

8.7 CONDUCTED EMISSION TEST

8.7.1 Applicable Standard

According to FCC Part 15.207(a)

According to IC RSS-Gen 8.8

8.7.2 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.

8.7.3 Test Configuration

Test according to clause 6.3conducted emission test setup

8.7.4 Test Procedure

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

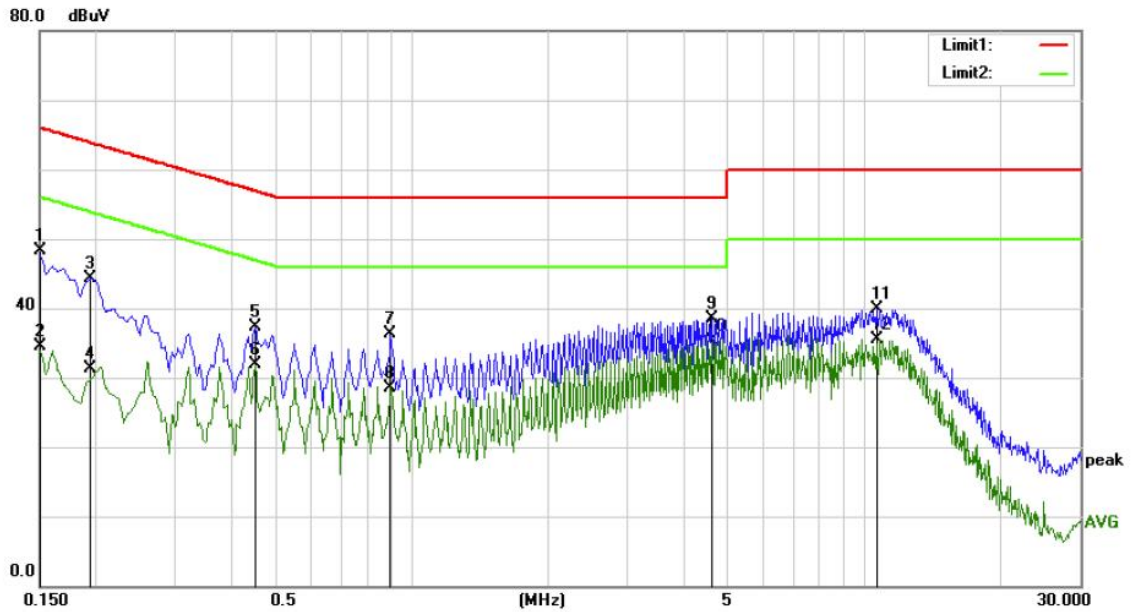
Maximum procedure was performed on the highest emissions to ensure EUT compliance.

Repeat above procedures until all frequency measured were complete.

8.7.5 Test Results

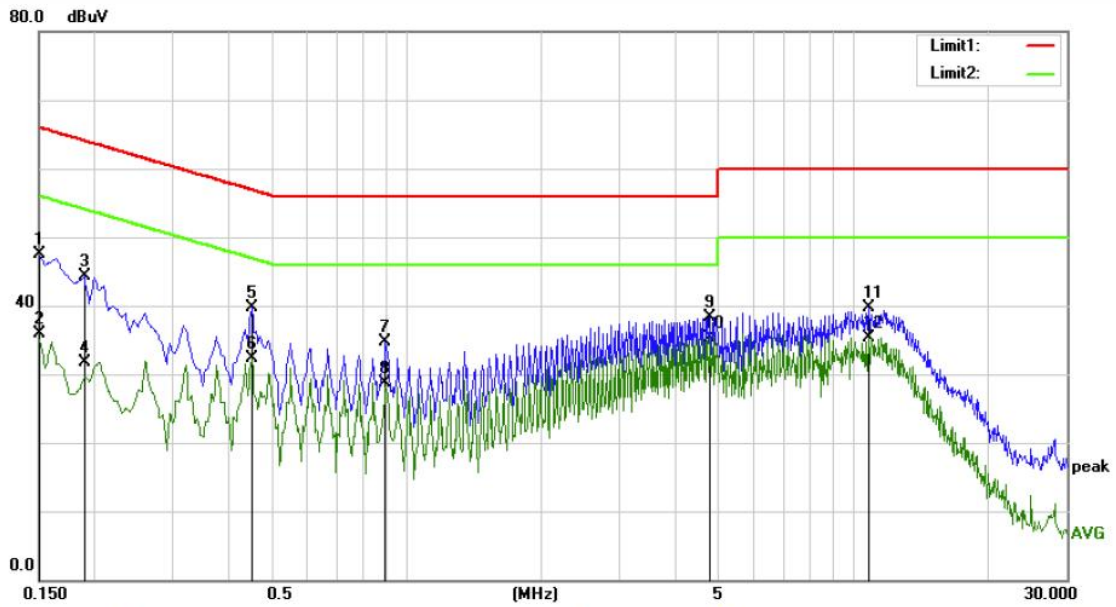
Pass

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



Site: Conduction #1 Phase: **L1** Temperature: 21.9
 Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 58 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1500	38.84	9.51	48.35	66.00	-17.65	QP	
2		0.1500	25.05	9.51	34.56	56.00	-21.44	AVG	
3		0.1950	34.21	10.04	44.25	63.82	-19.57	QP	
4		0.1950	21.17	10.04	31.21	53.82	-22.61	AVG	
5		0.4500	27.56	9.75	37.31	56.88	-19.57	QP	
6		0.4500	22.19	9.75	31.94	46.88	-14.94	AVG	
7		0.8950	26.58	9.78	36.36	56.00	-19.64	QP	
8		0.8950	18.82	9.78	28.60	46.00	-17.40	AVG	
9		4.6000	28.69	9.85	38.54	56.00	-17.46	QP	
10	*	4.6000	25.53	9.85	35.38	46.00	-10.62	AVG	
11		10.6550	29.92	10.04	39.96	60.00	-20.04	QP	
12		10.6550	25.37	10.04	35.41	50.00	-14.59	AVG	



Site Conduction #1 Phase: **N** Temperature: 21.9
 Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 58 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1500	38.09	9.51	47.60	66.00	-18.40	QP	
2		0.1500	26.45	9.51	35.96	56.00	-20.04	AVG	
3		0.1900	34.26	9.98	44.24	64.04	-19.80	QP	
4		0.1900	21.69	9.98	31.67	54.04	-22.37	AVG	
5		0.4500	29.91	9.75	39.66	56.88	-17.22	QP	
6		0.4500	22.56	9.75	32.31	46.88	-14.57	AVG	
7		0.8950	24.89	9.78	34.67	56.00	-21.33	QP	
8		0.8950	18.93	9.78	28.71	46.00	-17.29	AVG	
9		4.7750	28.49	9.86	38.35	56.00	-17.65	QP	
10	*	4.7750	25.51	9.86	35.37	46.00	-10.63	AVG	
11		10.8300	29.60	10.03	39.63	60.00	-20.37	QP	
12		10.8300	25.35	10.03	35.38	50.00	-14.62	AVG	

8.8 ANTENNA APPLICATION

8.8.1 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.

8.8.2 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.

*** End of Report ***