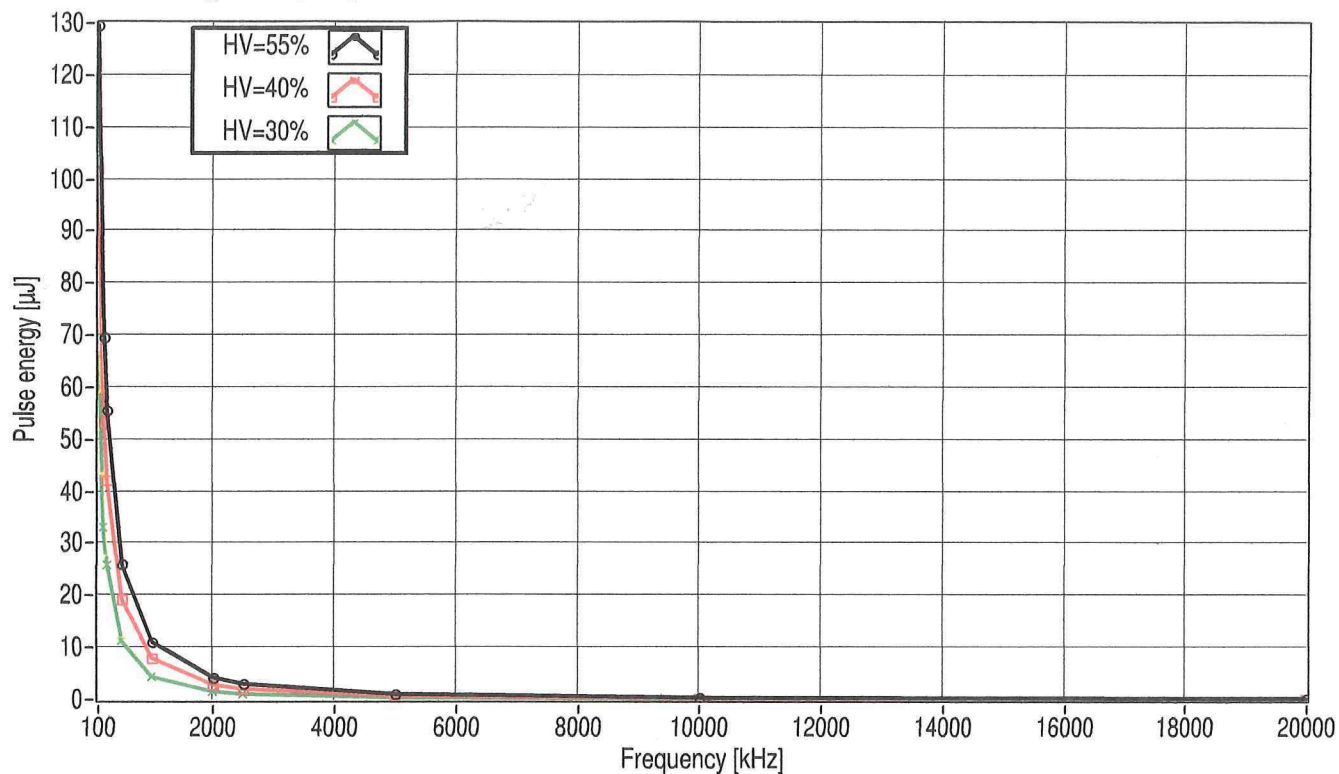


Pulse energy vs. frequency

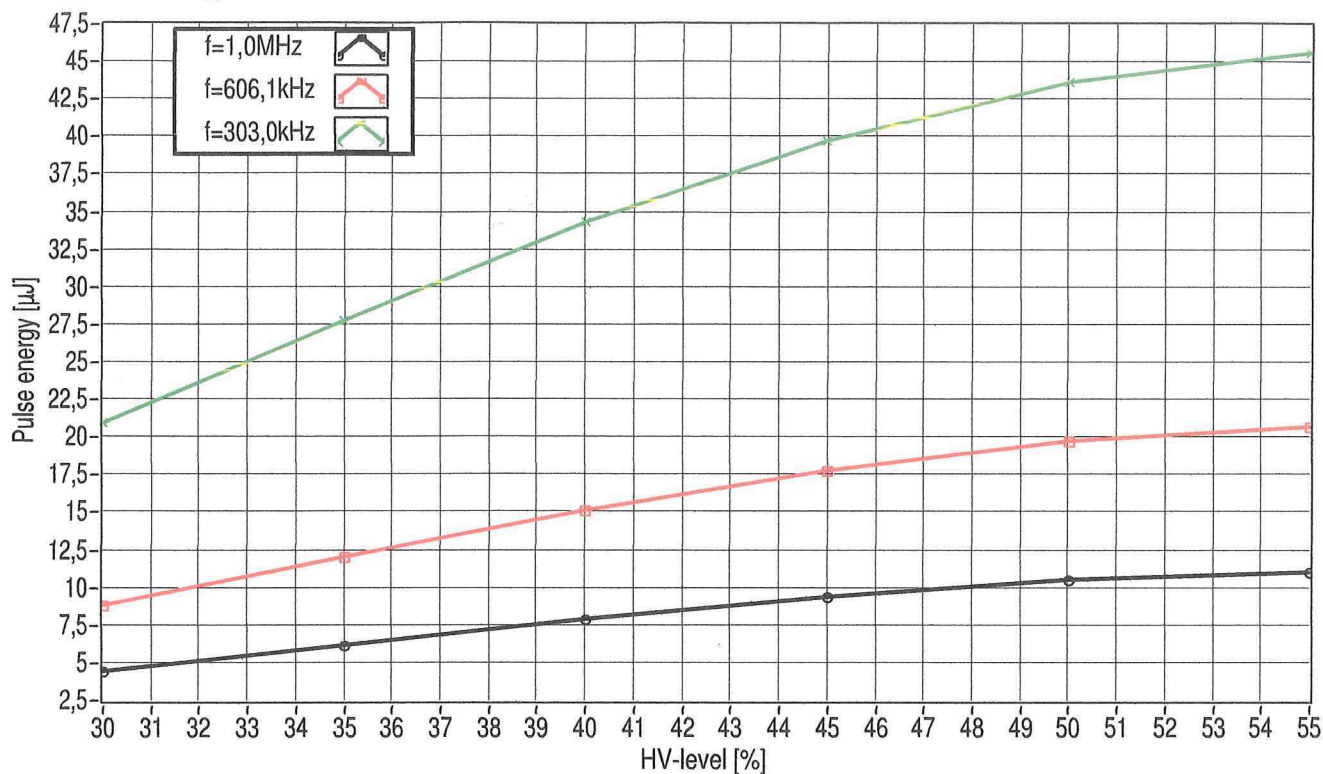


HV-level	100,0kHz	200,0kHz	250,0kHz	500,0kHz	1,0MHz	2,0MHz	2,5MHz	5,0MHz	10,0MHz	20,0MHz
HV=55%	129,47 μJ	69,48 μJ	55,47 μJ	25,97 μJ	10,99 μJ	4,13 μJ	2,96 μJ	0,97 μJ	0,29 μJ	0,09 μJ
HV=40%	102,08 μJ	53,14 μJ	42,11 μJ	19,20 μJ	7,91 μJ	2,87 μJ	2,03 μJ	0,65 μJ	0,19 μJ	0,06 μJ
HV=30%	66,28 μJ	33,09 μJ	25,83 μJ	11,24 μJ	4,34 μJ	1,49 μJ	1,04 μJ	0,32 μJ	0,09 μJ	0,03 μJ

Max. currents at different frequencies

Frequency range	SFD	I1max	I2max
20000 - 200kHz	1 - 100	2,9 A	43 A
198 - 133kHz	101 - 150	2,9 A	43 A
132 - 100kHz	151 - 200	2,9 A	43 A

Pulse energy vs. HV-level



Frequency	30%	35%	40%	45%	50%	55%
f=1,0MHz	4,4 μJ	6,1 μJ	7,9 μJ	9,4 μJ	10,5 μJ	11,0 μJ
f=606,1kHz	8,8 μJ	12,0 μJ	15,1 μJ	17,8 μJ	19,7 μJ	20,7 μJ
f=303,0kHz	20,9 μJ	27,7 μJ	34,3 μJ	39,7 μJ	43,6 μJ	45,6 μJ

Max. currents at different burst frequencies

Frequency range	SFD	I1max	I2max
20000 - 200kHz	1 - 100	2,9 A	43 A
198 - 133kHz	101 - 150	2,9 A	43 A
132 - 100kHz	151 - 200	2,9 A	43 A

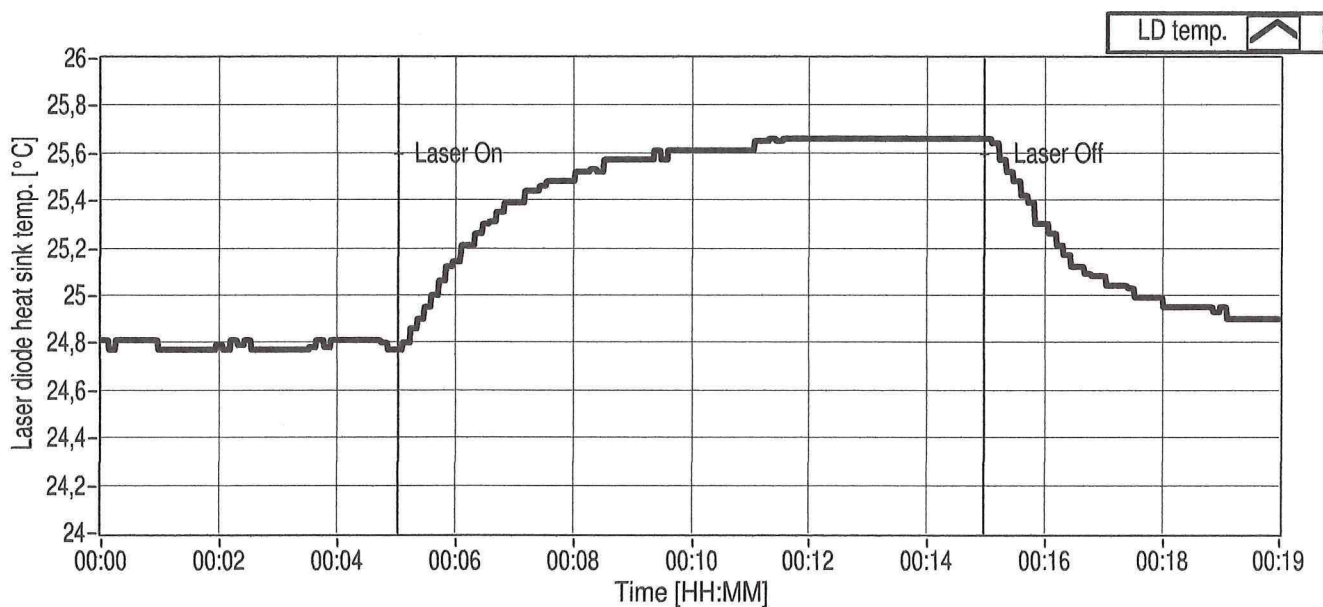
Laser diode heat sink temp.

Laser SN: 0702	Seeder freq.: 20,2MHz	Water temp.: 25°C	I1 max(Seeder): 2,9A
Wavelength: 532nm	Max. freq.: 20,2MHz	Water flow: _____	Max. Current2: 43A
P. on time: 291 h	Min. freq.: 101,2kHz	Oven temp.: 40,4°C	I1 min(Seeder): 2,9A

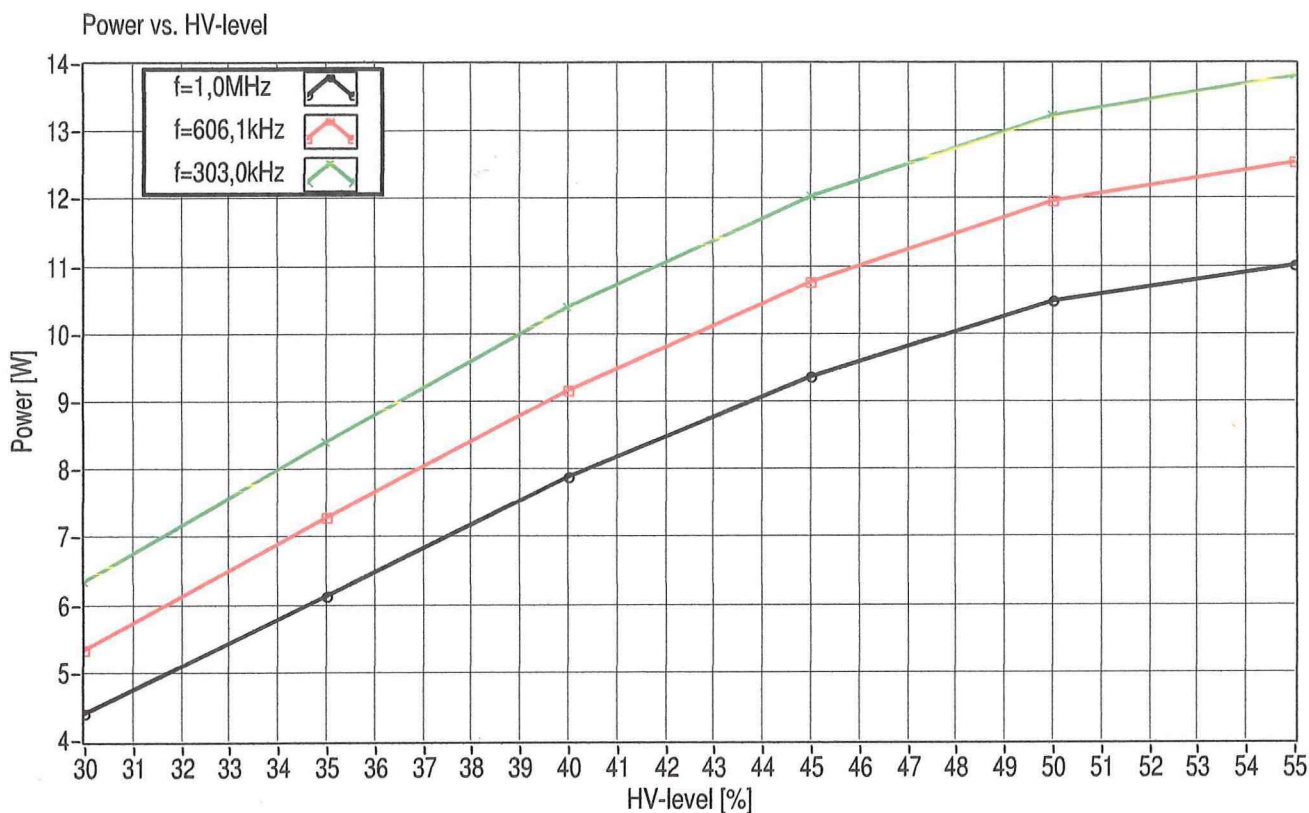
Reference temperature of laser diode heat sink

Chiller setpoint: 25°C

Current setpoint: I_{max}



Laser SN: 0702 Seeder freq.: 20,2MHz Water temp.: 25°C I1max(Seeder): 2,9A
 Wavelength: 532nm Max. freq.: 20,2MHz Water flow: _____ I1min(Seeder): 2,9A
 P. on time: 290 h Min. freq.: 101,2kHz Oven temp.: 40,4°C I2max(amp.): 43A



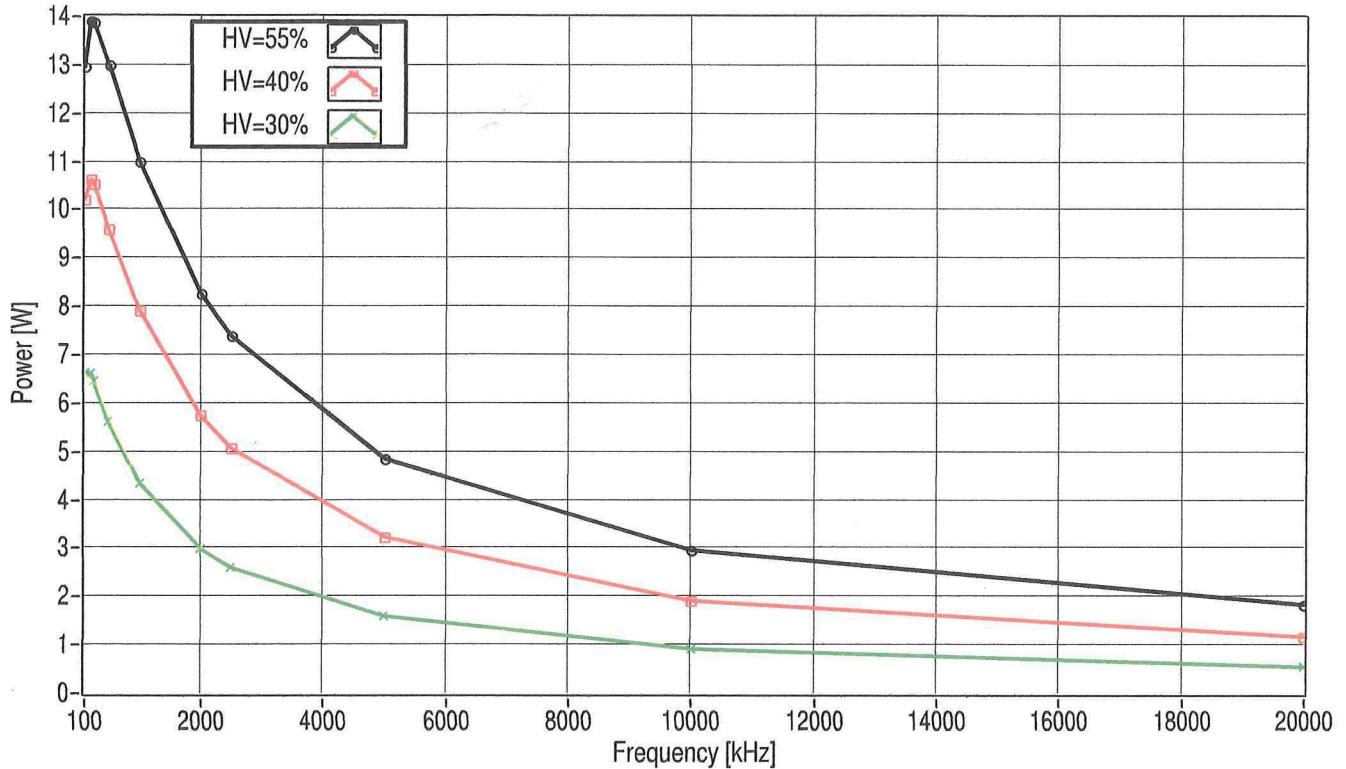
Frequency	30%	35%	40%	45%	50%	55%
f=1,0MHz	4,4 W	6,1 W	7,9 W	9,4 W	10,5 W	11,0 W
f=606,1kHz	5,3 W	7,3 W	9,2 W	10,8 W	12,0 W	12,5 W
f=303,0kHz	6,3 W	8,4 W	10,4 W	12,0 W	13,2 W	13,8 W

Max. currents at different burst frequencies

Frequency range	SFD	I1max	I2max
20000 - 200kHz	1 - 100	2,9 A	43 A
198 - 133kHz	101 - 150	2,9 A	43 A
132 - 100kHz	151 - 200	2,9 A	43 A

Laser SN: 0702 Seeder freq.: 20,2MHz Water temp.: 25°C I1max(Seeder): 2,9A
 Wavelength: 532nm Max. freq.: 20,2MHz Water flow: _____ I1min(Seeder): 2,9A
 P. on time: 291 h Min. freq.: 101,2kHz Oven temp.: 40,4°C I2max(amp.): 43A

Power vs. frequency



HV-level	100,0kHz	200,0kHz	250,0kHz	500,0kHz	1,0MHz	2,0MHz	2,5MHz	5,0MHz	10,0MHz	20,0MHz
HV=55%	12,95 W	13,90 W	13,87 W	12,99 W	10,99 W	8,26 W	7,39 W	4,84 W	2,95 W	1,82 W
HV=40%	10,21 W	10,63 W	10,53 W	9,60 W	7,91 W	5,75 W	5,07 W	3,23 W	1,91 W	1,16 W
HV=30%	6,63 W	6,62 W	6,46 W	5,62 W	4,34 W	2,99 W	2,60 W	1,59 W	0,91 W	0,54 W

Max. currents at different frequencies

Frequency range	SFD	I1max	I2max
20000 - 200kHz	1 - 100	2,9 A	43 A
198 - 133kHz	101 - 150	2,9 A	43 A
132 - 100kHz	151 - 200	2,9 A	43 A