

| General: | Units | Clear Sky | Faded |
|--|--------------|------------------|--------------|
| Emission Designator | | 250MG7W | 250MG7W |
| Data Rate | Mbit/s | 533 | 533 |
| Modulation | | 16-APSK | 16-APSK |
| Coding Rate | | 0.6642 | 0.6642 |
| Carrier Bandwidth | MHz | 250 | 250 |
| Uplink Frequency | GHz | 48.075 | 48.075 |
| Downlink Frequency | GHz | 40.875 | 40.875 |
| Uplink: | | | |
| Tx E/S Antenna Diameter | m | 3.5 | 3.5 |
| Tx E/S Power to Antenna | W | 20.0 | 200.0 |
| Tx E/S Antenna Gain | dBi | 63.0 | 63.0 |
| Tx E/S EIRP per Carrier | dBW | 76.1 | 86.1 |
| Tx E/S Antenna Pointing Loss | dB | 1 | 1 |
| Atmospheric and Rain Losses | dB | 1.6 | 11.6 |
| Free Space Loss | dB | 217.9 | 217.9 |
| G/T (-2dB contour) | dB/K | 20 | 20 |
| C/I - Intra-system | dB | 25.0 | 25.0 |
| Downlink: | | | |
| EIRP per Carrier towards Rx E/S (-3dB) | dBW | 67 | 67 |
| Atmospheric and Rain Losses | dB | 0.6 | 6.7 |
| Free Space Loss | dB | 216.4 | 216.4 |
| Rx E/S Antenna Pointing Loss | dB | 0.5 | 0.5 |
| Rx E/S Antenna Diameter | m | 0.74 | 0.74 |
| Rx E/S Antenna Gain | dBi | 48.1 | 48.1 |
| Rx E/S G/T | dB/K | 24.6 | 21.8 |
| System Noise Temp (LNA+Sky) | K | 225 | 434 |
| C/I - Intra-system | dB | 20.1 | 20.1 |
| End-to-End: | | | |
| C/N - Thermal Uplink | dB | 21.0 | 21.0 |
| C/I Up - ASI | dB | 22.8 | 22.8 |
| C/N - Thermal Downlink | dB | 19.5 | 10.6 |
| C/I Down - ASI | dB | 23.6 | 23.6 |
| C/(N+I) - Total Actual | dB | 13.8 | 9.3 |
| C/N - Required | dB | 9.3 | 9.3 |
| Excess Margin | dB | 4.5 | 0.0 |