RF Exposure

The applying equipment is a standard size 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. As shown in the following photo, the applying equipment satisfies the requirement of antenna separation.

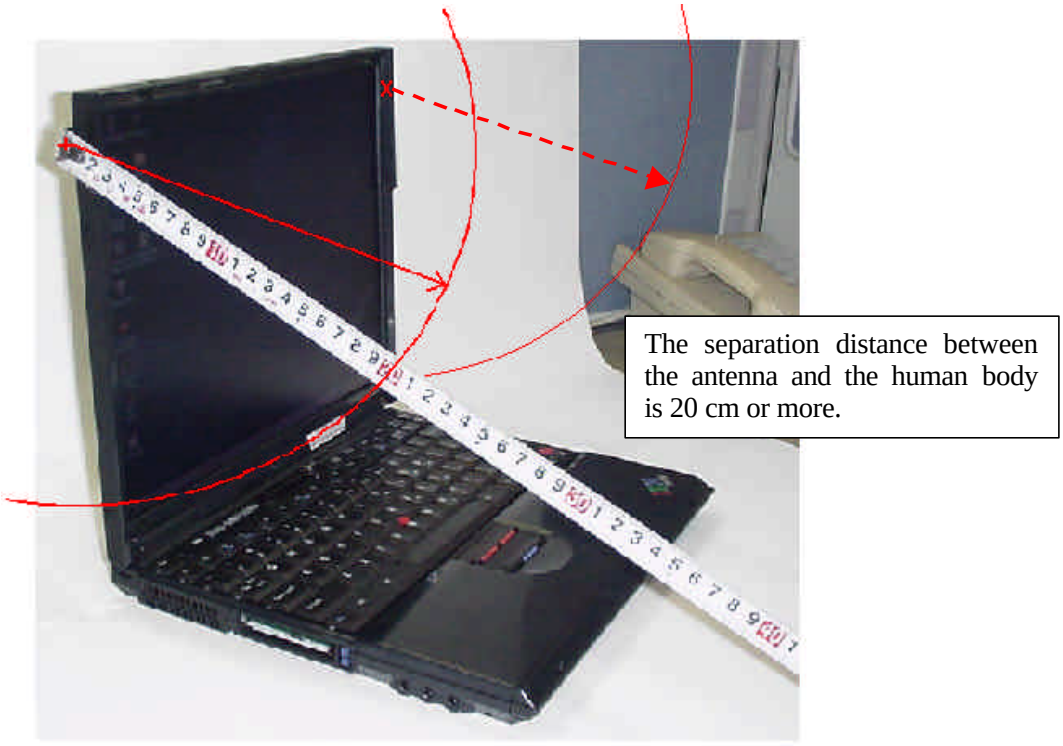


Figure 1 Left Antenna Gain

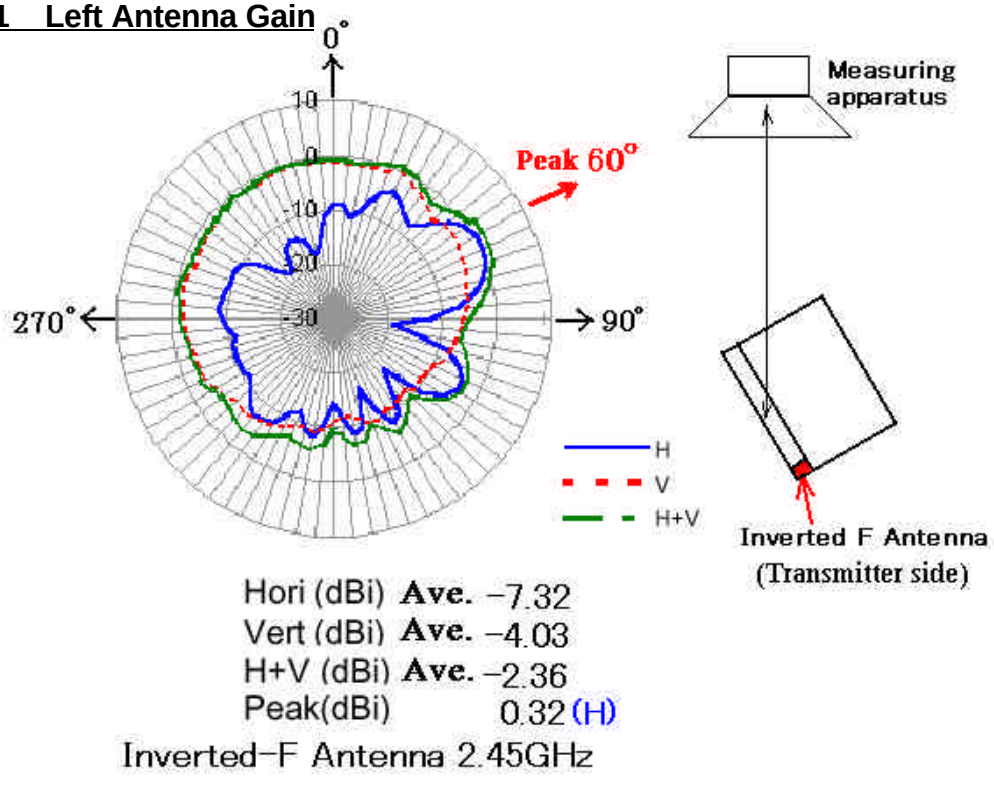
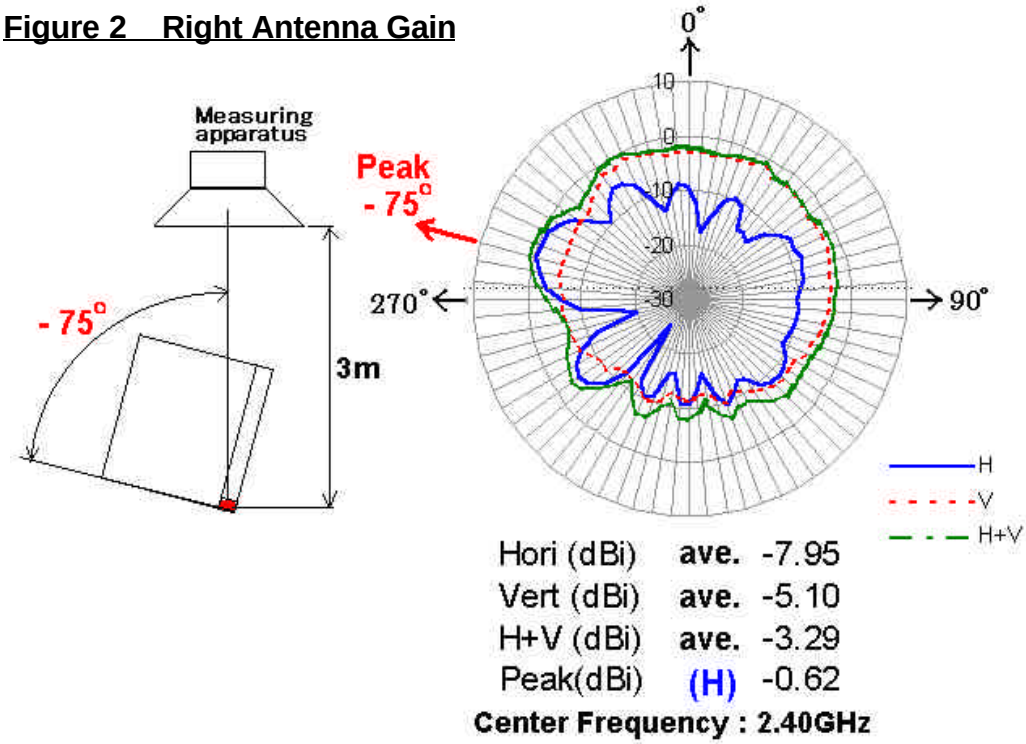


Figure 2 Right Antenna Gain



The peak conducted output power of the applying equipment is 20.5 dBm and the maximum antenna gain is 0.32dBi.

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

EIRP = P + G = 20.5 dBm + 0.32 dBi = 20.82 dBm (120.8 mW)

Then the maximum power density at 20cm distance is calculated as :

$S = EIRP/(4 \times R^2 \times \pi) = 0.024$ mW/cm^2

When an operator will use the applying equipment during 30 minutes continuously in normal operation, the time-averaging exposure is : $0.024 \times 30 = 0.72$
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.