

Firstly, thank you for your good work on these documents and I am very pleased to see them. Your work is greatly appreciated by our industry and this effort is of great value, thank you.

Now I have some comments:

### D03 – Instructions and Certification

#### Section 2.4.

It's true that a habit has started of certifying a Limited module (LMA) when tested stand-alone, for use in 'any' host, but not actually permitted in 'any' host, with the assumption that the installer will know what to do. But I think the original intention of LMA was that the module would be tested with the intended host, and certified only for that range of hosts. At the least, there should be a limited 'type' of host.

So I would recommend amending the text to something like this:

If the module is classified as "limited," then the module manufacturer must provide details of which host products, or host environments, the module is actually authorised to be used with, and an explanation that the module is only certified for use with those hosts or types of host.

In addition, the module Grantee should provide instructions on how the installer must proceed if the installer wishes to install the module into a host product which has not been part of the module authorisation by the module Grantee. For such cases, the integration instructions must provide the method and procedures needed by the host manufacturer to demonstrate their alternative means for ensuring compliance and informing the module Grantee that a Permissive Change may be required on the Grant of the module.

#### Section 2.5.

I think it would be important for the installation instructions to inform the installer that if there is any deviation from the defined parameters of the antenna trace, as described by the module Grantee; then the installer must inform the module Grantee that they wish to deviate from the antenna trace design. And, that in such a case, a Class 2 Permissive Change becomes mandatory.

(This is based on feedback already received by the FCC on this topic).

#### Section 2.7.

Thank you for this. I often see modules with an RF pin and antenna trace design for the host; but they never inform the installer that a standard antenna connector cannot be used on the host for an external antenna. Maybe that should also be added.

#### Section 2.10.

It may be worth noting here that the Part 15 subpart B assessment of the host must be performed with the module installed, and that the operating frequency of the module is to be considered by the installer when calculating the highest frequency within their product, to establish the upper frequency for emissions testing.

#### Section 3.0

I think there's a typo in the first sentence, and it should have "be" inserted between "shall" and "addressed".

#### Section 3.0.d)

I think there may be a typo in the sentence here too. Maybe the "and" is not necessary after the underlined section; or maybe instead add "is correct" after the underlined section.

#### Section 4.0

I'd like us to take this opportunity to remind people that "must not be co-located" is not really a helpful statement; and I am contacted regularly by installers saying that they cannot use the FCC ID of the module because they are co-locating it, and the Grant says they are not permitted to do that. I would prefer to see something like "Co-location of this module with simultaneous transmissions would require the use of FCC multi-transmitter procedures".

Another bullet point that could be added to this Grant notes section could be something like this:

Any company installing this module into their own product must ensure that the final composite product complies with the FCC requirements by a technical assessment or evaluation to the FCC rules, including the transmitter operation. Any company installing this module should refer to FCC KDB 996369.

.....I like to think this could help to capture all of the many installers who install modules, but are unaware of our KDBs or guidance.

## D04 – Module Integration

### Section 1.0

People often get stuck with the “it’s Certified, so I don’t need to test it” issue. This introduction does a good job of saying that the installer can save effort by leveraging the certification of the module, but perhaps could go further by commenting that some transmitter testing may be needed of the final product, in transmit mode, by the installer. I know it's explained later in D04, but it's nice to set the scene early.

### Section 2.0.f) and Section 3.1.

Confirms that transmitter testing or assessment could be needed on the final system, but it gives the impression that it’s only necessary in the case of multiple transmitters. I think it would be useful to clarify that some basic transmitter testing is needed, such as spurious emissions at least, even if only one module is installed into the host.

### Section 3.6.4

I think a typo in the final sentence. Maybe remove the “they”.

### Section 3.7.b)

Typo; “fora” should be “for a”.

### Section 3.7.b)

Typo; I think “consider a more” should be “consider more”, or instead “investigations” could become “investigation”.

Thanks for your excellent documents!!

Michael Derby

ACB.