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Comparison of crossed-Porro prism resonator design with conventional mirror resonator design in a Ho3+:YAG laser

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We compare a Ho\$3+:YAG laser cavity that includes two crossed Porro prisms instead of cavity end mirrors with a conventional mirror resonator. While the Porro resonator shows a slightly lower slope efficiency of 67.4 % than the mirror resonator, it is superior in terms of beam quality and stability.

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