



FCC TEST REPORT

FCC ID:2A6GBAOKC10S

Product	:	mini pc
Model Name	:	KC10
Brand	:	N/A
Report No.	:	PTC22021806201E-FC02
Prepared for		
aopoo technology co.,ltd		
Room 706, Bens Tower, Ganli 6 road, longhua district,Shenzhen city		
Prepared by		
Precise Testing & Certification Co., Ltd		
Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China		



1 TEST RESULT CERTIFICATION

Applicant's name : aopoo technology co.,ltd.

Address : Room 706, Bens Tower, Ganli 6 road, longhua district,Shenzhen city.

Manufacture's name : aopoo technology co.,ltd.

Address : Room 706, Bens Tower, Ganli 6 road, longhua district,Shenzhen city.

Product name : mini pc

Model name : KC10

Standards : FCC CFR47 Part 15 Section 15.247

Test procedure : ANSI C63.10:2013

Test Date : Apr. 08, 2022 to Apr. 16, 2022

Date of Issue : Apr. 16, 2022

Test Result : Pass

This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

This report shall not be reproduced except in full, without the written approval of PTC, this document may be altered or revised by PTC, personal only, and shall be noted in the revision of the document.

Test Engineer:

A handwritten signature in black ink that reads "Simon Pu".

Simon Pu / Engineer

Technical Manager:

A handwritten signature in black ink that reads "Ronnie Liu".

Ronnie Liu / Manager



Contents

	Page
1 TEST RESULT CERTIFICATION	2
2 TEST SUMMARY	5
3 GENERAL INFORMATION	6
3.1 GENERAL DESCRIPTION OF E.U.T.	6
3.2 CHANNEL LIST	7
3.3 TEST SITE	11
4 EQUIPMENT DURING TEST	12
4.1 EQUIPMENTS LIST	12
4.2 MEASUREMENT UNCERTAINTY	14
4.3 DESCRIPTION OF SUPPORT UNITS	15
5 CONDUCTED EMISSION	16
5.1 E.U.T. OPERATION	16
5.2 EUT SETUP	16
5.3 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	17
5.4 MEASUREMENT PROCEDURE	17
5.5 CONDUCTED EMISSION LIMIT	17
5.6 MEASUREMENT DESCRIPTION	17
5.7 CONDUCTED EMISSION TEST RESULT	17
6 RADIATED SPURIOUS EMISSIONS	20
6.1 EUT OPERATION	20
6.2 TEST SETUP	21
6.3 SPECTRUM ANALYZER SETUP	22
6.4 TEST PROCEDURE	23
6.5 SUMMARY OF TEST RESULTS	24
7 CONDUCTED SPURIOUS EMISSION	44
7.1 TEST PROCEDURE	44
7.2 TEST RESULT	44
8 BAND EDGE MEASUREMENT	49
8.1 TEST PROCEDURE	49



8.2 TEST RESULT	50
9 6DB BANDWIDTH MEASUREMENT	58
9.1 TEST PROCEDURE	58
9.2 TEST RESULT	58
10 MAXIMUM PEAK OUTPUT POWER	72
10.1 TEST PROCEDURE	72
10.2 TEST RESULT	72
11 POWER SPECTRAL DENSITY	73
11.1 TEST PROCEDURE	73
11.2 TEST RESULT	73
12 ANTENNA APPLICATION	87
12.1 ANTENNA REQUIREMENT	87
12.2 RESULT	87
13 TEST SETUP	88
14 EUT PHOTOS	90



2 Test Summary

Test Items	Test Requirement	Result
Conduct Emission	15.207	PASS
Radiated Spurious Emissions	15.205(a) 15.209 15.247(d)	PASS
Conducted Spurious Emission	15.247(d)	PASS
Band edge	15.247(d) 15.205(a)	PASS
6dB Bandwidth	15.247(a)(2)	PASS
Maximum Peak Output Power	15.247(b)(3)	PASS
Power Spectral Density	15.247(e)	PASS
Antenna Requirement	15.203	PASS

Remark:

N/A: Not Applicable



3 General Information

3.1 General Description of E.U.T.

Product Name	:	mini pc
Model Name	:	KC10
Additional model	:	KC10F,AC1-DP,AC1-Z,TK10,TK11,G1,WS10,WS10F Note:The appearance of the product is different.
Specification	:	802.11b/g/n HT20/HT40 BT 5.1 BLE 802.11a/n HT20/HT40/ac20/ac40
Operation Frequency	:	2.4G Wifi :2412-2462MHz 5G Wifi:5150-5250 MHz 5.8G Wifi:5725MHz~5850MHz
Number of Channel	:	11 channels for 802.11b/g; n(HT20) 7 channels for 802.11n(HT40) 4 channels for 802.11a/n20/ac20 5150-5250 MHz 5 channels for 802.11a/n20/ac20 5725MHz~5850MHz 2 channels for 802.11n40/ac40 5150-5250 MHz 2 channels for 802.11n40/ac40 5725MHz~5850MHz 40 channels for BLE
Type of Modulation	:	DSSS with DBPSK/DQPSK/CCK for 802.11b; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n/a/ac; GFSK For BT
Antenna installation	:	FPC antenna A FPC antenna B Note1: For Bluetooth just only Used antenna B) Note2:Single transmission, not simultaneous transmission
Antenna Gain	:	3 dBi
Power supply	:	Adapter model:ADP-65JH-DB Input: AC100-240V 50/60HZ 1.5A, Output:DC 19V 3.42A
Hardware Version	:	N/A
Software Version	:	N/A



3.2 Channel List

The EUT has been tested under its typical operating condition.

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

Test of channel included the lowest and middle and highest frequency to perform the test, then record on this report.

Those data rates (802.11b: 1 Mbps; 802.11g: 6 Mbps; 802.11n (HT20): MCS0;) were used for all test.

Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

Frequency and Channel list for 802.11 b/g/n (HT20)

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	5	2432	9	2452
2	2417	6	2437	10	2457
3	2422	7	2442	11	2462
4	2427	8	2447		

Test Frequency and Channel for 802.11 n (HT40):

Lowest Frequency		Middle Frequency		Highest Frequency	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	2422	5	2433	7	2442
4	2427	6	2437	8	2447
				9	2452



The maximum duty cycle as following table:

Test Mode	Duty Cycle(%)
802.11b	100%
802.11g	100%
802.11n(HT20)	100%
802.11n(HT40)	100%

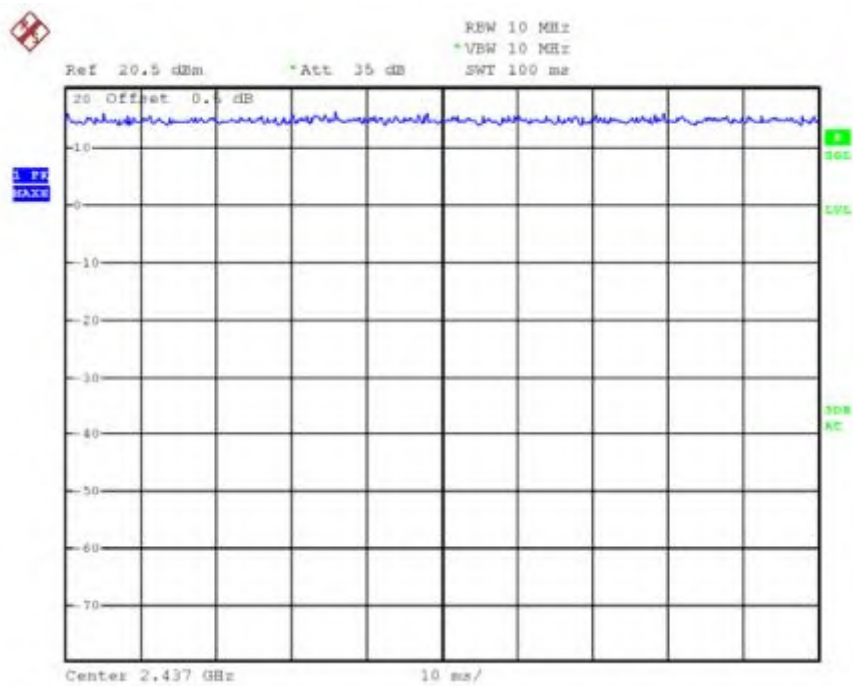
Test Plots:

802.11b

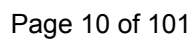
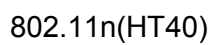
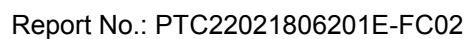




802.11g



802.11n(HT20)





Report No.: PTC22021806201E-FC02

3.3 Test Site

Precise Testing & Certification Co., Ltd

Address: Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China

FCC Registration Number: 790290

A2LA Certificate No.: 4408.01

IC Registration Number: 12191A



4 Equipment During Test

4.1 Equipments List

RF Conducted Test

Name of Equipment	Manufacturer	Model	Serial No.	Characteristics	Calibration Due
MXG Signal Analyzer	Agilent	N9020A	SER MY5111038	10Hz-30GHz	Aug. 21, 2022
Coaxial Cable	CDS	79254	46107086	10Hz-30GHz	Aug. 21, 2022
Power Meter	Anritsu	ML2495A	0949003	300MHz-40GHz	Aug. 21, 2022
Power Sensor	Anritsu	MA2411B	0917017	300MHz-40GHz	Aug. 21, 2022

Remark: The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.

Name of Equipment	Manufacturer	Model	Serial No.	Characteristics	Calibration Due
EMI Test Receiver	Rohde&Schwarz	ESCI	101417	9KHz-3GHz	Aug. 21, 2022
Loop Antenna	Schwarzbeck	FMZB 1519	012	9 KHz -30MHz	Aug. 21, 2022
Bilog Antenna	SCHWARZBECK	VULB9160	9160-3355	25MHz-2GHz	Aug. 21, 2022
Preamplifier (low frequency)	SCHWARZBECK	BBV 9475	9745-0013	1MHz-1GHz	Aug. 21, 2022
Cable	Schwarzbeck	PLF-100	549489	9KHz-3GHz	Aug. 21, 2022
Spectrum Analyzer	Agilent	E4407B	MY45109572	9KHz-40GHz	Aug. 21, 2022
Horn Antenna	SCHWARZBECK	9120D	9120D-1246	1GHz-18GHz	Aug. 21, 2022
Power Amplifier	LUNAR EM	LNA1G18-40	J10100000081	1GHz-26.5GHz	Aug. 21, 2022
Horn Antenna	SCHWARZBECK	BBHA 9170	9170-181	14GHz-40GHz	Aug. 21, 2022
Amplifier	SCHWARZBECK	BBV 9721	9721-205	18GHz-40GHz	Aug. 21, 2022



Report No.: PTC22021806201E-FC02

Cable	H+S	CBL-26	N/A	1GHz-26.5GHz	Aug. 21, 2022
RF Cable	R&S	R204	R21X	1GHz-40GHz	Aug. 21, 2022

Conducted Emissions

Name of Equipment	Manufacturer	Model	Serial No.	Characteristics	Calibration Due
EMI Test Receiver	Rohde&Schwarz	ESCI	101417	9KHz-3GHz	Aug. 21, 2022
Artificial Mains Network	Rohde&Schwarz	ENV216	102453	9KHz-300MHz	Aug. 21, 2022
Artificial Mains Network	Rohde&Schwarz	ENV216	101342	9KHz-300MHz	Aug. 21, 2022



4.2 Measurement Uncertainty

Parameter	Uncertainty
RF output power, conducted	$\pm 1.0\text{dB}$
Power Spectral Density, conducted	$\pm 2.2\text{dB}$
Radio Frequency	$\pm 1 \times 10^{-6}$
Bandwidth	$\pm 1.5 \times 10^{-6}$
Time	$\pm 2\%$
Duty Cycle	$\pm 2\%$
Temperature	$\pm 1^\circ\text{C}$
Humidity	$\pm 5\%$
DC and low frequency voltages	$\pm 3\%$
Conducted Emissions (150kHz~30MHz)	$\pm 3.64\text{dB}$
Radiated Emission(30MHz~1GHz)	$\pm 5.03\text{dB}$
Radiated Emission(1GHz~25GHz)	$\pm 4.74\text{dB}$



Report No.: PTC22021806201E-FC02

4.3 Description of Support Units

Equipment	Model No.	Series No.
Adapter	ADP-65JH-DB	N/A

5 Conducted Emission

Test Requirement: : FCC CFR 47 Part 15 Section 15.207

Test Method : ANSI C63.10: 2013

Test Result : PASS

Frequency Range : 150kHz to 30MHz

Class/Severity : Class B

5.1 E.U.T. Operation

Operating Environment :

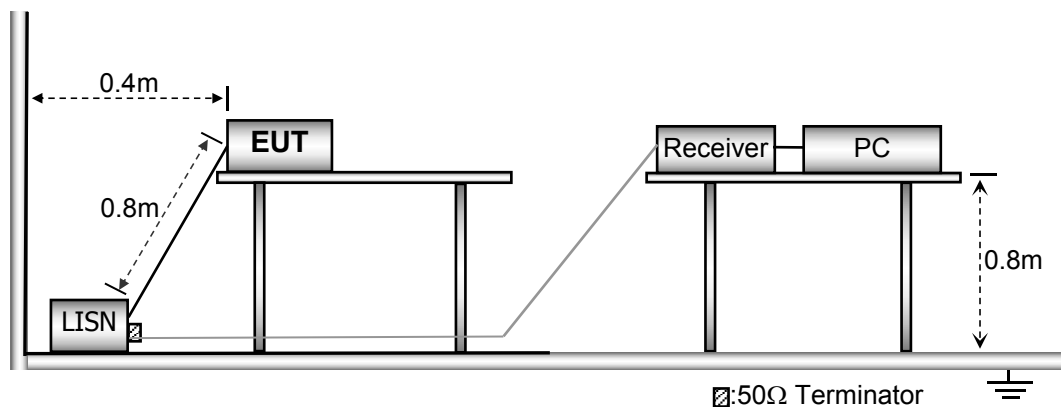
Temperature : 23.9 °C

Humidity : 51.4 % RH

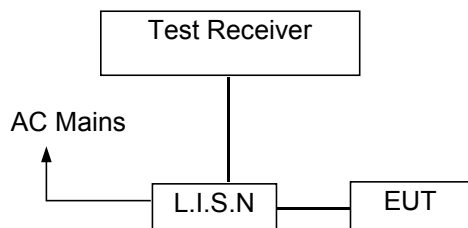
Atmospheric Pressure : 101.21kPa

5.2 EUT Setup

The conducted emission tests were performed using the setup accordance with the ANSI C63.10:2013.



5.3 Test SET-UP (Block Diagram of Configuration)



5.4 Measurement Procedure

1. The EUT was placed on a table, which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured was complete.

5.5 Conducted Emission Limit

Conducted Emission

Frequency(MHz)	Quasi-peak	Average
0.15-0.5	66-56	56-46
0.5-5.0	56	46
5.0-30.0	60	50

Note:

1. The lower limit shall apply at the transition frequencies
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

5.6 Measurement Description

The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line.

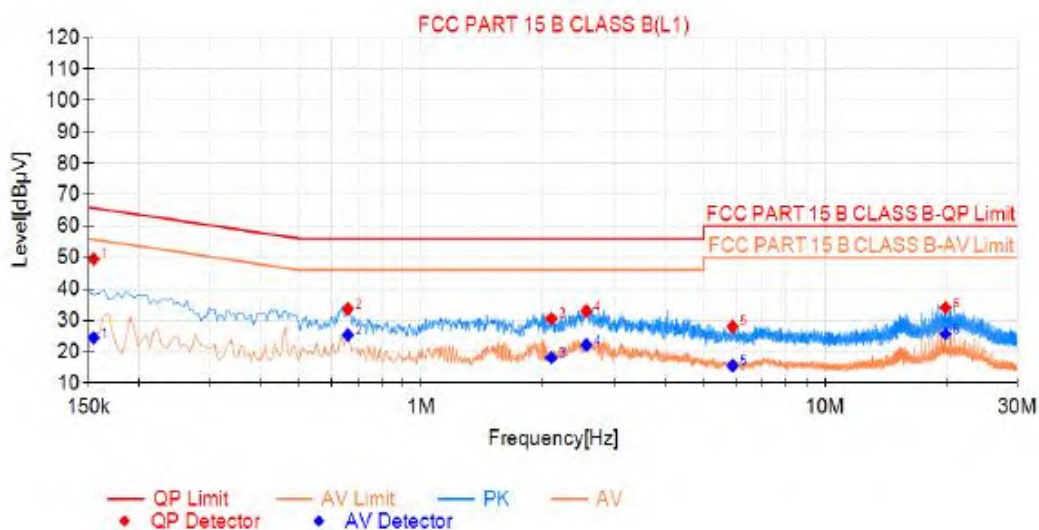
5.7 Conducted Emission Test Result

Pass.

During the test, the 120Vac/60Hz and 240Vac/60Hz power supplies were scanned in advance, and it was found that (120Vac/60Hz, TX 802.11b Low Channel) was a poor mode, and the report only reflected the poor mode.

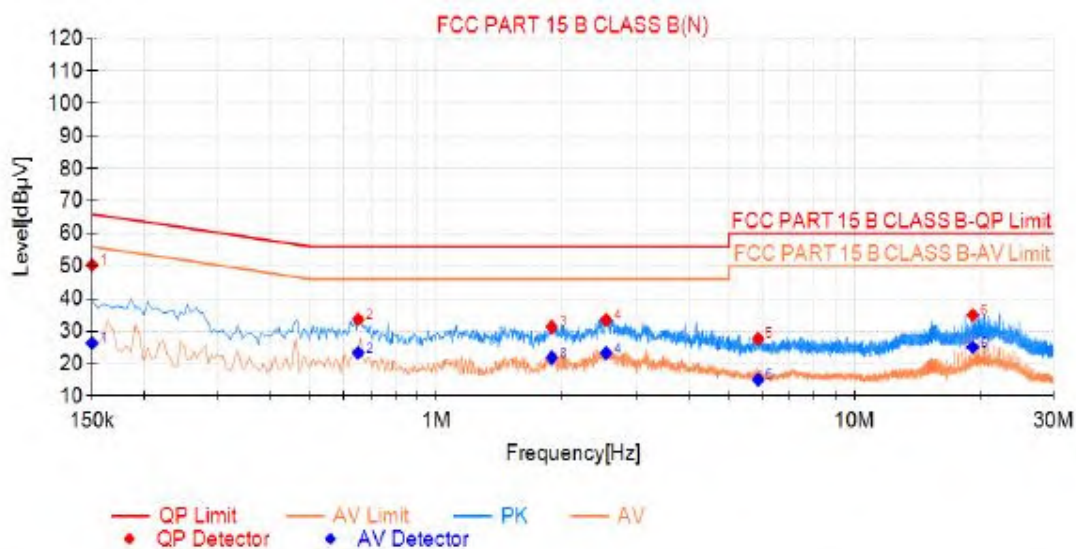
Please refer to the following pages.

Line- AC 120V/60Hz



Final Data List								
NO.	Freq. [MHz]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.155	49.55	65.75	16.20	24.41	55.75	31.34	PASS
2	0.659	33.59	56.00	22.41	25.33	46.00	20.67	PASS
3	2.099	30.56	56.00	25.44	18.07	46.00	27.93	PASS
4	2.562	32.94	56.00	23.06	22.11	46.00	23.89	PASS
5	5.897	28.00	60.00	32.00	15.51	50.00	34.49	PASS
6	19.869	34.01	60.00	25.99	25.69	50.00	24.31	PASS

Neutral-AC 120V/60Hz



Final Data List								
NO.	Freq. [MHz]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.150	50.28	66.00	15.72	26.27	56.00	29.73	PASS
2	0.650	33.57	56.00	22.43	23.30	46.00	22.70	PASS
3	1.887	31.28	56.00	24.72	21.79	46.00	24.21	PASS
4	2.544	33.39	56.00	22.61	23.21	46.00	22.79	PASS
5	5.879	27.66	60.00	32.34	15.02	50.00	34.98	PASS
6	19.167	34.89	60.00	25.11	25.03	50.00	24.97	PASS



6 Radiated Spurious Emissions

Test Requirement : FCC CFR47 Part 15 Section 15.209 & 15.247
Test Method : ANSI C63.10:2013
Test Result : PASS
Measurement Distance : 3m
Limit : See the follow table

Frequency (MHz)	Field Strength		Field Strength Limit at 3m Measurement Dist	
	uV/m	Distance (m)	uV/m	dBuV/m
0.009 ~ 0.490	$2400/F(\text{kHz})$	300	$10000 * 2400/F(\text{kHz})$	$20\log^{(2400/F(\text{kHz}))} + 80$
0.490 ~ 1.705	$24000/F(\text{kHz})$	30	$100 * 24000/F(\text{kHz})$	$20\log^{(24000/F(\text{kHz}))} + 40$
1.705 ~ 30	30	30	$100 * 30$	$20\log^{(30)} + 40$
30 ~ 88	100	3	100	$20\log^{(100)}$
88 ~ 216	150	3	150	$20\log^{(150)}$
216 ~ 960	200	3	200	$20\log^{(200)}$
Above 960	500	3	500	$20\log^{(500)}$

6.1 EUT Operation

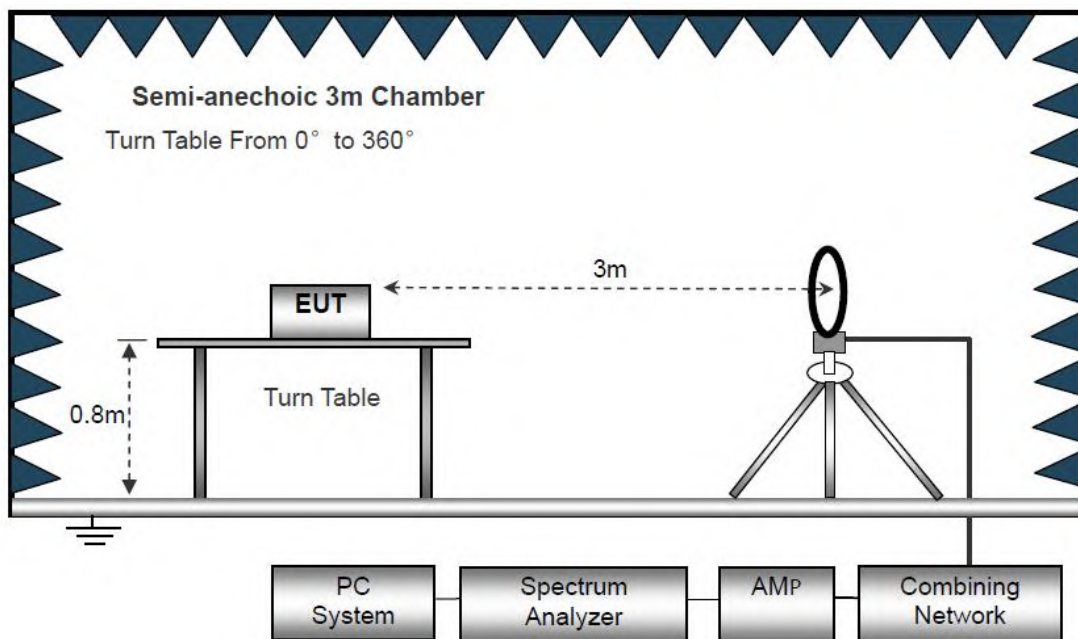
Operating Environment :

Temperature: : 24.5 °C
Humidity: : 52 % RH
Atmospheric Pressure: : 101.3kPa
Test Voltage : AC 120V 60Hz

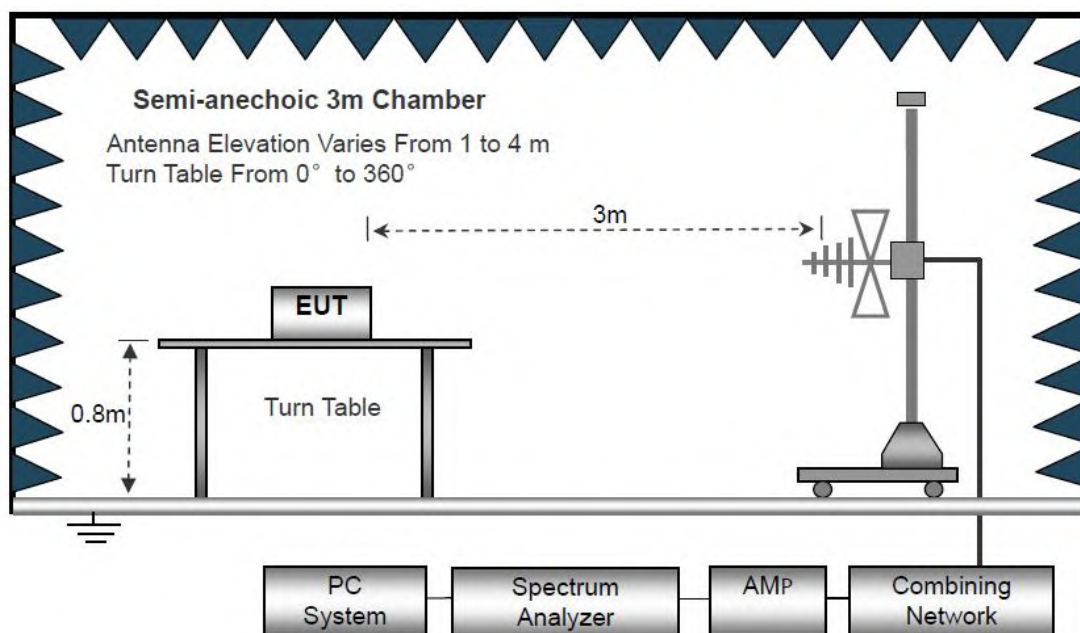
6.2 Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site

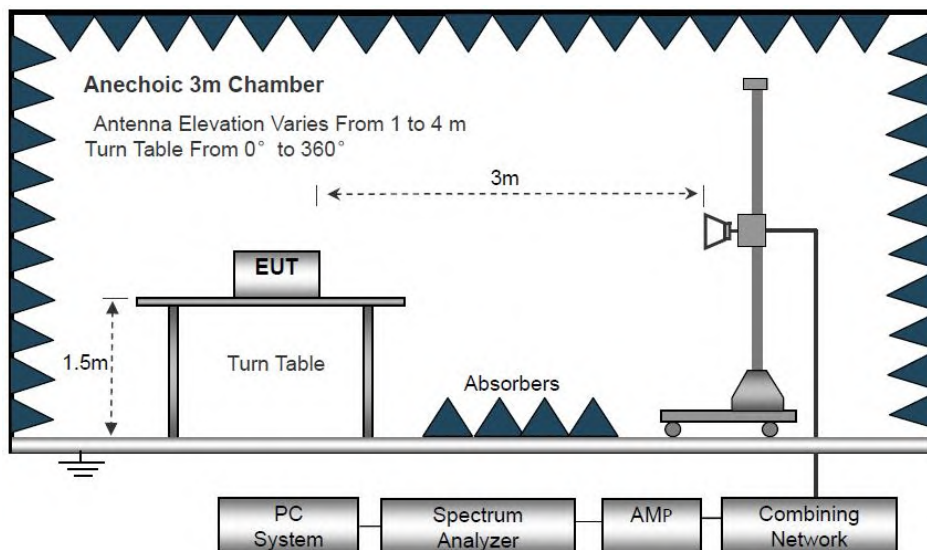
The test setup for emission measurement below 30MHz



The test setup for emission measurement from 30 MHz to 1 GHz.



The test setup for emission measurement above 1 GHz



6.3 Spectrum Analyzer Setup

	Frequency	Detector	RBW	VBW	Remark
Receiver Setup	Below 30MHz	--	10kHz	10kHz	--
	30MHz ~ 1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
		RMS	1MHz	3MHz	Average Value



6.4 Test Procedure

1. Below 1000MHz, The EUT was placed on a turn table which is 0.8m above ground plane, And above 1000MHz, The EUT was placed on a styrofoam table which is 1.5m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is moved from 1m to 4m to find out the maximum emissions. The spectrum was investigated from the lowest radio frequency signal generated in the device, without going below 9 kHz, up to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7. The radiation measurements are tested under 3-axes(X,Y,Z) position(X denotes lying on the table, Y denotes side stand and Z denotes vertical stand), After pre-test, It was found that the worse radiation emission was get at the X position. So the data shown was the X position only.
8. The test above 1GHz must be use the fully anechoic room, and the test below 1GHz use the half anechoic room



6.5 Summary of Test Results

Test Frequency: 9KHz-30MHz

Freq. (MHz)	Ant.Pol. H/V	Emission Level (dBuV/m)	Limit 3m (dBuV/m)	Over (dB)
--	--	--	--	>20

Note:

The amplitude of spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.

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

Limit line = Specific limits (dBuV) + distance extrapolation factor.

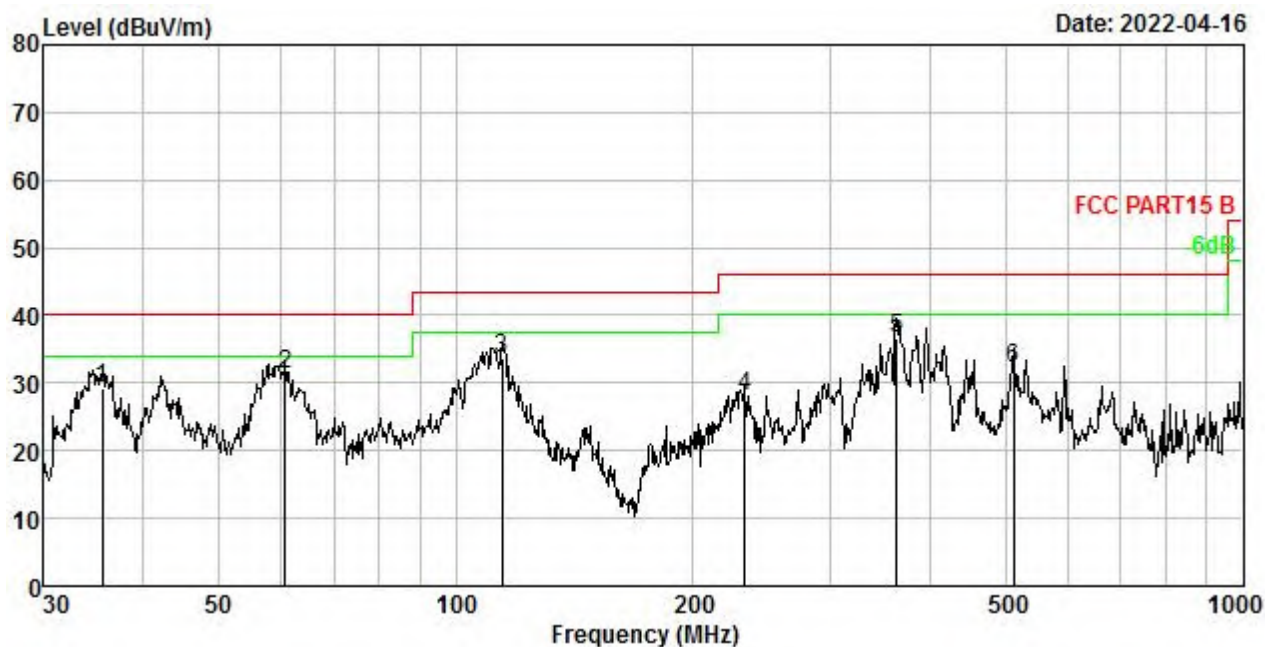
Test Frequency: 30MHz ~ 1GHz

All the modulation modes were tested the data of the worst mode (TX 802.11b Low Channel) are recorded in the following pages and the others modulation methods do not exceed the limits.

Please refer to the following test plots:



Antenna Polarization: Horizontal



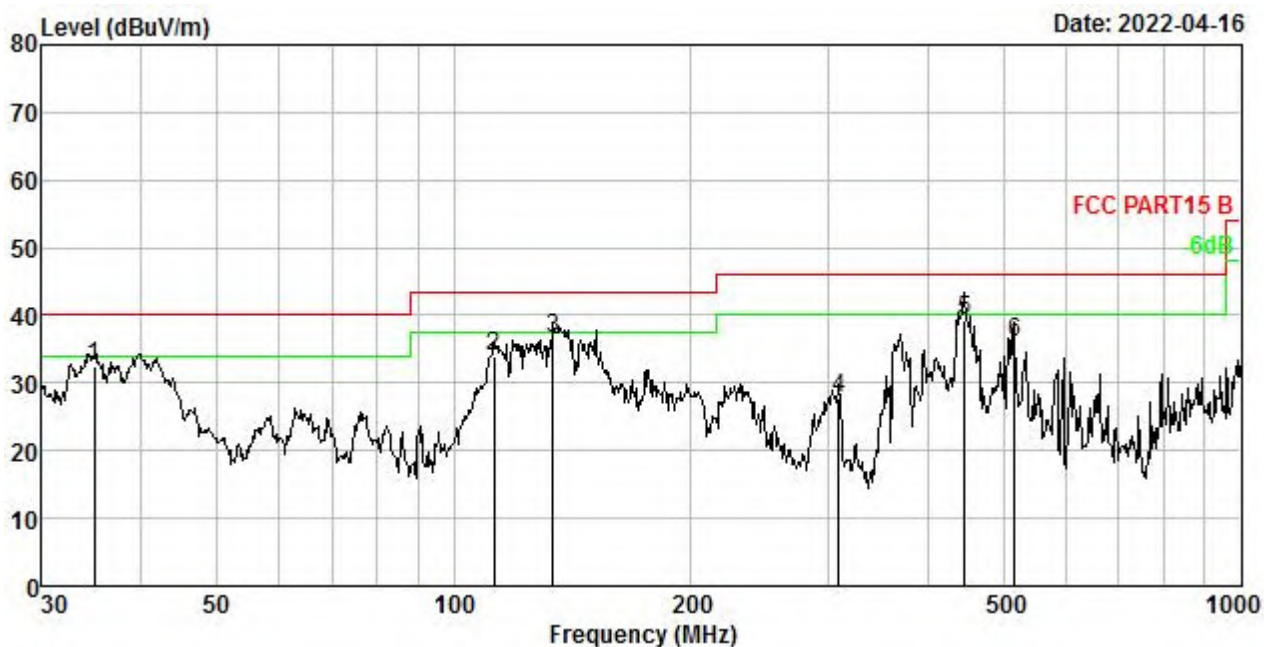
Env. / Ins. : Temp.:24.5°C Humi.:52% Press.:101.3 kPa

No.	Freq MHz	Cable Loss dB	ANT Factor dB/m	Receiver Reading dBuV	Preamp Factor dB	Emission Level dBuV/m	Limit dBuV/m	Over Limit dB	Remark
1.	35.624	1.50	12.19	45.30	29.90	29.09	40.00	-10.91	QP
2.	60.704	2.41	11.60	47.13	29.94	31.20	40.00	-8.80	QP
3.	114.515	3.51	11.35	48.75	30.00	33.61	43.50	-9.89	QP
4.	233.349	4.73	12.04	41.33	30.15	27.95	46.00	-18.05	QP
5.	362.985	5.49	14.51	47.05	30.57	36.48	46.00	-9.52	QP
6.	511.835	6.08	17.44	39.66	30.91	32.27	46.00	-13.73	QP

Remark:Emission Level=Reading+Cable Loss+ANT Factor-AMP Factor



Antenna Polarization: Vertical



Env./Ins. : Temp.:24.5°C Humi.:52% Press.:101.3 kPa

No.	Freq MHz	Cable Loss dB	ANT Factor dB/m	Receiver Reading dBuV	Preamp Factor dB	Emission Level dBuV/m	Limit dBuV/m	Over Limit dB	Remark
1.	35.005	1.47	12.20	48.81	29.90	32.58	40.00	-7.42	QP
2.	112.524	3.48	11.11	49.45	30.00	34.04	43.50	-9.46	QP
3.	133.619	3.77	12.91	49.89	30.01	36.56	43.50	-6.94	QP
4.	308.913	5.21	13.43	39.43	30.36	27.71	46.00	-18.29	QP
5.	446.414	5.85	15.83	48.38	30.80	39.26	46.00	-6.74	QP
6.	515.437	6.09	17.55	43.39	30.92	36.11	46.00	-9.89	QP

Remark:Emission Level=Reading+Cable Loss+ANT Factor-AMP Factor



Test Frequency: From 1GHz to 18GHz

Worst case 802.11b Antenna A

Test Mode: 2412					Test channel: Lowest			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4824	45.16	32.29	4.1	28.45	53.1	74	-20.9	V
7236	38.01	35.99	6.22	27.83	52.39	74	-21.61	V
9648	37.22	38.11	7.83	25.1	58.06	74	-15.94	V
4824	42.59	32.29	4.1	28.45	50.53	74	-23.47	H
7236	36.87	35.99	6.22	27.83	51.25	74	-22.75	H
9648	34.53	38.11	7.83	25.1	55.37	74	-18.63	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4824	32.05	32.29	4.1	28.45	39.99	54	-14.01	V
7236	30.89	35.99	6.22	27.83	45.27	54	-8.73	V
9648	25.11	38.11	7.83	25.1	45.95	54	-8.05	V
4824	36.02	32.29	4.1	28.45	43.96	54	-10.04	H
7236	31.13	35.99	6.22	27.83	45.51	54	-8.49	H
9648	25.17	38.11	7.83	25.1	46.01	54	-7.99	H



Worst case 802.11b Antenna A

Test Mode: 2437					Test channel: Middle			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4874	45.68	32.35	4.12	28.44	53.71	74	-20.29	V
7311	36.82	36.08	6.3	27.74	51.46	74	-22.54	V
9748	36.69	38.25	7.91	24.65	58.2	74	-15.8	V
4874	42.57	32.35	4.12	28.44	50.6	74	-23.4	H
7311	38.05	36.08	6.3	27.74	52.69	74	-21.31	H
9748	37.11	38.25	7.91	24.65	58.62	74	-15.38	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4874	34.16	32.35	4.12	28.44	42.19	54	-11.81	V
7311	29.23	36.08	6.3	27.74	43.87	54	-10.13	V
9748	25.11	38.25	7.91	24.65	46.62	54	-7.38	V
4874	32.08	32.35	4.12	28.44	40.11	54	-13.89	H
7311	27.94	36.08	6.3	27.74	42.58	54	-11.42	H
9748	24.15	38.25	7.91	24.65	45.66	54	-8.34	H



Worst case 802.11b Antenna A

Test Mode: 2462					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4924	46.38	32.41	4.14	28.42	54.51	74	-19.49	V
7386	38.56	36.15	6.36	27.68	53.39	74	-20.61	V
9848	35.29	38.35	7.97	24.33	57.28	74	-16.72	V
4924	44.97	32.41	4.14	28.42	53.1	74	-20.9	H
7386	38.59	36.15	6.36	27.68	53.42	74	-20.58	H
9848	34.79	38.35	7.97	24.33	56.78	74	-17.22	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4924	34.15	32.41	4.14	28.42	42.28	54	-11.72	V
7386	29.03	36.15	6.36	27.68	43.86	54	-10.14	V
9848	22.58	38.35	7.97	24.33	44.57	54	-9.43	V
4924	31.76	32.41	4.14	28.42	39.89	54	-14.11	H
7386	28.02	36.15	6.36	27.68	42.85	54	-11.15	H
9848	22.63	38.35	7.97	24.33	44.62	54	-9.38	H



Worst case 802.11g Antenna A

Test Mode: 2412					Test channel: Lowest			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4824	45.26	32.29	4.1	28.45	53.2	74	-20.8	V
7236	37.85	35.99	6.22	27.83	52.23	74	-21.77	V
9648	26.98	38.11	7.83	25.1	47.82	74	-26.18	V
4824	42.56	32.29	4.1	28.45	50.5	74	-23.5	H
7236	37.04	35.99	6.22	27.83	51.42	74	-22.58	H
9648	35.22	38.11	7.83	25.1	56.06	74	-17.94	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4824	32.25	32.29	4.1	28.45	40.19	54	-13.81	V
7236	27.11	35.99	6.22	27.83	41.49	54	-12.51	V
9648	23.08	38.11	7.83	25.1	43.92	54	-10.08	V
4824	36.04	32.29	4.1	28.45	43.98	54	-10.02	H
7236	21.56	35.99	6.22	27.83	35.94	54	-18.06	H
9648	22.22	38.11	7.83	25.1	43.06	54	-10.94	H



Worst case 802.11g Antenna A

Test Mode: 2437					Test channel: Middle			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4874	46.89	32.35	4.12	28.44	54.92	74	-19.08	V
7311	40.25	36.08	6.3	27.74	54.89	74	-19.11	V
9748	35.62	38.25	7.91	24.65	57.13	74	-16.87	V
4874	42.25	32.35	4.12	28.44	50.28	74	-23.72	H
7311	37.86	36.08	6.3	27.74	52.5	74	-21.5	H
9748	36.97	38.25	7.91	24.65	58.48	74	-15.52	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4874	35.65	32.35	4.12	28.44	43.68	54	-10.32	V
7311	29.22	36.08	6.3	27.74	43.86	54	-10.14	V
9748	25.34	38.25	7.91	24.65	46.85	54	-7.15	V
4874	32.06	32.35	4.12	28.44	40.09	54	-13.91	H
7311	28.46	36.08	6.3	27.74	43.1	54	-10.9	H
9748	24.52	38.25	7.91	24.65	46.03	54	-7.97	H



Worst case 802.11g Antenna A

Test Mode: 2462					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4924	46.05	32.41	4.14	28.42	54.18	74	-19.82	V
7386	39.56	36.15	6.36	27.68	54.39	74	-19.61	V
9848	34.25	38.35	7.97	24.33	56.24	74	-17.76	V
4924	46.51	32.41	4.14	28.42	54.64	74	-19.36	H
7386	41.04	36.15	6.36	27.68	55.87	74	-18.13	H
9848	36.97	38.35	7.97	24.33	58.96	74	-15.04	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4924	32.98	32.41	4.14	28.42	41.11	54	-12.89	V
7386	27.45	36.15	6.36	27.68	42.28	54	-11.72	V
9848	20.64	38.35	7.97	24.33	42.63	54	-11.37	V
4924	32.09	32.41	4.14	28.42	40.22	54	-13.78	H
7386	26.82	36.15	6.36	27.68	41.65	54	-12.35	H
9848	21.11	38.35	7.97	24.33	43.1	54	-10.9	H



Worst case 802.11n20 Antenna A

Test Mode: 2412					Test channel: Lowest			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4824.00	40.73	32.29	4.10	28.45	48.67	74.00	-25.33	V
7236.00	34.50	35.99	6.22	27.83	48.88	74.00	-25.12	V
9648.00	32.91	38.11	7.83	25.10	53.75	74.00	-20.25	V
4824.00	39.33	32.29	4.10	28.45	47.27	74.00	-26.73	H
7236.00	34.21	35.99	6.22	27.83	48.59	74.00	-25.41	H
9648.00	32.48	38.11	7.83	25.10	53.32	74.00	-20.68	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4824.00	29.78	32.29	4.10	28.45	37.72	54.00	-16.28	V
7236.00	23.35	35.99	6.22	27.83	37.73	54.00	-16.27	V
9648.00	23.25	38.11	7.83	25.10	44.09	54.00	-9.91	V
4824.00	28.85	32.29	4.10	28.45	36.79	54.00	-17.21	H
7236.00	22.79	35.99	6.22	27.83	37.17	54.00	-16.83	H
9648.00	22.22	38.11	7.83	25.10	43.06	54.00	-10.94	H



Worst case 802.11n20 Antenna A

Test Mode: 2437					Test channel: Middle			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4874.00	39.71	32.35	4.12	28.44	47.74	74.00	-26.26	V
7311.00	34.52	36.08	6.30	27.74	49.16	74.00	-24.84	V
9748.00	33.90	38.25	7.91	24.65	55.41	74.00	-18.59	V
4874.00	40.14	32.35	4.12	28.44	48.17	74.00	-25.83	H
7311.00	33.13	36.08	6.30	27.74	47.77	74.00	-26.23	H
9748.00	33.77	38.25	7.91	24.65	55.28	74.00	-18.72	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4874.00	30.54	32.35	4.12	28.44	38.57	54.00	-15.43	V
7311.00	22.83	36.08	6.30	27.74	37.47	54.00	-16.53	V
9748.00	23.14	38.25	7.91	24.65	44.65	54.00	-9.35	V
4874.00	30.23	32.35	4.12	28.44	38.26	54.00	-15.74	H
7311.00	22.21	36.08	6.30	27.74	36.85	54.00	-17.15	H
9748.00	23.48	38.25	7.91	24.65	44.99	54.00	-9.01	H



Worst case 802.11n20 Antenna A

Test Mode: 2462					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4924.00	45.51	32.41	4.14	28.42	53.64	74.00	-20.36	V
7386.00	35.36	36.15	6.36	27.68	50.19	74.00	-23.81	V
9848.00	37.31	38.35	7.97	24.33	59.30	74.00	-14.70	V
4924.00	44.72	32.41	4.14	28.42	52.85	74.00	-21.15	H
7386.00	34.21	36.15	6.36	27.68	49.04	74.00	-24.96	H
9848.00	33.46	38.35	7.97	24.33	55.45	74.00	-18.55	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4924.00	36.37	32.41	4.14	28.42	44.50	54.00	-9.50	V
7386.00	25.26	36.15	6.36	27.68	40.09	54.00	-13.91	V
9848.00	25.80	38.35	7.97	24.33	47.79	54.00	-6.21	V
4924.00	35.05	32.41	4.14	28.42	43.18	54.00	-10.82	H
7386.00	23.59	36.15	6.36	27.68	38.42	54.00	-15.58	H
9848.00	22.71	38.35	7.97	24.33	44.70	54.00	-9.30	H



Worst case 802.11n40 Antenna A

Test Mode: 2422					Test channel: Lowest			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4844	48.82	32.29	4.1	28.45	56.76	74	-17.24	V
7266	42.59	35.99	6.22	27.83	56.97	74	-17.03	V
9688	35.91	38.11	7.83	25.1	56.75	74	-17.25	V
4844	48.25	32.29	4.1	28.45	56.19	74	-17.81	H
7266	42.11	35.99	6.22	27.83	56.49	74	-17.51	H
9688	35.69	38.11	7.83	25.1	56.53	74	-17.47	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4844	31.85	32.29	4.1	28.45	39.79	54	-14.21	V
7266	26.05	35.99	6.22	27.83	40.43	54	-13.57	V
9688	19.96	38.11	7.83	25.1	40.8	54	-13.2	V
4844	31.74	32.29	4.1	28.45	39.68	54	-14.32	H
7266	26.58	35.99	6.22	27.83	40.96	54	-13.04	H
9688	20.03	38.11	7.83	25.1	40.87	54	-13.13	H



Worst case 802.11n40 Antenna A

Test Mode: 2437					Test channel: Middle			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4874	48.86	32.35	4.12	28.44	56.89	74	-17.11	V
7311	42.18	36.08	6.3	27.74	56.82	74	-17.18	V
9748	35.67	38.25	7.91	24.65	57.18	74	-16.82	V
4874	48.52	32.35	4.12	28.44	56.55	74	-17.45	H
7311	43.35	36.08	6.3	27.74	57.99	74	-16.01	H
9748	37.11	38.25	7.91	24.65	58.62	74	-15.38	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4874	32.06	32.35	4.12	28.44	40.09	54	-13.91	V
7311	24.98	36.08	6.3	27.74	39.62	54	-14.38	V
9748	19.75	38.25	7.91	24.65	41.26	54	-12.74	V
4874	31.66	32.35	4.12	28.44	39.69	54	-14.31	H
7311	26.05	36.08	6.3	27.74	40.69	54	-13.31	H
9748	21.11	38.25	7.91	24.65	42.62	54	-11.38	H



Worst case 802.11n40 Antenna A

Test Mode: 2452					Test channel: High			
Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4904	48.55	32.41	4.14	28.42	56.68	74	-17.32	V
7356	41.06	36.15	6.36	27.68	55.89	74	-18.11	V
9808	36.24	38.35	7.97	24.33	58.23	74	-15.77	V
4904	47.52	32.41	4.14	28.42	55.65	74	-18.35	H
7356	40.93	36.15	6.36	27.68	55.76	74	-18.24	H
9808	35.56	38.35	7.97	24.33	57.55	74	-16.45	H
Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.
4904	31.56	32.41	4.14	28.42	39.69	54	-14.31	V
7356	26.93	36.15	6.36	27.68	41.76	54	-12.24	V
9808	20.47	38.35	7.97	24.33	42.46	54	-11.54	V
4904	31.88	32.41	4.14	28.42	40.01	54	-13.99	H
7356	28.04	36.15	6.36	27.68	42.87	54	-11.13	H
9808	20.26	38.35	7.97	24.33	42.25	54	-11.75	H

2.4G WiFi Antenna A and Antenna B(802.11b/g/n)mode have been tested, and the worst result(Antenna A) was report as Above

Note:

1. The testing has been conformed to $10 \times 2462\text{MHz} = 24620\text{MHz}$.
2. All other emissions more than 30dB below the limit.
3. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Emission Level = Reading + Factor
Margin=Emission Level-Limit
4. X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.



Spurious Emission in Restricted Band 2310-2390MHz and 2483.5-2500MHz

2.4G WiFi Antenna A and Antenna B (802.11b/g/n) mode have been tested, and the worst result (Antenna A) was reported as below

Test Mode: Worst case 802.11b Low Channel 2412MHz

Test Mode: 802.11g Low Channel 2412MHz									Test Value
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over (dB)	Polarity H/V	
2390	53.06	27.39	2.77	34.01	49.21	74	-24.79	H	Peak
2390	52.69	27.39	2.77	34.01	48.84	74	-25.16	V	
2390	41.92	27.39	2.77	34.01	38.07	54	-15.93	H	Average
2390	42.37	27.39	2.77	34.01	38.52	54	-15.48	V	
2310	48.52	27.39	2.77	34.01	44.67	74	-29.33	H	Peak
2310	46.39	27.39	2.77	34.01	42.54	74	-31.46	V	
2310	39.11	27.39	2.77	34.01	35.26	54	-18.74	H	Average
2310	38.67	27.39	2.77	34.01	34.82	54	-19.18	V	

Test Mode: Worst case 802.11b High Channel 2462MHz

Test Mode: 802.11g High Channel 2462MHz									Test Value
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over (dB)	Polarity H/V	
2483.5	63.58	27.7	2.84	34.03	60.09	74	-13.91	H	Peak
2500	53.05	27.75	2.86	34.03	49.63	74	-24.37	H	
2483.5	64.92	27.7	2.84	34.03	61.43	74	-12.57	V	
2500	52.97	27.75	2.86	34.03	49.55	74	-24.45	V	
2483.5	47.82	27.7	2.84	34.03	44.33	54	-9.67	H	Average
2500	42.01	27.75	2.86	34.03	38.59	54	-15.41	H	
2483.5	48.16	27.7	2.84	34.03	44.67	54	-9.33	V	
2500	43.31	27.75	2.86	34.03	39.89	54	-14.11	V	



Test Mode: Worst case 802.11g Low Channel 2412MHz

Test Mode: 802.11g Low Channel 2412MHz									Test Value
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over (dB)	Polarity H/V	
2390	61.39	27.39	2.77	34.01	57.54	74	-16.46	H	Peak
2310	48.96	27.42	2.78	34.01	45.15	74	-28.85	H	
2390	60.39	27.39	2.77	34.01	56.54	74	-17.46	V	
2310	46.88	27.42	2.78	34.01	43.07	74	-30.93	V	
2390	47.82	27.39	2.77	34.01	43.97	54	-10.03	H	Average
2310	40.05	27.42	2.78	34.01	36.24	54	-17.76	H	
2390	48.67	27.39	2.77	34.01	44.82	54	-9.18	V	
2310	41.17	27.42	2.78	34.01	37.36	54	-16.64	V	

Test Mode: Worst case 802.11g High Channel 2462MHz

Test Mode: 802.11g High Channel 2462MHz									Test Value
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over (dB)	Polarity H/V	
2483.5	67.85	27.7	2.84	34.03	64.36	74	-9.64	H	Peak
2500	48.77	27.75	2.86	34.03	45.35	74	-28.65	H	
2483.5	70.22	27.7	2.84	34.03	66.73	74	-7.27	V	
2500	46.76	27.75	2.86	34.03	43.34	74	-30.66	V	
2483.5	48.92	27.7	2.84	34.03	45.43	54	-8.57	H	Average
2500	41.05	27.75	2.86	34.03	37.63	54	-16.37	H	
2483.5	49.31	27.7	2.84	34.03	45.82	54	-8.18	V	
2500	42.06	27.75	2.86	34.03	38.64	54	-15.36	V	



Test Mode: Worst case 802.11n20 Low Channel 2412MHz

Test Mode: 802.11n20 Low Channel 2412MHz									Test Value
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over (dB)	Polarity H/V	
2390.00	52.74	27.39	2.77	34.01	48.89	74.00	-25.11	H	Peak
2390.00	54.50	27.39	2.77	34.01	50.65	74.00	-23.35	V	
2390.00	39.19	27.39	2.77	34.01	35.34	54.00	-18.66	H	Average
2390.00	41.10	27.39	2.77	34.01	37.25	54.00	-16.75	V	
2310	47.33	27.39	2.77	34.01	43.48	74	-30.52	H	Peak
2310	46.38	27.39	2.77	34.01	42.53	74	-31.47	V	
2310	38.14	27.39	2.77	34.01	34.29	54	-19.71	H	Average
2310	37.46	27.39	2.77	34.01	33.61	54	-20.39	V	

Test Mode: 802.11n20 High Channel 2462MHz

Test Mode: 802.11n20 High Channel 2462MHz									Test Value
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over (dB)	Polarity H/V	
2483.50	53.87	27.70	2.84	34.03	50.38	74.00	-23.62	H	Peak
2500.00	49.35	27.75	2.86	34.03	45.93	74.00	-28.07	H	
2483.50	56.35	27.70	2.84	34.03	52.86	74.00	-21.14	V	
2500.00	52.06	27.75	2.86	34.03	48.64	74.00	-25.36	V	
2483.50	39.72	27.70	2.84	34.03	36.23	54.00	-17.77	H	Average
2500.00	35.61	27.75	2.86	34.03	32.19	54.00	-21.81	H	
2483.50	41.77	27.70	2.84	34.03	38.28	54.00	-15.72	V	
2500.00	37.54	27.75	2.86	34.03	34.12	54.00	-19.88	V	



Test Mode: Worst case 802.11n40 Low Channel 2422MHz

Test Mode: 802.11n40 Low Channel 2422MHz									Test Value
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over (dB)	Polarity H/V	
2390	50.24	27.39	2.77	34.01	46.39	74	-27.61	H	Peak
2390	50.26	27.39	2.77	34.01	46.41	74	-27.59	V	
2390	41.19	27.39	2.77	34.01	37.34	54	-16.66	H	Average
2390	42.31	27.39	2.77	34.01	38.46	54	-15.54	V	
2310	46.99	27.39	2.77	34.01	43.14	74	-30.86	H	Peak
2310	45.81	27.39	2.77	34.01	41.96	74	-32.04	V	
2310	37.11	27.39	2.77	34.01	33.26	54	-20.74	H	Average
2310	36.59	27.39	2.77	34.01	32.74	54	-21.26	V	

Test Mode: Worst case 802.11g High Channel 2452MHz

Test Mode: 802.11n40 High Channel 2452MHz									Test Value
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over (dB)	Polarity H/V	
2483.5	65.58	27.7	2.84	34.03	62.09	74	-11.91	H	Peak
2500	50.24	27.75	2.86	34.03	46.82	74	-27.18	H	
2483.5	66.79	27.7	2.84	34.03	63.3	74	-10.7	V	
2500	49.86	27.75	2.86	34.03	46.44	74	-27.56	V	
2483.5	47.52	27.7	2.84	34.03	44.03	54	-9.97	H	Average
2500	39.97	27.75	2.86	34.03	36.55	54	-17.45	H	
2483.5	46.92	27.7	2.84	34.03	43.43	54	-10.57	V	
2500	41.89	27.75	2.86	34.03	38.47	54	-15.53	V	



Report No.: PTC22021806201E-FC02

Test Frequency: From 18GHz to 25GHz

The measurements were more than 20dB below the limit and not reported.



7 Conducted Spurious Emission

Test Requirement	:	FCC CFR47 Part 15 Section 15.247
Test Method	:	ANSI C63.10:2013
Test Limit	:	Regulation 15.247 (d), In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

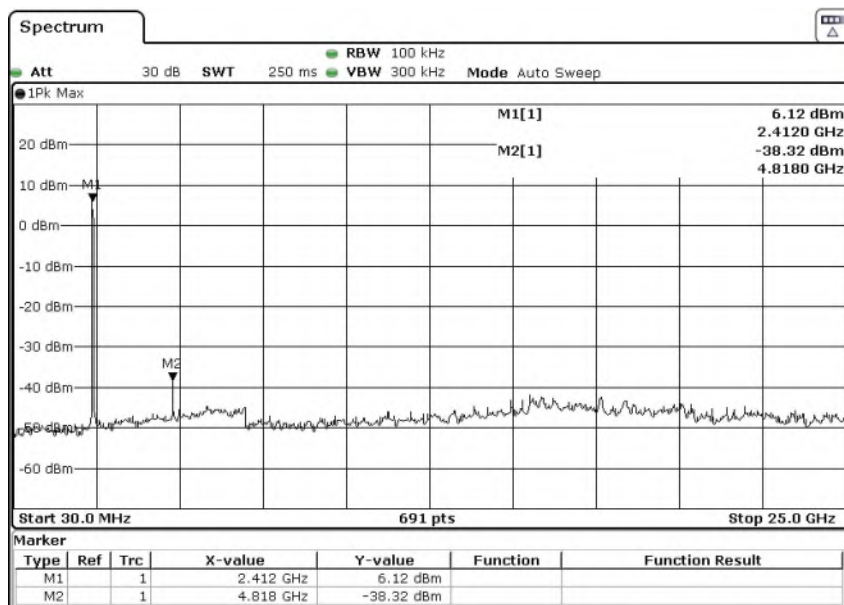
7.1 Test Procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer: RBW = 100kHz, VBW = 300kHz, Sweep = auto
Detector function = peak, Trace = max hold

7.2 Test Result

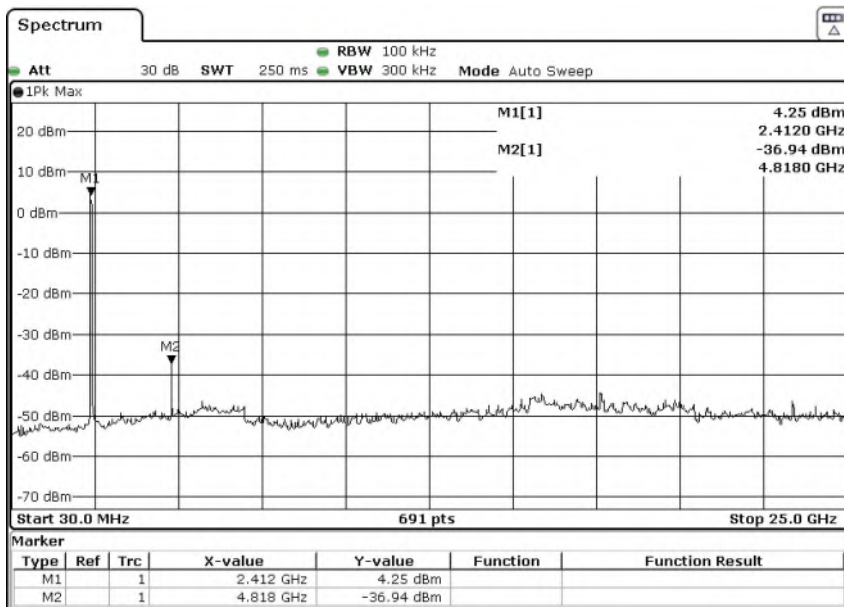
802.11 b Antenna A

Low Channel Worstcase mode



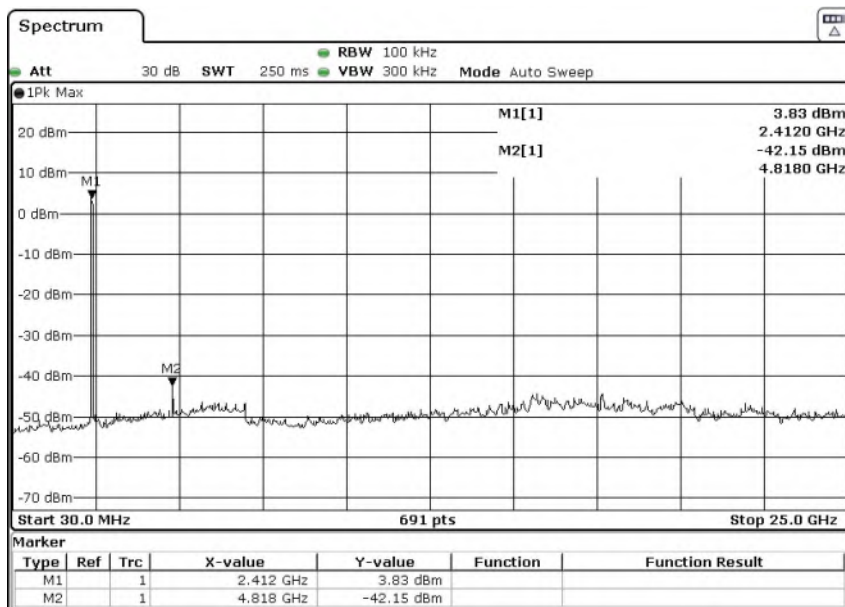
802.11 g Antenna A

Low Channel Worstcase mode



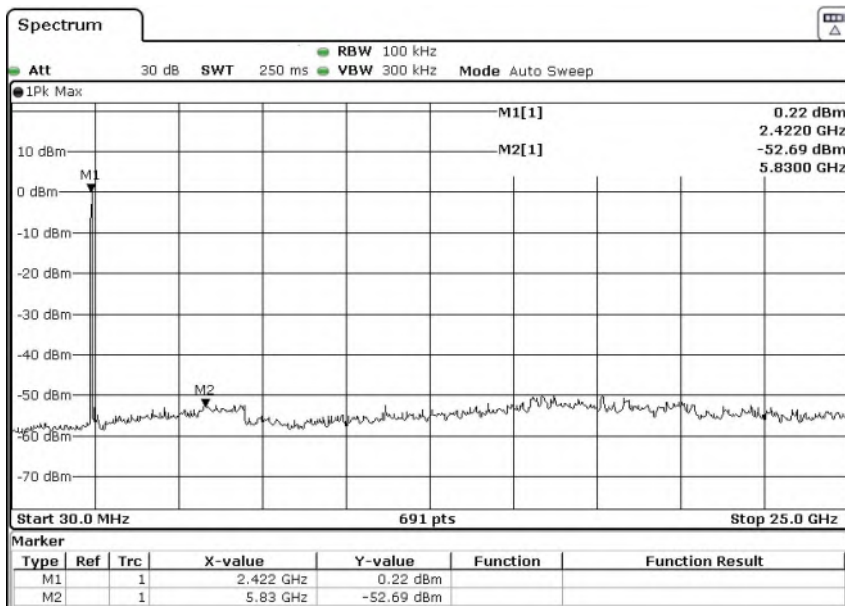
802.11 HT20 Antenna A

Low Channel Worstcase mode



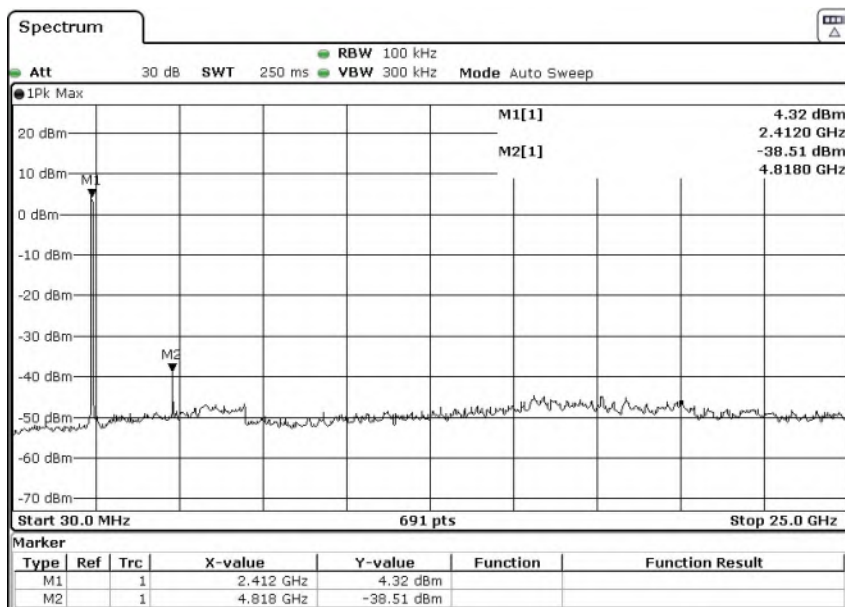
802.11 HT40 Antenna A

Low Channel Worstcase mode



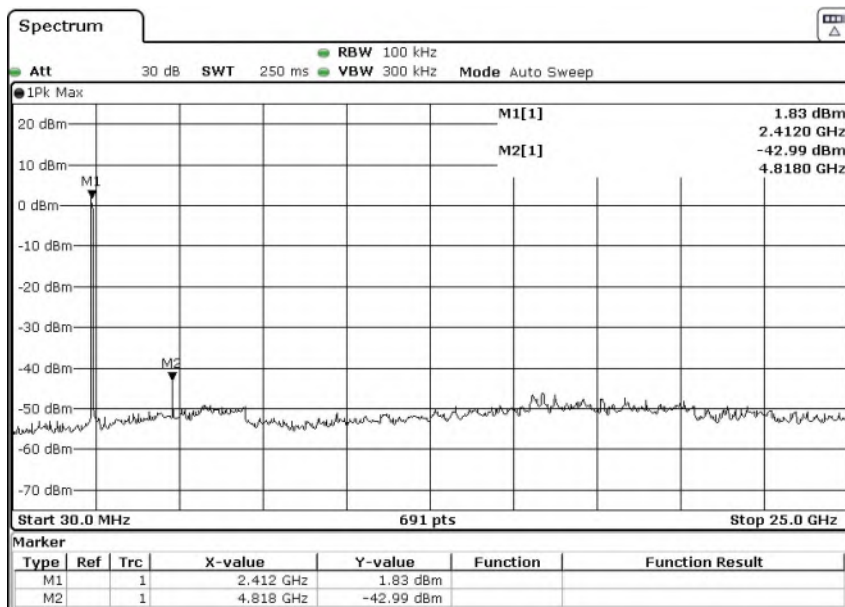
802.11 b Antenna B

Low Channel Worstcase mode



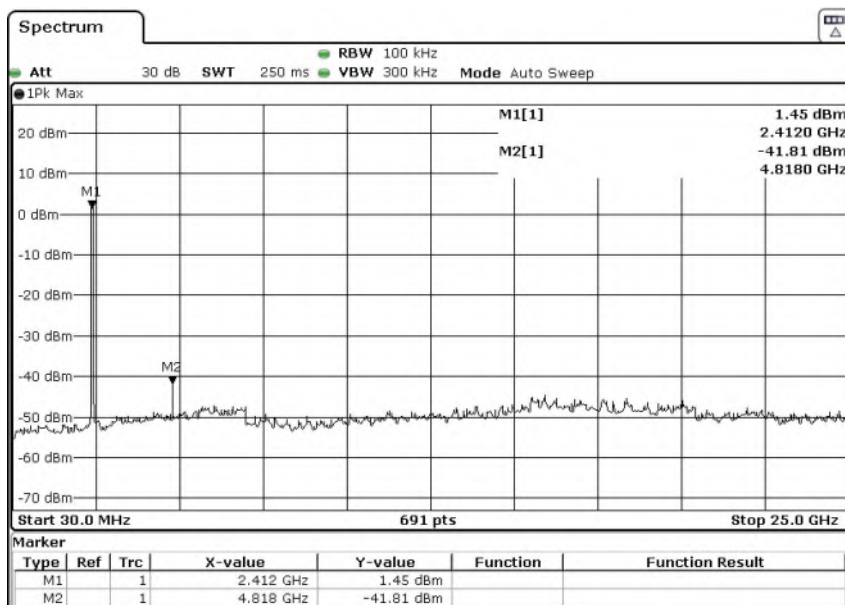
802.11 g Antenna B

Low Channel Worstcase mode



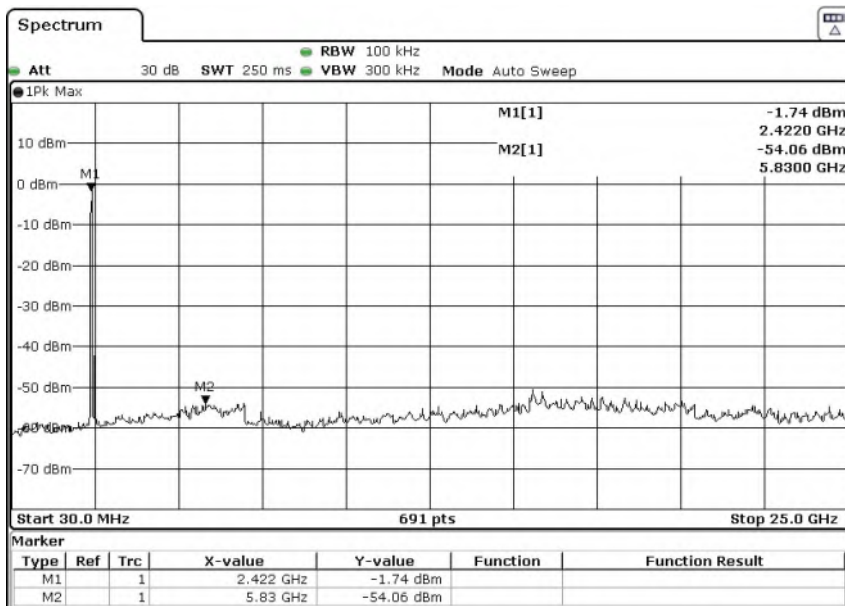
802.11 HT20 Antenna B

Low Channel Worstcase mode



802.11 HT40 Antenna B

Low Channel Worstcase mode





8 Band Edge Measurement

Test Requirement	: Section 15.247(d) In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).
Test Method	: ANSI C63.10:2013
Test Limit	: Regulation 15.247 (d), In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

8.1 Test Procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer: RBW = 100kHz, VBW = 300kHz, Sweep = auto
Detector function = peak, Trace = max hold



8.2 Test Result

802.11b Antenna A

