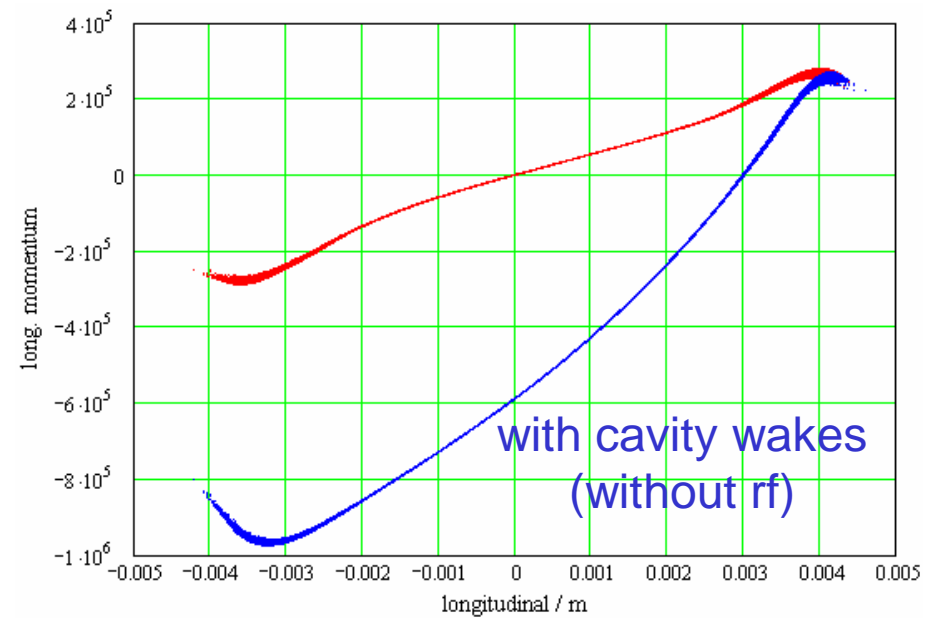
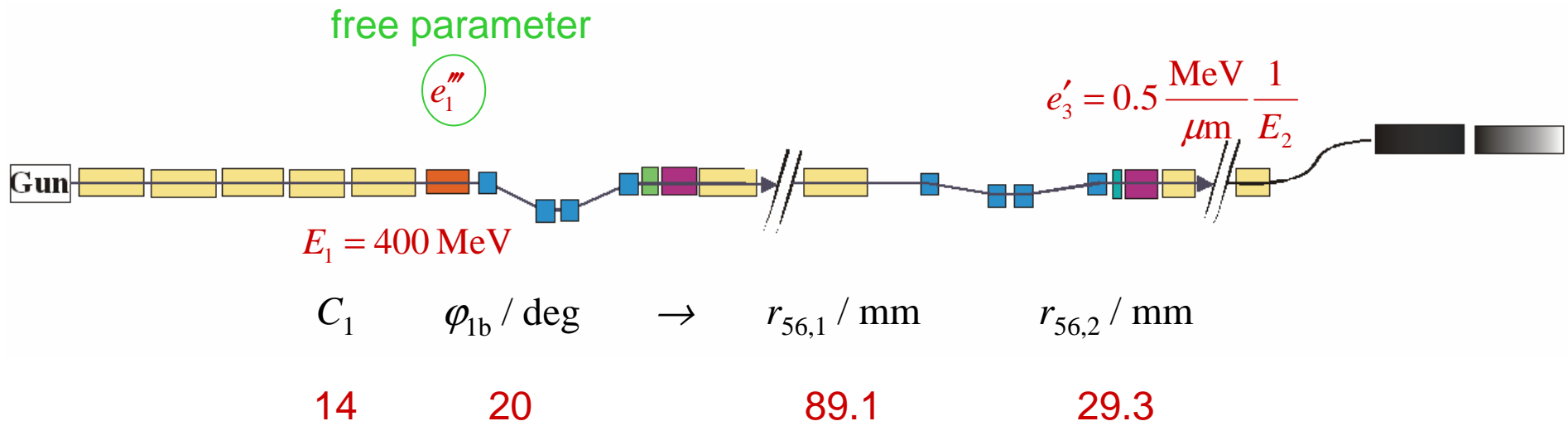
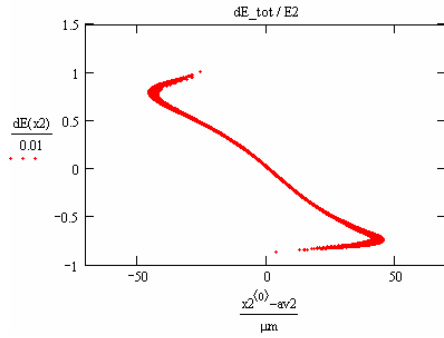
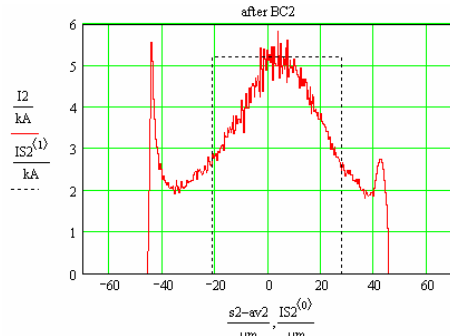


long. Density + wake fields:
 4 TESLA modules
 3rd harmonic cavities: 8m
 active length



setups 7 (low E1)





$$\frac{q_{fwhm}}{q_0} = 0.666$$

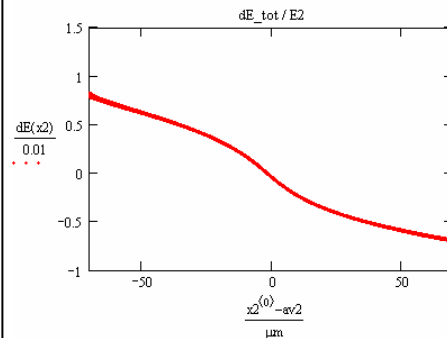
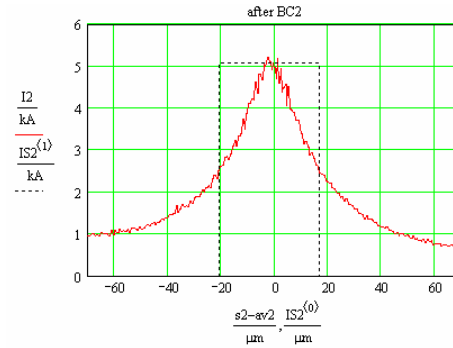
$$\frac{V1a}{MV} = 494.39 \quad \frac{\Delta V1}{MV} = -0.309$$

$$\frac{\phi1a}{deg} = 21.1 \quad \frac{\Delta\phi1}{deg} = 0.018$$

$$\frac{V3}{MV} = 65.577 \quad \frac{\Delta V3}{MV} = 0.259$$

$$\frac{\phi3}{deg} = -174.231 \quad \frac{\Delta\phi3}{deg} = -0.056$$

$$\left(\frac{1}{\Delta\phi1} + \frac{3}{\Delta\phi3}\right)^{-1} \cdot \frac{1}{deg} = 0.257$$



$$\frac{q_{fwhm}}{q_0} = 0.476$$

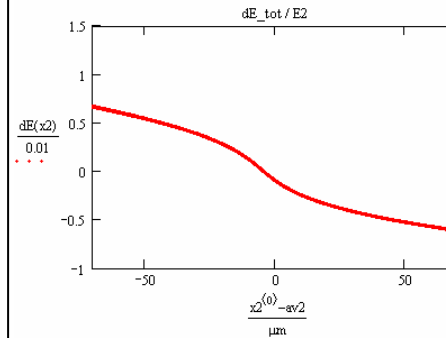
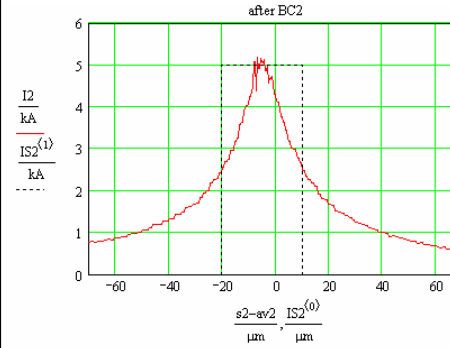
$$\frac{V1a}{MV} = 462.27 \quad \frac{\Delta V1}{MV} = -0.198$$

$$\frac{\phi1a}{deg} = 3.82 \quad \frac{\Delta\phi1}{deg} = 0.023$$

$$\frac{V3}{MV} = 77.844 \quad \frac{\Delta V3}{MV} = 0.079$$

$$\frac{\phi3}{deg} = -213.055 \quad \frac{\Delta\phi3}{deg} = -0.076$$

$$\left(\frac{1}{\Delta\phi1} + \frac{3}{\Delta\phi3}\right)^{-1} \cdot \frac{1}{deg} = 0.257$$



$$\frac{q_{fwhm}}{q_0} = 0.379$$

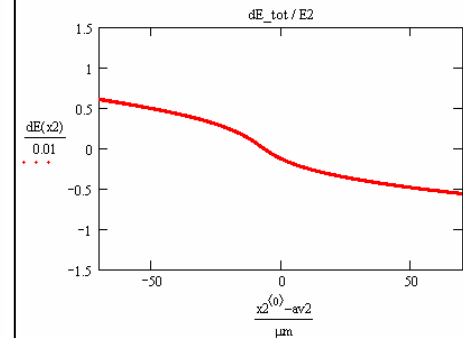
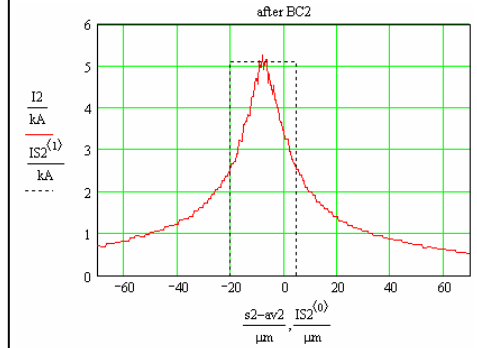
$$\frac{V1a}{MV} = 475.69 \quad \frac{\Delta V1}{MV} = -0.155$$

$$\frac{\phi1a}{deg} = -14.16 \quad \frac{\Delta\phi1}{deg} = 0.034$$

$$\frac{V3}{MV} = 112.387 \quad \frac{\Delta V3}{MV} = 0.065$$

$$\frac{\phi3}{deg} = -234.512 \quad \frac{\Delta\phi3}{deg} = -0.118$$

$$\left(\frac{1}{\Delta\phi1} + \frac{3}{\Delta\phi3}\right)^{-1} \cdot \frac{1}{deg} = 0.257$$



$$\frac{q_{fwhm}}{q_0} = 0.316$$

$$\frac{V1a}{MV} = 531.2 \quad \frac{\Delta V1}{MV} = -0.14$$

$$\frac{\phi1a}{deg} = -29.74 \quad \frac{\Delta\phi1}{deg} = 0.065$$

$$\frac{V3}{MV} = 154.965 \quad \frac{\Delta V3}{MV} = 0.063$$

$$\frac{\phi3}{deg} = -245.1 \quad \frac{\Delta\phi3}{deg} = -0.259$$

$$\left(\frac{1}{\Delta\phi1} + \frac{3}{\Delta\phi3}\right)^{-1} \cdot \frac{1}{deg} = 0.257$$

