

Federal Communications Commission Office of Engineering and Technology Laboratory Division

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Draft Laboratory Division Publications Report

Title: Referencing Test Data

Short Title: Test Data

Reason: Provide guidance for allowing references to test data based on associated products from a separate equipment authorization application.

Publication: 484596

Keyword/Subject: Referencing Test Data, Reusing Test Data

Question:

What is the FCC's policy on permitting referencing (reusing) test data from a separate equipment authorization application?

Answer:

Attachment <u>484596 D01 Referencing Test Data v01</u> below provides guidance for referencing and reusing test data from a separate equipment authorization application.

Attachment List:

484596 D01 Referencing Test Data v01

484596 D01 Referencing Test Data v01

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[Enter release date]

GUIDANCE FOR REFERENCING TEST DATA ACROSS SEPARATE EQUIPMENT AUTHORIZATION APPLICATIONS

This guidance pertains to RF devices approved under separate FCC IDs that use the same internal printed circuit board layout, have a common design and components, and where the separate FCC IDs differ in the population or depopulation of components for the purposes of adding or removing transmitters or frequency bands of operation. Applicable test data for the common transmitter/bands that overlap the separate FCC IDs may be eligible to be referenced in a new equipment authorization application.

Applications for certification based on this guidance are not subject to Pre-Approval Guidance (PAG) procedures (KDB Publication 388624) as long as all the items in this guidance document are followed by applicants and TCBs.

1) General guidance

- a) All compliance tests must be performed on a reference device that is fully populated or contains a majority of the components. The test results for the reference device must document all of the required tests under all applicable rule parts and supported air-interfaces (e.g., Wi-Fi, BT, BLE, NFC, and simultaneous transmission testing per Section 15.31(k)). If no single configuration represents a fully populated reference unit, because of variations in available devices, then the device configuration that has the majority of common components may be used as the reference device.
 - i) It may also be permissible to test multiple devices to establish the reference test data, to ensure that all components/layouts have been considered.
- b) Applications that intend to reuse the reference test data shall include spot check measurement data, to demonstrate that the referenced test data is valid.
- 2) Referenced test report exhibits filed have two options:
 - a) The test report exhibits for the new device must contain a reuse explanation that clearly identifies the test report exhibit(s) being referenced as contained in the separate source FCC ID application(s).
 - i) One risk in referencing test data from separate FCC ID filings is that the source filing(s) may have been dismissed (Section 2.917); in this case, a Class II permissive change is required to upload the referenced test data into the record of the new FCC ID.
 - b) Test report exhibits in a new FCC ID filing must contain suitable explanations when referenced test data from a separate source FCC ID is also uploaded into the new FCC ID filing.

3) Guidance for reference test data Explanations:

A separate reference test data explanation summary is required in each application (each equipment class) under a single FCC ID. Generally this should be an exhibit in the test report folder (exhibit type). The details and format are left to the applicant to organize the summary for clarity that best fits their situation. In some cases, within a single application, it may be appropriate to have more than one separate reference test data explanation summaries (as in the case for HAC) or separate summaries (as in the case for RF exposure) filed in the appropriate separate exhibit folder. A recommended outline for a test data summary is as follows:

- a) *Introduction:* An introductory statement identifying the FCC ID being referenced, and if appropriate the equipment class(s), rule parts, and frequency bands. A statement that the applicant takes full responsibility that the test data as referenced per d) below represents compliance for the new FCC ID.
- b) *Explain the Differences*: A brief description of the component differences among the different FCC IDs.
- c) Spot Check Verification Data Section: Provide a summary of spot check test data compared to the reference test data.¹
- d) Reference Section: A detailed matrix listing the cross references for the other FCC ID's test report(s). The reference section should be organized along the lines as listed on the grant (i.e. rule parts, frequency range (MHz), and emission designator). Each listing then would reference the FCC ID, report title and location for the referenced test report. At this time, the details and format will be left to the applicant to organize the cross reference matrix that best clarifies the specific situation. In some cases this can be a simple matrix that cross references to one common merged report or may require breaking down the matrix listing into split references. The reference section needs to clearly allow the reader to understand what is being granted and where the test data is located for each listed item.

4) Other considerations and requirements

- a) In general, test report(s) in an application are contained in multiple Form-731 line-entry records associated with equipment classes, initial grants, permissive changes, etc.; as such application records can be complex and confusing to novices and even experts. Please keep references simple and organized. Summarize and communicate the organization of the new versus referenced test data, making it clear what the data being referenced is, and what is new test data that is not being referenced.
- b) For DFS applications, please contact the FCC through a PAG (further to KDB Publication 443999).
- c) Reuse data can only be cross-referenced within the same Grantee Code. If a grantee (A) wants to use a separate grantee's (B) test report, then grantee (A) must first do a change-in-FCC ID (Section 2.933) to the FCC ID of grantee (B) that is referenced. With documented permission from grantee (B), grantee (A) shall upload the source test report as an exhibit in the change-in-FCC ID application. Next, grantee (A) can file a new FCC ID application for the depopulated or otherwise modified device configuration, including reference to the test report in the change-in-

¹ At present the format and amount of spot check data is the responsibility of the applicant's engineering judgment, based on the knowledge of the design, the changes made, and confidence in the observed spot check data. For example, include at least a spot check for every major rule part and frequency band required to demonstrate compliance.

- FCC ID application.
- d) Spot check test data included for the variants shall be based on worst-case results reported in the original FCC ID filing.
- e) For RF exposure purposes, each combination of frequency band, wireless mode, and exposure test conditions shall be considered separately. A KDB inquiry is recommended for complex device configurations to confirm appropriate RF exposure test cases.