

|                                 |              |                  |
|---------------------------------|--------------|------------------|
| <b>General:</b>                 | <b>Units</b> | <b>Clear Sky</b> |
| Emission Designator             |              | 6M25G7D          |
| Carrier Bandwidth               | kHz          | 6250             |
| Uplink Frequency                | GHz          | 28.85            |
| Downlink Frequency              | GHz          | 19.05            |
| <b>Uplink:</b>                  |              |                  |
| Tx E/S Antenna Diameter         | m            | 0.67             |
| Tx E/S Power to Antenna         | W            | 2.8              |
| Tx E/S Antenna Gain             | dBi          | 44.3             |
| Tx E/S EIRP per Carrier         | dBW          | 48.8             |
| Tx E/S Antenna Pointing Loss    | dB           | 0.5              |
| Atmospheric and Rain Losses     | dB           | 0.5              |
| Free Space Loss                 | dB           | 213.6            |
| G/T toward Tx E/S               | dB/K         | 19.5             |
| C/I - Intra-system              | dB           | 14.3             |
| <b>Downlink:</b>                |              |                  |
| EIRP per Carrier towards Rx E/S | dBW          | 48.9             |
| Atmospheric and Rain Losses     | dB           | 0.5              |
| Free Space Loss                 | dB           | 209.9            |
| Rx E/S Antenna Pointing Loss    | dB           | 0.55             |
| Rx E/S Antenna Diameter         | m            | 7.3              |
| Rx E/S Antenna Gain             | dBi          | 61.4             |
| Rx E/S G/T                      | dB/K         | 38.0             |
| System Noise Temp (LNA+Sky)     | K            | 250              |
| C/I - Intra-system              | dB           | 13.3             |
| <b>End-to-End:</b>              |              |                  |
| C/N - Thermal Uplink            | dB           | 15.3             |
| C/I Up - ASI                    | dB           | 12.4             |
| C/N - Thermal Downlink          | dB           | 37.6             |
| C/I Down - ASI                  | dB           | 37.6             |
| C/(N+I) - Total Actual          | dB           | 7.7              |
| C/N - Required                  | dB           | 6.2              |
| Excess Margin                   | dB           | 1.4              |