

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

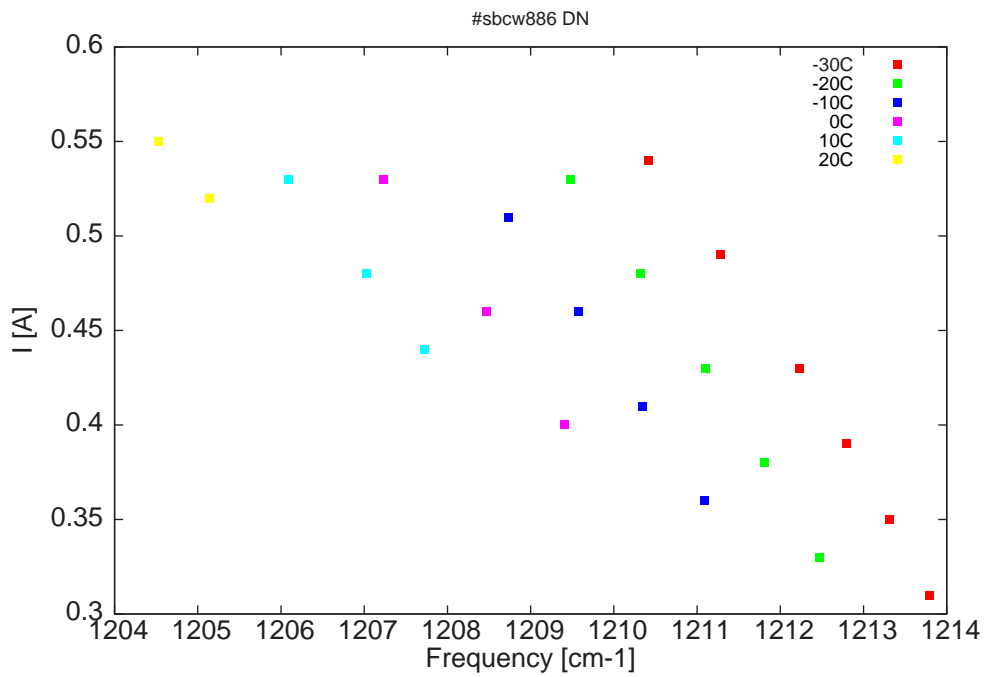


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

λ [nm]	ν [cm ⁻¹]	P[mW]	Temp[°C]	U_{LASER} [V]	I[A]
8238.6	1213.8	0.1	-30	8.6	0.31
8241.9	1213.3	6.5	-30	8.8	0.35
8245.5	1212.8	13.1	-30	9	0.39
8249.3	1212.2	17.4	-30	9.2	0.43
8255.7	1211.3	19.2	-30	9.5	0.49
8261.6	1210.4	18.1	-30	9.8	0.54
8247.6	1212.5	0.1	-20	8.6	0.33
8252.1	1211.8	7.1	-20	8.9	0.38
8257	1211.1	14.4	-20	9.1	0.43
8262.3	1210.3	18.6	-20	9.4	0.48
8268	1209.5	21	-20	9.7	0.53
8257.1	1211.1	0.1	-10	8.7	0.36
8262.1	1210.3	6.4	-10	9	0.41
8267.4	1209.6	12.8	-10	9.3	0.46
8273.1	1208.7	17.3	-10	9.5	0.51
8268.5	1209.4	0.1	0	8.9	0.4
8274.9	1208.5	7.3	0	9.2	0.46
8283.4	1207.2	13.5	0	9.6	0.53
8280	1207.7	0.1	10	9.1	0.44
8284.8	1207	3.2	10	9.3	0.48
8291.2	1206.1	7	10	9.6	0.53
8297.8	1205.1	0.1	20	9.5	0.52
8302	1204.5	1.3	20	9.7	0.55

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

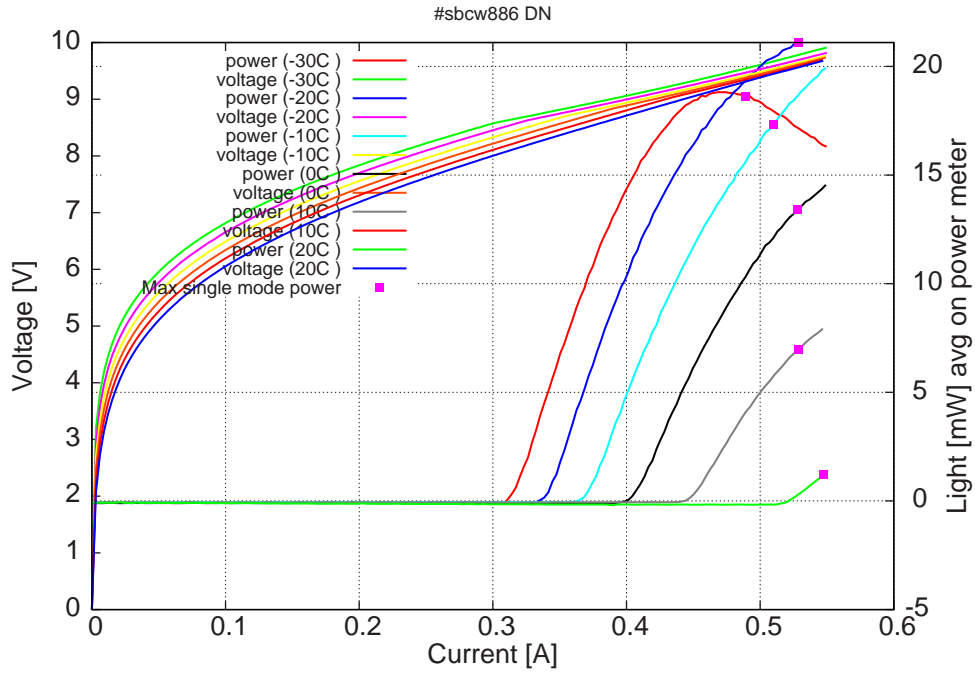


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -30C: Ith=310mA / Vth= 8.62V (2-wires measurements).

Note: Maximum operation current: 0.55A for all temperatures.

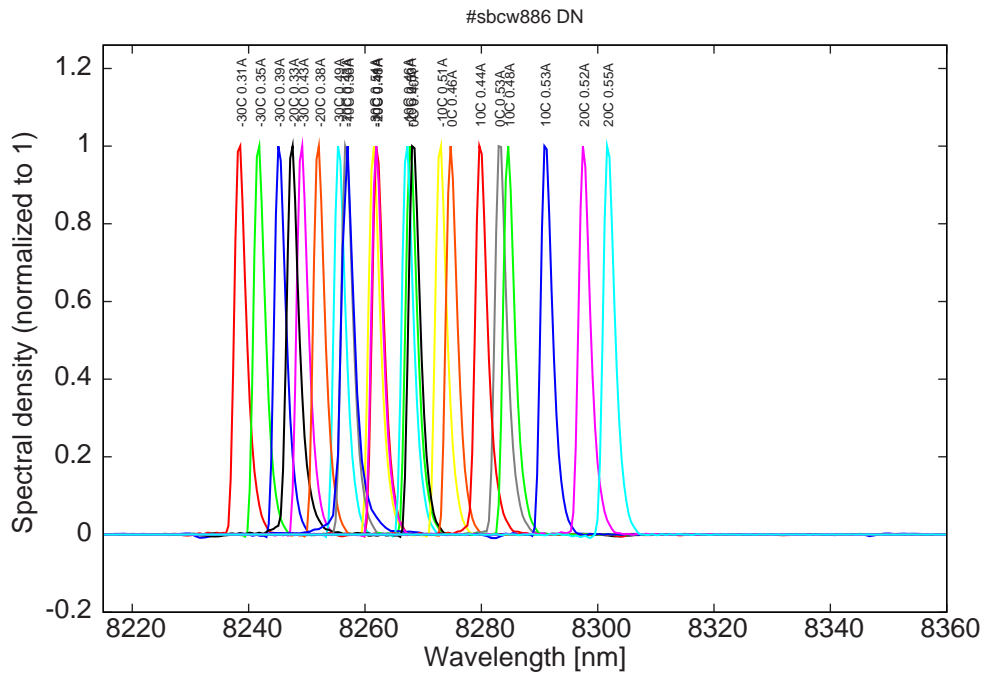


Figure 5: spectra at -30C, -20C, -10C, 0C, 10C and 20C for various DC currents

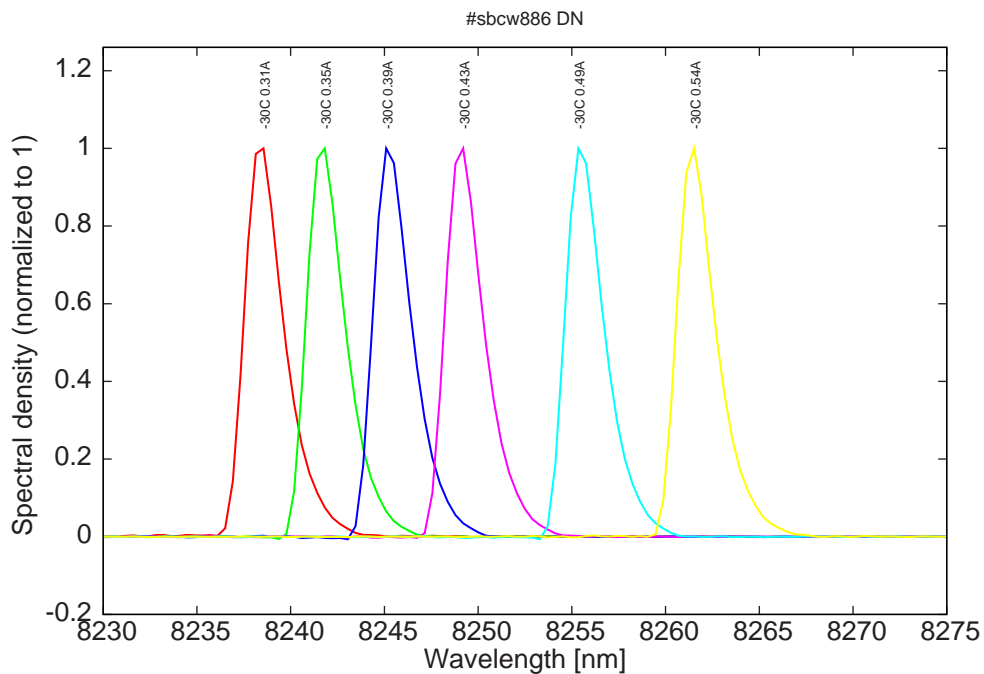


Figure 6: spectra at -30C for various DC currents

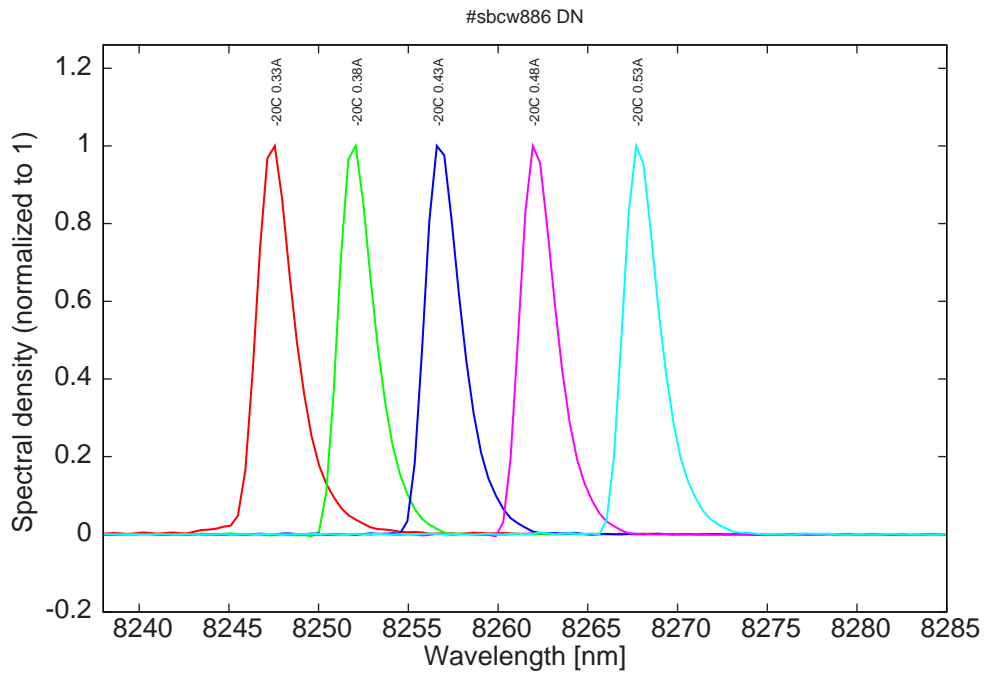


Figure 7: spectra at -20C for various DC currents

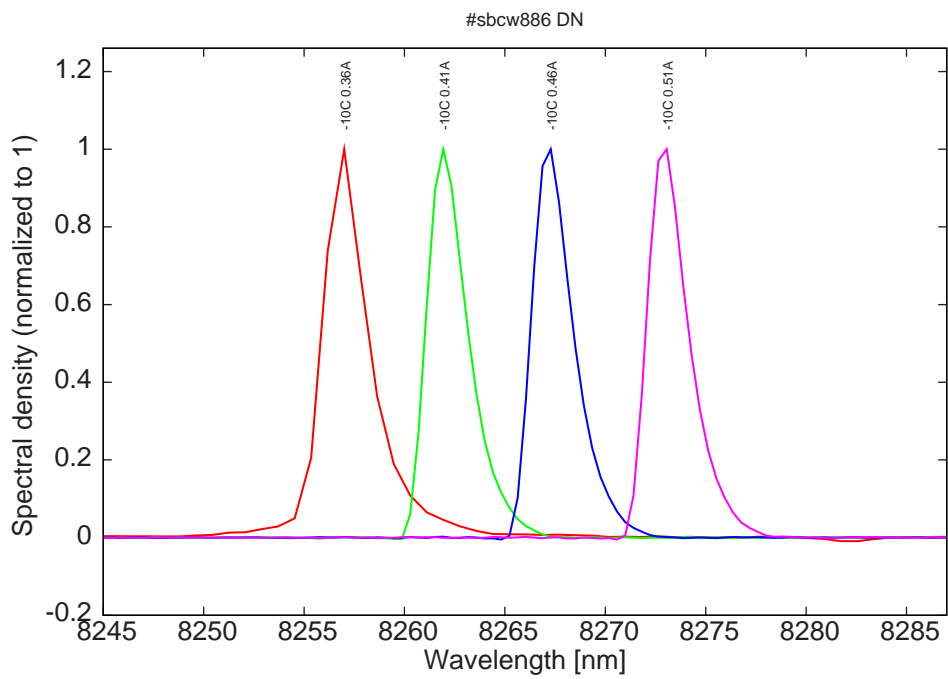


Figure 8: spectra at -10C for various DC currents

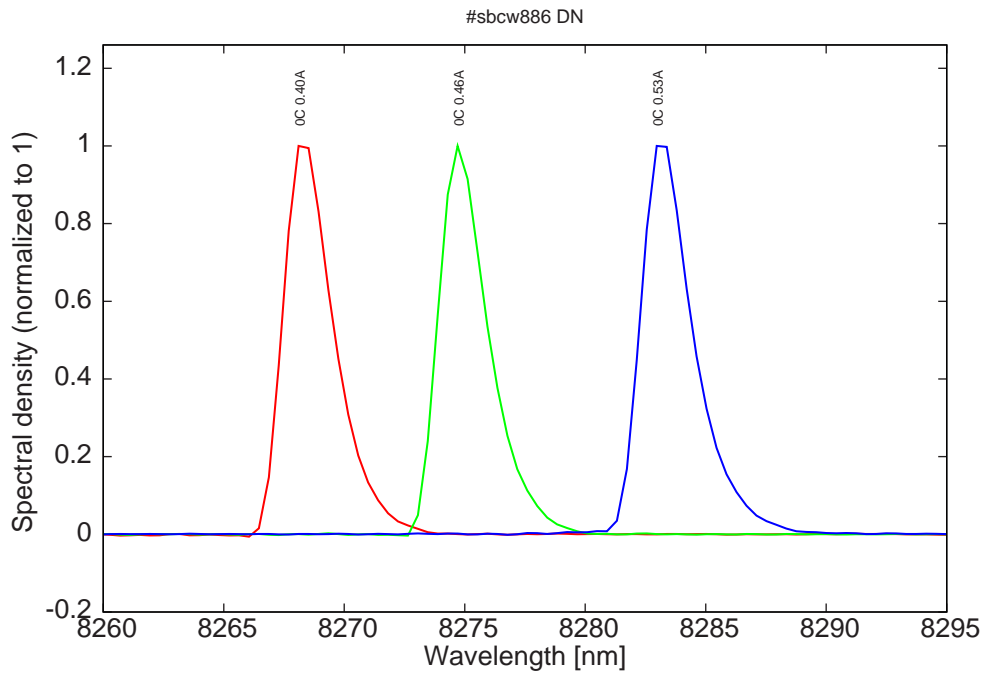


Figure 9: spectra at 0C for various DC currents

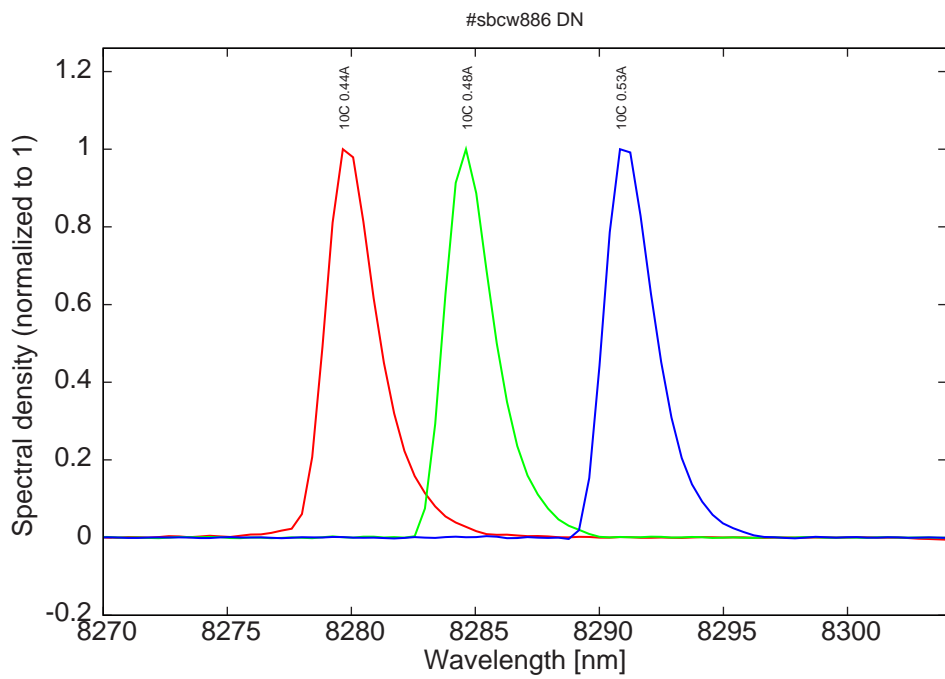


Figure 10: spectra at 10C for various DC currents

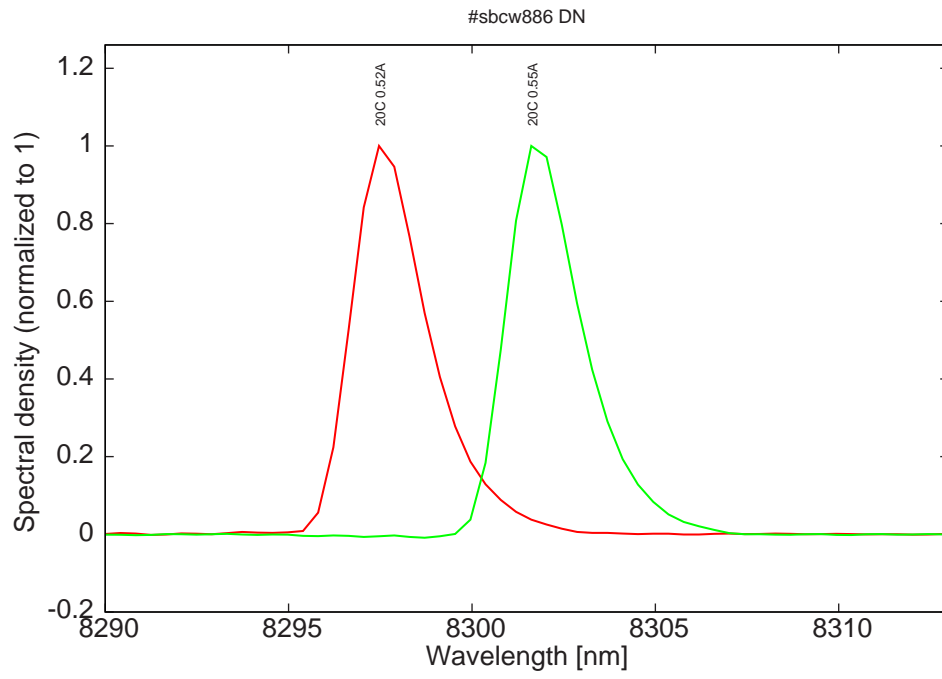


Figure 11: spectra at 20C for various DC currents