get above 95dB/2.83v/M but not many that go above 100dB/2.83v/M. The tough part is getting this kind of output full range. You can get a single horn to do it over about two octaves, maybe as far as a decade, but the range you need to cover is three decades. To be honest, you won't get 20-20kHz at 100dB/2.83v/M out of any two-way or three-way speaker. You would need at least a four-way horn and the basshorn would be huge.There are some things to consider though that would probably do what you want. First, forget the 100dB/2.83v/M requirement down low. You can use a horn down to the bottom of the midrange, perhaps upper midbass. That will greatly reduce your size requirements. But you'll have to add subs, in this case. Not a bad thing, 'cause you can smooth room modes using distributed subs.A compression horn tweeter will give you over 100dB, so will a horn loaded midrange. Those aren't a problem. The bass problem has already been discussed, but here's your next thing to consider. What do you want to do for the top octave?Compression horns rolloff 6dB/octave starting around 4kHz, so the top octave is usually at least 10dB below the bottom octave. Some horns have collapsing DI that acoustically equalizes the HF on-axis, but this is a fancy way of saying they're beaming real bad in the top octave.You may choose to live with the collapsing DI, go with a tractrix horn and call it good. Or you might choose to augment the top-octave with a super-tweeter. Either of those design choices will give you several options that will provide good response on-axis through the top-octave.Another option that might work out for you is more along the lines of what I like to do with horn-loaded speakers. I use their directional control characteristics to advantage in the way of making a uniform pattern. Horns increase output in one direction by focusing the sound in that direction. With careful crossover optimization, driver and horn selection and placement on the baffle, you can make the sound field uniform over a wide range of listening positions. Instead of making the sound best straight on-axis at the expense of all other radiation angles, the speaker designed for uniform directivity sounds good at all angles within a pattern. I like a 90°x40° pattern, because it limits ceiling and side wall reflections yet covers the listening room nicely.It isn't too hard to make a loudspeaker with a direct radiating midwoofer and 90°x40° horn that will reach 97dB/2.83v/M and provide uniform directivity. This may be enough for you. The three

AudioKinesis and Earl Geddes.If you want to reach 100dB/2.83v/M, my suggestion is something

constant directivity and its corner placement enforces toe-in that naturally balances the stereo image over a wide listening area.You could also make speakers like those designed by Edgar or Fitzmaurice, three-ways that are horn loaded. They aren't designed for uniform directivity, but they will provide the sensitivity you're looking for.In any of these cases, I suggest using distributed subs as I mentioned earlier. Don't even try to get 100dB/2.83v/M, instead, use 2-4 subwoofer cabinets with plate amps. This will smooth room modes. It's an easier approach to do, and provides better performance, in my opinion.