

REPLY 1 (4)

24. June 1999

## **FCC ID LJPNSW-6NX**

Applicant: Nokia Mobile Phones Correspondence Reference Number: 8337 731 Confirmation Number: EA93768

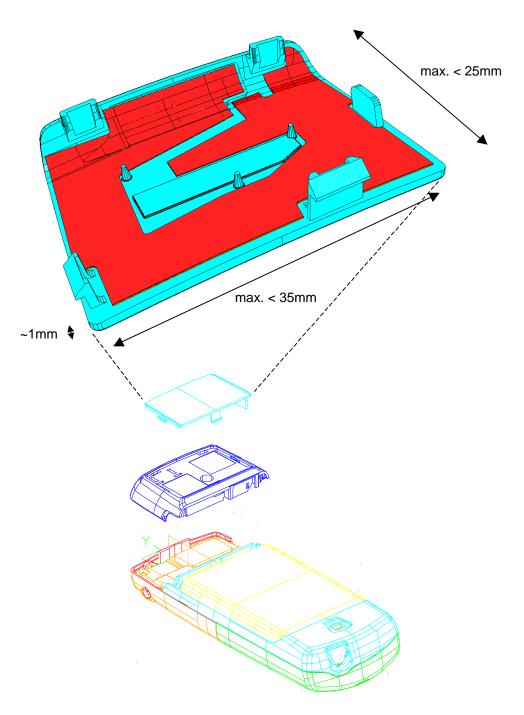


REPLY 2 (4)

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## 1. *Q:* It has an integrated internal antenna. For SAR purposes, we need a description of the dimension and location of the antenna within the handset.

**A:** Internal integrated antenna could be seen on section 9 (internal photos) on page 3 on top-right corner. It is located on the top of the device on its backside.



Picture 1. Internal antenna: Dimensions and location



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- 2. *Q:* For AMPS Mode, SAR was performed at 600 mW ERP. This mode will be listed on the grant as 600 mW ERP nominal, and AMPS mode not to exceed 600 mW maximum ERP for SAR compliance as external grant comment. Ratings for cellular TDMA is 500 mW ERP, and 630 nW for PCS/TDMA. (based on third version of radiated output data)
- A: Nokia has no problem accepting your power ratings on the Grant.
- 3. Q: Section 3 of users manual "Switching the phone on and off", the Normal Position description is for conventional antennas, which does not appear to be appropriate for this particular device with an internal antenna, should be revised accordingly.

**A:** In this device antenna is internal but it is still located in the one end of the device. Therefore it still can be pointing either up or down. In the user manual there already was a drawing attached into "Switching the phone on and off" -section to clarify antenna's location in the device (pointed by an arrow) and the correct positioning of the device but in the final version there will also be a note beside the drawing to explain its content more precisely.

- 4. Q: Page 11 of manual, "Using the slide" need clarification for the "slide" and "keypad cover" and their relations to normal operating positions for this device.
- **A:** Unfortunately both "slide" and "keypad cover" were used in "Using the slide" –section and these items were not harmonized in the user manual. However, they were both used in the same meaning. Furthermore, a glossary will be added to user manual where slide is explained to be 'the sliding keypad cover on the front of your phone'.

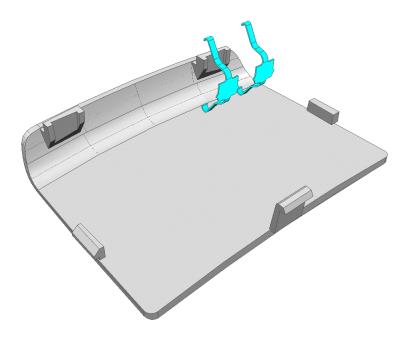
Normally this device is operated slide open during calls and otherwise slide closed. However, it is possible to answer the call by pressing TALK button without opening the slide. Thus slide can be either open or closed during conversation. Output power and SAR values are slightly higher when slide is open and this situation is used in all measurements as a worst case.



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## 5. Q: Clarify why left-hand side configuration was used for the SAR evaluation, with respect to worst case exposure conditions produced by the device and its antenna.

**A:** Left-hand side configuration was selected for SAR as a worst-case situation. If device is looked from the frontside internal antenna's feeding point is located on top-right corner. Using left-hand side will cause "hotspot" to be located closer to the surface of the phantom and thus also the measurement probe. Therefore higher SAR values are achieved with this method compared to the right-hand side configuration.



Picture 2. Feeding point on top-right corner