

**Table A.12-12 – Link Budget for Signaling Return Link from Class-3 User Terminal
(25 kHz bandwidth; Regional Beam)**

| General | Unit | |
|--|------------|----------------|
| User terminal type | - | Class-3 |
| Modulation ID / Designator | - | C3R3 / 25K0G7W |
| Data rate (kbps) | (kbps) | 20 |
| Coding rate | - | 0.73 |
| Modulation | - | pi/4 QPSK |
| Carrier bandwidth | (kHz) | 21 |
| Allocated bandwidth | (kHz) | 25 |
| Uplink | | |
| Frequency | (GHz) | 1.6 |
| User terminal elevation angle | (deg) | 90 |
| User terminal EIRP towards satellite | (dBW) | 11.0 |
| Path loss | (dB) | 188.9 |
| Atmospheric loss | (dB) | 0.1 |
| Satellite G/T | (dB/K) | 2.2 |
| Boltzmann Constant | (dBW/K/Hz) | -228.6 |
| Adjacent Channel Interference | (dB) | 0.2 |
| Up-path C/No | (dBHz) | 52.6 |
| Downlink | | |
| Frequency | (GHz) | 3.6 |
| SAS elevation angle | (deg) | 5 |
| Satellite EIRP | (dBW) | -3.5 |
| Path loss | (dB) | 195.7 |
| Atmospheric loss | (dB) | 0.4 |
| SAS G/T | (dB/K) | 32.3 |
| Boltzmann Constant | (dBW/K/Hz) | -228.6 |
| Random Loss (99%) | (dB) | 0.5 |
| Down-path C/No | (dBHz) | 60.8 |
| Total | | |
| Mean satellite C/IMo | (dBHz) | 65.0 |
| Co-Channel Interference | (dBHz) | 63.2 |
| Adjacent satellite interference allocation | (dB) | 1.0 |
| Mean Overall C/No | (dBHz) | 50.5 |
| Mean Overall C/N | (dB) | 7.3 |
| Margin | | |
| C/N objective | (dB) | 4.4 |
| C/N margin | (dB) | 2.8 |