| Link Parameters | Units | 346KG7W | 461KG7W | 1M84G7W | 8M25G7W |
|---|---|---|---|---|---|
| Uplink Frequency | GHz | 6.130 | 6.130 | 6.130 | 6.130 |
| Downlink Frequency | GHz | 3.905 | 3.905 | 3.905 | 3.905 |
| Carrier Allocated Bandwidth | kHz | 346.0 | 461.0 | 1840.0 | 8250.0 |
| **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 | 48.1 | 51.0 | 57.3 | 62.9 |
| Earth Station Diameter | m | 4.5 | 7.2 | 11.0 | 4.5 |
| Earth Station Gain | dBi | 47.3 | 51.4 | 55.1 | 47.3 |
| Uplink Input Power per Carrier | dBW | 0.8 | -0.4 | 2.2 | 15.6 |
| Free Space Loss | dB | 199.9 | 199.9 | 199.9 | 199.9 |
| G/T Satellite | dB/K | -5.0 | -5.0 | -5.0 | -5.0 |
| C/N Thermal Uplink | dB | 17.7 | 19.4 | 19.6 | 18.7 |
| C/I XPOL, ACI, IM, ASI | dB | 14.1 | 15.7 | 16.0 | 15.1 |
| C/(N+I) uplink | dB | 12.5 | 14.2 | 14.4 | 13.5 |
| **Downlink:** | | | | | |
| Satellite e.i.r.p. per carrier (-3dB contour) | dBW | 9.2 | 12.1 | 18.4 | 23.9 |
| Max e.i.r.p. Density | dBW/4KHz | -5.9 | -4.2 | -4.0 | -5.0 |
| Max PFD | dBW/m2/4kHz | -168.0 | -166.3 | -166.1 | -167.1 |
| Free Space Loss | dB | 195.5 | 195.5 | 195.5 | 195.5 |
| Earth Station Diameter | m | 3.8 | 4.5 | 4.5 | 3.8 |
| Earth Station Gain | dBi | 42.3 | 43.8 | 43.8 | 42.3 |
| Noise Temperature | kHz | 95.0 | 95.0 | 95.0 | 95.0 |
| Earth Station G/T | dB/K | 22.5 | 24.0 | 24.0 | 22.5 |
| C/N Thermal Downlink | dB | 10.7 | 13.9 | 14.2 | 11.7 |
| C/I XPOL, ACI, IM, ASI | dB | 13.5 | 16.6 | 16.9 | 14.4 |
| C/(N+I) downlink | dB | 8.9 | 12.0 | 12.3 | 9.8 |
| **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 | 17.07 | 18.72 | 19.00 | 18.09 |
| C/I dn | dB | 16.47 | 19.62 | 19.90 | 17.39 |
| Aggregate C/I up | dB | 14.07 | 15.72 | 16.00 | 15.09 |
| Aggregate C/I dn | dB | 13.47 | 16.62 | 16.90 | 14.39 |
| **Overall:** | | | | | |
| C/(N+I) overall | dB | 7.3 | 10.0 | 10.2 | 8.3 |
| C/(N+I) required | dB | 6.0 | 9.3 | 9.3 | 6.9 |
| System Margin | dB | 1.3 | 0.7 | 0.9 | 1.4 |

| 72M0G7W | 36M0F3F |
|---|---|
| 6.130 | 6.130 |
| 3.905 | 3.905 |
| 72000.0 | 36000.0 |
| | |
| 63330 | 2000.0 |
| 79.0 | 70.8 |
| 13.0 | 13.0 |
| 56.6 | 56.6 |
| 22.4 | 14.2 |
| 199.9 | 199.9 |
| -4.0 | -3.5 |
| 25.7 | 20.4 |
| 21.0 | 15.8 |
| 19.8 | 14.5 |
| | |
| 34.0 | 33.6 |
| -5.0 | 9.6 |
| -167.1 | -152.5 |
| 195.5 | 196.2 |
| 6.3 | 4.5 |
| 47.1 | 43.8 |
| 95.0 | 95.0 |
| 27.3 | 24.0 |
| 16.4 | 14.5 |
| 19.1 | 18.9 |
| 14.6 | 13.1 |
| | |
| -44 | -44.5 |
| -37 | -38 |
| 24.04 | 18.79 |
| 22.14 | 21.89 |
| 21.04 | 15.79 |
| 19.14 | 18.89 |
| | |
| 13.4 | 10.8 |
| 12.7 | 10.0 |
| 0.7 | 0.8 |