EMC電波迴響式特性研究分析

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摘 要

中文摘要 由於經濟和效率的考慮，電波迴響室(Reverberation Chamber；也稱做mode-stirred or mode-tune chambers)，以電磁相容測試場地而言，電波迴響室是最近積極發展的測試設備。這樣的電波暗室是利用一隔離室(Shield Room)再加上金屬旋轉葉片，這樣的設備裝置能夠在電波暗室中產生適當高場強的電磁場來源。電波迴響室最主要是利用金屬旋轉葉片將其隔離室中的測試區域之電磁場均勻打散攪拌，希望能在隔離室內得到一具有均勻電磁場測試區域。本論文將使用有限時域差分法(FDTD；Finite-Difference Time- Domain)分析在金屬旋轉葉片旋轉時電波迴響室中的場強變化，因為在電波迴響室裡面的電磁場強度是隨機的，利用適當的分析和統計的工具，可以說明電波迴響室的電磁場分布情況。本文中所模擬分析電場強度的數值，將進一步適用於經濟部商品檢驗局（BSMI）的電波迴響室設計與建立。 關鍵字：電磁免疫力測試(Electromagnetic immunity testing)、電波迴響室、隔離室、有限時域差分法(FDTD)、經濟部商品檢驗局(BSMI)

關鍵詞 : 電磁免疫力測試 ; 電波迴響室 ; 隔離室 ; 有限時域差分法 ; 經濟部商品檢驗局

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