

Site 3m Chamber #1

 Polarization: *Vertical*

Temperature: 28.1 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 43 %

Mode: BT 2480

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	dBuV	Factor	ment	dBuV/m	dB	Height	Degree	Comment
				dB	dBuV/m	dBuV/m	dB	cm	degree	
1	*	33.1676	46.81	-9.58	37.23	40.00	-2.77	QP		
2	!	36.8953	45.38	-8.85	36.53	40.00	-3.47	QP		
3		99.9653	41.37	-10.43	30.94	43.50	-12.56	QP		
4		263.9347	37.35	-6.56	30.79	46.00	-15.21	QP		
5		326.5963	36.41	-4.32	32.09	46.00	-13.91	QP		
6		831.4928	30.82	6.39	37.21	46.00	-8.79	QP		

9.8 CONDUCTED EMISSION TEST

9.8.1 Applicable Standard

According to FCC Part 15.207

According to IC RSS-Gen 8.8

9.8.2 Conformance Limit

Conducted Emission Limit		
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.

9.8.3 Test Configuration

Test according to clause 7.3 conducted emission test setup

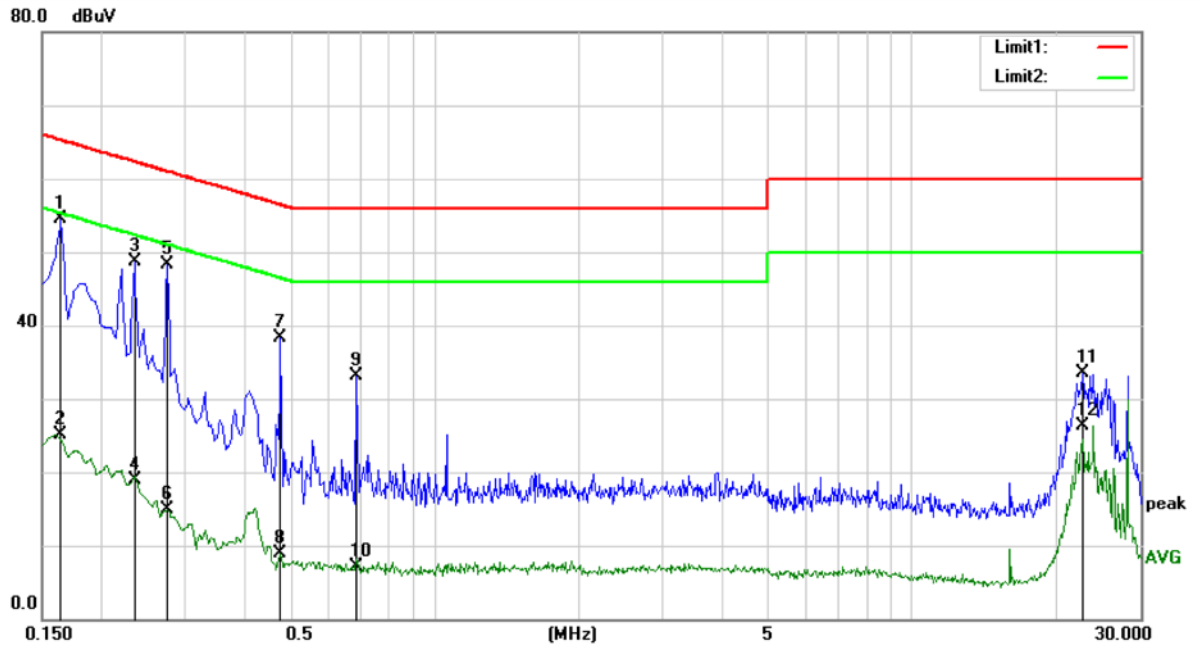
9.8.4 Test Procedure

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.

9.8.5 Test Results

Pass

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



Site Conduction #1

Phase: **N**

Temperature: 19.4

Limit: (CE)FCC PART 15 class B_QP

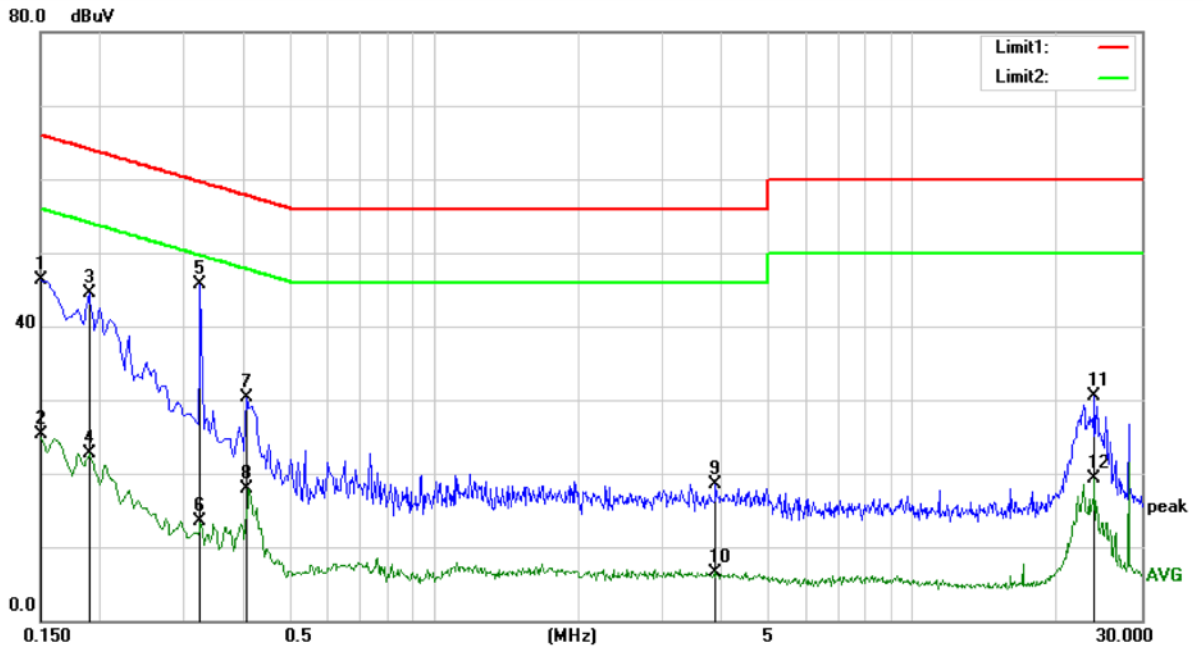
Power: AC 120V/60Hz

Humidity: 37 %

Mode: BT Mode

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1650	44.99	9.54	54.53	65.21	-10.68	QP	
2		0.1650	15.62	9.54	25.16	55.21	-30.05	AVG	
3		0.2350	39.14	9.54	48.68	62.27	-13.59	QP	
4		0.2350	9.31	9.54	18.85	52.27	-33.42	AVG	
5		0.2750	38.85	9.53	48.38	60.97	-12.59	QP	
6		0.2750	5.28	9.53	14.81	50.97	-36.16	AVG	
7		0.4750	28.83	9.53	38.36	56.43	-18.07	QP	
8		0.4750	-0.55	9.53	8.98	46.43	-37.45	AVG	
9		0.6850	23.58	9.54	33.12	56.00	-22.88	QP	
10		0.6850	-2.35	9.54	7.19	46.00	-38.81	AVG	
11		22.7550	23.56	9.99	33.55	60.00	-26.45	QP	
12		22.7550	16.25	9.99	26.24	50.00	-23.76	AVG	



Site Conduction #1

Phase: **L1**

Temperature: 19.4

Limit: (CE)FCC PART 15 class B_QP
Mode: BT Mode

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	36.68	9.54	46.22	66.00	-19.78	QP	
2		0.1500	15.74	9.54	25.28	56.00	-30.72	AVG	
3		0.1900	34.98	9.54	44.52	64.04	-19.52	QP	
4		0.1900	13.13	9.54	22.67	54.04	-31.37	AVG	
5	*	0.3250	36.24	9.53	45.77	59.58	-13.81	QP	
6		0.3250	3.93	9.53	13.46	49.58	-36.12	AVG	
7		0.4050	20.70	9.53	30.23	57.75	-27.52	QP	
8		0.4050	8.40	9.53	17.93	47.75	-29.82	AVG	
9		3.8800	8.96	9.56	18.52	56.00	-37.48	QP	
10		3.8800	-3.10	9.56	6.46	46.00	-39.54	AVG	
11		23.9800	20.37	10.04	30.41	60.00	-29.59	QP	
12		23.9800	9.28	10.04	19.32	50.00	-30.68	AVG	

9.9 ANTENNA APPLICATION

9.9.1 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.
FCC 47 CFR Part 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.
RSS-Gen Section 6.8	The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.
RSS-247 Section 5.4	If the transmitter employs an antenna system that emits multiple directional beams, but does not emit multiple directional beams simultaneously, the total output power conducted to the array or arrays that comprise the device (i.e. the sum of the power supplied to all antennas, antenna elements, staves, etc., and summed across all carriers or frequency channels) shall not exceed the applicable output power limit. However, the total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi. The directional antenna gain shall be computed as the sum of 10 log (number of array elements or staves) plus the directional gain of the element or stave having the highest gain.

9.9.2 Result

PASS.

- Note:
- Antenna 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)

Please refer to the attached documentInternal Photos to show the antenna connector.

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

