

| General: | Units | Clear Sky | Faded |
|---|--------------|------------------|--------------|
| Emission Designator | | 110MG7D | 110MG7D |
| Data Rate | Mbit/s | 1711.9 | 1711.9 |
| Modulation | | 8PSK | 8PSK |
| Coding Rate | | 0.7470 | 0.7470 |
| Carrier Bandwidth | MHz | 110 | 110 |
| Uplink Frequency | GHz | 28.85 | 28.85 |
| Downlink Frequency | GHz | 19.05 | 19.05 |
| Elevation Angle | degrees | 35 | 35 |
| Elevation Angle | degrees | 35 | 35 |
| Uplink: | | | |
| Tx E/S Antenna Diameter | m | 7.3 | 7.3 |
| Tx E/S Power to Antenna | W | 10.0 | 100.1 |
| Tx E/S Antenna Gain | dBi | 65.0 | 65.0 |
| Tx E/S EIRP per Carrier | dBW | 75 | 85.0 |
| Tx E/S Antenna Pointing Loss | dB | 1.2 | 1.2 |
| Atmospheric and Rain Losses | dB | 0.5 | 10.5 |
| Free Space Loss | dB | 213.3 | 213.3 |
| G/T toward Tx E/S (-3 dB) | dB/K | 3.5 | 3.5 |
| C/I - Intra-system | dB | 30.0 | 30.0 |
| Downlink: | | | |
| EIRP per Carrier towards Rx E/S (-3 dB) | dBW | 44.0 | 44.0 |
| Atmospheric and Rain Losses | dB | 0.4 | 5.6 |
| Free Space Loss | dB | 209.7 | 209.7 |
| Rx E/S Antenna Pointing Loss | dB | 0.8 | 0.8 |
| Rx E/S Antenna Diameter | m | 7.3 | 7.3 |
| Rx E/S Antenna Gain | dBi | 61.4 | 61.4 |
| Rx E/S G/T | dB/K | 38.2 | 35.3 |
| System Noise Temp (LNA+Sky) | K | 210 | 406 |
| C/I - Intra-system | dB | 30.0 | 30.0 |
| End-to-End: | | | |
| C/N - Thermal Uplink | dB | 12.4 | 12.4 |
| C/I Up - ASI | dB | 25.7 | 25.7 |
| C/N - Thermal Downlink | dB | 20.2 | 12.1 |
| C/I Down - ASI | dB | 16.9 | 16.9 |
| C/(N+I) - Total Actual | dB | 10.4 | 8.4 |
| C/N - Required | dB | 8.4 | 8.4 |
| Excess Margin | dB | 2.0 | 0.0 |