Name: **APEREC028V01**

Type: Earth station, Receiving and Transmitting

Region(s): 123

Required Input Parameters:

gain

Description:

Recommendation ITU-R M.1091, annex 1 reference radiation pattern for transportable or vehicle-mounted earth station antennas with a gain of 12 to 18 dB and with a frequency between 1 to 3 GHz for use in the land mobile-satellite service.

Validation Warnings/Errors:

Type	Message
Error	Gmax () is less than 4 (). Gmax is too low.

Pattern Information:

Recommendation ITU-R M.1091, annex 1 reference radiation pattern for transportable or vehicle-mounted earth station antennas with a gain of 12 to 18 dB and with a frequency between 1 to 3 GHz for use in the land mobile-satellite service.

Co-Polar Component:

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

$G = CoefA - CoefB * \log \varphi$ for $\varphi_1 < \varphi < \varphi_b$

$G = G_{min}$ for $\varphi_b \leq \varphi \leq 180°$

where:

$CoefA = 44$

$CoefB = 25$

$G_{min} = -5$

$\varphi_1 = 40°$

$\varphi_b = 90°$