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# Focused antennas in problems of medical radiometry

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*In the study we obtained quantitative estimates of the impact of antenna parameters on the quality indicators of resultant radiometric measurements. The antenna temperature contrast is considered as the main indicator, which is proportional to the gain of the antenna for the area near radiated field within the dissipative object. We investigated the possibility of focusing for purposes of medical radiometry in different directions with respect to the aperture. We estimated achievable gain value and considered dependences of this indicator from the size of aperture, the depth of the focus point and frequency. In addition, the article examines the issues of improving resolution using focused apertures.*

**Keywords:** radiometry, antenna temperature contrast, gain, area near the radiated field, focused aperture.

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