

| Link Parameters                               | Units       | 346KG7W | 461KG7W | 1M84G7W | 8M25G7W |
|---|-------------|---------|---------|---------|---------|
| Uplink Frequency                              | GHz         | 6.28    | 6.28    | 6.28    | 6.28    |
| Downlink Frequency                            | GHz         | 4.055   | 4.055   | 4.055   | 4.055   |
| Carrier Allocated Bandwidth                   | kHz         | 346     | 461     | 1840    | 8250    |
| Uplink:                                       |             |         |         |         |         |
| Noise BW (or energy dispersal for TV/FM)      | kHz         | 256     | 341.3   | 1365.3  | 6111.3  |
| Nominal E/S e.i.r.p. per carrier              | dBW         | 52.6    | 55.1    | 64.4    | 67.3    |
| Earth Station Diameter                        | m           | 7.2     | 4.5     | 11      | 7.2     |
| Earth Station Gain                            | dBi         | 51.6    | 47.5    | 55.3    | 51.6    |
| Uplink Input Power per Carrier                | dBW         | 1       | 7.6     | 9.1     | 15.7    |
| Free Space Loss                               | dB          | 200.6   | 200.6   | 200.6   | 200.6   |
| G/T Satellite                                 | dB/K        | -11.5   | -11.5   | -11.5   | -11.5   |
| C/N Thermal Uplink                            | dB          | 15      | 16.3    | 19.5    | 15.9    |
| C/I XPOL, ACI, IM, ASI                        | dB          | 18.6    | 19.8    | 23.1    | 19.5    |
| C/(N+I) uplink                                | dB          | 13.4    | 14.7    | 18      | 14.4    |
| Downlink:                                     |             |         |         |         |         |
| Satellite e.i.r.p. per carrier (-3dB contour) | dBW         | 8.4     | 10.8    | 20.2    | 23.1    |
| Max e.i.r.p. Density                          | dBW/4kHz    | -6.7    | -5.5    | -2.2    | -5.8    |
| Max PFD                                       | dBW/m2/4kHz | -168.8  | -167.6  | -164.3  | -167.9  |
| Free Space Loss                               | dB          | 196.8   | 196.8   | 196.8   | 196.8   |
| Earth Station Diameter                        | m           | 4.5     | 6.3     | 3.8     | 4.5     |
| Earth Station Gain                            | dBi         | 43.8    | 46.9    | 42.4    | 43.8    |
| Noise Temperature                             | kHz         | 95      | 95      | 95      | 95      |
| Earth Station G/T                             | dB/K        | 24      | 27.1    | 22.6    | 24      |
| C/N Thermal Downlink                          | dB          | 10.1    | 14.4    | 13.3    | 11.1    |
| C/I XPOL, ACI, IM, ASI                        | dB          | 14.2    | 18.4    | 17.3    | 15.1    |
| C/(N+I) downlink                              | dB          | 8.7     | 12.9    | 11.8    | 9.6     |
| Adjacent satellite interference:              |             |         |         |         |         |
| uplink input power dens @ 2 deg               | dBW/Hz      | -44     | -44     | -44     | -44     |
| downlink eirp dens @ 2 deg                    | dBW/Hz      | -37     | -37     | -37     | -37     |
| C/I up  | dB          | 21.57   | 22.82   | 26.1    | 22.49   |
| C/I dn  | dB          | 17.17   | 21.42   | 20.3    | 18.09   |
| Aggregate C/I up                              | dB          | 18.57   | 19.82   | 23.1    | 19.49   |
| Aggregate C/I dn                              | dB          | 14.17   | 18.42   | 17.3    | 15.09   |
| Overall:                                      |             |         |         |         |         |
| C/(N+I) overall                               | dB          | 7.4     | 10.7    | 10.9    | 8.4     |
| C/(N+I) required                              | dB          | 6       | 9.3     | 9.3     | 6.9     |
| System Margin                                 | dB          | 1.4     | 1.4     | 1.6     | 1.5     |

36M0G7W 36M0F3F

|        |        |
|--------|--------|
| 6.28   | 6.28   |
| 4.055  | 4.055  |
| 36000  | 36000  |
| 30000  | 2000   |
| 80.7   | 78.6   |
| 13     | 13     |
| 56.7   | 56.8   |
| 24     | 21.8   |
| 200.6  | 200.6  |
| -11.5  | -9.5   |
| 22.4   | 21.5   |
| 26     | 23.1   |
| 20.8   | 19.2   |
| 30.8   | 30.4   |
| -5     | 6.4    |
| -167.1 | -155.7 |
| 196.8  | 196.8  |
| 3.8    | 6.3    |
| 42.4   | 46.9   |
| 95     | 95     |
| 22.6   | 27.1   |
| 10.5   | 13.8   |
| 14.5   | 17.8   |
| 9      | 12.3   |
| -44    | -44    |
| -37    | -37    |
| 28.98  | 26.09  |
| 17.48  | 20.79  |
| 25.98  | 23.09  |
| 14.48  | 17.79  |
| 8.7    | 11.5   |
| 6.9    | 10     |
| 1.8    | 1.5    |