

**Table A.12-4 – Link Budget for Signaling Forward Link to Class-1 User Terminal  
(50 kHz bandwidth; Regional Beam)**

<b>General</b>	Unit	
User terminal type	-	Class1
Modulation ID / Designator	-	C1F3/ 50K0D7W
Data rate (kbps)	(kbps)	98
Coding rate	-	0.766
Modulation	-	16-QAM
Carrier bandwidth	(kHz)	42
Allocated bandwidth	(kHz)	50
<b>Uplink</b>		
Frequency	(GHz)	6.5
SAS elevation angle	(deg)	5.0
SAS EIRP towards satellite	(dBW)	61.0
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)	77.9
<b>Downlink</b>		
Frequency	(GHz)	1.5
User terminal elevation angle	(deg)	90.0
Satellite EIRP	(dBW)	33.2
Path loss	(dB)	188.4
Mean Atmospheric loss	(dB)	0.1
User terminal G/T	(dB/K)	-9.7
Boltzmann Constant	(dBW/K/Hz)	-228.6
Down-path C/No	(dBHz)	63.6
<b>Total</b>		
Mean satellite C/IMo	(dBHz)	65.8
Co-Channel Interference	(dBHz)	70.0
Adjacent satellite interference allocation	(dB)	1.0
Mean Overall C/No	(dBHz)	59.9
Mean Overall C/N	(dB)	13.6
<b>Margin</b>		
C/N objective	(dB)	11.4
C/N margin	(dB)	2.3