

|                                      |            |                 |
|--------------------------------------|------------|-----------------|
| <b>General</b>                       | Unit       |                 |
| User terminal type                   | -          | AERO-I<br>C-084 |
| Emission Designator                  | -          | 12K5G1D         |
| Data rate (kbps)                     | (kbps)     | 8.4             |
| Coding rate                          | -          | 0.5             |
| Modulation                           | -          | A-QPSK          |
| Carrier bandwidth                    | (kHz)      | 6.72            |
| Allocated bandwidth                  | (kHz)      | 12.5            |
| <b>Uplink</b>                        |            |                 |
| Frequency                            | (GHz)      | 6.5             |
| Earth Station EIRP                   | (dBW)      | 59.3            |
| Antenna diameter                     | m          | 19.0            |
| Antenna tx gain                      | dBi        | 59.2            |
| Uplink power                         | (dBW)      | 0.1             |
| Uplink p.s.d. avgd. in 4 kHz         | (dBW/4kHz) | -2.2            |
| Path loss                            | (dB)       | 200.9           |
| Mean Atmospheric loss                | (dB)       | 0.4             |
| Satellite G/T                        | (dB/K)     | -10.4           |
| Up-path C/No                         | (dBHz)     | 76.2            |
| <b>Downlink</b>                      |            |                 |
| Frequency                            | (GHz)      | 1.5             |
| Satellite EIRP                       | (dBW)      | 24.9            |
| Path loss                            | (dB)       | 188.4           |
| Mean Atmospheric loss                | (dB)       | 0.1             |
| User terminal G/T                    | (dB/K)     | -19.0           |
| Down-path C/No                       | (dBHz)     | 46.0            |
| <b>Total</b>                         |            |                 |
| Mean satellite C/IMo                 | (dBHz)     | 58.5            |
| Co-Channel Interference              | (dBHz)     | 64.0            |
| Other system interference allocation | (dB)       | 1.0             |
| Mean Overall C/No                    | (dBHz)     | 44.7            |
| Mean Overall C/N                     | (dB)       | 6.4             |
| <b>Margin</b>                        |            |                 |
| C/N objective                        | (dB)       | 2.9             |
| C/N margin                           | (dB)       | 3.5             |