

Answers week 6.

Cameras

- 1 a) 0.8
1 b) 4x4 binning gives SNR 9.2
- 2 Integration time 228 s gives SNR 43
- 3 a) -
3 b) SNR will be a factor $\sqrt{0.7/0.95}$ worse

Solar cells

- 1 a) -
1 b) $V=0.512$, $I=8.64$ A
1 c) 3.55Ω
1 d) 7.3%
- 2 a) -
2 b) -
2 c)

	Test 1	Test 2	Test 3
J_{sc} (mA/ cm ²)	30	40	40
V_{oc} (V)	0.8	0.8	0.8
FF (%)	87%	71%	74%
η (%)	20.9	22.7	23.6