

Name: APEUSA236V01**Type:** Earth station, Transmitting**Description:**

Earth station antenna pattern submitted by USA for the GOES networks DCP PLATFORM. Maximum antenna gain is fixed to 14.8 dB.

Required Input Parameters:

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Validation Warnings/Errors: None**Co-Polar Component:**

$$\begin{aligned} G &= 14.8 - 0.017578 * \varphi^2 && \text{for } 0^\circ \leq \varphi \leq 32^\circ \\ G &= -0.045 * (\varphi - 40)^2 && \text{for } 32^\circ < \varphi \leq 50^\circ \\ G &= -4.9 - 0.06436 * (\varphi - 55)^2 && \text{for } 50^\circ < \varphi \leq 72^\circ \\ G &= -15 - 0.07 * (\varphi - 85)^2 && \text{for } 72^\circ < \varphi \leq 95^\circ \\ G &= -4 - 0.010625 * (\varphi - 135)^2 && \text{for } 95^\circ < \varphi \leq 175^\circ \\ G &= -16 && \text{for } 175^\circ < \varphi \leq 180^\circ \end{aligned}$$