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Datasheet for #sbcw12209 DN

Recommendations:

Please read the User Manual and have a look at the FAQ at
`http://www.alpeslasers.ch/?a=142`

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.

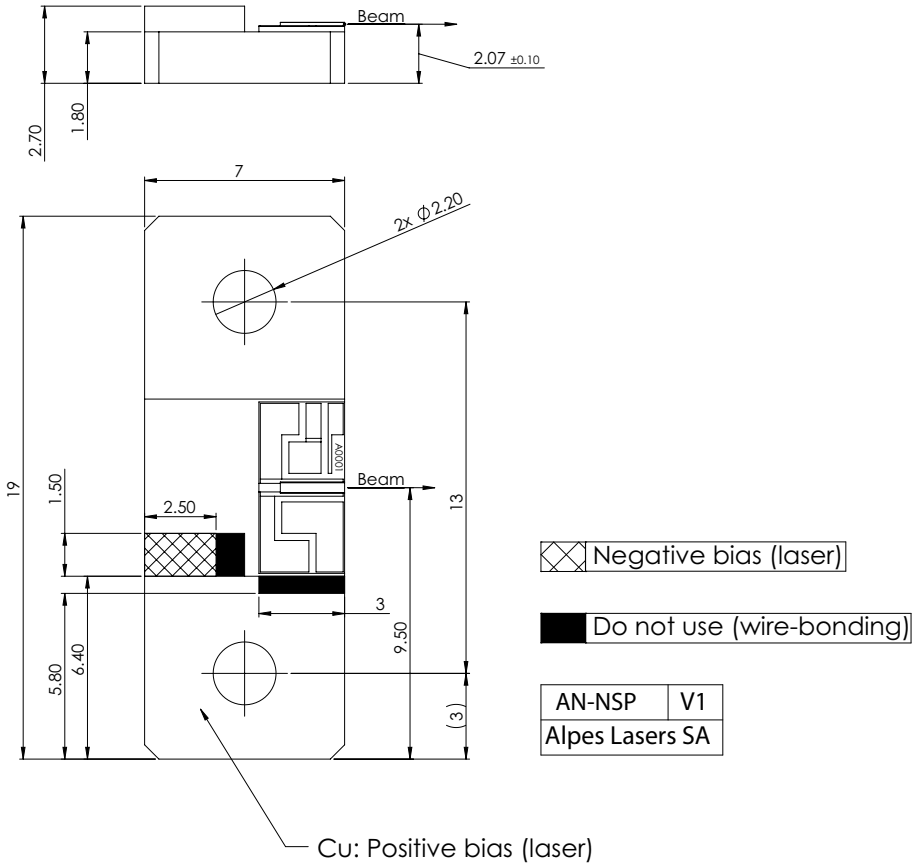

Figure 1: Support mounting for #sbcw12209 DN

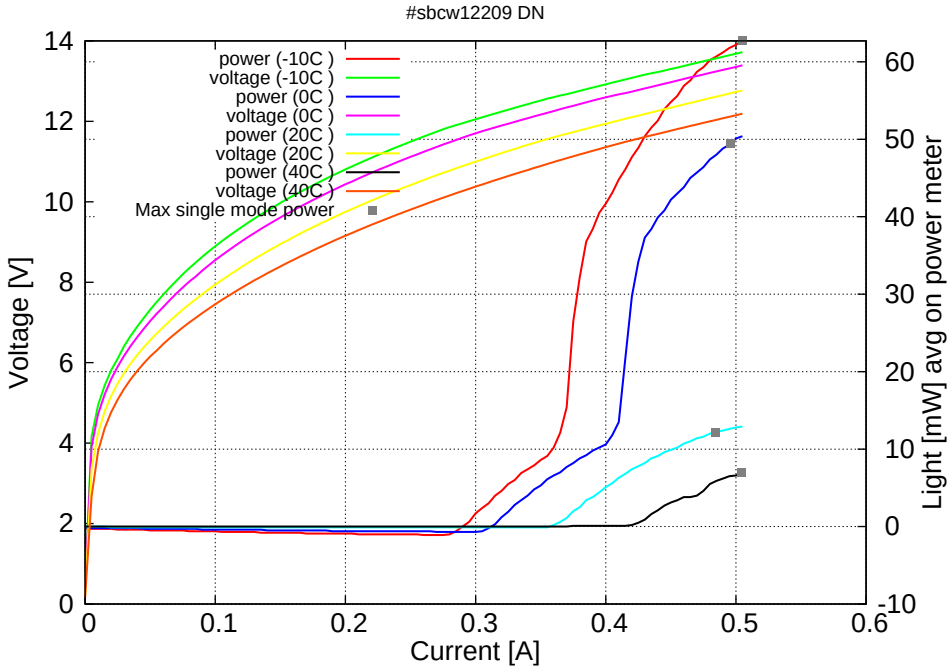

Figure 2: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at 0C: Ith=0.32A / Vth=11.9V (2-wires measurements). Maximum operation current: 0.505A for all temperatures.

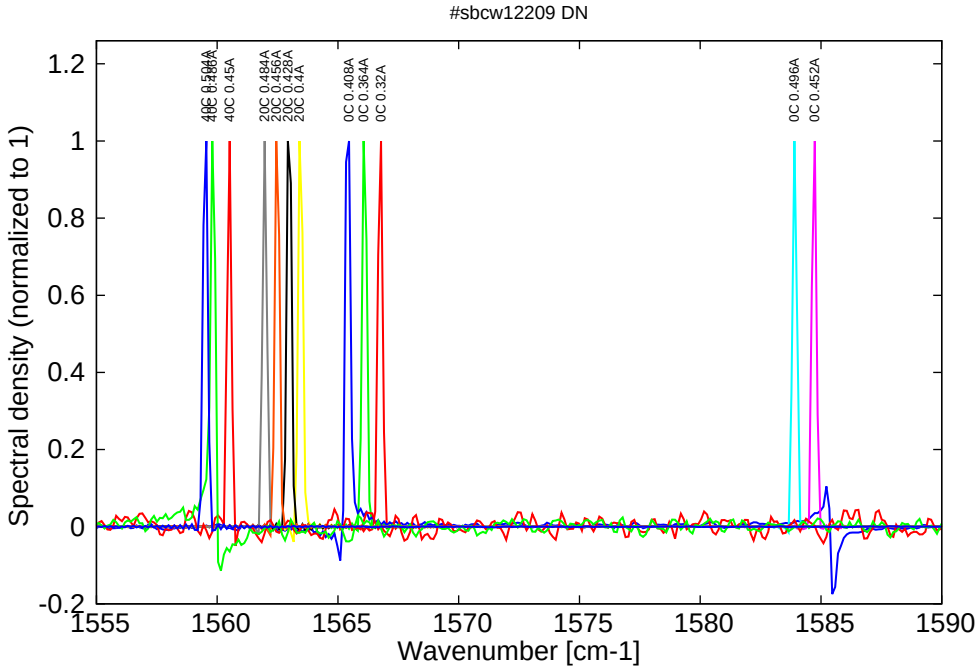

Figure 3: spectra at 0C, 20C and 40C in continuous-wave operation (front resistor current $I_F = 0$A and back resistor current $I_B = 0$A)

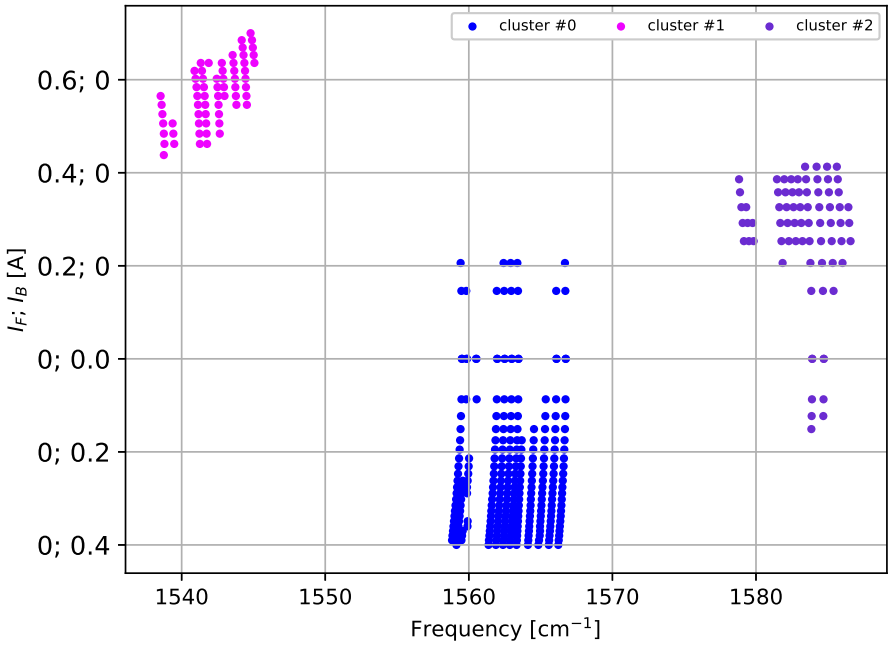

Figure 4: Emission frequency as a function of electrical current on the front resistor I_F or back resistor I_B. Either the back or the front resistors are heated, while no electrical current is flowing through the other resistor.

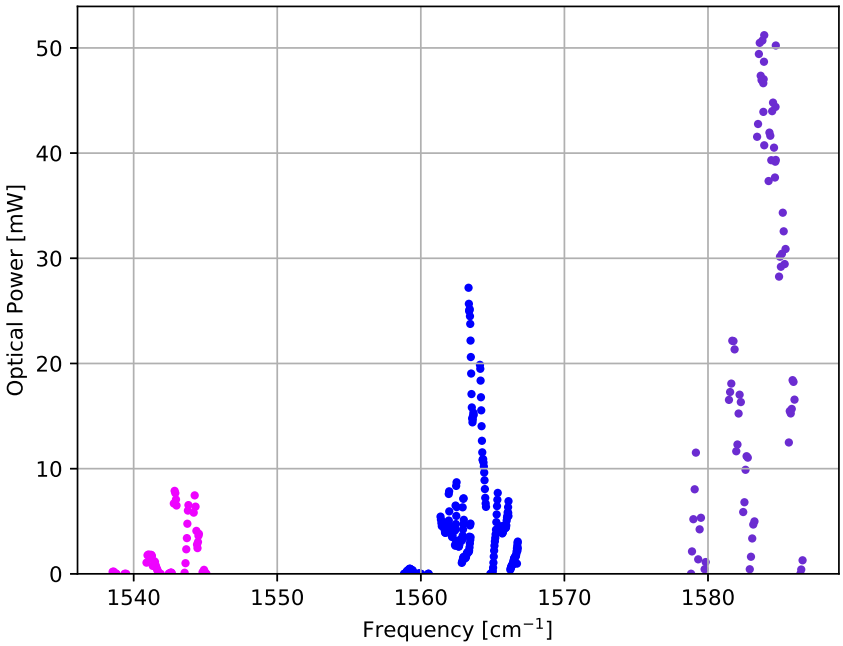

Figure 5: Optical power as a function of emission frequency.

Cluster	I_B [A]	V_B [V]	I_F [A]	V_F [V]	I_L [A]	V_L [V]	Freq [cm^{-1}]	T [C]	P_{opt} [mW]
#0-Back	0.00 - 0.40	0.0 - 1.9	0	0	0.32 - 0.50	11.5 - 13.2	1558.8 - 1566.8	0 - 40	27
#0-Front	0	0	0.00 - 0.21	0.0 - 0.8	0.32 - 0.50	11.8 - 12.6	1559.4 - 1566.8	0 - 40	9
#1-Front	0	0	0.44 - 0.70	1.9 - 3.0	0.36 - 0.50	11.4 - 12.8	1538.5 - 1545.1	0 - 40	8
#2-Back	0.00 - 0.15	0.0 - 0.6	0	0	0.45 - 0.50	12.9 - 13.3	1583.9 - 1584.7	0	51
#2-Front	0	0	0.00 - 0.41	0.0 - 1.7	0.32 - 0.50	11.7 - 13.3	1578.8 - 1586.6	0 - 40	51

Table 1: Overview of the clusters.

I_F [A]	V_F [V]	I_B [A]	V_B [V]	Pel_R [W]	I_L [A]	V_L [V]	P_L [W]	P_{tot} [W]	P_{opt} [mW]	T [C]	freq [cm^{-1}]
0.0	0.0	0.4	1.781	0.71	0.496	13.02	6.46	7.17	27	0	1563.32
0.0	0.0	0.39	1.737	0.68	0.496	13.03	6.46	7.14	26	0	1563.35
0.0	0.0	0.38	1.69	0.64	0.496	13.04	6.47	7.11	25	0	1563.36
0.0	0.0	0.37	1.646	0.61	0.496	13.05	6.47	7.08	25	0	1563.38
0.0	0.0	0.36	1.601	0.58	0.496	13.05	6.47	7.05	25	0	1563.40
0.0	0.0	0.349	1.552	0.54	0.496	13.06	6.48	7.02	24	0	1563.42
0.0	0.0	0.338	1.503	0.51	0.496	13.08	6.49	7.00	24	0	1563.44
0.0	0.0	0.327	1.453	0.48	0.496	13.09	6.49	6.97	22	0	1563.46
0.0	0.0	0.315	1.4	0.44	0.496	13.10	6.50	6.94	21	0	1563.48
0.0	0.0	0.302	1.341	0.40	0.496	13.12	6.51	6.91	19	0	1563.51
0.0	0.0	0.289	1.282	0.37	0.496	13.13	6.51	6.88	17	0	1563.53
0.0	0.0	0.276	1.224	0.34	0.496	13.14	6.52	6.85	16	0	1563.55
0.0	0.0	0.262	1.16	0.30	0.496	13.16	6.53	6.83	15	0	1563.57
0.0	0.0	0.247	1.091	0.27	0.496	13.17	6.53	6.80	14	0	1563.60
0.0	0.0	0.231	1.019	0.24	0.496	13.18	6.54	6.77	15	0	1563.62
0.0	0.0	0.214	0.94	0.20	0.496	13.20	6.55	6.75	15	0	1563.63
0.0	0.0	0.195	0.852	0.17	0.496	13.22	6.56	6.72	15	0	1563.66
0.0	0.0	0.175	0.759	0.13	0.496	13.23	6.56	6.70	15	0	1563.68
0.0	0.0	0.4	1.781	0.71	0.452	12.68	5.73	6.44	20	0	1564.12
0.0	0.0	0.39	1.737	0.68	0.452	12.68	5.73	6.41	19	0	1564.14
0.0	0.0	0.38	1.69	0.64	0.452	12.70	5.74	6.38	18	0	1564.16
0.0	0.0	0.37	1.646	0.61	0.452	12.70	5.74	6.35	17	0	1564.19
0.0	0.0	0.36	1.601	0.58	0.452	12.71	5.75	6.32	16	0	1564.21
0.0	0.0	0.349	1.552	0.54	0.452	12.73	5.75	6.29	14	0	1564.23
0.0	0.0	0.338	1.503	0.51	0.452	12.73	5.76	6.26	13	0	1564.26
0.0	0.0	0.327	1.453	0.48	0.452	12.74	5.76	6.24	12	0	1564.28
0.0	0.0	0.315	1.4	0.44	0.452	12.76	5.77	6.21	11	0	1564.30
0.0	0.0	0.302	1.341	0.40	0.452	12.77	5.77	6.18	11	0	1564.32
0.0	0.0	0.289	1.282	0.37	0.452	12.79	5.78	6.15	11	0	1564.34
0.0	0.0	0.276	1.224	0.34	0.452	12.80	5.78	6.12	11	0	1564.37
0.0	0.0	0.262	1.16	0.30	0.452	12.81	5.79	6.09	10	0	1564.39
0.0	0.0	0.247	1.091	0.27	0.452	12.83	5.80	6.07	10	0	1564.41
0.0	0.0	0.231	1.019	0.24	0.452	12.84	5.81	6.04	9	0	1564.44
0.0	0.0	0.214	0.94	0.20	0.452	12.85	5.81	6.01	8	0	1564.46
0.0	0.0	0.195	0.852	0.17	0.452	12.87	5.82	5.98	7	0	1564.49
0.0	0.0	0.175	0.759	0.13	0.452	12.89	5.83	5.96	7	0	1564.52
0.0	0.0	0.151	0.646	0.10	0.452	12.91	5.83	5.93	6	0	1564.54
0.0	0.0	0.4	1.781	0.71	0.408	12.33	5.03	5.74	0	0	1564.84
0.0	0.0	0.39	1.737	0.68	0.408	12.34	5.03	5.71	0	0	1564.89
0.0	0.0	0.38	1.69	0.64	0.408	12.34	5.04	5.68	0	0	1564.94
0.0	0.0	0.36	1.601	0.58	0.408	12.36	5.04	5.62	0	0	1564.96
0.0	0.0	0.37	1.646	0.61	0.408	12.36	5.04	5.65	0	0	1564.96
0.0	0.0	0.349	1.552	0.54	0.408	12.38	5.05	5.59	0	0	1564.99
0.0	0.0	0.338	1.503	0.51	0.408	12.39	5.05	5.56	0	0	1565.01
0.0	0.0	0.327	1.453	0.48	0.408	12.40	5.06	5.53	1	0	1565.03
0.0	0.0	0.315	1.4	0.44	0.408	12.41	5.06	5.50	1	0	1565.06

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I_F [A]	V_F [V]	I_B [A]	V_B [V]	Pel_R [W]	I_L [A]	V_L [V]	P_L [W]	P_{tot} [W]	P_{opt} [mW]	T [C]	freq [cm^{-1}]
0.0	0.0	0.302	1.341	0.40	0.408	12.42	5.07	5.47	2	0	1565.08
0.0	0.0	0.289	1.282	0.37	0.408	12.43	5.07	5.44	2	0	1565.10
0.0	0.0	0.276	1.224	0.34	0.408	12.44	5.08	5.41	3	0	1565.13
0.0	0.0	0.262	1.16	0.30	0.408	12.45	5.08	5.38	3	0	1565.16
0.0	0.0	0.247	1.091	0.27	0.408	12.47	5.09	5.36	3	0	1565.18
0.0	0.0	0.231	1.019	0.24	0.408	12.48	5.09	5.33	4	0	1565.21
0.0	0.0	0.214	0.94	0.20	0.408	12.50	5.10	5.30	4	0	1565.24
0.0	0.0	0.195	0.852	0.17	0.408	12.51	5.11	5.27	5	0	1565.26
0.0	0.0	0.175	0.759	0.13	0.408	12.53	5.11	5.25	6	0	1565.28
0.0	0.0	0.151	0.646	0.10	0.408	12.55	5.12	5.22	6	0	1565.31
0.0	0.0	0.123	0.512	0.06	0.408	12.57	5.13	5.19	7	0	1565.33
0.0	0.0	0.087	0.337	0.03	0.408	12.60	5.14	5.17	8	0	1565.36
0.0	0.0	0.4	1.781	0.71	0.364	11.95	4.35	5.06	5	0	1565.57
0.0	0.0	0.39	1.737	0.68	0.364	11.96	4.35	5.03	4	0	1565.59
0.0	0.0	0.38	1.69	0.64	0.364	11.98	4.36	5.00	4	0	1565.62
0.0	0.0	0.37	1.646	0.61	0.364	11.99	4.36	4.97	4	0	1565.65
0.0	0.0	0.36	1.601	0.58	0.364	12.00	4.37	4.94	4	0	1565.67
0.0	0.0	0.349	1.552	0.54	0.364	12.00	4.37	4.91	4	0	1565.70
0.0	0.0	0.338	1.503	0.51	0.364	12.02	4.37	4.88	4	0	1565.73
0.0	0.0	0.327	1.453	0.48	0.364	12.03	4.38	4.85	4	0	1565.75
0.0	0.0	0.315	1.4	0.44	0.364	12.04	4.38	4.82	5	0	1565.77
0.0	0.0	0.302	1.341	0.40	0.364	12.05	4.38	4.79	5	0	1565.80
0.0	0.0	0.289	1.282	0.37	0.364	12.06	4.39	4.76	5	0	1565.82
0.0	0.0	0.276	1.224	0.34	0.364	12.07	4.39	4.73	4	0	1565.85
0.0	0.0	0.262	1.16	0.30	0.364	12.09	4.40	4.70	4	0	1565.88
0.0	0.0	0.247	1.091	0.27	0.364	12.10	4.40	4.67	4	0	1565.90
0.0	0.0	0.231	1.019	0.24	0.364	12.11	4.41	4.64	4	0	1565.93
0.0	0.0	0.214	0.94	0.20	0.364	12.12	4.41	4.61	5	0	1565.95
0.0	0.0	0.195	0.852	0.17	0.364	12.14	4.42	4.58	5	0	1565.98
0.0	0.0	0.175	0.759	0.13	0.364	12.15	4.42	4.56	5	0	1566.00
0.0	0.0	0.151	0.646	0.10	0.364	12.18	4.43	4.53	6	0	1566.02
0.0	0.0	0.123	0.512	0.06	0.364	12.20	4.44	4.50	6	0	1566.05
0.0	0.0	0.087	0.337	0.03	0.364	12.22	4.45	4.48	6	0	1566.08
0.0	0.0	0.0	0.0	0.00	0.364	12.28	4.47	4.47	5	0	1566.10
0.0	0.0	0.0	0.0	0.00	0.364	12.28	4.47	4.47	7	0	1566.11
0.0	0.0	0.4	1.781	0.71	0.32	11.56	3.70	4.41	0	0	1566.23
0.0	0.0	0.39	1.737	0.68	0.32	11.57	3.70	4.38	1	0	1566.26
0.0	0.0	0.38	1.69	0.64	0.32	11.58	3.70	4.35	1	0	1566.29
0.0	0.0	0.37	1.646	0.61	0.32	11.59	3.71	4.32	1	0	1566.31
0.0	0.0	0.36	1.601	0.58	0.32	11.60	3.71	4.29	1	0	1566.34
0.0	0.0	0.349	1.552	0.54	0.32	11.61	3.71	4.26	1	0	1566.37
0.0	0.0	0.338	1.503	0.51	0.32	11.62	3.72	4.23	1	0	1566.40
0.0	0.0	0.327	1.453	0.48	0.32	11.63	3.72	4.20	1	0	1566.42
0.0	0.0	0.315	1.4	0.44	0.32	11.64	3.72	4.16	1	0	1566.45
0.0	0.0	0.302	1.341	0.40	0.32	11.65	3.73	4.13	1	0	1566.47
0.0	0.0	0.289	1.282	0.37	0.32	11.66	3.73	4.10	1	0	1566.50
0.0	0.0	0.276	1.224	0.34	0.32	11.67	3.74	4.07	2	0	1566.52
0.0	0.0	0.262	1.16	0.30	0.32	11.69	3.74	4.04	2	0	1566.54

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I_F [A]	V_F [V]	I_B [A]	V_B [V]	Pel_R [W]	I_L [A]	V_L [V]	P_L [W]	P_{tot} [W]	P_{opt} [mW]	T [C]	freq [cm^{-1}]
0.0	0.0	0.247	1.091	0.27	0.32	11.70	3.74	4.01	2	0	1566.57
0.0	0.0	0.231	1.019	0.24	0.32	11.71	3.75	3.98	2	0	1566.60
0.0	0.0	0.214	0.94	0.20	0.32	11.73	3.75	3.95	2	0	1566.62
0.0	0.0	0.195	0.852	0.17	0.32	11.74	3.76	3.92	2	0	1566.65
0.0	0.0	0.175	0.759	0.13	0.32	11.76	3.76	3.90	2	0	1566.67
0.0	0.0	0.151	0.646	0.10	0.32	11.78	3.77	3.87	2	0	1566.69
0.0	0.0	0.123	0.512	0.06	0.32	11.80	3.78	3.84	3	0	1566.72
0.0	0.0	0.087	0.337	0.03	0.32	11.83	3.78	3.81	3	0	1566.74
0.0	0.0	0.0	0.0	0.00	0.32	11.88	3.80	3.80	3	0	1566.75
0.0	0.0	0.0	0.0	0.00	0.32	11.89	3.81	3.81	2	0	1566.75
0.0	0.0	0.4	1.82	0.73	0.484	12.28	5.94	6.67	5	20	1561.37
0.0	0.0	0.39	1.771	0.69	0.484	12.28	5.94	6.63	5	20	1561.40
0.0	0.0	0.38	1.726	0.66	0.484	12.29	5.95	6.60	5	20	1561.43
0.0	0.0	0.37	1.676	0.62	0.484	12.29	5.95	6.57	5	20	1561.46
0.0	0.0	0.36	1.628	0.59	0.484	12.30	5.95	6.54	5	20	1561.49
0.0	0.0	0.349	1.576	0.55	0.484	12.31	5.96	6.51	5	20	1561.52
0.0	0.0	0.338	1.524	0.52	0.484	12.32	5.97	6.48	5	20	1561.54
0.0	0.0	0.327	1.472	0.48	0.484	12.33	5.97	6.45	5	20	1561.57
0.0	0.0	0.315	1.415	0.45	0.484	12.35	5.98	6.42	5	20	1561.59
0.0	0.0	0.302	1.353	0.41	0.484	12.36	5.98	6.39	4	20	1561.62
0.0	0.0	0.289	1.292	0.37	0.484	12.37	5.99	6.36	4	20	1561.66
0.0	0.0	0.276	1.231	0.34	0.484	12.38	5.99	6.33	4	20	1561.69
0.0	0.0	0.262	1.165	0.31	0.484	12.40	6.00	6.31	4	20	1561.72
0.0	0.0	0.247	1.092	0.27	0.484	12.41	6.01	6.28	4	20	1561.74
0.0	0.0	0.231	1.017	0.23	0.484	12.43	6.01	6.25	5	20	1561.77
0.0	0.0	0.214	0.936	0.20	0.484	12.44	6.02	6.22	5	20	1561.79
0.0	0.0	0.195	0.844	0.16	0.484	12.46	6.03	6.19	5	20	1561.82
0.0	0.0	0.175	0.748	0.13	0.484	12.47	6.04	6.17	5	20	1561.86
0.0	0.0	0.4	1.82	0.73	0.456	12.06	5.50	6.23	5	20	1561.89
0.0	0.0	0.151	0.632	0.10	0.484	12.49	6.04	6.14	5	20	1561.89
0.0	0.0	0.39	1.771	0.69	0.456	12.06	5.50	6.19	4	20	1561.92
0.0	0.0	0.123	0.495	0.06	0.484	12.51	6.05	6.12	5	20	1561.92
0.0	0.0	0.38	1.726	0.66	0.456	12.07	5.51	6.16	4	20	1561.95
0.0	0.0	0.087	0.317	0.03	0.484	12.54	6.07	6.10	5	20	1561.95
0.0	0.0	0.0	0.0	0.00	0.484	12.60	6.10	6.10	8	20	1561.97
0.0	0.0	0.37	1.676	0.62	0.456	12.08	5.51	6.13	4	20	1561.97
0.0	0.0	0.0	0.0	0.00	0.484	12.62	6.11	6.11	6	20	1561.98
0.0	0.0	0.36	1.628	0.59	0.456	12.09	5.51	6.10	4	20	1562.00
0.0	0.0	0.349	1.576	0.55	0.456	12.10	5.52	6.07	4	20	1562.03
0.0	0.0	0.338	1.524	0.52	0.456	12.11	5.52	6.04	4	20	1562.06
0.0	0.0	0.327	1.472	0.48	0.456	12.12	5.53	6.01	4	20	1562.08
0.0	0.0	0.315	1.415	0.45	0.456	12.13	5.53	5.98	4	20	1562.12
0.0	0.0	0.302	1.353	0.41	0.456	12.14	5.54	5.95	4	20	1562.15
0.0	0.0	0.289	1.292	0.37	0.456	12.15	5.54	5.92	3	20	1562.18
0.0	0.0	0.276	1.231	0.34	0.456	12.17	5.55	5.89	4	20	1562.21
0.0	0.0	0.262	1.165	0.31	0.456	12.18	5.55	5.86	4	20	1562.23
0.0	0.0	0.247	1.092	0.27	0.456	12.20	5.56	5.83	4	20	1562.26
0.0	0.0	0.231	1.017	0.23	0.456	12.21	5.57	5.80	4	20	1562.29

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I_F [A]	V_F [V]	I_B [A]	V_B [V]	Pel_R [W]	I_L [A]	V_L [V]	P_L [W]	P_{tot} [W]	P_{opt} [mW]	T [C]	freq [cm^{-1}]
0.0	0.0	0.214	0.936	0.20	0.456	12.22	5.57	5.77	4	20	1562.32
0.0	0.0	0.195	0.844	0.16	0.456	12.24	5.58	5.74	4	20	1562.35
0.0	0.0	0.4	1.82	0.73	0.428	11.84	5.07	5.79	3	20	1562.38
0.0	0.0	0.175	0.748	0.13	0.456	12.25	5.59	5.72	4	20	1562.38
0.0	0.0	0.39	1.771	0.69	0.428	11.84	5.07	5.76	3	20	1562.41
0.0	0.0	0.151	0.632	0.10	0.456	12.27	5.60	5.69	4	20	1562.42
0.0	0.0	0.38	1.726	0.66	0.428	11.85	5.07	5.73	3	20	1562.44
0.0	0.0	0.123	0.495	0.06	0.456	12.29	5.61	5.67	5	20	1562.44
0.0	0.0	0.37	1.676	0.62	0.428	11.86	5.08	5.70	3	20	1562.47
0.0	0.0	0.087	0.317	0.03	0.456	12.32	5.62	5.64	6	20	1562.47
0.0	0.0	0.0	0.0	0.00	0.456	12.39	5.65	5.65	9	20	1562.49
0.0	0.0	0.36	1.628	0.59	0.428	11.87	5.08	5.67	3	20	1562.49
0.0	0.0	0.0	0.0	0.00	0.456	12.40	5.66	5.66	6	20	1562.50
0.0	0.0	0.349	1.576	0.55	0.428	11.88	5.08	5.63	3	20	1562.52
0.0	0.0	0.338	1.524	0.52	0.428	11.89	5.09	5.61	3	20	1562.55
0.0	0.0	0.327	1.472	0.48	0.428	11.90	5.09	5.57	3	20	1562.58
0.0	0.0	0.315	1.415	0.45	0.428	11.91	5.10	5.54	3	20	1562.62
0.0	0.0	0.302	1.353	0.41	0.428	11.93	5.10	5.51	3	20	1562.65
0.0	0.0	0.289	1.292	0.37	0.428	11.94	5.11	5.48	3	20	1562.68
0.0	0.0	0.276	1.231	0.34	0.428	11.95	5.12	5.45	3	20	1562.70
0.0	0.0	0.262	1.165	0.31	0.428	11.96	5.12	5.42	3	20	1562.73
0.0	0.0	0.247	1.092	0.27	0.428	11.97	5.13	5.40	3	20	1562.76
0.0	0.0	0.231	1.017	0.23	0.428	11.99	5.13	5.37	3	20	1562.79
0.0	0.0	0.214	0.936	0.20	0.428	12.00	5.14	5.34	3	20	1562.82
0.0	0.0	0.4	1.82	0.73	0.4	11.61	4.64	5.37	1	20	1562.85
0.0	0.0	0.195	0.844	0.16	0.428	12.02	5.14	5.31	3	20	1562.86
0.0	0.0	0.175	0.748	0.13	0.428	12.03	5.15	5.28	3	20	1562.88
0.0	0.0	0.39	1.771	0.69	0.4	11.62	4.65	5.34	1	20	1562.89
0.0	0.0	0.151	0.632	0.10	0.428	12.05	5.16	5.25	4	20	1562.91
0.0	0.0	0.38	1.726	0.66	0.4	11.62	4.65	5.31	1	20	1562.91
0.0	0.0	0.123	0.495	0.06	0.428	12.07	5.17	5.23	4	20	1562.94
0.0	0.0	0.37	1.676	0.62	0.4	11.63	4.65	5.27	1	20	1562.94
0.0	0.0	0.087	0.317	0.03	0.428	12.10	5.18	5.21	5	20	1562.97
0.0	0.0	0.36	1.628	0.59	0.4	11.64	4.66	5.24	2	20	1562.97
0.0	0.0	0.0	0.0	0.00	0.428	12.16	5.20	5.20	7	20	1562.98
0.0	0.0	0.0	0.0	0.00	0.428	12.18	5.21	5.21	5	20	1562.99
0.0	0.0	0.349	1.576	0.55	0.4	11.65	4.66	5.21	2	20	1563.00
0.0	0.0	0.338	1.524	0.52	0.4	11.66	4.67	5.18	2	20	1563.03
0.0	0.0	0.327	1.472	0.48	0.4	11.67	4.67	5.15	2	20	1563.06
0.0	0.0	0.315	1.415	0.45	0.4	11.68	4.67	5.12	1	20	1563.10
0.0	0.0	0.302	1.353	0.41	0.4	11.70	4.68	5.09	2	20	1563.13
0.0	0.0	0.289	1.292	0.37	0.4	11.71	4.68	5.06	2	20	1563.16
0.0	0.0	0.276	1.231	0.34	0.4	11.72	4.69	5.03	2	20	1563.18
0.0	0.0	0.262	1.165	0.31	0.4	11.73	4.69	5.00	2	20	1563.21
0.0	0.0	0.247	1.092	0.27	0.4	11.75	4.70	4.97	2	20	1563.24
0.0	0.0	0.231	1.017	0.23	0.4	11.76	4.70	4.94	2	20	1563.27
0.0	0.0	0.214	0.936	0.20	0.4	11.77	4.71	4.91	2	20	1563.30
0.0	0.0	0.195	0.844	0.16	0.4	11.79	4.72	4.88	2	20	1563.34

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I_F [A]	V_F [V]	I_B [A]	V_B [V]	Pel_R [W]	I_L [A]	V_L [V]	P_L [W]	P_{tot} [W]	P_{opt} [mW]	T [C]	freq [cm^{-1}]
0.0	0.0	0.175	0.748	0.13	0.4	11.80	4.72	4.85	2	20	1563.36
0.0	0.0	0.151	0.632	0.10	0.4	11.82	4.73	4.82	3	20	1563.39
0.0	0.0	0.123	0.495	0.06	0.4	11.84	4.74	4.80	3	20	1563.42
0.0	0.0	0.087	0.317	0.03	0.4	11.87	4.75	4.78	3	20	1563.44
0.0	0.0	0.0	0.0	0.00	0.4	11.94	4.78	4.78	5	20	1563.46
0.0	0.0	0.0	0.0	0.00	0.4	11.94	4.78	4.78	3	20	1563.46
0.0	0.0	0.39	1.818	0.71	0.504	11.86	5.98	6.69	0	40	1558.83
0.0	0.0	0.38	1.769	0.67	0.504	11.87	5.98	6.66	0	40	1558.86
0.0	0.0	0.37	1.72	0.64	0.504	11.88	5.99	6.62	0	40	1558.90
0.0	0.0	0.36	1.67	0.60	0.504	11.88	5.99	6.59	0	40	1558.93
0.0	0.0	0.349	1.614	0.56	0.504	11.89	5.99	6.56	0	40	1558.97
0.0	0.0	0.338	1.559	0.53	0.504	11.90	6.00	6.53	0	40	1559.00
0.0	0.0	0.327	1.504	0.49	0.504	11.91	6.00	6.50	0	40	1559.03
0.0	0.0	0.315	1.444	0.45	0.504	11.92	6.01	6.46	0	40	1559.07
0.0	0.0	0.302	1.381	0.42	0.504	11.93	6.01	6.43	0	40	1559.11
0.0	0.0	0.4	1.871	0.75	0.486	11.72	5.70	6.45	0	40	1559.14
0.0	0.0	0.289	1.317	0.38	0.504	11.94	6.02	6.40	0	40	1559.15
0.0	0.0	0.39	1.818	0.71	0.486	11.73	5.70	6.41	0	40	1559.17
0.0	0.0	0.276	1.252	0.35	0.504	11.96	6.03	6.37	0	40	1559.18
0.0	0.0	0.38	1.769	0.67	0.486	11.74	5.70	6.38	0	40	1559.21
0.0	0.0	0.262	1.182	0.31	0.504	11.97	6.03	6.34	0	40	1559.21
0.0	0.0	0.37	1.72	0.64	0.486	11.74	5.71	6.34	0	40	1559.24
0.0	0.0	0.247	1.108	0.27	0.504	11.98	6.04	6.31	0	40	1559.25
0.0	0.0	0.36	1.67	0.60	0.486	11.75	5.71	6.31	0	40	1559.28
0.0	0.0	0.231	1.029	0.24	0.504	11.99	6.04	6.28	0	40	1559.28
0.0	0.0	0.349	1.614	0.56	0.486	11.76	5.71	6.28	0	40	1559.32
0.0	0.0	0.214	0.946	0.20	0.504	12.01	6.05	6.25	0	40	1559.32
0.0	0.0	0.338	1.559	0.53	0.486	11.77	5.72	6.25	0	40	1559.36
0.0	0.0	0.195	0.851	0.17	0.504	12.02	6.06	6.23	0	40	1559.36
0.0	0.0	0.175	0.751	0.13	0.504	12.04	6.07	6.20	0	40	1559.39
0.0	0.0	0.327	1.504	0.49	0.486	11.78	5.72	6.21	0	40	1559.39
0.0	0.0	0.151	0.631	0.10	0.504	12.06	6.08	6.17	0	40	1559.42
0.0	0.0	0.315	1.444	0.45	0.486	11.79	5.73	6.18	0	40	1559.43
0.0	0.0	0.123	0.49	0.06	0.504	12.08	6.09	6.15	0	40	1559.45
0.0	0.0	0.302	1.381	0.42	0.486	11.79	5.73	6.15	0	40	1559.46
0.0	0.0	0.39	1.818	0.71	0.468	11.59	5.42	6.13	0	40	1559.49
0.0	0.0	0.087	0.306	0.03	0.504	12.11	6.11	6.13	0	40	1559.49
0.0	0.0	0.289	1.317	0.38	0.486	11.81	5.74	6.12	0	40	1559.50
0.0	0.0	0.0	0.0	0.00	0.504	12.16	6.13	6.13	0	40	1559.51
0.0	0.0	0.0	0.0	0.00	0.504	12.17	6.13	6.13	0	40	1559.52
0.0	0.0	0.38	1.769	0.67	0.468	11.60	5.43	6.10	0	40	1559.53
0.0	0.0	0.276	1.252	0.35	0.486	11.82	5.74	6.09	0	40	1559.53
0.0	0.0	0.37	1.72	0.64	0.468	11.60	5.43	6.07	0	40	1559.57
0.0	0.0	0.262	1.182	0.31	0.486	11.83	5.75	6.06	0	40	1559.58
0.0	0.0	0.087	0.306	0.03	0.486	11.98	5.82	5.85	0	40	1559.82
0.0	0.0	0.0	0.0	0.00	0.486	12.02	5.84	5.84	0	40	1559.83
0.0	0.0	0.276	1.252	0.35	0.468	11.68	5.46	5.81	0	40	1559.87
0.0	0.0	0.289	1.317	0.38	0.468	11.67	5.46	5.84	0	40	1559.88

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I_F [A]	V_F [V]	I_B [A]	V_B [V]	Pel_R [W]	I_L [A]	V_L [V]	P_L [W]	P_{tot} [W]	P_{opt} [mW]	T [C]	freq [cm^{-1}]
0.0	0.0	0.0	0.0	0.00	0.486	12.03	5.85	5.85	0	40	1559.88
0.0	0.0	0.36	1.67	0.60	0.45	11.47	5.16	5.76	0	40	1559.91
0.0	0.0	0.349	1.614	0.56	0.45	11.48	5.17	5.73	0	40	1559.92
0.0	0.0	0.262	1.182	0.31	0.468	11.69	5.47	5.78	0	40	1559.92
0.0	0.0	0.247	1.108	0.27	0.468	11.71	5.48	5.75	0	40	1559.96
0.0	0.0	0.231	1.029	0.24	0.468	11.72	5.49	5.72	0	40	1559.99
0.0	0.0	0.214	0.946	0.20	0.468	11.73	5.49	5.69	0	40	1560.02
0.0	0.0	0.0	0.0	0.00	0.45	11.75	5.29	5.29	0	40	1560.50
0.0	0.0	0.0	0.0	0.00	0.45	11.75	5.29	5.29	0	40	1560.54
0.0	0.0	0.087	0.306	0.03	0.45	11.70	5.26	5.29	0	40	1560.55

Table 2:

Details of cluster #0-Front

I_F [A]	V_F [V]	I_B [A]	V_B [V]	Pel_R [W]	I_L [A]	V_L [V]	P_L [W]	P_{tot} [W]	P_{opt} [mW]	T [C]	freq [cm^{-1}]
0.146	0.575	0.0	0.0	0.08	0.364	12.19	4.44	4.52	6	0	1566.08
0.0	0.0	0.0	0.0	0.00	0.364	12.28	4.47	4.47	5	0	1566.10
0.0	0.0	0.0	0.0	0.00	0.364	12.28	4.47	4.47	7	0	1566.11
0.206	0.84	0.0	0.0	0.17	0.32	11.76	3.76	3.94	1	0	1566.70
0.146	0.575	0.0	0.0	0.08	0.32	11.80	3.78	3.86	2	0	1566.72
0.0	0.0	0.0	0.0	0.00	0.32	11.88	3.80	3.80	3	0	1566.75
0.0	0.0	0.0	0.0	0.00	0.32	11.89	3.81	3.81	2	0	1566.75
0.146	0.559	0.0	0.0	0.08	0.484	12.50	6.05	6.13	8	20	1561.94
0.0	0.0	0.0	0.0	0.00	0.484	12.60	6.10	6.10	8	20	1561.97
0.0	0.0	0.0	0.0	0.00	0.484	12.62	6.11	6.11	6	20	1561.98
0.206	0.83	0.0	0.0	0.17	0.456	12.25	5.58	5.76	6	20	1562.42
0.146	0.559	0.0	0.0	0.08	0.456	12.29	5.60	5.68	8	20	1562.46
0.0	0.0	0.0	0.0	0.00	0.456	12.39	5.65	5.65	9	20	1562.49
0.0	0.0	0.0	0.0	0.00	0.456	12.40	5.66	5.66	6	20	1562.50
0.206	0.83	0.0	0.0	0.17	0.428	12.03	5.15	5.32	6	20	1562.91
0.146	0.559	0.0	0.0	0.08	0.428	12.06	5.16	5.25	7	20	1562.96
0.0	0.0	0.0	0.0	0.00	0.428	12.16	5.20	5.20	7	20	1562.98
0.0	0.0	0.0	0.0	0.00	0.428	12.18	5.21	5.21	5	20	1562.99
0.206	0.83	0.0	0.0	0.17	0.4	11.80	4.72	4.89	4	20	1563.38
0.146	0.559	0.0	0.0	0.08	0.4	11.84	4.74	4.82	5	20	1563.42
0.0	0.0	0.0	0.0	0.00	0.4	11.94	4.78	4.78	5	20	1563.46
0.0	0.0	0.0	0.0	0.00	0.4	11.94	4.78	4.78	3	20	1563.46
0.206	0.832	0.0	0.0	0.17	0.504	12.03	6.06	6.23	0	40	1559.43
0.146	0.552	0.0	0.0	0.08	0.504	12.06	6.08	6.16	0	40	1559.48
0.0	0.0	0.0	0.0	0.00	0.504	12.16	6.13	6.13	0	40	1559.51
0.0	0.0	0.0	0.0	0.00	0.504	12.17	6.13	6.13	0	40	1559.52
0.146	0.552	0.0	0.0	0.08	0.486	11.93	5.80	5.88	0	40	1559.82
0.0	0.0	0.0	0.0	0.00	0.486	12.02	5.84	5.84	0	40	1559.83
0.0	0.0	0.0	0.0	0.00	0.486	12.03	5.85	5.85	0	40	1559.88
0.0	0.0	0.0	0.0	0.00	0.45	11.75	5.29	5.29	0	40	1560.50
0.0	0.0	0.0	0.0	0.00	0.45	11.75	5.29	5.29	0	40	1560.54

Table 3:

Details of cluster #1-Front

I_F [A]	V_F [V]	I_B [A]	V_B [V]	Pel_R [W]	I_L [A]	V_L [V]	P_L [W]	P_{tot} [W]	P_{opt} [mW]	T [C]	freq [cm^{-1}]
0.636	2.698	0.0	0.0	1.72	0.496	12.72	6.31	8.03	7	0	1542.80
0.619	2.622	0.0	0.0	1.62	0.496	12.74	6.32	7.94	8	0	1542.85
0.602	2.545	0.0	0.0	1.53	0.496	12.76	6.33	7.86	8	0	1542.90
0.584	2.468	0.0	0.0	1.44	0.496	12.78	6.34	7.78	7	0	1542.95
0.565	2.384	0.0	0.0	1.35	0.496	12.81	6.35	7.70	6	0	1542.98
0.653	2.773	0.0	0.0	1.81	0.452	12.35	5.58	7.39	0	0	1543.55
0.636	2.698	0.0	0.0	1.72	0.452	12.37	5.59	7.31	1	0	1543.61
0.619	2.622	0.0	0.0	1.62	0.452	12.39	5.60	7.22	2	0	1543.66
0.602	2.545	0.0	0.0	1.53	0.452	12.41	5.61	7.14	3	0	1543.71
0.584	2.468	0.0	0.0	1.44	0.452	12.44	5.62	7.06	5	0	1543.74
0.565	2.384	0.0	0.0	1.35	0.452	12.46	5.63	6.98	6	0	1543.78
0.546	2.301	0.0	0.0	1.26	0.452	12.49	5.65	6.90	7	0	1543.81
0.685	2.929	0.0	0.0	2.01	0.408	11.97	4.88	6.89	6	0	1544.18
0.669	2.856	0.0	0.0	1.91	0.408	11.99	4.89	6.80	7	0	1544.25
0.653	2.773	0.0	0.0	1.81	0.408	11.99	4.89	6.70	6	0	1544.31
0.636	2.698	0.0	0.0	1.72	0.408	12.02	4.91	6.62	4	0	1544.37
0.619	2.622	0.0	0.0	1.62	0.408	12.04	4.91	6.53	3	0	1544.41
0.602	2.545	0.0	0.0	1.53	0.408	12.07	4.92	6.46	2	0	1544.45
0.584	2.468	0.0	0.0	1.44	0.408	12.09	4.93	6.37	3	0	1544.48
0.565	2.384	0.0	0.0	1.35	0.408	12.11	4.94	6.29	4	0	1544.51
0.546	2.301	0.0	0.0	1.26	0.408	12.14	4.95	6.21	4	0	1544.54
0.7	2.997	0.0	0.0	2.10	0.364	11.59	4.22	6.32	0	0	1544.80
0.685	2.929	0.0	0.0	2.01	0.364	11.60	4.22	6.23	0	0	1544.90
0.669	2.856	0.0	0.0	1.91	0.364	11.62	4.23	6.14	0	0	1544.96
0.653	2.773	0.0	0.0	1.81	0.364	11.63	4.24	6.05	0	0	1545.02
0.636	2.698	0.0	0.0	1.72	0.364	11.66	4.24	5.96	0	0	1545.07
0.619	2.719	0.0	0.0	1.68	0.484	12.01	5.81	7.50	1	20	1540.89
0.602	2.635	0.0	0.0	1.59	0.484	12.02	5.82	7.40	2	20	1540.97
0.584	2.549	0.0	0.0	1.49	0.484	12.04	5.83	7.32	2	20	1541.03
0.565	2.457	0.0	0.0	1.39	0.484	12.06	5.84	7.23	2	20	1541.09
0.546	2.366	0.0	0.0	1.29	0.484	12.09	5.85	7.14	2	20	1541.14
0.526	2.27	0.0	0.0	1.19	0.484	12.12	5.87	7.06	2	20	1541.18
0.506	2.175	0.0	0.0	1.10	0.484	12.15	5.88	6.98	2	20	1541.20
0.484	2.073	0.0	0.0	1.00	0.484	12.18	5.89	6.90	2	20	1541.24
0.462	1.974	0.0	0.0	0.91	0.484	12.21	5.91	6.82	2	20	1541.27
0.636	2.811	0.0	0.0	1.79	0.456	11.77	5.37	7.16	1	20	1541.33
0.619	2.719	0.0	0.0	1.68	0.456	11.79	5.38	7.06	1	20	1541.42
0.602	2.635	0.0	0.0	1.59	0.456	11.80	5.38	6.97	1	20	1541.48
0.584	2.549	0.0	0.0	1.49	0.456	11.82	5.39	6.88	1	20	1541.55
0.565	2.457	0.0	0.0	1.39	0.456	11.85	5.40	6.79	1	20	1541.60
0.546	2.366	0.0	0.0	1.29	0.456	11.87	5.41	6.71	0	20	1541.64
0.526	2.27	0.0	0.0	1.19	0.456	11.90	5.43	6.62	0	20	1541.67
0.506	2.175	0.0	0.0	1.10	0.456	11.93	5.44	6.54	0	20	1541.71
0.484	2.073	0.0	0.0	1.00	0.456	11.96	5.46	6.46	0	20	1541.74
0.462	1.974	0.0	0.0	0.91	0.456	12.00	5.47	6.38	0	20	1541.77
0.636	2.811	0.0	0.0	1.79	0.428	11.55	4.94	6.73	0	20	1541.88

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I_F [A]	V_F [V]	I_B [A]	V_B [V]	Pel_R [W]	I_L [A]	V_L [V]	P_L [W]	P_{tot} [W]	P_{opt} [mW]	T [C]	freq [cm^{-1}]
0.602	2.635	0.0	0.0	1.59	0.4	11.36	4.54	6.13	0	20	1542.44
0.584	2.549	0.0	0.0	1.49	0.4	11.38	4.55	6.04	0	20	1542.50
0.565	2.457	0.0	0.0	1.39	0.4	11.41	4.56	5.95	0	20	1542.54
0.546	2.366	0.0	0.0	1.29	0.4	11.44	4.57	5.87	0	20	1542.57
0.526	2.27	0.0	0.0	1.19	0.4	11.46	4.59	5.78	0	20	1542.60
0.506	2.175	0.0	0.0	1.10	0.4	11.49	4.60	5.70	0	20	1542.63
0.484	2.073	0.0	0.0	1.00	0.4	11.53	4.61	5.61	0	20	1542.65
0.565	2.549	0.0	0.0	1.44	0.504	11.65	5.87	7.31	0	40	1538.53
0.546	2.456	0.0	0.0	1.34	0.504	11.67	5.88	7.22	0	40	1538.60
0.526	2.358	0.0	0.0	1.24	0.504	11.69	5.89	7.13	0	40	1538.66
0.506	2.259	0.0	0.0	1.14	0.504	11.72	5.91	7.05	0	40	1538.71
0.438	1.923	0.0	0.0	0.84	0.504	11.81	5.95	6.80	0	40	1538.76
0.484	2.151	0.0	0.0	1.04	0.504	11.75	5.92	6.96	0	40	1538.76
0.462	2.043	0.0	0.0	0.94	0.504	11.78	5.94	6.88	0	40	1538.80
0.506	2.259	0.0	0.0	1.14	0.468	11.45	5.36	6.50	0	40	1539.37
0.484	2.151	0.0	0.0	1.04	0.468	11.48	5.37	6.41	0	40	1539.42
0.462	2.043	0.0	0.0	0.94	0.468	11.51	5.39	6.33	0	40	1539.48

Table 4:

Details of cluster #2-Back

I_F [A]	V_F [V]	I_B [A]	V_B [V]	Pel_R [W]	I_L [A]	V_L [V]	P_L [W]	P_{tot} [W]	P_{opt} [mW]	T [C]	freq [cm^{-1}]
0.0	0.0	0.151	0.646	0.10	0.496	13.22	6.56	6.66	44	0	1583.86
0.0	0.0	0.123	0.512	0.06	0.496	13.24	6.57	6.63	47	0	1583.88
0.0	0.0	0.087	0.337	0.03	0.496	13.27	6.58	6.61	49	0	1583.90
0.0	0.0	0.0	0.0	0.00	0.496	13.33	6.61	6.61	41	0	1583.92
0.0	0.0	0.0	0.0	0.00	0.496	13.32	6.60	6.60	51	0	1583.92
0.0	0.0	0.123	0.512	0.06	0.452	12.90	5.83	5.90	39	0	1584.69
0.0	0.0	0.087	0.337	0.03	0.452	12.92	5.84	5.87	44	0	1584.70
0.0	0.0	0.0	0.0	0.00	0.452	12.99	5.87	5.87	39	0	1584.72
0.0	0.0	0.0	0.0	0.00	0.452	12.97	5.86	5.86	50	0	1584.72

Table 5:

Details of cluster #2-Front

I_F [A]	V_F [V]	I_B [A]	V_B [V]	Pel_R [W]	I_L [A]	V_L [V]	P_L [W]	P_{tot} [W]	P_{opt} [mW]	T [C]	freq [cm^{-1}]
0.413	1.725	0.0	0.0	0.71	0.496	12.99	6.44	7.16	42	0	1583.42
0.386	1.611	0.0	0.0	0.62	0.496	13.01	6.45	7.07	43	0	1583.49
0.358	1.491	0.0	0.0	0.53	0.496	13.04	6.47	7.00	49	0	1583.54
0.326	1.356	0.0	0.0	0.44	0.496	13.07	6.48	6.92	50	0	1583.60
0.292	1.211	0.0	0.0	0.35	0.496	13.10	6.50	6.85	47	0	1583.67
0.253	1.044	0.0	0.0	0.26	0.496	13.13	6.51	6.78	47	0	1583.73
0.206	0.84	0.0	0.0	0.17	0.496	13.17	6.53	6.71	51	0	1583.79
0.146	0.575	0.0	0.0	0.08	0.496	13.22	6.56	6.64	47	0	1583.85
0.0	0.0	0.0	0.0	0.00	0.496	13.33	6.61	6.61	41	0	1583.92
0.0	0.0	0.0	0.0	0.00	0.496	13.32	6.60	6.60	51	0	1583.92
0.413	1.725	0.0	0.0	0.71	0.452	12.65	5.72	6.43	37	0	1584.22
0.386	1.611	0.0	0.0	0.62	0.452	12.68	5.73	6.35	42	0	1584.28
0.358	1.491	0.0	0.0	0.53	0.452	12.70	5.74	6.27	42	0	1584.34
0.326	1.356	0.0	0.0	0.44	0.452	12.73	5.75	6.20	39	0	1584.41
0.292	1.211	0.0	0.0	0.35	0.452	12.76	5.77	6.12	44	0	1584.47
0.253	1.044	0.0	0.0	0.26	0.452	12.79	5.78	6.05	45	0	1584.53
0.206	0.84	0.0	0.0	0.17	0.452	12.84	5.80	5.98	41	0	1584.60
0.146	0.575	0.0	0.0	0.08	0.452	12.88	5.82	5.91	38	0	1584.66
0.0	0.0	0.0	0.0	0.00	0.452	12.99	5.87	5.87	39	0	1584.72
0.0	0.0	0.0	0.0	0.00	0.452	12.97	5.86	5.86	50	0	1584.72
0.413	1.725	0.0	0.0	0.71	0.408	12.30	5.02	5.73	28	0	1584.95
0.386	1.611	0.0	0.0	0.62	0.408	12.33	5.03	5.65	30	0	1585.01
0.358	1.491	0.0	0.0	0.53	0.408	12.36	5.04	5.58	29	0	1585.08
0.326	1.356	0.0	0.0	0.44	0.408	12.39	5.05	5.50	30	0	1585.15
0.292	1.211	0.0	0.0	0.35	0.408	12.42	5.07	5.42	34	0	1585.21
0.253	1.044	0.0	0.0	0.26	0.408	12.46	5.08	5.35	33	0	1585.27
0.206	0.84	0.0	0.0	0.17	0.408	12.49	5.10	5.27	29	0	1585.34
0.146	0.575	0.0	0.0	0.08	0.408	12.54	5.12	5.20	31	0	1585.40
0.413	1.725	0.0	0.0	0.71	0.364	11.95	4.35	5.06	12	0	1585.63
0.386	1.611	0.0	0.0	0.62	0.364	11.97	4.36	4.98	15	0	1585.70
0.358	1.491	0.0	0.0	0.53	0.364	12.01	4.37	4.90	15	0	1585.76
0.326	1.356	0.0	0.0	0.44	0.364	12.03	4.38	4.82	16	0	1585.83
0.292	1.211	0.0	0.0	0.35	0.364	12.06	4.39	4.74	18	0	1585.89
0.253	1.044	0.0	0.0	0.26	0.364	12.10	4.40	4.67	18	0	1585.96
0.206	0.84	0.0	0.0	0.17	0.364	12.13	4.42	4.59	17	0	1586.03
0.326	1.356	0.0	0.0	0.44	0.32	11.65	3.73	4.17	0	0	1586.44
0.292	1.211	0.0	0.0	0.35	0.32	11.68	3.74	4.09	0	0	1586.49
0.253	1.044	0.0	0.0	0.26	0.32	11.72	3.75	4.01	1	0	1586.59
0.386	1.632	0.0	0.0	0.63	0.484	12.30	5.95	6.58	17	20	1581.46
0.358	1.505	0.0	0.0	0.54	0.484	12.32	5.96	6.50	17	20	1581.54
0.326	1.365	0.0	0.0	0.44	0.484	12.35	5.98	6.42	18	20	1581.62
0.292	1.214	0.0	0.0	0.35	0.484	12.38	5.99	6.35	22	20	1581.69
0.253	1.04	0.0	0.0	0.26	0.484	12.41	6.01	6.27	22	20	1581.77
0.206	0.83	0.0	0.0	0.17	0.484	12.45	6.03	6.20	21	20	1581.85
0.386	1.632	0.0	0.0	0.63	0.456	12.09	5.51	6.14	12	20	1581.97
0.358	1.505	0.0	0.0	0.54	0.456	12.11	5.52	6.06	12	20	1582.05

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I_F [A]	V_F [V]	I_B [A]	V_B [V]	Pel_R [W]	I_L [A]	V_L [V]	P_L [W]	P_{tot} [W]	P_{opt} [mW]	T [C]	freq [cm^{-1}]
0.326	1.365	0.0	0.0	0.44	0.456	12.14	5.54	5.98	15	20	1582.13
0.292	1.214	0.0	0.0	0.35	0.456	12.17	5.55	5.90	17	20	1582.20
0.253	1.04	0.0	0.0	0.26	0.456	12.20	5.56	5.83	16	20	1582.29
0.386	1.632	0.0	0.0	0.63	0.428	11.87	5.08	5.71	6	20	1582.45
0.358	1.505	0.0	0.0	0.54	0.428	11.90	5.09	5.63	7	20	1582.54
0.326	1.365	0.0	0.0	0.44	0.428	11.93	5.11	5.55	10	20	1582.61
0.292	1.214	0.0	0.0	0.35	0.428	11.96	5.12	5.47	11	20	1582.69
0.253	1.04	0.0	0.0	0.26	0.428	11.99	5.13	5.39	11	20	1582.77
0.386	1.632	0.0	0.0	0.63	0.4	11.65	4.66	5.29	0	20	1582.91
0.358	1.505	0.0	0.0	0.54	0.4	11.68	4.67	5.21	2	20	1582.99
0.326	1.365	0.0	0.0	0.44	0.4	11.70	4.68	5.13	3	20	1583.08
0.292	1.214	0.0	0.0	0.35	0.4	11.73	4.69	5.05	5	20	1583.15
0.253	1.04	0.0	0.0	0.26	0.4	11.77	4.71	4.97	5	20	1583.24
0.386	1.671	0.0	0.0	0.65	0.504	11.88	5.99	6.64	0	40	1578.82
0.358	1.539	0.0	0.0	0.55	0.504	11.91	6.00	6.55	2	40	1578.89
0.326	1.389	0.0	0.0	0.45	0.504	11.94	6.02	6.47	5	40	1578.98
0.292	1.231	0.0	0.0	0.36	0.504	11.97	6.03	6.39	8	40	1579.07
0.253	1.05	0.0	0.0	0.27	0.504	12.00	6.05	6.31	12	40	1579.16
0.326	1.389	0.0	0.0	0.45	0.486	11.80	5.74	6.19	1	40	1579.32
0.292	1.231	0.0	0.0	0.36	0.486	11.83	5.75	6.11	4	40	1579.42
0.253	1.05	0.0	0.0	0.27	0.486	11.87	5.77	6.03	5	40	1579.51
0.292	1.231	0.0	0.0	0.36	0.468	11.70	5.47	5.83	0	40	1579.76
0.253	1.05	0.0	0.0	0.27	0.468	11.73	5.49	5.75	1	40	1579.84

Table 6: