

COMPARISON OF MICROWAVE, MILLIMETER WAVE AND OPTICAL TECHNIQUES FOR COMMUNICATIONS

(Invited Paper)

by

F. Arams

LNR Communications, Inc.

Farmingdale, New York

Abstract

The properties at millimeter and optical/infrared wavelengths of four key communications system elements will be surveyed. The key elements are: sensitivity of the receiving system, antenna properties, available transmitter power and atmospheric transmission. Fundamental equations, available data, and parameters on realizable systems will be presented and discussed.