

| | | CLEAR SKY | FADED |
|--------------------------------------|------------|-----------|--------|
| General | Unit | | |
| Data rate (kbps) | (kbps) | 4112 | 3616 |
| Coding rate | - | 0.68 | 0.60 |
| Modulation | - | QPSK | QPSK |
| Carrier bandwidth | (kHz) | 3780 | 3780 |
| Uplink | | | |
| Frequency | (GHz) | 29.75 | 29.75 |
| User Terminal EIRP | (dBW) | 49.3 | 54.1 |
| Antenna diameter | m | 0.60 | 0.60 |
| Antenna tx gain | dBi | 43.6 | 43.6 |
| Uplink power | (dBW) | 5.7 | 10.5 |
| Uplink p.s.d. | (dBW/Hz) | -60.0 | -55.2 |
| Path loss | (dB) | 213.6 | 213.6 |
| Rain loss | (dB) | 0.0 | 4.8 |
| Mean Atmospheric loss | (dB) | 0.4 | 0.4 |
| Satellite G/T (EOC) | (dB/K) | 9.0 | 9.0 |
| Boltzmann Constant | (dBW/K/Hz) | -228.6 | -228.6 |
| Up-path C/No | (dBHz) | 72.9 | 72.9 |
| Downlink | | | |
| Frequency | (GHz) | 18.8 | 18.8 |
| Satellite EIRP (EOC) | (dBW) | 33.8 | 33.8 |
| Path loss | (dB) | 209.6 | 209.6 |
| Rain loss | (dB) | 0.0 | 8.6 |
| Mean Atmospheric loss | (dB) | 0.4 | 0.4 |
| Earth Station G/T | (dB/K) | 36.2 | 36.2 |
| T (clear sky) | K | 300.0 | 300.0 |
| G/T degradation due to rain | (dB) | 0.0 | 2.4 |
| Boltzmann Constant | (dBW/K/Hz) | -228.6 | -228.6 |
| Rx terminal Pointing loss | (dB) | 0.1 | 0.1 |
| Down-path C/No | (dBHz) | 88.5 | 77.5 |
| Total | | | |
| Mean satellite C/Imo | (dBHz) | 90.8 | 90.8 |
| Co-Channel Interference | (dBHz) | 84.0 | 84.0 |
| Other system interference allocation | (dB) | 1.0 | 1.0 |
| Mean Overall C/No | (dBHz) | 71.4 | 70.3 |
| Mean Overall C/N | (dB) | 5.6 | 4.5 |
| Margin | | | |
| C/N required | (dB) | 4.0 | 2.9 |
| Margin | (dB) | 1.6 | 1.7 |
| Availability | (%) | n/a | 99.0% |