

**LSM 780 laser power in  $\mu\text{W}$**  measured in the sample plane for different settings of laser power percentage (0.2 – 50) and with different objectives (measured on 12/08/2020).

<b>10x/0.3</b>		<b>405</b>	<b>458</b>	<b>488</b>	<b>514</b>	<b>561**</b>	<b>633</b>
0.2		5.7	0.6	2.0	1.1	1.2	1.6
0.5		15	1.0	5.2	2.5	2.4	3.5
1		31	1.7	11	4.7	4.1	6.4
5		133	6.8	53	22	18	30
10		275	13	106	45	36	59
50		1427	68	533	223	184	298
<b>20x/0.8</b>		<b>405</b>	<b>458</b>	<b>488</b>	<b>514</b>	<b>561**</b>	<b>633</b>
0.2		6.3	0.7	2.6	1.5	1.7	2.2
0.5		17	1.3	6.7	3.3	3.1	4.7
1		34	2.1	14	6.2	5.6	8.7
5		146	8.5	69	30	25	40
10		303	17	137	59	49	80
50		1568	85	689	293	248	403
<b>40x/1.3</b>		<b>405</b>	<b>458</b>	<b>488</b>	<b>514</b>	<b>561**</b>	<b>633</b>
0.2		5.7	0.6	2.2	1.2	1.5	2.2
0.5		15	1.1	5.6	2.7	2.9	4.6
1		31	1.8	11	5.0	5.1	8.4
5		132	7.1	57	24	23	39
10		274	14	114	17	46	77
50		1410	71	569	236	229	392
<b>63x/1.2 W</b>		<b>405</b>	<b>458</b>	<b>488</b>	<b>514</b>	<b>561**</b>	<b>633</b>
0.2		2.3	0.3	1.0	0.6	0.7	0.9
0.5		6.2	0.5	2.6	1.2	1.2	1.8
1		13	0.8	5.3	2.3	2.2	3.4
5		55	3.3	27	11	10	16
10		114	6.4	53	22	19	31
50		592	33	267	112	100	157
<b>63x/1.4</b>		<b>405</b>	<b>458</b>	<b>488</b>	<b>514</b>	<b>561**</b>	<b>633</b>
0.2		3.2	0.4	2.8	0.7	0.9	1.1
0.5		8.6	0.7	4.9	1.6	1.7	2.3
1		18	1.1	8.3	3.0	3.0	4.1
5		73	4.3	36	14	14	19
10		151	8.4	71	29	27	38
50		780	43	350	143	135	194
<b>100x/1.46*</b>		<b>405</b>	<b>458</b>	<b>488</b>	<b>514</b>	<b>561**</b>	<b>633</b>
0.2		2.1	0.2	1.9	0.3	0.4	0.5
0.5		5.5	0.3	2.9	0.7	0.8	1.0
1		11	0.5	4.5	1.3	1.3	1.8
5		46	2.0	17	6.3	5.9	8.1
10		96	4.0	34	8.3	12	16
50		497	20	164	63	59	82

\* the values are likely underestimated; the power-meter probe has limited light collection efficiency for objectives with NA > 1.4 (oil immersion).

\*\* 561 nm laser sometimes exhibits about 3 to 3.5 times higher power; however, in most cases the power follows the values displayed here.

**ELYRA laser intensity in W/cm<sup>2</sup>** measured in the sample plane with the 100x TIRF objective for different settings of laser power percentage (0.2 – 100) and with the beam expander set to TIRF and 0 incidence angle (measured on 12/08/2020).

100x/1.46*	405	488	561	642
0.2	0.2	0.2	0.2	0.1
0.5	0.4	0.4	0.6	0.2
1	0.6	0.8	1.1	0.5
5	2.2	4.1	5.7	2.3
10	4.3	11	24	4.4
50	22	57	119	36
100	44	110	222	67

\* the values are likely underestimated; the power-meter probe has limited light collection efficiency for objectives with NA > 1.4 (oil immersion).