Name: APSREC408V01

Type: Space station, Receiving and Transmitting

Region(s): 123

Required Input Parameters:
gain,maj_axis,min_axis,orient

Validation Warnings/Errors: None

Pattern Information:
Single feed circular beams.
Ls = -20 dB for use in article 22, tables 22-2 and 22-3.

Description:
Recommendation ITU-R S.672-4 space station antenna pattern for use as a designe objective in the FSS employing geostationary satellites. For Ls = -20 dB.

Co-Polar Component:

$G = G_{max} - 12\ (\varphi/\varphi_0)^2$ for $0 \le (\varphi/\varphi_0) \le a/2$

$G = G_{max} + L_s$ for $a/2 < (\varphi/\varphi_0) \le b/2$

$G = G_{max} + L_s + 20 - 25 \log (2\varphi/\varphi_0)$ for $b/2 < (\varphi/\varphi_0)$

where:

$L_s = -20$ dB

$a = 2.58$

$b = 6.32$