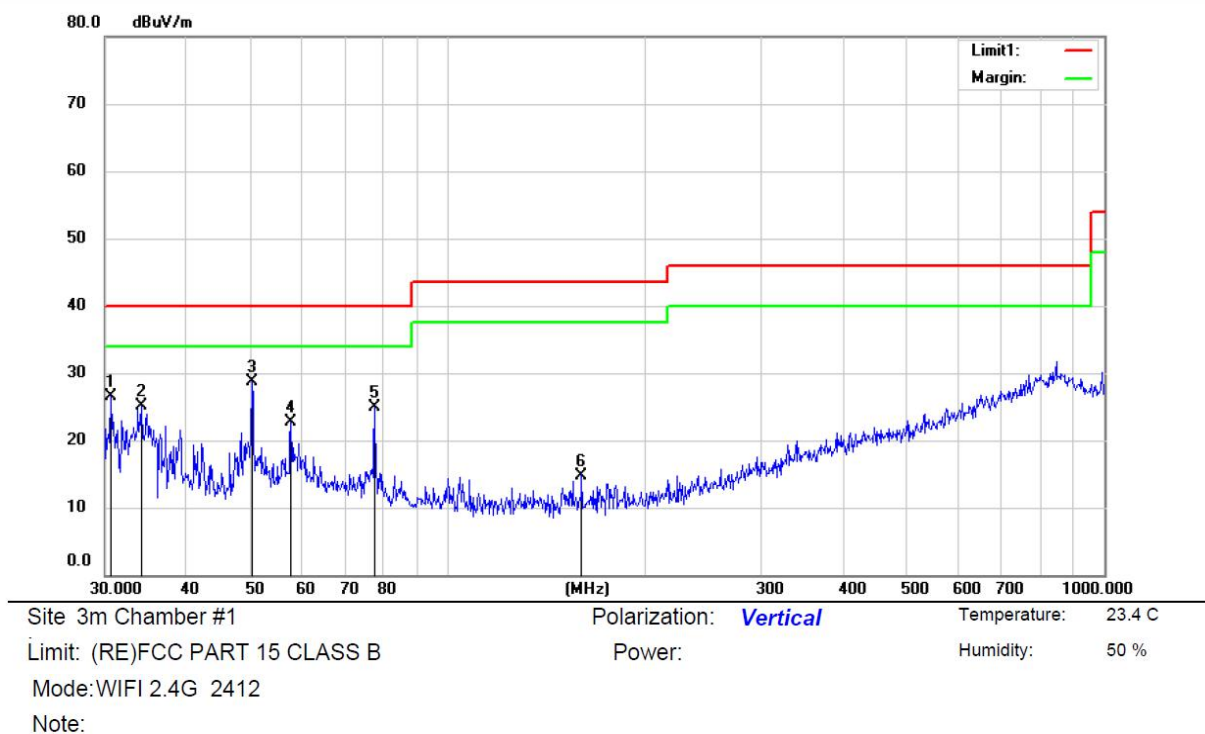


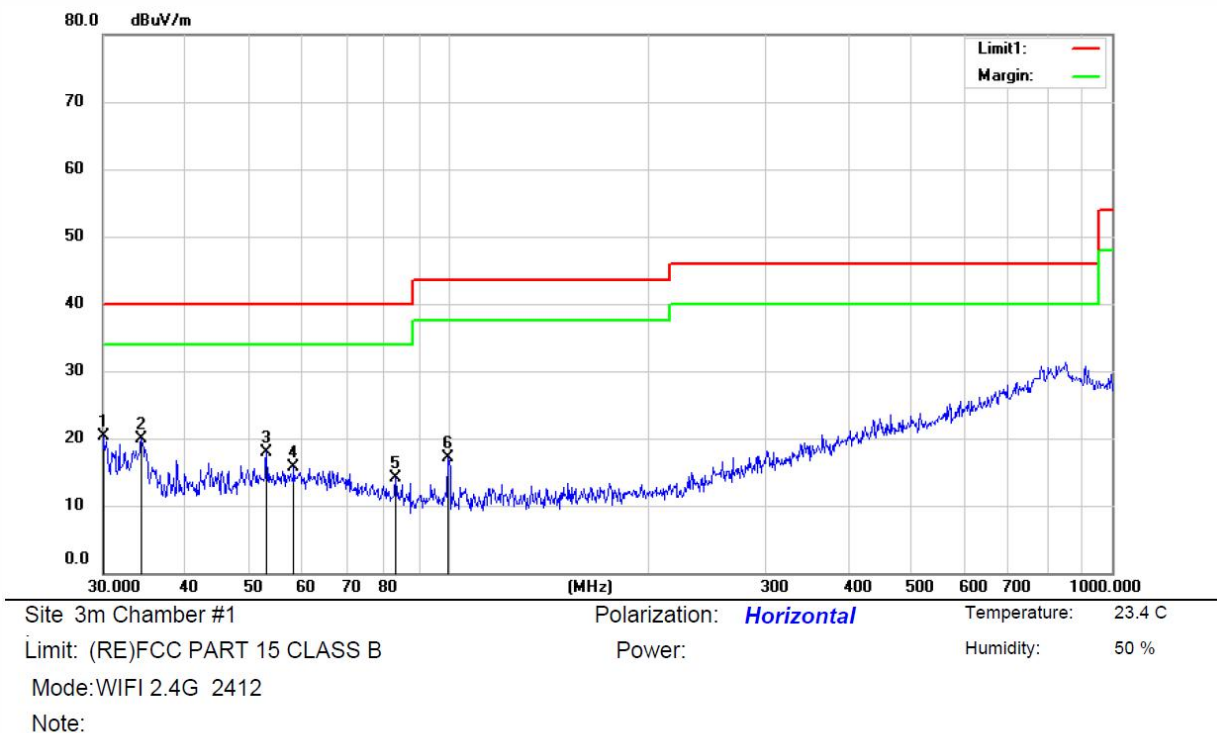
- Spurious Emission below 1GHz (30MHz to 1GHz)
- All antenna modes 2.4G 802.11b/g/n have been tested, and the worst result 802.11b recorded was report as below:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		30.7051	41.06	-14.53	26.53	40.00	-13.47	QP		
2		34.1261	39.24	-14.10	25.14	40.00	-14.86	QP		
3	*	50.3868	40.71	-11.96	28.75	40.00	-11.25	QP		
4		57.6444	34.75	-12.08	22.67	40.00	-17.33	QP		
5		77.4230	39.43	-14.55	24.88	40.00	-15.12	QP		
6		159.9245	28.68	-13.88	14.80	43.50	-28.70	QP		

*:Maximum data x:Over limit !:over margin

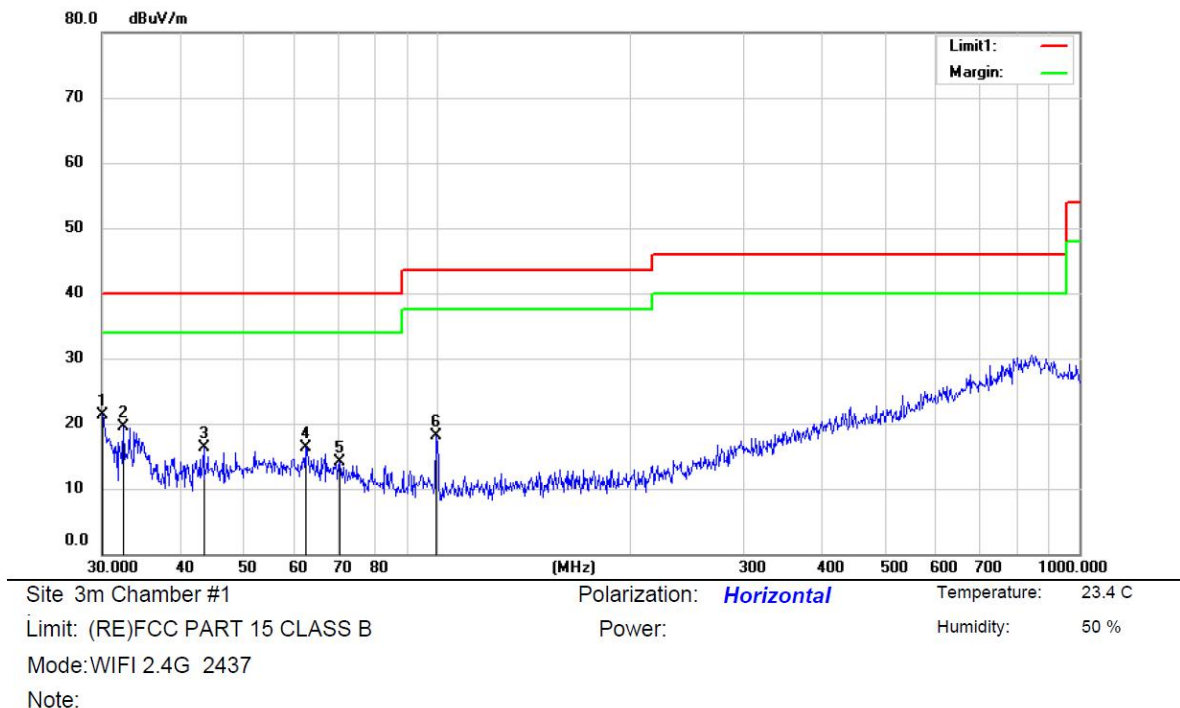
Operator: WHZ



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	*	30.0263	34.91	-14.58	20.33	40.00	-19.67	QP		
2		34.3814	34.00	-14.03	19.97	40.00	-20.03	QP		
3		53.0382	29.68	-11.86	17.82	40.00	-22.18	QP		
4		58.2540	27.75	-12.09	15.66	40.00	-24.34	QP		
5		82.9385	29.29	-15.25	14.04	40.00	-25.96	QP		
6		99.7902	31.80	-14.76	17.04	43.50	-26.46	QP		

*:Maximum data x:Over limit !:over margin

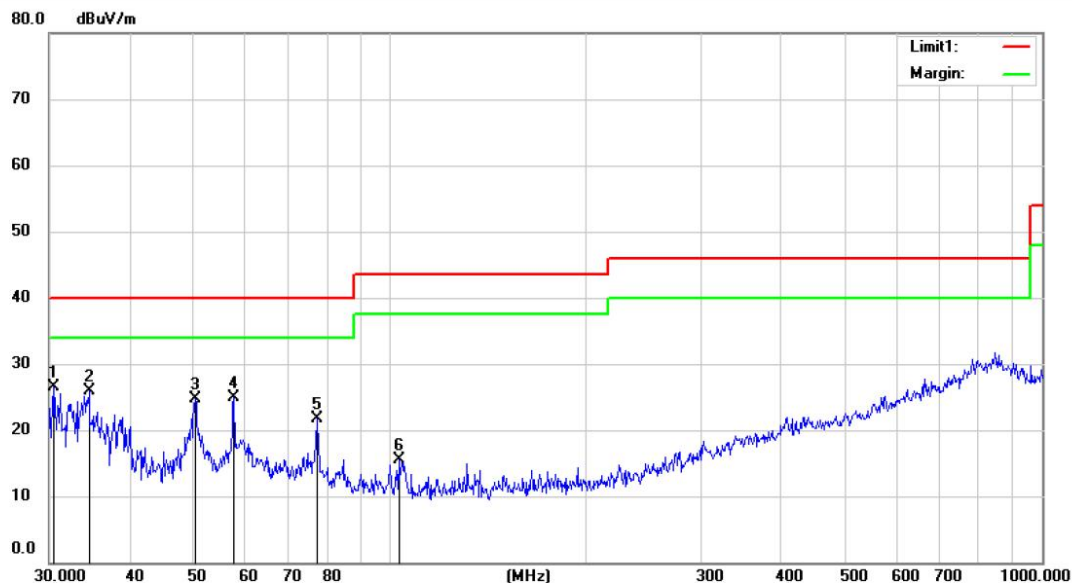
Operator: WHZ



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	*	30.0790	35.97	-14.58	21.39	40.00	-18.61	QP		
2		32.5055	33.88	-14.38	19.50	40.00	-20.50	QP		
3		43.2017	28.98	-12.74	16.24	40.00	-23.76	QP		
4		62.2674	28.25	-12.04	16.21	40.00	-23.79	QP		
5		70.5526	27.30	-13.27	14.03	40.00	-25.97	QP		
6		99.7902	32.93	-14.76	18.17	43.50	-25.33	QP		

*:Maximum data x:Over limit !:over margin

Operator: WHZ

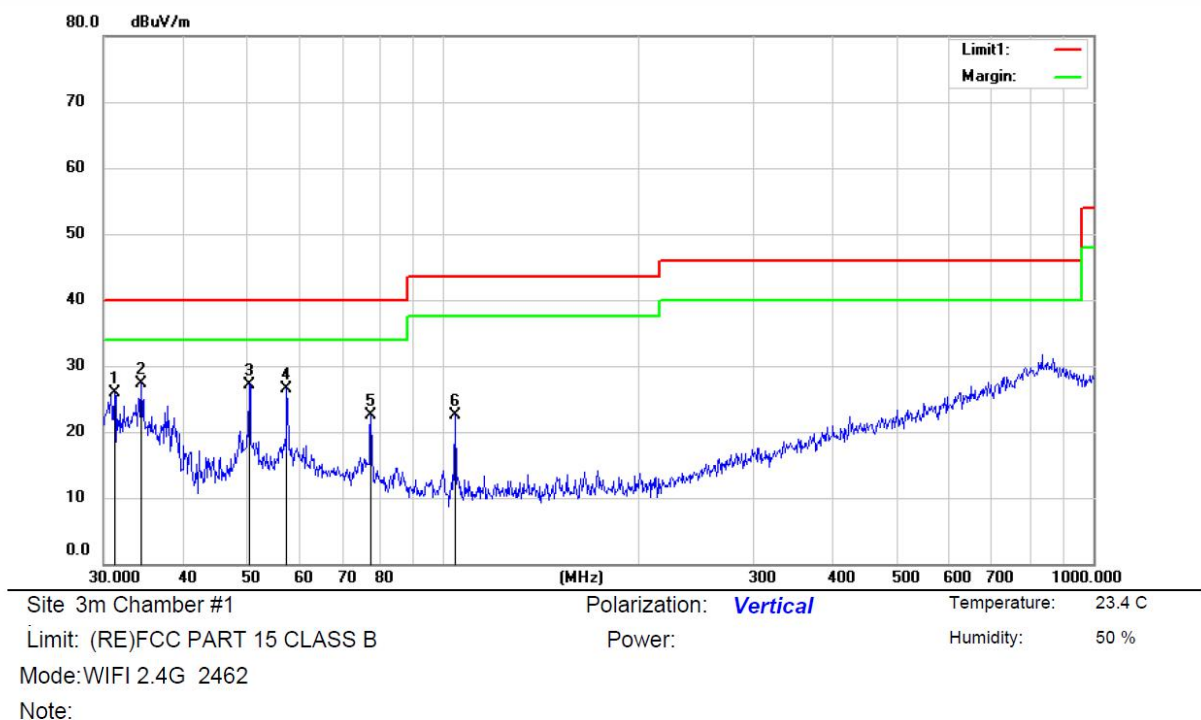


Site 3m Chamber #1 Polarization: **Vertical** Temperature: 23.4 C
 Limit: (RE)FCC PART 15 CLASS B Power: Humidity: 50 %
 Mode: WIFI 2.4G 2437
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	30.5574	41.06	-14.54	26.52	40.00	-13.48	QP		
2		34.5324	39.94	-13.98	25.96	40.00	-14.04	QP		
3		50.3647	36.71	-11.96	24.75	40.00	-15.25	QP		
4		57.6192	36.97	-12.08	24.89	40.00	-15.11	QP		
5		77.3890	36.15	-14.54	21.61	40.00	-18.39	QP		
6		103.3968	29.94	-14.46	15.48	43.50	-28.02	QP		

*:Maximum data x:Over limit !:over margin

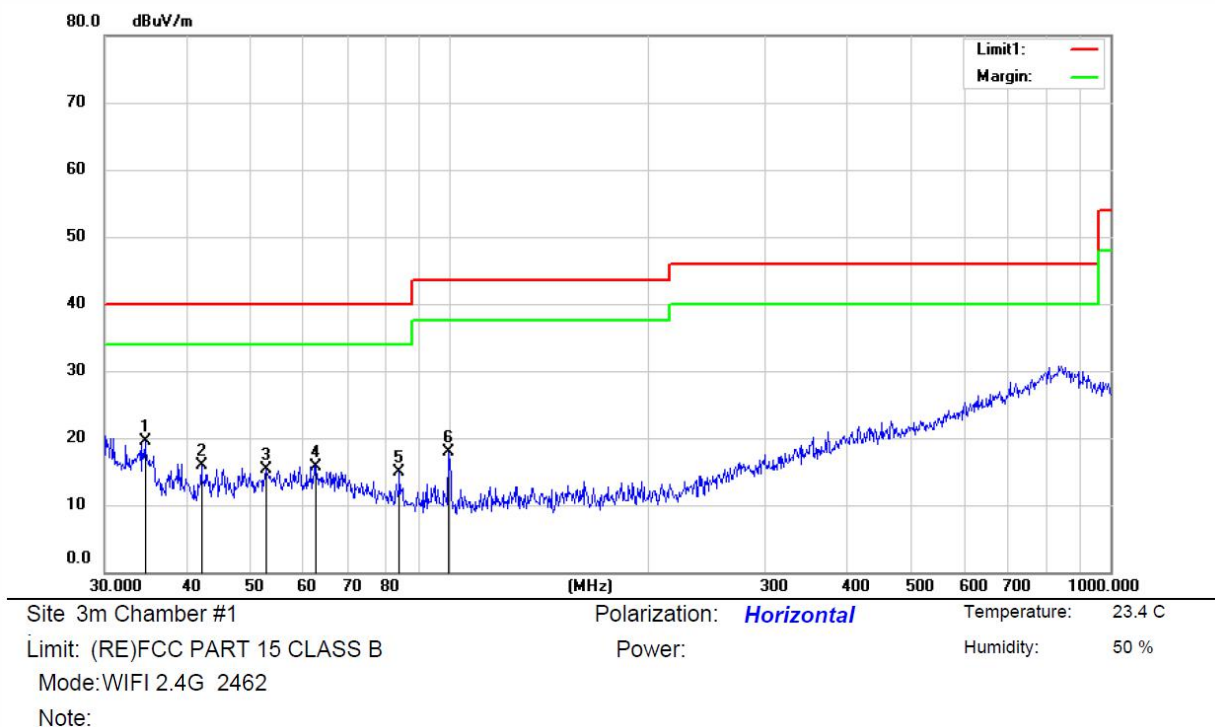
Operator: WHZ



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		31.2482	40.32	-14.51	25.81	40.00	-14.19	QP		
2	*	34.3663	41.37	-14.03	27.34	40.00	-12.66	QP		
3		50.3647	39.15	-11.96	27.19	40.00	-12.81	QP		
4		57.5687	38.54	-12.08	26.46	40.00	-13.54	QP		
5		77.4230	36.96	-14.55	22.41	40.00	-17.59	QP		
6		104.4445	36.88	-14.36	22.52	43.50	-20.98	QP		

*:Maximum data x:Over limit !:over margin

Operator: WHZ



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table
		MHz	Level	Factor	ment			Height	Degree
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree
1	*	34.5930	33.41	-13.96	19.45	40.00	-20.55	QP	
2		42.1357	28.74	-12.86	15.88	40.00	-24.12	QP	
3		52.6214	27.17	-11.83	15.34	40.00	-24.66	QP	
4		62.6781	27.86	-12.06	15.80	40.00	-24.20	QP	
5		83.8891	30.21	-15.35	14.86	40.00	-25.14	QP	
6		99.7902	32.74	-14.76	17.98	43.50	-25.52	QP	

*:Maximum data x:Over limit !:over margin

Operator: WHZ

8.6 CONDUCTED EMISSIONS TEST

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 7.3conducted emission test setup

8.6.4 Test Procedure

The EUT was placed on a table which is 0.8m above ground plane.

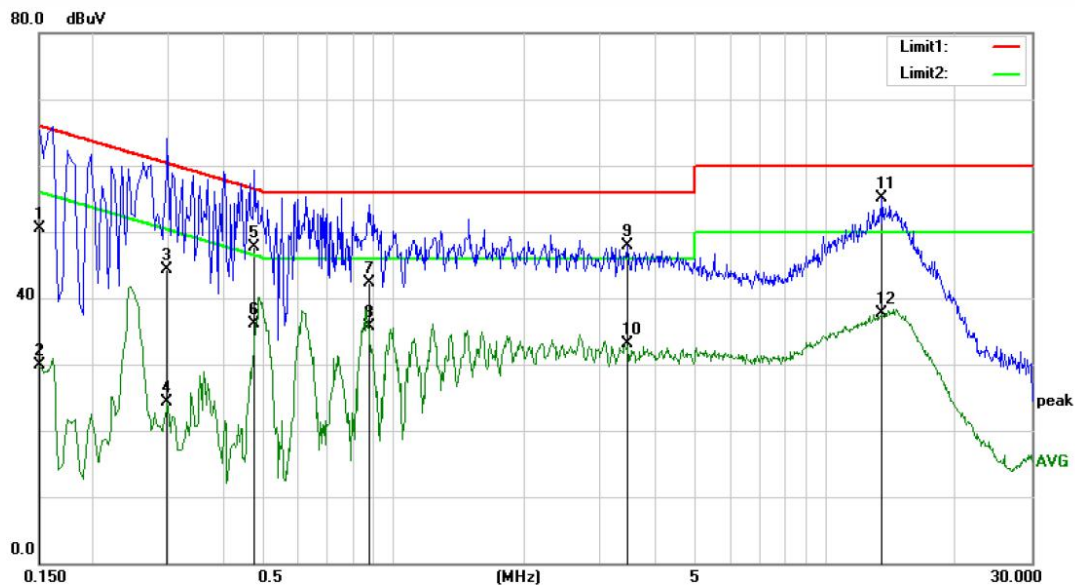
Maximum procedure was performed on the highest emissions to ensure EUT compliance.

Repeat above procedures until all frequency measured were complete.

8.6.5 Test Results

Pass

The AC120V voltage has been tested, and the worst result recorded was report as below:



Site Conduction #2

Phase: **N**

Temperature: 25.3

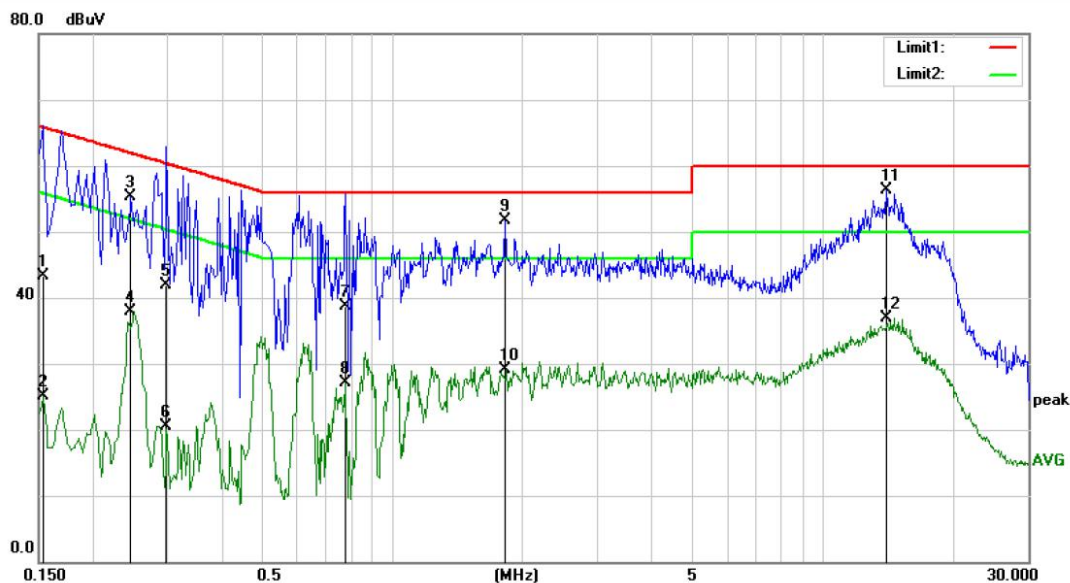
Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

Humidity: 37 %

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1500	40.08	10.52	50.60	66.00	-15.40	QP	
2		0.1500	19.46	10.52	29.98	56.00	-26.02	AVG	
3		0.2980	33.91	10.39	44.30	60.30	-16.00	QP	
4		0.2980	13.95	10.39	24.34	50.30	-25.96	AVG	
5		0.4740	37.37	10.33	47.70	56.44	-8.74	QP	
6		0.4740	25.86	10.33	36.19	46.44	-10.25	AVG	
7		0.8780	32.05	10.35	42.40	56.00	-13.60	QP	
8		0.8780	25.26	10.35	35.61	46.00	-10.39	AVG	
9		3.4740	37.47	10.40	47.87	56.00	-8.13	QP	
10		3.4740	22.71	10.40	33.11	46.00	-12.89	AVG	
11	*	13.5100	44.40	10.66	55.06	60.00	-4.94	QP	
12		13.5100	26.95	10.66	37.61	50.00	-12.39	AVG	



Site Conduction #2

Phase: **L1**

Temperature: 25.3

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

Humidity: 37 %

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1540	32.78	10.52	43.30	65.78	-22.48	QP	
2		0.1540	14.52	10.52	25.04	55.78	-30.74	AVG	
3		0.2460	44.93	10.41	55.34	61.89	-6.55	QP	
4		0.2460	27.52	10.41	37.93	51.89	-13.96	AVG	
5		0.2980	31.61	10.39	42.00	60.30	-18.30	QP	
6		0.2980	10.12	10.39	20.51	50.30	-29.79	AVG	
7		0.7780	28.38	10.32	38.70	56.00	-17.30	QP	
8		0.7780	16.83	10.32	27.15	46.00	-18.85	AVG	
9		1.8260	41.46	10.32	51.78	56.00	-4.22	QP	
10		1.8260	18.78	10.32	29.10	46.00	-16.90	AVG	
11	*	14.0060	45.58	10.65	56.23	60.00	-3.77	QP	
12		14.0060	26.30	10.65	36.95	50.00	-13.05	AVG	

8.7 ANTENNA APPLICATION

8.7.1 Antenna Requirement

Standard	Requirement
FCC CRF Part15.203	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 15.247 (b), 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 is integral antenna, the gain is 3.87 dBi.

Note:

- ☒ Antenna uses 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 ***