

Abstract Submitted
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Temperature influenced higher order transverse mode in vertical-cavity surface emitting laser KAI-WEI TU, YU-HENG WU, TSU-CHIANG YEN, None — This research discussed the transverse beam profile of VCSEL with variation of ambient temperature. In this experiment, the transverse mode profile presented a broken pattern when ambient temperature kept decreasing. On the other hand, the optical spectrum analyzer showed that the laser output appeared another frequency when the same approach applied. Therefore, an experiment was conducted by using grating in order to observe the separation of beam. The two separate and unstable spots showed on screen 10 meter away, indicating that the different wavelength really emerged in the output of laser. This result contributes to understanding the relationship between temperature modification and the transverse modes of VCSEL.

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None

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