Part 22
Subpart H – Cellular Radiotelephone Service

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§22H Effective Radiated Power Limits

§22.913 specifies the limits for transmitters operating in the Cellular Radiotelephone Service in terms of the “maximum” effective radiated power (ERP)

- For Part 22H transmitters, the RF conducted output power is assumed to be measured at the transmit antenna port (per §2.1046)
- The ERP is then calculated by multiplying the measured output power by the specified antenna system gain, relative to a half-wave dipole, in the direction of interest (§22.99)

Several questions have recently been submitted via KDB inquiring as to whether the term “maximum” is intended to mean that the ERP is based on the “peak” RF conducted output power.
FCC laboratory long-term precedent with respect to Part 22H transmitters, has been to assume that the output power limits (and associated ERP or EIRP) are in terms of the average power (unless otherwise specified) as measured during full-power transmission \((i.e., \text{no inclusion of transmitter off-times or periods when the EUT is transmitting at reduced power levels})\)

Thus, the FCC interpretation is that the §22H ERP limit is based on the “maximum” average output power, where in this context, “maximum” refers to the measurement being performed while the EUT is transmitting at its highest rated output power.
Questions and Answers

Thanks!