

Parameter	512 kbps
Data rate (kbit/s)	512
Uplink frequency (GHz)	14.0
Downlink frequency (GHz)	12.0
FEC rate	0.50
Occupied bandwidth per carrier (kHz)	614.0
Nominal E/S e.i.r.p. per carrier (dBW)	63.5
Earth station diameter (m)	4.5
Earth station gain (dBi)	54.5
Uplink input power per carrier (dBW)	9.0
E/S pointing loss (dB)	0.5
Atmospheric loss (dB)	0.3
Free space path loss (dB)	207.1
Noise Temperature (K)	668
G/T satellite (Typ.) (dB/K)	-0.5
C/N thermal uplink (dB)	25.8
C/I out-of-band emissions (dB)	30.0
C/I frequency reuse (dB)	30.0
C/I uplink ASI (dB)	28.7
C/I intermodulation (dB)	99.0
C/(N+I) uplink (dB)	22.3
Satellite e.i.r.p. per carrier (dBW)	30.0
Satellite e.i.r.p. density (dBW/Hz)	-27.9
Atmospheric loss (dB)	0.2
Free space path loss (dB)	205.7
Earth station pointing loss (dB)	0.3
Earth station diameter (m)	1.8
Earth station gain (dBi)	45.2
Noise temperature (K)	170.0
Earth station G/T (dB/K)	22.9
C/N thermal downlink (dB)	17.4
C/I out-of-band emissions (dB)	30.0
C/I downlink frequency reuse (dB)	30.0
C/I downlink ASI (dB)	19.7
C/I intermodulation (dB)	16.0
C/(N+I) downlink (dB)	12.5
C/(N+I) overall (dB)	12.1
C/(N+I) overall required (dB)	5.7
Excess Margin (dB)	6.4