Table 1. The OFD for varying criterion and light power for 200 μm fiber diameter

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Power  (mW) | Criterion  (mW/mm2) | OFD  (μs z) | OFD at 473 nm  (μm) | OFD at 532 nm  (μm) | OFD at 594 nm  (μm) |
| 4 | 10 | 3.45 | 300 | 329 | 359 |
| 4 | 5 | 4.83 | 420 | 460 | 503 |
| 4 | 1.3 | 6.79 | 590 | 646 | 707 |
| 8 | 10 | 4.83 | 420 | 460 | 503 |
| 8 | 5 | 5.75 | 500 | 548 | 599 |
| 8 | 1.3 | 7.94 | 690 | 756 | 827 |
| 12 | 10 | 5.29 | 460 | 504 | 551 |
| 12 | 5 | 6.44 | 560 | 613 | 671 |
| 12 | 1.3 | 8.40 | 730 | 800 | 874 |
| 16 | 10 | 5.75 | 500 | 548 | 599 |
| 16 | 5 | 6.90 | 600 | 657 | 719 |
| 16 | 1.3 | 8.63 | 750 | 821 | 898 |
| 20 | 10 | 6.21 | 540 | 591 | 647 |
| 20 | 5 | 7.13 | 620 | 679 | 743 |
| 20 | 1.3 | 8.74 | 760 | 832 | 910 |

Table 2. The rate of temperature changes per averaged power at OFD for different wavelength and criterion

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Wavelength  (nm) | Criterion  (mW/mm2) | OFD temperature for 50% duty (°C/mW) | OFD temperature for 30% duty (°C/mW) | Mean OFD temperature (°C/mW) |
| 473 | 10 | 0.124 | 0.133 | 0.129 |
| 473 | 5 | 0.112 | 0.120 | 0.116 |
| 473 | 1.3 | 0.093 | 0.100 | 0.096 |
| 532 | 10 | 0.068 | 0.073 | 0.071 |
| 532 | 5 | 0.062 | 0.066 | 0.064 |
| 532 | 1.3 | 0.053 | 0.056 | 0.054 |
| 594 | 10 | 0.040 | 0.044 | 0.042 |
| 594 | 5 | 0.037 | 0.040 | 0.038 |
| 594 | 1.3 | 0.031 | 0.033 | 0.032 |