

Susan, please change the emission designator to 7k4f1d. Attach occupied bw measurements from Bill Crook, along with graphs, and paper graph with emission mask drawn on it. Include new pictures of test setups from W0208. Include data sheets for W0208 Run 3.

This explanation needs to go in the Radiation Exposure folder.

1. 630 mW is the erp measured by using the substitution method. Initially we maximized the field strength from the transmitter to be 127.1 dBuV/m with the test antenna (biconicalog) 3 meters away. We removed the transmitter, and replaced it with a half-wave dipole antenna tuned to 836 MHz. The output of the signal generator into the dipole necessary to match the 127.1 dBuV/m level is what produced the 630 mW level. This would be below the 1.5 W requirement for device operating below 1.5 GHz. This corresponded to the manufacturer's designed for level. Using $TP = (FS \times D)^2 / 30G$, it does produce answer of 940 mW, assuming antenna gain of 1.64. The substitution value would indicate the antenna gain to be 2.44. In either case the ERP is less than 1.5 W, which would categorically exclude device from routine MPE evaluation, and for a grant level I feel more confident in the substitution measured value than the calculated using assumed antenna gain.
2. We retested with the EUT configured with the stub antenna, and by the substitution method measured an ERP of 160 mW. The calculated value using $TP = (FS \times D)^2 / 30G$, assuming antenna gain of 1.64, would be 440 mW. In any case, the 1.5 W limit is not exceeded. The worst case scenario would be 630 mW (measured maximum rf output) x 2 (3 dB antenna gain), or 1.26 W, which is also below the 1.5 W level.
3. The revised manual indicates installation that provides for 20 cm separation from operator and indicates use of any other antenna than one provided may cause non-compliance to FCC requirements.