

**Table A.12-11 – Link Budget for Signaling Return Link from Class-2 User Terminal  
(50 kHz bandwidth; Regional Beam)**

<b>General</b>	Unit	
User terminal type	-	Class-2
Modulation ID / Designator	-	C2R3 / 50K0G7W
Data rate (kbps)	(kbps)	52.8
Coding rate	-	0.87
Modulation	-	pi/4 QPSK
Carrier bandwidth	(kHz)	42
Allocated bandwidth	(kHz)	50
<b>Uplink</b>		
Frequency	(GHz)	1.6
User terminal elevation angle	(deg)	90
User terminal EIRP towards satellite	(dBW)	16.1
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)	57.7
<b>Downlink</b>		
Frequency	(GHz)	3.6
SAS elevation angle	(deg)	5
Satellite EIRP	(dBW)	1.6
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)	65.9
<b>Total</b>		
Mean satellite C/IMo	(dBHz)	70.1
Co-Channel Interference	(dBHz)	68.3
Adjacent satellite interference allocation	(dB)	1.0
Mean Overall C/No	(dBHz)	55.6
Mean Overall C/N	(dB)	9.3
<b>Margin</b>		
C/N objective	(dB)	6.6
C/N margin	(dB)	2.7