









[7], RA	8.37	790 (9.4 %)	< 12	3.5
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#### IV. CONCLUSION

Dual-CP transmitarray antennas with independent radiation performance in each polarization have been reported here at Ka-band. The TA architecture is based on a dual-LP interleaved transmitarray combined with an add-on polarization converter. Various experimental results have been presented using large-size TAs (5513 unit-cells in total).

Very good agreement has been obtained between calculation and measurement in linear polarization across the whole frequency band from 27 GHz to 32 GHz. Although higher axial ratio values are recorded beyond 29 GHz due to the limited polarizer bandwidth in the band of interest, excellent polarization quality has been demonstrated below 29.5 GHz, even for main beam direction pointing up to 50°.

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