lane utilization rate

(1, 89.3)
(2, 77.6)
(4, 70.5)
(8, 66.8)
(16, 65.1)

vector width

Data utilization rate decrease as vector width increase due to data irregularity. As the vector width increase, it is more likely for those datas that could have exited the while loop to stay within the redundant while loop, waiting for the computationally costly data to finish.

1
$(1, 89.3)$

2
$(2, 77.6)$

3
$(4, 70.5)$

4
$(8, 66.8)$

5
$(16, 65.1)$

6