

Digital Modulation ID	8
Emission Designator	450KG7D
Emission BW [kHz]	450
Modulation type	QPSK
Information (bit) rate [kbps]	176.5
FEC Rate	0.25
Uplink Frequency [GHz]	14
Uplink ES antenna diameter [m]	9.1
Uplink ES antenna gain [dBi]	60.6
Uplink Antenna feed flange power [dBW]	-3.5
Uplink ES to Satellite Distance [km]	38000
Uplink Free-Space Loss [dB]	207.0
Satellite RX antenna gain [dBi]	32.9
Satellite Rx system noise temperature [K]	400
Uplink Rain Atten. [dB]	5
Uplink Cloud Atten. [dB]	0.5
Uplink Noise temp. increase due to rain and cloud [K]	208.3
Uplink Thermal C/N [dB]	21.8
Uplink C/I (ASI) [dB]	8.8
Uplink C/I (Xpol) [dB]	30
Uplink C/I (IM) [dB]	27
Uplink C/(N+I) [dB]	8.48
Required C/(N+I) [dB]	-1.55
Margin [dB]	10.03