


## Falcon3 counting mode

Tue, 2017-06-20 18:21 — s.wu

I ran FindDQE on a beamstop image taken by Falcon3 counting mode (dose rate = 0.92e/p/s, total dose = 55e). The DQE goes above 1. The output is attached. Is there anything abnormal?

 logdqe2.txt

113.03 KB

### SAME HERE

NeCEN - 22 Nov 2017 - 03:38

Dear all,

we are encountering the same issue: DQE of 1.5 for Falcon3 (counting, dose rate = 0.6e/p/s, total dose = 50e, Krios, 300kV).

Best,  
Chris

### COULD YOU PLEASE PROVIDE THE

niko - 22 Nov 2017 - 11:47

Could you please provide the value for "Gain conversion factor (counts/e)" that is calculated by FindDQE? It should be close to 1 for a counting detector.

### HEY S.WU, I AM WONDERING

Crick\_user - 2 Oct 2017 - 09:13

Hey s.wu,

I am wondering whether you found a way out. We are experiencing the same issue right now. We triple checked the dose right before acquisition. Images were acquired in electron counting mode at dose rate of 0.6 e/px/s (total dose per pixel 40), as measured with EPU (1.9.1) and the Falcon Reference Image Manager. We still get a DQE well above 1.0.

Have you sorted it out?

### A DQE ABOVE 1 SUGGESTS THAT

niko - 20 Jun 2017 - 20:25

A DQE above 1 suggests that the total exposure was higher than what you entered. Please make sure you have the total exposure correct. Some software may alter the counts by some factor and this can then lead to incorrect assumed exposure values.

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Source URL: <http://grigoriefflab.janelia.org/node/5680>