Name: APENST816V01

Type: Earth station, Receiving and Transmitting

Region(s): 123

Description:

Non-standard generic earth station antenna pattern described by coefficient A, angle phi1 and Gmin = 0 dB.

Required Input Parameters:

gain,coefa,phi1

Validation Warnings/Errors:

Type	Message
Error	G(Phi1) () is less than Gmin (). G(Phi1) is too low or Phi1 is too high.
Error	Gmax () is less than G(Phi1) (). Gmax is too low.
Error	Phi1 () is out of limits [1:180].
Error	CoefA () is out of limits [18:47].

Pattern Information:

Pattern is equal to the maximum antenna gain in the main-lobe range (for off-axis angles less than Phi1).

Co-Polar Component:

$G = G_{max}$ for $0° \leq \varphi < \varphi_1$

$G = Max(CoefA - CoefB * \log \varphi, G_{min})$ for $\varphi_1 \leq \varphi \leq 180°$

where:

$CoefB = 25$

$G_{min} = 0$