NOKIA RESPONSE 1 (1)

TCC Oulu
Kare Oksanen 02/02/2004

1. FYI - Please note that MPE for the 824 MHz band has been provided, but MPE for the 1900 PCS band does not appear to have been provided. While the calculated safe distance would obviously be better than the 800MHz calculations due to power etc, the MPE for all bands should be considered in the MPE report.

I have updated MPE calculation to address also PCS band. This is related also to question #4.

2. Please note that you have stated on the 731 that this is a device that is held to the ear (PCE). However, the device is a mobile module with an antenna that is to be kept at least 20cm from the body at all times. As a mobile module, this would be classified as a Licensed Base Station (PCB equipment code). Also please note that the power listed on the grant for equipment code PCB would be the conducted power at the antenna terminal. The ERP and EIRP could then be listed in the grant notes. Please correct the 731 to reflect the proper equipment code and power listings.

You are absolutely correct, and I apologize for any inconvenience I have caused. I have now updated form 731.

3. Please note that the report states the use of ANSI C63.4 as a “Standard Test Condition”. Please note that ANSI C63.4 is primarily for use with unlicensed Part 15 devices. Except for the mention of ANSI C63.4 section 5.4 for OATS requirements during ERP/EIRP measurements in TIA603, ANSI C63.4 is not an appropriate reference for licensed PCS devices. Please explain why ANSI C63.4 was used.

Test reports lists ANSI C63.4 used as standard test condition only for ambient temperature. While this temperature range is a little bit wider than the one given in TIA-603-B, it is more appropriate for OATS. Tested device compensates changes in temperature.

4. Please note that the MPE report states that a “Customer Supplied” antenna can have a gain of 6 dBi. Please note that the manual (page 31) states that the antenna gain for other than that supplied in the “sales package” is not to exceed 3dBi. Please explain and reconcile the conflicting statements.

As stated in answer #1, MPE calculation is now revised to 3 dBi. Earlier version was obsolete as plans for antenna with 6 dBi gain were postponed, but unfortunately it still ended up into our application. Please disregard old version of this document.

5. The manual does not state that the antenna provided in the “sales package” is 6dBi. Also, the report does not clearly identify the gain of the EUT antenna used during ERP and EIRP measurements. Please verify that the ERP and EIRP measurements were performed using an EUT antenna with the maximum antenna gain allowed for the device (i.e. 6dBi).

There are several different kinds of sales packages, of which some include antenna while others do not. This antenna is identified in section 4 of manual, and it has gain of 0dBd (2.14dBi) in 850 and 1900 bands. While this gain is typical for this kind of antennas, for notification text, this number was rounded up to next integer in dBi for users who want to have antenna from different manufacturer. During ERP/EIRP measurements, effect of connection cable was compensated by cable loss factor, while in normal usage expected actual gain is lower due to cable loss.

Sincerely,
Kare Oksanen