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Coupling Optimization in Holographic Coupler

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Abstract - Literature review revealed, a method to optimize the coupling efficiency between two fibers using a holographic coupler consisting of two holograms. This method is used to describe the mechanism of coupling energy in between two large area dispersion flattened fibers. The overall efficiency is assumed to be the product of the intrinsic coupling efficiency of fibers and the diffraction efficiency of the holographic coupler, It is found that a communication system using single mode LADFF (Large Area Dispersion Flattened Fiber) has better performance than that of a communication system using single mode graded index fiber.