

## Asymmetrical Gauss-Hermite beam-mode analysis of the hexagonal horn

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*Tao Shen, Wenbin Dou and Zhongliang Sun. "Asymmetrical Gauss-Hermite beam-mode analysis of the hexagonal horn." 1998 Transactions on Microwave Theory and Techniques 46.10 (Oct. 1998, Part I [T-MTT]): 1444-1451.*

Asymmetrical Gauss-Hermite beam-mode analysis is presented to investigate the hexagonal horn. The fractional power in the fundamental beam mode is approximately 86%. The near- and far-field radiation patterns are calculated. The high fractional power in the fundamental beam mode of the horn indicates that it can be used as an efficient Gaussian beam launcher in quasi-optical systems.

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