

FCC §15.247 (i) & §2.1093 - RF EXPOSURE

Applicable Standard

According to FCC §15.247(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB 447498 D01 Mobile Portable RF Exposure v03r03, no SAR required if power is lower than the flowing threshold:

When routine evaluation is required for SAR and the output power is $\leq 60/f(\text{GHz})$ mW, the test reduction and test exclusion procedures given herein, or in KDB 616217 or KDB 648474, are applicable.

When the output power of a simultaneous transmitting antenna is $\leq 60/f(\text{GHz})$ mW and it is either ≥ 5 cm from all other simultaneous transmitting antennas or it is deployed on the display screen at ≥ 5 cm from users and nearby persons, the contributions of such antennas to the overall exposure potential of the laptop computer is generally small. SAR evaluation for these types of simultaneous transmission configurations is unnecessary. For simultaneous transmitting antennas with outputs $> 60/f$, the separation distances between these antennas are used to assess the overall exposure potential. The number and types of tests required for each simultaneous transmitting antenna to show compliance are based on the defined antenna configurations.

Measurement Result:

Conducted $P_{\text{Max}} = 11.12 \text{ dBm}$, Antenna Gain = -0.7 dBi, Maximum Output Power is 10.42 dBm (i.e. 11 mw)

SAR exempted threshold: $60/f_{\text{GHz}} = 60/2.462 = 24.37 \text{ mW}$

$P_{\text{Max}} < 60/f_{\text{GHz}}$

The distance among the BT, WiFi and GSM antenna are more than 5 cm.

SAR evaluation can be exempted due to the maximum output power is less than the threshold.