Dipole voltage and Power pattern vs direction angle

Voltage

Power

Edge of tertiary

Horizontal Lambda/2 dipole

Height:Lambda/4.0 above ground plane

5.9db taper at tertiary edge
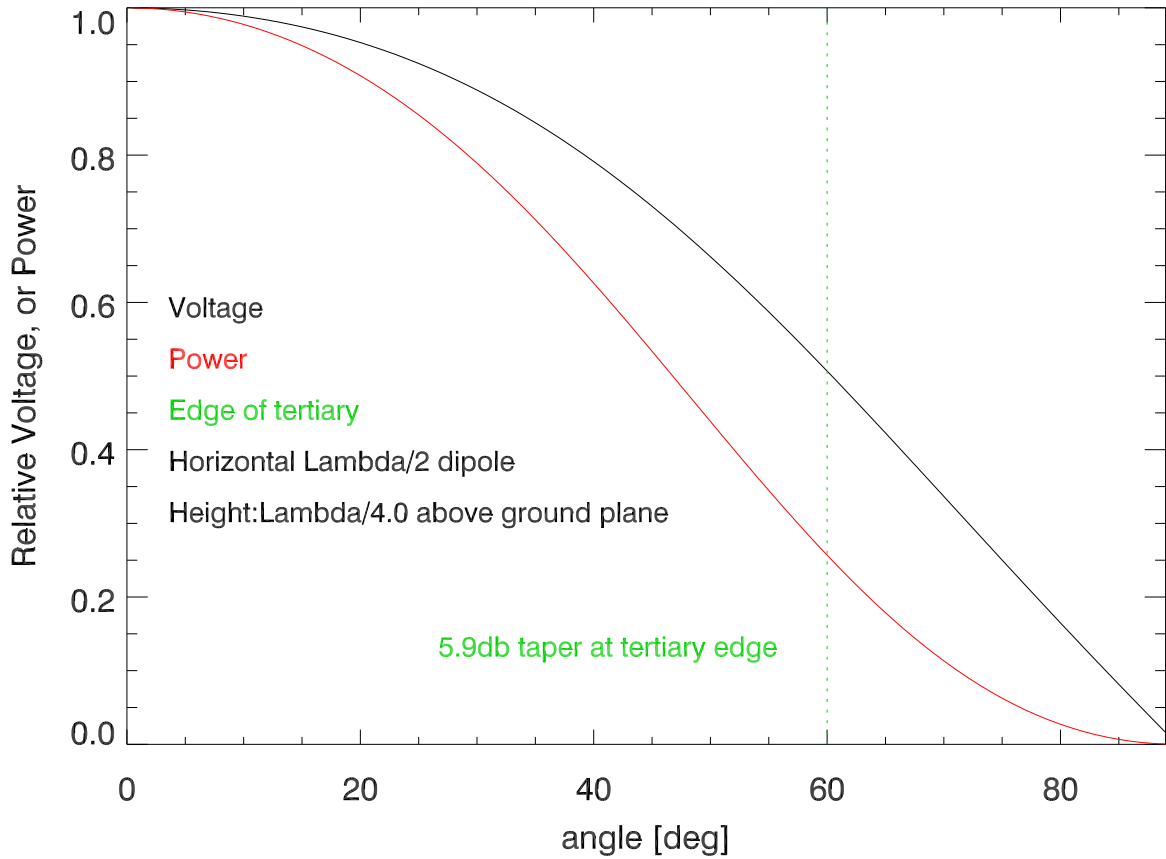
PowerOnTertiary/TotPower:0.81

PowerOffTertiary/TotPower:0.19

assume:Tdome=250K,Tsky=15K,Trcv=50K, then Tsys:110.3

voltage pattern used:

V(th)=cos(!pi/2.*cos(phi)cos(90-th))/sqrt(1-cos(phi)cos(90-th))^2) *sin(Hr*sin(90-th))