Name: APEREC028V01

Type: Earth station, Receiving and Transmitting

Region(s): 123

Required Input Parameters:
gain, ant_diam

Validation Warnings/Errors:

<table>
<thead>
<tr>
<th>Type</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error</td>
<td>Gmax () is less than 4 (). Gmax is too low.</td>
</tr>
</tbody>
</table>

Pattern Information:
Reference radiation pattern for transportable or vehicle-mounted near-axis symmetric earth station antennas with a gain of 12 to 18 dBi and with an operating frequency within the range of about 1 to 3 GHz for use in the land mobile-satellite service.

Co-Polar Component:

\[ G = G_{\text{max}} \quad \text{for } 0^\circ \leq \varphi \leq \varphi_1 \]
\[ G = \text{CoefA} - \text{CoefB} \times \log \varphi \quad \text{for } \varphi_1 < \varphi < \varphi_b \]
\[ G = G_{\text{min}} \quad \text{for } \varphi_b \leq \varphi \leq 180^\circ \]

where:

\text{CoefA} = 44
\text{CoefB} = 25
\text{G}_{\text{min}} = -5
\varphi_1 = 40^\circ
\varphi_b = 90^\circ