

IV. Conclusion

In this paper, an analog predistortion linearizer that was designed by EM Solutions to linearize a 200W C Band GaN amplifier was presented. Gain expansion and phase correction were designed to be controlled separately for ease of tuning. Output power at IM3 no more than -22dBc was improved by at least 1dB and was around 1.4dB at most frequencies. The flatness of the gain vs input power transfer function was also improved. When combined with tuning the biasing of the amplifier, this linearizer gives an improvement in efficiency, linearity and output power.

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