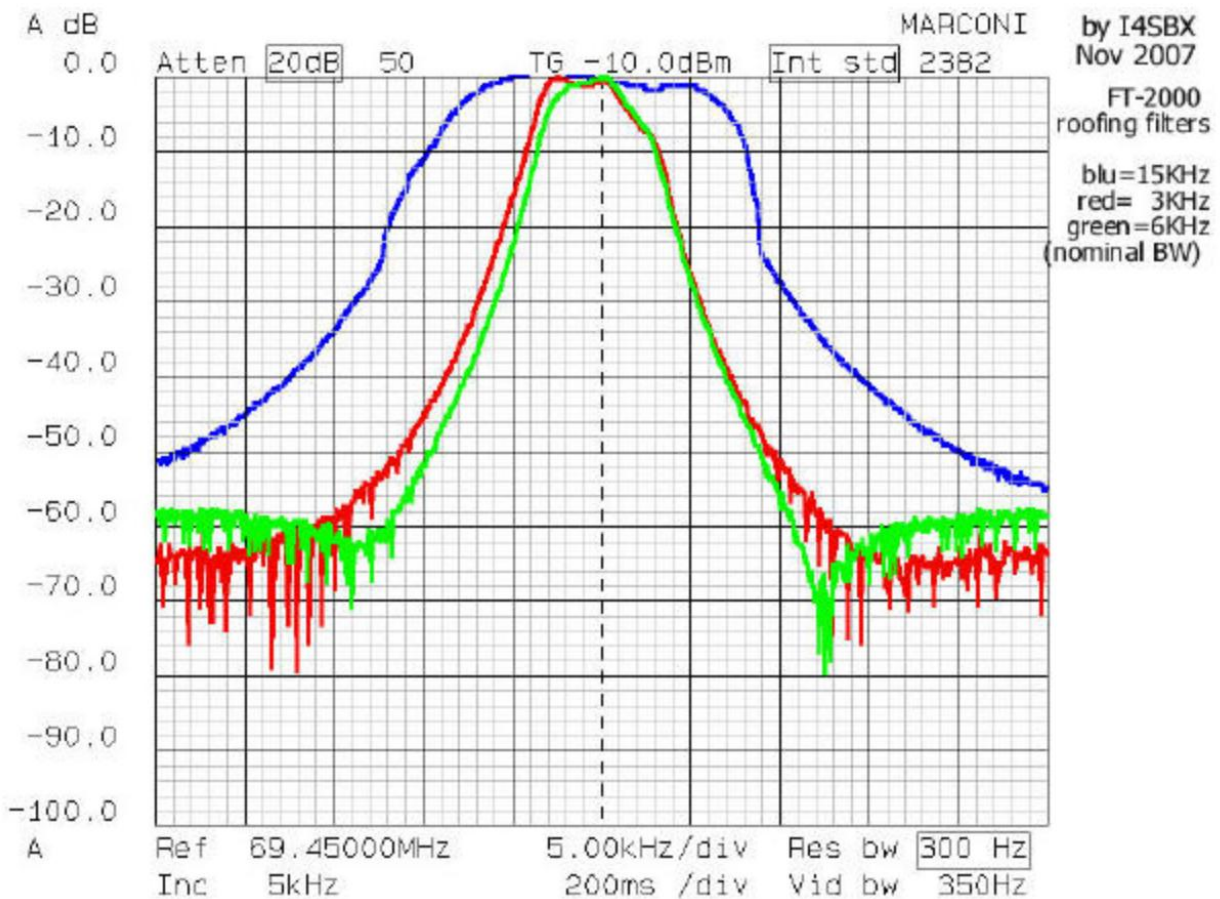
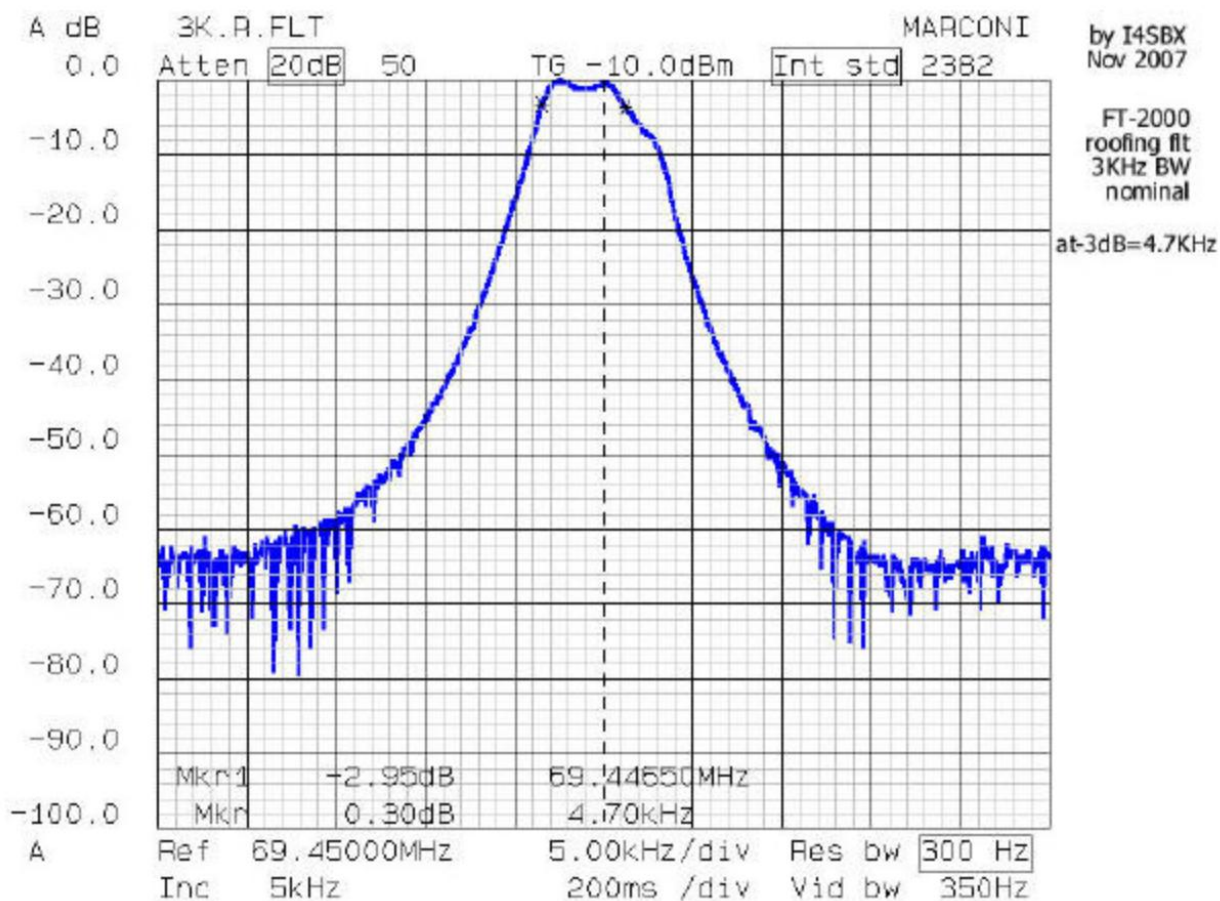


I4SBX measurement data on the FT2000

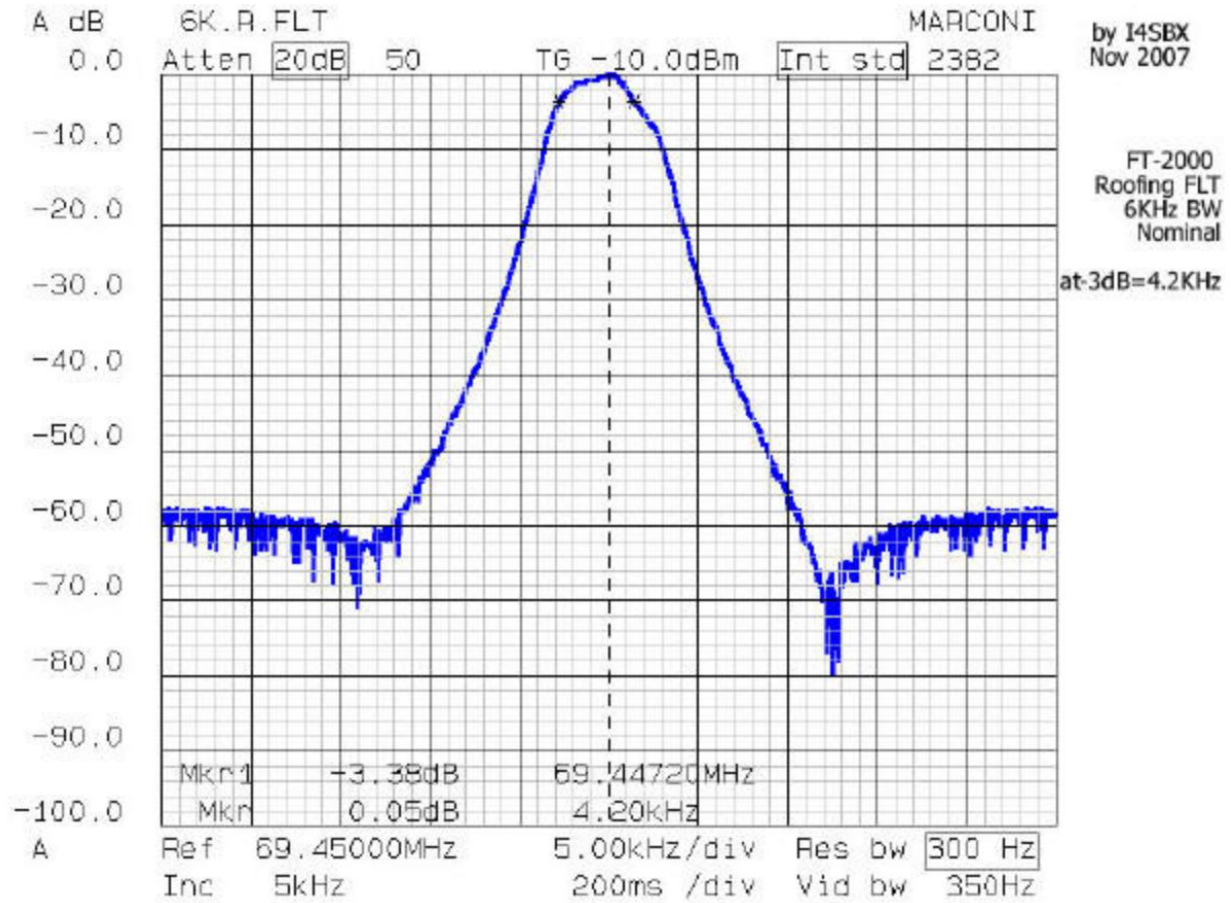
Overlay of the 3 roofing filters. Notice the 6 khz filter is actually slightly narrower than the 3khz filter in this test unit.



3KHz filter shown here. Note the right side shape has a cut out and is non-symmetric. This allows a lower -3db bandwidth (closer to the advertised 3khz spec) but has little meaning given the shape further down the slope is about the same as the 6khz filter



6 khz roof



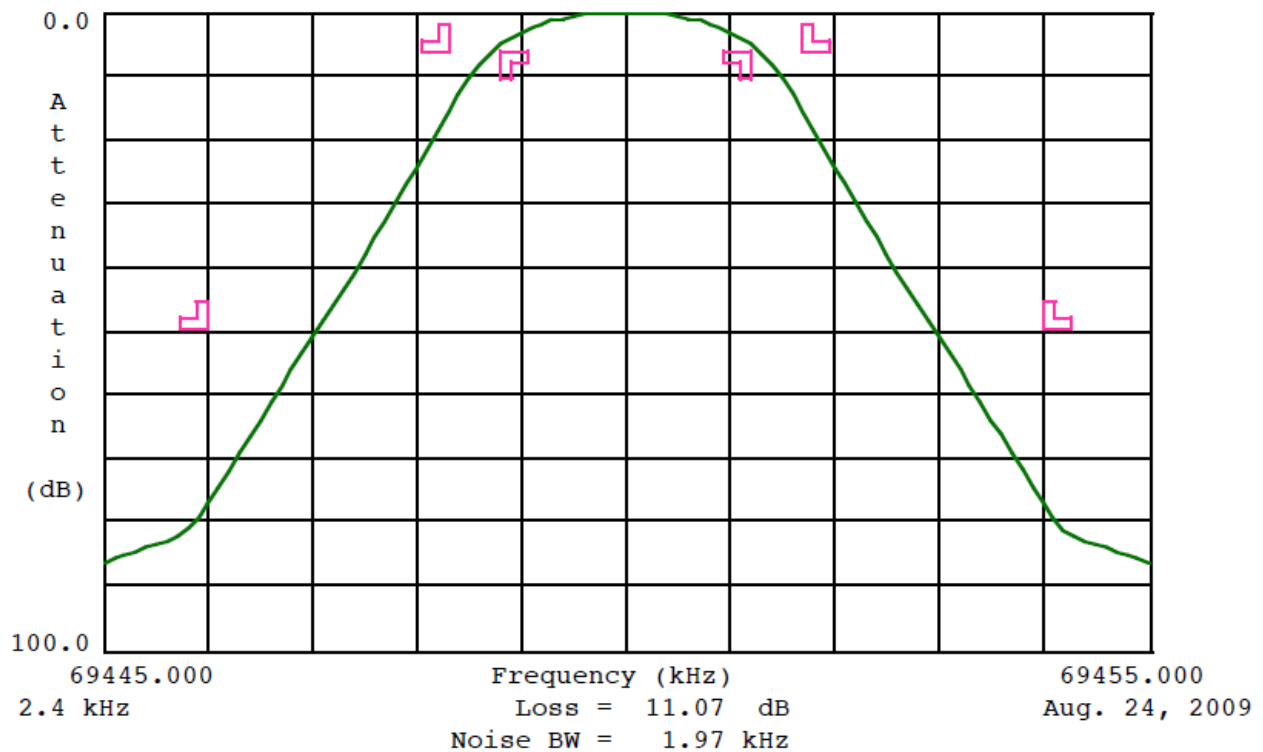
Model data of the proposed replacement filter.

-6db: 2.4khz

-60db: 6.8 khz

Net shape factor: 2.8:1

To our knowledge, no commercial up-conversion rig, at any price class, has a VHF roofing filter of this caliber.



Overlay of measured 3khz OEM filter and simulation model for the replacement.

We believe the stand-alone performance of the filter will match the plot shown. But the ultimate attenuation will likely be less than the 85db shown given some leakage in the rig. The important part of the graph is what happens in the first 30-50db – and the replacement is by far a tighter filter than the stock MCF.

Other filter characteristics like IP3, z-match and time-domain (ring) responses will also be very much superior to the stock filter.

