

Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

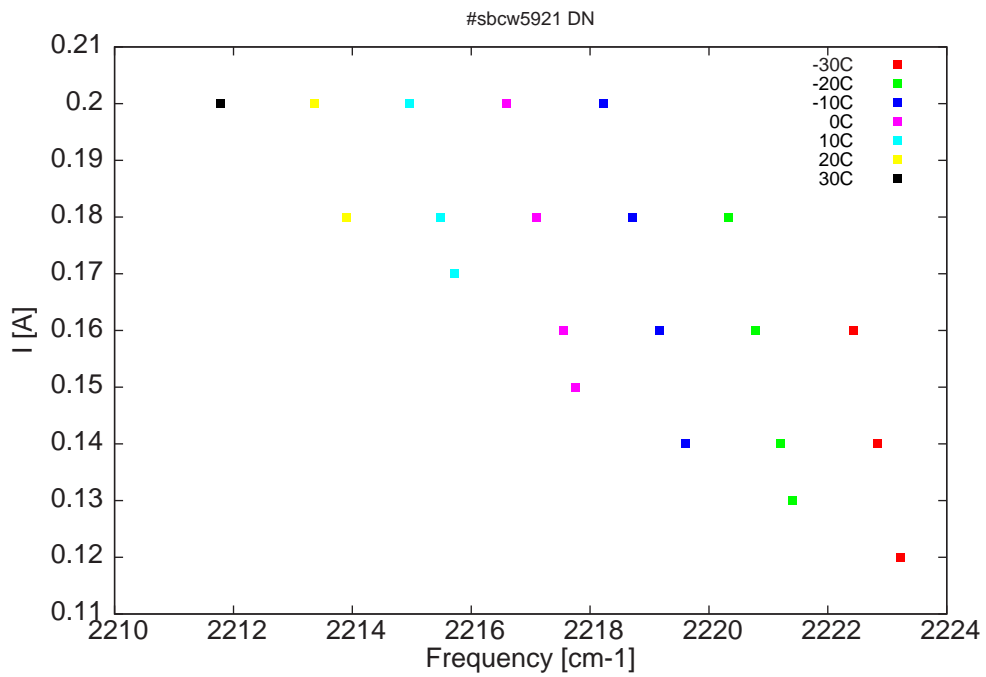


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

λ [nm]	ν [cm ⁻¹]	P[mW]	Temp[°C]	U_{LASER} [V]	I[A]
4498	2223.2	1	-30	8.3	0.12
4498.8	2222.8	7.7	-30	8.5	0.14
4499.6	2222.4	15.3	-30	8.6	0.16
4501.6	2221.4	0.6	-20	8.3	0.13
4502.1	2221.2	3.5	-20	8.4	0.14
4502.9	2220.8	10.3	-20	8.6	0.16
4503.8	2220.3	17.2	-20	8.7	0.18
4505.3	2219.6	0.4	-10	8.4	0.14
4506.2	2219.2	6.1	-10	8.5	0.16
4507.1	2218.7	12.7	-10	8.7	0.18
4508.1	2218.2	19.1	-10	8.9	0.2
4509.1	2217.8	0.1	0	8.4	0.15
4509.5	2217.6	2	0	8.5	0.16
4510.4	2217.1	7.8	0	8.7	0.18
4511.4	2216.6	13.7	0	8.8	0.2
4513.2	2215.7	0.9	10	8.6	0.17
4513.7	2215.5	3.4	10	8.6	0.18
4514.7	2215	8.7	10	8.8	0.2
4516.9	2213.9	0.1	20	8.6	0.18
4518	2213.4	3.9	20	8.8	0.2
4521.2	2211.8	0.1	30	8.7	0.2

Table 1 : singlemode optical output power as function of operating parameters

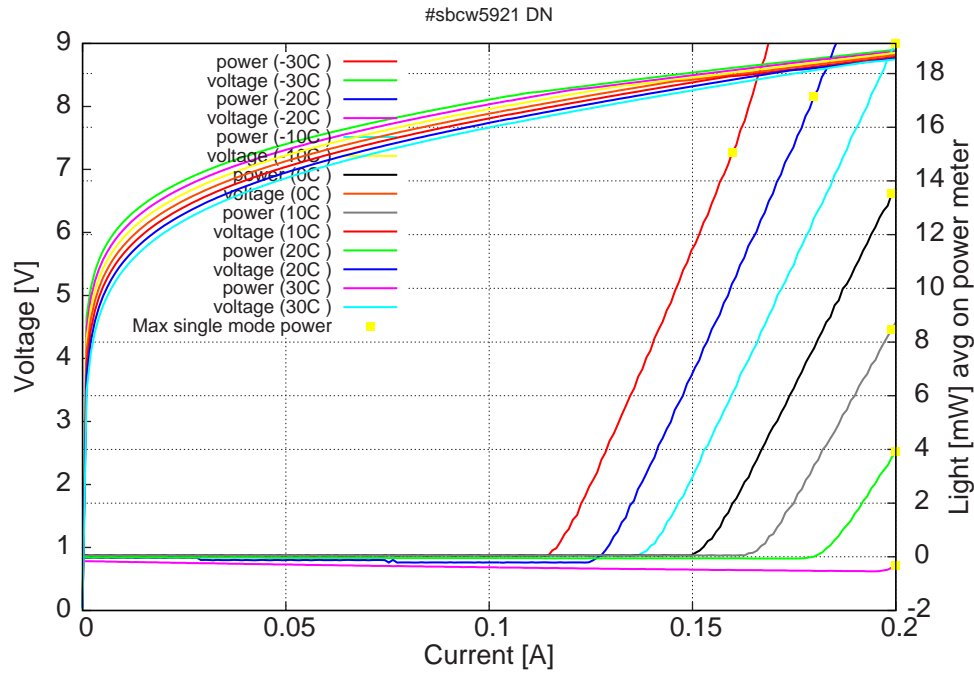


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

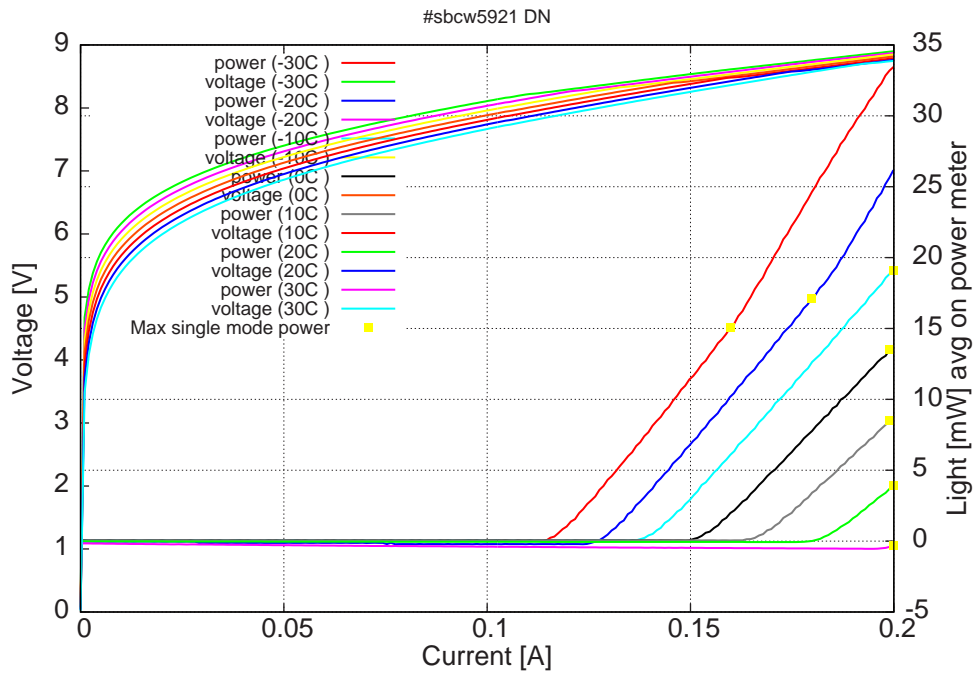
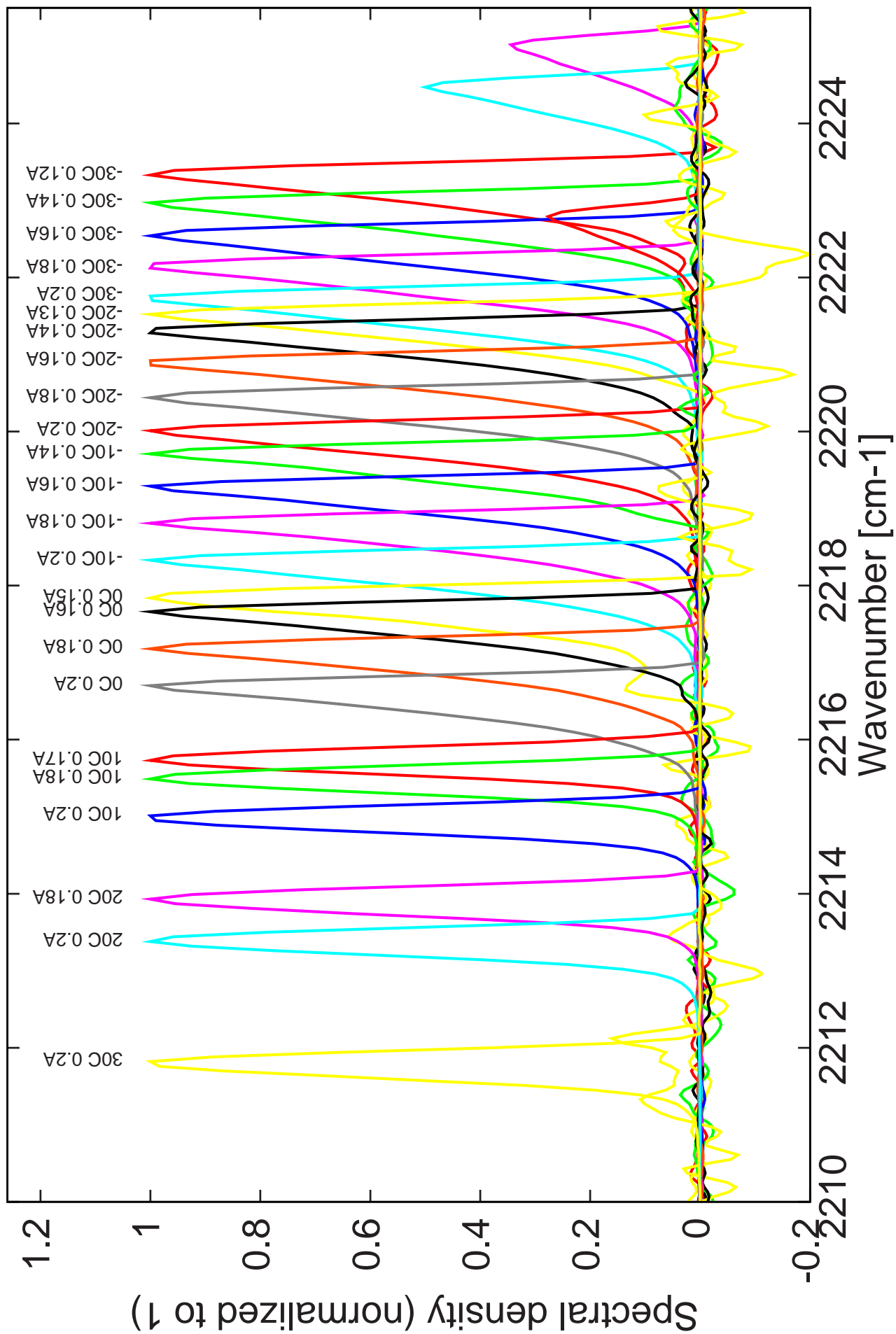


Figure 5: voltage and avg power vs current in continuous-wave operation (including the multimode region)

Note: at -30C: $I_{th}=115\text{mA}$ / $V_{th}= 8.2\text{V}$ (2-wires measurements). Maximum operation current: 0.2A for all temperatures.

Figure 4: spectra at different temperatures for various DC currents



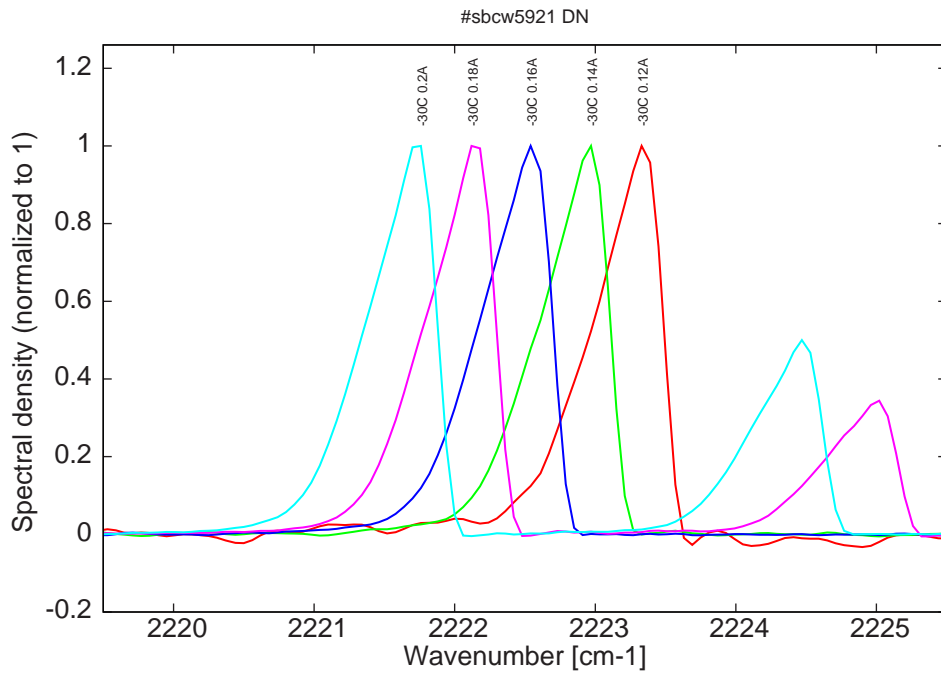


Figure 6: spectra at -30C for various DC currents (monomode up to 0.16A, then becomes bimode)

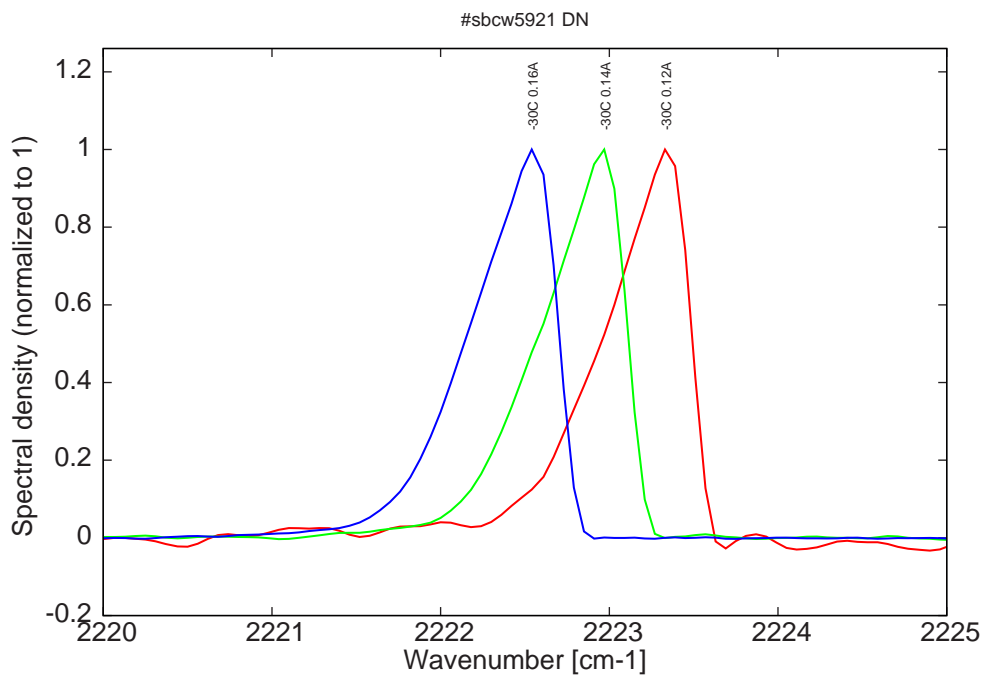


Figure 7: spectra at -30C for various DC currents (monomode range)

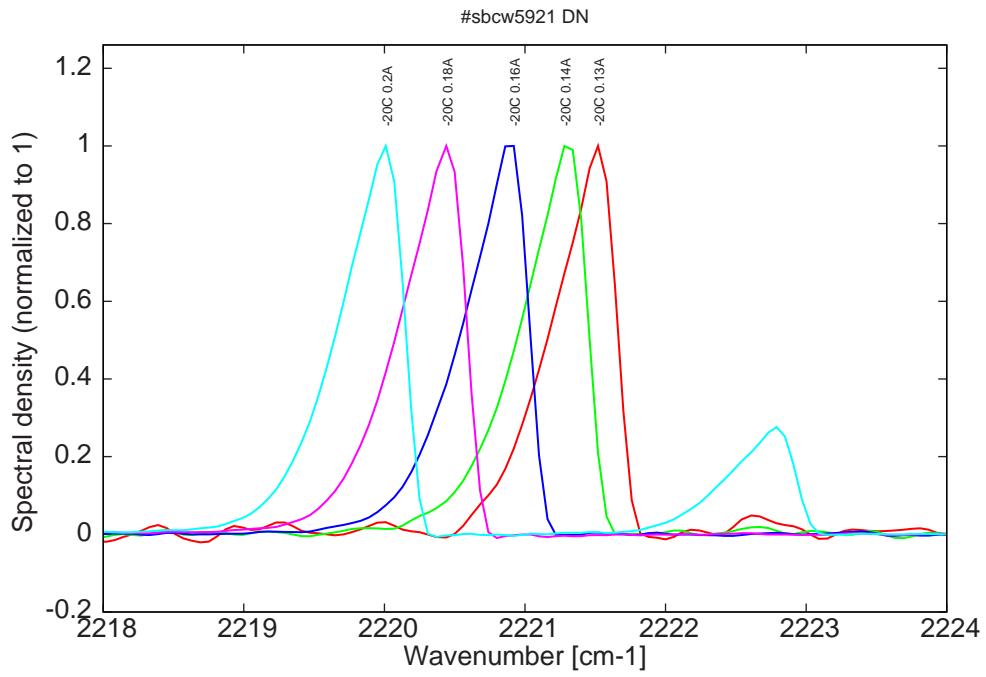


Figure 8: spectra at -20C for various DC currents (monomode up to 0.18A, then becomes bimode)

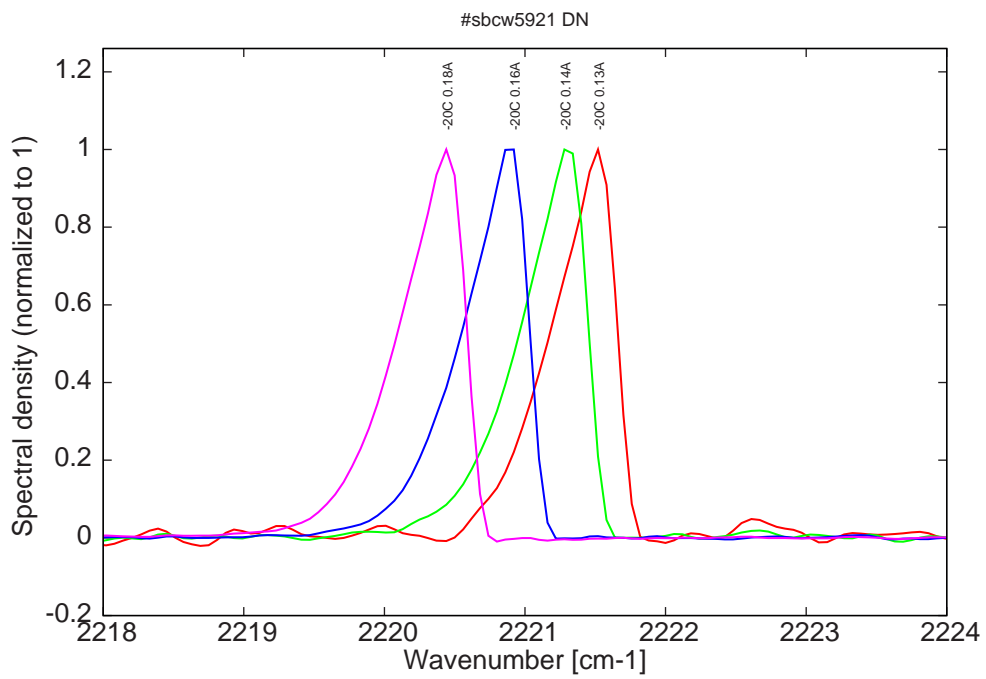


Figure 9: spectra at -20C for various DC currents (monomode range)

Figure 9: spectra between -10C and 30C for various DC currents (all monomode)

