COBHAM

WHEN CONNECTION MATTERS

3.7m Antenna – S/X Pattern Data

CPOL / XPOL / Gain / Efficiency vs. frequency.

2 that subject to Notes 4 and 5, the following reference radiation patterns should be adopted for angles between the direction considered and the axis of the main beam for frequencies in the range from 2 to 31 GHz:

$$G = 32 - 25 \log \varphi \quad \text{dBi} \quad \text{for } \varphi_{min} \leq \varphi < 48°$$

$$= -10 \quad \text{dBi} \quad \text{for } 48° \leq \varphi \leq 180°$$

where:

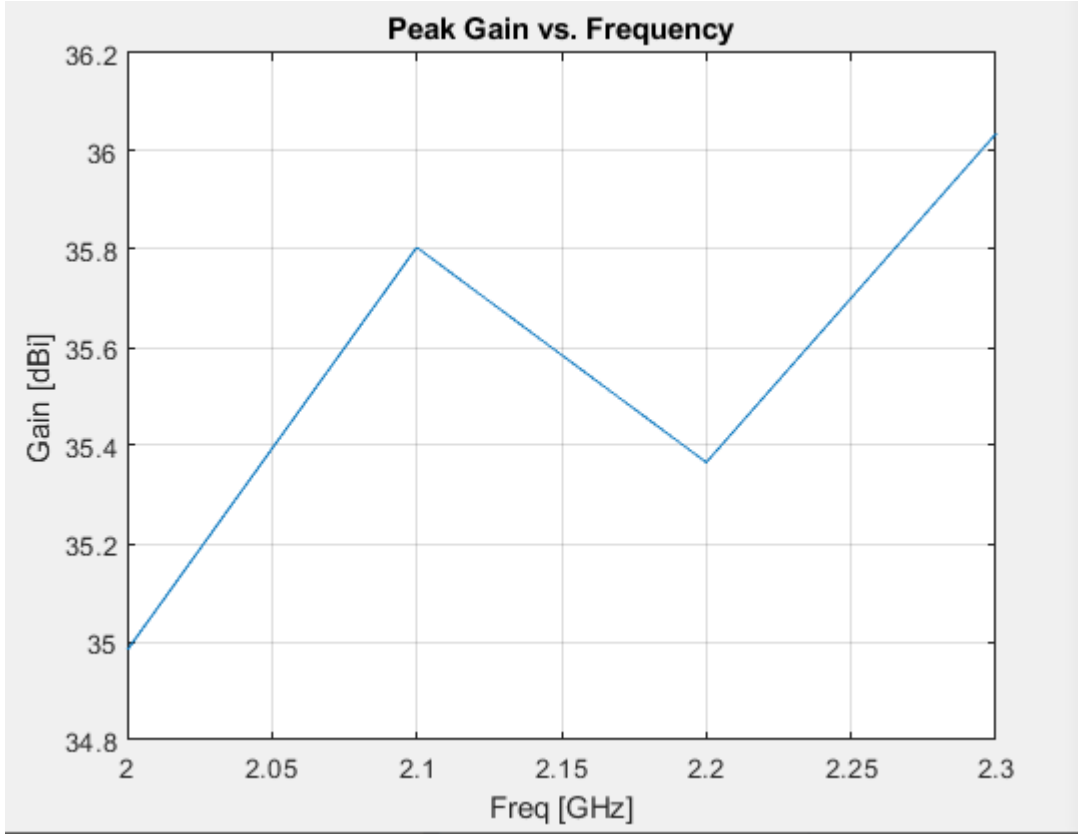
φ_{min} = 1° or 100 λ/D degrees, whichever is the greater, for $D/\lambda \geq 50$.

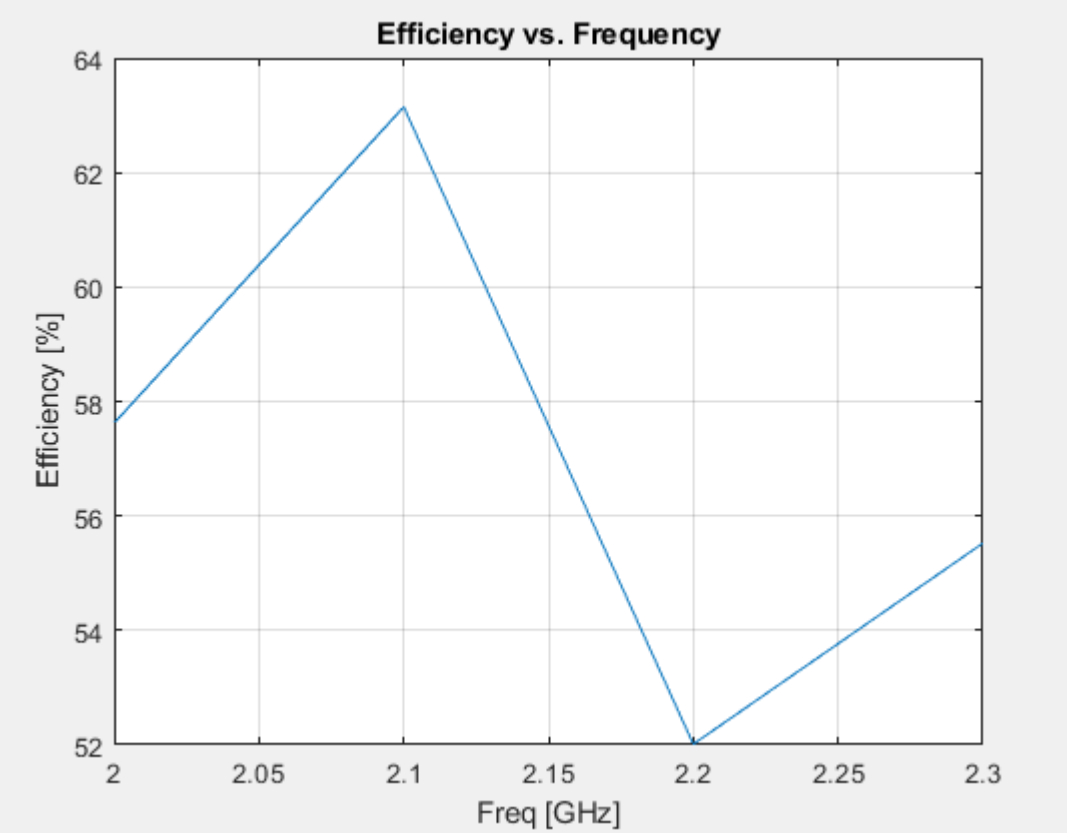
φ_{min} = 2° or 114 $(D/\lambda)^{-1.09}$ degrees, whichever is the greater, for $D/\lambda < 50$.

- S band: Theta_min = 2.15
- X band: Theta_min = 1

S Band Gain & Efficiency vs. Frequency

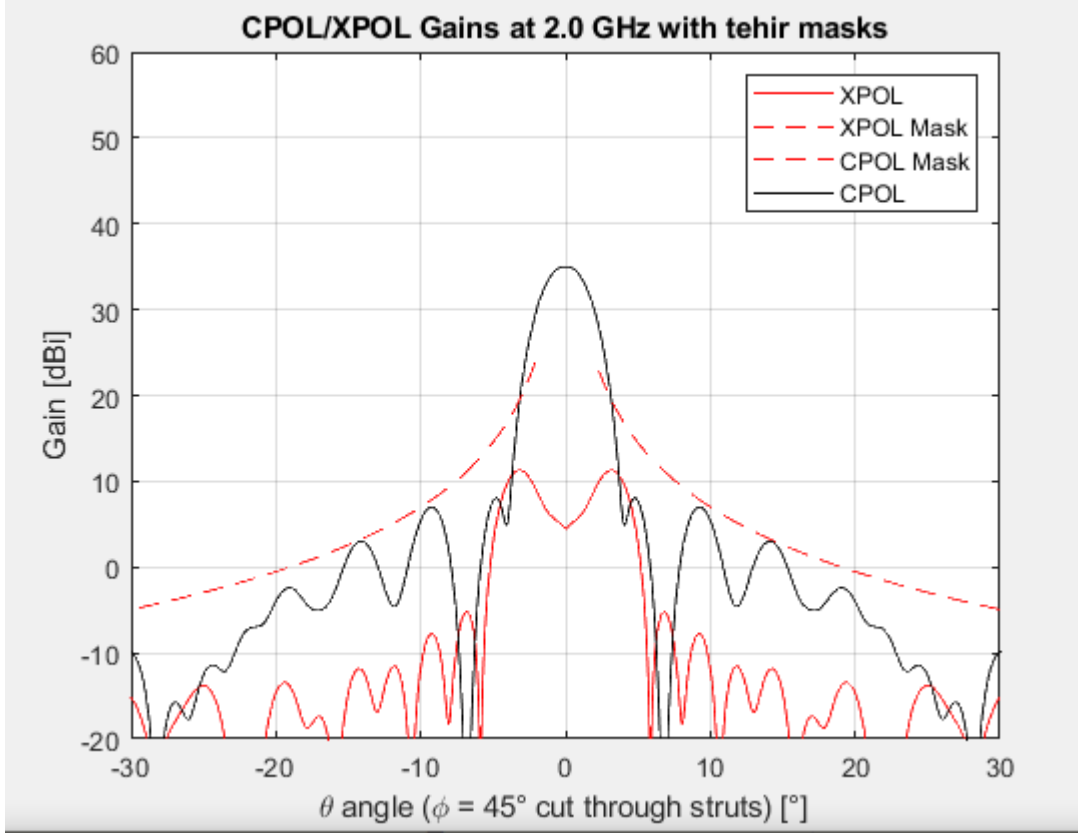
LHCP

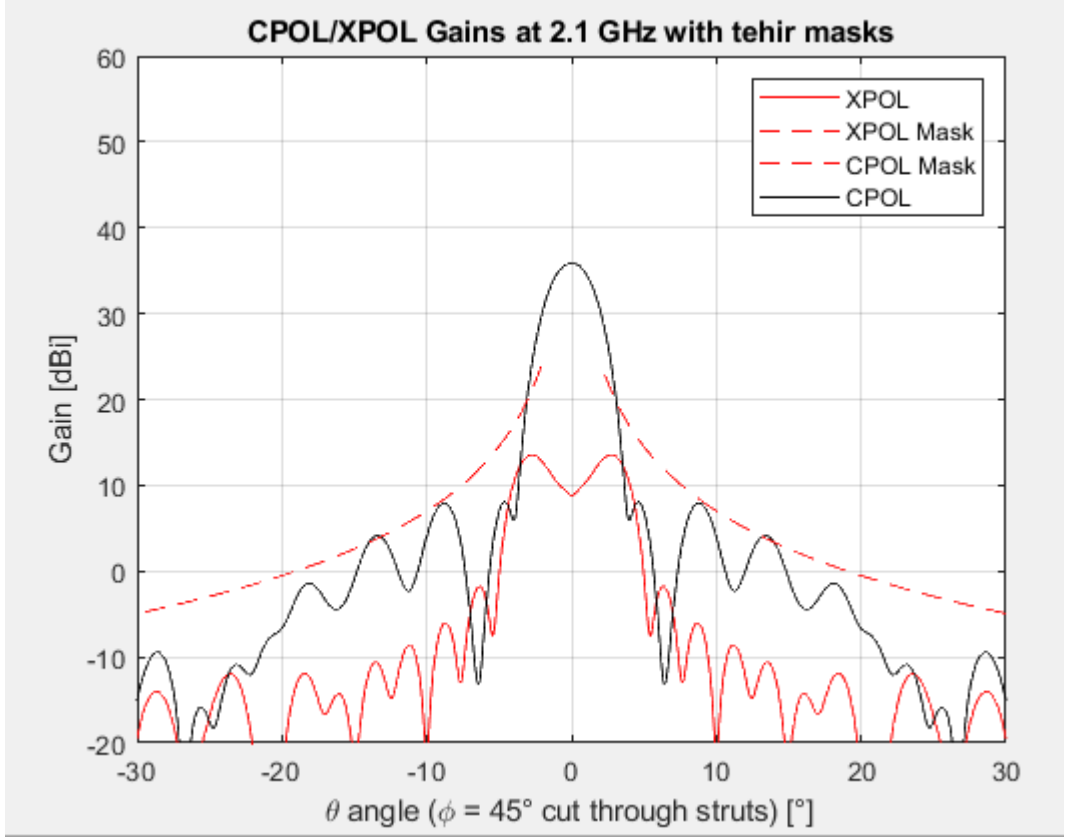




S Band Radiation Pattern

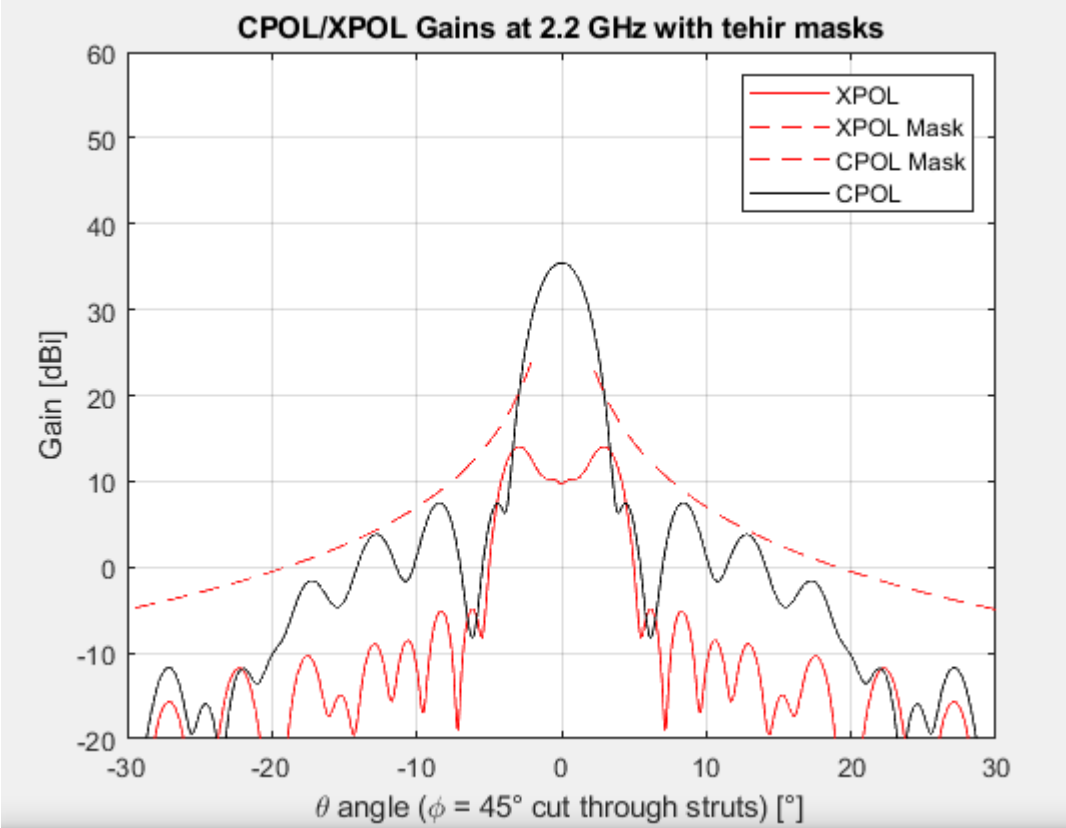
LHCP

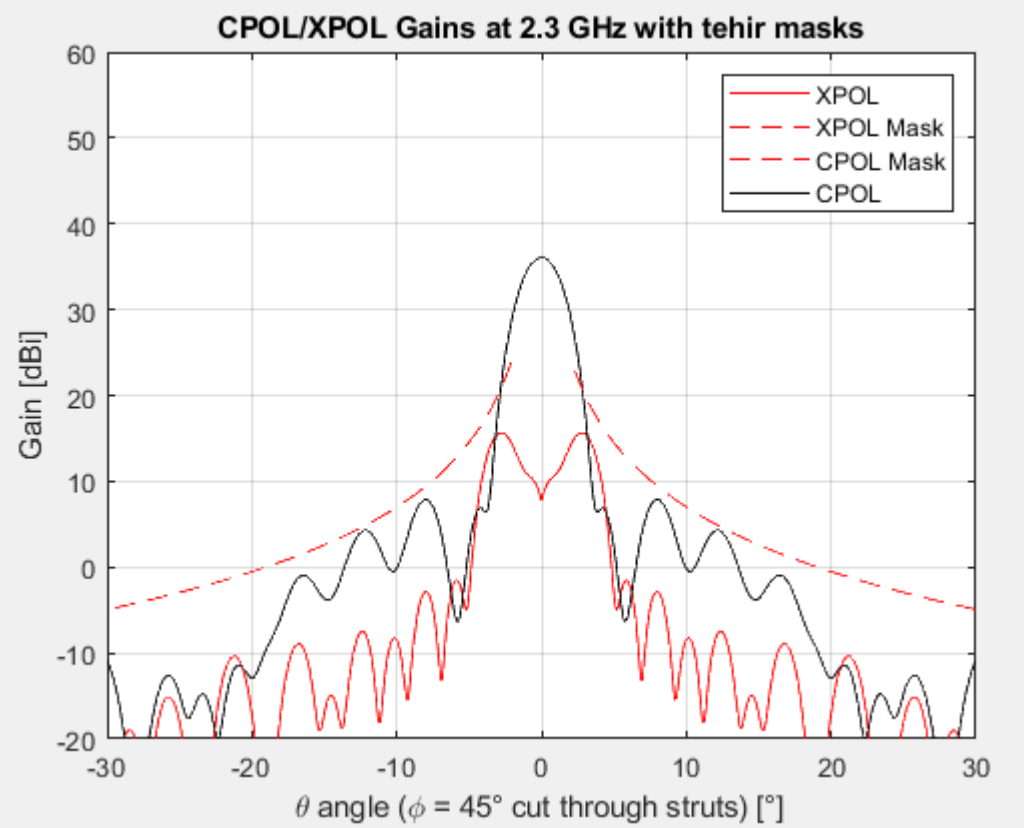




S Band Radiation Pattern

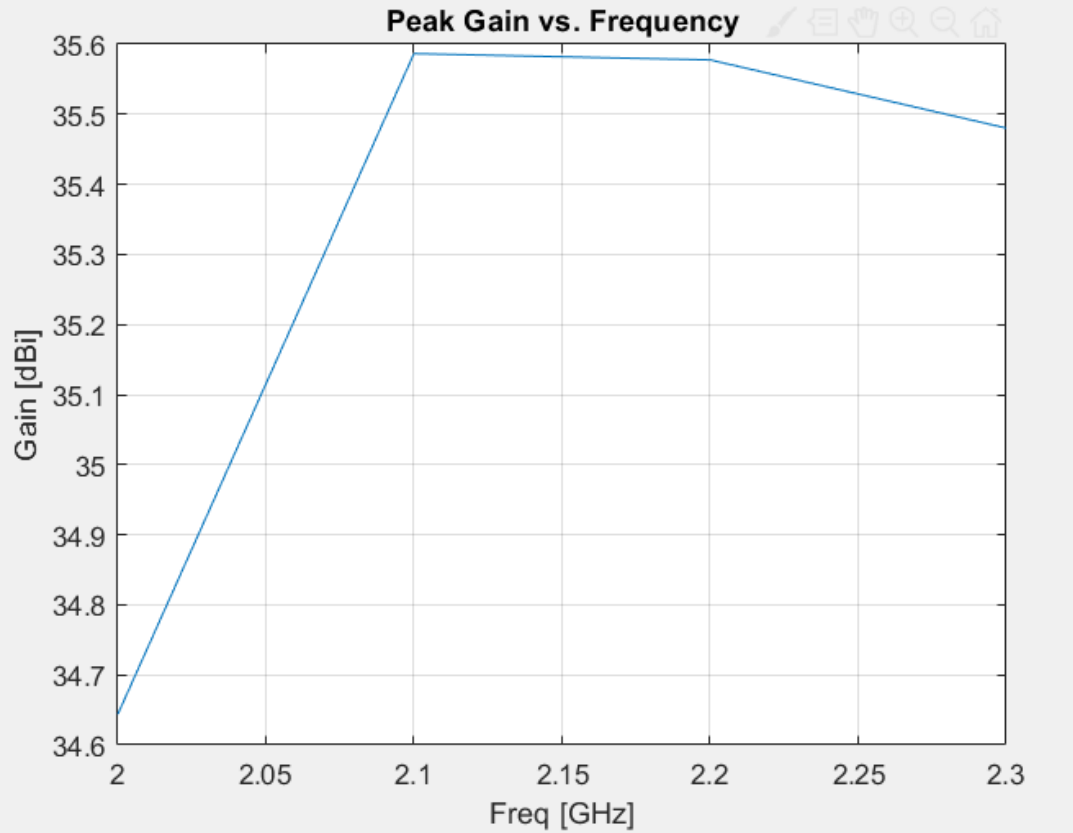
LHCP

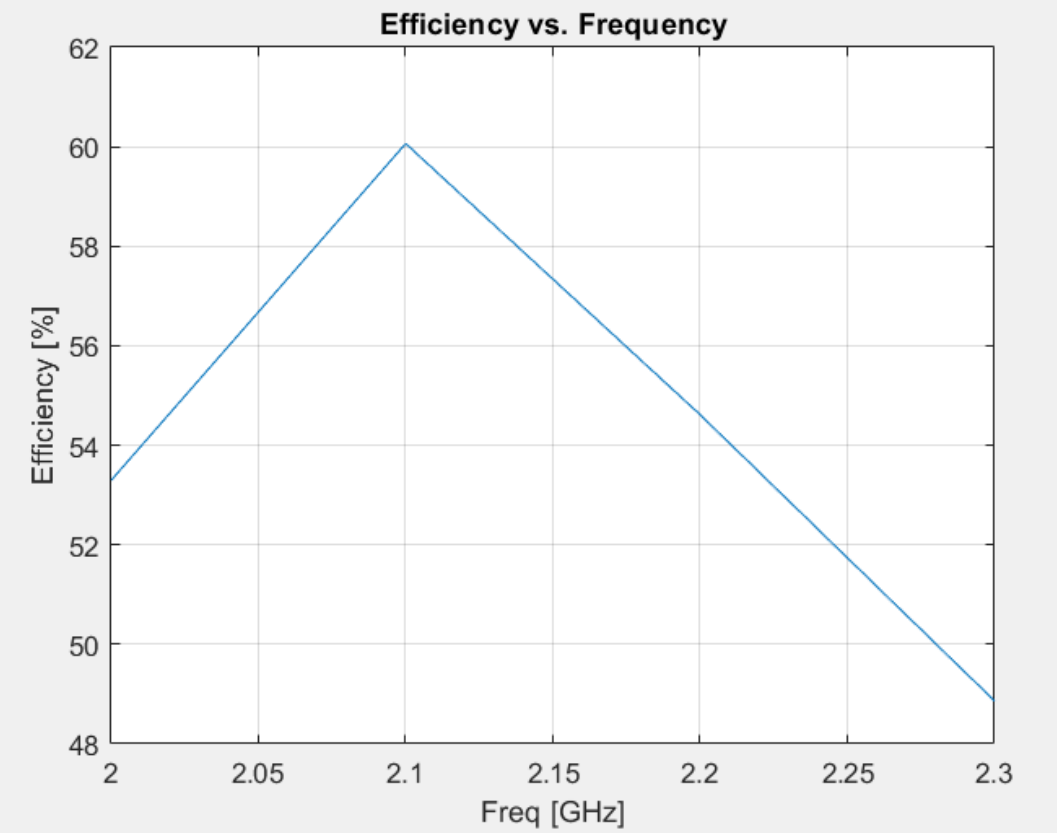




S Band Gain & Efficiency vs. Frequency

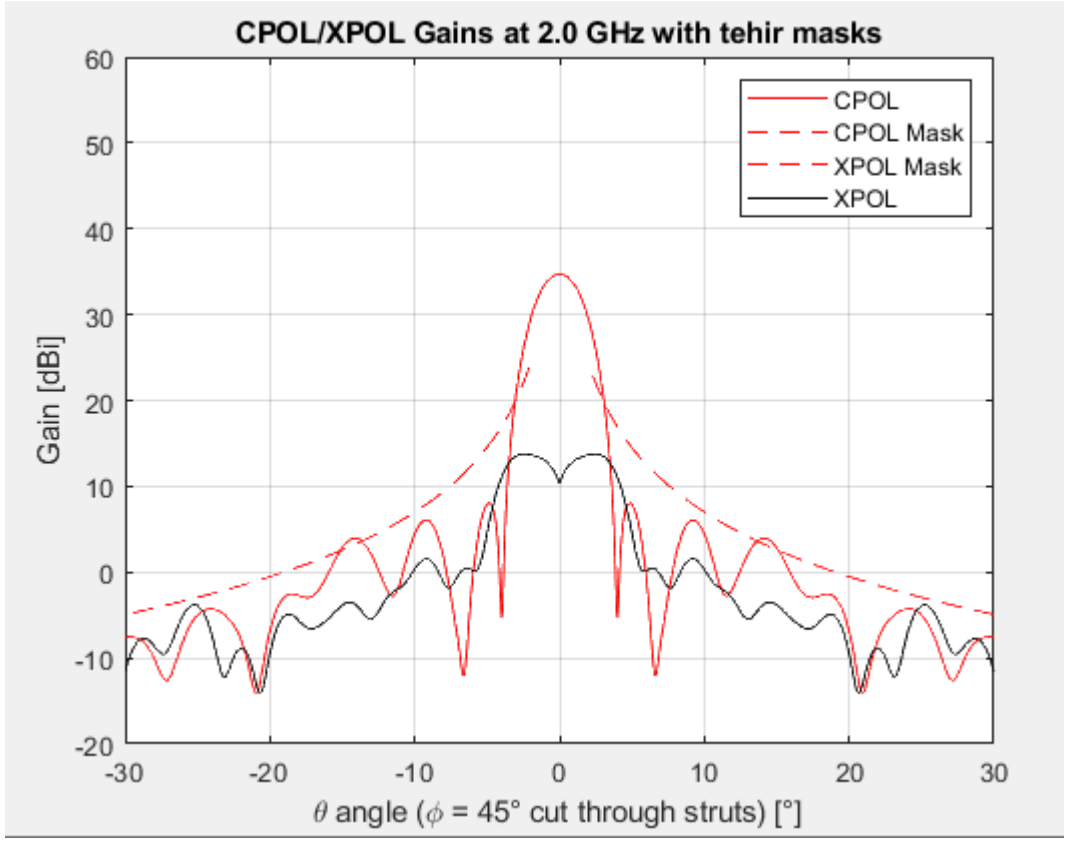
RHCP

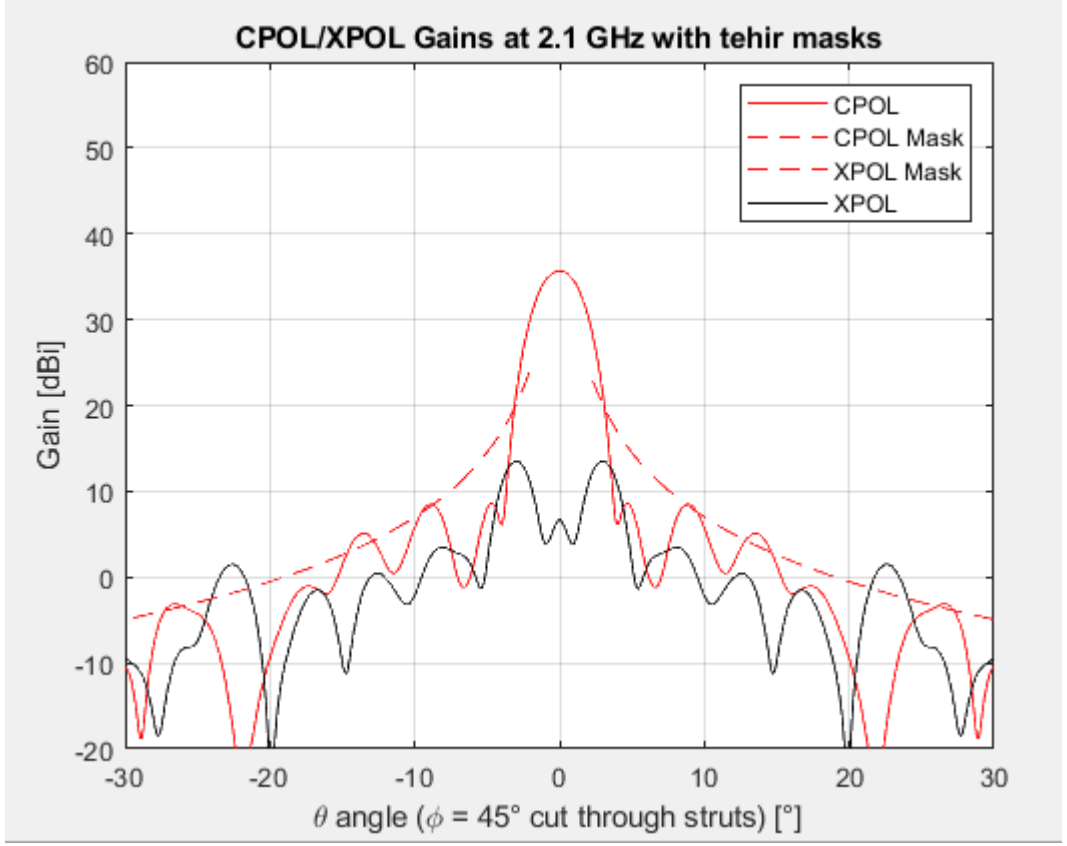




S Band Radiation Pattern

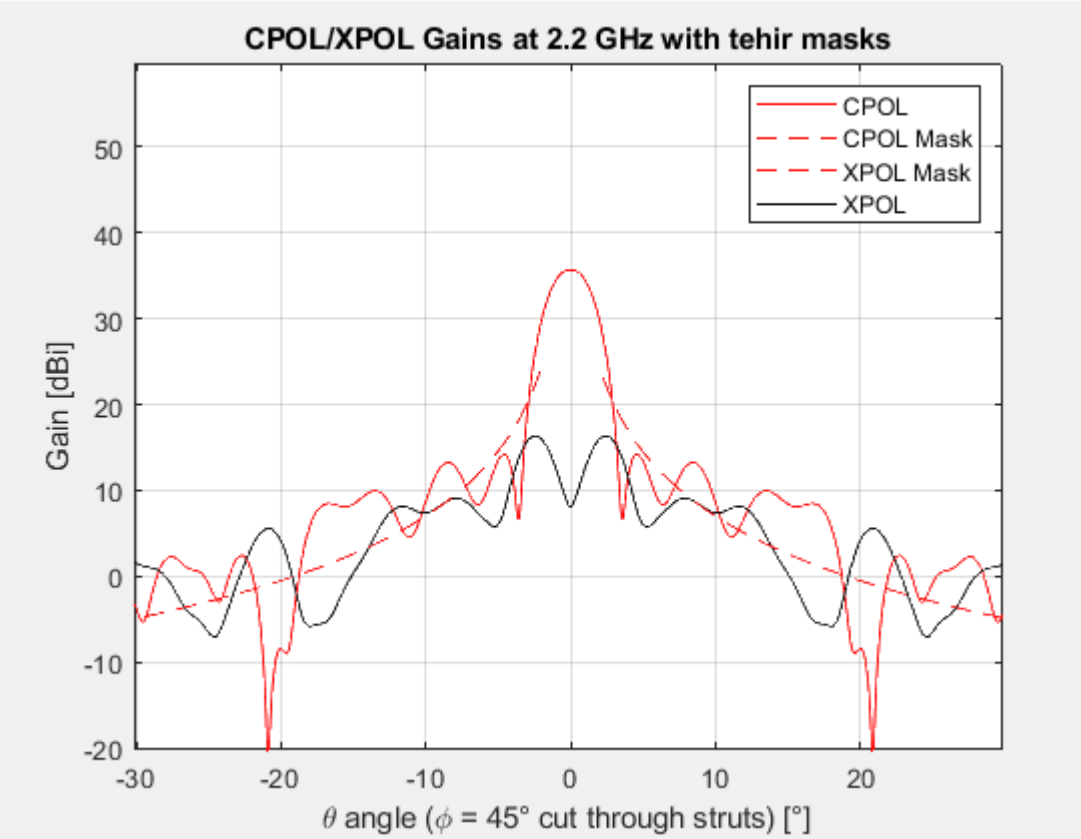
RHCP

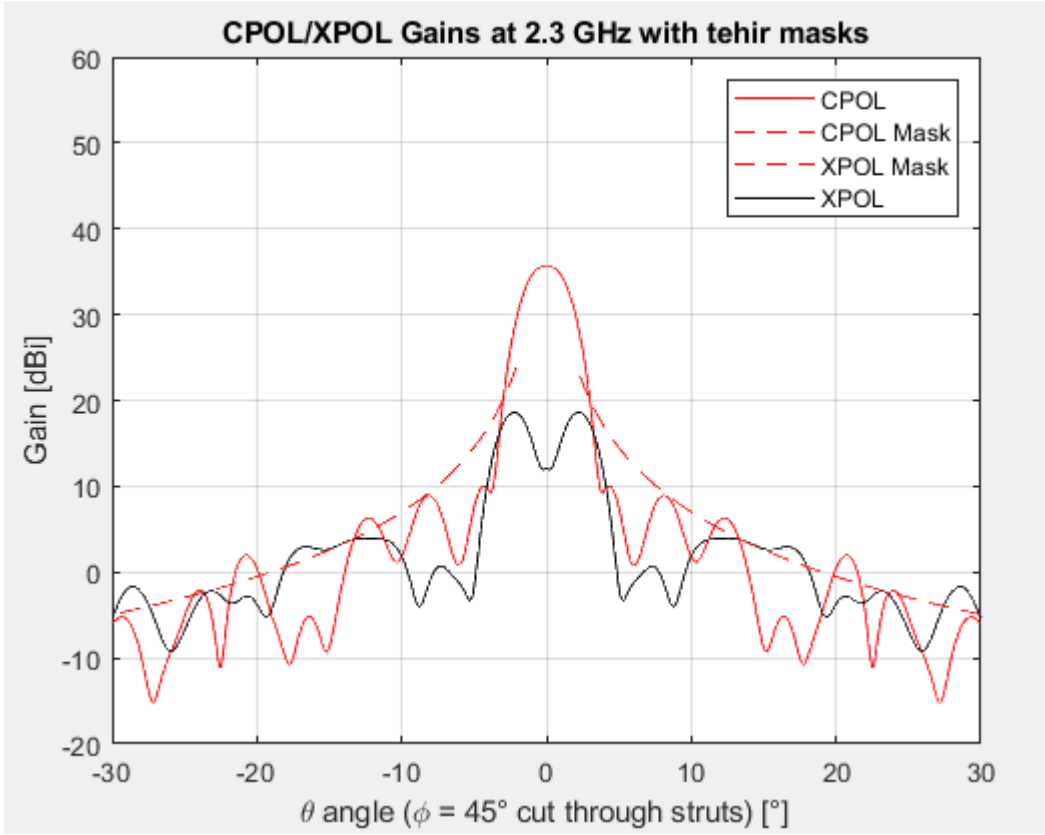




S Band Radiation Pattern

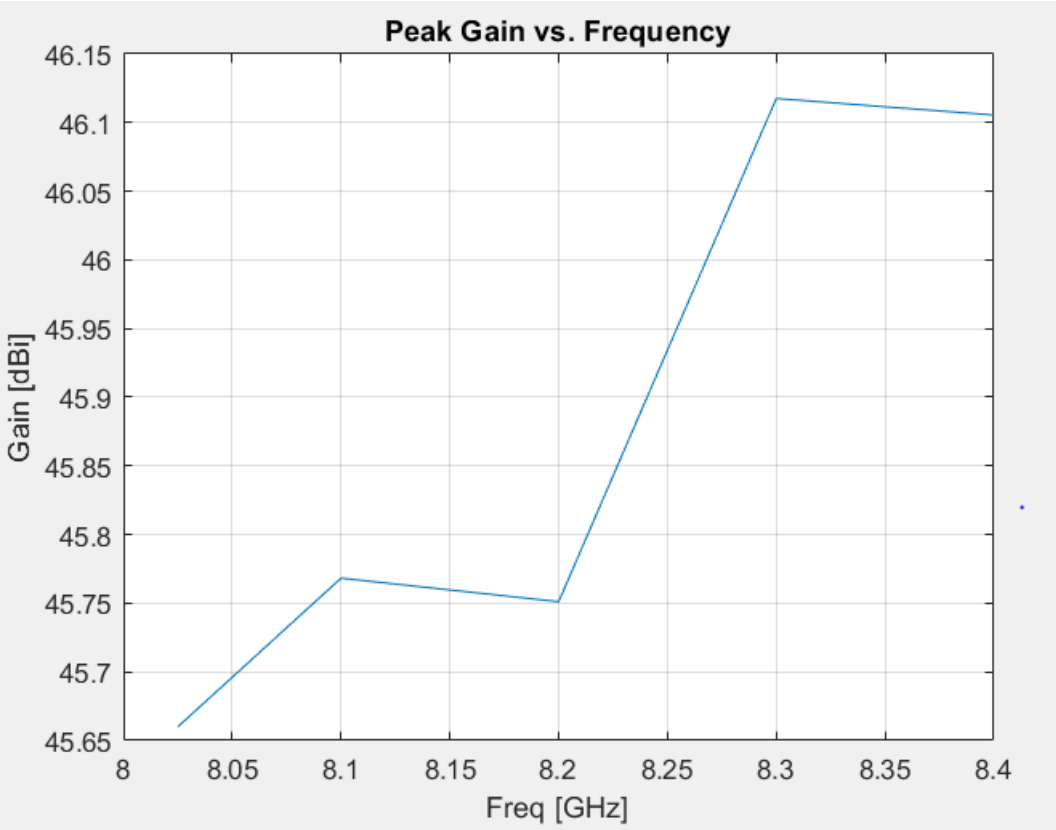
RHCP

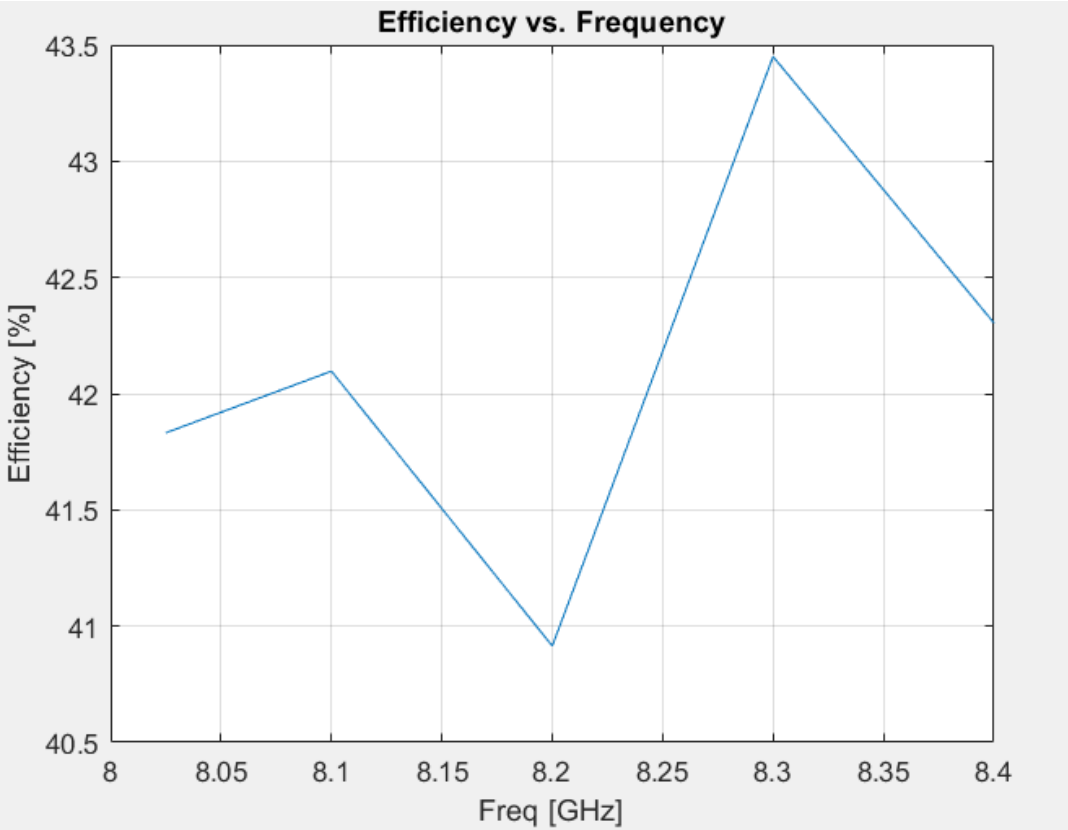




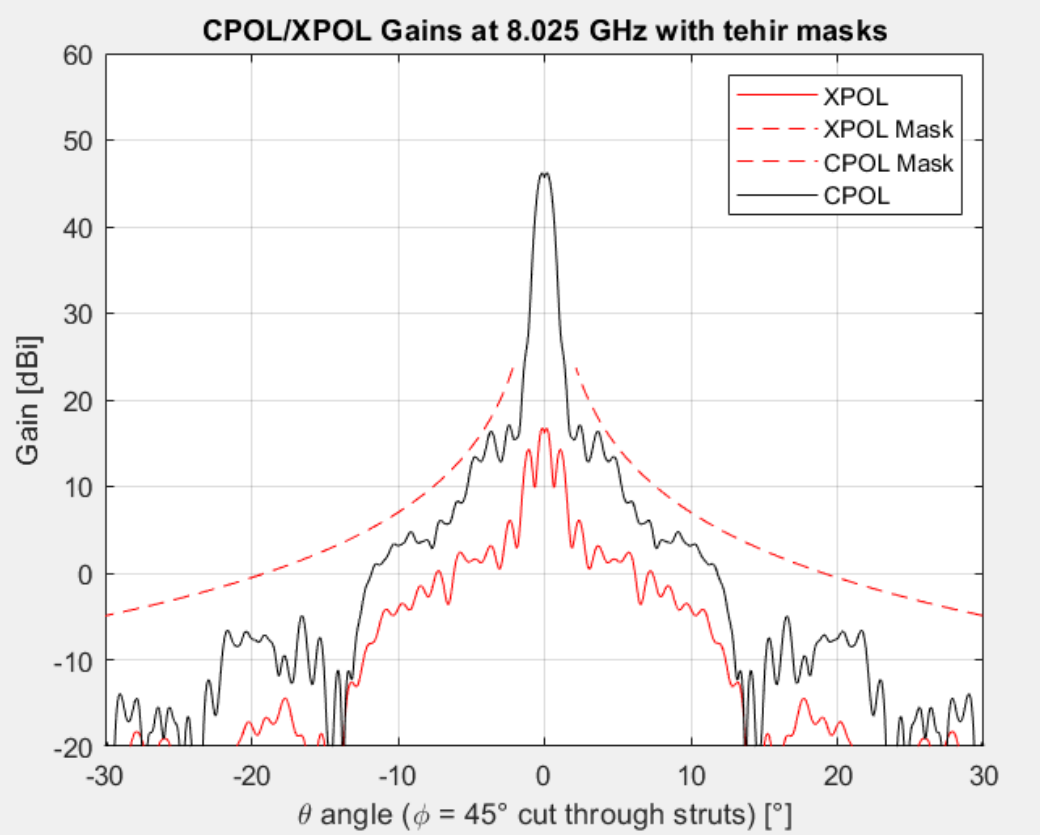
X Band Gain & Efficiency vs. Frequency

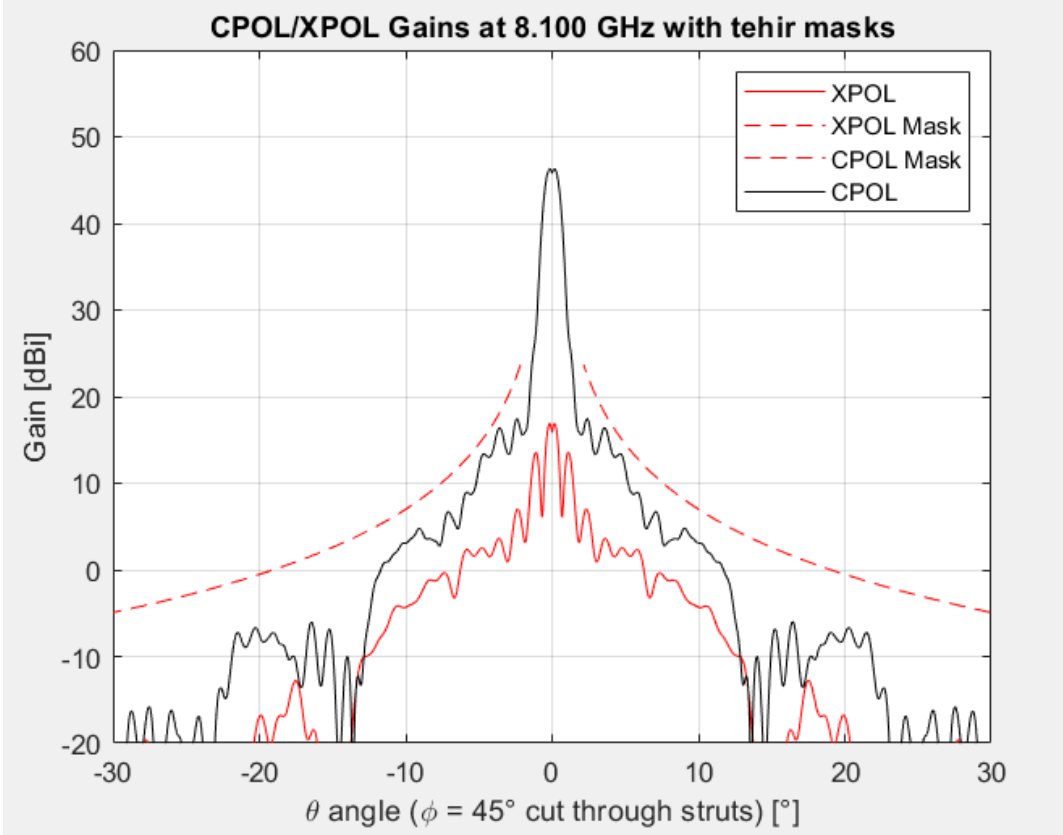
LHCP





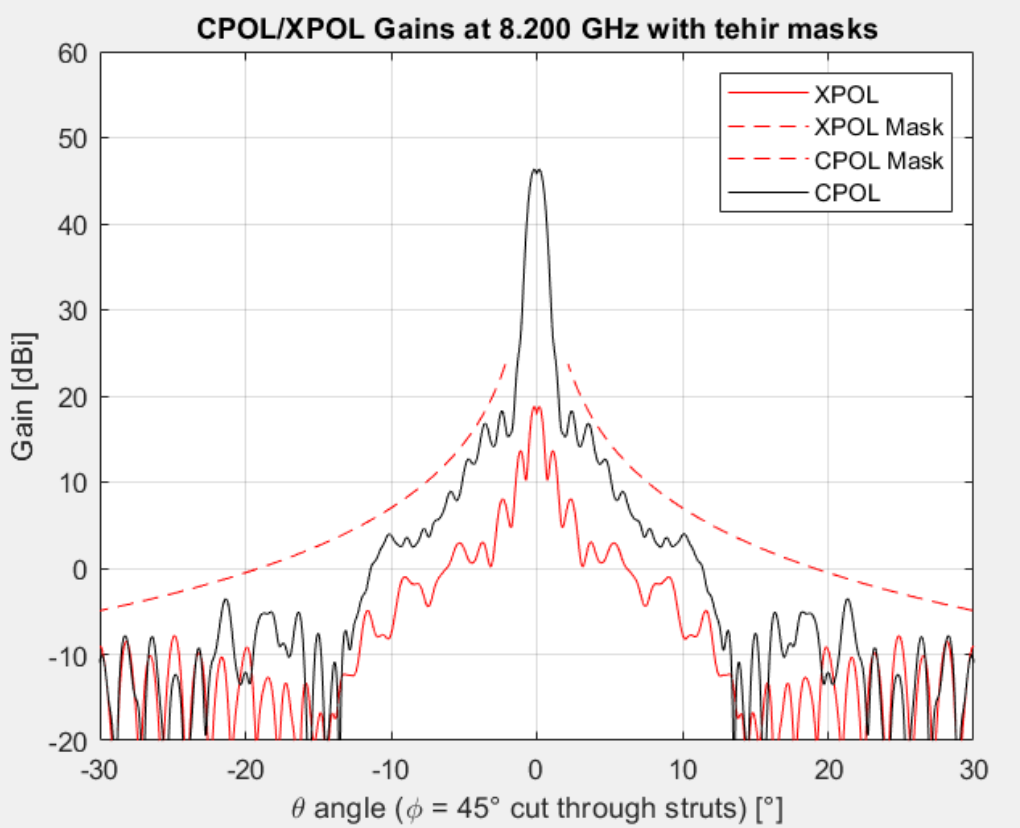
X Band Radiation Pattern
LHCP

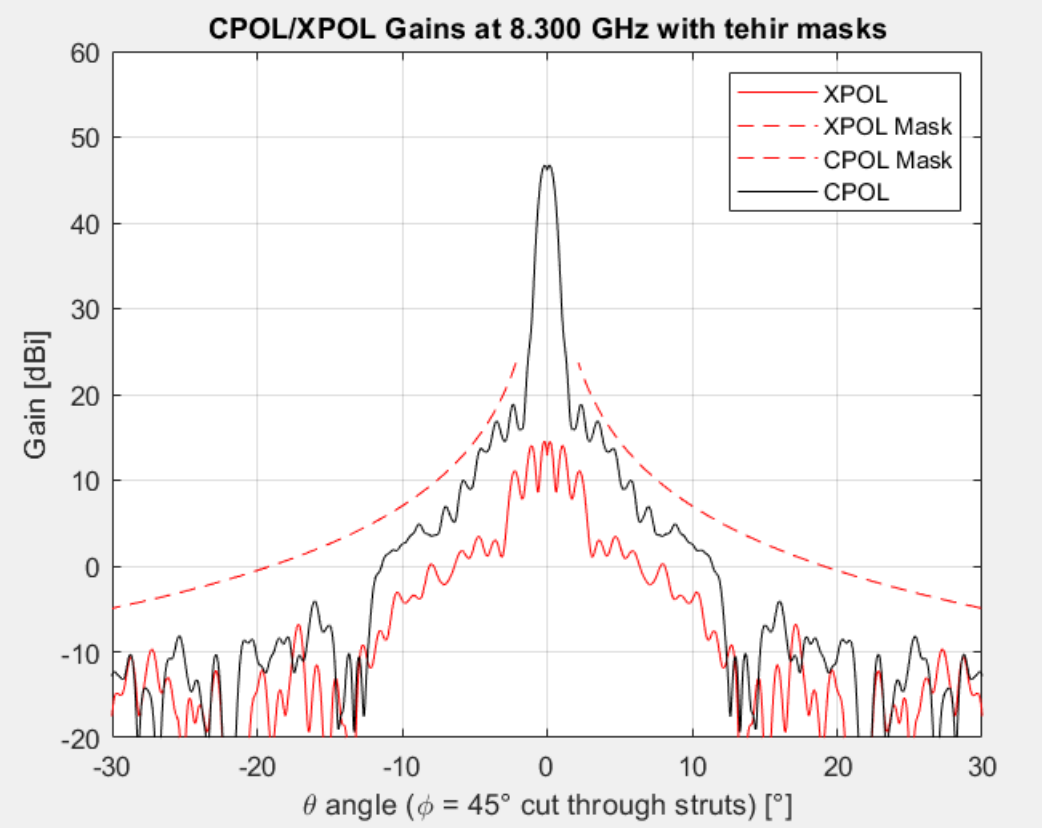




X Band Radiation Pattern

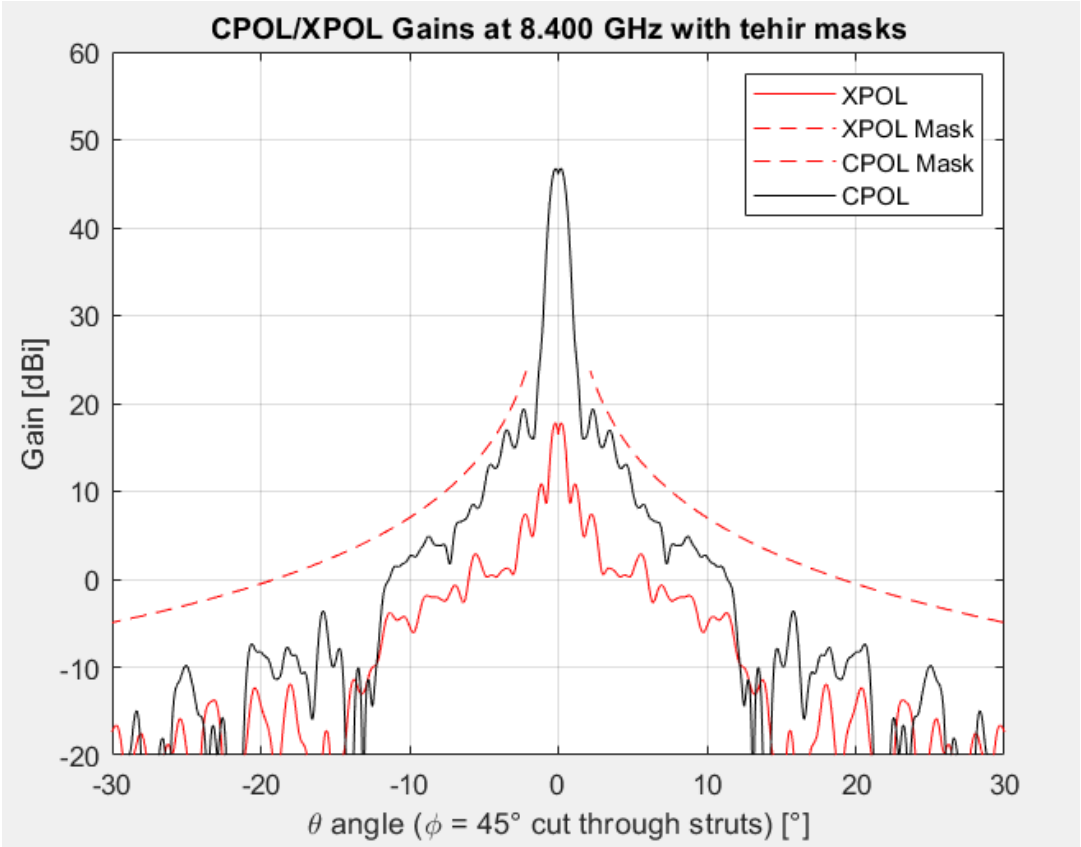
LHCP





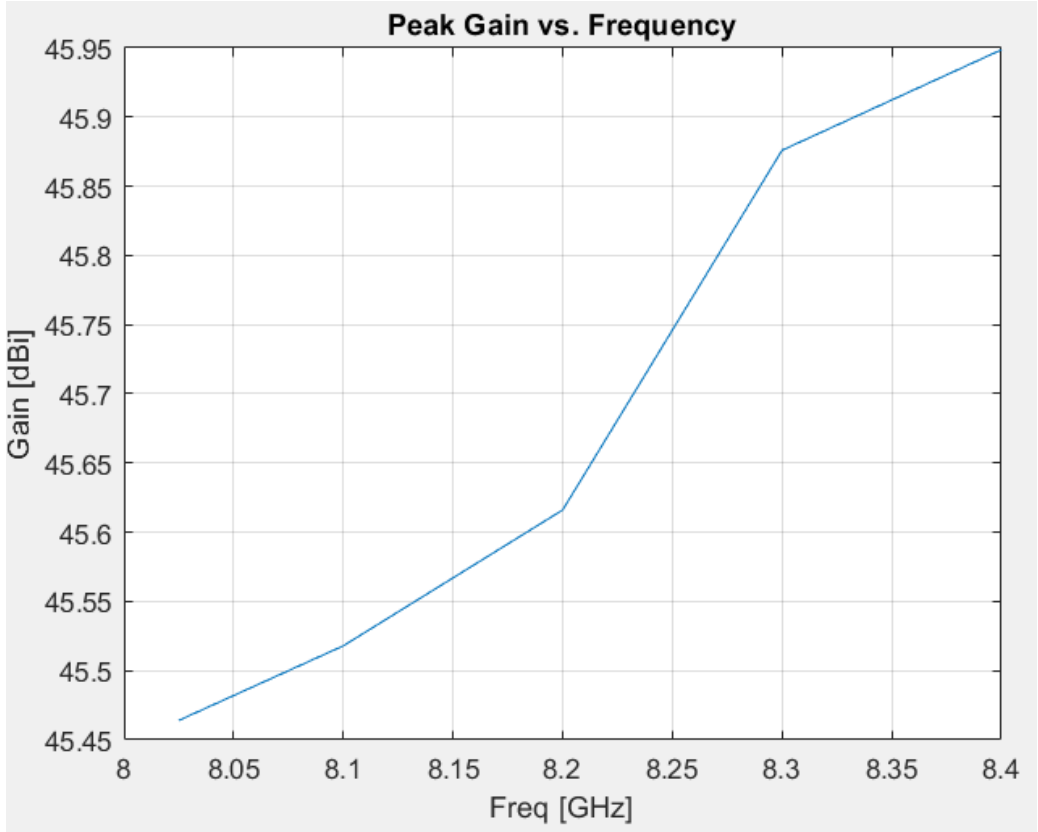
X Band Radiation Pattern

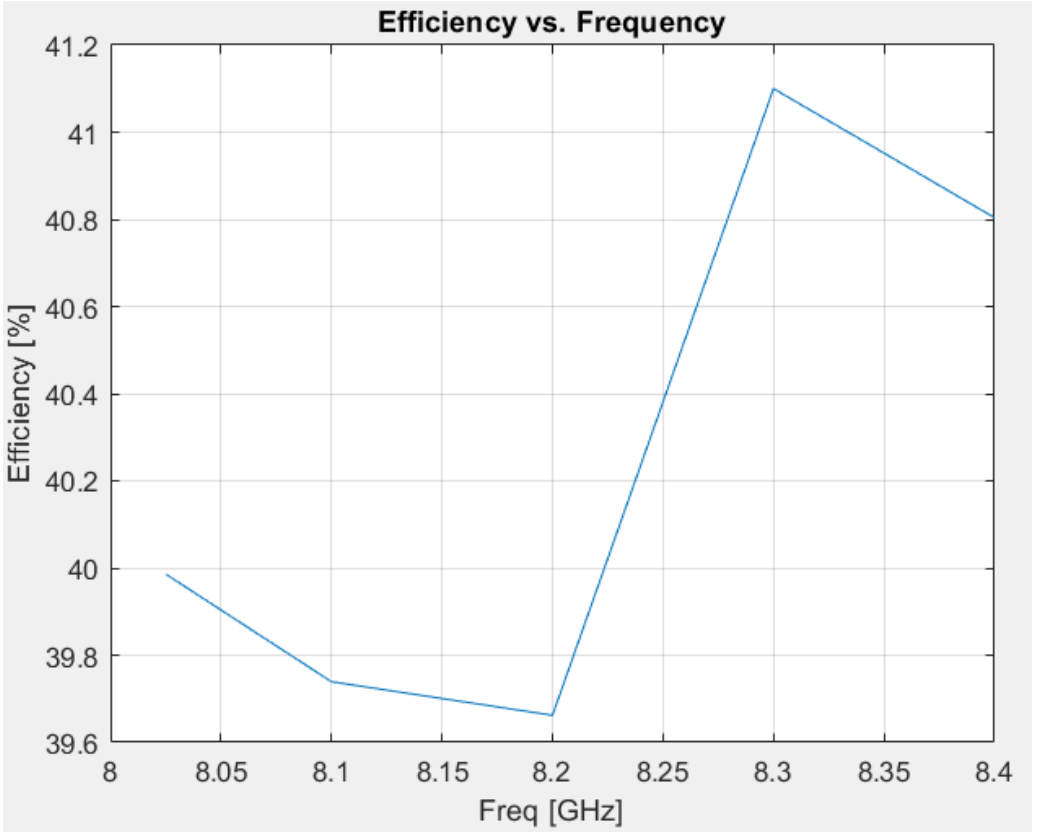
LHCP



X Band Gain & Efficiency vs. Frequency

RHCP





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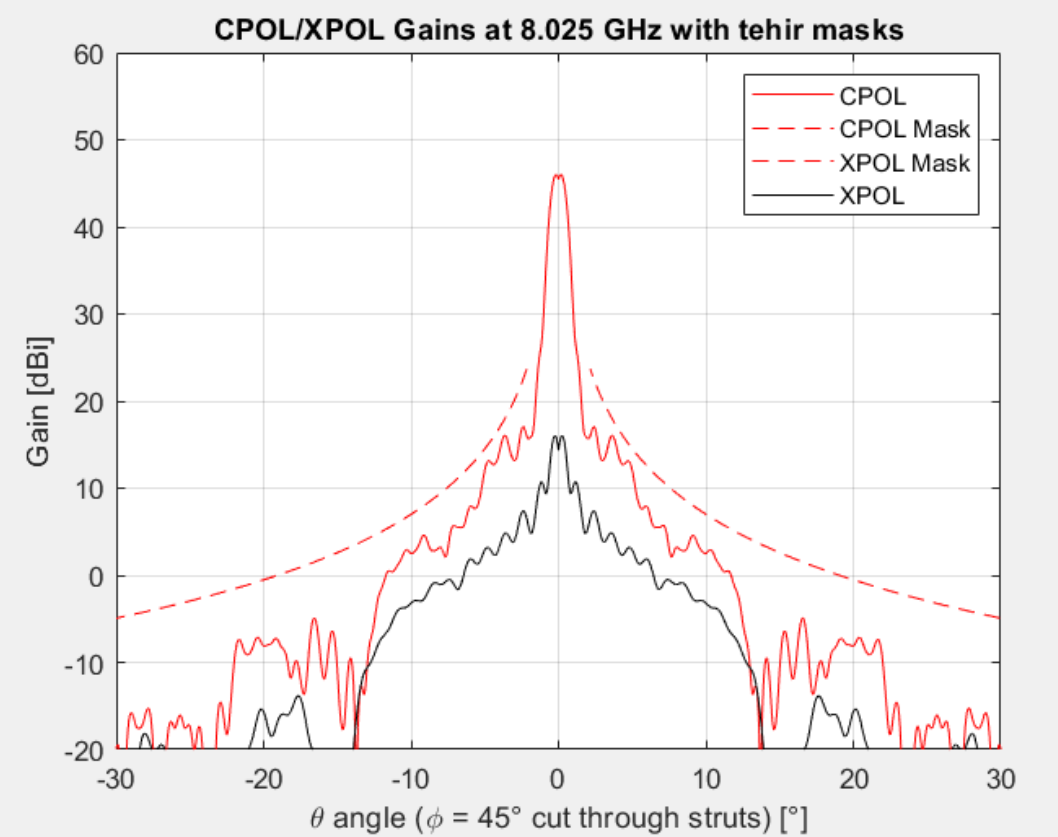
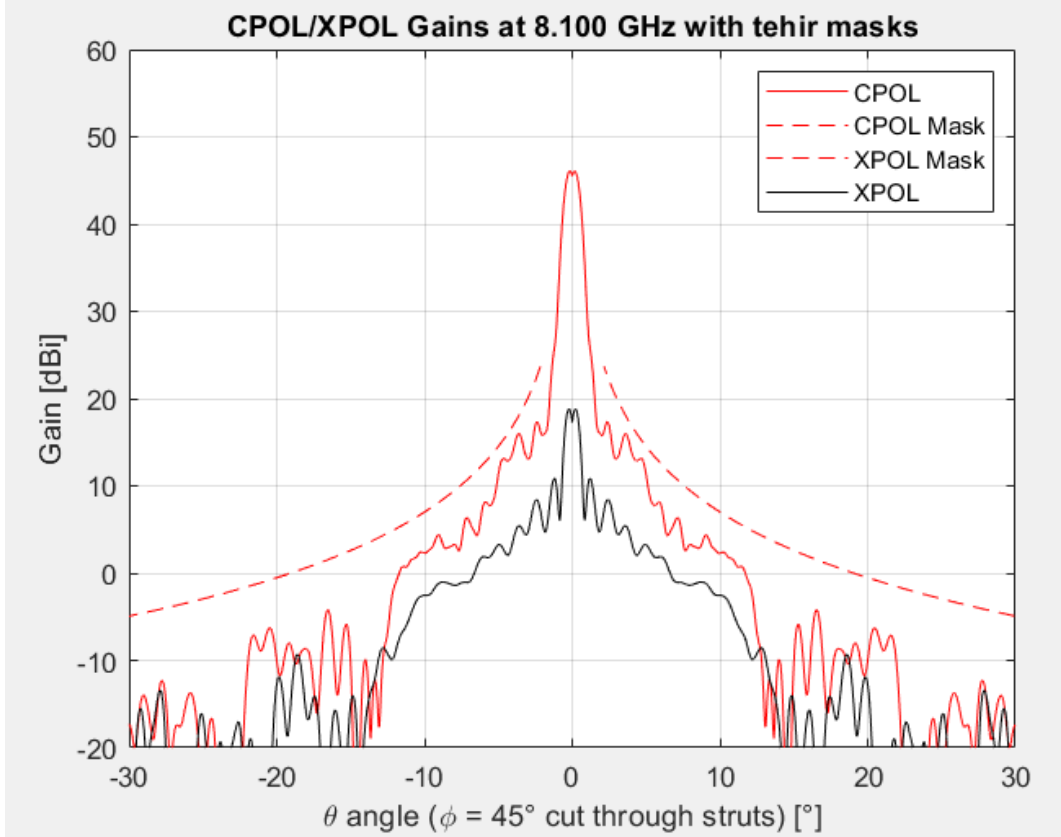
RHCP





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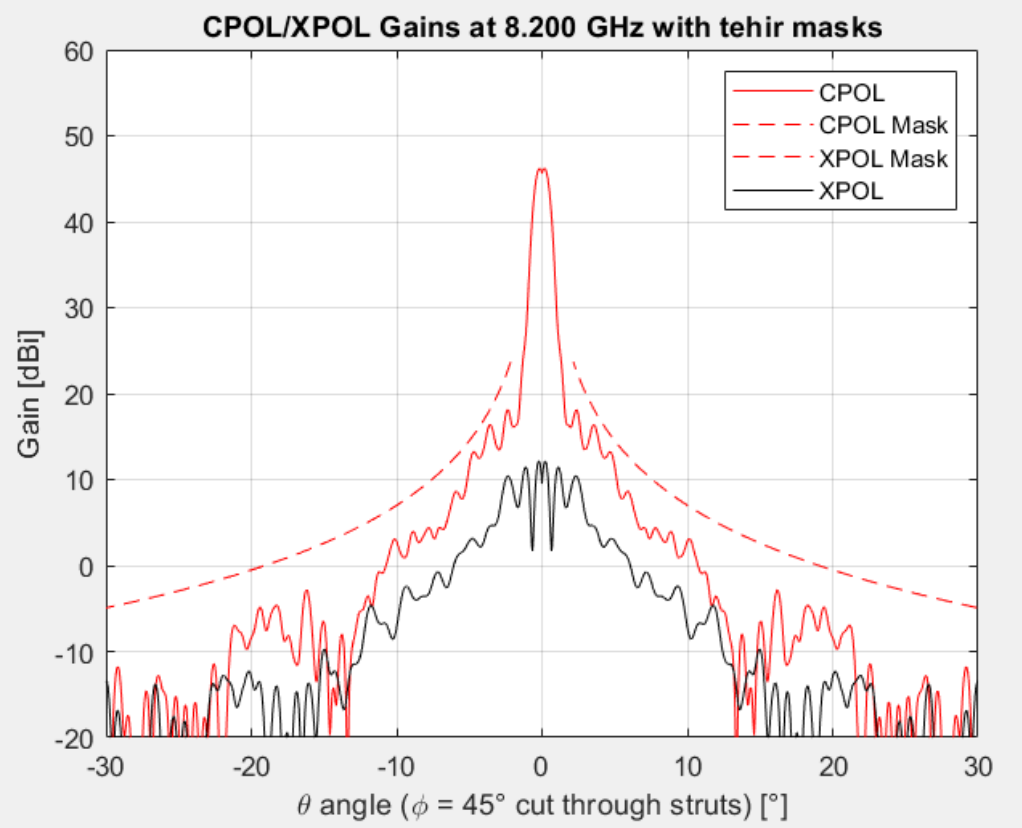
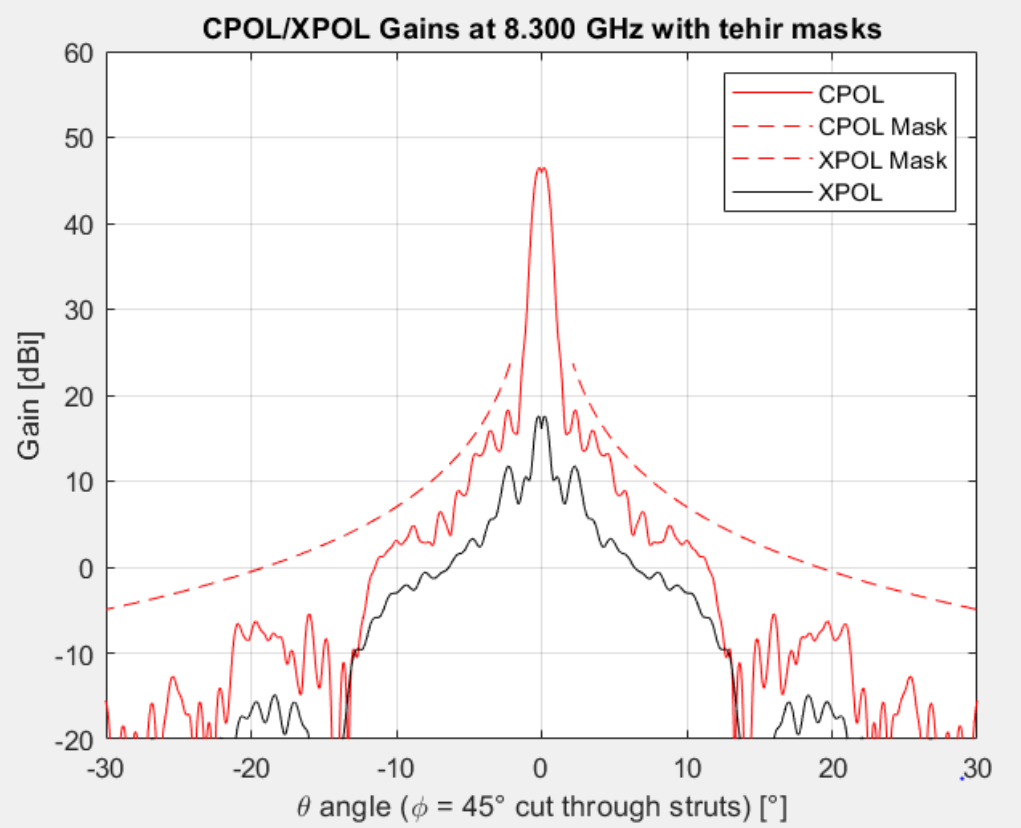
RHCP





X Band Radiation Pattern

RHCP