1.

100 iterations:

NAME: Tesla T10 Processor
VENDOR: NVIDIA Corporation
PROFILE: FULL_PROFILE
VERSION: OpenCL 1.0 CUDA

pixels/s: 320.770687 MPixels/s
bandwidth:2.566165 GBit/s
Flop/s:15.619675 GFlop/s

Original Image:

After 100 iterations:

After 200 iterations:

NAME: Tesla T10 Processor
VENDOR: NVIDIA Corporation
PROFILE: FULL_PROFILE
VERSION: OpenCL 1.0 CUDA
Work Size: 4*4, Repetations:100

pixels/s: 147.856913 MPixels/s
bandwidth: 1.182855 GBit/s
Flop/s: 7.199775 Gflop/s

Work Size: 8*8, Repetations:100

pixels/s: 278.286714 MPixels/s
bandwidth: 2.226294 GBit/s
Flop/s: 13.550952 Gflop/s

(b):

I just copy the output image of the kernel to input image using clEnqueueCopyBuffer.

Repetitions: 2

Repetitions: 5

Repetitions: 10

Repetitions:100