

POWER DENSITY CALCULATION

PROPOSED KCTU-LD
CHANNEL 23 – WICHITA, KANSAS

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Wichita facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 15.0 kw, an antenna radiation center 100 meters above ground, and the vertical pattern of the ERI antenna, maximum power density two meters above ground of 0.00049 mw/cm^2 is calculated to occur 88 meters from the base of the tower. Since this is only 0.1 percent of the 0.35 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 23 (524-530 MHz), this proposal may be excluded from consideration with respect to public exposure to nonionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive nonionizing radiation.