

# **Thales InFlyt Experience Directional Information Modular Connectivity Terminal (MCT)**

## **MCT Antenna Performance**

The Thales Modular Connectivity Terminal antenna is a two-axis (azimuth & elevation) motorized antenna with the rectangular micro horn array aperture dimensions of 62.4 cm (Width) and 16.2 cm (Height). Due to its low profile, rectangular shape, the antenna presents an asymmetrical directional beam with the following beam-width patterns:

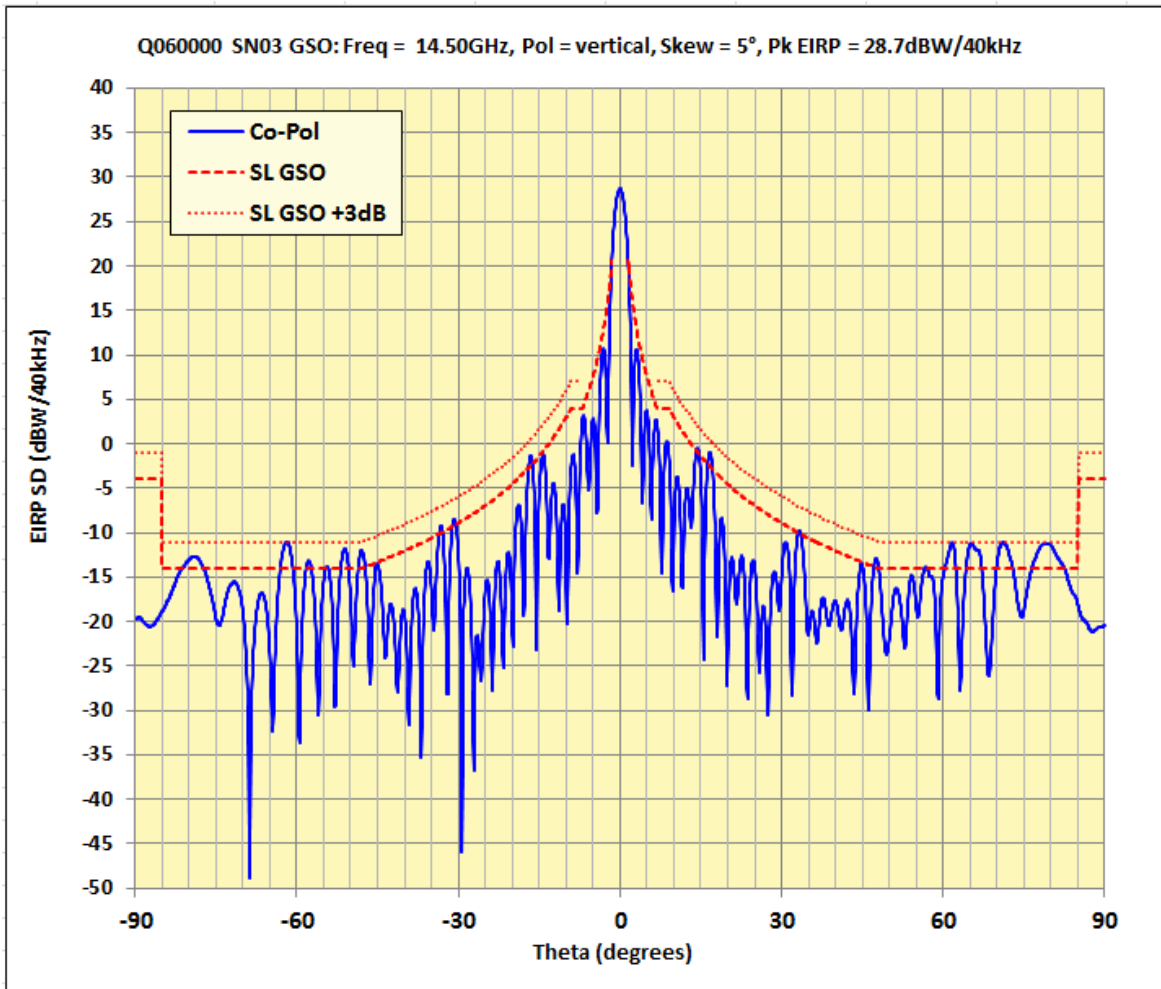
3dB Beam-width in AZ =  $2^{\circ}$  -  $3^{\circ}$  (depending on skew angle)

3 dB Beam-width in EL =  $5^{\circ}$  -  $6^{\circ}$  (depending on skew angle)

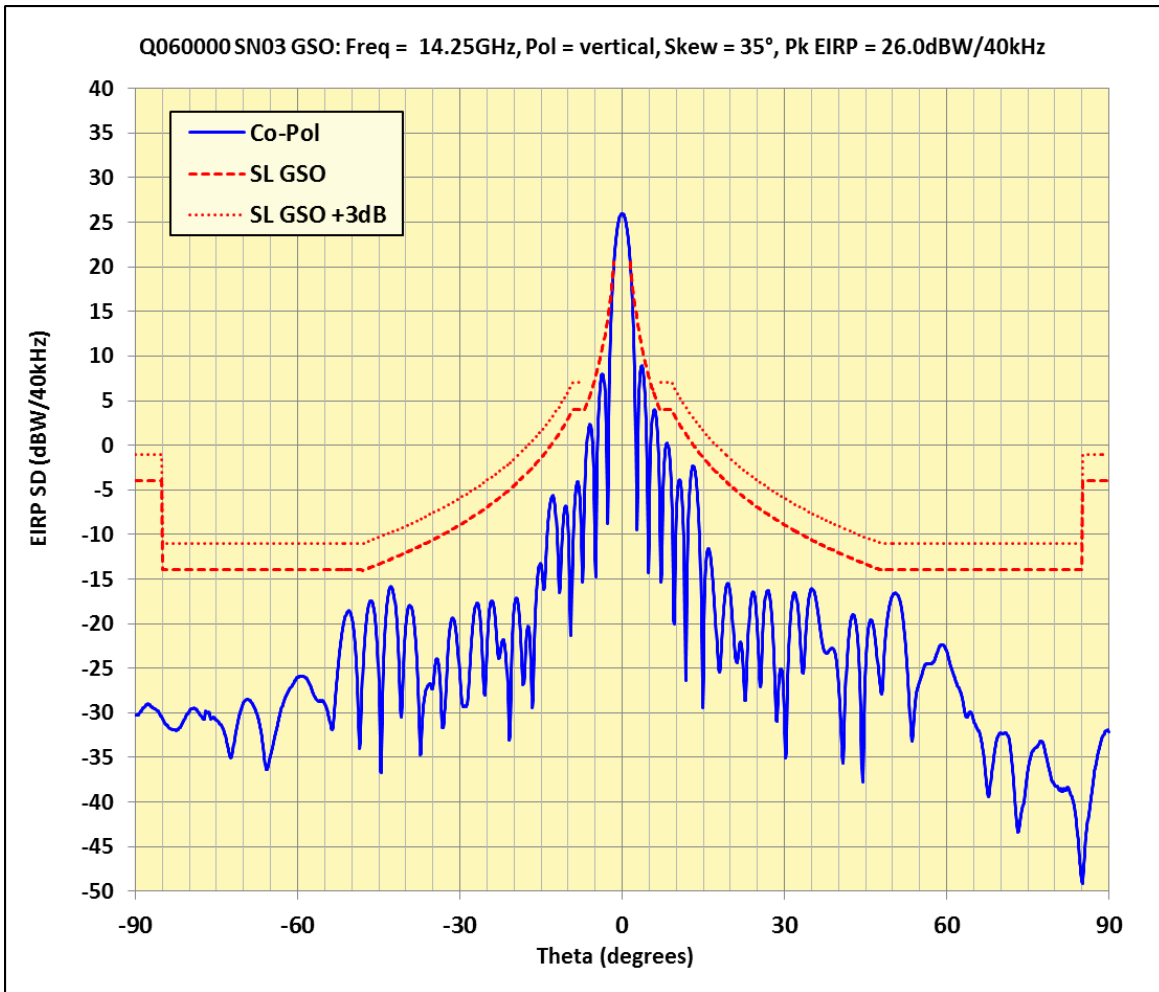
The antenna performance is fully compliant with the requirements in 47 CFR Section 25.138(a), as illustrated by the Max EIRP SD and off-axis EIRP Spectral Density plots attached hereto as Exhibit A.

The test location coordinates are:  $28.1^{\circ}$ N,  $80.62^{\circ}$ W and the corresponding skew angle to AMC-9 is  $-4.4^{\circ}$ . Below, shown measured data is for a skew angle of  $5^{\circ}$ .

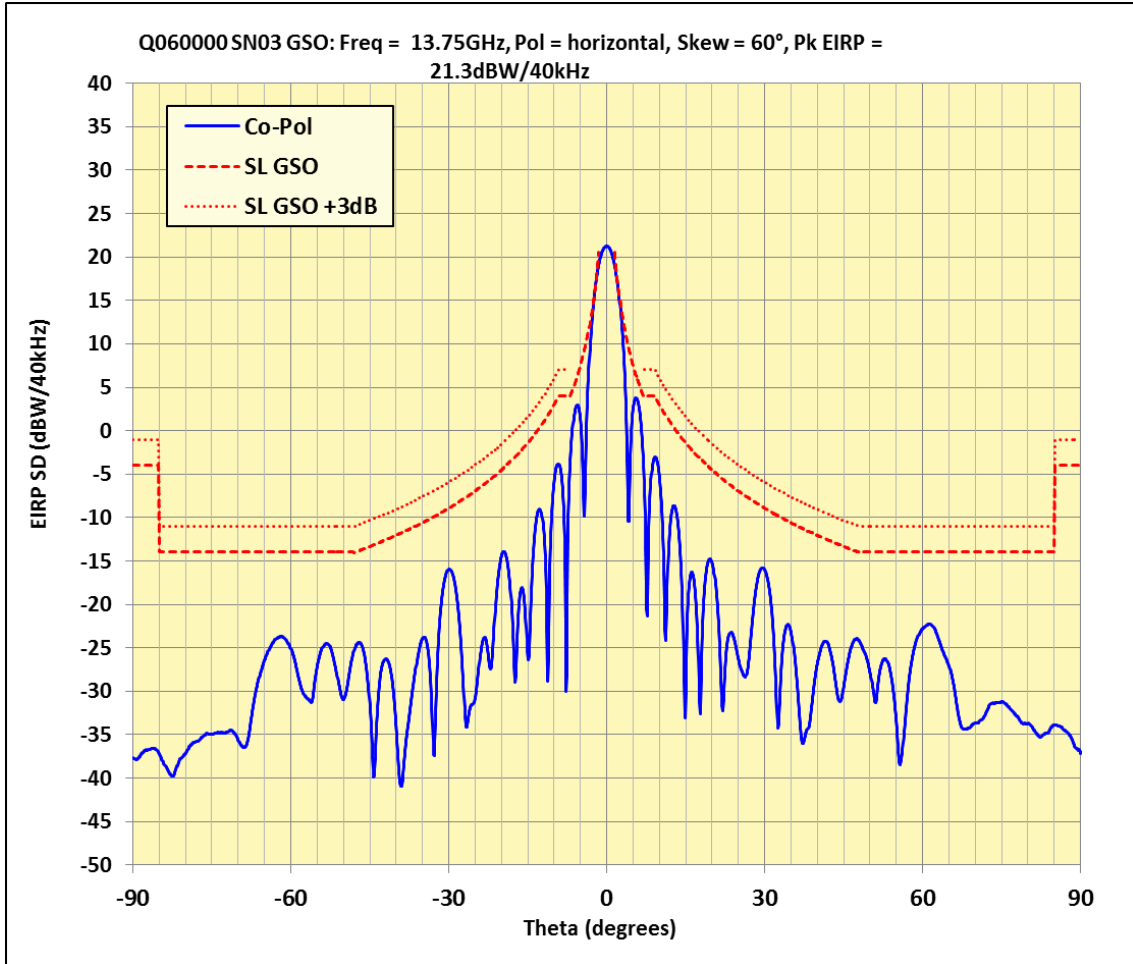
AMC-9 @ 83°W – Max EIRP SD for Skew angle = 5°



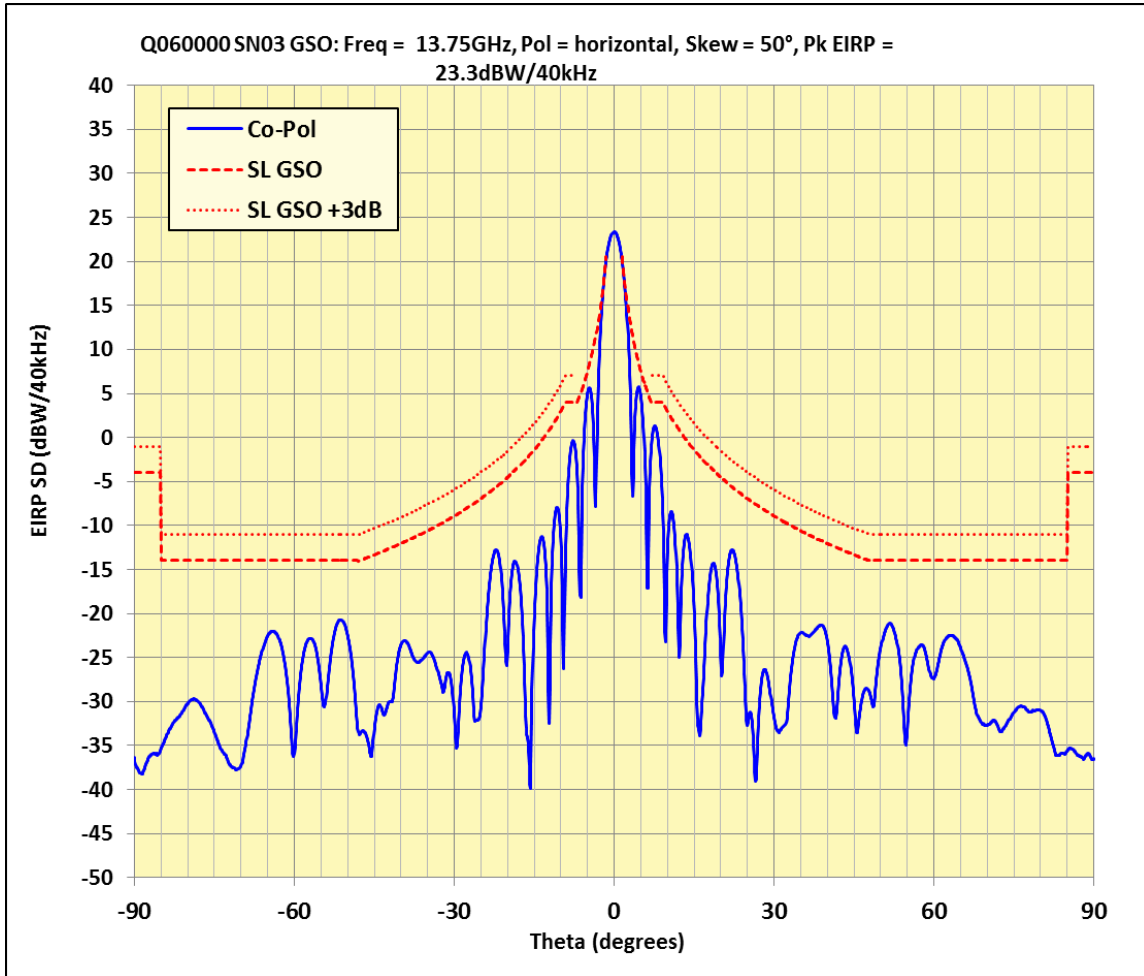
SES-1 @ 101°W - EIRP SD for Skew angle = 35°



### SES-4 @ 22°W EIRP SD for Skew angle = 60°



SES-6 @ 40.5°W EIRP SD for Skew angle = 50°



**Antenna Max EIRP SD performance for SES-1, SES-4, SES-6 and AMC-9 satellites:**

**Maximum EIRP SD vs. Skew Angles**

