

Fig. 1 Phantom overviews. (a) Columnar and (b) cubic objects were enclosed in a 200-mm-diameter acrylic cylindrical case filled with water. For each object shape, two objects made of acrylic or a soft tissue-equivalent material were prepared.

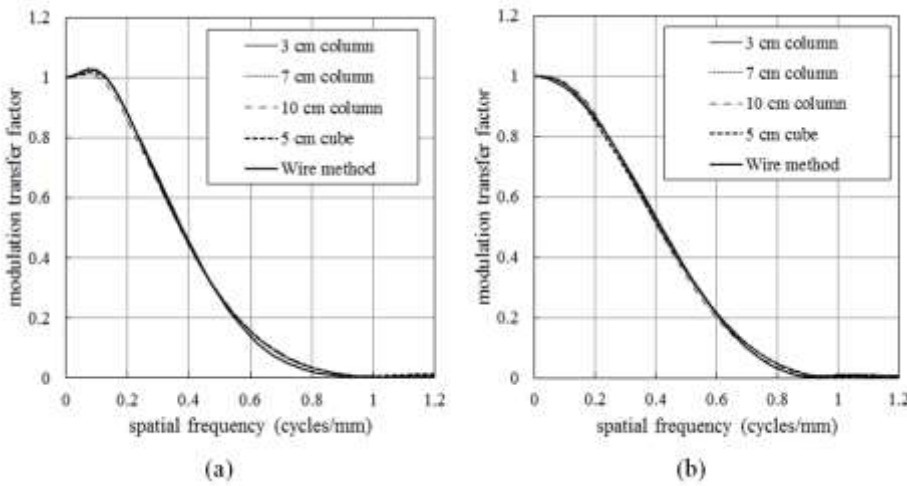


Fig. 2 MTF result of a wire phantom and  $MTF_{Task}$  results for acrylic objects with different shapes obtained using FBP with (a) SOMATOM DF and (b) CT750 HD at 10 mGy.

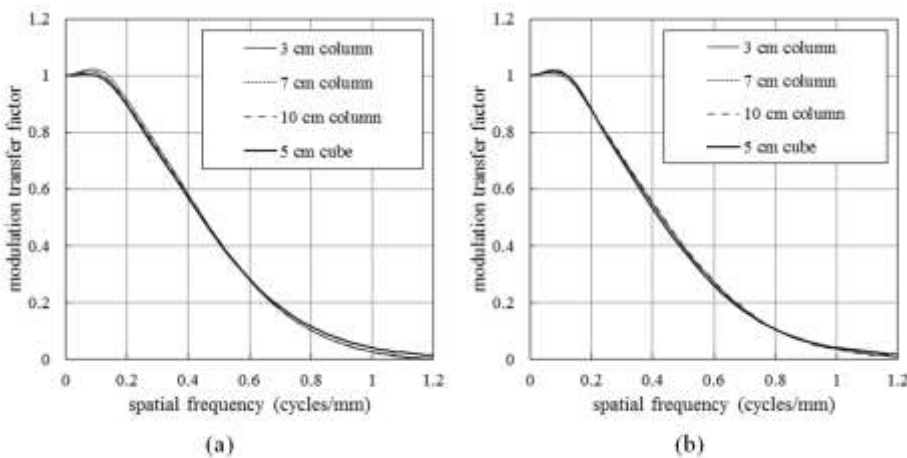


Fig. 3  $MTF_{Task}$  results of SAFIRE images for acrylic objects obtained at (a) 10 and (b) 5 mGy.

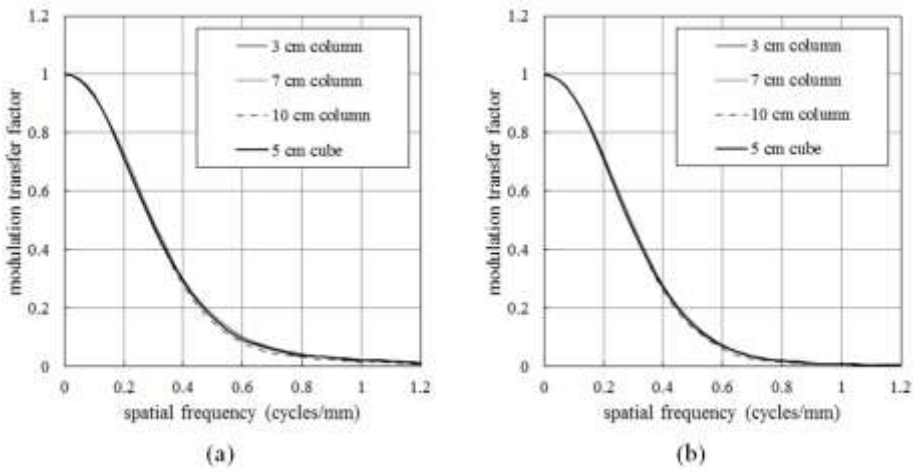


Fig. 4  
 $MTF_{Task}$  results of ASIR images for acrylic objects obtained at (a) 10 and (b) 5 mGy.

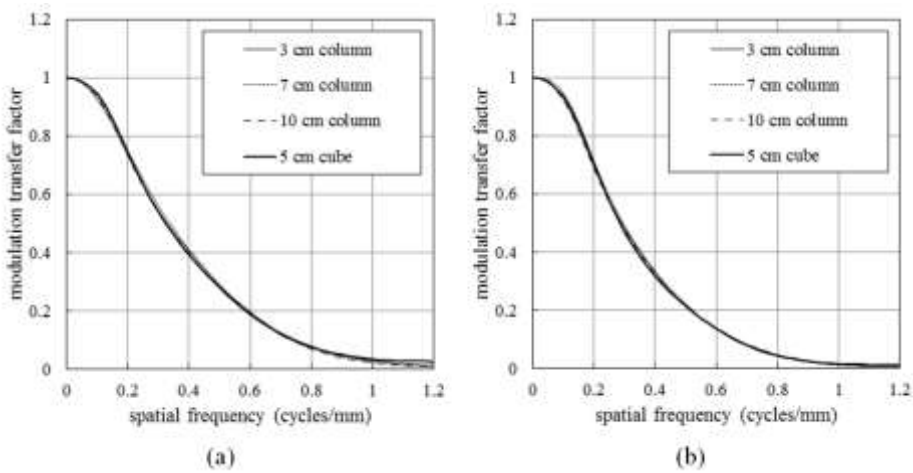


Fig. 5  
 $MTF_{Task}$  results of SAFIRE images for objects made of a soft-tissue-equivalent material obtained at (a) 10 and (b) 5mGy.

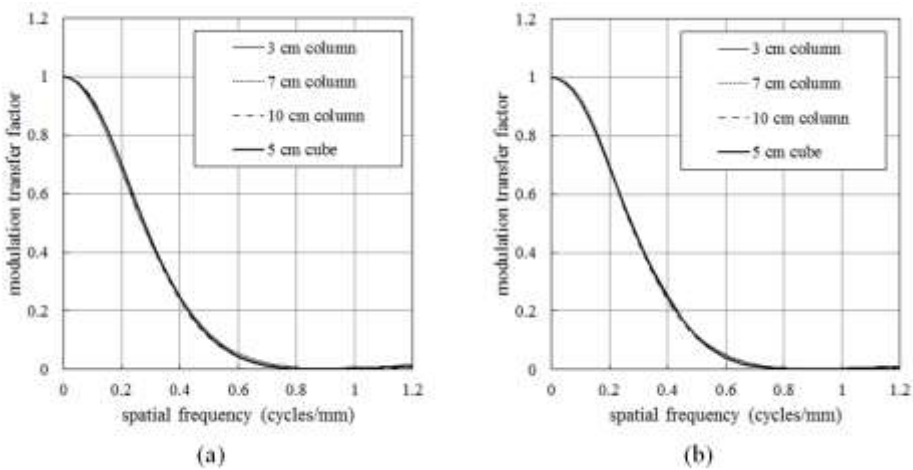


Fig. 6  
 $MTF_{Task}$  results of ASIR images for objects made of a soft-tissue-equivalent material obtained at (a) 10 and (b) 5mGy.

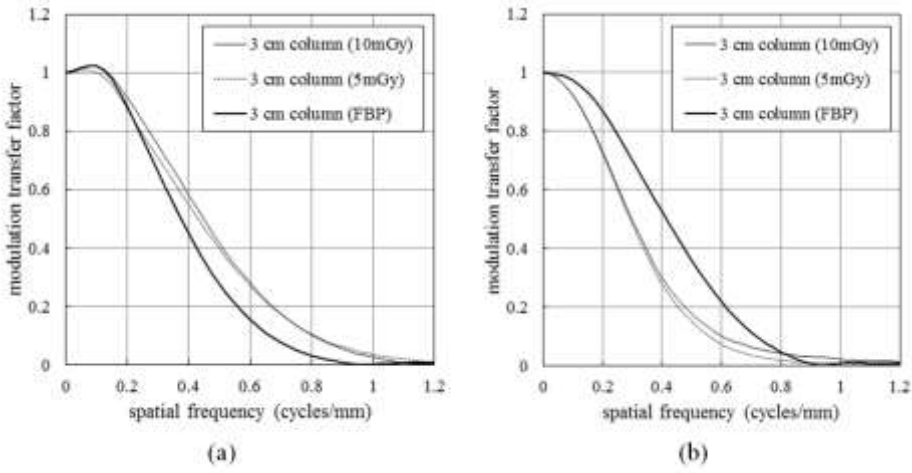


Fig. 7  
 $MTF_{Task}$  results of IR images with different doses for acrylic object and of FBP images. (a) SAFIRE and (b) ASIR.

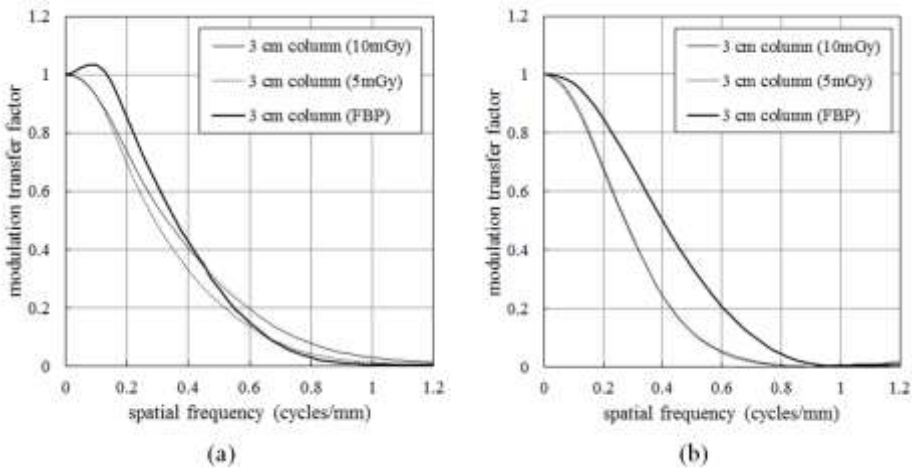


Fig. 8  
 $MTF_{Task}$  results of IR images with different doses for objects made of a soft tissue-equivalent material and of FBP images. (a) SAFIRE and (b) ASIR.