



AES NY 2018

WHERE AUDIO PROFESSIONALS AND TECHNOLOGY CONNECT



145th Audio Engineering Society International Convention



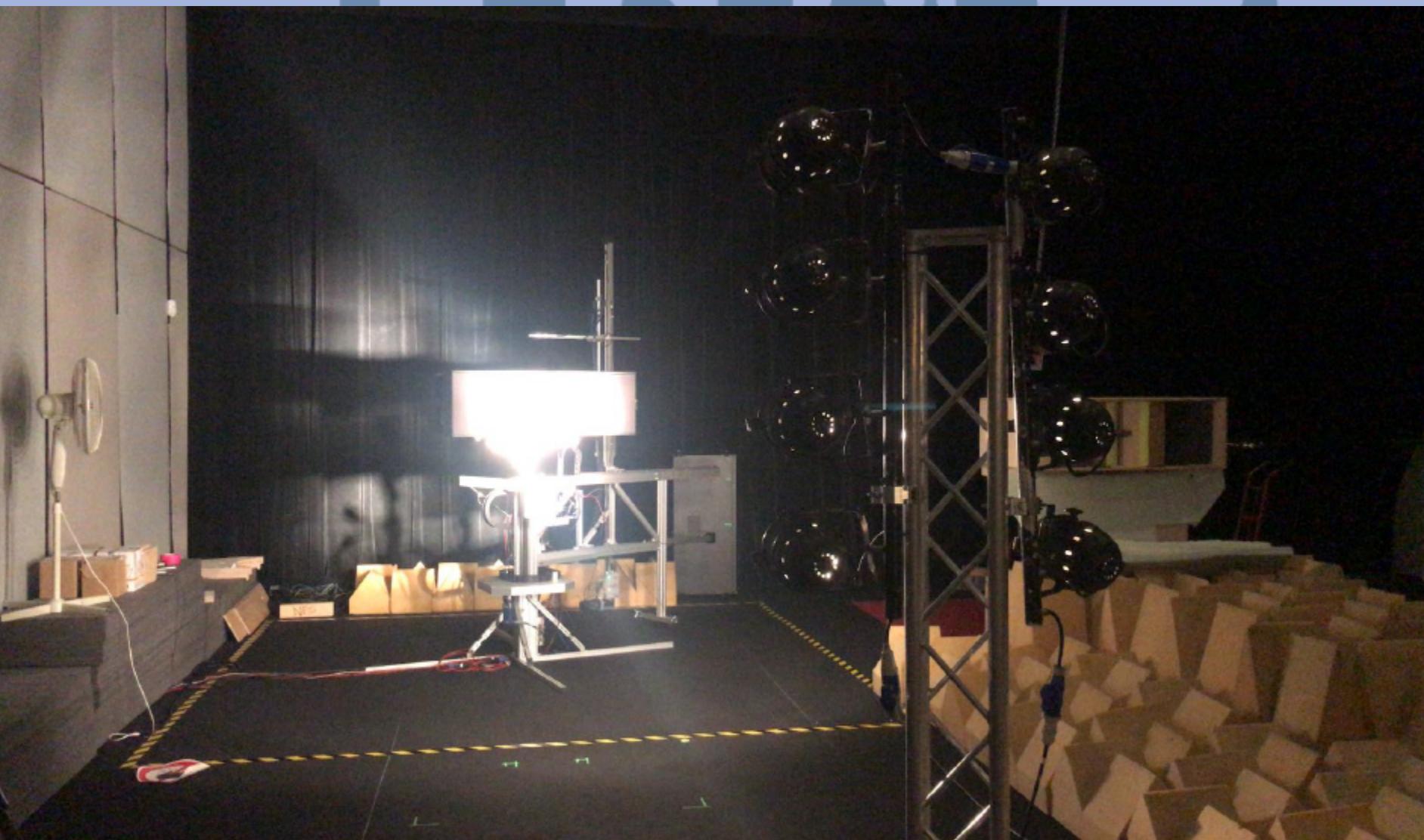
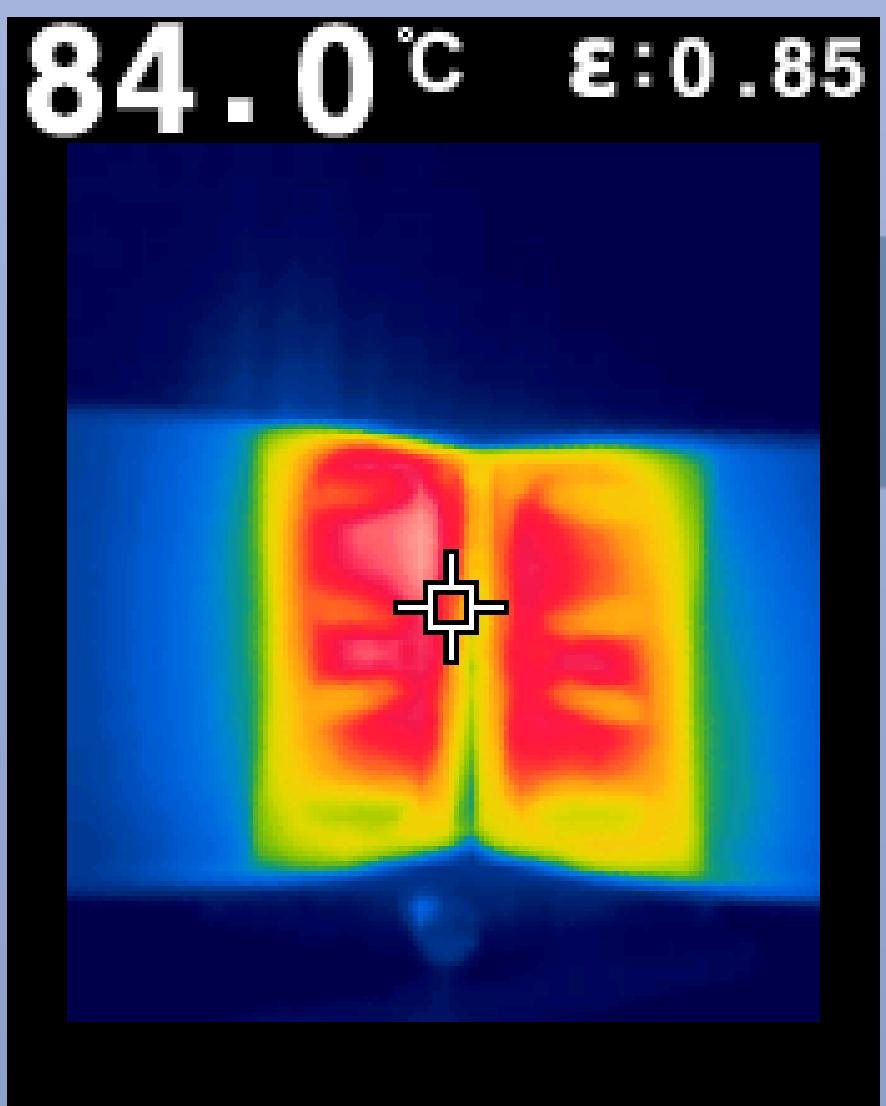
Influence of Horn's Surface Temperature on its Directivity Control

Dave “Rat” Levine (Rat Sound Systems, Inc, California, USA)
Letizia Chisari (Contralto Audio Srl, Italy)
Mario Di Cola (Contralto Audio Srl, Italy)
Paolo Martignon (Contralto Audio Srl, Italy)

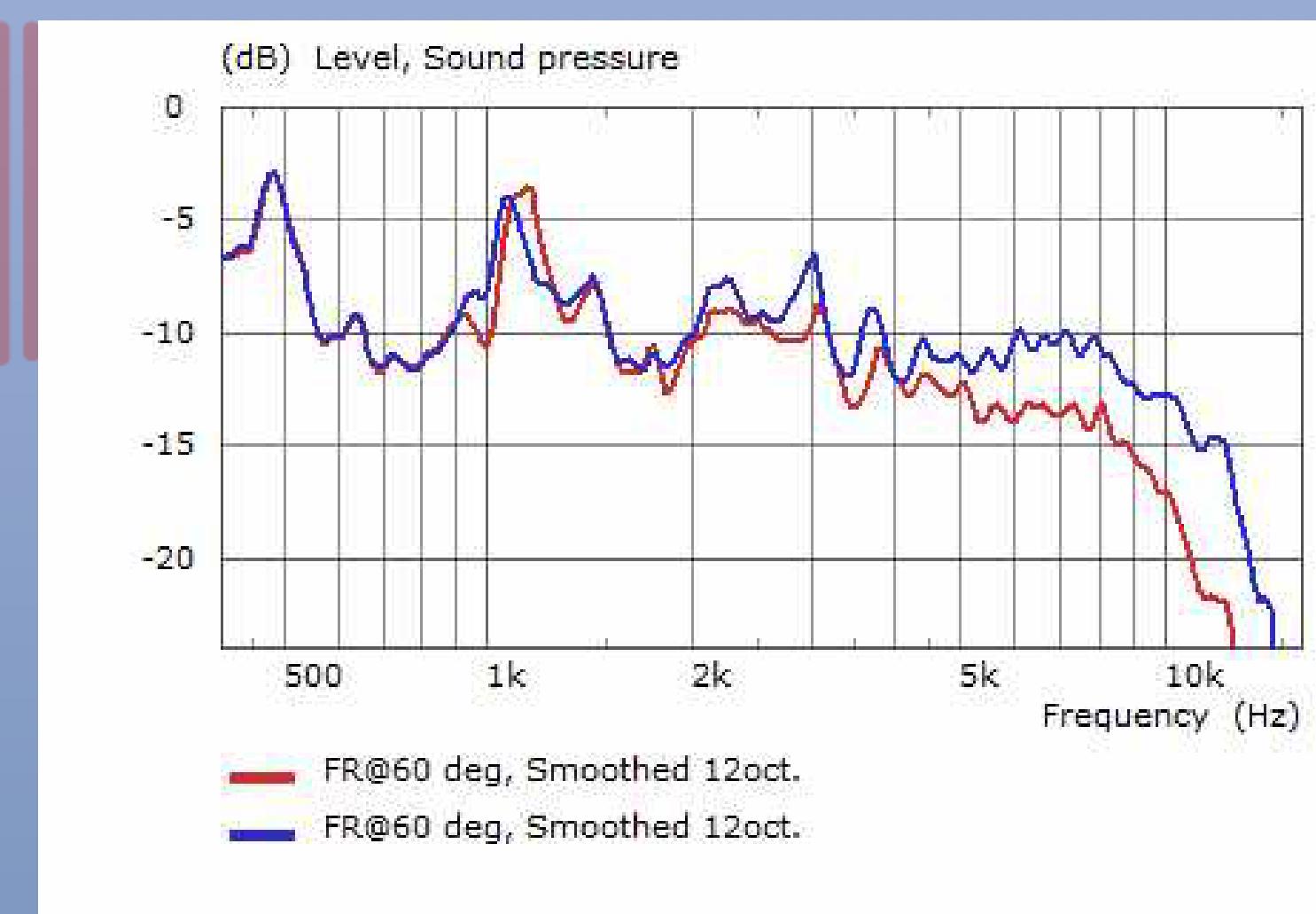
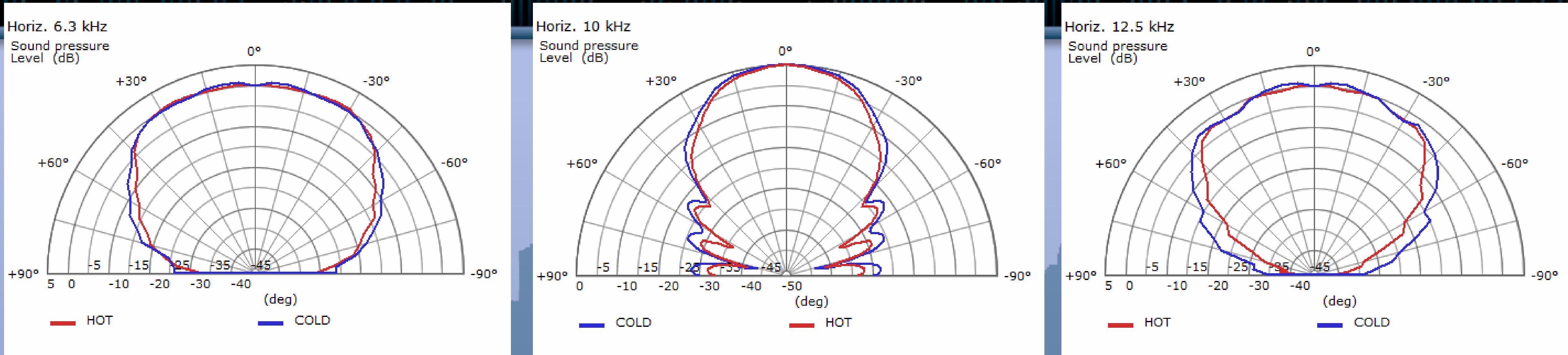


Real world
Observation...

Experiment setup

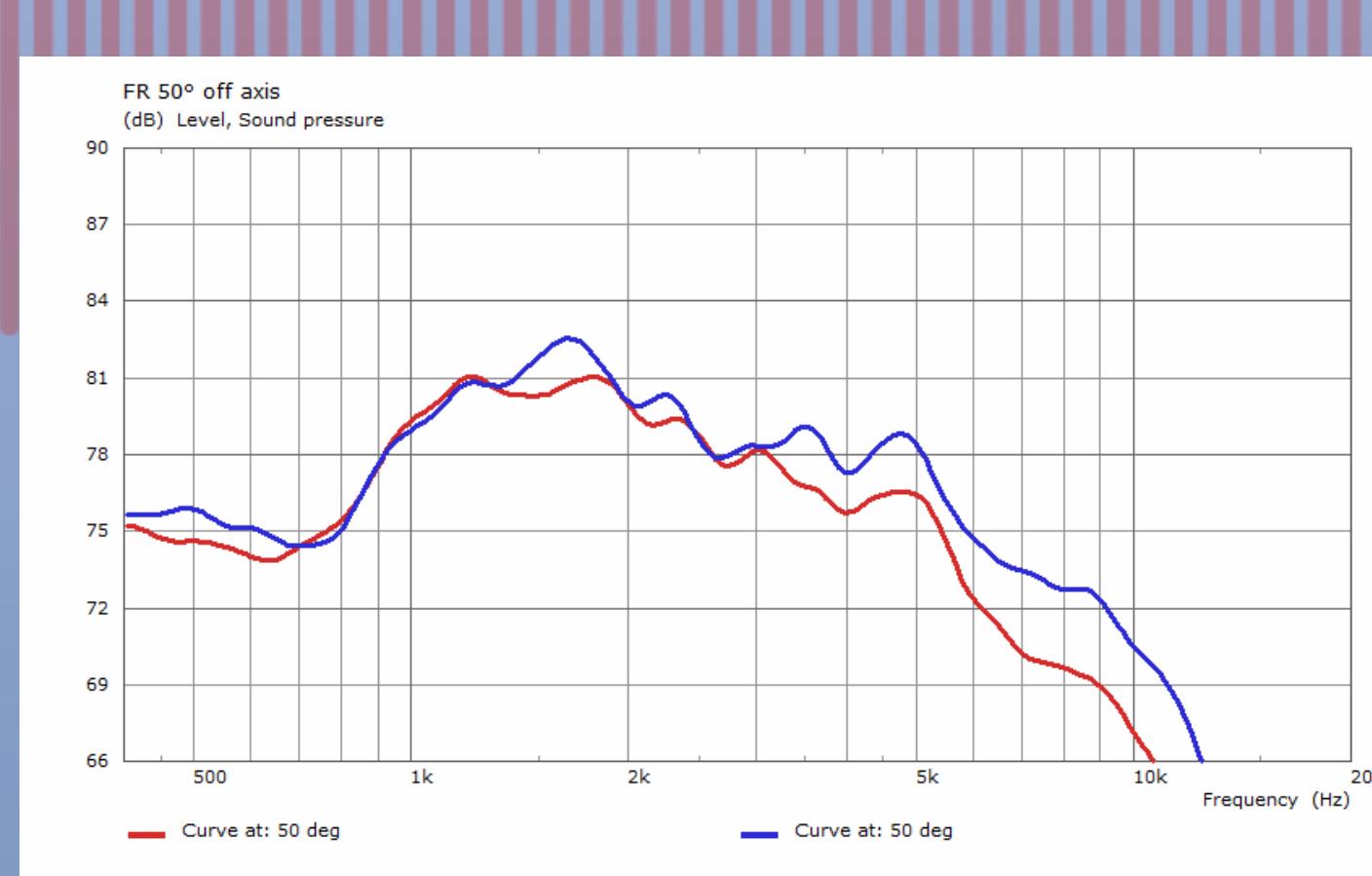
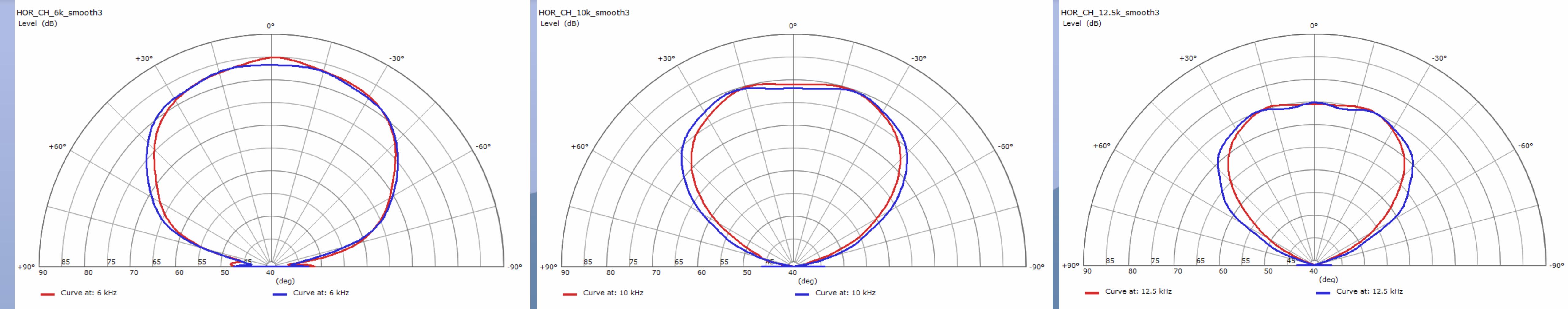


Large Format Line Array Element



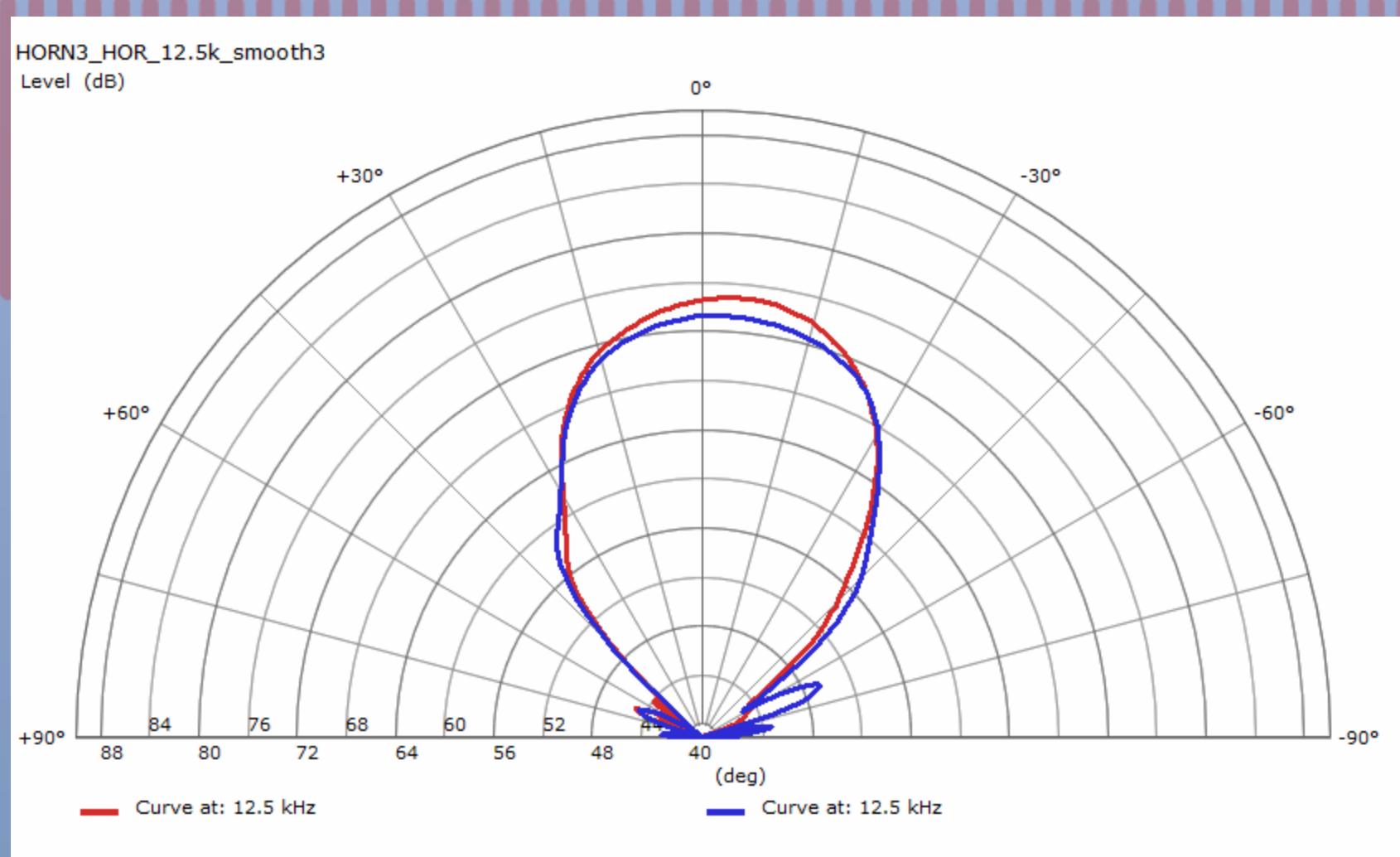
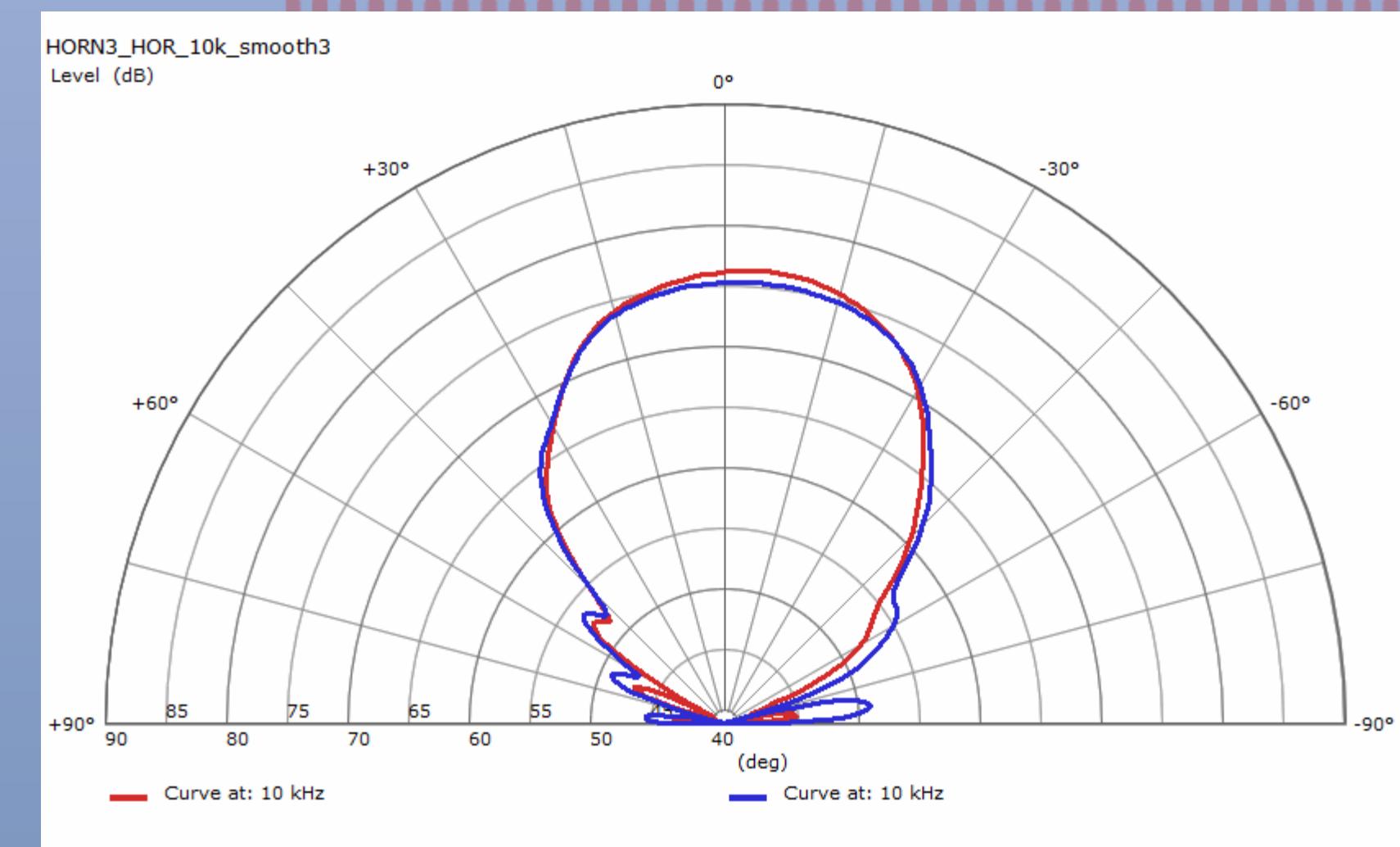
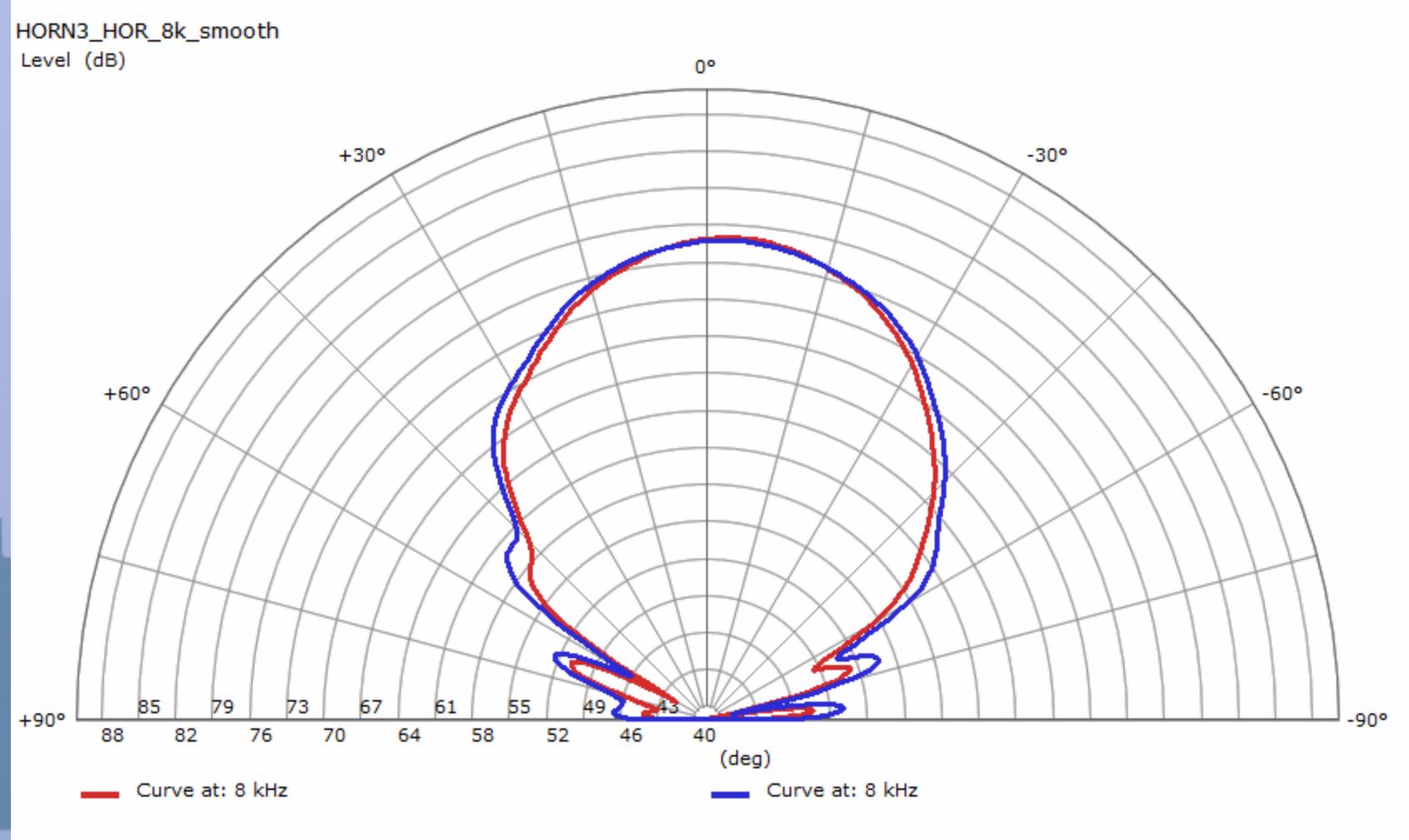
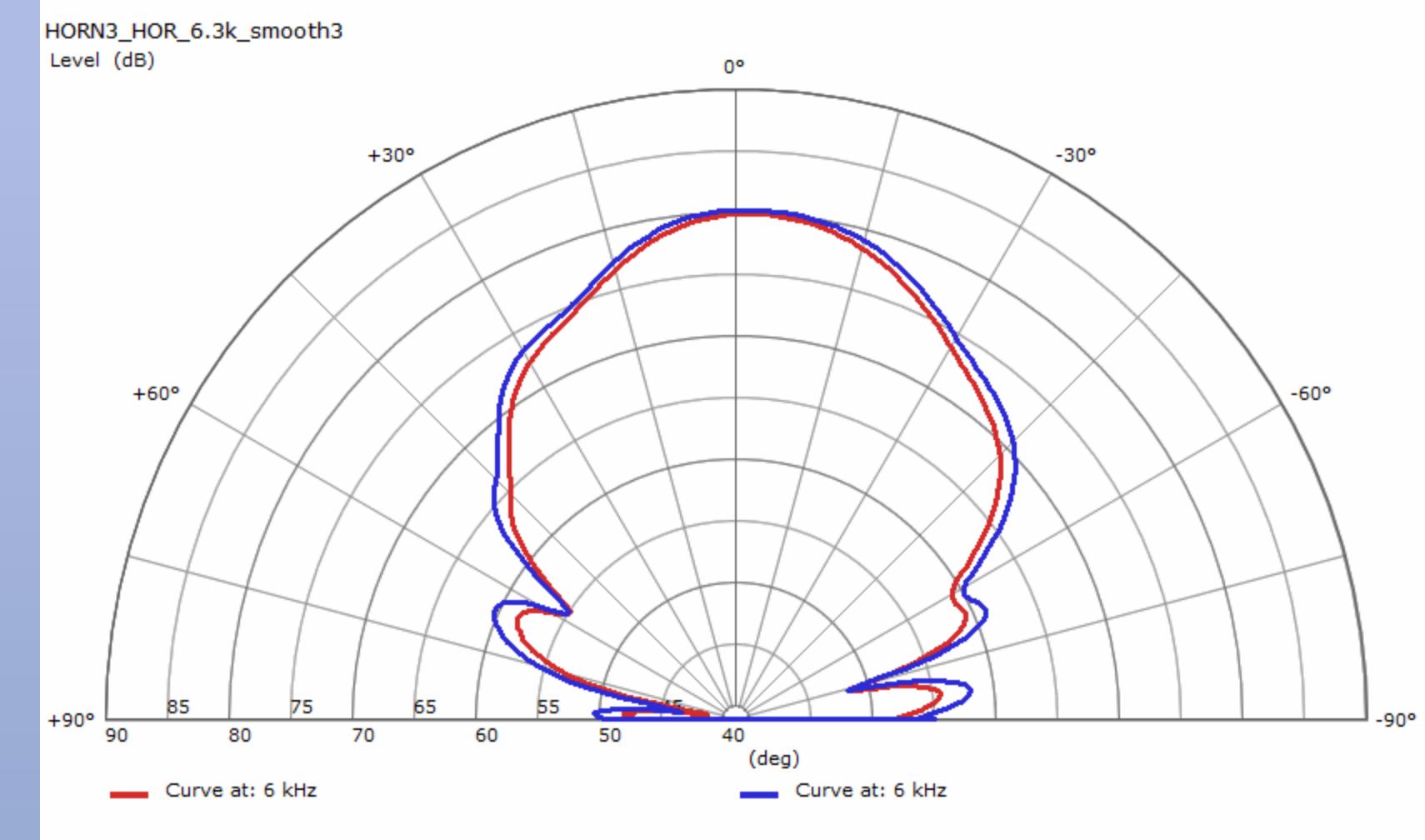
60° off axis

Medium Format Line Array Element

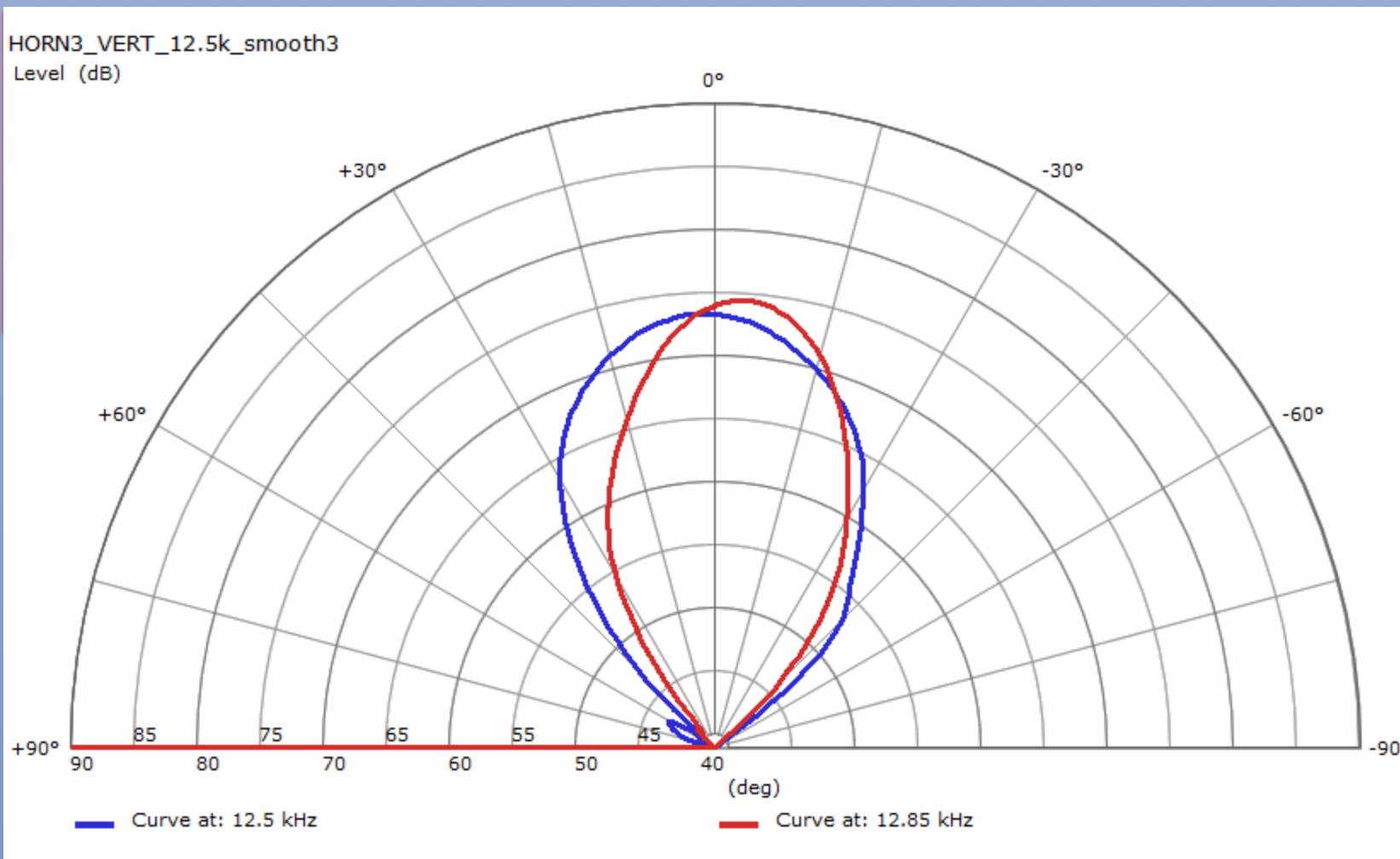
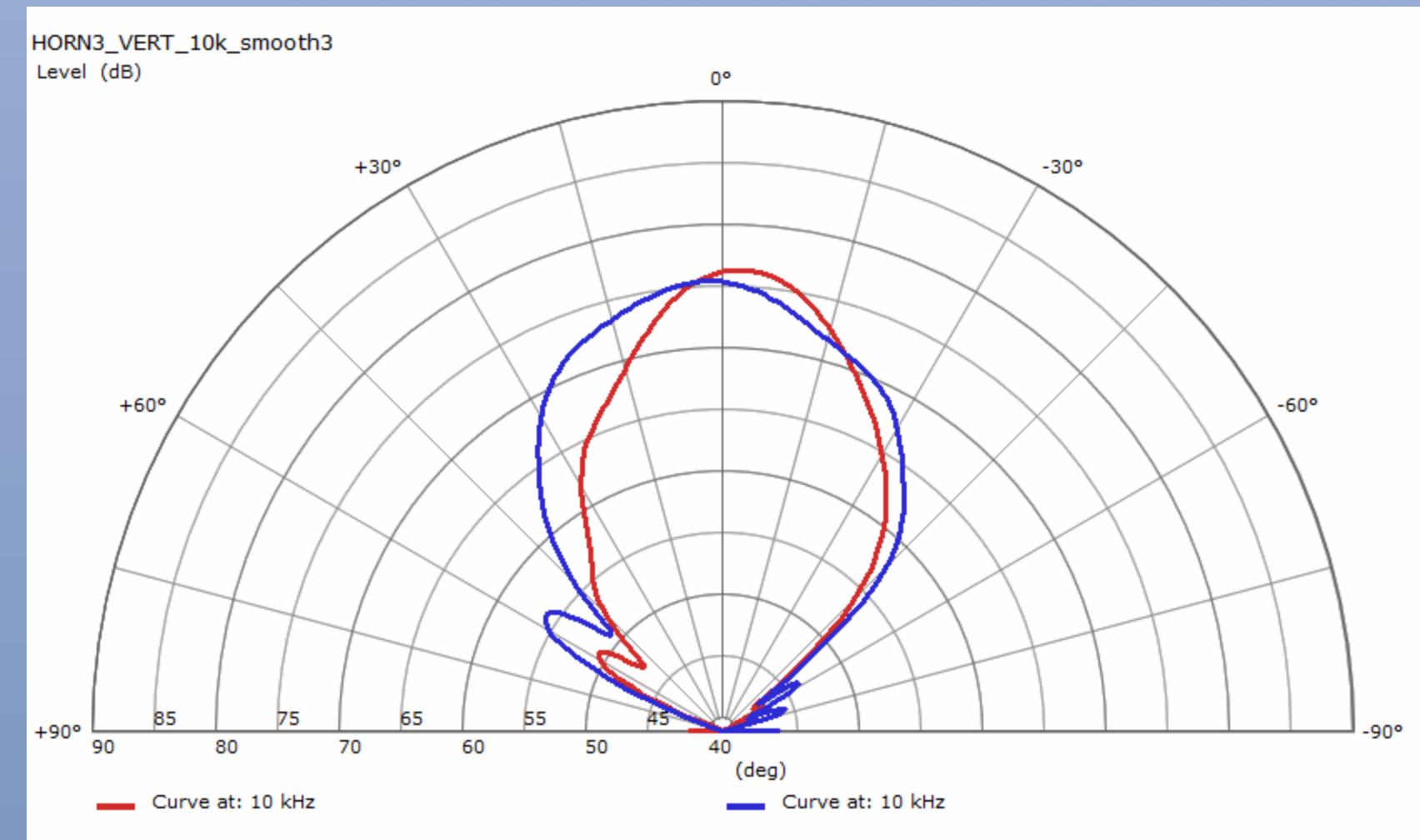
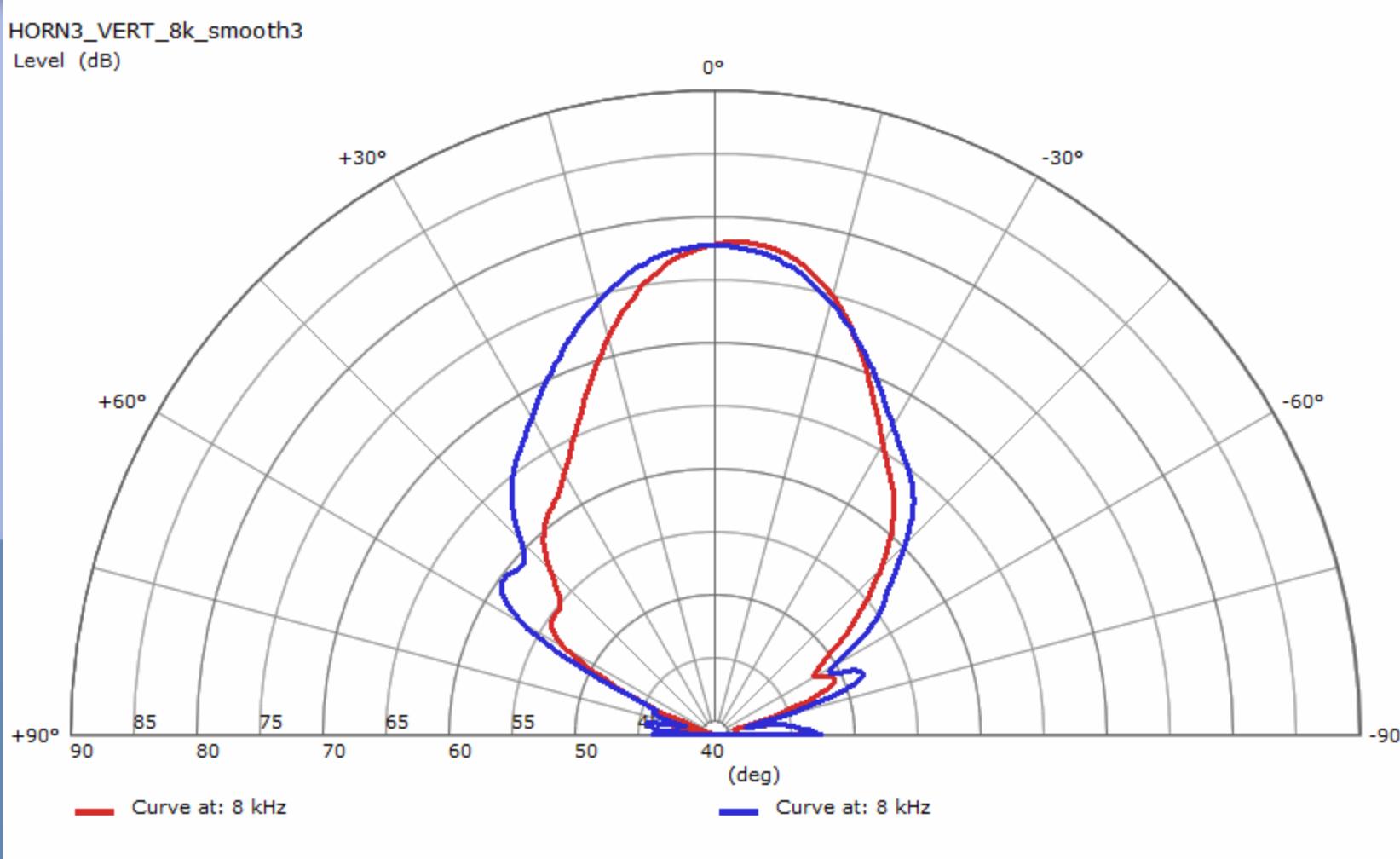
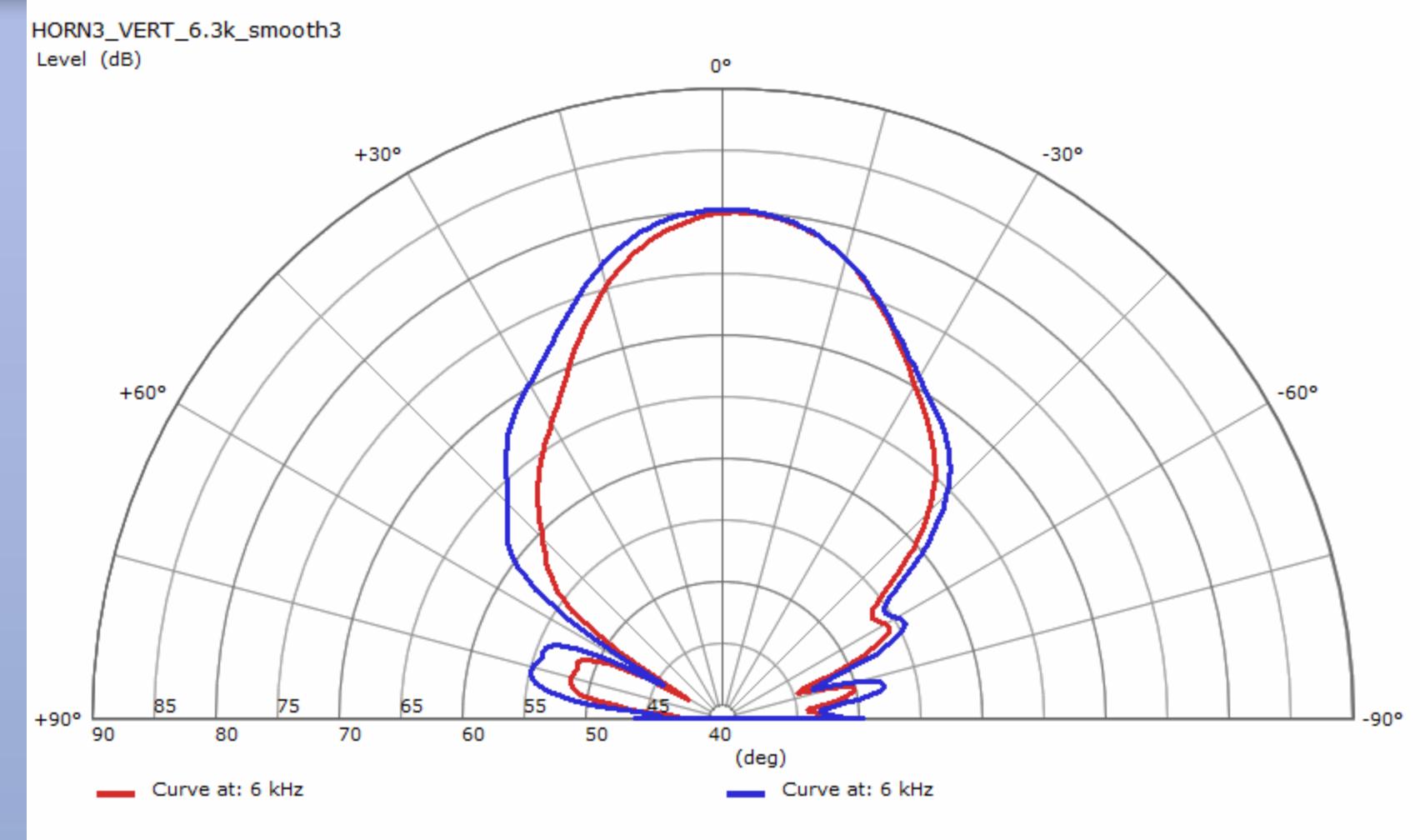


50° off axis

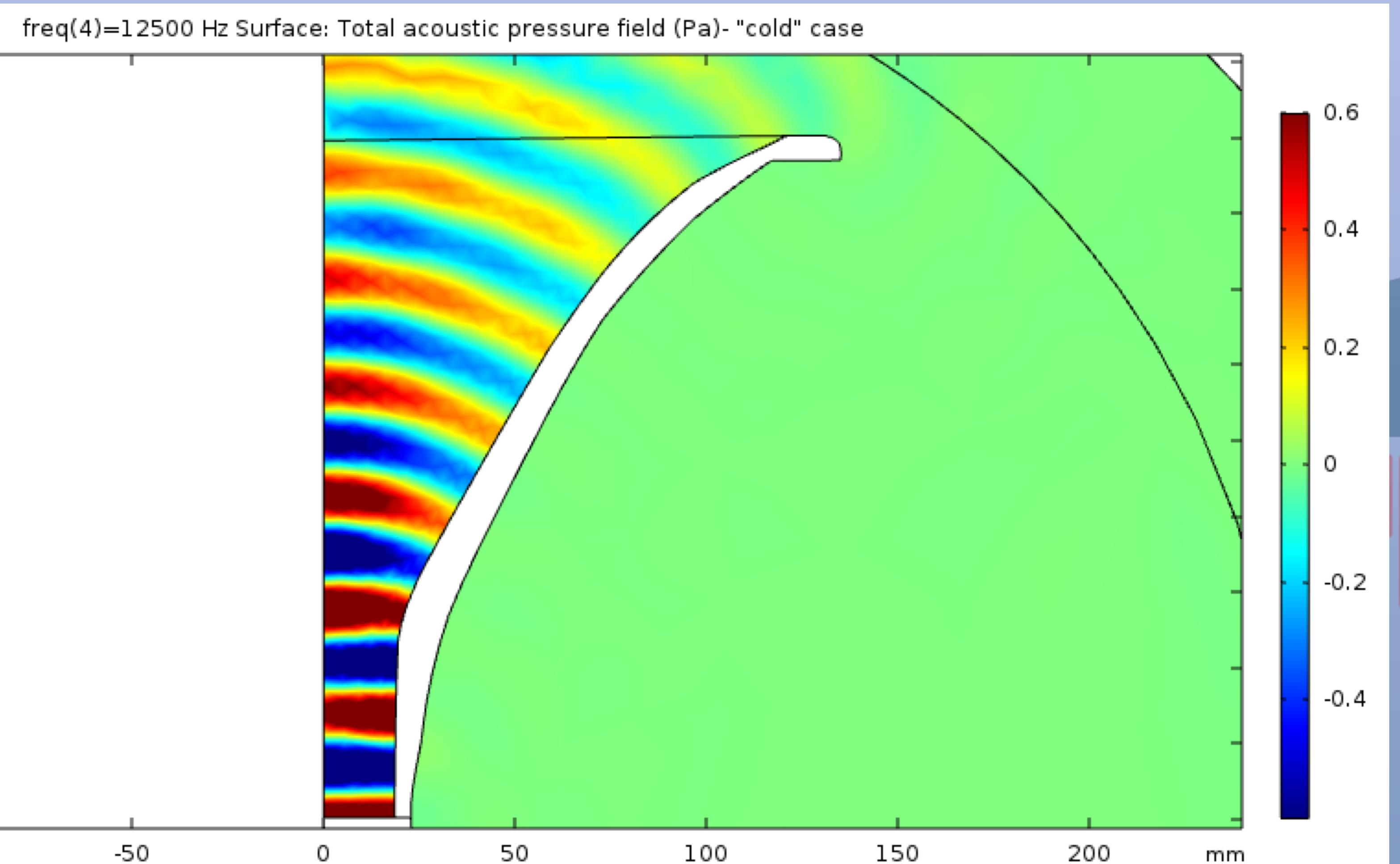
60 x 40 Constant Directivity Horn – Horizontal Angle



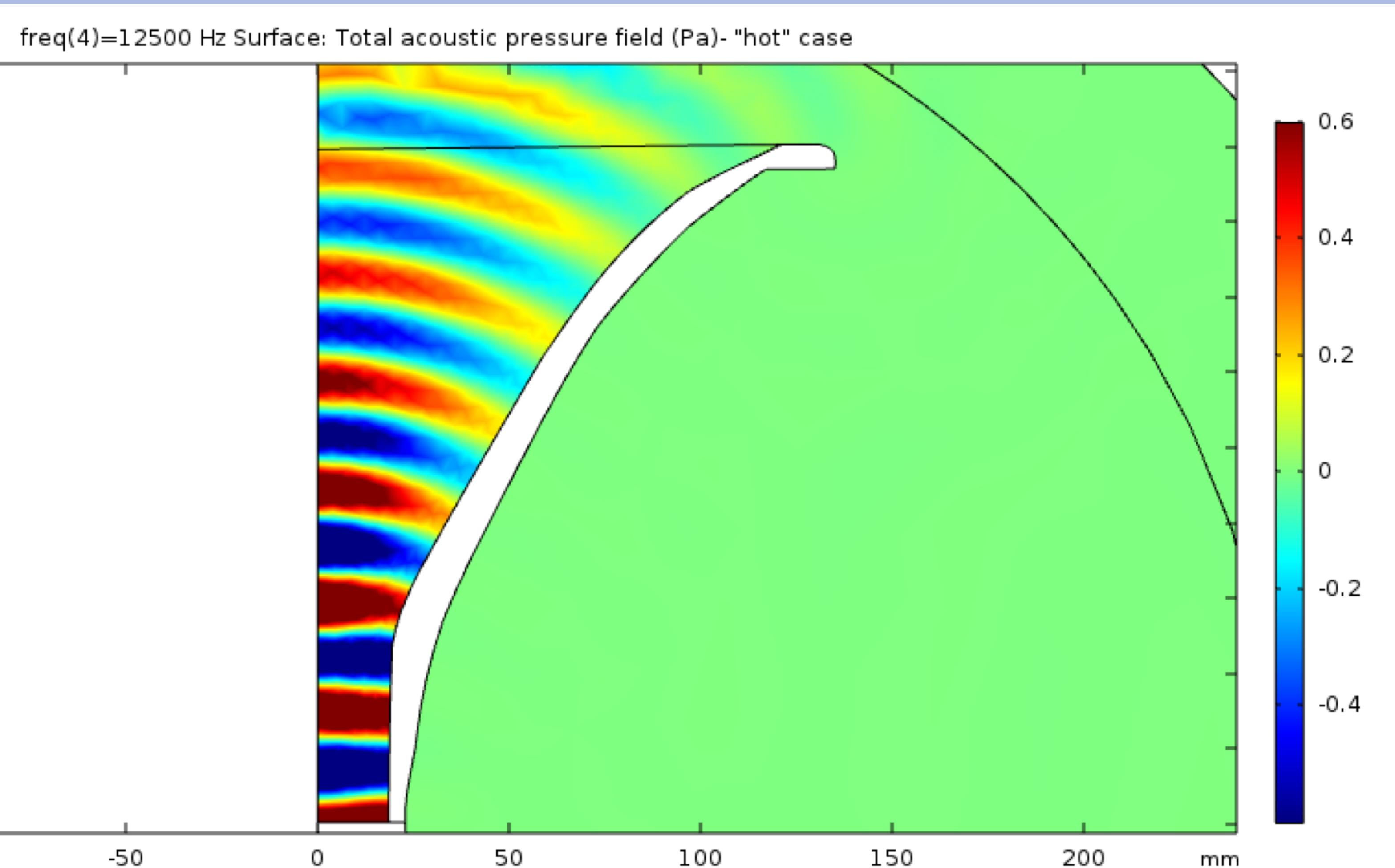
60 x 40 Constant Directivity Horn – Vertical Angle



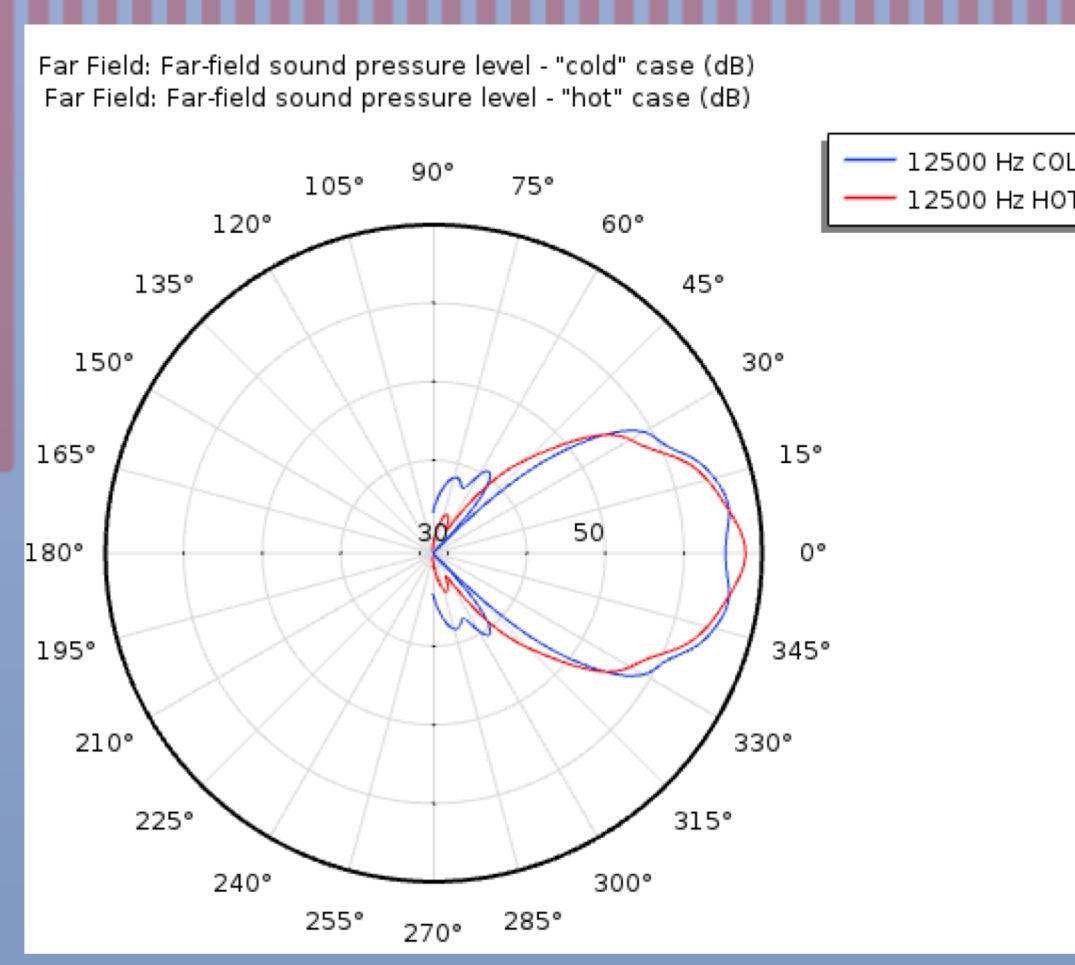
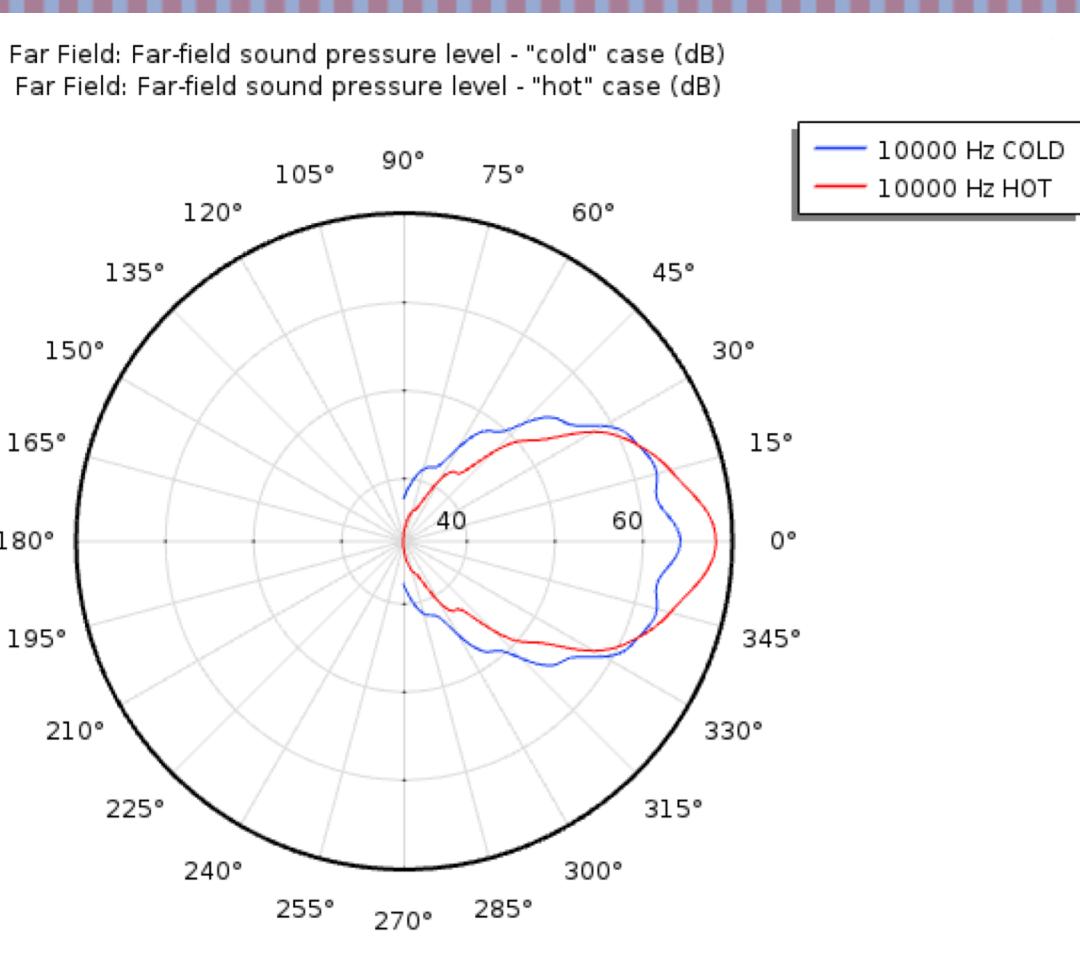
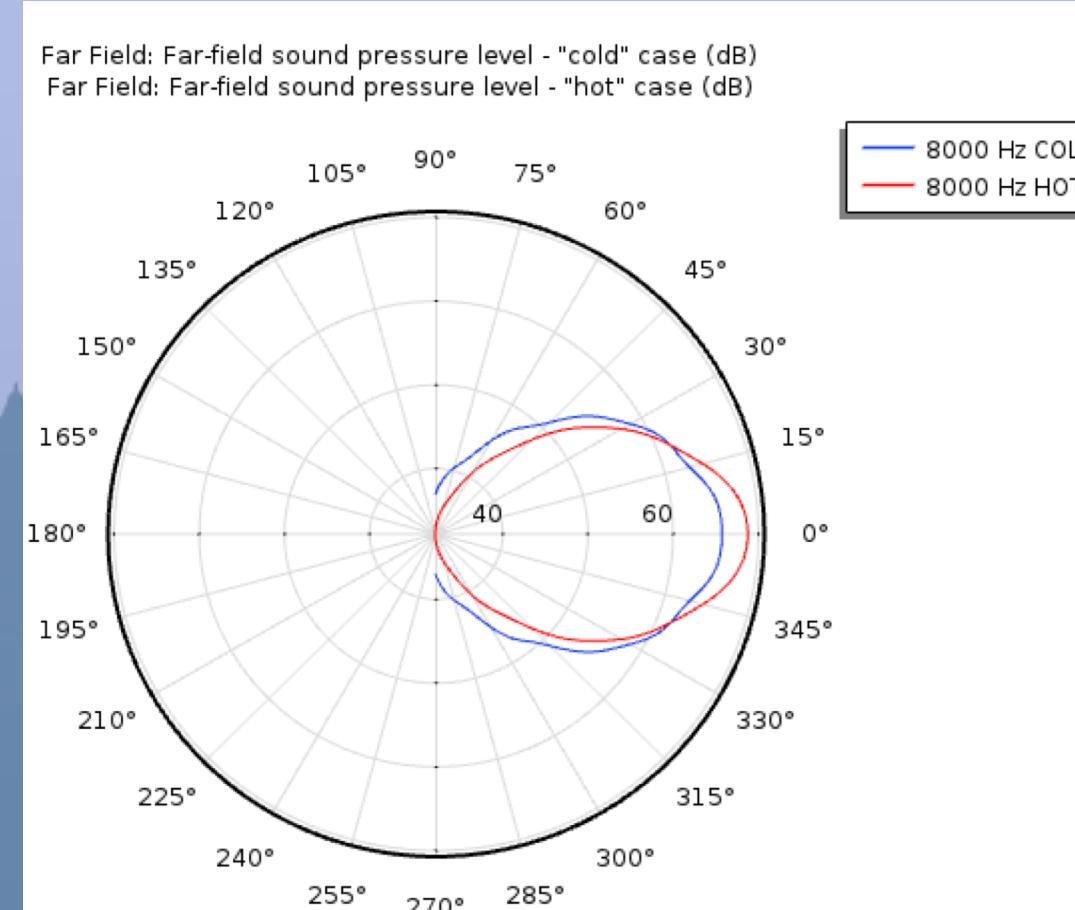
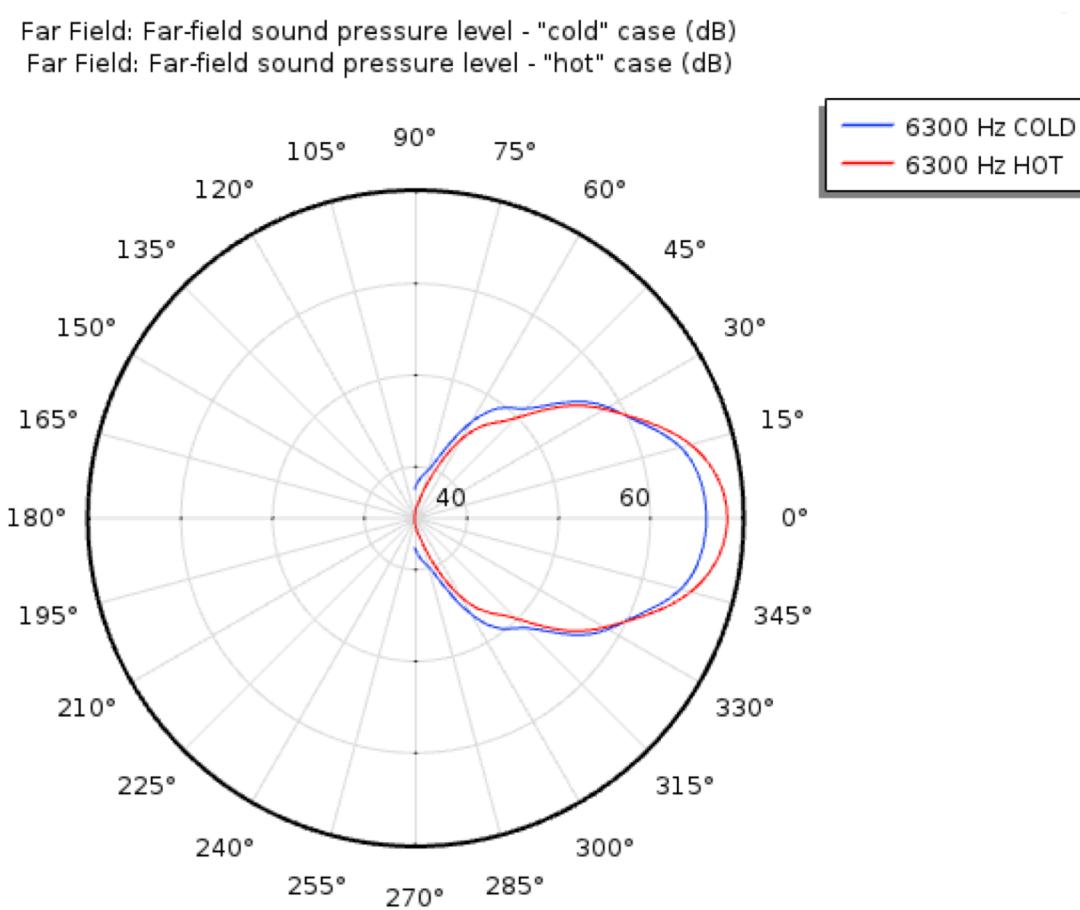
Instant pressure



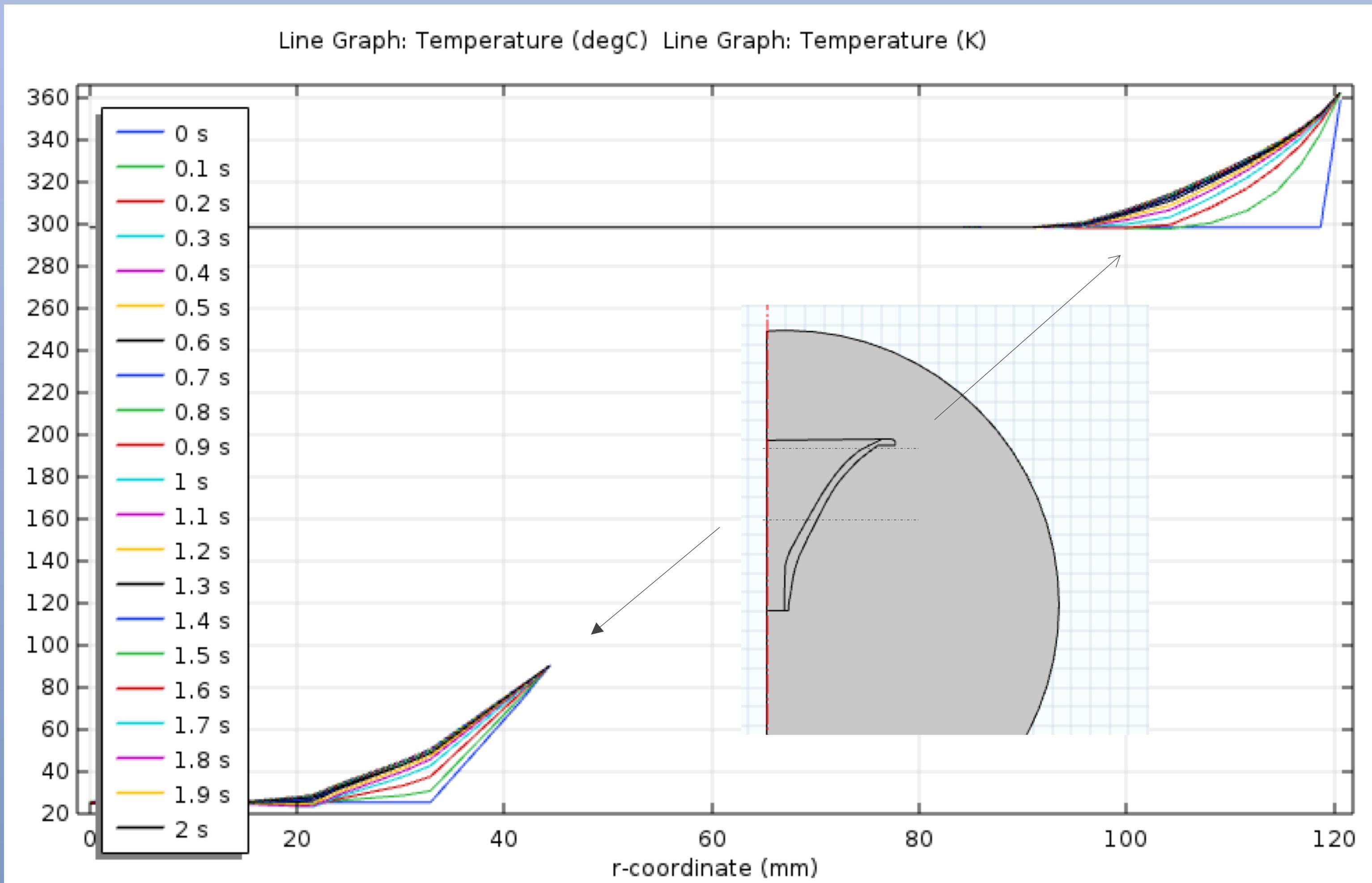
Instant pressure



Simulation of Horn's Polar Dispersion



Simulations: temperature distribution





THANKS FOR YOUR ATTENTION!!!

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