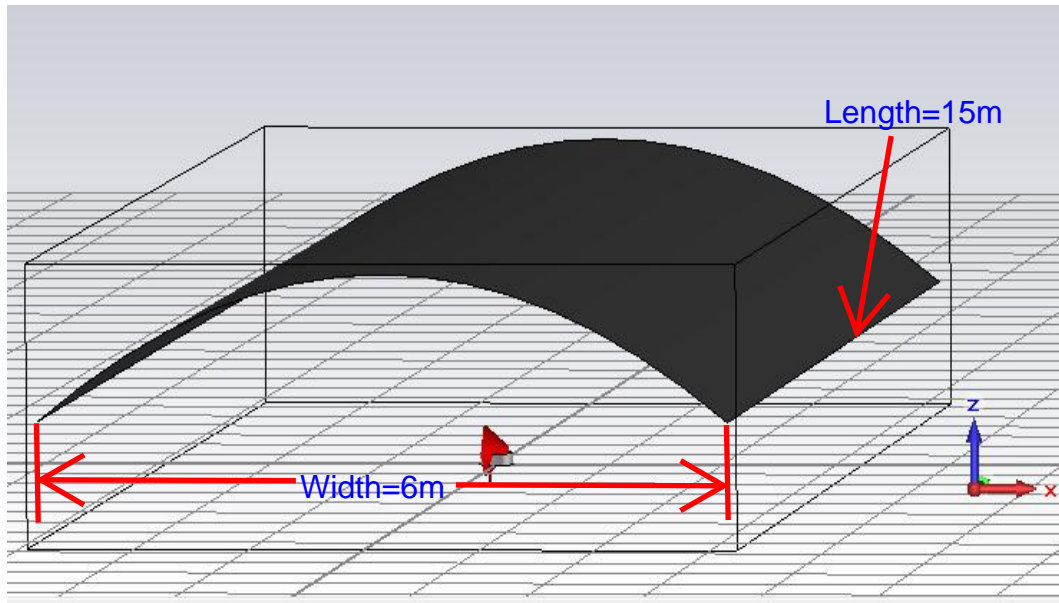


## The parabolic cylinder antenna fed by CETC 54 feed:



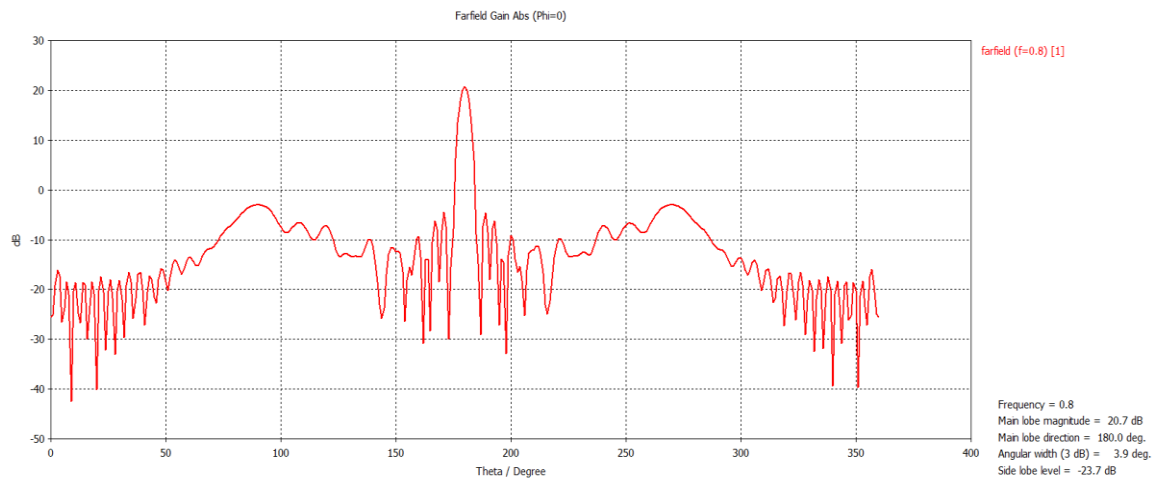
The aperture of parabolic cylinder antenna is 6 meter and the length of parabolic cylinder antenna is 15 meter in CST Microwave Studio. The performance of mode is analyzed and calculated as follows:

(1) Half-power beamwidth:  $3.9^\circ$  (x direction)  
 $70.6^\circ$  (y direction);

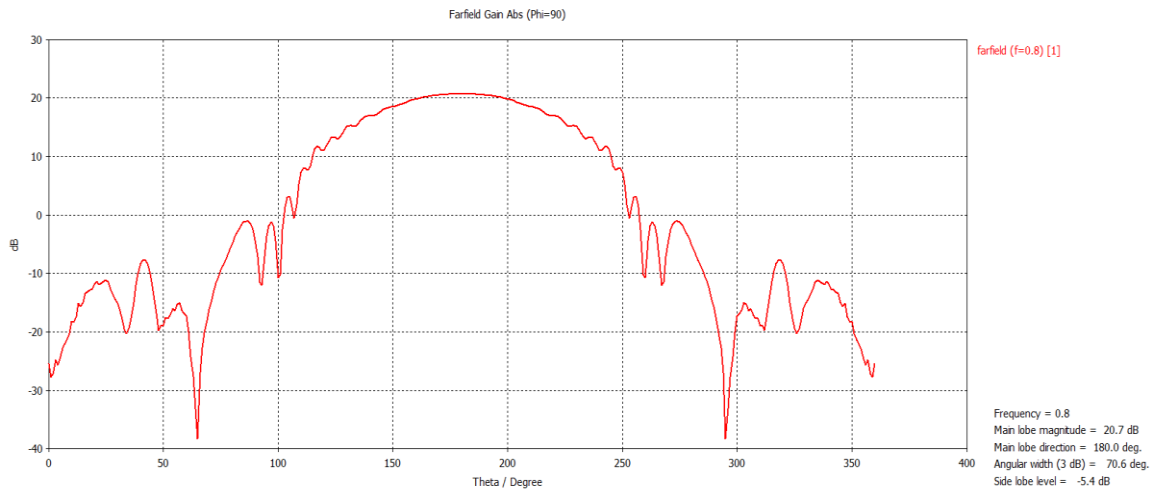
(2) Gain: 20.73dB

(3)The farfield pattern of the parabolic cylinder antenna( $f=800\text{MHz}$ ):

E\_Plane:



### H\_Plane:



### EH\_Polar\_Plane:

