Target

1267 mm

B = 0.92 T

1250 mm

800 mm

1000 mm

Effective Field Reg.

1200 mm

350 mm

YOKE

310 mm

MWDC 1

MWDC 2

25°

20°

Sieve

The length of the central track must be 64 cm, according to VIM paper, this is approximately right!

According to BB. paper, the central trajectory to deflected for 25°

200.0 cm
348.9 cm
69.5 cm
31.3 cm
5.3 cm
~23.4 cm
~23.5 cm

1.81 m

$(0.084.2) + (0.21.2) =$
$\approx 90\ mm$
$\approx 100\ mm$

$\alpha = 20°$

```c
//################### Vertex Time & Momentum Reconstruction ###################
//Magnetic field density in [T]
//---0.693---0.84-------------------------------------------
double magnetic_field_density = 0.92;//0.92;

//Distance from target to collimator [mm] -------------------------------
double DistanceToCollimator = 1267.03;

//Distance from target to front face of BB magnet in [mm] --------------------------------
double dist_to_target = 1267.0 + 350.0; //1267.0 + 350.0;

//Position of exit face with respect to to front face of BB magnet in [mm]
//1.0--------------
double exit_face_xc = 800.0;
double exit_face_yc = 0.0; //10.0


//Length and Height of BB magnet in [mm] 753-- 818----------------------------------------
double magnet_length = 1000.1;
double magnet_height = 1200.0;

//Exit face angle in [deg] -------------------------------------------------
double exit_face_angle = 20.0;

//Multi Wire Drift Chamber angle in [deg] ----------------------------------
double MWDC_angle = 25.0;

//Position of First MWDC plane with respect to the entrance face in [mm] 1100 in
//320--------------------
double MWDC_x = 1100.0 + 150.0; //
double MWDC_y = 300.0  + 150.0*tan(25.0*3.1415/180);

//Distance from first MWDC plane fo second MWDC plane in [mm] -------------------
double MWDC_dist_to_second = 757.0;

//Scattering angle  [rad] -------------------
double scattering_angle = -75.0 * 3.1415/180.0;

//Distance from first MWDC plane to Scintillation plane in [mm] -----------------
double distance_to_EdE  = 973.0;
//##########################################################################
```