

| Link Parameters                               | Units | 146KG7W |
|---|-------|---------|
| Uplink frequency                              | GHz   | 6.20    |
| Downlink frequency                            | GHz   | 4.00    |
| Occupied bandwidth                            | kHz   | 145.9   |
| <b>Uplink:</b>                                |       |         |
| Nominal E/S e.i.r.p. per carrier              | dBW   | 43.0    |
| Earth station diameter                        | m     | 4.5     |
| Earth station gain                            | dBi   | 47.5    |
| Uplink input power per carrier                | dBW   | -4.5    |
| Atmospheric loss                              | dB    | 0.2     |
| Free space path loss                          | dB    | 200.0   |
| G/T satellite (-3dB contour)                  | dB/K  | 7.3     |
| C/N thermal uplink                            | dB    | 27.1    |
| C/I XPOL, ACI, IM, ASI                        | dB    | 15.5    |
| C/(N+I) uplink                                | dB    | 15.2    |
| <b>Downlink:</b>                              |       |         |
| Satellite e.i.r.p. per carrier (-3dB contour) | dBW   | 10.4    |
| Atmospheric loss                              | dB    | 0.1     |
| Free space path loss                          | dB    | 196.2   |
| Earth station diameter                        | m     | 4.5     |
| Earth station gain                            | dBi   | 43.7    |
| Noise temperature                             | K     | 80.0    |
| Earth station G/T                             | dB/K  | 24.6    |
| C/N thermal downlink                          | dB    | 15.6    |
| C/I XPOL, ACI, IM, ASI                        | dB    | 13.6    |
| C/(N+I) downlink                              | dB    | 9.8     |
| <b>Overall:</b>                               |       |         |
| C/(N+I) overall                               | dB    | 8.7     |
| C/(N+I) required                              | dB    | 5.9     |
| System Margin                                 | dB    | 2.8     |