RF Exposure

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. The maximum conducted output power of the applying equipment is 15.5 dBm and the antenna gain is 2.5 dBi.

Therefore the peak radiated (EIRP) output power is calculated as follows.
EIRP = P + G = 15.5 dBm + 2.5 dBi = 18.0 dBm (63.1 mW)

With this result, the maximum power density in 20cm distance is calculated as :
$S = EIRP/(4 \times R^2 \times pi) = 0.0125$ mW/cm^2

When an operator uses the applying equipment during 30 minutes continuously in normal operation, the time-averaging exposure is : $0.0125 \times 30 = 0.38$ mW/cm^2 (< 1mW/cm^2, which is the limit). 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.

The following statement will be place in User's Manual :

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