

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

<b>General</b>	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
<b>Uplink</b>		
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
<b>Downlink</b>		
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
<b>Total</b>		
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
<b>Margin</b>		
C/N objective	(dB)	8.1
C/N margin	(dB)	5.4