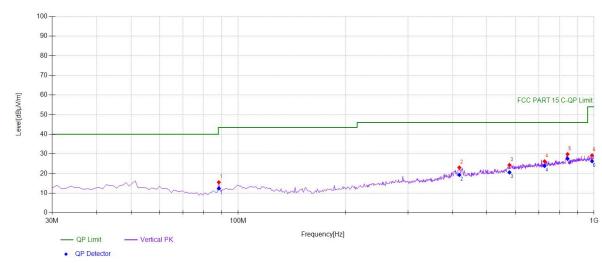
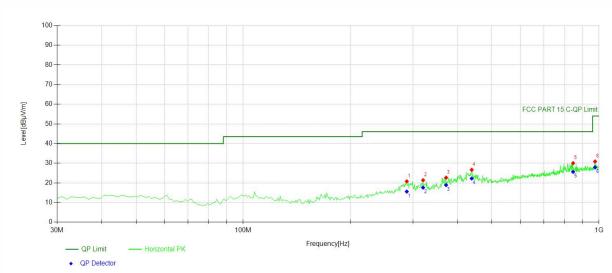


Test mode: 802.11a Frequency(MHz): 5240



Suspected Data List										
NO.	Freq. [MHz]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	88.2583	15.55	43.50	27.95	101	327	Vertical			
2	418.3884	23.08	46.00	22.92	133	68	Vertical			
3	578.5986	24.35	46.00	21.65	218	318	Vertical			
4	726.1862	26.22	46.00	19.78	203	132	Vertical			
5	842.7027	29.86	46.00	16.14	101	68	Vertical			
6	987.3774	29.27	54.00	24.73	109	49	Vertical			





Suspected Data List										
NO.	Freq. [MHz]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	288.2783	20.78	46.00	25.22	101	0	Horizontal			
2	320.3203	21.36	46.00	24.64	100	177	Horizontal			
3	371.7818	22.65	46.00	23.35	166	330	Horizontal			
4	438.7788	26.65	46.00	19.35	173	330	Horizontal			
5	845.6156	30.04	46.00	15.96	235	99	Horizontal			
6	974.7548	30.88	54.00	23.12	100	94	Horizontal			



# 8.5 POWER LINE CONDUCTED EMISSIONS

# 8.5.1 Applicable Standard

According to FCC Part 15.207(a)

#### 8.5.2 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.

# 8.5.3 Test Configuration

Test according to clause 6.3 conducted emission test setup

#### 8.5.4 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.

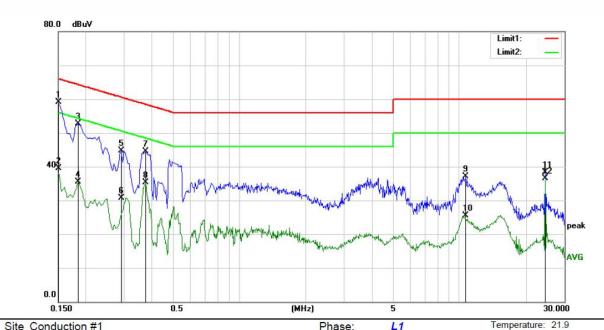
## 8.5.5 Test Results

#### **Pass**

The 120V &240V voltagehave been tested, and the worst result recorded was report as below:

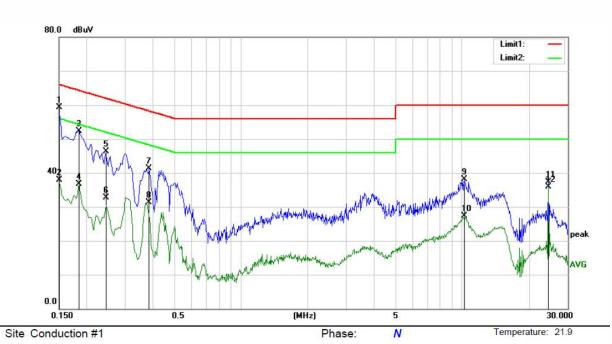
Report No. ENS2209290166W00204R Page 339 of 343 Ver.1.0





Site	COII	duction #					Filase		5	Temperature. 21.0
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
1	*	0.1500	49.50	9.53	59.03	66.00	-6.97	QP		
2		0.1500	29.95	9.53	39.48	56.00	-16.52	AVG		
3		0.1850	43.12	9.53	52.65	64.26	-11.61	QP		
4		0.1850	25.90	9.53	35.43	54.26	-18.83	AVG		
5		0.2900	35.26	9.53	44.79	60.52	-15.73	QP		
6		0.2900	21.11	9.53	30.64	50.52	-19.88	AVG		
7		0.3750	35.04	9.54	44.58	58.39	-13.81	QP		
8		0.3750	25.80	9.54	35.34	48.39	-13.05	AVG		
9		10.7300	27.34	9.72	37.06	60.00	-22.94	QP		
10		10.7300	15.78	9.72	25.50	50.00	-24.50	AVG		
11		24.5550	28.19	10.17	38.36	60.00	-21.64	QP		
12		24.5550	26.30	10.17	36.47	50.00	-13.53	AVG		





No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1500	49.72	9.53	59.25	66.00	-6.75	QP	
2		0.1500	28.37	9.53	37.90	56.00	-18.10	AVG	
3		0.1850	42.84	9.53	52.37	64.26	-11.89	QP	
4		0.1850	27.22	9.53	36.75	54.26	-17.51	AVG	
5		0.2450	36.72	9.53	46.25	61.92	-15.67	QP	
6		0.2450	23.15	9.53	32.68	51.92	-19.24	AVG	
7		0.3850	31.76	9.54	41.30	58.17	-16.87	QP	
8		0.3850	21.79	9.54	31.33	48.17	-16.84	AVG	
9		10.1800	28.48	9.70	38.18	60.00	-21.82	QP	
10		10.1800	17.51	9.70	27.21	50.00	-22.79	AVG	
11		24.5550	27.11	10.17	37.28	60.00	-22.72	QP	
12		24.5550	25.72	10.17	35.89	50.00	-14.11	AVG	



## **8.6 ANTENNA APPLICATION**

## 8.6.1 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.

## 8.6.2 Result

## **PASS**

The EUT is integrated antenna, the antenna gain as below: 5150MHz-5250MHz Band: Ant1:1.83dBi, Ant2:3.41dBi 5250MHz-5350MHz Band: Ant1:2.06dBi, Ant2:2.92dBi 5470MHz-5725MHz Band: Ant1:2.80dBi, Ant2:3.21dBi 5725MHz-5850MHz Band: Ant1:2.80dBi, Ant2:3.15dBi

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 ---