## PERFORMANCE EVALUATION

I try to record the timing between each iteration. See how much time it used to render a image. In order to test the difference between different block size. I changed the titleSize as to change the block size. In the same condition of everything except the block size, I calculate the time difference between the start and the end of the program.

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| --- | --- | --- |
| Title Size | Block Size(800 x 800) | Timing(average) in milliseconds |
| 4 | 200 | 200 |
| 8 | 100 | 71 |
| 16 | 50 | 75 |
| 32 | 25 | Too many resources |

As we can see from the table, as the title size which is related to the thread number pre block increases, the block size is going to decrease. The influence of the speed or timing is based on the computer capability of our own GPU and the way you allocate the thread and block size. Because each difference GPU, its SM has different number of active blocks and active threads. If the allocation of your threads pre block and blocks pre grid don’t hit the limit of your GPU configuration, then you actually waste the occupancy.