

Name: APSUSA607V01**Description:****Type:** Space station, Receiving and Transmitting

Space station antenna pattern submitted by USA for USGAE-R networks in 60 GHz. Gmax is 60 dB.

Required Input Parameters:

gain

Validation Warnings/Errors:

Type	Message
Error	Gmax () is out of limits [61:]. Gmax out of range.

Pattern Information:

Submitted maximum antenna gain was 60 dB. Beamwidth is fixed to 0.26 degrees.

In the main lobe the pattern REC-672 is used. Linear interpolation between points is applied.

Co-Polar Component:

$$G = G_{\max} - 12 (\varphi/\varphi_0)^2 \quad \text{for} \quad 0 \leq (\varphi/\varphi_0) \leq 0.5$$

where $\varphi_0 = 0.26^\circ$

Sidelobe gain relative to the main lobe gain is -3, -10, -15, -20, -30, -40, -50, -58, and -68 dB for off-axis angles of 0.13, 0.25, 0.40, 0.63, 1.58, 4.0, 10.0 and 20.0 degrees, greater than or equal to 48 degrees, respectively.