43	49.14	15.38	37.49	62.16	74	-11.84	PK
V	11340	45.35	49.14	15.38	37.49	49.08	54	-4.92	AV
V	17010	55.38	49.23	15.36	40.55	62.06	74	-11.94	PK
V	17010	43.92	49.23	15.36	40.55	50.60	54	-3.40	AV
H	11340	58.45	49.14	15.38	37.49	62.18	74	-11.82	PK
H	11340	45.41	49.14	15.38	37.49	49.14	54	-4.86	AV
H	17010	56.08	49.23	15.36	40.55	62.76	74	-11.24	PK
H	17010	44.68	49.23	15.36	40.55	51.36	54	-2.64	AV
Remark:									
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit									
2. If peak below the average limit, the average emission was no test.									
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5510									
V	11020	57.22	49.08	15.27	37.33	60.74	74	-13.26	PK
V	11020	45.76	49.08	15.27	37.33	49.28	54	-4.72	AV
V	16530	56.78	49.13	15.29	40.49	63.43	74	-10.57	PK
V	16530	43.84	49.13	15.29	40.49	50.49	54	-3.51	AV
H	11020	56.88	49.08	15.27	37.33	60.40	74	-13.60	PK
H	11020	46.03	49.08	15.27	37.33	49.55	54	-4.45	AV
H	16530	54.99	49.13	15.29	40.49	61.64	74	-12.36	PK
H	16530	44.73	49.13	15.29	40.49	51.38	54	-2.62	AV
operation frequency:5550									
V	11100	58.03	49.11	15.32	37.45	61.69	74	-12.31	PK
V	11100	45.54	49.11	15.32	37.45	49.20	54	-4.80	AV
V	16650	55.08	49.19	15.30	40.48	61.67	74	-12.33	PK
V	16650	43.27	49.19	15.30	40.48	49.86	54	-4.14	AV
H	11100	58.06	49.11	15.32	37.45	61.72	74	-12.28	PK
H	11100	45.21	49.11	15.32	37.45	48.87	54	-5.13	AV
H	16650	56.04	49.19	15.30	40.48	62.63	74	-11.37	PK
H	16650	44.23	49.19	15.30	40.48	50.82	54	-3.18	AV
operation frequency:5670									
V	11340	58.20	49.14	15.38	37.49	61.93	74	-12.07	PK
V	11340	45.17	49.14	15.38	37.49	48.90	54	-5.10	AV
V	17010	55.17	49.23	15.36	40.55	61.85	74	-12.15	PK
V	17010	43.74	49.23	15.36	40.55	50.42	54	-3.58	AV
H	11340	58.22	49.14	15.38	37.49	61.95	74	-12.05	PK
H	11340	45.23	49.14	15.38	37.49	48.96	54	-5.04	AV
H	17010	55.86	49.23	15.36	40.55	62.54	74	-11.46	PK
H	17010	44.51	49.23	15.36	40.55	51.19	54	-2.81	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
operation frequency:5530									
V	11060	58.66	49.11	15.37	37.46	62.38	74	-11.62	PK
V	11060	45.53	49.11	15.37	37.46	49.25	54	-4.75	AV
V	16590	55.60	49.21	15.34	40.51	62.24	74	-11.76	PK
V	16590	44.09	49.21	15.34	40.51	50.73	54	-3.27	AV
H	11060	58.68	49.11	15.37	31.31	56.25	74	-17.75	PK
H	11060	45.59	49.11	15.37	31.31	43.16	54	-10.84	AV
H	16590	56.30	49.21	15.34	40.51	62.94	74	-11.06	PK
H	16590	44.86	49.21	15.34	40.51	51.50	54	-2.50	AV

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Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
operation frequency:5530									
V	11060	59.19	49.11	15.37	37.46	62.91	74	-11.09	PK
V	11060	45.93	49.11	15.37	37.46	49.65	54	-4.35	AV
V	16590	56.09	49.21	15.34	40.51	62.73	74	-11.27	PK
V	16590	44.49	49.21	15.34	40.51	51.13	54	-2.87	AV
H	11060	59.21	49.11	15.37	31.31	56.78	74	-17.22	PK
H	11060	45.99	49.11	15.37	31.31	43.56	54	-10.44	AV
H	16590	56.81	49.21	15.34	40.51	63.45	74	-10.55	PK
H	16590	44.27	49.21	15.34	40.51	50.91	54	-3.09	AV

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



For MIMO mode
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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5500									
V	11000	59.21	49.08	15.27	37.33	62.73	74	-11.27	PK
V	11000	46.70	49.08	15.27	37.33	50.22	54	-3.78	AV
V	16500	58.00	49.13	15.29	40.49	64.65	74	-9.35	PK
V	16500	44.19	49.13	15.29	40.49	50.84	54	-3.16	AV
H	11000	57.57	49.08	15.27	37.33	61.09	74	-12.91	PK
H	11000	46.93	49.08	15.27	37.33	50.45	54	-3.55	AV
H	16500	61.26	49.13	15.29	40.49	67.91	74	-6.09	PK
H	16500	44.65	49.13	15.29	40.49	51.30	54	-2.70	AV
operation frequency:5600									
V	11200	59.41	49.11	15.32	37.45	63.07	74	-10.93	PK
V	11200	46.72	49.11	15.32	37.45	50.38	54	-3.62	AV
V	16800	61.36	49.19	15.30	40.48	67.95	74	-6.05	PK
V	16800	44.45	49.19	15.30	40.48	51.04	54	-2.96	AV
H	11200	58.50	49.11	15.32	37.45	62.16	74	-11.84	PK
H	11200	46.78	49.11	15.32	37.45	50.44	54	-3.56	AV
H	16800	53.84	49.19	15.30	40.48	60.43	74	-13.57	PK
H	16800	45.05	49.19	15.30	40.48	51.64	54	-2.36	AV
operation frequency:5700									
V	11400	60.07	49.14	15.38	37.49	63.80	74	-10.20	PK
V	11400	47.02	49.14	15.38	37.49	50.75	54	-3.25	AV
V	17100	61.38	49.23	15.36	40.55	68.06	74	-5.94	PK
V	17100	44.74	49.23	15.36	40.55	51.42	54	-2.58	AV
H	11400	58.97	49.14	15.38	37.49	62.70	74	-11.30	PK
H	11400	47.02	49.14	15.38	37.49	50.75	54	-3.25	AV
H	17100	59.20	49.23	15.36	40.55	65.88	74	-8.12	PK
H	17100	43.73	49.23	15.36	40.55	50.41	54	-3.59	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
operation frequency:5500									
V	11000	58.81	49.08	15.27	37.33	62.33	74	-11.67	PK
V	11000	46.38	49.08	15.27	37.33	49.90	54	-4.10	AV
V	16500	57.62	49.13	15.29	40.49	64.27	74	-9.73	PK
V	16500	44.88	49.13	15.29	40.49	51.53	54	-2.47	AV
H	11000	57.17	49.08	15.27	37.33	60.69	74	-13.31	PK
H	11000	46.61	49.08	15.27	37.33	50.13	54	-3.87	AV
H	16500	60.85	49.13	15.29	40.49	67.50	74	-6.50	PK
H	16500	44.35	49.13	15.29	40.49	51.00	54	-3.00	AV
operation frequency:5600									
V	11200	59.00	49.11	15.32	37.45	62.66	74	-11.34	PK
V	11200	46.40	49.11	15.32	37.45	50.06	54	-3.94	AV
V	16800	60.95	49.19	15.30	40.48	67.54	74	-6.46	PK
V	16800	44.14	49.19	15.30	40.48	50.73	54	-3.27	AV
H	11200	58.09	49.11	15.32	37.45	61.75	74	-12.25	PK
H	11200	46.46	49.11	15.32	37.45	50.12	54	-3.88	AV
H	16800	53.48	49.19	15.30	40.48	60.07	74	-13.93	PK
H	16800	44.65	49.19	15.30	40.48	51.24	54	-2.76	AV
operation frequency:5700									
V	11400	59.67	49.14	15.38	37.49	63.40	74	-10.60	PK
V	11400	46.71	49.14	15.38	37.49	50.44	54	-3.56	AV
V	17100	60.97	49.23	15.36	40.55	67.65	74	-6.35	PK
V	17100	44.44	49.23	15.36	40.55	51.12	54	-2.88	AV
H	11400	58.57	49.14	15.38	37.49	62.30	74	-11.70	PK
H	11400	46.71	49.14	15.38	37.49	50.44	54	-3.56	AV
H	17100	58.80	49.23	15.36	40.55	65.48	74	-8.52	PK
H	17100	43.44	49.23	15.36	40.55	50.12	54	-3.88	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



802.11n HT20

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5500									
V	11000	58.05	49.08	15.27	37.33	61.57	74	-12.43	PK
V	11000	46.76	49.08	15.27	37.33	50.28	54	-3.72	AV
V	16500	57.43	49.13	15.29	40.49	64.08	74	-9.92	PK
V	16500	44.32	49.13	15.29	40.49	50.97	54	-3.03	AV
H	11000	57.71	49.08	15.27	37.33	61.23	74	-12.77	PK
H	11000	46.69	49.08	15.27	37.33	50.21	54	-3.79	AV
H	16500	55.58	49.13	15.29	40.49	62.23	74	-11.77	PK
H	16500	44.13	49.13	15.29	40.49	50.78	54	-3.22	AV
operation frequency:5600									
V	11200	58.00	49.11	15.32	37.45	61.66	74	-12.34	PK
V	11200	45.83	49.11	15.32	37.45	49.49	54	-4.51	AV
V	16800	56.60	49.19	15.30	40.48	63.19	74	-10.81	PK
V	16800	44.32	49.19	15.30	40.48	50.91	54	-3.09	AV
H	11200	56.48	49.11	15.32	37.45	60.14	74	-13.86	PK
H	11200	44.52	49.11	15.32	37.45	48.18	54	-5.82	AV
H	16800	56.24	49.19	15.30	40.48	62.83	74	-11.17	PK
H	16800	44.20	49.19	15.30	40.48	50.79	54	-3.21	AV
operation frequency:5700									
V	11400	58.53	49.14	15.38	37.49	62.26	74	-11.74	PK
V	11400	45.35	49.14	15.38	37.49	49.08	54	-4.92	AV
V	17100	55.66	49.23	15.36	40.55	62.34	74	-11.66	PK
V	17100	44.14	49.23	15.36	40.55	50.82	54	-3.18	AV
H	11400	58.76	49.14	15.38	37.49	62.49	74	-11.51	PK
H	11400	45.70	49.14	15.38	37.49	49.43	54	-4.57	AV
H	17100	56.37	49.23	15.36	40.55	63.05	74	-10.95	PK
H	17100	44.03	49.23	15.36	40.55	50.71	54	-3.29	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:5510									
V	11020	58.41	49.08	15.27	37.33	61.93	74	-12.07	PK
V	11020	46.72	49.08	15.27	37.33	50.24	54	-3.76	AV
V	16530	57.96	49.13	15.29	40.49	64.61	74	-9.39	PK
V	16530	44.75	49.13	15.29	40.49	51.40	54	-2.60	AV
H	11020	58.05	49.08	15.27	37.33	61.57	74	-12.43	PK
H	11020	46.99	49.08	15.27	37.33	50.51	54	-3.49	AV
H	16530	56.13	49.13	15.29	40.49	62.78	74	-11.22	PK
H	16530	44.66	49.13	15.29	40.49	51.31	54	-2.69	AV
operation frequency:5550									
V	11340	59.42	49.11	15.32	37.45	63.08	74	-10.92	PK
V	11340	46.10	49.11	15.32	37.45	49.76	54	-4.24	AV
V	17010	56.31	49.19	15.30	40.48	62.90	74	-11.10	PK
V	17010	44.66	49.19	15.30	40.48	51.25	54	-2.75	AV
H	11340	59.44	49.11	15.32	37.45	63.10	74	-10.90	PK
H	11340	46.16	49.11	15.32	37.45	49.82	54	-4.18	AV
H	17010	57.03	49.19	15.30	40.48	63.62	74	-10.38	PK
H	17010	44.43	49.19	15.30	40.48	51.02	54	-2.98	AV
operation frequency:5670									
V	11340	59.32	49.14	15.38	37.49	63.05	74	-10.95	PK
V	11340	46.02	49.14	15.38	37.49	49.75	54	-4.25	AV
V	17010	56.22	49.23	15.36	40.55	62.90	74	-11.10	PK
V	17010	44.58	49.23	15.36	40.55	51.26	54	-2.74	AV
H	11340	59.34	49.14	15.38	37.49	63.07	74	-10.93	PK
H	11340	44.86	49.14	15.38	37.49	48.59	54	-5.41	AV
H	17010	55.42	49.23	15.36	40.55	62.10	74	-11.90	PK
H	17010	43.18	49.23	15.36	40.55	49.86	54	-4.14	AV
Remark:									
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit									
2. If peak below the average limit, the average emission was no test.									
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
operation frequency:5510									
V	11020	58.01	49.07	15.33	37.41	61.68	74	-12.32	PK
V	11020	46.40	49.07	15.33	37.41	50.07	54	-3.93	AV
V	16530	57.58	49.17	15.28	40.46	64.15	74	-9.85	PK
V	16530	44.45	49.17	15.28	40.46	51.02	54	-2.98	AV
H	11020	57.67	49.07	15.33	37.41	61.34	74	-12.66	PK
H	11020	46.68	49.07	15.33	37.41	50.35	54	-3.65	AV
H	16530	55.76	49.17	15.28	40.46	62.33	74	-11.67	PK
H	16530	44.36	49.17	15.28	40.46	50.93	54	-3.07	AV
operation frequency:5550									
V	11340	59.01	49.11	15.32	37.45	62.67	74	-11.33	PK
V	11340	45.79	49.11	15.32	37.45	49.45	54	-4.55	AV
V	17010	55.92	49.19	15.30	40.48	62.51	74	-11.49	PK
V	17010	44.36	49.19	15.30	40.48	50.95	54	-3.05	AV
H	11340	59.03	49.11	15.32	37.45	62.69	74	-11.31	PK
H	11340	45.85	49.11	15.32	37.45	49.51	54	-4.49	AV
H	17010	56.64	49.19	15.30	40.48	63.23	74	-10.77	PK
H	17010	44.12	49.19	15.30	40.48	50.71	54	-3.29	AV
operation frequency:5670									
V	11340	58.91	49.14	15.38	37.49	62.64	74	-11.36	PK
V	11340	45.72	49.14	15.38	37.49	49.45	54	-4.55	AV
V	17010	55.83	49.23	15.36	40.55	62.51	74	-11.49	PK
V	17010	44.29	49.23	15.36	40.55	50.97	54	-3.03	AV
H	11340	58.93	49.14	15.38	37.49	62.66	74	-11.34	PK
H	11340	44.56	49.14	15.38	37.49	48.29	54	-5.71	AV
H	17010	55.04	49.23	15.36	40.55	61.72	74	-12.28	PK
H	17010	42.88	49.23	15.36	40.55	49.56	54	-4.44	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5510									
V	11020	57.79	49.07	15.33	37.41	61.46	74	-12.54	PK
V	11020	46.22	49.07	15.33	37.41	49.89	54	-4.11	AV
V	16530	57.34	49.17	15.28	40.46	63.91	74	-10.09	PK
V	16530	44.28	49.17	15.28	40.46	50.85	54	-3.15	AV
H	11020	57.45	49.07	15.33	37.41	61.12	74	-12.88	PK
H	11020	46.49	49.07	15.33	37.41	50.16	54	-3.84	AV
H	16530	55.54	49.17	15.28	40.46	62.11	74	-11.89	PK
H	16530	44.18	49.17	15.28	40.46	50.75	54	-3.25	AV
operation frequency:5550									
V	11340	58.78	49.11	15.32	37.45	62.44	74	-11.56	PK
V	11340	45.62	49.11	15.32	37.45	49.28	54	-4.72	AV
V	17010	55.72	49.19	15.30	40.48	62.31	74	-11.69	PK
V	17010	44.18	49.19	15.30	40.48	50.77	54	-3.23	AV
H	11340	58.80	49.11	15.32	37.45	62.46	74	-11.54	PK
H	11340	45.68	49.11	15.32	37.45	49.34	54	-4.66	AV
H	17010	56.42	49.19	15.30	40.48	63.01	74	-10.99	PK
H	17010	43.95	49.19	15.30	40.48	50.54	54	-3.46	AV
operation frequency:5670									
V	11340	58.68	49.14	15.38	37.49	62.41	74	-11.59	PK
V	11340	45.54	49.14	15.38	37.49	49.27	54	-4.73	AV
V	17010	55.62	49.23	15.36	40.55	62.30	74	-11.70	PK
V	17010	44.11	49.23	15.36	40.55	50.79	54	-3.21	AV
H	11340	58.70	49.14	15.38	37.49	62.43	74	-11.57	PK
H	11340	44.39	49.14	15.38	37.49	48.12	54	-5.88	AV
H	17010	54.83	49.23	15.36	40.55	61.51	74	-12.49	PK
H	17010	42.71	49.23	15.36	40.55	49.39	54	-4.61	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



For MIMO Mode

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Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
operation frequency:5530									
V	11060	59.78	49.11	15.37	37.46	63.50	74	-10.50	PK
V	11060	46.39	49.11	15.37	37.46	50.11	54	-3.89	AV
V	16590	56.65	49.21	15.34	40.51	63.29	74	-10.71	PK
V	16590	44.93	49.21	15.34	40.51	51.57	54	-2.43	AV
H	11060	59.80	49.11	15.37	31.31	57.37	74	-16.63	PK
H	11060	46.45	49.11	15.37	31.31	44.02	54	-9.98	AV
H	16590	57.38	49.21	15.34	40.51	64.02	74	-9.98	PK
H	16590	44.71	49.21	15.34	40.51	51.35	54	-2.65	AV

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operation frequency:5530									
V	11060	59.78	49.11	15.37	37.46	63.50	74	-10.50	PK
V	11060	46.39	49.11	15.37	37.46	50.11	54	-3.89	AV
V	16590	56.65	49.21	15.34	40.51	63.29	74	-10.71	PK
V	16590	44.93	49.21	15.34	40.51	51.57	54	-2.43	AV
H	11060	59.80	49.11	15.37	31.31	57.37	74	-16.63	PK
H	11060	46.45	49.11	15.37	31.31	44.02	54	-9.98	AV
H	16590	57.38	49.21	15.34	40.51	64.02	74	-9.98	PK
H	16590	44.71	49.21	15.34	40.51	51.35	54	-2.65	AV

Remark:

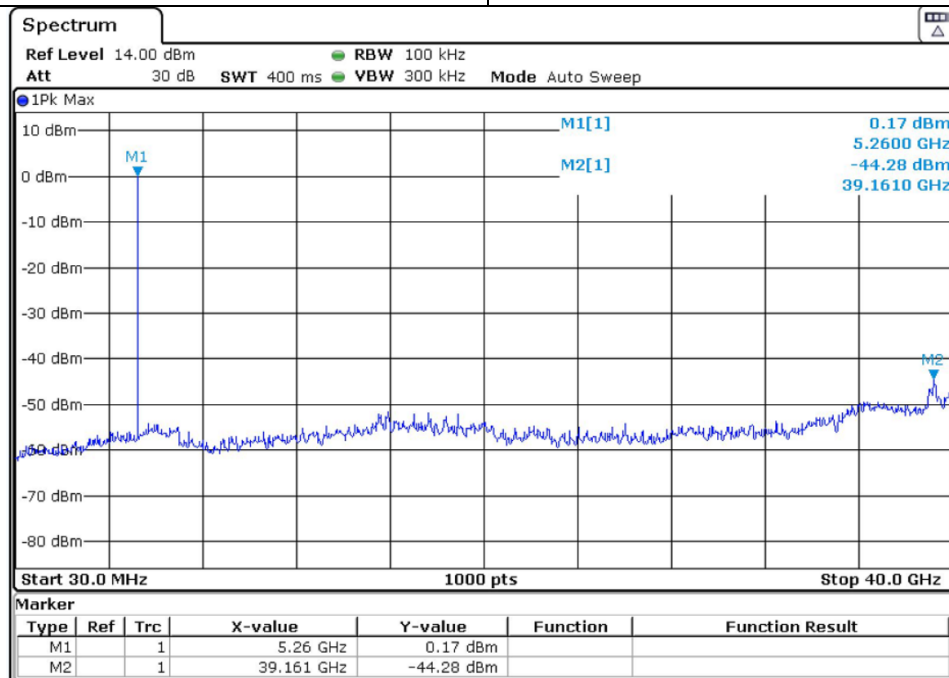
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



For Conducted

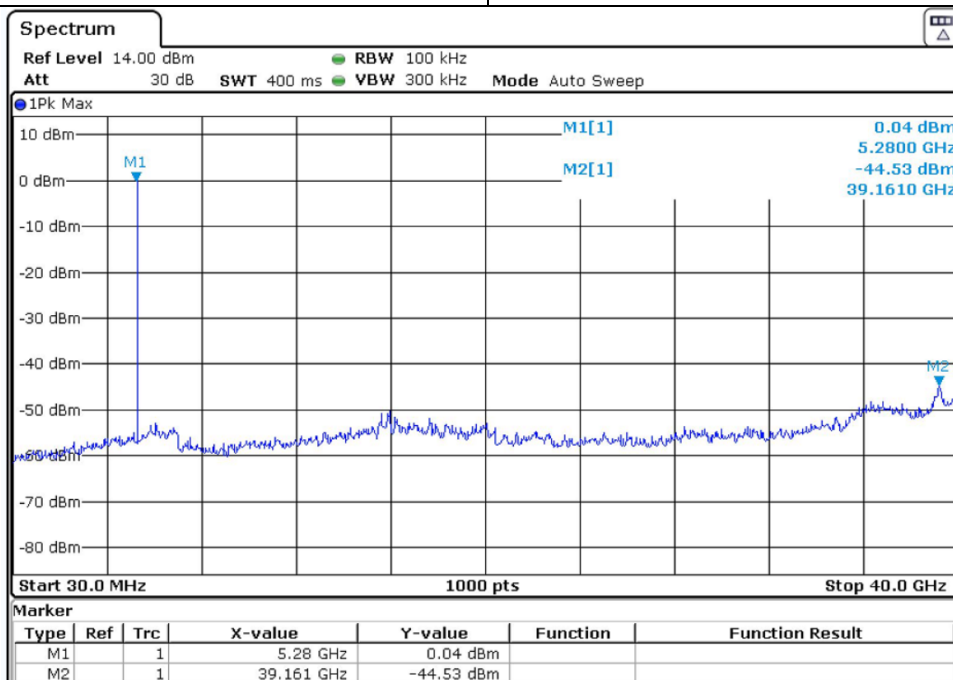
During the test, pre-scan the all modulation and all antenna , the 802.11a, antenna 1 were found to have the worst test results, as reflected in the report.

Test channel:	Band 2/802.11a Lowest channel
Limits(dBm)	-27



0.03Hz~40GHz

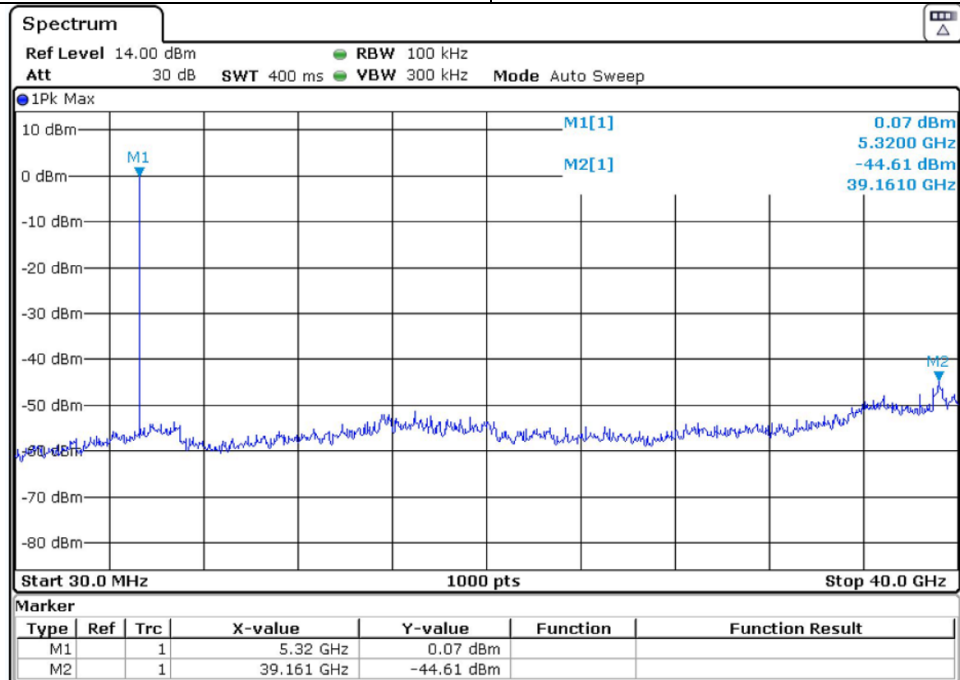
Test channel:	Band 2/802.11a Middle channel
Limits(dBm)	-27



0.03GHz~40GHz



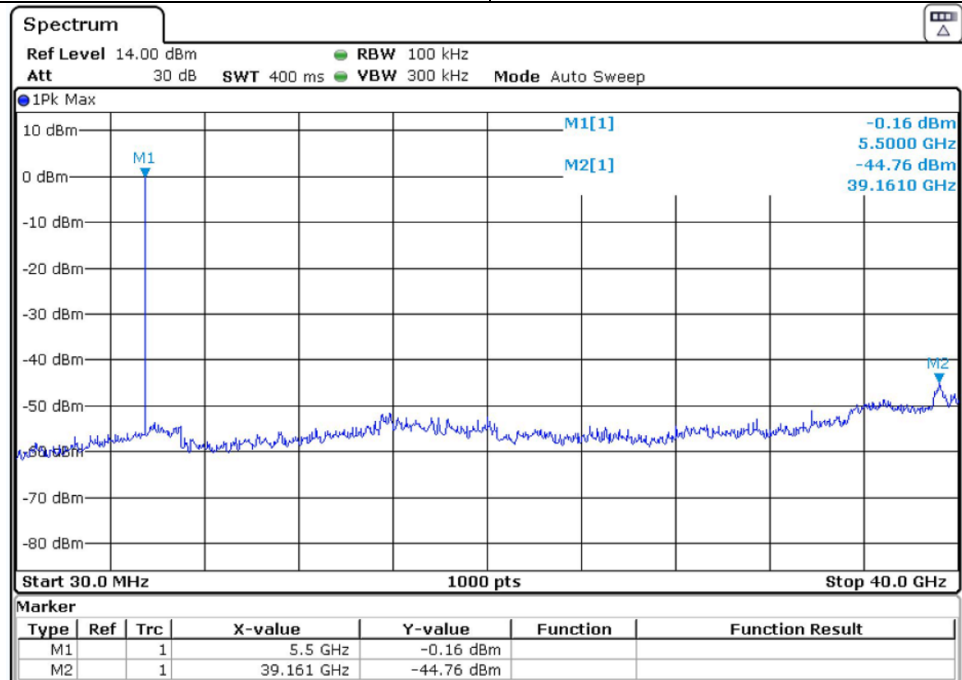
Test channel:	Band 2/802.11a Highest channel
Limits(dBm)	-27



0.03GHz~40GHz

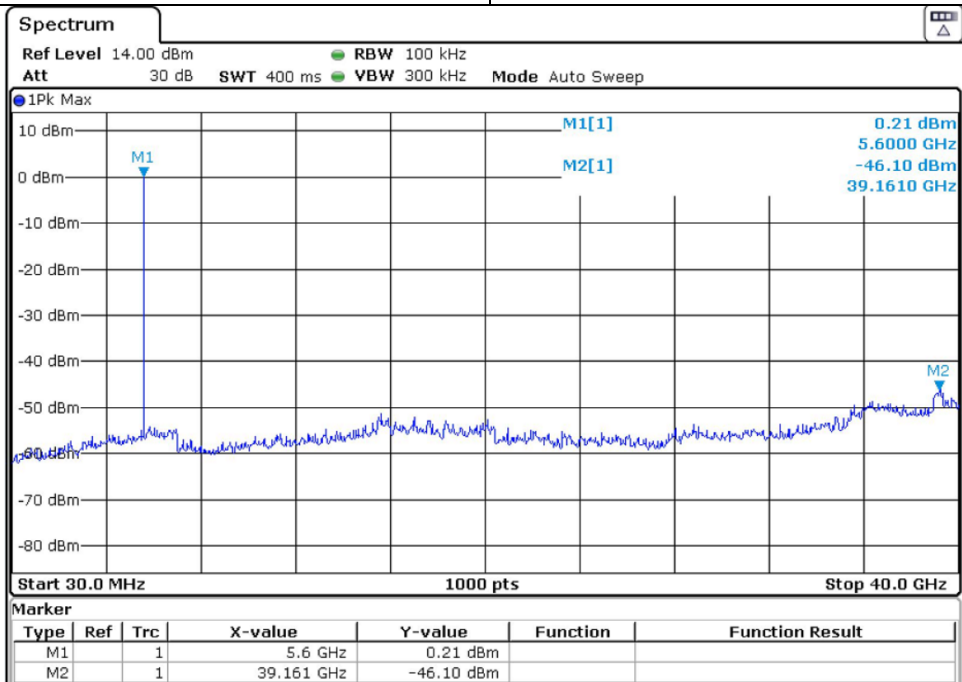


Test channel:	Band 3/802.11a Lowest channel
Limits(dBm)	-27



0.03Hz~40GHz

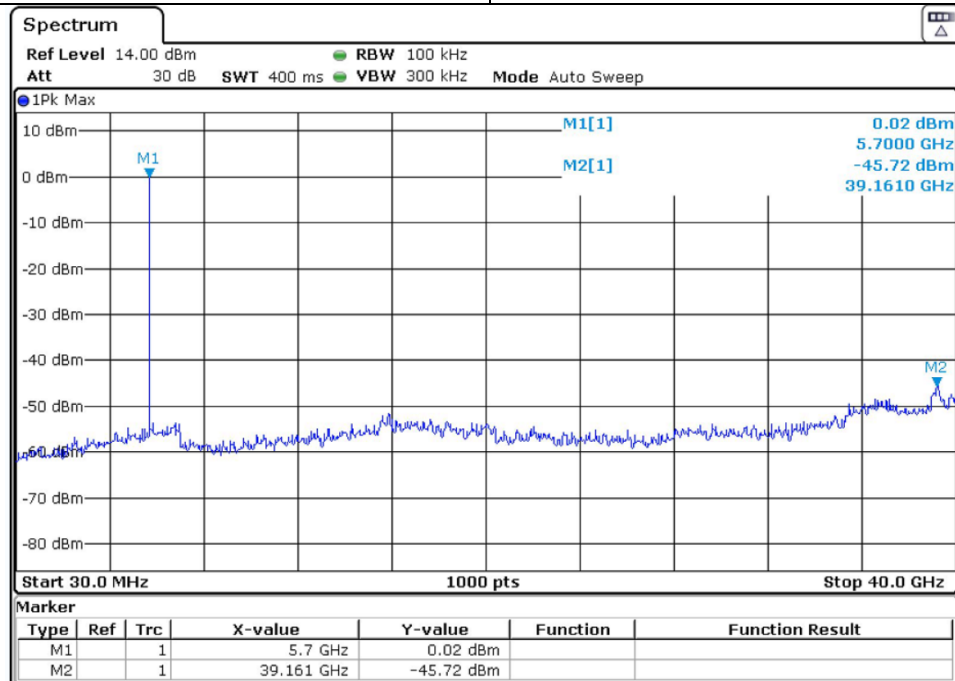
Test channel:	Band 3/802.11a Middle channel
Limits(dBm)	-27



0.03GHz~40GHz



Test channel:	Band 3/802.11a Highest channel
Limits(dBm)	-27



0.03GHz~40GHz



3.3 CONDUCTED BAND EMISSION MEASUREMENT

3.3.1 TEST REQUIREMENT:

FCC Part15 C Section 15.209 and 15.407

(1) 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.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(4) 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.

Spectrum Parameter	Setting	
Attenuation	Auto	
Start Frequency	5150MHz	5725MHz
Stop Frequency	5250MHz	5850MHz
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average	

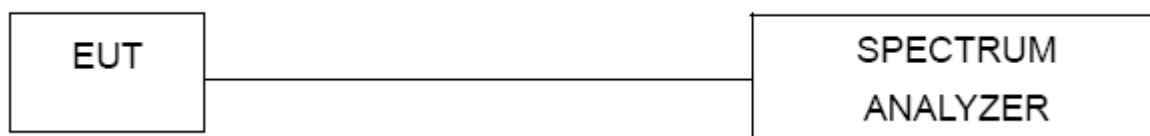
3.3.2 TEST PROCEDURE

Test method: FCC KDB 789033 G)& Parts 15.407(b)(4) & 15.209(a)

3.3.3 DEVIATION FROM TEST STANDARD

No deviation

3.3.4 TEST SETUP



3.3.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

3.3.6 TEST RESULT

For Conducted

Please see annex 3

The test result of ANT1 & ANT 2 are all attenuated 3dB below the limit. So the MIMO mode is passed.



3.4 RADIATED BAND EMISSION MEASUREMENT

3.4.1 TEST REQUIREMENT:

FCC Part15 C Section 15.209 and 15.407

- (1) 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.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) 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.

Spectrum Parameter	Setting	
Attenuation	Auto	
Start Frequency	5150MHz	5725MHz
Stop Frequency	5250MHz	5850MHz
RB / VB (emission in restricted band)	1 MHz / 3 MHz for Peak, 1 MHz / 3MHz for Average	

3.3.2 TEST PROCEDURE

3.2.9 TEST PROCEDURE

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. 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.
- d. 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 (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. 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.

Above 1GHz test procedure as below:

- g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre).
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel

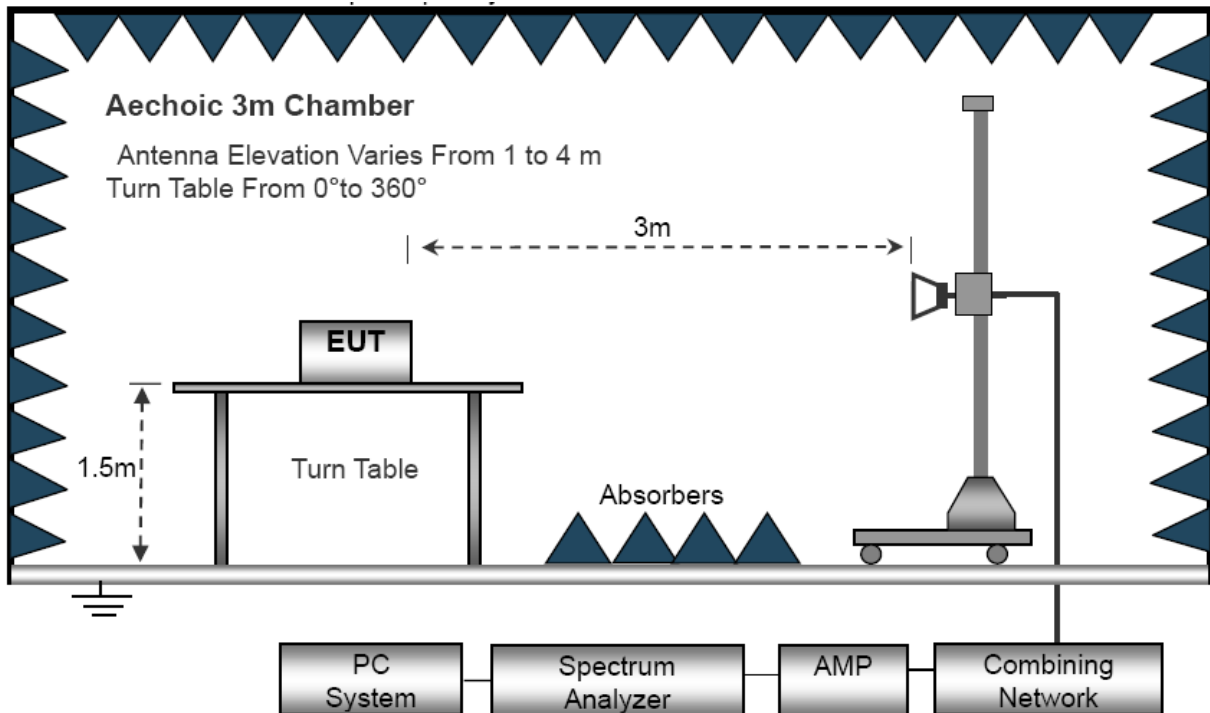
Note:

Both horizontal and vertical antenna polarities were tested and performed pretest to all antenna.

3.3.3 DEVIATION FROM TEST STANDARD

No deviation

3.3.4 TEST SETUP



3.3.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

3.3.6 TEST RESULT

For 802.11ac/ax/n mode, the MIMO mode was worst and the data recording in the report.



Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
ANTENNA 1 802.11a band 1 operation frequency:5260									
V	5132.00	51.70	46.38	12.43	35.65	53.40	68.2	-14.80	PK
V	5132.00	40.25	46.38	12.43	35.65	41.95	54	-12.05	AV
V	5150.00	51.90	46.56	12.47	35.76	53.57	68.2	-14.63	PK
V	5150.00	40.52	46.56	12.47	35.76	42.19	54	-11.81	AV
H	5132.00	51.33	46.38	12.43	35.65	53.03	68.2	-15.17	PK
H	5132.00	40.42	46.38	12.43	35.65	42.12	54	-11.88	AV
H	5150.00	51.45	46.56	12.47	35.76	53.12	68.2	-15.08	PK
H	5150.00	40.03	46.56	12.47	35.76	41.70	54	-12.30	AV
ANTENNA 1 802.11a band 1 operation frequency:5320									
V	5350.00	56.82	46.55	12.65	35.87	58.79	68.2	-9.41	PK
V	5350.00	42.34	46.55	12.65	35.87	44.31	54	-9.69	AV
V	5364.00	56.47	46.58	12.67	35.93	58.49	68.2	-9.71	PK
V	5364.00	42.32	46.58	12.67	35.93	44.34	54	-9.66	AV
H	5350.00	56.28	46.55	12.65	35.87	58.25	68.2	-9.95	PK
H	5350.00	42.56	46.55	12.65	35.87	44.53	54	-9.47	AV
H	5364.00	55.72	46.58	12.67	35.93	57.74	68.2	-10.46	PK
H	5364.00	42.49	46.58	12.67	35.93	44.51	54	-9.49	AV
ANTENNA 2 802.11a band 1 operation frequency:5260									
V	5132.00	51.26	46.38	12.43	35.65	52.96	68.2	-15.24	PK
V	5132.00	39.90	46.38	12.43	35.65	41.60	54	-12.40	AV
V	5150.00	51.44	46.56	12.47	35.76	53.11	68.2	-15.09	PK
V	5150.00	40.17	46.56	12.47	35.76	41.84	54	-12.16	AV
H	5132.00	51.88	46.38	12.43	35.65	53.58	68.2	-14.62	PK
H	5132.00	40.06	46.38	12.43	35.65	41.76	54	-12.24	AV
H	5150.00	50.97	46.56	12.47	35.76	52.64	68.2	-15.56	PK
H	5150.00	40.68	46.56	12.47	35.76	42.35	54	-11.65	AV
ANTENNA 2 802.11a band 1 operation frequency:5320									
V	5350.00	56.35	46.55	12.65	35.87	58.32	68.2	-9.88	PK
V	5350.00	42.98	46.55	12.65	35.87	44.95	54	-9.05	AV
V	5364.00	54.99	46.58	12.67	35.93	57.01	68.2	-11.19	PK
V	5364.00	42.98	46.58	12.67	35.93	45.00	54	-9.00	AV
H	5350.00	55.83	46.55	12.65	35.87	57.80	68.2	-10.40	PK
H	5350.00	43.19	46.55	12.65	35.87	45.16	54	-8.84	AV
H	5364.00	56.26	46.58	12.67	35.93	58.28	68.2	-9.92	PK
H	5364.00	43.15	46.58	12.67	35.93	45.17	54	-8.83	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



For MIMO mode

Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
802.11ac20 operation frequency:5260									
V	5132.00	51.83	46.38	12.43	35.65	53.53	68.2	-14.67	PK
V	5132.00	40.36	46.38	12.43	35.65	42.06	54	-11.94	AV
V	5150.00	51.01	46.56	12.47	35.76	52.68	68.2	-15.52	PK
V	5150.00	41.61	46.56	12.47	35.76	43.28	54	-10.72	AV
H	5132.00	51.44	46.38	12.43	35.65	53.14	68.2	-15.06	PK
H	5132.00	40.52	46.38	12.43	35.65	42.22	54	-11.78	AV
H	5150.00	51.56	46.56	12.47	35.76	53.23	68.2	-14.97	PK
H	5150.00	40.11	46.56	12.47	35.76	41.78	54	-12.22	AV
802.11ac20 operation frequency:5320									
V	5350.00	55.94	46.55	12.65	35.87	57.91	68.2	-10.29	PK
V	5350.00	43.44	46.55	12.65	35.87	45.41	54	-8.59	AV
V	5364.00	55.58	46.58	12.67	35.93	57.60	68.2	-10.60	PK
V	5364.00	42.41	46.58	12.67	35.93	44.43	54	-9.57	AV
H	5350.00	55.40	46.55	12.65	35.87	57.37	68.2	-10.83	PK
H	5350.00	43.65	46.55	12.65	35.87	45.62	54	-8.38	AV
H	5364.00	55.84	46.58	12.67	35.93	57.86	68.2	-10.34	PK
H	5364.00	42.58	46.58	12.67	35.93	44.60	54	-9.40	AV
802.11ax20 band 1 operation frequency:5260									
V	5132.00	51.48	46.38	12.43	35.65	53.18	68.2	-15.02	PK
V	5132.00	40.08	46.38	12.43	35.65	41.78	54	-12.22	AV
V	5150.00	51.67	46.56	12.47	35.76	53.34	68.2	-14.86	PK
V	5150.00	40.35	46.56	12.47	35.76	42.02	54	-11.98	AV
H	5132.00	51.11	46.38	12.43	35.65	52.81	68.2	-15.39	PK
H	5132.00	40.24	46.38	12.43	35.65	41.94	54	-12.06	AV
H	5150.00	51.21	46.56	12.47	35.76	52.88	68.2	-15.32	PK
H	5150.00	40.85	46.56	12.47	35.76	42.52	54	-11.48	AV
802.11ax20 band 1 operation frequency:5320									
V	5350.00	55.59	46.55	12.65	35.87	57.56	68.2	-10.64	PK
V	5350.00	43.16	46.55	12.65	35.87	45.13	54	-8.87	AV
V	5364.00	56.23	46.58	12.67	35.93	58.25	68.2	-9.95	PK
V	5364.00	42.15	46.58	12.67	35.93	44.17	54	-9.83	AV
H	5350.00	56.06	46.55	12.65	35.87	58.03	68.2	-10.17	PK
H	5350.00	43.38	46.55	12.65	35.87	45.35	54	-8.65	AV
H	5364.00	56.48	46.58	12.67	35.93	58.50	68.2	-9.70	PK
H	5364.00	43.33	46.58	12.67	35.93	45.35	54	-8.65	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
802.11n HT20 operation frequency:5260									
V	5132.00	51.76	46.38	12.43	35.65	53.46	68.2	-14.74	PK
V	5132.00	40.51	46.38	12.43	35.65	42.21	54	-11.79	AV
V	5150.00	51.27	46.56	12.47	35.76	52.94	68.2	-15.26	PK
V	5150.00	40.12	46.56	12.47	35.76	41.79	54	-12.21	AV
H	5132.00	51.68	46.38	12.43	35.65	53.38	68.2	-14.82	PK
H	5132.00	40.14	46.38	12.43	35.65	41.84	54	-12.16	AV
H	5150.00	51.12	46.56	12.47	35.76	52.79	68.2	-15.41	PK
H	5150.00	40.15	46.56	12.47	35.76	41.82	54	-12.18	AV
802.11n HT20 operation frequency:5320									
V	5350.00	55.57	46.55	12.65	35.87	57.54	68.2	-10.66	PK
V	5350.00	43.45	46.55	12.65	35.87	45.42	54	-8.58	AV
V	5364.00	55.34	46.58	12.67	35.93	57.36	68.2	-10.84	PK
V	5364.00	43.26	46.58	12.67	35.93	45.28	54	-8.72	AV
H	5350.00	56.61	46.55	12.65	35.87	58.58	68.2	-9.62	PK
H	5350.00	43.46	46.55	12.65	35.87	45.43	54	-8.57	AV
H	5364.00	56.34	46.58	12.67	35.93	58.36	68.2	-9.84	PK
H	5364.00	43.05	46.58	12.67	35.93	45.07	54	-8.93	AV

802.11ac 40 operation frequency:5270									
V	5132.00	51.78	46.38	12.43	35.65	53.48	68.2	-14.72	PK
V	5132.00	40.86	46.38	12.43	35.65	42.56	54	-11.44	AV
V	5150.00	51.23	46.56	12.47	35.76	52.90	68.2	-15.30	PK
V	5150.00	40.91	46.56	12.47	35.76	42.58	54	-11.42	AV
H	5132.00	51.64	46.38	12.43	35.65	53.34	68.2	-14.86	PK
H	5132.00	40.92	46.38	12.43	35.65	42.62	54	-11.38	AV
H	5150.00	51.58	46.56	12.47	35.76	53.25	68.2	-14.95	PK
H	5150.00	40.29	46.56	12.47	35.76	41.96	54	-12.04	AV
802.11ac 40 operation frequency:5310									
V	5350.00	56.21	46.55	12.65	35.87	58.18	68.2	-10.02	PK
V	5350.00	43.03	46.55	12.65	35.87	45.00	54	-9.00	AV
V	5364.00	56.33	46.58	12.67	35.93	58.35	68.2	-9.85	PK
V	5364.00	43.86	46.58	12.67	35.93	45.88	54	-8.12	AV
H	5350.00	55.38	46.55	12.65	35.87	57.35	68.2	-10.85	PK
H	5350.00	42.40	46.55	12.65	35.87	44.37	54	-9.63	AV
H	5364.00	55.32	46.58	12.67	35.93	57.34	68.2	-10.86	PK
H	5364.00	42.40	46.58	12.67	35.93	44.42	54	-9.58	AV

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
802.11ax 40 operation frequency:5270									
V	5132.00	51.37	46.38	12.43	35.65	53.07	68.2	-15.13	PK
V	5132.00	40.54	46.38	12.43	35.65	42.24	54	-11.76	AV
V	5150.00	51.84	46.56	12.47	35.76	53.51	68.2	-14.69	PK
V	5150.00	40.61	46.56	12.47	35.76	42.28	54	-11.72	AV
H	5132.00	51.24	46.38	12.43	35.65	52.94	68.2	-15.26	PK
H	5132.00	40.60	46.38	12.43	35.65	42.30	54	-11.70	AV
H	5150.00	51.19	46.56	12.47	35.76	52.86	68.2	-15.34	PK
H	5150.00	40.49	46.56	12.47	35.76	42.16	54	-11.84	AV
802.11ax 40 operation frequency:5310									
V	5350.00	55.81	46.55	12.65	35.87	57.78	68.2	-10.42	PK
V	5350.00	42.72	46.55	12.65	35.87	44.69	54	-9.31	AV
V	5364.00	54.95	46.58	12.67	35.93	56.97	68.2	-11.23	PK
V	5364.00	42.56	46.58	12.67	35.93	44.58	54	-9.42	AV
H	5350.00	55.98	46.55	12.65	35.87	57.95	68.2	-10.25	PK
H	5350.00	43.08	46.55	12.65	35.87	45.05	54	-8.95	AV
H	5364.00	55.93	46.58	12.67	35.93	57.95	68.2	-10.25	PK
H	5364.00	42.29	46.58	12.67	35.93	44.31	54	-9.69	AV

802.11n HT40 operation frequency:5270									
V	5132.00	51.09	46.38	12.43	35.65	52.79	68.2	-15.41	PK
V	5132.00	40.30	46.38	12.43	35.65	42.00	54	-12.00	AV
V	5150.00	51.56	46.56	12.47	35.76	53.23	68.2	-14.97	PK
V	5150.00	40.39	46.56	12.47	35.76	42.06	54	-11.94	AV
H	5132.00	50.96	46.38	12.43	35.65	52.66	68.2	-15.54	PK
H	5132.00	40.37	46.38	12.43	35.65	42.07	54	-11.93	AV
H	5150.00	51.91	46.56	12.47	35.76	53.58	68.2	-14.62	PK
H	5150.00	40.26	46.56	12.47	35.76	41.93	54	-12.07	AV
802.11n HT40 operation frequency:5310									
V	5350.00	55.51	46.55	12.65	35.87	57.48	68.2	-10.72	PK
V	5350.00	42.50	46.55	12.65	35.87	44.47	54	-9.53	AV
V	5364.00	55.68	46.58	12.67	35.93	57.70	68.2	-10.50	PK
V	5364.00	42.34	46.58	12.67	35.93	44.36	54	-9.64	AV
H	5350.00	55.70	46.55	12.65	35.87	57.67	68.2	-10.53	PK
H	5350.00	42.86	46.55	12.65	35.87	44.83	54	-9.17	AV
H	5364.00	55.66	46.58	12.67	35.93	57.68	68.2	-10.52	PK
H	5364.00	42.47	46.58	12.67	35.93	44.49	54	-9.51	AV

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
802.11ac 80 operation frequency:5290									
V	5132.00	51.78	46.38	12.43	35.65	57.53	68.2	-14.72	PK
V	5132.00	40.86	46.38	12.43	35.65	42.60	54	-11.44	AV
V	5150.00	51.23	46.56	12.47	35.76	56.95	68.2	-15.30	PK
V	5150.00	40.91	46.56	12.47	35.76	42.62	54	-11.42	AV
H	5132.00	51.64	46.38	12.43	35.65	57.39	68.2	-14.86	PK
H	5132.00	40.92	46.38	12.43	35.65	42.66	54	-11.38	AV
H	5150.00	51.58	46.56	12.47	35.76	57.30	68.2	-14.95	PK
H	5150.00	40.29	46.56	12.47	35.76	43.00	54	-12.04	AV
V	5350.00	55.41	46.55	12.65	35.87	59.18	68.2	-10.82	PK
V	5350.00	43.11	46.55	12.65	35.87	43.87	54	-8.92	AV
V	5364.00	55.30	46.58	12.67	35.93	61.99	68.2	-10.88	PK
V	5364.00	42.66	46.58	12.67	35.93	47.34	54	-9.32	AV
H	5350.00	55.43	46.55	12.65	35.87	53.05	68.2	-10.80	PK
H	5350.00	42.17	46.55	12.65	35.87	37.78	54	-9.86	AV
H	5364.00	56.02	46.58	12.67	35.93	62.71	68.2	-10.16	PK
H	5364.00	42.44	46.58	12.67	35.93	48.12	54	-9.54	AV

802.11ax 80 operation frequency:5290									
V	5132.00	51.73	46.38	12.43	35.65	53.43	68.2	-14.77	PK
V	5132.00	40.82	46.38	12.43	35.65	42.52	54	-11.48	AV
V	5150.00	51.18	46.56	12.47	35.76	52.85	68.2	-15.35	PK
V	5150.00	40.87	46.56	12.47	35.76	42.54	54	-11.46	AV
H	5132.00	51.59	46.38	12.43	35.65	53.29	68.2	-14.91	PK
H	5132.00	40.88	46.38	12.43	35.65	42.58	54	-11.42	AV
H	5150.00	51.53	46.56	12.47	35.76	53.20	68.2	-15.00	PK
H	5150.00	41.25	46.56	12.47	35.76	42.92	54	-11.08	AV
V	5350.00	55.36	46.55	12.65	35.87	57.33	68.2	-10.87	PK
V	5350.00	43.07	46.55	12.65	35.87	45.04	54	-8.96	AV
V	5364.00	55.25	46.58	12.67	35.93	57.27	68.2	-10.93	PK
V	5364.00	43.62	46.58	12.67	35.93	45.64	54	-8.36	AV
H	5350.00	55.38	46.55	12.65	35.87	57.35	68.2	-10.85	PK
H	5350.00	43.13	46.55	12.65	35.87	45.10	54	-8.90	AV
H	5364.00	55.96	46.58	12.67	35.93	57.98	68.2	-10.22	PK
H	5364.00	43.40	46.58	12.67	35.93	45.42	54	-8.58	AV



band 3

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
ANTENNA 1 802.11a operation frequency:5500									
V	5460.00	50.98	47.36	13.18	36.26	53.06	68.2	-15.14	PK
V	5460.00	40.52	47.36	13.18	36.26	42.60	54	-11.40	AV
V	5470.00	51.78	47.38	13.20	36.29	53.89	68.2	-14.31	PK
V	5470.00	41.01	47.38	13.20	36.29	43.12	54	-10.88	AV
H	5460.00	51.33	47.36	13.18	36.26	53.41	68.2	-14.79	PK
H	5460.00	41.75	47.36	13.18	36.26	43.83	54	-10.17	AV
H	5470.00	51.03	47.38	13.20	36.29	53.14	68.2	-15.06	PK
H	5470.00	40.47	47.38	13.20	36.29	42.58	54	-11.42	AV
ANTENNA 1 802.11a operation frequency:5700									
V	5725.00	51.84	48.32	15.24	37.37	56.13	68.2	-12.07	PK
V	5725.00	40.85	48.32	15.24	37.37	45.14	54	-8.86	AV
V	5728.00	51.15	48.36	15.27	37.39	55.45	74	-18.55	PK
V	5728.00	41.57	48.36	15.27	37.39	45.87	54	-8.13	AV
H	5725.00	51.74	48.32	15.24	37.37	56.03	68.2	-12.17	PK
H	5725.00	40.85	48.32	15.24	37.37	45.14	54	-8.86	AV
H	5728.00	50.97	48.36	15.27	37.39	55.27	74	-18.73	PK
H	5728.00	40.55	48.36	15.27	37.39	44.85	54	-9.15	AV
ANTENNA 2 802.11a operation frequency:5500									
V	5460.00	51.75	47.36	13.18	36.26	53.83	68.2	-14.37	PK
V	5460.00	41.34	47.36	13.18	36.26	43.42	54	-10.58	AV
V	5470.00	51.55	47.38	13.20	36.29	53.66	68.2	-14.54	PK
V	5470.00	40.83	47.38	13.20	36.29	42.94	54	-11.06	AV
H	5460.00	51.11	47.36	13.18	36.26	53.19	68.2	-15.01	PK
H	5460.00	41.57	47.36	13.18	36.26	43.65	54	-10.35	AV
H	5470.00	51.79	47.38	13.20	36.29	53.90	68.2	-14.30	PK
H	5470.00	40.30	47.38	13.20	36.29	42.41	54	-11.59	AV
ANTENNA 2 802.11a operation frequency:5700									
V	5725.00	51.61	48.32	15.24	37.37	55.90	68.2	-12.30	PK
V	5725.00	41.66	48.32	15.24	37.37	45.95	54	-8.05	AV
V	5728.00	50.91	48.36	15.27	37.39	55.21	74	-18.79	PK
V	5728.00	40.39	48.36	15.27	37.39	44.69	54	-9.31	AV
H	5725.00	51.51	48.32	15.24	37.37	55.80	68.2	-12.40	PK
H	5725.00	41.66	48.32	15.24	37.37	45.95	54	-8.05	AV
H	5728.00	51.74	48.36	15.27	37.39	56.04	74	-17.96	PK
H	5728.00	40.39	48.36	15.27	37.39	44.69	54	-9.31	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



For MIMO mode

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
802.11ac 20 operation frequency:5500									
V	5460.00	51.33	47.36	13.18	36.26	53.41	68.2	-14.79	PK
V	5460.00	41.80	47.36	13.18	36.26	43.88	54	-10.12	AV
V	5470.00	51.12	47.38	13.20	36.29	53.23	68.2	-14.97	PK
V	5470.00	40.28	47.38	13.20	36.29	42.39	54	-11.61	AV
H	5460.00	51.68	47.36	13.18	36.26	53.76	68.2	-14.44	PK
H	5460.00	40.03	47.36	13.18	36.26	42.11	54	-11.89	AV
H	5470.00	51.39	47.38	13.20	36.29	53.50	68.2	-14.70	PK
H	5470.00	40.74	47.38	13.20	36.29	42.85	54	-11.15	AV
802.11ac 20 operation frequency:5700									
V	5725.00	51.20	48.32	15.24	37.37	55.49	68.2	-12.71	PK
V	5725.00	41.12	48.32	15.24	37.37	45.41	54	-8.59	AV
V	5728.00	51.51	48.36	15.27	37.39	55.81	74	-18.19	PK
V	5728.00	40.83	48.36	15.27	37.39	45.13	54	-8.87	AV
H	5725.00	51.09	48.32	15.24	37.37	55.38	68.2	-12.82	PK
H	5725.00	40.12	48.32	15.24	37.37	44.41	54	-9.59	AV
H	5728.00	51.32	48.36	15.27	37.39	55.62	74	-18.38	PK
H	5728.00	40.82	48.36	15.27	37.39	45.12	54	-8.88	AV
802.11ax 20 operation frequency:5500									
V	5460.00	50.93	47.36	13.18	36.26	53.01	68.2	-15.19	PK
V	5460.00	41.48	47.36	13.18	36.26	43.56	54	-10.44	AV
V	5470.00	51.73	47.38	13.20	36.29	53.84	68.2	-14.36	PK
V	5470.00	40.97	47.38	13.20	36.29	43.08	54	-10.92	AV
H	5460.00	51.28	47.36	13.18	36.26	53.36	68.2	-14.84	PK
H	5460.00	41.71	47.36	13.18	36.26	43.79	54	-10.21	AV
H	5470.00	50.98	47.38	13.20	36.29	53.09	68.2	-15.11	PK
H	5470.00	40.44	47.38	13.20	36.29	42.55	54	-11.45	AV
802.11ax 20 operation frequency:5700									
V	5725.00	51.79	48.32	15.24	37.37	56.08	68.2	-12.12	PK
V	5725.00	40.81	48.32	15.24	37.37	45.10	54	-8.90	AV
V	5728.00	51.10	48.36	15.27	37.39	55.40	74	-18.60	PK
V	5728.00	41.53	48.36	15.27	37.39	45.83	54	-8.17	AV
H	5725.00	51.69	48.32	15.24	37.37	55.98	68.2	-12.22	PK
H	5725.00	40.81	48.32	15.24	37.37	45.10	54	-8.90	AV
H	5728.00	50.92	48.36	15.27	37.39	55.22	74	-18.78	PK
H	5728.00	40.52	48.36	15.27	37.39	44.82	54	-9.18	AV
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit 2. If peak below the average limit, the average emission was no test. 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.									



Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
802.11n HT20 operation frequency:5500									
V	5460.00	51.17	47.36	13.18	36.26	53.25	68.2	-14.95	PK
V	5460.00	41.86	47.36	13.18	36.26	43.94	54	-10.06	AV
V	5470.00	51.54	47.38	13.20	36.29	53.65	68.2	-14.55	PK
V	5470.00	41.41	47.38	13.20	36.29	43.52	54	-10.48	AV
H	5460.00	51.82	47.36	13.18	36.26	53.90	68.2	-14.30	PK
H	5460.00	41.79	47.36	13.18	36.26	43.87	54	-10.13	AV
H	5470.00	51.68	47.38	13.20	36.29	53.79	68.2	-14.41	PK
H	5470.00	41.22	47.38	13.20	36.29	43.33	54	-10.67	AV
802.11n HT20 operation frequency:5700									
V	5725.00	51.65	48.32	15.24	37.37	55.94	68.2	-12.26	PK
V	5725.00	40.44	48.32	15.24	37.37	44.73	54	-9.27	AV
V	5728.00	51.76	48.36	15.27	37.39	56.06	74	-17.94	PK
V	5728.00	41.23	48.36	15.27	37.39	45.53	54	-8.47	AV
H	5725.00	51.88	48.32	15.24	37.37	56.17	68.2	-12.03	PK
H	5725.00	41.80	48.32	15.24	37.37	46.09	54	-7.91	AV
H	5728.00	51.48	48.36	15.27	37.39	55.78	74	-18.22	PK
H	5728.00	41.12	48.36	15.27	37.39	45.42	54	-8.58	AV

802.11ac 40 operation frequency:5510									
V	5460.00	51.53	47.36	13.18	36.26	53.61	68.2	-14.59	PK
V	5460.00	41.82	47.36	13.18	36.26	43.90	54	-10.10	AV
V	5470.00	51.08	47.38	13.20	36.29	53.19	68.2	-15.01	PK
V	5470.00	41.84	47.38	13.20	36.29	43.95	54	-10.05	AV
H	5460.00	51.17	47.36	13.18	36.26	53.25	68.2	-14.95	PK
H	5460.00	41.09	47.36	13.18	36.26	43.17	54	-10.83	AV
H	5470.00	51.24	47.38	13.20	36.29	53.35	68.2	-14.85	PK
H	5470.00	40.75	47.38	13.20	36.29	42.86	54	-11.14	AV
802.11ac 40 operation frequency:5670									
V	5725.00	51.54	48.32	15.24	37.37	55.83	68.2	-12.37	PK
V	5725.00	41.20	48.32	15.24	37.37	45.49	54	-8.51	AV
V	5728.00	51.42	48.36	15.27	37.39	55.72	74	-18.28	PK
V	5728.00	41.75	48.36	15.27	37.39	46.05	54	-7.95	AV
H	5725.00	51.56	48.32	15.24	37.37	55.85	68.2	-12.35	PK
H	5725.00	40.26	48.32	15.24	37.37	44.55	54	-9.45	AV
H	5728.00	51.14	48.36	15.27	37.39	55.44	74	-18.56	PK
H	5728.00	40.52	48.36	15.27	37.39	44.82	54	-9.18	AV

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
802.11ax 40 operation frequency:5510									
V	5460.00	51.13	47.36	13.18	36.26	53.21	68.2	-14.99	PK
V	5460.00	41.50	47.36	13.18	36.26	43.58	54	-10.42	AV
V	5470.00	51.69	47.38	13.20	36.29	53.80	68.2	-14.40	PK
V	5470.00	40.54	47.38	13.20	36.29	42.65	54	-11.35	AV
H	5460.00	51.78	47.36	13.18	36.26	53.86	68.2	-14.34	PK
H	5460.00	40.78	47.36	13.18	36.26	42.86	54	-11.14	AV
H	5470.00	51.86	47.38	13.20	36.29	53.97	68.2	-14.23	PK
H	5470.00	41.45	47.38	13.20	36.29	43.56	54	-10.44	AV
802.11ax 40 operation frequency:5670									
V	5725.00	51.11	48.32	15.24	37.37	55.40	68.2	-12.80	PK
V	5725.00	40.89	48.32	15.24	37.37	45.18	54	-8.82	AV
V	5728.00	51.03	48.36	15.27	37.39	55.33	74	-18.67	PK
V	5728.00	40.45	48.36	15.27	37.39	44.75	54	-9.25	AV
H	5725.00	51.15	48.32	15.24	37.37	55.44	68.2	-12.76	PK
H	5725.00	40.95	48.32	15.24	37.37	45.24	54	-8.76	AV
H	5728.00	51.75	48.36	15.27	37.39	56.05	74	-17.95	PK
H	5728.00	40.21	48.36	15.27	37.39	44.51	54	-9.49	AV

802.11n HT40 operation frequency:5510									
V	5460.00	50.90	47.36	13.18	36.26	52.98	68.2	-15.22	PK
V	5460.00	40.32	47.36	13.18	36.26	42.40	54	-11.60	AV
V	5470.00	51.45	47.38	13.20	36.29	53.56	68.2	-14.64	PK
V	5470.00	41.37	47.38	13.20	36.29	43.48	54	-10.52	AV
H	5460.00	51.56	47.36	13.18	36.26	53.64	68.2	-14.56	PK
H	5460.00	41.59	47.36	13.18	36.26	43.67	54	-10.33	AV
H	5470.00	51.64	47.38	13.20	36.29	53.75	68.2	-14.45	PK
H	5470.00	40.27	47.38	13.20	36.29	42.38	54	-11.62	AV
802.11n HT40 operation frequency:5670									
V	5725.00	50.92	48.32	15.24	37.37	55.21	68.2	-12.99	PK
V	5725.00	41.71	48.32	15.24	37.37	46.00	54	-8.00	AV
V	5728.00	51.82	48.36	15.27	37.39	56.12	74	-17.88	PK
V	5728.00	41.27	48.36	15.27	37.39	45.57	54	-8.43	AV
H	5725.00	50.92	48.32	15.24	37.37	55.21	68.2	-12.99	PK
H	5725.00	40.77	48.32	15.24	37.37	45.06	54	-8.94	AV
H	5728.00	51.53	48.36	15.27	37.39	55.83	74	-18.17	PK
H	5728.00	40.04	48.36	15.27	37.39	44.34	54	-9.66	AV

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



Polar (H/V)	Frequency (MHz)	Meter Reading (dBUV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector Type
802.11ac 80 operation frequency:5530									
V	5460.00	51.73	47.36	13.18	36.26	53.81	68.2	-14.39	PK
V	5460.00	40.82	47.36	13.18	36.26	42.90	54	-11.10	AV
V	5470.00	51.18	47.38	13.20	36.29	53.29	68.2	-14.91	PK
V	5470.00	40.87	47.38	13.20	36.29	42.98	54	-11.02	AV
H	5460.00	51.59	47.36	13.18	36.26	53.67	68.2	-14.53	PK
H	5460.00	40.88	47.36	13.18	36.26	42.96	54	-11.04	AV
H	5470.00	51.53	47.38	13.20	36.29	53.64	68.2	-14.56	PK
H	5470.00	41.25	47.38	13.20	36.29	43.36	54	-10.64	AV
V	5725.00	51.36	48.32	15.24	37.37	55.65	68.2	-12.55	PK
V	5725.00	40.07	48.32	15.24	37.37	44.36	54	-9.64	AV
V	5728.00	51.25	48.36	15.27	37.39	55.55	74	-18.45	PK
V	5728.00	40.62	48.36	15.27	37.39	44.92	54	-9.08	AV
H	5725.00	51.38	48.32	15.24	37.37	55.67	68.2	-12.53	PK
H	5725.00	40.13	48.32	15.24	37.37	44.42	54	-9.58	AV
H	5728.00	50.97	48.36	15.27	37.39	55.27	74	-18.73	PK
H	5728.00	41.40	48.36	15.27	37.39	45.70	54	-8.30	AV

802.11ax 80 operation frequency:5530									
V	5460.00	51.77	47.36	13.18	36.26	53.85	68.2	-14.35	PK
V	5460.00	40.86	47.36	13.18	36.26	42.94	54	-11.06	AV
V	5470.00	51.22	47.38	13.20	36.29	53.33	68.2	-14.87	PK
V	5470.00	40.91	47.38	13.20	36.29	43.02	54	-10.98	AV
H	5460.00	51.63	47.36	13.18	36.26	53.71	68.2	-14.49	PK
H	5460.00	40.92	47.36	13.18	36.26	43.00	54	-11.00	AV
H	5470.00	51.57	47.38	13.20	36.29	53.68	68.2	-14.52	PK
H	5470.00	40.29	47.38	13.20	36.29	42.40	54	-11.60	AV
V	5725.00	50.94	48.32	15.24	37.37	55.23	68.2	-12.97	PK
V	5725.00	40.53	48.32	15.24	37.37	44.82	54	-9.18	AV
V	5728.00	51.80	48.36	15.27	37.39	56.10	74	-17.90	PK
V	5728.00	40.06	48.36	15.27	37.39	44.36	54	-9.64	AV
H	5725.00	50.96	48.32	15.24	37.37	55.25	68.2	-12.95	PK
H	5725.00	40.59	48.32	15.24	37.37	44.88	54	-9.12	AV
H	5728.00	51.53	48.36	15.27	37.39	55.83	74	-18.17	PK
H	5728.00	40.84	48.36	15.27	37.39	45.14	54	-8.86	AV

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



4. PEAK OUTPUT POWER

4.1 APPLIED PROCEDURES / LIMIT

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. 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.

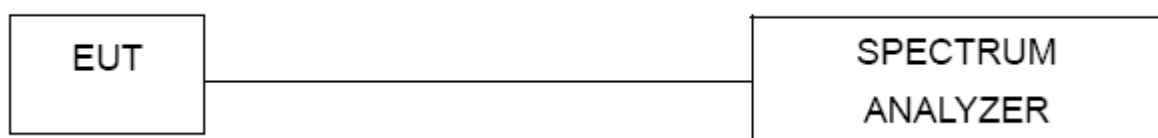
4.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- b. (i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.
(ii) Set RBW = 1 MHz.
(iii) Set VBW $\geq$ 3 MHz.
(iv) Number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$. (This ensures that bin-to-bin spacing is $\leq \text{RBW}/2$, so that narrowband signals are not lost between frequency bins.)
(v) Sweep time = auto.
(vi) Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
(vii) If transmit duty cycle $< 98\%$, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle $\geq 98\%$, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run."
(viii) Trace average at least 100 traces in power averaging (rms) mode.
(ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

4.1.2 DEVIATION FROM STANDARD

No deviation.

4.1.3 TEST SETUP



4.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

4.1.5 TEST RESULTS

Please see annex 3



5. POWER SPECTRAL DENSITY TEST

5.1 APPLIED PROCEDURES / LIMIT

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. 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.

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	= the frequency band of operation
RB	RBW $\geq$ 1MHz for band 2 RBW $\geq$ 510KHz for Band 3
VB	VBW $\geq$ 3RBW
Detector	AVG
Trace	Max Hold
Sweep Time	Auto

5.1.1 TEST PROCEDURE

1. Place the EUT on the table and set it in transmitting mode.
2. The testing follows FCC KDB 789033 D02.
3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to Spectrum.
4. For U-NII1, U-NII-2A, U-NII-2C Band:
Set RBW=1MHz, VBW=3MHz, where span is enough to capture the entire bandwidth, Sweep time = Auto (601 pts), detector = sample, traces 100 sweeps of video averaging. (SA-2 with the omission of procedure x, the integration with 26dB EBW bandwidth)
For U-NII-3 Band:
Set RBW=510 kHz, VBW=3*RBW, where span is enough to capture the entire bandwidth, Sweep time = Auto (601 pts), detector = sample, traces 100 sweeps of video averaging. (SA-2 with the omission of procedure x, the integration with 26dB EBW bandwidth)
5. Use the cursor on spectrum to peak search the highest level of trace
6. Record the max. reading and add 10 log(1/duty cycle).
we test all antennas, the antenna 1 was worst mode and the data recording in the report.
7. Duty factor Reference is made to the test results in Section 7.1.5.

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS



The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

5.1.5 TEST RESULTS

Please see annex 3



6. 6DB&26DB&99% BANDWIDTH TEST

6.1 APPLIED PROCEDURES / LIMIT

The 26 dB bandwidth is used to determine the conducted power limits.

There is no limit bandwidth for U-NII-1, U-NII-2-A and U-NII-2-C.

The minimum of 6dB Bandwidth measurement is 0.5 MHz for U-NII-3

6.1.1 TEST PROCEDURE

6dB Bandwidth	
Spectrum Parameters	Setting
RBW	100KHz
VBW	300KHz
Span	30MHz(20MHz Bandwidth mode) 60MHz(40MHz Bandwidth mode) 120MHz(80MHz Bandwidth mode)
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

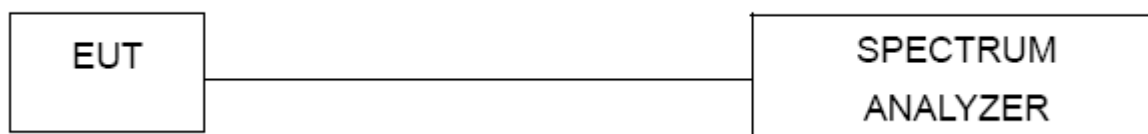
26dB Bandwidth	
Spectrum Parameters	Setting
RBW	approximately 1% of the emission bandwidth
VBW	>RBW
Span	30MHz(20MHz Bandwidth mode) 60MHz(40MHz Bandwidth mode) 120MHz(80MHz Bandwidth mode)
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

99% Occupied Bandwidth	
Spectrum Parameters	Setting
RBW	1% to 5% of the OBW
VBW	Approximately three times the RBW
Span	between 1.5 times and 5.0 times the OBW
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS



The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

6.1.5 TEST RESULTS

Please see annex 3



7. DUTY CYCLE TEST SIGNAL

7.1 APPLIED PROCEDURES / LIMIT

Pre-analysis Check: While conducting average power measurement, duty cycle of each mode shall be checked to ensure its duty cycle in order to compensate for the loss due to insufficient ratio of duty cycle. All duty cycle is pre-scanned, and result as obtained below shows only the most representative ones where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage.

7.1.1 TEST PROCEDURE

1. Set RBW = 1 MHz.
2. Set the video bandwidth (VBW) $\geq$ RBW.
3. Detector = Peak.
4. Sweep = auto couple.
5. Allow the trace to stabilize.
6. Span=0

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP



7.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

7.1.5 TEST RESULTS

Please see annex 3.

8. FREQUENCY STABILITY

8.1 APPLIED PROCEDURES / 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.

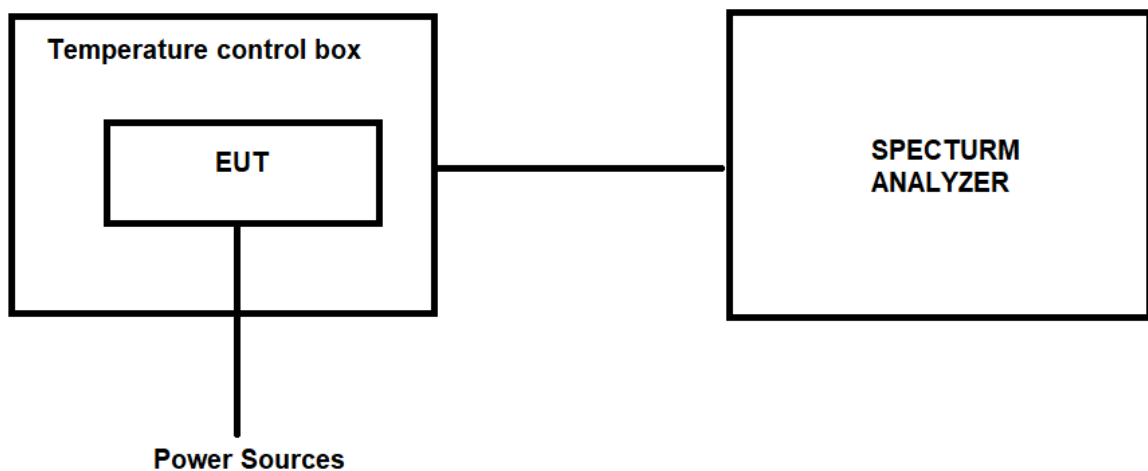
8.1.1 TEST PROCEDURE

1. The EUT was placed inside temperature chamber and powered and powered by nominal DC voltage.
2. Set EUT as normal operation.
3. Turn the EUT on and couple its output to spectrum.
4. Turn the EUT off and set the chamber to the highest temperature specified.
5. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT and measure the operating frequency.
6. Repeat step with the temperature chamber set to the lowest temperature.

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP



8.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.



8.1.5 TEST RESULTS

ANT1

Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)		ΔFrequency (MHz)	
			802.11a	802.11n HT20	802.11a	802.11n HT20
3.80V	-20°C	5260.0000	5260.0239	5260.0119	-0.0239	-0.0119
		5280.0000	5280.0280	5280.0195	-0.0280	-0.0195
		5320.0000	5320.0230	5320.0095	-0.0230	-0.0095
		5500.0000	5500.0248	5500.0115	-0.0248	-0.0115
		5600.0000	5600.0237	5600.0303	-0.0237	-0.0303
		5700.0000	5700.0216	5700.0195	-0.0216	-0.0195
2.81V	-20°C	5260.0000	5260.0309	5260.0139	-0.0309	-0.0139
		5280.0000	5280.0239	5280.0728	-0.0239	-0.0728
		5320.0000	5320.0174	5320.0395	-0.0174	-0.0395
		5500.0000	5500.0239	5500.0414	-0.0239	-0.0414
		5600.0000	5600.0255	5600.0503	-0.0255	-0.0503
		5700.0000	5700.0149	5700.0285	-0.0149	-0.0285
3.3V	25°C	5260.0000	5260.0240	5260.0305	-0.0240	-0.0305
		5280.0000	5280.0289	5280.0395	-0.0289	-0.0395
		5320.0000	5320.0241	5320.0284	-0.0241	-0.0284
		5500.0000	5500.0258	5500.0228	-0.0258	-0.0228
		5600.0000	5600.0239	5600.0248	-0.0239	-0.0248
		5700.0000	5700.0237	5700.0302	-0.0237	-0.0302
3.80V	50°C	5260.0000	5260.0261	5260.0230	-0.0261	-0.0230
		5280.0000	5280.0241	5280.0117	-0.0241	-0.0117
		5320.0000	5320.0260	5320.0141	-0.0260	-0.0141
		5500.0000	5500.0148	5500.0217	-0.0148	-0.0217
		5600.0000	5600.0228	5600.0303	-0.0228	-0.0303
		5700.0000	5700.0523	5700.0327	-0.0523	-0.0327
2.81V	50°C	5260.0000	5260.0241	5260.0284	-0.0241	-0.0284
		5280.0000	5280.0260	5280.0150	-0.0260	-0.0150
		5320.0000	5320.0141	5320.0130	-0.0141	-0.0130
		5500.0000	5500.0226	5500.0228	-0.0226	-0.0228
		5600.0000	5600.0348	5600.0326	-0.0348	-0.0326
		5700.0000	5700.0327	5700.0238	-0.0327	-0.0238



Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)		ΔFrequency (MHz)	
			802.11ac 20	802.11ax 20	802.11ac 20	802.11ax 20
3.80V	-20℃	5260.0000	5260.0208	5260.0086	-0.0208	-0.0086
		5280.0000	5280.0165	5280.0190	-0.0165	-0.0190
		5320.0000	5320.0016	5320.0150	-0.0016	-0.0150
		5500.0000	5500.0145	5500.0188	-0.0145	-0.0188
		5600.0000	5600.0123	5600.0248	-0.0123	-0.0248
		5700.0000	5700.0123	5700.0128	-0.0123	-0.0128
2.81V		5260.0000	5260.0097	5260.0056	-0.0097	-0.0056
		5280.0000	5280.0205	5280.0148	-0.0205	-0.0148
		5320.0000	5320.0216	5320.0231	-0.0216	-0.0231
		5500.0000	5500.0285	5500.0235	-0.0285	-0.0235
		5600.0000	5600.0284	5600.0349	-0.0284	-0.0349
		5700.0000	5700.0386	5700.0466	-0.0386	-0.0466
3.3V	25℃	5260.0000	5260.0407	5260.0381	-0.0407	-0.0381
		5280.0000	5280.0086	5280.0057	-0.0086	-0.0057
		5320.0000	5320.0085	5320.0160	-0.0085	-0.0160
		5500.0000	5500.0126	5500.0155	-0.0126	-0.0155
		5600.0000	5600.0204	5600.0269	-0.0204	-0.0269
		5700.0000	5700.0036	5700.0086	-0.0036	-0.0086
3.80V	50℃	5260.0000	5260.0206	5260.0146	-0.0206	-0.0146
		5280.0000	5280.0137	5280.0031	-0.0137	-0.0031
		5320.0000	5320.0305	5320.0326	-0.0305	-0.0326
		5500.0000	5500.0247	5500.0586	-0.0247	-0.0586
		5600.0000	5600.0407	5600.0424	-0.0407	-0.0424
		5700.0000	5700.0614	5700.0648	-0.0614	-0.0648
2.81V	50℃	5260.0000	5260.0308	5260.0326	-0.0308	-0.0326
		5280.0000	5280.0259	5280.0285	-0.0259	-0.0285
		5320.0000	5320.0308	5320.0197	-0.0308	-0.0197
		5500.0000	5500.0397	5500.0415	-0.0397	-0.0415
		5600.0000	5600.0236	5600.0218	-0.0236	-0.0218
		5700.0000	5700.0705	5700.0747	-0.0705	-0.0747



Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)			ΔFrequency (MHz)		
			802.11ac 40	802.11ax 40	802.11n HT40	802.11ac 40	802.11 ax 40	802.11n HT40
3.80V	-20℃	5270.000	5270.0161	5270.0177	5270.0319	-0.0161	-0.0177	-0.0319
		5310.000	5310.0302	5310.0239	5310.0430	-0.0302	-0.0239	-0.0430
		5510.000	5510.0529	5510.0328	5510.0503	-0.0529	-0.0328	-0.0503
		5550.000	5550.0317	5550.0337	5550.0348	-0.0317	-0.0337	-0.0348
		5670.000	5670.0560	5670.0314	5670.0538	-0.0560	-0.0314	-0.0538
2.81V		5270.000	5270.0210	5270.0239	5270.0350	-0.0210	-0.0239	-0.0350
		5310.000	5310.0275	5310.0330	5310.0252	-0.0275	-0.0330	-0.0252
		5510.000	5510.0190	5510.0248	5510.0504	-0.0190	-0.0248	-0.0504
		5550.000	5550.0357	5550.0328	5550.0298	-0.0357	-0.0328	-0.0298
		5670.000	5670.0382	5670.0416	5670.0305	-0.0382	-0.0416	-0.0305
3.3V	25℃	5270.000	5270.0194	5270.0413	5270.0430	-0.0194	-0.0413	-0.0430
		5310.000	5310.0613	5310.0635	5310.0496	-0.0613	-0.0635	-0.0496
		5510.000	5510.0161	5510.0328	5510.0475	-0.0161	-0.0328	-0.0475
		5550.000	5550.0337	5550.0279	5550.0373	-0.0337	-0.0279	-0.0373
		5670.000	5670.0506	5670.0446	5670.0572	-0.0506	-0.0446	-0.0572
3.80V	50℃	5270.000	5270.0594	5270.0476	5270.0617	-0.0594	-0.0476	-0.0617
		5310.000	5310.0506	5310.0520	5310.0474	-0.0506	-0.0520	-0.0474
		5510.000	5510.0407	5510.0446	5510.0436	-0.0407	-0.0446	-0.0436
		5550.000	5550.0239	5550.0316	5550.0372	-0.0239	-0.0316	-0.0372
		5670.000	5670.0260	5670.0438	5670.0238	-0.0260	-0.0438	-0.0238
2.81V	50℃	5270.000	5270.0496	5270.0521	5270.0341	-0.0496	-0.0521	-0.0341
		5310.000	5310.0305	5310.0360	5310.0374	-0.0305	-0.0360	-0.0374
		5510.000	5510.0258	5510.0384	5510.0337	-0.0258	-0.0384	-0.0337
		5550.000	5550.0228	5550.0305	5550.0299	-0.0228	-0.0305	-0.0299
		5670.000	5670.0409	5670.0438	5670.0372	-0.0409	-0.0438	-0.0372



Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)		ΔFrequency (MHz)	
			802.11ac 80	802.11ax 80	802.11ac 80	802.11ax 80
3.80V	-20℃	5290.0000	5290.0228	5290.0439	-0.0228	-0.0439
		5530.0000	5530.0348	5530.0530	-0.0348	-0.0530
2.81V		5290.0000	5290.0341	5290.0616	-0.0341	-0.0616
		5530.0000	5530.0548	5530.0696	-0.0548	-0.0696
3.3V	25℃	5290.0000	5290.0620	5290.0609	-0.0620	-0.0609
		5530.0000	5530.0550	5530.0593	-0.0550	-0.0593
3.80V	50℃	5290.0000	5290.0648	5290.0561	-0.0648	-0.0561
		5530.0000	5530.0617	5530.0573	-0.0617	-0.0573
2.81V	50℃	5290.0000	5290.0422	5290.0552	-0.0422	-0.0552
		5530.0000	5530.0684	5530.0728	-0.0684	-0.0728



ANT2

Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)		ΔFrequency (MHz)	
			802.11a	802.11n HT20	802.11a	802.11n HT20
3.80V	-20℃	5260.0000	5260.0249	5260.0129	-0.0249	-0.0129
		5280.0000	5280.0290	5280.0205	-0.0290	-0.0205
		5320.0000	5320.0240	5320.0105	-0.0240	-0.0105
		5500.0000	5500.0259	5500.0126	-0.0259	-0.0126
		5600.0000	5600.0249	5600.0315	-0.0249	-0.0315
		5700.0000	5700.0228	5700.0207	-0.0228	-0.0207
2.81V		5260.0000	5260.0319	5260.0149	-0.0319	-0.0149
		5280.0000	5280.0249	5280.0738	-0.0249	-0.0738
		5320.0000	5320.0184	5320.0405	-0.0184	-0.0405
		5500.0000	5500.0250	5500.0425	-0.0250	-0.0425
		5600.0000	5600.0267	5600.0515	-0.0267	-0.0515
		5700.0000	5700.0161	5700.0297	-0.0161	-0.0297
3.3V	25℃	5260.0000	5260.0250	5260.0315	-0.0250	-0.0315
		5280.0000	5280.0299	5280.0405	-0.0299	-0.0405
		5320.0000	5320.0251	5320.0294	-0.0251	-0.0294
		5500.0000	5500.0269	5500.0239	-0.0269	-0.0239
		5600.0000	5600.0251	5600.0260	-0.0251	-0.0260
		5700.0000	5700.0249	5700.0314	-0.0249	-0.0314
3.80V	50℃	5260.0000	5260.0271	5260.0240	-0.0271	-0.0240
		5280.0000	5280.0251	5280.0127	-0.0251	-0.0127
		5320.0000	5320.0270	5320.0151	-0.0270	-0.0151
		5500.0000	5500.0159	5500.0228	-0.0159	-0.0228
		5600.0000	5600.0240	5600.0315	-0.0240	-0.0315
		5700.0000	5700.0535	5700.0339	-0.0535	-0.0339
2.81V	50℃	5260.0000	5260.0251	5260.0294	-0.0251	-0.0294
		5280.0000	5280.0270	5280.0160	-0.0270	-0.0160
		5320.0000	5320.0151	5320.0140	-0.0151	-0.0140
		5500.0000	5500.0237	5500.0239	-0.0237	-0.0239
		5600.0000	5600.0360	5600.0338	-0.0360	-0.0338
		5700.0000	5700.0339	5700.0250	-0.0339	-0.0250



Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)		ΔFrequency (MHz)	
			802.11ac 20	802.11ax 20	802.11ac 20	802.11ax 20
3.80V	-20℃	5260.0000	5260.0218	5260.0096	-0.0218	-0.0096
		5280.0000	5280.0175	5280.0200	-0.0175	-0.0200
		5320.0000	5320.0026	5320.0160	-0.0026	-0.0160
		5500.0000	5500.0156	5500.0199	-0.0156	-0.0199
		5600.0000	5600.0135	5600.0260	-0.0135	-0.0260
		5700.0000	5700.0135	5700.0140	-0.0135	-0.0140
2.81V		5260.0000	5260.0107	5260.0066	-0.0107	-0.0066
		5280.0000	5280.0215	5280.0158	-0.0215	-0.0158
		5320.0000	5320.0226	5320.0241	-0.0226	-0.0241
		5500.0000	5500.0296	5500.0246	-0.0296	-0.0246
		5600.0000	5600.0296	5600.0361	-0.0296	-0.0361
		5700.0000	5700.0398	5700.0478	-0.0398	-0.0478
3.3V	25℃	5260.0000	5260.0417	5260.0391	-0.0417	-0.0391
		5280.0000	5280.0096	5280.0067	-0.0096	-0.0067
		5320.0000	5320.0095	5320.0170	-0.0095	-0.0170
		5500.0000	5500.0137	5500.0166	-0.0137	-0.0166
		5600.0000	5600.0216	5600.0281	-0.0216	-0.0281
		5700.0000	5700.0048	5700.0098	-0.0048	-0.0098
3.80V	50℃	5260.0000	5260.0216	5260.0156	-0.0216	-0.0156
		5280.0000	5280.0147	5280.0041	-0.0147	-0.0041
		5320.0000	5320.0315	5320.0336	-0.0315	-0.0336
		5500.0000	5500.0258	5500.0597	-0.0258	-0.0597
		5600.0000	5600.0419	5600.0436	-0.0419	-0.0436
		5700.0000	5700.0626	5700.0660	-0.0626	-0.0660
2.81V	50℃	5260.0000	5260.0318	5260.0336	-0.0318	-0.0336
		5280.0000	5280.0269	5280.0295	-0.0269	-0.0295
		5320.0000	5320.0318	5320.0207	-0.0318	-0.0207
		5500.0000	5500.0408	5500.0426	-0.0408	-0.0426
		5600.0000	5600.0248	5600.0230	-0.0248	-0.0230
		5700.0000	5700.0717	5700.0759	-0.0717	-0.0759



Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)			ΔFrequency (MHz)		
			802.11ac 40	802.11ax 40	802.11n HT40	802.11ac 40	802.11 ax 40	802.11n HT40
3.80V	-20℃	5270.000	5270.0171	5270.0187	5270.0329	-0.0171	-0.0187	-0.0171
		5310.000	5310.0312	5310.0249	5310.0440	-0.0312	-0.0249	-0.0312
		5510.000	5510.0541	5510.0340	5510.0515	-0.0541	-0.0340	-0.0541
		5670.000	5670.0572	5670.0326	5670.0550	-0.0572	-0.0326	-0.0572
2.81V		5270.000	5270.0220	5270.0249	5270.0360	-0.0220	-0.0249	-0.0220
		5310.000	5310.0285	5310.0340	5310.0262	-0.0285	-0.0340	-0.0285
		5510.000	5510.0202	5510.0260	5510.0516	-0.0202	-0.0260	-0.0202
		5670.000	5670.0394	5670.0428	5670.0317	-0.0394	-0.0428	-0.0394
3.3V	25℃	5270.000	5270.0204	5270.0423	5270.0440	-0.0204	-0.0423	-0.0204
		5310.000	5310.0623	5310.0645	5310.0506	-0.0623	-0.0645	-0.0623
		5510.000	5510.0173	5510.0340	5510.0487	-0.0173	-0.0340	-0.0173
		5670.000	5670.0518	5670.0458	5670.0584	-0.0518	-0.0458	-0.0518
3.80V	50℃	5270.000	5270.0604	5270.0486	5270.0627	-0.0604	-0.0486	-0.0604
		5310.000	5310.0516	5310.0530	5310.0484	-0.0516	-0.0530	-0.0516
		5510.000	5510.0419	5510.0458	5510.0448	-0.0419	-0.0458	-0.0419
		5670.000	5670.0272	5670.0450	5670.0250	-0.0272	-0.0450	-0.0272
2.81V	50℃	5270.000	5270.0506	5270.0531	5270.0351	-0.0506	-0.0531	-0.0506
		5310.000	5310.0315	5310.0370	5310.0384	-0.0315	-0.0370	-0.0315
		5510.000	5510.0270	5510.0396	5510.0349	-0.0270	-0.0396	-0.0270
		5670.000	5670.0421	5670.0450	5670.0384	-0.0421	-0.0450	-0.0421



Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)		ΔFrequency (MHz)	
			802.11ac 80	802.11ax 80	802.11ac 80	802.11ax 80
3.80V	-20℃	5290.0000	5290.0238	5290.0449	-0.0238	-0.0449
		5530.0000	5530.0360	5530.0542	-0.0360	-0.0542
2.81V		5290.0000	5290.0351	5290.0626	-0.0351	-0.0626
		5600.0000	5530.0560	5530.0708	69.9440	69.9292
3.3V	25℃	5290.0000	5290.0630	5290.0619	-0.0630	-0.0619
		5530.0000	5530.0562	5530.0605	-0.0562	-0.0605
3.80V	50℃	5290.0000	5290.0658	5290.0571	-0.0658	-0.0571
		5530.0000	5530.0629	5530.0585	-0.0629	-0.0585
2.81V	50℃	5290.0000	5290.0432	5290.0562	-0.0432	-0.0562
		5530.0000	5530.0696	5530.0740	-0.0696	-0.0740



9. TRANSMISSION IN THE ABSENCE OF DATA

9.1 STANDARD REQUIREMENT

According to §15.407(c)

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

9.2 TEST RESULT

No non-compliance noted:
Refer to the theory of operation.

10. ANTENNA REQUIREMENT

10.1 STANDARD REQUIREMENT

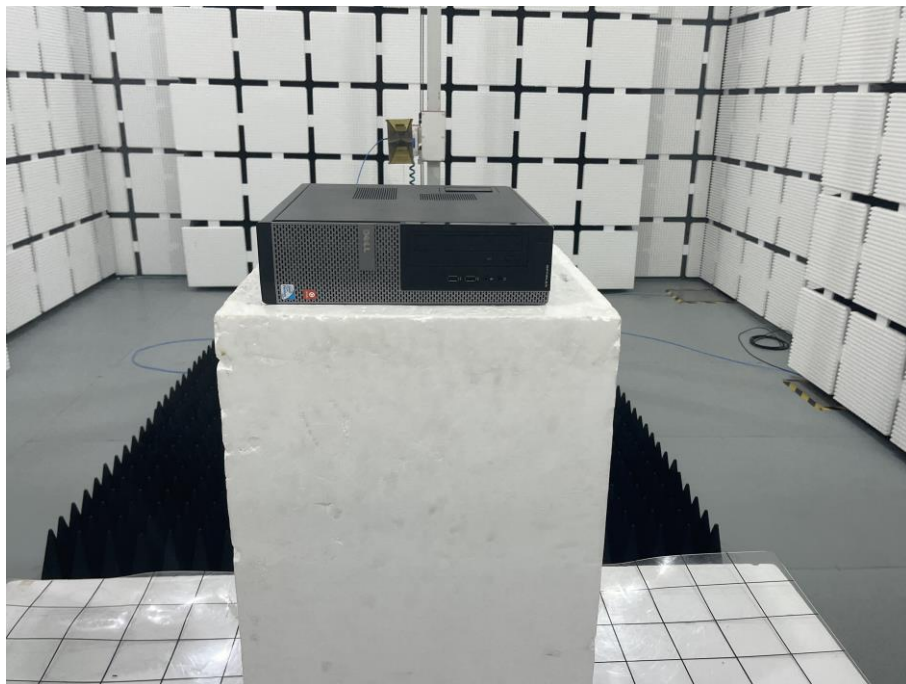
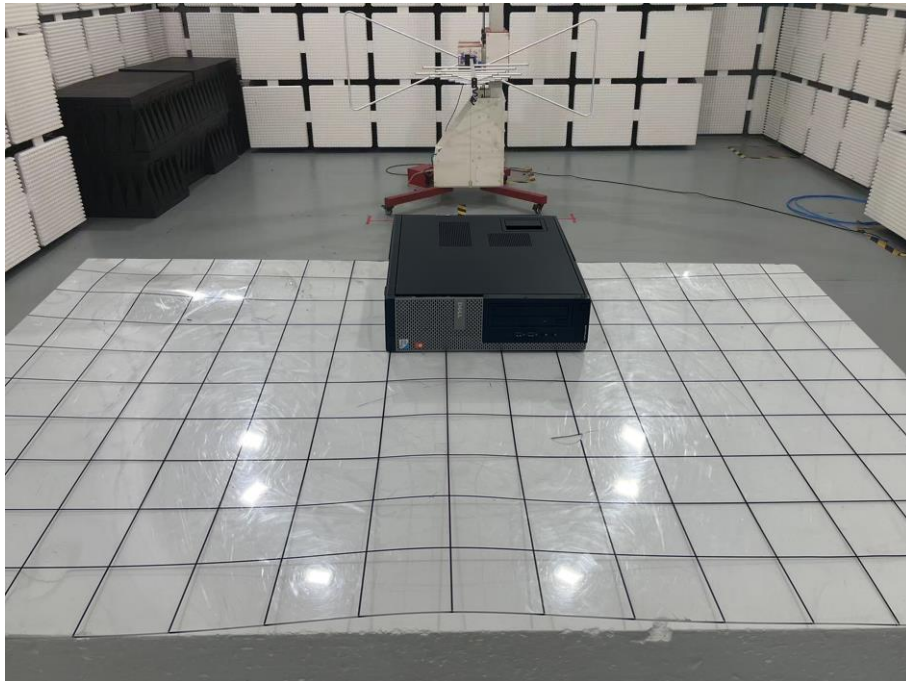
15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

10.2 EUT ANTENNA

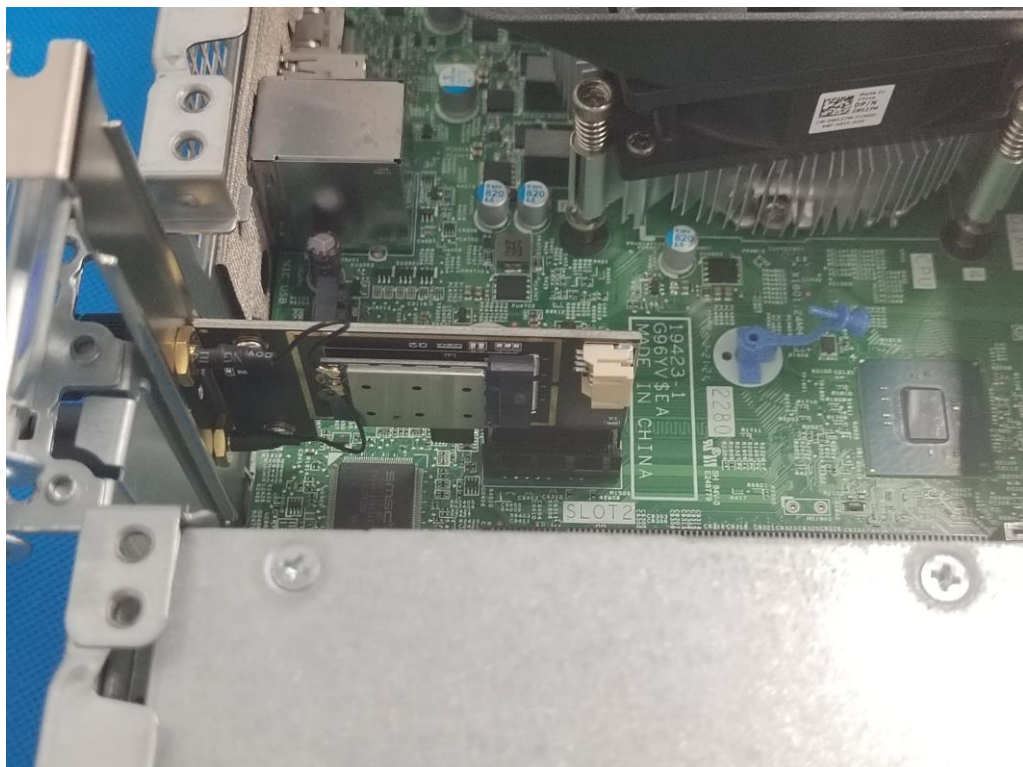
The EUT antenna is equipped unique antenna connector and antenna gain less than 6dBi, It comply with the standard requirement.

11. TEST SEUUP PHOTO

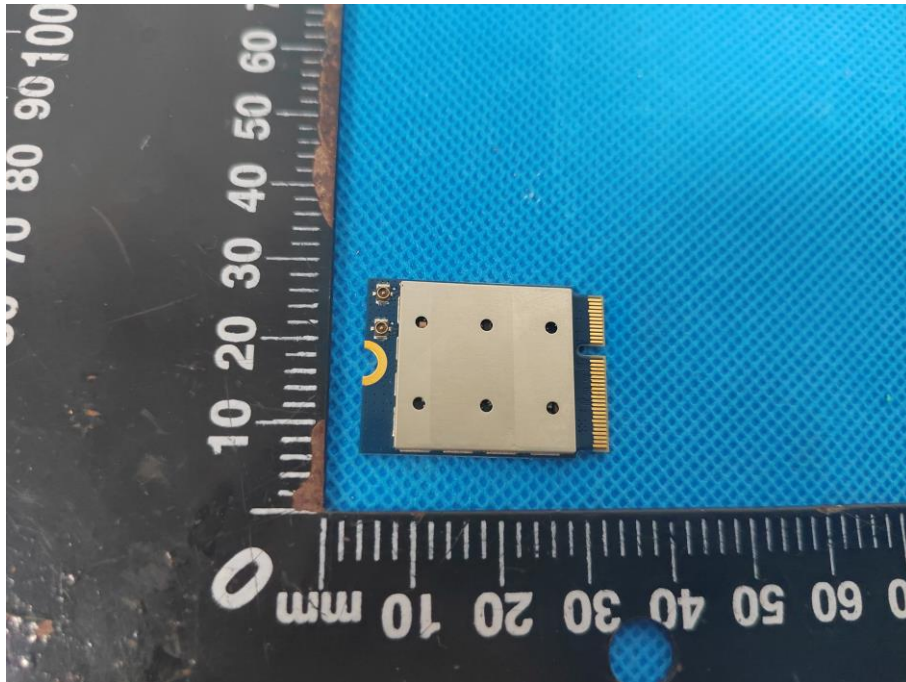
Radiated Measurement Photos



Conducted Measurement Photos



12. EUT PHOTO



***** END OF REPORT *****