

國家通訊傳播委員會(NCC)

電信終端設備與低功率射頻電機審驗一致性第47次會議 101年5月25日(星期五) 意見提案處理單結論彙整

提案編號:10105179

主旨：

廠商提出關於LP0002 Section 3.13 章節中的頻率穩定度測試,電壓變化需 $\pm 15\%$ 。

但FCC 15.255 (f) 非一定要 $\pm 15\%$ ，可接受廠商的規格去執行測試，但廠商需提出合理的證明。

考量實際狀況下，因電子特性，或相關技術而導致 $\pm 15\%$ 電壓變化下，電路無法正常工作下，同意依據廠商規格去執行測試的可能性？

結論：

依據 LP 0002 3.13 節規定業有多項器材取得型式認證證明，相關器材須依該技術規範規定辦理。

Federal Communications Commission

§ 15.255

as measured 3 meters from the radiating structure, and the peak power density of any emission shall not exceed 18 $\mu\text{W}/\text{cm}^2$, as measured 3 meters from the radiating structure. In addition, the average power density of any emission outside of the 61-61.5 GHz band, measured during the transmit interval, but still within the 57-64 GHz band, shall not exceed 9 nW/cm^2 , as measured 3 meters from the radiating structure, and the peak power density of any emission shall not exceed 18 nW/cm^2 , as measured three meters from the radiating structure.

(3) For fixed field disturbance sensors other than those operating under the provisions of paragraph (b)(2) of this section, the peak transmitter output power shall not exceed 0.1 mW and the peak power density shall not exceed 9 nW/cm^2 at a distance of 3 meters.

(4) Peak power density shall be measured with an RF detector that has a detection bandwidth that encompasses the 57-64 GHz band and has a video bandwidth of at least 10 MHz, or using an equivalent measurement method.

(5) The average emission levels shall be calculated, based on the measured peak levels, over the actual time period during which transmission occurs.

(c) Limits on spurious emissions:

(1) The power density of any emissions outside the 57-64 GHz band shall consist solely of spurious emissions.

(2) Radiated emissions below 40 GHz shall not exceed the general limits in §15.209.

(3) Between 40 GHz and 200 GHz, the level of these emissions shall not exceed 90 pW/cm^2 at a distance of 3 meters.

(4) The levels of the spurious emissions shall not exceed the level of the fundamental emission.

(d) Only spurious emissions and transmissions related to a publicly-accessible coordination channel, whose purpose is to coordinate operation between diverse transmitters with a view towards reducing the probability of interference throughout the 57-64 GHz band, are permitted in the 57-57.05 GHz band.

NOTE TO PARAGRAPH (d): The 57-57.05 GHz is reserved exclusively for a publicly-accessible coordination channel. The development of standards for this channel shall be performed

pursuant to authorizations issued under part 5 of this chapter.

(e) Except as specified elsewhere in this paragraph (e), the total peak transmitter output power shall not exceed 500 mW.

(1) Transmitters with an emission bandwidth of less than 100 MHz must limit their peak transmitter output power to the product of 500 mW times their emission bandwidth divided by 100 MHz. For the purposes of this paragraph (e)(1), emission bandwidth is defined as the instantaneous frequency range occupied by a steady state radiated signal with modulation, outside which the radiated power spectral density never exceeds 6 dB below the maximum radiated power spectral density in the band, as measured with a 100 kHz resolution bandwidth spectrum analyzer. The center frequency must be stationary during the measurement interval, even if not stationary during normal operation (e.g. for frequency hopping devices).

(2) Peak transmitter output power shall be measured with an RF detector that has a detection bandwidth that encompasses the 57-64 GHz band and that has a video bandwidth of at least 10 MHz, or using an equivalent measurement method.

(3) For purposes of demonstrating compliance with this paragraph (e), corrections to the transmitter output power may be made due to the antenna and circuit loss.

(f) Fundamental emissions must be contained within the frequency bands specified in this section during all conditions of operation. Equipment is presumed to operate over the temperature range -20 to +50 degrees celsius with an input voltage variation of 85% to 115% of rated input voltage, unless justification is presented to demonstrate otherwise.

(g) Regardless of the power density levels permitted under this section, devices operating under the provisions of this section are subject to the radio-frequency radiation exposure requirements specified in §§1.1307(b), 2.1091 and 2.1093 of this chapter, as appropriate. Applications for equipment authorization of devices operating under this

提案編號:10105179 (附件二) NCC / LP0002

3.13 工作頻率為 57 至 64 赫 (GHz) 者

3.13.1 器材型式：限室內短距離多媒體寬頻網路使用之高密度固定業務(High Density Fixed Services · HDFS)器材。

- (1) 發射功率密度限制值：
 - (1.1) 在發射期間內，距離 3 公尺處所測得任何發射之平均功率密度不得超過 $9 \mu\text{W}/\text{cm}^2$ ，所測得任何發射之峰值功率密度不得超過 $18 \mu\text{W}/\text{cm}^2$ 。
 - (1.2) 平均功率密度之推算須基於傳輸中涵蓋實際時間週期所測得之峰值位準。
 - (1.3) 使用具檢波器功能的儀器量測峰值功率密度，其量測頻帶範圍須包含 57-64 GHz 且設定視訊頻寬至少為 10MHz，或使用等效之量測方法。
- (2) 混附發射之限制值
 - (2.1) 在 57GHz-64GHz 頻帶外任何發射只能來自混附發射。
 - (2.2) 低於 40GHz 的輻射發射不可超過 2.8 節之一般限制值。
 - (2.3) 介於 40GHz 與 200GHz 之間，量測距離為 3 公尺，其混附發射功率密度不得超過 $90\text{pW}/\text{cm}^2$ 。
 - (2.4) 混附發射之位準不可超過主要發射之位準。
- (3) 發射傳導總峰值輸出功率限制值
 - (3.1) 發射頻寬大於 100MHz 之發射機，其傳導發射總峰值輸出功率不得超過 500mW。
 - (3.2) 發射頻寬小於等於 100MHz 之發射機，其傳導發射總峰值輸出功率不得超過 500mW 乘以發射頻寬(MHz)除以 100MHz。
 - (3.3) 本節之發射頻寬係指頻譜分析儀以峰值檢波器設定 100kHz 解析頻寬，量測具調變之穩定輻射信號其瞬間頻率佔用範圍，且在此頻寬範圍外之輻射功率頻譜密度，應低於該頻寬範圍內之最大輻射功率頻譜密度 6dB。非以固定頻率操作之器材（如跳頻器材），量測時須以固定頻率方式量測。
 - (3.4) 峰值發射輸出功率之量測須使用檢測帶寬涵蓋 57-64GHz 之儀器具射頻檢波器且其視訊頻寬至少為 10MHz，或使用等效之量測方法。
 - (3.5) 使用輻射方式量測，應考慮天線與電路造成之損失，可用來補償發射總峰值輸出功率。
- (4) 在正常供應電壓下，溫度在攝氏零度至攝氏五十度間變化；及在攝氏二十度下，供應電壓在額定值之 $\pm 15\%$ 內變化時，發射的頻率應維持在 57GHz-64GHz 頻帶內。以電池作業者，應以新電池測試，並須符合第 5.17 節之要求。

提案編號: 10105180

主旨：

符合WPC(Wireless Power Consortium)聯盟規範的電力發送器wireless charger (power transmitter)及電力接收器wireless battery charger(power receiver) 申請模組認證時可以不須符合“申請模組認證自我檢視聲明書”第一項的的屏蔽外殼要求。

結論：

1. 符合WPC (Wireless Power Consortium)聯盟規範，電力傳輸與接收藉由線圈頻率在110~205kHz變化之產品，該類器材為電磁感應以傳輸電力，非使用於通訊，爰該類器材申請模組認證時得不符合“申請模組認證自我檢視聲明書”第一項的的屏蔽外殼要求。
2. FCC規定前揭器材測試報告須註明WPC定義之類型(A1, A2...B1, B2)，爰本案器材測試報告比照FCC規定辦理。

提案編號: 10105181

主旨：

對於寄送天線實體至實驗室評估與拍照的部分是否可以放寬由實驗室或RCB自行抽樣進行?(廠商願意切結並保證所有增列的天線實體都可隨時由實驗室或RCB進行抽樣)。

結論：

1. 依電信管制射頻器材審驗辦法第8條第1項規定:驗證機關(構)得要求申請者檢送器材樣品。
 2. 低功率射頻電機審驗須將送審器材本體及天線併同評估。
- 綜上，持續辦理檢送天線實體至實驗室評估與拍照之規定。

提案編號: 10105182

主旨：

傳真機需於接收振鈴(含)三次之內自動接機

結論：

就傳真機需於接收振鈴(含)三次之內自動接機規定，本會同意審驗標準及配合事項如下：

1. 得採出廠值測試。
2. 使用手冊需加註”當設定自動接機的時間超過9秒時，使用者需確認所連接的自動回話裝置必須在振鈴(含)三次之內，自動接續完成。”之警語。另前揭手冊加註規定，可印製貼紙黏貼於使用手冊中，不可以夾頁方式辦理。

提案編號: 10105183

主旨：

手機之電池外殼已具備防火外殼V-1以上或電池放入手機後做過充電、過放電及電池短路符合CNS 14336-1第4.3.8及5.3.7節要求時

針對電池測試方法方要求參考CNS 14336-1第5.3.7節針對電池所有零件做開路、短路、過載等測試，均無起火之現象。

一般電池包內約有5-10個零件，由於該測試需有至少三次以上之重複結果(即同一點測三次)，是否針對每個電池內部零件都測且至少三次以上之重複測試?

結論：

CNS 14336-1為經濟部標準檢驗局(BSMI)制定，本會採用該法規時，依BSMI規定辦理，未來若BSMI放寬規定時，再考量是否配合其規定調整。本案器材每個零件皆須評估，且須做1次以上。

提案編號: 10105184

主旨：

有一系列案件，此案件新增的天線皆有附比例尺，其他的天線皆為一致性會議決議天線須附上比例尺之前即完成申請，那是否有必要要求先前申請過之天線也需附上比例尺?

結論：

依法規不溯既往原則，一致性會議決議後之新增天線申請案，才須依該決議規定辦理。