

Abstracts

155 Mbit/s data transmission at 60 GHz using a 1/spl times/4 patch array antenna with variable optical delay lines

G. Grosskopf, R. Eggemann, D. Rohde and M.S. Choi. "155 Mbit/s data transmission at 60 GHz using a 1/spl times/4 patch array antenna with variable optical delay lines." 2001 MTT-S International Microwave Symposium Digest 01.3 (2001 Vol. III [MWSYM]): 1821-1824 vol.3.

155 Mbit/s data transmission at 60 GHz was carried out successfully with bit error rates below 10⁻⁹. The experimental transmission system included a 1/spl times/4 patch array antenna. It was fed by optically generated RF-signals and its beam was steered by tunable optical delay lines. Bit error rates below 10⁻³ could be maintained for azimuthal angles over a range of 120 degrees. The antenna is part of an experimental radio-over-fiber system for proof-of-concept of optical beamforming to be applied in broadband mobile communication systems.

[Return to main document.](#)