

**Datasheet for #sbcw308 DN**

Recommendations:

Please read the starter kit user manual (at least installation chapter 5), if available, and have a look at the FAQ at <http://www.alpeslasers.ch/alfaq.pdf>

**WARNING:** Operating the laser with higher current or voltage than specified in this document may cause damage and will result in loss of warranty, unless Alpes Lasers has permitted to do so!

**WARNING:** Beware of the polarity of the laser. This laser has to be powered with negative current on the laser contact (= bonding pad, corresponding to the label "laser" on the LLH) and the positive current on the base contact (= submount, corresponding to the label "base" on the LLH). To use with a power-supply ILX Lightwave LDX-3232 or equivalent.

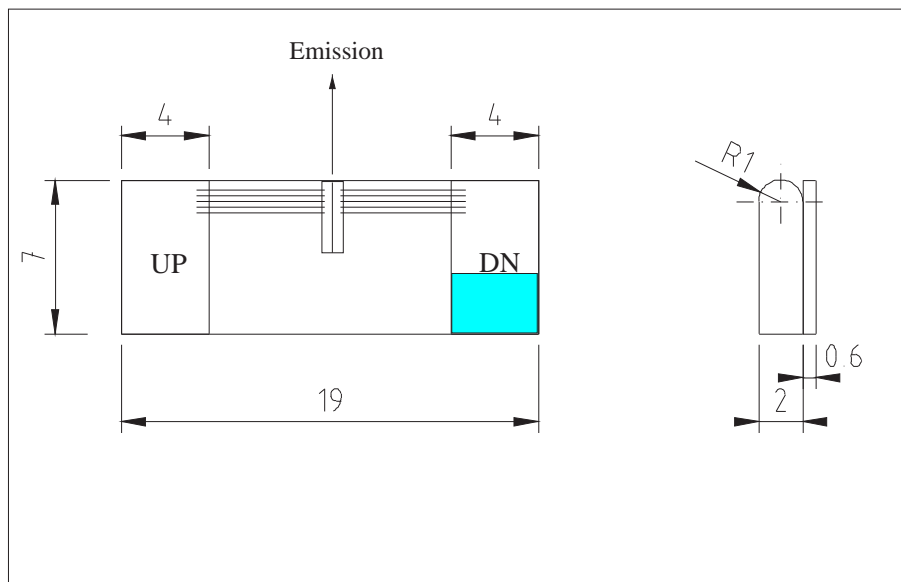


Figure 1: Support mounting for #sbcw308 DN (please note that the laser is connected to the DN pad drawn in blue)

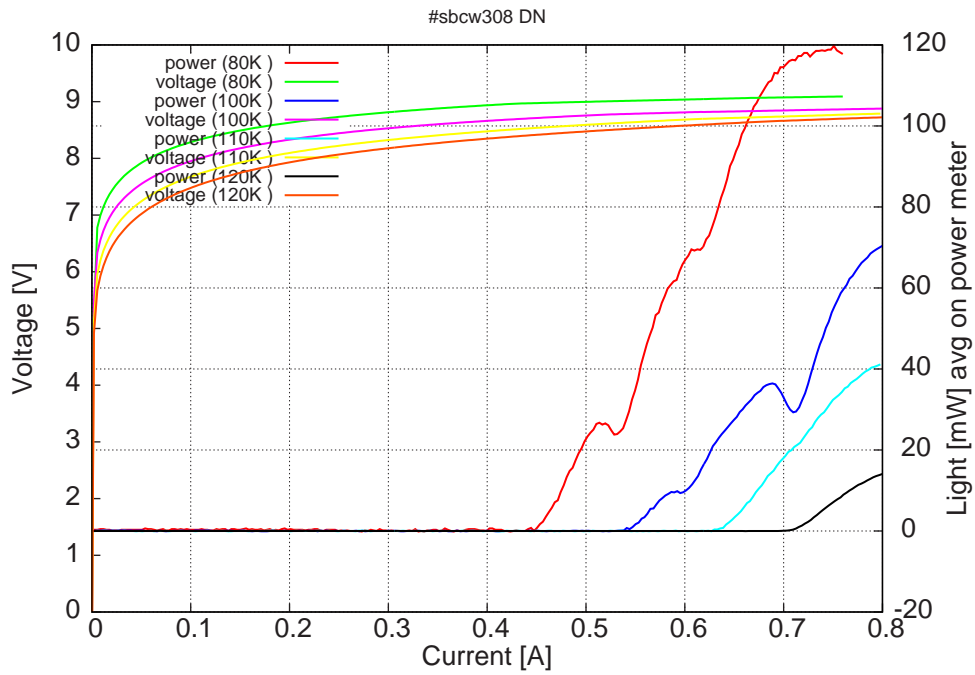


Figure 2: peak voltage and average power vs peak current in continuous-wave operation (doesn't lase at 125K) (the solid squares indicate the maximum singlemode emitted power)

Note: at 80K:  $I_{th}=440\text{mA}$  /  $V_{th}= 8.95\text{V}$  (4-wires measurements)

Maximum operation current: 0.65A at 80K, 0.74A at 100K, 0.77A at 110K, and 0.8A at 120K.

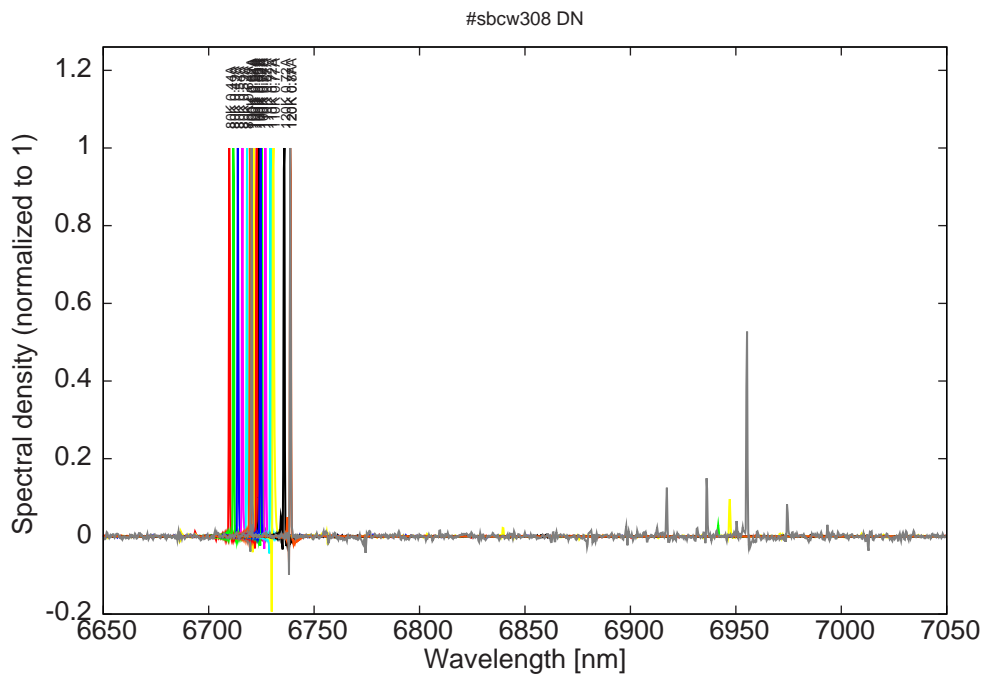


Figure 3: spectra at 80K, 100K, 110K, and 120K (all spectra)

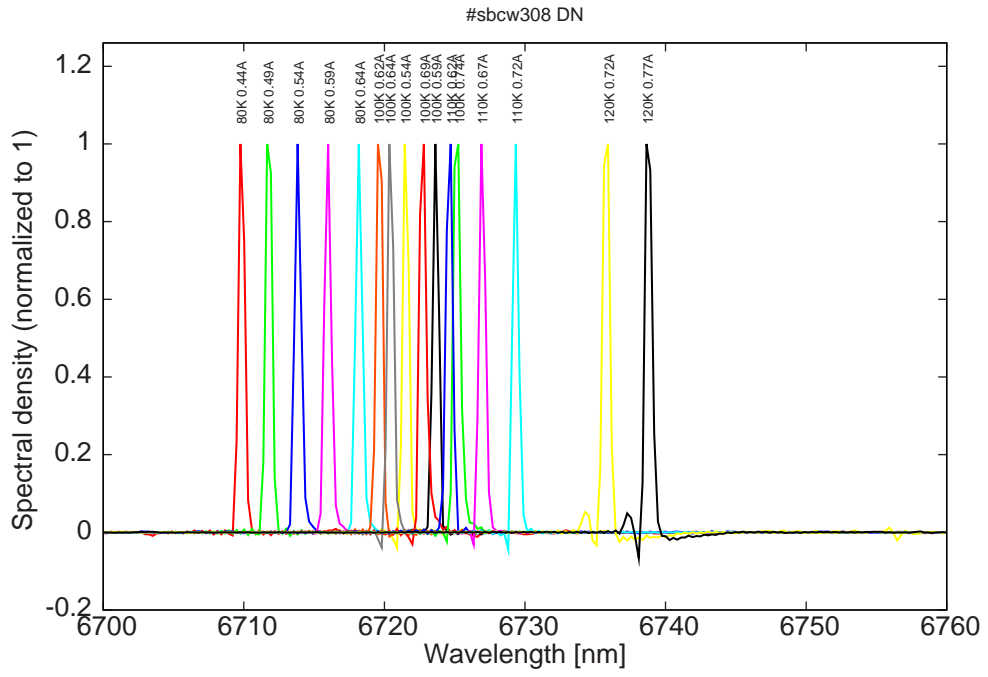


Figure 4: spectra at 80K, 100K, 110K, and 120K (monomode spectra)

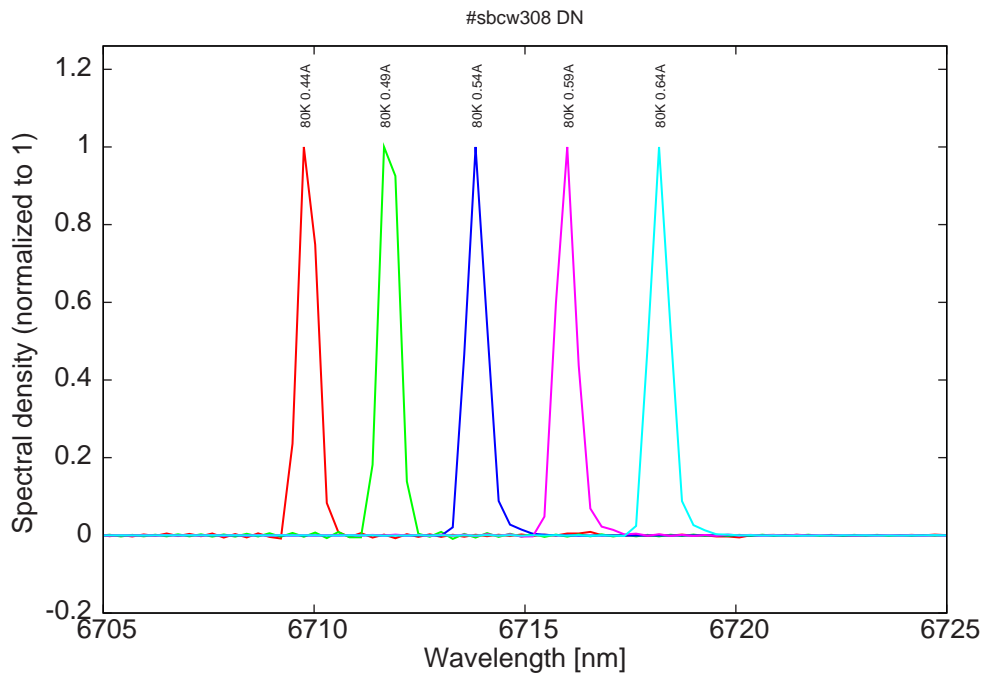


Figure 5: spectra at 80K (monomode)

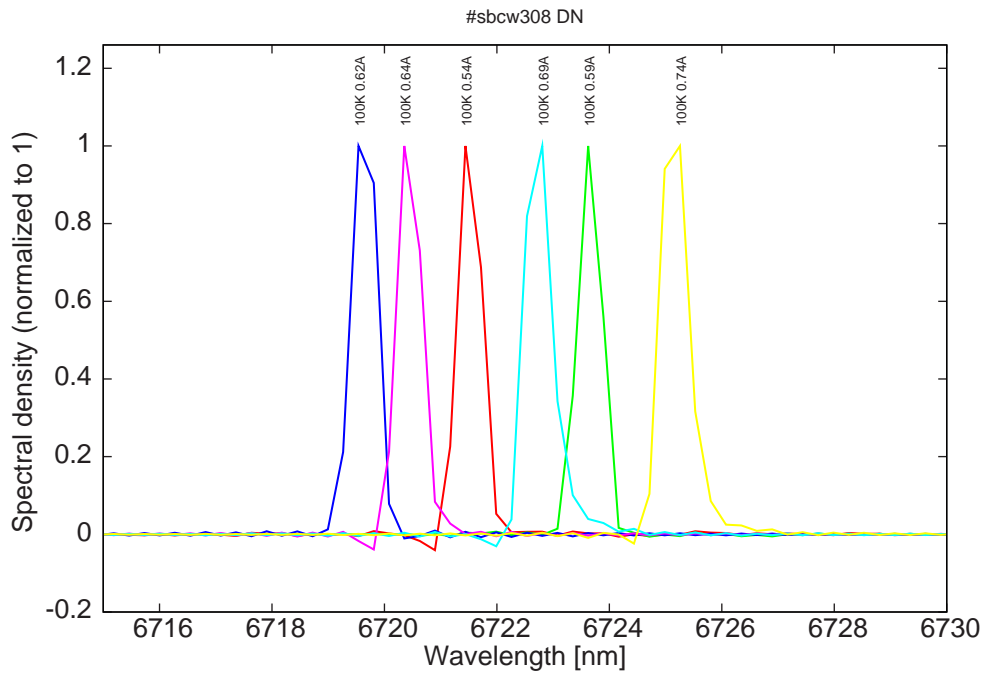


Figure 6: spectra at 100K (monomode)

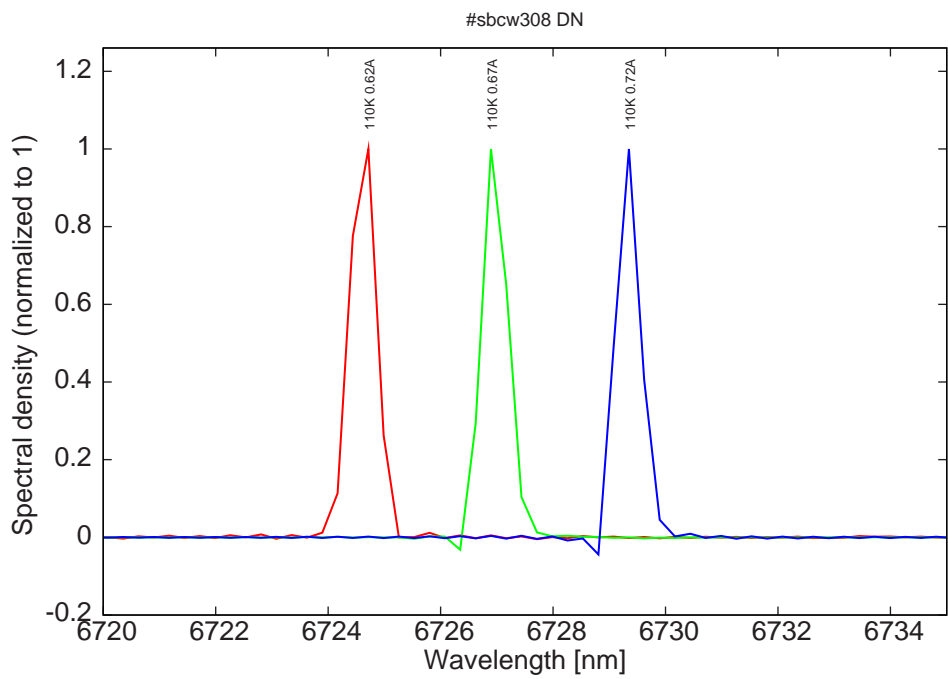


Figure 7: spectra at 110K (monomode range)

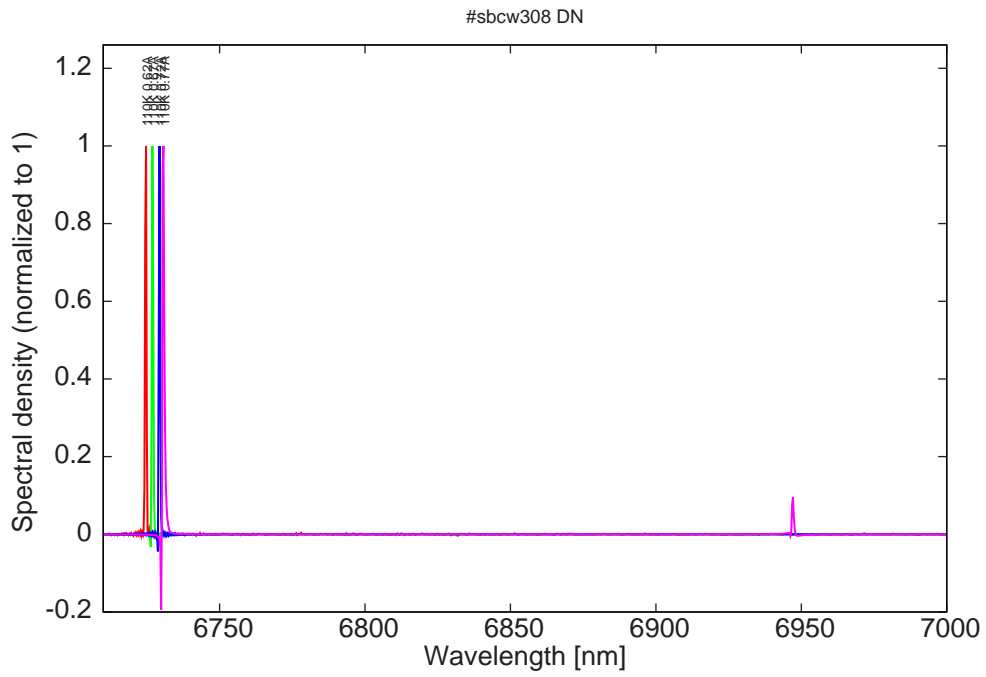


Figure 8: spectra at 110K

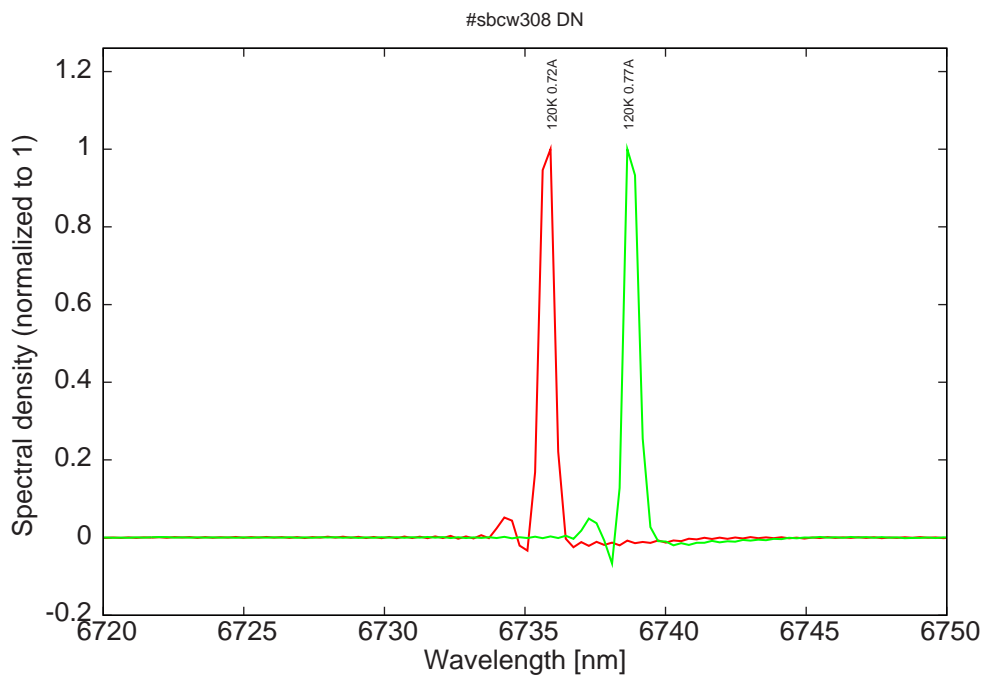


Figure 9: spectra at 120K (monomode range)

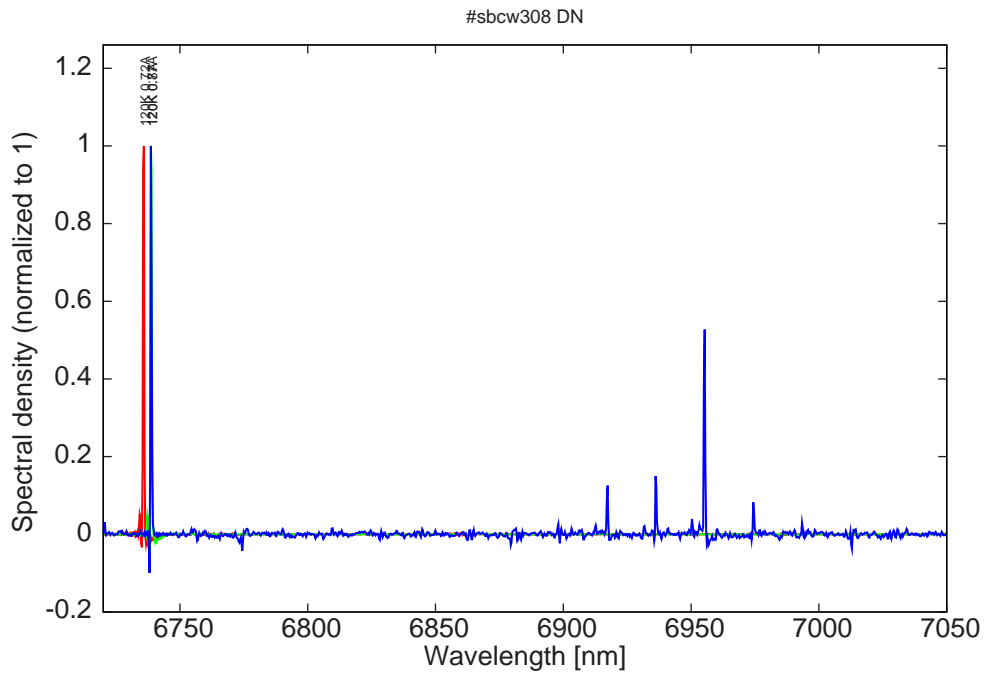


Figure 10: spectra at 120K