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Terahertz emission from pie-shaped wedge microstrip antennas of the high-T_c superconductor $Bi_2Sr_2CaCu_2O_{8+\delta}$[1] QING WANG, CONSTANCE DOTY, RICHARD KLEMM, Univ of Central Florida, KAVEH DELFANAZARI, University of Cambridge, UK, DANIEL CERKONEY, Rutgers University, TAKASHI YAMAMOTO, University of Ulm, Germany, MANABU TSUJIMOTO, KAZUO KADOWAKI, CHIHARU WATANABE, HIDETOSHI MINAMI, TAKANARI KASHIWAGI, University of Tsukuba, Japan, MANUEL MORALES, Massachusetts Institute of Technology — We calculate the standing wave functions for pie-shaped wedge microstrip antennas of various wedge angles ϕ_0. We then calculate the emission distributions from the uniform Josephson current and from the excitation of a cavity mode generated from the stand wave functions. For a narrow dieter's pie slice, quantitative fits to the experimental data on a $Bi_2Sr_2CaCu_2O_{8+\delta}$ narrow isosceles triangular mesa are shown.

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