

**Name:** APENOR210V01**Description:**

Earth station receiving antenna pattern for analyses under Appendix 30B for the BIFROST receiving antenna.

**Type:** Earth station, Receiving**Required Input Parameters:**

gain,bmwidth

**Validation Warnings/Errors:**

Type	Message
Warning	Phi0 () is out of limits [0.1:10.0].

**Pattern Information:**

Based on a pattern submitted by NOR administration for the antenna of 1m diameter and 0.7 efficiency, in 1995. The pattern requires input parameter beamwidth.

**Co-Polar Component:**

$$G = G_{\max} \quad \text{for } 0 \leq (\varphi/\varphi_0) \leq 0.25$$

$$G = G_{\max} - 12 (\varphi/\varphi_0)^2 \quad \text{for } 0.25 < (\varphi/\varphi_0) \leq 0.86$$

$$G = G_{\max} - 10.5 - 25 \log (\varphi/\varphi_0) \quad \text{for } 0.86 < (\varphi/\varphi_0)$$

$$\text{If } G < G_{\max} - 37: G = G_{\max} - 37$$