

A.7. AC Powerline Conducted Emission

Test Condition:

Voltage (V)	Frequency (Hz)
110	60

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	66 to 56	Fig.A.7.1	Fig.A.7.2	P
0.5 to 5	56			
5 to 30	60			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dB μ V)	Result (dB μ V)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	56 to 46	Fig.A.7.1	Fig.A.7.2	P
0.5 to 5	46			
5 to 30	50			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

The measurement is made according to KDB558074.

Conclusion: Pass

Measurement uncertainty:

Expanded measurement uncertainty for this test item is U =3.2dB, k=2.

Test graphs as below:

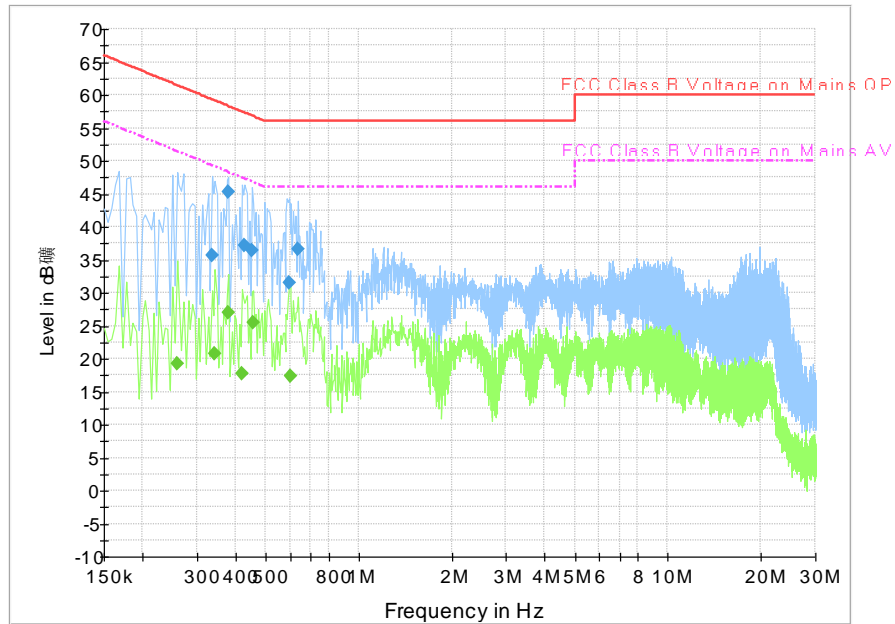


Fig.A.7.1 AC Powerline Conducted Emission-802.11b

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.334500	35.7	GND	L1	9.8	23.6	59.3
0.379500	45.4	GND	N	9.8	12.9	58.3
0.429000	37.2	GND	N	9.8	20.1	57.3
0.451500	36.4	GND	N	9.8	20.5	56.8
0.595500	31.5	GND	N	9.8	24.5	56.0
0.636000	36.6	GND	N	9.8	19.4	56.0

Final Result 2

Frequency (MHz)	Average (dB μ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.258000	19.2	GND	N	9.8	32.2	51.5
0.343500	20.8	GND	N	9.8	28.3	49.1
0.379500	27.0	GND	N	9.8	21.3	48.3
0.420000	17.8	GND	N	9.8	29.7	47.4
0.456000	25.5	GND	L1	9.8	21.3	46.8
0.600000	17.4	GND	L1	9.8	28.6	46.0

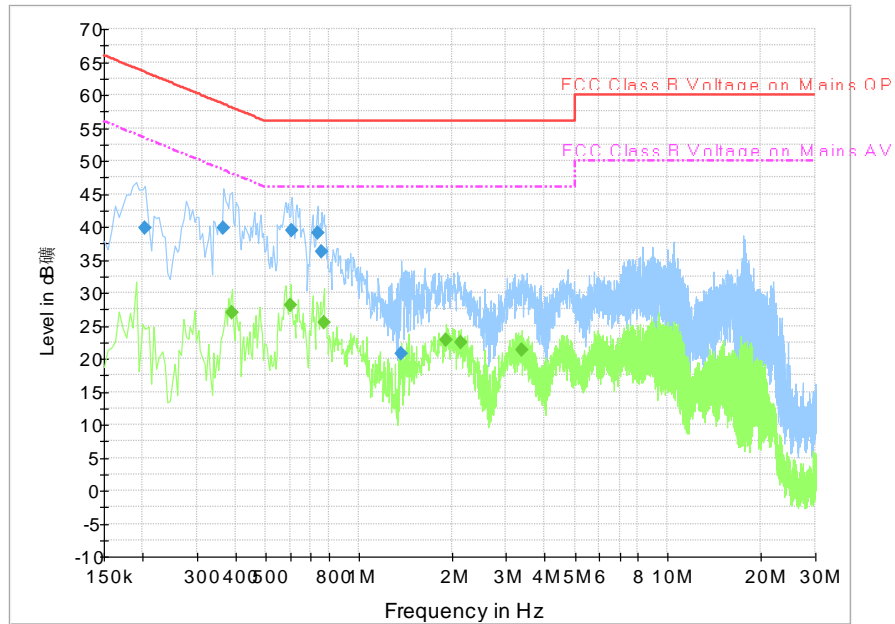


Fig.A.7.2 AC Powerline Conducted Emission-Idle

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.204000	39.9	GND	N	9.8	23.6	63.4
0.366000	39.8	GND	N	9.8	18.8	58.6
0.609000	39.4	GND	N	9.8	16.6	56.0
0.735000	39.0	GND	N	9.8	17.0	56.0
0.757500	36.2	GND	N	9.8	19.8	56.0
1.378500	20.7	GND	N	9.7	35.3	56.0

Final Result 2

Frequency (MHz)	Average (dB μ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.388500	27.1	GND	L1	9.8	21.0	48.1
0.604500	28.1	GND	L1	9.8	17.9	46.0
0.771000	25.4	GND	L1	9.8	20.6	46.0
1.918500	22.8	GND	L1	9.7	23.2	46.0
2.143500	22.5	GND	L1	9.7	23.5	46.0
3.367500	21.4	GND	L1	9.7	24.6	46.0