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#sb345 UP

Datasheet for #sb345 UP

Please read the starter kit user manual (at least installation section 4), if available, and have a look at the FAQ at <http://www.alpeslasers.ch/alfaqa.pdf>!

WARNING: Operating the laser with longer pulses, shorter period, or higher voltage or current than specified in this document may cause damage and will result in loss of warranty, unless agreed upon with Alpes Lasers!

λ [nm]	ν [cm ⁻¹]	P[mW]	Temp[°C]	U_{LDD} [V]	I_{pulse} [A]
5817.3	1719	0.1	-30	8.5	0.34
5817.5	1719	0.3	-30	9	0.41
5817.5	1719	0.8	-30	9.5	0.49
5819.2	1718.4	1.5	-30	10.5	0.62
5824.2	1717	0.1	-15	8.5	0.36
5824.6	1716.9	0.4	-15	9	0.43
5824.9	1716.8	1	-15	9.5	0.5
5825.1	1716.7	1.3	-15	10	0.55
5825.4	1716.6	1.8	-15	10.5	0.62
5831.4	1714.9	0.3	0	9	0.43
5831.6	1714.8	0.7	0	9.5	0.51
5831.8	1714.7	1.1	0	10	0.58
5836.9	1713.2	0.1	15	8	0.31
5837.1	1713.2	0.1	15	8.5	0.36
5837.3	1713.1	0.2	15	9	0.43
5837.7	1713	0.4	15	9.5	0.5
5838.1	1712.9	0.7	15	10	0.55
5843.2	1711.4	0	30	8	0.33
5843.4	1711.3	0.1	30	8.5	0.39
5843.6	1711.3	0.1	30	9	0.46
5844	1711.2	0.2	30	9.5	0.51
5844.3	1711.1	0.4	30	10	0.58

Table 1 : optical output power as function of operating parameters

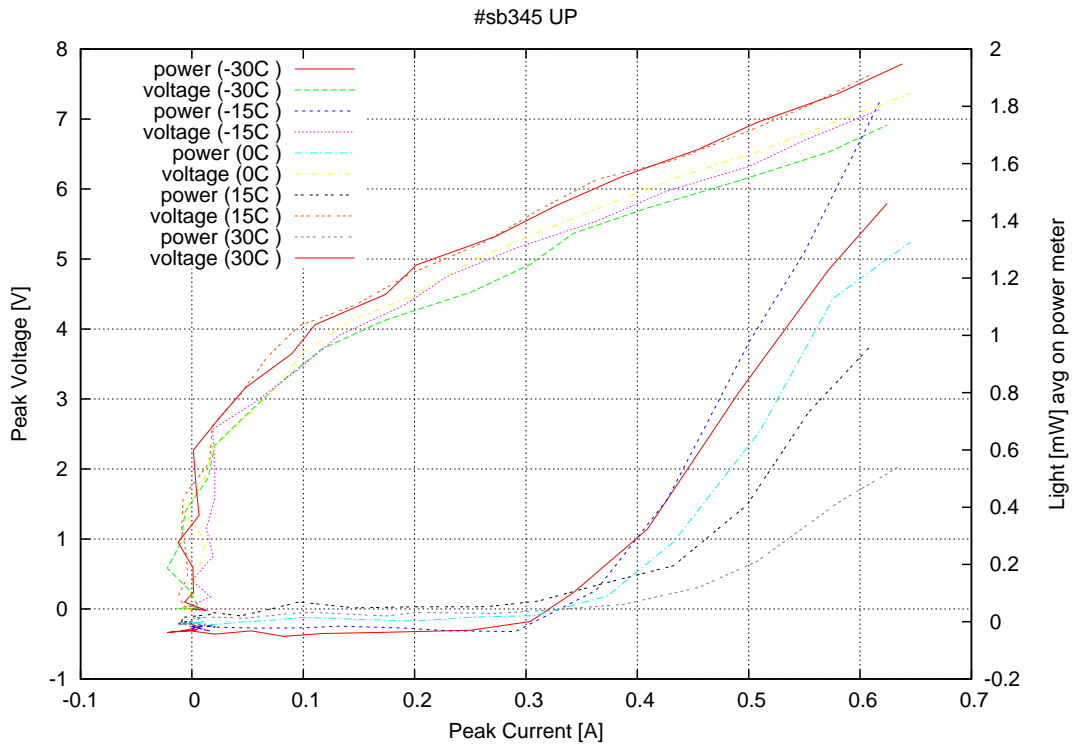


Figure 1: peak voltage and average power vs peak current at 2%dc

Note: data taken with 50ns pulses, 2.5 μ s period.

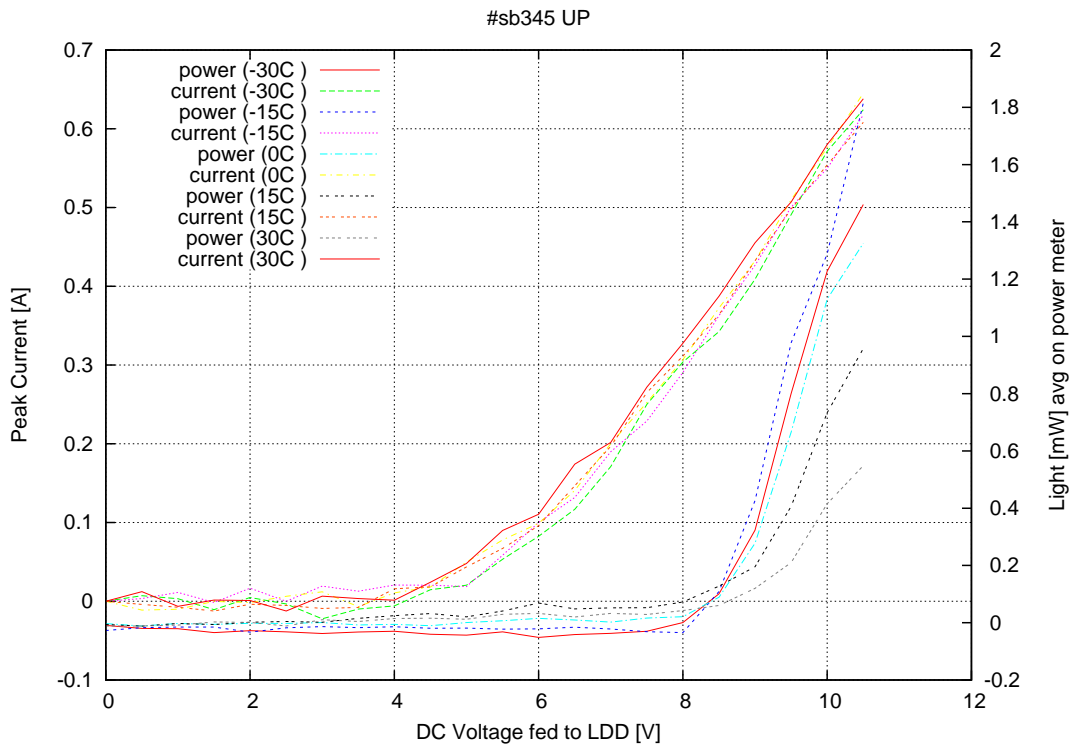


Figure 2: peak current and average power vs LDD voltage at 2%dc

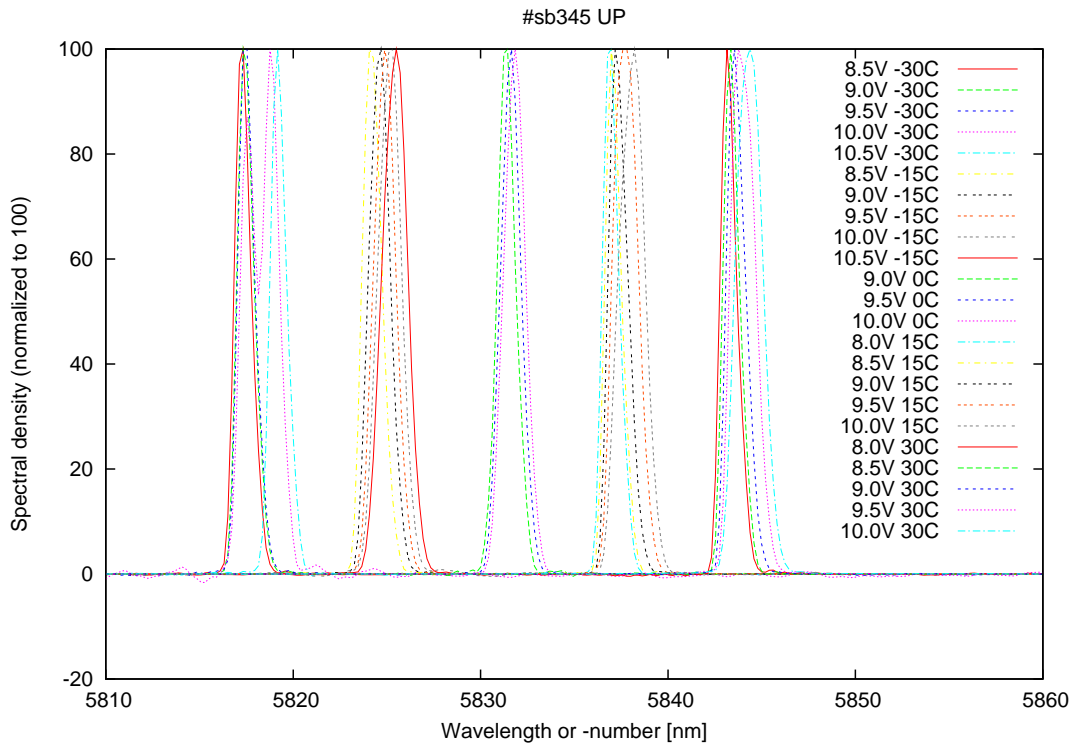


Figure 3: spectra at -30C, -15C, 0C, 15C and 30C at 2%dc for various LDD voltage

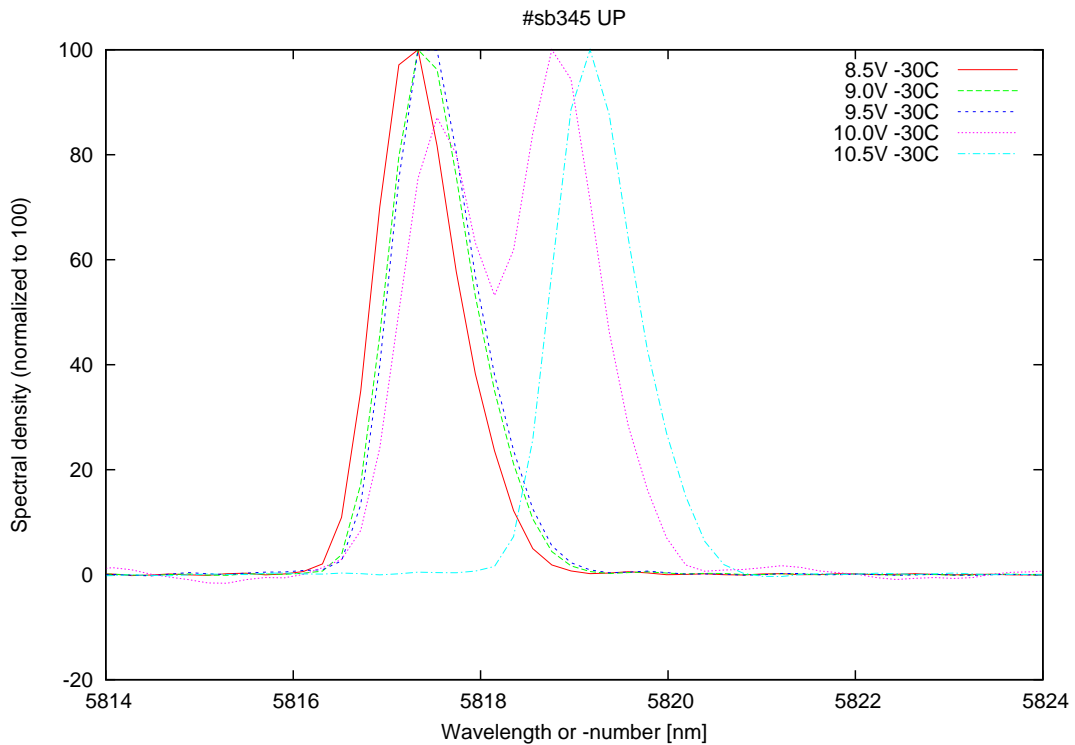


Figure 4: spectra at -30C for various LDD voltage (bimode at 10.0V, then mono at 10.5V but with mode jumping)

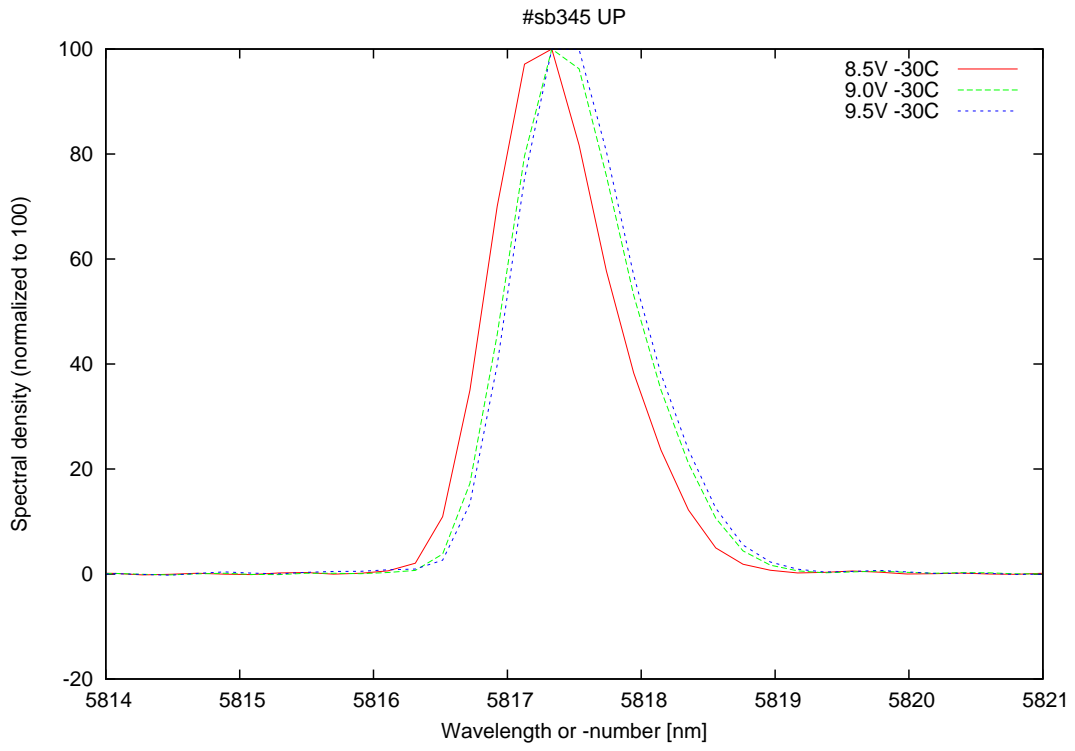


Figure 5: spectra at -30C for various LDD voltage (monomode range)

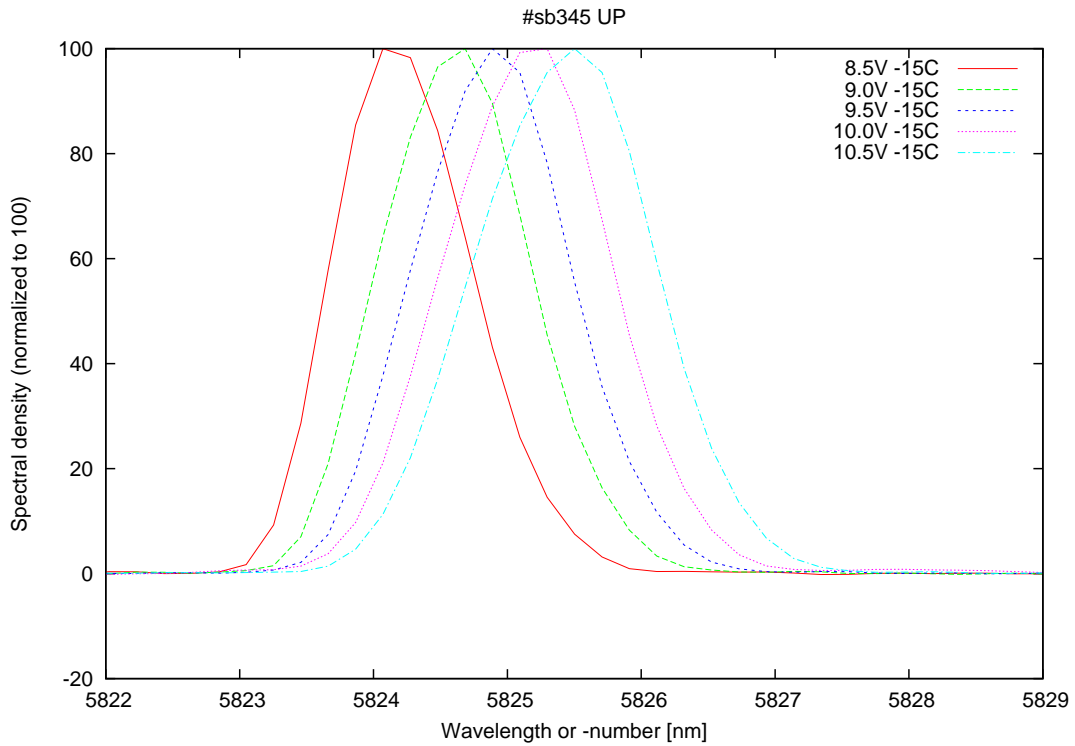


Figure 6: spectra at -15C for various LDD voltage

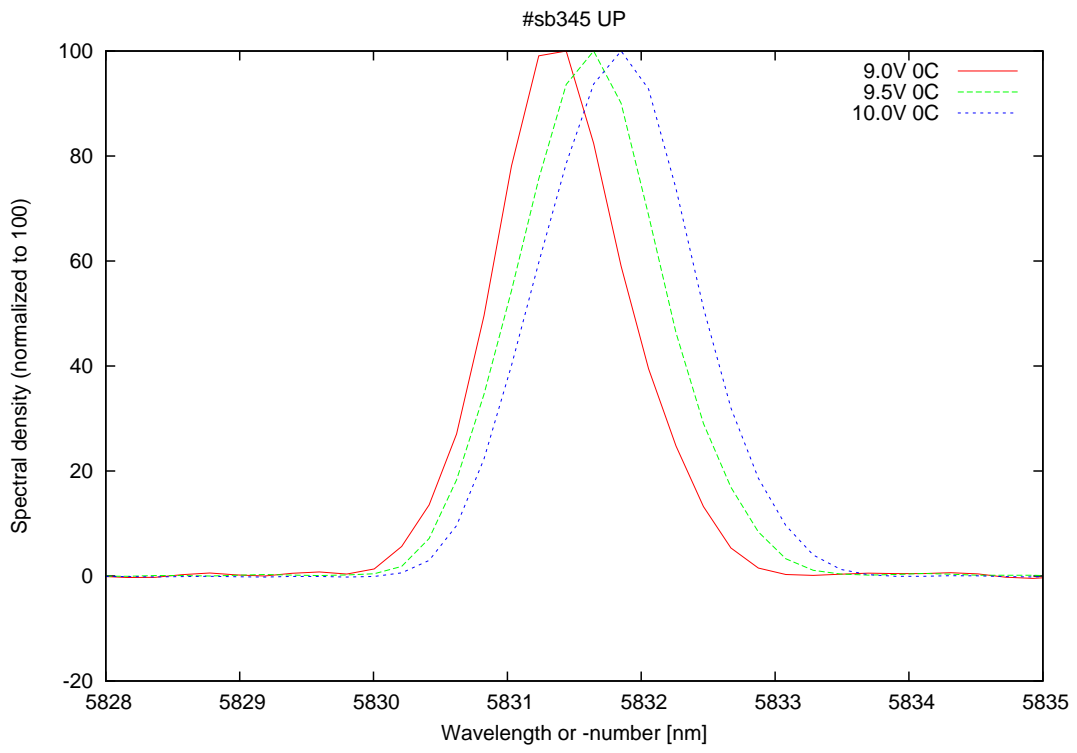


Figure 7: spectra at 0C for various LDD voltage

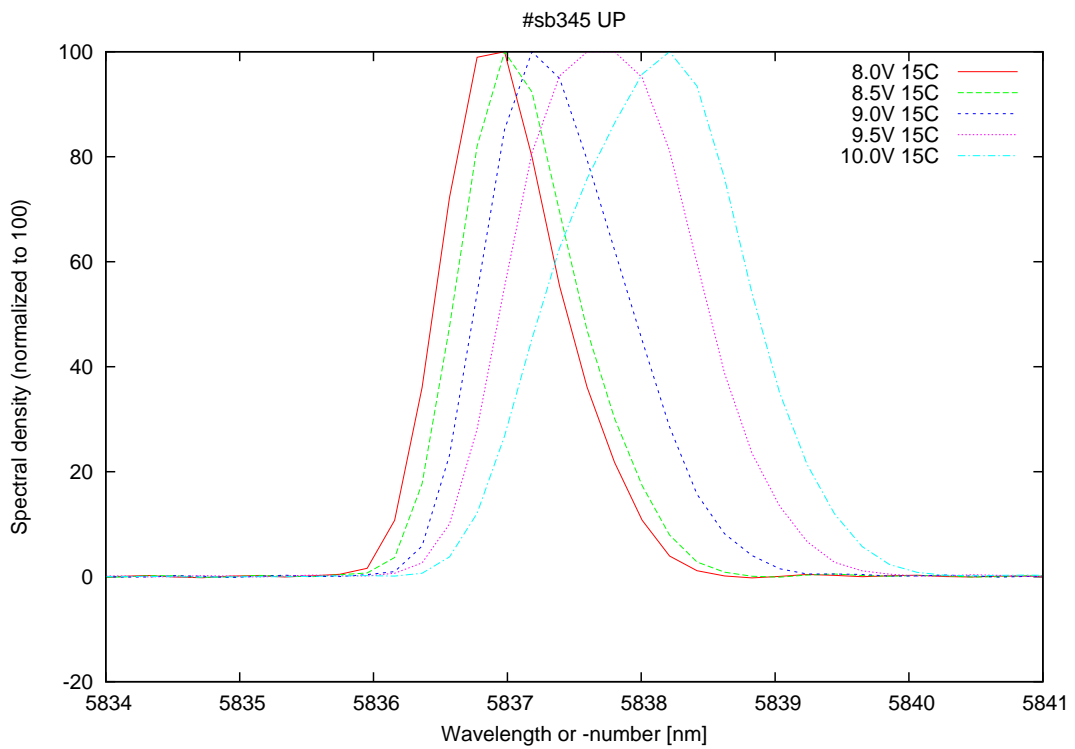


Figure 8: spectra at 15C for various LDD voltage

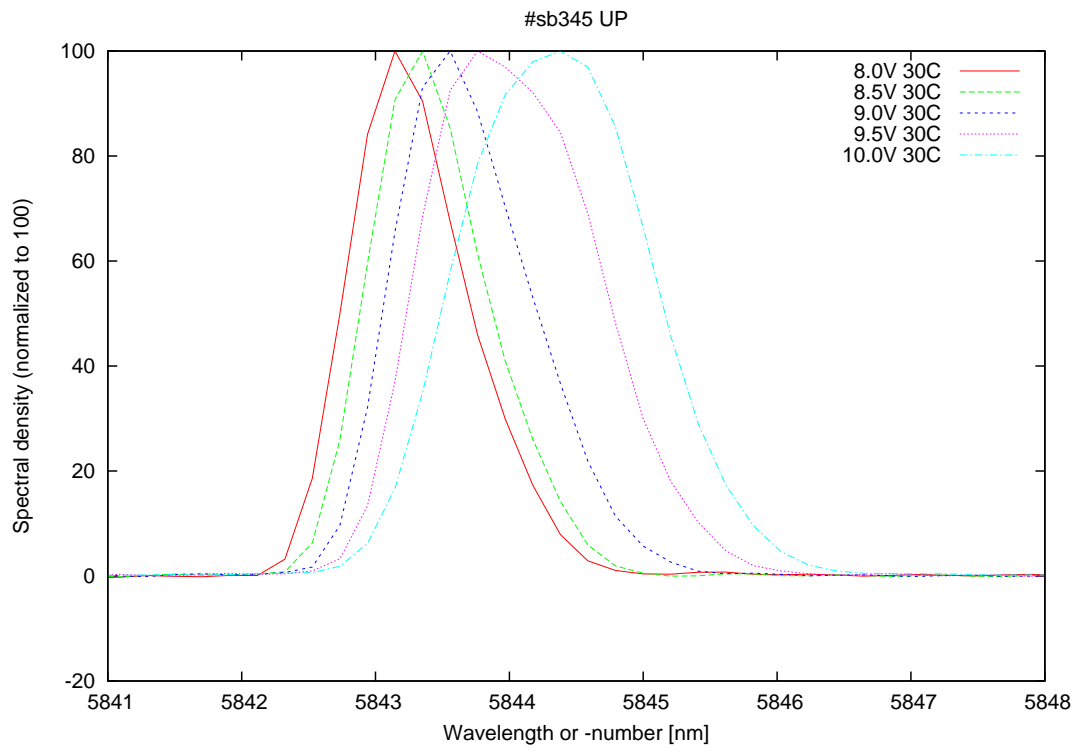


Figure 9: spectra at 30C for various LDD voltage