# 無線通訊應用之帶通頻蔽體與內部天線效能最佳化之探討


## 黃冠智、邱政男

E-mail: 343855@mail.dyu.edu.tw



**摘 要**

本篇論文將探討帶通屏蔽體(bandpass shielding enclosure, BPSE)與其內部天線之間的最佳化設計。經由研究顯示，效能的最佳化取決於內部的天線與帶通屏蔽體相鄰之周期性元件的相對位置與內部天線的型式。對於此最佳化設計，內部的天線宜採用高介電係數的介質共振天線，這不僅僅是為了天線尺寸所考量，且是為了能夠將內部的天線更靠近BPSE的金屬側邊。除此之外，也將探討出內部天線與BPSE周期性元件的適當相對位置。根據這些探討顯示，此天線能夠放置於非常靠近BPSE的角落，而這個位置是最符合用來擺放天線的位置。



關鍵詞 : 屏蔽、頻率選擇面、無線通訊系統


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