



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: May. 05, 2022

Test Date: May. 05, 2022 – May. 29, 2022

Date of Report: May. 29, 2022

Prepared By: Shenzhen DL Testing Technology Co., Ltd.

Address: 101-201, Building C, Shuanghuan, No.8, Baoqing Road, Baolong Industrial Zone, Baolong Street, Longgang District, Shenzhen, Guangdong, China

Applicable Standards: FCC PART 15 C 15.407
ANSI C63.10:2013
KDB 789033 D02 v01r02
KDB 662911 D01 Multiple Transmitter Output v02r01

Test Result: Pass

Report Number: DL-20220526017-2E

Prepared (Test Engineer): Pxing Huang

Reviewer (Supervisor): Jack Bu

Approved (Manager): Jade Yang



This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen DL Testing Technology Co., Ltd.



Table of Contents	Page
1 . SUMMARY OF TEST RESULTS	4
1.1 MEASUREMENT UNCERTAINTY	4
2 . GENERAL INFORMATION	5
2.1 GENERAL DESCRIPTION OF EUT	5
2.2 DESCRIPTION OF TEST MODES	7
2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	8
2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)	8
2.5 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING	8
2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS	9
3 . EMC EMISSION TEST	10
3.1 CONDUCTED EMISSION MEASUREMENT	10
3.1.1 POWER LINE CONDUCTED EMISSION LIMITS	10
3.1.2 TEST PROCEDURE	10
3.1.3 DEVIATION FROM TEST STANDARD	10
3.1.4 TEST SETUP	11
3.1.5 EUT OPERATING CONDITIONS	11
3.1.6 TEST RESULTS	11
3.2 RADIATED EMISSION MEASUREMENT	14
3.2.1 RADIATED EMISSION LIMITS	14
3.2.2 TEST PROCEDURE	15
3.2.3 DEVIATION FROM TEST STANDARD	15
3.2.4 TEST SETUP	15
3.2.5 EUT OPERATING CONDITIONS	16
3.2.6 TEST RESULTS (BETWEEN 9KHZ – 30 MHZ)	17
3.2.7 TEST RESULTS (BETWEEN 30MHZ – 1GHZ)	18
3.2.8 TEST RESULTS (1GHZ~40GHZ)	20
3.3 CONDUCTED BAND EMISSION MEASUREMENT	55
3.3.1 TEST REQUIREMENT:	55
3.3.2 TEST PROCEDURE	55
3.3.3 DEVIATION FROM TEST STANDARD	55
3.3.4 TEST SETUP	55
3.3.5 EUT OPERATING CONDITIONS	55
4 . PEAK OUTPUT POWER	68
4.1 APPLIED PROCEDURES / LIMIT	68
4.1.1 TEST PROCEDURE	68
4.1.2 DEVIATION FROM STANDARD	68
4.1.3 TEST SETUP	68
4.1.4 EUT OPERATION CONDITIONS	68
4.1.5 TEST RESULTS	68
5 . POWER SPECTRAL DENSITY TEST	69
5.1 APPLIED PROCEDURES / LIMIT	69
5.1.1 TEST PROCEDURE	69
5.1.2 DEVIATION FROM STANDARD	69
5.1.3 TEST SETUP	69
5.1.4 EUT OPERATION CONDITIONS	69
5.1.5 TEST RESULTS	70
6 . 6DB&26DB&99% BANDWIDTH TEST	71
6.1 APPLIED PROCEDURES / LIMIT	71
6.1.1 TEST PROCEDURE	71
6.1.2 DEVIATION FROM STANDARD	71



Table of Contents	Page
6.1.3 TEST SETUP	71
6.1.4 EUT OPERATION CONDITIONS	72
6.1.5 TEST RESULTS	72
7 . DUTY CYCLE TEST SIGNAL	73
7.1 APPLIED PROCEDURES / LIMIT	73
7.1.1 TEST PROCEDURE	73
7.1.2 DEVIATION FROM STANDARD	73
7.1.3 TEST SETUP	73
7.1.4 EUT OPERATION CONDITIONS	73
7.1.5 TEST RESULTS	73
8 . FREQUENCY STABILITY	74
8.1 APPLIED PROCEDURES / LIMIT	74
8.1.1 TEST PROCEDURE	74
8.1.2 DEVIATION FROM STANDARD	74
8.1.3 TEST SETUP	74
8.1.4 EUT OPERATION CONDITIONS	74
8.1.5 TEST RESULTS	75
9 . TRANSMISSION IN THE ABSENCE OF DATA	83
9.1 STANDARD REQUIREMENT	83
9.2 TEST RESULT	83
10 . ANTENNA REQUIREMENT	83
10.1 STANDARD REQUIREMENT	83
10.2 EUT ANTENNA	83
11 . TEST SEUUP PHOTO	84
12 . EUT PHOTO	86



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	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(e)	26dB bandwidth and 99%dB Bandwidth 6dB bandwidth and 99%dB Bandwidth	PASS	
15.407(g)	Frequency Stability	PASS	
15.407(c)	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

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:	5180-5240, 5745-5825MHz(802.11a/ac/ax/n(HT20)) 5190-5230, 5755-5795MHz(802.11ac/ax/n(HT40)) 5210MHz, 5775MHz(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)
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

802.11a/ac/ax/n(HT20)			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
40	5200	48	5240

802.11a/ac/ax/n(HT20)			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	161	5805
153	5765	165	5825
157	5785		

802.11ac/ax/n(HT40)				802.11ac/ax 80	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	46	5230	42	5210

802.11 ac/ax/ (HT40)				802.11ac/ax 80	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
151	5755	159	5795	155	5775



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 1	Band 4
Mode 1	802.11a /ac/ax/n HT20	CH36, CH44, CH48	CH149, CH157, CH165
Mode 2	802.11n/ac/ax HT40	CH38, CH46	CH151, CH159
Mode 3	802.11ac/ax HT80	CH42	CH157
Mode 4	Other	Link Mode	

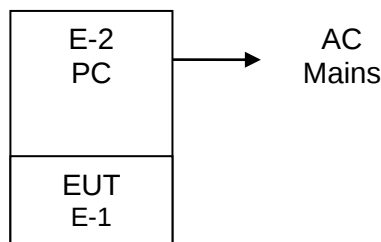
For Radiated Emission			
Pretest Mode	Channel	Band 1	Band 4
Mode 1	802.11a/n/acHT20	CH36, CH44, CH48	CH149, CH157, CH165
Mode 2	802.11n/acHT40	CH38, CH46	CH151, CH159
Mode 3	802.11ac/ax HT80	CH42	CH157
Mode 4	Other	Link Mode	

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 client.

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	Spectrum Analyzer (9kHz-26.5GHz)	Agilent	E4408B	MY50140780	Nov. 06, 2021	Nov. 05, 2022
2	Test Receiver (9kHz-7GHz)	R&S	ESRP7	101393	Nov. 06, 2021	Nov. 05, 2022
3	Bilog Antenna (30MHz-1GHz)	R&S	VULB9162	00306	Nov. 06, 2021	Nov. 05, 2022
4	Horn Antenna (1GHz-18GHz)	Schwarzbeck	BBHA9120D	02139	Nov. 06, 2021	Nov. 05, 2022
5	Horn Antenna (18GHz-40GHz)	A.H. Systems	SAS-574	588	Nov. 06, 2021	Nov. 05, 2022
6	Amplifier (9KHz-6GHz)	Schwarzbeck	BBV9743B	00153	Nov. 06, 2021	Nov. 05, 2022
7	Amplifier (1GHz-18GHz)	EMEC	EM01G8GA	00270	Nov. 06, 2021	Nov. 05, 2022
8	Amplifier (18GHz-40GHz)	Quanjuda	DLE-161	97	Nov. 06, 2021	Nov. 05, 2022
9	Loop Antenna (9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	Nov. 06, 2021	Nov. 05, 2022
10	RF cables1 (9kHz-1GHz)	ChengYu	966	004	Nov. 06, 2021	Nov. 05, 2022
11	RF cables2 (1GHz-40GHz)	ChengYu	966	003	Nov. 06, 2021	Nov. 05, 2022
12	Antenna connector	Florida RF Labs	N/A	RF 01#	Nov. 06, 2021	Nov. 05, 2022
13	Power probe	KEYSIGHT	U2021XA	MY55210018	Nov. 06, 2021	Nov. 05, 2022
14	Signal Analyzer 9kHz-26.5GHz	Agilent	N9020A	MY55370280	Nov. 06, 2021	Nov. 05, 2022
15	Test Receiver 20kHz-40GHz	R&S	ESU 40	100376	Nov. 06, 2021	Nov. 05, 2022
16	D.C. Power Supply	LongWei	PS-305D	010964729	Nov. 06, 2021	Nov. 05, 2022

Conduction Test equipment

Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	843 Shielded Room	ChengYu	843 Room	843	Nov. 25, 2019	Nov. 24, 2022
2	EMI Receiver	R&S	ESR	101421	Nov. 06, 2021	Nov. 05, 2022
3	LISN	R&S	ENV216	102417	Nov. 06, 2021	Nov. 05, 2022
4	843 Cable 1#	ChengYu	CE Cable	001	Nov. 06, 2021	Nov. 05, 2022

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

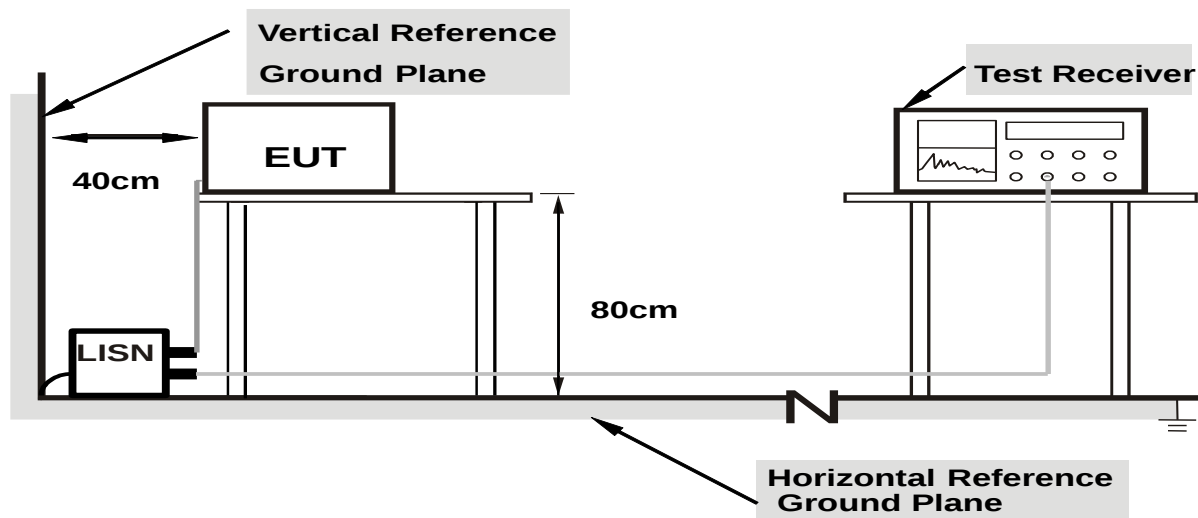
3.1.2 TEST PROCEDURE

- 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

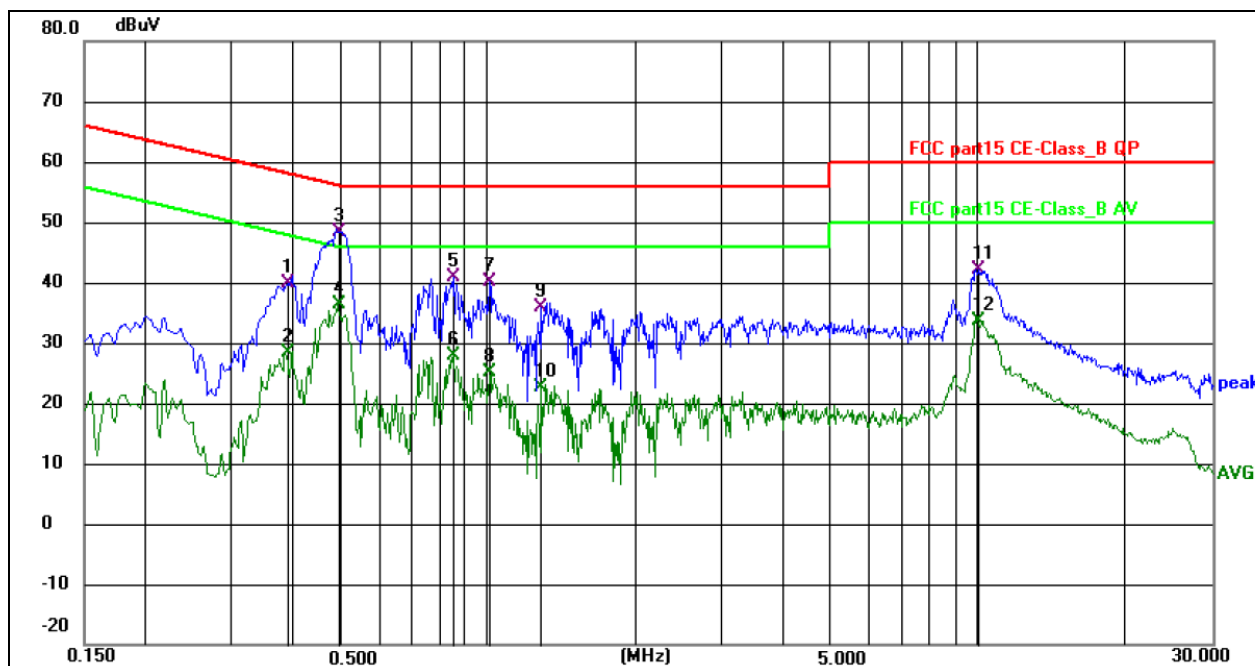
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

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



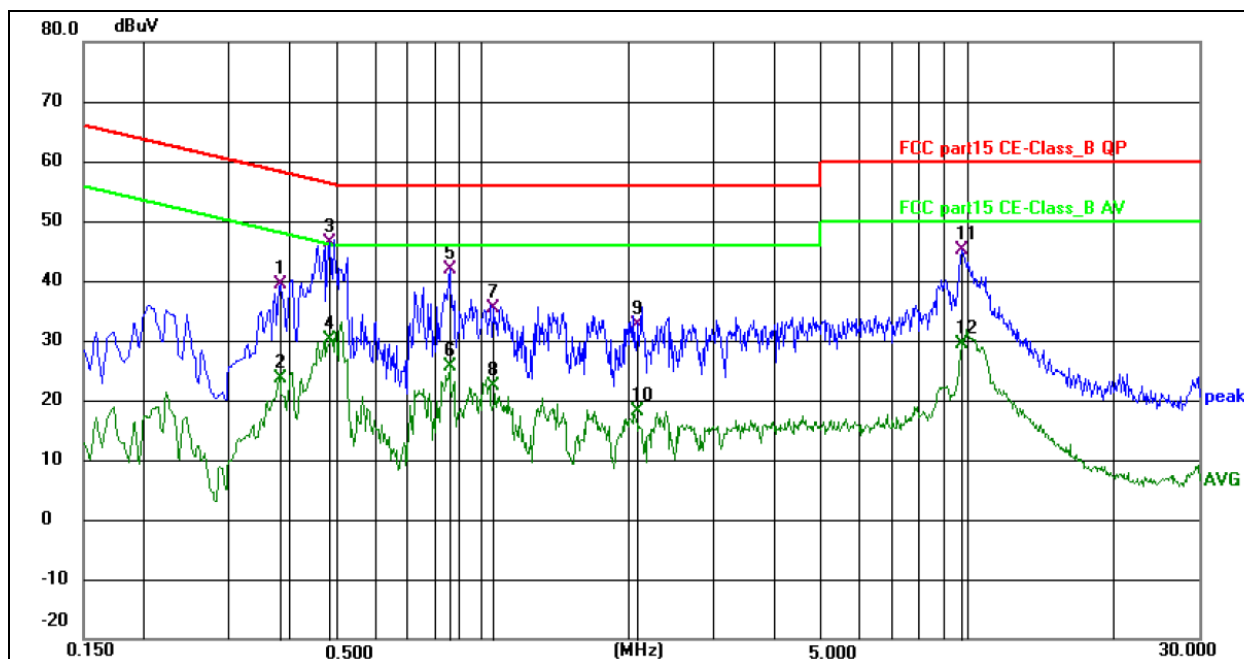
Remark:

 $\text{Margin} = \text{Limit} - \text{Level}$, Correct Factor = Cable lose + LISN insertion loss, $\text{Level} = \text{Reading} + \text{Correct factor}$

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.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (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.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Above 1GHz test procedure as below:

- 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).
- Test the EUT in the lowest channel, the middle channel, the Highest channel

Note:

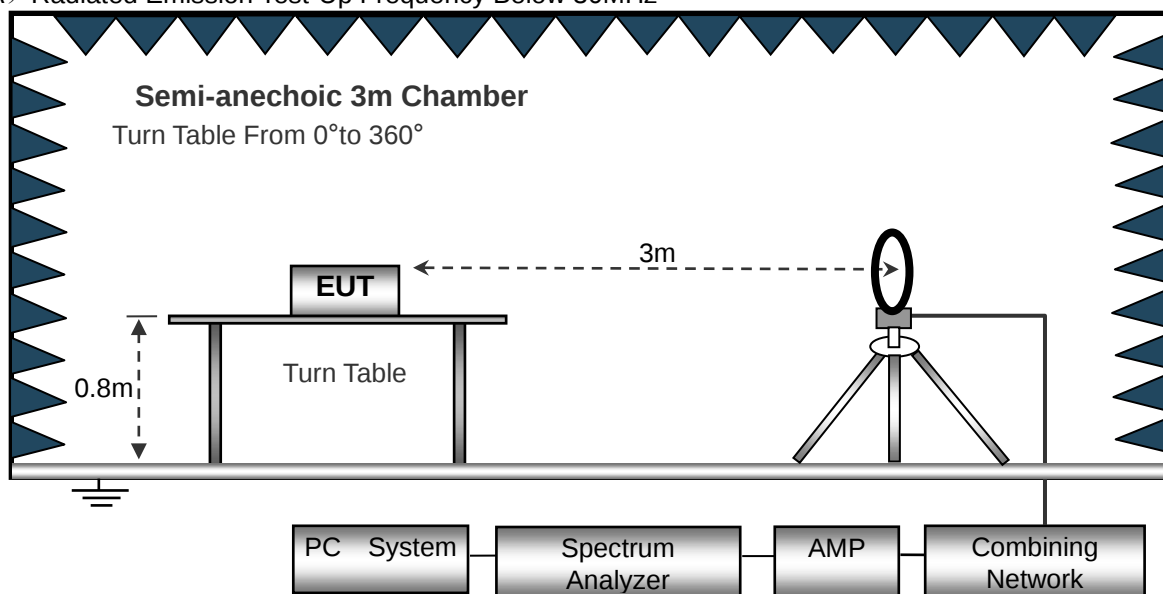
Both horizontal and vertical antenna polarities were tested and performed pretest to all antenna,. The worst case was antenna 1 and emissions were reported

3.2.3 DEVIATION FROM TEST STANDARD

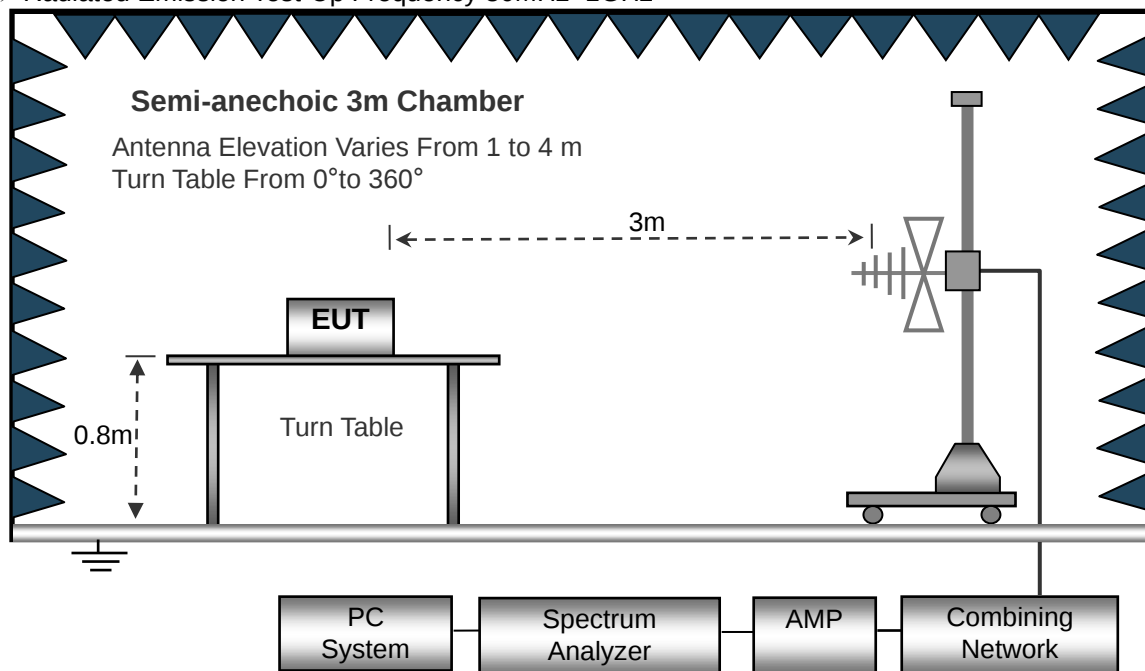
No deviation

3.2.4 TEST SETUP

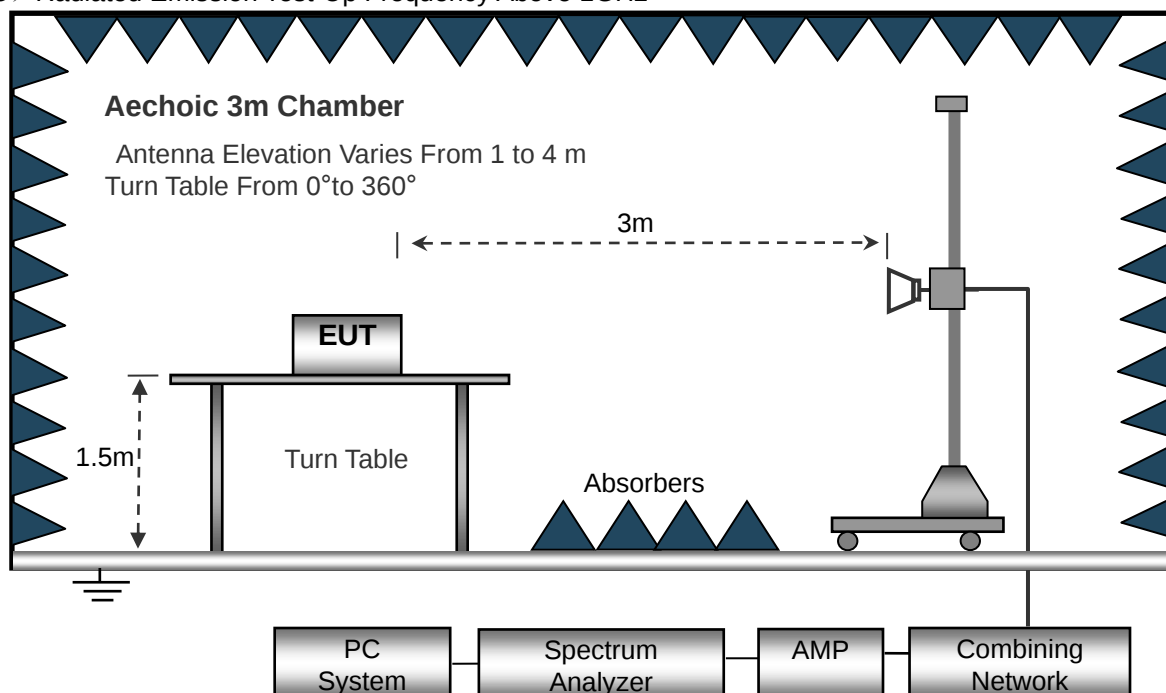
(A) Radiated Emission Test-Up Frequency Below 30MHz



(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℃	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:

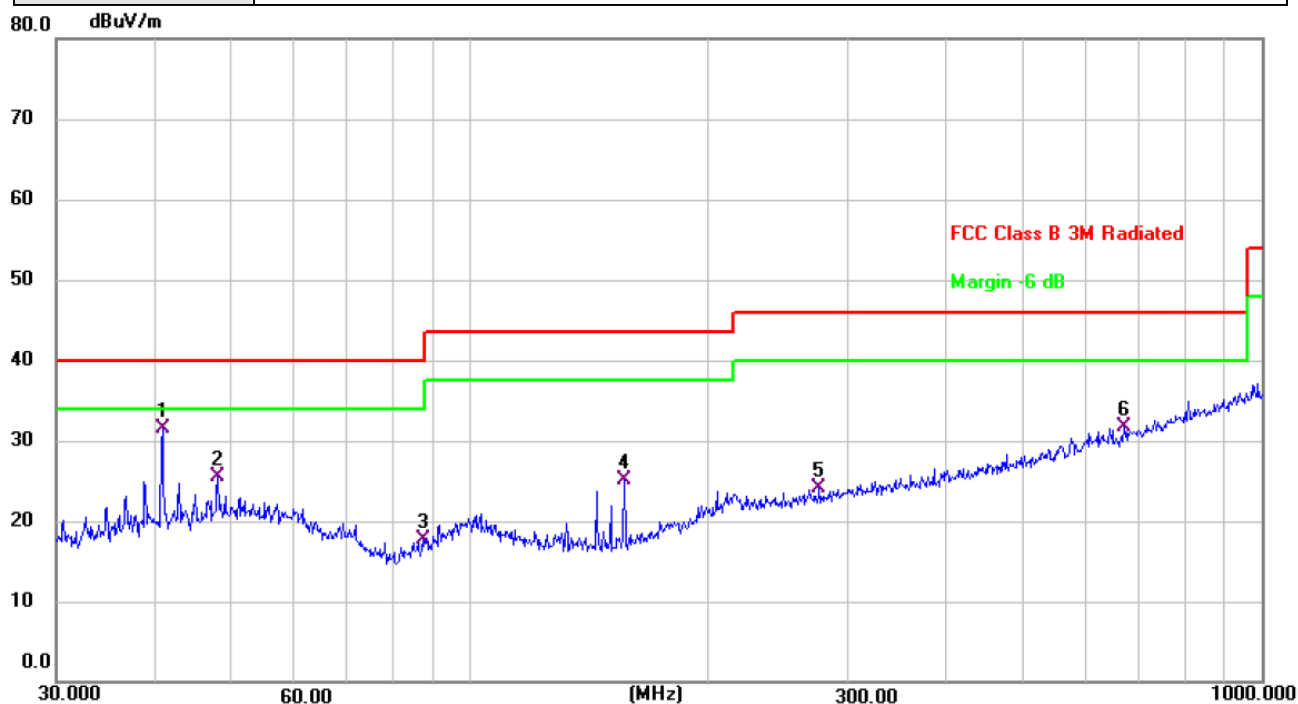
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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

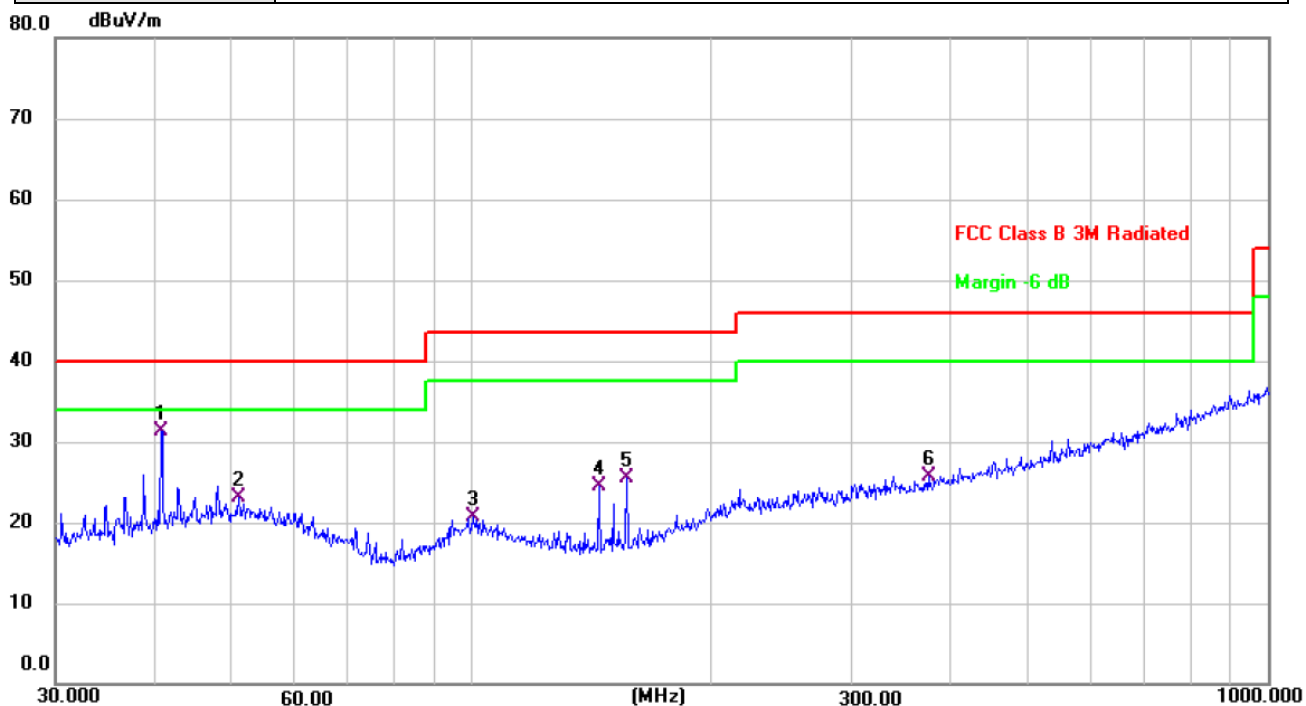
Remark:

Correct Factor = Cable loss + Antenna factor – Preamplifier;

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



Temperature:	26℃	Relative Humidity:	54%
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.

ANTENNA 1
802.11a band 1

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:5180									
V	10360	57.83	49.05	15.3	37.39	61.47	68.2	-6.73	PK
V	10360	46.35	49.05	15.3	37.39	49.99	54	-4.01	AV
V	15540	58.02	49.16	15.27	40.45	64.58	74	-9.42	PK
V	15540	44.61	49.16	15.27	40.45	51.17	54	-2.83	AV
H	10360	57.45	49.05	15.3	37.39	61.09	68.2	-7.11	PK
H	10360	46.51	49.05	15.3	37.39	50.15	54	-3.85	AV
H	15540	60.57	49.16	15.27	40.45	67.13	74	-6.87	PK
H	15540	44.12	49.16	15.27	40.45	50.68	54	-3.32	AV
operation frequency:5220									
V	10440	58.86	49.09	15.34	37.42	62.53	68.2	-5.67	PK
V	10440	46.41	49.09	15.34	37.42	50.08	54	-3.92	AV
V	15660	60.87	49.18	15.29	40.47	67.45	74	-6.55	PK
V	15660	44.16	49.18	15.29	40.47	50.74	54	-3.26	AV
H	10440	58.07	49.09	15.34	37.42	61.74	68.2	-6.46	PK
H	10440	46.85	49.09	15.34	37.42	50.52	54	-3.48	AV
H	15660	60.87	49.18	15.29	40.47	67.45	74	-6.55	PK
H	15660	44.40	49.18	15.29	40.47	50.98	54	-3.02	AV
operation frequency:5240									
V	10480	59.94	49.11	15.37	37.46	63.66	68.2	-4.54	PK
V	10480	46.43	49.11	15.37	37.46	50.15	54	-3.85	AV
V	15720	60.59	49.21	15.34	40.51	67.23	74	-6.77	PK
V	15720	44.41	49.21	15.34	40.51	51.05	54	-2.95	AV
H	10480	58.40	49.11	15.37	31.31	55.97	68.2	-12.23	PK
H	10480	46.65	49.11	15.37	31.31	44.22	54	-9.78	AV
H	15720	58.84	49.21	15.34	40.51	65.48	74	-8.52	PK
H	15720	43.58	49.21	15.34	40.51	50.22	54	-3.78	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 band 1

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:5180									
V	10360	57.38	49.05	15.3	37.39	61.02	68.2	-7.18	PK
V	10360	45.99	49.05	15.3	37.39	49.63	54	-4.37	AV
V	15540	57.56	49.16	15.27	40.45	64.12	74	-9.88	PK
V	15540	44.26	49.16	15.27	40.45	50.82	54	-3.18	AV
H	10360	57.00	49.05	15.3	37.39	60.64	68.2	-7.56	PK
H	10360	46.15	49.05	15.3	37.39	49.79	54	-4.21	AV
H	15540	60.09	49.16	15.27	40.45	66.65	74	-7.35	PK
H	15540	43.77	49.16	15.27	40.45	50.33	54	-3.67	AV
operation frequency:5220									
V	10440	58.40	49.09	15.34	37.42	62.07	68.2	-6.13	PK
V	10440	46.05	49.09	15.34	37.42	49.72	54	-4.28	AV
V	15660	60.40	49.18	15.29	40.47	66.98	74	-7.02	PK
V	15660	43.81	49.18	15.29	40.47	50.39	54	-3.61	AV
H	10440	57.61	49.09	15.34	37.42	61.28	68.2	-6.92	PK
H	10440	46.49	49.09	15.34	37.42	50.16	54	-3.84	AV
H	15660	60.40	49.18	15.29	40.47	66.98	74	-7.02	PK
H	15660	44.06	49.18	15.29	40.47	50.64	54	-3.36	AV
operation frequency:5240									
V	10480	59.47	49.11	15.37	37.46	63.19	68.2	-5.01	PK
V	10480	46.07	49.11	15.37	37.46	49.79	54	-4.21	AV
V	15720	60.11	49.21	15.34	40.51	66.75	74	-7.25	PK
V	15720	44.07	49.21	15.34	40.51	50.71	54	-3.29	AV
H	10480	57.95	49.11	15.37	31.31	55.52	68.2	-12.68	PK
H	10480	46.28	49.11	15.37	31.31	43.85	54	-10.15	AV
H	15720	58.38	49.21	15.34	40.51	65.02	74	-8.98	PK
H	15720	43.24	49.21	15.34	40.51	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.



802.11ax20 band 1

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:5180									
V	10360	57.04	49.05	15.3	37.39	60.68	68.2	-7.52	PK
V	10360	45.72	49.05	15.3	37.39	49.36	54	-4.64	AV
V	15540	57.22	49.16	15.27	40.45	63.78	74	-10.22	PK
V	15540	44.00	49.16	15.27	40.45	50.56	54	-3.44	AV
H	10360	56.67	49.05	15.3	37.39	60.31	68.2	-7.89	PK
H	10360	45.88	49.05	15.3	37.39	49.52	54	-4.48	AV
H	15540	59.74	49.16	15.27	40.45	66.30	74	-7.70	PK
H	15540	43.51	49.16	15.27	40.45	50.07	54	-3.93	AV
operation frequency:5220									
V	10440	58.05	49.09	15.34	37.42	61.72	68.2	-6.48	PK
V	10440	45.78	49.09	15.34	37.42	49.45	54	-4.55	AV
V	15660	60.04	49.18	15.29	40.47	66.62	74	-7.38	PK
V	15660	43.55	49.18	15.29	40.47	50.13	54	-3.87	AV
H	10440	57.27	49.09	15.34	37.42	60.94	68.2	-7.26	PK
H	10440	46.21	49.09	15.34	37.42	49.88	54	-4.12	AV
H	15660	60.04	49.18	15.29	40.47	66.62	74	-7.38	PK
H	15660	43.80	49.18	15.29	40.47	50.38	54	-3.62	AV
operation frequency:5240									
V	10480	59.12	49.11	15.37	37.46	62.84	68.2	-5.36	PK
V	10480	45.80	49.11	15.37	37.46	49.52	54	-4.48	AV
V	15720	59.76	49.21	15.34	40.51	66.40	74	-7.60	PK
V	15720	43.81	49.21	15.34	40.51	50.45	54	-3.55	AV
H	10480	57.61	49.11	15.37	31.31	55.18	68.2	-13.02	PK
H	10480	46.01	49.11	15.37	31.31	43.58	54	-10.42	AV
H	15720	58.03	49.21	15.34	40.51	64.67	74	-9.33	PK
H	15720	42.99	49.21	15.34	40.51	49.63	54	-4.37	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	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:5180									
V	10360	57.31	49.05	15.3	37.39	60.95	68.2	-7.25	PK
V	10360	46.14	49.05	15.3	37.39	49.78	54	-4.22	AV
V	15540	56.83	49.16	15.27	40.45	63.39	74	-10.61	PK
V	15540	43.78	49.16	15.27	40.45	50.34	54	-3.66	AV
H	10360	57.23	49.05	15.3	37.39	60.87	68.2	-7.33	PK
H	10360	45.78	49.05	15.3	37.39	49.42	54	-4.58	AV
H	15540	54.70	49.16	15.27	40.45	61.26	74	-12.74	PK
H	15540	44.80	49.16	15.27	40.45	51.36	54	-2.64	AV
operation frequency:5220									
V	10440	56.84	49.09	15.34	37.42	60.51	68.2	-7.69	PK
V	10440	45.23	49.09	15.34	37.42	48.90	54	-5.10	AV
V	15660	55.92	49.18	15.29	40.47	62.50	74	-11.50	PK
V	15660	43.88	49.18	15.29	40.47	50.46	54	-3.54	AV
H	10440	56.13	49.09	15.34	37.42	59.80	68.2	-8.40	PK
H	10440	43.77	49.09	15.34	37.42	47.44	54	-6.56	AV
H	15660	55.63	49.18	15.29	40.47	62.21	74	-11.79	PK
H	15660	43.65	49.18	15.29	40.47	50.23	54	-3.77	AV
operation frequency:5240									
V	10480	57.12	49.11	15.37	37.46	60.84	68.2	-7.36	PK
V	10480	45.09	49.11	15.37	37.46	48.81	54	-5.19	AV
V	15720	54.92	49.21	15.34	40.51	61.56	74	-12.44	PK
V	15720	43.92	49.21	15.34	40.51	50.56	54	-3.44	AV
H	10480	57.16	49.11	15.37	31.31	54.73	68.2	-13.47	PK
H	10480	45.10	49.11	15.37	31.31	42.67	54	-11.33	AV
H	15720	55.91	49.21	15.34	40.51	62.55	74	-11.45	PK
H	15720	44.70	49.21	15.34	40.51	51.34	54	-2.66	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.									



802.11ac 40

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:5190									
V	10380	58.32	49.07	15.33	37.41	61.99	68.2	-6.21	PK
V	10380	46.49	49.07	15.33	37.41	50.16	54	-3.84	AV
V	15570	57.78	49.17	15.28	40.46	64.35	74	-9.65	PK
V	15570	44.56	49.17	15.28	40.46	51.13	54	-2.87	AV
H	10380	58.18	49.07	15.33	37.41	61.85	68.2	-6.35	PK
H	10380	46.55	49.07	15.33	37.41	50.22	54	-3.78	AV
H	15570	56.14	49.17	15.28	40.46	62.71	74	-11.29	PK
H	15570	44.44	49.17	15.28	40.46	50.01	54	-3.99	AV
operation frequency:5230									
V	10460	58.75	49.11	15.37	37.46	62.47	68.2	-5.73	PK
V	10460	45.67	49.11	15.37	37.46	49.39	54	-4.61	AV
V	15690	55.90	49.21	15.34	40.51	62.54	74	-11.46	PK
V	15690	44.51	49.21	15.34	40.51	51.15	54	-2.85	AV
H	10460	58.92	49.11	15.37	31.31	56.49	68.2	-11.71	PK
H	10460	46.03	49.11	15.37	31.31	43.60	54	-10.40	AV
H	15690	56.88	49.21	15.34	40.51	63.52	74	-10.48	PK
H	15690	44.25	49.21	15.34	40.51	50.89	54	-3.11	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.									



802.11ax 40

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:5190									
V	10380	57.92	49.07	15.33	37.41	61.59	68.2	-6.61	PK
V	10380	46.17	49.07	15.33	37.41	49.84	54	-4.16	AV
V	15570	57.39	49.17	15.28	40.46	63.96	74	-10.04	PK
V	15570	44.26	49.17	15.28	40.46	50.83	54	-3.17	AV
H	10380	57.79	49.07	15.33	37.41	61.46	68.2	-6.74	PK
H	10380	46.23	49.07	15.33	37.41	49.90	54	-4.10	AV
H	15570	55.76	49.17	15.28	40.46	62.33	74	-11.67	PK
H	15570	45.13	49.17	15.28	40.46	51.70	54	-2.30	AV
operation frequency:5230									
V	10460	58.35	49.11	15.37	37.46	62.07	68.2	-6.13	PK
V	10460	45.36	49.11	15.37	37.46	49.08	54	-4.92	AV
V	15690	55.52	49.21	15.34	40.51	62.16	74	-11.84	PK
V	15690	44.21	49.21	15.34	40.51	50.85	54	-3.15	AV
H	10460	58.52	49.11	15.37	31.31	56.09	68.2	-12.11	PK
H	10460	45.72	49.11	15.37	31.31	43.29	54	-10.71	AV
H	15690	56.49	49.21	15.34	40.51	63.13	74	-10.87	PK
H	15690	44.94	49.21	15.34	40.51	51.58	54	-2.42	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	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:5190									
V	10380	57.64	49.07	15.33	37.41	61.31	68.2	-6.89	PK
V	10380	45.94	49.07	15.33	37.41	49.61	54	-4.39	AV
V	15570	57.11	49.17	15.28	40.46	63.68	74	-10.32	PK
V	15570	44.04	49.17	15.28	40.46	50.61	54	-3.39	AV
H	10380	57.51	49.07	15.33	37.41	61.18	68.2	-7.02	PK
H	10380	46.00	49.07	15.33	37.41	49.67	54	-4.33	AV
H	15570	55.48	49.17	15.28	40.46	62.05	74	-11.95	PK
H	15570	44.91	49.17	15.28	40.46	51.48	54	-2.52	AV
operation frequency:5230									
V	10460	58.06	49.11	15.37	37.46	61.78	68.2	-6.42	PK
V	10460	45.14	49.11	15.37	37.46	48.86	54	-5.14	AV
V	15690	55.25	49.21	15.34	40.51	61.89	68.2	-6.31	PK
V	15690	43.99	49.21	15.34	40.51	50.63	54	-3.37	AV
H	10460	58.24	49.11	15.37	31.31	55.81	68.2	-12.39	PK
H	10460	45.50	49.11	15.37	31.31	43.07	54	-10.93	AV
H	15690	56.22	49.21	15.34	40.51	62.86	74	-11.14	PK
H	15690	44.72	49.21	15.34	40.51	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.									



802.11ac 80

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:5210									
V	10420	58.46	49.09	15.34	37.42	62.13	68.2	-6.07	PK
V	10420	46.76	49.09	15.34	37.42	50.43	54	-3.57	AV
V	15630	58.02	49.18	15.29	40.47	64.60	74	-9.40	PK
V	15630	44.79	49.18	15.29	40.47	51.37	54	-2.63	AV
H	10420	58.12	49.09	15.34	37.42	61.79	68.2	-6.41	PK
H	10420	47.04	49.09	15.34	37.42	50.71	54	-3.29	AV
H	15630	56.19	49.18	15.29	40.47	62.77	74	-11.23	PK
H	15630	44.71	49.18	15.29	40.47	51.29	54	-2.71	AV

802.11ax 80

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:5210									
V	10420	58.99	49.09	15.34	37.42	62.66	68.2	-5.54	PK
V	10420	47.18	49.09	15.34	37.42	50.85	54	-3.15	AV
V	15630	58.54	49.18	15.29	40.47	65.12	74	-8.88	PK
V	15630	45.19	49.18	15.29	40.47	51.77	54	-2.23	AV
H	10420	58.65	49.09	15.34	37.42	62.32	68.2	-5.88	PK
H	10420	47.47	49.09	15.34	37.42	51.14	54	-2.86	AV
H	15630	56.70	49.18	15.29	40.47	63.28	74	-10.72	PK
H	15630	45.11	49.18	15.29	40.47	51.69	54	-2.31	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

802.11ac20

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:5180									
V	10360	57.95	49.05	15.3	37.39	61.59	68.2	-6.61	PK
V	10360	46.45	49.05	15.3	37.39	50.09	54	-3.91	AV
V	15540	58.13	49.16	15.27	40.45	64.69	74	-9.31	PK
V	15540	44.70	49.16	15.27	40.45	51.26	54	-2.74	AV
H	10360	57.56	49.05	15.3	37.39	61.20	68.2	-7.00	PK
H	10360	46.61	49.05	15.3	37.39	50.25	54	-3.75	AV
H	15540	60.68	49.16	15.27	40.45	67.24	74	-6.76	PK
H	15540	44.20	49.16	15.27	40.45	50.76	54	-3.24	AV
operation frequency:5220									
V	10440	58.98	49.09	15.34	37.42	62.65	68.2	-5.55	PK
V	10440	46.51	49.09	15.34	37.42	50.18	54	-3.82	AV
V	15660	61.00	49.18	15.29	40.47	67.58	74	-6.42	PK
V	15660	44.24	49.18	15.29	40.47	50.82	54	-3.18	AV
H	10440	58.18	49.09	15.34	37.42	61.85	68.2	-6.35	PK
H	10440	46.95	49.09	15.34	37.42	50.62	54	-3.38	AV
H	15660	61.00	49.18	15.29	40.47	67.58	74	-6.42	PK
H	15660	44.50	49.18	15.29	40.47	51.08	54	-2.92	AV
operation frequency:5240									
V	10480	60.06	49.11	15.37	37.46	63.78	68.2	-4.42	PK
V	10480	46.53	49.11	15.37	37.46	50.25	54	-3.75	AV
V	15720	60.71	49.21	15.34	40.51	67.35	74	-6.65	PK
V	15720	44.51	49.21	15.34	40.51	51.15	54	-2.85	AV
H	10480	58.52	49.11	15.37	31.31	56.09	68.2	-12.11	PK
H	10480	46.74	49.11	15.37	31.31	44.31	54	-9.69	AV
H	15720	58.96	49.21	15.34	40.51	65.60	74	-8.40	PK
H	15720	43.67	49.21	15.34	40.51	50.31	54	-3.69	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 band 1

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:5180									
V	10360	57.60	49.05	15.3	37.39	61.24	68.2	-6.96	PK
V	10360	46.17	49.05	15.3	37.39	49.81	54	-4.19	AV
V	15540	57.79	49.16	15.27	40.45	64.35	74	-9.65	PK
V	15540	44.44	49.16	15.27	40.45	51.00	54	-3.00	AV
H	10360	57.23	49.05	15.3	37.39	60.87	68.2	-7.33	PK
H	10360	46.33	49.05	15.3	37.39	49.97	54	-4.03	AV
H	15540	60.33	49.16	15.27	40.45	66.89	74	-7.11	PK
H	15540	43.94	49.16	15.27	40.45	50.50	54	-3.50	AV
operation frequency:5220									
V	10440	58.62	49.09	15.34	37.42	62.29	68.2	-5.91	PK
V	10440	46.23	49.09	15.34	37.42	49.90	54	-4.10	AV
V	15660	60.63	49.18	15.29	40.47	67.21	74	-6.79	PK
V	15660	43.98	49.18	15.29	40.47	50.56	54	-3.44	AV
H	10440	57.84	49.09	15.34	37.42	61.51	68.2	-6.69	PK
H	10440	46.67	49.09	15.34	37.42	50.34	54	-3.66	AV
H	15660	60.63	49.18	15.29	40.47	67.21	74	-6.79	PK
H	15660	44.23	49.18	15.29	40.47	50.81	54	-3.19	AV
operation frequency:5240									
V	10480	59.71	49.11	15.37	37.46	63.43	68.2	-4.77	PK
V	10480	46.25	49.11	15.37	37.46	49.97	54	-4.03	AV
V	15720	60.35	49.21	15.34	40.51	66.99	74	-7.01	PK
V	15720	44.24	49.21	15.34	40.51	50.88	54	-3.12	AV
H	10480	58.18	49.11	15.37	31.31	55.75	68.2	-12.45	PK
H	10480	46.47	49.11	15.37	31.31	44.04	54	-9.96	AV
H	15720	58.60	49.21	15.34	40.51	65.24	74	-8.76	PK
H	15720	43.42	49.21	15.34	40.51	50.06	54	-3.94	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	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:5180									
V	10360	57.88	49.05	15.3	37.39	61.52	68.2	-6.68	PK
V	10360	46.60	49.05	15.3	37.39	50.24	54	-3.76	AV
V	15540	57.39	49.16	15.27	40.45	63.95	74	-10.05	PK
V	15540	44.21	49.16	15.27	40.45	50.77	54	-3.23	AV
H	10360	57.80	49.05	15.3	37.39	61.44	68.2	-6.76	PK
H	10360	46.23	49.05	15.3	37.39	49.87	54	-4.13	AV
H	15540	55.24	49.16	15.27	40.45	61.80	74	-12.20	PK
H	15540	44.24	49.16	15.27	40.45	50.80	54	-3.20	AV
operation frequency:5220									
V	10440	57.40	49.09	15.34	37.42	61.07	68.2	-7.13	PK
V	10440	45.68	49.09	15.34	37.42	49.35	54	-4.65	AV
V	15660	56.47	49.18	15.29	40.47	63.05	74	-10.95	PK
V	15660	44.31	49.18	15.29	40.47	50.89	54	-3.11	AV
H	10440	56.69	49.09	15.34	37.42	60.36	68.2	-7.84	PK
H	10440	44.20	49.09	15.34	37.42	47.87	54	-6.13	AV
H	15660	56.18	49.18	15.29	40.47	62.76	74	-11.24	PK
H	15660	44.28	49.18	15.29	40.47	50.86	54	-3.14	AV
operation frequency:5240									
V	10480	57.69	49.11	15.37	37.46	61.41	68.2	-6.79	PK
V	10480	45.54	49.11	15.37	37.46	49.26	54	-4.74	AV
V	15720	55.46	49.21	15.34	40.51	62.10	74	-11.90	PK
V	15720	44.35	49.21	15.34	40.51	50.99	54	-3.01	AV
H	10480	57.73	49.11	15.37	31.31	55.30	68.2	-12.90	PK
H	10480	45.55	49.11	15.37	31.31	43.12	54	-10.88	AV
H	15720	56.46	49.21	15.34	40.51	63.10	74	-10.90	PK
H	15720	44.14	49.21	15.34	40.51	50.78	54	-3.22	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.									



802.11ac 40

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:5190									
V	10380	58.90	49.07	15.33	37.41	62.57	68.2	-5.63	PK
V	10380	46.95	49.07	15.33	37.41	50.62	54	-3.38	AV
V	15570	58.35	49.17	15.28	40.46	64.92	74	-9.08	PK
V	15570	45.00	49.17	15.28	40.46	51.57	54	-2.43	AV
H	10380	58.76	49.07	15.33	37.41	62.43	68.2	-5.77	PK
H	10380	47.01	49.07	15.33	37.41	50.68	54	-3.32	AV
H	15570	56.70	49.17	15.28	40.46	63.27	74	-10.73	PK
H	15570	44.38	49.17	15.28	40.46	50.95	54	-3.05	AV
operation frequency:5230									
V	10460	59.33	49.11	15.37	37.46	63.05	68.2	-5.15	PK
V	10460	46.12	49.11	15.37	37.46	49.84	54	-4.16	AV
V	15690	56.45	49.21	15.34	40.51	63.09	74	-10.91	PK
V	15690	44.95	49.21	15.34	40.51	51.59	54	-2.41	AV
H	10460	59.50	49.11	15.37	31.31	57.07	68.2	-11.13	PK
H	10460	46.49	49.11	15.37	31.31	44.06	54	-9.94	AV
H	15690	57.44	49.21	15.34	40.51	64.08	74	-9.92	PK
H	15690	44.49	49.21	15.34	40.51	51.13	54	-2.87	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.									



802.11ax 40

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:5190									
V	10380	58.49	49.07	15.33	37.41	62.16	68.2	-6.04	PK
V	10380	46.63	49.07	15.33	37.41	50.30	54	-3.70	AV
V	15570	57.96	49.17	15.28	40.46	64.53	74	-9.47	PK
V	15570	44.70	49.17	15.28	40.46	51.27	54	-2.73	AV
H	10380	58.36	49.07	15.33	37.41	62.03	68.2	-6.17	PK
H	10380	46.69	49.07	15.33	37.41	50.36	54	-3.64	AV
H	15570	56.31	49.17	15.28	40.46	62.88	74	-11.12	PK
H	15570	44.58	49.17	15.28	40.46	51.15	54	-2.85	AV
operation frequency:5230									
V	10460	58.93	49.11	15.37	37.46	62.65	68.2	-5.55	PK
V	10460	45.81	49.11	15.37	37.46	49.53	54	-4.47	AV
V	15690	56.07	49.21	15.34	40.51	62.71	74	-11.29	PK
V	15690	44.65	49.21	15.34	40.51	51.29	54	-2.71	AV
H	10460	59.10	49.11	15.37	31.31	56.67	68.2	-11.53	PK
H	10460	46.17	49.11	15.37	31.31	43.74	54	-10.26	AV
H	15690	57.05	49.21	15.34	40.51	63.69	74	-10.31	PK
H	15690	44.38	49.21	15.34	40.51	51.02	54	-2.98	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:5190									
V	10380	58.21	49.07	15.33	37.41	61.88	68.2	-6.32	PK
V	10380	46.39	49.07	15.33	37.41	50.06	54	-3.94	AV
V	15570	57.68	49.17	15.28	40.46	64.25	74	-9.75	PK
V	15570	44.48	49.17	15.28	40.46	51.05	54	-2.95	AV
H	10380	58.08	49.07	15.33	37.41	61.75	68.2	-6.45	PK
H	10380	46.46	49.07	15.33	37.41	50.13	54	-3.87	AV
H	15570	56.03	49.17	15.28	40.46	62.60	74	-11.40	PK
H	15570	44.35	49.17	15.28	40.46	50.92	54	-3.08	AV
operation frequency:5230									
V	10460	58.63	49.11	15.37	37.46	62.35	68.2	-5.85	PK
V	10460	45.59	49.11	15.37	37.46	49.31	54	-4.69	AV
V	15690	55.80	49.21	15.34	40.51	62.44	74	-11.56	PK
V	15690	44.43	49.21	15.34	40.51	51.07	54	-2.93	AV
H	10460	58.82	49.11	15.37	31.31	56.39	68.2	-11.81	PK
H	10460	45.95	49.11	15.37	31.31	43.52	54	-10.48	AV
H	15690	56.78	49.21	15.34	40.51	63.42	74	-10.58	PK
H	15690	44.56	49.21	15.34	40.51	51.20	54	-2.80	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.									



802.11ac 80

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:5210									
V	10420	58.52	49.09	15.34	37.42	62.19	68.2	-6.01	PK
V	10420	46.81	49.09	15.34	37.42	50.48	54	-3.52	AV
V	15630	58.08	49.18	15.29	40.47	64.66	74	-9.34	PK
V	15630	44.84	49.18	15.29	40.47	51.42	54	-2.58	AV
H	10420	58.18	49.09	15.34	37.42	61.85	68.2	-6.35	PK
H	10420	47.09	49.09	15.34	37.42	50.76	54	-3.24	AV
H	15630	56.25	49.18	15.29	40.47	62.83	74	-11.17	PK
H	15630	44.76	49.18	15.29	40.47	51.34	54	-2.66	AV

802.11ax 80

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:5210									
V	10420	59.05	49.09	15.34	37.42	62.72	68.2	-5.48	PK
V	10420	47.23	49.09	15.34	37.42	50.90	54	-3.10	AV
V	15630	58.60	49.18	15.29	40.47	65.18	74	-8.82	PK
V	15630	45.24	49.18	15.29	40.47	51.82	54	-2.18	AV
H	10420	58.71	49.09	15.34	37.42	62.38	68.2	-5.82	PK
H	10420	47.52	49.09	15.34	37.42	51.19	54	-2.81	AV
H	15630	56.76	49.18	15.29	40.47	63.34	74	-10.66	PK
H	15630	45.16	49.18	15.29	40.47	51.74	54	-2.26	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.



ANTENNA 1
band 4
802.11a

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:5745									
V	11490	59.15	49.05	15.3	37.39	62.79	74	-11.21	PK
V	11490	46.65	49.05	15.3	37.39	50.29	54	-3.71	AV
V	17235	57.95	49.16	15.27	40.45	64.51	74	-9.49	PK
V	17235	44.14	49.16	15.27	40.45	51.70	54	-2.30	AV
H	11490	57.50	49.05	15.3	37.39	61.14	74	-12.86	PK
H	11490	46.88	49.05	15.3	37.39	50.52	54	-3.48	AV
H	17235	61.20	49.16	15.27	40.45	67.76	74	-6.24	PK
H	17235	44.60	49.16	15.27	40.45	51.16	54	-2.84	AV
operation frequency:5785									
V	11570	59.34	49.09	15.34	37.42	63.01	74	-10.99	PK
V	11570	46.67	49.09	15.34	37.42	50.34	54	-3.66	AV
V	17355	61.30	49.18	15.29	40.47	67.88	74	-6.12	PK
V	17355	44.41	49.18	15.29	40.47	50.99	54	-3.01	AV
H	11570	58.43	49.09	15.34	37.42	62.10	74	-11.90	PK
H	11570	46.73	49.09	15.34	37.42	50.40	54	-3.60	AV
H	17355	53.79	49.18	15.29	40.47	60.37	74	-13.63	PK
H	17355	45.01	49.18	15.29	40.47	51.59	54	-2.41	AV
operation frequency:5825									
V	11650	60.01	49.11	15.37	37.46	63.73	74	-10.27	PK
V	11650	46.98	49.11	15.37	37.46	50.70	54	-3.30	AV
V	17475	61.32	49.21	15.34	40.51	67.96	74	-6.04	PK
V	17475	44.70	49.21	15.34	40.51	51.34	54	-2.66	AV
H	11650	58.91	49.11	15.37	31.31	56.48	74	-17.52	PK
H	11650	46.98	49.11	15.37	31.31	44.55	54	-9.45	AV
H	17475	59.14	49.21	15.34	40.51	65.78	74	-8.22	PK
H	17475	43.68	49.21	15.34	40.51	50.32	54	-3.68	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.



802.11ac 20

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:5745									
V	11490	58.92	49.05	15.3	37.39	62.56	74	-11.44	PK
V	11490	46.47	49.05	15.3	37.39	50.11	54	-3.89	AV
V	17235	57.72	49.16	15.27	40.45	64.28	74	-9.72	PK
V	17235	44.96	49.16	15.27	40.45	51.52	54	-2.48	AV
H	11490	57.28	49.05	15.3	37.39	60.92	74	-13.08	PK
H	11490	46.70	49.05	15.3	37.39	50.34	54	-3.66	AV
H	17235	60.96	49.16	15.27	40.45	67.52	74	-6.48	PK
H	17235	44.43	49.16	15.27	40.45	50.99	54	-3.01	AV
operation frequency:5785									
V	11570	59.11	49.09	15.34	37.42	62.78	74	-11.22	PK
V	11570	46.49	49.09	15.34	37.42	50.16	54	-3.84	AV
V	17355	61.06	49.18	15.29	40.47	67.64	74	-6.36	PK
V	17355	44.23	49.18	15.29	40.47	50.81	54	-3.19	AV
H	11570	58.21	49.09	15.34	37.42	61.88	74	-12.12	PK
H	11570	46.55	49.09	15.34	37.42	50.22	54	-3.78	AV
H	17355	53.58	49.18	15.29	40.47	60.16	74	-13.84	PK
H	17355	44.83	49.18	15.29	40.47	51.41	54	-2.59	AV
operation frequency:5825									
V	11650	59.78	49.11	15.37	37.46	63.50	74	-10.50	PK
V	11650	46.79	49.11	15.37	37.46	50.51	54	-3.49	AV
V	17475	61.08	49.21	15.34	40.51	67.72	74	-6.28	PK
V	17475	44.52	49.21	15.34	40.51	51.16	54	-2.84	AV
H	11650	58.68	49.11	15.37	31.31	56.25	74	-17.75	PK
H	11650	46.79	49.11	15.37	31.31	44.36	54	-9.64	AV
H	17475	58.91	49.21	15.34	40.51	65.55	74	-8.45	PK
H	17475	43.52	49.21	15.34	40.51	50.16	54	-3.84	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.									



802.11ax 20

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:5745									
V	11490	58.52	49.05	15.3	37.39	62.16	74	-11.84	PK
V	11490	46.15	49.05	15.3	37.39	49.79	54	-4.21	AV
V	17235	57.33	49.16	15.27	40.45	63.89	74	-10.11	PK
V	17235	44.66	49.16	15.27	40.45	51.22	54	-2.78	AV
H	11490	56.89	49.05	15.3	37.39	60.53	74	-13.47	PK
H	11490	46.38	49.05	15.3	37.39	50.02	54	-3.98	AV
H	17235	60.55	49.16	15.27	40.45	67.11	74	-6.89	PK
H	17235	44.13	49.16	15.27	40.45	50.69	54	-3.31	AV
operation frequency:5785									
V	11570	58.71	49.09	15.34	37.42	62.38	74	-11.62	PK
V	11570	46.17	49.09	15.34	37.42	49.84	54	-4.16	AV
V	17355	60.65	49.18	15.29	40.47	67.23	74	-6.77	PK
V	17355	43.93	49.18	15.29	40.47	50.51	54	-3.49	AV
H	11570	57.81	49.09	15.34	37.42	61.48	74	-12.52	PK
H	11570	46.23	49.09	15.34	37.42	49.90	54	-4.10	AV
H	17355	53.21	49.18	15.29	40.47	59.79	74	-14.21	PK
H	17355	44.53	49.18	15.29	40.47	51.11	54	-2.89	AV
operation frequency:5825									
V	11650	59.37	49.11	15.37	37.46	63.09	74	-10.91	PK
V	11650	46.48	49.11	15.37	37.46	50.20	54	-3.80	AV
V	17475	60.67	49.21	15.34	40.51	67.31	74	-6.69	PK
V	17475	44.22	49.21	15.34	40.51	50.86	54	-3.14	AV
H	11650	58.28	49.11	15.37	31.31	55.85	74	-18.15	PK
H	11650	46.48	49.11	15.37	31.31	44.05	54	-9.95	AV
H	17475	58.51	49.21	15.34	40.51	65.15	74	-8.85	PK
H	17475	43.22	49.21	15.34	40.51	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.



802.11n HT20

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:5745									
V	11490	57.77	49.05	15.3	37.39	61.41	74	-12.59	PK
V	11490	46.53	49.05	15.3	37.39	50.17	54	-3.83	AV
V	17235	57.14	49.16	15.27	40.45	63.70	74	-10.30	PK
V	17235	44.10	49.16	15.27	40.45	50.66	54	-3.34	AV
H	11490	57.42	49.05	15.3	37.39	61.06	74	-12.94	PK
H	11490	46.46	49.05	15.3	37.39	50.10	54	-3.90	AV
H	17235	55.30	49.16	15.27	40.45	61.86	74	-12.14	PK
H	17235	44.91	49.16	15.27	40.45	51.47	54	-2.53	AV
operation frequency:5785									
V	11570	57.72	49.09	15.34	37.42	61.39	74	-12.61	PK
V	11570	45.61	49.09	15.34	37.42	49.28	54	-4.72	AV
V	17355	56.32	49.18	15.29	40.47	62.90	74	-11.10	PK
V	17355	44.10	49.18	15.29	40.47	50.68	54	-3.32	AV
H	11570	56.20	49.09	15.34	37.42	59.87	74	-14.13	PK
H	11570	44.30	49.09	15.34	37.42	47.97	54	-6.03	AV
H	17355	55.97	49.18	15.29	40.47	62.55	74	-11.45	PK
H	17355	43.98	49.18	15.29	40.47	50.56	54	-3.44	AV
operation frequency:5825									
V	11650	58.24	49.11	15.37	37.46	61.96	74	-12.04	PK
V	11650	45.12	49.11	15.37	37.46	48.84	54	-5.16	AV
V	17475	55.38	49.21	15.34	40.51	62.02	74	-11.98	PK
V	17475	43.93	49.21	15.34	40.51	50.57	54	-3.43	AV
H	11650	58.47	49.11	15.37	31.31	56.04	74	-17.96	PK
H	11650	45.48	49.11	15.37	31.31	43.05	54	-10.95	AV
H	17475	56.09	49.21	15.34	40.51	62.73	74	-11.27	PK
H	17475	44.81	49.21	15.34	40.51	51.45	54	-2.55	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.



802.11ac 40

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:5755									
V	11510	58.12	49.07	15.33	37.41	61.79	74	-12.21	PK
V	11510	46.49	49.07	15.33	37.41	50.16	54	-3.84	AV
V	17265	57.68	49.17	15.28	40.46	64.25	74	-9.75	PK
V	17265	44.53	49.17	15.28	40.46	51.10	54	-2.90	AV
H	11510	57.77	49.07	15.33	37.41	61.44	74	-12.56	PK
H	11510	46.76	49.07	15.33	37.41	50.43	54	-3.57	AV
H	17265	55.86	49.17	15.28	40.46	62.43	74	-11.57	PK
H	17265	44.44	49.17	15.28	40.46	51.01	54	-2.99	AV
operation frequency:5795									
V	11590	59.12	49.11	15.37	37.46	62.84	74	-11.16	PK
V	11590	45.88	49.11	15.37	37.46	49.60	54	-4.40	AV
V	17385	56.04	49.21	15.34	40.51	62.68	74	-11.32	PK
V	17385	44.44	49.21	15.34	40.51	51.08	54	-2.92	AV
H	11590	59.14	49.11	15.37	31.31	56.71	74	-17.29	PK
H	11590	45.94	49.11	15.37	31.31	43.51	54	-10.49	AV
H	17385	56.75	49.21	15.34	40.51	63.39	74	-10.61	PK
H	17385	44.21	49.21	15.34	40.51	50.85	54	-3.15	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.									



802.11ax 40

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:5755									
V	11510	57.73	49.07	15.33	37.41	61.40	74	-12.60	PK
V	11510	46.17	49.07	15.33	37.41	49.84	54	-4.16	AV
V	17265	57.29	49.17	15.28	40.46	63.86	74	-10.14	PK
V	17265	44.23	49.17	15.28	40.46	50.80	54	-3.20	AV
H	11510	57.38	49.07	15.33	37.41	61.05	74	-12.95	PK
H	11510	46.45	49.07	15.33	37.41	50.12	54	-3.88	AV
H	17265	55.48	49.17	15.28	40.46	62.05	74	-11.95	PK
H	17265	45.13	49.17	15.28	40.46	51.70	54	-2.30	AV
operation frequency:5795									
V	11590	58.72	49.11	15.37	37.46	62.44	74	-11.56	PK
V	11590	45.57	49.11	15.37	37.46	49.29	54	-4.71	AV
V	17385	55.65	49.21	15.34	40.51	62.29	74	-11.71	PK
V	17385	44.14	49.21	15.34	40.51	50.78	54	-3.22	AV
H	11590	58.74	49.11	15.37	31.31	56.31	74	-17.69	PK
H	11590	45.63	49.11	15.37	31.31	43.20	54	-10.80	AV
H	17385	56.36	49.21	15.34	40.51	63.00	74	-11.00	PK
H	17385	44.90	49.21	15.34	40.51	51.54	54	-2.46	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	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:5755									
V	11510	57.50	49.07	15.33	37.41	61.17	74	-12.83	PK
V	11510	45.99	49.07	15.33	37.41	49.66	54	-4.34	AV
V	17265	57.06	49.17	15.28	40.46	63.63	74	-10.37	PK
V	17265	44.06	49.17	15.28	40.46	50.63	54	-3.37	AV
H	11510	57.16	49.07	15.33	37.41	60.83	74	-13.17	PK
H	11510	46.26	49.07	15.33	37.41	49.93	54	-4.07	AV
H	17265	55.26	49.17	15.28	40.46	61.83	74	-12.17	PK
H	17265	44.95	49.17	15.28	40.46	51.52	54	-2.48	AV
operation frequency:5795									
V	11590	58.49	49.11	15.37	37.46	62.21	74	-11.79	PK
V	11590	45.39	49.11	15.37	37.46	49.11	54	-4.89	AV
V	17385	55.44	49.21	15.34	40.51	62.08	74	-11.92	PK
V	17385	43.96	49.21	15.34	40.51	50.60	54	-3.40	AV
H	11590	58.51	49.11	15.37	31.31	56.08	74	-17.92	PK
H	11590	45.45	49.11	15.37	31.31	43.02	54	-10.98	AV
H	17385	56.14	49.21	15.34	40.51	62.78	74	-11.22	PK
H	17385	44.73	49.21	15.34	40.51	51.37	54	-2.63	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.



802.11ac 80

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:5775									
V	11550	58.95	49.11	15.37	37.46	62.67	74	-11.33	PK
V	11550	45.75	49.11	15.37	37.46	49.47	54	-4.53	AV
V	17325	55.87	49.21	15.34	40.51	62.51	74	-11.49	PK
V	17325	44.31	49.21	15.34	40.51	50.95	54	-3.05	AV
H	11550	58.97	49.11	15.37	31.31	56.54	74	-17.46	PK
H	11550	45.81	49.11	15.37	31.31	43.38	54	-10.62	AV
H	17325	56.58	49.21	15.34	40.51	63.22	74	-10.78	PK
H	17325	45.08	49.21	15.34	40.51	51.72	54	-2.28	AV

802.11ax 80

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:5775									
V	11550	59.48	49.11	15.37	37.46	63.20	74	-10.80	PK
V	11550	46.16	49.11	15.37	37.46	49.88	54	-4.12	AV
V	17325	56.37	49.21	15.34	40.51	63.01	74	-10.99	PK
V	17325	44.71	49.21	15.34	40.51	51.35	54	-2.65	AV
H	11550	59.50	49.11	15.37	31.31	57.07	74	-16.93	PK
H	11550	46.22	49.11	15.37	31.31	43.79	54	-10.21	AV
H	17325	57.09	49.21	15.34	40.51	63.73	74	-10.27	PK
H	17325	44.49	49.21	15.34	40.51	51.13	54	-2.87	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.



802.11ax 80

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:5210									
V	10420	58.47	49.09	15.34	37.42	62.14	74	-11.86	PK
V	10420	46.77	49.09	15.34	37.42	50.44	54	-3.56	AV
V	15630	58.03	49.18	15.29	40.47	64.61	74	-9.39	PK
V	15630	44.80	49.18	15.29	40.47	51.38	54	-2.62	AV
H	10420	58.13	49.09	15.34	37.42	61.80	74	-12.20	PK
H	10420	47.05	49.09	15.34	37.42	50.72	54	-3.28	AV
H	15630	56.20	49.18	15.29	40.47	62.78	74	-11.22	PK
H	15630	44.72	49.18	15.29	40.47	51.30	54	-2.70	AV
operation frequency:5775									
V	11550	59.48	49.11	15.37	37.46	63.20	74	-10.80	PK
V	11550	46.16	49.11	15.37	37.46	49.88	54	-4.12	AV
V	17325	56.37	49.21	15.34	40.51	63.01	74	-10.99	PK
V	17325	44.71	49.21	15.34	40.51	51.35	54	-2.65	AV
H	11550	59.50	49.11	15.37	31.31	57.07	74	-16.93	PK
H	11550	46.22	49.11	15.37	31.31	43.79	54	-10.21	AV
H	17325	57.09	49.21	15.34	40.51	63.73	74	-10.27	PK
H	17325	44.49	49.21	15.34	40.51	51.13	54	-2.87	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.									



For MIMO mode
802.11ac 20

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:5745									
V	11490	59.50	49.05	15.3	37.39	63.14	74	-10.86	PK
V	11490	46.93	49.05	15.3	37.39	50.57	54	-3.43	AV
V	17235	58.29	49.16	15.27	40.45	64.85	74	-9.15	PK
V	17235	44.41	49.16	15.27	40.45	50.97	54	-3.03	AV
H	11490	57.85	49.05	15.3	37.39	61.49	74	-12.51	PK
H	11490	47.16	49.05	15.3	37.39	50.80	54	-3.20	AV
H	17235	61.56	49.16	15.27	40.45	68.12	74	-5.88	PK
H	17235	44.87	49.16	15.27	40.45	51.43	54	-2.57	AV
operation frequency:5785									
V	11570	59.70	49.09	15.34	37.42	63.37	74	-10.63	PK
V	11570	46.95	49.09	15.34	37.42	50.62	54	-3.38	AV
V	17355	61.66	49.18	15.29	40.47	68.24	74	-5.76	PK
V	17355	44.67	49.18	15.29	40.47	51.25	54	-2.75	AV
H	11570	58.79	49.09	15.34	37.42	62.46	74	-11.54	PK
H	11570	47.01	49.09	15.34	37.42	50.68	54	-3.32	AV
H	17355	54.11	49.18	15.29	40.47	60.69	74	-13.31	PK
H	17355	45.27	49.18	15.29	40.47	51.85	54	-2.15	AV
operation frequency:5825									
V	11650	60.37	49.11	15.37	37.46	64.09	74	-9.91	PK
V	11650	47.25	49.11	15.37	37.46	50.97	54	-3.03	AV
V	17475	61.68	49.21	15.34	40.51	68.32	74	-5.68	PK
V	17475	44.96	49.21	15.34	40.51	51.60	54	-2.40	AV
H	11650	59.26	49.11	15.37	31.31	56.83	74	-17.17	PK
H	11650	47.25	49.11	15.37	31.31	44.82	54	-9.18	AV
H	17475	59.49	49.21	15.34	40.51	66.13	74	-7.87	PK
H	17475	43.95	49.21	15.34	40.51	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.									



802.11ax 20

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:5745									
V	11490	59.10	49.05	15.3	37.39	62.74	74	-11.26	PK
V	11490	46.61	49.05	15.3	37.39	50.25	54	-3.75	AV
V	17235	57.90	49.16	15.27	40.45	64.46	74	-9.54	PK
V	17235	45.10	49.16	15.27	40.45	51.66	54	-2.34	AV
H	11490	57.45	49.05	15.3	37.39	61.09	74	-12.91	PK
H	11490	46.84	49.05	15.3	37.39	50.48	54	-3.52	AV
H	17235	61.15	49.16	15.27	40.45	67.71	74	-6.29	PK
H	17235	44.57	49.16	15.27	40.45	51.13	54	-2.87	AV
operation frequency:5785									
V	11570	59.29	49.09	15.34	37.42	62.96	74	-11.04	PK
V	11570	46.63	49.09	15.34	37.42	50.30	54	-3.70	AV
V	17355	61.25	49.18	15.29	40.47	67.83	74	-6.17	PK
V	17355	44.36	49.18	15.29	40.47	50.94	54	-3.06	AV
H	11570	58.38	49.09	15.34	37.42	62.05	74	-11.95	PK
H	11570	46.69	49.09	15.34	37.42	50.36	54	-3.64	AV
H	17355	53.74	49.18	15.29	40.47	60.32	74	-13.68	PK
H	17355	44.87	49.18	15.29	40.47	51.45	54	-2.55	AV
operation frequency:5825									
V	11650	59.96	49.11	15.37	37.46	63.68	74	-10.32	PK
V	11650	46.94	49.11	15.37	37.46	50.66	54	-3.34	AV
V	17475	61.27	49.21	15.34	40.51	67.91	74	-6.09	PK
V	17475	44.66	49.21	15.34	40.51	51.30	54	-2.70	AV
H	11650	58.86	49.11	15.37	31.31	56.43	74	-17.57	PK
H	11650	46.94	49.11	15.37	31.31	44.51	54	-9.49	AV
H	17475	59.09	49.21	15.34	40.51	65.73	74	-8.27	PK
H	17475	43.65	49.21	15.34	40.51	50.29	54	-3.71	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	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:5745									
V	11490	58.34	49.05	15.3	37.39	61.98	74	-12.02	PK
V	11490	46.99	49.05	15.3	37.39	50.63	54	-3.37	AV
V	17235	57.71	49.16	15.27	40.45	64.27	74	-9.73	PK
V	17235	44.54	49.16	15.27	40.45	51.10	54	-2.90	AV
H	11490	57.99	49.05	15.3	37.39	61.63	74	-12.37	PK
H	11490	46.92	49.05	15.3	37.39	50.56	54	-3.44	AV
H	17235	55.85	49.16	15.27	40.45	62.41	74	-11.59	PK
H	17235	44.35	49.16	15.27	40.45	50.91	54	-3.09	AV
operation frequency:5785									
V	11570	58.29	49.09	15.34	37.42	61.96	74	-12.04	PK
V	11570	46.06	49.09	15.34	37.42	49.73	54	-4.27	AV
V	17355	56.88	49.18	15.29	40.47	63.46	74	-10.54	PK
V	17355	44.54	49.18	15.29	40.47	51.12	54	-2.88	AV
H	11570	56.76	49.09	15.34	37.42	60.43	74	-13.57	PK
H	11570	44.74	49.09	15.34	37.42	48.41	54	-5.59	AV
H	17355	56.52	49.18	15.29	40.47	63.10	74	-10.90	PK
H	17355	44.42	49.18	15.29	40.47	51.00	54	-3.00	AV
operation frequency:5825									
V	11650	58.82	49.11	15.37	37.46	62.54	74	-11.46	PK
V	11650	45.57	49.11	15.37	37.46	49.29	54	-4.71	AV
V	17475	55.93	49.21	15.34	40.51	62.57	74	-11.43	PK
V	17475	44.36	49.21	15.34	40.51	51.00	54	-3.00	AV
H	11650	59.05	49.11	15.37	31.31	56.62	74	-17.38	PK
H	11650	45.93	49.11	15.37	31.31	43.50	54	-10.50	AV
H	17475	56.65	49.21	15.34	40.51	63.29	74	-10.71	PK
H	17475	44.25	49.21	15.34	40.51	50.89	54	-3.11	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.



802.11ac 40

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:5755									
V	11510	58.70	49.07	15.33	37.41	62.37	74	-11.63	PK
V	11510	46.95	49.07	15.33	37.41	50.62	54	-3.38	AV
V	17265	58.25	49.17	15.28	40.46	64.82	74	-9.18	PK
V	17265	44.97	49.17	15.28	40.46	51.54	54	-2.46	AV
H	11510	58.34	49.07	15.33	37.41	62.01	74	-11.99	PK
H	11510	47.22	49.07	15.33	37.41	50.89	54	-3.11	AV
H	17265	56.41	49.17	15.28	40.46	62.98	74	-11.02	PK
H	17265	44.88	49.17	15.28	40.46	51.45	54	-2.55	AV
operation frequency:5795									
V	11590	59.71	49.11	15.37	37.46	63.43	74	-10.57	PK
V	11590	46.33	49.11	15.37	37.46	50.05	54	-3.95	AV
V	17385	56.59	49.21	15.34	40.51	63.23	74	-10.77	PK
V	17385	44.88	49.21	15.34	40.51	51.52	54	-2.48	AV
H	11590	59.73	49.11	15.37	31.31	57.30	74	-16.70	PK
H	11590	46.39	49.11	15.37	31.31	43.96	54	-10.04	AV
H	17385	57.31	49.21	15.34	40.51	63.95	74	-10.05	PK
H	17385	44.65	49.21	15.34	40.51	51.29	54	-2.71	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.									



802.11ax 40

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:5755									
V	11510	58.30	49.07	15.33	37.41	61.97	74	-12.03	PK
V	11510	46.63	49.07	15.33	37.41	50.30	54	-3.70	AV
V	17265	57.86	49.17	15.28	40.46	64.43	74	-9.57	PK
V	17265	44.67	49.17	15.28	40.46	51.24	54	-2.76	AV
H	11510	57.95	49.07	15.33	37.41	61.62	74	-12.38	PK
H	11510	46.91	49.07	15.33	37.41	50.58	54	-3.42	AV
H	17265	56.03	49.17	15.28	40.46	62.60	74	-11.40	PK
H	17265	44.58	49.17	15.28	40.46	51.15	54	-2.85	AV
operation frequency:5795									
V	11590	59.30	49.11	15.37	37.46	63.02	74	-10.98	PK
V	11590	46.02	49.11	15.37	37.46	49.74	54	-4.26	AV
V	17385	56.20	49.21	15.34	40.51	62.84	74	-11.16	PK
V	17385	44.58	49.21	15.34	40.51	51.22	54	-2.78	AV
H	11590	59.32	49.11	15.37	31.31	56.89	74	-17.11	PK
H	11590	46.08	49.11	15.37	31.31	43.65	54	-10.35	AV
H	17385	56.92	49.21	15.34	40.51	63.56	74	-10.44	PK
H	17385	44.34	49.21	15.34	40.51	50.98	54	-3.02	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	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:5755									
V	11510	58.07	49.07	15.33	37.41	61.74	74	-12.26	PK
V	11510	46.45	49.07	15.33	37.41	50.12	54	-3.88	AV
V	17265	57.62	49.17	15.28	40.46	64.19	74	-9.81	PK
V	17265	44.50	49.17	15.28	40.46	51.07	54	-2.93	AV
H	11510	57.73	49.07	15.33	37.41	61.40	74	-12.60	PK
H	11510	46.72	49.07	15.33	37.41	50.39	54	-3.61	AV
H	17265	55.81	49.17	15.28	40.46	62.38	74	-11.62	PK
H	17265	44.40	49.17	15.28	40.46	50.97	54	-3.03	AV
operation frequency:5795									
V	11590	59.07	49.11	15.37	37.46	62.79	74	-11.21	PK
V	11590	45.84	49.11	15.37	37.46	49.56	54	-4.44	AV
V	17385	55.99	49.21	15.34	40.51	62.63	74	-11.37	PK
V	17385	44.40	49.21	15.34	40.51	51.04	54	-2.96	AV
H	11590	59.09	49.11	15.37	31.31	56.66	74	-17.34	PK
H	11590	45.90	49.11	15.37	31.31	43.47	54	-10.53	AV
H	17385	56.70	49.21	15.34	40.51	63.34	74	-10.66	PK
H	17385	44.17	49.21	15.34	40.51	50.81	54	-3.19	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.



802.11ac 80

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:5775									
V	11550	59.53	49.11	15.37	37.46	63.25	74	-10.75	PK
V	11550	46.20	49.11	15.37	37.46	49.92	54	-4.08	AV
V	17325	56.42	49.21	15.34	40.51	63.06	74	-10.94	PK
V	17325	44.75	49.21	15.34	40.51	51.39	54	-2.61	AV
H	11550	59.55	49.11	15.37	31.31	57.12	74	-16.88	PK
H	11550	46.26	49.11	15.37	31.31	43.83	54	-10.17	AV
H	17325	57.14	49.21	15.34	40.51	63.78	74	-10.22	PK
H	17325	44.53	49.21	15.34	40.51	51.17	54	-2.83	AV

802.11ax 80

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:5775									
V	11550	60.07	49.11	15.37	37.46	63.79	74	-10.21	PK
V	11550	46.62	49.11	15.37	37.46	50.34	54	-3.66	AV
V	17325	56.93	49.21	15.34	40.51	63.57	74	-10.43	PK
V	17325	45.15	49.21	15.34	40.51	51.79	54	-2.21	AV
H	11550	60.09	49.11	15.37	31.31	57.66	74	-16.34	PK
H	11550	46.68	49.11	15.37	31.31	44.25	54	-9.75	AV
H	17325	57.66	49.21	15.34	40.51	64.30	74	-9.70	PK
H	17325	44.93	49.21	15.34	40.51	51.57	54	-2.43	AV

Remark:

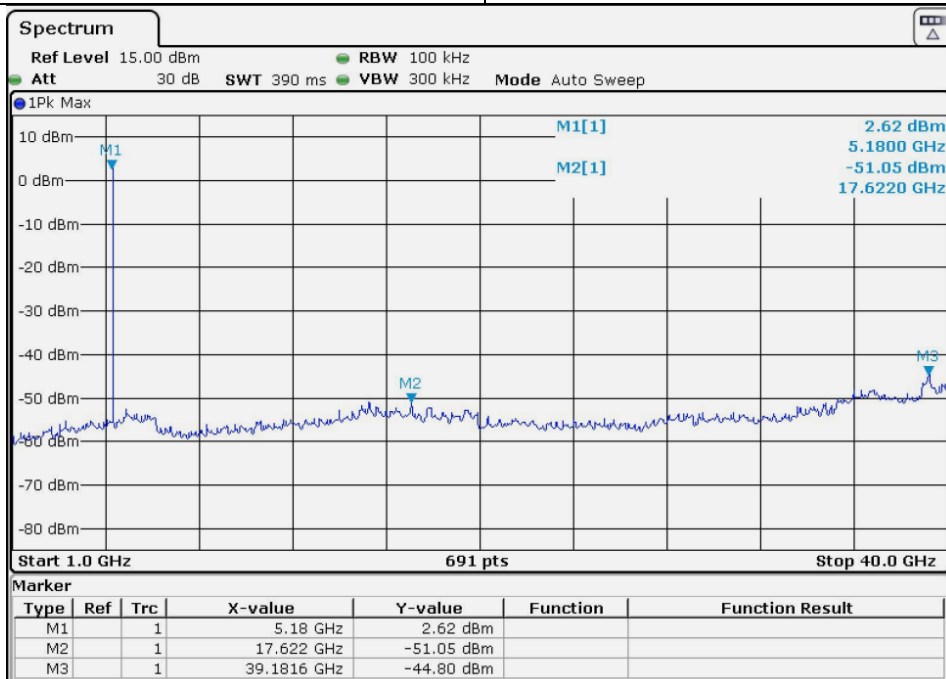
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to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



For Conducted

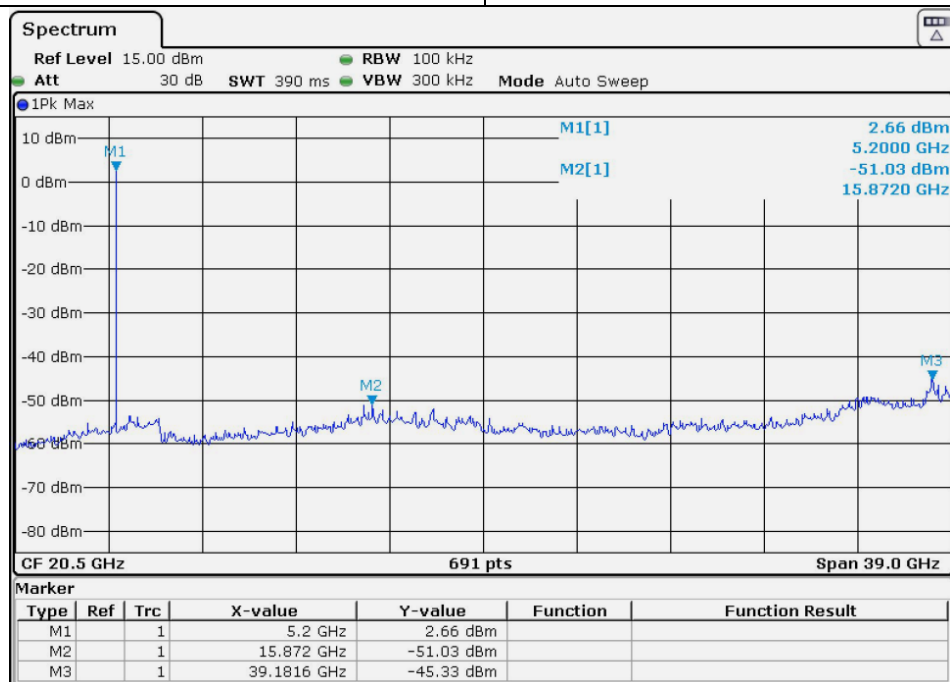
During the test, pre-scan the all modulation and all antenna , the 802.11a, antenna 1 were found to have the worst test results, as reflected in the report.

Test channel:	Band 1/802.11a Lowest channel
Limits(dBm)	-27



0.03Hz~40GHz

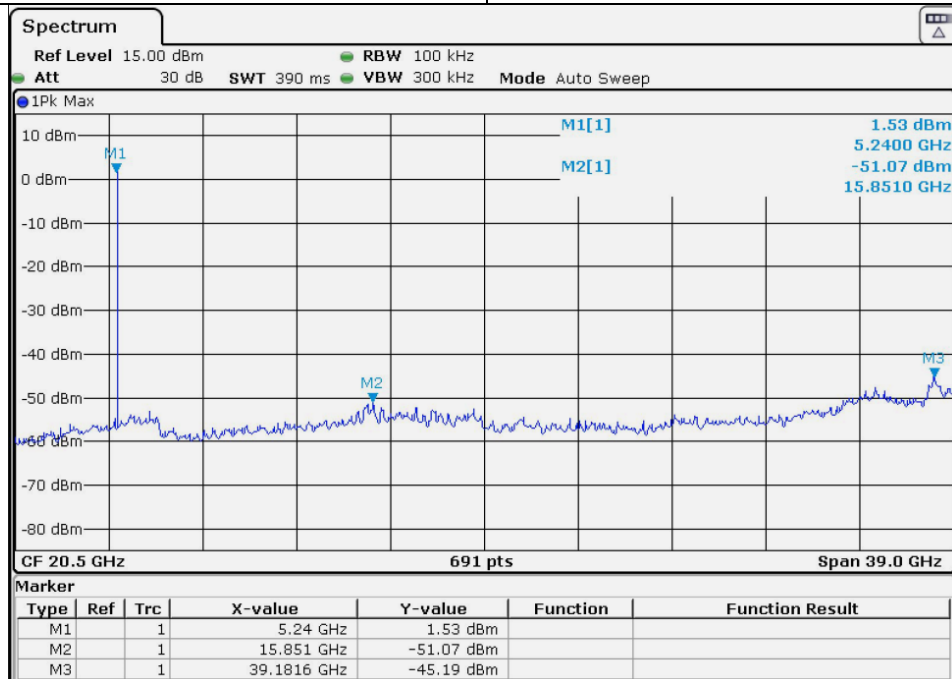
Test channel:	Band 1/802.11a Middle channel
Limits(dBm)	-27



0.03GHz~40GHz



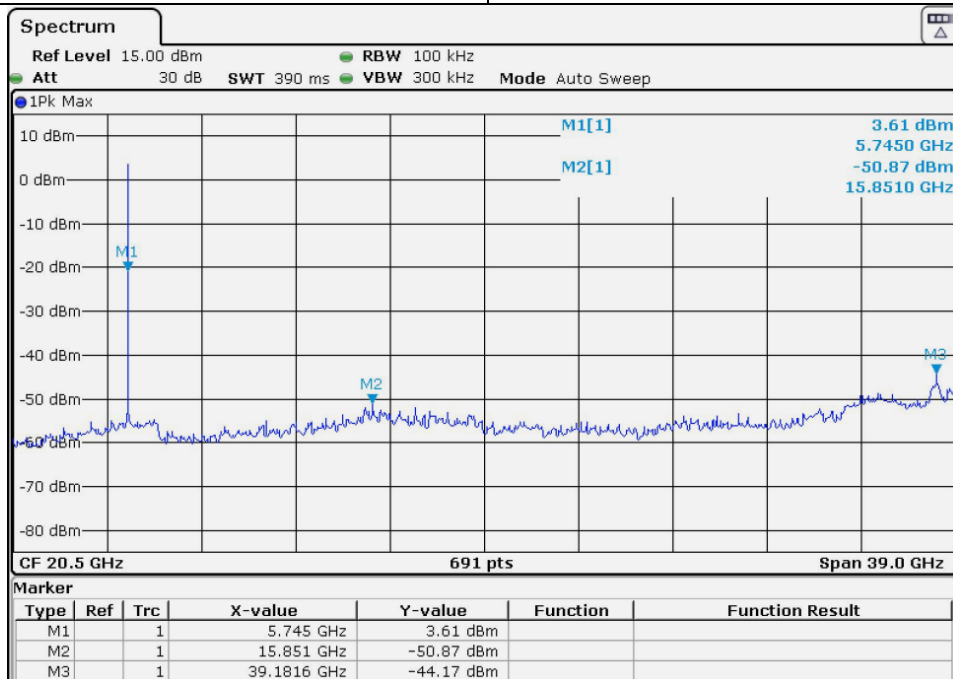
Test channel:	Band 1/802.11a Highest channel
Limits(dBm)	-27



0.03GHz~40GHz

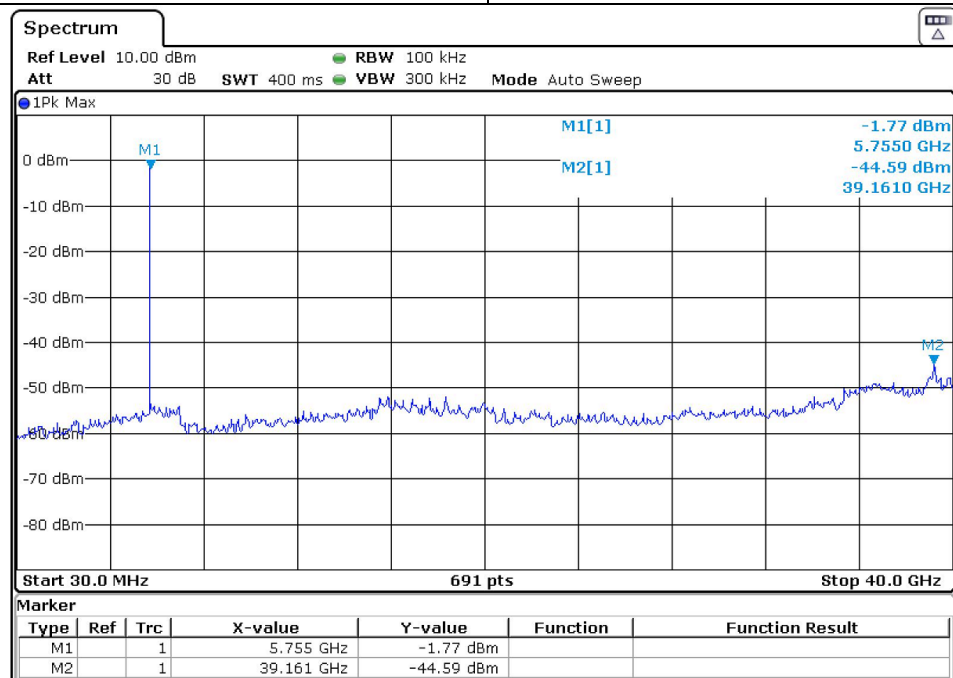


Test channel:	Band 4/802.11a Lowest channel
Limits(dBm)	-27



0.03Hz~40GHz

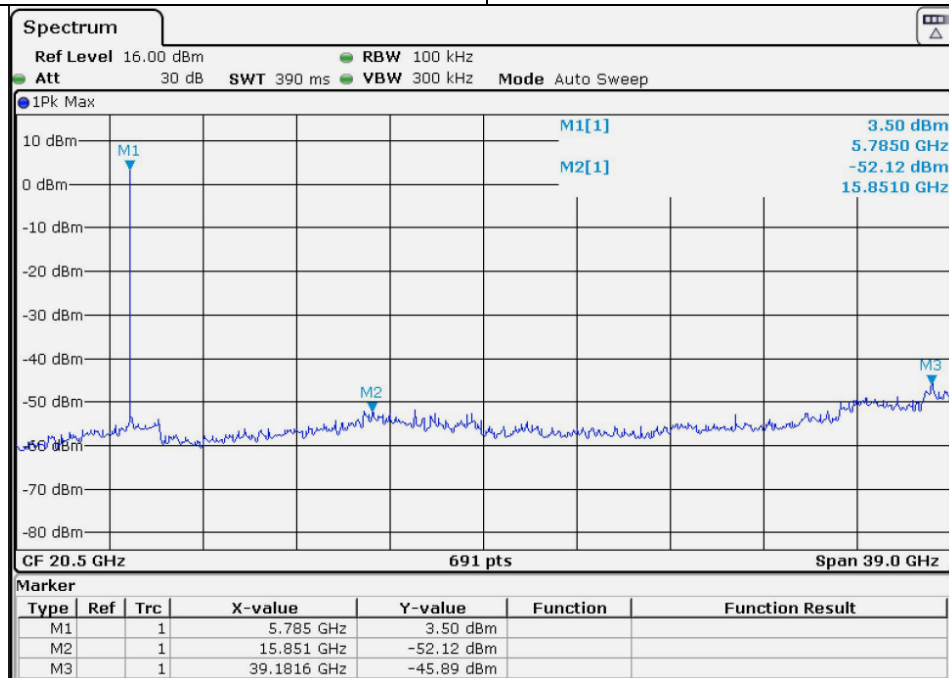
Test channel:	Band 4/802.11a Middle channel
Limits(dBm)	-27



0.03GHz~40GHz



Test channel:	Band 4/802.11a 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.

(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 2

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

3.3.1 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.

(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

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.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (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.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Above 1GHz test procedure as below:

- 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).
- Test the EUT in the lowest channel, the middle channel, the Highest channel

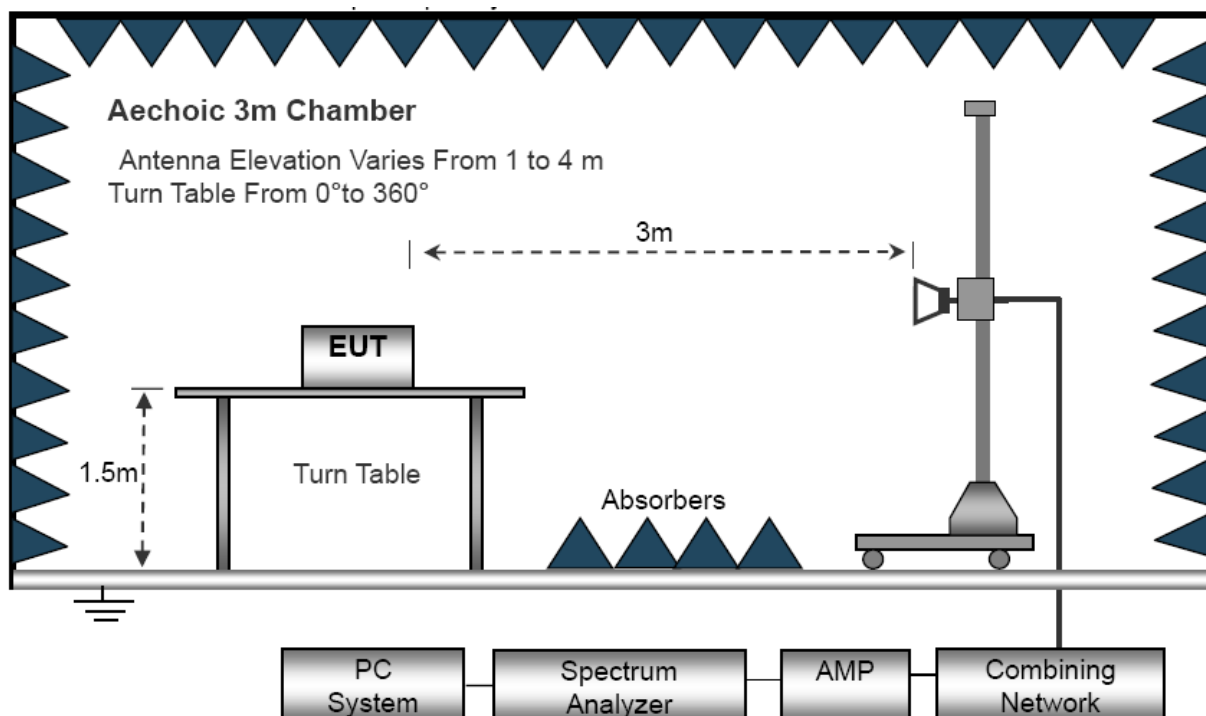
Note:

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

3.3.3 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:5180									
V	5132.00	57.75	46.38	12.43	35.65	59.45	68.2	-8.75	PK
V	5132.00	42.29	46.38	12.43	35.65	43.99	54	-10.01	AV
V	5150.00	55.95	46.56	12.47	35.76	57.62	68.2	-10.58	PK
V	5150.00	41.56	46.56	12.47	35.76	43.23	54	-10.77	AV
H	5132.00	57.38	46.38	12.43	35.65	59.08	68.2	-9.12	PK
H	5132.00	41.46	46.38	12.43	35.65	43.16	54	-10.84	AV
H	5150.00	56.50	46.56	12.47	35.76	58.17	68.2	-10.03	PK
H	5150.00	42.07	46.56	12.47	35.76	43.74	54	-10.26	AV
ANTENNA 1 802.11a band 1 operation frequency:5240									
V	5350.00	55.87	46.55	12.65	35.87	57.84	68.2	-10.36	PK
V	5350.00	41.38	46.55	12.65	35.87	43.35	54	-10.65	AV
V	5364.00	56.52	46.58	12.67	35.93	58.54	68.2	-9.66	PK
V	5364.00	40.36	46.58	12.67	35.93	42.38	54	-11.62	AV
H	5350.00	56.33	46.55	12.65	35.87	58.30	68.2	-9.90	PK
H	5350.00	41.60	46.55	12.65	35.87	43.57	54	-10.43	AV
H	5364.00	55.77	46.58	12.67	35.93	57.79	68.2	-10.41	PK
H	5364.00	40.53	46.58	12.67	35.93	42.55	54	-11.45	AV
ANTENNA 2 802.11a band 1 operation frequency:5180									
V	5132.00	56.31	46.38	12.43	35.65	58.01	68.2	-10.19	PK
V	5132.00	41.94	46.38	12.43	35.65	43.64	54	-10.36	AV
V	5150.00	57.49	46.56	12.47	35.76	59.16	68.2	-9.04	PK
V	5150.00	42.21	46.56	12.47	35.76	43.88	54	-10.12	AV
H	5132.00	55.93	46.38	12.43	35.65	57.63	68.2	-10.57	PK
H	5132.00	41.10	46.38	12.43	35.65	42.80	54	-11.20	AV
H	5150.00	56.02	46.56	12.47	35.76	57.69	68.2	-10.51	PK
H	5150.00	41.72	46.56	12.47	35.76	43.39	54	-10.61	AV
ANTENNA 2 802.11a band 1 operation frequency:5240									
V	5350.00	56.40	46.55	12.65	35.87	58.37	68.2	-9.83	PK
V	5350.00	41.02	46.55	12.65	35.87	42.99	54	-11.01	AV
V	5364.00	55.04	46.58	12.67	35.93	57.06	68.2	-11.14	PK
V	5364.00	40.02	46.58	12.67	35.93	42.04	54	-11.96	AV
H	5350.00	55.88	46.55	12.65	35.87	57.85	68.2	-10.35	PK
H	5350.00	41.23	46.55	12.65	35.87	43.20	54	-10.80	AV
H	5364.00	56.31	46.58	12.67	35.93	58.33	68.2	-9.87	PK
H	5364.00	41.19	46.58	12.67	35.93	43.21	54	-10.79	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	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)	
802.11ac20 operation frequency:5180									
V	5132.00	55.88	46.38	12.43	35.65	57.58	68.2	-10.62	PK
V	5132.00	40.40	46.38	12.43	35.65	42.10	54	-11.90	AV
V	5150.00	56.06	46.56	12.47	35.76	57.73	68.2	-10.47	PK
V	5150.00	41.65	46.56	12.47	35.76	43.32	54	-10.68	AV
H	5132.00	55.49	46.38	12.43	35.65	57.19	68.2	-11.01	PK
H	5132.00	40.56	46.38	12.43	35.65	42.26	54	-11.74	AV
H	5150.00	56.61	46.56	12.47	35.76	58.28	68.2	-9.92	PK
H	5150.00	41.15	46.56	12.47	35.76	42.82	54	-11.18	AV
802.11ac20 operation frequency:5240									
V	5350.00	55.99	46.55	12.65	35.87	57.96	68.2	-10.24	PK
V	5350.00	41.48	46.55	12.65	35.87	43.45	54	-10.55	AV
V	5364.00	57.63	46.58	12.67	35.93	59.65	68.2	-8.55	PK
V	5364.00	42.45	46.58	12.67	35.93	44.47	54	-9.53	AV
H	5350.00	55.45	46.55	12.65	35.87	57.42	68.2	-10.78	PK
H	5350.00	40.69	46.55	12.65	35.87	42.66	54	-11.34	AV
H	5364.00	55.89	46.58	12.67	35.93	57.91	68.2	-10.29	PK
H	5364.00	40.62	46.58	12.67	35.93	42.64	54	-11.36	AV

802.11ax20 band 1 operation frequency:5180									
V	5132.00	55.53	46.38	12.43	35.65	57.23	68.2	-10.97	PK
V	5132.00	41.12	46.38	12.43	35.65	42.82	54	-11.18	AV
V	5150.00	55.72	46.56	12.47	35.76	57.39	68.2	-10.81	PK
V	5150.00	40.39	46.56	12.47	35.76	42.06	54	-11.94	AV
H	5132.00	56.16	46.38	12.43	35.65	57.86	68.2	-10.34	PK
H	5132.00	41.28	46.38	12.43	35.65	42.98	54	-11.02	AV
H	5150.00	56.26	46.56	12.47	35.76	57.93	68.2	-10.27	PK
H	5150.00	40.89	46.56	12.47	35.76	42.56	54	-11.44	AV
802.11ax20 band 1 operation frequency:5240									
V	5350.00	55.64	46.55	12.65	35.87	57.61	68.2	-10.59	PK
V	5350.00	41.20	46.55	12.65	35.87	43.17	54	-10.83	AV
V	5364.00	56.28	46.58	12.67	35.93	58.30	68.2	-9.90	PK
V	5364.00	41.19	46.58	12.67	35.93	43.21	54	-10.79	AV
H	5350.00	56.11	46.55	12.65	35.87	58.08	68.2	-10.12	PK
H	5350.00	40.42	46.55	12.65	35.87	42.39	54	-11.61	AV
H	5364.00	56.53	46.58	12.67	35.93	58.55	68.2	-9.65	PK
H	5364.00	41.37	46.58	12.67	35.93	43.39	54	-10.61	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.



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)	
802.11n HT20 operation frequency:5180									
V	5132.00	55.81	46.38	12.43	35.65	57.51	68.2	-10.69	PK
V	5132.00	40.55	46.38	12.43	35.65	42.25	54	-11.75	AV
V	5150.00	56.32	46.56	12.47	35.76	57.99	68.2	-10.21	PK
V	5150.00	41.16	46.56	12.47	35.76	42.83	54	-11.17	AV
H	5132.00	55.73	46.38	12.43	35.65	57.43	68.2	-10.77	PK
H	5132.00	40.18	46.38	12.43	35.65	41.88	54	-12.12	AV
H	5150.00	51.17	46.56	12.47	35.76	52.84	68.2	-15.36	PK
H	5150.00	40.19	46.56	12.47	35.76	41.86	54	-12.14	AV
802.11n HT20 operation frequency:5240									
V	5350.00	55.62	46.55	12.65	35.87	57.59	68.2	-10.61	PK
V	5350.00	41.49	46.55	12.65	35.87	43.46	54	-10.54	AV
V	5364.00	55.39	46.58	12.67	35.93	57.41	68.2	-10.79	PK
V	5364.00	41.30	46.58	12.67	35.93	43.32	54	-10.68	AV
H	5350.00	56.66	46.55	12.65	35.87	58.63	68.2	-9.57	PK
H	5350.00	41.50	46.55	12.65	35.87	43.47	54	-10.53	AV
H	5364.00	56.39	46.58	12.67	35.93	58.41	68.2	-9.79	PK
H	5364.00	41.09	46.58	12.67	35.93	43.11	54	-10.89	AV
802.11ac 40 operation frequency:5190									
V	5132.00	55.83	46.38	12.43	35.65	57.53	68.2	-10.67	PK
V	5132.00	40.90	46.38	12.43	35.65	42.60	54	-11.40	AV
V	5150.00	56.28	46.56	12.47	35.76	57.95	68.2	-10.25	PK
V	5150.00	40.95	46.56	12.47	35.76	42.62	54	-11.38	AV
H	5132.00	55.69	46.38	12.43	35.65	57.39	68.2	-10.81	PK
H	5132.00	41.96	46.38	12.43	35.65	43.66	54	-10.34	AV
H	5150.00	55.63	46.56	12.47	35.76	57.30	68.2	-10.90	PK
H	5150.00	40.33	46.56	12.47	35.76	42.00	54	-12.00	AV
802.11ac 40 operation frequency:5230									
V	5350.00	56.26	46.55	12.65	35.87	58.23	68.2	-9.97	PK
V	5350.00	40.07	46.55	12.65	35.87	42.04	54	-11.96	AV
V	5364.00	51.38	46.58	12.67	35.93	53.40	68.2	-14.80	PK
V	5364.00	40.90	46.58	12.67	35.93	42.92	54	-11.08	AV
H	5350.00	55.43	46.55	12.65	35.87	57.40	68.2	-10.80	PK
H	5350.00	41.44	46.55	12.65	35.87	43.41	54	-10.59	AV
H	5364.00	55.37	46.58	12.67	35.93	57.39	68.2	-10.81	PK
H	5364.00	40.44	46.58	12.67	35.93	42.46	54	-11.54	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	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)	
802.11ax 40 operation frequency:5190									
V	5132.00	55.42	46.38	12.43	35.65	57.12	68.2	-11.08	PK
V	5132.00	41.58	46.38	12.43	35.65	43.28	54	-10.72	AV
V	5150.00	55.89	46.56	12.47	35.76	57.56	68.2	-10.64	PK
V	5150.00	41.65	46.56	12.47	35.76	43.32	54	-10.68	AV
H	5132.00	55.29	46.38	12.43	35.65	56.99	68.2	-11.21	PK
H	5132.00	40.64	46.38	12.43	35.65	42.34	54	-11.66	AV
H	5150.00	56.24	46.56	12.47	35.76	57.91	68.2	-10.29	PK
H	5150.00	41.53	46.56	12.47	35.76	43.20	54	-10.80	AV
802.11ax 40 operation frequency:5230									
V	5350.00	55.86	46.55	12.65	35.87	57.83	68.2	-10.37	PK
V	5350.00	40.76	46.55	12.65	35.87	42.73	54	-11.27	AV
V	5364.00	55.00	46.58	12.67	35.93	57.02	68.2	-11.18	PK
V	5364.00	41.60	46.58	12.67	35.93	43.62	54	-10.38	AV
H	5350.00	56.03	46.55	12.65	35.87	58.00	68.2	-10.20	PK
H	5350.00	41.12	46.55	12.65	35.87	43.09	54	-10.91	AV
H	5364.00	55.98	46.58	12.67	35.93	58.00	68.2	-10.20	PK
H	5364.00	40.33	46.58	12.67	35.93	42.35	54	-11.65	AV

802.11n HT40 operation frequency:5190									
V	5132.00	55.14	46.38	12.43	35.65	56.84	68.2	-11.36	PK
V	5132.00	41.34	46.38	12.43	35.65	43.04	54	-10.96	AV
V	5150.00	55.61	46.56	12.47	35.76	57.28	68.2	-10.92	PK
V	5150.00	40.43	46.56	12.47	35.76	42.10	54	-11.90	AV
H	5132.00	55.01	46.38	12.43	35.65	56.71	68.2	-11.49	PK
H	5132.00	41.41	46.38	12.43	35.65	43.11	54	-10.89	AV
H	5150.00	55.96	46.56	12.47	35.76	57.63	68.2	-10.57	PK
H	5150.00	41.30	46.56	12.47	35.76	42.97	54	-11.03	AV
802.11n HT40 operation frequency:5230									
V	5350.00	55.56	46.55	12.65	35.87	57.53	68.2	-10.67	PK
V	5350.00	41.54	46.55	12.65	35.87	43.51	54	-10.49	AV
V	5364.00	55.73	46.58	12.67	35.93	57.75	68.2	-10.45	PK
V	5364.00	41.38	46.58	12.67	35.93	43.40	54	-10.60	AV
H	5350.00	55.75	46.55	12.65	35.87	57.72	68.2	-10.48	PK
H	5350.00	40.90	46.55	12.65	35.87	42.87	54	-11.13	AV
H	5364.00	55.71	46.58	12.67	35.93	57.73	68.2	-10.47	PK
H	5364.00	41.51	46.58	12.67	35.93	43.53	54	-10.47	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	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)	
802.11ac 80 operation frequency:5210									
V	5132.00	55.83	46.38	12.43	35.65	57.53	68.2	-10.67	PK
V	5132.00	40.90	46.38	12.43	35.65	42.60	54	-11.40	AV
V	5150.00	55.28	46.56	12.47	35.76	56.95	68.2	-11.25	PK
V	5150.00	40.95	46.56	12.47	35.76	42.62	54	-11.38	AV
V	5350.00	55.56	46.55	12.65	35.87	57.53	68.2	-10.67	PK
V	5350.00	40.76	46.55	12.65	35.87	42.73	54	-11.27	AV
H	5132.00	55.69	46.38	12.43	35.65	57.39	68.2	-10.81	PK
H	5132.00	40.96	46.38	12.43	35.65	42.66	54	-11.34	AV
H	5150.00	55.63	46.56	12.47	35.76	57.30	68.2	-10.90	PK
H	5150.00	41.33	46.56	12.47	35.76	43.00	54	-11.00	AV
H	5350.00	56.12	46.55	12.65	35.87	58.09	68.2	-10.11	PK
H	5350.00	41.43	46.55	12.65	35.87	43.40	54	-10.60	AV

802.11ax 80 operation frequency:5210									
V	5132.00	55.83	46.38	12.43	35.65	57.53	68.2	-10.67	PK
V	5132.00	40.90	46.38	12.43	35.65	42.60	54	-11.40	AV
V	5150.00	56.28	46.56	12.47	35.76	57.95	68.2	-10.25	PK
V	5150.00	40.95	46.56	12.47	35.76	42.62	54	-11.38	AV
V	5350.00	55.15	46.55	12.65	35.87	57.12	68.2	-11.08	PK
V	5350.00	40.26	46.55	12.65	35.87	42.23	54	-11.77	AV
H	5132.00	55.69	46.38	12.43	35.65	57.39	68.2	-10.81	PK
H	5132.00	40.96	46.38	12.43	35.65	42.66	54	-11.34	AV
H	5150.00	55.63	46.56	12.47	35.76	57.30	68.2	-10.90	PK
H	5150.00	40.33	46.56	12.47	35.76	42.00	54	-12.00	AV
H	5350.00	55.66	46.55	12.65	35.87	57.63	68.2	-10.57	PK
H	5350.00	40.54	46.55	12.65	35.87	42.51	54	-11.49	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 4

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)	
ANTENNA 1 802.11a operation frequency:5745									
V	5725.00	55.08	47.32	13.11	36.23	57.10	68.2	-11.10	PK
V	5725.00	40.60	47.32	13.11	36.23	42.62	54	-11.38	AV
V	5723.00	55.88	47.30	13.10	36.21	57.89	74	-16.11	PK
V	5723.00	41.09	47.30	13.10	36.21	43.10	54	-10.90	AV
H	5725.00	55.43	47.32	13.11	36.23	57.45	68.2	-10.75	PK
H	5725.00	41.83	47.32	13.11	36.23	43.85	54	-10.15	AV
H	5723.00	55.13	47.30	13.10	36.21	57.14	74	-16.86	PK
H	5723.00	40.55	47.30	13.10	36.21	42.56	54	-11.44	AV
ANTENNA 1 802.11a operation frequency:5825									
V	5850.00	55.94	49.11	15.37	37.46	59.66	68.2	-8.54	PK
V	5850.00	40.93	49.11	15.37	37.46	44.65	54	-9.35	AV
V	5861.00	56.25	49.21	15.34	40.51	62.89	74	-11.11	PK
V	5861.00	41.65	49.21	15.34	40.51	48.29	54	-5.71	AV
H	5850.00	55.84	49.11	15.37	31.31	53.41	68.2	-14.79	PK
H	5850.00	40.93	49.11	15.37	31.31	38.50	54	-15.50	AV
H	5861.00	55.07	49.21	15.34	40.51	61.71	74	-12.29	PK
H	5861.00	40.63	49.21	15.34	40.51	47.27	54	-6.73	AV
ANTENNA 2 802.11a operation frequency:5745									
V	5725.00	55.85	47.32	13.11	36.23	57.87	68.2	-10.33	PK
V	5725.00	41.42	47.32	13.11	36.23	43.44	54	-10.56	AV
V	5723.00	55.65	47.30	13.10	36.21	57.66	74	-16.34	PK
V	5723.00	40.91	47.30	13.10	36.21	42.92	54	-11.08	AV
H	5725.00	55.21	47.32	13.11	36.23	57.23	68.2	-10.97	PK
H	5725.00	41.65	47.32	13.11	36.23	43.67	54	-10.33	AV
H	5723.00	56.89	47.30	13.10	36.21	58.90	74	-15.10	PK
H	5723.00	40.38	47.30	13.10	36.21	42.39	54	-11.61	AV
ANTENNA 2 802.11a operation frequency:5825									
V	5850.00	56.71	49.11	15.37	37.46	60.43	68.2	-7.77	PK
V	5850.00	41.74	49.11	15.37	37.46	45.46	54	-8.54	AV
V	5861.00	56.01	49.21	15.34	40.51	62.65	74	-11.35	PK
V	5861.00	40.47	49.21	15.34	40.51	47.11	54	-6.89	AV
H	5850.00	55.61	49.11	15.37	31.31	53.18	68.2	-15.02	PK
H	5850.00	41.74	49.11	15.37	31.31	39.31	54	-14.69	AV
H	5861.00	55.84	49.21	15.34	40.51	62.48	74	-11.52	PK
H	5861.00	40.47	49.21	15.34	40.51	47.11	54	-6.89	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	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)	
802.11ac 20 operation frequency:5745									
V	5725.00	55.43	47.32	13.11	36.23	57.45	68.2	-10.75	PK
V	5725.00	41.88	47.32	13.11	36.23	43.90	54	-10.10	AV
V	5723.00	55.22	47.30	13.10	36.21	57.23	74	-16.77	PK
V	5723.00	40.36	47.30	13.10	36.21	42.37	54	-11.63	AV
H	5725.00	55.78	47.32	13.11	36.23	57.80	68.2	-10.40	PK
H	5725.00	40.11	47.32	13.11	36.23	42.13	54	-11.87	AV
H	5723.00	55.49	47.30	13.10	36.21	57.50	74	-16.50	PK
H	5723.00	40.82	47.30	13.10	36.21	42.83	54	-11.17	AV
802.11ac 20 operation frequency:5825									
V	5850.00	56.30	49.11	15.37	37.46	60.02	68.2	-8.18	PK
V	5850.00	41.20	49.11	15.37	37.46	44.92	54	-9.08	AV
V	5861.00	55.61	49.21	15.34	40.51	62.25	74	-11.75	PK
V	5861.00	40.91	49.21	15.34	40.51	47.55	54	-6.45	AV
H	5850.00	55.19	49.11	15.37	31.31	52.76	68.2	-15.44	PK
H	5850.00	40.20	49.11	15.37	31.31	37.77	54	-16.23	AV
H	5861.00	55.42	49.21	15.34	40.51	62.06	74	-11.94	PK
H	5861.00	40.90	49.21	15.34	40.51	47.54	54	-6.46	AV

802.11ax 20 operation frequency:5745									
V	5725.00	56.03	47.32	13.11	36.23	58.05	68.2	-10.15	PK
V	5725.00	41.56	47.32	13.11	36.23	43.58	54	-10.42	AV
V	5723.00	55.83	47.30	13.10	36.21	57.84	74	-16.16	PK
V	5723.00	41.05	47.30	13.10	36.21	43.06	54	-10.94	AV
H	5725.00	55.38	47.32	13.11	36.23	57.40	68.2	-10.80	PK
H	5725.00	41.79	47.32	13.11	36.23	43.81	54	-10.19	AV
H	5723.00	56.08	47.30	13.10	36.21	58.09	74	-15.91	PK
H	5723.00	40.52	47.30	13.10	36.21	42.53	54	-11.47	AV
802.11ax 20 operation frequency:5825									
V	5850.00	55.89	49.11	15.37	37.46	59.61	68.2	-8.59	PK
V	5850.00	40.89	49.11	15.37	37.46	44.61	54	-9.39	AV
V	5861.00	56.20	49.21	15.34	40.51	62.84	74	-11.16	PK
V	5861.00	41.61	49.21	15.34	40.51	48.25	54	-5.75	AV
H	5850.00	55.79	49.11	15.37	31.31	53.36	68.2	-14.84	PK
H	5850.00	40.89	49.11	15.37	31.31	38.46	54	-15.54	AV
H	5861.00	55.02	49.21	15.34	40.51	61.66	74	-12.34	PK
H	5861.00	40.60	49.21	15.34	40.51	47.24	54	-6.76	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	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)	
802.11n HT20 operation frequency:5745									
V	5725.00	55.27	47.32	13.11	36.23	57.29	68.2	-10.91	PK
V	5725.00	41.94	47.32	13.11	36.23	43.96	54	-10.04	AV
V	5723.00	55.64	47.30	13.10	36.21	57.65	74	-16.35	PK
V	5723.00	41.49	47.30	13.10	36.21	43.50	54	-10.50	AV
H	5725.00	55.92	47.32	13.11	36.23	57.94	68.2	-10.26	PK
H	5725.00	41.87	47.32	13.11	36.23	43.89	54	-10.11	AV
H	5723.00	55.78	47.30	13.10	36.21	57.79	74	-16.21	PK
H	5723.00	41.30	47.30	13.10	36.21	43.31	54	-10.69	AV
802.11n HT20 operation frequency:5825									
V	5850.00	55.75	49.11	15.37	37.46	59.47	68.2	-8.73	PK
V	5850.00	40.52	49.11	15.37	37.46	44.24	54	-9.76	AV
V	5861.00	55.86	49.21	15.34	40.51	62.50	74	-11.50	PK
V	5861.00	41.31	49.21	15.34	40.51	47.95	54	-6.05	AV
H	5850.00	55.98	49.11	15.37	31.31	53.55	68.2	-14.65	PK
H	5850.00	41.88	49.11	15.37	31.31	39.45	54	-14.55	AV
H	5861.00	55.58	49.21	15.34	40.51	62.22	74	-11.78	PK
H	5861.00	41.20	49.21	15.34	40.51	47.84	54	-6.16	AV

802.11ac 40 operation frequency:5755									
V	5725.00	55.63	47.32	13.11	36.23	57.65	68.2	-10.55	PK
V	5725.00	41.90	47.32	13.11	36.23	43.92	54	-10.08	AV
V	5723.00	55.18	47.30	13.10	36.21	57.19	74	-16.81	PK
V	5723.00	41.92	47.30	13.10	36.21	43.93	54	-10.07	AV
H	5725.00	55.27	47.32	13.11	36.23	57.29	68.2	-10.91	PK
H	5725.00	41.17	47.32	13.11	36.23	43.19	54	-10.81	AV
H	5723.00	55.34	47.30	13.10	36.21	57.35	74	-16.65	PK
H	5723.00	40.83	47.30	13.10	36.21	42.84	54	-11.16	AV
802.11ac 40 operation frequency:5795									
V	5850.00	55.64	49.11	15.37	37.46	59.36	68.2	-8.84	PK
V	5850.00	41.28	49.11	15.37	37.46	45.00	54	-9.00	AV
V	5861.00	56.52	49.21	15.34	40.51	63.16	74	-10.84	PK
V	5861.00	41.83	49.21	15.34	40.51	48.47	54	-5.53	AV
H	5850.00	55.66	49.11	15.37	31.31	53.23	68.2	-14.97	PK
H	5850.00	40.34	49.11	15.37	31.31	37.91	54	-16.09	AV
H	5861.00	55.24	49.21	15.34	40.51	61.88	74	-12.12	PK
H	5861.00	40.60	49.21	15.34	40.51	47.24	54	-6.76	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	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)	
802.11ax 40 operation frequency:5755									
V	5725.00	55.23	47.32	13.11	36.23	57.25	68.2	-10.95	PK
V	5725.00	41.58	47.32	13.11	36.23	43.60	54	-10.40	AV
V	5723.00	55.79	47.30	13.10	36.21	57.80	74	-16.20	PK
V	5723.00	40.62	47.30	13.10	36.21	42.63	54	-11.37	AV
H	5725.00	55.88	47.32	13.11	36.23	57.90	68.2	-10.30	PK
H	5725.00	40.86	47.32	13.11	36.23	42.88	54	-11.12	AV
H	5723.00	54.96	47.30	13.10	36.21	56.97	74	-17.03	PK
H	5723.00	41.53	47.30	13.10	36.21	43.54	54	-10.46	AV
802.11ax 40 operation frequency:5795									
V	5850.00	55.21	49.11	15.37	37.46	58.93	68.2	-9.27	PK
V	5850.00	40.97	49.11	15.37	37.46	44.69	54	-9.31	AV
V	5861.00	55.13	49.21	15.34	40.51	61.77	74	-12.23	PK
V	5861.00	40.53	49.21	15.34	40.51	47.17	54	-6.83	AV
H	5850.00	55.25	49.11	15.37	31.31	52.82	68.2	-15.38	PK
H	5850.00	41.03	49.11	15.37	31.31	38.60	54	-15.40	AV
H	5861.00	55.85	49.21	15.34	40.51	62.49	74	-11.51	PK
H	5861.00	40.29	49.21	15.34	40.51	46.93	54	-7.07	AV

802.11n HT40 operation frequency:5755									
V	5725.00	55.00	47.32	13.11	36.23	57.02	68.2	-11.18	PK
V	5725.00	40.40	47.32	13.11	36.23	42.42	54	-11.58	AV
V	5723.00	51.55	47.30	13.10	36.21	53.56	74	-20.44	PK
V	5723.00	41.45	47.30	13.10	36.21	43.46	54	-10.54	AV
H	5725.00	55.66	47.32	13.11	36.23	57.68	68.2	-10.52	PK
H	5725.00	41.67	47.32	13.11	36.23	43.69	54	-10.31	AV
H	5723.00	55.74	47.30	13.10	36.21	57.75	74	-16.25	PK
H	5723.00	40.35	47.30	13.10	36.21	42.36	54	-11.64	AV
802.11n HT40 operation frequency:5795									
V	5850.00	55.02	49.11	15.37	37.46	58.74	68.2	-9.46	PK
V	5850.00	41.79	49.11	15.37	37.46	45.51	54	-8.49	AV
V	5861.00	55.92	49.21	15.34	40.51	62.56	74	-11.44	PK
V	5861.00	41.35	49.21	15.34	40.51	47.99	54	-6.01	AV
H	5850.00	55.02	49.11	15.37	31.31	52.59	68.2	-15.61	PK
H	5850.00	40.85	49.11	15.37	31.31	38.42	54	-15.58	AV
H	5861.00	55.63	49.21	15.34	40.51	62.27	74	-11.73	PK
H	5861.00	40.12	49.21	15.34	40.51	46.76	54	-7.24	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	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)	
802.11ac 80 operation frequency:5775									
V	5725.00	55.23	47.32	13.11	36.23	57.25	68.2	-10.95	PK
V	5725.00	41.43	47.32	13.11	36.23	43.45	54	-10.55	AV
V	5850.00	55.26	49.11	15.37	37.46	58.98	68.2	-9.22	PK
V	5850.00	40.11	49.11	15.37	37.46	43.83	54	-10.17	AV
H	5725.00	55.43	47.32	13.11	36.23	57.45	68.2	-10.75	PK
H	5725.00	40.35	47.32	13.11	36.23	42.37	54	-11.63	AV
H	5850.00	55.43	49.11	15.37	31.31	53.00	68.2	-15.20	PK
H	5850.00	40.31	49.11	15.37	31.31	37.88	54	-16.12	AV

802.11ax 80 operation frequency:5775									
V	5725.00	55.34	47.32	13.11	36.23	57.36	68.2	-10.84	PK
V	5725.00	41.24	47.32	13.11	36.23	43.26	54	-10.74	AV
V	5850.00	55.45	49.11	15.37	37.46	59.17	68.2	-9.03	PK
V	5850.00	40.51	49.11	15.37	37.46	44.23	54	-9.77	AV
H	5725.00	55.32	47.32	13.11	36.23	57.34	68.2	-10.86	PK
H	5725.00	40.35	47.32	13.11	36.23	42.37	54	-11.63	AV
H	5850.00	55.47	49.11	15.37	31.31	53.04	68.2	-15.16	PK
H	5850.00	40.57	49.11	15.37	31.31	38.14	54	-15.86	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 client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

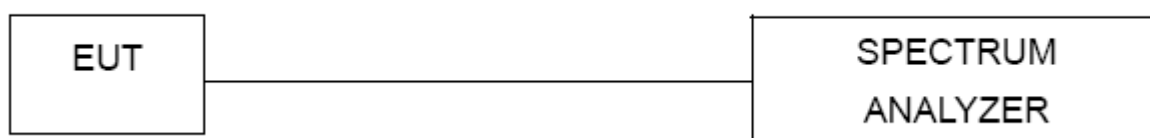
4.1.1 TEST PROCEDURE

- 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 2.



5. POWER SPECTRAL DENSITY TEST

5.1 APPLIED PROCEDURES / LIMIT

5.15-5.25 GHz band, 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.

For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	= the frequency band of operation
RB	RBW $\geq$ 1MHz for band 1 RBW $\geq$ 510KHz for band 4
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. User 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 2



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

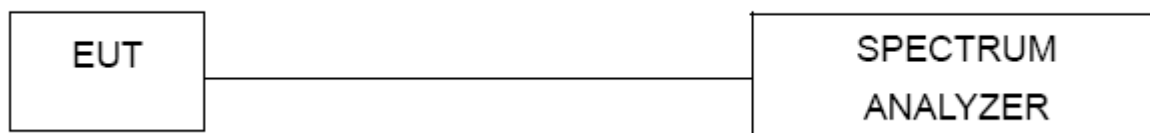
26dB Bandwidth	
Spectrum Parameters	Setting
RBW	approximately 1% of the emission bandwidth
VBW	>RBW
Span	30MHz(20MHz Bandwidth mode) 60MHz(40MHz Bandwidth mode) 120MHz(80MHz Bandwidth mode)
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

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 2



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 2



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.

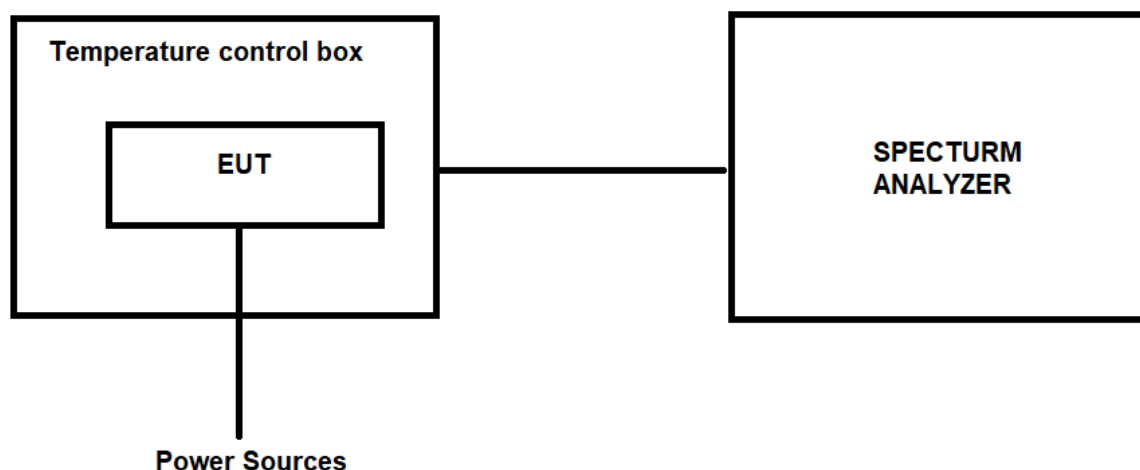
8.1.1 TEST PROCEDURE

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)		Δ Frequency (MHz)	
			802.11a	802.11n HT20	802.11a	802.11n HT20
3.80V	-20℃	5180.0000	5180.0276	5180.0156	-0.0276	-0.0156
		5220.0000	5220.0317	5220.0232	-0.0317	-0.0232
		5240.0000	5240.0267	5240.0132	-0.0267	-0.0132
		5745.0000	5745.0287	5745.0154	-0.0287	-0.0154
		5785.0000	5785.0276	5785.0342	-0.0276	-0.0342
		5825.0000	5825.0256	5825.0235	-0.0256	-0.0235
2.81V	-20℃	5180.0000	5180.0346	5180.0176	-0.0346	-0.0176
		5220.0000	5220.0276	5220.0765	-0.0276	-0.0765
		5240.0000	5240.0211	5240.0432	-0.0211	-0.0432
		5745.0000	5745.0278	5745.0453	-0.0278	-0.0453
		5785.0000	5785.0294	5785.0542	-0.0294	-0.0542
		5825.0000	5825.0189	5825.0325	-0.0189	-0.0325
3.3V	25℃	5180.0000	5180.0277	5180.0342	-0.0277	-0.0342
		5220.0000	5220.0326	5220.0432	-0.0326	-0.0432
		5240.0000	5240.0278	5240.0321	-0.0278	-0.0321
		5745.0000	5745.0297	5745.0267	-0.0297	-0.0267
		5785.0000	5785.0278	5785.0287	-0.0278	-0.0287
		5825.0000	5825.0277	5825.0342	-0.0277	-0.0342
3.80V	50℃	5180.0000	5180.0298	5180.0267	-0.0298	-0.0267
		5220.0000	5220.0278	5220.0154	-0.0278	-0.0154
		5240.0000	5240.0297	5240.0178	-0.0297	-0.0178
		5745.0000	5745.0187	5745.0256	-0.0187	-0.0256
		5785.0000	5785.0267	5785.0342	-0.0267	-0.0342
		5825.0000	5825.0563	5825.0367	-0.0563	-0.0367
2.81V	50℃	5180.0000	5180.0278	5180.0321	-0.0278	-0.0321
		5220.0000	5220.0297	5220.0187	-0.0297	-0.0187
		5240.0000	5240.0178	5240.0167	-0.0178	-0.0167
		5745.0000	5745.0265	5745.0267	-0.0265	-0.0267
		5785.0000	5785.0387	5785.0365	-0.0387	-0.0365
		5825.0000	5825.0367	5825.0278	-0.0367	-0.0278



Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)		Δ Frequency (MHz)	
			802.11ac 20	802.11ax 20	802.11ac 20	802.11ax 20
3.80V	-20℃	5180.0000	5180.0245	5180.0123	-0.0245	-0.0123
		5220.0000	5220.0202	5220.0227	-0.0202	-0.0227
		5240.0000	5240.0053	5240.0187	-0.0053	-0.0187
		5745.0000	5745.0184	5745.0227	-0.0184	-0.0227
		5785.0000	5785.0162	5785.0287	-0.0162	-0.0287
		5825.0000	5825.0163	5825.0168	-0.0163	-0.0168
2.81V	-20℃	5180.0000	5180.0134	5180.0093	-0.0134	-0.0093
		5220.0000	5220.0242	5220.0185	-0.0242	-0.0185
		5240.0000	5240.0253	5240.0268	-0.0253	-0.0268
		5745.0000	5745.0324	5745.0274	-0.0324	-0.0274
		5785.0000	5785.0323	5785.0388	-0.0323	-0.0388
		5825.0000	5825.0426	5825.0506	-0.0426	-0.0506
3.3V	25℃	5180.0000	5180.0444	5180.0418	-0.0444	-0.0418
		5220.0000	5220.0123	5220.0094	-0.0123	-0.0094
		5240.0000	5240.0122	5240.0197	-0.0122	-0.0197
		5745.0000	5745.0165	5745.0194	-0.0165	-0.0194
		5785.0000	5785.0243	5785.0308	-0.0243	-0.0308
		5825.0000	5825.0076	5825.0126	-0.0076	-0.0126
3.80V	50℃	5180.0000	5180.0243	5180.0183	-0.0243	-0.0183
		5220.0000	5220.0174	5220.0068	-0.0174	-0.0068
		5240.0000	5240.0342	5240.0363	-0.0342	-0.0363
		5745.0000	5745.0286	5745.0625	-0.0286	-0.0625
		5785.0000	5785.0446	5785.0463	-0.0446	-0.0463
		5825.0000	5825.0654	5825.0688	-0.0654	-0.0688
2.81V	50℃	5180.0000	5180.0345	5180.0363	-0.0345	-0.0363
		5220.0000	5220.0296	5220.0322	-0.0296	-0.0322
		5240.0000	5240.0345	5240.0234	-0.0345	-0.0234
		5745.0000	5745.0436	5745.0454	-0.0436	-0.0454
		5785.0000	5785.0275	5785.0257	-0.0275	-0.0257
		5825.0000	5825.0745	5825.0787	-0.0745	-0.0787



Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)			Δ Frequency (MHz)		
			802.11ac 40	802.11ax 40	802.11n HT40	802.11ac 40	802.11 ax 40	802.11n HT40
3.80V	-20℃	5190.000	5190.0198	5190.0214	5190.0356	-0.0198	-0.0214	-0.0356
		5230.000	5230.0339	5230.0276	5230.0467	-0.0339	-0.0276	-0.0467
		5755.000	5755.0568	5755.0367	5755.0542	-0.0568	-0.0367	-0.0542
		5795.000	5795.0600	5795.0354	5795.0578	-0.0600	-0.0354	-0.0578
2.81V		5190.000	5190.0247	5190.0276	5190.0387	-0.0247	-0.0276	-0.0387
		5230.000	5230.0312	5230.0367	5230.0289	-0.0312	-0.0367	-0.0289
		5755.000	5755.0229	5755.0287	5755.0543	-0.0229	-0.0287	-0.0543
		5795.000	5795.0422	5795.0456	5795.0345	-0.0422	-0.0456	-0.0345
3.3V	25℃	5190.000	5190.0231	5190.045	5190.0467	-0.0231	-0.0450	-0.0467
		5230.000	5230.0650	5230.0672	5230.0533	-0.0650	-0.0672	-0.0533
		5755.000	5755.0200	5755.0367	5755.0514	-0.0200	-0.0367	-0.0514
		5795.000	5795.0546	5795.0486	5795.0612	-0.0546	-0.0486	-0.0612
3.80V	50℃	5190.000	5190.0631	5190.0513	5190.0654	-0.0631	-0.0513	-0.0654
		5230.000	5230.0543	5230.0557	5230.0511	-0.0543	-0.0557	-0.0511
		5755.000	5755.0446	5755.0485	5755.0475	-0.0446	-0.0485	-0.0475
		5795.000	5795.0300	5795.0478	5795.0278	-0.0300	-0.0478	-0.0278
2.81V	50℃	5190.000	5190.0533	5190.0558	5190.0378	-0.0533	-0.0558	-0.0378
		5230.000	5230.0342	5230.0397	5230.0411	-0.0342	-0.0397	-0.0411
		5755.000	5755.0297	5755.0423	5755.0376	-0.0297	-0.0423	-0.0376
		5795.000	5795.0449	5795.0478	5795.0412	-0.0449	-0.0478	-0.0412



Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)		Δ Frequency (MHz)	
			802.11ac 80	802.11ax 80	802.11ac 80	802.11ax 80
3.80V	-20℃	5210.0000	5210.0265	5210.0476	-0.0265	-0.0476
		5775.0000	5775.0387	5775.0569	-0.0387	-0.0569
2.81V		5210.0000	5210.0378	5210.0653	-0.0378	-0.0653
		5775.0000	5775.0587	5775.0735	-0.0587	-0.0735
3.3V	25℃	5210.0000	5210.0657	5210.0646	-0.0657	-0.0646
		5775.0000	5775.0589	5775.0632	-0.0589	-0.0632
3.80V	50℃	5210.0000	5210.0685	5210.0598	-0.0685	-0.0598
		5775.0000	5775.0656	5775.0612	-0.0656	-0.0612
2.81V	50℃	5210.0000	5210.0459	5210.0589	-0.0459	-0.0589
		5775.0000	5775.0723	5775.0767	-0.0723	-0.0767



ANT2

Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)		Δ Frequency (MHz)	
			802.11a	802.11n HT20	802.11a	802.11n HT20
3.80V	-20℃	5180.0000	5180.0286	5180.0166	-0.0286	-0.0166
		5220.0000	5220.0327	5220.0242	-0.0327	-0.0242
		5240.0000	5240.0277	5240.0142	-0.0277	-0.0142
		5745.0000	5745.0298	5745.0165	-0.0298	-0.0165
		5785.0000	5785.0288	5785.0354	-0.0288	-0.0354
		5825.0000	5825.0268	5825.0247	-0.0268	-0.0247
2.81V	-20℃	5180.0000	5180.0356	5180.0186	-0.0356	-0.0186
		5220.0000	5220.0286	5220.0775	-0.0286	-0.0775
		5240.0000	5240.0221	5240.0442	-0.0221	-0.0442
		5745.0000	5745.0289	5745.0464	-0.0289	-0.0464
		5785.0000	5785.0306	5785.0554	-0.0306	-0.0554
		5825.0000	5825.0201	5825.0337	-0.0201	-0.0337
3.3V	25℃	5180.0000	5180.0287	5180.0352	-0.0287	-0.0352
		5220.0000	5220.0336	5220.0442	-0.0336	-0.0442
		5240.0000	5240.0288	5240.0331	-0.0288	-0.0331
		5745.0000	5745.0308	5745.0278	-0.0308	-0.0278
		5785.0000	5785.0290	5785.0299	-0.0290	-0.0299
		5825.0000	5825.0289	5825.0354	-0.0289	-0.0354
3.80V	50℃	5180.0000	5180.0308	5180.0277	-0.0308	-0.0277
		5220.0000	5220.0288	5220.0164	-0.0288	-0.0164
		5240.0000	5240.0307	5240.0188	-0.0307	-0.0188
		5745.0000	5745.0198	5745.0267	-0.0198	-0.0267
		5785.0000	5785.0279	5785.0354	-0.0279	-0.0354
		5825.0000	5825.0575	5825.0379	-0.0575	-0.0379
2.81V	50℃	5180.0000	5180.0288	5180.0331	-0.0288	-0.0331
		5220.0000	5220.0307	5220.0197	-0.0307	-0.0197
		5240.0000	5240.0188	5240.0177	-0.0188	-0.0177
		5745.0000	5745.0276	5745.0278	-0.0276	-0.0278
		5785.0000	5785.0399	5785.0377	-0.0399	-0.0377
		5825.0000	5825.0379	5825.0290	-0.0379	-0.0290



Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)		Δ Frequency (MHz)	
			802.11ac 20	802.11ax 20	802.11ac 20	802.11ax 20
3.80V	-20℃	5180.0000	5180.0255	5180.0133	-0.0255	-0.0133
		5220.0000	5220.0212	5220.0237	-0.0212	-0.0237
		5240.0000	5240.0063	5240.0197	-0.0063	-0.0197
		5745.0000	5745.0195	5745.0238	-0.0195	-0.0238
		5785.0000	5785.0174	5785.0299	-0.0174	-0.0299
		5825.0000	5825.0175	5825.0180	-0.0175	-0.0180
2.81V	-20℃	5180.0000	5180.0144	5180.0103	-0.0144	-0.0103
		5220.0000	5220.0252	5220.0195	-0.0252	-0.0195
		5240.0000	5240.0263	5240.0278	-0.0263	-0.0278
		5745.0000	5745.0335	5745.0285	-0.0335	-0.0285
		5785.0000	5785.0335	5785.0400	-0.0335	-0.0400
		5825.0000	5825.0438	5825.0518	-0.0438	-0.0518
3.3V	25℃	5180.0000	5180.0454	5180.0428	-0.0454	-0.0428
		5220.0000	5220.0133	5220.0104	-0.0133	-0.0104
		5240.0000	5240.0132	5240.0207	-0.0132	-0.0207
		5745.0000	5745.0176	5745.0205	-0.0176	-0.0205
		5785.0000	5785.0255	5785.0320	-0.0255	-0.0320
		5825.0000	5825.0088	5825.0138	-0.0088	-0.0138
3.80V	50℃	5180.0000	5180.0253	5180.0193	-0.0253	-0.0193
		5220.0000	5220.0184	5220.0078	-0.0184	-0.0078
		5240.0000	5240.0352	5240.0373	-0.0352	-0.0373
		5745.0000	5745.0297	5745.0636	-0.0297	-0.0636
		5785.0000	5785.0458	5785.0475	-0.0458	-0.0475
		5825.0000	5825.0666	5825.0700	-0.0666	-0.0700
2.81V	50℃	5180.0000	5180.0355	5180.0373	-0.0355	-0.0373
		5220.0000	5220.0306	5220.0332	-0.0306	-0.0332
		5240.0000	5240.0355	5240.0244	-0.0355	-0.0244
		5745.0000	5745.0447	5745.0465	-0.0447	-0.0465
		5785.0000	5785.0287	5785.0269	-0.0287	-0.0269
		5825.0000	5825.0757	5825.0799	-0.0757	-0.0799



Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)			Δ Frequency (MHz)		
			802.11ac 40	802.11ax 40	802.11n HT40	802.11ac 40	802.11 ax 40	802.11n HT40
3.80V	-20℃	5190.000	5190.0208	5190.0224	5190.0366	-0.0208	-0.0224	-0.0366
		5230.000	5230.0349	5230.0286	5230.0477	-0.0349	-0.0286	-0.0477
		5755.000	5755.0580	5755.0379	5755.0554	-0.0580	-0.0379	-0.0554
		5795.000	5795.0612	5795.0366	5795.0590	-0.0612	-0.0366	-0.0590
2.81V		5190.000	5190.0257	5190.0286	5190.0397	-0.0257	-0.0286	-0.0397
		5230.000	5230.0322	5230.0377	5230.0299	-0.0322	-0.0377	-0.0299
		5755.000	5755.0241	5755.0299	5755.0555	-0.0241	-0.0299	-0.0555
		5795.000	5795.0434	5795.0468	5795.0357	-0.0434	-0.0468	-0.0357
3.3V	25℃	5190.000	5190.0241	5190.0460	5190.0477	-0.0241	-0.0460	-0.0477
		5230.000	5230.0660	5230.0682	5230.0543	-0.0660	-0.0682	-0.0543
		5755.000	5755.0212	5755.0379	5755.0526	-0.0212	-0.0379	-0.0526
		5795.000	5795.0558	5795.0498	5795.0624	-0.0558	-0.0498	-0.0624
3.80V	50℃	5190.000	5190.0641	5190.0523	5190.0664	-0.0641	-0.0523	-0.0664
		5230.000	5230.0553	5230.0567	5230.0521	-0.0553	-0.0567	-0.0521
		5755.000	5755.0458	5755.0497	5755.0487	-0.0458	-0.0497	-0.0487
		5795.000	5795.0312	5795.0490	5795.0290	-0.0312	-0.0490	-0.0290
2.81V	50℃	5190.000	5190.0543	5190.0568	5190.0388	-0.0543	-0.0568	-0.0388
		5230.000	5230.0352	5230.0407	5230.0421	-0.0352	-0.0407	-0.0421
		5755.000	5755.0309	5755.0435	5755.0388	-0.0309	-0.0435	-0.0388
		5795.000	5795.0461	5795.0490	5795.0424	-0.0461	-0.0490	-0.0424



Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)		Δ Frequency (MHz)	
			802.11ac 80	802.11ax 80	802.11ac 80	802.11ax 80
3.80V	-20℃	5210.0000	5210.0275	5210.0486	-0.0275	-0.0486
		5775.0000	5775.0399	5775.0581	-0.0399	-0.0581
2.81V		5210.0000	5210.0388	5210.0663	-0.0388	-0.0663
		5785.0000	5775.0599	5775.0747	-0.0599	-0.0747
3.3V	25℃	5210.0000	5210.0667	5210.0656	-0.0667	-0.0656
		5775.0000	5775.0601	5775.0644	-0.0601	-0.0644
3.80V	50℃	5210.0000	5210.0695	5210.0608	-0.0695	-0.0608
		5775.0000	5775.0668	5775.0624	-0.0668	-0.0624
2.81V	50℃	5210.0000	5210.0469	5210.0599	-0.0469	-0.0599
		5775.0000	5775.0735	5775.0779	-0.0735	-0.0779



9. TRANSMISSION IN THE ABSENCE OF DATA

9.1 STANDARD REQUIREMENT

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

Rss-gen requirement:: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

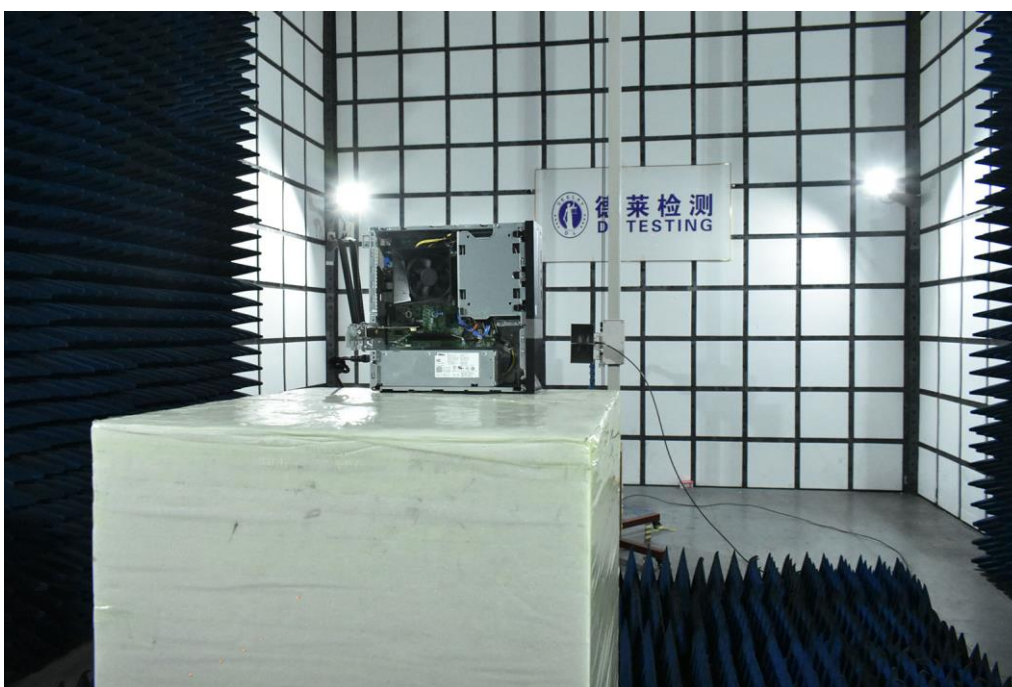
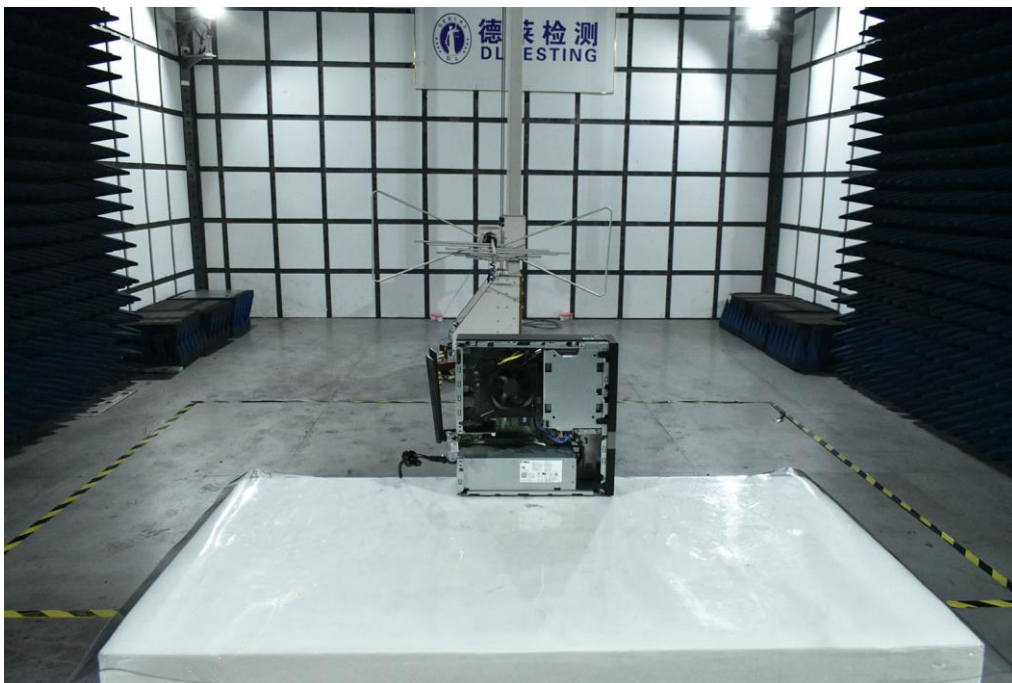
10.2 EUT ANTENNA

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



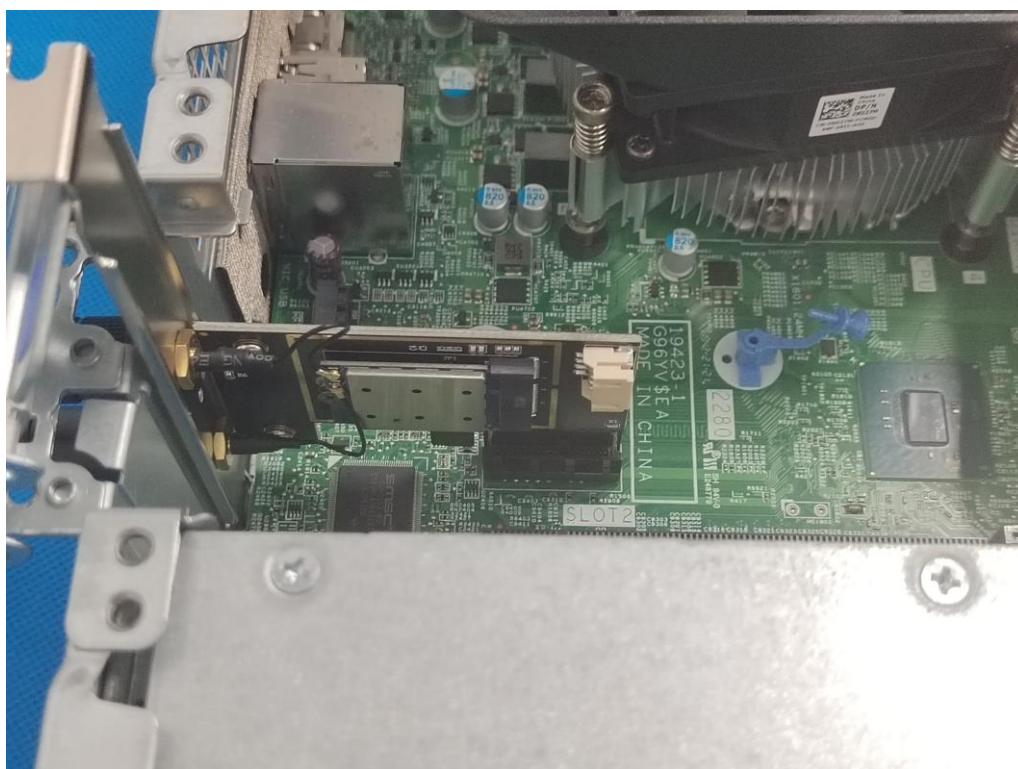
11. TEST SEUUP PHOTO

Radiated Measurement Photos



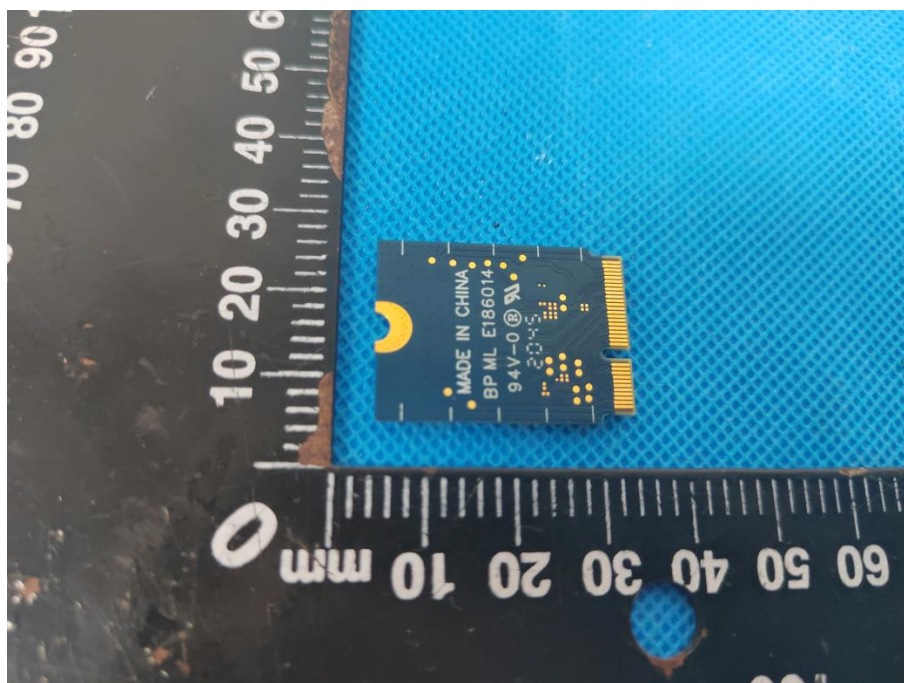
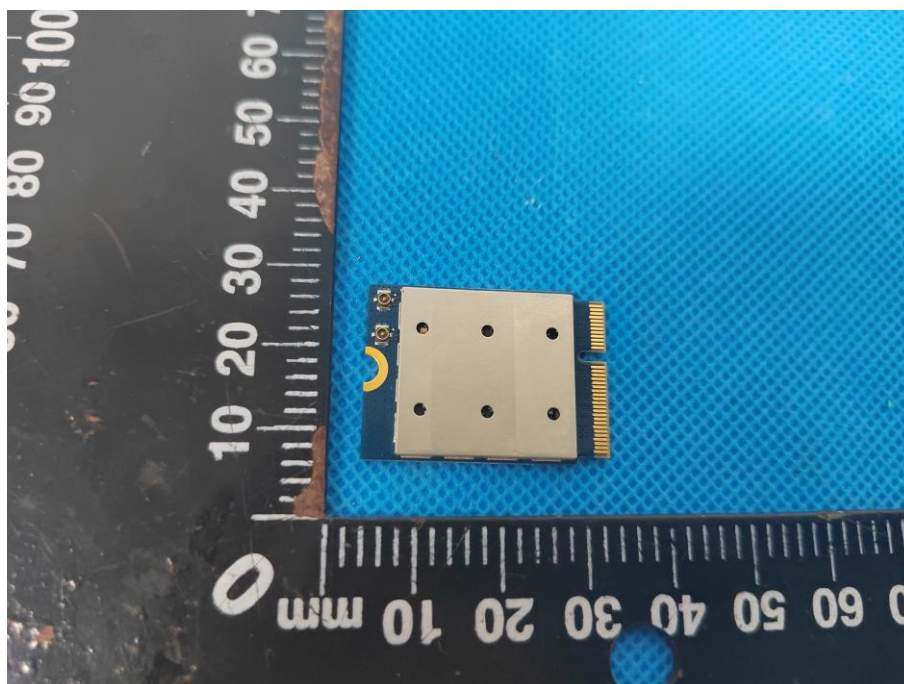


Conducted Measurement Photos





12. EUT PHOTO



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