

| <b>Telemetry Link Budget</b> |        |                       |
|------------------------------|--------|-----------------------|
| <b>Link Parameters</b>       |        | <b>Transfer Orbit</b> |
| Frequency (average)          | (MHz)  | 19706.25              |
| Transmit Power               | (dBW)  | 21.1                  |
| Line Losses                  | (dB)   | 2.0                   |
| Antenna Gain (minimum)       | (dBi)  | -4.0                  |
| EIRP (minimum)               | (dBW)  | 15.1                  |
| Free Space Path Loss         | (dB)   | 210.6                 |
| Rx E/S G/T                   | (dB/K) | 42.5                  |
| Downlink C/N                 | (dB)   | 15.6                  |
| C/N Required                 | (dB)   | 9.0                   |
| Margin                       | (dB)   | 6.6                   |