802.11b(Worst)-Middle

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	35.40	31.85	8.66	32.12	43.79	74.00	-30.21	Vertical
7311.00	31.80	36.37	11.71	31.91	47.97	74.00	-26.03	Vertical
9748.00	31.95	38.27	14.25	31.56	52.91	74.00	-21.09	Vertical
12185.00	*					74.00		Vertical
14622.00	*					74.00		Vertical
17059.00	*					74.00		Vertical
4874.00	36.50	31.85	8.66	32.12	44.89	74.00	-29.11	Horizontal
7311.00	30.75	36.37	11.71	31.91	46.92	74.00	-27.08	Horizontal
9748.00	31.98	38.27	14.25	31.56	52.94	74.00	-21.06	Horizontal
12185.00	*					74.00		Horizontal
14622.00	*					74.00		Horizontal
17059.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	26.57	31.85	8.66	32.12	34.96	54.00	-19.04	Vertical
7311.00	20.20	36.37	11.71	31.91	36.37	54.00	-17.63	Vertical
9748.00	21.27	38.27	14.25	31.56	42.23	54.00	-11.77	Vertical
12185.00	*					54.00		Vertical
14622.00	*					54.00		Vertical
17059.00	*					54.00		Vertical
4874.00	26.82	31.85	8.66	32.12	35.21	54.00	-18.79	Horizontal
7311.00	19.90	36.37	11.71	31.91	36.07	54.00	-17.93	Horizontal
9748.00	21.75	38.27	14.25	31.56	42.71	54.00	-11.29	Horizontal
12185.00	*					54.00		Horizontal
14622.00	*					54.00		Horizontal
17059.00	*					54.00		Horizontal

802.11b(Worst)-High

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	38.08	31.90	8.70	32.15	46.53	74.00	-27.47	4924.00
7386.00	30.67	36.49	11.76	31.83	47.09	74.00	-26.91	7386.00
9848.00	33.96	38.62	14.31	31.77	55.12	74.00	-18.88	9848.00
12310.00	*					74.00		Vertical
14772.00	*					74.00		Vertical
17234.00	*					74.00		Vertical
4924.00	38.44	31.90	8.70	32.15	46.89	74.00	-27.11	Horizontal
7386.00	30.11	36.49	11.76	31.83	46.53	74.00	-27.47	Horizontal
9848.00	30.36	38.62	14.31	31.77	51.52	74.00	-22.48	Horizontal
12310.00	*					74.00		Horizontal
14772.00	*					74.00		Horizontal
17234.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	29.53	31.90	8.70	32.15	37.98	54.00	-16.02	Vertical
7386.00	20.73	36.49	11.76	31.83	37.15	54.00	-16.85	Vertical
9848.00	22.58	38.62	14.31	31.77	43.74	54.00	-10.26	Vertical
12310.00	*					54.00		Vertical
14772.00	*					54.00		Vertical
17234.00	*					54.00		Vertical
4924.00	29.16	31.90	8.70	32.15	37.61	54.00	-16.39	Horizontal
7386.00	19.61	36.49	11.76	31.83	36.03	54.00	-17.97	Horizontal
9848.00	19.73	38.62	14.31	31.77	40.89	54.00	-13.11	Horizontal
12310.00	*					54.00		Horizontal
14772.00	*					54.00		Horizontal
17234.00	*					54.00		Horizontal

Remark:

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss- Preamplifier Factor
2. The amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported.
3. "*", means this data is the too weak instrument of signal is unable to test.

Radiated Band Edge data

802.11 b low CH

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2390.00	49.74	27.38	3.91	34.83	46.20	74.00	-27.80	Horizontal
2400.00	52.89	27.38	3.93	34.83	49.37	74.00	-24.63	Horizontal
2390.00	51.61	27.38	3.91	34.83	48.07	74.00	-25.93	Vertical
2400.00	53.66	27.38	3.93	34.83	50.14	74.00	-23.86	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2390.00	38.46	27.38	3.91	34.83	34.92	54.00	-19.08	Horizontal
2400.00	41.02	27.38	3.93	34.83	37.50	54.00	-16.50	Horizontal
2390.00	39.06	27.38	3.91	34.83	35.52	54.00	-18.48	Vertical
2400.00	42.48	27.38	3.93	34.83	38.96	54.00	-15.04	Vertical

802.11 b High CH

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	51.07	27.32	3.99	34.86	47.52	74.00	-26.48	Horizontal
2500.00	48.70	27.35	4.00	34.87	45.18	74.00	-28.82	Horizontal
2483.50	51.84	27.32	3.99	34.86	48.29	74.00	-25.71	Vertical
2500.00	50.42	27.35	4.00	34.87	46.90	74.00	-27.10	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	36.69	27.32	3.99	34.86	33.14	54.00	-20.86	Horizontal
2500.00	33.35	27.35	4.00	34.87	29.83	54.00	-24.17	Horizontal
2483.50	38.04	27.32	3.99	34.86	34.49	54.00	-19.51	Vertical
2500.00	34.25	27.35	4.00	34.87	30.73	54.00	-23.27	Vertical

802.11 g Low CH

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2390.00	48.52	27.38	3.91	34.83	44.98	74.00	-29.02	Horizontal
2400.00	50.67	27.38	3.93	34.83	47.15	74.00	-26.85	Horizontal
2390.00	50.51	27.38	3.91	34.83	46.97	74.00	-27.03	Vertical
2400.00	52.19	27.38	3.93	34.83	48.67	74.00	-25.33	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2390.00	33.99	27.38	3.91	34.83	30.45	54.00	-23.55	Horizontal
2400.00	36.07	27.38	3.93	34.83	32.55	54.00	-21.45	Horizontal
2390.00	34.26	27.38	3.91	34.83	30.72	54.00	-23.28	Vertical
2400.00	36.22	27.38	3.93	34.83	32.70	54.00	-21.30	Vertical

802.11 g High CH

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	48.37	27.32	3.99	34.86	44.82	74.00	-29.18	Horizontal
2500.00	45.10	27.35	4.00	34.87	41.58	74.00	-32.42	Horizontal
2483.50	50.15	27.32	3.99	34.86	46.60	74.00	-27.40	Vertical
2500.00	47.99	27.35	4.00	34.87	44.47	74.00	-29.53	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	34.66	27.32	3.99	34.86	31.11	54.00	-22.89	Horizontal
2500.00	33.02	27.35	4.00	34.87	29.50	54.00	-24.50	Horizontal
2483.50	35.93	27.32	3.99	34.86	32.38	54.00	-21.62	Vertical
2500.00	34.25	27.35	4.00	34.87	30.73	54.00	-23.27	Vertical

802.11 N 20 Low CH

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2390.00	48.47	27.38	3.91	34.83	44.93	74.00	-29.07	Horizontal
2400.00	50.20	27.38	3.93	34.83	46.68	74.00	-27.32	Horizontal
2390.00	44.64	27.38	3.91	34.83	41.10	74.00	-32.90	Vertical
2400.00	46.53	27.38	3.93	34.83	43.01	74.00	-30.99	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2390.00	35.29	27.38	3.91	34.83	31.75	54.00	-22.25	Horizontal
2400.00	37.55	27.38	3.93	34.83	34.03	54.00	-19.97	Horizontal
2390.00	29.83	27.38	3.91	34.83	26.29	54.00	-27.71	Vertical
2400.00	32.65	27.38	3.93	34.83	29.13	54.00	-24.87	Vertical

802.11 N 20 High CH

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	46.87	27.32	3.99	34.86	43.32	74.00	-30.68	Horizontal
2500.00	45.17	27.35	4.00	34.87	41.65	74.00	-32.35	Horizontal
2483.50	49.04	27.32	3.99	34.86	45.49	74.00	-28.51	Vertical
2500.00	46.15	27.35	4.00	34.87	42.63	74.00	-31.37	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	34.19	27.32	3.99	34.86	30.64	54.00	-23.36	Horizontal
2500.00	32.42	27.35	4.00	34.87	28.90	54.00	-25.10	Horizontal
2483.50	34.48	27.32	3.99	34.86	30.93	54.00	-23.07	Vertical
2500.00	33.09	27.35	4.00	34.87	29.57	54.00	-24.43	Vertical

Remark.

1.Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

2.The amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported.

8. CONDUCTED EMISSION MEASUREMENT

8.1 LIMIT

Operating frequency band. In case the emission fall within the restricted band specified on Part 207(a) limit in the table below has to be followed.

FREQUENCY (MHz)	Conducted Emissionlimit (dBuV)	
	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

8.2 TEST PROCEDURE

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

a. The EUT was 0.8 meters from the horizontal ground plane and 0.4 meters from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.

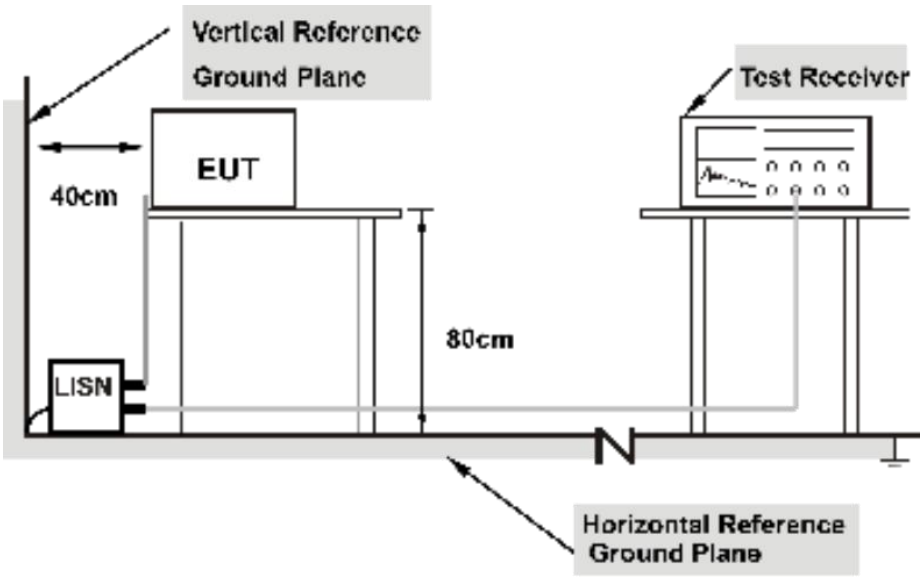
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

d. LISN at least 80 cm from nearest part of EUT chassis.

e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

8.3 TEST SETUP

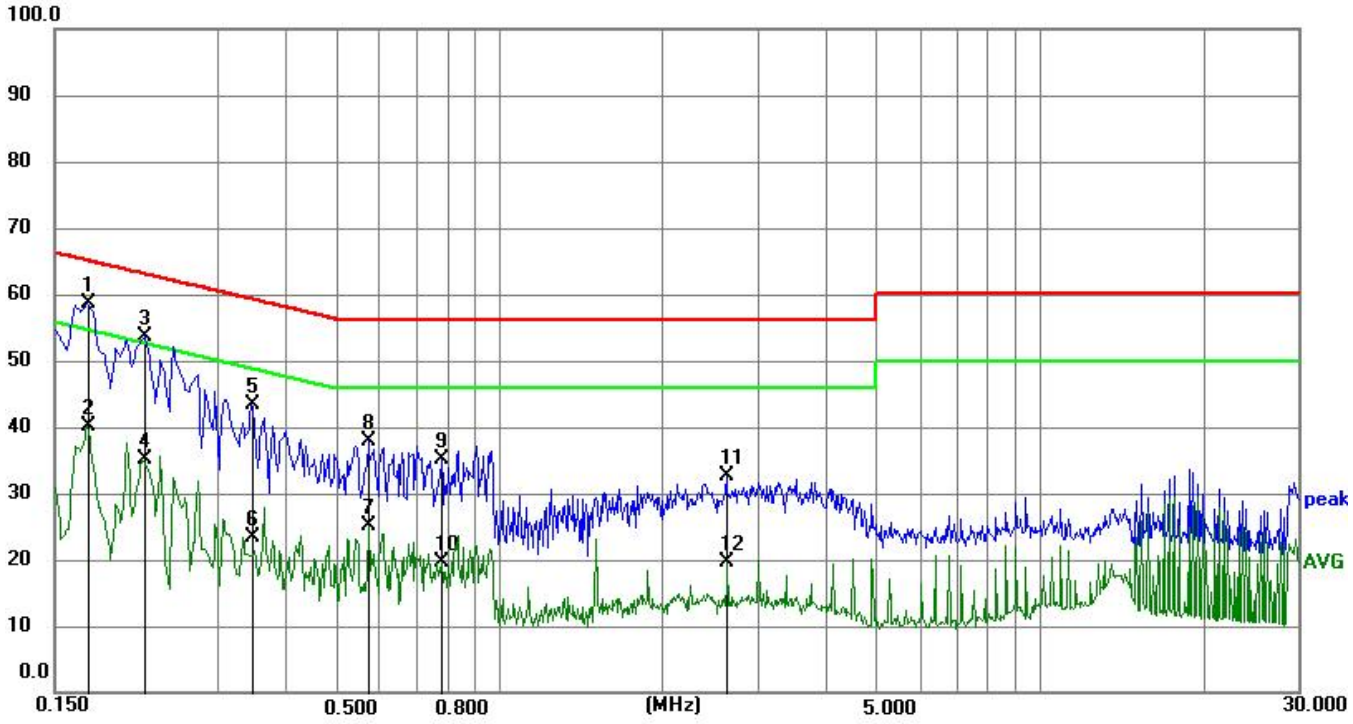


Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

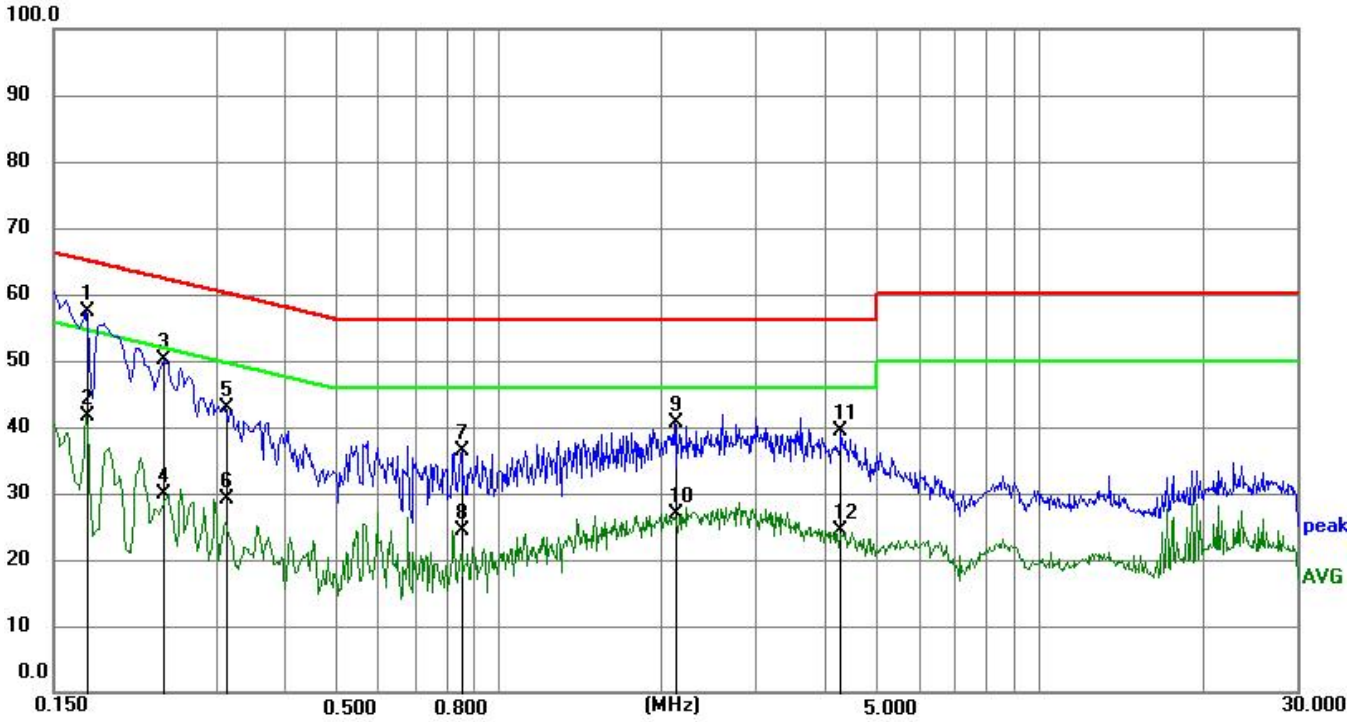
8.4 TEST RESULTS

Temperature:	25℃	Relative Humidity:	50%
Test Mode:	802.11b(worst)	Test Voltage:	DC 5V from adapter AC 120V/60Hz
Result:	L	Result:	Pass



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1725	48.45	10.11	58.56	64.84	6.28	QP
2	0.1725	30.07	10.11	40.18	54.84	14.66	AVG
3	0.2220	43.56	10.07	53.63	62.74	9.11	QP
4	0.2220	25.16	10.07	35.23	52.74	17.51	AVG
5	0.3480	33.34	10.02	43.36	59.01	15.65	QP
6	0.3480	13.26	10.02	23.28	49.01	25.73	AVG
7	0.5728	15.01	10.01	25.02	46.00	20.98	QP
8	0.5729	27.87	10.01	37.88	56.00	18.12	AVG
9	0.7799	25.06	9.99	35.05	56.00	20.95	QP
10	0.7799	9.75	9.99	19.74	46.00	26.26	AVG
11	2.6340	22.59	9.95	32.54	56.00	23.46	QP
12	2.6340	9.60	9.95	19.55	46.00	26.45	AVG

Temperature:	25℃	Relative Humidity:	50%
Test Mode:	802.11b(worst)	Test Voltage:	DC 5V from adapter AC 120V/60Hz
Result:	N	Result:	Pass



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1725	47.41	10.07	57.48	64.84	7.36	QP
2	0.1725	31.47	10.07	41.54	54.84	13.30	AVG
3	0.2400	40.00	10.05	50.05	62.10	12.05	QP
4	0.2400	19.71	10.05	29.76	52.10	22.34	AVG
5	0.3120	32.82	10.03	42.85	59.92	17.07	QP
6	0.3120	19.10	10.03	29.13	49.92	20.79	AVG
7	0.8564	26.42	9.99	36.41	56.00	19.59	QP
8	0.8564	14.35	9.99	24.34	46.00	21.66	AVG
9	2.1209	30.72	9.96	40.68	56.00	15.32	QP
10	2.1209	16.96	9.96	26.92	46.00	19.08	AVG
11	4.2990	29.38	9.90	39.28	56.00	16.72	QP
12	4.2990	14.39	9.90	24.29	46.00	21.71	AVG

Remark:
1. All readings are Quasi-Peak and Average values
2. During the test, pre-scan all modes, only the worst case is recorded in the report. AC conducted emission pre-test at both at AC 120V/60Hz and AC 240V/60Hz modes, recorded worst case AC 120V/60Hz.

9. ANTENNA REQUIREMENT

9.1 STANDARD REQUIREMENT

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.

9.2 RESULT

The antennas used for this product are Copper tube antenna antenna and other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 1.77dBi.

※※※※※END OF THE REPORT※※※※※