

Limitations in Distance and Frequency Due to Chromatic Dispersion in Fibre-Optic Microwave and Millimeter-Wave Links

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Chromatic dispersion significantly limits the distance and/or frequency in fibre-optic microwave and millimeter-wave links based on direct detection due to a decrease of the carrier to noise ratio. The limitations in links based on coherent remote heterodyne detection, however, are far less significant, and are primarily due to an increase of the phase noise.

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