

| <b>Command Link Budget (On-Station )</b> |                       |                 |                |
|--|-----------------------|-----------------|----------------|
| <b>Link Parameters</b>                   |                       | <b>Nom. U/L</b> | <b>Low U/L</b> |
| Frequency                                | (MHz)                 | 29,999.5        | 29,999.5       |
| Incident Flux Density                    | (dBW/m <sup>2</sup> ) | -110.0          | -120.0         |
| Aperture Factor                          | (dB-m <sup>2</sup> )  | -51.0           | -51.0          |
| Incident Isotropic Power                 | (dBW)                 | -161.0          | -171.0         |
| Antenna Gain (Peak)                      | (dBi)                 | 55.2            | 55.2           |
| Noise Temperature                        | (dB-K)                | 28.7            | 28.7           |
| Satellite G/T                            | (dB/K)                | 26.5            | 26.5           |
| Receive Losses                           | (dB)                  | -23.6           | -23.6          |
| Receiver Input Power                     | (dBm)                 | -99.4           | -109.4         |
| Receiver Threshold                       | (dBm)                 | -112.0          | -112.0         |
| Spacecraft Margin                        | (dB)                  | 12.6            | 2.6            |