

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

General	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
Uplink		
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
Downlink		
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
Total		
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
Margin		
C/N objective	(dB)	11.4
C/N margin	(dB)	2.3