

Site: 3m Chamber #1

Polarization: **Horizontal**

Temperature: 26.2 C

Limit: (RE)FCC PART 15 CLASS B

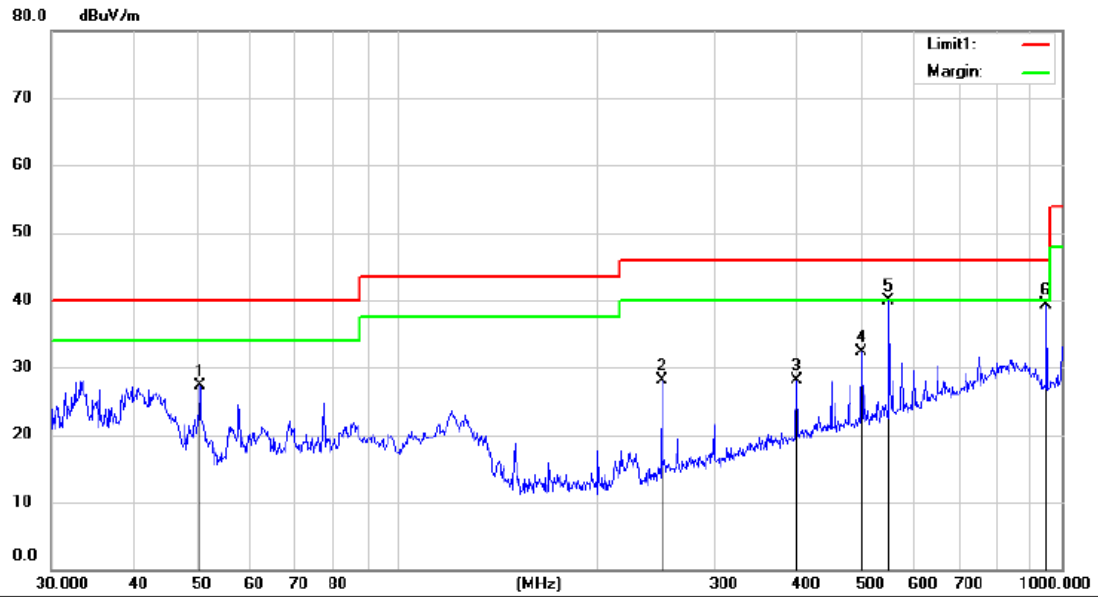
Power: AC 120V/60Hz

Humidity: 40 %

Mode: WIFI 5200

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Comment
1		250.0820	45.98	-11.23	34.75	46.00	-11.25	QP		
2		300.1041	38.07	-8.96	29.11	46.00	-16.89	QP		
3		400.0810	39.57	-6.35	33.22	46.00	-12.78	QP		
4		625.6263	37.24	-2.49	34.75	46.00	-11.25	QP		
5		750.1083	37.44	0.07	37.51	46.00	-8.49	QP		
6	*	950.4260	38.66	0.10	38.76	46.00	-7.24	QP		



Site 3m Chamber #1

Polarization: **Vertical**

Temperature: 26.2 C

Limit: (RE)FCC PART 15 CLASS B

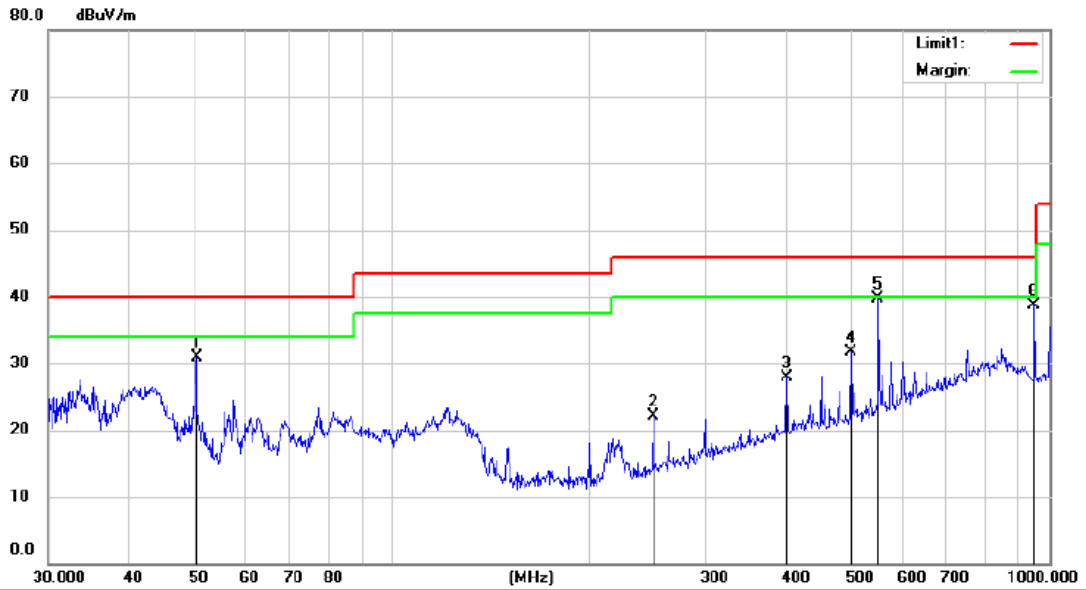
Power: AC 120V/60Hz

Humidity: 40 %

Mode:WIFI 5200

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		50.3647	39.34	-11.96	27.38	40.00	-12.62	QP		
2		250.0820	39.30	-11.23	28.07	46.00	-17.93	QP		
3		400.0810	34.40	-6.35	28.05	46.00	-17.95	QP		
4		500.0818	37.26	-4.93	32.33	46.00	-13.67	QP		
5	*	549.9830	43.99	-4.03	39.96	46.00	-6.04	QP		
6		950.4260	39.19	0.10	39.29	46.00	-6.71	QP		



Site: 3m Chamber #1 Polarization: **Vertical** Temperature: 26.2 C

Limit: (RE)FCC PART 15 CLASS B

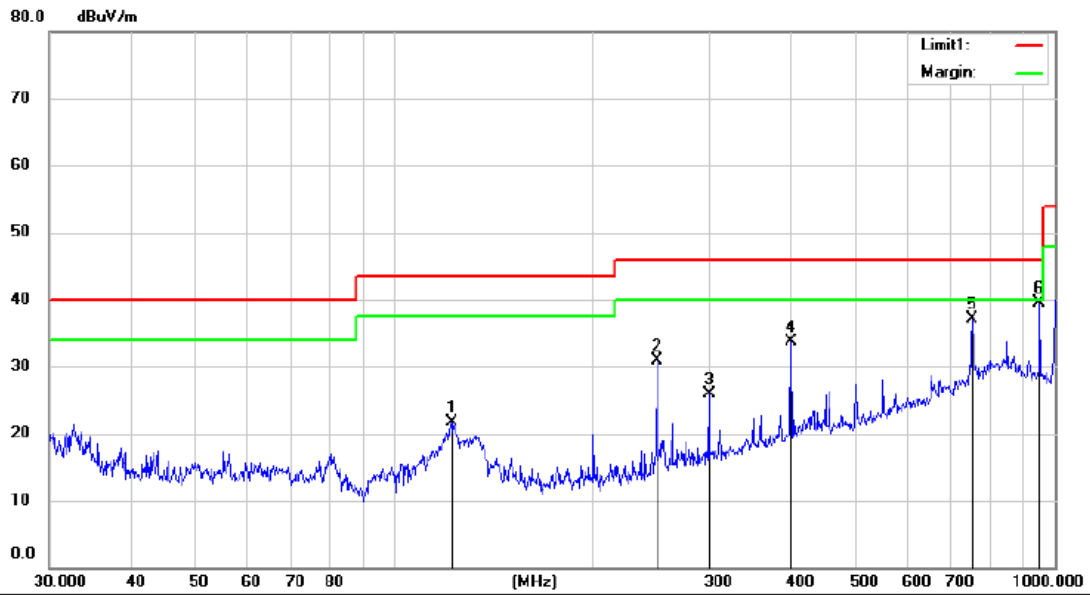
Power: AC 120V/60Hz

Humidity: 40 %

Mode:WIFI 5240

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		50.4090	42.94	-11.96	30.98	40.00	-9.02	QP		
2		250.0820	33.35	-11.23	22.12	46.00	-23.88	QP		
3		400.0810	34.29	-6.35	27.94	46.00	-18.06	QP		
4		500.0818	36.65	-4.93	31.72	46.00	-14.28	QP		
5	*	550.2240	43.63	-4.02	39.61	46.00	-6.39	QP		
6		950.4260	38.52	0.10	38.62	46.00	-7.38	QP		



Site 3m Chamber #1

Polarization: **Horizontal**

Temperature: 26.2 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 40 %

Mode:WIFI 5240

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		121.9755	36.14	-14.37	21.77	43.50	-21.73	QP		
2		250.0820	42.23	-11.23	31.00	46.00	-15.00	QP		
3		300.1041	34.92	-8.96	25.96	46.00	-20.04	QP		
4		400.0810	40.14	-6.35	33.79	46.00	-12.21	QP		
5		750.1083	37.06	0.07	37.13	46.00	-8.87	QP		
6	*	950.4260	39.46	0.10	39.56	46.00	-6.44	QP		

8.6 POWER LINE CONDUCTED EMISSIONS

8.6.1 Applicable Standard

According to FCC Part 15.207(a)

8.6.2 Conformance Limit

Frequency(MHz)	Conducted Emission Limit	
	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.

8.6.3 Test Configuration

Test according to clause 6.3 conducted emission test setup

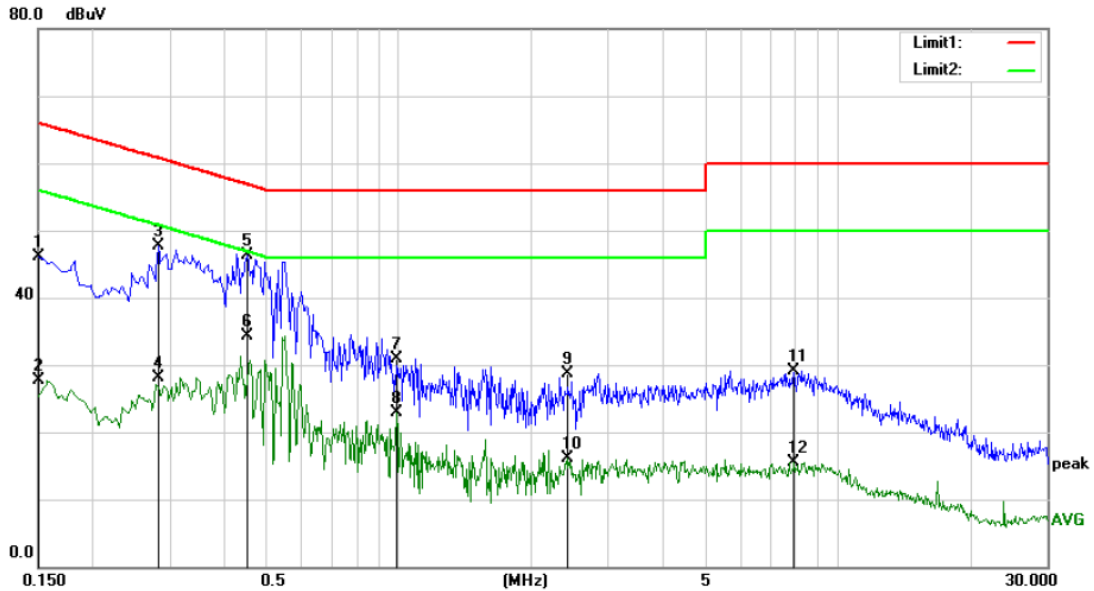
8.6.4 Test Procedure

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

8.6.5 Test Results

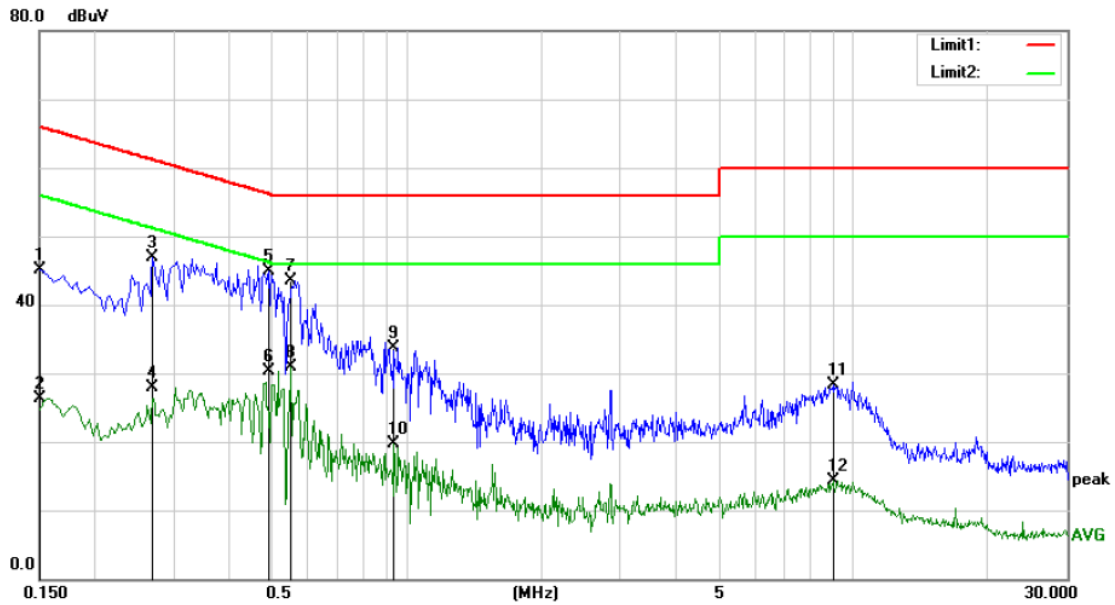
Pass

The AC120V &240V voltage have been tested, and the worst result recorded was report as below:



Site Conduction #1 Phase: **L1** Temperature: 24.9
 Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 50 %
 Mode: WIFI Mode
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1500	36.59	9.44	46.03	66.00	-19.97	QP	
2		0.1500	18.18	9.44	27.62	56.00	-28.38	AVG	
3		0.2820	38.32	9.31	47.63	60.76	-13.13	QP	
4		0.2820	18.71	9.31	28.02	50.76	-22.74	AVG	
5	*	0.4500	37.08	9.29	46.37	56.88	-10.51	QP	
6		0.4500	25.04	9.29	34.33	46.88	-12.55	AVG	
7		0.9860	21.20	9.74	30.94	56.00	-25.06	QP	
8		0.9860	13.19	9.74	22.93	46.00	-23.07	AVG	
9		2.4300	18.84	9.81	28.65	56.00	-27.35	QP	
10		2.4300	6.36	9.81	16.17	46.00	-29.83	AVG	
11		7.9500	19.07	9.96	29.03	60.00	-30.97	QP	
12		7.9500	5.58	9.96	15.54	50.00	-34.46	AVG	



Site Conduction #1 Phase: **N** Temperature: 24.9
 Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 50 %
 Mode: WIFI Mode
 Note:

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV	Limit dBuV	Over dB	Detector	Comment
1	0.1500	35.76	9.44	45.20	66.00	-20.80	QP	
2	0.1500	16.95	9.44	26.39	56.00	-29.61	AVG	
3	0.2700	37.58	9.33	46.91	61.12	-14.21	QP	
4	0.2700	18.54	9.33	27.87	51.12	-23.25	AVG	
5 *	0.4900	35.68	9.27	44.95	56.17	-11.22	QP	
6	0.4900	21.08	9.27	30.35	46.17	-15.82	AVG	
7	0.5500	34.18	9.28	43.46	56.00	-12.54	QP	
8	0.5500	21.64	9.28	30.92	46.00	-15.08	AVG	
9	0.9380	23.97	9.65	33.62	56.00	-22.38	QP	
10	0.9380	9.97	9.65	19.62	46.00	-26.38	AVG	
11	8.9700	18.21	10.01	28.22	60.00	-31.78	QP	
12	8.9700	4.22	10.01	14.23	50.00	-35.77	AVG	

8.7 ANTENNA APPLICATION

8.7.1 Antenna Requirement

Standard	Requirement
FCC CRF Part 15.203	An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.407 (a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

8.7.2 Result

PASS.

- The EUT has two Internal Antennas: antenna 1 gains are 1.09 dBi; antenna 2 gains are 1.75dBi

- Note:
- Antennas use a permanently attached antenna which is not replaceable.
 - Not using a standard antenna jack or electrical connector for antenna replacement
 - The antenna has to be professionally installed (please provide method of installation)

Which in accordance to section 15.203, please refer to the internal photos.

Detail of factor for radiated emission

Frequency(MHz)	Ant_F(dB)	Cab_L(dB)	Preamp(dB)	Correct Factor(dB)
0.009	20.6	0.03	\	20.63
0.15	20.7	0.1	\	20.8
1	20.9	0.15	\	21.05
10	20.1	0.28	\	20.38
30	18.8	0.45	\	19.25
30	11.7	0.62	27.9	-15.58
100	12.5	1.02	27.8	-14.28
300	12.9	1.91	27.5	-12.69
600	19.2	2.92	27	-4.88
800	21.1	3.54	26.6	-1.96
1000	22.3	4.17	26.2	0.27
1000	25.6	1.76	41.4	-14.04
3000	28.9	3.27	43.2	-11.03
5000	31.1	4.2	44.6	-9.3
8000	36.2	5.95	44.7	-2.55
10000	38.4	6.3	43.9	0.8
12000	38.5	7.14	42.3	3.34
15000	40.2	8.15	41.4	6.95
18000	45.4	9.02	41.3	13.12
18000	37.9	1.81	47.9	-8.19
21000	37.9	1.95	48.7	-8.85
25000	39.3	2.01	42.8	-1.49
28000	39.6	2.16	46.0	-4.24
31000	41.2	2.24	44.5	-1.06
34000	41.5	2.29	46.6	-2.81
37000	43.8	2.30	46.4	-0.3
40000	43.2	2.50	42.2	3.5

----- END OF REPORT -----