Is it when the passport is stamped; upon landing, or upon obtaining the newly created permanent resident card?

An individual becomes a permanent resident immediately upon successful conclusion of the landing process. The subsequent issuance of the permanent resident card does not have a bearing on such status. The card facilities travel to and from Canada as proof of PR status.

Failure to land by the date prescribed will invalidate those documents, and would typically mean that you must reapply to be eligible to be a permanent resident.