



IBM Japan Ltd.
1623-14, Shimotsuruma, Yamato-shi
Kanagawa-ken 242-8502, Japan

May 23, 2001

CKC Certification Services

4933 Sierra Pines Dr., Mariposa, CA 95338

Subject: FCC Certification of Part 15, Subpart C

Response to E-Mail "Requested Information from the FCC" dated May 19, 2001

FCC ID: **ANO12P701Z**

Dear Sir :

The attachment is the update of RF Exposure evaluation to be replaced together with the re-submission of the maximum peak output power measurement.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Murota".

Toshiya Murota
EMC Staff Engineer
Yamato Laboratory, IBM Japan Ltd.

RF Exposre

The applying equipment is a standard fullsize laptop computer which is categorized as a mobile device by FCC CFR 47 Section 2.1091.

Therefore the separation distance between the antenna and the human body is 20cm or more.

SP(1): The peak conducted output power of the applying equipment is 15.0 dBm ($P = 31.6\text{mW}$), and the maximum antenna gain is -1.2dBi .

Therefore the peak radiated (EIRP) output power is calculated as follows.

$$\text{EIRP} = P + G = 15.0 \text{ dBm} - 1.2 \text{ dBi} = 13.8 \text{ dBm} (24.0 \text{ mW})$$

With this result, the maximum power density in 20cm distance is calculated as :

$$S = \text{EIRP} / (4 \times R^2 \times \pi) = 0.0048 \text{ mW/cm}^2$$

When an operator will use the applying equipment during 30 minutes continuously in normal operation, the time-averaging exposure is : $0.0048 \times 30 = 0.144$

So the source-based time-averaging duty factor is considered as 100% duty.

Therefore the applying equipment meets the MPE requirements for general Population/Uncontrolled exposure.

SP(3): In line with the instruction of Section F, the users notification shown in the next page is delivered to customers associated with the users manual.

SP(5): The applying equipment has 11 channels, but it selects one of the available frequencies in the link establishing phase in line with the standard CCA procedure of IEEE802.11b, then starts radiocommunication in a single frequency band.

SP(7): The antenna installation instructions and device operating conditions for installers to satisfy RF exposure requirements are presented in the users notification shown in the next page.

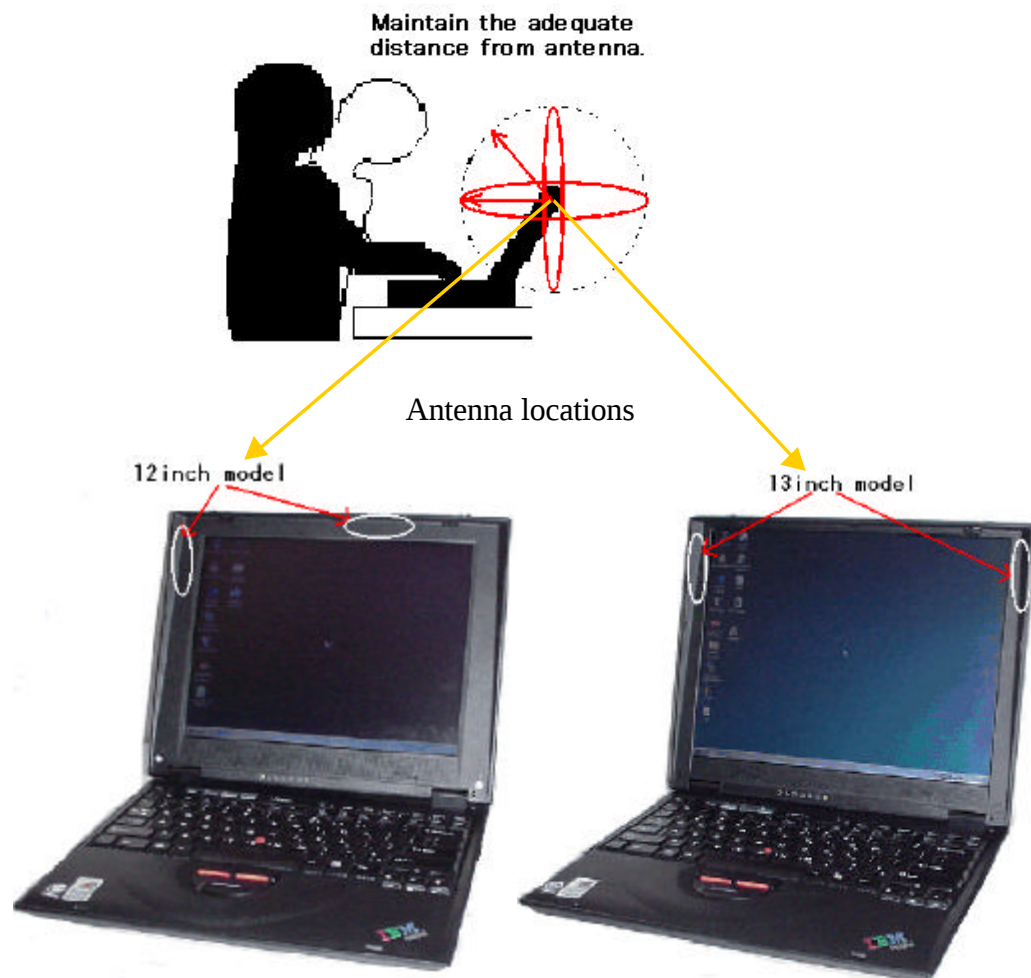
SP(8): The installation and operating instructions, of which conditions are for satisfying FCC RF exposure compliance, are presented in the users notification shown in the next page.

Exposure to Radio Frequency Energy



IMPOTANT NOTE

To comply with FCC RF exposure compliance requirements, a separation distance of at least 20 cm (8 inches) must be maintained between the antenna of this device and all persons.



FCC Certification of this device prohibits the use of any other Radio Frequency wireless device in conjunction with your ThinkPad i Series notebook wireless LAN. Do not use any wireless PCMCIA card in your ThinkPad i Series notebook while operating the internal wireless LAN function. Furthermore, any tampering of the internal antenna will void the FCC Certification and your warranty.