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标题: Experimental research on resolution improvement in CW THz digital holography

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摘要: High-resolution continuous-wave terahertz (CW THz) real-time imaging operating at 2.52 THz is demonstrated based on THz digital holographic technique. To eliminate the influence of zero-order diffraction while reducing the recording distance, effective zero-order diffraction suppression methods are studied and compared. The spatial resolution of the imaging system is tested by imaging a self-made Siemens star. When the recording distance is 2.1 cm, the measured resolution can reach 0.245 mm. The experimental results confirm the high imaging performance of the THz digital holography system.

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