

Abstract: In my study is designed, realized and tested microwave applicator with TEM wave to be used for local microwave treatment. Applicator is determined for hyperthermia system LUND 1040. Working frequency is 434 MHz and dimension of aperture is 100 x 75 mm. For optimization of the discussed applicator SEMCAD EM Simulator.

Effective area of treatment of by me designed applicator is 55%. It is better of more than 15% in comparison with conventional waveguide applicators. Applicator has been found convenient for patient treatment.