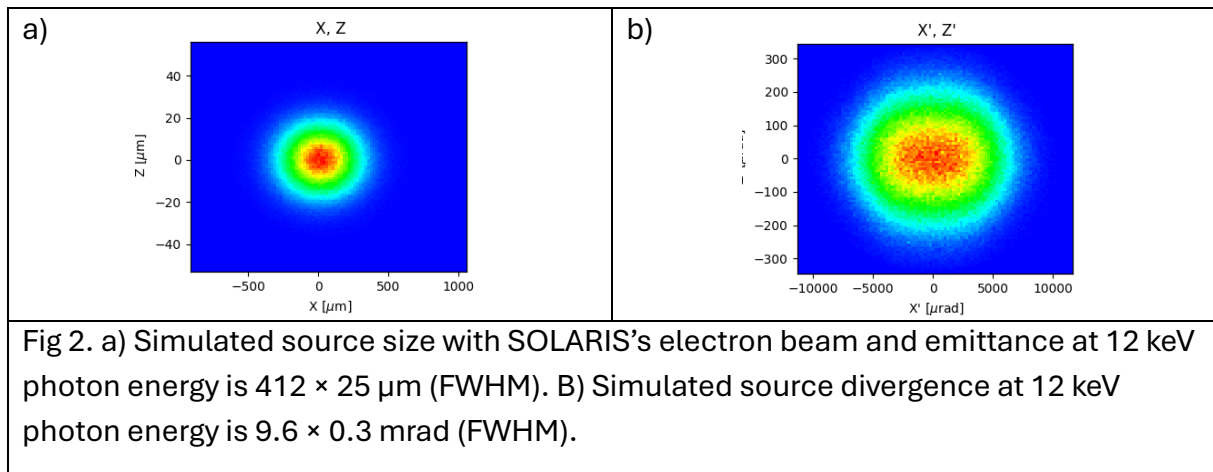
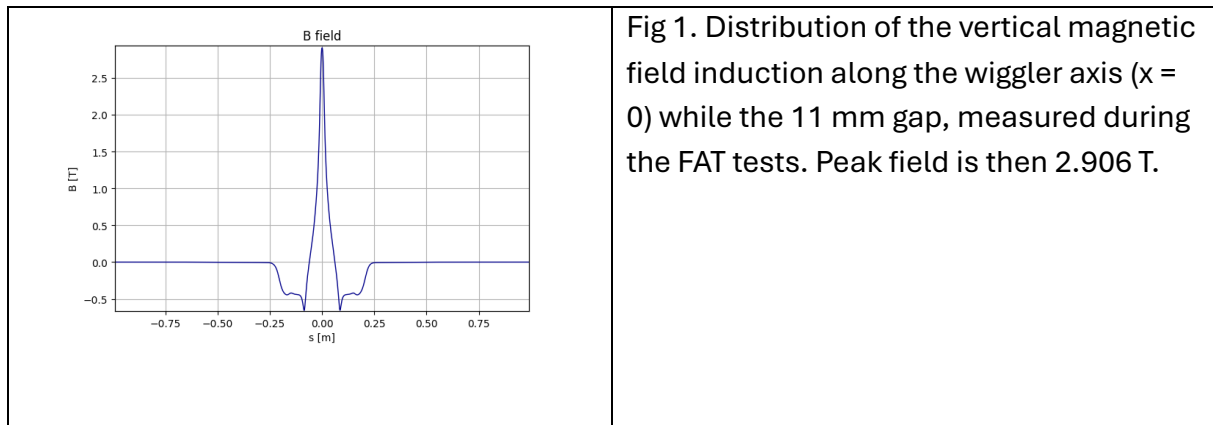
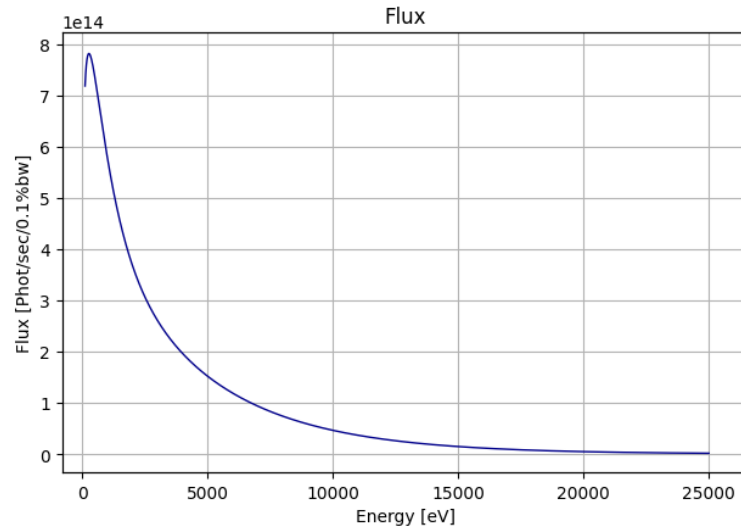


The 3-pole-wiggler has following magnetic and mechanical parameters:

Parameter	Values
ID type	3 pole wiggler
Magnetic gap (operational)	11.0 - 300 mm
Maximum length (girder with magnets)	469 mm
Peak field of central pole	2.906 T
Beamline's intended spectral range	4 keV – 23 keV
Field roll off at x = 5 mm	0.036 %
Field roll-off at x = 10 mm	0.1 %
Field roll-off at x = 20 mm	0.314 %
On axis first field integrals $I_x$ , $I_z$ (no correction coils)	0.02 Gm, 0.20 Gm
On axis second field integrals $I_2x$ , $I_2z$ (no correction coils)	$0.14 \text{ Gm}^2$ , $-0.28 \text{ Gm}^2$
Integrated quadrupole $X = \pm 20 \text{ mm}$ (normal and skew) (6th order polynomial) (no correction coils)	0.53 G, -7.7 G
Integrated sextupole $X = \pm 20 \text{ mm}$ (normal and skew) (6th order polynomial) (no correction coils)	-8.8 G/cm, -24.0 G/cm
Total power emitted by the 3PW while 500 mA of storage ring current	< 450 W



a)



b)

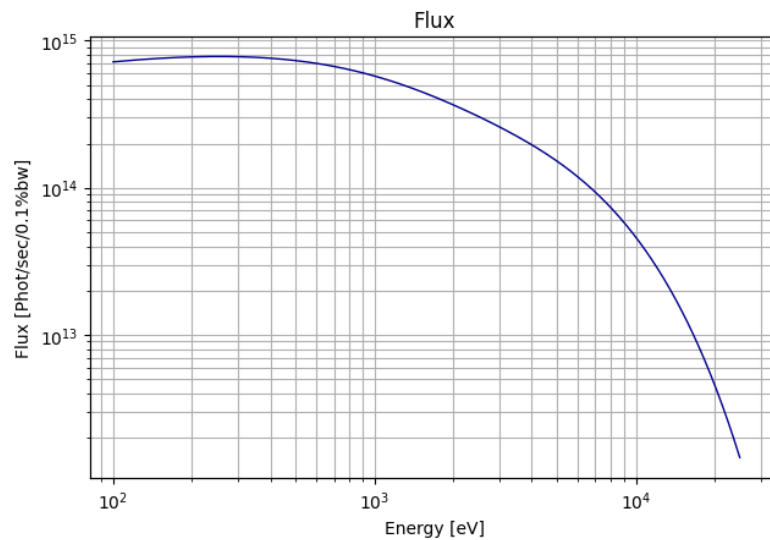


Fig 3. Calculated flux (ph/s/0.1%bw) of the full photon beam emitted by the device while 11 mm gap opening and with 1.5 GeV e-beam, in the spectral range 0.1 – 25 keV. a) linear scale, b) logarithmic scale. ARYA beamline is intended to operate in the range of  $\sim 4 - \sim 23$  keV