| Link Parameters | Units | 72M0G7W |
|---|---|---|
| Uplink frequency | GHz | 12.88 |
| Downlink frequency | GHz | 10.83 |
| User data rate | kbit/s | 153004 |
| Modulation | | 8PSK |
| Total coding rate | | 0.841 |
| Carrier bandwidth | kHz | 72000 |
| **Uplink:** | | |
| Nominal E/S e.i.r.p. per carrier | dBW | 85.8 |
| Earth station diameter | m | 4.5 |
| Earth station gain | dBi | 53.8 |
| Uplink input power per carrier | dBW | 32.0 |
| Uplink input power density | dBW/Hz | -46.6 |
| Atmospheric loss | dB | 0.2 |
| Free space path loss | dB | 206.4 |
| G/T satellite  (-6 dB contour) | dB/K | 2.3 |
| C/N thermal uplink | dB | 31.6 |
| C/I XPOL, ACI, ASI | dB | 26.3 |
| C/(N+I) uplink | dB | 25.1 |
| **Downlink:** | | |
| Satellite e.i.r.p. per carrier  (-4 dB contour) | dBW | 52.3 |
| Atmospheric loss | dB | 0.1 |
| Free space path loss | dB | 204.8 |
| Earth station diameter | m | 1.8 |
| Earth station gain | dBi | 44.4 |
| Noise temperature | K | 120.0 |
| Earth station G/T | dB/K | 23.6 |
| C/N thermal downlink | dB | 20.9 |
| C/I XPOL, ACI, IM, ASI | dB | 17.1 |
| C/(N+I) downlink | dB | 13.3 |
| **Overall:** | | |
| C/(N+I) overall | dB | 13.0 |
| C/(N+I) required | dB | 6.5 |
| Margin | dB | 6.5 |