

RF Exposure Statement

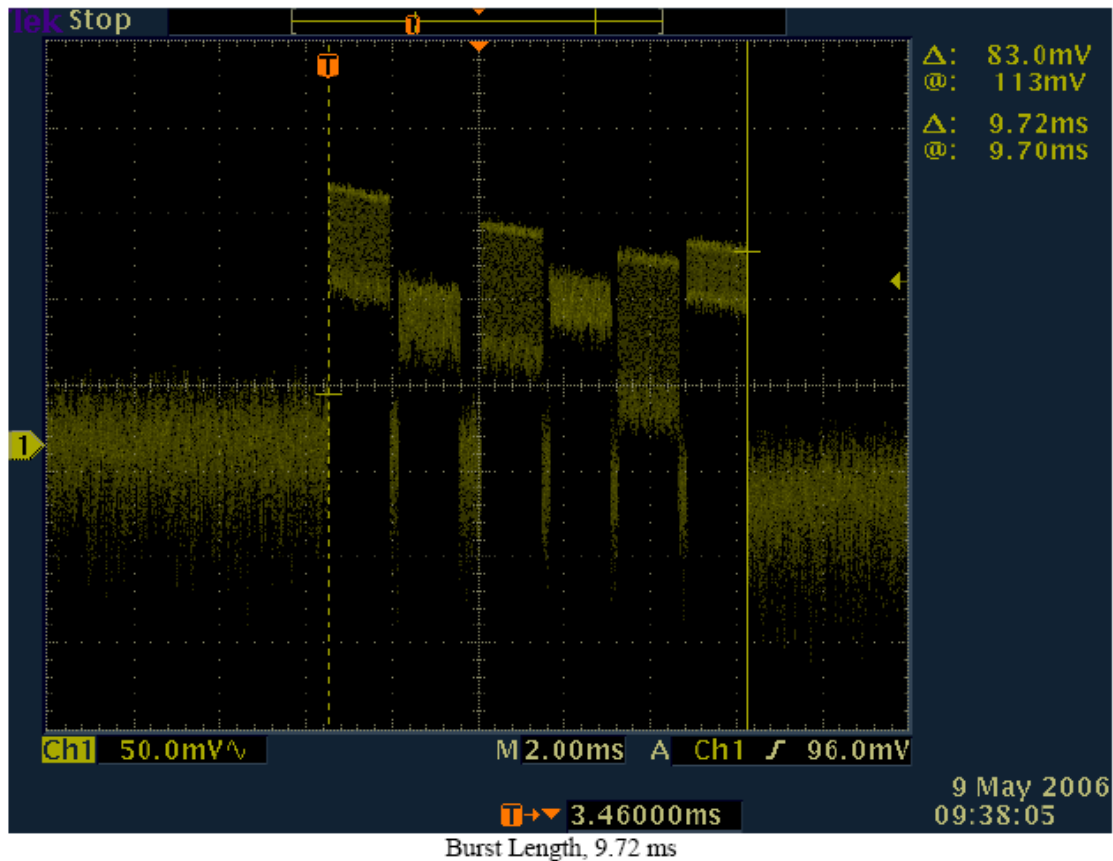
RF Output Power and Human RF Exposure FCC 15.247(b)(3-5)

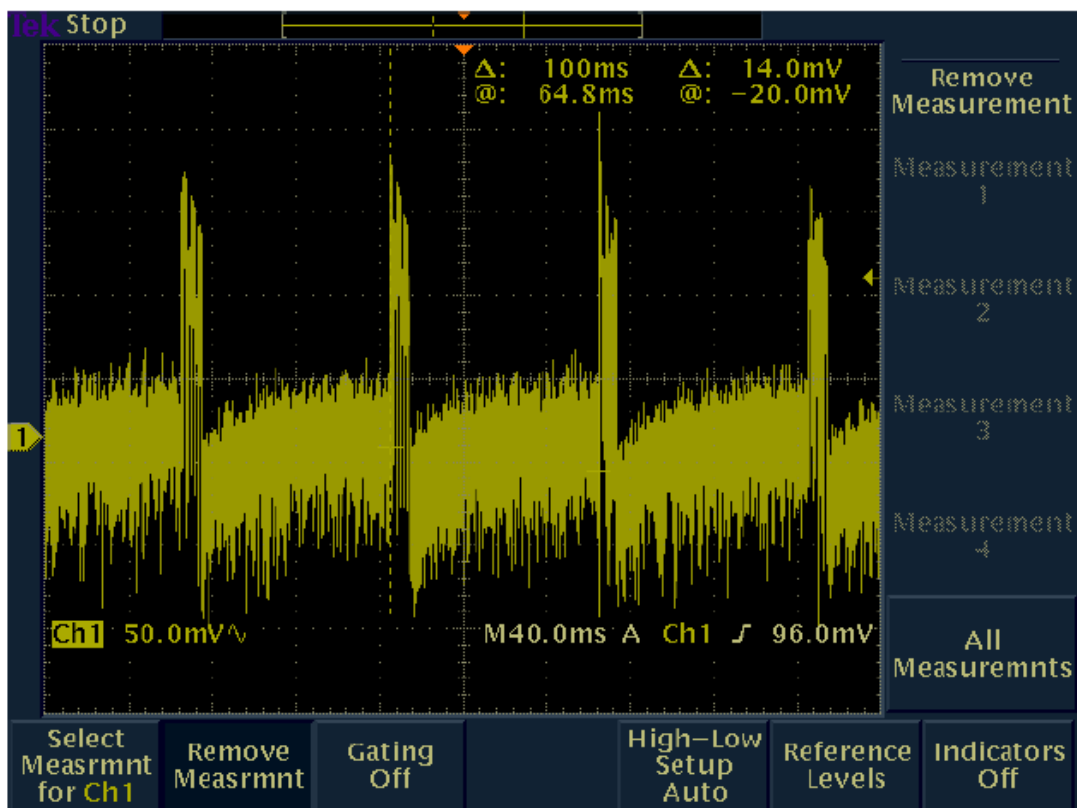
Notes: The EUT was measured radiatively. The RF output power was measured via integration using a 50 MHz span with a 100 kHz resolution bandwidth and 500 points of resolution. The data obtained was adjusted for equipment losses and converted from a field strength reading to a power reading using the provisions of FCC Public Notice DA-00-705A1. The human RF exposure limit is 1 mW/cm². The power density S generated by some value of EIRP at a given distance d is related by the equation:

$$S = \text{EIRP} / (4\pi d^2)$$

The distance, given a maximum EIRP of 20.41 dBm (109.93 mW), at which the radiated power density of the EUT is equal to the human RF exposure limit is 2.96 cm from the antenna.

A duty cycle averaging factor has been calculated which takes into account the typical EUT duty cycle. Normally the device would transmit a burst every 60 seconds. The worst-case burst length is 9.72 ms. For the duty cycle test, the EUT was configured to transmit every 100 ms for ease of testing. Given the 9.72 ms burst length and the maximum allowed averaging period of 100 ms, using the equation, dB reduction = 20 * LOG (dwell time/ 100 ms), the duty cycle average factor obtained is 20.25 dB. Given a max output power of 20.41 dBm, after adjustment for duty cycle the output power is 0.16 dBm (1.04 mW). The EUT is therefore exempt from SAR evaluation due to the output power being below 25 mW after duty cycle adjustment.





Burst Interval, 100 ms (60 seconds in normal operation)