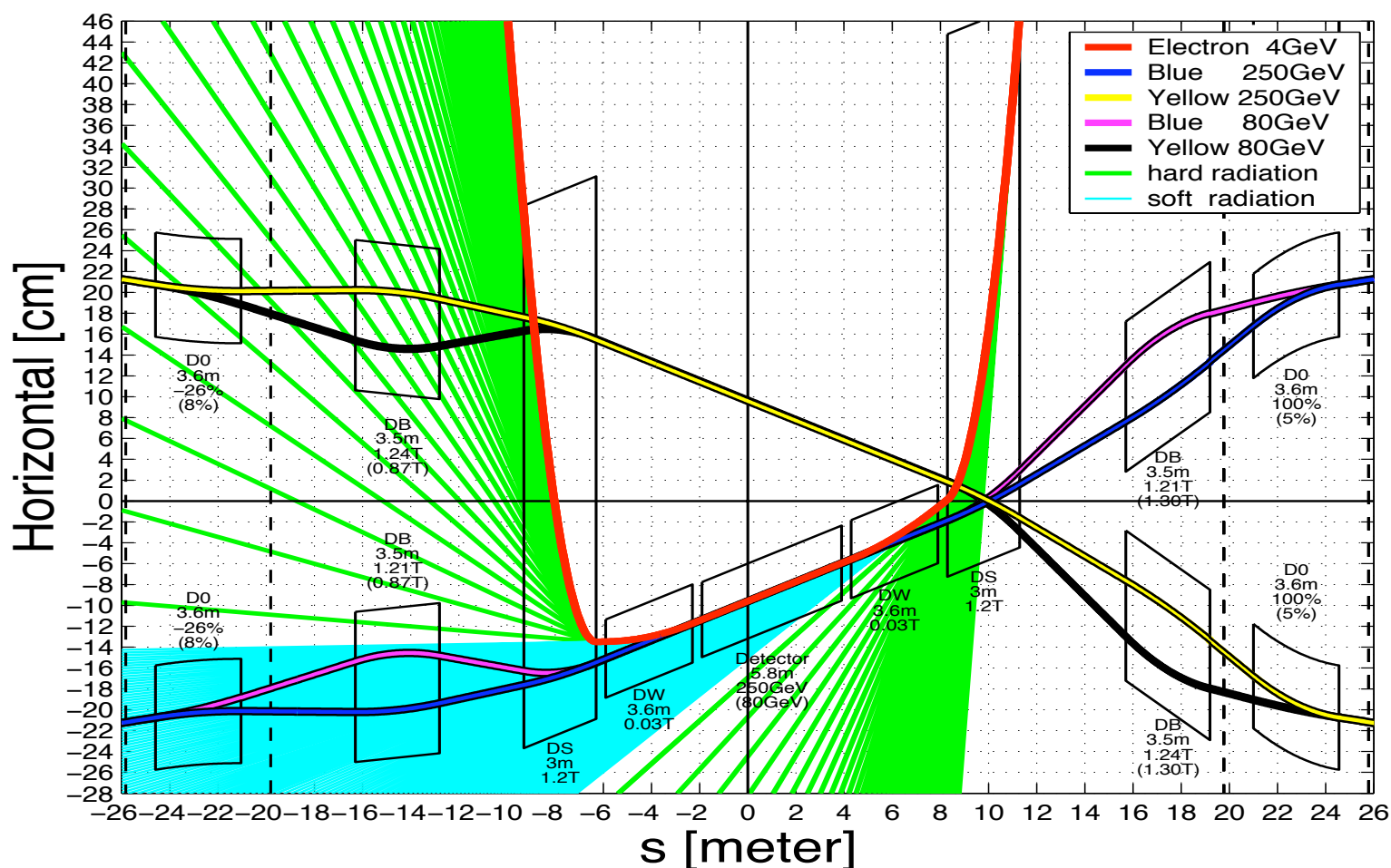
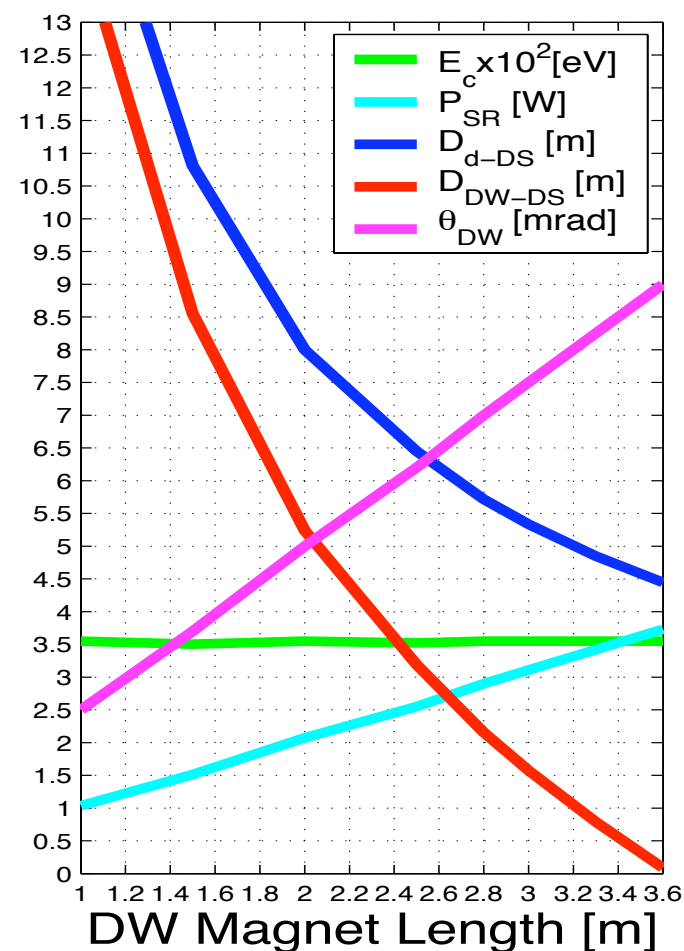
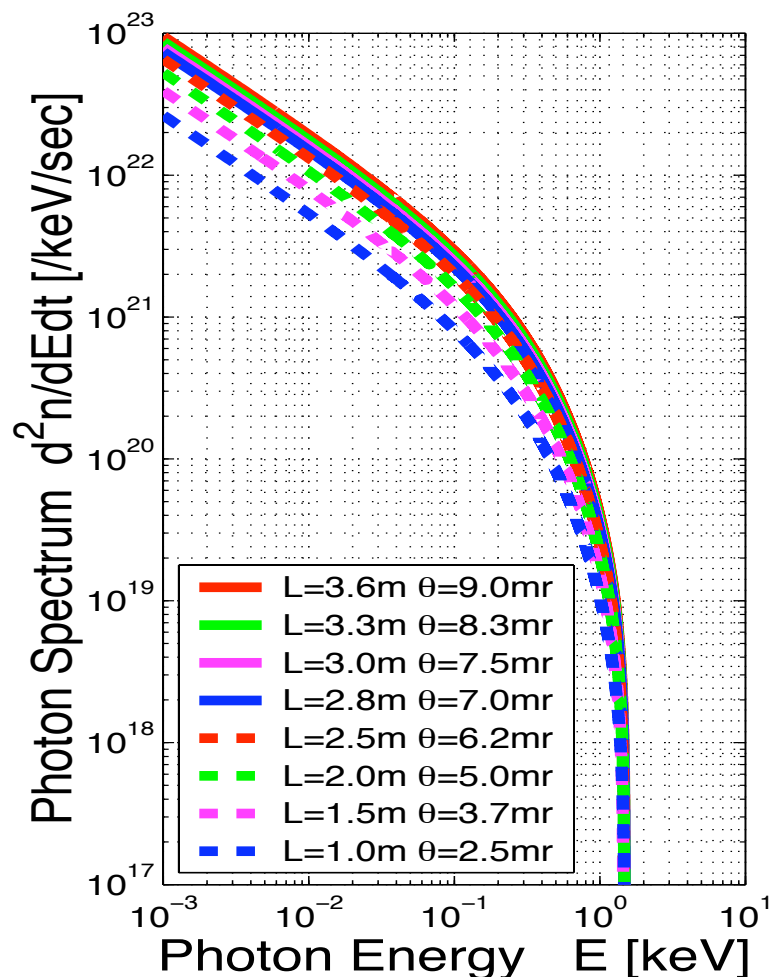


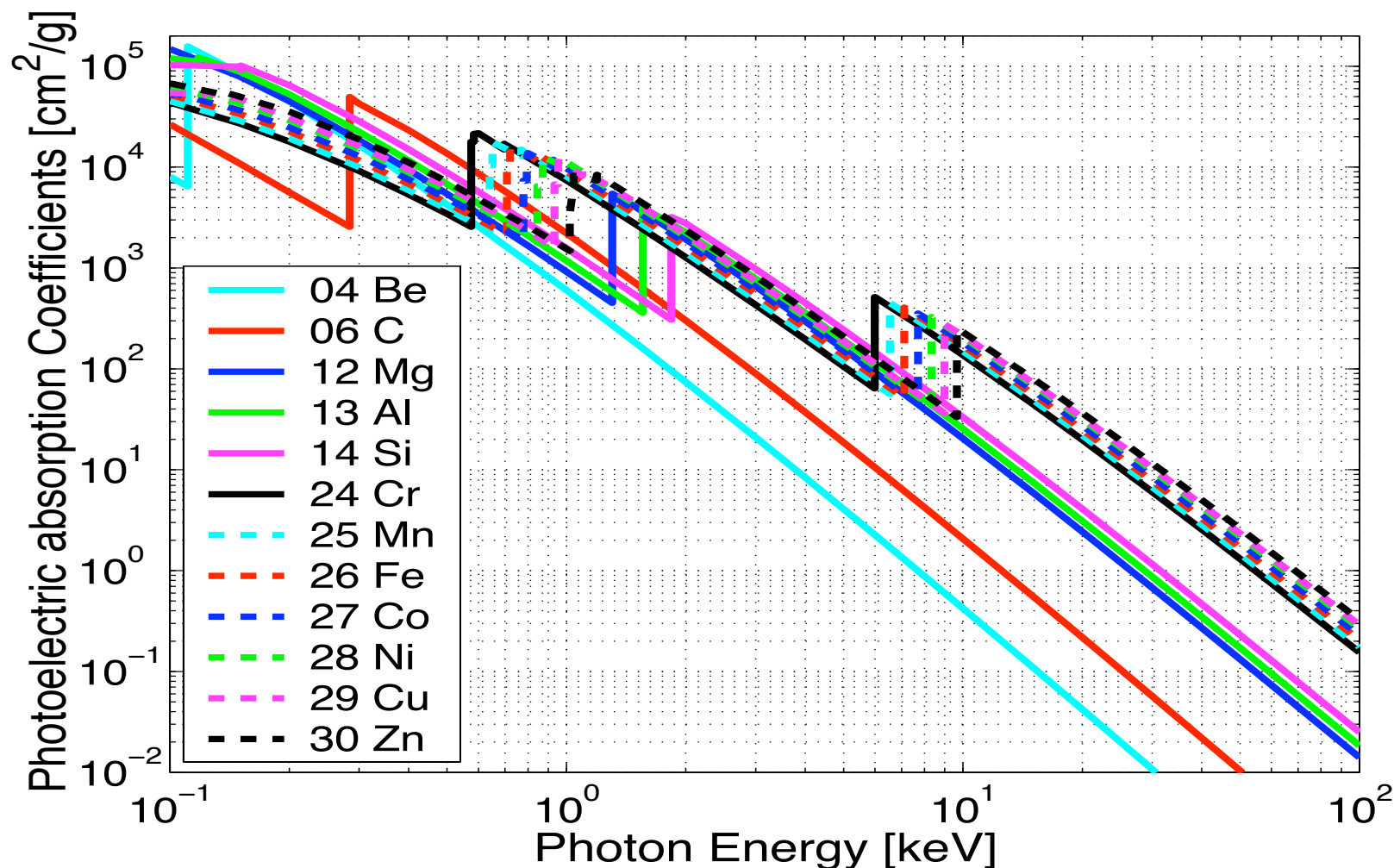
IR-layout Option #9 (no DX, H-soft bend) Proton energy tunability for a fixed e energy (4GeV)



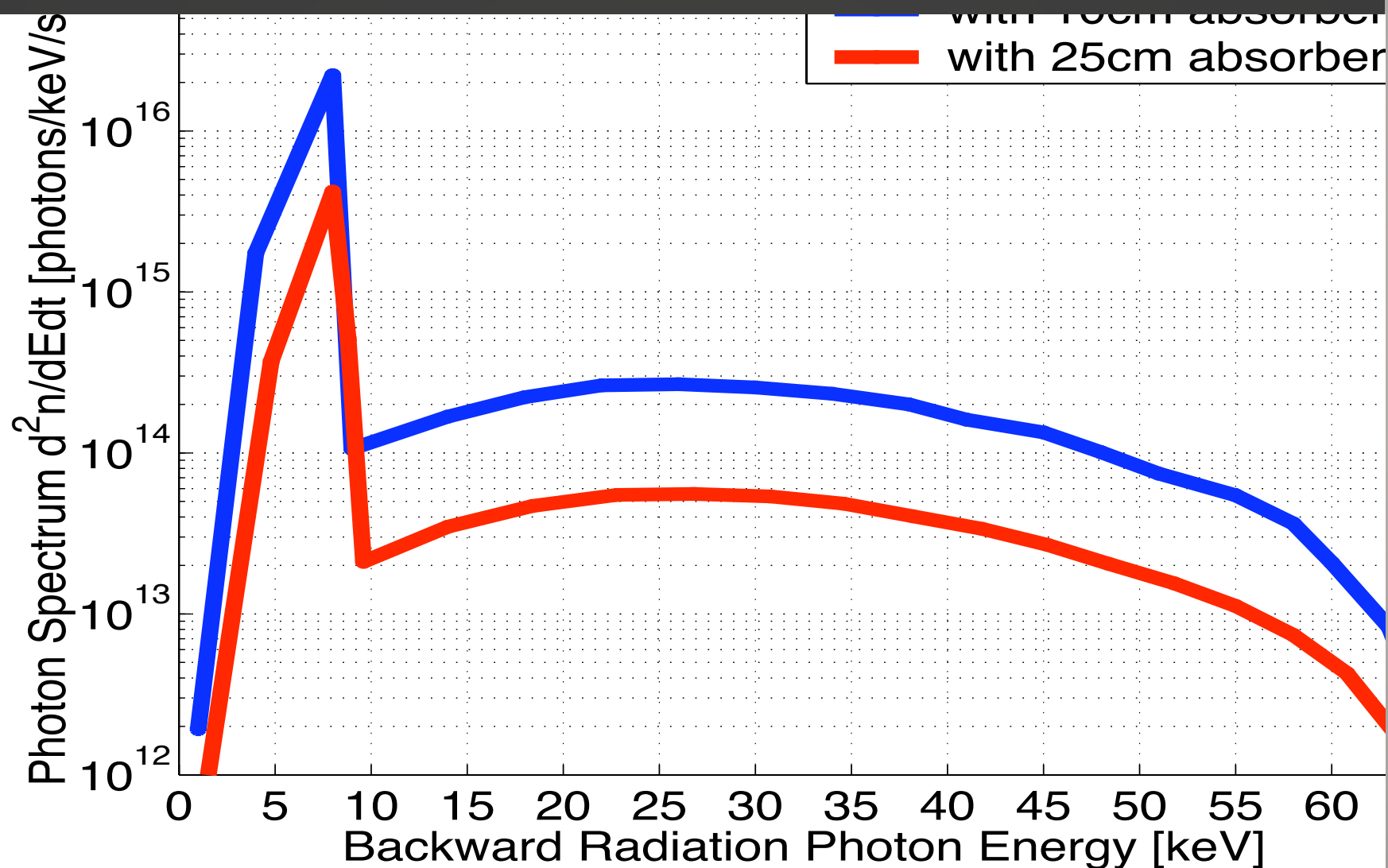
IR-layout Option #9 (no DX, H-soft bend) Detector Synchrotron Radiation Background



Synchrotron Radiation Background



Synchrotron Radiation Background



Choice of Materials

SR absorbers/masks for IR and arcs: Glidcop (Copper based)

Secondary photon energy: 9keV

Electron beam lines: Aluminum

Complicated shape to accommodate absorbers/masks, vacuum pumps, water cooling...

Secondary photon energy: 1keV

Experimental beam pipe (EBP): Beryllium and/or Aluminum

Secondary photon energy: 0.1keV

Experiment	BRAHMS	STAR	PHENIX	PHOBOS	MeRHIC
Interaction region #	2	6	8	10	2
DX flange ends [m]	2 x 8.615	2 x 8.615	2 x 8.615	2 x 8.615	--
EBP length [m]	7.1	8	5.2	12	5.8
EBP material	Beryllium	Beryllium	Beryllium	Beryllium	Beryllium
Extension material	Aluminum	Aluminum	SS	None	Aluminum
Flange	Al Conflat	Al Conflat	SS Conflat	Be Conflat	Al Conflat
Be pipe length [m]	1.5	1.5	1.5	3 x 4	6
Be pipe I.D. [cm]	7.4 (3")	7.4 (3")	7.4 (3")	7.4 (3")	7.4 (3")
Be thickness [mm]	1	1	1	1	1