XOP Power calculations at 11 keV

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2 UA at 11 keV, pinhole and mirror aperture

Xpower input parameters

Spectral power of source and after each optics
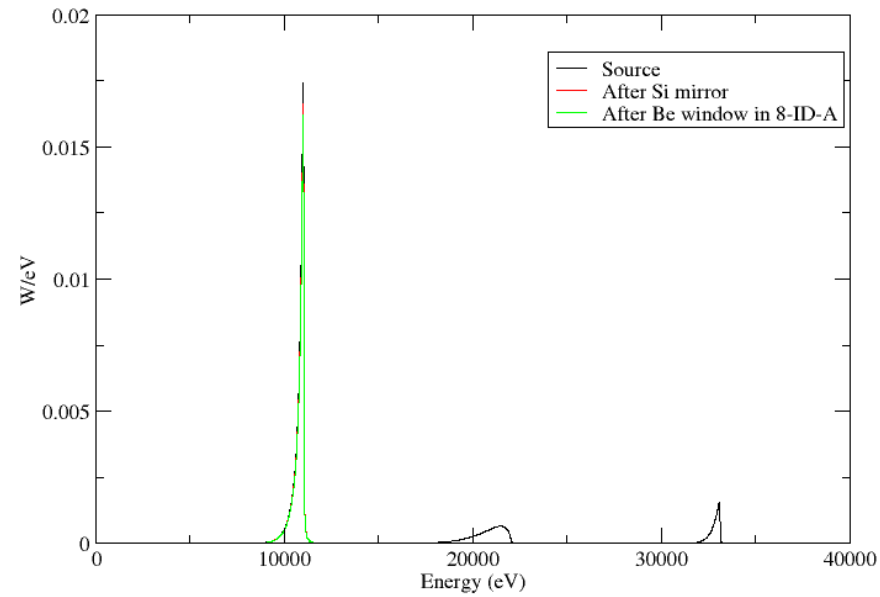
Power after each elements

Source energy (start,end,points): 4000.00, 36000.0, 3001
Number of optical elements: 2
Incoming power [source integral]: 6.98485
Normalized Incoming power: 1.00000

***** oe 1 [Mirror] *************
Material: Si
Density [g/cm^3]: 2.3300000
grazing angle [mrad]: 2.50000
roughness [A]: 1.00000
Outcoming power: 4.87333   (total is 6.985 W)
Absorbed power: 2.11152
Normalized Outcoming power: 0.697701

***** oe 2 [Filter] *************
Material: Be
Density [g/cm^3]: 1.8500000
thickness [mm] : 0.254000
Outcoming power: 4.74883   (to split between E and I hutches)
Absorbed power: 0.124499
Normalized Outcoming power: 0.679876
Absorbed dose Gy.(mm^2 beam cross section)/s: 264948.54

How does this compare to closed gap at 7.35 keV?

Source energy (start,end,points): 4000.00, 24000.0, 2001
Number of optical elements: 3
Incoming power [source integral]: 8.63734
Normalized Incoming power: 1.00000

***** oe 1 [Mirror] *************
Material: Si
Density [g/cm^3]: 2.3300000
grazing angle [mrad]: 2.50000
roughness [A]: 1.00000
Outcoming power: 4.54278   (total is 8.367 W)
Absorbed power: 4.09457
Normalized Outcoming power: 0.525946

***** oe 2 [Filter] *************
Material: Be
Density [g/cm^3]: 1.8500000
thickness [mm] : 0.254000
Outcoming power: 4.25298   (to share between I and E hutches)
Absorbed power: 0.289795
Normalized Outcoming power: 0.492395
Absorbed dose Gy.(mm^2 beam cross section)/s: 616716.14