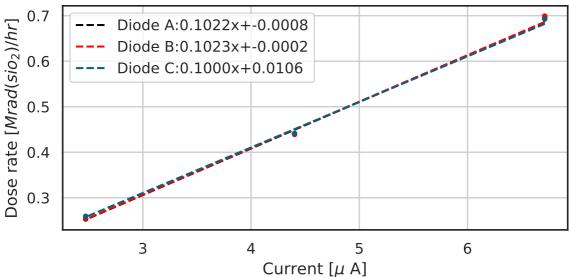
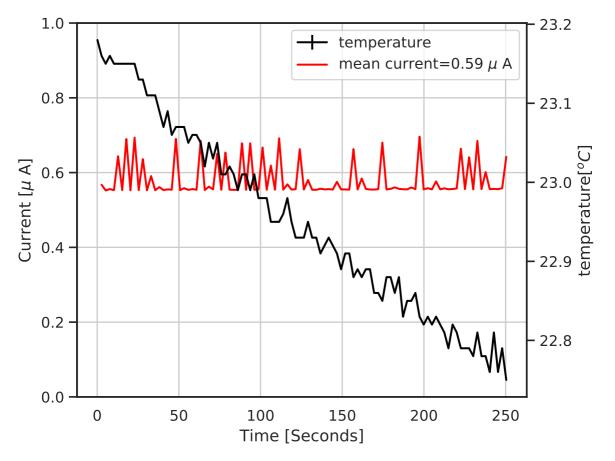
(Diode calibration at 40kV and 50mA)

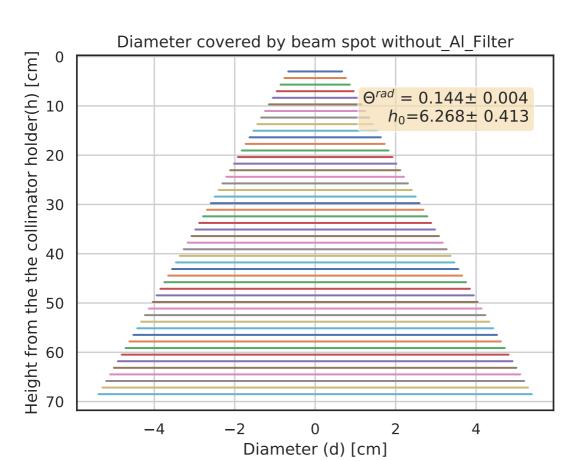


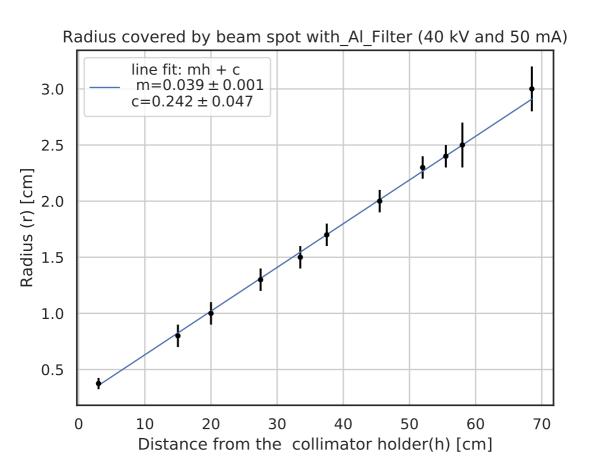
	3 cm	5 cm	8 cm	Mean factor
Diode A	9.674	10.02	9.847	9.847
Diode B	9.625	10.066	9.761	9.817
Diode C	9.708	10.015	9.602	9.775

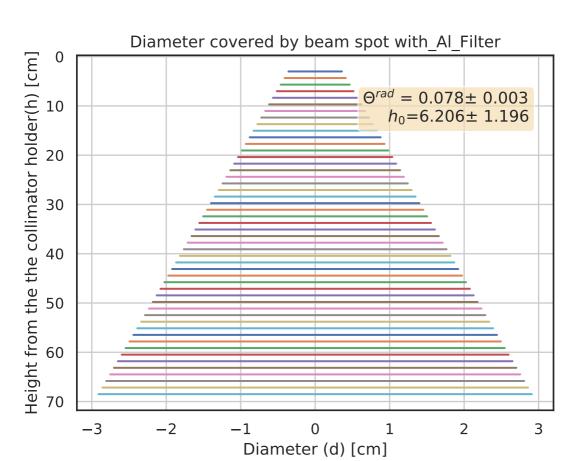


Radius covered by beam spot without Al Filter (40 kV and 50 mA) line fit: mh + c $m=0.072 \pm 0.002$ 5 $c=0.451 \pm 0.030$ Radius (r) [cm] 0 10 20 30 40 50 60 70

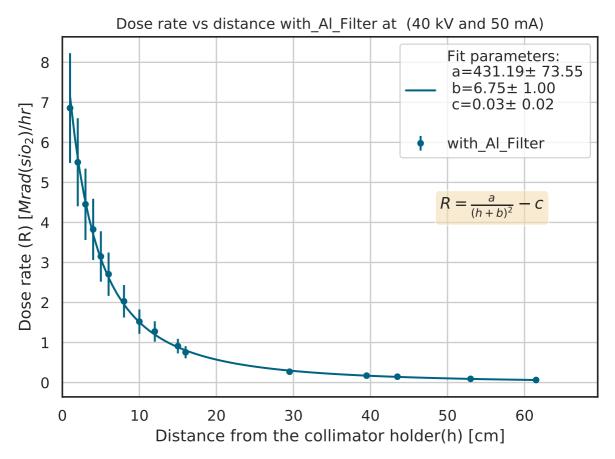
Distance from the collimator holder(h) [cm]



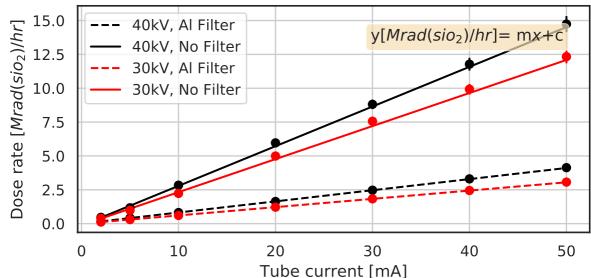




Dose rate vs distance without Al Filter at (40 kV and 50 mA) Fit parameters: 17.5 a=1391.77± 256.16 $b=6.20\pm 1.31$ $c=0.13\pm0.05$ 15.0 Dose rate (R) [Mrad(sio₂)/hr] without Al Filter 12.5 10.0 $R = \frac{a}{(h+b)^2}$ 7.5 5.0 2.5 0.0 0 10 20 30 40 50 60 70 Distance from the collimator holder(h) [cm]

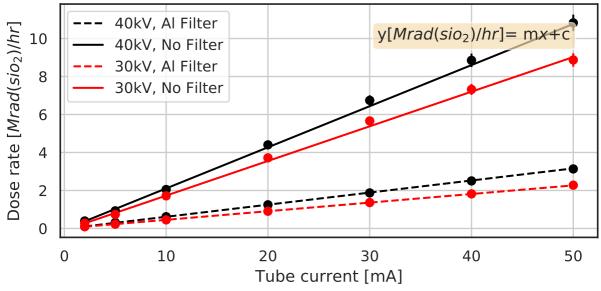


Calibration curve for 3cm



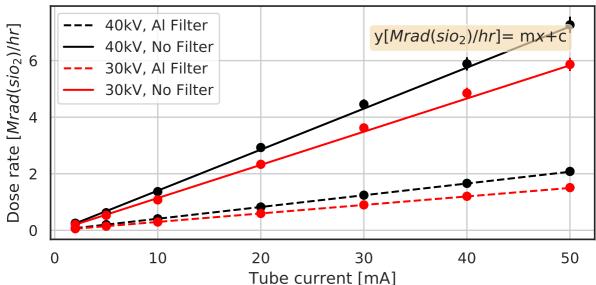
	m	С
V, Filter	0.08	-0.0
No Filter	0.29	-0.14
V, Filter	0.06	-0.01
No Filter	0.24	-0.12

Calibration curve for 5cm



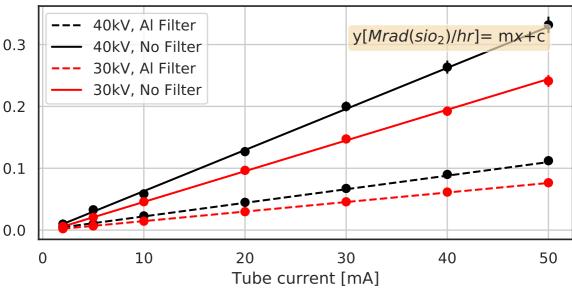
	m	С
ilter	0.06	-0.02
Filter	0.22	-0.06
ilter	0.05	0.0
Filter	0.18	-0.09

Calibration curve for 8cm



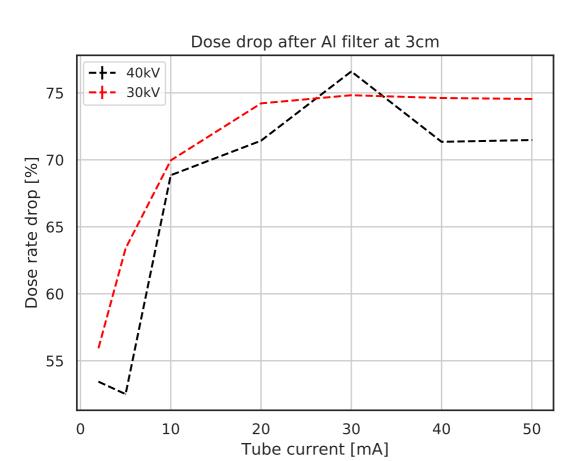
	m	С
lter	0.04	-0.01
Filter	0.15	-0.05
lter	0.03	-0.0
Filter	0.12	-0.03

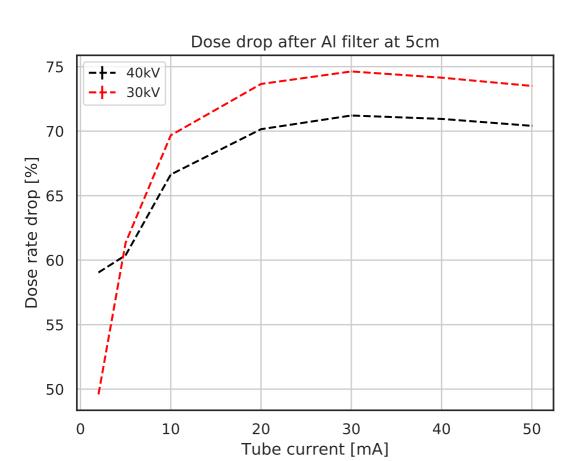
Calibration curve for 51cm

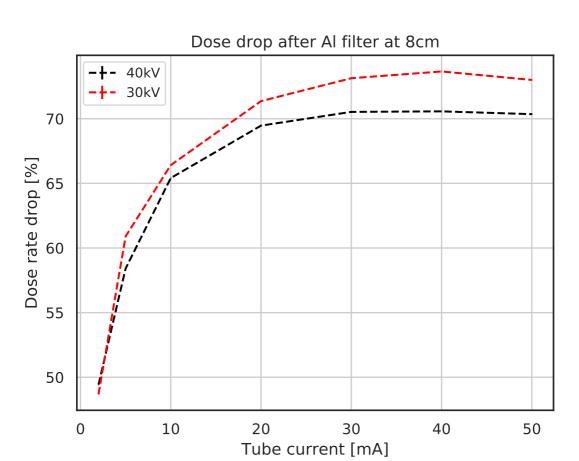


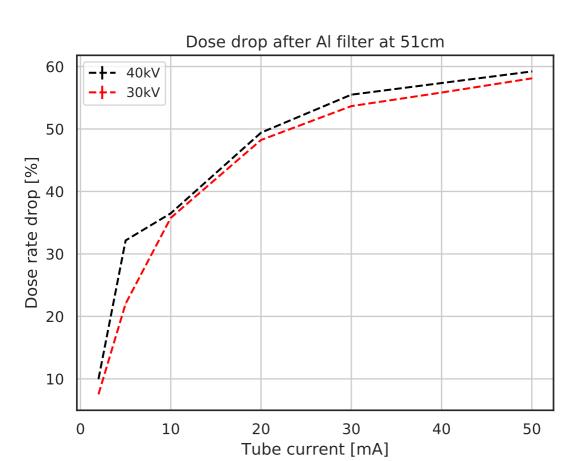
Dose rate [*Mrad*(sio₂)/hr]

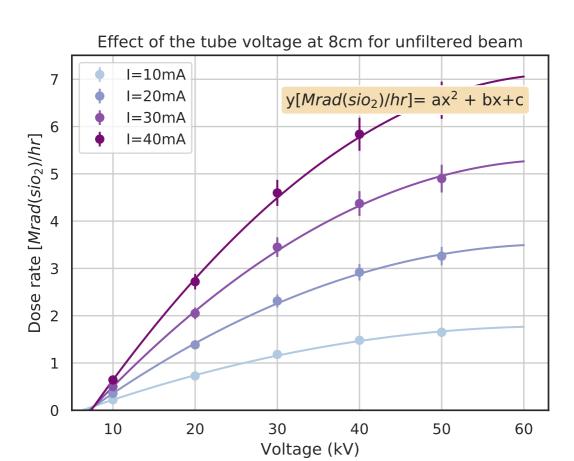
	m	С
Filter	0.0	0.0
o Filter	0.01	-0.0
Filter	0.0	-0.0
o Filter	0.0	-0.0

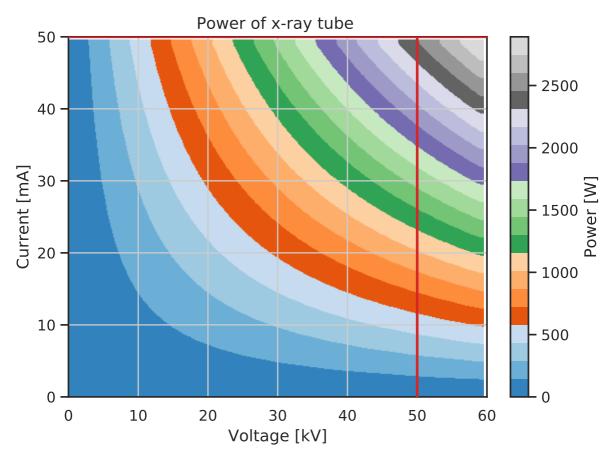




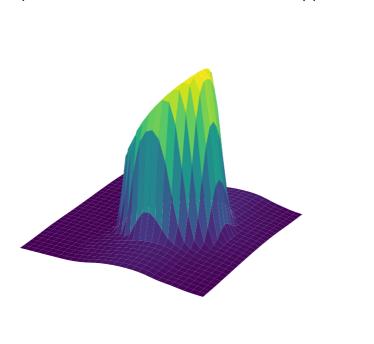








Beam profile at 3cmwithout collimator support



20.0

- 17.5

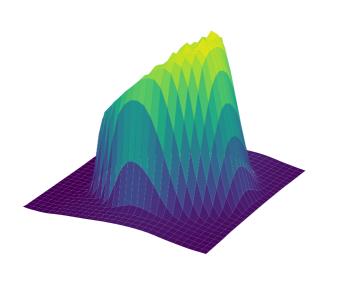
15.0

- 2.5 -Dose rate [*Mrad/l*

5.0

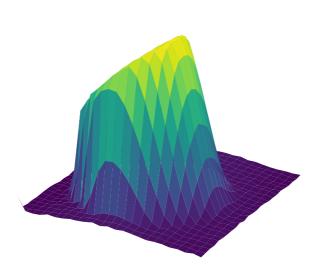
0.0

Beam profile at 8cmwithout collimator support





Beam profile at 51cmwithout collimator support





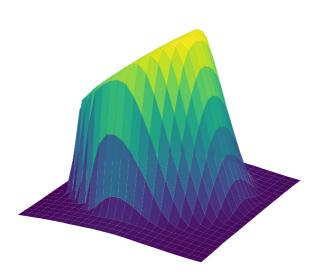








Beam profile at 60cmwithout collimator support



- 0.15

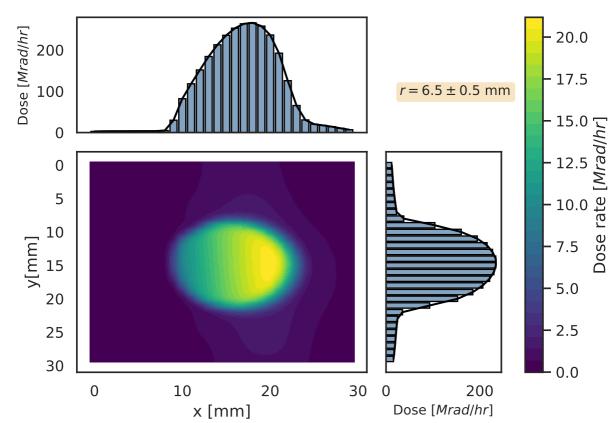
- 0.10

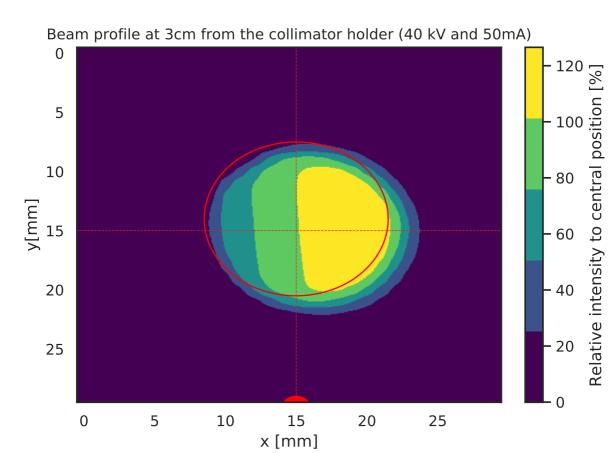
0.05

0.00

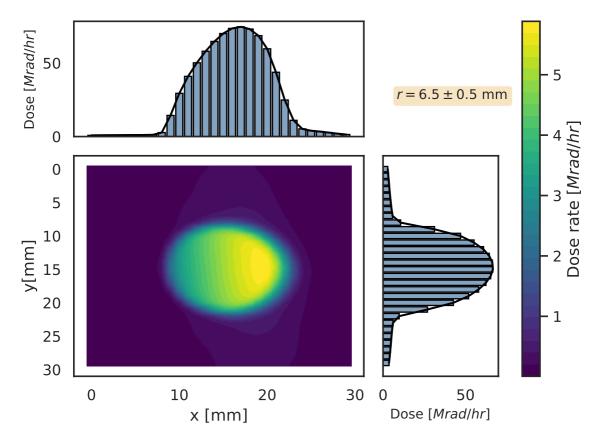
-0.05

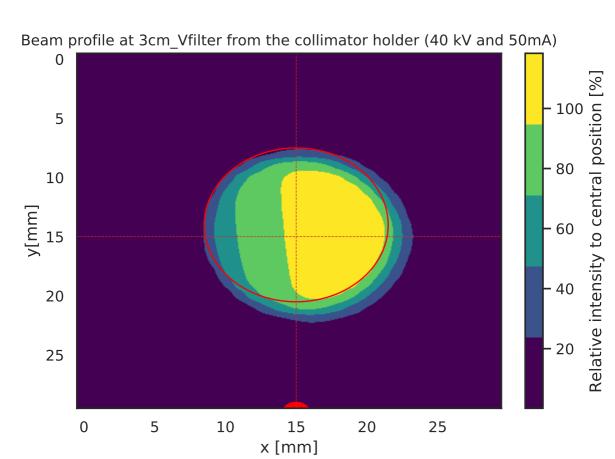
Beam profile at 3cm from the collimator holder (40 kV and 50mA)



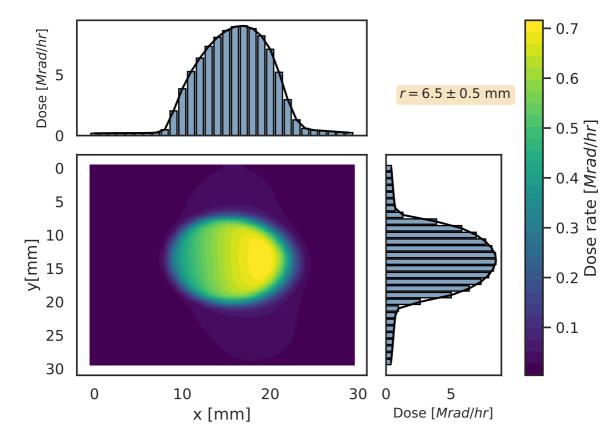


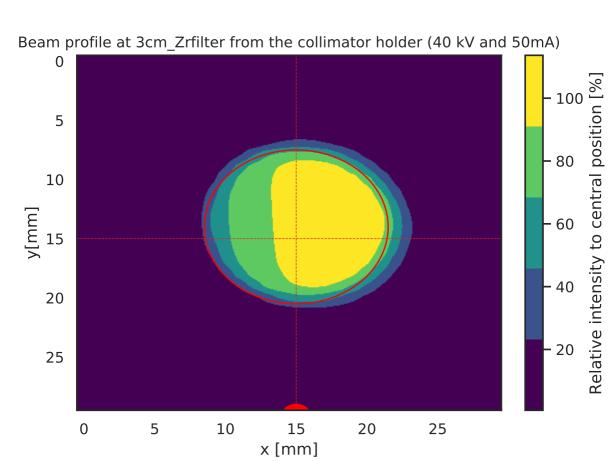
Beam profile at 3cm_Vfilter from the collimator holder (40 kV and 50mA)





Beam profile at 3cm_Zrfilter from the collimator holder (40 kV and 50mA)





Beam profile at 3cm collimator from the collimator holder (40 kV and 50m/ Dose [Mrad/hr] 17.5 100 15.0 50 $r = 3.75 \pm 0.05$ mm $r_{collimator} = 6 \text{ mm}$ 0 12.5 0 10.0 7.5 y[mm] 10 5.0 15 2.5 20

15

20

5

0

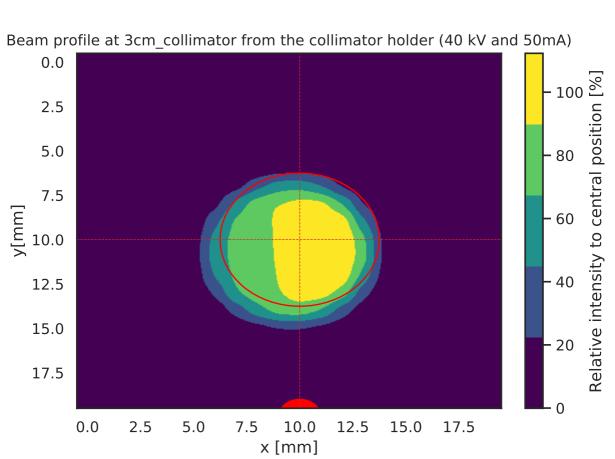
10

x [mm]

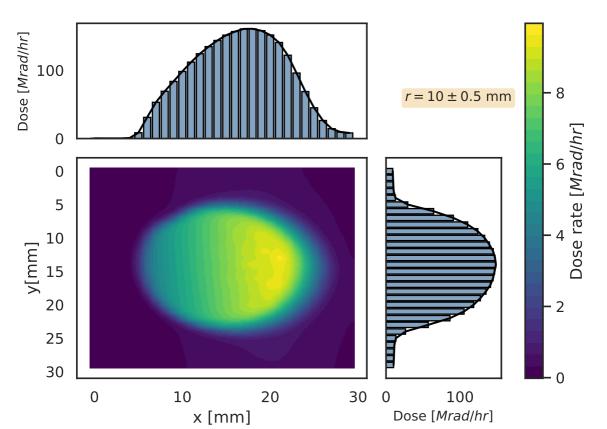
0.0

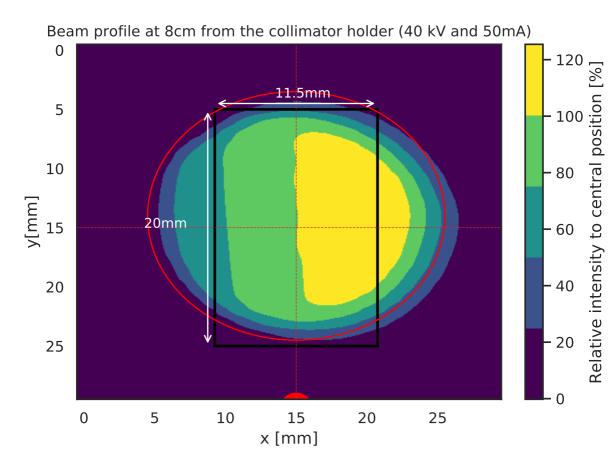
100

Dose [Mrad/hr]



Beam profile at 8cm from the collimator holder (40 kV and 50mA)





Beam profile at 60cm from the collimator holder (40 kV and 50mA)

