Name: APEG__219V01
Type: Earth station, Receiving and Transmitting

Description:
Earth station antenna pattern submitted by G for network INMARSAT earth station type INM-M(M).

Required Input Parameters:
gain

Validation Warnings/Errors:

<table>
<thead>
<tr>
<th>Type</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error</td>
<td>Gmax () is less than 11 (). Gmax is too low.</td>
</tr>
</tbody>
</table>

Co-Polar Component:

\[
G = G_{\text{max}} \quad \text{for } 0^\circ \leq \varphi < \varphi_1 \\
G = G_1 \quad \text{for } \varphi_1 \leq \varphi < \varphi_r \\
G = \text{CoefA} - \text{CoefB} \times \log \varphi \quad \text{for } \varphi_r \leq \varphi < \varphi_b \\
G = G_{\text{min}} \quad \text{for } \varphi_b \leq \varphi \leq 180^\circ
\]

where:

\[
\varphi_1 = 20^\circ \\
\varphi_r = 40^\circ \\
\varphi_b = 10 \left( \frac{51}{25} \right) (110^\circ) \\
G_1 = 11 \\
\text{CoefA} = 46 \\
\text{CoefB} = 25 \\
G_{\text{min}} = -5
\]