

**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