

**Table A.12-9 – Link Budget for Signaling Forward Link to Class-3 User Terminal
(12.5 kHz bandwidth, via Global Beam)**

| General | Unit | |
|--|------------|---------------|
| User terminal type | - | Class-3 |
| Modulation ID / Designator | - | C3F4/ 12K5G7W |
| Data rate (kbps) | (kbps) | 12.2 |
| Coding rate | - | 0.897 |
| Modulation | - | QPSK |
| Carrier bandwidth | (kHz) | 10.5 |
| Allocated bandwidth | (kHz) | 12.5 |
| Uplink | | |
| Frequency | (GHz) | 6.5 |
| SAS elevation angle | (deg) | 5.0 |
| SAS EIRP towards satellite | (dBW) | 60.3 |
| Path loss | (dB) | 200.9 |
| Mean Atmospheric loss | (dB) | 0.4 |
| Satellite G/T | (dB/K) | -10.4 |
| Boltzmann Constant | (dBW/K/Hz) | -228.6 |
| Up-path C/No | (dBHz) | 77.2 |
| Downlink | | |
| Frequency | (GHz) | 1.5 |
| User terminal elevation angle | (deg) | 90.0 |
| Satellite EIRP | (dBW) | 33.0 |
| Path loss | (dB) | 188.4 |
| Mean Atmospheric loss | (dB) | 0.1 |
| User terminal G/T | (dB/K) | -16.9 |
| Boltzmann Constant | (dBW/K/Hz) | -228.6 |
| Down-path C/No | (dBHz) | 56.2 |
| Total | | |
| Mean satellite C/IMo | (dBHz) | 60.0 |
| Co-Channel Interference | (dBHz) | 999.0 |
| Adjacent satellite interference allocation | (dB) | 1.0 |
| Mean Overall C/No | (dBHz) | 53.7 |
| Mean Overall C/N | (dB) | 13.4 |
| Margin | | |
| C/N objective | (dB) | 8.1 |
| C/N margin | (dB) | 5.4 |