OVERVIEW
This technical note presents the results of a test performed on a typical production model LDX-3525B Precision Current Source to measure the effectiveness of current limit. The test was also performed on other manufacturers’ laser diode drivers for comparison.

MEASUREMENT SET UP
The measurement setup is shown in Figure 1. Each tested unit was set to drive a 1W load, with the DC output level set to 100 mA, and the limit set at 125 mA. The output was then modulated via the analog input port to produce output modulation of ±50 mA. Both the input modulation voltage and the load voltage (proportional to output current) were measured with an oscilloscope.

RESULTS
It can be seen from the results in Figure 2a – 2c that of the tested units, only the LDX-3525B effectively clamped the output current at the set limit, and prevented overdrive current.