

<b>Digital Modulation ID</b>	<b>9</b>
Emission Designator	225KG7D
Emission BW [kHz]	225
Modulation type	QPSK
Information (bit) rate [kbps]	88.2
FEC Rate	0.25
Downlink Frequency (GHz)	11.7
Downlink EIRP [dBW]	22.0
Downlink ES to Satellite Distance [km]	38000
Downlink Free-Space Loss [dB]	205.4
RX ES antenna diameter [m]	9.1
RX ES antenna gain [dBi]	59.1
RX ES system noise temperature [K]	200
Downlink Rain Atten. [dB]	3.6
Downlink Cloud Atten. [dB]	0.4
Downlink Noise temp. increase due to rain and cloud [deg K]	174.5
Downlink Thermal C/N [dB]	21.0
Downlink C/I (ASI) [dB]	8.8
Downlink C/I (Xpol) [dB]	30.0
Downlink C/I (IM) [dB]	27.0
Downlink C/(N+I) [dB]	8.44
Required C/(N+I) [dB]	-1.55
Margin [dB]	9.99